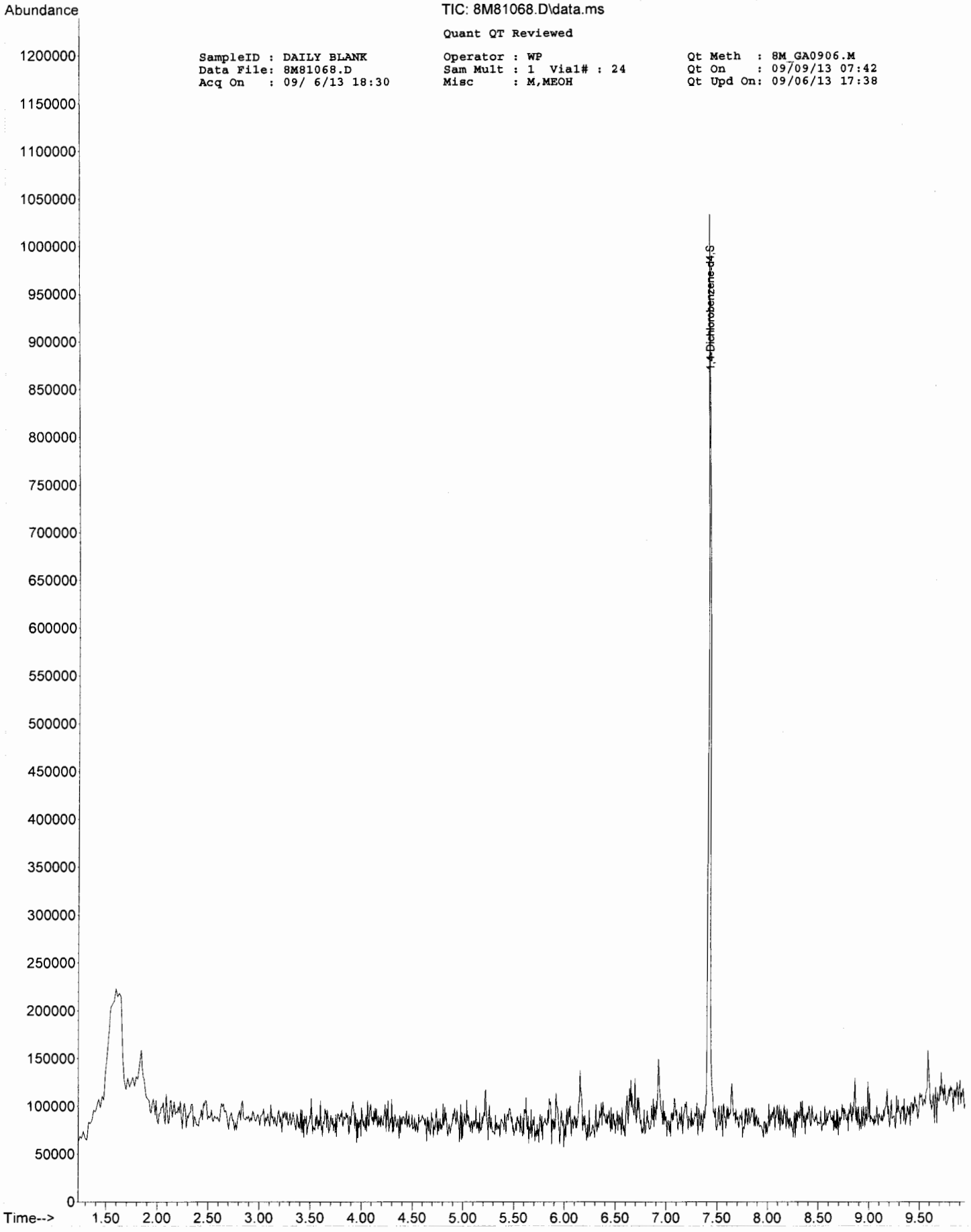
TIC: 8M81068.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK
Data File: 8M81068.D
Acq On : 09/ 6/13 18:30

Operator : WP
Sam Mult : 1 Vial# : 24
Misc : M,MEOH

Qt Meth : 8M_GA0906.M
Qt On : 09/09/13 07:42
Qt Upd On: 09/06/13 17:38



FORM2

Surrogate Recovery

Method: EPA 8015B

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column0 S2 Recov	Column0 S3 Recov	Column0 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
8M81068.D	DAILY BLANK	Methanol	09/06/13 18:30	1		98					
8M81096.D	DAILY BLANK	Methanol	09/09/13 10:22	1		96					
8M81071.D	AC74358-006	Methanol	09/06/13 19:17	1		90					
8M81070.D	MBS28761	Methanol	09/06/13 19:01	1		89					
8M81097.D	MBS28765	Methanol	09/09/13 10:37	1		104					
8M81099.D	AC74358-006(	Methanol	09/09/13 11:09	1		105					
8M81124.D	AC74358-006(	Methanol	09/09/13 17:40	1		93					

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8015B

Soil Limits

Compound	Spike Amt	Limits
S1=1,4-Dichlorobenzene-d4	30	29-149

Form3
Recovery Data
QC Batch: MBS28761

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8M81070.D	MBS28761	9/6/2013 7:01:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8015 Matrix: Methanol QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	1672.942	0	2000	84	11	181

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS28765

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8M81097.D	MBS28765	9/9/2013 10:37:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8015 Matrix: Methanol QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	2313.531	0	2000	116	11	181

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS28765

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8M81099.D	AC74358-006(MS)	9/9/2013 11:09:00 AM
Non Spike(If applicable):	8M81071.D	AC74358-006	9/6/2013 7:17:00 PM
Inst Blank(If applicable):			

Method: 8015 Matrix: Methanol QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	1831.183	0	2000	92	11	181

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8M81124.D	AC74358-006(MSD)	9/9/2013 5:40:00 PM
Non Spike(If applicable):	8M81071.D	AC74358-006	9/6/2013 7:17:00 PM
Inst Blank(If applicable):			

Method: 8015 Matrix: Methanol QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	1980.371	0	2000	99	11	181

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA

QC Batch: MBS28765

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8M81124.D	AC74358-006(MSD)	9/9/2013 5:40:00 PM
Duplicate(If applicable):	8M81099.D	AC74358-006(MS)	9/9/2013 11:09:00 AM
Inst Blank(If applicable):			

Method: 8015 Matrix: Methanol QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Gasoline Range Organics	1	1980.371	1831.183	7.8	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 8M81068.D
Matrix: Methanol

Blank Analysis Date: 09/06/13 18:30
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8015B

Sample Number	Data File	Analysis Date
AC74358-006	8M81071.D	09/06/13 19:17
MBS28761	8M81070.D	09/06/13 19:01

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 8M81096.D
Matrix: Methanol

Blank Analysis Date: 09/09/13 10:22
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8015B

Sample Number	Data File	Analysis Date
AC74358-006(MSD	8M81124.D	09/09/13 17:40
AC74358-006(MS)	8M81099.D	09/09/13 11:09
MBS28765	8M81097.D	09/09/13 10:37

Form 5

Method: EPA 8015B

Instrument: GCMS_8 Column: DB-624 25M 0.200mm ID 1.12um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8M81051.D	BLK	09/06/13 14:01	Aqueous					
8M81052.D	BLK	09/06/13 14:17	Aqueous					
8M81053.D	BLK	09/06/13 14:35	Aqueous					
8M81055.D	2000 PPB	09/06/13 15:06	Aqueous					
8M81056.D	CAL @ 10000 PPB	09/06/13 15:22	Aqueous					
8M81057.D	6000 PPB	09/06/13 15:37	Aqueous					
8M81058.D	CAL @ 4000 PPB	09/06/13 15:53	Aqueous					
8M81059.D	2000 PPB	09/06/13 16:09	Aqueous					
8M81060.D	CAL @ 1000 PPB	09/06/13 16:25	Aqueous					
8M81061.D	CAL @ 750 PPB	09/06/13 16:40	Aqueous					
8M81062.D	CAL @ 500 PPB	09/06/13 16:56	Aqueous					
8M81063.D	CAL @ 6000 PPB	09/06/13 17:12	Aqueous					
8M81064.D	CAL @ 2000 PPB	09/06/13 17:27	Aqueous					
8M81065.D	2000 PPB	09/06/13 17:43	Aqueous					
8M81066.D	ICV	09/06/13 17:59	Aqueous					
8M81067.D	BLK	09/06/13 18:14	Aqueous					
8M81068.D	DAILY BLANK	09/06/13 18:30	Methanol					
8M81069.D	MBS28760	09/06/13 18:46	Methanol					
8M81070.D	MBS28761	09/06/13 19:01	Methanol					
8M81071.D	AC74358-006	09/06/13 19:17	Methanol					
8M81072.D	AC74245-001	09/06/13 19:32	Methanol					
8M81073.D	AC74245-002	09/06/13 19:48	Methanol					
8M81074.D	AC74245-003	09/06/13 20:04	Methanol					
8M81075.D	AC74245-004	09/06/13 20:19	Methanol					
8M81076.D	AC74245-005	09/06/13 20:35	Methanol					
8M81077.D	AC74246-001	09/06/13 20:51	Methanol					
8M81078.D	AC74246-002	09/06/13 21:06	Methanol					
8M81079.D	AC74246-003	09/06/13 21:22	Methanol					
8M81080.D	AC74246-004	09/06/13 21:37	Methanol					
8M81081.D	AC74246-005	09/06/13 21:53	Methanol					
8M81082.D	AC74246-006	09/06/13 22:09	Methanol					
8M81083.D	AC74246-007	09/06/13 22:24	Methanol					
8M81084.D	AC74246-008	09/06/13 22:40	Methanol					
8M81085.D	AC74246-009	09/06/13 22:55	Methanol					
8M81086.D	AC74246-010	09/06/13 23:11	Methanol					
8M81087.D	AC74303-001	09/06/13 23:27	Methanol					
8M81088.D	AC74303-003	09/06/13 23:42	Methanol					
8M81089.D	AC74303-004	09/06/13 23:58	Methanol					
8M81090.D	AC74303-005	09/07/13 00:13	Methanol					

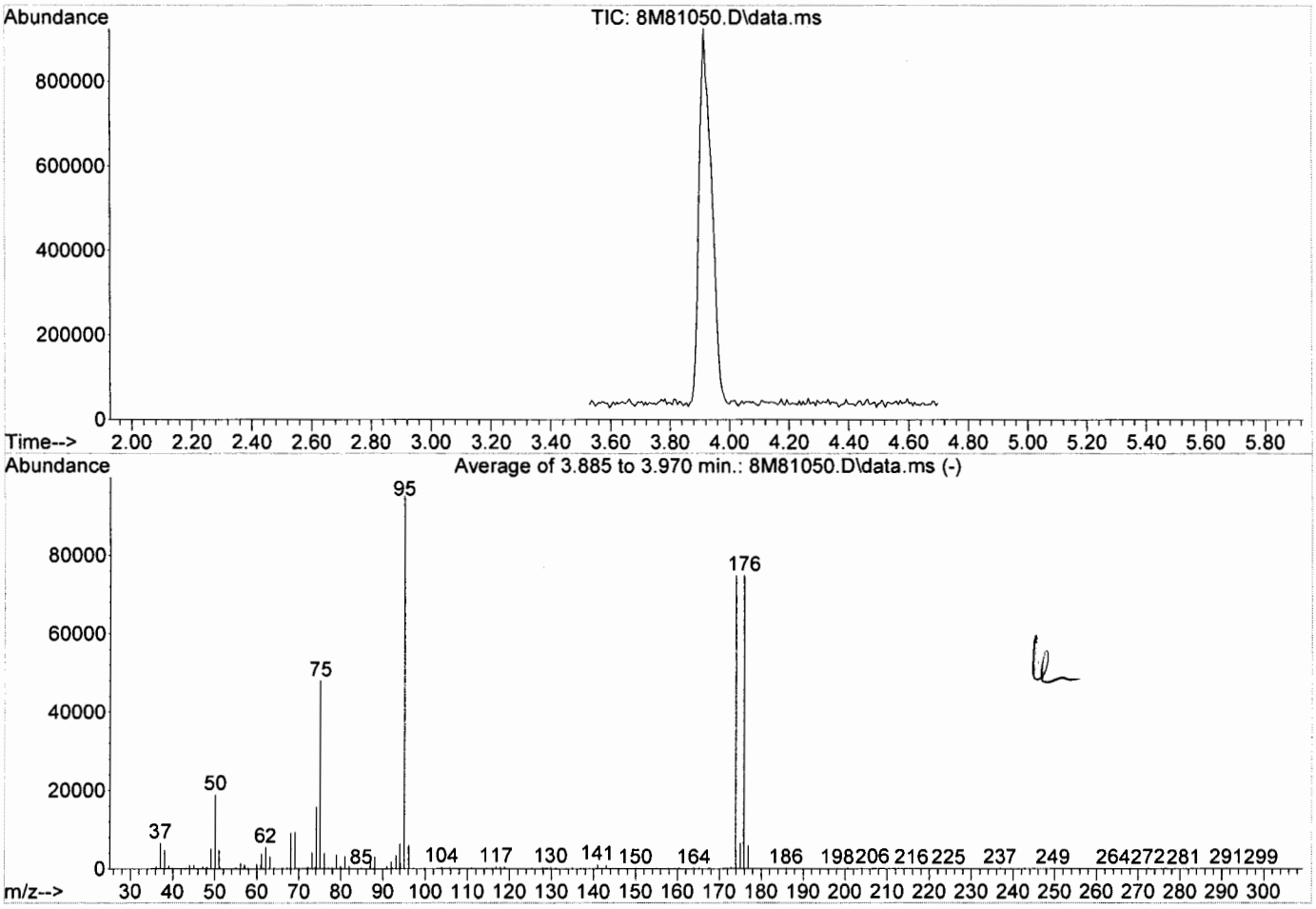
Drift Compound: Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

3090309 0345

Data Path : G:\GCMSDATA\2013\GCMS_8\DATA\09-06-13\
Data File : 8M81050.D
Acq On : 6 Sep 2013 13:39
Operator : WP
Sample : GRO TUNE
Misc : A,5mL
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GcMsData\2013\GCMS_8\MethodQt\8M_GA0906.M
Title : @GCMS_8,ug,8015
Last Update : Fri Sep 06 17:38:39 2013



Spectrum Information: Average of 3.885 to 3.970 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.9	18989	PASS
75	95	30	60	50.5	48063	PASS
95	95	100	100	100.0	95199	PASS
96	95	5	9	6.5	6185	PASS
173	174	0.00	2	0.6	453	PASS
174	95	50	100	78.6	74833	PASS
175	174	5	9	8.8	6621	PASS
176	174	95	101	100.0	74840	PASS
177	176	5	9	8.0	5963	PASS

Form 5

Method: EPA 8015B

Instrument: GCMS_8 Column: DB-624 25M 0.200mm ID 1.12um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8M81093.D	2000 PPB	09/09/13 09:09	Aqueous					
8M81094.D	CAL @ 2000 PPB	09/09/13 09:33	Aqueous					
8M81095.D	DAILY BLANK	09/09/13 10:06	Aqueous					
8M81096.D	DAILY BLANK	09/09/13 10:22	Methanol					
8M81097.D	MBS28765	09/09/13 10:37	Methanol					
8M81098.D	MBS28766	09/09/13 10:53	Aqueous					
8M81099.D	AC74358-006(MS)	09/09/13 11:09	Methanol					
8M81100.D	AC74358-006(MSD)	09/09/13 11:24	Methanol					
8M81101.D	AC74334-001	09/09/13 11:40	Methanol					
8M81102.D	AC74334-002	09/09/13 11:56	Methanol					
8M81103.D	AC74334-003	09/09/13 12:11	Methanol					
8M81104.D	AC74334-004(400uL)	09/09/13 12:27	Methanol					
8M81105.D	BLK	09/09/13 12:43	Aqueous					
8M81106.D	AC74334-005	09/09/13 12:58	Methanol					
8M81107.D	AC74334-006	09/09/13 13:14	Methanol					
8M81108.D	AC74403-001	09/09/13 13:29	Aqueous					
8M81109.D	AC74334-007	09/09/13 13:45	Methanol					
8M81110.D	AC74334-008	09/09/13 14:01	Methanol					
8M81111.D	AC74334-009	09/09/13 14:16	Methanol					
8M81112.D	AC74334-010	09/09/13 14:32	Methanol					
8M81113.D	AC74334-011	09/09/13 14:48	Methanol					
8M81114.D	AC74334-012	09/09/13 15:03	Methanol					
8M81115.D	AC74334-013	09/09/13 15:19	Methanol					
8M81116.D	AC74334-014	09/09/13 15:35	Methanol					
8M81117.D	AC74334-015	09/09/13 15:50	Methanol					
8M81118.D	AC74334-016	09/09/13 16:06	Methanol					
8M81119.D	AC74334-017	09/09/13 16:22	Methanol					
8M81120.D	AC74334-018	09/09/13 16:37	Methanol					
8M81121.D	AC74334-019	09/09/13 16:53	Methanol					
8M81122.D	AC74334-020(400uL)	09/09/13 17:09	Methanol					
8M81123.D	BLK	09/09/13 17:24	Aqueous					
8M81124.D	AC74358-006(MSD)	09/09/13 17:40	Methanol					
8M81125.D	AC74334-001	09/09/13 17:55	Methanol					
8M81126.D	AC74334-002	09/09/13 18:11	Methanol					
8M81127.D	AC74334-003	09/09/13 18:27	Methanol					
8M81128.D	AC74334-004(400uL)	09/09/13 18:42	Methanol					
8M81129.D	BLK	09/09/13 18:58	Aqueous					
8M81130.D	AC74334-005	09/09/13 19:13	Methanol					
8M81131.D	AC74334-006	09/09/13 19:29	Methanol					
8M81132.D	AC74403-001	09/09/13 19:45	Aqueous					
8M81133.D	AC74334-007	09/09/13 20:00	Methanol					
8M81134.D	AC74334-008	09/09/13 20:16	Methanol					
8M81135.D	BLK	09/10/13 06:41	Aqueous					

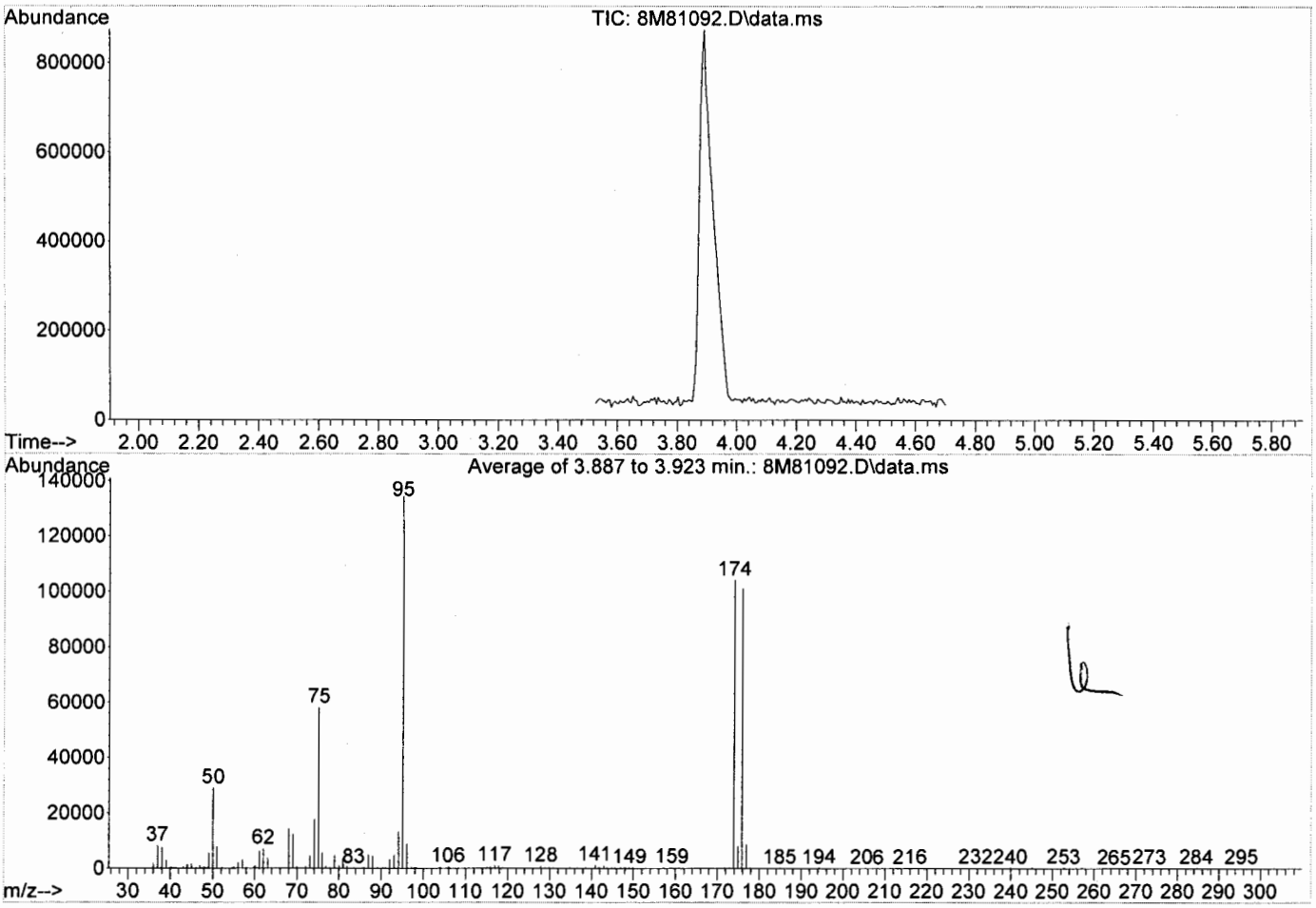
Drift Compound: Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

3090309 0347

Data Path : G:\GCMSDATA\2013\GCMS_8\DATA\09-09-13\
Data File : 8M81092.D
Acq On : 9 Sep 2013 8:50
Operator : SG
Sample : GRO TUNE
Misc : A,5mL
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GcMsData\2013\GCMS_8\MethodQt\8M_GA0906.M
Title : @GCMS_8,ug,8015
Last Update : Fri Sep 06 17:38:39 2013



Spectrum Information: Average of 3.887 to 3.923 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.7	29102	PASS
75	95	30	60	43.3	58135	PASS
95	95	100	100	100.0	134350	PASS
96	95	5	9	6.6	8880	PASS
173	174	0.00	2	0.5	479	PASS
174	95	50	100	77.5	104174	PASS
175	174	5	9	7.8	8136	PASS
176	174	95	101	97.1	101152	PASS
177	176	5	9	8.8	8910	PASS

0309030348

Form 6
Initial Calibration

Method: EPA 8015B

Instrument: GCMS_8

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	8M81056.	CAL @ 10000 PPB	09/06/13 15:22	2	8M81063.	CAL @ 6000 PPB	09/06/13 17:12
3	8M81058.	CAL @ 4000 PPB	09/06/13 15:53	4	8M81064.	CAL @ 2000 PPB	09/06/13 17:27
5	8M81060.	CAL @ 1000 PPB	09/06/13 16:25	6	8M81061.	CAL @ 750 PPB	09/06/13 16:40
7	8M81062.	CAL @ 500 PPB	09/06/13 16:56				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
1,4-Dichlorobenzene-d-	1	0	Avg	6.5506	8.1827	5.3260	6.9275	6.8050	6.4791	6.3024	-----	-----	6.65	7.41	-1	-1	13	30.00	30.00	30.00	30.00	30.00	30.00	30.00		
2-Methylpentane	1	0	Avg	0.7953	0.7577	0.9206	0.8957	0.8458	0.9420	0.9317	-----	-----	0.870	2.47	0.994	0.994	8.3	1000	6000.	4000.	2000.	1000.	750.0	500.0		
1,2,4-Trimethylbenzene	1	0	Avg	0.7199	0.8011	0.9887	1.0776	1.0857	1.1010	1.1356	-----	-----	0.987	7.18	0.980	0.995	16	1000	6000.	4000.	2000.	1000.	750.0	500.0		
Gasoline Range Organ	1	0	Avg	59.830	59.064	70.585	73.589	74.760	80.844	87.222	-----	-----	72.3	4.94	0.995	0.996	14	1000	6000.	4000.	2000.	1000.	750.0	500.0		

Flags
a - failed the spcc criteria — ** - ccc compound*
b - failed the ccc criteria — *** - spcc compound*
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 13
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form7

Continuing Calibration

Calibration Name: CAL @ 2000 PPB **Data File:** 8M81094.D **Instrument:** GCMS 8

Cont Calibration Date/Time 9/9/2013 9:33:00 A Method: EPA 8015B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	%Diff	Flag
Gasoline Range Organics(Total)	1	0	GRO	5.22	2194.34	2000	20		72.271	9.72	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

DRO Data

Form1

ORGANICS PETROLEUM HYDROCARBON REPORT

Sample Number: AC74358-006
Client Id: 024 SS-4 Composite
Data File: 7G31607.D
Analysis Date: 09/09/13 16:51
Date Rec/Extracted: 09/03/13-09/07/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8015B
Matrix: Soil
Initial Vol: 5g
Final Vol: 1ml
Dilution: 1
Solids: 90

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
PHCHPD2	Diesel Range Organics	67	U				

Worksheet #: 276174

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

Quantitation Report (QT Reviewed)

3090309 0352

Data Path : G:\Gcdata\2013\GC_7\Data\09-09-13\
Data File : 7G31607.D
Signal(s) : FID2B.CH
Acq On : 9 Sep 2013 16:51
Operator : RAK/KD/AHD
Sample : AC74358-006
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 17:17:41 2013
Quant Method : G:\GCDATA\2013\GC_7\METHODQT\7G_T0812.M
Quant Title : @GC_7,mg,8015
QLast Update : Tue Aug 13 10:10:15 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

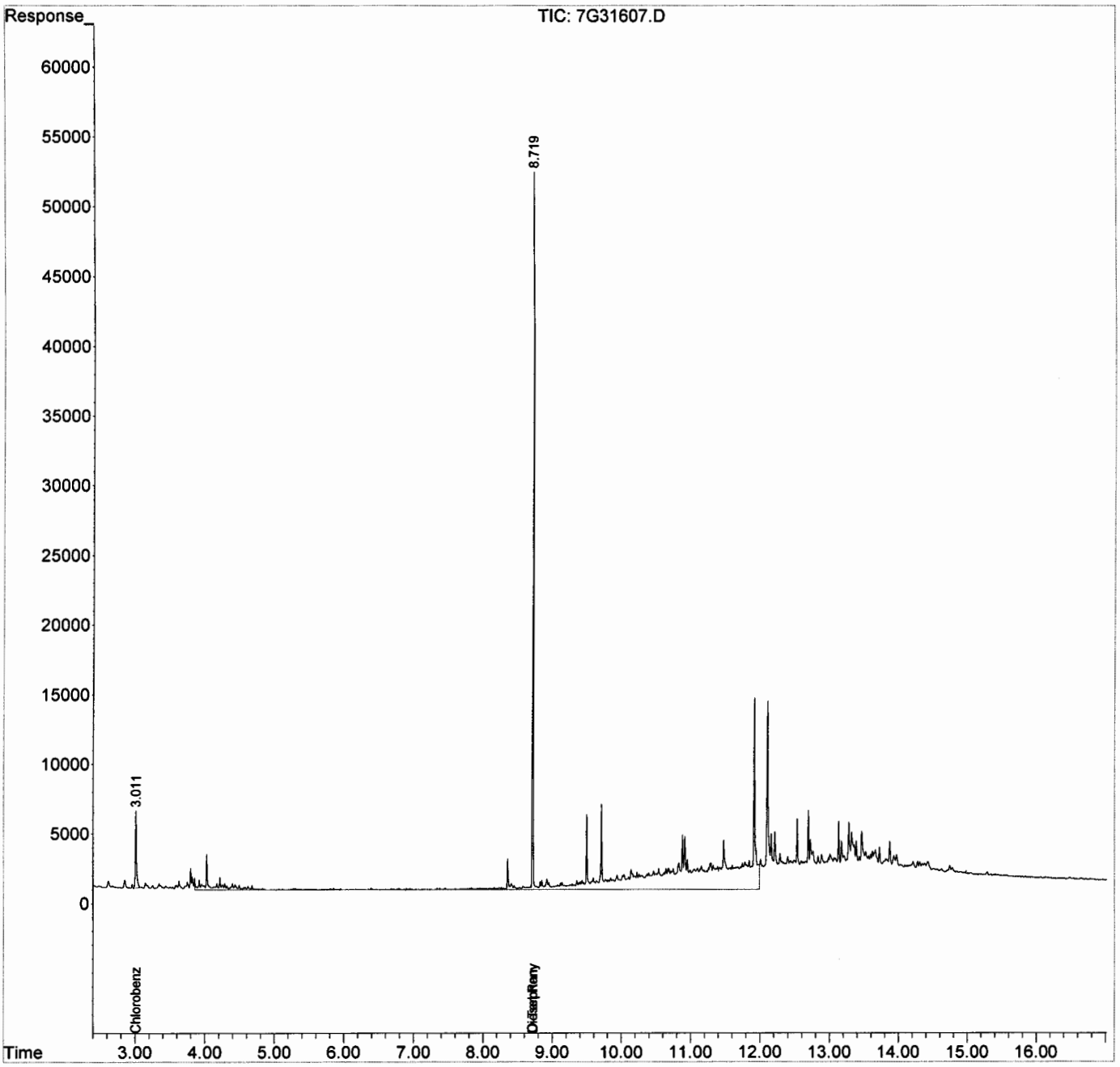
	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)mt	C8	0.000	0	N.D.	d
2)mte	C9	0.000	0	N.D.	d
3)mdte	C10	0.000	0	N.D.	d
4)mdte	C12	0.000	0	N.D.	d
5)mdte	C14	0.000	0	N.D.	d
6)dte	C16	0.000	0	N.D.	d
7)dte	C17	0.000	0	N.D.	d
8)dte	Pristane	0.000	0	N.D.	d
9)dte	C18	0.000	0	N.D.	d
10)dte	Phytane	0.000	0	N.D.	d
11)dte	C20	0.000	0	N.D.	d
12)dte	C22	0.000	0	N.D.	d
13)dte	C24	0.000	0	N.D.	d
14)dte	C26	0.000	0	N.D.	d
15)dte	C28	0.000	0	N.D.	d
16)te	C30	0.000	0	N.D.	d
17)te	C32	0.000	0	N.D.	d
18)te	C34	0.000	0	N.D.	d
19)te	C36	0.000	0	N.D.	d
20)t	C40	0.000	0	N.D.	
21)	Chlorobenzene	3.011	60114	8.468	
22)	O-Terphenyl	8.719	388121	29.539	
23)d	Diesel Range Organics(T	8.719f	2825555	226.928	m
24)t	Total Petroleum Hydroca	0.000	0	N.D.	d
25)e	Ext. Petroleum Hydrocar	0.000	0	N.D.	d
26)m	Mineral Spirits(TOTAL)	0.000	0	N.D.	d
27)m	Stoddard Solvent(TOTAL)	0.000	0	N.D.	d

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_7\Data\09-09-13\
Data File : 7G31607.D
Signal(s) : FID2B.CH
Acq On : 9 Sep 2013 16:51
Operator : RAK/KD/AHD
Sample : AC74358-006
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 17:17:41 2013
Quant Method : G:\GCDATA\2013\GC_7\METHODQT\7G_T0812.M
Quant Title : @GC_7,mg,8015
QLast Update : Tue Aug 13 10:10:15 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Form1

ORGANICS PETROLEUM HYDROCARBON REPORT

Sample Number: SMB27939
Client Id:
Data File: 7G31606.D
Analysis Date: 09/09/13 16:12
Date Rec/Extracted: NA-09/07/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8015B
Matrix: Soil
Initial Vol: 5g
Final Vol: 1ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
PHCHPD2	Diesel Range Organics	60	U				

Worksheet #: 276174

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

Quantitation Report (QT Reviewed)

3090309 0355

Data Path : G:\Gcdata\2013\GC_7\Data\09-09-13\
Data File : 7G31606.D
Signal(s) : FID2B.CH
Acq On : 9 Sep 2013 16:12
Operator : RAK/KD/AHD
Sample : SMB27939
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 17:16:36 2013
Quant Method : G:\GCDATA\2013\GC_7\METHODQT\7G_T0812.M
Quant Title : @GC_7,mg,8015
QLast Update : Tue Aug 13 10:10:15 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

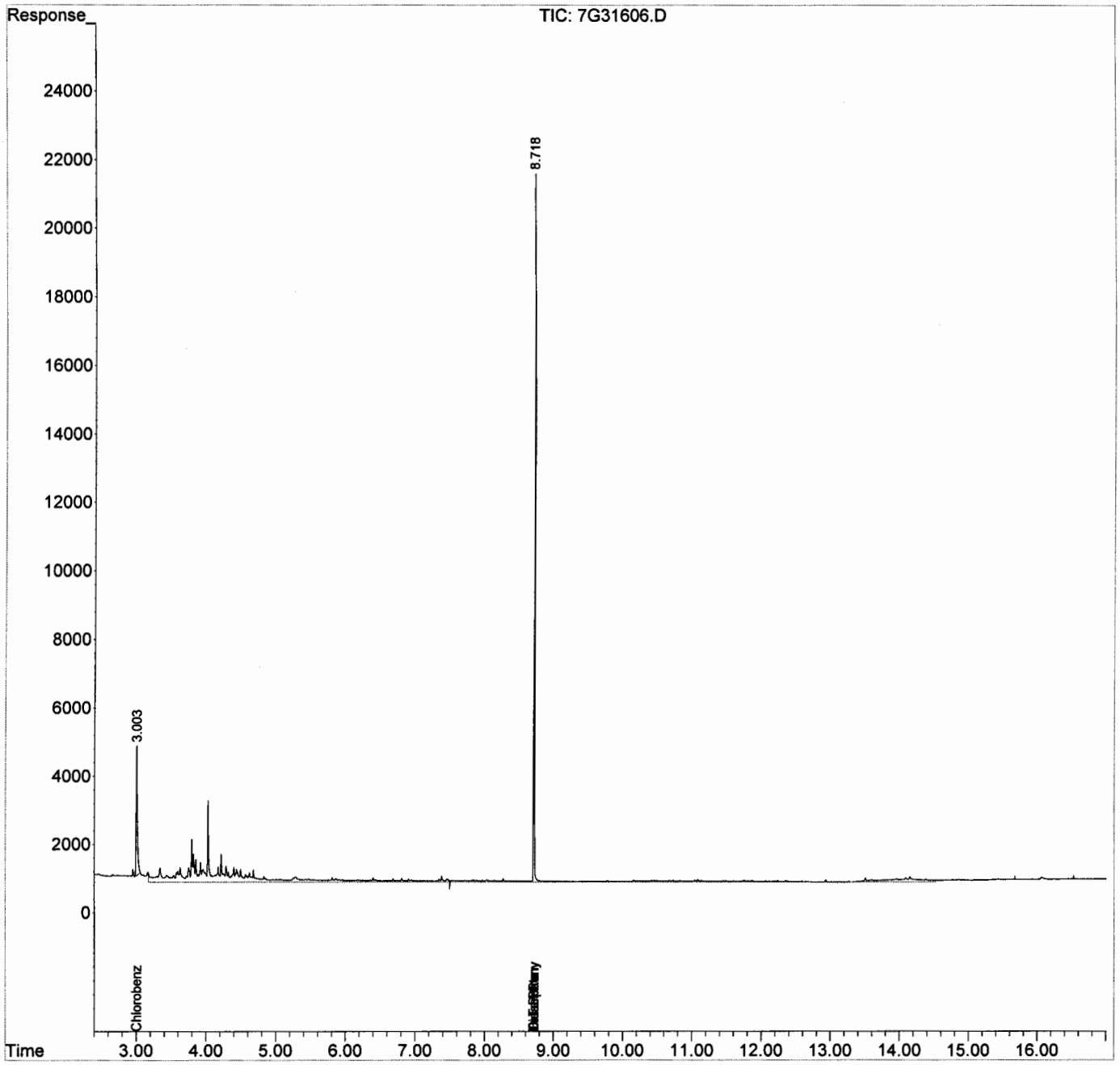
	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)mt	C8	0.000	0	N.D.		
2)mte	C9	0.000	0	N.D.		d
3)mdte	C10	0.000	0	N.D.		d
4)mdte	C12	0.000	0	N.D.		d
5)mdte	C14	0.000	0	N.D.		d
6)dte	C16	0.000	0	N.D.		d
7)dte	C17	0.000	0	N.D.		d
8)dte	Pristane	0.000	0	N.D.		d
9)dte	C18	0.000	0	N.D.		d
10)dte	Phytane	0.000	0	N.D.		d
11)dte	C20	0.000	0	N.D.		d
12)dte	C22	0.000	0	N.D.		d
13)dte	C24	0.000	0	N.D.		d
14)dte	C26	0.000	0	N.D.		d
15)dte	C28	0.000	0	N.D.		d
16)te	C30	0.000	0	N.D.		d
17)te	C32	0.000	0	N.D.		
18)te	C34	0.000	0	N.D.		
19)te	C36	0.000	0	N.D.		
20)t	C40	0.000	0	N.D.		
21)	Chlorobenzene	3.003	46805	6.593		
22)	O-Terphenyl	8.718	146217	11.128		
23)d	Diesel Range Organics(T	8.718f	438188	35.192		m
24)t	Total Petroleum Hydroca	8.718f	787793	63.313		m
25)e	Ext. Petroleum Hydrocar	8.718f	576630	45.814		m
26)m	Mineral Spirits(TOTAL)	0.000	0	N.D.		d
27)m	Stoddard Solvent(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_7\Data\09-09-13\
Data File : 7G31606.D
Signal(s) : FID2B.CH
Acq On : 9 Sep 2013 16:12
Operator : RAK/KD/AHD
Sample : SMB27939
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 17:16:36 2013
Quant Method : G:\GCDATA\2013\GC_7\METHODQT\7G_T0812.M
Quant Title : @GC_7,mg,8015
QLast Update : Tue Aug 13 10:10:15 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



FORM2

Surrogate Recovery

Method: EPA 8015B

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column0 S3 Recov	Column0 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
7G31606.D	SMB27939	Soil	09/09/13 16:12	1		33	56				
7G31607.D	AC74358-006	Soil	09/09/13 16:51	1		42	148*				
7G31610.D	SMB27939(M	Soil	09/09/13 18:12	1		40	97				
7G31611.D	AC74391-001(	Soil	09/09/13 18:39	1		48	89				
7G31612.D	AC74391-001(	Soil	09/09/13 19:06	1		54	91				
7G31613.D	AC74391-001	Soil	09/09/13 19:32	1		54	87				

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8015B

Soil Limits

Compound	Spike Amt	Limits
S1=Chlorobenzene	20	20-117
S2=O-Terphenyl	20	30-146

FORM 3

Spike Recovery

Batch Number: SMB27939
Mbs Name: SMB27939(MS)
Ns Name: AC74391-001
Ms Name: AC74391-001(MS)
Msd Name: AC74391-001(MSD

Mbs File: 7G31610.D
Non Spk'd File: 7G31613.D
Spike File: 7G31611.D
Spike Dup File: 7G31612.D
Matrix: Soil
Method: EPA 8015B

Mbs Date: 09/09/13 18:12
Non Spk'd Date: 09/09/13 19:32
Spike Date : 09/09/13 18:39
Spike Dup Date: 09/09/13 19:06

Compound	C#	Co	Mr	Conc Exp	Lo Llm	Hi Lim	Rpd Llm	Mbs Conc	Sample Conc	Spike Conc	Spike Dup Conc	Mbs Rec	MS Rec	Msd Rec	Rpd
Diesel Range Organic	23	1	0	3000	26	153	42	1970.49	163.49	2023.20	2046.43	66	62	63	1.1

Note:

Rp = Failed Rpd Criteria **Mo = Failed Recovery Criteria**

^ - Both Ms and Msd Recoveries = 0 ... no valid information can be calculated

FORM 4
Blank Summary

Blank Number: SMB27939
Blank Data File: 7G31606.D
Matrix: Soil

Blank Analysis Date: 09/09/13 16:12
Blank Extraction Date: 09/07/13
(If Applicable)
Method: EPA 8015B

Sample Number	Data File	Analysis Date
AC74358-006	7G31607.D	09/09/13 16:51
AC74391-001	7G31613.D	09/09/13 19:32
AC74391-001(MSD	7G31612.D	09/09/13 19:06
AC74391-001(MS)	7G31611.D	09/09/13 18:39
SMB27939(MS)	7G31610.D	09/09/13 18:12

Form 5

Method: EPA 8015B

Instrument: GC_7

Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
7G31317.	INST BLK	08/12/13 14:25	Soil					
7G31318.	CALTPH@20PPM	08/12/13 14:52	Soil	7G31323.	8.7209	0.0642		
7G31319.	CALTPH@500PPM	08/12/13 15:19	Soil	7G31323.	8.7747	0.6793		
7G31320.	CALTPH@100PPM	08/12/13 15:46	Soil	7G31323.	8.7352	0.2281		
7G31321.	CALTPH@40PPM	08/12/13 16:13	Soil	7G31323.	8.7245	0.1055		
7G31322.	CALTPH@10PPM	08/12/13 16:40	Soil	7G31323.	8.7179	0.0298		
7G31323.	CALTPH@5PPM	08/12/13 17:07	Soil	7G31323.	8.7153	0		
7G31324.	ICVTPH@20PPM	08/12/13 17:34	Soil	7G31323.	8.7195	0.0482		
7G31325.	INST BLK	08/12/13 18:00	Soil	7G31323.	0.0000	200		
7G31326.	25863(MS)	08/12/13 18:27	Soil	7G31323.	8.7265	0.1284		
7G31327.	SMB25863	08/12/13 18:54	Soil	7G31323.	8.7201	0.0551		
7G31328.	25853(MS)	08/12/13 19:20	Soil	7G31323.	8.7226	0.0837		
7G31329.	MB25853	08/12/13 19:47	Soil	7G31323.	8.7186	0.0379		
7G31330.	AC73860-001	08/12/13 20:14	Soil	7G31323.	8.7176	0.0264		
7G31331.	AC73860-002	08/12/13 20:40	Soil	7G31323.	8.7175	0.0252		
7G31332.	TEST	08/12/13 21:08	Soil	7G31323.	0.0000	200		
7G31333.	CALTPH@20PPM	08/12/13 21:34	Soil	7G31323.	8.7195	0.0482		
7G31334.	20PPM	08/12/13 22:27	Soil	7G31333.	8.7191	0.0046		
7G31335.	INST BLK	08/12/13 23:21	Soil	7G31333.	0.0000	200		

Drift Compound: O-Terphenyl

Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph)

* - Values outside of limits for this column/run

Form 5

Method: EPA 8015B

Instrument: GC_7

Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
7G31602.	INST BLK	09/09/13 10:03	Soil					
7G31603.	CALTPH@20PPM	09/09/13 10:30	Soil	7G31603.	8.7072	0		
7G31604.	INST BLK	09/09/13 10:57	Soil	7G31603.	0.0000	200		
7G31605.	MB27939(MS)	09/09/13 11:24	Soil	7G31603.	8.6783	0.3325		
7G31606.	SMB27939	09/09/13 16:12	Soil	7G31603.	8.7185	0.1297		
7G31607.	AC74358-006	09/09/13 16:51	Soil	7G31603.	8.7194	0.14		
7G31608.	CALTPH@20PPM	09/09/13 17:18	Soil	7G31603.	8.7155	0.0953		
7G31609.	INST BLK	09/09/13 17:45	Soil	7G31608.	0.0000	200		
7G31610.	SMB27939(MS)	09/09/13 18:12	Soil	7G31608.	8.7178	0.0264		
7G31611.	AC74391-001(MS)	09/09/13 18:39	Soil	7G31608.	8.7165	0.0115		
7G31612.	AC74391-001(MSD)	09/09/13 19:06	Soil	7G31608.	8.7170	0.0172		
7G31613.	AC74391-001	09/09/13 19:32	Soil	7G31608.	8.7141	0.0161		
7G31614.	SMB27946(MS)	09/09/13 19:59	Soil	7G31608.	8.7175	0.0229		
7G31615.	SMB27945(MS)	09/09/13 20:27	Soil	7G31608.	8.7160	0.0057		
7G31616.	SMB27945	09/09/13 20:54	Soil	7G31608.	8.7104	0.0585		
7G31617.	SMB27946	09/09/13 21:22	Soil	7G31608.	8.7118	0.0425		
7G31618.	AC74257-009(MS:AC74	09/09/13 21:49	Soil	7G31608.	8.7217	0.0711		
7G31619.	AC74257-010(MSD:AC7	09/09/13 22:16	Soil	7G31608.	8.7238	0.0952		
7G31620.	AC74257-008	09/09/13 22:43	Soil	7G31608.	8.7220	0.0746		
7G31621.	AC74221-005(MS)	09/09/13 23:10	Soil	7G31608.	8.7192	0.0424		
7G31622.	AC74221-005(MSD)	09/09/13 23:37	Soil	7G31608.	8.7173	0.0207		
7G31623.	AC74221-005	09/10/13 00:03	Soil	7G31608.	8.7133	0.0252		
7G31624.	AC742218-002	09/10/13 00:29	Soil	7G31608.	8.7131	0.0275		
7G31625.	AC742218-003	09/10/13 00:56	Soil	7G31608.	8.7139	0.0184		
7G31626.	AC742218-005	09/10/13 01:23	Soil	7G31608.	8.7136	0.0218		
7G31627.	AC742218-010	09/10/13 01:49	Soil	7G31608.	8.7134	0.0241		
7G31628.	TEST	09/10/13 02:16	Soil	7G31608.	0.0000	200		
7G31629.	CALTPH@20PPM	09/10/13 02:42	Soil	7G31608.	8.7143	0.0138		
7G31630.	20PPM	09/10/13 03:36	Soil	7G31629.	8.7151	0.0092		
7G31631.	INST BLK	09/10/13 04:28	Soil	7G31629.	0.0000	200		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

3090309 0362

Form 6
Initial Calibration

Method: EPA 8015B

Instrument: GC_7

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7G31323.D	CALTPH@5PPM	08/12/13 17:07	2	7G31322.D	CALTPH@10PPM	08/12/13 16:40
3	7G31318.D	CALTPH@20PPM	08/12/13 14:52	4	7G31321.D	CALTPH@40PPM	08/12/13 16:13
5	7G31320.D	CALTPH@100PPM	08/12/13 15:46	6	7G31319.D	CALTPH@500PPM	08/12/13 15:19

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
C8	1	0	Avg	0.7369	0.8279	0.8089	0.8065	0.8217	1.0275	----	----	0.838	2.64	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C9	1	0	Avg	0.8538	0.9609	0.9189	0.9147	0.9589	1.1775	----	----	0.964	3.34	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C10	1	0	Avg	0.9301	1.0412	0.9740	0.9767	1.0463	1.2678	----	----	1.04	4.02	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C12	1	0	Avg	0.9736	1.1295	1.0379	1.0448	1.1370	1.3525	----	----	1.11	5.28	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C14	1	0	Avg	1.0195	1.2055	1.0755	1.0803	1.1855	1.3881	----	----	1.16	6.39	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C16	1	0	Avg	1.0874	1.2990	1.1364	1.1419	1.2598	1.4630	----	----	1.23	7.38	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C17	1	0	Qua	1.0969	1.4173	1.2096	1.1824	1.4961	2.3261	----	----	1.45	7.84	0.996	1.00	31	5.00	10.00	20.00	40.00	100.0	500.0		
Pristane	1	0	Qua	1.1786	1.3700	1.1806	1.1456	1.1315	0.6503	----	----	1.11	7.85	0.980	1.00	22	5.00	10.00	20.00	40.00	100.0	500.0		
C18	1	0	Qua	1.1078	1.3313	1.1457	1.1549	1.2857	1.6911	----	----	1.29	8.27	0.998	1.00	17	5.00	10.00	20.00	40.00	100.0	500.0		
Phytane	1	0	Avg	1.0482	1.2393	1.0596	1.0588	1.1660	1.1321	----	----	1.12	8.30	1.00	1.00	6.8	5.00	10.00	20.00	40.00	100.0	500.0		
C20	1	0	Avg	1.1504	1.3812	1.1884	1.1941	1.3248	1.5207	----	----	1.29	9.08	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C22	1	0	Avg	1.1613	1.3930	1.1870	1.1913	1.3221	1.5077	----	----	1.29	9.82	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C24	1	0	Avg	1.2232	1.4659	1.2449	1.2476	1.3885	1.5787	----	----	1.36	10.51	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C26	1	0	Avg	1.2319	1.4745	1.2507	1.2542	1.3963	1.5947	----	----	1.37	11.14	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C28	1	0	Avg	1.2214	1.4717	1.2482	1.2527	1.3938	1.5972	----	----	1.36	11.75	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C30	1	0	Avg	1.2261	1.4812	1.2580	1.2652	1.4266	1.6169	----	----	1.38	12.33	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C32	1	0	Avg	1.2484	1.4977	1.2825	1.2853	1.4377	1.6420	----	----	1.40	12.90	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C34	1	0	Avg	1.2065	1.4369	1.2350	1.2446	1.3995	1.6127	----	----	1.36	13.45	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C36	1	0	Avg	1.2248	1.4547	1.2461	1.2588	1.4171	1.6213	----	----	1.37	14.11	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C40	1	0	Avg	1.2530	1.5068	1.2724	1.2837	1.4475	1.5881	----	----	1.39	16.04	1.00	1.00	10	5.00	10.00	20.00	40.00	100.0	500.0		
Chlorobenzene	1	0	Avg	0.6249	0.7150	0.6803	0.6822	0.7085	0.8482	----	----	0.710	3.00	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
O-Terphenyl	1	0	Avg	1.1781	1.4053	1.2082	1.2134	1.3353	1.5430	----	----	1.31	8.72	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
Diesel Range Organics(TO	1	0	Avg	1.1100	1.3246	1.1491	1.1481	1.2718	1.4669	----	----	1.25	4.03	0.999	1.00	11	65.00	130.0	260.0	520.0	1300.	6500.		
Total Petroleum Hydrocarb	1	0	Avg	1.1090	1.3193	1.1480	1.1492	1.2721	1.4678	----	----	1.24	2.64	0.999	1.00	11	100.0	200.0	400.0	800.0	2000.	10000		
Ext. Petroleum Hydrocarbo	1	0	Avg	1.1217	1.3362	1.1599	1.1608	1.2874	1.4856	----	----	1.26	3.34	0.999	1.00	11	90.00	180.0	360.0	720.0	1800.	9000.		
Mineral Spirits(TOTAL)	1	0	Avg	0.9028	1.0330	0.9631	0.9646	1.0299	1.2427	----	----	1.02	2.60	0.999	1.00	12	25.00	50.00	100.0	200.0	500.0	2500.		
Stoddard Solvent(TOTAL)	1	0	Avg	0.9028	1.0330	0.9631	0.9646	1.0299	1.2427	----	----	1.02	2.60	0.999	1.00	12	25.00	50.00	100.0	200.0	500.0	2500.		

Avg Rsd Col 1: 12.59 Avg Rsd Col 2: -1

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Form7
Continuing Calibration

Method: EPA 8015B

Data File:				7G31603.D			7G31608.D			7G31629.D									
Method:				8015			8015			8015									
Calibration Name:				CALTPH@20PPM			CALTPH@20PPM			CALTPH@20PPM									
Calibration Date/Time				09/09/13 10:30			09/09/13 17:18			09/10/13 02:42									
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff
C8	20	1	0	16.73	20	16.4	18.78	20	6.1	20.68	20	3.4						
C9	20	1	0	17.15	20	14.3	18.95	20	5.2	20.78	20	3.9						
C10	20	1	0	16.34	20	18.3	18.99	20	5.1	20.64	20	3.2						
C12	20	1	0	15.52	20	22.4*	19.21	20	4.0	20.16	20	0.8						
C14	20	1	0	16.61	20	17.0	20.22	20	1.1	21.48	20	7.4						
C16	20	1	0	17.64	20	11.8	20.46	20	2.3	22.33	20	11.7						
C17	20	1	0	16.96	20	15.2	20.04	20	0.2	21.83	20	9.2						
Pristane	20	1	0	18.43	20	7.8	21.57	20	7.8	23.94	20	19.7						
C18	20	1	0	18.76	20	6.2	21.32	20	6.6	23.46	20	17.3						
Phytane	20	1	0	18.37	20	8.1	21.19	20	6.0	23.5	20	17.5						
C20	20	1	0	18.07	20	9.7	20.11	20	0.6	22.58	20	12.9						
C22	20	1	0	18.01	20	9.9	19.85	20	0.7	22.71	20	13.6						
C24	20	1	0	17.78	20	11.1	19.77	20	1.1	22.97	20	14.9						
C26	20	1	0	17.75	20	11.3	19.95	20	0.2	23.31	20	16.6						
C28	20	1	0	17.49	20	12.6	20.24	20	1.2	23.62	20	18.1						
C30	20	1	0	17.38	20	13.1	20.54	20	2.7	23.48	20	17.4						
C32	20	1	0	16.32	20	18.4	21	20	5.0	23.14	20	15.7						
C34	20	1	0	15.05	20	24.8*	21.38	20	6.9	21.85	20	9.3						
C36	20	1	0	12.88	20	35.6*	21.66	20	8.3	19.58	20	2.1						
C40	20	1	0	7.63	20	61.9*	21.95	20	9.8	11.74	20	41.3*						
Chlorobenzene	20	1	0	15.83	20	20.9*	18.79	20	6.0	20.65	20	3.2						
O-Terphenyl	20	1	0	18.28	20	8.6	20.91	20	4.5	23.28	20	16.4						
Average Difference	20	1	0			17.1			4.2			12.5						

Flags/Notes: **** - Values outside of limits for this column/run***

EPH Category 2 Data

EPH Category 2 Data
Sample Data

Form1

ORGANICS REPORT

Sample Number: AC74358-006
Client Id: 024 SS-4 Composite
Data File: 9G157140.D
Analysis Date: 09/07/13 01:28
Date Rec/Extracted: 09/03/13-09/06/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: NJEPHRev3B
Matrix: Soil
Initial Vol: 10g
Final Vol: 1ml
Dilution: 1
Solids: 90

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
ephc9c40	**C9-C40**	**67**	**82**				

Worksheet #: 276148 ***Total Target Concentration*** 82 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3090309 0367

Data Path : G:\Gcdata\2013\GC_9\Data\09-05-13\
Data File : 9G157140.D
Signal(s) : FID1A.CH
Acq On : 07-Sep-13, 01:28:19
Operator : KD/RAK/ABM
Sample : AC74358-006
Misc : S.TPH
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 10:41:06 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	11.823	353003	114.359		
22)S	1-Chlorooctadecane	13.263	279852	117.892		
	Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	13.263f	3524008	1380.673		m

(f)=RT Delta > 1/2 Window (m)=manual int.

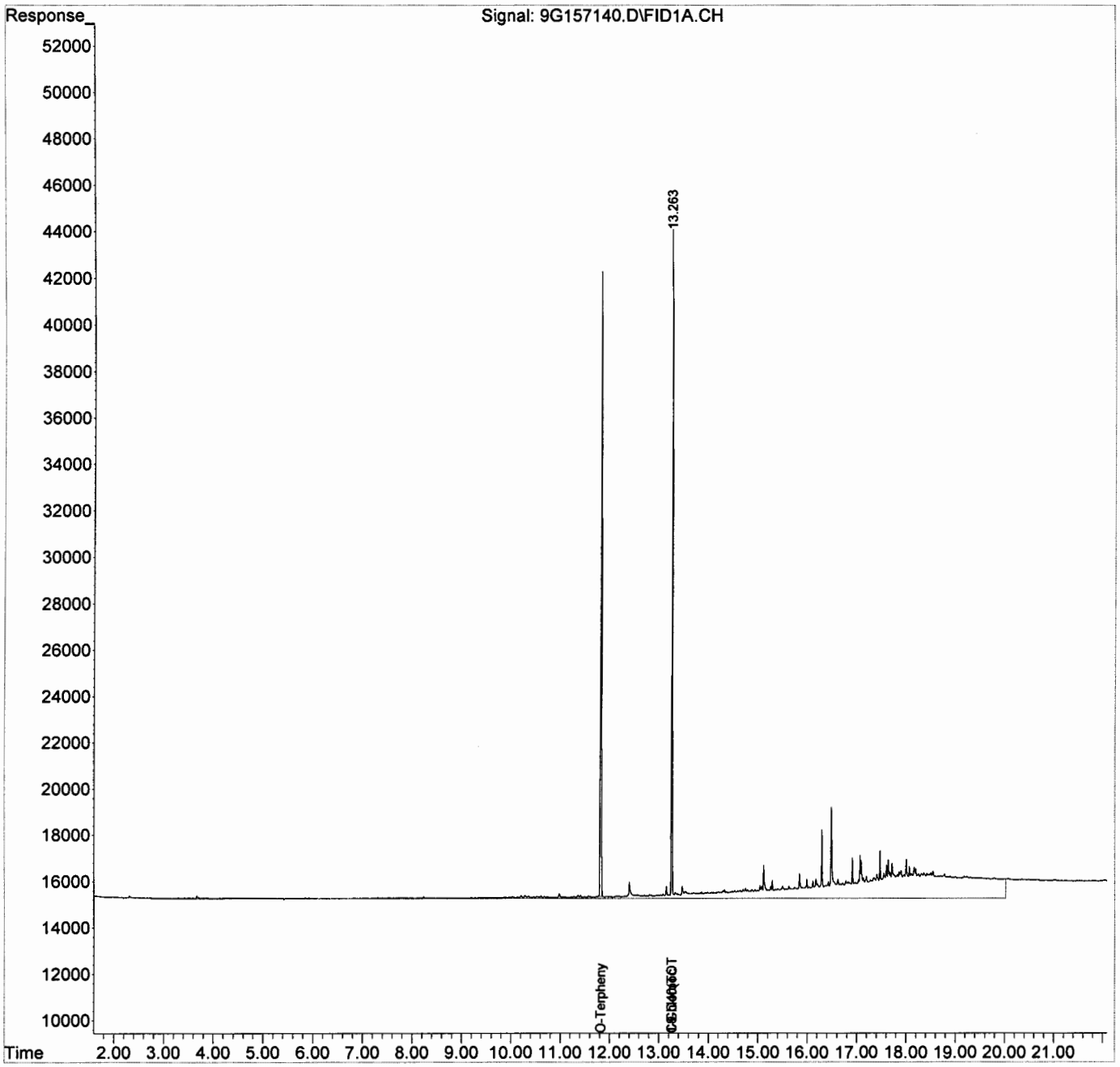
Quantitation Report (QT Reviewed)

3090309 0368

Data Path : G:\Gcdata\2013\GC_9\Data\09-05-13\
Data File : 9G157140.D
Signal(s) : FID1A.CH
Acq On : 07-Sep-13, 01:28:19
Operator : KD/RAK/ABM
Sample : AC74358-006
Misc : S.TPH
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 10:41:06 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



FORM2

Surrogate Recovery

Method: NJEPHRev3B

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column0 S3 Recov	Column0 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
8G43024.D	SMB27926	Soil	09/07/13 04:43	1		110	118				
9G156970.D	SMB26018	Soil	08/28/13 17:34	1		63	64				
9G157140.D	AC74358-006	Soil	09/07/13 01:28	1		114	118				
8G42823.D	SMB26018(M	Soil	08/28/13 16:54	1		82	85				
8G42824.D	SMB26018(M	Soil	08/28/13 17:25	1		84	89				
8G42825.D	AC74163-013(	Soil	08/28/13 17:55	1		70	74				
8G42826.D	AC74163-013(	Soil	08/28/13 18:25	1		74	79				
8G42827.D	AC74163-013	Soil	08/28/13 18:56	1		65	68				
8G43025.D	SMB27926(M	Soil	09/07/13 05:13	1		99	104				

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: NJEPHRev3B

Soil Limits

Compound	Spike Amt	Limits
S1=O-Terphenyl	100	40-140
S2=1-Chlorooctadecane	100	40-140

Form3
Recovery Data
QC Batch: SMB26018

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42823.D	SMB26018(MS)	8/28/2013 4:54:42 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42822.D	INST BLK(MECL2)	8/28/2013 4:05:20 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	63.4	0	100	63	25	140
n-Decane (C10)	1	79.86	0	100	80	40	140
n-Dodecane (C12)	1	88.39	0	100	88	40	140
n-Tetradecane (C14)	1	94.59	0	100	95	40	140
n-Hexadecane (C16)	1	92.13	0	100	92	40	140
n-Octadecane (C18)	1	90.27	0	100	90	40	140
n-Eicosane (C20)	1	90.86	0	100	91	40	140
n-Heneicosane (C21)	1	89.38	0	100	89	40	140
n-Docosane (C22)	1	89.75	0	100	90	40	140
n-Tetracosane (C24)	1	88.28	0	100	88	40	140
n-Hexacosane (C26)	1	89.87	0	100	90	40	140
n-Octacosane (C28)	1	87.9	0	100	88	40	140
n-Triacontane (C30)	1	85.44	0	100	85	40	140
n-Dotriacontane(C32)	1	84.35	0	100	84	40	140
n-Tetratriacontane (C34)	1	81.92	0	100	82	40	140
n-Hexatriacontane (C36)	1	84.8	0	100	85	40	140
n-Octatriacontane (C38)	1	85.43	0	100	85	40	140
n-Tetracontane (C40)	1	88.66	0	100	89	40	140

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42824.D	SMB26018(MSD)	8/28/2013 5:25:03 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42822.D	INST BLK(MECL2)	8/28/2013 4:05:20 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	59.78	0	100	60	25	140
n-Decane (C10)	1	76.35	0	100	76	40	140
n-Dodecane (C12)	1	84.9	0	100	85	40	140
n-Tetradecane (C14)	1	91.83	0	100	92	40	140
n-Hexadecane (C16)	1	91.2	0	100	91	40	140
n-Octadecane (C18)	1	90.69	0	100	91	40	140
n-Eicosane (C20)	1	92.73	0	100	93	40	140
n-Heneicosane (C21)	1	91.89	0	100	92	40	140
n-Docosane (C22)	1	92.86	0	100	93	40	140
n-Tetracosane (C24)	1	92.04	0	100	92	40	140
n-Hexacosane (C26)	1	94.14	0	100	94	40	140
n-Octacosane (C28)	1	92.23	0	100	92	40	140
n-Triacontane (C30)	1	90.05	0	100	90	40	140
n-Dotriacontane(C32)	1	88.9	0	100	89	40	140
n-Tetratriacontane (C34)	1	86.08	0	100	86	40	140
n-Hexatriacontane (C36)	1	87.99	0	100	88	40	140
n-Octatriacontane (C38)	1	88.2	0	100	88	40	140
n-Tetracontane (C40)	1	90.9	0	100	91	40	140

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA
QC Batch: SMB26018

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42824.D	SMB26018(MSD)	8/28/2013 5:25:03 PM
Duplicate(If applicable):	8G42823.D	SMB26018(MS)	8/28/2013 4:54:42 PM
Inst Blank(If applicable):	8G42822.D	INST BLK(MECL2)	8/28/2013 4:05:20 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Nonane (C9)	1	59.78	63.4	5.9	25
n-Decane (C10)	1	76.35	79.86	4.5	25
n-Dodecane (C12)	1	84.9	88.39	4	25
n-Tetradecane (C14)	1	91.83	94.59	3	25
n-Hexadecane (C16)	1	91.2	92.13	1	25
n-Octadecane (C18)	1	90.69	90.27	0.46	25
n-Eicosane (C20)	1	92.73	90.86	2	25
n-Heneicosane (C21)	1	91.89	89.38	2.8	25
n-Docosane (C22)	1	92.86	89.75	3.4	25
n-Tetracosane (C24)	1	92.04	88.28	4.2	25
n-Hexacosane (C26)	1	94.14	89.87	4.6	25
n-Octacosane (C28)	1	92.23	87.9	4.8	25
n-Triacontane (C30)	1	90.05	85.44	5.3	25
n-Dotriacontane(C32)	1	88.9	84.35	5.3	25
n-Tetratriacontane (C34)	1	86.08	81.92	5	25
n-Hexatriacontane (C36)	1	87.99	84.8	3.7	25
n-Octatriacontane (C38)	1	88.2	85.43	3.2	25
n-Tetracontane (C40)	1	90.9	88.66	2.5	25

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Form3
Recovery Data
QC Batch: SMB27926

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G43025.D	SMB27926(MS)	9/7/2013 5:13:16 AM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G43023.D	INST BLK(MECL2	9/7/2013 4:12:56 AM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	49.58	0	100	50	25	140
n-Decane (C10)	1	68.1	0	100	68	40	140
n-Dodecane (C12)	1	79.74	0	100	80	40	140
n-Tetradecane (C14)	1	86.05	0	100	86	40	140
n-Hexadecane (C16)	1	85.46	0	100	85	40	140
n-Octadecane (C18)	1	81.73	0	100	82	40	140
n-Eicosane (C20)	1	86.85	0	100	87	40	140
n-Heneicosane (C21)	1	85.64	0	100	86	40	140
n-Docosane (C22)	1	88.34	0	100	88	40	140
n-Tetracosane (C24)	1	88.77	0	100	89	40	140
n-Hexacosane (C26)	1	92.35	0	100	92	40	140
n-Octacosane (C28)	1	95.18	0	100	95	40	140
n-Triacontane (C30)	1	91.84	0	100	92	40	140
n-Dotriacontane(C32)	1	91.03	0	100	91	40	140
n-Tetratriacontane (C34)	1	87.6	0	100	88	40	140
n-Hexatriacontane (C36)	1	88.7	0	100	89	40	140
n-Octatriacontane (C38)	1	87.67	0	100	88	40	140
n-Tetracontane (C40)	1	89.64	0	100	90	40	140

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB26018

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42825.D	AC74163-013(MS)	8/28/2013 5:55:20 PM
Non Spike(If applicable):	8G42827.D	AC74163-013	8/28/2013 6:56:11 PM
Inst Blank(If applicable):	8G42822.D	INST BLK(MECL2)	8/28/2013 4:05:20 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	52.6	0	100	53	25	140
n-Decane (C10)	1	66.27	0	100	66	40	140
n-Dodecane (C12)	1	73.24	0	100	73	40	140
n-Tetradecane (C14)	1	78.7	0	100	79	40	140
n-Hexadecane (C16)	1	78.1	0	100	78	40	140
n-Octadecane (C18)	1	72.32	0	100	72	40	140
n-Eicosane (C20)	1	79.51	0	100	80	40	140
n-Heneicosane (C21)	1	78.98	0	100	79	40	140
n-Docosane (C22)	1	80.39	0	100	80	40	140
n-Tetracosane (C24)	1	79.65	0	100	80	40	140
n-Hexacosane (C26)	1	82	0	100	82	40	140
n-Octacosane (C28)	1	80.42	0	100	80	40	140
n-Triacontane (C30)	1	78.15	0	100	78	40	140
n-Dotriacontane(C32)	1	77.51	0	100	78	40	140
n-Tetratriacontane (C34)	1	72.66	0	100	73	40	140
n-Hexatriacontane (C36)	1	73.14	0	100	73	40	140
n-Octatriacontane (C38)	1	71.14	0	100	71	40	140
n-Tetracontane (C40)	1	72.5	0	100	72	40	140

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA

QC Batch: SMB26018

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42826.D	AC74163-013(DUP)	8/28/2013 6:25:48 PM
Duplicate(If applicable):	8G42827.D	AC74163-013	8/28/2013 6:56:11 PM
Inst Blank(If applicable):	8G42822.D	INST BLK(MECL2)	8/28/2013 4:05:20 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: DUP

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
C9-C28	1	0	0	NA	50
>C28-C40	1	0	0	NA	50
C9-C40	1	0	0	NA	50

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: SMB26018
Blank Data File: 9G156970.D
Matrix: Soil

Blank Analysis Date: 08/28/13 17:34
Blank Extraction Date: 08/28/13
(If Applicable)
Method: NJEPHRev3B

Sample Number	Data File	Analysis Date
AC74163-013	8G42827.D	08/28/13 18:56
AC74163-013(DUP	8G42826.D	08/28/13 18:25
AC74163-013(MS)	8G42825.D	08/28/13 17:55
SMB26018(MSD)	8G42824.D	08/28/13 17:25
SMB26018(MS)	8G42823.D	08/28/13 16:54

FORM 4
Blank Summary

Blank Number: SMB27926
Blank Data File: 8G43024.D
Matrix: Soil

Blank Analysis Date: 09/07/13 04:43
Blank Extraction Date: 09/06/13
(If Applicable)
Method: NJEPHRev3B

Sample Number	Data File	Analysis Date
AC74358-006	9G157140.D	09/07/13 01:28
SMB27926(MS)	8G43025.D	09/07/13 05:13

Form 5

Method: NJEPHRev3B

Instrument: GC_9

Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
9G156776.D	INST BLK(MECL2)	08/21/13 09:27	Soil					
9G156777.D	CALDTH AL@100PPM	08/21/13 09:56	Soil		11.8733	0		
9G156778.D	CALDTH AL@500PPM	08/21/13 10:26	Soil	9G15678	11.8952	0		
9G156779.D	CALDTH AL@300PPM	08/21/13 10:55	Soil	9G15678	11.8838	0.1019		
9G156780.D	CALDTH AL@200PPM	08/21/13 11:25	Soil	9G15678	11.8790	0.0615		
9G156781.D	CALDTH AL@100PPM	08/21/13 11:55	Soil	9G15678	11.8717	0		
9G156782.D	CALDTH AL@50PPM	08/21/13 12:25	Soil	9G15678	11.8683	0.0286		
9G156783.D	10PPM	08/21/13 12:54	Soil	9G15678	11.8658	0.0497		
9G156784.D	CALDTH AL@10PPM	08/21/13 13:35	Soil	9G15678	11.8682	0.0295		
9G156785.D	ICV	08/21/13 14:50	Soil	9G15678	11.8747	0.0253		
9G156786.D	INST BLK(MECL2)	08/21/13 15:23	Soil	9G15678	0.0000	200*		
9G156787.D	TEST	08/21/13 16:01	Soil	9G15678	0.0000	200*		
9G156788.D	AC74049-004	08/21/13 16:36	Soil	9G15678	11.8730	0.0109		
9G156789.D	AC74049-001	08/21/13 17:06	Soil	9G15678	11.8701	0.0135		
9G156790.D	AC74013-001	08/21/13 17:36	Soil	9G15678	11.8689	0.0236		
9G156791.D	AC74013-002	08/21/13 18:06	Soil	9G15678	11.8693	0.0202		
9G156792.D	AC74013-003	08/21/13 18:36	Soil	9G15678	11.8699	0.0152		
9G156793.D	AC74014-001	08/21/13 19:06	Soil	9G15678	11.8683	0.0286		
9G156794.D	AC74014-002	08/21/13 19:36	Soil	9G15678	11.8679	0.032		
9G156795.D	AC74014-003	08/21/13 20:06	Soil	9G15678	11.8684	0.0278		
9G156796.D	AC74015-001	08/21/13 20:36	Soil	9G15678	11.8684	0.0278		
9G156797.D	AC74064-001	08/21/13 21:06	Soil	9G15678	11.8737	0.0168		
9G156798.D	AC74064-002	08/21/13 21:35	Soil	9G15678	11.8710	0.0059		
9G156799.D	AC74064-003	08/21/13 22:05	Soil	9G15678	11.8668	0.0413		
9G156800.D	TEST	08/21/13 22:35	Soil	9G15678	0.0000	200*		
9G156801.D	CALDTH AL@100PPM	08/21/13 23:04	Soil	9G15678	11.8701	0.0135		
9G156802.D	100PPM	08/21/13 23:34	Soil	9G15680	11.8713	0.0101		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: NJEPHRev3B

Instrument: GC_8

Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8G42781.D	INST BLK(MEL2)	08/27/13 08:22	Soil					
8G42782.D	CALDTH AL@100PPM	08/27/13 08:52	Soil		12.3397	0		
8G42783.D	CALDTH AL@100PPM	08/27/13 09:41	Soil	8G42783.	12.3403	0		
8G42784.D	CALDTH AL@500PPM	08/27/13 10:55	Soil	8G42783.	12.3561	0.128		
8G42785.D	CALDTH AL@300PPM	08/27/13 11:25	Soil	8G42783.	12.3471	0.0551		
8G42786.D	CALDTH AL@200PPM	08/27/13 11:55	Soil	8G42783.	12.3422	0.0154		
8G42787.D	CALDTH AL@100PPM	08/27/13 12:25	Soil	8G42783.	12.3371	0.0259		
8G42788.D	CALDTH AL@50PPM	08/27/13 12:56	Soil	8G42783.	12.3346	0.0462		
8G42789.D	CALDTH AL@10PPM	08/27/13 13:26	Soil	8G42783.	12.3330	0.0592		
8G42790.D	ICV	08/27/13 15:54	Soil	8G42783.	12.3387	0.013		
8G42791.D	INST BLK(MECL2)	08/27/13 17:15	Soil	8G42783.	0.0000	200*		
8G42792.D	WMB26008(MS)	08/27/13 17:46	Aqueous	8G42783.	12.3380	0.0186		
8G42793.D	WMB26008(MSD)	08/27/13 18:16	Aqueous	8G42783.	12.3374	0.0235		
8G42794.D	AC74188-005(MS)	08/27/13 18:47	Aqueous	8G42783.	12.3395	0.0065		
8G42795.D	AC74188-005(DUP)	08/27/13 19:18	Aqueous	8G42783.	12.3393	0.0081		
8G42796.D	AC74188-005	08/27/13 19:48	Aqueous	8G42783.	12.3431	0.0227		
8G42797.D	AC74196-001(MS)	08/27/13 20:19	Soil	8G42783.	12.3339	0.0519		
8G42798.D	AC74196-001(DUP)	08/27/13 20:49	Soil	8G42783.	12.3361	0.034		
8G42799.D	AC74196-001	08/27/13 21:20	Soil	8G42783.	12.3347	0.0454		
8G42800.D	AC74187-006	08/27/13 21:50	Soil	8G42783.	12.3399	0.0032		
8G42801.D	AC74187-007	08/27/13 22:20	Soil	8G42783.	12.3394	0.0073		
8G42802.D	AC74187-008	08/27/13 22:51	Soil	8G42783.	12.3348	0.0446		
8G42803.D	AC74187-009	08/27/13 23:21	Soil	8G42783.	12.3339	0.0519		
8G42804.D	AC74187-010	08/27/13 23:51	Soil	8G42783.	12.3347	0.0454		
8G42805.D	AC74187-011	08/28/13 00:22	Soil	8G42783.	12.3336	0.0543		
8G42806.D	AC74140-005(R)	08/28/13 00:52	Soil	8G42783.	12.3312	0.0738		
8G42807.D	AC74187-004	08/28/13 01:22	Soil	8G42783.	12.3366	0.03		
8G42808.D	AC74196-002(5X)	08/28/13 01:52	Soil	8G42783.	12.3310	0.0754		
8G42809.D	TEST	08/28/13 02:22	Soil	8G42783.	0.0000	200*		
8G42810.D	100PPM	08/28/13 02:52	Soil	8G42783.	12.3345	0.047		
8G42811.D	CALDTH AL@100PPM	08/28/13 03:22	Soil	8G42783.	12.3344	0.0478		
8G42812.D	INST BL(MECL2)	08/28/13 03:52	Soil	8G42811.	0.0000	200*		
8G42813.D	TEST	08/28/13 04:22	Soil	8G42811.	12.3341	0.0024		
8G42814.D	TEST	08/28/13 04:52	Soil	8G42811.	12.3348	0.0032		
8G42815.D	TEST	08/28/13 05:22	Soil	8G42811.	0.0000	200*		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: NJEPHRev3B

