GC/MS Semivolatiles

Case Narrative

COGCC

Charles C Bell TB

Work Order Number: 1607160

1. This report consists of 1 oil sample. The sample was received intact at ambient temperature by ALS on 07/20/16.

2. The sample was prepared and analyzed according to SW-846, 3rd Edition procedures. Specifically, the oil sample was diluted with solvent according to the current revision of SOP 622 based on Method 3580A.

3. The extract was analyzed using GC/MS with a DB-5MS capillary column according to the current revision of SOP 506 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 the daily (continuing) calibration verifications were within 20%D.

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. A matrix spike and matrix spike duplicate were not 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 times.

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

Surrogate	Sample	Direction
2-Fluorobiphenyl	EX160728-4MB & -4LCS	High
Nitrobenzene-D_5	EX160728-4MB & -1	High

There were no target analytes detected above the reporting limits in the method blank. All target recoveries in the laboratory control sample were within the acceptance limits. The reporting limits are defensible because the elevated recoveries demonstrate a high bias. No further action was taken.

The re-analysis of the sample confirmed the original surrogate analysis. This suggests that the outliers were due to matrix effects. No further action was taken.

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 the current revision of SOP 939.

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 Lyons — 7/31/16
Organics Primary Data Reviewer — Date

7/31/16
Organics Final Data Reviewer — Date

ALS
Data Qualifier Flags
Organics

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 -- Fort Collins

Sample Number(s) Cross-Reference Table

OrderNum: 1607160
Client Name: COGCC
Client Project Name: Charles C Bell TB
Client Project Number:
Client PO Number: CT 2016-141

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
754964 Bell TB	1607160-1		OIL	24-Jun-16	8:18
754964 Bell TB	1607160-2		WATER	24-Jun-16	8:18

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

PROJECT NAME	Charles CBell TB	SAMPLER	PAC	DATE	11 July 2016
PROJECT No.		SITE ID		TURNAROUND	14 days
		EDD FORMAT	COGCC		
COMPANY NAME	Colorado Oil + Gas Conservation Comm	PURCHASE ORDER			
SEND REPORT TO	Peter Gintautas	BILL TO COMPANY			
ADDRESS	1120 Lincoln St Suite 801	INVOICE ATTN TO			
CITY / STATE / ZIP	Denver CO 80203	ADDRESS			
PHONE	719-679-1306	CITY / STATE / ZIP			
FAX		PHONE			
E-MAIL	peter.gintautas@state.co.us	FAX			
		E-MAIL			

WORKORDER #	1607160
PAGE	1 of 1
DISPOSAL	By Lab or Return to Client

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	8015 DRO	8270 PAH	8260	
(1)	T54964 Bell TB	oil phase	24 June 16	08:18	1	✓		X	X		
(2)	" "	H2O	24 June 16	08:16						X	Emptied H2O volume
											Separate oil + water phases

*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:	QC PACKAGE (check below)	
analyze oil phase analyze diluted H2O phase after separating	✓	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	11 July 16	1335
RECEIVED BY	C Trimble	C Trimble	7-11-16	1335
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: COGCC Workorder No: 1607160

Project Manager: AW Initials: CDT Date: 7-11-16

1. Does this project require any special handling in addition to standard ALS procedures?		YES	(NO)
2. Are custody seals on shipping containers intact?	(NONE)	YES	NO
3. Are Custody seals on sample containers intact?	(NONE)	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		(YES)	NO
5. Are the COC and bottle labels complete and legible?		(YES)	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		(YES)	NO
7. Were airbills / shipping documents present and/or removable?	(DROP OFF)	YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	(N/A)	YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	(N/A)	YES	NO
10. Is there sufficient sample for the requested analyses?		YES	(NO)
11. Were all samples placed in the proper containers for the requested analyses?		(YES)	NO
12. Are all samples within holding times for the requested analyses?		(YES)	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		(YES)	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____ > green pea	(N/A)	YES	NO
15. Do any water samples contain sediment? Amount Amount of sediment: ____ dusting ____ moderate ____ heavy	N/A	YES	(NO)
16. Were the samples shipped on ice?		YES	(NO)
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	RAD ONLY	YES	(NO)

Cooler #:	1							
Temperature (°C):	Amb							
No. of custody seals on cooler:	0							
DOT Survey/ Acceptance Information: External µR/hr reading:	NA							
Background µR/hr reading:	NA							

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

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

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

Project Manager Signature / Date: [signature] 7/24/16

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

GC/MS Semi-volatiles

Method SW8270D

Method Blank

Lab Name: ALS -- Fort Collins
Work Order Number: 1607160
Client Name: COGCC
ClientProject ID: Charles C Bell TB

Lab ID: EX160728-4MB

Sample Matrix: OIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 28-Jul-16
Date Analyzed: 30-Jul-16

Prep Batch: EX160728-4
QCBatchID: EX160728-4-1
Run ID: SV160730-4
Cleanup: NONE
Basis: N/A
File Name: S04523

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

CASNO	Target Analyte	DF	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
91-20-3	NAPHTHALENE	1	100000	100000	100000	U	
91-57-6	2-METHYLNAPHTHALENE	1	100000	100000	100000	U	
208-96-8	ACENAPHTHYLENE	1	100000	100000	100000	U	
83-32-9	ACENAPHTHENE	1	100000	100000	100000	U	
86-73-7	FLUORENE	1	100000	100000	100000	U	
85-01-8	PHENANTHRENE	1	100000	100000	100000	U	
120-12-7	ANTHRACENE	1	100000	100000	100000	U	
206-44-0	FLUORANTHENE	1	100000	100000	100000	U	
129-00-0	PYRENE	1	100000	100000	100000	U	
56-55-3	BENZO(A)ANTHRACENE	1	100000	100000	100000	U	
218-01-9	CHRYSENE	1	100000	100000	100000	U	
205-99-2	BENZO(B)FLUORANTHENE	1	100000	100000	100000	U	
207-08-9	BENZO(K)FLUORANTHENE	1	100000	100000	100000	U	
50-32-8	BENZO(A)PYRENE	1	100000	100000	100000	U	
193-39-5	INDENO(1,2,3-CD)PYRENE	1	100000	100000	100000	U	
53-70-3	DIBENZO(A,H)ANTHRACENE	1	100000	100000	100000	U	
191-24-2	BENZO(G,H,I)PERYLENE	1	100000	100000	100000	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
321-60-8	2-FLUOROBIPHENYL	560000	*	500000	112	41 - 111
4165-60-0	NITROBENZENE-D5	553000	*	500000	111	32 - 110
1718-51-0	TERPHENYL-D14	568000		500000	114	23 - 159

Data Package ID: *SV1607160-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS -- Fort Collins
Work Order Number: 1607160
Client Name: COGCC
ClientProject ID: Charles C Bell TB

Field ID: 754964 Bell TB
Lab ID: 1607160-1

Sample Matrix: OIL
% Moisture: N/A
Date Collected: 24-Jun-16
Date Extracted: 28-Jul-16
Date Analyzed: 30-Jul-16
Prep Method: SW3580 Rev A

Prep Batch: EX160728-4
QCBatchID: EX160728-4-1
Run ID: SV160730-4
Cleanup: NONE
Basis: As Received
File Name: S04527

Analyst: Tyler Knaebel
Sample Aliquot: 0.5195 g
Final Volume: 10 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
91-20-3	NAPHTHALENE	1	300000	190000	190000		
91-57-6	2-METHYLNAPHTHALENE	1	840000	190000	190000		
208-96-8	ACENAPHTHYLENE	1	190000	190000	190000	U	
83-32-9	ACENAPHTHENE	1	190000	190000	190000	U	
86-73-7	FLUORENE	1	190000	190000	190000	U	
85-01-8	PHENANTHRENE	1	190000	190000	190000	U	
120-12-7	ANTHRACENE	1	190000	190000	190000	U	
206-44-0	FLUORANTHENE	1	190000	190000	190000	U	
129-00-0	PYRENE	1	190000	190000	190000	U	
56-55-3	BENZO(A)ANTHRACENE	1	190000	190000	190000	U	
218-01-9	CHRYSENE	1	190000	190000	190000	U	
205-99-2	BENZO(B)FLUORANTHENE	1	190000	190000	190000	U	
207-08-9	BENZO(K)FLUORANTHENE	1	190000	190000	190000	U	
50-32-8	BENZO(A)PYRENE	1	190000	190000	190000	U	
193-39-5	INDENO(1,2,3-CD)PYRENE	1	190000	190000	190000	U	
53-70-3	DIBENZO(A,H)ANTHRACENE	1	190000	190000	190000	U	
191-24-2	BENZO(G,H,I)PERYLENE	1	190000	190000	190000	U	

Data Package ID: *SV1607160-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS -- Fort Collins
Work Order Number: 1607160
Client Name: COGCC
ClientProject ID: Charles C Bell TB

Field ID: 754964 Bell TB
Lab ID: 1607160-1

Sample Matrix: OIL
% Moisture: N/A
Date Collected: 24-Jun-16
Date Extracted: 28-Jul-16
Date Analyzed: 30-Jul-16
Prep Method: SW3580 Rev A

Prep Batch: EX160728-4
QCBatchID: EX160728-4-1
Run ID: SV160730-4
Cleanup: NONE
Basis: As Received
File Name: S04527