Instrument: GC_8 Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8G42816.D	INST BLK(MEL2)	08/28/13 07:44	Soil					
8G42817.D	CALDTH AL@100PPM	08/28/13 08:14	Soil	8G42817.	12.3337	0		
8G42818.D	INST BLK(MECL2)	08/28/13 11:13	Soil	8G42817.	0.0000	200*		
8G42819.D	AC74188-006(3X)	08/28/13 14:04	Aqueous	8G42817.	12.3306	0.0251		
8G42820.D	74187-002(5X)	08/28/13 14:34	Soil	8G42817.	12.3261	0.0616		
8G42821.D	CALDTH AL@100PPM	08/28/13 15:34	Soil	8G42817.	12.3309	0.0227		
8G42822.D	INST BLK(MECL2)	08/28/13 16:05	Soil	8G42821.	0.0000	200*		
8G42823.D	SMB26018(MS)	08/28/13 16:54	Soil	8G42821.	12.3311	0.0016		
8G42824.D	SMB26018(MSD)	08/28/13 17:25	Soil	8G42821.	12.3287	0.0178		
8G42825.D	AC74163-013(MS)	08/28/13 17:55	Soil	8G42821.	12.3281	0.0227		
8G42826.D	AC74163-013(DUP)	08/28/13 18:25	Soil	8G42821.	12.3274	0.0284		
8G42827.D	AC74163-013	08/28/13 18:56	Soil	8G42821.	12.3270	0.0316		
8G42828.D	AC74163-011	08/28/13 19:26	Soil	8G42821.	12.3277	0.026		
8G42829.D	AC74091-001	08/28/13 19:57	Soil	8G42821.	12.3273	0.0292		
8G42830.D	AC74163-004(3X)	08/28/13 20:27	Soil	8G42821.	12.3252	0.0462		
8G42831.D	AC74163-007(3X)	08/28/13 20:57	Soil	8G42821.	12.3257	0.0422		
8G42832.D	AC74220-001(3X)	08/28/13 21:28	Soil	8G42821.	12.3257	0.0422		
8G42833.D	AC74187-006(5X)	08/28/13 21:58	Soil	8G42821.	12.3239	0.0568		
8G42834.D	AC74187-007(5X)	08/28/13 22:28	Soil	8G42821.	12.3236	0.0592		
8G42835.D	AC74187-004(5X)	08/28/13 22:58	Soil	8G42821.	12.3243	0.0535		
8G42836.D	AC74187-002(20X)	08/28/13 23:28	Soil	8G42821.	0.0000	200*		
8G42837.D	TEST	08/28/13 23:59	Soil	8G42821.	0.0000	200*		
8G42838.D	CALDTH AL@100PPM	08/29/13 00:29	Soil	8G42821.	12.3265	0.0357		
8G42839.D	100PPM	08/29/13 00:59	Soil	8G42838.	12.3277	0.0097		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: NJEPHRev3B

Instrument: GC_9 Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
9G156955.D	INST BLK(MECL2)	08/28/13 07:46	Soil					
9G156956.D	CALDTH AL@1OOPPM	08/28/13 08:18	Soil	9G15695	11.8507	0		
9G156957.D	TEST	08/28/13 08:49	Soil	9G15695	0.0000	200*		
9G156958.D	INST BLK(MECL2)	08/28/13 09:18	Soil	9G15695	0.0000	200*		
9G156959.D	MBS-ABM 1	08/28/13 11:41	Soil	9G15695	11.8515	0.0067		
9G156960.D	MBS-ABM 2	08/28/13 12:10	Soil	9G15695	11.8481	0.0219		
9G156961.D	MBS-ABM 3	08/28/13 12:40	Soil	9G15695	11.8485	0.0186		
9G156962.D	SMB26005(DIESEL)(MS	08/28/13 13:10	Soil	9G15695	11.8477	0.0253		
9G156963.D	MBS-ABM 5	08/28/13 13:40	Soil	9G15695	0.0000	200*		
9G156964.D	MBS-ABM 6	08/28/13 14:09	Soil	9G15695	11.8476	0.0262		
9G156965.D	MBS-ABM 7	08/28/13 14:39	Soil	9G15695	11.8465	0.0354		
9G156966.D	CALDTH AL@100PPM	08/28/13 15:09	Soil	9G15695	11.8478	0.0245		
9G156967.D	INST BLK(MECL2)	08/28/13 15:39	Soil	9G15696	0.0000	200*		
9G156968.D	MBS-ABM 4	08/28/13 16:34	Soil	9G15696	11.8499	0.0177		
9G156969.D	MBS-ABM 8	08/28/13 17:04	Soil	9G15696	11.8480	0.0017		
9G156970.D	SMB26018	08/28/13 17:34	Soil	9G15696	11.8438	0.0338		
9G156971.D	AC74195-002	08/28/13 18:04	Soil	9G15696	11.8442	0.0304		
9G156972.D	AC74195-003	08/28/13 18:33	Soil	9G15696	11.8428	0.0422		
9G156973.D	AC74195-004	08/28/13 19:03	Soil	9G15696	11.8449	0.0245		
9G156974.D	AC74195-005	08/28/13 19:33	Soil	9G15696	11.8420	0.049		
9G156975.D	AC74195-006	08/28/13 20:03	Soil	9G15696	11.8443	0.0295		
9G156976.D	AC74195-001	08/28/13 20:33	Soil	9G15696	11.8451	0.0228		
9G156977.D	AC74091-002	08/28/13 21:03	Soil	9G15696	11.8434	0.0371		
9G156978.D	TEST	08/28/13 21:32	Soil	9G15696	0.0000	200*		
9G156979.D	100PPM	08/28/13 22:02	Soil	9G15696	11.8475	0.0025		
9G156980.D	CALDTH AL@100PPM	08/28/13 22:32	Soil	9G15696	11.8462	0.0135		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: NJEPHRev3B

Instrument: GC_8

Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8G42965.D	INST BLK(MECL2)	09/05/13 15:53	Soil					
8G42966.D	CALDTH AL@100PPM	09/05/13 16:23	Soil	8G42966.	12.3059	0		
8G42967.D	INST BLK(MECL2)	09/05/13 16:53	Soil	8G42966.	0.0000	200*		
8G42968.D	TEST	09/05/13 18:00	Soil	8G42966.	12.3087	0.0228		
8G42969.D	AC74339-001(MS)	09/05/13 18:30	Soil	8G42966.	12.3042	0.0138		
8G42970.D	AC74339-001(DUP)	09/05/13 19:00	Soil	8G42966.	12.3035	0.0195		
8G42971.D	AC74339-001	09/05/13 19:30	Soil	8G42966.	12.3024	0.0284		
8G42972.D	AC74339-002	09/05/13 20:00	Soil	8G42966.	12.3036	0.0187		
8G42973.D	AC74339-003	09/05/13 20:30	Soil	8G42966.	12.3016	0.0349		
8G42974.D	AC74339-004	09/05/13 21:01	Soil	8G42966.	12.3023	0.0293		
8G42975.D	AC74339-005	09/05/13 21:32	Soil	8G42966.	12.3025	0.0276		
8G42976.D	AC74338-001	09/05/13 22:02	Soil	8G42966.	12.3073	0.0114		
8G42977.D	AC74341-001	09/05/13 22:32	Soil	8G42966.	12.3132	0.0593		
8G42978.D	AC74341-002	09/05/13 23:02	Soil	8G42966.	12.3137	0.0634		
8G42979.D	AC74341-003	09/05/13 23:32	Soil	8G42966.	12.3025	0.0276		
8G42980.D	AC74341-004	09/06/13 00:02	Soil	8G42966.	12.3017	0.0341		
8G42981.D	AC74341-005	09/06/13 00:32	Soil	8G42966.	12.3147	0.0715		
8G42982.D	AC74341-006	09/06/13 01:02	Soil	8G42966.	12.3093	0.0276		
8G42983.D	AC74341-007	09/06/13 01:32	Soil	8G42966.	12.3049	0.0081		
8G42984.D	AC74341-008	09/06/13 02:02	Soil	8G42966.	12.3022	0.0301		
8G42985.D	AC74341-009	09/06/13 02:32	Soil	8G42966.	12.3016	0.0349		
8G42986.D	TEST	09/06/13 03:02	Soil	8G42966.	0.0000	200*		
8G42987.D	CALDTH AL@100PPM	09/06/13 03:32	Soil	8G42966.	12.3032	0.0219		
8G42988.D	100PPM	09/06/13 04:32	Soil	8G42987.	12.3041	0.0073		
8G42989.D	TEST	09/06/13 08:44	Soil	8G42987.	0.0000	200*		
8G42990.D	INST BLK(MECL2)	09/06/13 09:46	Soil	8G42987.	0.0000	200*		
8G42991.D	AC74285-001(MS)	09/06/13 10:20	Soil	8G42987.	12.3010	0.0179		
8G42992.D	AC74285-001(DUP)	09/06/13 10:50	Soil	8G42987.	12.2979	0.0431		
8G42993.D	AC74285-001	09/06/13 11:20	Soil	8G42987.	12.2998	0.0276		
8G42994.D	AC74285-002	09/06/13 11:50	Soil	8G42987.	12.2997	0.0285		
8G42995.D	AC74285-003	09/06/13 12:20	Soil	8G42987.	12.2993	0.0317		
8G42996.D	AC74315-001	09/06/13 12:51	Soil	8G42987.	12.2977	0.0447		
8G42997.D	AC74338-001(5X)	09/06/13 13:21	Soil	8G42987.	12.2966	0.0537		
8G42998.D	AC74341-001(10X)	09/06/13 13:51	Soil	8G42987.	12.2961	0.0577		
8G42999.D	AC74341-002(10X)	09/06/13 14:21	Soil	8G42987.	12.2961	0.0577		
8G43000.D	AC74341-005(20X)	09/06/13 14:52	Soil	8G42987.	0.0000	200*		
8G43001.D	CALDTH AL@100PPM	09/06/13 15:22	Soil	8G42987.	12.3027	0.0041		
8G43002.D	INST BLK(MECL2)	09/06/13 15:55	Soil	8G43001.	0.0000	200*		
8G43003.D	SMB27927	09/06/13 17:11	Soil	8G43001.	12.3042	0.0122		
8G43004.D	SMB27927(DIESEL)(MS	09/06/13 17:41	Soil	8G43001.	12.3032	0.0041		
8G43005.D	MBS27927	09/06/13 18:12	Soil	8G43001.	12.2993	0.0276		
8G43006.D	AC74326-001(MS)	09/06/13 18:42	Soil	8G43001.	12.3012	0.0122		
8G43007.D	AC74326-001(DUP)	09/06/13 19:12	Soil	8G43001.	12.3016	0.0089		
8G43008.D	AC74326-001	09/06/13 19:42	Soil	8G43001.	12.3007	0.0163		
8G43009.D	AC74326-002	09/06/13 20:12	Soil	8G43001.	12.2992	0.0285		
8G43010.D	AC74333-001	09/06/13 20:42	Soil	8G43001.	12.2997	0.0244		
8G43011.D	AC74333-002	09/06/13 21:12	Soil	8G43001.	12.2998	0.0236		
8G43012.D	AC74333-003	09/06/13 21:42	Soil	8G43001.	12.2999	0.0228		
8G43013.D	AC74333-004	09/06/13 22:12	Soil	8G43001.	12.2994	0.0268		
8G43014.D	AC74333-005	09/06/13 22:42	Soil	8G43001.	12.3000	0.0219		
8G43015.D	AC74333-006	09/06/13 23:12	Soil	8G43001.	12.2990	0.0301		
8G43016.D	AC74333-007	09/06/13 23:42	Soil	8G43001.	12.2987	0.0325		
8G43017.D	AC74333-008	09/07/13 00:12	Soil	8G43001.	12.2981	0.0374		
8G43018.D	AC74333-014	09/07/13 00:42	Soil	8G43001.	12.2989	0.0309		
8G43019.D	AC74323-001	09/07/13 01:12	Soil	8G43001.	12.2991	0.0293		
8G43020.D	AC74390-001	09/07/13 01:42	Soil	8G43001.	12.2997	0.0244		
8G43021.D	CALDTH AL@100PPM	09/07/13 02:42	Soil	8G43001.	12.3008	0.0154		
8G43022.D	100PPM	09/07/13 03:12	Soil	8G43021.	12.3031	0.0187		
8G43023.D	INST BLK(MECL2	09/07/13 04:12	Soil	8G43021.	0.0000	200*		
8G43024.D	SMB27926	09/07/13 04:43	Soil	8G43021.	12.3000	0.0065		
8G43025.D	SMB27926(MS)	09/07/13 05:13	Soil	8G43021.	12.2996	0.0098		
8G43026.D	AC74359-001	09/07/13 05:43	Soil	8G43021.	12.2996	0.0098		
8G43027.D	AC74359-002	09/07/13 06:13	Soil	8G43021.	12.2974	0.0276		
8G43028.D	AC74359-003	09/07/13 06:43	Soil	8G43021.	12.2999	0.0073		
8G43029.D	AC74388-001	09/07/13 07:13	Soil	8G43021.	12.2987	0.0171		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: NJEPHRev3B
Instrument: GC_8

Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8G43030.D	AC74388-002	09/07/13 07:43	Soil	8G43021.	12.2986	0.0179		
8G43031.D	SMB27906(MS)	09/07/13 08:14	Soil	8G43021.	12.2962	0.0374		
8G43032.D	CALDTH AL@100PPM	09/07/13 08:44	Soil	8G43021.	12.2986	0.0179		
8G43033.D	100PPM	09/07/13 09:44	Soil	8G43032.	12.2993	0.0057		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: NJEPHRev3B

Instrument: GC_9

Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
9G157102.D	INST BLK(MECL2)	09/05/13 17:10	Soil					
9G157103.D	100PPM	09/05/13 17:39	Soil					
9G157104.D	CALDTH AL@100PPM	09/05/13 18:25	Soil	9G15710	11.8301	0		
9G157105.D	INST BLK(MECL2)	09/05/13 18:54	Soil	9G15710	0.0000	200*		
9G157106.D	SMB27920	09/06/13 08:24	Soil	9G15710	11.8269	0.0271		
9G157107.D	SMB27919	09/06/13 08:54	Soil	9G15710	11.8258	0.0364		
9G157108.D	SMB27920(DIESEL)(MS	09/06/13 09:23	Soil	9G15710	11.8240	0.0516		
9G157109.D	SMB27919(DIESEL)(MS	09/06/13 09:53	Soil	9G15710	11.8273	0.0237		
9G157110.D	SMB27919(DIESEL)(MS	09/06/13 10:22	Soil	9G15710	11.8264	0.0313		
9G157111.D	AC74299-001	09/06/13 10:52	Soil	9G15710	11.8238	0.0533		
9G157112.D	AC74299-002	09/06/13 11:22	Soil	9G15710	11.8242	0.0499		
9G157113.D	AC74299-003	09/06/13 11:51	Soil	9G15710	11.8226	0.0634		
9G157114.D	AC74299-004	09/06/13 12:21	Soil	9G15710	11.8238	0.0533		
9G157115.D	AC74307-001	09/06/13 12:51	Soil	9G15710	11.8225	0.0643		
9G157116.D	AC74307-002	09/06/13 13:20	Soil	9G15710	11.8217	0.071		
9G157117.D	AC74307-003	09/06/13 13:50	Soil	9G15710	11.8221	0.0677		
9G157118.D	AC74307-004	09/06/13 14:20	Soil	9G15710	11.8215	0.0727		
9G157119.D	AC74341-007(3X)	09/06/13 14:49	Soil	9G15710	11.8204	0.082		
9G157120.D	AC74341-006(5X)	09/06/13 15:19	Soil	9G15710	11.8203	0.0829		
9G157121.D	CALDTH AL@100PPM	09/06/13 15:49	Soil	9G15710	11.8244	0.0482		
9G157122.D	INST BLK(MECL2)	09/06/13 16:19	Soil	9G15712	0.0000	200*		
9G157123.D	AC74368-001	09/06/13 17:06	Soil	9G15712	11.8245	0.0008		
9G157124.D	AC74368-002	09/06/13 17:35	Soil	9G15712	11.8216	0.0237		
9G157125.D	AC74368-003	09/06/13 18:05	Soil	9G15712	11.8219	0.0211		
9G157126.D	AC74368-004	09/06/13 18:35	Soil	9G15712	11.8209	0.0296		
9G157127.D	AC74368-005	09/06/13 19:04	Soil	9G15712	11.8218	0.022		
9G157128.D	AC74325-001	09/06/13 19:34	Soil	9G15712	11.8216	0.0237		
9G157129.D	AC74325-002	09/06/13 20:03	Soil	9G15712	11.8226	0.0152		
9G157130.D	AC74325-003	09/06/13 20:33	Soil	9G15712	11.8217	0.0228		
9G157131.D	AC74325-004	09/06/13 21:02	Soil	9G15712	11.8218	0.022		
9G157132.D	AC74325-005	09/06/13 21:32	Soil	9G15712	11.8218	0.022		
9G157133.D	AC74325-007	09/06/13 22:01	Soil	9G15712	11.8202	0.0355		
9G157134.D	AC74383-001	09/06/13 22:31	Soil	9G15712	11.8315	0.06		
9G157135.D	AC74383-002	09/06/13 23:00	Soil	9G15712	11.8239	0.0042		
9G157136.D	AC74383-003	09/06/13 23:30	Soil	9G15712	11.8307	0.0533		
9G157137.D	AC74383-004	09/06/13 23:59	Soil	9G15712	11.8322	0.0659		
9G157138.D	AC74383-005	09/07/13 00:29	Soil	9G15712	11.8317	0.0617		
9G157139.D	AC74333-009	09/07/13 00:58	Soil	9G15712	11.8230	0.0118		
9G157140.D	AC74358-006	09/07/13 01:28	Soil	9G15712	11.8228	0.0135		
9G157141.D	TEST	09/07/13 01:57	Soil	9G15712	0.0000	200*		
9G157142.D	100PPM	09/07/13 02:27	Soil	9G15712	11.8271	0.0228		
9G157143.D	CALDTH AL@100PPM	09/07/13 03:26	Soil	9G15712	11.8224	0.0169		

Drift Compound: O-Terphenyl

Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph)

* - Values outside of limits for this column/run

Form8

EPH Surrogate Initial Calibration Areas And Area Recovery Limits

Inital Calibration File: 8G42783.D
Analysis Date: 8/27/2013 9:41:56 AM
Analytical Method: NJEPHRev3B

Surrogate	Area Found	Area Limit
1-Chlorooctadecane	250471	125236-500942
O-Terphenyl	328918	164459-657836

Continuing Calibration Data

Data File	TxtSamNum:	Analysis Date	Surrogate: 1-Chlorooctadecane	Surrogate O-Terphenyl
8G42821.D	CALDTH AL@100PPM	8/28/13 15:34	263516	343161
8G42838.D	CALDTH AL@100PPM	8/29/13 00:29	230706	299550
8G43021.D	CALDTH AL@100PPM	9/7/13 02:42	272373	353109
8G43032.D	CALDTH AL@100PPM	9/7/13 08:44	246198	320159

* - Indicates Area Failed Criteria

Form8

EPH Surrogate Initial Calibration Areas And Area Recovery Limits

Inital Calibration File: 9G156781.D
Analysis Date: 8/21/2013 11:55:20 AM
Analytical Method: NJEPHRev3B

Surrogate	Area Found	Area Limit
1-Chlorooctadecane	247274	123637-494548
O-Terphenyl	315267	157634-630534

Continuing Calibration Data

Data File	TxtSamNum:	Analysis Date	Surrogate: 1-Chlorooctadecane	Surrogate O-Terphenyl
9G156966.D	CALDTH AL@100PPM	8/28/13 15:09	279952	365820
9G156980.D	CALDTH AL@100PPM	8/28/13 22:32	298262	386068
9G157121.D	CALDTH AL@100PPM	9/6/13 15:49	279171	357459
9G157143.D	CALDTH AL@100PPM	9/7/13 03:26	244861	313531

* - Indicates Area Failed Criteria

EPH Category 2 Data
QC Summary

EPH Category 2 Data
Standards Data

3090309 0388

Form 6
Initial Calibration

Method: NJEPHRev3B

Instrument: GC_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9G156781.	CALDTH AL@100PP	08/21/13 11:55	2	9G156784.	CALDTH AL@10PPM	08/21/13 13:35
3	9G156782.	CALDTH AL@50PPM	08/21/13 12:25	4	9G156780.	CALDTH AL@200PP	08/21/13 11:25
5	9G156779.	CALDTH AL@300PP	08/21/13 10:55	6	9G156778.	CALDTH AL@500PP	08/21/13 10:26

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
n-Nonane (C9)	1	0	Avg	0.2466	0.2263	0.2258	0.2450	0.2553	0.2851	----	----	0.247	2.88	0.995	1.00	8.9	100.0	10.00	50.00	200.0	300.0	500.0		
n-Decane (C10)	1	0	Avg	0.2536	0.2330	0.2320	0.2503	0.2595	0.2877	----	----	0.253	3.93	0.996	1.00	8.1	100.0	10.00	50.00	200.0	300.0	500.0		
Naphthalene	1	0	Avg	0.2880	0.2545	0.2632	0.2832	0.2913	0.3194	----	----	0.283	5.87	0.997	1.00	8.1	100.0	10.00	50.00	200.0	300.0	500.0		
n-Dodecane (C12)	1	0	Avg	0.2621	0.2482	0.2428	0.2567	0.2636	0.2876	----	----	0.260	5.96	0.997	1.00	6.0	100.0	10.00	50.00	200.0	300.0	500.0		
2-Methylnaphthalene	1	0	Avg	0.2937	0.2570	0.2696	0.2881	0.2956	0.3217	----	----	0.288	6.92	0.997	1.00	7.8	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetradecane (C14)	1	0	Avg	0.2656	0.2483	0.2463	0.2581	0.2640	0.2842	----	----	0.261	7.78	0.998	1.00	5.3	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexadecane (C16)	1	0	Avg	0.2678	0.2469	0.2478	0.2586	0.2639	0.2799	----	----	0.261	9.42	0.998	1.00	4.8	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octadecane (C18)	1	0	Avg	0.2705	0.2621	0.2508	0.2598	0.2636	0.2749	----	----	0.264	11.11	0.999	1.00	3.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Eicosane (C20)	1	0	Avg	0.2728	0.2576	0.2562	0.2591	0.2615	0.2675	----	----	0.263	12.75	1.00	1.00	2.5	100.0	10.00	50.00	200.0	300.0	500.0		
n-Heneicosane (C21)	1	0	Avg	0.2768	0.2640	0.2606	0.2622	0.2642	0.2678	----	----	0.266	13.37	1.00	1.00	2.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Docosane (C22)	1	0	Avg	0.2766	0.2586	0.2599	0.2613	0.2630	0.2641	----	----	0.264	13.90	1.00	1.00	2.5	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetracosane (C24)	1	0	Avg	0.2803	0.2617	0.2631	0.2630	0.2637	0.2598	----	----	0.265	14.79	1.00	1.00	2.8	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexacosane (C26)	1	0	Avg	0.2762	0.2604	0.2606	0.2572	0.2565	0.2480	----	----	0.260	15.54	0.999	1.00	3.5	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octacosane (C28)	1	0	Avg	0.2763	0.2651	0.2616	0.2551	0.2526	0.2403	----	----	0.259	16.21	0.999	1.00	4.7	100.0	10.00	50.00	200.0	300.0	500.0		
n-Triacontane (C30)	1	0	Avg	0.2787	0.2712	0.2651	0.2542	0.2504	0.2363	----	----	0.259	16.82	0.998	1.00	5.9	100.0	10.00	50.00	200.0	300.0	500.0		
n-Dotriacontane(C32)	1	0	Avg	0.2743	0.2729	0.2636	0.2474	0.2430	0.2304	----	----	0.255	17.39	0.998	1.00	6.9	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetratriacontane (C34)	1	0	Avg	0.2686	0.2721	0.2583	0.2407	0.2373	0.2286	----	----	0.251	17.95	0.999	1.00	7.1	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexatriacontane (C36)	1	0	Avg	0.2569	0.2587	0.2477	0.2304	0.2289	0.2243	----	----	0.241	18.49	0.999	1.00	6.3	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octatriacontane (C38)	1	0	Avg	0.2457	0.2605	0.2369	0.2227	0.2224	0.2209	----	----	0.235	19.13	1.00	1.00	6.8	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetracontane (C40)	1	0	Avg	0.2390	0.2475	0.2294	0.2191	0.2276	0.2199	----	----	0.230	19.96	0.999	0.999	4.8	100.0	10.00	50.00	200.0	300.0	500.0		
O-Terphenyl	1	0	Avg	0.3152	0.3171	0.2981	0.3002	0.3038	0.3174	----	----	0.309	11.87	0.999	1.00	2.9	100.0	10.00	50.00	200.0	300.0	500.0		
1-Chlorooctadecane	1	0	Avg	0.2472	0.2345	0.2329	0.2336	0.2357	0.2401	----	----	0.237	13.30	1.00	1.00	2.3	100.0	10.00	50.00	200.0	300.0	500.0		
C9-C28(Total)	1	0	Avg	0.2688	0.2527	0.2506	0.2572	0.2610	0.2706	----	----	0.260	2.88	0.999	1.00	3.2	1200.	120.0	600.0	2400.	3600.	6000.		
>C28-C40(Total)	1	0	Avg	0.2605	0.2638	0.2501	0.2357	0.2349	0.2267	----	----	0.245	16.31	0.999	1.00	6.2	600.0	60.00	300.0	1200.	1800.	3000.		
C9-C40(TOTAL)	1	0	Avg	0.2660	0.2564	0.2505	0.2500	0.2523	0.2560	----	----	0.255	2.88	1.00	1.00	2.3	1800.	180.0	900.0	3600.	5400.	9000.		

Avg Rsd Col 1: 5.159 Avg Rsd Col 2: -1

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156781.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 11:55:20
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:27:59 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	11.872	315267	79.164		
22)S	1-Chlorooctadecane	13.300	247274	80.774		m
Target Compounds						
1)AT	n-Nonane (C9)	2.884	246626	74.830		
2)AT	n-Decane (C10)	3.925	253667	75.933		
3)	Naphthalene	5.866	288081	76.216		
4)AT	n-Dodecane (C12)	5.957	262146	77.139		
5)	2-Methylnaphthalene	6.916	293719	77.052		
6)AT	n-Tetradecane (C14)	7.780	265668	77.785		
7)AT	n-Hexadecane (C16)	9.419	267842	76.062		
8)AT	n-Octadecane (C18)	11.108	270520	79.349		
9)AT	n-Eicosane (C20)	12.753	272894	81.397		
10)AT	n-Heneicosane (C21)	13.372	276821	81.195		
11)AT	n-Docosane (C22)	13.900	276612	82.518		
12)AT	n-Tetracosane (C24)	14.787	280333	84.167		
13)AT	n-Hexacosane (C26)	15.537	276211	86.273		
14)AT	n-Octacosane (C28)	16.205	276300	87.850		
15)BT	n-Triacontane (C30)	16.817	278737	90.236		
16)BT	n-Dotriacontane(C32)	17.394	274306	92.436		
17)BT	n-Tetratriacontane (C34	17.949f	268645	92.758		
18)BT	n-Hexatriacontane (C36)	18.494f	256992	97.502		
19)BT	n-Octatriacontane (C38)	19.133f	245711	98.502		
20)BT	n-Tetracontane (C40)	19.955f	239044	97.132		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

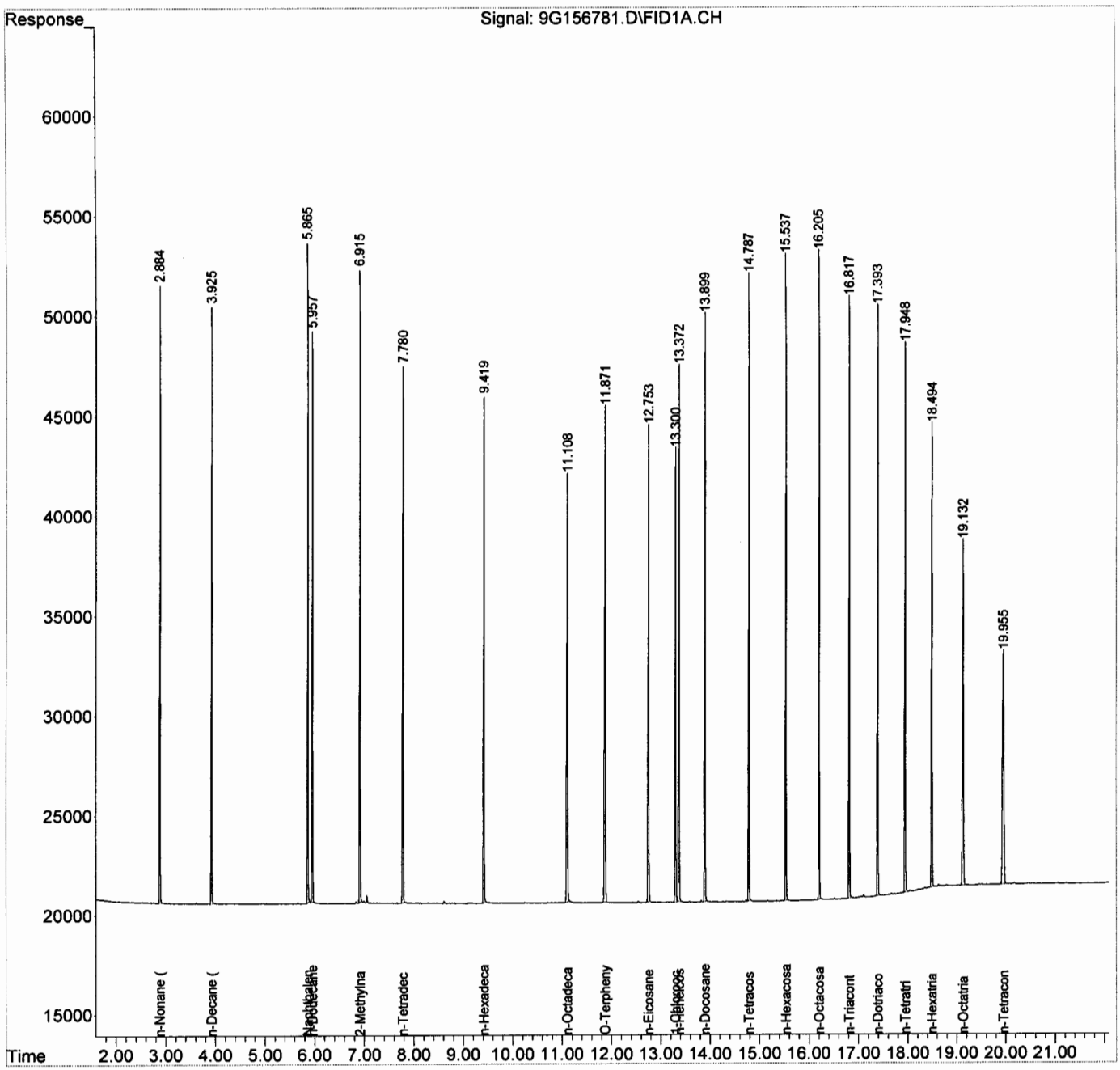
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156781.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 11:55:20
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:27:59 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0391

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156784.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 13:35:34
Operator : KD/RAK/ABM
Sample : CALDTH AL@10PPM
Misc : S.TPH
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 14:29:30 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units
System Monitoring Compounds					
21)S	O-Terphenyl	11.868	31714	7.963	
22)S	1-Chlorooctadecane	13.300	23450	7.660	m
Target Compounds					
1)AT	n-Nonane (C9)	2.884	22636	6.868	
2)AT	n-Decane (C10)	3.925	23305	6.976	
3)	Naphthalene	5.865	25456	6.735	
4)AT	n-Dodecane (C12)	5.957	24821	7.304	
5)	2-Methylnaphthalene	6.915	25707	6.744	
6)AT	n-Tetradecane (C14)	7.779	24839	7.273	
7)AT	n-Hexadecane (C16)	9.419	24690	7.012	
8)AT	n-Octadecane (C18)	11.105	26219	7.691	m
9)AT	n-Eicosane (C20)	12.751	25762	7.684	
10)AT	n-Heneicosane (C21)	13.370	26409	7.746	
11)AT	n-Docosane (C22)	13.899	25865	7.716	
12)AT	n-Tetracosane (C24)	14.786	26173	7.858	
13)AT	n-Hexacosane (C26)	15.537	26045	8.135	
14)AT	n-Octacosane (C28)	16.203	26518	8.431	
15)BT	n-Triacontane (C30)	16.817	27123	8.781	
16)BT	n-Dotriacontane(C32)	17.398	27297	9.199	
17)BT	n-Tetratriacontane (C34	17.962f	27220	9.398	
18)BT	n-Hexatriacontane (C36)	18.513	25875	9.817	
19)BT	n-Octatriacontane (C38)	19.153f	26054	10.445	m
20)BT	n-Tetracontane (C40)	19.978f	24756	10.059	m
23)A	C9-C28(Total)	0.000	0	N.D.	d
24)B	>C28-C40(Total)	0.000	0	N.D.	d
25)t	C9-C40(TOTAL)	0.000	0	N.D.	d

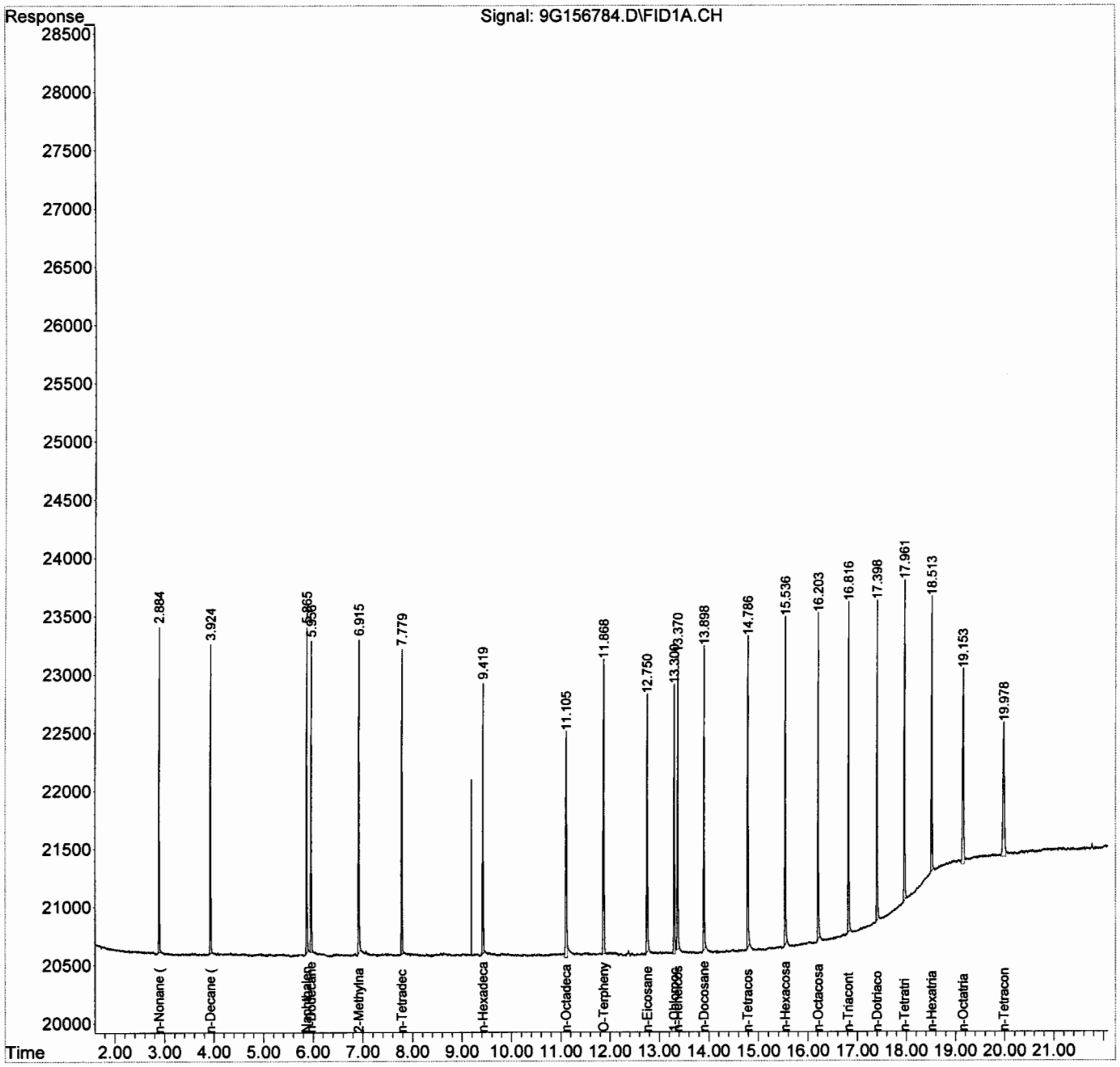
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156784.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 13:35:34
Operator : KD/RAK/ABM
Sample : CALDTH AL@10PPM
Misc : S.TPH
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 14:29:30 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156782.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 12:25:05
Operator : KD/RAK/ABM
Sample : CALDTH AL@50PPM
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:28:49 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	11.868	149085	37.435		
22)S	1-Chlorooctadecane	13.298	116493	38.053		m
Target Compounds						
1)AT	n-Nonane (C9)	2.883	112930	34.264		
2)AT	n-Decane (C10)	3.924	116003	34.725		
3)	Naphthalene	5.864	131609	34.819		
4)AT	n-Dodecane (C12)	5.956	121405	35.724		
5)	2-Methylnaphthalene	6.914	134810	35.365		
6)AT	n-Tetradecane (C14)	7.779	123178	36.065		
7)AT	n-Hexadecane (C16)	9.417	123920	35.191		
8)AT	n-Octadecane (C18)	11.106	125404	36.784		
9)AT	n-Eicosane (C20)	12.750	128132	38.218		
10)AT	n-Heneicosane (C21)	13.370	130324	38.226		
11)AT	n-Docosane (C22)	13.897	129951	38.767		
12)AT	n-Tetracosane (C24)	14.785	131571	39.503		
13)AT	n-Hexacosane (C26)	15.537	130301	40.699		
14)AT	n-Octacosane (C28)	16.204	130825	41.596		
15)BT	n-Triacontane (C30)	16.820	132556	42.913		
16)BT	n-Dotriacontane(C32)	17.402	131803	44.415		
17)BT	n-Tetratriacontane (C34	17.961f	129156	44.595		
18)BT	n-Hexatriacontane (C36)	18.505f	123854	46.990		
19)BT	n-Octatriacontane (C38)	19.145f	118473	47.494		
20)BT	n-Tetracontane (C40)	19.968f	114711	46.611		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

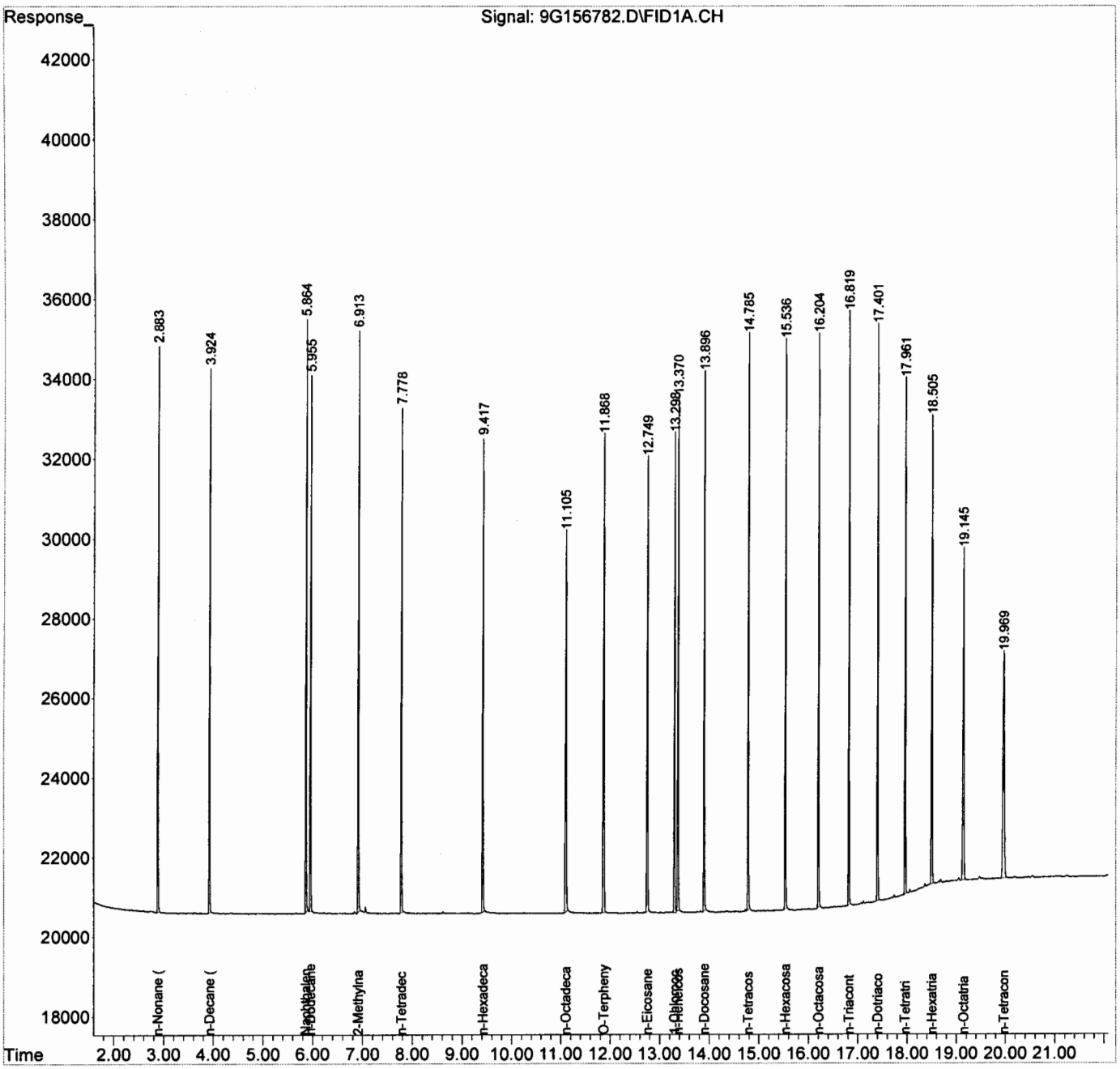
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156782.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 12:25:05
Operator : KD/RAK/ABM
Sample : CALDTH AL@50PPM
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:28:49 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0395

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156780.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 11:25:34
Operator : KD/RAK/ABM
Sample : CALDTH AL@200PPM
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:26:37 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	11.879	600415	150.765		
22)S	1-Chlorooctadecane	13.304	467326	152.655		
	Target Compounds					
1)AT	n-Nonane (C9)	2.887	490054	148.689		
2)AT	n-Decane (C10)	3.928	500612	149.854		
3)	Naphthalene	5.869	566443	149.861		
4)AT	n-Dodecane (C12)	5.961	513560	151.120		
5)	2-Methylnaphthalene	6.920	576339	151.193		
6)AT	n-Tetradecane (C14)	7.784	516203	151.140		
7)AT	n-Hexadecane (C16)	9.423	517211	146.878		
8)AT	n-Octadecane (C18)	11.113	519747	152.453		
9)AT	n-Eicosane (C20)	12.757	518271	154.586		
10)AT	n-Heneicosane (C21)	13.377	524430	153.822		
11)AT	n-Docosane (C22)	13.903	522684	155.925		
12)AT	n-Tetracosane (C24)	14.790	526091	157.953		
13)AT	n-Hexacosane (C26)	15.540	514493	160.700		
14)AT	n-Octacosane (C28)	16.207	510260	162.239		
15)BT	n-Triacontane (C30)	16.817	508428	164.595		
16)BT	n-Dotriacontane(C32)	17.387	494942	166.787		
17)BT	n-Tetratriacontane (C34	17.932f	481504	166.255		
18)BT	n-Hexatriacontane (C36)	18.466f	460860	174.848		
19)BT	n-Octatriacontane (C38)	19.104f	445465	178.580		
20)BT	n-Tetracontane (C40)	19.925f	438302	178.097		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

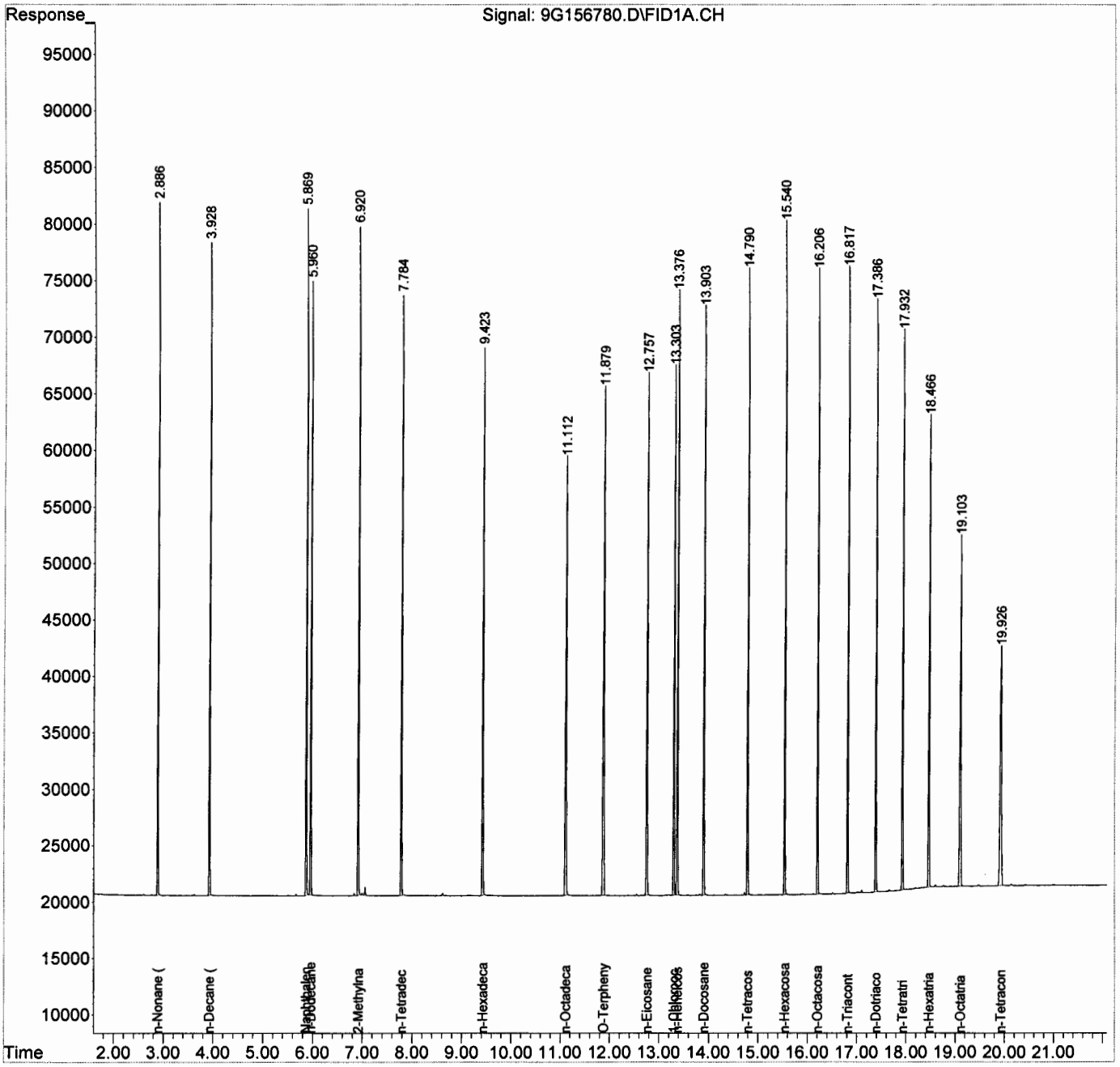
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156780.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 11:25:34
Operator : KD/RAK/ABM
Sample : CALDTH AL@200PPM
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:26:37 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0397

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156779.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 10:55:53
Operator : KD/RAK/ABM
Sample : CALDTH AL@300PPM
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:25:51 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

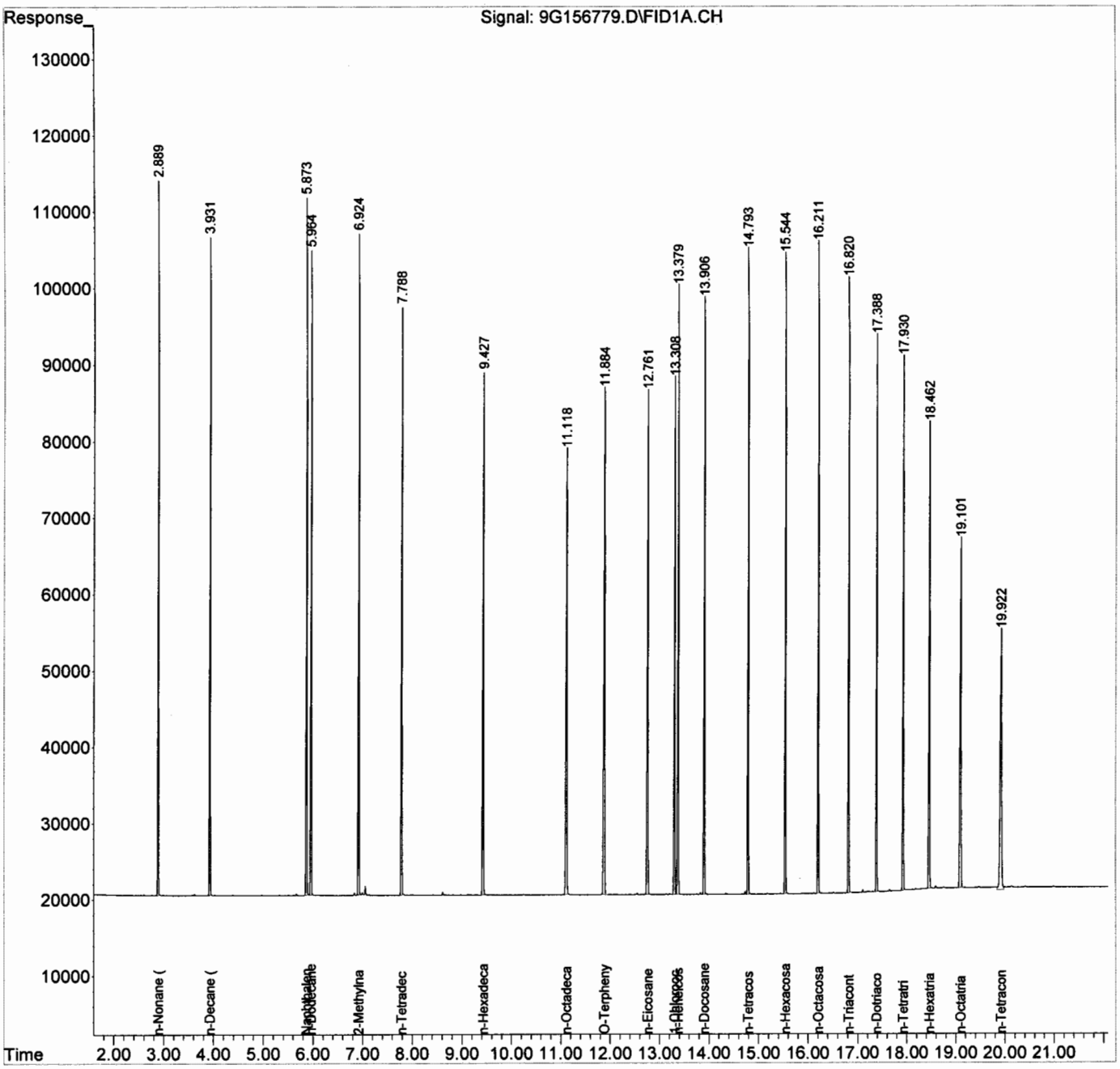
	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	11.884	911478	228.873		
22)S	1-Chlorooctadecane	13.308	707270	231.034		
Target Compounds						
1)AT	n-Nonane (C9)	2.889	766157	232.463		
2)AT	n-Decane (C10)	3.931	778645	233.081		
3)	Naphthalene	5.873	873942	231.215		
4)AT	n-Dodecane (C12)	5.964	790957	232.747		
5)	2-Methylnaphthalene	6.924	886910	232.666		
6)AT	n-Tetradecane (C14)	7.788	792125	231.928		
7)AT	n-Hexadecane (C16)	9.427	791974	224.906		
8)AT	n-Octadecane (C18)	11.118	791068	232.037		
9)AT	n-Eicosane (C20)	12.761	784734	234.064		
10)AT	n-Heneicosane (C21)	13.380	792831	232.547		
11)AT	n-Docosane (C22)	13.907	789053	235.387		
12)AT	n-Tetracosane (C24)	14.794	791316	237.583		
13)AT	n-Hexacosane (C26)	15.545	769696	240.411		
14)AT	n-Octacosane (C28)	16.211	757864	240.966		
15)BT	n-Triacontane (C30)	16.820	751397	243.252		
16)BT	n-Dotriacontane(C32)	17.388	729122	245.701		
17)BT	n-Tetratriacontane (C34	17.930f	712122	245.883		
18)BT	n-Hexatriacontane (C36)	18.462f	686777	260.560		
19)BT	n-Octatriacontane (C38)	19.101f	667426	267.561		
20)BT	n-Tetracontane (C40)	19.922f	682826	277.455		m
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156779.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 10:55:53
Operator : KD/RAK/ABM
Sample : CALDTH AL@300PPM
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:25:51 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0399

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156778.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 10:26:13
Operator : KD/RAK/ABM
Sample : CALDTH AL@500PPM
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:24:51 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	11.895	1587320	398.578		
22)S	1-Chlorooctadecane	13.314	1200510	392.155		
Target Compounds						
1)AT	n-Nonane (C9)	2.897	1425635	432.558		
2)AT	n-Decane (C10)	3.938	1438476	430.596		
3)	Naphthalene	5.881	1597219	422.569		
4)AT	n-Dodecane (C12)	5.971	1438329	423.242		
5)	2-Methylnaphthalene	6.933	1608559	421.978		
6)AT	n-Tetradecane (C14)	7.794	1421015	416.061		
7)AT	n-Hexadecane (C16)	9.434	1399893	397.544		
8)AT	n-Octadecane (C18)	11.127	1374650	403.215		
9)AT	n-Eicosane (C20)	12.768	1337736	399.009		
10)AT	n-Heneicosane (C21)	13.387	1339175	392.797		
11)AT	n-Docosane (C22)	13.913	1320505	393.928		
12)AT	n-Tetracosane (C24)	14.799	1299206	390.071		
13)AT	n-Hexacosane (C26)	15.548	1240283	387.397		
14)AT	n-Octacosane (C28)	16.216	1201604	382.055		
15)BT	n-Triacontane (C30)	16.831	1181916	382.624		
16)BT	n-Dotriacontane(C32)	17.417	1152460	388.358		
17)BT	n-Tetratriacontane (C34	17.986	1143072	394.683		
18)BT	n-Hexatriacontane (C36)	18.540	1121532	425.504		
19)BT	n-Octatriacontane (C38)	19.183	1104946	442.956		
20)BT	n-Tetracontane (C40)	20.016	1099750	446.866		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

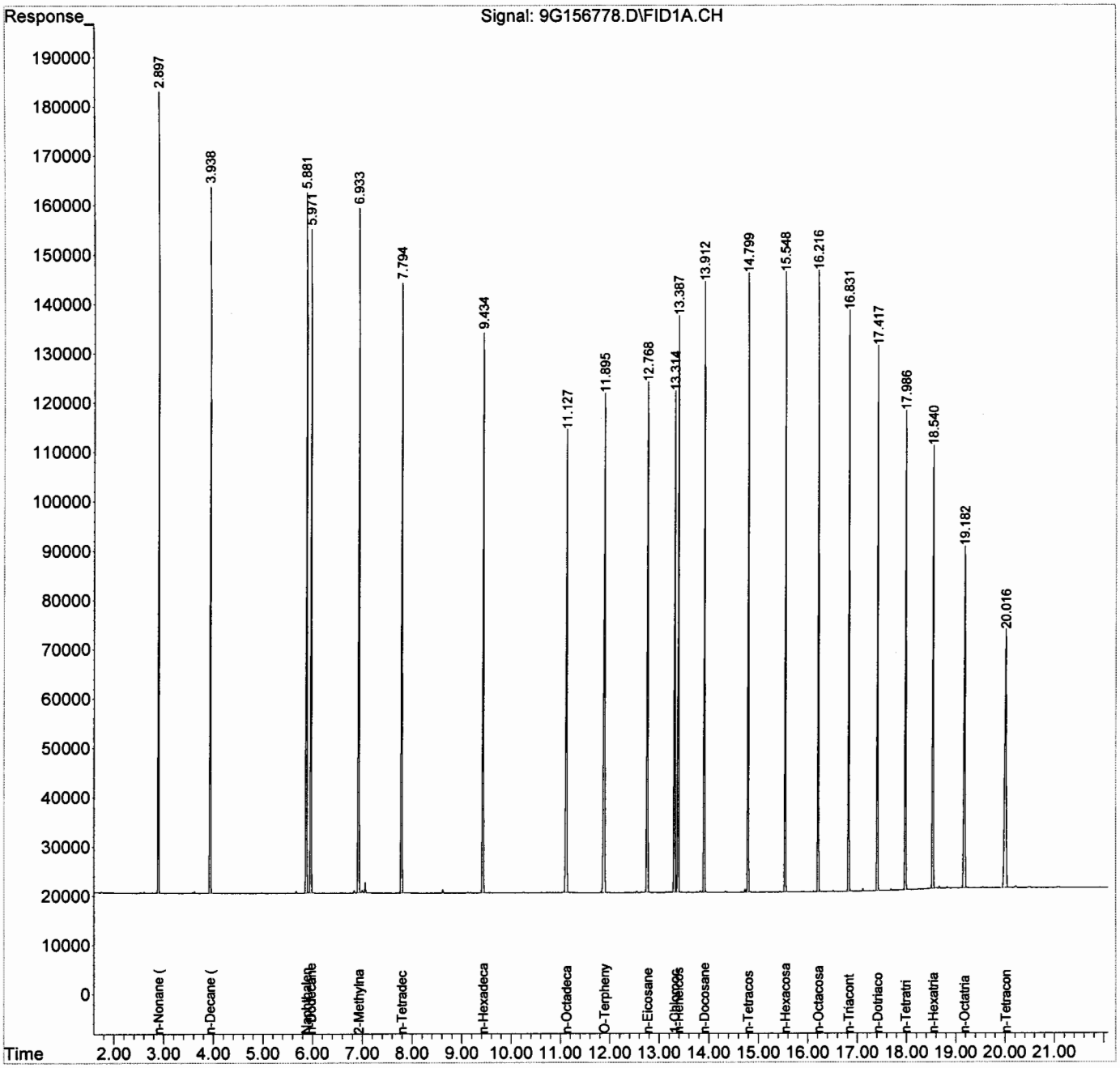
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156778.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 10:26:13
Operator : KD/RAK/ABM
Sample : CALDTH AL@500PPM
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:24:51 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



3090309 0401

Form 6
Initial Calibration

Method: NJEPHRev3B

Instrument: GC_8

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	8G42783.D	CALDTH AL@100PP	08/27/13 09:41	2	8G42789.D	CALDTH AL@10PPM	08/27/13 13:26
3	8G42788.D	CALDTH AL@50PPM	08/27/13 12:56	4	8G42786.D	CALDTH AL@200PP	08/27/13 11:55
5	8G42785.D	CALDTH AL@300PP	08/27/13 11:25	6	8G42784.D	CALDTH AL@500PP	08/27/13 10:55

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
n-Nonane (C9)	1	0	Avg	0.2699	0.2466	0.2527	0.2599	0.2603	0.2883	---	---	0.263	3.23	0.996	0.999	5.6	100.0	10.00	50.00	200.0	300.0	500.0		
n-Decane (C10)	1	0	Avg	0.2752	0.1949	0.2564	0.2644	0.2648	0.2899	---	---	0.258	4.28	0.997	0.999	13	100.0	10.00	50.00	200.0	300.0	500.0		
Naphthalene	1	0	Avg	0.3135	0.2655	0.2920	0.3021	0.3021	0.3269	---	---	0.300	6.25	0.998	1.00	6.9	100.0	10.00	50.00	200.0	300.0	500.0		
n-Dodecane (C12)	1	0	Avg	0.2826	0.2608	0.2677	0.2702	0.2694	0.2886	---	---	0.273	6.32	0.998	1.00	3.8	100.0	10.00	50.00	200.0	300.0	500.0		
2-Methylnaphthalene	1	0	Avg	0.3162	0.2581	0.2918	0.3048	0.3061	0.3269	---	---	0.301	7.30	0.998	1.00	8.0	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetradecane (C14)	1	0	Avg	0.2812	0.2040	0.2660	0.2683	0.2677	0.2818	---	---	0.262	8.14	0.999	1.00	11	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexadecane (C16)	1	0	Avg	0.2809	0.2730	0.2672	0.2668	0.2651	0.2740	---	---	0.271	9.81	0.999	1.00	2.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octadecane (C18)	1	0	Avg	0.2812	0.2828	0.2671	0.2649	0.2623	0.2661	---	---	0.271	11.55	1.00	1.00	3.3	100.0	10.00	50.00	200.0	300.0	500.0		
n-Eicosane (C20)	1	0	Avg	0.2780	0.2912	0.2659	0.2600	0.2569	0.2559	---	---	0.268	13.11	1.00	1.00	5.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Heneicosane (C21)	1	0	Avg	0.2815	0.3022	0.2712	0.2626	0.2589	0.2549	---	---	0.272	13.70	1.00	1.00	6.5	100.0	10.00	50.00	200.0	300.0	500.0		
n-Docosane (C22)	1	0	Avg	0.2798	0.2954	0.2684	0.2605	0.2568	0.2504	---	---	0.269	14.21	0.999	1.00	6.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetracosane (C24)	1	0	Avg	0.2800	0.2988	0.2682	0.2604	0.2551	0.2437	---	---	0.268	15.08	0.999	1.00	7.3	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexacosane (C26)	1	0	Avg	0.2733	0.2908	0.2622	0.2527	0.2468	0.2305	---	---	0.259	15.82	0.997	1.00	8.1	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octacosane (C28)	1	0	Avg	0.2710	0.2893	0.2600	0.2491	0.2419	0.2220	---	---	0.256	16.49	0.996	1.00	9.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Triacontane (C30)	1	0	Avg	0.2711	0.2948	0.2604	0.2480	0.2397	0.2185	---	---	0.255	17.10	0.995	1.00	10	100.0	10.00	50.00	200.0	300.0	500.0		
n-Dotriacontane(C32)	1	0	Avg	0.2661	0.2951	0.2552	0.2422	0.2338	0.2141	---	---	0.251	17.68	0.996	1.00	11	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetratriacontane (C34)	1	0	Avg	0.2619	0.2898	0.2490	0.2372	0.2296	0.2134	---	---	0.247	18.24	0.997	1.00	11	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexatriacontane (C36)	1	0	Avg	0.2530	0.2728	0.2391	0.2287	0.2228	0.2111	---	---	0.238	18.84	0.998	1.00	9.4	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octatriacontane (C38)	1	0	Avg	0.2440	0.2677	0.2290	0.2220	0.2178	0.2099	---	---	0.232	19.58	0.999	1.00	9.1	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetracontane (C40)	1	0	Avg	0.2395	0.2527	0.2207	0.2186	0.2162	0.2107	---	---	0.226	20.55	0.999	1.00	7.1	100.0	10.00	50.00	200.0	300.0	500.0		
O-Terphenyl	1	0	Avg	0.3289	0.3462	0.3144	0.3096	0.3065	0.3112	---	---	0.320	12.34	1.00	1.00	4.8	100.0	10.00	50.00	200.0	300.0	500.0		
1-Chlorooctadecane	1	0	Avg	0.2504	0.2581	0.2391	0.2336	0.2314	0.2292	---	---	0.240	13.64	1.00	1.00	4.8	100.0	10.00	50.00	200.0	300.0	500.0		
C9-C28(Total)	1	0	Avg	0.2779	0.2691	0.2644	0.2617	0.2588	0.2622	---	---	0.266	3.23	1.00	1.00	2.6	1200.	120.0	600.0	2400.	3600.	6000.		
>C28-C40(Total)	1	0	Avg	0.2559	0.2788	0.2422	0.2328	0.2266	0.2130	---	---	0.242	16.59	0.998	1.00	9.6	600.0	60.00	300.0	1200.	1800.	3000.		
C9-C40(TOTAL)	1	0	Avg	0.2706	0.2724	0.2570	0.2520	0.2481	0.2458	---	---	0.258	3.23	1.00	1.00	4.4	1800.	180.0	900.0	3600.	5400.	9000.		