Analyst: Tyler Knaebel
Sample Aliquot: 0.5195 g
Final Volume: 10 ml
Result Units: UG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
321-60-8	2-FLUOROBIPHENYL	1000000		962000	104	41 - 111
4165-60-0	NITROBENZENE-D5	1360000	*	962000	141	32 - 110
1718-51-0	TERPHENYL-D14	1010000		962000	105	23 - 159

Data Package ID: *SV1607160-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS -- Fort Collins
Work Order Number: 1607160
Client Name: COGCC
ClientProject ID: Charles C Bell TB

Lab ID: EX160728-4LCS

Sample Matrix: OIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 07/28/2016
Date Analyzed: 07/30/2016
Prep Method: SW3580A

Prep Batch: EX160728-4
QCBatchID: EX160728-4-1
Run ID: SV160730-4
Cleanup: NONE
Basis: N/A
File Name: S04524

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

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
91-20-3	NAPHTHALENE	500000	459000	100000		92	51 - 100%
91-57-6	2-METHYLNAPHTHALENE	500000	482000	100000		96	51 - 100%
208-96-8	ACENAPHTHYLENE	500000	475000	100000		95	60 - 109%
83-32-9	ACENAPHTHENE	500000	467000	100000		93	38 - 103%
86-73-7	FLUORENE	500000	459000	100000		92	65 - 106%
85-01-8	PHENANTHRENE	500000	487000	100000		97	66 - 107%
120-12-7	ANTHRACENE	500000	476000	100000		95	65 - 108%
206-44-0	FLUORANTHENE	500000	490000	100000		98	64 - 109%
129-00-0	PYRENE	500000	459000	100000		92	48 - 118%
56-55-3	BENZO(A)ANTHRACENE	500000	458000	100000		92	64 - 107%
218-01-9	CHRYSENE	500000	491000	100000		98	65 - 108%
205-99-2	BENZO(B)FLUORANTHENE	500000	462000	100000		92	60 - 111%
207-08-9	BENZO(K)FLUORANTHENE	500000	537000	100000		107	62 - 111%
50-32-8	BENZO(A)PYRENE	500000	493000	100000		99	63 - 109%
193-39-5	INDENO(1,2,3-CD)PYRENE	500000	498000	100000		100	55 - 117%
53-70-3	DIBENZO(A,H)ANTHRACENE	500000	493000	100000		99	55 - 120%
191-24-2	BENZO(G,H,I)PERYLENE	500000	499000	100000		100	37 - 123%

Data Package ID: *SV1607160-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS -- Fort Collins
Work Order Number: 1607160
Client Name: COGCC
ClientProject ID: Charles C Bell TB

Lab ID: EX160728-4LCSD

Sample Matrix: OIL
% Moisture: N/A
Date Collected: N/A
Date Extracted: 07/28/2016
Date Analyzed: 07/30/2016
Prep Method: SW3580A

Prep Batch: EX160728-4
QCBatchID: EX160728-4-1
Run ID: SV160730-4
Cleanup: NONE
Basis: N/A
File Name: S04525

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

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
91-20-3	NAPHTHALENE	500000	470000	100000		94	30	2
91-57-6	2-METHYLNAPHTHALENE	500000	489000	100000		98	30	1
208-96-8	ACENAPHTHYLENE	500000	484000	100000		97	30	2
83-32-9	ACENAPHTHENE	500000	480000	100000		96	30	3
86-73-7	FLUORENE	500000	480000	100000		96	30	4
85-01-8	PHENANTHRENE	500000	499000	100000		100	30	3
120-12-7	ANTHRACENE	500000	485000	100000		97	30	2
206-44-0	FLUORANTHENE	500000	513000	100000		103	30	5
129-00-0	PYRENE	500000	470000	100000		94	30	2
56-55-3	BENZO(A)ANTHRACENE	500000	475000	100000		95	30	4
218-01-9	CHRYSENE	500000	503000	100000		101	30	2
205-99-2	BENZO(B)FLUORANTHENE	500000	436000	100000		87	30	6
207-08-9	BENZO(K)FLUORANTHENE	500000	502000	100000		100	30	7
50-32-8	BENZO(A)PYRENE	500000	494000	100000		99	30	0
193-39-5	INDENO(1,2,3-CD)PYRENE	500000	515000	100000		103	30	3
53-70-3	DIBENZO(A,H)ANTHRACENE	500000	516000	100000		103	30	5
191-24-2	BENZO(G,H,I)PERYLENE	500000	507000	100000		101	30	2

Surrogate Recovery LCS/LCSD

CASNO	Target Analyte	Spike Added	LCS % Rec.	LCS Flag	LCSD % Rec.	LCSD Flag	Control Limits
321-60-8	2-FLUOROBIPHENYL	500000	113	*	111		41 - 111
4165-60-0	NITROBENZENE-D5	500000	109		110		32 - 110
1718-51-0	TERPHENYL-D14	500000	102		103		23 - 159

Data Package ID: *SV1607160-1*

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\073016\
Data File : S04517.D
Acq On : 30 Jul 2016 8:24
Operator : TK HPSV4 sn #: CV11451177
Sample : SV160730-4CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 30 09:37:08 2016
Quant Method : C:\msdchem\1\methods\062516.M
Quant Title : GC-MS Semivolatiles SW8270D SOP #506
QLast Update : Sat Jul 30 09:37:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.304	152	163689	40.00	ng/uL	0.00
24) Naphthalene-d8	5.487	136	639024	40.00	ng/uL	0.00
38) Acenaphthene-d10	7.045	164	374192	40.00	ng/uL	0.00
67) Phenanthrene-d10	8.328	188	768577	40.00	ng/uL	0.00
76) Chrysene-d12	10.598	240	805108	40.00	ng/uL	0.00
87) Perylene-d12	11.969	264	640675	40.00	ng/uL	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.075	112	205891	43.43	ng/uL	0.00
Spiked Amount 75.000	Range 46 - 105		Recovery = 57.91%			
6) Phenol-d5	3.899	99	270384	42.92	ng/uL	0.00
Spiked Amount 75.000	Range 50 - 109		Recovery = 57.23%			
10) 2-Chlorophenol-d4	4.093	132	225109	41.18	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery = 54.91%			
14) 1,2-Dichlorobenzene-d4	4.304	150	289498	43.84	ng/uL	0.00
Spiked Amount 75.000	Range 16 - 110		Recovery = 58.45%			
23) Nitrobenzene-d5	4.810	82	359176	47.80	ng/uL	0.00
Spiked Amount 50.000	Range 53 - 111		Recovery = 95.60%			
42) 2-Fluorobiphenyl	6.428	172	566847	38.15	ng/uL	0.00
Spiked Amount 50.000	Range 55 - 108		Recovery = 76.30%			
68) 2,4,6-Tribromophenol	7.722	330	71619	34.72	ng/uL	0.00
Spiked Amount 75.000	Range 42 - 117		Recovery = 46.29%			
85) p-Terphenyl-d14	9.651	244	665459	36.04	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 139		Recovery = 72.08%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.916	88	81692	49.46	ng/uL	99
3) n-Nitrosodimethylamine	2.081	74	136459	52.14	ng/uL	98
4) Pyridine	2.134	79	230270	47.89	ng/uL	99
7) Phenol	3.910	94	293044	44.38	ng/uL	90
8) Aniline	3.981	93	359379	44.71	ng/uL	96
9) Bis(2-chloroethyl)ether	4.010	93	207636	43.71	ng/uL	96
11) 2-Chlorophenol	4.104	128	216099	38.91	ng/uL#	88
12) 1,3-Dichlorobenzene	4.257	146	256316	40.53	ng/uL	98
13) 1,4-Dichlorobenzene	4.316	146	265081	41.14	ng/uL	91
15) Benzyl alcohol	4.399	79	256310	49.20	ng/uL	94
16) 1,2-Dichlorobenzene	4.469	146	247180	40.66	ng/uL	92
17) 2-Methylphenol	4.487	108	211747	42.15	ng/uL	93
18) Bis(2-chloroisopropyl)...	4.522	45	155520	45.17	ng/uL	94
19) 3+4-Methylphenol	4.628	107	250791	42.41	ng/uL	93
20) n-Nitroso-di-n-propyla...	4.640	70	200665	47.32	ng/uL#	96
21) Hexachloroethane	4.787	117	116879	44.54	ng/uL	97
22) Nitrobenzene	4.828	123	111717	41.08	ng/uL	75
25) Isophorone	5.034	82	518562	42.90	ng/uL	95
26) 2,4-Dimethylphenol	5.128	122	218280	38.39	ng/uL	93
27) 2-Nitrophenol	5.128	107	287352	42.08	ng/uL	93
28) Benzoic acid	5.193	105	33321	35.79	ng/uL	91
29) Bis(2-chloroethoxy)met...	5.210	93	257618	41.13	ng/uL	95
30) 2,4-dichlorophenol	5.340	162	202692	39.84	ng/uL	93
31) 1,2,4-Trichlorobenzene	5.428	180	237025	40.34	ng/uL	98
32) Naphthalene	5.504	128	685570	39.01	ng/uL	99
33) 4-Chloroaniline	5.528	65	114811	47.48	ng/uL	77
34) Hexachlorobutadiene	5.604	225	157369	41.90	ng/uL	99