Avg Rsd Col 1: 7.436 Avg Rsd Col 2: -1

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Quantitation Report (QT Reviewed)

3090309 0402

Data Path : G:\Gcdata\2013\GC_8\Data\08-27-13\
Data File : 8G42783.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 09:41:56
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 12:05:44 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.340	328918	113.395		
22)S	1-Chlorooctadecane	13.636	250471	115.827		m
Target Compounds						
1)AT	n-Nonane (C9)	3.228	269992	109.582		
2)AT	n-Decane (C10)	4.280	275206	112.188		
3)	Naphthalene	6.249	313539	112.507		
4)AT	n-Dodecane (C12)	6.317	282621	112.700		
5)	2-Methylnaphthalene	7.301	316292	114.023		
6)AT	n-Tetradecane (C14)	8.142	281285	117.083		
7)AT	n-Hexadecane (C16)	9.808	280937	121.399		
8)AT	n-Octadecane (C18)	11.551	281290	122.393		
9)AT	n-Eicosane (C20)	13.114	278013	116.851		
10)AT	n-Heneicosane (C21)	13.699	281539	115.780		
11)AT	n-Docosane (C22)	14.209	279880	117.805		
12)AT	n-Tetracosane (C24)	15.078	280027	118.250		
13)AT	n-Hexacosane (C26)	15.822	273358	119.019		
14)AT	n-Octacosane (C28)	16.488	271039	119.083		
15)BT	n-Triacontane (C30)	17.099	271142	119.019		
16)BT	n-Dotriacontane(C32)	17.681	266141	118.506		
17)BT	n-Tetratriacontane (C34	18.243	261979	117.291		
18)BT	n-Hexatriacontane (C36)	18.837	253012	115.003		
19)BT	n-Octatriacontane (C38)	19.579	244011	114.132		
20)BT	n-Tetracontane (C40)	20.550	239580	115.268		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

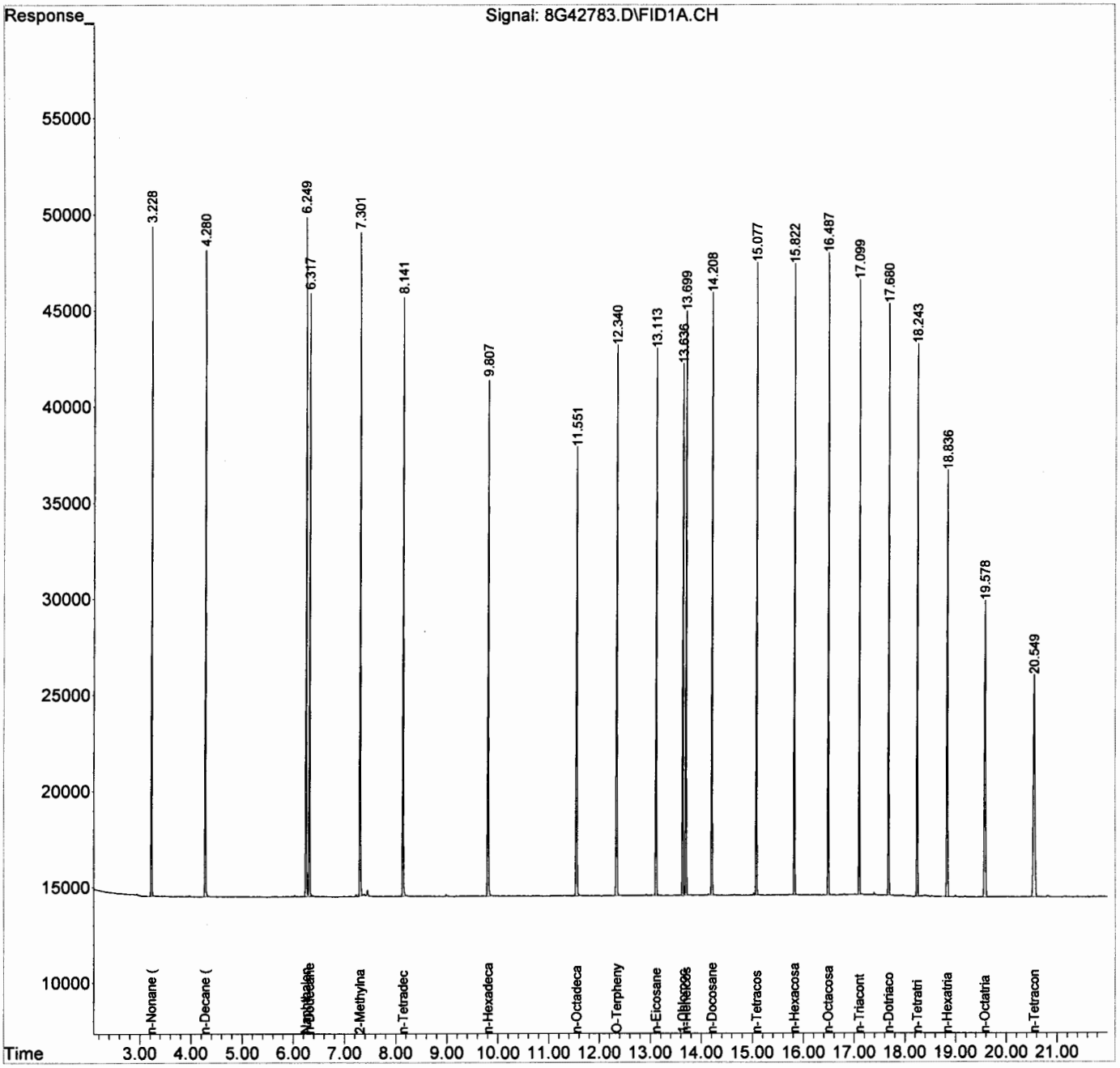
R

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-27-13\
Data File : 8G42783.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 09:41:56
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 12:05:44 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0404

Data Path : G:\Gcdata\2013\GC_8\Data\08-27-13\
Data File : 8G42789.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 13:26:42
Operator : KD/RAK/ABM
Sample : CALDTH AL@10PPM
Misc : S.TPH
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 14:16:55 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.333	34625	11.937		
22)S	1-Chlorooctadecane	13.631	25814	11.937		m
Target Compounds						
1)AT	n-Nonane (C9)	3.228	24660	10.009		
2)AT	n-Decane (C10)	4.280	19490	7.945		
3)	Naphthalene	6.248	26559	9.530		
4)AT	n-Dodecane (C12)	6.314	26084	10.402		
5)	2-Methylnaphthalene	7.299	25815	9.306		
6)AT	n-Tetradecane (C14)	8.137	20401	8.492		
7)AT	n-Hexadecane (C16)	9.803	27306	11.800		
8)AT	n-Octadecane (C18)	11.545	28287	12.308		
9)AT	n-Eicosane (C20)	13.109	29121	12.240		
10)AT	n-Heneicosane (C21)	13.695	30224	12.429		
11)AT	n-Docosane (C22)	14.204	29542	12.435		
12)AT	n-Tetracosane (C24)	15.074	29887	12.621		
13)AT	n-Hexacosane (C26)	15.818	29084	12.663		
14)AT	n-Octacosane (C28)	16.487	28935	12.713		
15)BT	n-Triacontane (C30)	17.113	29481	12.941		
16)BT	n-Dotriacontane(C32)	17.709	29519	13.144		
17)BT	n-Tetratriacontane (C34	18.287	28985	12.977		
18)BT	n-Hexatriacontane (C36)	18.884	27288	12.403		
19)BT	n-Octatriacontane (C38)	19.630	26772	12.522		
20)BT	n-Tetracontane (C40)	20.601	25273	12.160		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

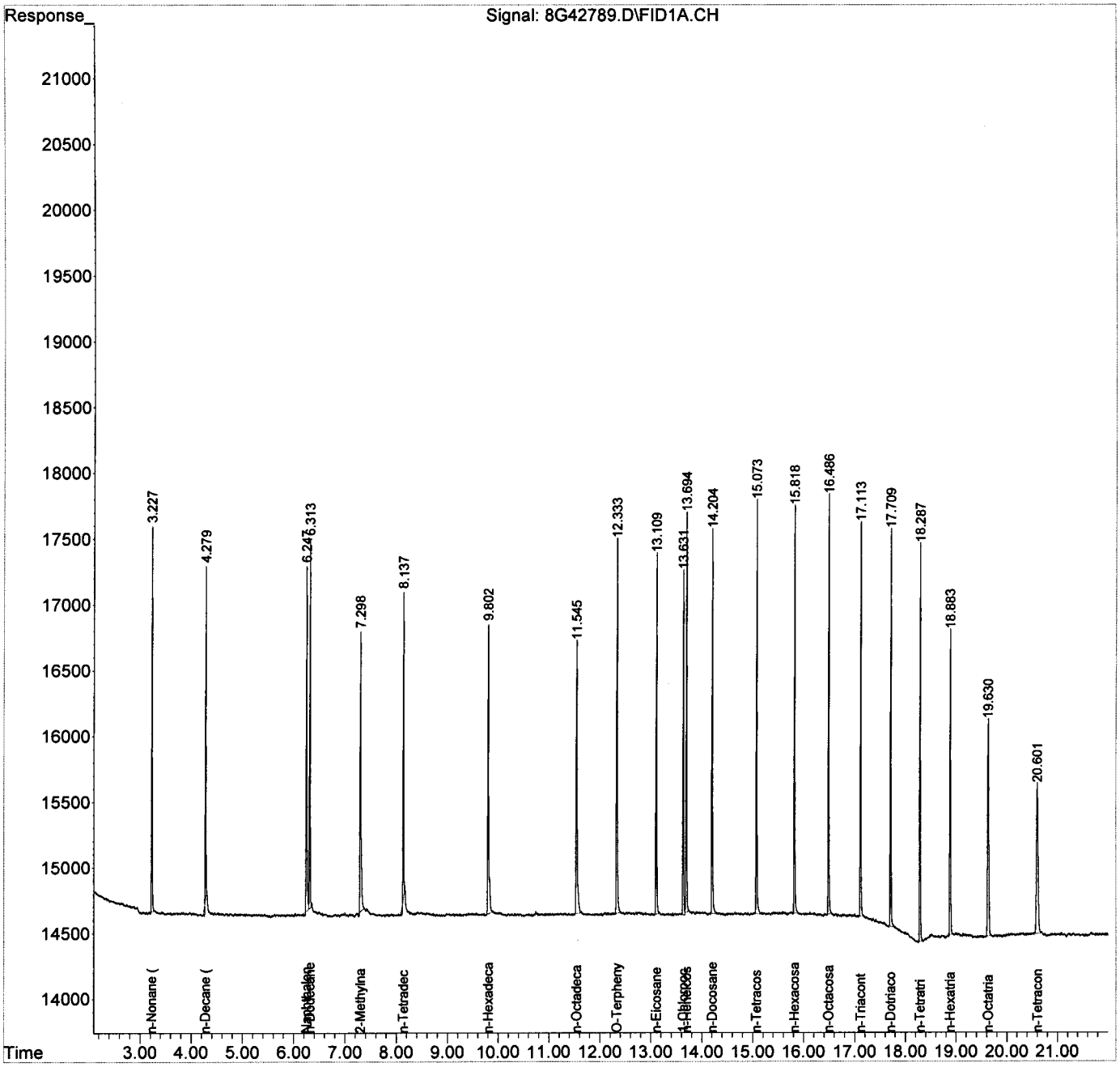
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-27-13\
Data File : 8G42789.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 13:26:42
Operator : KD/RAK/ABM
Sample : CALDTH AL@10PPM
Misc : S.TPH
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 14:16:55 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0406

Data Path : G:\Gcdata\2013\GC_8\Data\08-27-13\
Data File : 8G42788.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 12:56:24
Operator : KD/RAK/ABM
Sample : CALDTH AL@50PPM
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 14:15:21 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.335	157247	54.211		
22)S	1-Chlorooctadecane	13.631	119562	55.290		m
Target Compounds						
1)AT	n-Nonane (C9)	3.228	126383	51.295		
2)AT	n-Decane (C10)	4.280	128232	52.274		
3)	Naphthalene	6.247	146030	52.400		
4)AT	n-Dodecane (C12)	6.315	133866	53.382		
5)	2-Methylnaphthalene	7.298	145932	52.608		
6)AT	n-Tetradecane (C14)	8.138	133019	55.368		
7)AT	n-Hexadecane (C16)	9.803	133605	57.733		
8)AT	n-Octadecane (C18)	11.546	133575	58.120		
9)AT	n-Eicosane (C20)	13.110	132967	55.887		
10)AT	n-Heneicosane (C21)	13.695	135618	55.772		
11)AT	n-Docosane (C22)	14.204	134220	56.495		
12)AT	n-Tetracosane (C24)	15.074	134138	56.644		
13)AT	n-Hexacosane (C26)	15.819	131127	57.092		
14)AT	n-Octacosane (C28)	16.484	130016	57.123		
15)BT	n-Triacontane (C30)	17.097	130228	57.164		
16)BT	n-Dotriacontane(C32)	17.678	127602	56.818		
17)BT	n-Tetratriacontane (C34	18.240	124527	55.752		
18)BT	n-Hexatriacontane (C36)	18.831	119581	54.354		
19)BT	n-Octatriacontane (C38)	19.573	114498	53.555		
20)BT	n-Tetracontane (C40)	20.540	110371	53.102		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

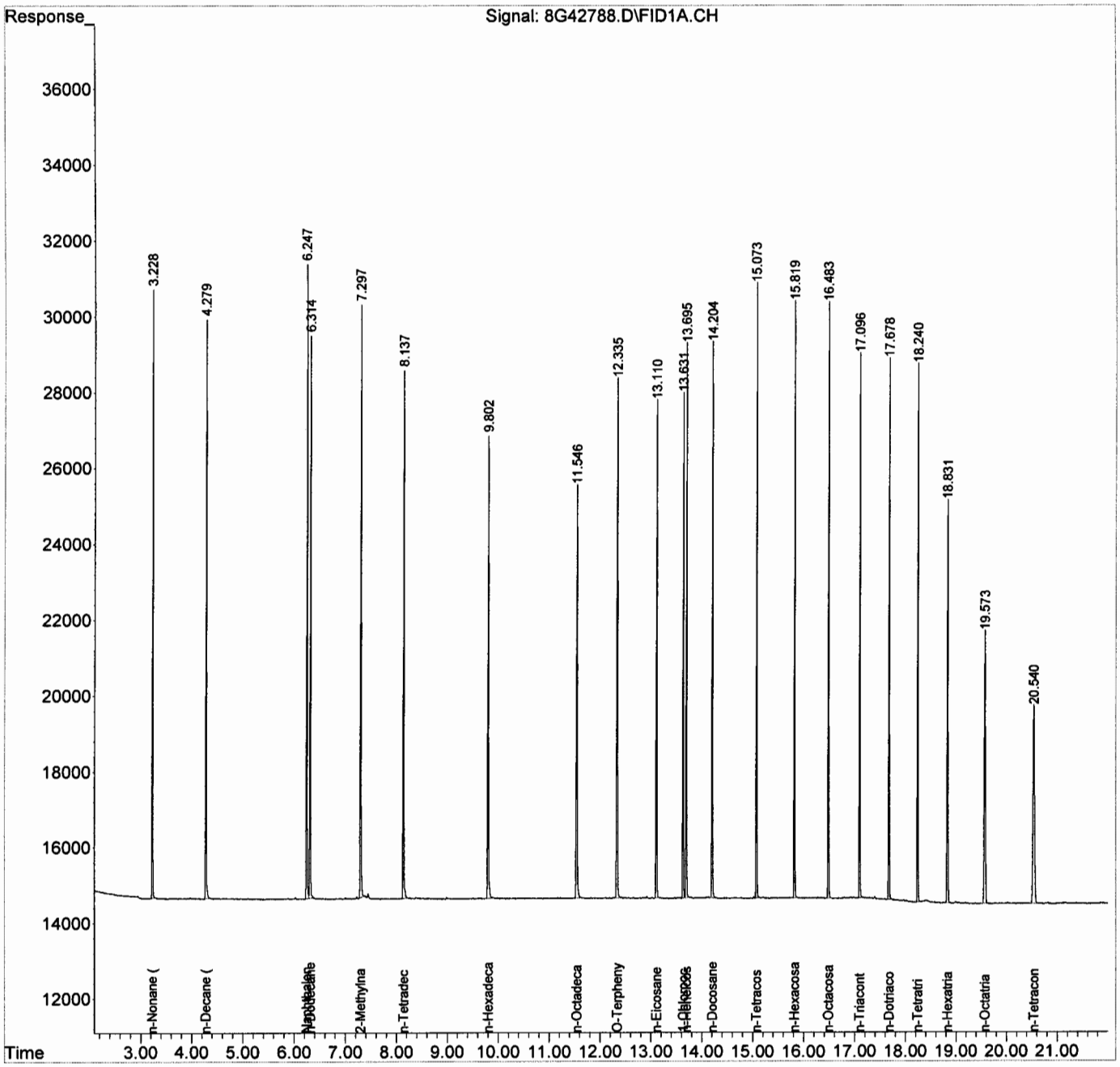
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-27-13\
Data File : 8G42788.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 12:56:24
Operator : KD/RAK/ABM
Sample : CALDTH AL@50PPM
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 14:15:21 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0408

Data Path : G:\Gcdata\2013\GC_8\Data\08-27-13\
Data File : 8G42786.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 11:55:38
Operator : KD/RAK/ABM
Sample : CALDTH AL@200PPM
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 12:29:09 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.342	619331	213.515		
22)S	1-Chlorooctadecane	13.636	467285	216.090		
Target Compounds						
1)AT	n-Nonane (C9)	3.232	519934	211.027		
2)AT	n-Decane (C10)	4.283	528829	215.578		
3)	Naphthalene	6.252	604284	216.834		
4)AT	n-Dodecane (C12)	6.319	540556	215.557		
5)	2-Methylnaphthalene	7.303	609631	219.770		
6)AT	n-Tetradecane (C14)	8.143	536763	223.423		
7)AT	n-Hexadecane (C16)	9.809	533642	230.598		
8)AT	n-Octadecane (C18)	11.553	529833	230.538		
9)AT	n-Eicosane (C20)	13.115	520078	218.593		
10)AT	n-Heneicosane (C21)	13.700	525357	216.048		
11)AT	n-Docosane (C22)	14.209	521180	219.372		
12)AT	n-Tetracosane (C24)	15.079	520809	219.929		
13)AT	n-Hexacosane (C26)	15.823	505450	220.070		
14)AT	n-Octacosane (C28)	16.488	498291	218.928		
15)BT	n-Triacontane (C30)	17.099	496083	217.757		
16)BT	n-Dotriacontane(C32)	17.675	484485	215.729		
17)BT	n-Tetratriacontane (C34	18.233	474392	212.390		
18)BT	n-Hexatriacontane (C36)	18.826	457556	207.976		
19)BT	n-Octatriacontane (C38)	19.567	444077	207.710		
20)BT	n-Tetracontane (C40)	20.539	437202	210.350		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

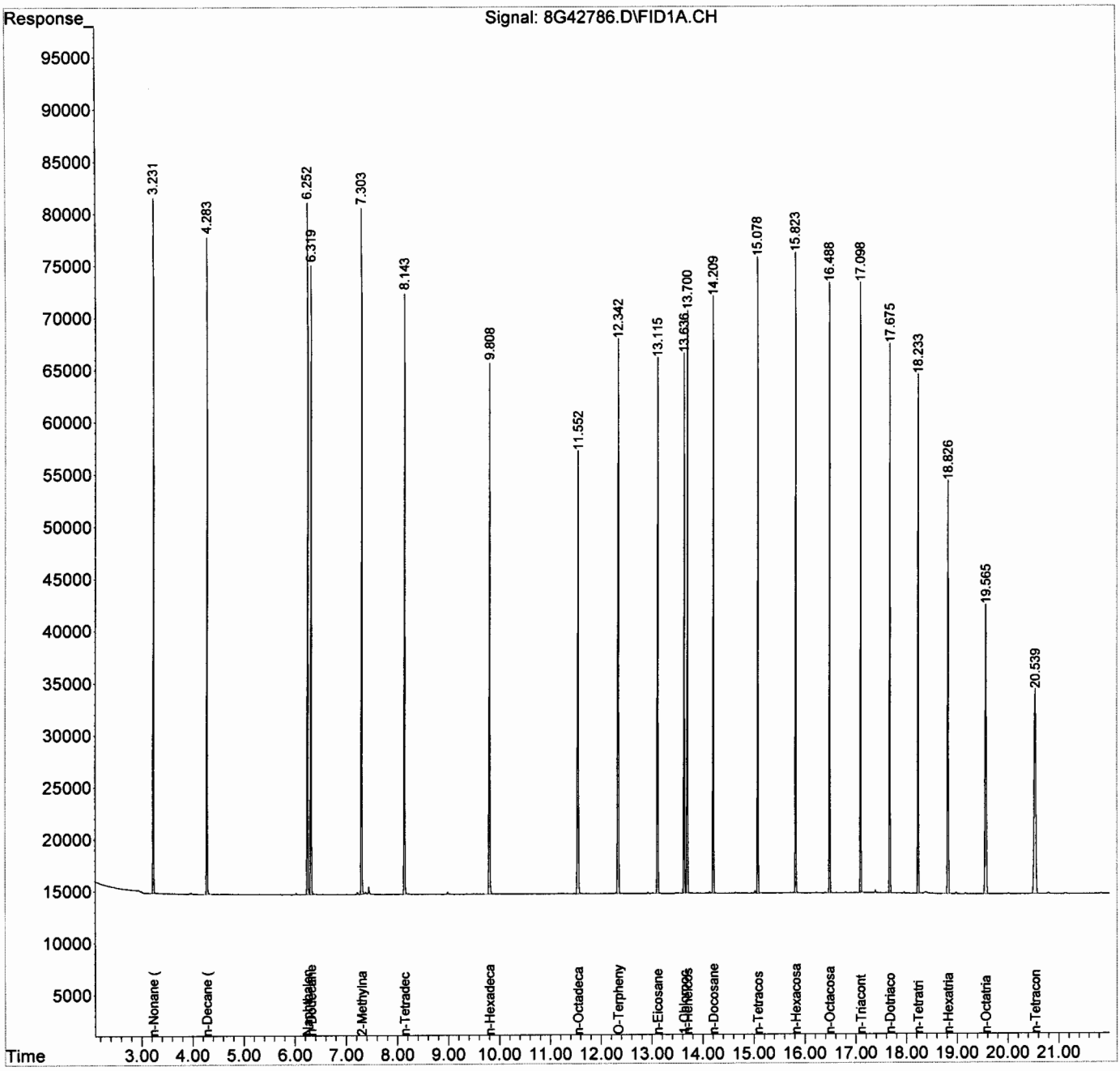
N

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-27-13\
Data File : 8G42786.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 11:55:38
Operator : KD/RAK/ABM
Sample : CALDTH AL@200PPM
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 12:29:09 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0410

Data Path : G:\Gcdata\2013\GC_8\Data\08-27-13\
Data File : 8G42785.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 11:25:16
Operator : KD/RAK/ABM
Sample : CALDTH AL@300PPM
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 12:07:34 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.347	919606	317.036		
22)S	1-Chlorooctadecane	13.639	694342	321.089		
Target Compounds						
1)AT	n-Nonane (C9)	3.234	780998	316.986		
2)AT	n-Decane (C10)	4.286	794412	323.844		
3)	Naphthalene	6.255	906569	325.303		
4)AT	n-Dodecane (C12)	6.322	808292	322.322		
5)	2-Methylnaphthalene	7.307	918489	331.113		
6)AT	n-Tetradecane (C14)	8.145	803296	334.365		
7)AT	n-Hexadecane (C16)	9.812	795399	343.709		
8)AT	n-Octadecane (C18)	11.557	787036	342.451		
9)AT	n-Eicosane (C20)	13.118	770696	323.930		
10)AT	n-Heneicosane (C21)	13.703	776756	319.433		
11)AT	n-Docosane (C22)	14.212	770559	324.339		
12)AT	n-Tetracosane (C24)	15.081	765515	323.264		
13)AT	n-Hexacosane (C26)	15.825	740674	322.485		
14)AT	n-Octacosane (C28)	16.490	725829	318.898		
15)BT	n-Triacontane (C30)	17.102	719190	315.690		
16)BT	n-Dotriacontane(C32)	17.680	701443	312.336		
17)BT	n-Tetratriacontane (C34	18.237	688933	308.442		
18)BT	n-Hexatriacontane (C36)	18.829	668528	303.870		
19)BT	n-Octatriacontane (C38)	19.573	653512	305.669		
20)BT	n-Tetracontane (C40)	20.547	648616	312.067		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

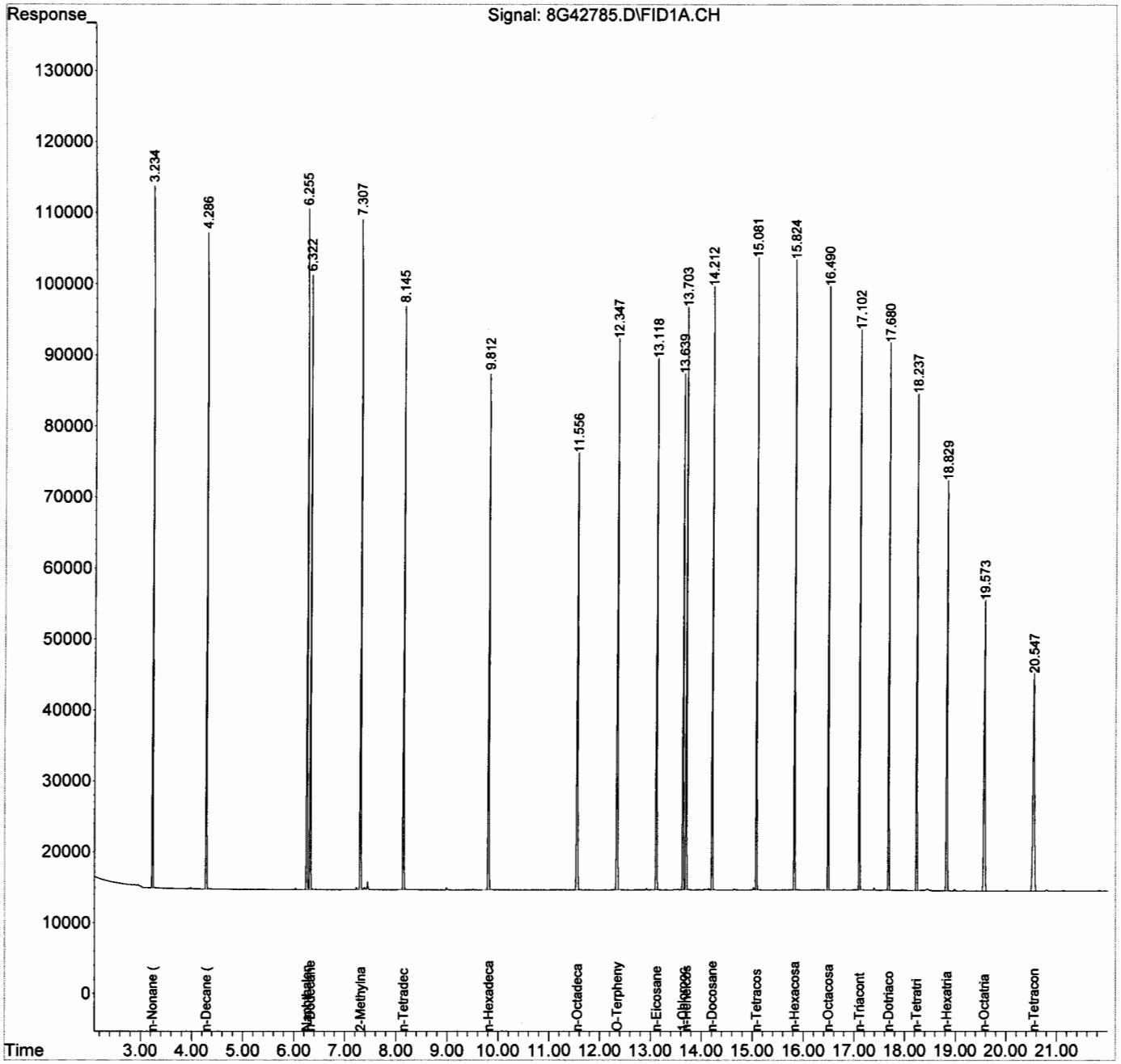
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-27-13\
Data File : 8G42785.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 11:25:16
Operator : KD/RAK/ABM
Sample : CALDTH AL@300PPM
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 12:07:34 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0412

Data Path : G:\Gcdata\2013\GC_8\Data\08-27-13\
Data File : 8G42784.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 10:55:06
Operator : KD/RAK/ABM
Sample : CALDTH AL@500PPM
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 12:06:43 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.356	1556152	536.486		
22)S	1-Chlorooctadecane	13.645	1146257	530.070		
Target Compounds						
1)AT	n-Nonane (C9)	3.240	1441954	585.251		
2)AT	n-Decane (C10)	4.292	1449584	590.926		
3)	Naphthalene	6.261	1634664	586.564		
4)AT	n-Dodecane (C12)	6.328	1443177	575.493		
5)	2-Methylnaphthalene	7.314	1634490	589.230		
6)AT	n-Tetradecane (C14)	8.152	1409090	586.522		
7)AT	n-Hexadecane (C16)	9.819	1370338	592.152		
8)AT	n-Octadecane (C18)	11.565	1330926	579.106		
9)AT	n-Eicosane (C20)	13.125	1279883	537.946		
10)AT	n-Heneicosane (C21)	13.710	1274672	524.196		
11)AT	n-Docosane (C22)	14.217	1251982	526.976		
12)AT	n-Tetracosane (C24)	15.086	1218756	514.660		
13)AT	n-Hexacosane (C26)	15.829	1152733	501.894		
14)AT	n-Octacosane (C28)	16.495	1110317	487.826		
15)BT	n-Triacontane (C30)	17.114	1092543	479.574		
16)BT	n-Dotriacontane(C32)	17.706	1070770	476.788		
17)BT	n-Tetratriacontane (C34	18.281	1067470	477.918		
18)BT	n-Hexatriacontane (C36)	18.882	1055810	479.903		
19)BT	n-Octatriacontane (C38)	19.630	1049626	490.945		
20)BT	n-Tetracontane (C40)	20.610	1053882	507.051		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

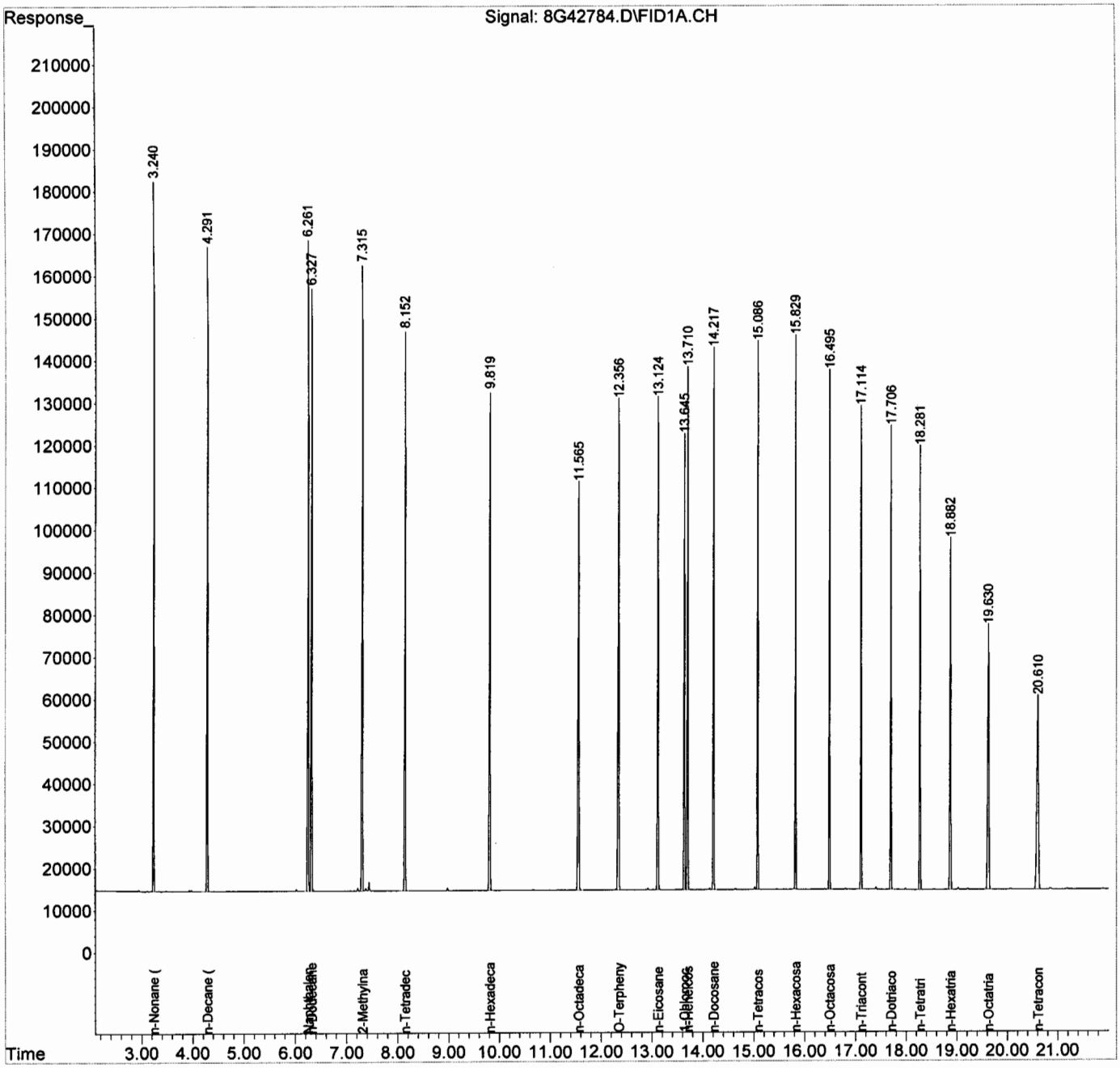
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-27-13\
Data File : 8G42784.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 10:55:06
Operator : KD/RAK/ABM
Sample : CALDTH AL@500PPM
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 12:06:43 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Form7
Continuing Calibration

Method: NJEPHRev3B

Data File:				8G42821.D			8G42838.D			8G43021.D			8G43032.D			9G156966.D		
Method:				8015-EPHCAT			8015-EPHCAT			8015-EPHCAT			8015-EPHCAT			8015-EPHCAT		
Calibration Name:				CALDTH AL@100			CALDTH AL@100			CALDTH AL@100			CALDTH AL@100			CALDTH AL@100		
Calibration Date/Time				08/28/13 15:34			08/29/13 00:29			09/07/13 02:42			09/07/13 08:44			08/28/13 15:09		
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff
n-Nonane (C9)	30	1	0	103.1	100	3.1	89.84	100	10.2	104.4	100	4.4	94.01	100	6.0	120.6	100	20.6
n-Decane (C10)	30	1	0	107.7	100	7.7	93.79	100	6.2	109	100	9.0	98.55	100	1.4	121.3	100	21.3
Naphthalene	30	1	0	106.3	100	6.3	92.54	100	7.5	108.6	100	8.6	98.23	100	1.8	122.2	100	22.2
n-Dodecane (C12)	30	1	0	105.4	100	5.4	91.12	100	8.9	106.3	100	6.3	96.03	100	4.0	122.2	100	22.2
2-Methylnaphthalene	30	1	0	107.7	100	7.7	93.54	100	6.5	109.8	100	9.8	99.14	100	0.9	121.8	100	21.8
n-Tetradecane (C14)	30	1	0	111.2	100	11.2	95.85	100	4.2	111.8	100	11.8	101	100	1.0	123.1	100	23.1
n-Hexadecane (C16)	30	1	0	108	100	7.9	93.29	100	6.7	109.4	100	9.4	99.05	100	0.9	123.5	100	23.5
n-Octadecane (C18)	30	1	0	108.5	100	8.5	93.83	100	6.2	110.8	100	10.8	100.5	100	0.5	122	100	22.0
n-Eicosane (C20)	30	1	0	109.7	100	9.7	94.44	100	5.6	112.4	100	12.4	101.5	100	1.4	121.1	100	21.1
n-Heneicosane (C21)	30	1	0	109.1	100	9.1	94.25	100	5.8	112.6	100	12.6	101.9	100	1.9	120.5	100	20.5
n-Docosane (C22)	30	1	0	109.9	100	9.9	95.12	100	4.9	114.5	100	14.5	103.2	100	3.2	120.1	100	20.1
n-Tetracosane (C24)	30	1	0	110.6	100	10.6	95.98	100	4.0	116.5	100	16.5	105.1	100	5.1	118.9	100	18.9
n-Hexacosane (C26)	30	1	0	111.8	100	11.8	96.84	100	3.2	119	100	19.0	106.9	100	6.9	116.9	100	16.9
n-Octacosane (C28)	30	1	0	111.9	100	11.9	97.29	100	2.7	120.8	100	20.8	108.3	100	8.3	115.2	100	15.2
n-Triacontane (C30)	30	1	0	111.9	100	11.9	97.03	100	3.0	122.5	100	22.5	109.8	100	9.8	113.9	100	13.9
n-Dotriacontane(C32)	30	1	0	111.4	100	11.4	96.68	100	3.3	123.6	100	23.6	110.7	100	10.7	112.5	100	12.5
n-Tetratriacontane (C	30	1	0	110.9	100	10.9	97.63	100	2.4	125.8	100	25.8	111.6	100	11.6	111.5	100	11.5
n-Hexatriacontane (C	30	1	0	110.6	100	10.6	96.87	100	3.1	125.6	100	25.6	113.0	100	13.0	109.8	100	9.8
n-Octatriacontane (C3	30	1	0	109.4	100	9.4	96.87	100	3.1	126.1	100	26.1	114.2	100	14.2	103.7	100	3.7
n-Tetracontane (C40)	30	1	0	110.3	100	10.3	97.8	100	2.2	128.4	100	28.4	114.8	100	14.8	93.56	100	6.4
O-Terphenyl	30	1	0	107.4	100	7.4	93.75	100	6.3	110.5	100	10.5	100.2	100	0.2	118.5	100	18.5
1-Chlorooctadecane	30	1	0	109.6	100	9.6	95.99	100	4.0	113.3	100	13.3	102.4	100	2.4	117.9	100	17.9
C9-C28	25	1	0	1307	1200	8.9	1132	1200	5.7	1347	1200	12.3	1216	1200	1.3	1445	1200	20.5
>C28-C40	25	1	0	664.4	600	10.7	582.9	600	2.9	752	600	25.3	674.2	600	12.4	645.0	600	7.5
C9-C40	25	1	0	1971	1800	9.5	1715	1800	4.7	2099	1800	16.6	1890	1800	5.0	2090	1800	16.1

Flags/Notes: **** - Values outside of limits for this column/run***

Form7
Continuing Calibration

Method: NJEPHRev3B

				9G156980.D			9G157121.D			9G157143.D								
Data File:				9G156980.D			9G157121.D			9G157143.D								
Method:				8015-EPHCAT			8015-EPHCAT			8015-EPHCAT								
Calibration Name:				CALDTH AL@100			CALDTH AL@100			CALDTH AL@100								
Calibration Date/Time				08/28/13 22:32			09/06/13 15:49			09/07/13 03:26								
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff
n-Nonane (C9)	30	1	0	120.7	100	20.7	122.2	100	22.2	110.9	100	10.9						
n-Decane (C10)	30	1	0	122.8	100	22.8	122.7	100	22.7	111.1	100	11.1						
Naphthalene	30	1	0	125.2	100	25.2	122.6	100	22.6	110	100	10.0						
n-Dodecane (C12)	30	1	0	125.9	100	25.9	122.3	100	22.3	110.5	100	10.5						
2-Methylnaphthalene	30	1	0	125.1	100	25.1	121.8	100	21.8	109	100	8.9						
n-Tetradecane (C14)	30	1	0	128.8	100	28.8	122.7	100	22.7	110.3	100	10.3						
n-Hexadecane (C16)	30	1	0	130.4	100	30.4	122.8	100	22.8	109.9	100	9.8						
n-Octadecane (C18)	30	1	0	129.1	100	29.1	121	100	21.0	107.4	100	7.4						
n-Eicosane (C20)	30	1	0	127.7	100	27.7	119.4	100	19.4	105.1	100	5.1						
n-Heneicosane (C21)	30	1	0	126.7	100	26.7	118.4	100	18.4	103.8	100	3.8						
n-Docosane (C22)	30	1	0	126.0	100	26.0	118	100	18.0	103.1	100	3.1						
n-Tetracosane (C24)	30	1	0	123.2	100	23.2	116.5	100	16.5	101.2	100	1.2						
n-Hexacosane (C26)	30	1	0	119.4	100	19.4	114.2	100	14.2	98.42	100	1.6						
n-Octacosane (C28)	30	1	0	115.4	100	15.4	112.7	100	12.7	96.81	100	3.2						
n-Triacontane (C30)	30	1	0	112.2	100	12.2	112.4	100	12.4	96.31	100	3.7						
n-Dotriacontane(C32)	30	1	0	109.8	100	9.8	112.9	100	12.9	96.56	100	3.4						
n-Tetratriacontane (C	30	1	0	108.2	100	8.2	114.1	100	14.1	97.51	100	2.5						
n-Hexatriacontane (C	30	1	0	107.2	100	7.2	115.9	100	15.9	99.05	100	0.9						
n-Octatriacontane (C3	30	1	0	103.9	100	3.9	115.7	100	15.7	99.09	100	0.9						
n-Tetracontane (C40)	30	1	0	99.06	100	0.9	115.3	100	15.3	98.85	100	1.2						
O-Terphenyl	30	1	0	125.1	100	25.1	115.8	100	15.8	101.6	100	1.6						
1-Chlorooctadecane	30	1	0	125.7	100	25.7	117.6	100	17.6	103.2	100	3.2						
C9-C28	25	1	0	1496	1200	24.7	1433	1200	19.4	1269	1200	5.7						
>C28-C40	25	1	0	640.4	600	6.7	686.4	600	14.4	587.4	600	2.1						
C9-C40	25	1	0	2136	1800	18.7	2119	1800	17.7	1856	1800	3.1						

Flags/Notes: **** - Values outside of limits for this column/run***

Form7

RtWindow Summary

Method: NJEPHRev3B

Data File:	8G42783.D		9G156781.D		8G42821.D		8G43021.D		9G156966.D	
Calibration Name:	CALDTH AL@100PPM		CALDTH AL@100PPM		CALDTH AL@100PPM		CALDTH AL@100PPM		CALDTH AL@100PPM	
Calibration Date/Time	8/27/2013 9:41:56 AM		8/21/2013 11:55:20 AM		8/28/2013 3:34:55 PM		9/7/2013 2:42:52 AM		8/28/2013 3:09:34 PM	

Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
n-Nonane (C9)	1	0	3.23	(3.18 - 3.28)	2.89	(2.84 - 2.94)	3.22	(3.17 - 3.27)	3.21	(3.16 - 3.26)	2.87	(2.82 - 2.92)
n-Decane (C10)	1	0	4.28	(4.23 - 4.33)	3.93	(3.88 - 3.98)	4.28	(4.23 - 4.33)	4.26	(4.21 - 4.31)	3.91	(3.86 - 3.96)
Naphthalene	1	0	6.25	(6.20 - 6.30)	5.87	(5.82 - 5.92)	6.24	(6.19 - 6.29)	6.22	(6.17 - 6.27)	5.85	(5.80 - 5.90)
n-Dodecane (C12)	1	0	6.32	(6.27 - 6.37)	5.96	(5.91 - 6.01)	6.31	(6.26 - 6.36)	6.29	(6.24 - 6.34)	5.94	(5.89 - 5.99)
2-Methylnaphthalene	1	0	7.30	(7.25 - 7.35)	6.92	(6.87 - 6.97)	7.29	(7.24 - 7.34)	7.27	(7.22 - 7.32)	6.90	(6.85 - 6.95)
n-Tetradecane (C14)	1	0	8.14	(8.09 - 8.19)	7.78	(7.73 - 7.83)	8.13	(8.08 - 8.18)	8.11	(8.06 - 8.16)	7.76	(7.71 - 7.81)
n-Hexadecane (C16)	1	0	9.81	(9.76 - 9.86)	9.42	(9.37 - 9.47)	9.80	(9.75 - 9.85)	9.77	(9.72 - 9.82)	9.40	(9.35 - 9.45)
n-Octadecane (C18)	1	0	11.55	(11.50 - 11.60)	11.11	(11.06 - 11.16)	11.54	(11.49 - 11.59)	11.51	(11.46 - 11.56)	11.08	(11.03 - 11.13)
n-Eicosane (C20)	1	0	13.12	(13.07 - 13.17)	12.76	(12.71 - 12.81)	13.11	(13.06 - 13.16)	13.08	(13.03 - 13.13)	12.73	(12.68 - 12.78)
n-Heneicosane (C21)	1	0	13.70	(13.65 - 13.75)	13.38	(13.33 - 13.43)	13.69	(13.64 - 13.74)	13.67	(13.62 - 13.72)	13.35	(13.30 - 13.40)
n-Docosane (C22)	1	0	14.21	(14.16 - 14.26)	13.90	(13.85 - 13.95)	14.20	(14.15 - 14.25)	14.18	(14.13 - 14.23)	13.88	(13.83 - 13.93)
n-Tetracosane (C24)	1	0	15.08	(15.03 - 15.13)	14.79	(14.74 - 14.84)	15.07	(15.02 - 15.12)	15.05	(15.00 - 15.10)	14.77	(14.72 - 14.82)
n-Hexacosane (C26)	1	0	15.82	(15.77 - 15.87)	15.54	(15.49 - 15.59)	15.82	(15.77 - 15.87)	15.80	(15.75 - 15.85)	15.52	(15.47 - 15.57)
n-Octacosane (C28)	1	0	16.49	(16.44 - 16.54)	16.21	(16.16 - 16.26)	16.48	(16.43 - 16.53)	16.46	(16.41 - 16.51)	16.19	(16.14 - 16.24)
n-Triacontane (C30)	1	0	17.10	(17.05 - 17.15)	16.82	(16.77 - 16.87)	17.09	(17.04 - 17.14)	17.07	(17.02 - 17.12)	16.80	(16.75 - 16.85)
n-Dotriacontane(C32)	1	0	17.69	(17.64 - 17.74)	17.40	(17.35 - 17.45)	17.66	(17.61 - 17.71)	17.64	(17.59 - 17.69)	17.37	(17.32 - 17.42)
n-Tetratriacontane (C	1	0	18.25	(18.20 - 18.30)	17.95	(17.90 - 18.00)	18.20	(18.15 - 18.25)	18.16	(18.11 - 18.21)	17.92	(17.87 - 17.97)
n-Hexatriacontane (C	1	0	18.85	(18.80 - 18.90)	18.50	(18.45 - 18.55)	18.79	(18.74 - 18.84)	18.75	(18.70 - 18.80)	18.45	(18.40 - 18.50)
n-Octatriacontane (C	1	0	19.59	(19.54 - 19.64)	19.14	(19.09 - 19.19)	19.53	(19.48 - 19.58)	19.47	(19.42 - 19.52)	19.08	(19.03 - 19.13)
n-Tetracontane (C40)	1	0	20.56	(20.51 - 20.61)	19.96	(19.91 - 20.01)	20.49	(20.44 - 20.54)	20.42	(20.37 - 20.47)	19.89	(19.84 - 19.94)
O-Terphenyl	1	0	12.34	(12.30 - 12.38)	11.88	(11.84 - 11.92)	12.33	(12.29 - 12.37)	12.30	(12.26 - 12.34)	11.85	(11.81 - 11.89)
1-Chlorooctadecane	1	0	13.64	(13.60 - 13.68)	13.30	(13.26 - 13.34)	13.63	(13.59 - 13.67)	13.61	(13.57 - 13.65)	13.28	(13.24 - 13.32)
C9-C28	1	0										
>C28-C40	1	0										
C9-C40	1	0										

Form7

RtWindow Summary

Method: NJEPHRev3B

Data File:			9G157121.D									
Calibration Name:			CALDTH AL@100PPM									
Calibration Date/Time			9/6/2013 3:49:12 PM									
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
n-Nonane (C9)	1	0	2.85	(2.80 - 2.90)								
n-Decane (C10)	1	0	3.89	(3.84 - 3.94)								
Naphthalene	1	0	5.83	(5.78 - 5.88)								
n-Dodecane (C12)	1	0	5.92	(5.87 - 5.97)								
2-Methylnaphthalene	1	0	6.88	(6.83 - 6.93)								
n-Tetradecane (C14)	1	0	7.74	(7.69 - 7.79)								
n-Hexadecane (C16)	1	0	9.38	(9.33 - 9.43)								
n-Octadecane (C18)	1	0	11.06	(11.01 - 11.11)								
n-Eicosane (C20)	1	0	12.71	(12.66 - 12.76)								
n-Heneicosane (C21)	1	0	13.34	(13.29 - 13.39)								
n-Docosane (C22)	1	0	13.87	(13.81 - 13.91)								
n-Tetracosane (C24)	1	0	14.75	(14.70 - 14.80)								
n-Hexacosane (C26)	1	0	15.51	(15.46 - 15.56)								
n-Octacosane (C28)	1	0	16.17	(16.12 - 16.22)								
n-Triacontane (C30)	1	0	16.78	(16.73 - 16.83)								
n-Dotriacontane(C32)	1	0	17.35	(17.30 - 17.40)								
n-Tetratriacontane (C	1	0	17.89	(17.84 - 17.94)								
n-Hexatriacontane (C	1	0	18.42	(18.37 - 18.47)								
n-Octatriacontane (C	1	0	19.04	(18.99 - 19.09)								
n-Tetracontane (C40)	1	0	19.84	(19.79 - 19.89)								
O-Terphenyl	1	0	11.82	(11.78 - 11.86)								
1-Chlorooctadecane	1	0	13.26	(13.22 - 13.30)								
C9-C28	1	0										
>C28-C40	1	0										
C9-C40	1	0										

Quantitation Report (QT Reviewed)

3090309 0418

Data Path : G:\Gcdata\2013\GC_9\Data\08-28-13\
Data File : 9G156966.D
Signal(s) : FID1A.CH
Acq On : 28-Aug-13, 15:09:34
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 28 15:34:31 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	11.848	365820	118.511		
22)S	1-Chlorooctadecane	13.281	279952	117.934		
Target Compounds						
1)AT	n-Nonane (C9)	2.867	298282	120.568		
2)AT	n-Decane (C10)	3.907	306559	121.308		
3)	Naphthalene	5.847	346320	122.242		
4)AT	n-Dodecane (C12)	5.937	317948	122.189		
5)	2-Methylnaphthalene	6.897	350460	121.834		
6)AT	n-Tetradecane (C14)	7.760	321533	123.133		
7)AT	n-Hexadecane (C16)	9.397	322146	123.494		
8)AT	n-Octadecane (C18)	11.082	321651	121.991		
9)AT	n-Eicosane (C20)	12.730	317926	121.111		
10)AT	n-Heneicosane (C21)	13.352	320423	120.469		
11)AT	n-Docosane (C22)	13.881	317007	120.106		
12)AT	n-Tetracosane (C24)	14.770	315470	118.906		
13)AT	n-Hexacosane (C26)	15.521	303886	116.944		
14)AT	n-Octacosane (C28)	16.188	297847	115.206		
15)BT	n-Triacontane (C30)	16.798	295490	113.931		
16)BT	n-Dotriacontane(C32)	17.372	287269	112.516		
17)BT	n-Tetratriacontane (C34	17.918	279877	111.513		
18)BT	n-Hexatriacontane (C36)	18.449	264743	109.768		
19)BT	n-Octatriacontane (C38)	19.079	243685	103.740		
20)BT	n-Tetracontane (C40)	19.887	215605	93.556		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

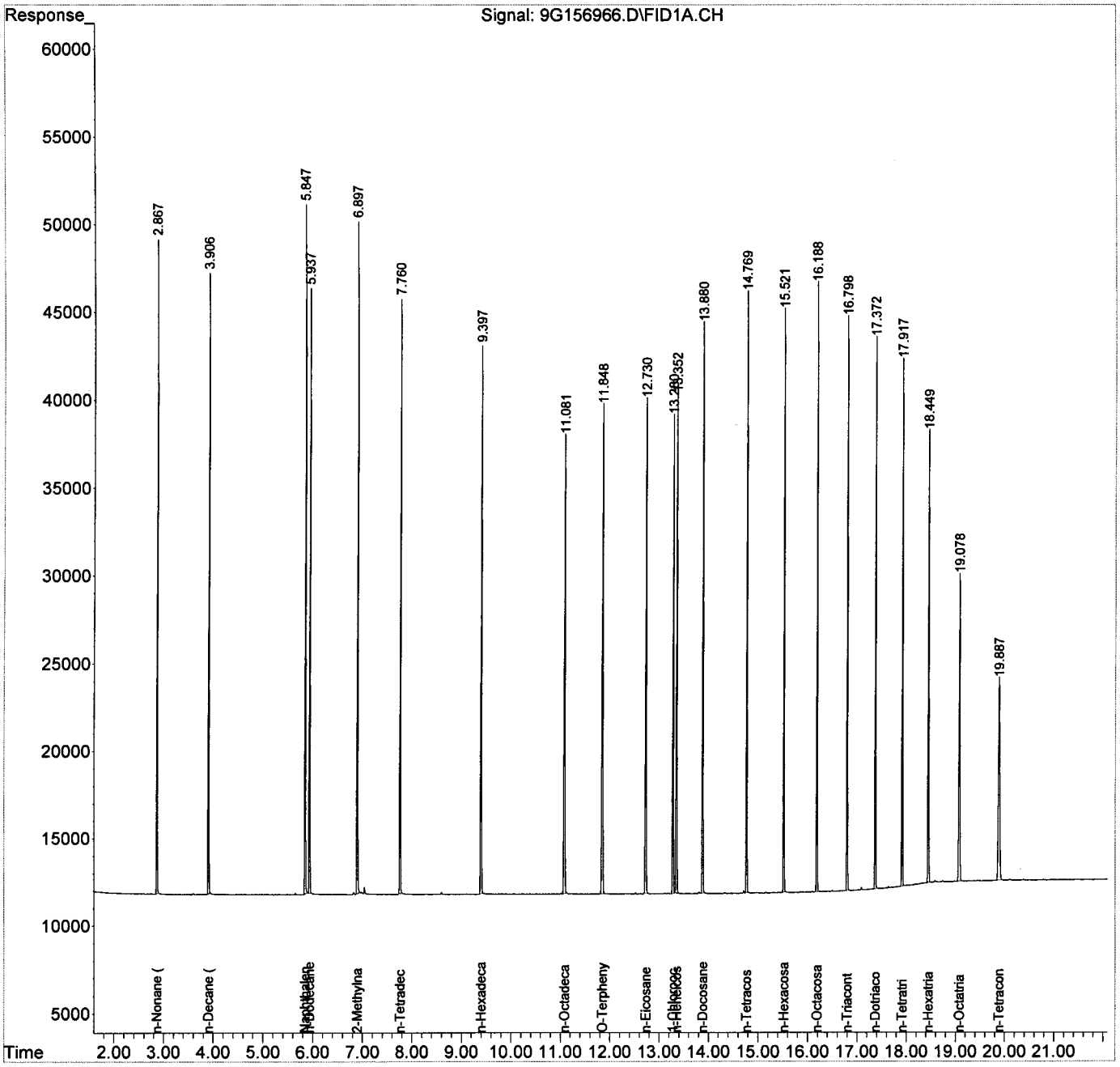
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-28-13\
Data File : 9G156966.D
Signal(s) : FID1A.CH
Acq On : 28-Aug-13, 15:09:34
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 28 15:34:31 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0420

Data Path : G:\Gcdata\2013\GC_8\Data\08-28-13\
Data File : 8G42821.D
Signal(s) : FID1A.CH
Acq On : 28-Aug-13, 15:34:55
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 28 15:58:32 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.331	343161	107.400		
22)S	1-Chlorooctadecane	13.629	263516	109.640		
Target Compounds						
1)AT	n-Nonane (C9)	3.225	271198	103.114		
2)AT	n-Decane (C10)	4.276	277510	107.722		
3)	Naphthalene	6.243	319368	106.311		
4)AT	n-Dodecane (C12)	6.311	287916	105.365		
5)	2-Methylnaphthalene	7.294	323742	107.664		
6)AT	n-Tetradecane (C14)	8.134	290741	111.161		
7)AT	n-Hexadecane (C16)	9.799	292757	107.947		
8)AT	n-Octadecane (C18)	11.541	293845	108.513		
9)AT	n-Eicosane (C20)	13.106	293865	109.646		
10)AT	n-Heneicosane (C21)	13.692	296707	109.114		
11)AT	n-Docosane (C22)	14.202	295216	109.911		
12)AT	n-Tetracosane (C24)	15.071	296245	110.642		
13)AT	n-Hexacosane (C26)	15.816	289957	111.764		
14)AT	n-Octacosane (C28)	16.481	285906	111.859		
15)BT	n-Triacontane (C30)	17.090	285744	111.859		
16)BT	n-Dotriacontane(C32)	17.660	279813	111.424		
17)BT	n-Tetratriacontane (C34	18.204	273644	110.846		
18)BT	n-Hexatriacontane (C36)	18.791	263164	110.586		
19)BT	n-Octatriacontane (C38)	19.528	253632	109.440		
20)BT	n-Tetracontane (C40)	20.492	249644	110.247		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

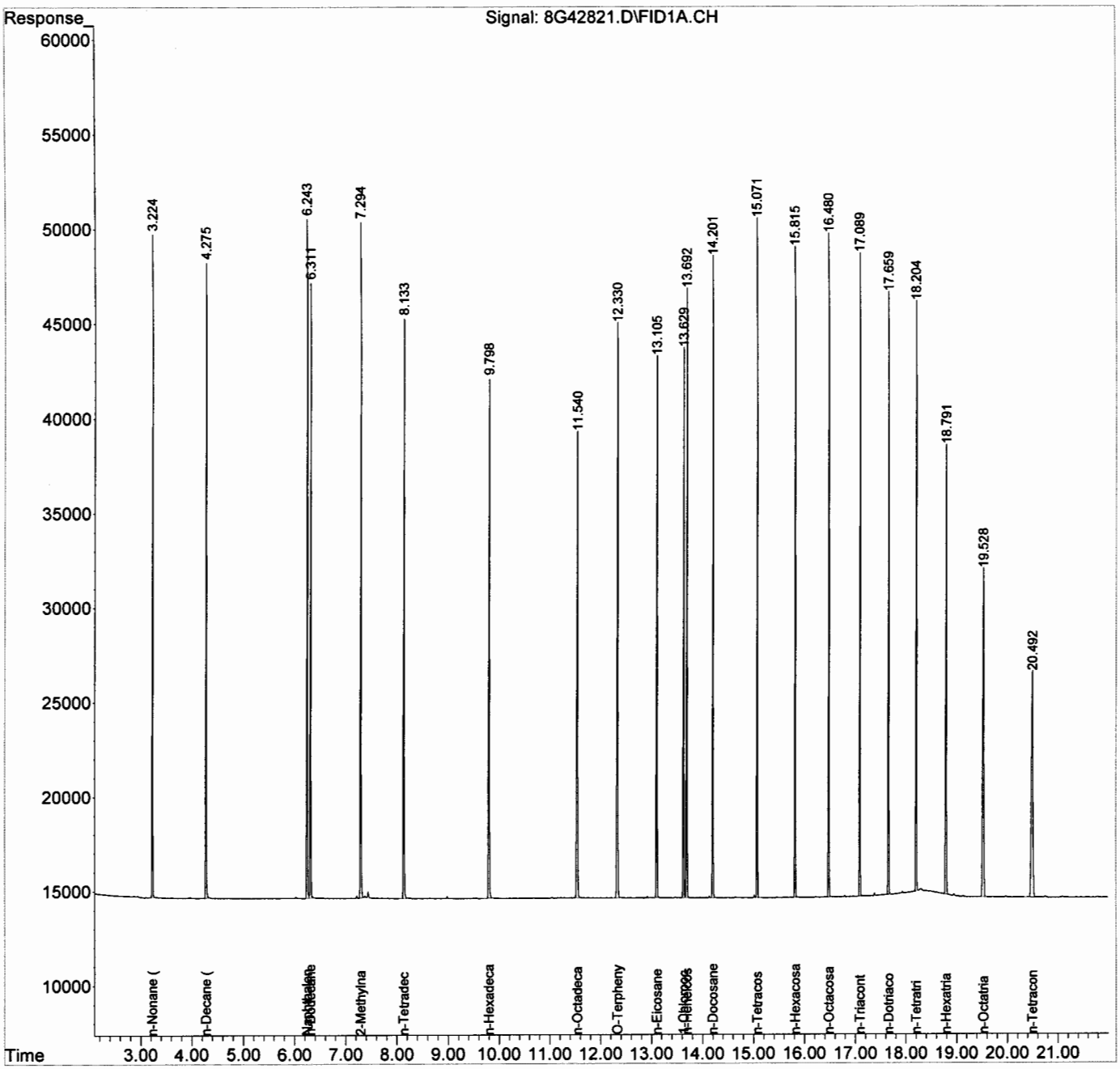
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-28-13\
Data File : 8G42821.D
Signal(s) : FID1A.CH
Acq On : 28-Aug-13, 15:34:55
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 28 15:58:32 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0422

Data Path : G:\Gcdata\2013\GC_9\Data\08-28-13\
Data File : 9G156980.D
Signal(s) : FID1A.CH
Acq On : 28-Aug-13, 22:32:11
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 08:48:47 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	11.846	386068	125.071		
22)S	1-Chlorooctadecane	13.280	298262	125.647		
Target Compounds						
1)AT	n-Nonane (C9)	2.866	298615	120.703		
2)AT	n-Decane (C10)	3.905	310247	122.767		
3)	Naphthalene	5.846	354613	125.170		
4)AT	n-Dodecane (C12)	5.936	327498	125.859		
5)	2-Methylnaphthalene	6.897	359916	125.121		
6)AT	n-Tetradecane (C14)	7.759	336353	128.809		
7)AT	n-Hexadecane (C16)	9.396	340070	130.365		
8)AT	n-Octadecane (C18)	11.081	340292	129.061		
9)AT	n-Eicosane (C20)	12.729	335237	127.706		
10)AT	n-Heneicosane (C21)	13.351	337036	126.715		
11)AT	n-Docosane (C22)	13.880	332637	126.028		
12)AT	n-Tetracosane (C24)	14.769	326751	123.158		
13)AT	n-Hexacosane (C26)	15.519	310239	119.389		
14)AT	n-Octacosane (C28)	16.187	298268	115.369		
15)BT	n-Triacontane (C30)	16.796	291070	112.227		
16)BT	n-Dotriacontane(C32)	17.361	280288	109.782		
17)BT	n-Tetratriacontane (C34	17.889f	271554	108.197		
18)BT	n-Hexatriacontane (C36)	18.406f	258564	107.206		
19)BT	n-Octatriacontane (C38)	19.031f	244052	103.896		
20)BT	n-Tetracontane (C40)	19.837f	228290	99.060		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

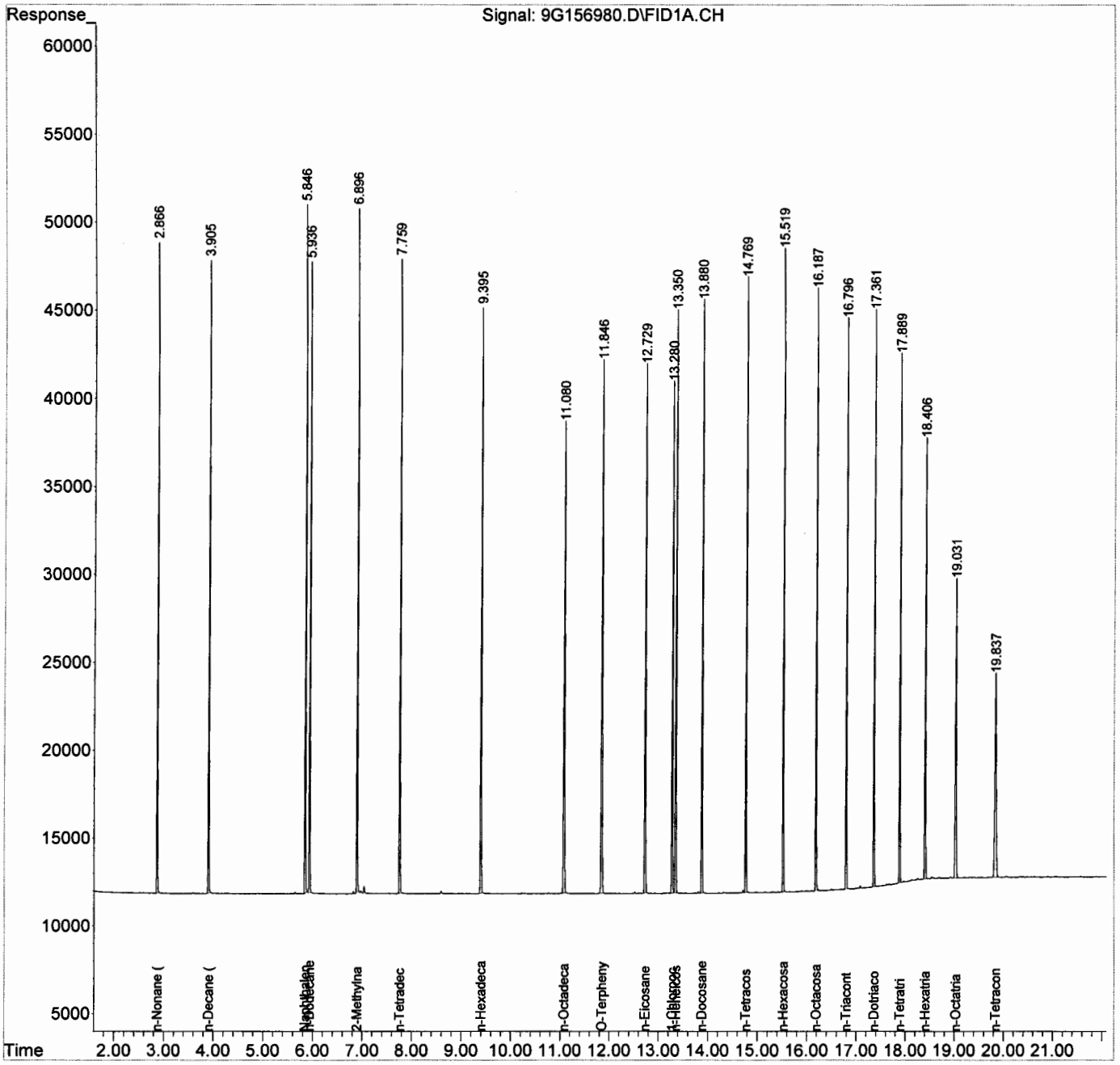
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-28-13\
Data File : 9G156980.D
Signal(s) : FID1A.CH
Acq On : 28-Aug-13, 22:32:11
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 08:48:47 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0424

Data Path : G:\Gcdata\2013\GC_8\Data\08-28-13\
Data File : 8G42838.D
Signal(s) : FID1A.CH
Acq On : 29-Aug-13, 00:29:15
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 19 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 09:05:14 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.326	299550	93.751		
22)S	1-Chlorooctadecane	13.625	230706	95.989		
Target Compounds						
1)AT	n-Nonane (C9)	3.222	236276	89.836		
2)AT	n-Decane (C10)	4.273	241620	93.790		
3)	Naphthalene	6.240	277992	92.538		
4)AT	n-Dodecane (C12)	6.308	248996	91.121		
5)	2-Methylnaphthalene	7.291	281275	93.541		
6)AT	n-Tetradecane (C14)	8.130	250693	95.849		
7)AT	n-Hexadecane (C16)	9.795	252996	93.286		
8)AT	n-Octadecane (C18)	11.536	254086	93.830		
9)AT	n-Eicosane (C20)	13.103	253120	94.443		
10)AT	n-Heneicosane (C21)	13.689	256286	94.249		
11)AT	n-Docosane (C22)	14.199	255481	95.117		
12)AT	n-Tetracosane (C24)	15.069	256978	95.977		
13)AT	n-Hexacosane (C26)	15.813	251234	96.838		
14)AT	n-Octacosane (C28)	16.479	248666	97.289		
15)BT	n-Triacontane (C30)	17.087	247857	97.028		
16)BT	n-Dotriacontane(C32)	17.652	242783	96.679		
17)BT	n-Tetratriacontane (C34	18.183	241022	97.632		
18)BT	n-Hexatriacontane (C36)	18.768	230526	96.871		
19)BT	n-Octatriacontane (C38)	19.503	224497	96.869		
20)BT	n-Tetracontane (C40)	20.464	221460	97.801		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

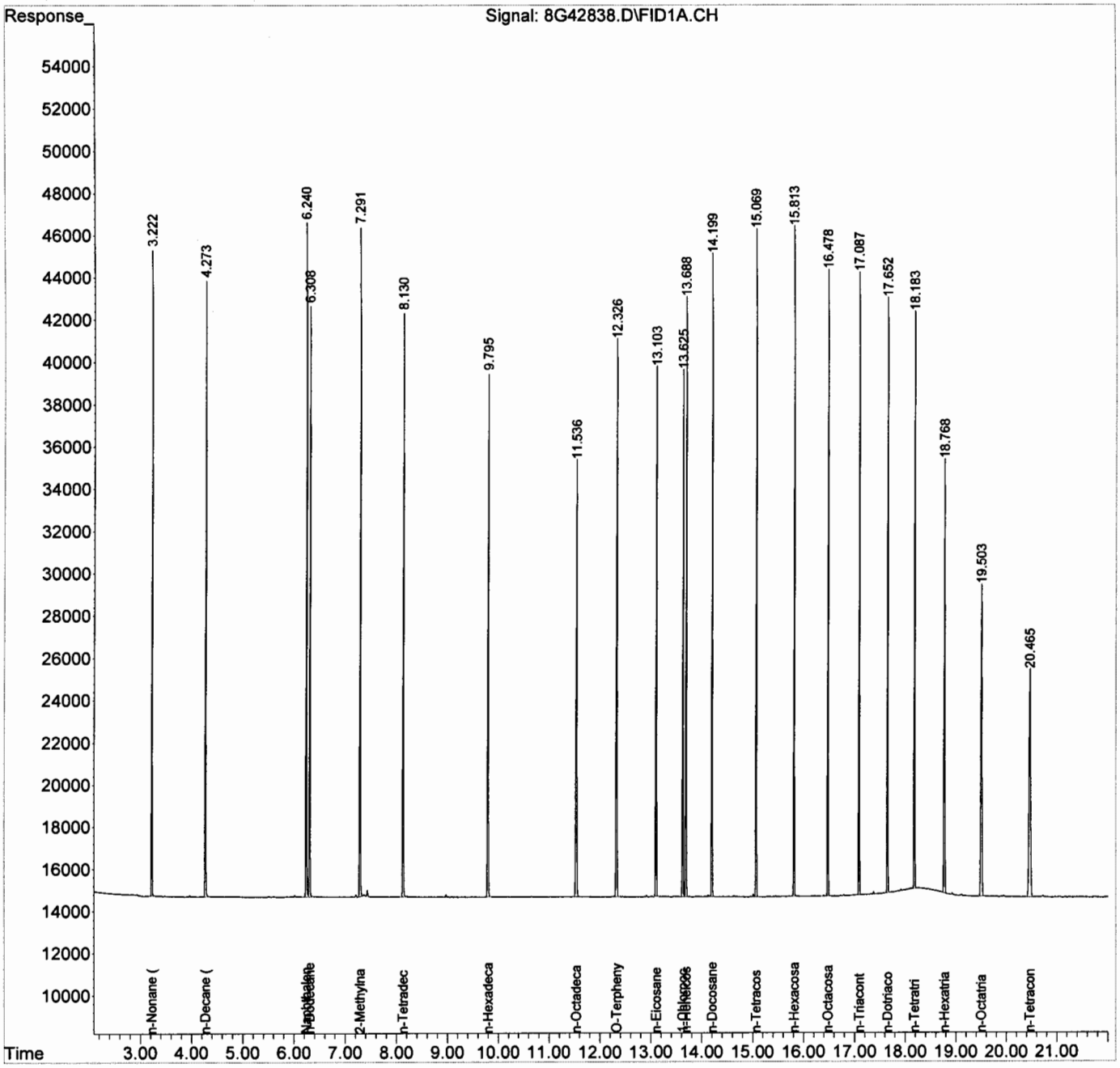
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-28-13\
Data File : 8G42838.D
Signal(s) : FID1A.CH
Acq On : 29-Aug-13, 00:29:15
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 19 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 09:05:14 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0426

Data Path : G:\Gcdata\2013\GC_9\Data\09-05-13\
Data File : 9G157121.D
Signal(s) : FID1A.CH
Acq On : 06-Sep-13, 15:49:12
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 06 16:14:48 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	11.824	357459	115.803		
22)S	1-Chlorooctadecane	13.264	279171	117.605		m
Target Compounds						
1)AT	n-Nonane (C9)	2.855	302317	122.199		
2)AT	n-Decane (C10)	3.893	310186	122.743		
3)	Naphthalene	5.832	347431	122.635		
4)AT	n-Dodecane (C12)	5.922	318183	122.279		
5)	2-Methylnaphthalene	6.882	350306	121.781		
6)AT	n-Tetradecane (C14)	7.744	320290	122.657		
7)AT	n-Hexadecane (C16)	9.380	320357	122.808		
8)AT	n-Octadecane (C18)	11.060	318913	120.952		
9)AT	n-Eicosane (C20)	12.711	313435	119.400		
10)AT	n-Heneicosane (C21)	13.335	314881	118.385		
11)AT	n-Docosane (C22)	13.865	311362	117.968		
12)AT	n-Tetracosane (C24)	14.755	309104	116.507		
13)AT	n-Hexacosane (C26)	15.507	296853	114.238		
14)AT	n-Octacosane (C28)	16.174	291269	112.662		
15)BT	n-Triacontane (C30)	16.783	291565	112.418		
16)BT	n-Dotriacontane(C32)	17.349	288244	112.897		
17)BT	n-Tetratriacontane (C34	17.891f	286458	114.135		
18)BT	n-Hexatriacontane (C36)	18.418	279498	115.885		
19)BT	n-Octatriacontane (C38)	19.042f	271873	115.740		
20)BT	n-Tetracontane (C40)	19.844f	265691	115.289		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

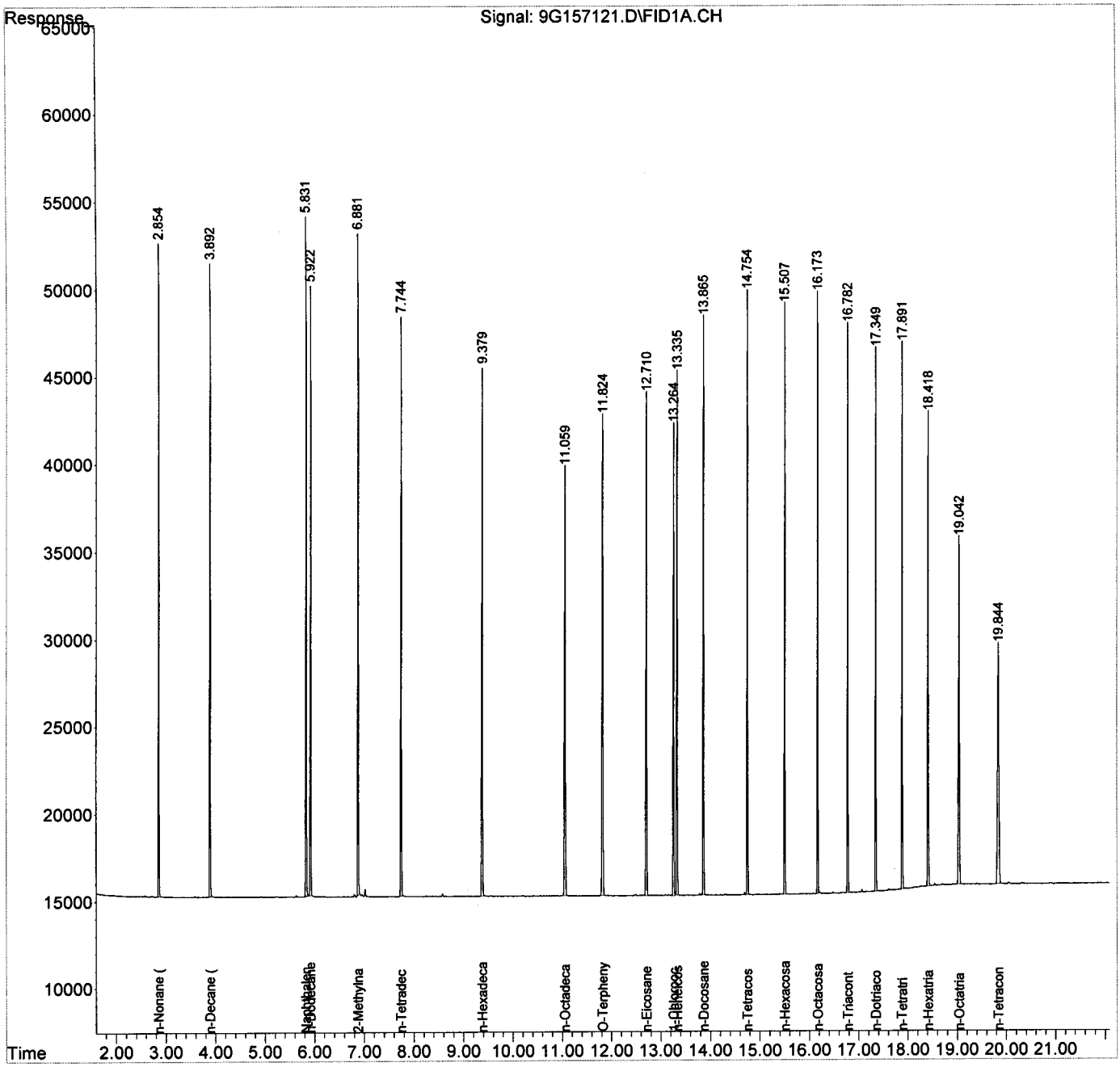
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\09-05-13\
Data File : 9G157121.D
Signal(s) : FID1A.CH
Acq On : 06-Sep-13, 15:49:12
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 06 16:14:48 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0428

Data Path : G:\Gcdata\2013\GC_8\Data\09-05-13\
Data File : 8G43021.D
Signal(s) : FID1A.CH
Acq On : 07-Sep-13, 02:42:52
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 10:08:19 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.301	353109	110.514		
22)S	1-Chlorooctadecane	13.605	272373	113.325		
Target Compounds						
1)AT	n-Nonane (C9)	3.207	274561	104.392		
2)AT	n-Decane (C10)	4.256	280778	108.990		
3)	Naphthalene	6.221	326152	108.569		
4)AT	n-Dodecane (C12)	6.289	290391	106.270		
5)	2-Methylnaphthalene	7.271	330195	109.810		
6)AT	n-Tetradecane (C14)	8.111	292466	111.820		
7)AT	n-Hexadecane (C16)	9.773	296664	109.387		
8)AT	n-Octadecane (C18)	11.509	299943	110.765		
9)AT	n-Eicosane (C20)	13.081	301142	112.361		
10)AT	n-Heneicosane (C21)	13.670	306108	112.571		
11)AT	n-Docosane (C22)	14.180	307611	114.525		
12)AT	n-Tetracosane (C24)	15.051	311971	116.516		
13)AT	n-Hexacosane (C26)	15.796	308706	118.991		
14)AT	n-Octacosane (C28)	16.461	308811	120.821		
15)BT	n-Triacontane (C30)	17.070	312819	122.459		
16)BT	n-Dotriacontane(C32)	17.635	310438	123.619		
17)BT	n-Tetratriacontane (C34	18.165f	310528	125.786		
18)BT	n-Hexatriacontane (C36)	18.746f	298985	125.639		
19)BT	n-Octatriacontane (C38)	19.470f	292213	126.088		
20)BT	n-Tetracontane (C40)	20.418f	290667	128.364		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

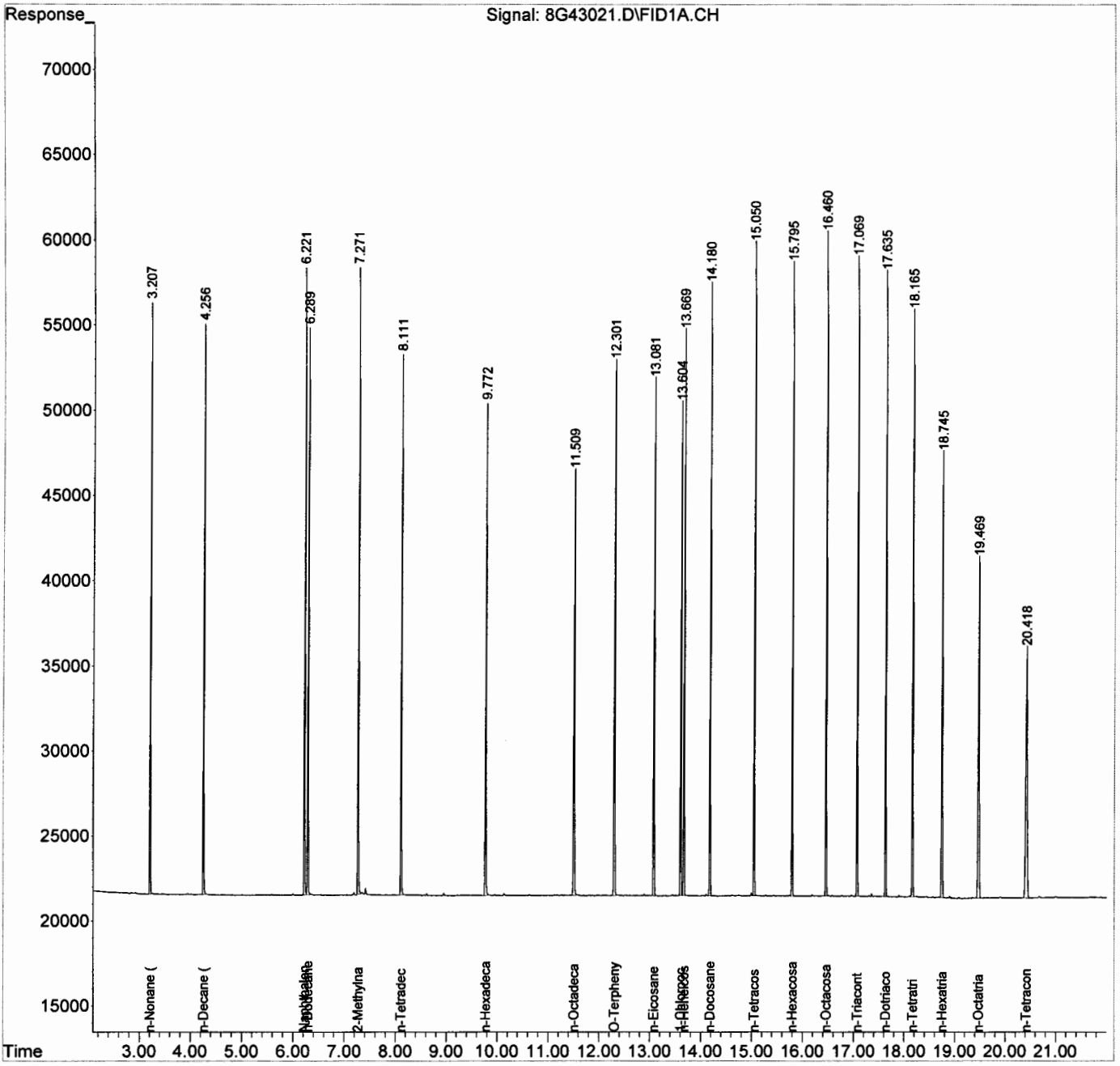
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\09-05-13\
Data File : 8G43021.D
Signal(s) : FID1A.CH
Acq On : 07-Sep-13, 02:42:52
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 10:08:19 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0430