Tue 7/30/16

Data Path : C:\msdchem\1\data\2016\073016\
Data File : S04517.D
Acq On : 30 Jul 2016 8:24
Operator : TK HPSV4 sn #: CV11451177
Sample : SV160730-4CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 30 09:37:08 2016
Quant Method : C:\msdchem\1\methods\062516.M
Quant Title : GC-MS Semivolatiles SW8270D SOP #506
QLast Update : Sat Jul 30 09:37:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
35) 4-chloro-3-methylphenol	5.945	107	237507	42.39 ng/uL	89
36) 2-Methylnaphthalene	6.122	142	485913	38.81 ng/uL	96
37) 1-Methylnaphthalene	6.210	142	440440	39.38 ng/uL	97
39) Hexachlorocyclopentadiene	6.263	237	103315	32.33 ng/uL	99
40) 2,4,6-Trichlorophenol	6.363	196	156945	37.46 ng/uL	96
41) 2,4,5-Trichlorophenol	6.393	196	160003	37.20 ng/uL	98
43) 2-Chloronaphthalene	6.557	162	465902	37.93 ng/uL	98
44) 2-Nitroaniline	6.628	138	140031	35.86 ng/uL	81
45) 1,4-Dinitrobenzene	6.734	75	127191	42.31 ng/uL	92
46) Dimethylphthalate	6.757	163	568222	38.69 ng/uL	90
47) 1,3-Dinitrobenzene	6.804	168	94379	37.24 ng/uL	72
48) 2,6-Dinitrotoluene	6.822	165	128260	37.01 ng/uL#	75
49) 1,2-Dinitrobenzene	6.881	168	62214	36.77 ng/uL	78
50) Acenaphthylene	6.922	152	695364	36.38 ng/uL#	100
51) 3-Nitroaniline	6.981	92	179603	41.16 ng/uL	92
52) 2,4-Dinitrophenol	7.069	184	55483	39.19 ng/uL#	72
53) Acenaphthene	7.069	153	505378	37.18 ng/uL	99
54) 4-Nitrophenol	7.098	139	92621	35.39 ng/uL#	75
55) 2,4-Dinitrotoluene	7.175	165	167005	37.14 ng/uL#	83
56) Dibenzofuran	7.216	168	695300	38.12 ng/uL	97
57) 2,3,5,6-Tetrachlorophenol	7.281	232	122449	38.45 ng/uL	97
58) 2,3,4,6-Tetrachlorophenol	7.316	232	134613	39.13 ng/uL	97
59) Diethylphthalate	7.351	149	584053	39.44 ng/uL	97
60) 4-Chlorophenyl phenyl ...	7.487	204	301758	38.59 ng/uL	96
61) 4-Nitroaniline	7.510	138	146282	38.31 ng/uL#	81
62) Fluorene	7.516	166	597653	38.03 ng/uL	98
63) 4,6-Dinitro-2-methylph...	7.534	198	84761	38.53 ng/uL#	92
64) n-Nitrosodiphenylamine	7.581	169	489648	37.37 ng/uL#	100
65) Azobenzene	7.622	77	679411	45.19 ng/uL#	94
66) 4-Bromophenyl phenyl e...	7.910	248	177582	36.07 ng/uL#	89
69) Hexachlorobenzene	8.004	284	185115	34.38 ng/uL	95
70) Pentachlorophenol	8.157	266	57063	42.81 ng/uL	97
71) Phenanthrene	8.345	178	854279	38.40 ng/uL	99
72) Anthracene	8.392	178	826701	37.80 ng/uL	99
73) Carbazole	8.510	167	758139	38.07 ng/uL	99
74) Di-n-butylphthalate	8.739	149	878877	38.05 ng/uL	100
75) Fluoranthene	9.375	202	955582	38.97 ng/uL	99
77) Benzidine	9.445	184	554245	35.42 ng/uL	100
78) Pyrene	9.575	202	962679	38.37 ng/uL	99
79) Butylbenzylphthalate	10.028	149	385880	37.49 ng/uL	87
80) Bis(2-ethylhexyl) adipate	10.045	129	332898	37.03 ng/uL	100
81) Bis(2-ethylhexyl)phtha...	10.480	149	522771	39.36 ng/uL	96
82) 3,3'-Dichlorobenzidine	10.528	252	333113	36.92 ng/uL	99
83) Benzo[a]anthracene	10.592	228	929342	38.46 ng/uL	99
84) Chrysene	10.622	228	786656	37.44 ng/uL	99
86) Di-n-octylphthalate	11.016	149	788940	38.52 ng/uL	94
88) Benzo[b]fluoranthene	11.563	252	860557	39.32 ng/uL	95
89) Benzo[k]fluoranthene	11.586	252	746229	39.12 ng/uL	96
90) Benzo[a]pyrene	11.910	252	745964	38.95 ng/uL	99
91) Dibenzo[a,h]anthracene	13.298	278	714768	41.12 ng/uL	99
92) Indeno(1,2,3-cd)pyrene	13.304	276	829657	40.56 ng/uL	98
93) Benzo[g,h,i]perylene	13.716	276	646512	39.64 ng/uL	98

Data Path : C:\msdchem\1\data\2016\073016\
Data File : S04517.D
Acq On : 30 Jul 2016 8:24
Operator : TK HPSV4 sn #: CV11451177
Sample : SV160730-4CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 30 09:37:08 2016
Quant Method : C:\msdchem\1\methods\062516.M
Quant Title : GC-MS Semivolatiles SW8270D SOP #506
QLast Update : Sat Jul 30 09:37:00 2016
Response via : Initial Calibration

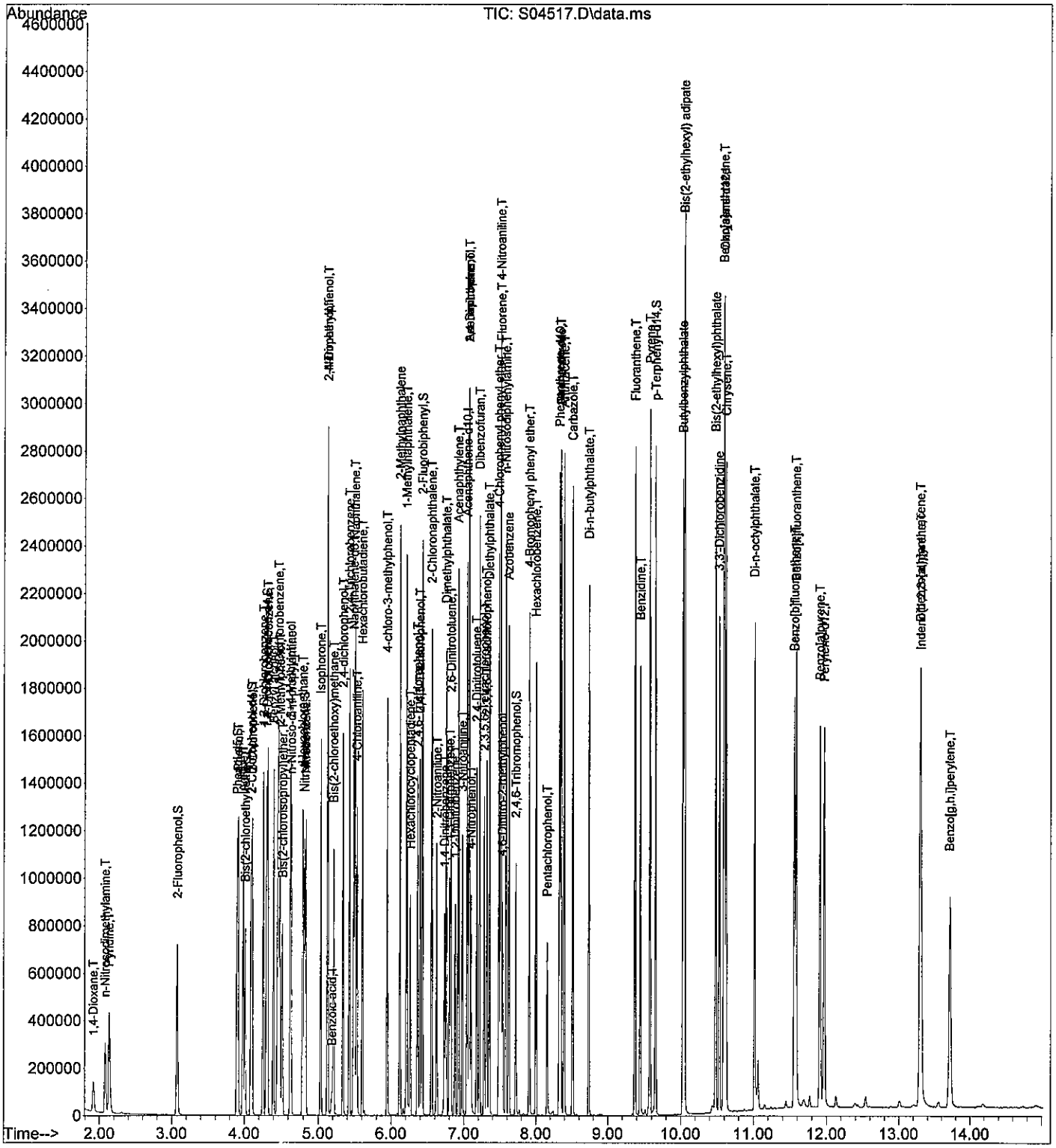
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\073016\
Data File : S04517.D
Acq On : 30 Jul 2016 8:24
Operator : TK HPSV4 sn #: CV11451177
Sample : SV160730-4CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 30 09:37:08 2016
Quant Method : C:\msdchem\1\methods\062516.M
Quant Title : GC-MS Semivolatiles SW8270D SOP #506
QLast Update : Sat Jul 30 09:37:00 2016
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2016\073016\
Data File : S04523.D
Acq On : 30 Jul 2016 11:55
Operator : TK HPSV4 sn #: CV11451177
Sample : EX160728-4MB
Misc : EX160728-4 SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 30 12:10:48 2016
Quant Method : C:\msdchem\1\methods\062516.M
Quant Title : GC-MS Semivolatiles SW8270D SOP #506
QLast Update : Sat Jul 30 09:37:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.304	152	117430	40.00	ng/uL	0.00
24) Naphthalene-d8	5.481	136	466108	40.00	ng/uL	0.00
38) Acenaphthene-d10	7.040	164	263805	40.00	ng/uL	0.00
67) Phenanthrene-d10	8.328	188	576440	40.00	ng/uL	0.00
76) Chrysene-d12	10.598	240	587148	40.00	ng/uL	0.00
87) Perylene-d12	11.969	264	489376	40.00	ng/uL	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.069	112	236822	69.63	ng/uL	0.00
Spiked Amount 75.000	Range 46 - 105		Recovery = 92.84%			
6) Phenol-d5	3.899	99	359074	79.45	ng/uL	0.00
Spiked Amount 75.000	Range 50 - 109		Recovery = 105.93%			
10) 2-Chlorophenol-d4	4.087	132	299279	76.31	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery = 101.75%			
14) 1,2-Dichlorobenzene-d4	4.299	150	185555	39.17	ng/uL	0.00
Spiked Amount 75.000	Range 16 - 110		Recovery = 52.23%			
23) Nitrobenzene-d5	4.810	82	298196	55.32	ng/uL	0.00
Spiked Amount 50.000	Range 53 - 111		Recovery = 110.64%			
42) 2-Fluorobiphenyl	6.428	172	586311	55.97	ng/uL	0.00
Spiked Amount 50.000	Range 55 - 108		Recovery = 111.94%#			
68) 2,4,6-Tribromophenol	7.722	330	70315	43.97	ng/uL	0.00
Spiked Amount 75.000	Range 42 - 117		Recovery = 58.63%			
85) p-Terphenyl-d14	9.651	244	764691	56.78	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 139		Recovery = 113.56%			
Target Compounds						Qvalue

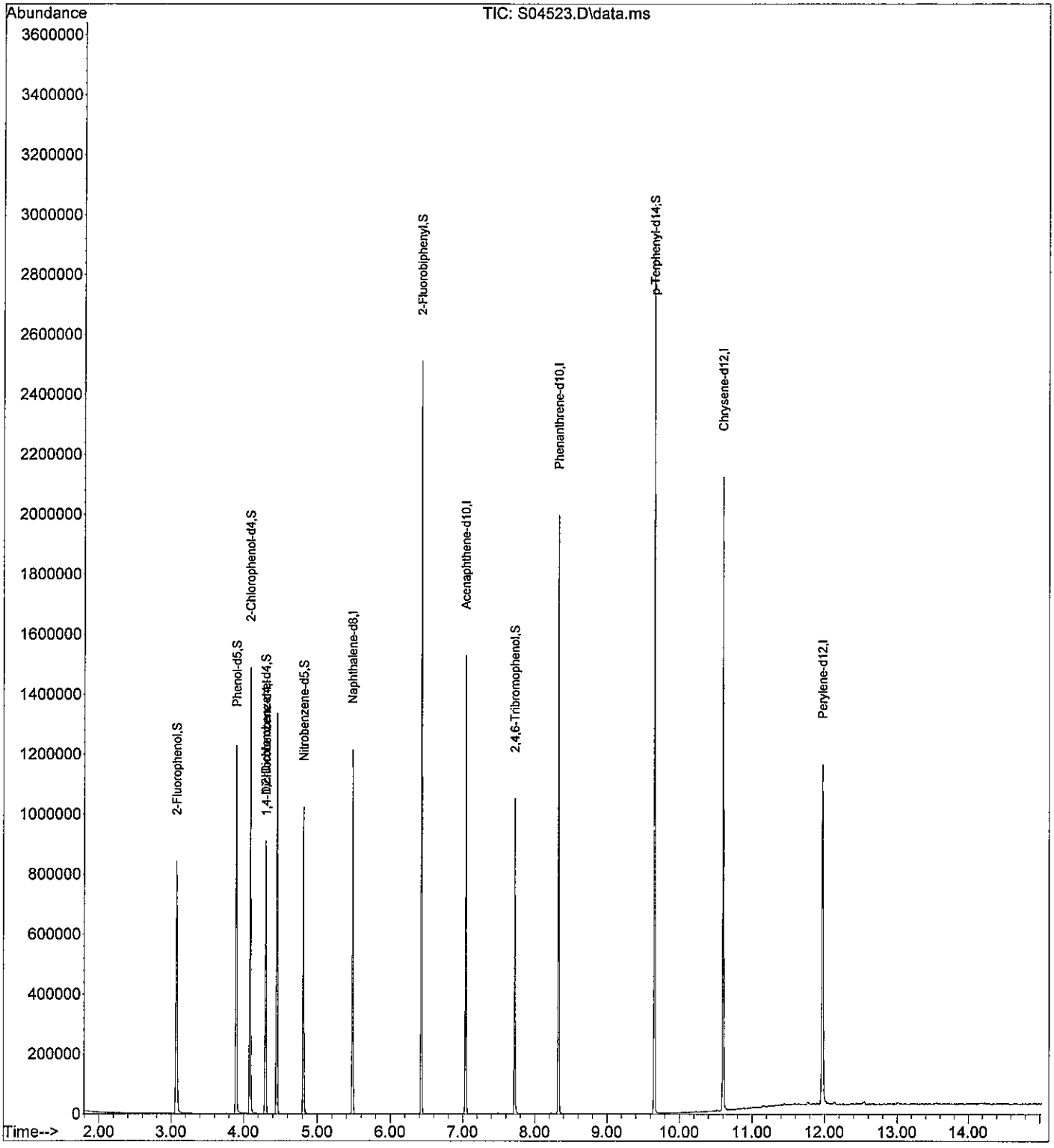
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Tw 7/30/16

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2016\073016\
Data File : S04523.D
Acq On : 30 Jul 2016 11:55
Operator : TK HPSV4 sn #: CV11451177
Sample : EX160728-4MB
Misc : EX160728-4 SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 30 12:10:48 2016
Quant Method : C:\msdchem\1\methods\062516.M
Quant Title : GC-MS Semivolatiles SW8270D SOP #506
QLast Update : Sat Jul 30 09:37:00 2016
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2016\073016\
Data File : S04524.D
Acq On : 30 Jul 2016 12:17
Operator : TK HPSV4 sn #: CV11451177
Sample : EX160728-4LCS
Misc : EX160728-4 SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 30 12:34:08 2016
Quant Method : C:\msdchem\1\methods\062516.M
Quant Title : GC-MS Semivolatiles SW8270D SOP #506
QLast Update : Sat Jul 30 09:37:00 2016
Response via : Initial Calibration

Compound		R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4		4.304	152	111544	40.00	ng/uL	0.00
24) Naphthalene-d8		5.487	136	442440	40.00	ng/uL	0.00
38) Acenaphthene-d10		7.045	164	246147	40.00	ng/uL	0.00
67) Phenanthrene-d10		8.328	188	520785	40.00	ng/uL	0.00
76) Chrysene-d12		10.604	240	590154	40.00	ng/uL	0.00
87) Perylene-d12		11.969	264	458606	40.00	ng/uL	0.00
System Monitoring Compounds							
5) 2-Fluorophenol		3.069	112	242808	75.16	ng/uL	0.00
Spiked Amount	75.000	Range 16 - 106		Recovery =	100.21%		
6) Phenol-d5		3.893	99	343238	79.95	ng/uL	0.00
Spiked Amount	75.000	Range 31 - 105		Recovery =	106.60%#		
10) 2-Chlorophenol-d4		4.087	132	293656	78.83	ng/uL	0.00
Spiked Amount	75.000	Range 20 - 130		Recovery =	105.11%		
14) 1,2-Dichlorobenzene-d4		4.298	150	174759	38.84	ng/uL	0.00
Spiked Amount	75.000	Range 20 - 130		Recovery =	51.79%		
23) Nitrobenzene-d5		4.810	82	278096	54.31	ng/uL	0.00
Spiked Amount	50.000	Range 32 - 110		Recovery =	108.62%		
42) 2-Fluorobiphenyl		6.428	172	550924	56.37	ng/uL	0.00
Spiked Amount	50.000	Range 41 - 111		Recovery =	112.74%#		
68) 2,4,6-Tribromophenol		7.722	330	79223	53.19	ng/uL	0.00
Spiked Amount	75.000	Range 19 - 119		Recovery =	70.92%		
85) p-Terphenyl-d14		9.657	244	691218	51.07	ng/uL	0.00
Spiked Amount	50.000	Range 23 - 159		Recovery =	102.14%		
Target Compounds							Qvalue
32) Naphthalene		5.504	128	558710	45.92	ng/uL	99
36) 2-Methylnaphthalene		6.122	142	418096	48.23	ng/uL	97
37) 1-Methylnaphthalene		6.210	142	352686	45.54	ng/uL	97
50) Acenaphthylene		6.922	152	597209	47.49	ng/uL#	100
53) Acenaphthene		7.069	153	417791	46.72	ng/uL	95
61) 4-Nitroaniline		7.516	138	7060	3.81	ng/uL#	23
62) Fluorene		7.516	166	475019	45.94	ng/uL	98
71) Phenanthrene		8.351	178	733591	48.66	ng/uL	99
72) Anthracene		8.392	178	705417	47.60	ng/uL	99
75) Fluoranthene		9.375	202	813560	48.97	ng/uL	100
78) Pyrene		9.575	202	843500	45.86	ng/uL	99
83) Benzo[a]anthracene		10.592	228	811048	45.79	ng/uL	99
84) Chrysene		10.627	228	756829	49.14	ng/uL	100
88) Benzo[b]fluoranthene		11.563	252	723570	46.18	ng/uL	96
89) Benzo[k]fluoranthene		11.586	252	733406	53.71	ng/uL	95
90) Benzo[a]pyrene		11.916	252	676120	49.31	ng/uL	99
91) Dibenzo[a,h]anthracene		13.298	278	613102	49.28	ng/uL	98
92) Indeno(1,2,3-cd)pyrene		13.310	276	728772	49.77	ng/uL	98
93) Benzo[g,h,i]perylene		13.721	276	582506	49.89	ng/uL	96