Data Path : G:\Gcdata\2013\GC_9\Data\09-05-13\
Data File : 9G157143.D
Signal(s) : FID1A.CH
Acq On : 07-Sep-13, 03:26:26
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 22 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 09:33:10 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	11.822	313531	101.572		
22)S	1-Chlorooctadecane	13.261	244861	103.151		m
Target Compounds						
1)AT	n-Nonane (C9)	2.854	274441	110.931		
2)AT	n-Decane (C10)	3.891	280720	111.083		
3)	Naphthalene	5.830	311520	109.959		
4)AT	n-Dodecane (C12)	5.920	287536	110.502		
5)	2-Methylnaphthalene	6.880	313405	108.952		
6)AT	n-Tetradecane (C14)	7.742	288029	110.303		
7)AT	n-Hexadecane (C16)	9.377	286542	109.845		
8)AT	n-Octadecane (C18)	11.059	283296	107.444		
9)AT	n-Eicosane (C20)	12.709	275946	105.119		
10)AT	n-Heneicosane (C21)	13.333	276122	103.813		
11)AT	n-Docosane (C22)	13.863	272078	103.084		
12)AT	n-Tetracosane (C24)	14.754	268388	101.160		
13)AT	n-Hexacosane (C26)	15.505	255754	98.422		
14)AT	n-Octacosane (C28)	16.172	250294	96.813		
15)BT	n-Triacontane (C30)	16.781	249782	96.308		
16)BT	n-Dotriacontane(C32)	17.347	246530	96.559		
17)BT	n-Tetratriacontane (C34	17.874f	244732	97.510		
18)BT	n-Hexatriacontane (C36)	18.389f	238885	99.046		
19)BT	n-Octatriacontane (C38)	19.011f	232764	99.091		
20)BT	n-Tetracontane (C40)	19.810f	227814	98.854		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

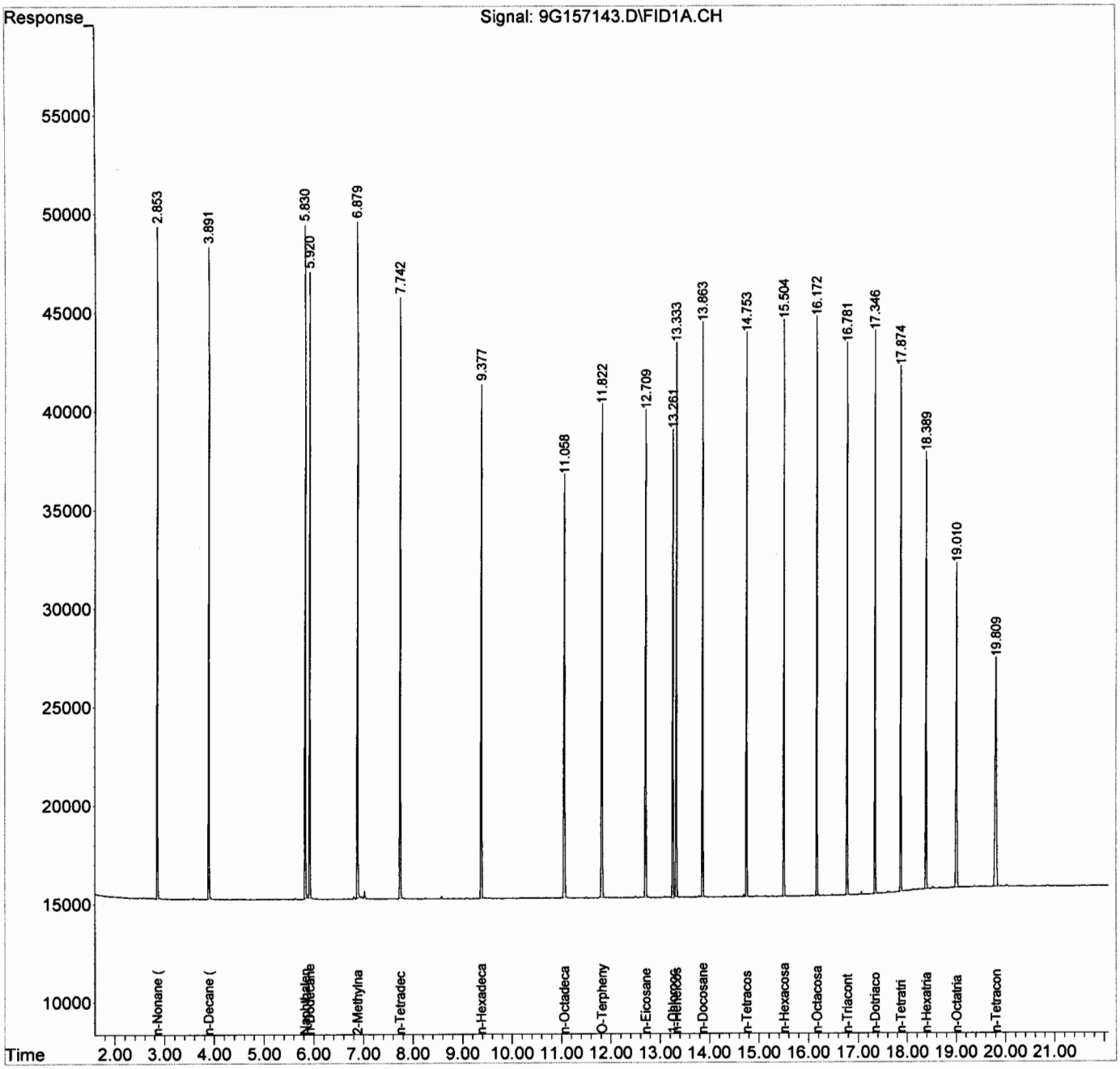
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\09-05-13\
Data File : 9G157143.D
Signal(s) : FID1A.CH
Acq On : 07-Sep-13, 03:26:26
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 22 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 09:33:10 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0432

Data Path : G:\Gcdata\2013\GC_8\Data\09-05-13\
Data File : 8G43032.D
Signal(s) : FID1A.CH
Acq On : 07-Sep-13, 08:44:29
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 32 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 08:34:24 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.299	320159	100.201		
22)S	1-Chlorooctadecane	13.604	246198	102.435		
	Target Compounds					
1)AT	n-Nonane (C9)	3.206	247242	94.005		
2)AT	n-Decane (C10)	4.255	253882	98.550		
3)	Naphthalene	6.219	295107	98.235		
4)AT	n-Dodecane (C12)	6.288	262409	96.030		
5)	2-Methylnaphthalene	7.269	298126	99.145		
6)AT	n-Tetradecane (C14)	8.109	264109	100.979		
7)AT	n-Hexadecane (C16)	9.771	268626	99.049		
8)AT	n-Octadecane (C18)	11.508	272030	100.457		
9)AT	n-Eicosane (C20)	13.079	271896	101.449		
10)AT	n-Heneicosane (C21)	13.668	277212	101.944		
11)AT	n-Docosane (C22)	14.178	277229	103.214		
12)AT	n-Tetracosane (C24)	15.050	281485	105.130		
13)AT	n-Hexacosane (C26)	15.795	277349	106.904		
14)AT	n-Octacosane (C28)	16.460	276825	108.306		
15)BT	n-Triacontane (C30)	17.069	280446	109.785		
16)BT	n-Dotriacontane(C32)	17.634	278052	110.723		
17)BT	n-Tetratriacontane (C34	18.164f	275595	111.636		
18)BT	n-Hexatriacontane (C36)	18.742f	268968	113.025		
19)BT	n-Octatriacontane (C38)	19.468f	264756	114.240		
20)BT	n-Tetracontane (C40)	20.415f	259857	114.758		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

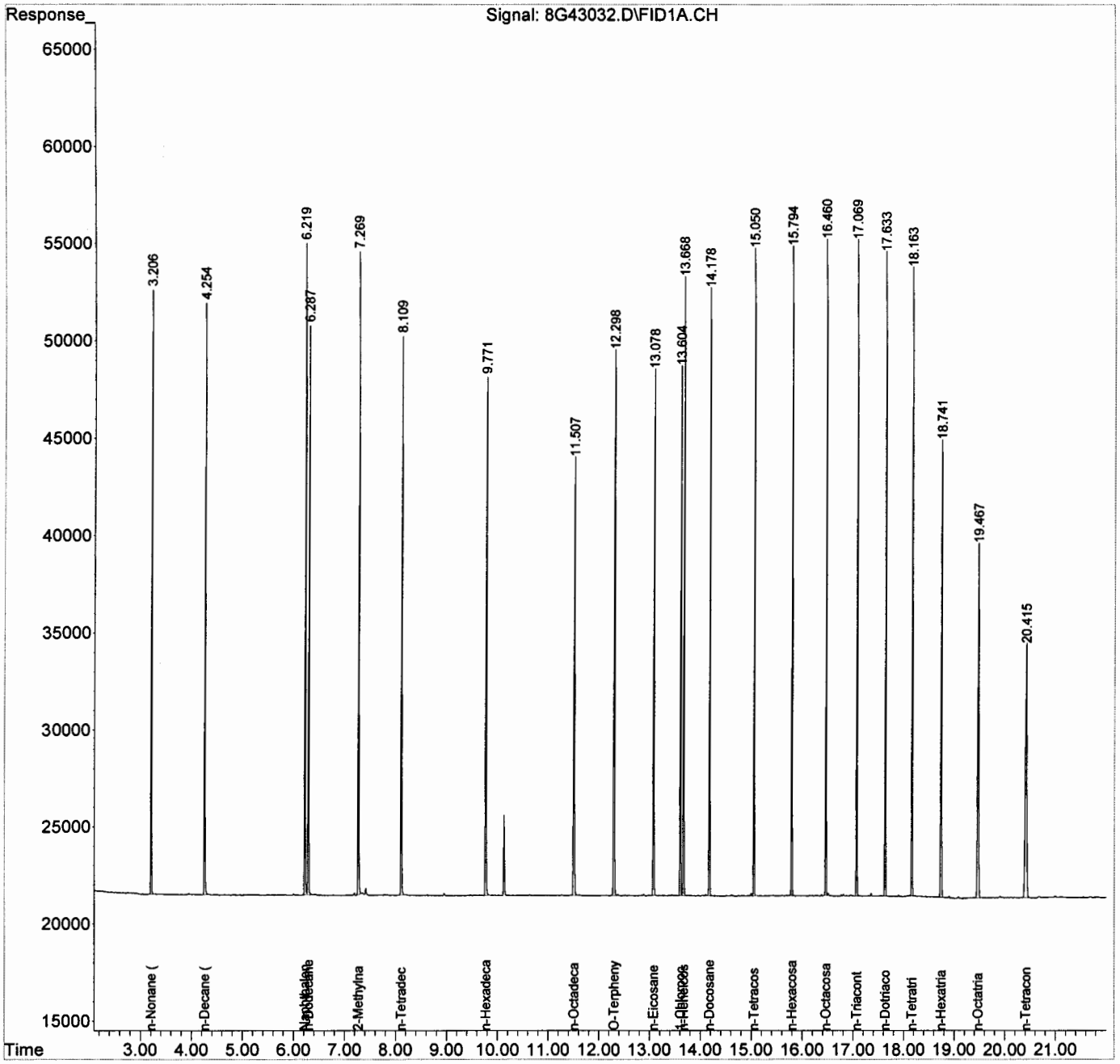
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\09-05-13\
Data File : 8G43032.D
Signal(s) : FID1A.CH
Acq On : 07-Sep-13, 08:44:29
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 32 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 08:34:24 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



EPH Category 2 Data
Raw QC Data

Form1

ORGANICS REPORT

Sample Number: SMB27926
Client Id:
Data File: 8G43024.D
Analysis Date: 09/07/13 04:43
Date Rec/Extracted: NA-09/06/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: NJEPHRev3B
Matrix: Soil
Initial Vol: 10g
Final Vol: 1ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
ephc9c40	C9-C40	60	U				

Worksheet #: 276148

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3090309 0436

Data Path : G:\Gcdata\2013\GC_8\Data\09-05-13\
Data File : 8G43024.D
Signal(s) : FID1A.CH
Acq On : 07-Sep-13, 04:43:02
Operator : KD/RAK/ABM
Sample : SMB27926
Misc : S.TPH
ALS Vial : 24 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 12:55:44 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

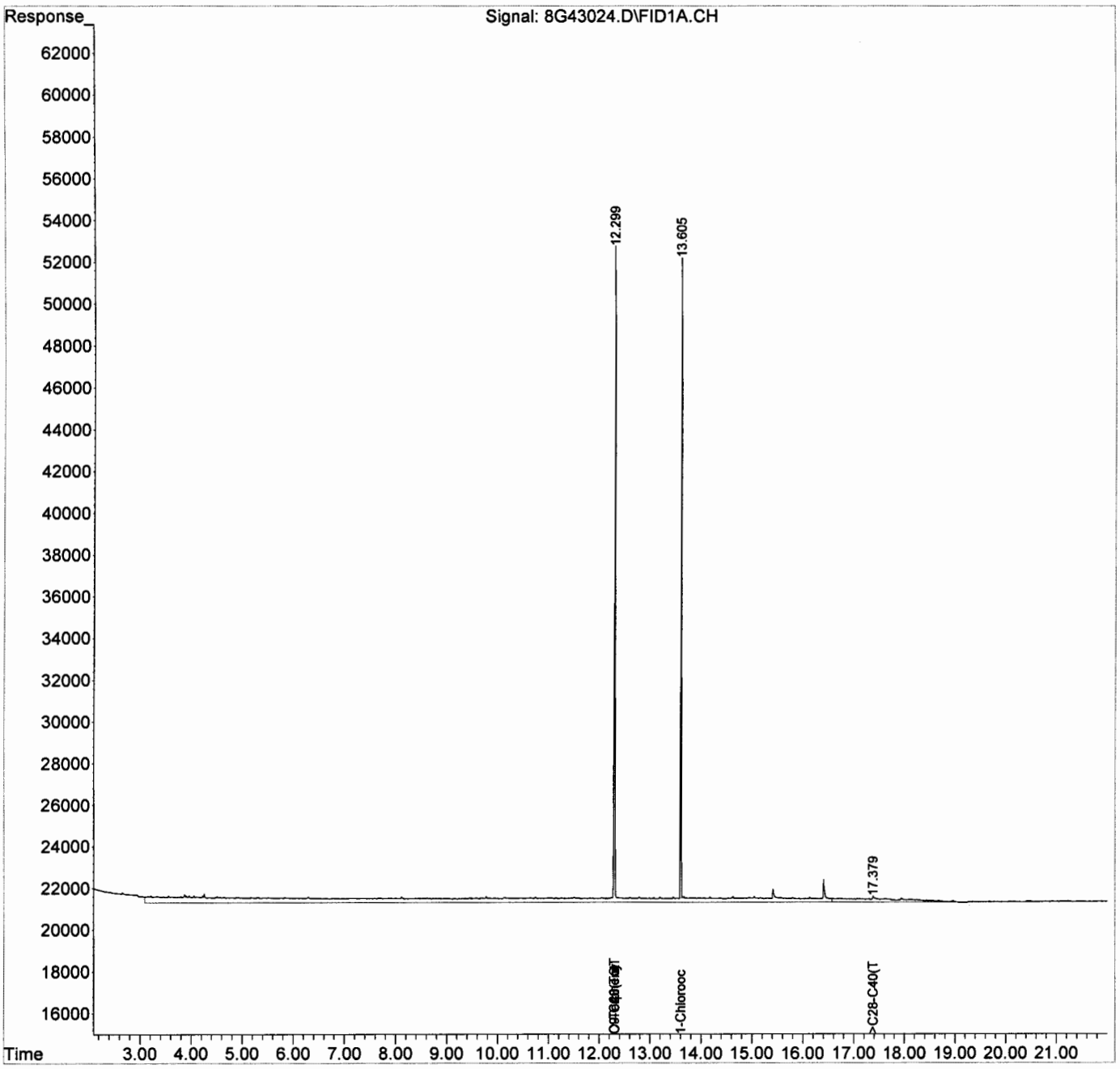
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.300	350224	109.611		
22)S	1-Chlorooctadecane	13.605	283754	118.060		
	Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	12.299f	2348969	883.972		m
24)B	>C28-C40(Total)	17.379	186796	77.316		m
25)t	C9-C40(TOTAL)	12.299f	2538568	985.139		m

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_8\Data\09-05-13\
Data File : 8G43024.D
Signal(s) : FID1A.CH
Acq On : 07-Sep-13, 04:43:02
Operator : KD/RAK/ABM
Sample : SMB27926
Misc : S.TPH
ALS Vial : 24 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 12:55:44 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-28-13\
Data File : 8G42822.D
Signal(s) : FID1A.CH
Acq On : 28-Aug-13, 16:05:20
Operator : KD/RAK/ABM
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 11:40:43 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	0.000	0	N.D.		d
22)S	1-Chlorooctadecane	0.000	0	N.D.		d
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		d
5)	2-Methylnaphthalene	0.000	0	N.D.		d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		d
23)A	C9-C28(Total)	8.639f	375698	141.384		m
24)B	>C28-C40(Total)	18.274f	326280	135.049		m
25)t	C9-C40(TOTAL)	18.274f	704344	273.334		m

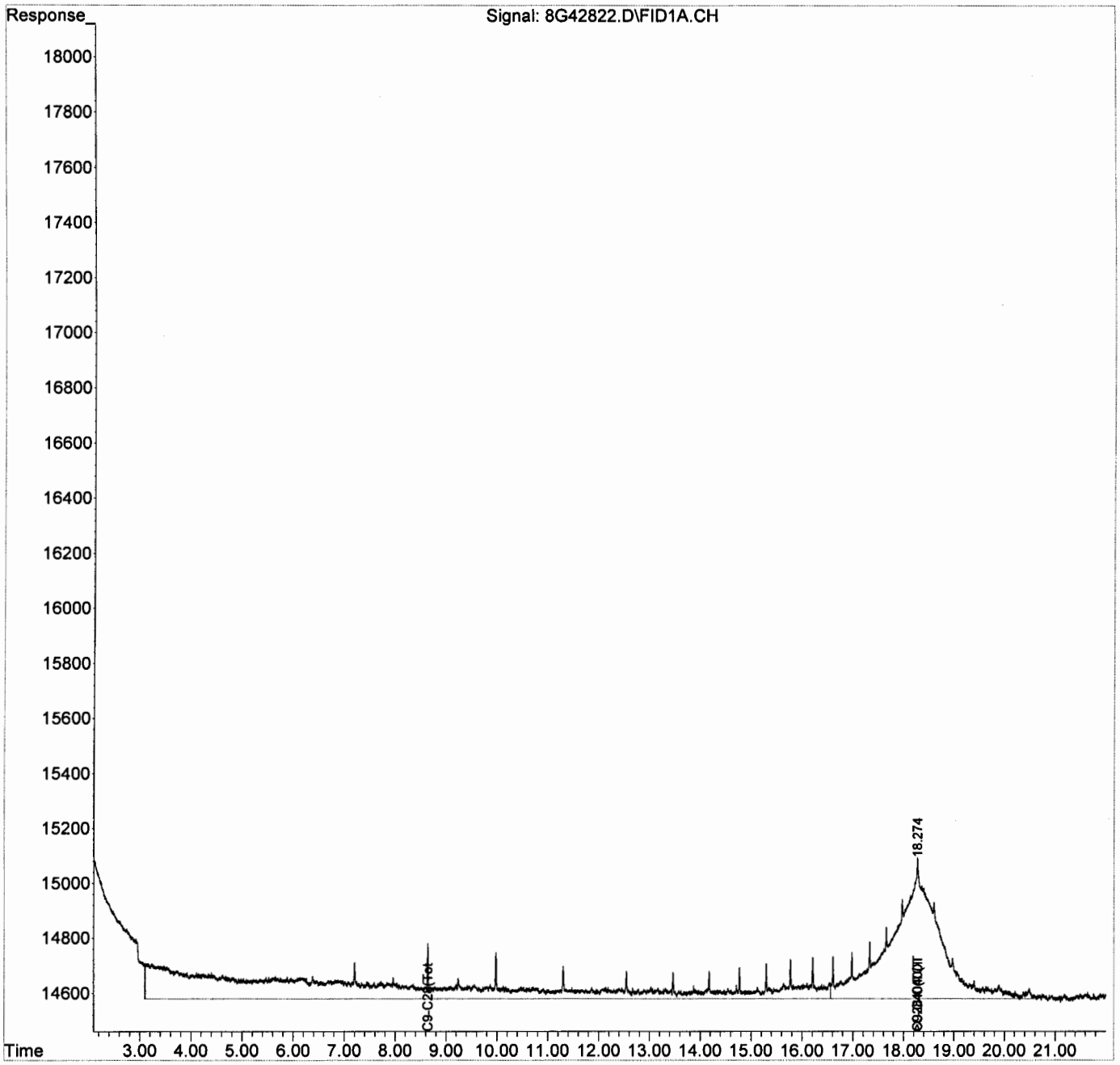
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-28-13\
Data File : 8G42822.D
Signal(s) : FID1A.CH
Acq On : 28-Aug-13, 16:05:20
Operator : KD/RAK/ABM
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 11:40:43 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0440

Data Path : G:\Gcdata\2013\GC_8\Data\09-05-13\
Data File : 8G43023.D
Signal(s) : FID1A.CH
Acq On : 07-Sep-13, 04:12:56
Operator : KD/RAK/ABM
Sample : INST BLK(MECL2
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 13:02:38 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

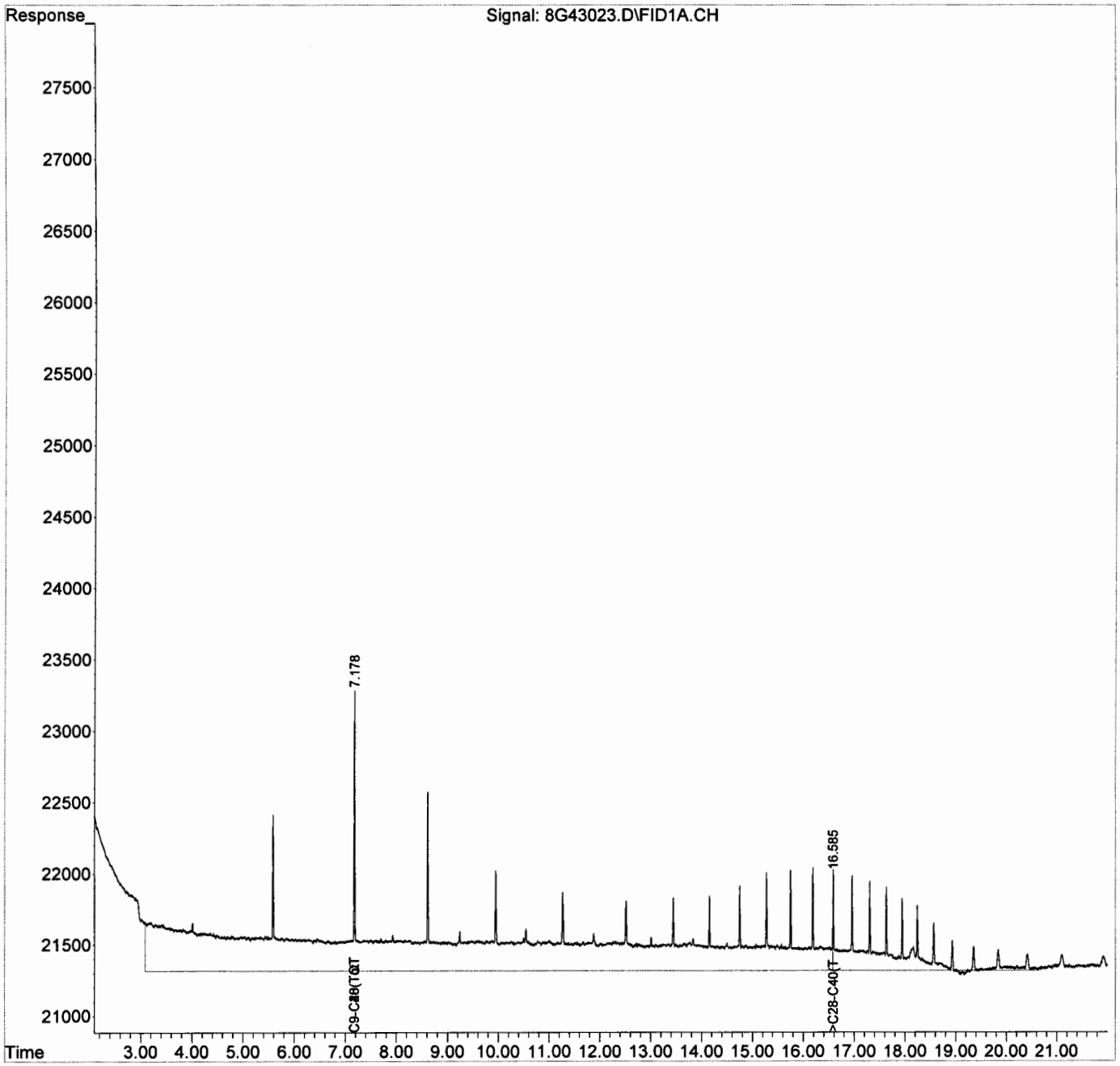
	Compound	R.T.	Response	Conc	Units
System Monitoring Compounds					
21)S	O-Terphenyl	0.000	0	N.D.	d
22)S	1-Chlorooctadecane	0.000	0	N.D.	d
Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.	
2)AT	n-Decane (C10)	0.000	0	N.D.	d
3)	Naphthalene	0.000	0	N.D.	d
4)AT	n-Dodecane (C12)	0.000	0	N.D.	d
5)	2-Methylnaphthalene	0.000	0	N.D.	d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.	d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.	d
8)AT	n-Octadecane (C18)	0.000	0	N.D.	d
9)AT	n-Eicosane (C20)	0.000	0	N.D.	d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.	d
11)AT	n-Docosane (C22)	0.000	0	N.D.	d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.	d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.	d
14)AT	n-Octacosane (C28)	0.000	0	N.D.	d
15)BT	n-Triacontane (C30)	0.000	0	N.D.	d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.	d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.	d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.	d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.	d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.	d
23)A	C9-C28(Total)	7.178f	1697725	638.894	m
24)B	>C28-C40(Total)	16.585	190858	78.997	m
25)t	C9-C40(TOTAL)	7.178	1895224	735.477	m

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_8\Data\09-05-13\
Data File : 8G43023.D
Signal(s) : FID1A.CH
Acq On : 07-Sep-13, 04:12:56
Operator : KD/RAK/ABM
Sample : INST BLK(MECL2
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 13:02:38 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\09-05-13\
Data File : 9G157122.D
Signal(s) : FID1A.CH
Acq On : 06-Sep-13, 16:19:26
Operator : KD/RAK/ABM
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 09:37:23 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

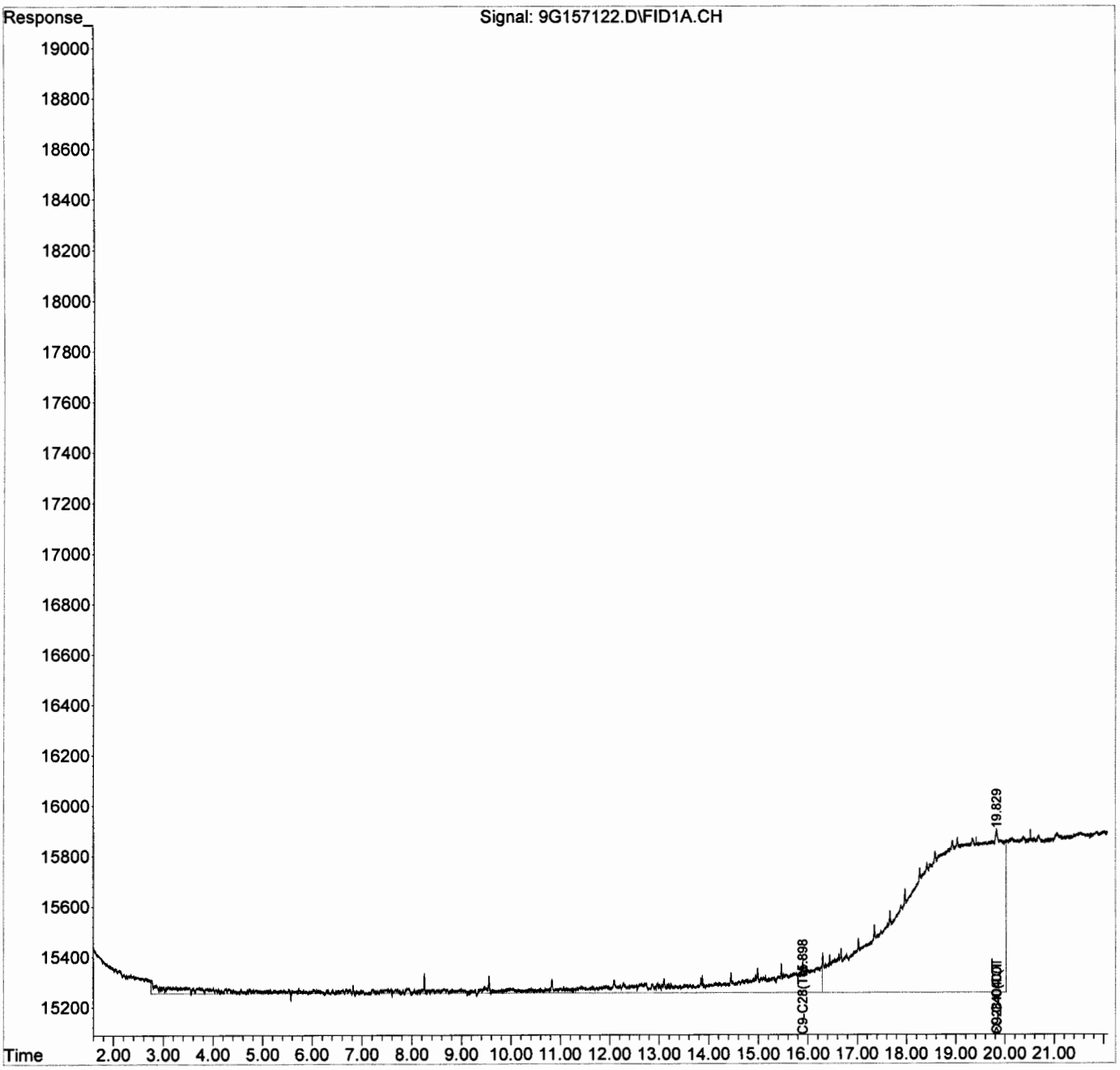
	Compound	R.T.	Response	Conc	Units
System Monitoring Compounds					
21)S	O-Terphenyl	0.000	0	N.D.	d
22)S	1-Chlorooctadecane	0.000	0	N.D.	d
Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.	
2)AT	n-Decane (C10)	0.000	0	N.D.	d
3)	Naphthalene	0.000	0	N.D.	d
4)AT	n-Dodecane (C12)	0.000	0	N.D.	d
5)	2-Methylnaphthalene	0.000	0	N.D.	d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.	d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.	d
8)AT	n-Octadecane (C18)	0.000	0	N.D.	d
9)AT	n-Eicosane (C20)	0.000	0	N.D.	d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.	d
11)AT	n-Docosane (C22)	0.000	0	N.D.	d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.	d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.	d
14)AT	n-Octacosane (C28)	0.000	0	N.D.	d
15)BT	n-Triacontane (C30)	0.000	0	N.D.	d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.	d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.	d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.	d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.	d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.	d
23)A	C9-C28(Total)	15.898f	170621	65.579	m
24)B	>C28-C40(Total)	19.829f	877026	357.436	m
25)t	C9-C40(TOTAL)	19.829f	1037414	406.449	m

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_9\Data\09-05-13\
Data File : 9G157122.D
Signal(s) : FID1A.CH
Acq On : 06-Sep-13, 16:19:26
Operator : KD/RAK/ABM
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 09:37:23 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0444

Data Path : G:\Gcdata\2013\GC_8\Data\08-28-13\
Data File : 8G42823.D
Signal(s) : FID1A.CH
Acq On : 28-Aug-13, 16:54:42
Operator : KD/RAK/ABM
Sample : SMB26018(MS)
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 11:11:49 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.331	261394	81.809		
22)S	1-Chlorooctadecane	13.629	204240	84.977		
Target Compounds						
1)AT	n-Nonane (C9)	3.221	166747	63.400		
2)AT	n-Decane (C10)	4.274	205735	79.861		
3)	Naphthalene	6.243	273732	91.119		
4)AT	n-Dodecane (C12)	6.311	241536	88.391		
5)	2-Methylnaphthalene	7.294	274860	91.408		
6)AT	n-Tetradecane (C14)	8.134	247398	94.589		
7)AT	n-Hexadecane (C16)	9.800	249865	92.131		
8)AT	n-Octadecane (C18)	11.542	244457	90.275		
9)AT	n-Eicosane (C20)	13.107	243509	90.857		
10)AT	n-Heneicosane (C21)	13.694	243046	89.380		
11)AT	n-Docosane (C22)	14.202	241054	89.746		
12)AT	n-Tetracosane (C24)	15.073	236370	88.280		
13)AT	n-Hexacosane (C26)	15.818	233153	89.869		
14)AT	n-Octacosane (C28)	16.482	224658	87.896		
15)BT	n-Triacontane (C30)	17.092	218261	85.442		
16)BT	n-Dotriacontane(C32)	17.665	211821	84.349		
17)BT	n-Tetratriacontane (C34	18.213	202232	81.919		
18)BT	n-Hexatriacontane (C36)	18.802	201799	84.799		
19)BT	n-Octatriacontane (C38)	19.540	197998	85.434		
20)BT	n-Tetracontane (C40)	20.502	200772	88.664		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

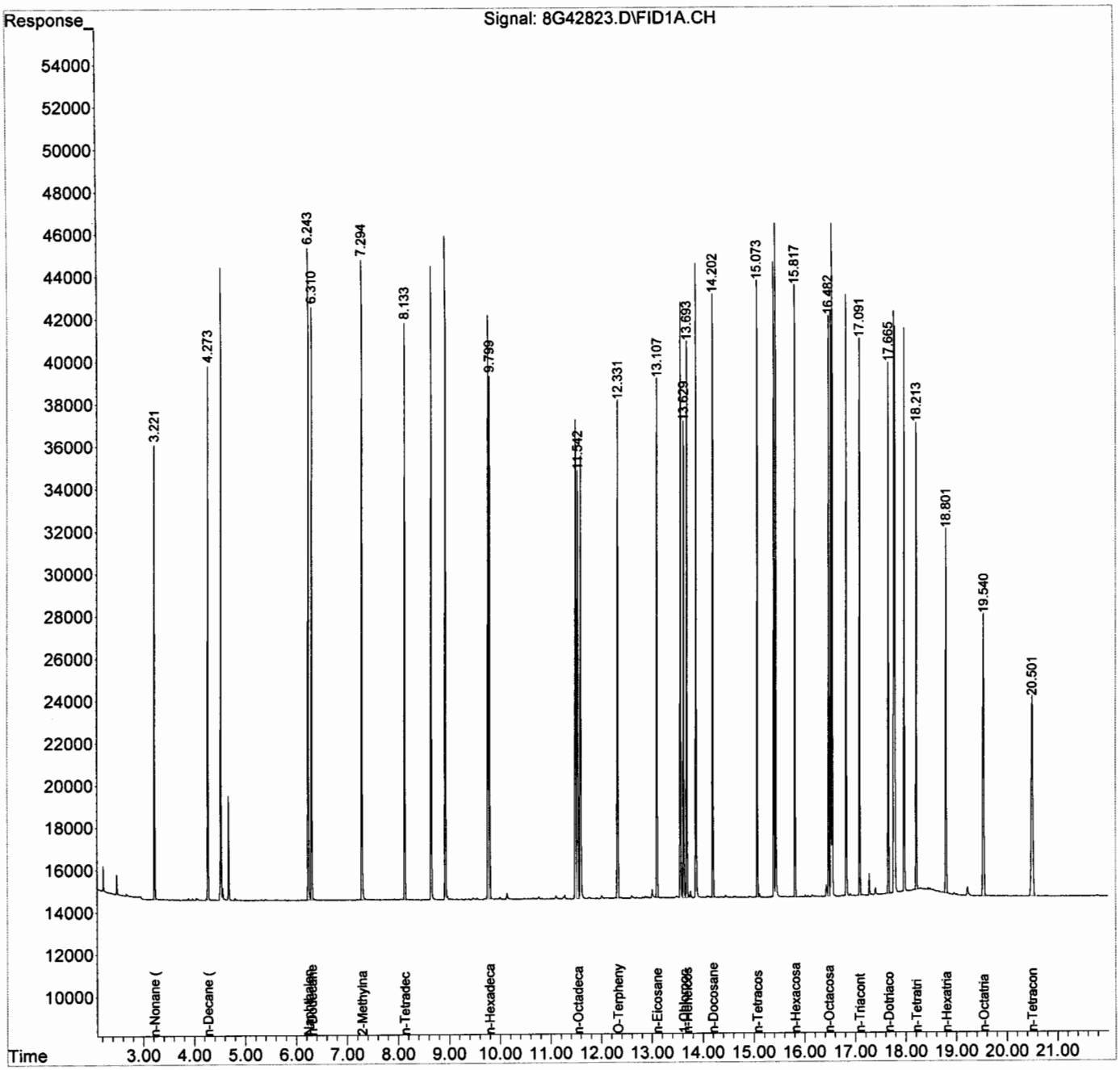
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-28-13\
Data File : 8G42823.D
Signal(s) : FID1A.CH
Acq On : 28-Aug-13, 16:54:42
Operator : KD/RAK/ABM
Sample : SMB26018(MS)
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 11:11:49 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0446

Data Path : G:\Gcdata\2013\GC_8\Data\08-28-13\
Data File : 8G42824.D
Signal(s) : FID1A.CH
Acq On : 28-Aug-13, 17:25:03
Operator : KD/RAK/ABM
Sample : SMB26018(MSD)
Misc : S.TPH
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 11:12:23 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.329	268662	84.084		
22)S	1-Chlorooctadecane	13.627	213317	88.754		
	Target Compounds					
1)AT	n-Nonane (C9)	3.223	157235	59.783		
2)AT	n-Decane (C10)	4.274	196691	76.350		
3)	Naphthalene	6.242	263876	87.839		
4)AT	n-Dodecane (C12)	6.310	232004	84.903		
5)	2-Methylnaphthalene	7.293	265316	88.234		
6)AT	n-Tetradecane (C14)	8.133	240169	91.825		
7)AT	n-Hexadecane (C16)	9.798	247336	91.199		
8)AT	n-Octadecane (C18)	11.540	245590	90.693		
9)AT	n-Eicosane (C20)	13.105	248539	92.734		
10)AT	n-Heneicosane (C21)	13.691	249870	91.890		
11)AT	n-Docosane (C22)	14.201	249431	92.865		
12)AT	n-Tetracosane (C24)	15.071	246449	92.045		
13)AT	n-Hexacosane (C26)	15.816	244223	94.136		
14)AT	n-Octacosane (C28)	16.481	235725	92.226		
15)BT	n-Triacontane (C30)	17.090	230042	90.054		
16)BT	n-Dotriacontane(C32)	17.655	223253	88.901		
17)BT	n-Tetratriacontane (C34	18.188	212507	86.081		
18)BT	n-Hexatriacontane (C36)	18.773	209385	87.987		
19)BT	n-Octatriacontane (C38)	19.509	204405	88.199		
20)BT	n-Tetracontane (C40)	20.469	205828	90.897		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

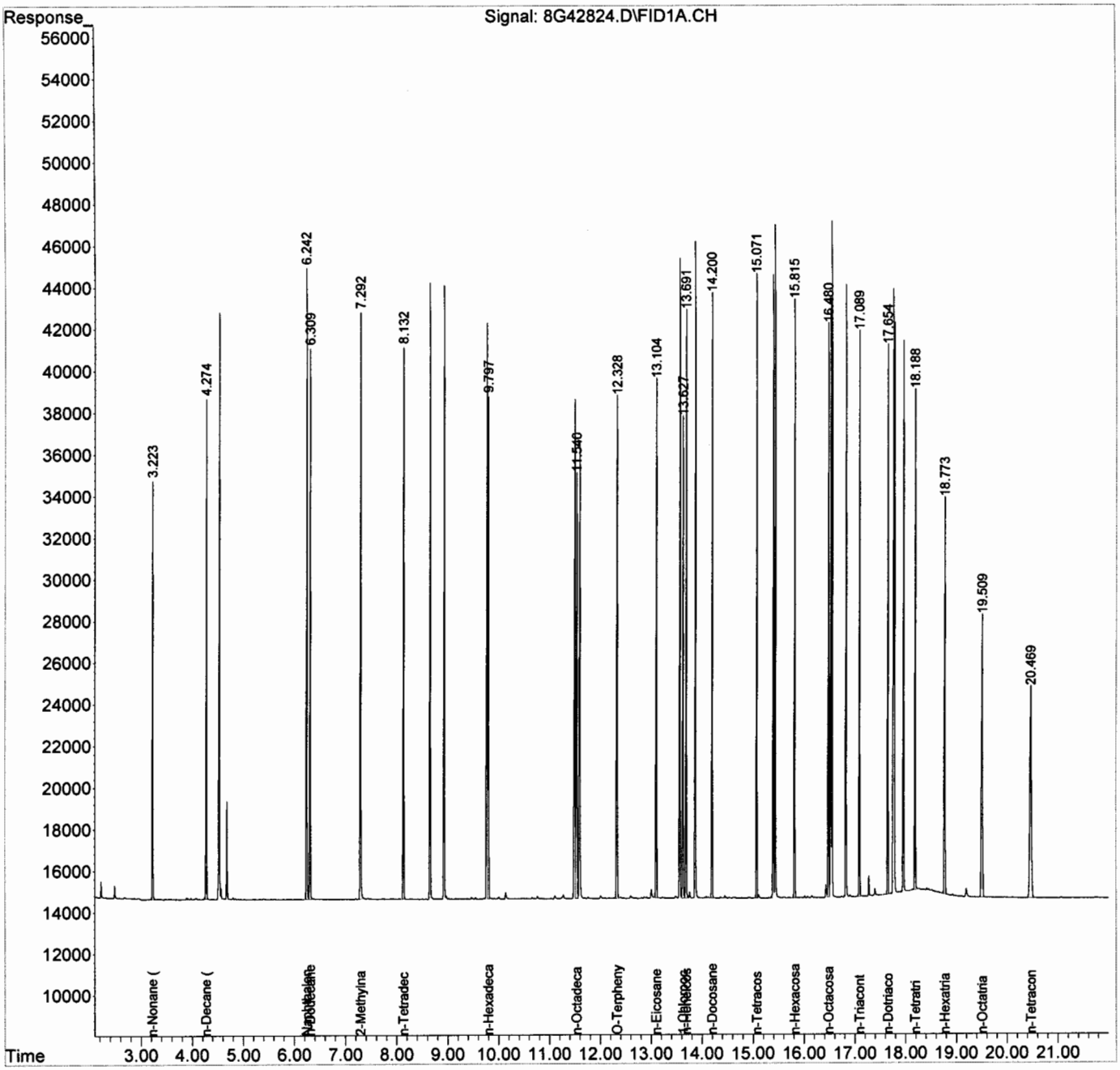
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-28-13\
Data File : 8G42824.D
Signal(s) : FID1A.CH
Acq On : 28-Aug-13, 17:25:03
Operator : KD/RAK/ABM
Sample : SMB26018(MSD)
Misc : S.TPH
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 11:12:23 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0448

Data Path : G:\Gcdata\2013\GC_8\Data\09-05-13\
Data File : 8G43025.D
Signal(s) : FID1A.CH
Acq On : 07-Sep-13, 05:13:16
Operator : KD/RAK/ABM
Sample : SMB27926(MS)
Misc : S.TPH
ALS Vial : 25 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 11:50:39 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.300	316038	98.911		
22)S	1-Chlorooctadecane	13.605	248963	103.585		
Target Compounds						
1)AT	n-Nonane (C9)	3.206	130406	49.583		
2)AT	n-Decane (C10)	4.255	175438	68.100		
3)	Naphthalene	6.220	249925	83.195		
4)AT	n-Dodecane (C12)	6.288	217887	79.737		
5)	2-Methylnaphthalene	7.270	252620	84.011		
6)AT	n-Tetradecane (C14)	8.110	225070	86.053		
7)AT	n-Hexadecane (C16)	9.772	231772	85.460		
8)AT	n-Octadecane (C18)	11.508	221310	81.726		m
9)AT	n-Eicosane (C20)	13.080	232766	86.849		
10)AT	n-Heneicosane (C21)	13.668	232878	85.641		
11)AT	n-Docosane (C22)	14.179	237279	88.340		
12)AT	n-Tetracosane (C24)	15.051	237677	88.768		
13)AT	n-Hexacosane (C26)	15.795	239586	92.349		
14)AT	n-Octacosane (C28)	16.460	243276	95.180		m
15)BT	n-Triacontane (C30)	17.070	234599	91.838		
16)BT	n-Dotriacontane(C32)	17.634	228606	91.033		
17)BT	n-Tetratriacontane (C34	18.164f	216263	87.602		
18)BT	n-Hexatriacontane (C36)	18.742f	211084	88.701		
19)BT	n-Octatriacontane (C38)	19.469f	203188	87.674		
20)BT	n-Tetracontane (C40)	20.416f	202971	89.636		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

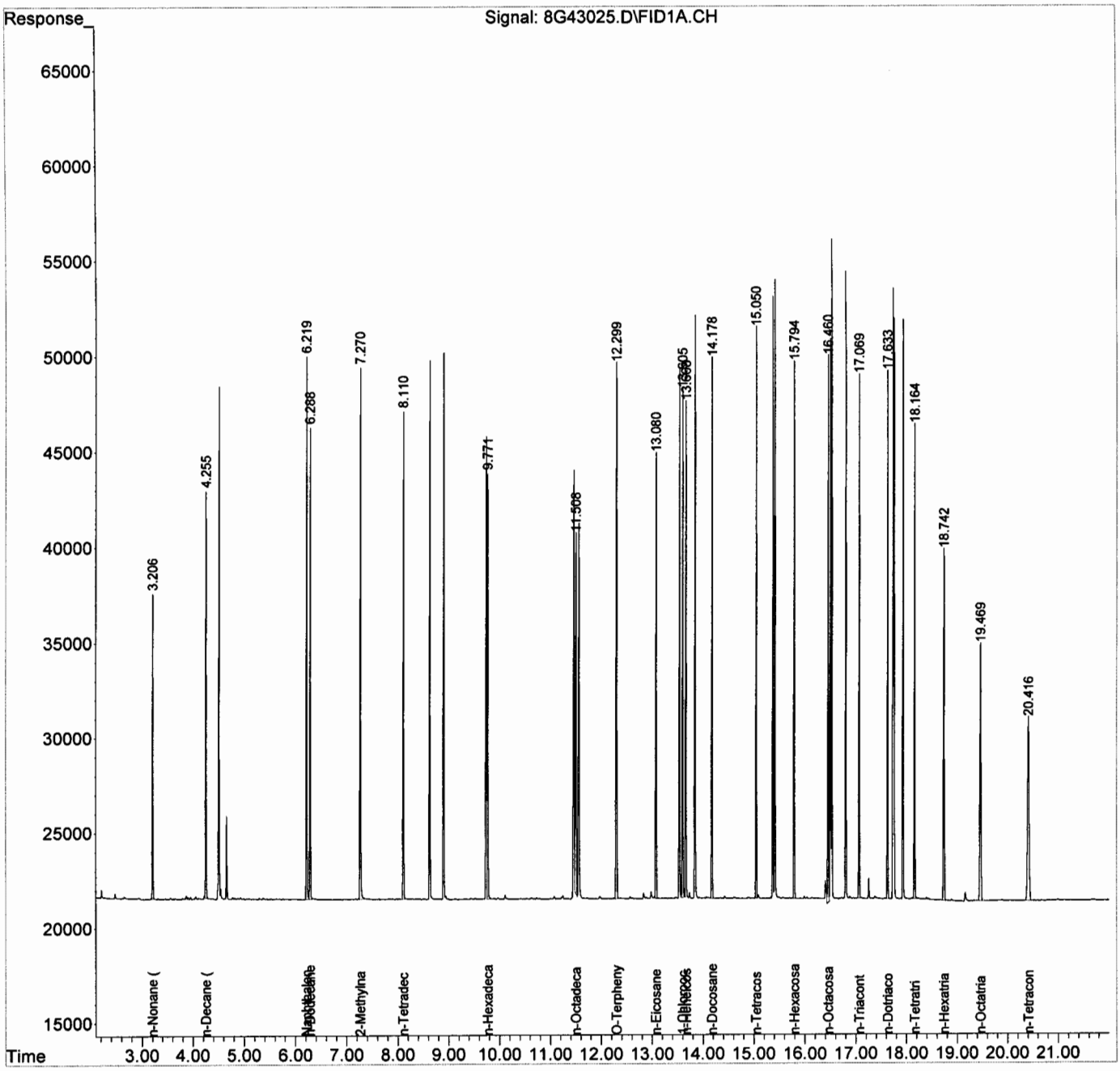
N

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\09-05-13\
Data File : 8G43025.D
Signal(s) : FID1A.CH
Acq On : 07-Sep-13, 05:13:16
Operator : KD/RAK/ABM
Sample : SMB27926(MS)
Misc : S.TPH
ALS Vial : 25 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 09 11:50:39 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-28-13\
Data File : 8G42825.D
Signal(s) : FID1A.CH
Acq On : 28-Aug-13, 17:55:20
Operator : KD/RAK/ABM
Sample : AC74163-013(MS)
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 11:44:05 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.328	224555	70.280		
22)S	1-Chlorooctadecane	13.627	179004	74.478		
	Target Compounds					
1)AT	n-Nonane (C9)	3.223	138355	52.605		
2)AT	n-Decane (C10)	4.274	170730	66.273		
3)	Naphthalene	6.241	229649	76.445		
4)AT	n-Dodecane (C12)	6.309	200123	73.236		
5)	2-Methylnaphthalene	7.292	231074	76.846		
6)AT	n-Tetradecane (C14)	8.132	205833	78.698		
7)AT	n-Hexadecane (C16)	9.797	211822	78.104		
8)AT	n-Octadecane (C18)	11.538	195833	72.318		m
9)AT	n-Eicosane (C20)	13.105	213093	79.509		
10)AT	n-Heneicosane (C21)	13.691	214776	78.984		
11)AT	n-Docosane (C22)	14.200	215934	80.393		
12)AT	n-Tetracosane (C24)	15.071	213262	79.650		
13)AT	n-Hexacosane (C26)	15.815	212750	82.005		
14)AT	n-Octacosane (C28)	16.479	205559	80.424		
15)BT	n-Triacontane (C30)	17.090	199631	78.149		
16)BT	n-Dotriacontane(C32)	17.654	194638	77.506		m
17)BT	n-Tetratriacontane (C34	18.187	179386	72.664		
18)BT	n-Hexatriacontane (C36)	18.772	174046	73.137		
19)BT	n-Octatriacontane (C38)	19.506	164860	71.136		
20)BT	n-Tetracontane (C40)	20.468	164158	72.495		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

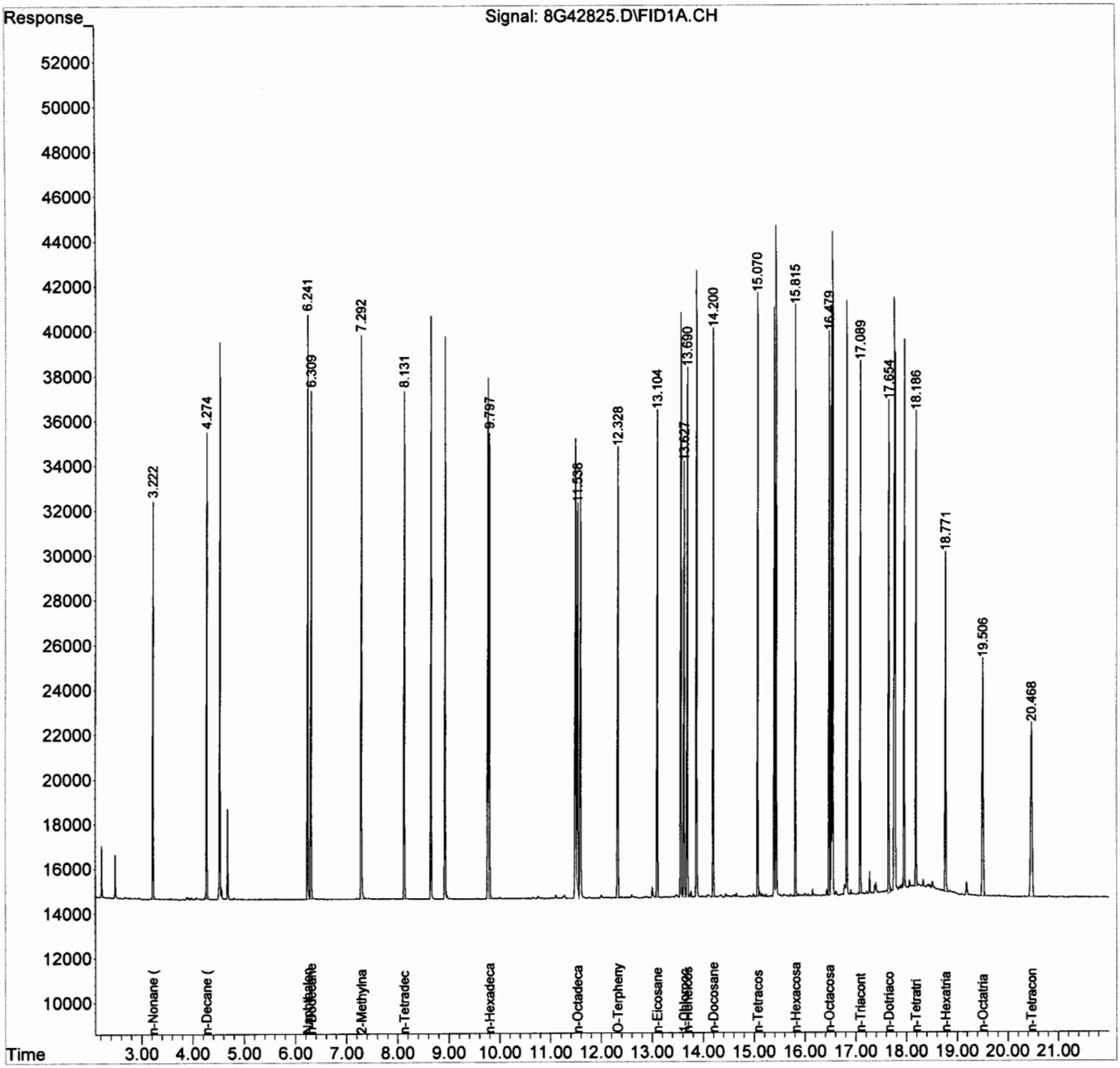
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-28-13\
Data File : 8G42825.D
Signal(s) : FID1A.CH
Acq On : 28-Aug-13, 17:55:20
Operator : KD/RAK/ABM
Sample : AC74163-013(MS)
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 11:44:05 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0452

Data Path : G:\Gcdata\2013\GC_8\Data\08-28-13\
Data File : 8G42826.D
Signal(s) : FID1A.CH
Acq On : 28-Aug-13, 18:25:48
Operator : KD/RAK/ABM
Sample : AC74163-013(DUP)
Misc : S.TPH
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 11:52:50 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.327	234954	73.534		
22)S	1-Chlorooctadecane	13.626	188889	78.590		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	13.626f	881306	331.656		m
24)B	>C28-C40(Total)	17.955f	647234	267.893		m
25)t	C9-C40(TOTAL)	13.626f	1526736	592.478		m

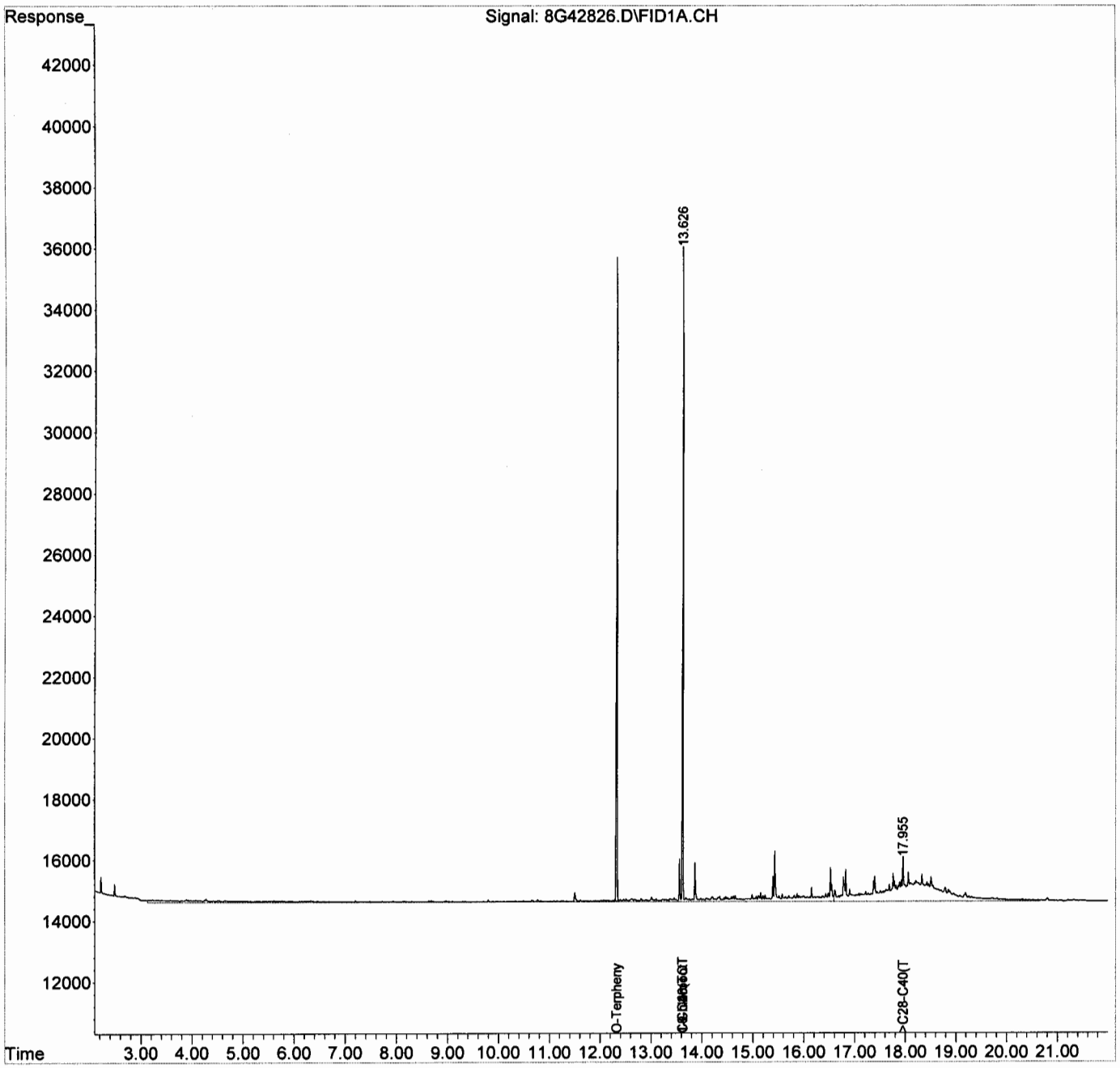
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-28-13\
Data File : 8G42826.D
Signal(s) : FID1A.CH
Acq On : 28-Aug-13, 18:25:48
Operator : KD/RAK/ABM
Sample : AC74163-013(DUP)
Misc : S.TPH
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 11:52:50 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3090309 0454

Data Path : G:\Gcdata\2013\GC_8\Data\08-28-13\
Data File : 8G42827.D
Signal(s) : FID1A.CH
Acq On : 28-Aug-13, 18:56:11
Operator : KD/RAK/ABM
Sample : AC74163-013
Misc : S.TPH
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 12:00:51 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.327	207208	64.850		
22)S	1-Chlorooctadecane	13.625	164603	68.486		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	12.326f	752202	283.071		m
24)B	>C28-C40(Total)	17.957f	535220	221.530		m
25)t	C9-C40(TOTAL)	12.326f	1288516	500.033		m

(f)=RT Delta > 1/2 Window (m)=manual int.

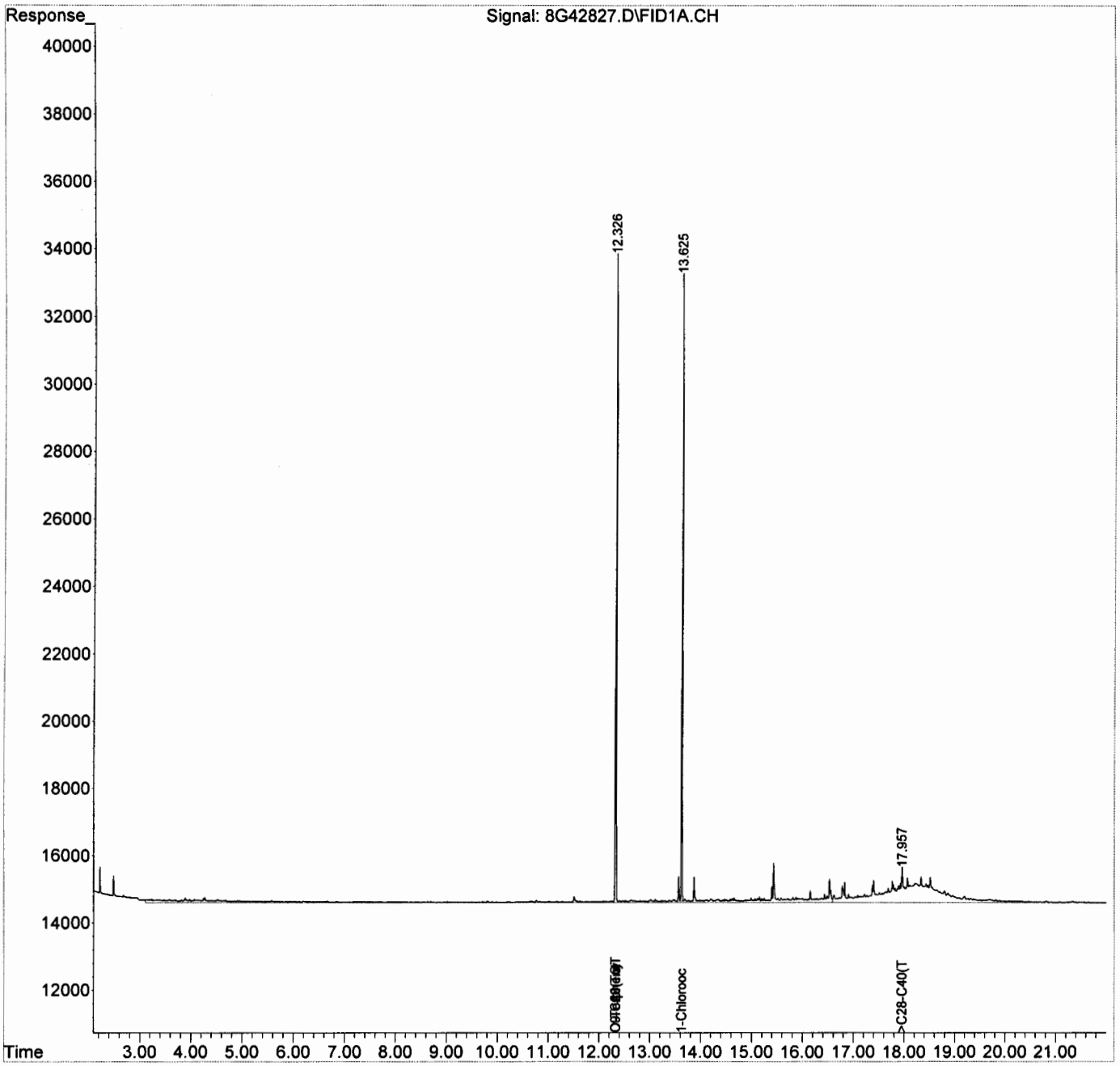
N

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-28-13\
Data File : 8G42827.D
Signal(s) : FID1A.CH
Acq On : 28-Aug-13, 18:56:11
Operator : KD/RAK/ABM
Sample : AC74163-013
Misc : S.TPH
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 29 12:00:51 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0827.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 27 16:00:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Glycol Data

Form1

ORGANICS REPORT

Sample Number: AC74358-006
Client Id: 024 SS-4 Composite
Data File: 1G06024.D
Analysis Date: 09/13/13 18:49
Date Rec/Extracted: 09/03/13-09/06/13
Column: HP-1 30m 0.530mm ID 2.65um film

Method: EPA 8015B
Matrix: Soil
Initial Vol: 5g
Final Vol: 5ml
Dilution: 1
Solids: 90

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
107-21-1	ETHYLENE GLYCOL	56	U	57-55-6	PROPYLENE GLYCOL	56	U

Worksheet #: 276823

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_1\Data\09-13-13\
Data File : 1G06024.D
Signal(s) : FID1A.CH
Acq On : 13 Sep 2013 18:49
Operator : KD
Sample : AC74358-006
Misc : S,GLY
ALS Vial : 21 Sample Multiplier: 1

Integration File: events.e
Quant Time: Sep 16 10:40:39 2013
Quant Method : G:\GCDATA\2013\GC_1\METHODQT\1G_A0913.M
Quant Title : @GC_1
QLast Update : Mon Sep 16 10:32:45 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

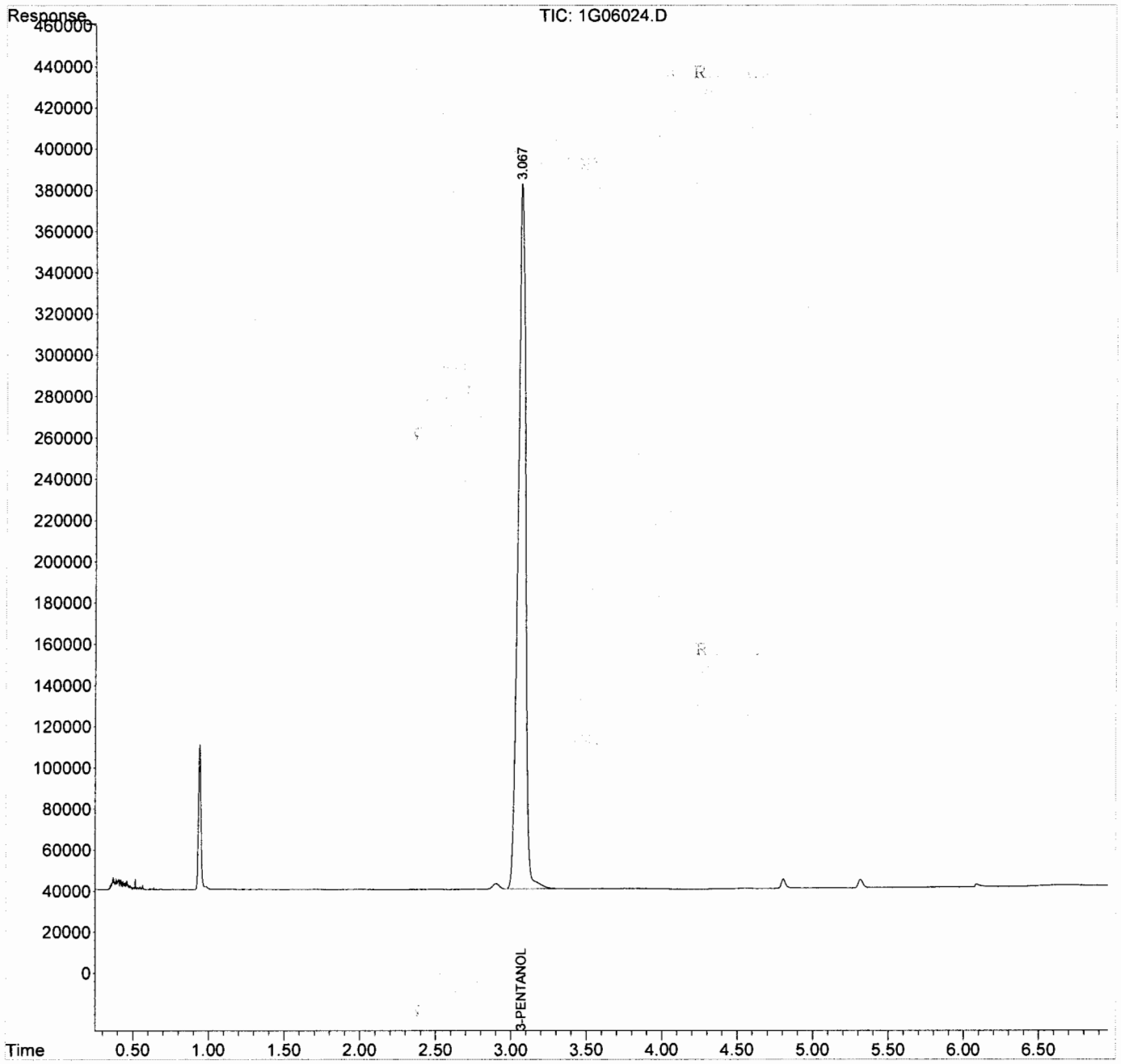
Compound	R.T.	Response	Conc Units
Target Compounds			
11) 3-PENTANOL(SURROGATE)	3.068	11906573	463.676

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_1\Data\09-13-13\
Data File : 1G06024.D
Signal(s) : FID1A.CH
Acq On : 13 Sep 2013 18:49
Operator : KD
Sample : AC74358-006
Misc : S,GLY
ALS Vial : 21 Sample Multiplier: 1

Integration File: events.e
Quant Time: Sep 16 10:40:39 2013
Quant Method : G:\GCDATA\2013\GC_1\METHODQT\1G_A0913.M
Quant Title : @GC_1
QLast Update : Mon Sep 16 10:32:45 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Form1

ORGANICS REPORT

Sample Number: SMB27932
Client Id:
Data File: 1G06014.D
Analysis Date: 09/13/13 16:49
Date Rec/Extracted: NA-09/06/13
Column: HP-1 30m 0.530mm ID 2.65um film

Method: EPA 8015B
Matrix: Soil
Initial Vol: 5g
Final Vol: 5ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
107-21-1	ETHYLENE GLYCOL	50	U	57-55-6	PROPYLENE GLYCOL	50	U

Worksheet #: 276823

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3090309 0461

Data Path : G:\Gcdata\2013\GC_1\Data\09-13-13\
Data File : 1G06014.D
Signal(s) : FID1A.CH
Acq On : 13 Sep 2013 16:49
Operator : KD
Sample : SMB27932
Misc : S,GLY
ALS Vial : 11 Sample Multiplier: 1

Integration File: events.e
Quant Time: Sep 16 10:38:47 2013
Quant Method : G:\GCDATA\2013\GC_1\METHODQT\1G_A0913.M
Quant Title : @GC_1
QLast Update : Mon Sep 16 10:32:45 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
11) 3-PENTANOL(SURROGATE)	3.067	11548088	449.716

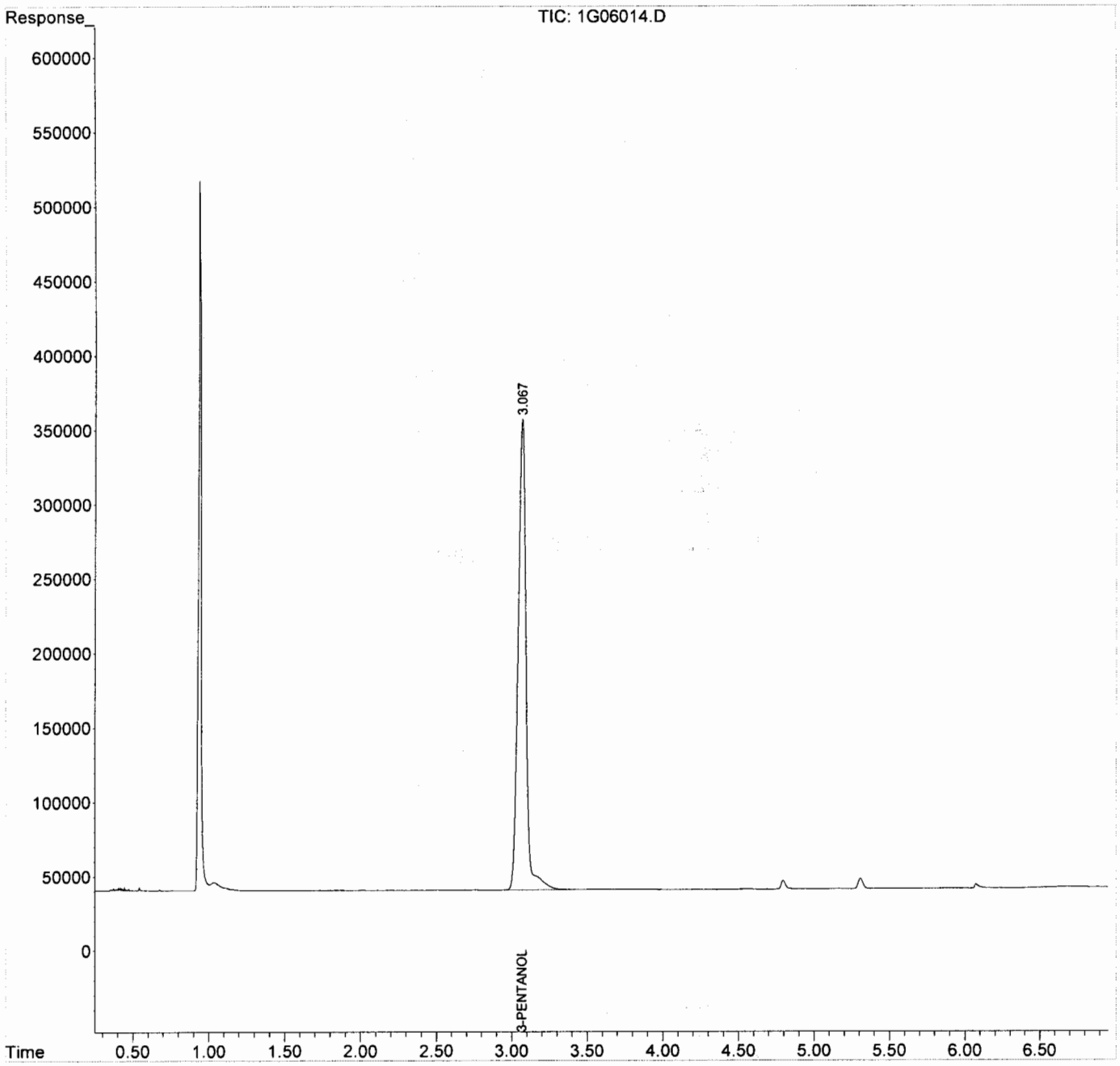
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_1\Data\09-13-13\
Data File : 1G06014.D
Signal(s) : FID1A.CH
Acq On : 13 Sep 2013 16:49
Operator : KD
Sample : SMB27932
Misc : S,GLY
ALS Vial : 11 Sample Multiplier: 1

Integration File: events.e
Quant Time: Sep 16 10:38:47 2013
Quant Method : G:\GCDATA\2013\GC_1\METHODQT\1G_A0913.M
Quant Title : @GC_1
QLast Update : Mon Sep 16 10:32:45 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