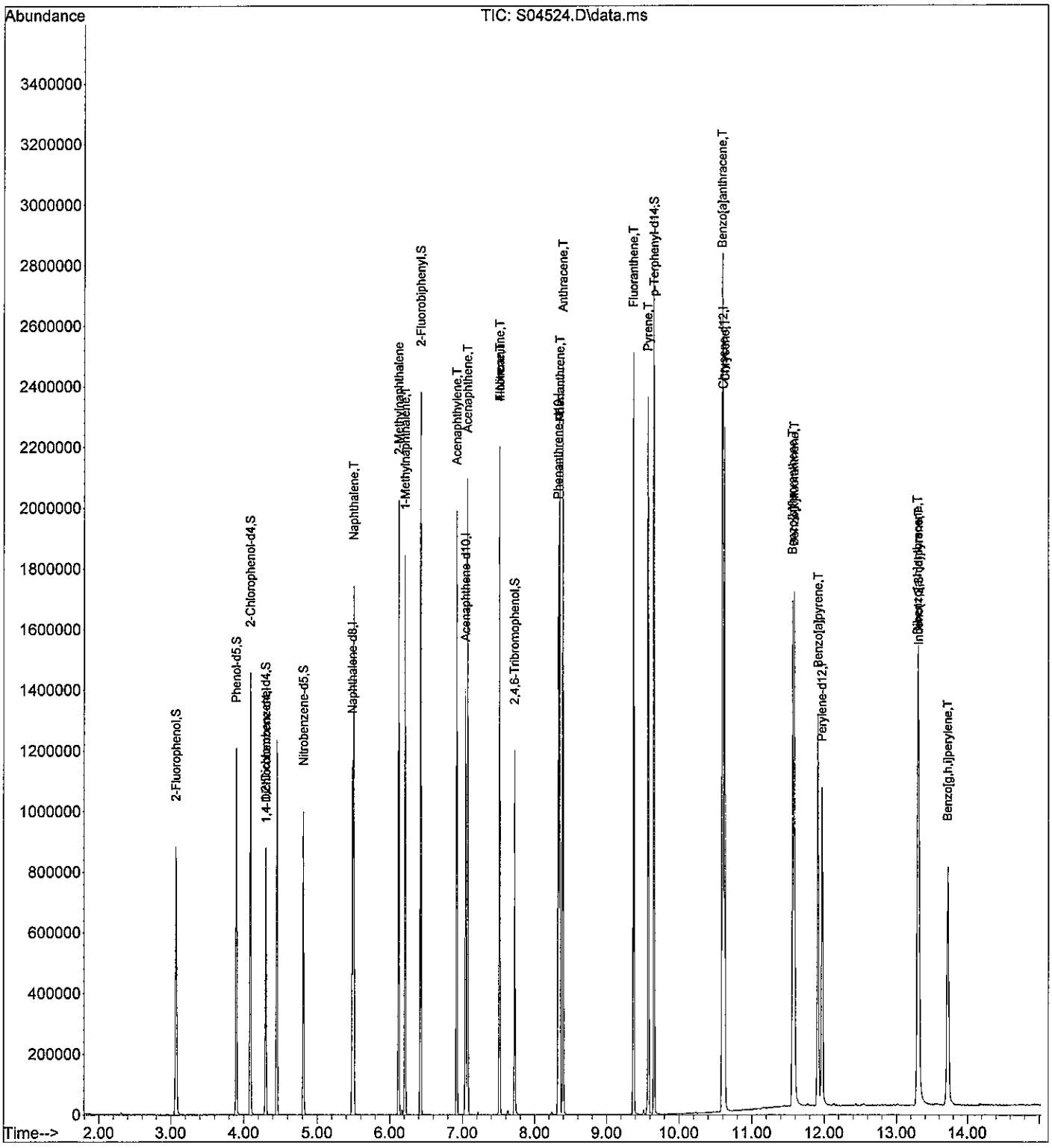
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7/30/16

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2016\073016\
Data File : S04524.D
Acq On : 30 Jul 2016 12:17
Operator : TK HPSV4 sn #: CV11451177
Sample : EX160728-4LCS
Misc : EX160728-4 SOIL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 30 12:34:08 2016
Quant Method : C:\msdchem\1\methods\062516.M
Quant Title : GC-MS Semivolatiles SW8270D SOP #506
QLast Update : Sat Jul 30 09:37:00 2016
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\2016\073016\
Data File : S04525.D
Acq On : 30 Jul 2016 12:39
Operator : TK HPSV4 sn #: CV11451177
Sample : EX160728-4LCSD
Misc : EX160728-4 SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 30 12:55:17 2016
Quant Method : C:\msdchem\1\methods\062516.M
Quant Title : GC-MS Semivolatiles SW8270D SOP #506
QLast Update : Sat Jul 30 09:37:00 2016
Response via : Initial Calibration