FORM2

Surrogate Recovery

Method: EPA 8015B

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column0 S2 Recov	Column0 S3 Recov	Column0 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
1G06014.D	SMB27932	Soil	09/13/13 16:49	1		90					
1G06024.D	AC74358-006	Soil	09/13/13 18:49	1		93					
1G06015.D	SMB27932(M	Soil	09/13/13 17:01	1		88					
1G06022.D	AC74358-006(	Soil	09/13/13 18:25	1		90					
1G06023.D	AC74358-006(	Soil	09/13/13 18:37	1		91					

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8015B

Soil Limits

Compound	Spike Amt	Limits
S1=3-PENTANOL(SURROGATE	500	39-148

Form3
Recovery Data
QC Batch: SMB27932

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1G06015.D	SMB27932(MS)	9/13/2013 5:01:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8015 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
METHANOL	1	450.51	0	500	90	70	130
ETHANOL	1	455.34	0	500	91	70	130
ISOPROPANOL	1	423.32	0	500	85	70	130
2-METHYL-2-PROPANOL	1	448.69	0	500	90	70	130
1-PROPANOL	1	486.4	0	500	97	70	130
2-BUTANOL	1	473.55	0	500	95	70	130
ISOBUTYL ALCOHOL	1	457.81	0	500	92	70	130
1-BUTANOL	1	456.54	0	500	91	70	130
ETHYLENE GLYCOL	1	528.23	0	500	106	30	130
PROPYLENE GLYCOL	1	531.02	0	500	106	30	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB27932

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1G06022.D	AC74358-006(MS)	9/13/2013 6:25:00 PM
Non Spike(If applicable):	1G06024.D	AC74358-006	9/13/2013 6:49:00 PM
Inst Blank(If applicable):			

Method: 8015 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
METHANOL	1	496.82	0	500	99	70	130
ETHANOL	1	504.19	0	500	101	70	130
ISOPROPANOL	1	436.9	0	500	87	70	130
2-METHYL-2-PROPANOL	1	479.82	0	500	96	70	130
1-PROPANOL	1	505.95	0	500	101	70	130
2-BUTANOL	1	523.27	0	500	105	70	130
ISOBUTYL ALCOHOL	1	505.82	0	500	101	70	130
1-BUTANOL	1	501.83	0	500	100	70	130
ETHYLENE GLYCOL	1	546.83	0	500	109	30	130
PROPYLENE GLYCOL	1	565.11	0	500	113	30	130

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1G06023.D	AC74358-006(MSD)	9/13/2013 6:37:00 PM
Non Spike(If applicable):	1G06024.D	AC74358-006	9/13/2013 6:49:00 PM
Inst Blank(If applicable):			

Method: 8015 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
METHANOL	1	520.33	0	500	104	70	130
ETHANOL	1	534.78	0	500	107	70	130
ISOPROPANOL	1	454.5	0	500	91	70	130
2-METHYL-2-PROPANOL	1	482.54	0	500	97	70	130
1-PROPANOL	1	529.39	0	500	106	70	130
2-BUTANOL	1	547.01	0	500	109	70	130
ISOBUTYL ALCOHOL	1	529.82	0	500	106	70	130
1-BUTANOL	1	526.68	0	500	105	70	130
ETHYLENE GLYCOL	1	562.5	0	500	112	30	130
PROPYLENE GLYCOL	1	577.27	0	500	115	30	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA
QC Batch: SMB27932

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1G06023.D	AC74358-006(MSD)	9/13/2013 6:37:00 PM
Duplicate(If applicable):	1G06022.D	AC74358-006(MS)	9/13/2013 6:25:00 PM
Inst Blank(If applicable):			

Method: 8015 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
METHANOL	1	520.33	496.82	4.6	40
ETHANOL	1	534.78	504.19	5.9	40
ISOPROPANOL	1	454.5	436.9	3.9	40
2-METHYL-2-PROPANOL	1	482.54	479.82	0.57	40
1-PROPANOL	1	529.39	505.95	4.5	40
2-BUTANOL	1	547.01	523.27	4.4	40
ISOBUTYL ALCOHOL	1	529.82	505.82	4.6	40
1-BUTANOL	1	526.68	501.83	4.8	40
ETHYLENE GLYCOL	1	562.5	546.83	2.8	40
PROPYLENE GLYCOL	1	577.27	565.11	2.1	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: SMB27932
Blank Data File: 1G06014.D
Matrix: Soil

Blank Analysis Date: 09/13/13 16:49
Blank Extraction Date: 09/06/13
(If Applicable)
Method: EPA 8015B

Sample Number	Data File	Analysis Date
AC74358-006	1G06024.D	09/13/13 18:49
AC74358-006(MSD	1G06023.D	09/13/13 18:37
AC74358-006(MS)	1G06022.D	09/13/13 18:25
SMB27932(MS)	1G06015.D	09/13/13 17:01

Form 5

Method: EPA 8015B

Instrument: GC_1 Column: HP-1 30m 0.530mm ID 2.65um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
1G06004.D	CAL GLY@0.5PPM	09/13/13 14:49	Soil		0.0000	0		
1G06005.D	CAL GLY@5PPM	09/13/13 15:01	Soil	1G06009.	3.0688	0.4973		
1G06006.D	CAL GLY@50PPM	09/13/13 15:13	Soil	1G06009.	3.0618	0.7257		
1G06007.D	CAL GLY@500PPM	09/13/13 15:25	Soil	1G06009.	3.0718	0.3996		
1G06008.D	CAL GLY@750PPM	09/13/13 15:37	Soil	1G06009.	3.0755	0.2792		
1G06009.D	CAL GLY@1000PPM	09/13/13 15:49	Soil	1G06009.	3.0841	0		
1G06010.D	CAL GLY@0.5PPM	09/13/13 16:01	Soil	1G06009.	3.0614	0.7388		
1G06011.D	CAL GLY@100PPM	09/13/13 16:13	Soil	1G06009.	3.0615	0.7355		
1G06012.D	CAL GLY@200PPM	09/13/13 16:25	Soil	1G06009.	3.0644	0.6408		
1G06013.D	ICV	09/13/13 16:37	Soil	1G06009.	3.0696	0.4713		
1G06014.D	SMB27932	09/13/13 16:49	Soil	1G06009.	3.0675	0.5397		
1G06015.D	SMB27932(MS)	09/13/13 17:01	Soil	1G06009.	3.0694	0.4778		
1G06016.D	OMB27992	09/13/13 17:13	OIL/OTHER	1G06009.	3.0692	0.4843		
1G06017.D	OMB27992(MS)	09/13/13 17:25	OIL/OTHER	1G06009.	3.0636	0.6669		
1G06018.D	WMB27973	09/13/13 17:37	Aqueous	1G06009.	3.0648	0.6278		
1G06019.D	WMB27973(MS)	09/13/13 17:49	Aqueous	1G06009.	3.0696	0.4713		
1G06020.D	SMB27972	09/13/13 18:01	Soil	1G06009.	3.0683	0.5136		
1G06021.D	SMB27972(MS)	09/13/13 18:13	Soil	1G06009.	3.0745	0.3118		
1G06022.D	AC74358-006(MS)	09/13/13 18:25	Soil	1G06009.	3.0710	0.4257		
1G06023.D	AC74358-006(MSD)	09/13/13 18:37	Soil	1G06009.	3.0688	0.4973		
1G06024.D	AC74358-006	09/13/13 18:49	Soil	1G06009.	3.0679	0.5267		
1G06025.D	CAL GLY@500PPB	09/13/13 19:01	Soil	1G06009.	3.0715	0.4094		
1G06026.D	1000PPB	09/13/13 19:13	Soil	1G06025.	3.0838	0.3997		
1G06027.D	AC74454-008(MS)	09/13/13 19:25	Aqueous	1G06025.	3.0707	0.0261		
1G06028.D	AC74454-008(MSD)	09/13/13 19:37	Aqueous	1G06025.	3.0746	0.1009		
1G06029.D	AC74454-004	09/13/13 19:49	Soil	1G06025.	3.0717	0.0065		
1G06030.D	AC74454-005	09/13/13 20:01	Soil	1G06025.	3.0766	0.1659		
1G06031.D	AC74454-006	09/13/13 20:12	Soil	1G06025.	3.0788	0.2374		
1G06032.D	AC74454-001	09/13/13 20:24	Aqueous	1G06025.	3.0857	0.4612		
1G06033.D	AC74454-002	09/13/13 20:36	Aqueous	1G06025.	3.0865	0.4872		
1G06034.D	CAL GLY@500PPB	09/13/13 20:48	Aqueous	1G06025.	3.0867	0.4936		
1G06035.D	1000PPB	09/13/13 21:00	Aqueous	1G06034.	3.1137	0.8709		
1G06036.D	AC74454-007	09/13/13 21:11	Aqueous	1G06034.	3.0978	0.359		
1G06037.D	AC74454-008	09/13/13 21:23	Aqueous	1G06034.	3.0899	0.1036		
1G06038.D	AC74454-003	09/13/13 21:35	OIL/OTHER	1G06034.	3.1045	0.575		
1G06039.D	AC74454-003(MS)	09/13/13 21:46	OIL/OTHER	1G06034.	0.0000	200		
1G06040.D	AC74454-003(MSD)	09/13/13 21:58	OIL/OTHER	1G06034.	0.0000	200		
1G06041.D	CAL GLY@500PPB	09/13/13 22:10	Soil	1G06034.	0.0000	200		
1G06042.D	CAL GLY@1000PPB	09/13/13 22:21	Soil	1G06034.	0.0000	200		

Drift Compound: 3-PENTANOL(S Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

3090309 0469

Form 6
Initial Calibration

Method: EPA 8015B

Instrument: GC_1

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	1G06009.	CAL GLY@1000PPM	09/13/13 15:49	2	1G06008.	CAL GLY@750PPM	09/13/13 15:37
3	1G06007.	CAL GLY@500PPM	09/13/13 15:25	4	1G06012.	CAL GLY@200PPM	09/13/13 16:25
5	1G06011.	CAL GLY@100PPM	09/13/13 16:13	6	1G06006.	CAL GLY@50PPM	09/13/13 15:13
7	1G06005.	CAL GLY@5PPM	09/13/13 15:01	8	1G06010.	CAL GLY@0.5PPM	09/13/13 16:01

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
METHANOL	1	0	Avg	1.0931	1.1073	1.1093	1.0926	1.0778	1.1867	1.0636	----	1.10	0.68	1.00	1.00	3.6	1000.	750.0	500.0	200.0	100.0	50.00	5.00	
ETHANOL	1	0	Avg	1.6121	1.6588	1.6758	1.6086	1.6315	1.7949	1.4424	----	1.63	0.83	0.999	1.00	6.4	1000.	750.0	500.0	200.0	100.0	50.00	5.00	
ISOPROPANOL	1	0	Avg	2.0891	2.0692	2.1103	1.9971	2.1327	2.5291	2.8678	----	2.26	0.99	1.00	1.00	14	1000.	750.0	500.0	200.0	100.0	50.00	5.00	
2-METHYL-2-PROPANOL	1	0	Avg	2.9539	3.0060	2.8964	2.8887	2.8934	3.1621	3.1639	----	2.99	1.13	1.00	1.00	4.1	1000.	750.0	500.0	200.0	100.0	50.00	5.00	
1-PROPANOL	1	0	Avg	2.2933	2.3387	2.3328	2.3191	2.3268	2.4232	1.9394	----	2.28	1.34	1.00	1.00	6.9	1000.	750.0	500.0	200.0	100.0	50.00	5.00	
2-BUTANOL	1	0	Avg	2.2107	2.2566	2.2620	2.2187	2.2149	2.3653	2.0771	----	2.23	1.71	1.00	1.00	3.8	1000.	750.0	500.0	200.0	100.0	50.00	5.00	
ISOBUTYL ALCOHOL	1	0	Avg	2.6398	2.7043	2.6994	2.6506	2.6257	2.8113	2.4454	----	2.65	2.01	1.00	1.00	4.2	1000.	750.0	500.0	200.0	100.0	50.00	5.00	
1-BUTANOL	1	0	Avg	2.4694	2.5186	2.5200	2.4821	2.4740	2.7253	2.0853	----	2.47	2.49	1.00	1.00	7.7	1000.	750.0	500.0	200.0	100.0	50.00	5.00	
ETHYLENE GLYCOL	1	0	Qua	1.0690	1.0526	0.9156	0.8026	0.6693	0.1815	----	----	0.782	4.87	0.997	0.999	42	1000.	750.0	500.0	200.0	100.0	50.00		
PROPYLENE GLYCOL	1	0	Qua	1.4663	1.4622	1.3789	1.3144	1.0474	0.3815	----	----	1.18	5.35	1.00	1.00	36	1000.	750.0	500.0	200.0	100.0	50.00		
3-PENTANOL(SURROGA	1	0	Avg	2.4212	2.4882	2.4589	2.4439	2.3899	2.6535	2.1985	3.4885	2.57	3.07	1.00	1.00	15	1000.	750.0	500.0	200.0	100.0	50.00	5.00	0.50
DIMETHYL SULFOXIDE	1	0	Avg	1.3939	1.3937	1.3794	1.3713	1.3230	1.2608	----	----	1.35	6.07	1.00	1.00	3.9	1000.	750.0	500.0	200.0	100.0	50.00		

Avg Rsd Col 1: 12.3 Avg Rsd Col 2: -1

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Form7
Continuing Calibration

Method: EPA 8015B

Data File:				1G06025.D																				
Method:				8015																				
Calibration Name:				CAL GLY@500PP																				
Calibration Date/Time				09/13/13 19:01																				
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff
METHANOL	20	1	0	496.4	500	0.7												
ETHANOL	20	1	0	509.1	500	1.8												
ISOPROPANOL	20	1	0	460.3	500	7.9												
2-METHYL-2-PROPA	20	1	0	478.1	500	4.4												
1-PROPANOL	20	1	0	504.6	500	0.9												
2-BUTANOL	20	1	0	498.7	500	0.3												
ISOBUTYL ALCOHO	20	1	0	499.2	500	0.2												
1-BUTANOL	20	1	0	505.2	500	1.0												
ETHYLENE GLYCOL	20	1	0	440.3	500	11.9												
PROPYLENE GLYCO	20	1	0	490.9	500	1.8												
DIMETHYL SULFOXI	20	1	0	503.6	500	0.7												
Average Difference	20	1	0			2.9												

Flags/Notes: **** - Values outside of limits for this column/run***

Form7

RtWindow Summary

Method: EPA 8015B

Data File:			1G06009.D		1G06009.D							
Calibration Name:			CAL GLY@1000PPM		CAL GLY@1000PPM							
Calibration Date/Time			9/13/2013 3:49:00 PM		9/13/2013 3:49:00 PM							
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
METHANOL	1	0	0.68	(0.62 - 0.74)	0.68	(0.62 - 0.74)						
ETHANOL	1	0	0.83	(0.77 - 0.89)	0.83	(0.77 - 0.89)						
ISOPROPANOL	1	0	0.99	(0.93 - 1.05)	0.99	(0.93 - 1.05)						
2-METHYL-2-PROPA	1	0	1.13	(1.07 - 1.19)	1.13	(1.07 - 1.19)						
1-PROPANOL	1	0										
2-BUTANOL	1	0	1.71	(1.65 - 1.77)	1.71	(1.65 - 1.77)						
ISOBUTYL ALCOHO	1	0	2.01	(1.95 - 2.07)	2.02	(1.96 - 2.08)						
1-BUTANOL	1	0	2.48	(2.42 - 2.54)	2.50	(2.44 - 2.56)						
ETHYLENE GLYCOL	1	0	4.86	(4.71 - 5.01)	4.97	(4.82 - 5.12)						
PROPYLENE GLYC	1	0	5.34	(5.19 - 5.49)	5.38	(5.23 - 5.53)						
3-PENTANOL(SURR	1	0										
DIMETHYL SULFOXI	1	0	6.06	(6.00 - 6.12)	6.08	(6.02 - 6.14)						

Metal Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC74358-006	% Solid:	90	Lab Name:	Veritech	Nras No:	
Client Id:	024 SS-4 Composite	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/3/2013	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	220	2000	1	0.5	50	09/09/13	27147	S15442B	21	P	PEICPRAD1A
7440-36-0	Antimony	2.2	ND	1	0.5	50	09/06/13	27147	S15442A3	24	P	PEICP3A
7440-38-2	Arsenic	2.2	ND	1	0.5	50	09/06/13	27147	S15442A3	24	P	PEICP3A
7440-39-3	Barium	11	26	1	0.5	50	09/06/13	27147	S15442A3	24	P	PEICP3A
7440-41-7	Beryllium	0.67	ND	1	0.5	50	09/06/13	27147	S15442A3	24	P	PEICP3A
7440-43-9	Cadmium	0.67	ND	1	0.5	50	09/06/13	27147	S15442A3	24	P	PEICP3A
7440-70-2	Calcium	1100	2100	1	0.5	50	09/09/13	27147	S15442B	21	P	PEICPRAD1A
7440-47-3	Chromium	5.6	ND	1	0.5	50	09/06/13	27147	S15442A3	24	P	PEICP3A
7440-48-4	Cobalt	2.8	ND	1	0.5	50	09/06/13	27147	S15442A3	24	P	PEICP3A
7440-50-8	Copper	5.6	15	1	0.5	50	09/06/13	27147	S15442A3	24	P	PEICP3A
7439-89-6	Iron	220	5300	1	0.5	50	09/09/13	27147	S15442B	21	P	PEICPRAD1A
7439-92-1	Lead	5.6	27	1	0.5	50	09/06/13	27147	S15442A3	24	P	PEICP3A
7439-95-4	Magnesium	560	1000	1	0.5	50	09/09/13	27147	S15442B	21	P	PEICPRAD1A
7439-96-5	Manganese	11	91	1	0.5	50	09/06/13	27147	S15442A3	24	P	PEICP3A
7439-97-6	Mercury	0.093	0.17	1	0.15	25	09/06/13	27147	H15442S	36	CV	HGCV1A
7440-02-0	Nickel	5.6	ND	1	0.5	50	09/06/13	27147	S15442A3	24	P	PEICP3A
7440-09-7	Potassium	560	ND	1	0.5	50	09/09/13	27147	S15442B	21	P	PEICPRAD1A
7782-49-2	Selenium	2.0	ND	1	0.5	50	09/06/13	27147	S15442A3	24	P	PEICP3A
7440-22-4	Silver	1.7	ND	1	0.5	50	09/06/13	27147	S15442A3	24	P	PEICP3A
7440-23-5	Sodium	280	ND	1	0.5	50	09/09/13	27147	S15442B	21	P	PEICPRAD1A
7440-28-0	Thallium	1.3	ND	1	0.5	50	09/06/13	27147	S15442A3	24	P	PEICP3A
7440-62-2	Vanadium	11	12	1	0.5	50	09/06/13	27147	S15442A3	24	P	PEICP3A
7440-66-6	Zinc	11	26	1	0.5	50	09/06/13	27147	S15442A3	24	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 27147 (100) % Solid: 0 Lab Name: Veritech
Client Id: MB 27147 (100) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	0.5	50	09/09/13	27147	S15442B	10	P	PEICPRAD1A
7440-36-0	Antimony	2.0	ND	1	0.5	50	09/06/13	27147	S15442A3	11	P	PEICP3A
7440-38-2	Arsenic	2.0	ND	1	0.5	50	09/06/13	27147	S15442A3	11	P	PEICP3A
7440-39-3	Barium	10	ND	1	0.5	50	09/06/13	27147	S15442A3	11	P	PEICP3A
7440-41-7	Beryllium	0.60	ND	1	0.5	50	09/06/13	27147	S15442A3	11	P	PEICP3A
7440-43-9	Cadmium	0.60	ND	1	0.5	50	09/06/13	27147	S15442A3	11	P	PEICP3A
7440-70-2	Calcium	1000	ND	1	0.5	50	09/09/13	27147	S15442B	10	P	PEICPRAD1A
7440-47-3	Chromium	5.0	ND	1	0.5	50	09/06/13	27147	S15442A3	11	P	PEICP3A
7440-48-4	Cobalt	2.5	ND	1	0.5	50	09/06/13	27147	S15442A3	11	P	PEICP3A
7440-50-8	Copper	5.0	ND	1	0.5	50	09/06/13	27147	S15442A3	11	P	PEICP3A
7439-89-6	Iron	200	ND	1	0.5	50	09/09/13	27147	S15442B	10	P	PEICPRAD1A
7439-92-1	Lead	5.0	ND	1	0.5	50	09/06/13	27147	S15442A3	11	P	PEICP3A
7439-95-4	Magnesium	500	ND	1	0.5	50	09/09/13	27147	S15442B	10	P	PEICPRAD1A
7439-96-5	Manganese	10	ND	1	0.5	50	09/06/13	27147	S15442A3	11	P	PEICP3A
7439-98-7	Molybdenum	2.5	ND	1	0.5	50	09/06/13	27147	S15442A3	11	P	PEICP3A
7440-02-0	Nickel	5.0	ND	1	0.5	50	09/06/13	27147	S15442A3	11	P	PEICP3A
7440-09-7	Potassium	500	ND	1	0.5	50	09/09/13	27147	S15442B	10	P	PEICPRAD1A
7782-49-2	Selenium	1.8	ND	1	0.5	50	09/06/13	27147	S15442A3	11	P	PEICP3A
7440-22-4	Silver	1.5	ND	1	0.5	50	09/06/13	27147	S15442A3	11	P	PEICP3A
7440-23-5	Sodium	250	ND	1	0.5	50	09/09/13	27147	S15442B	10	P	PEICPRAD1A
7440-28-0	Thallium	1.2	ND	1	0.5	50	09/06/13	27147	S15442A3	11	P	PEICP3A
7440-31-5	Tin	5.7	ND	1	0.5	50	09/06/13	27147	S15442A3	11	P	PEICP3A
7440-32-6	Titanium	35	ND	1	0.5	50	09/06/13	27147	S15442A3	11	P	PEICP3A
7440-62-2	Vanadium	10	ND	1	0.5	50	09/06/13	27147	S15442A3	11	P	PEICP3A
7440-66-6	Zinc	10	ND	1	0.5	50	09/06/13	27147	S15442A3	11	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 27147 (167) % Solid: 0 Lab Name: Veritech
Client Id: MB 27147 (167) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7439-97-6	Mercury	0.083	ND	1	0.15	25	09/06/13	27147	H15442S	11	CV	HGCV1A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/06/13
Data File: H15442S
Prep Batch: 27147
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3090309

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

		ICV (2)-9		CCV-21		CCV-33		CCV-39									
Analyte	ICV/CCV Amt		Rec		Rec		Rec		Rec		Rec		Rec		Rec		Rec
Mercury	20/10	18.40311	92	9.29072	93	9.24400	92	9.24871	92								

Notes:
a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits:
ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-11

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/06/13
Data File: S15442A3
Prep Batch: 27147
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3090309

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV (2) V-168169-7	Rec	CCV V-168988-19	Rec	CCV V-168988-31	Rec	CCV V-168988-41	Rec	CCV V-168988-49	Rec		Rec		Rec		Rec
Antimony	1/.5	1.01291	101	0.50690	101	0.50570	101	0.50088	100	0.51442	103						
Arsenic	1/.5	0.99928	100	0.49569	99	0.49651	99	0.49252	99	0.50640	101						
Barium	1/.5	1.00131	100	0.51426	103	0.51248	102	0.50719	101	0.52098	104						
Beryllium	1/.5	1.00053	100	0.50076	100	0.50418	101	0.49674	99	0.51211	102						
Cadmium	1/.5	0.99755	100	0.50770	102	0.50639	101	0.50211	100	0.51658	103						
Chromium	1/.5	0.99228	99	0.50909	102	0.50822	102	0.50235	100	0.51345	103						
Cobalt	1/.5	0.99720	100	0.51502	103	0.51486	103	0.50854	102	0.52464	105						
Copper	1/.5	0.98744	99	0.50748	101	0.50728	101	0.50263	101	0.51608	103						
Lead	1/.5	1.00573	101	0.50760	102	0.52124	104	0.51246	102	0.52351	105						
Manganese	1/.5	0.97614	98	0.50334	101	0.50179	100	0.49685	99	0.50951	102						
Nickel	1/.5	0.98040	98	0.51126	102	0.50975	102	0.50263	101	0.51926	104						
Selenium	1/.5	1.02939	103	0.50348	101	0.50056	100	0.49200	98	0.51341	103						
Silver	0.2/0.1	0.19975	100	0.10158	102	0.10137	101	0.09967	100	0.10286	103						
Thallium	1/.5	1.03001	103	0.52437	105	0.52619	105	0.51757	104	0.53239	106						
Vanadium	1/.5	0.98472	98	0.50726	101	0.50639	101	0.50076	100	0.51590	103						
Zinc	1/.5	0.98717	99	0.51061	102	0.50593	101	0.50362	101	0.51766	104						

Notes:
a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits:
ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-11

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/09/13
Data File: S15442B
Prep Batch: 27147
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICPRAD1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3090309

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V-165044 (2)-6	Rec	CCV V-165587-18	Rec	CCV V-165587-29	Rec	CCV V-165587-40	Rec		Rec		Rec		Rec		Rec
Aluminum	10/5	10.22460	102	4.89462	98	4.79375	96	4.70729	94								
Calcium	100/50	99.61900	100	48.20790	96	47.15770	94	46.06970	92								
Iron	10/5	9.87071	99	4.87712	98	4.74370	95	4.58888	92								
Magnesium	100/50	99.45540	99	48.76780	98	47.48090	95	45.89880	92								
Potassium	100/50	100.38300	100	46.79340	94	45.72400	91	44.33430	89 **c**								
Sodium	100/50	99.48340	99	47.24530	94	46.18840	92	44.88070	90								

Notes:
a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits:
ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-11

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/06/13
Data File: H15442S
Prep Batch: 27147
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3090309

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-40	MB 27147 (167)-11	MB FB (1)-37		
Mercury	.5 U	.5 U	.5 U	.5 U	83 U	.5 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/06/13
Data File: S15442A3
Prep Batch: 27147
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3090309

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-170817-8	CCB V-170817-20	CCB V-170817-32	CCB V-170817-42	CCB V-170817-50	MB 27147 (100)-11	MB FB (1)-27
Antimony	.02 U	.02 U	.02 U	.02 U	.02 U	2 U	.02 U
Arsenic	.02 U	.02 U	.02 U	.02 U	.02 U	2 U	.02 U
Barium	.1 U	.1 U	.1 U	.1 U	.1 U	10 U	.1 U
Beryllium	.006 U	.006 U	.006 U	.006 U	.006 U	.6 U	.006 U
Cadmium	.006 U	.006 U	.006 U	.006 U	.006 U	.6 U	.006 U
Chromium	.05 U	.05 U	.05 U	.05 U	.05 U	5 U	.05 U
Cobalt	.025 U	.025 U	.025 U	.025 U	.025 U	2.5 U	.025 U
Copper	.05 U	.05 U	.05 U	.05 U	.05 U	5 U	.05 U
Lead	.05 U	.05 U	.05 U	.05 U	.05 U	5 U	.05 U
Manganese	.1 U	.1 U	.1 U	.1 U	.1 U	10 U	.1 U
Nickel	.05 U	.05 U	.05 U	.05 U	.05 U	5 U	.05 U
Selenium	.018 U	.018 U	.018 U	.018 U	.018 U	1.8 U	.018 U
Silver	.015 U	.015 U	.015 U	.015 U	.015 U	1.5 U	.015 U
Thallium	.012 U	.012 U	.012 U	.012 U	.012 U	1.2 U	.012 U
Vanadium	.1 U	.1 U	.1 U	.1 U	.1 U	10 U	.1 U
Zinc	.1 U	.1 U	.1 U	.1 U	.1 U	10 U	.1 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/09/13
Data File: S15442B
Prep Batch: 27147
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICPRAD1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3090309

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-170817-7	CCB-19	CCB-30	CCB-41	MB 27147 (100)-10			
Aluminum	2 U	2 U	2 U	2 U	200 U			
Calcium	10 U	10 U	10 U	10 U	1000 U			
Iron	2 U	2 U	2 U	2 U	200 U			
Magnesium	5 U	5 U	5 U	5 U	500 U			
Potassium	5 U	5 U	5 U	5 U	500 U			
Sodium	2.5 U	2.5 U	2.5 U	2.5 U	250 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/06/13
Data File: S15442A3
Prep Batch: 27147
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3090309

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-169160-9	Rec	ICSAB V-169161-10	Rec	ICSA V-169160-29	Rec	ICSAB V-169161-30	Rec	ICSA V-169160-39	Rec	ICSAB V-169161-40	Rec	ICSA V-169160-47	Rec	ICSAB V-169161-48	Rec
Aluminum	500	489.369	98	494.13600	99	496.943	99	492.09600	98	495.137	99	495.29700	99	496.329	99	501.87900	100
Antimony	1	U		1.05485	105	U		1.04394	104	U		1.07173	107	U		1.09095	109
Arsenic	1	U		1.03897	104	U		1.02140	102	U		1.05156	105	U		1.04214	104
Barium	.5	U		0.53822	108	U		0.53194	106	U		0.54401	109	U		0.54875	110
Beryllium	.5	U		0.51378	103	U		0.51227	102	U		0.51284	103	U		0.51962	104
Cadmium	1	U		1.04018	104	U		1.03293	103	U		1.05527	106	U		1.06616	107
Calcium	500	465.601	93	472.04400	94	476.352	95	465.72300	93	475.873	95	474.87800	95	472.522	95	475.07300	95
Chromium	.5	U		0.50382	101	U		0.49907	100	U		0.50801	102	U		0.51306	103
Cobalt	.5	U		0.49219	98	U		0.48795	98	U		0.49937	100	U		0.50495	101
Copper	.5	U		0.53183	106	U		0.53008	106	U		0.54249	108	U		0.54943	110
Iron	200	185.571	93	187.45200	94	187.4	94	186.40600	93	186.436	93	186.86300	93	187.189	94	189.47800	95
Lead	1	U		0.97521	98	U		0.96386	96	U		0.99687	100	U		0.99892	100
Magnesium	500	499.499	100	504.34100	101	503.186	101	500.85600	100	500.012	100	501.51500	100	503.467	101	508.65100	102
Manganese	.5	U		0.48748	97	U		0.48098	96	U		0.49251	99	U		0.49717	99
Nickel	1	U		0.94635	95	U		0.93859	94	U		0.95962	96	U		0.96883	97
Selenium	1	U		1.01488	101	U		0.99504	100	U		1.02709	103	U		1.03354	103
Silver	1	U		1.09842	110	U		1.08781	109	U		1.11752	112	U		1.12533	113
Thallium	1	U		0.97531	98	U		0.96795	97	U		0.97777	98	U		0.98774	99
Vanadium	.5	U		0.50228	100	U		0.49698	99	U		0.51061	102	U		0.51397	103
Zinc	1	U		0.94428	94	U		0.93732	94	U		0.95801	96	U		0.96541	97

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/09/13
Data File: S15442B
Prep Batch: 27147
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICPRAD1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3090309

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-165588-8	Rec	ICSAB V-165589-9	Rec	ICSA V-165588-27	Rec	ICSAB V-165589-28	Rec	ICSA V-165588-38	Rec	ICSAB V-165589-39	Rec		Rec		Rec
Aluminum	500	458.081	92	455.88000	91	435.282	87	429.06300	86	471.164	94	439.74900	88				
Calcium	500	432.314	86	430.43500	86	410.023	82	404.99800	81	441.341	88	413.81600	83				
Iron	200	172.195	86	167.70800	84	162.163	81	161.56600	81	174.833	87	161.53600	81				
Magnesium	500	460.357	92	457.68600	92	434.128	87	429.26800	86	464.601	93	436.21100	87				

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 27147

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS Matrix: AQUEOUS SampleID: LCSW 27147

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27147	1	S15442C	20	5.2203	5.000	104		80	120
Antimony	27147	1	S15442A3	28	0.5035	0.500	101		80	120
Arsenic	27147	1	S15442A3	28	0.4972	0.500	99		80	120
Barium	27147	1	S15442A3	28	0.5129	0.500	103		80	120
Beryllium	27147	1	S15442A3	28	0.4991	0.500	100		80	120
Cadmium	27147	1	S15442A3	28	0.5029	0.500	101		80	120
Calcium	27147	1	S15442C	20	52.5309	50.00	105		80	120
Chromium	27147	1	S15442A3	28	0.5075	0.500	101		80	120
Cobalt	27147	1	S15442A3	28	0.5141	0.500	103		80	120
Copper	27147	1	S15442A3	28	0.5126	0.500	103		80	120
Iron	27147	1	S15442C	20	5.2688	5.000	105		80	120
Lead	27147	1	S15442A3	28	0.5050	0.500	101		80	120
Magnesium	27147	1	S15442C	20	52.5684	50.00	105		80	120
Manganese	27147	1	S15442A3	28	0.5030	0.500	101		80	120
Mercury	27147	1	H15442S	38	9.2062	10	92		80	120
Nickel	27147	1	S15442A3	28	0.5096	0.500	102		80	120
Potassium	27147	1	S15442C	20	50.6887	50.00	101		80	120
Selenium	27147	1	S15442A3	28	0.5003	0.500	100		80	120
Silver	27147	1	S15442A3	28	0.1010	0.100	101		80	120
Sodium	27147	1	S15442C	20	51.4737	50.00	103		80	120
Thallium	27147	1	S15442A3	28	0.5196	0.500	104		80	120
Vanadium	27147	1	S15442A3	28	0.5082	0.500	102		80	120
Zinc	27147	1	S15442A3	28	0.5109	0.500	102		80	120

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 27147

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27147	1	S15442B	12	68.0718	90.6	75		46	153
Antimony	27147	1	S15442A3	13	0.8065	1.06	76		1.9	219
Arsenic	27147	1	S15442A3	13	1.7055	1.82	94		83	118
Barium	27147	1	S15442A3	13	1.3801	1.43	97		83	117
Beryllium	27147	1	S15442A3	13	0.9259	0.983	94		84	116
Cadmium	27147	1	S15442A3	13	0.5868	0.604	97		83	117
Calcium	27147	1	S15442B	12	60.9211	60.4	101		83	117
Chromium	27147	1	S15442A3	13	1.1812	1.25	94		82	118
Cobalt	27147	1	S15442A3	13	1.6269	1.63	100		85	115
Copper	27147	1	S15442A3	13	0.7794	0.801	97		84	116
Iron	27147	1	S15442B	12	114.0030	129	88		51	150
Lead	27147	1	S15442A3	13	1.2719	1.36	94		84	117
Magnesium	27147	1	S15442B	12	24.8088	26.4	94		75	124
Manganese	27147	1	S15442A3	13	2.5723	2.79	92		83	118
Mercury	27147	5	H15442S	15	9.8485	55.5	89		72	129
Nickel	27147	1	S15442A3	13	1.2606	1.28	98		84	116
Potassium	27147	1	S15442B	12	23.4341	28.2	83		73	127
Selenium	27147	1	S15442A3	13	0.7957	0.859	93		80	120
Silver	27147	1	S15442A3	13	0.5926	0.613	97		66	134
Sodium	27147	1	S15442B	12	3.9652	4.39	90		74	126
Thallium	27147	1	S15442A3	13	1.3870	1.44	96		81	119
Vanadium	27147	1	S15442A3	13	0.9281	1.04	89		75	124
Zinc	27147	1	S15442A3	13	1.9176	2.04	94		82	118

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 27147

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS Matrix: SOIL SampleID: LCS 27147

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27147	1	S15442B	11	67.2712	90.6	74		46	153
Antimony	27147	1	S15442A3	12	0.7901	1.06	75		1.9	219
Arsenic	27147	1	S15442A3	12	1.7233	1.82	95		83	118
Barium	27147	1	S15442A3	12	1.3534	1.43	95		83	117
Beryllium	27147	1	S15442A3	12	0.9258	0.983	94		84	116
Cadmium	27147	1	S15442A3	12	0.6004	0.604	99		83	117
Calcium	27147	1	S15442B	11	61.6699	60.4	102		83	117
Chromium	27147	1	S15442A3	12	1.1980	1.25	96		82	118
Cobalt	27147	1	S15442A3	12	1.6536	1.63	101		85	115
Copper	27147	1	S15442A3	12	0.8014	0.801	100		84	116
Iron	27147	1	S15442B	11	116.9370	129	91		51	150
Lead	27147	1	S15442A3	12	1.2984	1.36	95		84	117
Magnesium	27147	1	S15442B	11	24.5034	26.4	93		75	124
Manganese	27147	1	S15442A3	12	2.5831	2.79	93		83	118
Mercury	27147	5	H15442S	14	10.0164	55.5	90		72	129
Nickel	27147	1	S15442A3	12	1.2867	1.28	101		84	116
Potassium	27147	1	S15442B	11	23.7723	28.2	84		73	127
Selenium	27147	1	S15442A3	12	0.7942	0.859	92		80	120
Silver	27147	1	S15442A3	12	0.6050	0.613	99		66	134
Sodium	27147	1	S15442B	11	4.0976	4.39	93		74	126
Thallium	27147	1	S15442A3	12	1.3956	1.44	97		81	119
Vanadium	27147	1	S15442A3	12	0.9459	1.04	91		75	124
Zinc	27147	1	S15442A3	12	1.9451	2.04	95		82	118

TxtQcType: MSD Matrix: SOIL SampleID: AC74412-001

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27147	1	S15442B	16	S15442B	13	97.3263	59.0523	5	765	b	75	125
Antimony	27147	1	S15442A3	17	S15442A3	14	0.3102	0.02U	0.5	62	a	75	125
Arsenic	27147	1	S15442A3	17	S15442A3	14	0.5038	0.0410	0.5	93		75	125
Barium	27147	1	S15442A3	17	S15442A3	14	0.8263	0.3205	0.5	101		75	125
Beryllium	27147	1	S15442A3	17	S15442A3	14	0.4676	0.006U	0.5	94		75	125
Cadmium	27147	1	S15442A3	17	S15442A3	14	0.4696	0.006U	0.5	94		75	125
Calcium	27147	1	S15442B	16	S15442B	13	106.4920	37.7475	50	137	a	75	125
Chromium	27147	1	S15442A3	17	S15442A3	14	0.8882	0.3606	0.5	106		75	125
Cobalt	27147	1	S15442A3	17	S15442A3	14	0.5410	0.0479	0.5	99		75	125
Copper	27147	1	S15442A3	17	S15442A3	14	0.8254	0.1929	0.5	126	a	75	125
Iron	27147	1	S15442B	16	S15442B	13	193.4240	127.1550	5	1330	b	75	125
Lead	27147	1	S15442A3	17	S15442A3	14	0.7229	0.2605	0.5	92		75	125
Magnesium	27147	1	S15442B	16	S15442B	13	92.2771	24.1494	50	136	a	75	125
Manganese	27147	1	S15442A3	17	S15442A3	14	2.6117	1.6049	0.5	201	a	75	125
Mercury	27147	1	H15442S	19	H15442S	16	9.6190	.5U	10	96		75	125
Nickel	27147	1	S15442A3	17	S15442A3	14	1.1119	0.5869	0.5	105		75	125
Potassium	27147	1	S15442B	16	S15442B	13	68.5278	9.9733	50	117		75	125
Selenium	27147	1	S15442A3	17	S15442A3	14	0.4530	0.018U	0.5	91		75	125
Silver	27147	1	S15442A3	17	S15442A3	14	0.0937	0.015U	0.10	94		75	125
Sodium	27147	1	S15442B	16	S15442B	13	53.6529	3.2814	50	101		75	125
Thallium	27147	1	S15442A3	17	S15442A3	14	0.4764	0.012U	0.5	95		75	125
Vanadium	27147	1	S15442A3	17	S15442A3	14	0.6819	0.1617	0.5	104		75	125
Zinc	27147	1	S15442A3	17	S15442A3	14	0.9073	0.4124	0.5	99		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 27147

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MS Matrix: SOIL SampleID: AC74412-001

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27147	1	S15442B	15	S15442B	13	83.2486	59.0523	5	484	b	75	125
Antimony	27147	1	S15442A3	16	S15442A3	14	0.3071	0.02U	0.5	61	a	75	125
Arsenic	27147	1	S15442A3	16	S15442A3	14	0.5127	0.0410	0.5	94		75	125
Barium	27147	1	S15442A3	16	S15442A3	14	0.8532	0.3205	0.5	107		75	125
Beryllium	27147	1	S15442A3	16	S15442A3	14	0.4774	0.006U	0.5	95		75	125
Cadmium	27147	1	S15442A3	16	S15442A3	14	0.4784	0.006U	0.5	96		75	125
Calcium	27147	1	S15442B	15	S15442B	13	87.5856	37.7475	50	100		75	125
Chromium	27147	1	S15442A3	16	S15442A3	14	0.9370	0.3606	0.5	115		75	125
Cobalt	27147	1	S15442A3	16	S15442A3	14	0.5413	0.0479	0.5	99		75	125
Copper	27147	1	S15442A3	16	S15442A3	14	0.7238	0.1929	0.5	106		75	125
Iron	27147	1	S15442B	15	S15442B	13	149.7850	127.1550	5	453	b	75	125
Lead	27147	1	S15442A3	16	S15442A3	14	0.7900	0.2605	0.5	106		75	125
Magnesium	27147	1	S15442B	15	S15442B	13	78.0891	24.1494	50	108		75	125
Manganese	27147	1	S15442A3	16	S15442A3	14	2.3010	1.6049	0.5	139	a	75	125
Mercury	27147	1	H15442S	18	H15442S	16	9.6571	.5U	10	97		75	125
Nickel	27147	1	S15442A3	16	S15442A3	14	1.2334	0.5869	0.5	129	a	75	125
Potassium	27147	1	S15442B	15	S15442B	13	59.0649	9.9733	50	98		75	125
Selenium	27147	1	S15442A3	16	S15442A3	14	0.4431	0.018U	0.5	89		75	125
Silver	27147	1	S15442A3	16	S15442A3	14	0.0946	0.015U	0.10	95		75	125
Sodium	27147	1	S15442B	15	S15442B	13	53.3199	3.2814	50	100		75	125
Thallium	27147	1	S15442A3	16	S15442A3	14	0.4876	0.012U	0.5	98		75	125
Vanadium	27147	1	S15442A3	16	S15442A3	14	0.6588	0.1617	0.5	99		75	125
Zinc	27147	1	S15442A3	16	S15442A3	14	0.9566	0.4124	0.5	109		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 27147

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 27147

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	27147	S15442B	12	S15442B	11	68.0718	67.2712	1.2		20
Antimony	27147	S15442A3	13	S15442A3	12	0.8065	0.7901	2.1		20
Arsenic	27147	S15442A3	13	S15442A3	12	1.7055	1.7233	1		20
Barium	27147	S15442A3	13	S15442A3	12	1.3801	1.3534	2		20
Beryllium	27147	S15442A3	13	S15442A3	12	0.9259	0.9258	.012		20
Cadmium	27147	S15442A3	13	S15442A3	12	0.5868	0.6004	2.3		20
Calcium	27147	S15442B	12	S15442B	11	60.9211	61.6699	1.2		20
Chromium	27147	S15442A3	13	S15442A3	12	1.1812	1.1980	1.4		20
Cobalt	27147	S15442A3	13	S15442A3	12	1.6269	1.6536	1.6		20
Copper	27147	S15442A3	13	S15442A3	12	0.7794	0.8014	2.8		20
Iron	27147	S15442B	12	S15442B	11	114.0030	116.9370	2.5		20
Lead	27147	S15442A3	13	S15442A3	12	1.2719	1.2984	2.1		20
Magnesium	27147	S15442B	12	S15442B	11	24.8088	24.5034	1.2		20
Manganese	27147	S15442A3	13	S15442A3	12	2.5723	2.5831	.42		20
Mercury	27147	H15442S	15	H15442S	14	9.8485	10.0164	1.7		20
Nickel	27147	S15442A3	13	S15442A3	12	1.2606	1.2867	2.1		20
Potassium	27147	S15442B	12	S15442B	11	23.4341	23.7723	1.4		20
Selenium	27147	S15442A3	13	S15442A3	12	0.7957	0.7942	.19		20
Silver	27147	S15442A3	13	S15442A3	12	0.5926	0.6050	2.1		20
Sodium	27147	S15442B	12	S15442B	11	3.9652	4.0976	3.3		20
Thallium	27147	S15442A3	13	S15442A3	12	1.3870	1.3956	.62		20
Vanadium	27147	S15442A3	13	S15442A3	12	0.9281	0.9459	1.9		20
Zinc	27147	S15442A3	13	S15442A3	12	1.9176	1.9451	1.4		20

TxtQcType: MR Matrix: SOIL SampleID: AC74412-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	27147	S15442B	14	S15442B	13	83.4722	59.0523	34	a	20
Antimony	27147	S15442A3	15	S15442A3	14	0.02U	0.02U	---		20
Arsenic	27147	S15442A3	15	S15442A3	14	0.0449	0.0410	9.1		20
Barium	27147	S15442A3	15	S15442A3	14	0.3451	0.3205	7.4		20
Beryllium	27147	S15442A3	15	S15442A3	14	0.006U	0.006U	---		20
Cadmium	27147	S15442A3	15	S15442A3	14	0.006U	0.006U	---		20
Calcium	27147	S15442B	14	S15442B	13	39.8217	37.7475	5.3		20
Chromium	27147	S15442A3	15	S15442A3	14	0.4427	0.3606	20		20
Cobalt	27147	S15442A3	15	S15442A3	14	0.0872	0.0479	58	b	20
Copper	27147	S15442A3	15	S15442A3	14	0.3066	0.1929	46	a	20
Iron	27147	S15442B	14	S15442B	13	182.0230	127.1550	35	a	20
Lead	27147	S15442A3	15	S15442A3	14	0.3528	0.2605	30	a	20
Magnesium	27147	S15442B	14	S15442B	13	53.9027	24.1494	76	a	20
Manganese	27147	S15442A3	15	S15442A3	14	2.7427	1.6049	52	a	20
Mercury	27147	H15442S	17	H15442S	16	.5U	.5U	---		20
Nickel	27147	S15442A3	15	S15442A3	14	0.6825	0.5869	15		20
Potassium	27147	S15442B	14	S15442B	13	9.8876	9.9733	0.86		20
Selenium	27147	S15442A3	15	S15442A3	14	0.018U	0.018U	---		20
Silver	27147	S15442A3	15	S15442A3	14	0.015U	0.015U	---		20
Sodium	27147	S15442B	14	S15442B	13	4.9904	3.2814	41	b	20
Thallium	27147	S15442A3	15	S15442A3	14	0.012U	0.012U	---		20
Vanadium	27147	S15442A3	15	S15442A3	14	0.2720	0.1617	51	b	20
Zinc	27147	S15442A3	15	S15442A3	14	0.4867	0.4124	17		20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 27147

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MSD Matrix: SOIL SampleID: AC74412-001

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	27147	S15442B	16	S15442B	15	97.3263	83.2486	16		20
Antimony	27147	S15442A3	17	S15442A3	16	0.3102	0.3071	1		20
Arsenic	27147	S15442A3	17	S15442A3	16	0.5038	0.5127	1.8		20
Barium	27147	S15442A3	17	S15442A3	16	0.8263	0.8532	3.2		20
Beryllium	27147	S15442A3	17	S15442A3	16	0.4676	0.4774	2.1		20
Cadmium	27147	S15442A3	17	S15442A3	16	0.4696	0.4784	1.9		20
Calcium	27147	S15442B	16	S15442B	15	106.4920	87.5856	19		20
Chromium	27147	S15442A3	17	S15442A3	16	0.8882	0.9370	5.3		20
Cobalt	27147	S15442A3	17	S15442A3	16	0.5410	0.5413	.047		20
Copper	27147	S15442A3	17	S15442A3	16	0.8254	0.7238	13		20
Iron	27147	S15442B	16	S15442B	15	193.4240	149.7850	25	a	20
Lead	27147	S15442A3	17	S15442A3	16	0.7229	0.7900	8.9		20
Magnesium	27147	S15442B	16	S15442B	15	92.2771	78.0891	17		20
Manganese	27147	S15442A3	17	S15442A3	16	2.6117	2.3010	13		20
Mercury	27147	H15442S	19	H15442S	18	9.6190	9.6571	.4		20
Nickel	27147	S15442A3	17	S15442A3	16	1.1119	1.2334	10		20
Potassium	27147	S15442B	16	S15442B	15	68.5278	59.0649	15		20
Selenium	27147	S15442A3	17	S15442A3	16	0.4530	0.4431	2.2		20
Silver	27147	S15442A3	17	S15442A3	16	0.0937	0.0946	.93		20
Sodium	27147	S15442B	16	S15442B	15	53.6529	53.3199	.62		20
Thallium	27147	S15442A3	17	S15442A3	16	0.4764	0.4876	2.3		20
Vanadium	27147	S15442A3	17	S15442A3	16	0.6819	0.6588	3.4		20
Zinc	27147	S15442A3	17	S15442A3	16	0.9073	0.9566	5.3		20

TxtQcType: SD Matrix: SOIL SampleID: AC74412-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Aluminum	27147	S15442B	20	S15442B	13	5	11.2394	59.0523	4.8		10
Antimony	27147	S15442A3	21	S15442A3	14	5	-0.0007	0.0124	---		10
Arsenic	27147	S15442A3	21	S15442A3	14	5	0.0089	0.0410	8.8		10
Barium	27147	S15442A3	21	S15442A3	14	5	0.0647	0.3205	0.86		10
Beryllium	27147	S15442A3	21	S15442A3	14	5	0.0017	0.0053	58	a	10
Cadmium	27147	S15442A3	21	S15442A3	14	5	0.0017	0.0034	156	c	10
Calcium	27147	S15442B	20	S15442B	13	5	7.2310	37.7475	4.2		10
Chromium	27147	S15442A3	21	S15442A3	14	5	0.0732	0.3606	1.5		10
Cobalt	27147	S15442A3	21	S15442A3	14	5	0.0101	0.0479	5.9		10
Copper	27147	S15442A3	21	S15442A3	14	5	0.0388	0.1929	0.57		10
Iron	27147	S15442B	20	S15442B	13	5	24.7258	127.1550	2.8		10
Lead	27147	S15442A3	21	S15442A3	14	5	0.0532	0.2605	2.1		10
Magnesium	27147	S15442B	20	S15442B	13	5	4.4015	24.1494	8.9		10
Manganese	27147	S15442A3	21	S15442A3	14	5	0.3315	1.6049	3.3		10
Nickel	27147	S15442A3	21	S15442A3	14	5	0.1193	0.5869	1.6		10
Potassium	27147	S15442B	20	S15442B	13	5	2.0233	9.9733	1.4		10
Selenium	27147	S15442A3	21	S15442A3	14	5	-0.0070	-0.0055	---		10
Silver	27147	S15442A3	21	S15442A3	14	5	-0.0001	-0.0012	---		10
Sodium	27147	S15442B	20	S15442B	13	5	0.4867	3.2814	26	c	10
Thallium	27147	S15442A3	21	S15442A3	14	5	-0.0008	0.0000	---		10
Vanadium	27147	S15442A3	21	S15442A3	14	5	0.0329	0.1617	1.7		10
Zinc	27147	S15442A3	21	S15442A3	14	5	0.0835	0.4124	1.2		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Hampton-Clarke/Veritech

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B (6020) 200.7/200.8 OTHER

Batch No.: 15442 Analyst: km

QC Number: 27147 Prep Date: 9/6/13

Matrix: Soil Reviewed By: SB

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				--	
LCS	0.5g					--	
LCSD						--	
1. ~~LC~~ 74412-001							
MR 74412-001							
MS 74412-001							
MSD 74412-001							
2. 74391-001							
3. 74405-001							
4. 74405-002							
5. 74405-003							
6. 74405-004							
7. 74405-005							
8. 74405-006							
9. 74405-007							
10. 74405-008							
11. 74405-009	50ml						FB
12. 74410-007	0.5g						
13. 74410-013							
14. ~~74412~~							
15. 74358-006							
16. 74134-002							
17. 74134-006							
18. FBMB	50ml						
19. LCS W							
20.							

Hot Plate Temperature: 93.7 C (90-95° C)

	Volume mL	Lot #
LCS, LCSD	0.5g	V- 7835
LLLCS, LLLCSD		V-
MS, MSD	0.5ml	V-7685, 7686
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO_3	2.5ml	V- 8067
HCl	5ml	V- 8068
H_2O_2	1.5ml	V- 74123

Acid	Vol mL	Lot#
1:1 HNO_3	5ml	V-120825
1:1 HCl		V-

Relinquished By km Date 9/6/13

Received By [illegible] Date 9/6/13

T:\QC\FORMS\LOGBOOK FORMS\METALS\ICP sample prep log 2012.DOC

Hampton-Clarke/Veritech

HG SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 245.1 7470A 7471A OTHER_____

Batch No.:* 15442

QC Number: 27147

Matrix: Soil

Analyst: km

Prep Date: 9/6/13

Review By: km

LAB ID#	MERCURY INITIAL	MERCURY FINAL	COMMENTS
Method blank	25ml	25ml	
LCS	0.15g		
LCSD			
1 LC 74412-001			
MR 74412-001			
MS 74412-001			
MSD 74412-001			
2 74391-001			
3 74405-001			
4 74405-002			
5 74405-003			
6 74405-004			
7 74405-005			
8 74405-006			
9 74405-007			
10 74405-008			
11 74405-009	25ml		FB
12 74410-007	0.15g		
13 74410-013			
14 74358-006			
15 74405MB	25ml		
16 LCSW			
17			
18			
19			
20			

Lot Numbers	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 168354	HNO_3		V-
$K_2S_2O_8$: V-	HCl		V-
NH_2OH: V- 166613	H_2SO_4		V-
	Aqua Regia	1.25ml	V- 172126

**Block Temp:	95.6 °C
Time In Block:	4:15
Time Out of Block:	4:45
** Required range = 92-98C	

Spike Volume & Lot #

☐ LCS V- 7835 (0.15g / 0.25 ml)

☐ MS V- 172125 (0.250 ml)

☐ Standards/Control Batch B- 16204

Relinquished By: km

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S15442A3.txt

Analysis Date: 09/06/13

Instrument: PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calib Blank 1 V-170817	1	CAL	19:42	1							V-170817(ICB/CCB)
Calib 1 V-167308	1	CAL	19:46	2							V-167308(ICS1 Lowest std)
Calib 2 V-168853	1	CAL	19:49	3							V-168853(ICS2- Low Std)
Calib 3 V-168467	1	CAL	19:53	4							V-168467(ICS3 - Middle Std)
Calib 4 V-168987	1	CAL	19:56	5							V-168987(ICS4 - High std)
ICS3 V-168467	1	ICS	20:01	6							V-168467(ICS3 - Middle Std)
ICV (2) V-168169	1	ICV	20:04	7							V-168169(ICV)
ICB V-170817	1	ICB	20:09	8							V-170817(ICB/CCB)
ICSA V-169160	1	ICSA	20:12	9							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	20:17	10							V-169161(ICSAB)
MB 27147 (100)	1	MB	20:22	11		SOIL	SOIL	SW846	27147		()
LCS 27147	1	LCS	20:25	12		SOIL	SOIL	SW846	27147		()
LCS MR 27147	1	LCS	20:30	13		SOIL	SOIL	SW846	27147		()
AC74412-001	1	SMP	20:34	14	METALS-TAL-S	SOIL	SOIL	SW846	27147		()
AC74412-001	1	MR	20:38	15	METALS-TAL-S	SOIL	SOIL	SW846	27147		()
AC74412-001	1	MS	20:42	16	METALS-TAL-S	SOIL	SOIL	SW846	27147		()
AC74412-001	1	MSD	20:46	17	METALS-TAL-S	SOIL	SOIL	SW846	27147		()
AC74412-001	1	PS	20:51	18	METALS-TAL-S	SOIL	SOIL	SW846	27147		()
CCV V-168988	1	CCV	20:54	19							V-168988(CCV)
CCB V-170817	1	CCB	20:58	20							V-170817(ICB/CCB)
AC74412-001	5	SD	21:01	21	METALS-TAL-S	SOIL	SOIL	SW846	27147		()
AC74410-007	1	SMP	21:05	22	METALS-TAL-S	SOIL	SOIL	SW846	27147		()
AC74410-013	1	SMP	21:08	23	METALS-TAL-S	SOIL	SOIL	SW846	27147		()
AC74358-006	1	SMP	21:12	24	METALS-TAL-S	SOIL	SOIL	SW846	27147		()
AC74134-002	1	SMP	21:16	25	MET-2-SOIL	SOIL	SOIL	SW846	27147		()
AC74134-006	1	SMP	21:19	26	MET-1-SOIL	SOIL	SOIL	SW846	27147		()
MB FB (1)	1	MB	21:23	27		SOIL	AQUEO	SW846	27147		()
LCSW	1	LCS	21:26	28		SOIL	AQUEO	SW846	27147		()
ICSA V-169160	1	ICSA	21:30	29							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	21:34	30							V-169161(ICSAB)
CCV V-168988	1	CCV	21:39	31							V-168988(CCV)
CCB V-170817	1	CCB	21:42	32							V-170817(ICB/CCB)
AC74391-001	1	SMP	21:46	33	METALS-TAL-S	SOIL	SOIL	SW846	27147		()
AC74405-001	1	SMP	21:49	34	METALS-TAL-S	SOIL	SOIL	SW846	27147		()
AC74405-002	1	SMP	21:53	35	METALS-TAL-S	SOIL	SOIL	SW846	27147		()
AC74405-003	1	SMP	21:57	36	METALS-TAL-S	SOIL	SOIL	SW846	27147		()
AC74405-004	1	SMP	22:01	37	METALS-TAL-S	SOIL	SOIL	SW846	27147		()
AC74405-005	1	SMP	22:05	38	METALS-TAL-S	SOIL	SOIL	SW846	27147		()
ICSA V-169160	1	ICSA	22:09	39							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	22:13	40							V-169161(ICSAB)
CCV V-168988	1	CCV	22:18	41							V-168988(CCV)
CCB V-170817	1	CCB	22:22	42							V-170817(ICB/CCB)
AC74405-006	1	SMP	22:25	43	METALS-TAL-S	SOIL	SOIL	SW846	27147		()
AC74405-007	1	SMP	22:29	44	METALS-TAL-S	SOIL	SOIL	SW846	27147		()
AC74405-008	1	SMP	22:32	45	METALS-TAL-S	SOIL	SOIL	SW846	27147		()
AC74405-009	1	SMP	22:36	46	METALS-TAL-S	SOIL	AQUEO	SW846	27147		()
ICSA V-169160	1	ICSA	22:39	47							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	22:44	48							V-169161(ICSAB)
CCV V-168988	1	CCV	22:49	49							V-168988(CCV)
CCB V-170817	1	CCB	22:52	50							V-170817(ICB/CCB)

Comments/Reviewedby:

olufemi
192.168.1.89 9/9/2013 10:30:51 AM

RUN IS OK
All elements reported except the earth elements

9/9/13

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD1A\S15442B.txt

Analysis Date: 09/09/13

Instrument: PEICPRAD1A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calib Blk 1 V-170817	1	CAL	11:09	1							V-170817(ICB/CCB)
Calib Std 1 V-165042	1	CAL	11:12	2							V-165042(ICS2- Low Std)
Calib Std 2 V-164864	1	CAL	11:16	3							V-164864(ICS3 - Middle Std)
Calib Std 3 V-166089	1	CAL	11:19	4							V-166089(ICS4 - High std)
ICS3 V-164864	1	ICS	11:22	5							V-164864(ICS3 - Middle Std)
ICV V-165044 (2)	1	ICV	11:25	6							V-165044(ICV)
ICB V-170817	1	ICB	11:28	7							V-170817(ICB/CCB)
ICSA V-165588	1	ICSA	11:31	8							V-165588(ICSA)
ICSAB V-165589	1	ICSAB	11:35	9							V-165589(ICSAB)
MB 27147 (100)	1	MB	11:39	10		SOIL	SOIL	SW846	27147		0
LCS 27147	1	LCS	11:42	11		SOIL	SOIL	SW846	27147		0
LCS MR 27147	1	LCS	11:45	12		SOIL	SOIL	SW846	27147		0
AC74412-001	1	SMP	11:48	13	METALS-TAL-S	SOIL	SOIL	SW846	27147		0
AC74412-001	1	MR	11:51	14	METALS-TAL-S	SOIL	SOIL	SW846	27147		0
AC74412-001	1	MS	11:53	15	METALS-TAL-S	SOIL	SOIL	SW846	27147		0
AC74412-001	1	MSD	11:55	16	METALS-TAL-S	SOIL	SOIL	SW846	27147		0
AC74412-001	1	PS	11:58	17	METALS-TAL-S	SOIL	SOIL	SW846	27147		0
CCV V-165587	1	CCV	12:00	18							V-165587(CCV)
CCB	1	CCB	12:04	19							0
AC74412-001	5	SD	12:07	20	METALS-TAL-S	SOIL	SOIL	SW846	27147		0
AC74358-006	1	SMP	12:10	21	METALS-TAL-S	SOIL	SOIL	SW846	27147		0
AC74391-001	1	SMP	12:13	22	METALS-TAL-S	SOIL	SOIL	SW846	27147		0
AC74405-001	1	SMP	12:16	23	METALS-TAL-S	SOIL	SOIL	SW846	27147		0
AC74405-002	1	SMP	12:19	24	METALS-TAL-S	SOIL	SOIL	SW846	27147		0
AC74405-003	1	SMP	12:22	25	METALS-TAL-S	SOIL	SOIL	SW846	27147		0
AC74405-004	1	SMP	12:25	26	METALS-TAL-S	SOIL	SOIL	SW846	27147		0
ICSA V-165588	1	ICSA	12:28	27							V-165588(ICSA)
ICSAB V-165589	1	ICSAB	12:32	28							V-165589(ICSAB)
CCV V-165587	1	CCV	12:36	29							V-165587(CCV)
CCB	1	CCB	12:39	30							0
AC74405-005	1	NA	12:42	31	METALS-TAL-S	SOIL	SOIL	SW846	27147		0
AC74405-006	1	NA	12:45	32	METALS-TAL-S	SOIL	SOIL	SW846	27147		0
AC74405-007	1	NA	12:48	33	METALS-TAL-S	SOIL	SOIL	SW846	27147		0
AC74405-008	1	NA	12:51	34	METALS-TAL-S	SOIL	SOIL	SW846	27147		0
AC74405-009	1	NA	12:54	35	METALS-TAL-S	SOIL	AQUEO	SW846	27147		0
AC74410-007	1	NA	12:57	36	METALS-TAL-S	SOIL	SOIL	SW846	27147		0
AC74410-013	1	NA	13:00	37	METALS-TAL-S	SOIL	SOIL	SW846	27147		0
ICSA V-165588	1	ICSA	13:03	38							V-165588(ICSA)
ICSAB V-165589	1	ICSAB	13:07	39							V-165589(ICSAB)
CCV V-165587	1	CCV	13:11	40						K failed	V-165587(CCV)
CCB	1	CCB	13:14	41							0

Comments/Reviewedby:

sean
192.168.1.78 9/9/2013 1:40:06 PM

first half OK, second half not used

e 9/9/12

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV1A\H15442S.txt

Analysis Date: 09/06/13

Instrument: HGCV1A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	17:29	1							0
.2 PPB	1	CAL	17:30	2							0
.5 PPB	1	CAL	17:32	3							0
1 PPB	1	CAL	17:33	4							0
2 PPB	1	CAL	17:35	5							0
5 PPB	1	CAL	17:36	6							0
10 PPB	1	CAL	17:38	7							0
25 PPB	1	CAL	17:40	8							0
ICV (2)	1	ICV	17:41	9							0
ICB	1	ICB	17:43	10							0
MB 27147 (167)	1	MB	17:44	11	HG-SOIL	SOIL	SOIL	SW846	27147		0
LCS 27147	1	NA	17:46	12	HG-SOIL	SOIL	SOIL	SW846	27147	Over Calibration Range	0
LCS MR 27147	1	NA	17:47	13	HG-SOIL	SOIL	SOIL	SW846	27147	Over Calibration Range	0
LCS 5D	5	LCS	17:49	14	HG-SOIL	SOIL	SOIL	SW846	27147	LCS good.	0
LCS MR 5D	5	LCS	17:50	15	HG-SOIL	SOIL	SOIL	SW846	27147	LCS MR good.	0
AC74412-001	1	SMP	17:52	16	HG-SOIL	SOIL	SOIL	SW846	27147		0
AC74412-001	1	MR	17:53	17	HG-SOIL	SOIL	SOIL	SW846	27147		0
AC74412-001	1	MS	17:55	18	HG-SOIL	SOIL	SOIL	SW846	27147		0
AC74412-001	1	MSD	17:56	19	HG-SOIL	SOIL	SOIL	SW846	27147		0
AC74391-001	1	SMP	17:58	20	HG-SOIL	SOIL	SOIL	SW846	27147		0
CCV	1	CCV	18:00	21							0
CCB	1	CCB	18:01	22							0
AC74405-001	1	SMP	18:03	23	HG-SOIL	SOIL	SOIL	SW846	27147		0
AC74405-002	1	SMP	18:04	24	HG-SOIL	SOIL	SOIL	SW846	27147		0
AC74405-003	1	SMP	18:06	25	HG-SOIL	SOIL	SOIL	SW846	27147		0
AC74405-004	1	SMP	18:07	26	HG-SOIL	SOIL	SOIL	SW846	27147		0
AC74405-005	1	SMP	18:09	27	HG-SOIL	SOIL	SOIL	SW846	27147		0
AC74405-006	1	SMP	18:10	28	HG-SOIL	SOIL	SOIL	SW846	27147		0
AC74405-007	1	SMP	18:12	29	HG-SOIL	SOIL	SOIL	SW846	27147		0
AC74405-008	1	SMP	18:13	30	HG-SOIL	SOIL	SOIL	SW846	27147		0
AC74405-009	1	SMP	18:15	31	HG-W-7470	SOIL	AQUEO	SW846	27147		0
AC74410-007	1	SMP	18:16	32	HG-SOIL	SOIL	SOIL	SW846	27147		0
CCV	1	CCV	18:18	33							0
CCB	1	CCB	18:20	34							0
AC74410-013	1	SMP	18:21	35	HG-SOIL	SOIL	SOIL	SW846	27147		0
AC74358-006	1	SMP	18:23	36	HG-SOIL	SOIL	SOIL	SW846	27147		0
MB FB (1)	1	MB	18:24	37	HG-SOIL	SOIL	AQUEO	SW846	27147		0
LCSW	1	LCS	18:26	38	HG-SOIL	SOIL	AQUEO	SW846	27147		0
CCV	1	CCV	18:27	39							0
CCB	1	CCB	18:29	40							0

Comments/Reviewedby:

pcousineau
192.168.1.89 9/9/2013 11:31:27 AM

ok

9/9/13

Standard/Batch/SnCl2 Lot #:

V-172189

TCLP Metal Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC74358-006	% Solid:	0	Lab Name:	Veritech	Nras No:	
Client Id:	024 SS-4 Composite	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	9/3/2013	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.20	ND	1	50	50	09/09/13	26662	T15407A3	22	P	PEICP3A
7440-39-3	Barium	0.25	0.87	1	50	50	09/09/13	26662	T15407A3	22	P	PEICP3A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/09/13	26662	T15407A3	22	P	PEICP3A
7440-47-3	Chromium	0.20	ND	1	50	50	09/09/13	26662	T15407A3	22	P	PEICP3A
7440-50-8	Copper	0.20	ND	1	50	50	09/09/13	26662	T15407A3	22	P	PEICP3A
7439-92-1	Lead	0.15	ND	1	50	50	09/09/13	26662	T15407A3	22	P	PEICP3A
7439-97-6	Mercury	0.00070	ND	1	25	25	09/09/13	26662	H15407T	37	CV	HGCV1A
7440-02-0	Nickel	0.20	ND	1	50	50	09/09/13	26662	T15407A3	22	P	PEICP3A
7782-49-2	Selenium	0.10	ND	1	50	50	09/09/13	26662	T15407A3	22	P	PEICP3A
7440-22-4	Silver	0.050	ND	1	50	50	09/09/13	26662	T15407A3	22	P	PEICP3A
7440-66-6	Zinc	0.20	ND	1	50	50	09/09/13	26662	T15407A3	22	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 26662 (1) % Solid: 0 Lab Name: Veritech
Client Id: MB 26662 (1) Units: MG/L Lab Code:
Matrix: TCLP
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	1.0	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7440-36-0	Antimony	0.20	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7440-38-2	Arsenic	0.20	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7440-39-3	Barium	0.25	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7440-41-7	Beryllium	0.050	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7440-43-9	Cadmium	0.050	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7440-70-2	Calcium	5.0	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7440-47-3	Chromium	0.20	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7440-48-4	Cobalt	0.20	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7440-50-8	Copper	0.20	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7439-89-6	Iron	1.0	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7439-92-1	Lead	0.15	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7439-95-4	Magnesium	5.0	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7439-96-5	Manganese	0.20	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7439-97-6	Mercury	0.00070	ND	1	25	25	09/09/13	26662	H15407T	11	CV	HGCV1A
7439-98-7	Molybdenum	0.20	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7440-02-0	Nickel	0.20	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7782-49-2	Selenium	0.10	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7440-22-4	Silver	0.050	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7440-28-0	Thallium	0.20	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7440-31-5	Tin	0.20	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7440-32-6	Titanium	0.20	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7440-62-2	Vanadium	0.20	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A
7440-66-6	Zinc	0.20	ND	1	50	50	09/09/13	26662	T15407A3	11	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/09/13
Data File: H15407T
Prep Batch: 26662
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3090309

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV (2)-9	Rec	CCV-21	Rec	CCV-33	Rec	CCV-39	Rec		Rec		Rec		Rec		Rec
Mercury	20/10	18.39289	92	9.51948	95	9.51945	95	9.51541	95								

Notes:
a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits:
ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-11

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 2
(ICV/CCV Summary)

Date Analyzed: 09/09/13
Data File: T15407A3
Prep Batch: 26662
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3090309

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV (2) V-168169-7	Rec	CCV V-168988-19	Rec	CCV V-168988-28	Rec		Rec		Rec		Rec		Rec		Rec
Arsenic	1/.5	0.99359	99	0.46286	93	0.44911	90										
Barium	1/.5	1.00537	101	0.49695	99	0.49495	99										
Cadmium	1/.5	0.99426	99	0.48641	97	0.47921	96										
Chromium	1/.5	0.99201	99	0.50016	100	0.50768	102										
Copper	1/.5	0.99091	99	0.49784	100	0.50765	102										
Lead	1/.5	0.98832	99	0.47248	94	0.46616	93										
Nickel	1/.5	0.98215	98	0.48858	98	0.48490	97										
Selenium	1/.5	1.00637	101	0.46614	93	0.45431	91										
Silver	0.2/0.1	0.20038	100	0.09976	100	0.10212	102										
Zinc	1/.5	0.98229	98	0.46353	93	0.44980	90										

Notes:
a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits:
ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-11

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/09/13
Data File: H15407T
Prep Batch: 26662
Reporting Limits Used: TCLP,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3090309

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-40	MB 26662 (1)-11	EF-V-171903-38		
Mercury	.7 U	.7 U	.7 U	.7 U	.7 U	.7 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/09/13
Data File: T15407A3
Prep Batch: 26662
Reporting Limits Used: TCLP,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3090309

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-170817-8	CCB V-170817-20	CCB V-170817-29	MB 26662 (1)-11	EF-V-171903-23			
Arsenic	.2 U	.2 U	.2 U	.2 U	.2 U			
Barium	.25 U	.25 U	.25 U	.25 U	.25 U			
Cadmium	.05 U	.05 U	.05 U	.05 U	.05 U			
Chromium	.2 U	.2 U	.2 U	.2 U	.2 U			
Copper	.2 U	.2 U	.2 U	.2 U	.2 U			
Lead	.15 U	.15 U	.15 U	.15 U	.15 U			
Nickel	.2 U	.2 U	.2 U	.2 U	.2 U			
Selenium	.1 U	.1 U	.1 U	.1 U	.1 U			
Silver	.05 U	.05 U	.05 U	.05 U	.05 U			
Zinc	.2 U	.2 U	.2 U	.2 U	.2 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 09/09/13
Data File: T15407A3
Prep Batch: 26662
Reporting Limits Used: TCLP,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3090309

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-169160-9	Rec	ICSAB V-169161-10	Rec	ICSA V-169160-26	Rec	ICSAB V-169161-27	Rec		Rec		Rec		Rec
Aluminum	500	487.426	97	489.90200	98	489.136	98	481.07900	96						
Arsenic	1	U		1.01096	101	U		0.90625	91						
Barium	.5	U		0.53344	107	U		0.50594	101						
Cadmium	1	U		1.02269	102	U		0.96035	96						
Calcium	500	473.132	95	472.49000	94	474.3	95	470.31400	94						
Chromium	.5	U		0.49541	99	U		0.48684	97						
Copper	.5	U		0.52763	106	U		0.51563	103						
Iron	200	183.619	92	184.71500	92	182.896	91	180.34100	90						
Lead	1	U		0.92644	93	U		0.82287	82						
Magnesium	500	517.695	104	518.15500	104	516.872	103	507.99900	102						
Nickel	1	U		0.92478	92	U		0.87386	87						
Selenium	1	U		0.98657	99	U		0.86690	87						
Silver	1	U		1.08913	109	U		1.07116	107						
Zinc	1	U		0.91152	91	U		0.81085	81						

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 26662

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: TCLP SampleID: LCSW MR 26662

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	26662	1	T15407A3	13	0.5043	0.500	101		80	120
Barium	26662	1	T15407A3	13	0.5192	.5	104		80	120
Cadmium	26662	1	T15407A3	13	0.5092	0.500	102		80	120
Chromium	26662	1	T15407A3	13	0.5155	0.500	103		80	120
Copper	26662	1	T15407A3	13	0.5140	0.500	103		80	120
Lead	26662	1	T15407A3	13	0.5057	.5	101		80	120
Mercury	26662	1	H15407T	13	9.6409	10	96		80	120
Nickel	26662	1	T15407A3	13	0.5139	0.500	103		80	120
Selenium	26662	1	T15407A3	13	0.4967	0.500	99		80	120
Silver	26662	1	T15407A3	13	0.1031	0.100	103		80	120
Zinc	26662	1	T15407A3	13	0.5057	0.500	101		80	120

TxtQcType: LCS Matrix: TCLP SampleID: LCSW 26662

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	26662	1	T15407A3	12	0.4676	0.500	94		80	120
Barium	26662	1	T15407A3	12	0.4974	.5	99		80	120
Cadmium	26662	1	T15407A3	12	0.4888	0.500	98		80	120
Chromium	26662	1	T15407A3	12	0.4979	0.500	100		80	120
Copper	26662	1	T15407A3	12	0.5008	0.500	100		80	120
Lead	26662	1	T15407A3	12	0.4785	.5	96		80	120
Mercury	26662	1	H15407T	12	9.4350	10	94		80	120
Nickel	26662	1	T15407A3	12	0.4902	0.500	98		80	120
Selenium	26662	1	T15407A3	12	0.4626	0.500	93		80	120
Silver	26662	1	T15407A3	12	0.1001	0.100	100		80	120
Zinc	26662	1	T15407A3	12	0.4713	0.500	94		80	120

TxtQcType: MSD Matrix: TCLP SampleID: AC74182-004

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	26662	1	T15407A3	17	T15407A3	14	0.5178	.2U	0.5	104		50	
Barium	26662	1	T15407A3	17	T15407A3	14	0.6970	.25U	0.5	139		50	
Cadmium	26662	1	T15407A3	17	T15407A3	14	0.5154	.05U	0.5	103		50	
Chromium	26662	1	T15407A3	17	T15407A3	14	0.5089	.2U	0.5	102		50	
Copper	26662	1	T15407A3	17	T15407A3	14	0.5295	.2U	0.5	106		50	
Lead	26662	1	T15407A3	17	T15407A3	14	0.5005	0.6079	0.5	-21	a	50	
Mercury	26662	1	H15407T	17	H15407T	14	9.9618	.70U	10	100		50	
Nickel	26662	1	T15407A3	17	T15407A3	14	0.5152	.2U	0.5	103		50	
Selenium	26662	1	T15407A3	17	T15407A3	14	0.5324	.1U	0.5	106		50	
Silver	26662	1	T15407A3	17	T15407A3	14	0.1040	0.05U	0.10	104		50	
Zinc	26662	1	T15407A3	17	T15407A3	14	0.8643	0.4496	0.5	83		50	

TxtQcType: MS Matrix: TCLP SampleID: AC74182-003

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	26662	1	T15407A3	16	T15407A3	14	0.5245	.2U	0.5	105		50	
Barium	26662	1	T15407A3	16	T15407A3	14	0.7194	.25U	0.5	144		50	
Cadmium	26662	1	T15407A3	16	T15407A3	14	0.5156	.05U	0.5	103		50	
Chromium	26662	1	T15407A3	16	T15407A3	14	0.5059	.2U	0.5	101		50	
Copper	26662	1	T15407A3	16	T15407A3	14	0.5242	.2U	0.5	105		50	
Lead	26662	1	T15407A3	16	T15407A3	14	0.5054	0.6079	0.5	-21	a	50	
Mercury	26662	1	H15407T	16	H15407T	14	9.7155	.70U	10	97		50	
Nickel	26662	1	T15407A3	16	T15407A3	14	0.5169	.2U	0.5	103		50	
Selenium	26662	1	T15407A3	16	T15407A3	14	0.5406	.1U	0.5	108		50	
Silver	26662	1	T15407A3	16	T15407A3	14	0.1036	0.05U	0.10	104		50	
Zinc	26662	1	T15407A3	16	T15407A3	14	0.8619	0.4496	0.5	82		50	

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 26662

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: TCLP SampleID: LCSW MR 26662

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	26662	T15407A3	13	T15407A3	12	0.5043	0.4676	7.6	20
Barium	26662	T15407A3	13	T15407A3	12	0.5192	0.4974	4.3	20
Cadmium	26662	T15407A3	13	T15407A3	12	0.5092	0.4888	4.1	20
Chromium	26662	T15407A3	13	T15407A3	12	0.5155	0.4979	3.5	20
Copper	26662	T15407A3	13	T15407A3	12	0.5140	0.5008	2.6	20
Lead	26662	T15407A3	13	T15407A3	12	0.5057	0.4785	5.5	20
Mercury	26662	H15407T	13	H15407T	12	9.6409	9.4350	2.2	20
Nickel	26662	T15407A3	13	T15407A3	12	0.5139	0.4902	4.7	20
Selenium	26662	T15407A3	13	T15407A3	12	0.4967	0.4626	7.1	20
Silver	26662	T15407A3	13	T15407A3	12	0.1031	0.1001	2.9	20
Zinc	26662	T15407A3	13	T15407A3	12	0.5057	0.4713	7	20

TxtQcType: MR Matrix: TCLP SampleID: AC74182-002

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	26662	T15407A3	15	T15407A3	14	.2U	.2U	---	20
Barium	26662	T15407A3	15	T15407A3	14	.25U	.25U	---	20
Cadmium	26662	T15407A3	15	T15407A3	14	.05U	.05U	---	20
Chromium	26662	T15407A3	15	T15407A3	14	.2U	.2U	---	20
Copper	26662	T15407A3	15	T15407A3	14	.2U	.2U	---	20
Lead	26662	T15407A3	15	T15407A3	14	0.5893	0.6079	3.1	20
Mercury	26662	H15407T	15	H15407T	14	.70U	.70U	---	20
Nickel	26662	T15407A3	15	T15407A3	14	.2U	.2U	---	20
Selenium	26662	T15407A3	15	T15407A3	14	.1U	.1U	---	20
Silver	26662	T15407A3	15	T15407A3	14	0.05U	0.05U	---	20
Zinc	26662	T15407A3	15	T15407A3	14	0.4338	0.4496	3.6	20

TxtQcType: MSD Matrix: TCLP SampleID: AC74182-004

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	26662	T15407A3	17	T15407A3	16	0.5178	0.5245	1.3	20
Barium	26662	T15407A3	17	T15407A3	16	0.6970	0.7194	3.2	20
Cadmium	26662	T15407A3	17	T15407A3	16	0.5154	0.5156	.044	20
Chromium	26662	T15407A3	17	T15407A3	16	0.5089	0.5059	.6	20
Copper	26662	T15407A3	17	T15407A3	16	0.5295	0.5242	1	20
Lead	26662	T15407A3	17	T15407A3	16	0.5005	0.5054	.98	20
Mercury	26662	H15407T	17	H15407T	16	9.9618	9.7155	2.5	20
Nickel	26662	T15407A3	17	T15407A3	16	0.5152	0.5169	.33	20
Selenium	26662	T15407A3	17	T15407A3	16	0.5324	0.5406	1.5	20
Silver	26662	T15407A3	17	T15407A3	16	0.1040	0.1036	.4	20
Zinc	26662	T15407A3	17	T15407A3	16	0.8643	0.8619	.28	20

TxtQcType: SD Matrix: TCLP SampleID: AC74182-002

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Arsenic	26662	T15407A3	21	T15407A3	14	5	0.0089	0.0094	371	c	10
Barium	26662	T15407A3	21	T15407A3	14	5	0.0383	0.2051	6.5		10
Cadmium	26662	T15407A3	21	T15407A3	14	5	0.0008	0.0022	87	c	10
Chromium	26662	T15407A3	21	T15407A3	14	5	0.0008	0.0027	47	c	10
Copper	26662	T15407A3	21	T15407A3	14	5	-0.0022	0.0027	---		10
Lead	26662	T15407A3	21	T15407A3	14	5	0.1112	0.6079	8.5		10
Nickel	26662	T15407A3	21	T15407A3	14	5	0.0023	0.0213	46	c	10
Selenium	26662	T15407A3	21	T15407A3	14	5	0.0021	0.0017	---		10
Silver	26662	T15407A3	21	T15407A3	14	5	0.0007	0.0010	260	c	10
Zinc	26662	T15407A3	21	T15407A3	14	5	0.0761	0.4496	15	a	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Hampton-Clarke/Veritech

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B (6020) 200.7/200.8 OTHER_____

Batch No.: 15407 Analyst: SRB

QC Number: 26662 Prep Date: 9/6/13

Matrix: TCLP Reviewed By: [illegible]

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				–	
LCS	↓	↓				–	
LCSD						–	
1. 74182 002					171903	74182 002	
MR 74182 002					↓	↓	
MS 74182 003							
MSD 74182 004							
2. 74182 001							
3. 74182 005							
4. 74182 006							
5. 74182 007							
6. 74182 009							
7. 74182 010							
8. 74182 011							
9. 74182 012							
10. 74182 013							
11. 74182 014							
12. 74182 017							
13. 74182 018							
14. 74182 019							
15. 74182 020							
16. 74182 023							
17. 74358 006					↓	↓	
18. EF-1-171903	↓	↓					
19.							
20.							