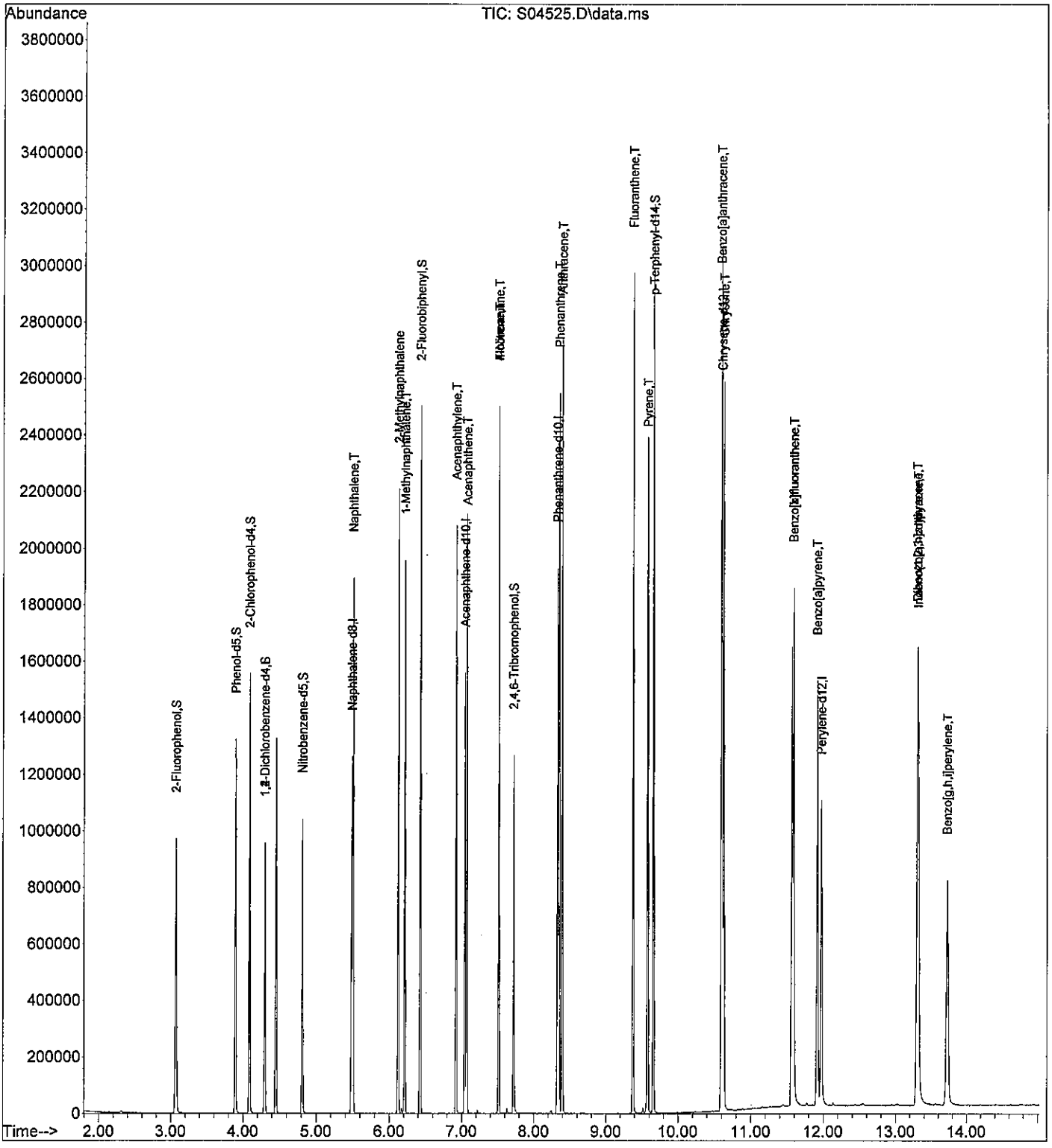
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.299	152	116081	40.00	ng/uL	0.00
24) Naphthalene-d8	5.487	136	467485	40.00	ng/uL	0.00
38) Acenaphthene-d10	7.045	164	258988	40.00	ng/uL	0.00
67) Phenanthrene-d10	8.328	188	552570	40.00	ng/uL	0.00
76) Chrysene-d12	10.604	240	618741	40.00	ng/uL	0.00
87) Perylene-d12	11.975	264	476248	40.00	ng/uL	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.069	112	260472	77.47	ng/uL	0.00
Spiked Amount 75.000	Range 46 - 105		Recovery =	103.29%		
6) Phenol-d5	3.893	99	361103	80.83	ng/uL	0.00
Spiked Amount 75.000	Range 50 - 109		Recovery =	107.77%		
10) 2-Chlorophenol-d4	4.087	132	303141	78.19	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery =	104.25%		
14) 1,2-Dichlorobenzene-d4	4.299	150	180238	38.49	ng/uL	0.00
Spiked Amount 75.000	Range 16 - 110		Recovery =	51.32%		
23) Nitrobenzene-d5	4.810	82	291870	54.77	ng/uL	0.00
Spiked Amount 50.000	Range 53 - 111		Recovery =	109.54%		
42) 2-Fluorobiphenyl	6.428	172	570209	55.45	ng/uL	0.00
Spiked Amount 50.000	Range 55 - 108		Recovery =	110.90%#		
68) 2,4,6-Tribromophenol	7.722	330	88127	55.38	ng/uL	0.00
Spiked Amount 75.000	Range 42 - 117		Recovery =	73.84%		
85) p-Terphenyl-d14	9.657	244	728871	51.36	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 139		Recovery =	102.72%		
Target Compounds						Qvalue
32) Naphthalene	5.504	128	604676	47.04	ng/uL	99
36) 2-Methylnaphthalene	6.122	142	447723	48.89	ng/uL	97
37) 1-Methylnaphthalene	6.210	142	385740	47.14	ng/uL	98
50) Acenaphthylene	6.922	152	640189	48.39	ng/uL#	100
53) Acenaphthene	7.075	153	451883	48.03	ng/uL	95
61) 4-Nitroaniline	7.516	138	8939	4.45	ng/uL#	20
62) Fluorene	7.516	166	521653	47.95	ng/uL	98
71) Phenanthrene	8.351	178	798357	49.91	ng/uL	99
72) Anthracene	8.392	178	761900	48.46	ng/uL	99
75) Fluoranthene	9.375	202	903871	51.27	ng/uL	99
78) Pyrene	9.581	202	905868	46.98	ng/uL	100
83) Benzo[a]anthracene	10.592	228	882353	47.52	ng/uL	99
84) Chrysene	10.628	228	811732	50.27	ng/uL	99
88) Benzo[b]fluoranthene	11.592	252	709451	43.60	ng/uL	96
89) Benzo[k]fluoranthene	11.592	252	712327	50.23	ng/uL	95
90) Benzo[a]pyrene	11.916	252	702981	49.37	ng/uL	98
91) Dibenzo[a,h]anthracene	13.304	278	667283	51.64	ng/uL	97
92) Indeno(1,2,3-cd)pyrene	13.310	276	783237	51.51	ng/uL	98
93) Benzo[g,h,i]perylene	13.727	276	614932	50.72	ng/uL	97

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

7/30/16

Data Path : C:\msdchem\1\data\2016\073016\
Data File : S04525.D
Acq On : 30 Jul 2016 12:39
Operator : TK HPSV4 sn #: CV11451177
Sample : EX160728-4LCSD
Misc : EX160728-4 SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 30 12:55:17 2016
Quant Method : C:\msdchem\1\methods\062516.M
Quant Title : GC-MS Semivolatiles SW8270D SOP #506
QLast Update : Sat Jul 30 09:37:00 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\073016\
Data File : S04527.D
Acq On : 30 Jul 2016 13:27
Operator : TK HPSV4 sn #: CV11451177
Sample : 1607160-1
Misc : EX160728-4 SOIL (OIL)
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 30 13:47:15 2016
Quant Method : C:\msdchem\1\methods\062516.M
Quant Title : GC-MS Semivolatiles SW8270D SOP #506
QLast Update : Sat Jul 30 09:37:00 2016
Response via : Initial Calibration

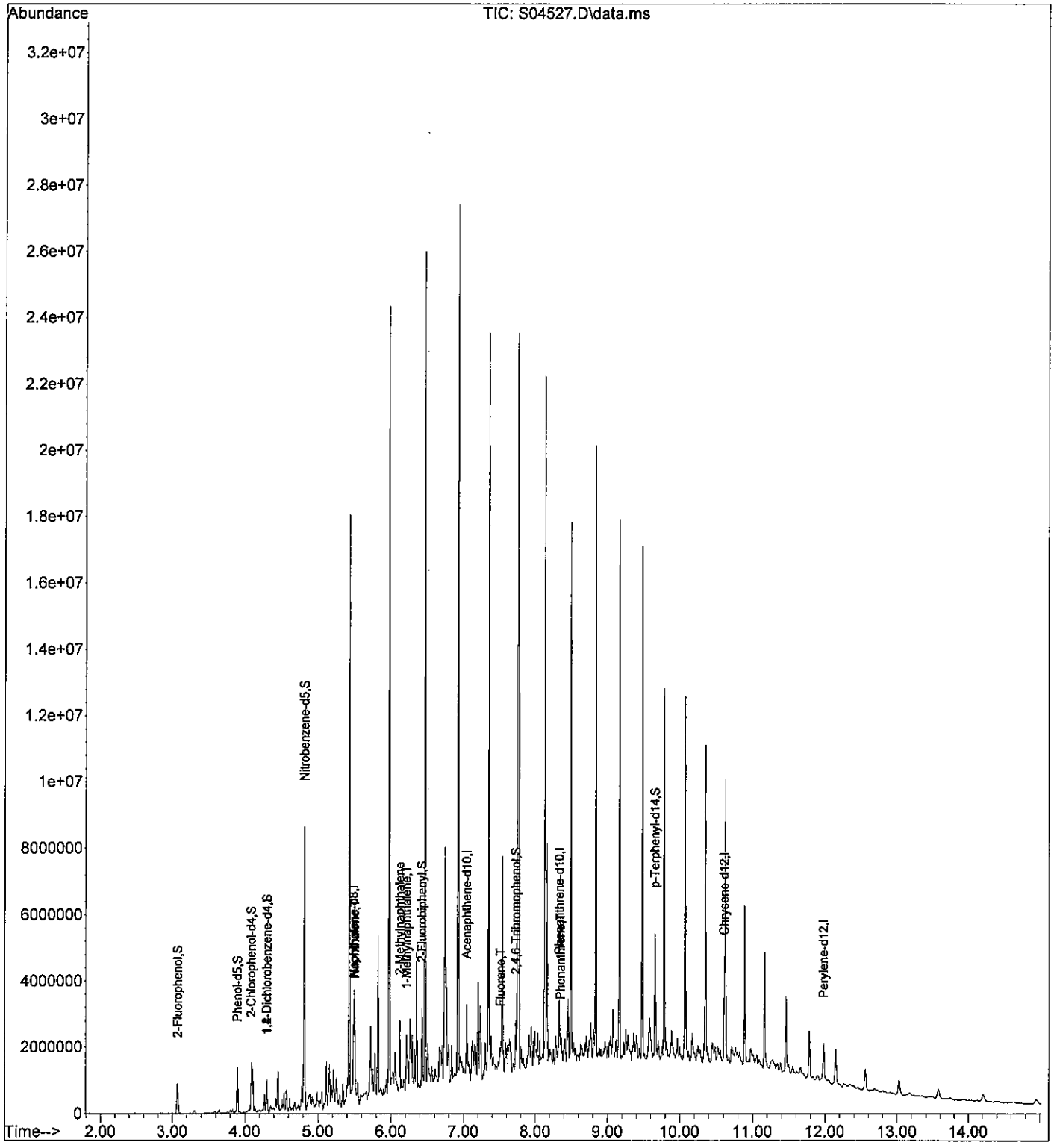
Compound		R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards								
1) 1,4-Dichlorobenzene-d4		4.304	152	111420	40.00	ng/uL		0.00
24) Naphthalene-d8		5.487	136	426628	40.00	ng/uL	#	0.00
38) Acenaphthene-d10		7.045	164	241089	40.00	ng/uL		0.00
67) Phenanthrene-d10		8.334	188	492619	40.00	ng/uL		0.00
76) Chrysene-d12		10.610	240	569979	40.00	ng/uL		0.01
87) Perylene-d12		11.980	264	455968	40.00	ng/uL		0.01
System Monitoring Compounds								
5) 2-Fluorophenol		3.075	112	263903	81.78	ng/uL		0.00
Spiked Amount	75.000	Range 16 - 106		Recovery =	109.04%#			
6) Phenol-d5		3.899	99	352071	82.10	ng/uL		0.00
Spiked Amount	75.000	Range 31 - 105		Recovery =	109.47%#			
10) 2-Chlorophenol-d4		4.087	132	301168	80.93	ng/uL		0.00
Spiked Amount	75.000	Range 20 - 130		Recovery =	107.91%			
14) 1,2-Dichlorobenzene-d4		4.304	150	178138	39.63	ng/uL		0.00
Spiked Amount	75.000	Range 20 - 130		Recovery =	52.84%			
23) Nitrobenzene-d5		4.810	82	361849	70.74	ng/uL		0.00
Spiked Amount	50.000	Range 32 - 110		Recovery =	141.48%#			
42) 2-Fluorobiphenyl		6.428	172	497755	52.00	ng/uL		0.00
Spiked Amount	50.000	Range 41 - 111		Recovery =	104.00%			
68) 2,4,6-Tribromophenol		7.728	330	91981	63.27	ng/uL		0.00
Spiked Amount	75.000	Range 19 - 119		Recovery =	84.36%			
85) p-Terphenyl-d14		9.657	244	688053	52.63	ng/uL		0.00
Spiked Amount	50.000	Range 23 - 159		Recovery =	105.26%			
Target Compounds								Qvalue
32) Naphthalene		5.504	128	182736	15.58	ng/uL	#	92
36) 2-Methylnaphthalene		6.122	142	366036	43.79	ng/uL	#	96
37) 1-Methylnaphthalene		6.216	142	224051	30.00	ng/uL	#	88
62) Fluorene		7.516	166	56736	5.60	ng/uL	#	69
71) Phenanthrene		8.351	178	112388	7.88	ng/uL	#	87

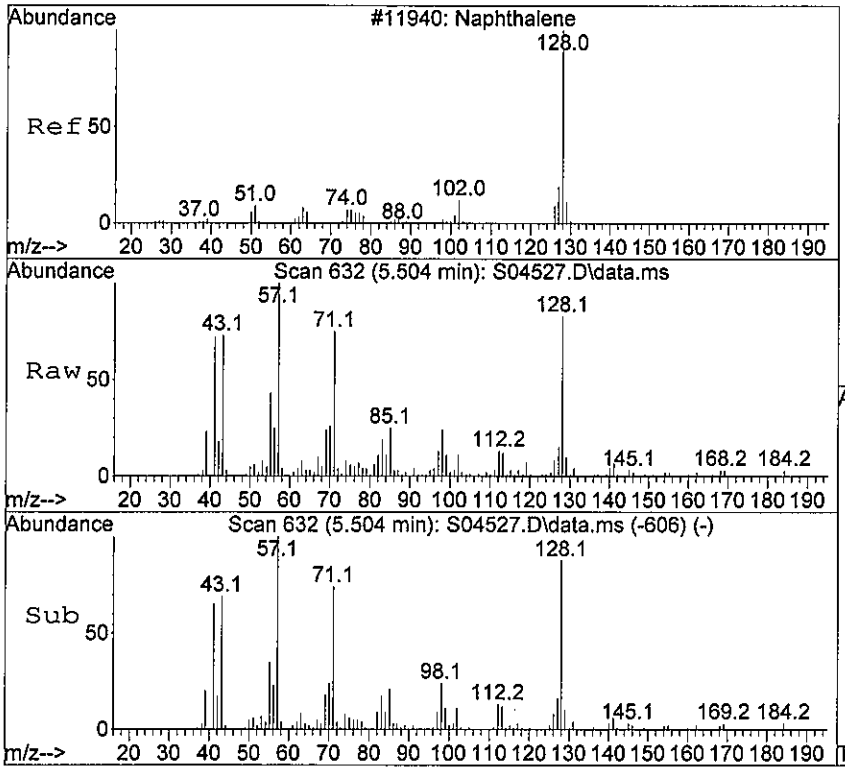
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Th 7/30/16

Data Path : C:\msdchem\1\data\2016\073016\
Data File : S04527.D
Acq On : 30 Jul 2016 13:27
Operator : TK HPSV4 sn #: CV11451177
Sample : 1607160-1
Misc : EX160728-4 SOIL (OIL)
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 30 13:47:15 2016
Quant Method : C:\msdchem\1\methods\062516.M
Quant Title : GC-MS Semivolatiles SW8270D SOP #506
QLast Update : Sat Jul 30 09:37:00 2016
Response via : Initial Calibration

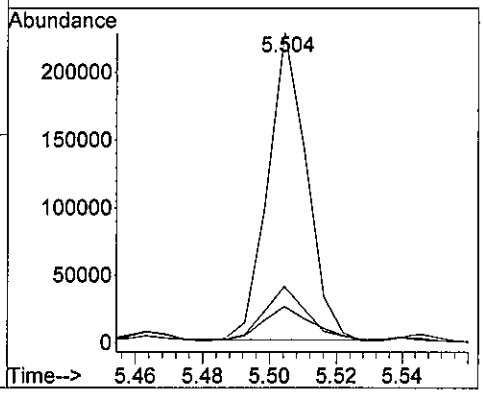


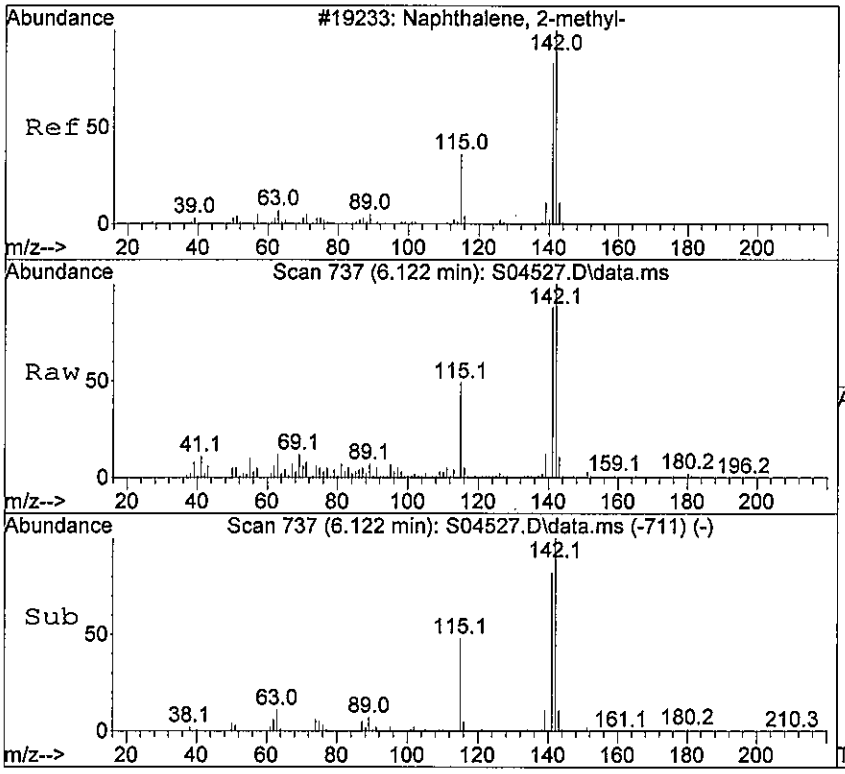


#32
Naphthalene
Concen: 15.58 ng/uL
RT: 5.504 min Scan# 632
Delta R.T. 0.000 min
Lab File: S04527.D
Acq: 30 Jul 2016 13:27