Hot Plate Temperature: 93.6 C (90-95° C)

	Volume mL	Lot #
LCS, LCSD	0.5, 0.5	V- 7685, 7686
LLLCS, LLLCSD		V-
MS, MSD	0.5, 0.5	V- 7685, 7686
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO_3	3	V- 8067
HCl		V-
H_2O_2		V-

Acid	Vol mL	Lot#
1:1 HNO_3		V-
1:1 HCl	5	V- 166179

Relinquished By [signature] Date 9/6/13

Received By [signature] Date 09/10/2013

0194

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3090309 0505

Hampton-Clarke/Veritech

HG SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 245.1 7470A 7471A **OTHER**_____

Batch No.:* 15407

Analyst: SRB

QC Number: 26662

Prep Date: 9/6/13

Matrix: TCLP

Review By: PR

LAB ID#	MERCURY INITIAL	MERCURY FINAL	COMMENTS
Method blank	25 ml	25 ml	
LCS			
LCSD			
1 74182 002			
MR 74182 002			
MS 74182 003			
MSD 74182 004			
2 74182 001			
3 74182 005			
4 74182 006			
5 74182 007			
6 74182 009			
7 74182 010			
8 74182 011			
9 74182 012			
10 74182 013			
11 74182 014			
12 74182 017			
13 74182 018			
14 74182 019			
15 74182 020			
16 74182 023			
17 74358 006			
18 EF.171903			
19			
20			

Lot Numbers	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 168354	HNO_3	0.625	V- 7838
$K_2S_2O_8$: V- 166616	HCl		V-
NH_2OH: V- 166613	H_2SO_4	1.25	V- 7331
	Aqua Regia		V-

**Block Temp.:	93.4 °C
Time In Block:	1540
Time Out of Block:	
** Required range = 92-98C	

Spike Volume & Lot #

☐ LCS V- 172125 0.15g / 0.25 ml

☐ MS V- 172125 0.250 ml

☐ Standards/Control Batch B- 16209

Relinquished By: [signature] 9/6

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\T15407A3.txt

Analysis Date: 09/09/13

Instrument: PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calib Blank 1 V-170817	1	CAL	18:51	1							V-170817(ICB/CCB)
Calib 1 V-167308	1	CAL	18:55	2							V-167308(ICS1 Lowest std)
Calib 2 V-168853	1	CAL	18:58	3							V-168853(ICS2- Low Std)
Calib 3 V-168467	1	CAL	19:02	4							V-168467(ICS3 - Middle Std)
Calib 4 V-168987	1	CAL	19:05	5							V-168987(ICS4 - High std)
ICS3 V-168467	1	ICS	19:09	6							V-168467(ICS3 - Middle Std)
ICV (2) V-168169	1	ICV	19:13	7							V-168169(ICV)
ICB V-170817	1	ICB	19:17	8							V-170817(ICB/CCB)
ICSA V-169160	1	ICSA	19:21	9							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	19:25	10							V-169161(ICSAB)
MB 26662 (1)	1	MB	19:30	11		TCLP	TCLP	SW846	26662		()
LCSW 26662	1	LCS	19:33	12		TCLP	TCLP	SW846	26662		()
LCSW MR 26662	1	LCS	19:37	13		TCLP	TCLP	SW846	26662		()
AC74182-002	1	SMP	19:40	14	METALS-TCLP	TCLP	TCLP	SW846	26662		()
AC74182-002	1	MR	19:44	15	METALS-TCLP	TCLP	TCLP	SW846	26662		()
AC74182-003	1	MS	19:47	16	METALS-TCLP	TCLP	TCLP	SW846	26662		()
AC74182-004	1	MSD	19:51	17	METALS-TCLP	TCLP	TCLP	SW846	26662		()
AC74182-002	1	PS	19:55	18	METALS-TCLP	TCLP	TCLP	SW846	26662		()
CCV V-168988	1	CCV	19:58	19							V-168988(CCV)
CCB V-170817	1	CCB	20:02	20							V-170817(ICB/CCB)
AC74182-002	5	SD	20:05	21	METALS-TCLP	TCLP	TCLP	SW846	26662		()
AC74358-006	1	SMP	20:09	22	MET-TCLP-XL	TCLP	TCLP	SW846	26662		()
EF-V-171903	1	EF	20:12	23		TCLP	TCLP	SW846	26662		V-171903(EF-1)
AC74182-001	1	SMP	20:16	24	METALS-TCLP	TCLP	TCLP	SW846	26662		()
AC74182-005	1	SMP	20:19	25	METALS-TCLP	TCLP	TCLP	SW846	26662		()
ICSA V-169160	1	ICSA	20:23	26							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	20:27	27							V-169161(ICSAB)
CCV V-168988	1	CCV	20:32	28							V-168988(CCV)
CCB V-170817	1	CCB	20:35	29							V-170817(ICB/CCB)

Comments/Reviewedby:

olufemi
192.168.1.89 9/10/2013 9:32:19 AM

RUN IS OK
All elements reported

LBe 9/10/13

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV1A\H15407T.txt

Analysis Date: 09/09/13

Instrument: HGCV1A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	11:10	1							0
.2 PPB	1	CAL	11:12	2							0
.5 PPB	1	CAL	11:13	3							0
1 PPB	1	CAL	11:14	4							0
2 PPB	1	CAL	11:16	5							0
5 PPB	1	CAL	11:17	6							0
10 PPB	1	CAL	11:18	7							0
25 PPB	1	CAL	11:20	8							0
ICV (2)	1	ICV	11:21	9							0
ICB	1	ICB	11:23	10							0
MB 26662 (1)	1	MB	11:24	11		TCLP	TCLP	SW846	26662		0
LCSW 26662	1	LCS	11:25	12		TCLP	TCLP	SW846	26662		0
LCSW MR 26662	1	LCS	11:27	13		TCLP	TCLP	SW846	26662		0
AC74182-002	1	SMP	11:28	14	HG-TCLP	TCLP	TCLP	SW846	26662		0
AC74182-002	1	MR	11:29	15	HG-TCLP	TCLP	TCLP	SW846	26662		0
AC74182-003	1	MS	11:31	16	HG-TCLP	TCLP	TCLP	SW846	26662		0
AC74182-004	1	MSD	11:32	17	HG-TCLP	TCLP	TCLP	SW846	26662		0
AC74182-001	1	SMP	11:33	18	HG-TCLP	TCLP	TCLP	SW846	26662		0
AC74182-005	1	SMP	11:35	19	HG-TCLP	TCLP	TCLP	SW846	26662		0
AC74182-006	1	SMP	11:36	20	HG-TCLP	TCLP	TCLP	SW846	26662		0
CCV	1	CCV	11:38	21							0
CCB	1	CCB	11:39	22							0
AC74182-007	1	SMP	11:40	23	HG-TCLP	TCLP	TCLP	SW846	26662		0
AC74182-009	1	SMP	11:42	24	HG-TCLP	TCLP	TCLP	SW846	26662		0
AC74182-010	1	SMP	11:43	25	HG-TCLP	TCLP	TCLP	SW846	26662		0
AC74182-011	1	SMP	11:44	26	HG-TCLP	TCLP	TCLP	SW846	26662		0
AC74182-012	1	SMP	11:46	27	HG-TCLP	TCLP	TCLP	SW846	26662		0
AC74182-013	1	SMP	11:47	28	HG-TCLP	TCLP	TCLP	SW846	26662		0
AC74182-014	1	SMP	11:48	29	HG-TCLP	TCLP	TCLP	SW846	26662		0
AC74182-017	1	SMP	11:50	30	HG-TCLP	TCLP	TCLP	SW846	26662		0
AC74182-018	1	SMP	11:51	31	HG-TCLP	TCLP	TCLP	SW846	26662		0
AC74182-019	1	SMP	11:53	32	HG-TCLP	TCLP	TCLP	SW846	26662		0
CCV	1	CCV	11:54	33							0
CCB	1	CCB	11:55	34							0
AC74182-020	1	SMP	11:57	35	HG-TCLP	TCLP	TCLP	SW846	26662		0
AC74182-023	1	SMP	11:58	36	HG-TCLP	TCLP	TCLP	SW846	26662		0
AC74358-006	1	SMP	11:59	37	HG-TCLP	TCLP	TCLP	SW846	26662		0
EF-V-171903	1	EF	12:01	38		TCLP	TCLP	SW846	26662		V-171903(EF-1)
CCV	1	CCV	12:02	39							0
CCB	1	CCB	12:04	40							0

Comments/Reviewedby:

pcousineau
192.168.1.89 9/9/2013 12:27:27 PM

TCLP ok

9/9/13

Standard/Batch/SnCl2 Lot #:

V-172209

Wet Chemistry Data

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AC74358-006
Matrix Soil
Client SampleID: 024 SS-4 Composite

Project Number: 3090309
Received Date: 9/3/2013
Collect Date: 9/3/2013

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Ammonia	AMMONIA-SOIL	**1**	**35**	**MG/KG**	**13**	09/09/13	09/09/13
Chloride	CHLORIDE-ICS	**1**	**36**	**mg/Kg**	**22**	09/06/13	09/06/13
Cyanide (Reactive)	CN-REACTIVE	1	ND	mg/Kg	0.50	09/04/13	09/05/13
Cyanide	CN-S-9012	1	ND	mg/Kg	0.27	09/04/13	09/04/13
Eh	CR6-EH	**1**	**89**	**mv**		09/04/13	09/04/13
pH	CR6-PH	**1**	**8.1**	**pH**		09/04/13	09/04/13
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.1	09/04/13	09/05/13
Ignitability	IGNIT-MOD	**1**	**>141**	**Deg. F**			09/09/13
Nitrite	NO2-ICS	1	ND	mg/Kg	11	09/06/13	09/06/13
Nitrate	NO3-ICS	**1**	**26**	**mg/Kg**	**11**	09/06/13	09/06/13
Paint Filter Test	PAINT FILTER	1	NEG				09/05/13
Sulfate	SO4-ICS	**1**	**93**	**mg/Kg**	**22**	09/06/13	09/06/13
Sulfide (Reactive)	S-REACTIVE	1	ND	mg/kg	100	09/04/13	09/05/13

VERITECH Wet Chem Form1 Analysis Summary
% Solids

TestGroupName: % Solids SM2540G **Project #: 3090309**

TestGroup: %SOLIDS

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AC74358-003	021 SS-4C (2-2.5')	Soil/Encore	**1**	**88**	**Percent**			09/04/13	09/03/13	09/03/13
AC74358-006	024 SS-4 Compos	Soil	**1**	**90**	**Percent**			09/04/13	09/03/13	09/03/13

% Solids Report

Analysis Type: SOLIDS-SS
BatchID: SOLIDS-SS-2234

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AC74368-005	86	85.61841	Percent	1.08	11.51	10.03	09/04/13	hossain	0.32	5
Sample	AC74358-003	88	88.34123	Percent	1.09	11.64	10.42	09/04/13	hossain		
Sample	AC74358-006	90	90.15595	Percent	1.09	11.35	10.35	09/04/13	hossain		
Sample	AC74359-001	91	90.79307	Percent	1.09	12.06	11.06	09/04/13	hossain		
Sample	AC74359-002	88	87.58422	Percent	1.09	11.48	10.19	09/04/13	hossain		
Sample	AC74359-003	88	87.78908	Percent	1.09	11.90	10.59	09/04/13	hossain		
Sample	AC74362-001	93	93.16406	Percent	1.08	11.32	10.62	09/04/13	hossain		
Sample	AC74362-002	82	81.94175	Percent	1.09	11.39	9.53	09/04/13	hossain		
Sample	AC74362-003	85	85.19856	Percent	1.10	12.18	10.54	09/04/13	hossain		
Sample	AC74362-004	84	83.86492	Percent	1.09	11.75	10.03	09/04/13	hossain		
Sample	AC74362-005	81	80.73807	Percent	1.08	12.19	10.04	09/04/13	hossain		
Sample	AC74362-006	86	86.07595	Percent	1.08	11.35	9.91	09/04/13	hossain		
Sample	AC74362-007	86	85.54801	Percent	1.09	11.40	9.90	09/04/13	hossain		
Sample	AC74362-008	81	81.40162	Percent	1.10	12.23	10.15	09/04/13	hossain		
Sample	AC74362-009	86	86.06870	Percent	1.08	11.56	10.10	09/04/13	hossain		
Sample	AC74362-010	79	78.62129	Percent	1.08	12.54	10.08	09/04/13	hossain		
Sample	AC74368-001	76	76.43478	Percent	1.09	12.59	9.88	09/04/13	hossain		
Sample	AC74368-002	88	87.70104	Percent	1.09	11.66	10.35	09/04/13	hossain		
Sample	AC74368-003	84	84.19011	Percent	1.09	11.40	9.77	09/04/13	hossain		
Sample	AC74368-004	78	78.04878	Percent	1.10	12.17	9.75	09/04/13	hossain		
Sample	AC74368-005	85	85.34483	Percent	1.08	11.52	9.99	09/04/13	hossain		

* - Indicates Failed Rpd Criteria

Analysis	Ammonia Soil ISE							
Batch#	NH3-S-2							
Date	09/09/13							
Analyst	SN							
Q.C. DATA								
		Spike Amt	Result	Adj Conc	% REC	Limits	RPD	Limits
		PPM	PPM	PPM				
	LCS	600.00	572.40	572.40	95%	75-125%	3.33%	20%
	LCSD	600.00	590.40	590.40	98%	75-125%		
	MS	600.00	648.00	613.07	102%	75-125%	0.87%	20%
	MSD	600.00	642.67	607.73	101%	75-125%		
	SAMPLE	NA	34.93	NA	NA	NA	24.46%	20% *
	SAMPLE DUP	NA	44.67	NA	NA	NA		

****

Samples #	mg/L NH3	Solid Factor	Sample Weight	DF	Final vol(mL)	NH3-N (ppm)	MDL (PPM)	%REC
ICV	50.4	1	1	1	1	50.4	1	101%
ICB	0.074	1	1	1	1	ND	1	
MB	0.109	1	0.5	1	6	ND	12	
LCS	47.7	1	0.5	1	6	572.4	12	
LCSD	49.2	1	0.5	1	6	590.4	12	
AC74358-006	2.62	0.9	0.5	1	6	34.93	13.333333	
AC74358-006 DUP	3.35	0.9	0.5	1	6	44.67	13.333333	
AC74358-006 MS	48.6	0.9	0.5	1	6	648.0	13.333333	
AC74358-006 MSD	48.2	0.9	0.5	1	6	642.7	13.333333	
CCV	40.6	1	1	1	1	40.6	1	81%
CCB	0.104	1	1	1	1	ND	1	

BT 9/9/13 BT

BP 9/9/13

Calibration Summary:

3090309 0513

Instrument: IC1
Analysis Meth: EPA 9056A

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Chloride	20130826141	7	ICV	92	10	90-110
Chloride	20130826141	188	CCV	93	10	90-110
Chloride	20130826141	200	CCV	93	10	90-110
Chloride	20130826141	208	CCV	93	10	90-110
Nitrate	20130826141	7	ICV	94	10	90-110
Nitrate	20130826141	188	CCV	95	10	90-110
Nitrate	20130826141	200	CCV	96	10	90-110
Nitrate	20130826141	208	CCV	96	10	90-110
Nitrite	20130826141	7	ICV	96	10	90-110
Nitrite	20130826141	188	CCV	98	10	90-110
Nitrite	20130826141	200	CCV	98	10	90-110
Nitrite	20130826141	208	CCV	98	10	90-110
Sulfate	20130826141	7	ICV	97	10	90-110
Sulfate	20130826141	188	CCV	98	10	90-110
Sulfate	20130826141	200	CCV	100	10	90-110
Sulfate	20130826141	208	CCV	99	10	90-110

Blank Summary

Instrument: IC1

Qc Type: Method Blank Summary Prep Date: 9/6/13

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130826141	9/6/13 10:35	MBS-1115	190	Chloride	ND	20
20130826141	9/6/13 10:35	MBS-1115	190	Nitrate	ND	10
20130826141	9/6/13 10:35	MBS-1115	190	Nitrite	ND	10
20130826141	9/6/13 10:35	MBS-1115	190	Sulfate	ND	20

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130826141	8/26/13 16:45	ICB	8	Chloride	ND	2.0
20130826141	8/26/13 16:45	ICB	8	Nitrate	ND	1.0
20130826141	8/26/13 16:45	ICB	8	Nitrite	ND	1.0
20130826141	8/26/13 16:45	ICB	8	Sulfate	ND	2.0

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130826141	9/6/13 10:14	CCB	189	Chloride	ND	2.0
20130826141	9/6/13 14:30	CCB	201	Chloride	ND	2.0
20130826141	9/6/13 17:24	CCB	209	Chloride	ND	2.0
20130826141	9/6/13 10:14	CCB	189	Nitrate	ND	1.0
20130826141	9/6/13 14:30	CCB	201	Nitrate	ND	1.0
20130826141	9/6/13 17:24	CCB	209	Nitrate	ND	1.0
20130826141	9/6/13 10:14	CCB	189	Nitrite	ND	1.0
20130826141	9/6/13 14:30	CCB	201	Nitrite	ND	1.0
20130826141	9/6/13 17:24	CCB	209	Nitrite	ND	1.0
20130826141	9/6/13 10:14	CCB	189	Sulfate	ND	2.0
20130826141	9/6/13 14:30	CCB	201	Sulfate	ND	2.0
20130826141	9/6/13 17:24	CCB	209	Sulfate	ND	2.0

Ref SampleID:	Ref Standard RunID	Ref Standard Date
5 PPM	3	8/26/2013 2:56:00 PM

Sample ID: CCV RunID: 19 Analysis Date: 8/26/2013 8:44:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.364	7.354	9.374001	
Chloride	5.607	5.22	6	
Fluoride	3.687	3.547	3.827	
Nitrate	9.577	8.400001	10.78	
Nitrite	6.747	6.164	7.324	
Phosphorus (Ortho)	12.624	11.544	13.764	
Sulfate	14.36	13.37	15.37	

Sample ID: CCV RunID: 27 Analysis Date: 8/26/2013 11:38:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.364	7.354	9.374001	
Chloride	5.61	5.22	6	
Fluoride	3.69	3.547	3.827	
Nitrate	9.58	8.400001	10.78	
Nitrite	6.75	6.164	7.324	
Phosphorus (Ortho)	12.62	11.544	13.764	
Sulfate	14.367	13.37	15.37	

Sample ID: CCV RunID: 30 Analysis Date: 8/27/2013 12:44:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.357	7.354	9.374001	
Chloride	5.614	5.22	6	
Fluoride	3.697	3.547	3.827	
Nitrate	9.567	8.400001	10.78	
Nitrite	6.747	6.164	7.324	
Phosphorus (Ortho)	12.631	11.544	13.764	
Sulfate	14.304	13.37	15.37	

Sample ID: CCV RunID: 37 Analysis Date: 8/27/2013 3:16:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.34	7.354	9.374001	
Chloride	5.6	5.22	6	
Fluoride	3.687	3.547	3.827	
Nitrate	9.55	8.400001	10.78	
Nitrite	6.734	6.164	7.324	
Phosphorus (Ortho)	12.614	11.544	13.764	
Sulfate	14.29	13.37	15.37	

Ref SampleID:	Ref Standard RunID	Ref Standard Date
5 PPM	3	8/26/2013 2:56:00 PM

Sample ID: CCV RunID: 39 Analysis Date: 8/27/2013 4:01:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.337	7.354	9.374001	
Chloride	5.597	5.22	6	
Fluoride	3.687	3.547	3.827	
Nitrate	9.547	8.400001	10.78	
Nitrite	6.731	6.164	7.324	
Phosphorus (Ortho)	12.604	11.544	13.764	
Sulfate	14.277	13.37	15.37	

Sample ID: CCV RunID: 46 Analysis Date: 8/27/2013 6:33:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.344	7.354	9.374001	
Chloride	5.6	5.22	6	
Fluoride	3.687	3.547	3.827	
Nitrate	9.554	8.400001	10.78	
Nitrite	6.734	6.164	7.324	
Phosphorus (Ortho)	12.607	11.544	13.764	
Sulfate	14.284	13.37	15.37	

Sample ID: CCV RunID: 53 Analysis Date: 8/27/2013 9:07:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.341	7.354	9.374001	
Chloride	5.601	5.22	6	
Fluoride	3.687	3.547	3.827	
Nitrate	9.554	8.400001	10.78	
Nitrite	6.734	6.164	7.324	
Phosphorus (Ortho)	12.601	11.544	13.764	
Sulfate	14.287	13.37	15.37	

Sample ID: CCV RunID: 63 Analysis Date: 8/28/2013 8:31:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.334	7.354	9.374001	
Chloride	5.597	5.22	6	
Fluoride	3.69	3.547	3.827	
Nitrate	9.54	8.400001	10.78	
Nitrite	6.73	6.164	7.324	
Phosphorus (Ortho)	12.624	11.544	13.764	
Sulfate	14.26	13.37	15.37	

Ref SampleID:	Ref Standard RunID	Ref Standard Date
5 PPM	3	8/26/2013 2:56:00 PM

Sample ID: CCV RunID: 75 Analysis Date: 8/29/2013 12:49:00 AM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.324	7.354	9.374001	
Chloride	5.591	5.22	6	
Fluoride	3.684	3.547	3.827	
Nitrate	9.534	8.400001	10.78	
Nitrite	6.721	6.164	7.324	
Phosphorus (Ortho)	12.614	11.544	13.764	
Sulfate	14.264	13.37	15.37	

Sample ID: CCV RunID: 79 Analysis Date: 8/29/2013 2:16:00 AM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.331	7.354	9.374001	
Chloride	5.594	5.22	6	
Fluoride	3.687	3.547	3.827	
Nitrate	9.537	8.400001	10.78	
Nitrite	6.727	6.164	7.324	
Phosphorus (Ortho)	12.611	11.544	13.764	
Sulfate	14.257	13.37	15.37	

Sample ID: CCV RunID: 82 Analysis Date: 8/29/2013 12:11:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.321	7.354	9.374001	
Chloride	5.587	5.22	6	
Fluoride	3.684	3.547	3.827	
Nitrate	9.527	8.400001	10.78	
Nitrite	6.717	6.164	7.324	
Phosphorus (Ortho)	12.564	11.544	13.764	
Sulfate	14.247	13.37	15.37	

Sample ID: CCV RunID: 94 Analysis Date: 8/29/2013 4:29:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.323	7.354	9.374001	
Chloride	5.59	5.22	6	
Fluoride	3.68	3.547	3.827	
Nitrate	9.53	8.400001	10.78	
Nitrite	6.717	6.164	7.324	
Phosphorus (Ortho)	12.553	11.544	13.764	
Sulfate	14.25	13.37	15.37	

Ref SampleID:	Ref Standard RunID	Ref Standard Date
5 PPM	3	8/26/2013 2:56:00 PM

Sample ID: CCV RunID: 106 Analysis Date: 8/29/2013 8:50:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.324	7.354	9.374001	
Chloride	5.594	5.22	6	
Fluoride	3.687	3.547	3.827	
Nitrate	9.53	8.400001	10.78	
Nitrite	6.724	6.164	7.324	
Phosphorus (Ortho)	12.544	11.544	13.764	
Sulfate	14.24	13.37	15.37	

Sample ID: CCV RunID: 118 Analysis Date: 8/30/2013 1:11:00 AM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.321	7.354	9.374001	
Chloride	5.587	5.22	6	
Fluoride	3.684	3.547	3.827	
Nitrate	9.524	8.400001	10.78	
Nitrite	6.717	6.164	7.324	
Phosphorus (Ortho)	12.531	11.544	13.764	
Sulfate	14.241	13.37	15.37	

Sample ID: CCV RunID: 130 Analysis Date: 8/30/2013 5:32:00 AM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.317	7.354	9.374001	
Chloride	5.587	5.22	6	
Fluoride	3.683	3.547	3.827	
Nitrate	9.52	8.400001	10.78	
Nitrite	6.713	6.164	7.324	
Phosphorus (Ortho)	12.513	11.544	13.764	
Sulfate	14.237	13.37	15.37	

Sample ID: CCV RunID: 134 Analysis Date: 8/30/2013 6:59:00 AM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.321	7.354	9.374001	
Chloride	5.591	5.22	6	
Fluoride	3.684	3.547	3.827	
Nitrate	9.524	8.400001	10.78	
Nitrite	6.717	6.164	7.324	
Phosphorus (Ortho)	12.511	11.544	13.764	
Sulfate	14.241	13.37	15.37	

Ref SampleID:	Ref Standard RunID	Ref Standard Date
5 PPM	3	8/26/2013 2:56:00 PM

Sample ID: CCV RunID: 138 Analysis Date: 8/30/2013 3:42:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.287	7.354	9.374001	
Chloride	5.574	5.22	6	
Fluoride	3.684	3.547	3.827	
Nitrate	9.487	8.400001	10.78	
Nitrite	6.697	6.164	7.324	
Phosphorus (Ortho)	12.467	11.544	13.764	
Sulfate	14.087	13.37	15.37	

Sample ID: CCV RunID: 150 Analysis Date: 8/30/2013 8:01:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.29	7.354	9.374001	
Chloride	5.577	5.22	6	
Fluoride	3.684	3.547	3.827	
Nitrate	9.49	8.400001	10.78	
Nitrite	6.7	6.164	7.324	
Phosphorus (Ortho)	12.47	11.544	13.764	
Sulfate	14.09	13.37	15.37	

Sample ID: CCV RunID: 156 Analysis Date: 8/30/2013 10:11:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.29	7.354	9.374001	
Chloride	5.577	5.22	6	
Fluoride	3.684	3.547	3.827	
Nitrate	9.487	8.400001	10.78	
Nitrite	6.7	6.164	7.324	
Phosphorus (Ortho)	12.457	11.544	13.764	
Sulfate	14.08	13.37	15.37	

Sample ID: CCV RunID: 161 Analysis Date: 9/5/2013 10:27:00 AM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.274	7.354	9.374001	
Chloride	5.567	5.22	6	
Fluoride	3.677	3.547	3.827	
Nitrate	9.467	8.400001	10.78	
Nitrite	6.687	6.164	7.324	
Phosphorus (Ortho)	12.47	11.544	13.764	
Sulfate	14.097	13.37	15.37	

Ref SampleID:	Ref Standard RunID	Ref Standard Date
5 PPM	3	8/26/2013 2:56:00 PM

Sample ID: CCV RunID: 173 Analysis Date: 9/5/2013 2:46:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.277	7.354	9.374001	
Chloride	5.567	5.22	6	
Fluoride	3.677	3.547	3.827	
Nitrate	9.467	8.400001	10.78	
Nitrite	6.687	6.164	7.324	
Phosphorus (Ortho)	12.464	11.544	13.764	
Sulfate	14.107	13.37	15.37	

Sample ID: CCV RunID: 177 Analysis Date: 9/5/2013 4:13:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.27	7.354	9.374001	
Chloride	5.567	5.22	6	
Fluoride	3.674	3.547	3.827	
Nitrate	9.464	8.400001	10.78	
Nitrite	6.684	6.164	7.324	
Phosphorus (Ortho)	12.464	11.544	13.764	
Sulfate	14.114	13.37	15.37	

Sample ID: CCV RunID: 185 Analysis Date: 9/5/2013 7:07:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.277	7.354	9.374001	
Chloride	5.571	5.22	6	
Fluoride	3.677	3.547	3.827	
Nitrate	9.471	8.400001	10.78	
Nitrite	6.691	6.164	7.324	
Phosphorus (Ortho)	12.464	11.544	13.764	
Sulfate	14.117	13.37	15.37	

Sample ID: CCV RunID: 188 Analysis Date: 9/6/2013 9:52:00 AM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.27	7.354	9.374001	
Chloride	5.567	5.22	6	
Fluoride	3.677	3.547	3.827	
Nitrate	9.464	8.400001	10.78	
Nitrite	6.684	6.164	7.324	
Phosphorus (Ortho)	12.41	11.544	13.764	
Sulfate	14.097	13.37	15.37	

Ref SampleID:	Ref Standard RunID	Ref Standard Date
5 PPM	3	8/26/2013 2:56:00 PM

Sample ID: CCV RunID: 200 Analysis Date: 9/6/2013 2:08:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.307	7.354	9.374001	
Chloride	5.591	5.22	6	
Fluoride	3.694	3.547	3.827	
Nitrate	9.501	8.400001	10.78	
Nitrite	6.714	6.164	7.324	
Phosphorus (Ortho)	12.454	11.544	13.764	
Sulfate	14.147	13.37	15.37	

Sample ID: CCV RunID: 208 Analysis Date: 9/6/2013 5:02:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.27	7.354	9.374001	
Chloride	5.57	5.22	6	
Fluoride	3.68	3.547	3.827	
Nitrate	9.464	8.400001	10.78	
Nitrite	6.684	6.164	7.324	
Phosphorus (Ortho)	12.397	11.544	13.764	
Sulfate	14.087	13.37	15.37	

LCS Recoveries

BatchRunID/RunID:====>				201308261415-191								
QcBatchID:====>				LCSS-1115								
Date/Time:====>				09/06/13 10:55								
Analytical Method:====>				EPA 9056A								
Matrix:====>				Soil		Soil		Soil		Soil		Soil
Analyte	EPA 9056A **Amt**	**Limits**	**Amt**	**Limits**	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags
Chloride	5	80-120			101									
Nitrate	5	80-120			97									
Nitrite	5	80-120			99									
Sulfate	5	80-120			102									

MS/MSD/DUP Recovery

3090309 0523

Prep Batch: S-1115 Sample ID: AC74394-002
Method: EPA 9056A Matrix Soil

Qc Type: MS

Analyte	Amt	Limits Recov	Dil	MS Conc	Sam Conc	Recov	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Chloride	5	80-120	1	24.0943	18.5275	111		20130826141	194	09/06/13 12:00	20130826141	193	09/06/13 11:38
Nitrate	5	80-120	1	4.9188	0	98		20130826141	194	09/06/13 12:00	20130826141	193	09/06/13 11:38
Nitrite	5	80-120	1	5.037	0	101		20130826141	194	09/06/13 12:00	20130826141	193	09/06/13 11:38
Sulfate	5	80-120	1	10.8658	6.015	97		20130826141	194	09/06/13 12:00	20130826141	193	09/06/13 11:38

Qc Type: MSD

Analyte	Amt	Limits Recov	Limits Rpd	Dil	MS Conc	Sam Conc	Recov	Rpd	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Chloride	5	80-120	20	1	24.1137	18.5275	112	0.1		20130826141	195	09/06/13 12:22	20130826141	193	09/06/13 11:38
Nitrate	5	80-120	20	1	4.9253	0	99	0.1		20130826141	195	09/06/13 12:22	20130826141	193	09/06/13 11:38
Nitrite	5	80-120	20	1	5.0349	0	101	0		20130826141	195	09/06/13 12:22	20130826141	193	09/06/13 11:38
Sulfate	5	80-120	20	1	10.7926	6.015	96	0.7		20130826141	195	09/06/13 12:22	20130826141	193	09/06/13 11:38

Calibration Summary:

Instrument: DA1
Analysis Meth: SW846 7.3.3

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide (Reactive)	20130905124	9	ICV	94	0.4	90-110
Cyanide (Reactive)	20130905124	21	CCV	95	0.4	90-110
Cyanide (Reactive)	20130905124	27	CCV	98	0.4	90-110

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 9/4/13

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130905124	9/5/13 13:01	MBS-591	11	Cyanide (	ND	0.50

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130905124	9/5/13 12:59	CCB	10	Cyanide (	ND	0.02

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130905124	9/5/13 13:24	CCB	22	Cyanide (	ND	0.02
20130905124	9/5/13 13:34	CCB	28	Cyanide (	ND	0.02

LCS Recoveries

			BatchRunID/RunID:====>	201309051240-12							
			QcBatchID:====>	LCSS-591							
			Date/Time:====>	09/05/13 13:03							
			Analytical Method:====>	SW846 7.3.3							
			Matrix:====>	Soil		Soil		Soil		Soil		Soil	
Analyte	SW846 7.3. Amt	Limits	Amt	Limits	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags
Cyanide (Rea	0.4	75-125			96									

MS/MSD/DUP Recovery

Prep Batch: S-591 Sample ID: AC74358-006
Method: SW846 7.3.3 Matrix: Soil

Qc Type: MS		Limits			MS	Sample			MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov		Dil	Conc	Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide (Reactive)	0.4	75-125		1	0.3605	0	90		20130905124	13	09/05/13 13:05	20130905124	15	09/05/13 13:09

Qc Type: MSD		Limits			MSD	Sample				MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Rpd	Dil	Conc	Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide (Reactive)	0.4	75-125	20	1	0.3931	0	98	8.7		20130905124	14	09/05/13 13:07	20130905124	15	09/05/13 13:09

Calibration Summary:

Instrument: DA1
Analysis Meth: EPA 9012B

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20130904132	9	ICV	97	0.4	90-110
Cyanide	20130904132	21	CCV	98	0.4	90-110
Cyanide	20130904132	33	CCV	103	0.4	90-110
Cyanide	20130904132	41	CCV	99	0.4	90-110

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 9/4/13

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130904132	9/4/13 13:49	MBS-1224	11	Cyanide	ND	0.24

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130904132	9/4/13 13:47	CCB	10	Cyanide	ND	0.02

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130904132	9/4/13 14:12	CCB	22	Cyanide	ND	0.02
20130904132	9/4/13 14:38	CCB	34	Cyanide	ND	0.02
20130904132	9/4/13 14:52	CCB	42	Cyanide	ND	0.02

LCS Recoveries

BatchRunID/RunID:===>			201309041329-12								
QcBatchID:===>			LCSS-1224								
Date/Time:===>			09/04/13 13:52								
Analytical Method:===>			EPA 9012B								
Matrix:===>			Soil		Soil		Soil		Soil		Soil
Analyte	EPA 9012B **Amt**	**Limits**	**Amt**	**Limits**	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags
Cyanide	0.4	90-110			98									

MS/MSD/DUP Recovery

Prep Batch: S-1224 Sample ID: AC74296-005
Method: EPA 9012B Matrix: Soil

Qc Type: DUP	Limits			DUP	Sample			MS/MSD/DUP			Non Spike		
Analyte		Rpd	Dil	Conc	Conc	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide		20	1	0	0	NA		20130904132	15	09/04/13 13:58	20130904132	14	09/04/13 13:56

Qc Type: MS		Limits		MS	Sample			MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Dil	Conc	Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125	1	0.3016	0	75		20130904132	16	09/04/13 14:00	20130904132	14	09/04/13 13:56

Qc Type: MSD		Limits			MSD	Sample				MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Rpd	Dil	Conc	Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125	20	1	0.2696	0	67	11.2	Ms	20130904132	17	09/04/13 14:02	20130904132	14	09/04/13 13:56

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Analysis Type: IGNIT-MOD

Batch Number: IGNIT-MOD-180

Units: Deg. F

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-09/09/13	81	90-110	NA	~~82.88~~ 82.76	102	NA	
DUP	AC74454-004	0	NA	20	#Error	NA	NA	Nc

MA 9/9

Calibration Curve Information

Analytical Method(s)

EPA 1010

MA 9/9

Sam #	Type	MB	Result	RL	Per Sol	Full Result	Obs FP	Press	p-Xylene Std	Prep Date	Prep By	Anal Date	Anal By
CAL-01-09/09/13	CAL-01		83		100	~~82.88~~ 82.76	82.82	761	82.76			09/09/13	SDL
AC74454-004	DUP		>141		100	0	>141	761	82.44			09/09/13	SDL
AC74358-006	Sample		>141		100	0	>141	761	82.44			09/09/13	SDL
AC74388-001	Sample		>141		100	0	>141	761	82.76			09/09/13	SDL
AC74388-002	Sample		>141		100	0	>141	761	82.44			09/09/13	SDL
AC74453-001	Sample		>141		100	0	>141	761	82.76			09/09/13	SDL
AC74453-002	Sample		>141		100	0	>141	761	82.44			09/09/13	SDL
AC74453-003	Sample		>141		100	0	>141	761	82.76			09/09/13	SDL
AC74453-004	Sample		>141		100	0	>141	761	82.44			09/09/13	SDL
AC74453-005	Sample		>141		100	0	>141	761	82.76			09/09/13	SDL
AC74453-011	Sample		>141		100	0	>141	761	82.44			09/09/13	SDL
AC74286-001	Sample		>141		100	0	>141	761	82.76			09/09/13	SDL
AC74286-002	Sample		>141		100	0	>141	761	82.44			09/09/13	SDL
AC74286-003	Sample		>141		100	0	>141	761	82.76			09/09/13	SDL
AC74454-004	Sample		>141		100	0	>141	761	82.76			09/09/13	SDL
AC74454-006	Sample		>141		100	0	>141	761	82.44			09/09/13	SDL

SDL 9/9/13

MA 9/9/13

Flag Codes: Ra - Recovery failed specified criteria (PVS/LCS/MS/MSD/ICV/CAL)
Na - Not Applicable
Rp - RPD failed specified criteria.
Nc - Not Checked ..either one or both values =ND

Analysis Type: PAINT FILT

Batch Number: PAINT FILT-348

Units:

Calibration Curve Information

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
DUP	AC73664-001	0	NA	NA	#Error	NA	NA	

Analytical Method(s)

EPA 9095A

Sam #	Type	MB	Result	RL	Per Sol	Full Result	Pos/Neg	Prep Date	Prep By	Anal Date	Anal By
AC73664-001	DUP		NEG		100	0	NEG			09/05/13	SDL
AC73664-001	Sample		NEG		100	0	NEG			09/05/13	SDL
AC74317-001	Sample		NEG		100	0	NEG			09/05/13	SDL
AC74318-001	Sample		NEG		100	0	NEG			09/05/13	SDL
AC74358-006	Sample		NEG		100	0	NEG			09/05/13	SDL
AC74385-001	Sample		NEG		100	0	NEG			09/05/13	SDL
AC74286-001	Sample		NEG		100	0	NEG			09/05/13	SDL
AC74286-002	Sample		NEG		100	0	NEG			09/05/13	SDL
AC74286-003	Sample		NEG		100	0	NEG			09/05/13	SDL
AC74286-004	Sample		NEG		100	0	NEG			09/05/13	SDL
AC74286-005	Sample		NEG		100	0	NEG			09/05/13	SDL
AC74286-006	Sample		NEG		100	0	NEG			09/05/13	SDL
AC74286-007	Sample		NEG		100	0	NEG			09/05/13	SDL
AC74286-008	Sample		NEG		100	0	NEG			09/05/13	SDL
AC74286-009	Sample		NEG		100	0	NEG			09/05/13	SDL
AC74286-010	Sample		NEG		100	0	NEG			09/05/13	SDL
AC74286-011	Sample		NEG		100	0	NEG			09/05/13	SDL

SDL
9/5/13

DA 9/6/13

Flag Codes: Ra - Recovery failed specified criteria (PVS/LCS/MS/MSD/ICV/CAL) Rp - RPD failed specified criteria.
Na - Not Applicable Nc - Not Checked ..either one or both values =ND

Analysis Type: RS

Batch Number: RS-591

Units: mg/kg

Calibration Curve Information

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-09/05/13	16	90-110	NA	15.62925	98	NA	
LCS	LCS	400	75-125	NA	410.76875	103	NA	
MS	AC74358-006	400	75-125	NA	400.75	100	NA	
MSD	AC74358-006	400	75-125	20	400.75	100	0	

Analytical Method(s)

SW846 7.3.4

Sam #	Type	MB	Result	RL	Per Sol	Full Result	Titr Vol	Iod Vol	DF	Sam Wt (g)	Scrb Vol (ml)	Prep Date	Prep By	Anal Date	Anal By
CAL-01-09/05/13	CAL-01		16		100	15.629	6.1	10	1	250	250			09/05/13	hs
MB-1-09/04/13	MB	MB-1-09/04/13	ND	100	100	10.019	9.9	10	1	10	250	09/04/13	hs	09/05/13	hs
LCS	LCS	MB-1-09/04/13	410	100	100	410.77	5.9	10	1	10	250	09/04/13	hs	09/05/13	hs
AC74358-006	MS	MB-1-09/04/13	400	100	90	400.75	6.0	10	1	10	250	09/04/13	hs	09/05/13	hs
AC74358-006	MSD	MB-1-09/04/13	400	100	90	400.75	6.0	10	1	10	250	09/04/13	hs	09/05/13	hs
AC74358-006	Sample	MB-1-09/04/13	ND	100	90	20.038	9.8	10	1	10	250	09/04/13	hs	09/05/13	hs
AC74303-003	Sample	MB-1-09/04/13	ND	100	85	20.038	9.8	10	1	10	250	09/04/13	hs	09/05/13	hs
AC74303-004	Sample	MB-1-09/04/13	ND	100	70	10.019	9.9	10	1	10	250	09/04/13	hs	09/05/13	hs
AC74303-005	Sample	MB-1-09/04/13	ND	100	79	20.038	9.8	10	1	10	250	09/04/13	hs	09/05/13	hs
AC74334-009	Sample	MB-1-09/04/13	ND	100	84	20.038	9.8	10	1	10	250	09/04/13	hs	09/05/13	hs
AC74334-010	Sample	MB-1-09/04/13	ND	100	74	20.038	9.8	10	1	10	250	09/04/13	hs	09/05/13	hs
AC74334-011	Sample	MB-1-09/04/13	ND	100	75	20.038	9.8	10	1	10	250	09/04/13	hs	09/05/13	hs
AC74334-022	Sample	MB-1-09/04/13	ND	100	69	10.019	9.9	10	1	10	250	09/04/13	hs	09/05/13	hs
AC74334-023	Sample	MB-1-09/04/13	ND	100	77	10.019	9.9	10	1	10	250	09/04/13	hs	09/05/13	hs
AC74334-024	Sample	MB-1-09/04/13	ND	100	75	30.056	9.7	10	1	10	250	09/04/13	hs	09/05/13	hs

HS 9/5/13

AA 9/5/13

Flag Codes: Ra - Recovery failed specified criteria (PVS/LCS/MS/MSD/ICV/CAL)
Na - Not Applicable
Rp - RPD failed specified criteria.
Nc - Not Checked ..either one or both values =ND

30309 0535

Hex-Cr Soil SW-846 3060A / 7196A

	Hex-Cr Soil		Q.C. DATA										
atch#	172		QC Sample	AC74296-005 NS.Sample									
ate	9/4/2013			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD	
nalyst	JW			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL	
repBy	JW/BCT		LCS	20.00	19.74	19.74	99%	75-125%	NA	NA	PASS		
			MS(Sol)	20.00	2.48	2.48	12%	75-125%	NA	NA			
			MS(Insol)	2318.51	8.60	8.60	0%	75-125%	NA	20%		PASS	
			Sample	NA	ND	NA	NA	NA	NA	NA			
			Sample Dup	NA	ND	NA	NA	NA	NA	20%		PASS	
			PVS	20.00	11.32	11.32	57%	75-125%	NA	NA			
Lead Chromate Added :	0.0155	g											
Upper Calibration Abbsorbance:	0.702												

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ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3765	0.0000	0.3765	0.525182598	1	1	1	1	0.525	0.500	105	9/5/13 14:43	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	0.0026	0.0000	0.0026	-0.005874567	1	1	1	1	-0.006	0.025		9/5/13 14:43	
MB.Sample	0.0027	0.0000	0.0027	-0.005732535	1	2.5	1	100	-0.229	1.000		9/5/13 14:43	
LCS.Sample	0.3541	0.0000	0.3541	0.493367429	1	2.5	1	100	19.735	1.000		9/5/13 14:44	
AC74296-005 NS.Sample	0.0126	0.0086	0.0040	-0.003886121	0.43	2.5	1	100	-0.361	2.326		9/5/13 14:44	
AC74296-005 D.Sample	0.0207	0.0086	0.0121	0.00761846	0.43	2.5	1	100	0.709	2.326		9/5/13 14:46	
AC74296-005 MS.Sample	0.0341	0.0086	0.0255	0.02665073	0.43	2.5	1	100	2.479	2.326		9/5/13 14:46	
AC74296-005 MSD.Sample	0.0804	0.0086	0.0718	0.092411481	0.43	2.5	1	100	8.596	2.326		9/5/13 14:47	
AC74296-005 PVS.Sample	0.1010	0.0086	0.0924	0.121670054	0.43	2.5	1	100	11.318	2.326		9/5/13 14:48	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3765		0.3765	0.525182598	1	1	1	1	0.525	0.025	105	9/5/13 14:43	PASS
ICB.Sample	0.0026		0.0026	-0.005874567	1	1	1	1	-0.006	0.025		9/5/13 14:43	
MB.Sample	0.0027		0.0027	-0.005732535	1	2.5	1	100	-0.229	1.000		9/5/13 14:43	
LCS.Sample	0.3541		0.3541	0.493367429	1	2.5	1	100	19.735	1.000		9/5/13 14:44	
AC74296-005 NS.Sample	0.0126	0.0086	0.0040	-0.003886121	0.43	2.5	1	100	-0.361	2.326		9/5/13 14:44	
AC74296-005 D.Sample	0.0207	0.0086	0.0121	0.00761846	0.43	2.5	1	100	0.709	2.326		9/5/13 14:46	
AC74296-005 MS.Sample	0.0341	0.0086	0.0255	0.02665073	0.43	2.5	1	100	2.479	2.326		9/5/13 14:46	
AC74296-005 MSD.Sample	0.0804	0.0086	0.0718	0.092411481	0.43	2.5	1	100	8.596	2.326		9/5/13 14:47	
AC74296-005 PVS.Sample	0.1010	0.0086	0.0924	0.121670054	0.43	2.5	1	100	11.318	2.326		9/5/13 14:48	
CCV.Control	0.3490		0.3490	0.486123829	1	1	1	1	0.486	0.025		9/5/13 14:48	
CCB.Sample	0.0049		0.0049	-0.002607834	1	1	1	1	-0.003	0.025		9/5/13 14:48	
AC74296-006.Sample	0.0341	0.0246	0.0095	0.003925633	0.48	2.5	1	100	0.327	2.083		9/5/13 14:49	
AC74276-009.Sample	0.0206	0.0187	0.0019	-0.006868789	0.49	2.5	1	100	-0.561	2.041		9/5/13 14:49	
AC74276-011.Sample	0.0181	0.0174	0.0007	-0.008573171	0.51	2.5	1	100	-0.672	1.961		9/5/13 14:50	
AC74358-006.Sample	0.0274	0.0227	0.0047	-0.002891898	0.9	2.5	1	100	-0.129	1.111		9/5/13 14:51	
AC74359-001.Sample	0.0070	0.0030	0.0040	-0.003886121	0.91	2.5	1	100	-0.171	1.099		9/5/13 14:51	
AC74359-002.Sample	0.0022	0.0023	-0.0001	-0.009709427	0.88	2.5	1	100	-0.441	1.136		9/5/13 14:52	
AC74359-003.Sample	0.0055	0.0025	0.0030	-0.005306439	0.88	2.5	1	100	-0.241	1.136		9/5/13 14:52	
AC74221-011.Sample	0.0149	0.0120	0.0029	-0.005448472	0.91	2.5	1	100	-0.239	1.099		9/5/13 14:52	
AC74221-012.Sample	0.0151	0.0143	0.0008	-0.00843114	0.92	2.5	1	100	-0.367	1.087		9/5/13 14:53	
CCV-2.Control	0.3484		0.3484	0.485271624	1	1	1	1	0.485	0.025	97	9/5/13 14:53	PASS
CCB-2.Sample	0.0030		0.0030	-0.005306439	1	1	1	1	-0.005	0.025		9/5/13 14:55	
AC74221-013.Sample	0.0217	0.0191	0.0026	-0.005874565	0.92	2.5	1	100	-0.255	1.087		9/5/13 14:55	
AC74257-001.Sample	0.0390	0.0382	0.0008	-0.008431137	0.87	2.5	1	100	-0.388	1.149		9/5/13 14:56	
AC74257-002.Sample	0.0120	0.0080	0.0040	-0.003886121	0.93	2.5	1	100	-0.167	1.075		9/5/13 14:56	
AC74257-003.Sample	0.0097	0.0083	0.0014	-0.007578949	0.91	2.5	1	100	-0.333	1.099		9/5/13 14:56	
AC74257-004.Sample	0.0196	0.0171	0.0025	-0.0060166	0.89	2.5	1	100	-0.270	1.124		9/5/13 14:57	
AC74257-005.Sample	0.0403	0.0314	0.0089	0.003073443	0.87	2.5	1	100	0.141	1.149		9/5/13 14:57	
AC74246-008.Sample	0.0035	0.0033	0.0002	-0.009283332	0.87	2.5	1	100	-0.427	1.149		9/5/13 14:57	
AC74246-009.Sample	0.0074	0.0071	0.0003	-0.0091413	0.86	2.5	1	100	-0.425	1.163		9/5/13 14:58	

BB 9/5/13

172 JW 9/6/13

3090309 0536

Hex-Cr Soil SW-846 3060A / 7196A

r6 soil curve		Date	9/5/2013			Batch #	172			TestGroupID	CR6-SOIL
										TestID:	CR-HEX
TD ppm			ABS								
0			0.0010		Intercept	Constant	0.006736091				
0.025			0.0194								
0.25			0.1860		Slope	X Coefficients	0.70406735				
0.5			0.3750								
1			0.7020								

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STD mg/L			ABS		PPM	DIFF					
0			0.0010		-0.008147077	0.008147077					
0.025			0.0194		0.017986787	0.007013213					
0.25			0.1860		0.254611877	-0.004611877					
0.5			0.3750		0.523052105	-0.023052105					
1			0.7020		0.987496309	0.012503691					

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SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.999396907
R Square	0.998794177
Adjusted R Square	0.998392236
Standard Error	0.011672602
Observations	5

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.338570499	0.338570499	2484.92777	1.77775E-05
Residual	3	0.000408749	0.00013625		
Total	4	0.338979248			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.006736091	0.007238113	0.930641849	0.420687022	-0.016298836	0.029771018	-0.016298836	0.029771018
X Variable 1	0.70406735	0.014123987	49.84904984	1.77775E-05	0.659118476	0.749016223	0.659118476	0.749016223

MA 9/5/13

172
JW
9/5/13

Hex-Cr Soil SW-846 3060A / 7196A

C74246-010 .Sample	0.0080	0.0061	0.0019	-0.006868789	0.8	2.5	1	100	-0.343	1.250		9/5/13 14:59	
C74296-005 T.Sample	0.0086		0.0086	0.002647345	0.43	2.5	1	100	0.246	2.326		9/5/13 15:00	
CV-3.Control	0.3481		0.3481	0.484845542	1	1	1	1	0.485	0.025	97	9/5/13 15:01	PASS
CB-3.Sample	0.0057		0.0057	-0.001471579	1	1	1	1	-0.001	0.025		9/5/13 15:01	
C74296-006 T.Sample	0.0246		0.0246	0.025372443	0.48	2.5	1	100	2.114	2.083		9/5/13 15:02	
C74276-009 T.Sample	0.0187		0.0187	0.016992563	0.49	2.5	1	100	1.387	2.041		9/5/13 15:03	
C74276-011 T.Sample	0.0174		0.0174	0.01514615	0.51	2.5	1	100	1.188	1.961		9/5/13 15:03	
AC74358-006 T.Sample	0.0227		0.0227	0.022673839	0.9	2.5	1	100	1.008	1.111		9/5/13 15:05	
AC74359-001 T.Sample	0.0030		0.0030	-0.005306439	0.91	2.5	1	100	-0.233	1.099		9/5/13 15:05	
AC74359-002 T.Sample	0.0023		0.0023	-0.006300662	0.88	2.5	1	100	-0.286	1.136		9/5/13 15:05	
AC74359-003 T.Sample	0.0025		0.0025	-0.006016599	0.88	2.5	1	100	-0.273	1.136		9/5/13 15:06	
AC74221-011 T.Sample	0.0120		0.0120	0.007476429	0.91	2.5	1	100	0.329	1.099		9/5/13 15:07	
AC74221-012 T.Sample	0.0143		0.0143	0.010743161	0.92	2.5	1	100	0.467	1.087		9/5/13 15:07	
CCV-4.Control	0.3472		0.3472	0.483567255	1	1	1	1	0.484	0.025	97	9/5/13 15:08	PASS
CCB-4.Sample	0.0025		0.0025	-0.006016599	1	1	1	1	-0.006	0.025		9/5/13 15:08	
AC74221-013 T.Sample	0.0191		0.0191	0.01756069	0.92	2.5	1	100	0.764	1.087		9/5/13 15:08	
AC74257-001 T.Sample	0.0382		0.0382	0.044688775	0.87	2.5	1	100	2.055	1.149		9/5/13 15:09	
AC74257-002 T.Sample	0.0080		0.0080	0.001795154	0.93	2.5	1	100	0.077	1.075		9/5/13 15:10	
AC74257-003 T.Sample	0.0083		0.0083	0.002221249	0.91	2.5	1	100	0.098	1.099		9/5/13 15:10	
AC74257-004 T.Sample	0.0171		0.0171	0.014720055	0.89	2.5	1	100	0.662	1.124		9/5/13 15:10	
AC74257-005 T.Sample	0.0314		0.0314	0.035030609	0.87	2.5	1	100	1.611	1.149		9/5/13 15:12	
AC74246-008 T.Sample	0.0033		0.0033	-0.004880344	0.87	2.5	1	100	-0.224	1.149		9/5/13 15:13	
AC74246-009 T.Sample	0.0071		0.0071	0.000516867	0.86	2.5	1	100	0.024	1.163		9/5/13 15:14	
AC74246-010 T.Sample	0.0061		0.0061	-0.000903452	0.8	2.5	1	100	-0.045	1.250		9/5/13 15:15	
CCV-5.Control	0.3464		0.3464	0.48243098	1	1	1	1	0.482	0.025	96	9/5/13 15:15	PASS
CCB-5.Sample	0.0026		0.0026	-0.005874567	1	1	1	1	-0.006	0.025		9/5/13 15:15	
AC74101-015.Sample	0.0385	0.0080	0.0305	0.033752323	0.87	2.5	1	100	1.552	1.149		9/5/13 15:31	
AC74101-015 T.Sample	0.0080		0.0080	0.001795154	0.87	2.5	1	100	0.083	1.149		9/5/13 15:32	
CCV-6.Control	0.3442		0.3442	0.479306269	1	1	1	1	0.479	0.025	96	9/5/13 15:32	PASS
CCB-6.Sample	0.0027		0.0027	-0.005732535	1	1	1	1	-0.006	0.025		9/5/13 15:32	

9/10/13

172
JW
9-7-13

30903090538

Hex-Cr Soil SW-846 3060A / 7196A

6 soil curve		Date	9/5/2013			Batch #	172A			TestGroupID	CR6-SOIL
D ppm			ABS							TestID:	CR-HEX
0			0.0010		Intercept	Constant	0.006736091				
0.025			0.0194								
0.25			0.1860		Slope	X Coefficients	0.70406735				
0.5			0.3750								
1			0.7020								

STD mg/L			ABS		PPM	DIFF					
0			0.0010		-0.008147077	0.008147077					
0.025			0.0194		0.017986787	0.007013213					
0.25			0.1860		0.254611877	-0.004611877					
0.5			0.3750		0.523052105	-0.023052105					
1			0.7020		0.987496309	0.012503691					

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.999396907
R Square	0.998794177
Adjusted R Square	0.998392236
Standard Error	0.011672602
Observations	5

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.338570499	0.338570499	2484.92777	1.77775E-05
Residual	3	0.000408749	0.00013625		
Total	4	0.338979248			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.006736091	0.007238113	0.930641849	0.420687022	-0.016298836	0.029771018	-0.016298836	0.029771018
X Variable 1	0.70406735	0.014123987	49.84904984	1.77775E-05	0.659118476	0.749016223	0.659118476	0.749016223

09/13/13

172A
JW
9/5/13

3090309 0539

Hex-Cr Soil SW-846 3060A / 7196A

	Hex-Cr Soil		Q.C. DATA										
atch#	172A		QC Sample	AC74296-005 NS.Sample									
ate	9/4/2013			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD	
nalyst	JW			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL	
epBy	JW/BCT		LCS	20.00	19.16	19.16	96%	75-125%	NA	NA	PASS		
			MS(Sol)	20.00	-0.11	-0.11	-1%	75-125%	NA	NA			
			MS(Insol)	2318.51	6.09	6.09	0%	75-125%	NA	20%		PASS	
			Sample	NA	ND	NA	NA	NA	NA	NA			
			Sample Dup	NA	ND	NA	NA	NA	NA	20%		PASS	
			PVS	20.00	7.94	7.94	40%	75-125%	NA	NA			
Lead Chromate Added :	0.0155	g											
Upper Calibration Abbsorbance:	0.702												

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3669	0.0000	0.3669	0.511547519	1	1	1	1	0.512	0.500	102	9/5/13 15:41	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	0.0004	0.0000	0.0004	-0.008999268	1	1	1	1	-0.009	0.025		9/5/13 15:41	
MB.Sample	0.0000	0.0000	0.0000	-0.009567395	1	2.5	1	100	-0.383	1.000		9/5/13 15:42	
LCS.Sample	0.3440	0.0000	0.3440	0.479022243	1	2.5	1	100	19.161	1.000		9/5/13 15:42	
AC74296-005 NS.Sample	0.0142	0.0128	0.0014	-0.007578949	0.43	2.5	1	100	-0.705	2.326		9/5/13 15:42	
AC74296-005 D.Sample	0.0253	0.0128	0.0125	0.008186588	0.43	2.5	1	100	0.762	2.326		9/5/13 15:43	
AC74296-005 MS.Sample	0.0187	0.0128	0.0059	-0.001187515	0.43	2.5	1	100	-0.110	2.326		9/5/13 15:43	
AC74296-005 MSD.Sample	0.0656	0.0128	0.0528	0.065425431	0.43	2.5	1	100	6.086	2.326		9/5/13 15:44	
AC74296-005 PVS.Sample	0.0796	0.0128	0.0668	0.08530989	0.43	2.5	1	100	7.936	2.326		9/5/13 15:44	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3669		0.3669	0.511547519	1	1	1	1	0.512	0.025	102	9/5/13 15:41	PASS
ICB.Sample	0.0004		0.0004	-0.008999268	1	1	1	1	-0.009	0.025		9/5/13 15:41	
MB.Sample	0.0000		0.0000	-0.009567395	1	2.5	1	100	-0.383	1.000		9/5/13 15:42	
LCS.Sample	0.3440		0.3440	0.479022243	1	2.5	1	100	19.161	1.000		9/5/13 15:42	
AC74296-005 NS.Sample	0.0142	0.0128	0.0014	-0.007578949	0.43	2.5	1	100	-0.705	2.326		9/5/13 15:42	
AC74296-005 D.Sample	0.0253	0.0128	0.0125	0.008186588	0.43	2.5	1	100	0.762	2.326		9/5/13 15:43	
AC74296-005 MS.Sample	0.0187	0.0128	0.0059	-0.001187515	0.43	2.5	1	100	-0.110	2.326		9/5/13 15:43	
AC74296-005 MSD.Sample	0.0656	0.0128	0.0528	0.065425431	0.43	2.5	1	100	6.086	2.326		9/5/13 15:44	
AC74296-005 PVS.Sample	0.0796	0.0128	0.0668	0.08530989	0.43	2.5	1	100	7.936	2.326		9/5/13 15:44	
CCV.Control	0.3383		0.3383	0.470926395	1	1	1	1	0.471	0.025		9/5/13 15:45	
CCB.Sample	0.0035		0.0035	-0.00459628	1	1	1	1	-0.005	0.025		9/5/13 15:45	
AC74296-006.Sample	0.0270	0.0161	0.0109	0.005914078	0.48	2.5	1	100	0.493	2.083		9/5/13 15:46	
AC74276-009.Sample	0.0308	0.0249	0.0059	-0.001187516	0.49	2.5	1	100	-0.097	2.041		9/5/13 15:46	
AC74276-011.Sample	0.0183	0.0128	0.0055	-0.001755642	0.51	2.5	1	100	-0.138	1.961		9/5/13 15:47	
AC74358-006.Sample	0.0156	0.0145	0.0011	-0.008005045	0.9	2.5	1	100	-0.356	1.111		9/5/13 15:47	
AC74359-001.Sample	0.0036	0.0044	-0.0008	-0.01070365	0.91	2.5	1	100	-0.470	1.099		9/5/13 15:48	
AC74359-002.Sample	0.0007	0.0000	0.0007	-0.008573172	0.88	2.5	1	100	-0.390	1.136		9/5/13 15:48	
AC74359-003.Sample	0.0005	0.0003	0.0002	-0.009283332	0.88	2.5	1	100	-0.422	1.136		9/5/13 15:49	
AC74221-011.Sample	0.0032	0.0052	-0.0020	-0.012408033	0.91	2.5	1	100	-0.545	1.099		9/5/13 15:49	
AC74221-012.Sample	0.0087	0.0071	0.0016	-0.007294885	0.92	2.5	1	100	-0.317	1.087		9/5/13 15:49	
CCV-2.Sample	0.3367		0.3367	0.468653889	1	1	1	1	0.469	0.025	94	9/5/13 15:50	PASS
CCB-2.Sample	0.0029		0.0029	-0.005448471	1	1	1	1	-0.005	0.025		9/5/13 15:50	
AC74221-013.Sample	0.0097	0.0077	0.0020	-0.006726758	0.92	2.5	1	100	-0.292	1.087		9/5/13 15:51	
AC74257-001.Sample	0.0310	0.0265	0.0045	-0.003175962	0.87	2.5	1	100	-0.146	1.149		9/5/13 15:51	
AC74257-002.Sample	0.0081	0.0091	-0.0010	-0.010987714	0.93	2.5	1	100	-0.473	1.075		9/5/13 15:52	
AC74257-003.Sample	0.0065	0.0038	0.0027	-0.005732535	0.91	2.5	1	100	-0.252	1.099		9/5/13 15:53	
AC74257-004.Sample	0.0147	0.0138	0.0009	-0.008289108	0.89	2.5	1	100	-0.373	1.124		9/5/13 15:53	
AC74257-005.Sample	0.0345	0.0284	0.0061	-0.000903453	0.87	2.5	1	100	-0.042	1.149		9/5/13 15:54	
AC74246-008.Sample	0.0010	0.0016	-0.0006	-0.010419587	0.87	2.5	1	100	-0.479	1.149		9/5/13 15:54	
AC74246-009.Sample	0.0027	0.0028	-0.0001	-0.009709427	0.86	2.5	1	100	-0.452	1.163		9/5/13 15:55	

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Hex-Cr Soil SW-846 3060A / 7196A

74246-010 .Sample	0.0079	0.0068	0.0011	-0.008005046	0.8	2.5	1	100	-0.400	1.250		9/5/13 15:55	
74296-005 T.Sample	0.0128		0.0128	0.008612683	0.43	2.5	1	100	0.801	2.326		9/5/13 15:56	
V-3.Control	0.3357		0.3357	0.467233589	1	1	1	1	0.467	0.025	93	9/5/13 15:56	PASS
B-3.Sample	0.0015		0.0015	-0.007436917	1	1	1	1	-0.007	0.025		9/5/13 15:57	
74296-006 T.Sample	0.0161		0.0161	0.013299736	0.48	2.5	1	100	1.108	2.083		9/5/13 15:57	
74276-009 T.Sample	0.0249		0.0249	0.02579854	0.49	2.5	1	100	2.106	2.041		9/5/13 15:58	
74276-011 T.Sample	0.0128		0.0128	0.008612683	0.51	2.5	1	100	0.676	1.961		9/5/13 15:58	
AC74358-006 T.Sample	0.0145		0.0145	0.011027225	0.9	2.5	1	100	0.490	1.111		9/5/13 16:00	
AC74359-001 T.Sample	0.0044		0.0044	-0.003317993	0.91	2.5	1	100	-0.146	1.099		9/5/13 16:01	
AC74359-002 T.Sample	0.0000		0.0000	-0.009567395	0.88	2.5	1	100	-0.435	1.136		9/5/13 16:02	
AC74359-003 T.Sample	0.0003		0.0003	-0.0091413	0.88	2.5	1	100	-0.416	1.136		9/5/13 16:02	
AC74221-011 T.Sample	0.0052		0.0052	-0.002181738	0.91	2.5	1	100	-0.096	1.099		9/5/13 16:03	
AC74221-012 T.Sample	0.0071		0.0071	0.000516867	0.92	2.5	1	100	0.022	1.087		9/5/13 16:04	
AC74221-013 T.Sample	0.0077		0.0077	0.001369058	0.92	2.5	1	100	0.060	1.087		9/5/13 16:04	
CCV-4.Control	0.3340		0.3340	0.464819027	1	1	1	1	0.465	0.025	93	9/5/13 16:05	PASS
CCB-4.Sample	0.0002		0.0002	-0.009283332	1	1	1	1	-0.009	0.025		9/5/13 16:05	
AC74257-001 T.Sample	0.0265		0.0265	0.028071049	0.87	2.5	1	100	1.291	1.149		9/5/13 16:06	
AC74257-002 T.Sample	0.0091		0.0091	0.003357505	0.93	2.5	1	100	0.144	1.075		9/5/13 16:06	
AC74257-003 T.Sample	0.0038		0.0038	-0.004170184	0.91	2.5	1	100	-0.183	1.099		9/5/13 16:07	
AC74257-004 T.Sample	0.0138		0.0138	0.010033002	0.89	2.5	1	100	0.451	1.124		9/5/13 16:07	
AC74257-005 T.Sample	0.0284		0.0284	0.030769655	0.87	2.5	1	100	1.415	1.149		9/5/13 16:08	
AC74246-008 T.Sample	0.0016		0.0016	-0.007294886	0.87	2.5	1	100	-0.335	1.149		9/5/13 16:09	
AC74246-009 T.Sample	0.0028		0.0028	-0.005590503	0.86	2.5	1	100	-0.260	1.163		9/5/13 16:09	
AC74246-010 T.Sample	0.0068		0.0068	9.07716E-05	0.8	2.5	1	100	0.005	1.250		9/5/13 16:10	
AC74101-015.Sample	0.0338	0.0039	0.0299	0.032900131	0.87	2.5	1	100	1.513	1.149		9/5/13 16:11	
AC74101-015 T.Sample	0.0039		0.0039	-0.004028153	0.87	2.5	1	100	-0.185	1.149		9/5/13 16:11	
CCV-5.Control	0.3326		0.3326	0.46283059	1	1	1	1	0.463	0.025	93	9/5/13 16:11	PASS
CCB-5.Sample	0.0006		0.0006	-0.008715204	1	1	1	1	-0.009	0.025		9/5/13 16:11	

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HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)
Method 3060A

Batch: 172 Analyst JW Date 9/4/13
Digestion Start: 15:10 Finish: 16:10 Hot Plate Temp 1: 90 Hot Plate Temp 2: 91.C

Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 From	0.0ml	7.84	100	1.97	
Cal Curve 0.025 100	0.025	7.69		1.90	V. 171965
Cal Curve 0.25 PPM	0.25	7.63		2.11	V. 171966
Cal Curve 0.5	0.5	7.55		2.13	V. 171967
Cal Curve 1.0	1.0	7.10		2.04	V. 171968
MB	2.5gm	7.13		1.98	
LCS		7.19		1.95	V. 171972
QC Sample					
PDS AC74296-005		7.24		2.03	ICV V. 171969
DUP		7.57		2.16	CCV. V. 171970
(Sol) MS		7.46		2.12	
(Insol) MSD		7.48		2.13	
1. AC74296-005		7.45		1.94	
2. 006		7.40		1.90	
3. AC74276-009		7.36		1.86	
4. 011		7.81		1.84	
5. AC74101-015		7.75		1.80	
6. AC74358-006		7.63		1.83	
7. AC74359-001		7.86		1.84	
8. 002		7.75		2.16	
9. 003		7.49		2.10	
10. AC74221-011		7.54		2.15	
11. 012		7.50		2.11	
12. 013		7.48		2.13	
13. AC74257-001		7.56		1.97	
14. 002		7.39		1.95	
15. 003		7.30		1.98	
16. 004		7.26		1.86	
17. 005		7.28		1.94	
18. AC74246-008		7.80		2.06	
19. 009		7.56		2.09	
20. 010		7.50		2.15	

Reagent	Lot #:		$MgCl_2$	#
				7734
Digestion Solution - pH must be > 11.5. If not, discard	V- 171802	pH 13.16	Lead Chromate (PbCr)	# 6413
Phosphate Buffer	V- 164939		Weight of PbCr (10-20mg)	0.0155 g ~~mg~~
			PVS 100ppm Volume 0.5ml ml	10% H_2SO_4 V: 170990
			Sample chosen for PVS should be spiked at 40 mg/kg. If sample is > 40 mg/kg, use 2X	5 M HNO_3 V: 171336
			Spike Volume 1ml & Lot # V- 167177	Col Rea. V: 171910

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)
Method 3060A

Batch: 172A Analyst JW Date 9/4/13
Digestion Start: 16:20 Finish: 17:20 Hot Plate Temp 1: 91°C Hot Plate Temp 2: 92°C

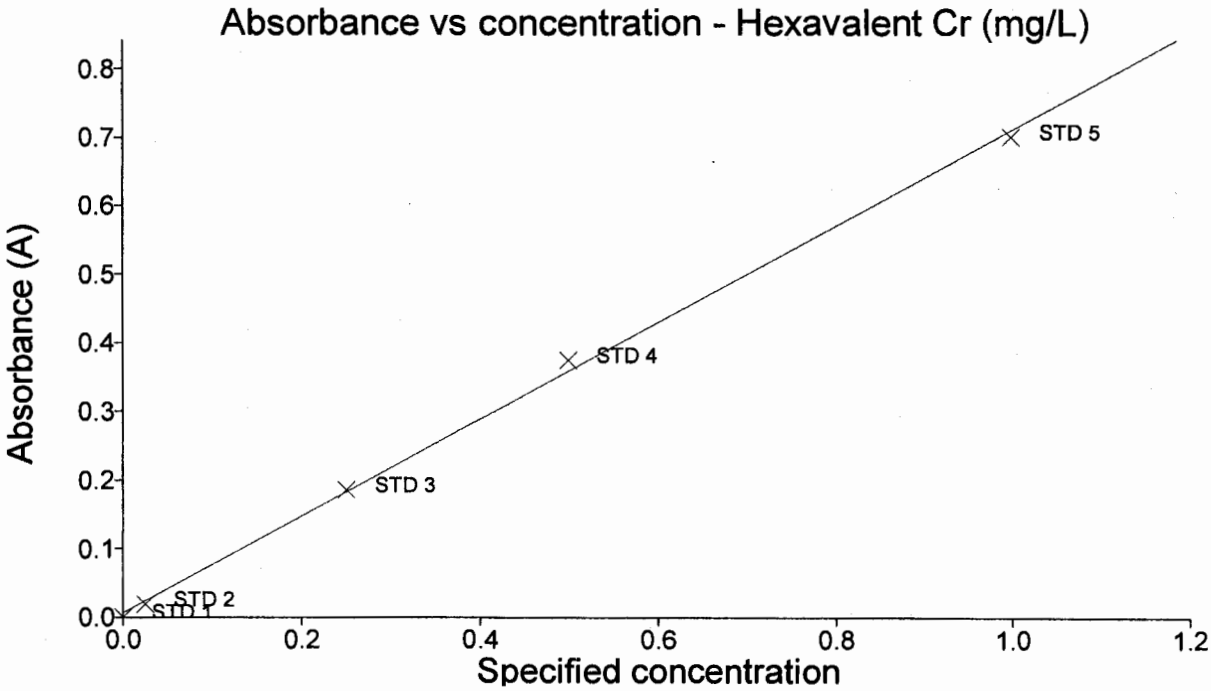
Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 from	0.0 ml	7.84	100	1.97	
Cal Curve 0.025 (100ppm)	0.025	7.69		1.90	V. 171965
Cal Curve 0.25	0.25	2.63		2.11	V. 171966
Cal Curve 0.5	0.5	7.55		2.13	V. 171967
Cal Curve 1.0	1.0	7.10		2.04	V. 171968
MB	2.5gm	7.13		1.97	
LCS		7.64		2.13	V. 171972
QC Sample AC74296.005					
PDS		7.54		2.11	ICV V. 171969
DUP		7.50		2.10	CCV V. 171970
(Sol) MS		7.36		2.16	
(Insol) MSD		7.31		2.19	
1. AC74296.005		7.28		2.04	
2. 006		7.39		2.18	
3. AC74276.009		7.66		1.97	
4. 011		7.54		1.90	
5. AC74101.015		7.50		1.82	
6. AC74358.006		7.91		1.86	
7. AC74359.001		7.84		1.84	
8. 002		7.83		1.80	
9. 003		7.37		1.94	
10. AC74221.011		7.38		2.03	
11. 012		7.41		2.16	
12. 013		7.54		2.14	
13. AC74257.001		7.50		2.19	
14. 002		7.61		2.18	
15. 003		7.63		2.03	
16. 004		7.62		2.16	
17. 005		7.68		2.17	
18. AC74246.008		7.59		2.14	
19. 009		7.57		2.10	
20. 010		7.54		2.13	

Reagent	Lot #:		$MgCl_2$	#
				7734
Digestion Solution - pH must be > 11.5. If not, discard	V- 171802	pH 13.16	Lead Chromate (PbCr)	# 6413
Phosphate Buffer	V- 169939		Weight of PbCr (10-20mg)	0.0155 g mg
			PVS Volume 0.5ml 1g 100ppm ml	10% H_2SO_4 V: 170990
			Sample chosen for PVS should be spiked at 40 mg/kg. If sample is > 40 mg/kg, use 2X	5 M HNO_3 V: 171336
			Spike Volume 1ml & Lot # V- 167177	Col Rea. V: 171910

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9994

Calibrated on: 09/05/13 18:31

User name: wet chem

Method name: Hexavalent Cr

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample.Cycle1	0.0000	-0.0081	0.0081	0.0010
STD 2.Sample.Cycle1	0.0250	0.0180	0.0070	0.0194
STD 3.Sample.Cycle1	0.2500	0.2546	-0.0046	0.1860
STD 4.Sample.Cycle1	0.5000	0.5230	-0.0230	0.3750
STD 5.Sample.Cycle1	1.0000	0.9875	0.0125	0.7020

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Report Generated On:09/05/2013 15:33

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Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		09/05/13 14:43:01	0.5000	-0.0252	0.3765	0.5252
ICB.Sample		09/05/13 14:43:16			0.0026	-0.0059 : Exceeded calibration limits.
MB.Sample		09/05/13 14:43:38			0.0027	-0.0058 : Exceeded calibration limits.
LCS.Sample		09/05/13 14:44:07			0.3541	0.4934
AC74296-005 NS.Sample		09/05/13 14:44:45			0.0126	0.0083
AC74296-005 D.Sample		09/05/13 14:46:25			0.0207	0.0198
AC74296-005 MS.Sample		09/05/13 14:46:48			0.0341	0.0388
AC74296-005 MSD.Sample		09/05/13 14:47:32			0.0804	0.1046
AC74296-005 PVS.Sample		09/05/13 14:48:03			0.1010	0.1339
CCV.Control		09/05/13 14:48:19	0.5000	0.0139	0.3490	0.4861
CCB.Sample		09/05/13 14:48:56			0.0049	-0.0026 : Exceeded calibration limits.
AC74296-006.Sample		09/05/13 14:49:30			0.0341	0.0388
AC74276-009.Sample		09/05/13 14:49:57			0.0206	0.0197
AC74276-011.Sample		09/05/13 14:50:26			0.0181	0.0161
AC74358-006.Sample		09/05/13 14:51:21			0.0274	0.0294
AC74359-001.Sample		09/05/13 14:51:43			0.0070	0.0004
AC74359-002.Sample		09/05/13 14:52:04			0.0022	-0.0064 : Exceeded calibration limits.
AC74359-003.Sample		09/05/13 14:52:25			0.0055	-0.0018 : Exceeded calibration limits.
AC74221-011.Sample		09/05/13 14:52:50			0.0149	0.0116
AC74221-012.Sample		09/05/13 14:53:18			0.0151	0.0119
CCV-2.Control		09/05/13 14:53:36	0.5000	0.0148	0.3484	0.4852
CCB-2.Sample		09/05/13 14:55:05			0.0030	-0.0053 : Exceeded calibration limits.
AC74221-013.Sample		09/05/13 14:55:37			0.0217	0.0212

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Report Generated On:09/05/2013 15:33

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Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AC74257-001.Sample		09/05/13 14:56:04			0.0390	0.0458
AC74257-002.Sample		09/05/13 14:56:24			0.0120	0.0074
AC74257-003.Sample		09/05/13 14:56:54			0.0097	0.0042
AC74257-004.Sample		09/05/13 14:57:18			0.0196	0.0182
AC74257-005.Sample		09/05/13 14:57:42			0.0403	0.0477
AC74246-008.Sample		09/05/13 14:57:59			0.0035	-0.0045 : Exceeded calibration limits
AC74246-009.Sample		09/05/13 14:58:24			0.0074	0.0009
AC74246-010 .Sample		09/05/13 14:59:32			0.0080	0.0018
AC74296-005 T.Sample		09/05/13 15:00:36			0.0086	0.0026
CCV-3.Control		09/05/13 15:01:34	0.5000	0.0152	0.3481	0.4848
CCB-3.Sample		09/05/13 15:01:49			0.0057	-0.0015 : Exceeded calibration limits
AC74296-006 T.Sample		09/05/13 15:02:32			0.0246	0.0253
AC74276-009 T.Sample		09/05/13 15:03:13			0.0187	0.0169
AC74276-011 T.Sample		09/05/13 15:03:49			0.0174	0.0152
AC74358-006 T.Sample		09/05/13 15:05:11			0.0227	0.0227
AC74359-001 T.Sample		09/05/13 15:05:35			0.0030	-0.0053 : Exceeded calibration limits
AC74359-002 T.Sample		09/05/13 15:05:59			0.0023	-0.0062 : Exceeded calibration limits
AC74359-003 T.Sample		09/05/13 15:06:41			0.0025	-0.0061 : Exceeded calibration limits
AC74221-011 T.Sample		09/05/13 15:07:14			0.0120	0.0075
AC74221-012 T.Sample		09/05/13 15:07:37			0.0143	0.0107
CCV-4.Control		09/05/13 15:08:05	0.5000	0.0165	0.3472	0.4835
CCB-4.Sample		09/05/13 15:08:24			0.0025	-0.0060 : Exceeded calibration limits
AC74221-013 T.Sample		09/05/13 15:08:52			0.0191	0.0175

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Report Generated On:09/05/2013 15:33

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Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AC74257-001 T.Sample		09/05/13 15:09:37			0.0382	0.0447
AC74257-002 T.Sample		09/05/13 15:10:08			0.0080	0.0019
AC74257-003 T.Sample		09/05/13 15:10:31			0.0083	0.0022
AC74257-004 T.Sample		09/05/13 15:10:56			0.0171	0.0147
AC74257-005 T.Sample		09/05/13 15:12:05			0.0314	0.0351
AC74246-008 T.Sample		09/05/13 15:13:10			0.0033	-0.0049 : Exceeded calibration limits
AC74246-009 T.Sample		09/05/13 15:14:25			0.0071	0.0005
AC74246-010 T.Sample		09/05/13 15:15:00			0.0061	-0.0010 : Exceeded calibration limits
CCV-5.Control		09/05/13 15:15:17	0.5000	0.0176	0.3464	0.4824
CCB-5.Sample		09/05/13 15:15:29			0.0026	-0.0058 : Exceeded calibration limits
AC74101-015.Sample		09/05/13 15:31:02			0.0385	0.0451
AC74101-015 T.Sample		09/05/13 15:32:23			0.0080	0.0018
CCV-6.Control		09/05/13 15:32:42	0.5000	0.0208	0.3442	0.4792
CCB-6.Sample		09/05/13 15:32:56			0.0027	-0.0058 : Exceeded calibration limits

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Report Generated On:09/05/2013 15:33

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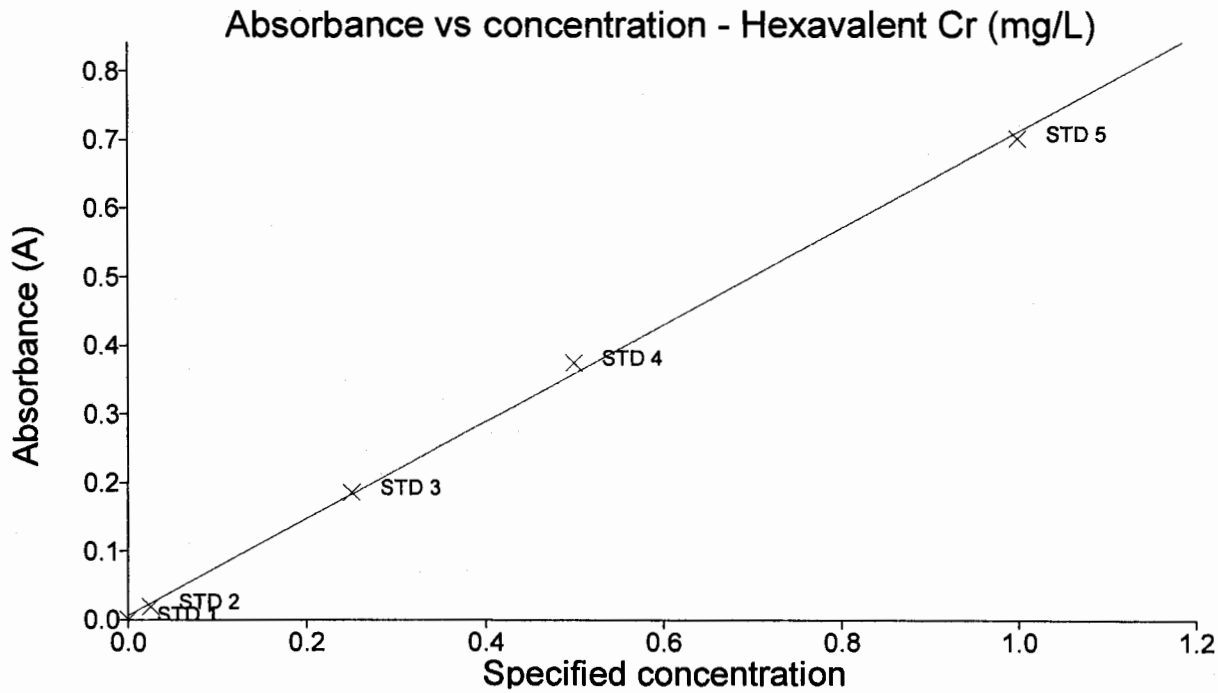
Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9994

Calibrated on: 09/05/13 18:31

User name: wet chem

Method name: Hexavalent Cr

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample	0.0000	-0.0081	0.0081	0.0010
STD 2.Sample	0.0250	0.0180	0.0070	0.0194
STD 3.Sample	0.2500	0.2546	-0.0046	0.1860
STD 4.Sample	0.5000	0.5230	-0.0230	0.3750
STD 5.Sample	1.0000	0.9875	0.0125	0.7020

DA 9/5/13

Report Generated On:09/05/2013 16:12

172A
JW
9/5/13

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		09/05/13 15:41:15	0.5000	-0.0116	0.3669	0.5116
ICB.Sample		09/05/13 15:41:38			0.0004	-0.0091 : Exceeded calibration limits.
MB.Sample		09/05/13 15:42:01			-0.0000	-0.0096 : Exceeded calibration limits.
LCS.Sample		09/05/13 15:42:28			0.3440	0.4791
AC74296-005 NS.Sample		09/05/13 15:42:54			0.0142	0.0106
AC74296-005 D.Sample		09/05/13 15:43:20			0.0253	0.0263
AC74296-005 MS.Sample		09/05/13 15:43:47			0.0187	0.0170
AC74296-005 MSD.Sample		09/05/13 15:44:17			0.0656	0.0836
AC74296-005 PVS.Sample		09/05/13 15:44:44			0.0796	0.1034
CCV.Control		09/05/13 15:45:10	0.5000	0.0290	0.3383	0.4710
CCB.Sample		09/05/13 15:45:22			0.0035	-0.0046 : Exceeded calibration limits.
AC74296-006.Sample		09/05/13 15:46:00			0.0270	0.0287
AC74276-009.Sample		09/05/13 15:46:51			0.0308	0.0341
AC74276-011.Sample		09/05/13 15:47:19			0.0183	0.0165
AC74358-006.Sample		09/05/13 15:47:59			0.0156	0.0125
AC74359-001.Sample		09/05/13 15:48:20			0.0036	-0.0045 : Exceeded calibration limits.
AC74359-002.Sample		09/05/13 15:48:43			0.0007	-0.0086 : Exceeded calibration limits.
AC74359-003.Sample		09/05/13 15:49:06			0.0005	-0.0089 : Exceeded calibration limits.
AC74221-011.Sample		09/05/13 15:49:32			0.0032	-0.0051 : Exceeded calibration limits.
AC74221-012.Sample		09/05/13 15:49:57			0.0087	0.0027
CCV-2.Sample		09/05/13 15:50:12			0.3367	0.4686
CCB-2.Sample		09/05/13 15:50:43			0.0029	-0.0055 : Exceeded calibration limits.

DA 9/5/13

Report Generated On:09/05/2013 16:12

172A
JW
9/5/13

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AC74221-013.Sample		09/05/13 15:51:21			0.0097	0.0042
AC74257-001.Sample		09/05/13 15:51:47			0.0310	0.0345
AC74257-002.Sample		09/05/13 15:52:09			0.0081	0.0019
AC74257-003.Sample		09/05/13 15:53:16			0.0065	-0.0003 : Exceeded calibration limits
AC74257-004.Sample		09/05/13 15:53:41			0.0147	0.0112
AC74257-005.Sample		09/05/13 15:54:08			0.0345	0.0395
AC74246-008.Sample		09/05/13 15:54:33			0.0010	-0.0082 : Exceeded calibration limits
AC74246-009.Sample		09/05/13 15:55:00			0.0027	-0.0057 : Exceeded calibration limits
AC74246-010 .Sample		09/05/13 15:55:21			0.0079	0.0016
AC74296-005 T.Sample		09/05/13 15:56:34			0.0128	0.0086
CCV-3.Control		09/05/13 15:56:50	0.5000	0.0327	0.3357	0.4673
CCB-3.Sample		09/05/13 15:57:06			0.0015	-0.0074 : Exceeded calibration limits
AC74296-006 T.Sample		09/05/13 15:57:36			0.0161	0.0133
AC74276-009 T.Sample		09/05/13 15:58:01			0.0249	0.0258
AC74276-011 T.Sample		09/05/13 15:58:23			0.0128	0.0085
AC74358-006 T.Sample		09/05/13 16:00:39			0.0145	0.0110
AC74359-001 T.Sample		09/05/13 16:01:25			0.0044	-0.0033 : Exceeded calibration limits
AC74359-002 T.Sample		09/05/13 16:02:00			-0.0000	-0.0096 : Exceeded calibration limits
AC74359-003 T.Sample		09/05/13 16:02:38			0.0003	-0.0092 : Exceeded calibration limits
AC74221-011 T.Sample		09/05/13 16:03:24			0.0052	-0.0021 : Exceeded calibration limits
AC74221-012 T.Sample		09/05/13 16:04:29			0.0071	0.0006
AC74221-013 T.Sample		09/05/13 16:04:53			0.0077	0.0013

BB 9/5/13

Report Generated On:09/05/2013 16:12

172A
JW
9/5/13

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
CCV-4.Control		09/05/13 16:05:10	0.5000	0.0352	0.3340	0.4648
CCB-4.Sample		09/05/13 16:05:40			0.0002	-0.0094 : Exceeded calibration limits
AC74257-001 T.Sample		09/05/13 16:06:07			0.0265	0.0281
AC74257-002 T.Sample		09/05/13 16:06:36			0.0091	0.0034
AC74257-003 T.Sample		09/05/13 16:07:09			0.0038	-0.0041 : Exceeded calibration limits
AC74257-004 T.Sample		09/05/13 16:07:34			0.0138	0.0101
AC74257-005 T.Sample		09/05/13 16:08:37			0.0284	0.0308
AC74246-008 T.Sample		09/05/13 16:09:07			0.0016	-0.0073 : Exceeded calibration limits
AC74246-009 T.Sample		09/05/13 16:09:30			0.0028	-0.0056 : Exceeded calibration limits
AC74246-010 T.Sample		09/05/13 16:10:04			0.0068	0.0001
AC74101-015.Sample		09/05/13 16:11:07			0.0338	0.0384
AC74101-015 T.Sample		09/05/13 16:11:23			0.0039	-0.0041 : Exceeded calibration limits
CCV-5.Control		09/05/13 16:11:38	0.5000	0.0372	0.3326	0.4628
CCB-5.Sample		09/05/13 16:11:53			0.0006	-0.0087 : Exceeded calibration limits

MB 9/5/13

Report Generated On:09/05/2013 16:12

172A
JW
9/5/13

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-164939

Prepared By: Lewis, Simon D.
Description: Phosphate Buffer
Prep Date: 5/9/2013
Expiration Date: 11/8/2013
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: aurora
ApproveDate: 05/21/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7487	POTASSIUM PHOSPHATE MONOBASIC	68.04 g	NEAT neat	
6514	Potassium Phosphate Dibasic Anhydrous	87.09 g	neat neat	
	DI WATER (FILL TO VOLUME)			

Veritech Lot Number: V-167177

Prepared By: Wonge, Janee
Description: 100 ppm cr6 std
Prep Date: 6/17/2013
Expiration Date: 12/16/2013
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: aurora
ApproveDate: 06/19/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7906	Chromium 1000 ppm Standard	10 ml	1000 mg/l	100 mg/l
	DI WATER FILL TO THE VOLUME			

Veritech Lot Number: V-167178

Prepared By: Wonge, Janee
Description: 100 ppm CR6 FOR CCV
Prep Date: 6/17/2013
Expiration Date: 12/16/2013
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: aurora
ApproveDate: 06/19/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
6758	Hexavalent Chromium	10 ml	1000 mg/l	100 mg/l
	DI WATER FILL TO THE VOLUME			

Veritech Lot Number: V-170990

Prepared By: Neil, Neceta
Description: 10 % H2SO4
Prep Date: 8/16/2013
Expiration Date: 2/14/2014
Department: WetChem
BatchNumber:
Concentration: 10 %
Final Volume: 2000 ml
ApprovedBy: aurora
ApproveDate: 08/20/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7940	Sulfuric Acid	200 ml	neat neat	
	DI WATER FILL TO THE VOLUME			

Veritech Lot Number: V-171336

Prepared By: Trivedi, Beena
Description: 5 M HNO3
Prep Date: 8/22/2013
Expiration Date: 2/21/2014
Department: WetChem
BatchNumber:
Concentration: 5 m
Final Volume: 2000 ml
ApprovedBy: aurora
ApproveDate: 08/22/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8078	Nitric Acid	640 ml	neat neat	
	DI WATER FILL TO THE VOLUME			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-171802

Prepared By: Lewis, Simon D.
Description: Cr6 digestion solution
Prep Date: 8/29/2013
Expiration Date: 2/28/2014
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 3000 ml
ApprovedBy:
ApproveDate:
Checked: No

BB 9/5/13

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7110	Sodium Carbonate ACS	90 g	NEATNEAT n	
7490	Sodium Hydroxide	60 g	neat neat	
	DI WATER FILL TO THE VOLUME			

Veritech Lot Number: V-171910

Prepared By: Trivedi, Beena
Description: Cr6 Color Reagent
Prep Date: 9/3/2013
Expiration Date: 11/2/2013
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 200 ml
ApprovedBy: aurora
ApproveDate: 09/03/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7705	1,5-Diphenylcarbezide	1 g	NEAT neat	
8064	Acetone	200 ml	neat neat	

Veritech Lot Number: V-171965

Prepared By: Trivedi, Beena
Description: 0.025 ppm
Prep Date: 9/4/2013
Expiration Date: 9/4/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.025 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

BB 9/5/13

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	.025 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-171802	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-171966

Prepared By: Trivedi, Beena
Description: 0.25 ppm
Prep Date: 9/4/2013
Expiration Date: 9/4/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.25 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	.25 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-171802	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-171967

Prepared By: Trivedi, Beena
Description: 0.5 ppm
Prep Date: 9/4/2013
Expiration Date: 9/4/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	.5 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-171802	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Internally Prepared Standard Log

BB 9/5/13

Veritech Lot Number: V-171968

Prepared By: Trivedi, Beena
Description: 1.0 ppm
Prep Date: 9/4/2013
Expiration Date: 9/4/2013
Department: Wet Lab
BatchNumber:
Concentration: 1.0 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	1 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-171802	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-171969

Prepared By: Trivedi, Beena
Description: ICV
Prep Date: 9/4/2013
Expiration Date: 9/4/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167178	100 ppm CR6 FOR CCV	.5 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-171802	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-171970

Prepared By: Trivedi, Beena
Description: CCV
Prep Date: 9/4/2013
Expiration Date: 9/4/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167178	100 ppm CR6 FOR CCV	.5 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-171802	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-171971

Prepared By: Trivedi, Beena
Description: LCS
Prep Date: 9/4/2013
Expiration Date: 9/4/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	.5 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-171802	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-171972

Prepared By: Trivedi, Beena
Description: LCS-2
Prep Date: 9/4/2013
Expiration Date: 9/4/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	.5 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-171802	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 6514

Description
Potassium Phosphate Dibasic Anhydrous

ApprovedBy: jean
ApproveDate: 08/17/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	m-8391	112839	12/02/11	12/01/15	Soules, John	1	500g	neat	neat

Veritech Control/Receipt Number: 6758

Description
Hexavalent Chromium

ApprovedBy: melissa
ApproveDate: 02/17/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
HACH	14664-42	A1320	02/17/12	11/01/16	Dalmeida, Melissa	2	100m	1000	mg/L

Veritech Control/Receipt Number: 7110

Description
Sodium Carbonate ACS

ApprovedBy: jean
ApproveDate: 06/20/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LAB CHEM INC	LC22965-1	B131-11	06/20/12	06/19/15	Trivedi, Beena	8	500 G	NEATNE	NEATNEAT

Veritech Control/Receipt Number: 7487

Description
POTASSIUM PHOSPHATE MONOBASIC

ApprovedBy: jean
ApproveDate: 11/27/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	P 285-500	124970	11/26/12	11/25/20	Trivedi, Beena	1	500 G	NEAT	NEAT

Veritech Control/Receipt Number: 7490

Description
Sodium Hydroxide

ApprovedBy: richq
ApproveDate: 11/27/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EMD	SX0590-7	B0729269 152	11/21/12	11/20/16	Quimby, Richard	4	12KG	neat	neat

Veritech Control/Receipt Number: 7705

Description
1,5-Diphenylcarbezide

ApprovedBy: melissa
ApproveDate: 02/19/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	D85-25	120894	02/19/13	02/18/18	Trivedi, Beena	1	25G	NEAT	NEAT

Veritech Control/Receipt Number: 7906

Description
Chromium 1000 ppm Standard

ApprovedBy: melissa
ApproveDate: 06/13/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	SC192-100	125581	05/22/13	09/30/14	Dalmeida, Melissa	1	100 m	1000	mg/L

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 7940

Description
Sulfuric Acid

ApprovedBy: aurora
ApproveDate: 07/01/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	A510-P212	3112052	06/05/13	11/19/15	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 8064

Description
Acetone

ApprovedBy: jean
ApproveDate: 08/16/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9254-03	43333	08/13/13	12/05/15	Lopez, Jose	44	4L	neat	neat

Veritech Control/Receipt Number: 8078

Description
Nitric Acid

ApprovedBy: aurora
ApproveDate: 08/22/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	50770	08/20/13	06/23/18	Lopez, Jose	11	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 6413

Description
Lead Chromate

ApprovedBy: melissa
ApproveDate: 01/23/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Pfaltz & Bauer inc	L01745	A056-5	10/27/11	10/26/14	Soules, John	1	500g	neat	neat

Veritech Control/Receipt Number: 7734

Description
Magnesium Chloride, Anhydrous

ApprovedBy: melissa
ApproveDate: 02/25/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
AMRESCO	J364-500G	1932C182	02/25/13	02/24/18	Dalmeida, Melissa	2	500g	Neat	Neat

3090309 0557

Hampton-Clarke/Veritech

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 229

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Meter #: 125641

Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	226.9	18.4	226.9	18.4	LCS: 4.46	—	—	09/04/13 13:15	SV
DUP AC74276-011	-427.6	23.4	-427.8	23.4	DUP: 12.23	25	25		
1. AC74276-011	-427.8	23.4	-428.0	23.4	12.25				
2. AC74276-009	-403.4	23.8	-403.5	23.8	12.21				
3. AC74296-006	-363.7	23.5	-363.7	23.5	12.25				
4. AC74358-006	88.8	22.6	89.0	22.6	8.13				
5. AC74359-001	245.9	23.7	247.3	23.7	6.85				
6. -002	338.2	23.1	340.9	23.1	5.62				
7. -003	344.2	22.6	344.4	22.6	5.93				
8.									
9.									
10.									
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									

* Reading 1 and Reading 2 must agree within ± 10 mV

Reviewed by: _____

Date Reviewed: _____

Solution	Manufacturer's Lot #
ZoBell's Solution	7917
4 M KCl Filling Solution	5456
LCS	V- 169601

0042

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Hampton-Clarke/Veritech

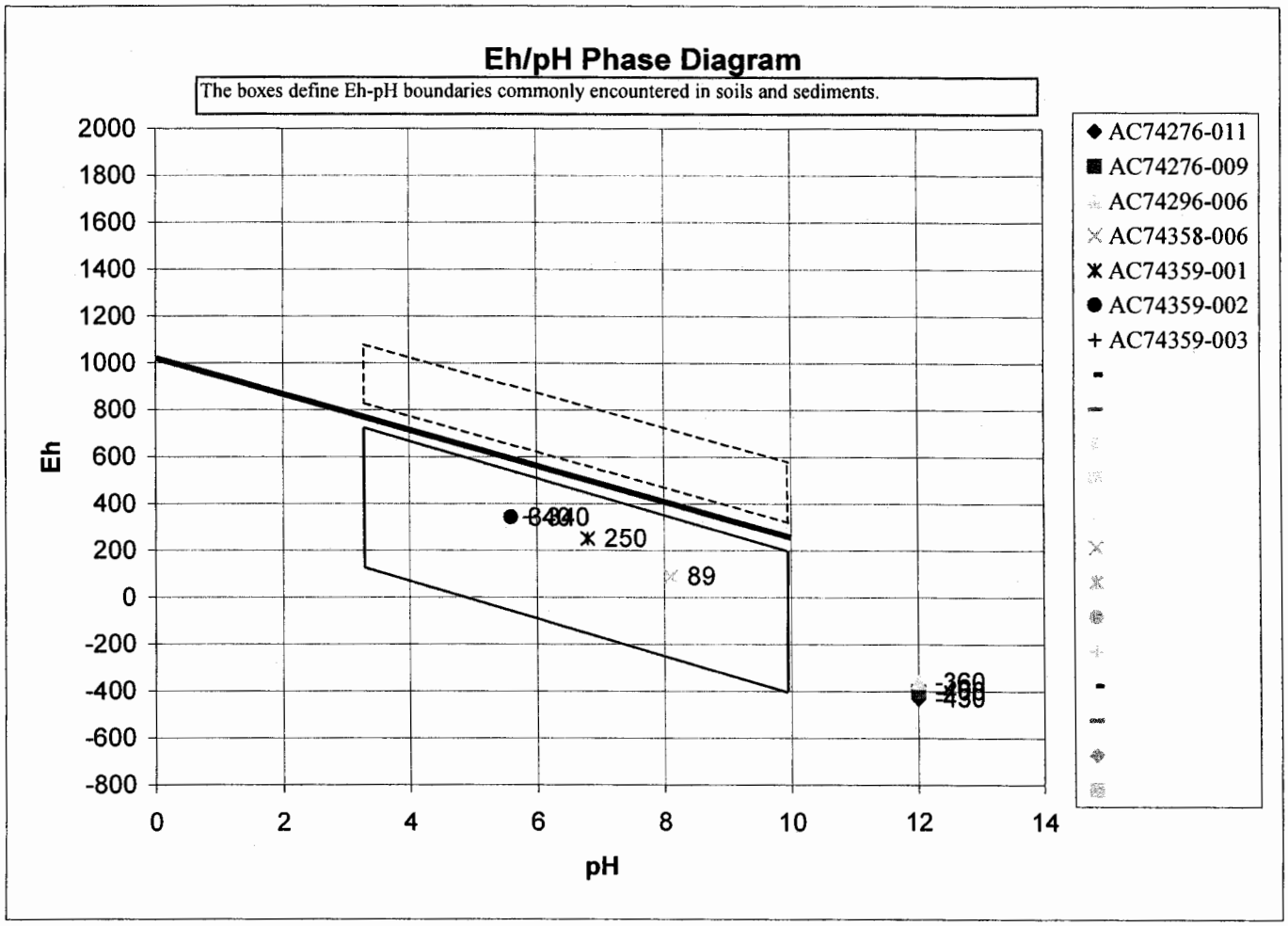
pH CALIBRATION RECORD

pH Meter: Orion 3 Star

Serial # 25641

Date	Calibration				Checks				Buffer Lot #s		
	Initials	Calibrate		Read	Initials	Read	Initials	Read	pH 4.0	pH 10.0	pH 7.0
	Time	Buffer 1	Buffer 2	pH 7.0 Buffer	Time	pH 7.0 Buffer	Time	pH 7.0 Buffer			
09/03/13	SN 8:15	4.00	10.00	7.05	BN 13:00	7.03			7601	8004	7922
09/04/13	SN 7:45	4.00	10.00	7.03	SN 13:15	7.03			7601	8004	7922
09/05/13	SN 7:30	4.00	10.00	7.05	SN 12:00	7.03			7601	8004	7922

Calibrate using pH 4.0 and pH 10.0/Read and record pH 7.0 (the pH 7.0 must agree within ± 0.1 pH units)
When using the pH meter more for analysis and more than 3 hours has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.



Sample	Eh	pH
AC74276-011	-430	12
AC74276-009	-400	12
AC74296-006	-360	12
AC74358-006	89	8.1
AC74359-001	250	6.8
AC74359-002	340	5.6
AC74359-003	340	5.9

Reducing

Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units must be added for the combination platinum electrode used.

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-169601

Prepared By: Trivedi, Beena	Department: WetChem	ApprovedBy: aurora
Description: KHP LCS	BatchNumber:	ApproveDate: 07/26/13
Prep Date: 7/24/2013	Concentration: 300 ppm	Checked: Yes
Expiration Date: 1/24/2014	Final Volume: 2000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
5981	POTASSIUM HYDROGEN PHTHALATE DI WATER FILL TO THE VOLUME	600 mg	NEAT	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 5981

Description
POTASSIUM HYDROGEN PHTHALATE

ApprovedBy: jean
ApproveDate: 05/24/11
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	P243-500	101727	05/24/11	05/31/21	Revolus, Jean	1	500g	NEAT	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 5456

Description
Redox reference probe solution

ApprovedBy: brent
ApproveDate: 06/15/11
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
fisher	SP135-500	105440	11/19/10	11/18/13	Miller,Gael E.	1	500ml	4	M

Veritech Control/Receipt Number: 7917

Description
ZoBell's Solution

ApprovedBy: melissa
ApproveDate: 05/29/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Ricca	9880-32	2305597	05/23/13	01/31/14	Dalmeida, Melissa	1	1 L	228	mV

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 7601

Description
4.0 PH BUFFER RED

ApprovedBy: jean
ApproveDate: 01/23/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LAB CHEM INC	LC12280-6	C008-25	01/23/13	01/17/15	Trivedi, Beena	1	10 L	4.0	4.0

Veritech Control/Receipt Number: 7922

Description
Buffer Solution pH 7.0

ApprovedBy: melissa
ApproveDate: 06/13/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LabChem	LC12380-6	C114-15	05/29/13	05/05/15	Dalmeida, Melissa	1	10L	7.0	pH

Veritech Control/Receipt Number: 8004

Description
pH 10.0 Buffer Solution

ApprovedBy: aurora
ApproveDate: 07/31/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LabChem	LC12510	C078-21	07/15/13	03/20/14	Dalmeida, Melissa	1	10L	10.0	pH

Miscellaneous Data

ZERO HEADSPACE EXTRACTION- SAMPLE ENTRY

Sample ID	Vessel #	Initial Pressure	Final Pressure	Ext. Fluid #	Wt./Vol. Of Sample	Start Date	Start Time	Finish Date	Finish Time	Final pH	Ext. Type*	Analyst (s)	Transfer To**	Transfer To**	Comments
EFIU-172020	A4	20	20	172020 EFIU-	500mL	9-5	12:30	9-6	7:00		T	SW	[illegible]		
AC74202-008	27				25g/500mL										
AC74202-010	26														
AC74202-012	23														
AC74202-014	A6														
AC74182-012	22														
AC74182-013	S1														
AC74182-014	A4														
AC74182-017	29														
AC74182-018	2														
AC74182-019	30														
AC74182-020	24														
AC74182-023	A5														
AC74/358-003	8														

*Ext. Type TCLP=T ASTM=A SPLP=S MEP = M
** Initials of person taking custody of extractions

3090309 0565

3090309 0566

LEACHATE PREPARATION LOG
(TCLP, SPLP)

Start Date: 9/3/13

Finish Date: 9/4/13

**TCLP Ext. Fluid #1 pH: 4.88 (criteria: 4.93 ± 0.5)
**TCLP Ext. Fluid #2 pH: ____ (criteria: 2.88 ± 0.05)
**SPLP Ext. Fluid #3 pH: 4.20 (criteria: 4.20 ± 0.5)

Sample #	pH (units)	pH in HCL (units)	Final pH (units)	Ext. Fluid (number)	Wt./Vol of Sample (g or mL)	Start Time	Finish Time	Analyst (s)	Ext. Type*	Comments
AC074276-011	—	—	11.95	SPLP 171809	150g/3L	17:00	11:00	BR	P	Metals and Organics (wet lab)
AC074296-006	↓	↓	11.96	↓	↓	↓	↓	↓	↓	↓
AC074296-006			11.96							
AC074296-006			11.96							
SPLP 171809	4.20		7.11		3L					
SPLP 171809	4.20		7.12							
SPLP 171809	4.20		7.12							
EF-1 171903	4.88		4.96	EF-1 171903		18:30				

* Ext. Type: TCLP = T (Method 1311) LAMP=L (Methods 1311 / ANSI/NEMA C78.LL 1256-2003)
SPLP = P (Method 1312) MEP=M (Method 1320)
ZHE = Z (Method 1311/1312)

** The pH of the extraction fluid must be checked prior to use and must be within limits specified above

0092

Leachate prep log 2010

3090309 0567

LEACHATE PREP (TCLP, SPLP)

Start Date: 9/3/13

Finish Date: 9/4/13

**TCLP Ext. Fluid #1 pH: 4.88 (criteria: 4.93 ± 0.5)
**TCLP Ext. Fluid #2 pH: ____ (criteria: 2.88 ± 0.05)
**SPLP Ext. Fluid #3 pH: 4.20 (criteria: 4.20 ± 0.5)

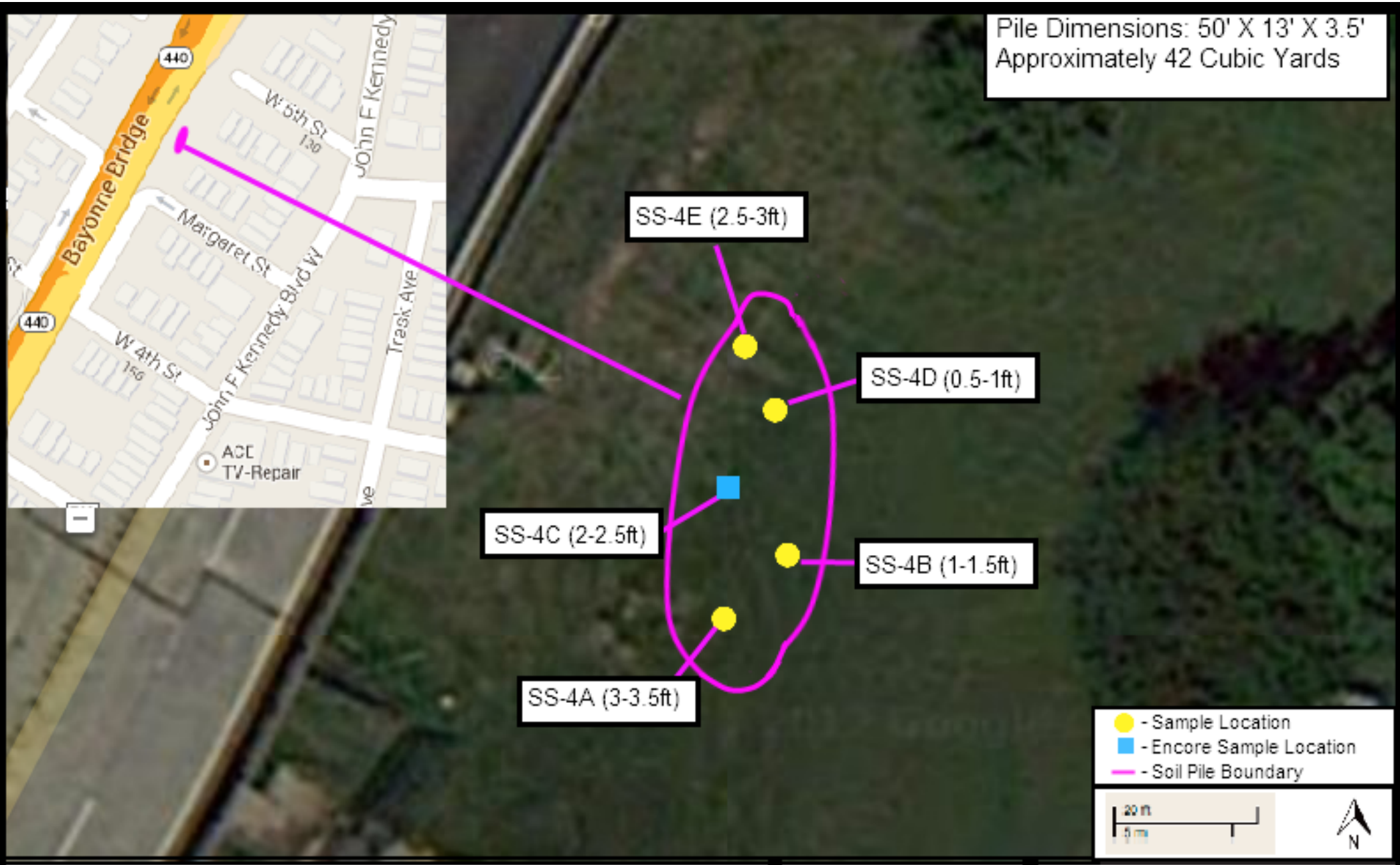
Sample #	pH (units)	pH in HCL (units)	Final pH (units)	Ext. Fluid (number)	Wt./Vol of Sample (g or mL)	Start Time	Finish Time	Analyst (s)	Ext. Type*	Comments
AC 74182-001	8.06	1.67	5.08	EF171903	150g/3L	18:30	11:00	ER	T	Metals and Organics
AC 74182-002	7.22	1.68	5.01							
AC 74182-003	7.31	1.69	4.95							
AC 74182-004	7.59	1.75	4.70							
AC 74182-005	8.76	1.72	4.68							
AC 74182-006	8.47	1.69	482							
AC 74182-007	8.78	1.77	4.96							
AC 74182-009	9.67	1.76	4.95							
AC 74182-010	8.55	1.76	4.73							
AC 74182-011	8.46	1.79	5.11							
AC 74182-012	7.77	1.73	4.69							
AC 74182-013	7.34	1.73	5.04							
AC 74182-014	8.25	1.78	4.99							
AC 74182-017	7.88	1.77	4.99							
AC 74182-018	7.14	1.78	4.72							
AC 74182-019	10.00	1.82	5.98							
AC 74182-020	8.23	1.78	4.71							
AC 74182-023	6.69	1.72	4.94							
AC 74358-006	10.05	2.16	4.88							
AC(A) 74276-009	—	—	11.88	SPLP 171809		17:00			P	(WetLab)
AC(B) 74276-009			11.88							
AC(C) 74276-009			11.88							
AC(A) 74276-011			11.95							
AC(B) 74276-011			11.94							

* Ext. Type: TCLP = T (Method 1311) SPLP = P (Method 1312) ZHE = Z (Method 1311/1312) LAMP=L MEP=M (Methods 1311 / ANSI/NEMA C78.LL 1256-2003) (Method 1320)

** The pH of the extraction fluid must be checked prior to use and must be within limits specified above

HC·V
HAMPTONCLARKE·VERITECH

Last Page of Report



Bayonne Bridge Bayonne, NJ - PANYNJ
Completed Soil Pile Sample Locations - September 3, 2013
Sampler: Anthony Romandetto

Figure 2

HC·V
HAMPTONCLARKEVERITECH
WBE/DBE/SBE 800.426.9992

HC·V
HAMPTONCLARKE·VERITECH

175 ROUTE 46 WEST, UNIT D · FAIRFIELD, NJ 07004
2 MADISON ROAD, FAIRFIELD, NJ 07004
800-426-9992 · 973-244-9770
FAX: 973-244-9787

WWW.HCVLAB.COM

Project: Bayonne Bridge

Client PO: Not Available

Report To: PORT AUTHORITY OF NY & NJ
MATERIALS ENGINEERING DIV.
241 ERIE ST.
ROOM 234
JERSEY CITY, NJ 07310-1397

Attn: Dorian Bailey

Received Date: 8/23/2013

Report Date: 9/4/2013

Deliverables: NJDEP-R

Lab ID: AC74177

Lab Project No: 3082313

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Veritech to all parties shall not exceed Veritech's total fee for analytical services rendered.

Robin Cousineau - Quality Assurance Director OR **Stanley Gilewicz - Laboratory Director**

NJ	(07071)	NY	(ELAP11408)	CT	(PH-0671)
PA	(68-00463)	KY	(90124)		

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Sample Summary

Client: PORT AUTHORITY OF NY & NJ

HCV Project #: 3082313

Project: Bayonne Bridge

Lab#	SampleID	Matrix	Collection Date	Receipt Date
AC74177-001	002 SS-1B (1.5-2')	Soil/Encore	8/23/2013	8/23/2013
AC74177-002	006 SS-1 Composite	Soil	8/23/2013	8/23/2013
AC74177-003	010 SS-2D (4-4.5')	Soil/Encore	8/23/2013	8/23/2013
AC74177-004	012 SS-2 Composite	Soil	8/23/2013	8/23/2013
AC74177-005	017 SS-3E (8-8.5')	Soil/Encore	8/23/2013	8/23/2013
AC74177-006	018 SS-3 Composite	Soil	8/23/2013	8/23/2013

HCV Case Narrative

Client: Port Authority of NY & NJ
Project: Bayonne Bridge

HCV Project: 3082313

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Volatile Organic Analysis:

Benzene was recovered in extraction fluid blank EF-1-V-171617 and in sample AC74177-001 suggesting laboratory contamination.

Base Neutral/Acid Extractable Analysis:

The Matrix Spike and/or Matrix Spike Duplicate for batch 26013 had recoveries outside QC limits. However, since the associated Method Blank and Laboratory Control Sample were within control, no corrective action was necessary.

PCB Analysis:

Data conforms to method requirements.

Pesticide Analysis:

The Matrix Spike and/or Matrix Spike Duplicate for batch 26006 had recoveries outside QC limits. An RPD also has recovery outside the limit. However, since the associated Method Blank and Laboratory Control Sample were within control, no corrective action was necessary.

Herbicide Analysis:

The Matrix Spike Duplicate for batch 25925 has one or more surrogates outside QC limits due to co-eluting interference.

Gasoline Range Organics Analysis:

Data conforms to method requirements.

Diesel Range Organics Analysis:

Data conforms to method requirements.

Extractable Petroleum Hydrocarbon Analysis:

Data conforms to method requirements.

Glycol Analysis:

The Laboratory Control Sample (MBS) for batch 26015 had recoveries outside QC limits, but the compounds were non-target analyte.

The Matrix Spike and/or Matrix Spike Duplicate for batch 25963 had recoveries outside QC limits. However, since the associated Method Blank and Laboratory Control Sample were within control, no corrective action was necessary.

Metals Analysis:

The Matrix Spike and/or Matrix Spike Duplicate for batch 26655 had recoveries outside QC limits. However, since the associated Method Blank and Laboratory Control Sample were within control, no corrective action was necessary.
The MS/MSD RPD had recoveries outside QC limits also. The RPD criteria were met between the LCS/LCS Method Replicate.

The serial dilutions for batches 26655 and 26654 are outside QC limits suggesting matrix interference.

Wet Chemistry Analysis:

The Matrix Spike and Matrix Spike Duplicate in batch 1114-Sulfate recovered outside QC limits. However, since the associated Method Blank and Laboratory Control Sample were within control, no corrective action was necessary.

The insoluble and soluble spikes for batch 169-Hex-Cr recovered outside QC limits. The batch was re-analyzed confirming low recoveries of both spikes. The initial analysis is reported.

Samples AC74177-002, 004 and 006 were analyzed for Reactivity using SW-846 7.3. SW-846 7.3 is not a NELAP accredited parameter.

Subcontracted Analysis:

Please refer to attached subcontracted laboratory report. Samples AC74177-02, 004 and 006 were submitted to Eurofins Lancaster Laboratories Environmental for Parathion analysis.

Robin Cousineau
Quality Assurance Director

Or

Stanley Gilewicz
Laboratory Director

9/4/2013
Date

HCV Executive Summary

Client: PORT AUTHORITY OF NY & NJ **HCV Project #:** 3082313

Project: Bayonne Bridge

Lab#: AC74177-001 **Sample ID: 002 SS-1B (1.5-2')**

Analyte	Units	RL	Result	Analytical Method
Benzene	mg/l	0.00050	0.18	EPA 8260B

Lab#: AC74177-002 **Sample ID: 006 SS-1 Composite**

Analyte	Units	RL	Result	Analytical Method
pH	ph		8.0	9040C/9045D
Ignitability	deg. f		>141	EPA 1010
Aluminum	mg/kg	220	7800	EPA 6010B
Arsenic	mg/kg	2.2	4.5	EPA 6010B
Barium	mg/kg	11	97	EPA 6010B
Barium	mg/l	0.25	0.56	EPA 6010B
Beryllium	mg/kg	0.65	0.85	EPA 6010B
Calcium	mg/kg	1100	5100	EPA 6010B
Chromium	mg/kg	5.4	22	EPA 6010B
Cobalt	mg/kg	2.7	9.0	EPA 6010B
Copper	mg/kg	5.4	27	EPA 6010B
Iron	mg/kg	220	18000	EPA 6010B
Lead	mg/kg	5.4	40	EPA 6010B
Magnesium	mg/kg	540	4100	EPA 6010B
Manganese	mg/kg	11	380	EPA 6010B
Nickel	mg/kg	5.4	37	EPA 6010B
Potassium	mg/kg	540	1400	EPA 6010B
Vanadium	mg/kg	11	27	EPA 6010B
Zinc	mg/kg	11	61	EPA 6010B
Anthracene	mg/kg	0.036	0.042	EPA 8270C
Benzo[a]anthracene	mg/kg	0.036	0.18	EPA 8270C
Benzo[a]pyrene	mg/kg	0.036	0.15	EPA 8270C
Benzo[b]fluoranthene	mg/kg	0.036	0.21	EPA 8270C
Benzo[g,h,i]perylene	mg/kg	0.036	0.11	EPA 8270C
Benzo[k]fluoranthene	mg/kg	0.036	0.076	EPA 8270C
bis(2-Ethylhexyl)phthalate	mg/kg	0.036	0.037	EPA 8270C
Chrysene	mg/kg	0.036	0.17	EPA 8270C
Fluoranthene	mg/kg	0.036	0.25	EPA 8270C
Indeno[1,2,3-cd]pyrene	mg/kg	0.036	0.10	EPA 8270C
Naphthalene	mg/kg	0.0090	0.020	EPA 8270C
Phenanthrene	mg/kg	0.036	0.15	EPA 8270C
Pyrene	mg/kg	0.036	0.33	EPA 8270C
TotalSemiVolatileTic	mg/kg	NA	81J	EPA 8270C
Nitrate	mg/kg	11	13	EPA 9056A
Paint Filter Test			NEG	EPA 9095A
Eh	mv		250	SM 2580
Ammonia	mg/kg	13	48	SM 4500 mod.

Lab#: AC74177-003 **Sample ID: 010 SS-2D (4-4.5')**

Analyte	Units	RL	Result	Analytical Method
TotalVolatileTic	mg/kg	NA	0.0061J	EPA 8260B

HCV Executive Summary

Client: PORT AUTHORITY OF NY & NJ **HCV Project #:** 3082313

Project: Bayonne Bridge

Lab#: AC74177-004 **Sample ID: 012 SS-2 Composite**

Analyte	Units	RL	Result	Analytical Method
pH	ph		7.6	9040C/9045D
Ignitability	deg. f		>141	EPA 1010
Aluminum	mg/kg	220	8500	EPA 6010B
Antimony	mg/kg	2.2	3.3	EPA 6010B
Arsenic	mg/kg	2.2	5.6	EPA 6010B
Barium	mg/l	0.25	0.40	EPA 6010B
Barium	mg/kg	11	90	EPA 6010B
Beryllium	mg/kg	0.65	0.83	EPA 6010B
Calcium	mg/kg	1100	3200	EPA 6010B
Chromium	mg/kg	5.4	52	EPA 6010B
Cobalt	mg/kg	2.7	20	EPA 6010B
Copper	mg/kg	5.4	57	EPA 6010B
Iron	mg/kg	220	24000	EPA 6010B
Lead	mg/kg	5.4	54	EPA 6010B
Magnesium	mg/kg	540	4400	EPA 6010B
Manganese	mg/kg	11	760	EPA 6010B
Nickel	mg/kg	5.4	42	EPA 6010B
Potassium	mg/kg	540	1200	EPA 6010B
Vanadium	mg/kg	11	48	EPA 6010B
Zinc	mg/kg	11	100	EPA 6010B
Benzo[a]anthracene	mg/kg	0.036	0.073	EPA 8270C
Benzo[a]pyrene	mg/kg	0.036	0.066	EPA 8270C
Benzo[b]fluoranthene	mg/kg	0.036	0.10	EPA 8270C
Benzo[g,h,i]perylene	mg/kg	0.036	0.054	EPA 8270C
bis(2-Ethylhexyl)phthalate	mg/kg	0.036	0.046	EPA 8270C
Chrysene	mg/kg	0.036	0.074	EPA 8270C
Fluoranthene	mg/kg	0.036	0.094	EPA 8270C
Indeno[1,2,3-cd]pyrene	mg/kg	0.036	0.047	EPA 8270C
Naphthalene	mg/kg	0.0090	0.019	EPA 8270C
Phenanthrene	mg/kg	0.036	0.050	EPA 8270C
Pyrene	mg/kg	0.036	0.12	EPA 8270C
TotalSemiVolatileTic	mg/kg	NA	77J	EPA 8270C
Chloride	mg/kg	22	22	EPA 9056A
Nitrate	mg/kg	11	18	EPA 9056A
Sulfate	mg/kg	22	24	EPA 9056A
Paint Filter Test			NEG	EPA 9095A
Eh	mv		250	SM 2580
Ammonia	mg/kg	13	67	SM 4500 mod.

HCV Executive Summary

Client: PORT AUTHORITY OF NY & NJ **HCV Project #:** 3082313

Project: Bayonne Bridge

Lab#: AC74177-006 **Sample ID: 018 SS-3 Composite**

Analyte	Units	RL	Result	Analytical Method
pH	ph		7.6	9040C/9045D
Ignitability	deg. f		>141	EPA 1010
Aluminum	mg/kg	220	8400	EPA 6010B
Arsenic	mg/kg	2.2	5.3	EPA 6010B
Barium	mg/l	0.25	0.29	EPA 6010B
Barium	mg/kg	11	99	EPA 6010B
Beryllium	mg/kg	0.65	0.81	EPA 6010B
Calcium	mg/kg	1100	4600	EPA 6010B
Chromium	mg/kg	5.4	26	EPA 6010B
Cobalt	mg/kg	2.7	11	EPA 6010B
Copper	mg/kg	5.4	34	EPA 6010B
Iron	mg/kg	220	19000	EPA 6010B
Lead	mg/kg	5.4	56	EPA 6010B
Magnesium	mg/kg	540	4500	EPA 6010B
Manganese	mg/kg	11	450	EPA 6010B
Nickel	mg/kg	5.4	46	EPA 6010B
Potassium	mg/kg	540	1500	EPA 6010B
Vanadium	mg/kg	11	30	EPA 6010B
Zinc	mg/kg	11	81	EPA 6010B
p,p'-DDE	mg/kg	0.0027	0.0056	EPA 8081A
p,p'-DDT	mg/kg	0.0027	0.0028d	EPA 8081A
Benzo[a]anthracene	mg/kg	0.036	0.083	EPA 8270C
Benzo[a]pyrene	mg/kg	0.036	0.070	EPA 8270C
Benzo[b]fluoranthene	mg/kg	0.036	0.11	EPA 8270C
Benzo[g,h,i]perylene	mg/kg	0.036	0.058	EPA 8270C
Benzo[k]fluoranthene	mg/kg	0.036	0.037	EPA 8270C
bis(2-Ethylhexyl)phthalate	mg/kg	0.036	0.044	EPA 8270C
Chrysene	mg/kg	0.036	0.086	EPA 8270C
Fluoranthene	mg/kg	0.036	0.12	EPA 8270C
Indeno[1,2,3-cd]pyrene	mg/kg	0.036	0.050	EPA 8270C
Phenanthrene	mg/kg	0.036	0.063	EPA 8270C
Pyrene	mg/kg	0.036	0.14	EPA 8270C
TotalSemiVolatileTic	mg/kg	NA	74J	EPA 8270C
Nitrate	mg/kg	11	21	EPA 9056A
Paint Filter Test			NEG	EPA 9095A
C9-C40	mg/kg	65	77	NJEPHRev3B
Eh	mv		250	SM 2580
Ammonia	mg/kg	13	98	SM 4500 mod.

HCV Report Of Analysis

Client: PORT AUTHORITY OF NY & NJ **HCV Project #:** 3082313

Project: Bayonne Bridge

Sample ID: 002 SS-1B (1.5-2') **Collection Date:** 8/23/2013
Lab#: AC74177-001 **Receipt Date:** 8/23/2013
Matrix: Soil/Encore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		94

TCLP Volatiles 8260

Analyte	DF	Units	RL	Result
1,1-Dichloroethene	1	mg/l	0.0010	ND
1,2-Dichloroethane	1	mg/l	0.00050	ND
1,4-Dichlorobenzene	1	mg/l	0.0010	ND
2-Butanone	1	mg/l	0.0010	ND
Benzene	**1**	**mg/l**	**0.00050**	**0.18**
Carbon tetrachloride	1	mg/l	0.0010	ND
Chlorobenzene	1	mg/l	0.0010	ND
Chloroform	1	mg/l	0.0010	ND
Tetrachloroethene	1	mg/l	0.0010	ND
Trichloroethene	1	mg/l	0.0010	ND
Vinyl chloride	1	mg/l	0.0010	ND

Volatile Organics + 10 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1.12	mg/kg	0.0024	ND
1,1,2,2-Tetrachloroethane	1.12	mg/kg	0.0024	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.12	mg/kg	0.0024	ND
1,1,2-Trichloroethane	1.12	mg/kg	0.0024	ND
1,1-Dichloroethane	1.12	mg/kg	0.0024	ND
1,1-Dichloroethene	1.12	mg/kg	0.0024	ND
1,2,3-Trichlorobenzene	1.12	mg/kg	0.0024	ND
1,2,4-Trichlorobenzene	1.12	mg/kg	0.0024	ND
1,2-Dibromo-3-chloropropane	1.12	mg/kg	0.0024	ND
1,2-Dibromoethane	1.12	mg/kg	0.0024	ND
1,2-Dichlorobenzene	1.12	mg/kg	0.0024	ND
1,2-Dichloroethane	1.12	mg/kg	0.0024	ND
1,2-Dichloropropane	1.12	mg/kg	0.0024	ND
1,3-Dichlorobenzene	1.12	mg/kg	0.0024	ND
1,4-Dichlorobenzene	1.12	mg/kg	0.0024	ND
1,4-Dioxane	1.12	mg/kg	0.12	ND
2-Butanone	1.12	mg/kg	0.0024	ND
2-Chloroethylvinylether	1.12	mg/kg	0.0024	ND
2-Hexanone	1.12	mg/kg	0.0024	ND
4-Methyl-2-pentanone	1.12	mg/kg	0.0024	ND
Acetone	1.12	mg/kg	0.012	ND
Acrolein	1.12	mg/kg	0.012	ND
Acrylonitrile	1.12	mg/kg	0.0060	ND
Benzene	1.12	mg/kg	0.0012	ND
Bromochloromethane	1.12	mg/kg	0.0024	ND
Bromodichloromethane	1.12	mg/kg	0.0024	ND
Bromoform	1.12	mg/kg	0.0024	ND
Bromomethane	1.12	mg/kg	0.0024	ND
Carbon disulfide	1.12	mg/kg	0.0024	ND
Carbon tetrachloride	1.12	mg/kg	0.0024	ND

Sample ID: 002 SS-1B (1.5-2')
Lab#: AC74177-001
Matrix: Soil/Encore

Collection Date: 8/23/2013
Receipt Date: 8/23/2013

Chlorobenzene	1.12	mg/kg	0.0024	ND
Chloroethane	1.12	mg/kg	0.0024	ND
Chloroform	1.12	mg/kg	0.0024	ND
Chloromethane	1.12	mg/kg	0.0024	ND
cis-1,2-Dichloroethene	1.12	mg/kg	0.0024	ND
cis-1,3-Dichloropropene	1.12	mg/kg	0.0024	ND
Cyclohexane	1.12	mg/kg	0.0024	ND
Dibromochloromethane	1.12	mg/kg	0.0024	ND
Dichlorodifluoromethane	1.12	mg/kg	0.0024	ND
Ethylbenzene	1.12	mg/kg	0.0012	ND
Isopropylbenzene	1.12	mg/kg	0.0012	ND
m&p-Xylenes	1.12	mg/kg	0.0012	ND
Methyl Acetate	1.12	mg/kg	0.0024	ND
Methylcyclohexane	1.12	mg/kg	0.0024	ND
Methylene chloride	1.12	mg/kg	0.0024	ND
Methyl-t-butyl ether	1.12	mg/kg	0.0012	ND
o-Xylene	1.12	mg/kg	0.0012	ND
Styrene	1.12	mg/kg	0.0024	ND
t-Butyl Alcohol	1.12	mg/kg	0.012	ND
Tetrachloroethene	1.12	mg/kg	0.0024	ND
Toluene	1.12	mg/kg	0.0012	ND
trans-1,2-Dichloroethene	1.12	mg/kg	0.0024	ND
trans-1,3-Dichloropropene	1.12	mg/kg	0.0024	ND
Trichloroethene	1.12	mg/kg	0.0024	ND
Trichlorofluoromethane	1.12	mg/kg	0.0024	ND
Vinyl chloride	1.12	mg/kg	0.0024	ND
Xylenes (Total)	1.12	mg/kg	0.0012	ND

Volatile Organics + 10 (8260) Library Searches

Analyte	DF	Units	RT	Result
No Unknown Compounds Detected	1.12	mg/kg	NA	ND
TotalVolatileTic	1.12	mg/kg	NA	ND

Sample ID: 006 SS-1 Composite
Lab#: AC74177-002
Matrix: Soil

Collection Date: 8/23/2013
Receipt Date: 8/23/2013

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		93

Ammonia SM 4500 mod.

Analyte	DF	Units	RL	Result
Ammonia	1	mg/kg	13	48

Chloride (Soil) 9056

Analyte	DF	Units	RL	Result
Chloride	1	mg/kg	22	ND

Chlorinated Herbicides 8151

Analyte	DF	Units	RL	Result
2,4-D	1	mg/kg	0.011	ND
Silvex	1	mg/kg	0.011	ND

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.1	ND

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.26	ND

Diesel Range Organics 8015B

Analyte	DF	Units	RL	Result
Diesel Range Organics	1	mg/kg	65	ND

Eh

Analyte	DF	Units	RL	Result
Eh	1	mv		250

Gasoline range organics 8015B

Analyte	DF	Units	RL	Result
Gasoline Range Organics	92.1	mg/kg	50	ND

Glycols (GC/FID) 8015

Analyte	DF	Units	RL	Result
Ethylene Glycol	1	mg/kg	54	ND
Propylene Glycol	1	mg/kg	54	ND

Ignitability (1010 modified)

Analyte	DF	Units	RL	Result
Ignitability	1	deg. f		>141

Mercury (Soil/Waste) 7471A

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.090	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00070	ND

Nitrate-N (Soil) 9056A

Analyte	DF	Units	RL	Result
Nitrate	1	mg/kg	11	13

Nitrite-N (Soil) 9056A

Analyte	DF	Units	RL	Result

Sample ID: 006 SS-1 Composite
Lab#: AC74177-002
Matrix: Soil

Collection Date: 8/23/2013
Receipt Date: 8/23/2013

Nitrite	1	mg/kg	11	ND

NJ EPH Category 2

Analyte	DF	Units	RL	Result
C9-C40	1	mg/kg	65	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0054	ND
Aldrin	1	mg/kg	0.0054	ND
Alpha-BHC	1	mg/kg	0.0011	ND
beta-BHC	1	mg/kg	0.0011	ND
Chlordane	1	mg/kg	0.027	ND
delta-BHC	1	mg/kg	0.0054	ND
Dieldrin	1	mg/kg	0.0011	ND
Endosulfan I	1	mg/kg	0.0054	ND
Endosulfan II	1	mg/kg	0.0054	ND
Endosulfan Sulfate	1	mg/kg	0.0054	ND
Endrin	1	mg/kg	0.0054	ND
Endrin Aldehyde	1	mg/kg	0.0054	ND
Endrin Ketone	1	mg/kg	0.0054	ND
gamma-BHC	1	mg/kg	0.0011	ND
Heptachlor	1	mg/kg	0.0054	ND
Heptachlor Epoxide	1	mg/kg	0.0054	ND
Methoxychlor	1	mg/kg	0.0054	ND
p,p'-DDD	1	mg/kg	0.0027	ND
p,p'-DDE	1	mg/kg	0.0027	ND
p,p'-DDT	1	mg/kg	0.0027	ND
Toxaphene	1	mg/kg	0.027	ND
y-Chlordane	1	mg/kg	0.0054	ND

Organophosphorous Pesticides 8141

Analyte	DF	Units	RL	Result
Parathion	1	ug/kg	72	ND

Paint Filter Test 9095A

Analyte	DF	Units	RL	Result
Paint Filter Test	**1**			**NEG**

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.027	ND
Aroclor-1016	1	mg/kg	0.027	ND
Aroclor-1221	1	mg/kg	0.027	ND
Aroclor-1232	1	mg/kg	0.027	ND
Aroclor-1242	1	mg/kg	0.027	ND
Aroclor-1248	1	mg/kg	0.027	ND
Aroclor-1254	1	mg/kg	0.027	ND
Aroclor-1260	1	mg/kg	0.027	ND
Aroclor-1262	1	mg/kg	0.027	ND
Aroclor-1268	1	mg/kg	0.027	ND

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	**1**	**ph**		**8.0**

Reactive Cyanide

Analyte	DF	Units	RL	Result
Cyanide (Reactive)	1	mg/kg	0.50	ND

Sample ID: 006 SS-1 Composite
Lab#: AC74177-002
Matrix: Soil

Collection Date: 8/23/2013
Receipt Date: 8/23/2013

Reactive Sulfide

Analyte	DF	Units	RL	Result
Sulfide (Reactive)	1	mg/kg	100	ND

Semivolatile Organics + 25 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.036	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.036	ND
1,2,4-Trichlorobenzene	1	mg/kg	0.036	ND
1,2-Diphenylhydrazine	1	mg/kg	0.036	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.036	ND
2,4,5-Trichlorophenol	1	mg/kg	0.036	ND
2,4,6-Trichlorophenol	1	mg/kg	0.036	ND
2,4-Dichlorophenol	1	mg/kg	0.0090	ND
2,4-Dimethylphenol	1	mg/kg	0.0090	ND
2,4-Dinitrophenol	1	mg/kg	0.18	ND
2,4-Dinitrotoluene	1	mg/kg	0.036	ND
2,6-Dinitrotoluene	1	mg/kg	0.036	ND
2-Chloronaphthalene	1	mg/kg	0.036	ND
2-Chlorophenol	1	mg/kg	0.036	ND
2-Methylnaphthalene	1	mg/kg	0.036	ND
2-Methylphenol	1	mg/kg	0.0090	ND
2-Nitroaniline	1	mg/kg	0.036	ND
2-Nitrophenol	1	mg/kg	0.036	ND
3&4-Methylphenol	1	mg/kg	0.0090	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.036	ND
3-Nitroaniline	1	mg/kg	0.036	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.18	ND
4-Bromophenyl-phenylether	1	mg/kg	0.036	ND
4-Chloro-3-methylphenol	1	mg/kg	0.036	ND
4-Chloroaniline	1	mg/kg	0.017	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.036	ND
4-Nitroaniline	1	mg/kg	0.036	ND
4-Nitrophenol	1	mg/kg	0.036	ND
Acenaphthene	1	mg/kg	0.036	ND
Acenaphthylene	1	mg/kg	0.036	ND
Acetophenone	1	mg/kg	0.036	ND
Anthracene	**1**	**mg/kg**	**0.036**	**0.042**
Atrazine	1	mg/kg	0.036	ND
Benzaldehyde	1	mg/kg	0.036	ND
Benzidine	1	mg/kg	0.036	ND
Benzo[a]anthracene	**1**	**mg/kg**	**0.036**	**0.18**
Benzo[a]pyrene	**1**	**mg/kg**	**0.036**	**0.15**
Benzo[b]fluoranthene	**1**	**mg/kg**	**0.036**	**0.21**
Benzo[g,h,i]perylene	**1**	**mg/kg**	**0.036**	**0.11**
Benzo[k]fluoranthene	**1**	**mg/kg**	**0.036**	**0.076**
bis(2-Chloroethoxy)methane	1	mg/kg	0.036	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0090	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.036	ND
bis(2-Ethylhexyl)phthalate	**1**	**mg/kg**	**0.036**	**0.037**
Butylbenzylphthalate	1	mg/kg	0.036	ND
Caprolactam	1	mg/kg	0.036	ND
Carbazole	1	mg/kg	0.036	ND
Chrysene	**1**	**mg/kg**	**0.036**	**0.17**
Dibenzo[a,h]anthracene	1	mg/kg	0.036	ND
Dibenzofuran	1	mg/kg	0.0090	ND

Sample ID: 006 SS-1 Composite **Collection Date: 8/23/2013**
Lab#: AC74177-002 **Receipt Date: 8/23/2013**
Matrix: Soil

Diethylphthalate	1	mg/kg	0.036	ND
Dimethylphthalate	1	mg/kg	0.036	ND
Di-n-butylphthalate	1	mg/kg	0.018	ND
Di-n-octylphthalate	1	mg/kg	0.036	ND
Fluoranthene	**1**	**mg/kg**	**0.036**	**0.25**
Fluorene	1	mg/kg	0.036	ND
Hexachlorobenzene	1	mg/kg	0.036	ND
Hexachlorobutadiene	1	mg/kg	0.036	ND
Hexachlorocyclopentadiene	1	mg/kg	0.036	ND
Hexachloroethane	1	mg/kg	0.036	ND
Indeno[1,2,3-cd]pyrene	**1**	**mg/kg**	**0.036**	**0.10**
Isophorone	1	mg/kg	0.036	ND
Naphthalene	**1**	**mg/kg**	**0.0090**	**0.020**
Nitrobenzene	1	mg/kg	0.036	ND
N-Nitrosodimethylamine	1	mg/kg	0.036	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.0090	ND
N-Nitrosodiphenylamine	1	mg/kg	0.036	ND
Pentachlorophenol	1	mg/kg	0.18	ND
Phenanthrene	**1**	**mg/kg**	**0.036**	**0.15**
Phenol	1	mg/kg	0.036	ND
Pyrene	**1**	**mg/kg**	**0.036**	**0.33**

Semivolatile Organics + 25 (8270) Library Searches

Analyte	DF	Units	RT	Result
Benzaldehyde, 3,5-dichloro-2-hydroxy-	**1**	**mg/kg**	**10.41**	**0.081J**
Cyclotetracosane	**1**	**mg/kg**	**12.67**	**0.074J**
1-Octadecene	**1**	**mg/kg**	**13.44**	**0.19J**
Tetradecanal	**1**	**mg/kg**	**13.96**	**0.22J**
Cyclotetracosane	**1**	**mg/kg**	**14.18**	**0.49J**
Benzo[e]pyrene	**1**	**mg/kg**	**14.31**	**0.13J**
unknown	**1**	**mg/kg**	**14.59**	**0.12J**
unknown	**1**	**mg/kg**	**14.72**	**0.10J**
Nonadecane	**1**	**mg/kg**	**14.93**	**0.20J**
16-Octadecenal	**1**	**mg/kg**	**15.64**	**0.13J**
Pentacosane	**1**	**mg/kg**	**15.9**	**0.076J**
unknown	**1**	**mg/kg**	**15.93**	**0.10J**
unknown	**1**	**mg/kg**	**16.07**	**0.096J**
Stigmast-5-en-3-ol, (3.beta.,24S)-	**1**	**mg/kg**	**16.29**	**0.30J**
unknown	**1**	**mg/kg**	**3.54**	**0.12J**
unknown	**1**	**mg/kg**	**4.07**	**2.0JB**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.4**	**76JAB**
unknown	**1**	**mg/kg**	**5.03**	**0.48JB**
2,3-Butanediol, 2,3-dimethyl-	**1**	**mg/kg**	**6.78**	**0.085J**
Dodecane, 4,6-dimethyl-	**1**	**mg/kg**	**9.12**	**0.073J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**81J**

Sulfate (Soil) 9056

Analyte	DF	Units	RL	Result
Sulfate	1	mg/kg	22	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**220**	**7800**
Antimony	1	mg/kg	2.2	ND
Arsenic	**1**	**mg/kg**	**2.2**	**4.5**
Barium	**1**	**mg/kg**	**11**	**97**
Beryllium	**1**	**mg/kg**	**0.65**	**0.85**
Cadmium	1	mg/kg	0.65	ND

Sample ID: 006 SS-1 Composite
Lab#: AC74177-002
Matrix: Soil

Collection Date: 8/23/2013
Receipt Date: 8/23/2013

Calcium	**1**	**mg/kg**	**1100**	**5100**
Chromium	**1**	**mg/kg**	**5.4**	**22**
Cobalt	**1**	**mg/kg**	**2.7**	**9.0**
Copper	**1**	**mg/kg**	**5.4**	**27**
Iron	**1**	**mg/kg**	**220**	**18000**
Lead	**1**	**mg/kg**	**5.4**	**40**
Magnesium	**1**	**mg/kg**	**540**	**4100**
Manganese	**1**	**mg/kg**	**11**	**380**
Nickel	**1**	**mg/kg**	**5.4**	**37**
Potassium	**1**	**mg/kg**	**540**	**1400**
Selenium	1	mg/kg	1.9	ND
Silver	1	mg/kg	1.6	ND
Sodium	1	mg/kg	270	ND
Thallium	1	mg/kg	1.3	ND
Vanadium	**1**	**mg/kg**	**11**	**27**
Zinc	**1**	**mg/kg**	**11**	**61**

TCLP Herbicides 8151

Analyte	DF	Units	RL	Result
2,4-D	1	mg/l	0.0050	ND
Silvex	1	mg/l	0.0050	ND

TCLP Metals 6010

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.20	ND
Barium	**1**	**mg/l**	**0.25**	**0.56**
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.20	ND
Copper	1	mg/l	0.20	ND
Lead	1	mg/l	0.15	ND
Nickel	1	mg/l	0.20	ND
Selenium	1	mg/l	0.10	ND
Silver	1	mg/l	0.050	ND
Zinc	1	mg/l	0.20	ND

TCLP Pesticides 8081

Analyte	DF	Units	RL	Result
Chlordane	1	mg/l	0.0010	ND
Endrin	1	mg/l	0.00010	ND
gamma-BHC	1	mg/l	0.00010	ND
Heptachlor	1	mg/l	0.00010	ND
Heptachlor Epoxide	1	mg/l	0.00010	ND
Methoxychlor	1	mg/l	0.00010	ND
Toxaphene	1	mg/l	0.0025	ND

TCLP Semivolatiles 8270

Analyte	DF	Units	RL	Result
2,4,5-Trichlorophenol	1	mg/l	0.0080	ND
2,4,6-Trichlorophenol	1	mg/l	0.0080	ND
2,4-Dinitrotoluene	1	mg/l	0.0080	ND
2-Methylphenol	1	mg/l	0.0020	ND
3&4-Methylphenol	1	mg/l	0.0020	ND
Hexachlorobenzene	1	mg/l	0.0080	ND
Hexachlorobutadiene	1	mg/l	0.0080	ND
Hexachloroethane	1	mg/l	0.0080	ND
Nitrobenzene	1	mg/l	0.0080	ND
Pentachlorophenol	1	mg/l	0.040	ND
Pyridine	1	mg/l	0.040	ND

Sample ID: 010 SS-2D (4-4.5')
Lab#: AC74177-003
Matrix: Soil/Encore

Collection Date: 8/23/2013
Receipt Date: 8/23/2013

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		94

TCLP Volatiles 8260

Analyte	DF	Units	RL	Result
1,1-Dichloroethene	1	mg/l	0.0010	ND
1,2-Dichloroethane	1	mg/l	0.00050	ND
1,4-Dichlorobenzene	1	mg/l	0.0010	ND
2-Butanone	1	mg/l	0.0010	ND
Benzene	1	mg/l	0.00050	ND
Carbon tetrachloride	1	mg/l	0.0010	ND
Chlorobenzene	1	mg/l	0.0010	ND
Chloroform	1	mg/l	0.0010	ND
Tetrachloroethene	1	mg/l	0.0010	ND
Trichloroethene	1	mg/l	0.0010	ND
Vinyl chloride	1	mg/l	0.0010	ND

Volatile Organics + 10 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1.12	mg/kg	0.0024	ND
1,1,2,2-Tetrachloroethane	1.12	mg/kg	0.0024	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.12	mg/kg	0.0024	ND
1,1,2-Trichloroethane	1.12	mg/kg	0.0024	ND
1,1-Dichloroethane	1.12	mg/kg	0.0024	ND
1,1-Dichloroethene	1.12	mg/kg	0.0024	ND
1,2,3-Trichlorobenzene	1.12	mg/kg	0.0024	ND
1,2,4-Trichlorobenzene	1.12	mg/kg	0.0024	ND
1,2-Dibromo-3-chloropropane	1.12	mg/kg	0.0024	ND
1,2-Dibromoethane	1.12	mg/kg	0.0024	ND
1,2-Dichlorobenzene	1.12	mg/kg	0.0024	ND
1,2-Dichloroethane	1.12	mg/kg	0.0024	ND
1,2-Dichloropropane	1.12	mg/kg	0.0024	ND
1,3-Dichlorobenzene	1.12	mg/kg	0.0024	ND
1,4-Dichlorobenzene	1.12	mg/kg	0.0024	ND
1,4-Dioxane	1.12	mg/kg	0.12	ND
2-Butanone	1.12	mg/kg	0.0024	ND
2-Chloroethylvinylether	1.12	mg/kg	0.0024	ND
2-Hexanone	1.12	mg/kg	0.0024	ND
4-Methyl-2-pentanone	1.12	mg/kg	0.0024	ND
Acetone	1.12	mg/kg	0.012	ND
Acrolein	1.12	mg/kg	0.012	ND
Acrylonitrile	1.12	mg/kg	0.0059	ND
Benzene	1.12	mg/kg	0.0012	ND
Bromochloromethane	1.12	mg/kg	0.0024	ND
Bromodichloromethane	1.12	mg/kg	0.0024	ND
Bromoform	1.12	mg/kg	0.0024	ND
Bromomethane	1.12	mg/kg	0.0024	ND
Carbon disulfide	1.12	mg/kg	0.0024	ND
Carbon tetrachloride	1.12	mg/kg	0.0024	ND
Chlorobenzene	1.12	mg/kg	0.0024	ND
Chloroethane	1.12	mg/kg	0.0024	ND
Chloroform	1.12	mg/kg	0.0024	ND
Chloromethane	1.12	mg/kg	0.0024	ND
cis-1,2-Dichloroethene	1.12	mg/kg	0.0024	ND
cis-1,3-Dichloropropene	1.12	mg/kg	0.0024	ND
Cyclohexane	1.12	mg/kg	0.0024	ND

Sample ID: 010 SS-2D (4-4.5')
Lab#: AC74177-003
Matrix: Soil/Encore

Collection Date: 8/23/2013
Receipt Date: 8/23/2013

Dibromochloromethane	1.12	mg/kg	0.0024	ND
Dichlorodifluoromethane	1.12	mg/kg	0.0024	ND
Ethylbenzene	1.12	mg/kg	0.0012	ND
Isopropylbenzene	1.12	mg/kg	0.0012	ND
m&p-Xylenes	1.12	mg/kg	0.0012	ND
Methyl Acetate	1.12	mg/kg	0.0024	ND
Methylcyclohexane	1.12	mg/kg	0.0024	ND
Methylene chloride	1.12	mg/kg	0.0024	ND
Methyl-t-butyl ether	1.12	mg/kg	0.0012	ND
o-Xylene	1.12	mg/kg	0.0012	ND
Styrene	1.12	mg/kg	0.0024	ND
t-Butyl Alcohol	1.12	mg/kg	0.012	ND
Tetrachloroethene	1.12	mg/kg	0.0024	ND
Toluene	1.12	mg/kg	0.0012	ND
trans-1,2-Dichloroethene	1.12	mg/kg	0.0024	ND
trans-1,3-Dichloropropene	1.12	mg/kg	0.0024	ND
Trichloroethene	1.12	mg/kg	0.0024	ND
Trichlorofluoromethane	1.12	mg/kg	0.0024	ND
Vinyl chloride	1.12	mg/kg	0.0024	ND
Xylenes (Total)	1.12	mg/kg	0.0012	ND

Volatile Organics + 10 (8260) Library Searches

Analyte	DF	Units	RT	Result
unknown	**1.12**	**mg/kg**	**2.82**	**0.0061J**
TotalVolatileTic	**1.12**	**mg/kg**	**NA**	**0.0061J**

Sample ID: 012 SS-2 Composite
Lab#: AC74177-004
Matrix: Soil

Collection Date: 8/23/2013
Receipt Date: 8/23/2013

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		93

Ammonia SM 4500 mod.