Tgt Ion:128 Resp: 182736

Ion	Ratio	Lower	Upper
128	100		
127	18.7	11.1	23.0
129	16.1	7.2	14.9#

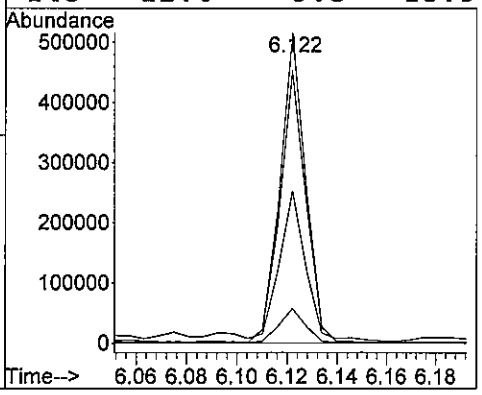


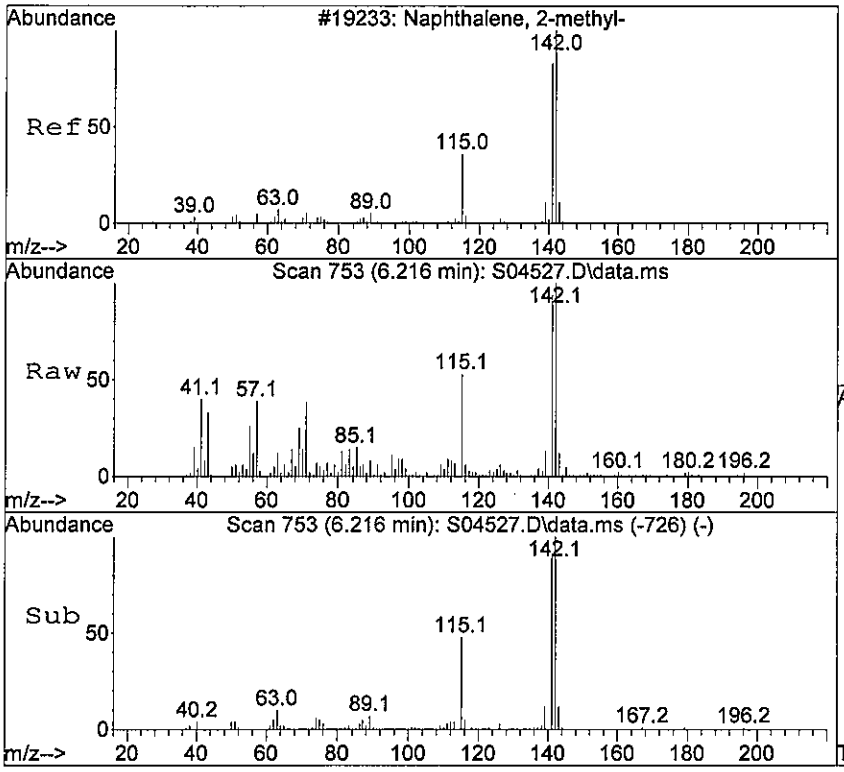


#36
2-Methylnaphthalene
Concen: 43.79 ng/uL
RT: 6.122 min Scan# 737
Delta R.T. 0.000 min
Lab File: S04527.D
Acq: 30 Jul 2016 13:27

Tgt Ion:142 Resp: 366036

Ion	Ratio	Lower	Upper
142	100		
141	88.0	70.9	106.3
115	49.9	33.2	49.8#
143	12.0	9.3	13.9

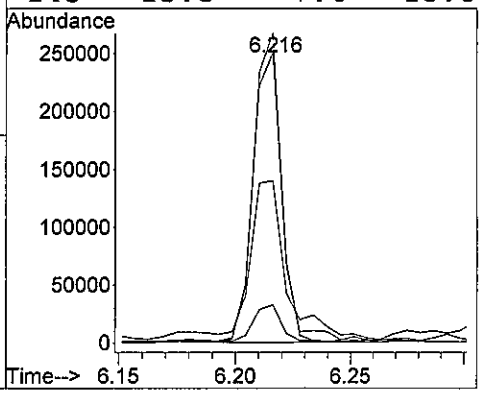


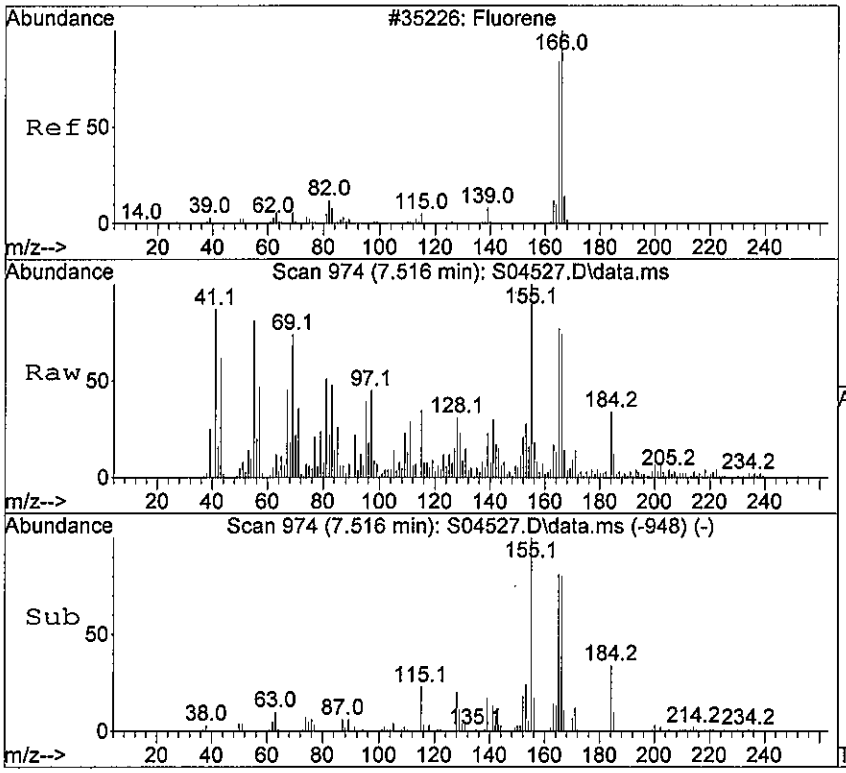


#37
1-Methylnaphthalene
Concen: 30.00 ng/uL
RT: 6.216 min Scan# 753
Delta R.T. 0.006 min
Lab File: S04527.D
Acq: 30 Jul 2016 13:27

Tgt Ion:142 Resp: 224051

Ion	Ratio	Lower	Upper
142	100		
141	95.6	60.1	124.7
115	65.3	28.9	59.9#
143	13.5	7.6	15.8

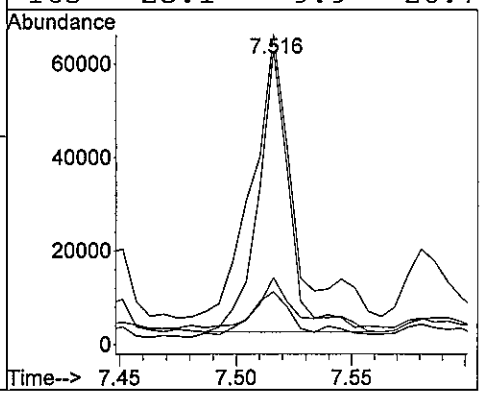


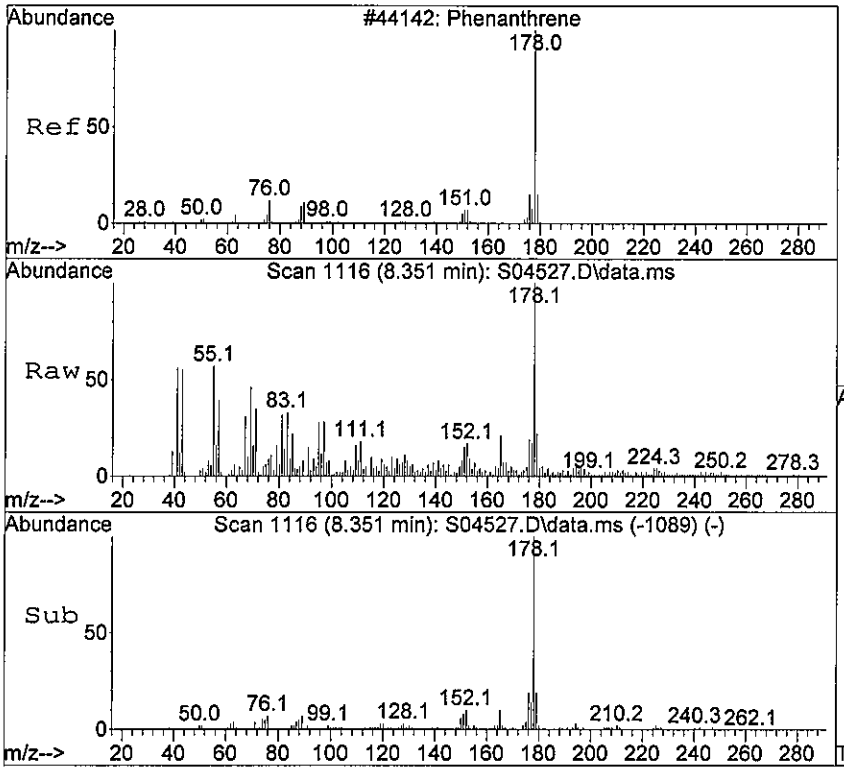


#62
Fluorene
Concen: 5.60 ng/uL
RT: 7.516 min Scan# 974
Delta R.T. 0.000 min
Lab File: S04527.D
Acq: 30 Jul 2016 13:27

Tgt Ion:166 Resp: 56736

Ion	Ratio	Lower	Upper
166	100		
165	131.3	62.4	129.6#
164	21.5	10.3	21.3#
163	23.1	9.9	20.7#





#71
Phenanthrene
Concen: 7.88 ng/uL
RT: 8.351 min Scan# 1116
Delta R.T. 0.006 min
Lab File: S04527.D
Acq: 30 Jul 2016 13:27

Tgt Ion:178 Resp: 112388

Ion	Ratio	Lower	Upper
178	100		
179	26.5	12.7	19.1#
176	20.2	15.2	22.8