Analyte	DF	Units	RL	Result
Ammonia	1	mg/kg	13	67

Chloride (Soil) 9056

Analyte	DF	Units	RL	Result
Chloride	1	mg/kg	22	22

Chlorinated Herbicides 8151

Analyte	DF	Units	RL	Result
2,4-D	1	mg/kg	0.011	ND
Silvex	1	mg/kg	0.011	ND

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.1	ND

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.26	ND

Diesel Range Organics 8015B

Analyte	DF	Units	RL	Result
Diesel Range Organics	1	mg/kg	65	ND

Eh

Analyte	DF	Units	RL	Result
Eh	1	mv		250

Gasoline range organics 8015B

Analyte	DF	Units	RL	Result
Gasoline Range Organics	96.2	mg/kg	52	ND

Glycols (GC/FID) 8015

Analyte	DF	Units	RL	Result
Ethylene Glycol	1	mg/kg	54	ND
Propylene Glycol	1	mg/kg	54	ND

Ignitability (1010 modified)

Analyte	DF	Units	RL	Result
Ignitability	1	deg. f		>141

Mercury (Soil/Waste) 7471A

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.090	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00070	ND

Nitrate-N (Soil) 9056A

Analyte	DF	Units	RL	Result
Nitrate	1	mg/kg	11	18

Nitrite-N (Soil) 9056A

Analyte	DF	Units	RL	Result

Sample ID: 012 SS-2 Composite
Lab#: AC74177-004
Matrix: Soil

Collection Date: 8/23/2013
Receipt Date: 8/23/2013

Nitrite	1	mg/kg	11	ND

NJ EPH Category 2

Analyte	DF	Units	RL	Result
C9-C40	1	mg/kg	65	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0054	ND
Aldrin	1	mg/kg	0.0054	ND
Alpha-BHC	1	mg/kg	0.0011	ND
beta-BHC	1	mg/kg	0.0011	ND
Chlordane	1	mg/kg	0.027	ND
delta-BHC	1	mg/kg	0.0054	ND
Dieldrin	1	mg/kg	0.0011	ND
Endosulfan I	1	mg/kg	0.0054	ND
Endosulfan II	1	mg/kg	0.0054	ND
Endosulfan Sulfate	1	mg/kg	0.0054	ND
Endrin	1	mg/kg	0.0054	ND
Endrin Aldehyde	1	mg/kg	0.0054	ND
Endrin Ketone	1	mg/kg	0.0054	ND
gamma-BHC	1	mg/kg	0.0011	ND
Heptachlor	1	mg/kg	0.0054	ND
Heptachlor Epoxide	1	mg/kg	0.0054	ND
Methoxychlor	1	mg/kg	0.0054	ND
p,p'-DDD	1	mg/kg	0.0027	ND
p,p'-DDE	1	mg/kg	0.0027	ND
p,p'-DDT	1	mg/kg	0.0027	ND
Toxaphene	1	mg/kg	0.027	ND
y-Chlordane	1	mg/kg	0.0054	ND

Organophosphorous Pesticides 8141

Analyte	DF	Units	RL	Result
Parathion	1	ug/kg	72	ND

Paint Filter Test 9095A

Analyte	DF	Units	RL	Result
Paint Filter Test	**1**			**NEG**

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.027	ND
Aroclor-1016	1	mg/kg	0.027	ND
Aroclor-1221	1	mg/kg	0.027	ND
Aroclor-1232	1	mg/kg	0.027	ND
Aroclor-1242	1	mg/kg	0.027	ND
Aroclor-1248	1	mg/kg	0.027	ND
Aroclor-1254	1	mg/kg	0.027	ND
Aroclor-1260	1	mg/kg	0.027	ND
Aroclor-1262	1	mg/kg	0.027	ND
Aroclor-1268	1	mg/kg	0.027	ND

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	**1**	**ph**		**7.6**

Reactive Cyanide

Analyte	DF	Units	RL	Result
Cyanide (Reactive)	1	mg/kg	0.50	ND

Sample ID: 012 SS-2 Composite | **Collection Date: 8/23/2013**
Lab#: AC74177-004 | **Receipt Date: 8/23/2013**
Matrix: Soil

Reactive Sulfide

Analyte	DF	Units	RL	Result
Sulfide (Reactive)	1	mg/kg	100	ND

Semivolatile Organics + 25 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.036	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.036	ND
1,2,4-Trichlorobenzene	1	mg/kg	0.036	ND
1,2-Diphenylhydrazine	1	mg/kg	0.036	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.036	ND
2,4,5-Trichlorophenol	1	mg/kg	0.036	ND
2,4,6-Trichlorophenol	1	mg/kg	0.036	ND
2,4-Dichlorophenol	1	mg/kg	0.0090	ND
2,4-Dimethylphenol	1	mg/kg	0.0090	ND
2,4-Dinitrophenol	1	mg/kg	0.18	ND
2,4-Dinitrotoluene	1	mg/kg	0.036	ND
2,6-Dinitrotoluene	1	mg/kg	0.036	ND
2-Chloronaphthalene	1	mg/kg	0.036	ND
2-Chlorophenol	1	mg/kg	0.036	ND
2-Methylnaphthalene	1	mg/kg	0.036	ND
2-Methylphenol	1	mg/kg	0.0090	ND
2-Nitroaniline	1	mg/kg	0.036	ND
2-Nitrophenol	1	mg/kg	0.036	ND
3&4-Methylphenol	1	mg/kg	0.0090	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.036	ND
3-Nitroaniline	1	mg/kg	0.036	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.18	ND
4-Bromophenyl-phenylether	1	mg/kg	0.036	ND
4-Chloro-3-methylphenol	1	mg/kg	0.036	ND
4-Chloroaniline	1	mg/kg	0.017	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.036	ND
4-Nitroaniline	1	mg/kg	0.036	ND
4-Nitrophenol	1	mg/kg	0.036	ND
Acenaphthene	1	mg/kg	0.036	ND
Acenaphthylene	1	mg/kg	0.036	ND
Acetophenone	1	mg/kg	0.036	ND
Anthracene	1	mg/kg	0.036	ND
Atrazine	1	mg/kg	0.036	ND
Benzaldehyde	1	mg/kg	0.036	ND
Benzidine	1	mg/kg	0.036	ND
Benzo[a]anthracene	**1**	**mg/kg**	**0.036**	**0.073**
Benzo[a]pyrene	**1**	**mg/kg**	**0.036**	**0.066**
Benzo[b]fluoranthene	**1**	**mg/kg**	**0.036**	**0.10**
Benzo[g,h,i]perylene	**1**	**mg/kg**	**0.036**	**0.054**
Benzo[k]fluoranthene	1	mg/kg	0.036	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.036	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0090	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.036	ND
bis(2-Ethylhexyl)phthalate	**1**	**mg/kg**	**0.036**	**0.046**
Butylbenzylphthalate	1	mg/kg	0.036	ND
Caprolactam	1	mg/kg	0.036	ND
Carbazole	1	mg/kg	0.036	ND
Chrysene	**1**	**mg/kg**	**0.036**	**0.074**
Dibenzo[a,h]anthracene	1	mg/kg	0.036	ND
Dibenzofuran	1	mg/kg	0.0090	ND

Sample ID: 012 SS-2 Composite **Collection Date: 8/23/2013**
Lab#: AC74177-004 **Receipt Date: 8/23/2013**
Matrix: Soil

Diethylphthalate	1	mg/kg	0.036	ND
Dimethylphthalate	1	mg/kg	0.036	ND
Di-n-butylphthalate	1	mg/kg	0.018	ND
Di-n-octylphthalate	1	mg/kg	0.036	ND
Fluoranthene	**1**	**mg/kg**	**0.036**	**0.094**
Fluorene	1	mg/kg	0.036	ND
Hexachlorobenzene	1	mg/kg	0.036	ND
Hexachlorobutadiene	1	mg/kg	0.036	ND
Hexachlorocyclopentadiene	1	mg/kg	0.036	ND
Hexachloroethane	1	mg/kg	0.036	ND
Indeno[1,2,3-cd]pyrene	**1**	**mg/kg**	**0.036**	**0.047**
Isophorone	1	mg/kg	0.036	ND
Naphthalene	**1**	**mg/kg**	**0.0090**	**0.019**
Nitrobenzene	1	mg/kg	0.036	ND
N-Nitrosodimethylamine	1	mg/kg	0.036	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.0090	ND
N-Nitrosodiphenylamine	1	mg/kg	0.036	ND
Pentachlorophenol	1	mg/kg	0.18	ND
Phenanthrene	**1**	**mg/kg**	**0.036**	**0.050**
Phenol	1	mg/kg	0.036	ND
Pyrene	**1**	**mg/kg**	**0.036**	**0.12**

Semivolatile Organics + 25 (8270) Library Searches

Analyte	DF	Units	RT	Result
6-tert-Butyl-7-methoxy-8-methyl-1-napht	1	mg/kg	11.27	0.082J
1,2,4-Trimethoxydibenzofuran	1	mg/kg	11.44	0.082J
Octadecane, 1-chloro-	1	mg/kg	12.67	0.12J
unknown	1	mg/kg	13.24	0.35J
1-Octadecene	1	mg/kg	13.44	0.31J
Octadecanal	1	mg/kg	13.95	0.17J
Cyclotetracosane	1	mg/kg	14.18	0.76J
1,1'-Bicyclopentyl, 2-hexadecyl-	1	mg/kg	14.72	0.078J
Pentacosane	1	mg/kg	14.93	0.28J
unknown	1	mg/kg	15.64	0.081J
Ergost-5-en-3-ol, (3.beta.)-	1	mg/kg	15.8	0.26J
(5'Z,8'Z,11'Z)-6-(Heptadeca-5',8',11'-t	1	mg/kg	15.93	0.45J
unknown	1	mg/kg	16.07	0.17J
Stigmast-5-en-3-ol, (3.beta.,24S)-	1	mg/kg	16.29	0.53J
(24R)-4-ERGOSTEN-3-ONE	1	mg/kg	16.57	0.11J
1,2-Propanediol	1	mg/kg	3.04	0.11J
unknown	1	mg/kg	3.54	0.090J
unknown	1	mg/kg	4.06	1.9JB
2-Pentanone, 4-hydroxy-4-methyl-	1	mg/kg	4.39	70JAB
unknown	1	mg/kg	5.03	0.47JB
3-Heptanol, 6-methyl-	1	mg/kg	6.78	0.084J
1,2,3-Propanetriol, triacetate	1	mg/kg	7.4	0.12J
Dodecane, 4,6-dimethyl-	1	mg/kg	9.12	0.075J
TotalSemiVolatileTic	1	mg/kg	NA	77J

Sulfate (Soil) 9056

Analyte	DF	Units	RL	Result
Sulfate	1	mg/kg	22	24

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	220	8500
Antimony	1	mg/kg	2.2	3.3
Arsenic	1	mg/kg	2.2	5.6

Sample ID: 012 SS-2 Composite | **Collection Date: 8/23/2013**
Lab#: AC74177-004 | **Receipt Date: 8/23/2013**
Matrix: Soil

Barium	**1**	**mg/kg**	**11**	**90**
Beryllium	**1**	**mg/kg**	**0.65**	**0.83**
Cadmium	1	mg/kg	0.65	ND
Calcium	**1**	**mg/kg**	**1100**	**3200**
Chromium	**1**	**mg/kg**	**5.4**	**52**
Cobalt	**1**	**mg/kg**	**2.7**	**20**
Copper	**1**	**mg/kg**	**5.4**	**57**
Iron	**1**	**mg/kg**	**220**	**24000**
Lead	**1**	**mg/kg**	**5.4**	**54**
Magnesium	**1**	**mg/kg**	**540**	**4400**
Manganese	**1**	**mg/kg**	**11**	**760**
Nickel	**1**	**mg/kg**	**5.4**	**42**
Potassium	**1**	**mg/kg**	**540**	**1200**
Selenium	1	mg/kg	1.9	ND
Silver	1	mg/kg	1.6	ND
Sodium	1	mg/kg	270	ND
Thallium	1	mg/kg	1.3	ND
Vanadium	**1**	**mg/kg**	**11**	**48**
Zinc	**1**	**mg/kg**	**11**	**100**

TCLP Herbicides 8151

Analyte	DF	Units	RL	Result
2,4-D	1	mg/l	0.0050	ND
Silvex	1	mg/l	0.0050	ND

TCLP Metals 6010

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.20	ND
Barium	**1**	**mg/l**	**0.25**	**0.40**
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.20	ND
Copper	1	mg/l	0.20	ND
Lead	1	mg/l	0.15	ND
Nickel	1	mg/l	0.20	ND
Selenium	1	mg/l	0.10	ND
Silver	1	mg/l	0.050	ND
Zinc	1	mg/l	0.20	ND

TCLP Pesticides 8081

Analyte	DF	Units	RL	Result
Chlordane	1	mg/l	0.0010	ND
Endrin	1	mg/l	0.00010	ND
gamma-BHC	1	mg/l	0.00010	ND
Heptachlor	1	mg/l	0.00010	ND
Heptachlor Epoxide	1	mg/l	0.00010	ND
Methoxychlor	1	mg/l	0.00010	ND
Toxaphene	1	mg/l	0.0025	ND

TCLP Semivolatiles 8270

Analyte	DF	Units	RL	Result
2,4,5-Trichlorophenol	1	mg/l	0.0080	ND
2,4,6-Trichlorophenol	1	mg/l	0.0080	ND
2,4-Dinitrotoluene	1	mg/l	0.0080	ND
2-Methylphenol	1	mg/l	0.0020	ND
3&4-Methylphenol	1	mg/l	0.0020	ND
Hexachlorobenzene	1	mg/l	0.0080	ND
Hexachlorobutadiene	1	mg/l	0.0080	ND
Hexachloroethane	1	mg/l	0.0080	ND

Sample ID: 012 SS-2 Composite
Lab#: AC74177-004
Matrix: Soil

Collection Date: 8/23/2013
Receipt Date: 8/23/2013

Nitrobenzene	1	mg/l	0.0080	ND
Pentachlorophenol	1	mg/l	0.040	ND
Pyridine	1	mg/l	0.040	ND

Sample ID: 017 SS-3E (8-8.5')
Lab#: AC74177-005
Matrix: Soil/Encore

Collection Date: 8/23/2013
Receipt Date: 8/23/2013

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		92

TCLP Volatiles 8260

Analyte	DF	Units	RL	Result
1,1-Dichloroethene	1	mg/l	0.0010	ND
1,2-Dichloroethane	1	mg/l	0.00050	ND
1,4-Dichlorobenzene	1	mg/l	0.0010	ND
2-Butanone	1	mg/l	0.0010	ND
Benzene	1	mg/l	0.00050	ND
Carbon tetrachloride	1	mg/l	0.0010	ND
Chlorobenzene	1	mg/l	0.0010	ND
Chloroform	1	mg/l	0.0010	ND
Tetrachloroethene	1	mg/l	0.0010	ND
Trichloroethene	1	mg/l	0.0010	ND
Vinyl chloride	1	mg/l	0.0010	ND

Volatile Organics + 10 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1.19	mg/kg	0.0026	ND
1,1,2,2-Tetrachloroethane	1.19	mg/kg	0.0026	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.19	mg/kg	0.0026	ND
1,1,2-Trichloroethane	1.19	mg/kg	0.0026	ND
1,1-Dichloroethane	1.19	mg/kg	0.0026	ND
1,1-Dichloroethene	1.19	mg/kg	0.0026	ND
1,2,3-Trichlorobenzene	1.19	mg/kg	0.0026	ND
1,2,4-Trichlorobenzene	1.19	mg/kg	0.0026	ND
1,2-Dibromo-3-chloropropane	1.19	mg/kg	0.0026	ND
1,2-Dibromoethane	1.19	mg/kg	0.0026	ND
1,2-Dichlorobenzene	1.19	mg/kg	0.0026	ND
1,2-Dichloroethane	1.19	mg/kg	0.0026	ND
1,2-Dichloropropane	1.19	mg/kg	0.0026	ND
1,3-Dichlorobenzene	1.19	mg/kg	0.0026	ND
1,4-Dichlorobenzene	1.19	mg/kg	0.0026	ND
1,4-Dioxane	1.19	mg/kg	0.13	ND
2-Butanone	1.19	mg/kg	0.0026	ND
2-Chloroethylvinylether	1.19	mg/kg	0.0026	ND
2-Hexanone	1.19	mg/kg	0.0026	ND
4-Methyl-2-pentanone	1.19	mg/kg	0.0026	ND
Acetone	1.19	mg/kg	0.013	ND
Acrolein	1.19	mg/kg	0.013	ND
Acrylonitrile	1.19	mg/kg	0.0065	ND
Benzene	1.19	mg/kg	0.0013	ND
Bromochloromethane	1.19	mg/kg	0.0026	ND
Bromodichloromethane	1.19	mg/kg	0.0026	ND
Bromoform	1.19	mg/kg	0.0026	ND
Bromomethane	1.19	mg/kg	0.0026	ND
Carbon disulfide	1.19	mg/kg	0.0026	ND
Carbon tetrachloride	1.19	mg/kg	0.0026	ND
Chlorobenzene	1.19	mg/kg	0.0026	ND
Chloroethane	1.19	mg/kg	0.0026	ND
Chloroform	1.19	mg/kg	0.0026	ND
Chloromethane	1.19	mg/kg	0.0026	ND
cis-1,2-Dichloroethene	1.19	mg/kg	0.0026	ND
cis-1,3-Dichloropropene	1.19	mg/kg	0.0026	ND
Cyclohexane	1.19	mg/kg	0.0026	ND

Sample ID: 017 SS-3E (8-8.5')
Lab#: AC74177-005
Matrix: Soil/Encore

Collection Date: 8/23/2013
Receipt Date: 8/23/2013

Dibromochloromethane	1.19	mg/kg	0.0026	ND
Dichlorodifluoromethane	1.19	mg/kg	0.0026	ND
Ethylbenzene	1.19	mg/kg	0.0013	ND
Isopropylbenzene	1.19	mg/kg	0.0013	ND
m&p-Xylenes	1.19	mg/kg	0.0013	ND
Methyl Acetate	1.19	mg/kg	0.0026	ND
Methylcyclohexane	1.19	mg/kg	0.0026	ND
Methylene chloride	1.19	mg/kg	0.0026	ND
Methyl-t-butyl ether	1.19	mg/kg	0.0013	ND
o-Xylene	1.19	mg/kg	0.0013	ND
Styrene	1.19	mg/kg	0.0026	ND
t-Butyl Alcohol	1.19	mg/kg	0.013	ND
Tetrachloroethene	1.19	mg/kg	0.0026	ND
Toluene	1.19	mg/kg	0.0013	ND
trans-1,2-Dichloroethene	1.19	mg/kg	0.0026	ND
trans-1,3-Dichloropropene	1.19	mg/kg	0.0026	ND
Trichloroethene	1.19	mg/kg	0.0026	ND
Trichlorofluoromethane	1.19	mg/kg	0.0026	ND
Vinyl chloride	1.19	mg/kg	0.0026	ND
Xylenes (Total)	1.19	mg/kg	0.0013	ND

Volatile Organics + 10 (8260) Library Searches

Analyte	DF	Units	RT	Result
No Unknown Compounds Detected	1.19	mg/kg	NA	ND
TotalVolatileTic	1.19	mg/kg	NA	ND

Sample ID: 018 SS-3 Composite
Lab#: AC74177-006
Matrix: Soil

Collection Date: 8/23/2013
Receipt Date: 8/23/2013

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		92

Ammonia SM 4500 mod.

Analyte	DF	Units	RL	Result
Ammonia	1	mg/kg	13	98

Chloride (Soil) 9056

Analyte	DF	Units	RL	Result
Chloride	1	mg/kg	22	ND

Chlorinated Herbicides 8151

Analyte	DF	Units	RL	Result
2,4-D	1	mg/kg	0.011	ND
Silvex	1	mg/kg	0.011	ND

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.1	ND

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.26	ND

Diesel Range Organics 8015B

Analyte	DF	Units	RL	Result
Diesel Range Organics	1	mg/kg	65	ND

Eh

Analyte	DF	Units	RL	Result
Eh	1	mv		250

Gasoline range organics 8015B

Analyte	DF	Units	RL	Result
Gasoline Range Organics	95.8	mg/kg	52	ND

Glycols (GC/FID) 8015

Analyte	DF	Units	RL	Result
Ethylene Glycol	1	mg/kg	54	ND
Propylene Glycol	1	mg/kg	54	ND

Ignitability (1010 modified)

Analyte	DF	Units	RL	Result
Ignitability	1	deg. f		>141

Mercury (Soil/Waste) 7471A

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.091	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00070	ND

Nitrate-N (Soil) 9056A

Analyte	DF	Units	RL	Result
Nitrate	1	mg/kg	11	21

Nitrite-N (Soil) 9056A

Analyte	DF	Units	RL	Result

Sample ID: 018 SS-3 Composite **Collection Date: 8/23/2013**
Lab#: AC74177-006 **Receipt Date: 8/23/2013**
Matrix: Soil

Nitrite	1	mg/kg	11	ND

NJ EPH Category 2

Analyte	DF	Units	RL	Result
C9-C40	**1**	**mg/kg**	**65**	**77**

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0054	ND
Aldrin	1	mg/kg	0.0054	ND
Alpha-BHC	1	mg/kg	0.0011	ND
beta-BHC	1	mg/kg	0.0011	ND
Chlordane	1	mg/kg	0.027	ND
delta-BHC	1	mg/kg	0.0054	ND
Dieldrin	1	mg/kg	0.0011	ND
Endosulfan I	1	mg/kg	0.0054	ND
Endosulfan II	1	mg/kg	0.0054	ND
Endosulfan Sulfate	1	mg/kg	0.0054	ND
Endrin	1	mg/kg	0.0054	ND
Endrin Aldehyde	1	mg/kg	0.0054	ND
Endrin Ketone	1	mg/kg	0.0054	ND
gamma-BHC	1	mg/kg	0.0011	ND
Heptachlor	1	mg/kg	0.0054	ND
Heptachlor Epoxide	1	mg/kg	0.0054	ND
Methoxychlor	1	mg/kg	0.0054	ND
p,p'-DDD	1	mg/kg	0.0027	ND
p,p'-DDE	**1**	**mg/kg**	**0.0027**	**0.0056**
p,p'-DDT	**1**	**mg/kg**	**0.0027**	**0.0028d**
Toxaphene	1	mg/kg	0.027	ND
y-Chlordane	1	mg/kg	0.0054	ND

Organophosphorous Pesticides 8141

Analyte	DF	Units	RL	Result
Parathion	1	ug/kg	74	ND

Paint Filter Test 9095A

Analyte	DF	Units	RL	Result
Paint Filter Test	**1**			**NEG**

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.027	ND
Aroclor-1016	1	mg/kg	0.027	ND
Aroclor-1221	1	mg/kg	0.027	ND
Aroclor-1232	1	mg/kg	0.027	ND
Aroclor-1242	1	mg/kg	0.027	ND
Aroclor-1248	1	mg/kg	0.027	ND
Aroclor-1254	1	mg/kg	0.027	ND
Aroclor-1260	1	mg/kg	0.027	ND
Aroclor-1262	1	mg/kg	0.027	ND
Aroclor-1268	1	mg/kg	0.027	ND

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	**1**	**ph**		**7.6**

Reactive Cyanide

Analyte	DF	Units	RL	Result
Cyanide (Reactive)	1	mg/kg	0.50	ND

Sample ID: 018 SS-3 Composite
Lab#: AC74177-006
Matrix: Soil

Collection Date: 8/23/2013
Receipt Date: 8/23/2013

Reactive Sulfide

Analyte	DF	Units	RL	Result
Sulfide (Reactive)	1	mg/kg	100	ND

Semivolatile Organics + 25 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.036	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.036	ND
1,2,4-Trichlorobenzene	1	mg/kg	0.036	ND
1,2-Diphenylhydrazine	1	mg/kg	0.036	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.036	ND
2,4,5-Trichlorophenol	1	mg/kg	0.036	ND
2,4,6-Trichlorophenol	1	mg/kg	0.036	ND
2,4-Dichlorophenol	1	mg/kg	0.0091	ND
2,4-Dimethylphenol	1	mg/kg	0.0091	ND
2,4-Dinitrophenol	1	mg/kg	0.18	ND
2,4-Dinitrotoluene	1	mg/kg	0.036	ND
2,6-Dinitrotoluene	1	mg/kg	0.036	ND
2-Chloronaphthalene	1	mg/kg	0.036	ND
2-Chlorophenol	1	mg/kg	0.036	ND
2-Methylnaphthalene	1	mg/kg	0.036	ND
2-Methylphenol	1	mg/kg	0.0091	ND
2-Nitroaniline	1	mg/kg	0.036	ND
2-Nitrophenol	1	mg/kg	0.036	ND
3&4-Methylphenol	1	mg/kg	0.0091	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.036	ND
3-Nitroaniline	1	mg/kg	0.036	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.18	ND
4-Bromophenyl-phenylether	1	mg/kg	0.036	ND
4-Chloro-3-methylphenol	1	mg/kg	0.036	ND
4-Chloroaniline	1	mg/kg	0.017	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.036	ND
4-Nitroaniline	1	mg/kg	0.036	ND
4-Nitrophenol	1	mg/kg	0.036	ND
Acenaphthene	1	mg/kg	0.036	ND
Acenaphthylene	1	mg/kg	0.036	ND
Acetophenone	1	mg/kg	0.036	ND
Anthracene	1	mg/kg	0.036	ND
Atrazine	1	mg/kg	0.036	ND
Benzaldehyde	1	mg/kg	0.036	ND
Benzidine	1	mg/kg	0.036	ND
Benzo[a]anthracene	**1**	**mg/kg**	**0.036**	**0.083**
Benzo[a]pyrene	**1**	**mg/kg**	**0.036**	**0.070**
Benzo[b]fluoranthene	**1**	**mg/kg**	**0.036**	**0.11**
Benzo[g,h,i]perylene	**1**	**mg/kg**	**0.036**	**0.058**
Benzo[k]fluoranthene	**1**	**mg/kg**	**0.036**	**0.037**
bis(2-Chloroethoxy)methane	1	mg/kg	0.036	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0091	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.036	ND
bis(2-Ethylhexyl)phthalate	**1**	**mg/kg**	**0.036**	**0.044**
Butylbenzylphthalate	1	mg/kg	0.036	ND
Caprolactam	1	mg/kg	0.036	ND
Carbazole	1	mg/kg	0.036	ND
Chrysene	**1**	**mg/kg**	**0.036**	**0.086**
Dibenzo[a,h]anthracene	1	mg/kg	0.036	ND
Dibenzofuran	1	mg/kg	0.0091	ND

Sample ID: 018 SS-3 Composite **Collection Date: 8/23/2013**
Lab#: AC74177-006 **Receipt Date: 8/23/2013**
Matrix: Soil

Diethylphthalate	1	mg/kg	0.036	ND
Dimethylphthalate	1	mg/kg	0.036	ND
Di-n-butylphthalate	1	mg/kg	0.018	ND
Di-n-octylphthalate	1	mg/kg	0.036	ND
Fluoranthene	**1**	**mg/kg**	**0.036**	**0.12**
Fluorene	1	mg/kg	0.036	ND
Hexachlorobenzene	1	mg/kg	0.036	ND
Hexachlorobutadiene	1	mg/kg	0.036	ND
Hexachlorocyclopentadiene	1	mg/kg	0.036	ND
Hexachloroethane	1	mg/kg	0.036	ND
Indeno[1,2,3-cd]pyrene	**1**	**mg/kg**	**0.036**	**0.050**
Isophorone	1	mg/kg	0.036	ND
Naphthalene	1	mg/kg	0.0091	ND
Nitrobenzene	1	mg/kg	0.036	ND
N-Nitrosodimethylamine	1	mg/kg	0.036	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.0091	ND
N-Nitrosodiphenylamine	1	mg/kg	0.036	ND
Pentachlorophenol	1	mg/kg	0.18	ND
Phenanthrene	**1**	**mg/kg**	**0.036**	**0.063**
Phenol	1	mg/kg	0.036	ND
Pyrene	**1**	**mg/kg**	**0.036**	**0.14**

Semivolatile Organics + 25 (8270) Library Searches

Analyte	DF	Units	RT	Result
Stigmast-4-en-3-one	**1**	**mg/kg**	**11.7**	**0.24J**
1-Octadecanethiol	**1**	**mg/kg**	**12.67**	**0.12J**
unknown	**1**	**mg/kg**	**13.24**	**0.64J**
1-Heptadecene	**1**	**mg/kg**	**13.44**	**0.36J**
unknown	**1**	**mg/kg**	**13.74**	**0.18J**
10-DEMETHYLSQUALENE	**1**	**mg/kg**	**13.87**	**0.093J**
16-Octadecenal	**1**	**mg/kg**	**13.96**	**0.32J**
Cyclotetracosane	**1**	**mg/kg**	**14.18**	**0.86J**
10-Octadecenal	**1**	**mg/kg**	**14.72**	**0.12J**
Hentriacontane	**1**	**mg/kg**	**14.93**	**0.29J**
9-Tricosene, (Z)-	**1**	**mg/kg**	**14.98**	**0.093J**
Tetradecanal	**1**	**mg/kg**	**15.64**	**0.11J**
unknown	**1**	**mg/kg**	**15.8**	**0.27J**
Tetracosane	**1**	**mg/kg**	**15.9**	**0.086J**
Stigmasta-5,23-dien-3.beta.-ol	**1**	**mg/kg**	**15.93**	**0.25J**
.beta.-Maaliene	**1**	**mg/kg**	**16.07**	**0.15J**
Stigmast-5-en-3-ol, (3.beta.,24S)-	**1**	**mg/kg**	**16.29**	**0.63J**
unknown	**1**	**mg/kg**	**16.35**	**0.12J**
Aristolone	**1**	**mg/kg**	**16.48**	**0.27J**
unknown	**1**	**mg/kg**	**16.57**	**0.12J**
unknown	**1**	**mg/kg**	**3.54**	**0.094J**
unknown	**1**	**mg/kg**	**4.06**	**1.7JB**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.39**	**66JAB**
unknown	**1**	**mg/kg**	**5.03**	**0.44JB**
unknown	**1**	**mg/kg**	**6.78**	**0.080J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**74J**

Sulfate (Soil) 9056

Analyte	DF	Units	RL	Result
Sulfate	1	mg/kg	22	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**220**	**8400**

Sample ID: 018 SS-3 Composite **Collection Date: 8/23/2013**
Lab#: AC74177-006 **Receipt Date: 8/23/2013**
Matrix: Soil

Antimony	1	mg/kg	2.2	ND
Arsenic	**1**	**mg/kg**	**2.2**	**5.3**
Barium	**1**	**mg/kg**	**11**	**99**
Beryllium	**1**	**mg/kg**	**0.65**	**0.81**
Cadmium	1	mg/kg	0.65	ND
Calcium	**1**	**mg/kg**	**1100**	**4600**
Chromium	**1**	**mg/kg**	**5.4**	**26**
Cobalt	**1**	**mg/kg**	**2.7**	**11**
Copper	**1**	**mg/kg**	**5.4**	**34**
Iron	**1**	**mg/kg**	**220**	**19000**
Lead	**1**	**mg/kg**	**5.4**	**56**
Magnesium	**1**	**mg/kg**	**540**	**4500**
Manganese	**1**	**mg/kg**	**11**	**450**
Nickel	**1**	**mg/kg**	**5.4**	**46**
Potassium	**1**	**mg/kg**	**540**	**1500**
Selenium	1	mg/kg	2.0	ND
Silver	1	mg/kg	1.6	ND
Sodium	1	mg/kg	270	ND
Thallium	1	mg/kg	1.3	ND
Vanadium	**1**	**mg/kg**	**11**	**30**
Zinc	**1**	**mg/kg**	**11**	**81**

TCLP Herbicides 8151

Analyte	DF	Units	RL	Result
2,4-D	1	mg/l	0.0050	ND
Silvex	1	mg/l	0.0050	ND

TCLP Metals 6010

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.20	ND
Barium	**1**	**mg/l**	**0.25**	**0.29**
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.20	ND
Copper	1	mg/l	0.20	ND
Lead	1	mg/l	0.15	ND
Nickel	1	mg/l	0.20	ND
Selenium	1	mg/l	0.10	ND
Silver	1	mg/l	0.050	ND
Zinc	1	mg/l	0.20	ND

TCLP Pesticides 8081

Analyte	DF	Units	RL	Result
Chlordane	1	mg/l	0.0010	ND
Endrin	1	mg/l	0.00010	ND
gamma-BHC	1	mg/l	0.00010	ND
Heptachlor	1	mg/l	0.00010	ND
Heptachlor Epoxide	1	mg/l	0.00010	ND
Methoxychlor	1	mg/l	0.00010	ND
Toxaphene	1	mg/l	0.0025	ND

TCLP Semivolatiles 8270

Analyte	DF	Units	RL	Result
2,4,5-Trichlorophenol	1	mg/l	0.0080	ND
2,4,6-Trichlorophenol	1	mg/l	0.0080	ND
2,4-Dinitrotoluene	1	mg/l	0.0080	ND
2-Methylphenol	1	mg/l	0.0020	ND
3&4-Methylphenol	1	mg/l	0.0020	ND
Hexachlorobenzene	1	mg/l	0.0080	ND

Sample ID: 018 SS-3 Composite
Lab#: AC74177-006
Matrix: Soil

Collection Date: 8/23/2013
Receipt Date: 8/23/2013

Hexachlorobutadiene	1	mg/l	0.0080	ND
Hexachloroethane	1	mg/l	0.0080	ND
Nitrobenzene	1	mg/l	0.0080	ND
Pentachlorophenol	1	mg/l	0.040	ND
Pyridine	1	mg/l	0.040	ND

HCV Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

MDL = Method Detection Limit

RL* = Reporting Limit

ND = Not Detected

RT = Retention Time

NA = Not Applicable

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

B- Indicates analyte was present in the Method Blank and sample.

d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.

E- Indicates the concentration exceeded the upper calibration range of the instrument.

J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

Laboratory Chronicle

Client: PORT AUTHORITY OF NY & NJ **HCV Project #:** 3082313

Project: Bayonne Bridge

Lab#: AC74177-001 **Sample ID: 002 SS-1B (1.5-2')**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	8/26/13 00:00	hossain
TCLP Volatiles 8260	EPA 5030B			EPA 8260B	8/29/13 12:41	SG
TCLP Zero Headspace Extraction	EPA 1311					
Volatile Organics + 10 (8260)	EPA5030/5035			EPA 8260B	8/26/13 10:52	SG

Lab#: AC74177-002 **Sample ID: 006 SS-1 Composite**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	8/26/13 00:00	hossain
Ammonia SM 4500 mod.		08/28/13	beena	SM 4500 mod.	8/28/13 00:00	JW
Chloride (Soil) 9056		08/26/13	Janee	EPA 9056A	8/26/13 22:11	Janee
Chlorinated Herbicides 8151	EPA 8151A	08/27/13	marie	EPA 8151A	8/28/13 13:07	MS
Cr (Hexavalent) 7196A	EPA 3060A	08/26/13	BCT	EPA 7196A	8/27/13 11:59	JW
Cyanide (Soil/Waste) 9012B	EPA 9012B	08/27/13	Anthony	EPA 9012B	8/27/13 11:51	af
Diesel Range Organics 8015B	Mod. Shaker	08/27/13	lynda	EPA 8015B	8/27/13 18:21	RAK/KD/AHD
Eh		08/26/13	sn	SM 2580	8/26/13 00:00	sn
Gasoline range organics 8015B	EPA5030/5035			EPA 8015B	8/29/13 09:25	SG
Glycols (GC/FID) 8015	H2O Extract	08/28/13	BINIT	EPA 8015B	8/28/13 14:26	MS
Ignitability (1010 modified)				EPA 1010	8/26/13 00:00	SDL
Mercury (Soil/Waste) 7471A	EPA 7471A	08/26/13	aadewusi	EPA 7471A	8/26/13 15:38	OA
Mercury (TCLP) 7470A	EPA 7470A	08/27/13	Julijana	EPA 7470A	8/28/13 12:12	OA
Nitrate-N (Soil) 9056A		08/26/13	Janee	EPA 9056A	8/26/13 22:11	Janee
Nitrite-N (Soil) 9056A		08/26/13	Janee	EPA 9056A	8/26/13 22:11	Janee
NJ EPH Category 2	EPA3510/3545	08/26/13	kvr	NJEPHRev3B	8/27/13 00:01	KD/RAK/ABM
Organochlorine Pesticides 8081	3510C/3550B	08/26/13	smarwala	EPA 8081A	8/28/13 11:52	MS
Organophosphorous Pesticides 8141		08/26/13	Lancaster	EPA 8141	8/28/13 00:00	Lancaster
Paint Filter Test 9095A				EPA 9095A	8/27/13 00:00	SDL
PCB 8082	3510C/3550B	08/26/13	smarwala	EPA 8082	8/27/13 16:42	MS/BS
pH 9040C/9045D		08/26/13	sn	9040C/9045D	8/26/13 11:45	sn
Reactive Cyanide	SW846 7.3.3	08/26/13	hossain	SW846 7.3.3	8/27/13 08:24	af
Reactive Sulfide	SW846 7.3.4	08/26/13	HS	SW846 7.3.4	8/27/13 00:00	HS
Semivolatile Organics + 25 (8270)	3510C/3550B	08/26/13	marie	EPA 8270C	8/26/13 18:09	AHD/JB
Sulfate (Soil) 9056		08/26/13	Janee	EPA 9056A	8/26/13 22:11	Janee
TAL Metals 6010	3005&10/3050	08/26/13	aadewusi	EPA 6010B	8/27/13 22:44	OA
TAL Metals 6010	3005&10/3050	08/26/13	aadewusi	EPA 6010B	8/27/13 13:43	OA
TCLP Herbicides 8151	EPA 8151A	08/27/13	JESSICA	EPA 8151A	8/28/13 11:06	MS
TCLP Metals 6010	3005&10/3050	08/27/13	Julijana	EPA 6010B	8/28/13 11:37	SRB
TCLP Metals Extraction 1311	EPA 1311	08/26/13	ramos		8/27/13 00:00	Ramos
TCLP organics extraction 1311	EPA 1311	08/26/13	ramos		8/27/13 00:00	Ramos
TCLP Pesticides 8081	EPA 3510	08/27/13	lynda	EPA 8081A	8/28/13 11:00	MS
TCLP Semivolatiles 8270	EPA 3510	08/28/13	DYR/JESSICA	EPA 8270C	8/28/13 15:25	AHD/JB

Laboratory Chronicle

Client: PORT AUTHORITY OF NY & NJ **HCV Project #:** 3082313

Project: Bayonne Bridge

Lab#: AC74177-003 **Sample ID: 010 SS-2D (4-4.5')**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	8/26/13 00:00	hossain
TCLP Volatiles 8260	EPA 5030B			EPA 8260B	8/29/13 12:57	SG
TCLP Zero Headspace Extraction	EPA 1311					
Volatile Organics + 10 (8260)	EPA5030/5035			EPA 8260B	8/26/13 11:09	SG

Lab#: AC74177-004 **Sample ID: 012 SS-2 Composite**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	8/26/13 00:00	hossain
Ammonia SM 4500 mod.		08/28/13	beena	SM 4500 mod.	8/28/13 00:00	JW
Chloride (Soil) 9056		08/26/13	Janee	EPA 9056A	8/26/13 22:33	Janee
Chlorinated Herbicides 8151	EPA 8151A	08/27/13	marie	EPA 8151A	8/28/13 13:27	MS
Cr (Hexavalent) 7196A	EPA 3060A	08/26/13	BCT	EPA 7196A	8/27/13 12:06	JW
Cyanide (Soil/Waste) 9012B	EPA 9012B	08/27/13	Anthony	EPA 9012B	8/27/13 11:57	af
Diesel Range Organics 8015B	Mod. Shaker	08/27/13	lynda	EPA 8015B	8/27/13 18:48	RAK/KD/AHD
Eh		08/26/13	sn	SM 2580	8/26/13 00:00	sn
Gasoline range organics 8015B	EPA5030/5035			EPA 8015B	8/29/13 09:41	SG
Glycols (GC/FID) 8015	H2O Extract	08/28/13	BINIT	EPA 8015B	8/28/13 14:38	MS
Ignitability (1010 modified)				EPA 1010	8/26/13 00:00	SDL
Mercury (Soil/Waste) 7471A	EPA 7471A	08/26/13	aadewusi	EPA 7471A	8/26/13 16:10	OA
Mercury (TCLP) 7470A	EPA 7470A	08/27/13	Julijana	EPA 7470A	8/28/13 12:14	OA
Nitrate-N (Soil) 9056A		08/26/13	Janee	EPA 9056A	8/26/13 22:33	Janee
Nitrite-N (Soil) 9056A		08/26/13	Janee	EPA 9056A	8/26/13 22:33	Janee
NJ EPH Category 2	EPA3510/3545	08/26/13	kvr	NJEPHRev3B	8/27/13 03:28	KD/RAK/ABM
Organochlorine Pesticides 8081	3510C/3550B	08/26/13	smarwala	EPA 8081A	8/28/13 12:10	MS
Organophosphorous Pesticides 8141		08/26/13	Lancaster	EPA 8141	8/29/13 00:00	Lancaster
Paint Filter Test 9095A				EPA 9095A	8/27/13 00:00	SDL
PCB 8082	3510C/3550B	08/26/13	smarwala	EPA 8082	8/27/13 19:40	MS/BS
pH 9040C/9045D		08/26/13	sn	9040C/9045D	8/26/13 11:45	sn
Reactive Cyanide	SW846 7.3.3	08/26/13	hossain	SW846 7.3.3	8/27/13 08:26	af
Reactive Sulfide	SW846 7.3.4	08/26/13	HS	SW846 7.3.4	8/27/13 00:00	HS
Semivolatile Organics + 25 (8270)	3510C/3550B	08/26/13	marie	EPA 8270C	8/26/13 18:32	AHD/JB
Sulfate (Soil) 9056		08/26/13	Janee	EPA 9056A	8/26/13 22:33	Janee
TAL Metals 6010	3005&10/3050	08/26/13	aadewusi	EPA 6010B	8/28/13 00:17	OA
TAL Metals 6010	3005&10/3050	08/26/13	aadewusi	EPA 6010B	8/27/13 15:34	OA
TCLP Herbicides 8151	EPA 8151A	08/27/13	JESSICA	EPA 8151A	8/28/13 11:26	MS
TCLP Metals 6010	3005&10/3050	08/27/13	Julijana	EPA 6010B	8/28/13 11:41	SRB
TCLP Metals Extraction 1311	EPA 1311	08/26/13	ramos		8/27/13 00:00	Ramos
TCLP organics extraction 1311	EPA 1311	08/26/13	ramos		8/27/13 00:00	Ramos
TCLP Pesticides 8081	EPA 3510	08/27/13	lynda	EPA 8081A	8/28/13 11:17	MS
TCLP Semivolatiles 8270	EPA 3510	08/28/13	DYR/JESSICA	EPA 8270C	8/28/13 15:48	AHD/JB

Laboratory Chronicle

Client: PORT AUTHORITY OF NY & NJ **HCV Project #:** 3082313

Project: Bayonne Bridge

Lab#: AC74177-005 **Sample ID: 017 SS-3E (8-8.5')**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	8/26/13 00:00	hossain
TCLP Volatiles 8260	EPA 5030B			EPA 8260B	8/29/13 13:14	SG
TCLP Zero Headspace Extraction	EPA 1311					
Volatile Organics + 10 (8260)	EPA5030/5035			EPA 8260B	8/26/13 11:25	SG

Lab#: AC74177-006 **Sample ID: 018 SS-3 Composite**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	8/26/13 00:00	hossain
Aminonia SM 4500 mod.		08/28/13	beena	SM 4500 mod.	8/28/13 00:00	JW
Chloride (Soil) 9056		08/26/13	Janee	EPA 9056A	8/26/13 22:55	Janee
Chlorinated Herbicides 8151	EPA 8151A	08/27/13	marie	EPA 8151A	8/28/13 13:47	MS
Cr (Hexavalent) 7196A	EPA 3060A	08/26/13	BCT	EPA 7196A	8/27/13 12:06	JW
Cyanide (Soil/Waste) 9012B	EPA 9012B	08/27/13	Anthony	EPA 9012B	8/27/13 11:59	af
Diesel Range Organics 8015B	Mod. Shaker	08/27/13	lynda	EPA 8015B	8/27/13 19:15	RAK/KD/AHD
Eh		08/26/13	sn	SM 2580	8/26/13 00:00	sn
Gasoline range organics 8015B	EPA5030/5035			EPA 8015B	8/29/13 09:57	SG
Glycols (GC/FID) 8015	H2O Extract	08/28/13	BINIT	EPA 8015B	8/28/13 14:51	MS
Ignitability (1010 modified)				EPA 1010	8/26/13 00:00	SDL
Mercury (Soil/Waste) 7471A	EPA 7471A	08/26/13	aadewusi	EPA 7471A	8/26/13 16:12	OA
Mercury (TCLP) 7470A	EPA 7470A	08/27/13	Julijana	EPA 7470A	8/28/13 12:15	OA
Nitrate-N (Soil) 9056A		08/26/13	Janee	EPA 9056A	8/26/13 22:55	Janee
Nitrite-N (Soil) 9056A		08/26/13	Janee	EPA 9056A	8/26/13 22:55	Janee
NJ EPH Category 2	EPA3510/3545	08/26/13	kvr	NJEPHRev3B	8/27/13 03:57	KD/RAK/ABM
Organochlorine Pesticides 8081	3510C/3550B	08/26/13	smarwala	EPA 8081A	8/28/13 12:27	MS
Organophosphorous Pesticides 8141		08/26/13	Lancaster	EPA 8141	8/29/13 00:00	Lancaster
Paint Filter Test 9095A				EPA 9095A	8/27/13 00:00	SDL
PCB 8082	3510C/3550B	08/26/13	smarwala	EPA 8082	8/27/13 19:58	MS/BS
pH 9040C/9045D		08/26/13	sn	9040C/9045D	8/26/13 11:45	sn
Reactive Cyanide	SW846 7.3.3	08/26/13	hossain	SW846 7.3.3	8/27/13 08:28	af
Reactive Sulfide	SW846 7.3.4	08/26/13	HS	SW846 7.3.4	8/27/13 00:00	HS
Semivolatile Organics + 25 (8270)	3510C/3550B	08/26/13	marie	EPA 8270C	8/26/13 18:55	AHD/JB
Sulfate (Soil) 9056		08/26/13	Janee	EPA 9056A	8/26/13 22:55	Janee
TAL Metals 6010	3005&10/3050	08/26/13	aadewusi	EPA 6010B	8/27/13 15:39	OA
TAL Metals 6010	3005&10/3050	08/26/13	aadewusi	EPA 6010B	8/28/13 00:21	OA
TCLP Herbicides 8151	EPA 8151A	08/27/13	JESSICA	EPA 8151A	8/28/13 11:46	MS
TCLP Metals 6010	3005&10/3050	08/27/13	Julijana	EPA 6010B	8/28/13 11:45	SRB
TCLP Metals Extraction 1311	EPA 1311	08/26/13	ramos		8/27/13 00:00	Ramos
TCLP organics extraction 1311	EPA 1311	08/26/13	ramos		8/27/13 00:00	Ramos
TCLP Pesticides 8081	EPA 3510	08/27/13	lynda	EPA 8081A	8/28/13 11:35	MS
TCLP Semivolatiles 8270	EPA 3510	08/28/13	DYR/JESSICA	EPA 8270C	8/28/13 16:11	AHD/JB

Chain of Custody

3082313 0035

HamptonClarke-Veritech Laboratories
175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056
NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124

HC·V HamptonClarke Veritech Laboratories

CHAIN OF CUSTODY RECORD

A Disadvantaged, Women-Owned, Small Business Enterprise

Project# (Lab Use Only): 3082313

Page 1 of 2

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Deliv.
24 Hours (100%)	Data Summary	Hazsite/CSV
48 Hours (75%)	Waste	EQuIS 4-File / EZ / NYS
72 Hours (50%)	Red - NJ / NY / PA	EQuIS EPA Region 2 or 5
4 Days (35%; TPH)	CLP	**Excel - NJ Regulatory**
1 Week (25%; EPH)	Full / Category B	**Excel - NY Regulatory**
10 Days (10%)	Category A	Excel - PA Regulatory
2 Weeks	**Other: REDUCED NJ**	PDF
Other:		Other:

Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer: Port Authority of New York and New Jersey
Address: 241 Erie Street, Jersey City, NJ 07310
1b) Email/Cell/Fax/Ph: dbailey@panynj.gov
1c) Send Invoice to: Dorian Bailey
1d) Send Report to: Dorian Bailey

Project Information

2a) Project: Bayonne Bridge
2b) Project Mgr: Dorian Bailey
2c) Project Location (City/State): Staten Island, NY
2d) Quote/PO # (If Applicable):

FOR LAB USE ONLY ↓

Batch # AC74177

Check If Contingent ===>

Matrix Codes
DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis Request <=== Check If Contingent

8) # of Bottles

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Composite (C)	Grab (G)	TCL VOA+10	TCL BNA+20	Pest, PCB, Herbicides	TAL Metals, Cyanide	EPH Cat 2-Screen, DRO, GRO	Full TCLP w/11 metals+Cr, Ni, Zn	Reactivity, Ignite, Corrosivity, Paint Filter	Hex Chromium	Phos Pesticide-Parathion	Lab 5:1 Composite	Hold	None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
	001 SS-1A (2-2.5')	S	8/23/2013	9:57		x										x	x									After composite, hold
-001	002 SS-1B (1.5-2')	S	8/23/2013	10:50		x	x									x	x									sample for additional
	003 SS-1C (3.5-4')	S	8/23/2013	10:42		x										x	x									individual sample
	004 SS-1D (1.5-2')	S	8/23/2013	10:30		x										x	x									analysis
	005 SS-1E (8-8.5')	S	8/23/2013	10:14		x										x	x									
-002	006 SS-1 Composite	S	8/23/2013		x			x	x	x	x	x	x	x	x											
	007 SS-2A (3.5-4')	S	8/23/2013	12:00		x										x	x									
	008 SS-2B (1-1.5')	S	8/23/2013	11:25		x										x	x									
	009 SS-2C (2-2.5')	S	8/23/2013	11:35		x										x	x									
-003	010 SS-2D (4-4.5')	S	8/23/2013	11:50		x	x									x	x									
	011 SS-2E (6-6.5')	S	8/23/2013	11:12		x										x	x									
-004	012 SS-2 Composite	S	8/23/2013		x			x	x	x	x	x	x	x	x											

10) Relinquished by:	Accepted by:	Date	Time
[signature]	[signature]	8/23/13	1420

Comments, Notes, Special Requirements, HAZARDS

Note: Check if low-level groundwater methods required to meet current standards in NJ or PA:
- [ ] BN or BNA (8270C SIM)
- [ ] VOC (8260B SIM or 8011)
- [ ] Metals (ICP-MS 200.8 or 6020)
- [ ] Metals-Soil (ICP-MS 6020 for Be & Ag)

Note: Check if applicable:
- [ ] **Project-Specific Reporting Limits**
- [ ] **High Contaminant Concentrations**
- [ ] **NJ LSRP Project**

Cooler Temperature: 2.9, 2.1

Additional Notes

Signed Final Needed

11) Sampler (print name): Date:

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

3082313 0036

HamptonClarke-Veritech Laboratories
175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1456
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HC·V HamptonClarke Veritech Laboratories

CHAIN OF CUSTODY RECORD

A Disadvantaged, Women-Owned, Small Business Enterprise

Project# (Lab Use Only): 3082313

Page 2 of 2

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2 Weeks	**Other: REDUCED NJ**	PDF
Other: _____		Other: _____

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2c) Project Location (City/State): Staten Island, NY
2d) Quote/PO # (If Applicable):

FOR LAB USE ONLY ↓

Batch # AC74177

Check If Contingent ===>

Matrix Codes
DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis Request <=== Check If Contingent

8) # of Bottles

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Composite (C)	Grab (G)	TCL VOA+10	TCL BNA+20	Pest, PCB, Herbicides	TAL Metals, Cyanide	EPH Cat 2-Screen, DRO, GRO	Full TCLP w/11 metals+Cn, Ni, Zn	Reactivity, Ingnite, Corrosivity, Paint Filter	Hex Chromium	Phos Pesticide-Parathion	Lab 5:1 Composite	Hold	None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
	013 SS-3A (1.5-2')	S	8/23/2013	12:53		x										x	x									After composite, hold
	014 SS-3B (0.5-1')	S	8/23/2013	12:32		x										x	x									sample for additional
	015 SS-3C (3.5-4')	S	8/23/2013	12:40		x										x	x									individual sample
	016 SS-3D (2-2.5')	S	8/23/2013	12:46		x										x	x									analysis
-005	017 SS-3E (8-8.5')	S	8/23/2013	12:20		x	x									x	x									
-006	018 SS-3 Composite	S	8/23/2013		x			x	x	x	x	x	x	x	x											

10) Relinquished by:	Accepted by:	Date	Time
[signature]	[signature]	8/23	1420

Comments, Notes, Special Requirements, HAZARDS

Note: Check if low-level groundwater methods required to meet current standards in NJ or PA:
- [ ] BN or BNA (8270C SIM)
- [ ] VOC (8260B SIM or 8011)
- [ ] Metals (ICP-MS 200.8 or 6020)
- [ ] Metals-Soil (ICP-MS 6020 for Be & Ag)

Note: Check if applicable:
- [ ] **Project-Specific Reporting Limits**
- [ ] **High Contaminant Concentrations**
- [ ] **NJ LSRP Project**

Cooler Temperature: 2.9, 2.1

Additional Notes

Signed Final Needed

11) Sampler (print name): Date:

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

CONDITION UPON RECEIPT

Batch Number AC74177

Entered By: VINCENT
Date Entered 8/23/2013 3:38:00 PM

1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	Yes	Are the COC seals intact?
4	Yes	Please specify the Temperature inside the container (in degC) 2.4,2.1
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	Yes	Do the contents match the COC? If no, specify
10	Yes	Is there enough sample sent for the analyses listed on the COC? If no, specify:
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify
14	NA	Corrective actions (Specify item number and corrective action taken).

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AC74177-001	08/23/13 14:20	VINCE	0	M	Received
AC74177-001	08/23/13 15:29	VINCE	0	M	Login
AC74177-001	08/23/13 21:43	PA	2	A	mixing
AC74177-001	08/23/13 21:44	R12	2	A	NONE
AC74177-001	08/26/13 06:55	HS	2	A	%solids
AC74177-001	08/26/13 15:10	R12	2	A	NONE
AC74177-001	08/28/13 08:05	KVR	2	A	ZHE
AC74177-001	08/28/13 12:05	R12	2	A	NONE
AC74177-001	08/23/13 18:24	R31	3	A	NONE
AC74177-001	08/26/13 10:35	SG	3	M	VOA
AC74177-001	08/26/13 12:37	R31	3	A	NONE
AC74177-001	08/23/13 18:24	F18	4	A	none
AC74177-001	08/26/13 10:31	WP	4	A	VOA
AC74177-001	08/23/13 18:24	F18	5	A	none
AC74177-002	08/23/13 14:20	VINCE	0	M	Received
AC74177-002	08/23/13 15:29	VINCE	0	M	Login
AC74177-002	08/23/13 21:43	PA	1	A	mixing
AC74177-002	08/23/13 21:44	R12	1	A	NONE
AC74177-002	08/26/13 06:55	HS	1	A	%solids
AC74177-002	08/26/13 08:50	KVR	1	A	EPH
AC74177-002	08/26/13 09:18	HS	1	A	rcn/rs
AC74177-002	08/26/13 09:59	SN	1	A	Cr6
AC74177-002	08/26/13 10:12	BCT	1	M	CR6 S
AC74177-002	08/26/13 11:05	R12	1	A	NONE
AC74177-002	08/26/13 11:14	SDL	1	A	IGNIT MOD
AC74177-002	08/26/13 11:18	AM	1	A	TDSI/HG
AC74177-002	08/26/13 11:19	AM	1	A	R12
AC74177-002	08/26/13 12:47	RAMO	1	A	TCLP
AC74177-002	08/26/13 12:48	RAMO	1	A	R12
AC74177-002	08/26/13 15:37	JW	1	A	IC
AC74177-002	08/26/13 16:28	R12	1	A	NONE
AC74177-002	08/27/13 08:26	ANTH	1	A	cn-s
AC74177-002	08/27/13 10:22	SDL	1	A	PAINT FILTER
AC74177-002	08/27/13 14:34	LYND	1	A	TPH
AC74177-002	08/27/13 17:16	R12	1	A	NONE
AC74177-002	08/28/13 12:53	BINIT	1	A	S,GLYCOL
AC74177-002	08/28/13 13:10	R12	1	A	NONE
AC74177-002	08/26/13 07:48	MSL	2	A	bn
AC74177-002	08/26/13 08:28	R12	2	A	NONE
AC74177-002	08/26/13 08:38	SN	2	A	Eh/pH
AC74177-002	08/26/13 09:54	SW	2	A	ZHE/SPLP
AC74177-002	08/26/13 09:55	R12	2	A	NONE
AC74177-002	08/26/13 16:32	SMAR	2	A	p/p
AC74177-002	08/26/13 16:32	R12	2	A	NONE
AC74177-002	08/27/13 09:34	MSL	2	A	HERB
AC74177-002	08/27/13 10:01	R12	2	A	NONE
AC74177-002	08/28/13 09:35	BCT	2	A	nh3 n s
AC74177-002	08/28/13 14:41	R12	2	A	NONE
AC74177-002	08/28/13 09:43	R31	4	A	NONE
AC74177-002	08/28/13 09:58	SG	4	A	GRO
AC74177-002	08/28/13 10:09	R30	4	A	NONE
AC74177-002	08/28/13 10:09	R31	5	A	NONE
AC74177-002	08/29/13 08:47	SG	5	A	GRO
AC74177-002	08/29/13 08:47	R31	5	A	NONE
AC74177-003	08/23/13 14:20	VINCE	0	M	Received
AC74177-003	08/23/13 15:29	VINCE	0	M	Login
AC74177-003	08/23/13 21:43	PA	2	A	mixing
AC74177-003	08/23/13 21:44	R12	2	A	NONE
AC74177-003	08/26/13 06:55	HS	2	A	%solids
AC74177-003	08/26/13 15:10	R12	2	A	NONE
AC74177-003	08/28/13 08:05	KVR	2	A	ZHE
AC74177-003	08/28/13 12:05	R12	2	A	NONE
AC74177-003	08/23/13 18:24	R31	3	A	NONE
AC74177-003	08/26/13 10:35	SG	3	M	VOA
AC74177-003	08/26/13 12:37	R31	3	A	NONE
AC74177-003	08/23/13 18:24	F18	4	A	none
AC74177-003	08/26/13 10:31	WP	4	A	VOA
AC74177-003	08/23/13 18:24	F18	5	A	none
AC74177-004	08/23/13 14:20	VINCE	0	M	Received
AC74177-004	08/23/13 15:29	VINCE	0	M	Login
AC74177-004	08/23/13 21:43	PA	2	A	mixing
AC74177-004	08/23/13 21:44	R12	2	A	NONE
AC74177-004	08/26/13 06:55	HS	2	A	%solids
AC74177-004	08/26/13 08:50	KVR	2	A	EPH
AC74177-004	08/26/13 09:59	SN	2	A	Cr6
AC74177-004	08/26/13 10:12	BCT	2	M	CR6 S
AC74177-004	08/26/13 11:05	R12	2	A	NONE
AC74177-004	08/26/13 11:14	SDL	2	A	IGNIT MOD
AC74177-004	08/26/13 11:18	AM	2	A	TDSI/HG
AC74177-004	08/26/13 11:19	AM	2	A	R12
AC74177-004	08/26/13 12:47	RAMO	2	A	TCLP
AC74177-004	08/26/13 12:48	RAMO	2	A	R12
AC74177-004	08/26/13 15:37	JW	2	A	IC
AC74177-004	08/26/13 16:30	R12	2	A	NONE
AC74177-004	08/27/13 08:26	ANTH	2	A	cn-s
AC74177-004	08/27/13 10:22	SDL	2	A	PAINT FILTER
AC74177-004	08/27/13 14:34	LYND	2	A	TPH
AC74177-004	08/27/13 17:16	R12	2	A	NONE
AC74177-004	08/28/13 12:53	BINIT	2	A	S,GLYCOL
AC74177-004	08/28/13 13:10	R12	2	A	NONE
AC74177-004	08/26/13 07:48	MSL	3	A	bn
AC74177-004	08/26/13 08:28	R12	3	A	NONE
AC74177-004	08/26/13 08:38	SN	3	A	Eh/pH
AC74177-004	08/26/13 09:54	SW	3	A	ZHE/SPLP
AC74177-004	08/26/13 09:55	R12	3	A	NONE
AC74177-004	08/26/13 16:32	R12	3	A	NONE
AC74177-004	08/26/13 16:32	SMAR	3	A	p/p
AC74177-004	08/27/13 09:34	MSL	3	A	HERB
AC74177-004	08/27/13 10:01	R12	3	A	NONE
AC74177-004	08/28/13 09:35	BCT	3	A	nh3 n s
AC74177-004	08/28/13 14:41	R12	3	A	NONE
AC74177-004	08/28/13 09:43	R31	4	A	NONE
AC74177-004	08/28/13 09:58	SG	4	A	GRO
AC74177-004	08/28/13 10:09	R30	4	A	NONE
AC74177-004	08/28/13 10:09	R31	5	A	NONE
AC74177-004	08/29/13 08:47	SG	5	A	GRO
AC74177-004	08/29/13 08:47	R31	5	A	NONE
AC74177-005	08/23/13 14:20	VINCE	0	M	Received
AC74177-005	08/23/13 15:29	VINCE	0	M	Login
AC74177-005	08/23/13 21:43	PA	1	A	mixing
AC74177-005	08/23/13 21:44	R12	1	A	NONE
AC74177-005	08/26/13 06:55	HS	1	A	%solids
AC74177-005	08/26/13 15:10	R12	1	A	NONE
AC74177-005	08/28/13 08:05	KVR	1	A	ZHE
AC74177-005	08/28/13 12:05	R12	1	A	NONE
AC74177-005	08/23/13 18:24	R31	3	A	NONE
AC74177-005	08/26/13 10:35	SG	3	M	VOA
AC74177-005	08/26/13 12:37	R31	3	A	NONE
AC74177-005	08/23/13 18:24	F18	4	A	none
AC74177-005	08/26/13 10:31	WP	4	A	VOA
AC74177-005	08/23/13 18:24	F18	5	A	none
AC74177-006	08/23/13 14:20	VINCE	0	M	Received
AC74177-006	08/23/13 15:29	VINCE	0	M	Login
AC74177-006	08/26/13 07:48	MSL	2	A	bn
AC74177-006	08/26/13 08:28	R12	2	A	NONE
AC74177-006	08/26/13 08:38	SN	2	A	Eh/pH
AC74177-006	08/26/13 09:54	SW	2	A	ZHE/SPLP
AC74177-006	08/26/13 09:55	R12	2	A	NONE
AC74177-006	08/26/13 16:32	SMAR	2	A	p/p
AC74177-006	08/26/13 16:32	R12	2	A	NONE
AC74177-006	08/27/13 09:34	MSL	2	A	HERB
AC74177-006	08/27/13 10:01	R12	2	A	NONE
AC74177-006	08/28/13 09:35	BCT	2	A	nh3 n s
AC74177-006	08/28/13 14:41	R12	2	A	NONE
AC74177-006	08/23/13 21:43	PA	3	A	mixing
AC74177-006	08/23/13 21:44	R12	3	A	NONE
AC74177-006	08/26/13 06:55	HS	3	A	%solids
AC74177-006	08/26/13 08:50	KVR	3	A	EPH
AC74177-006	08/26/13 09:59	SN	3	A	Cr6
AC74177-006	08/26/13 10:12	BCT	3	M	CR6 S
AC74177-006	08/26/13 11:05	R12	3	A	NONE
AC74177-006	08/26/13 11:14	SDL	3	A	IGNIT MOD
AC74177-006	08/26/13 11:18	AM	3	A	TDSI/HG
AC74177-006	08/26/13 11:19	AM	3	A	R12
AC74177-006	08/26/13 12:47	RAMO	3	A	TCLP
AC74177-006	08/26/13 12:48	RAMO	3	A	R12
AC74177-006	08/26/13 15:37	JW	3	A	IC
AC74177-006	08/26/13 16:30	R12	3	A	NONE
AC74177-006	08/27/13 08:26	ANTH	3	A	cn-s
AC74177-006	08/27/13 10:22	SDL	3	A	PAINT FILTER

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AC74177-006	08/27/13 14:34	LYND	3	A	TPH
AC74177-006	08/27/13 17:16	R12	3	A	NONE
AC74177-006	08/28/13 12:53	BINIT	3	A	S,GLYCOL
AC74177-006	08/28/13 13:10	R12	3	A	NONE
AC74177-006	08/28/13 09:43	R31	4	A	NONE
AC74177-006	08/28/13 09:58	SG	4	A	GRO
AC74177-006	08/28/13 10:09	R30	4	A	NONE
AC74177-006	08/28/13 10:09	R31	5	A	NONE
AC74177-006	08/29/13 08:47	R31	5	A	NONE
AC74177-006	08/29/13 08:47	SG	5	A	GRO

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Volatile Data

Form1

ORGANICS VOLATILE REPORT

Sample Number: AC74177-001
Client Id: 002 SS-1B (1.5-2')
Data File: 6M01283.D
Analysis Date: 08/26/13 10:52
Date Rec/Extracted: 08/23/13-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260B
Matrix: Soil
Initial Vol: 4.46g
Final Vol: NA
Dilution: 1.12
Solids: 94

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0024	U	75-15-0	Carbon Disulfide	0.0024	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0024	U	56-23-5	Carbon Tetrachloride	0.0024	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0024	U	108-90-7	Chlorobenzene	0.0024	U
79-00-5	1,1,2-Trichloroethane	0.0024	U	75-00-3	Chloroethane	0.0024	U
75-34-3	1,1-Dichloroethane	0.0024	U	67-66-3	Chloroform	0.0024	U
75-35-4	1,1-Dichloroethene	0.0024	U	74-87-3	Chloromethane	0.0024	U
87-61-6	1,2,3-Trichlorobenzene	0.0024	U	156-59-2	cis-1,2-Dichloroethene	0.0024	U
120-82-1	1,2,4-Trichlorobenzene	0.0024	U	10061-01-5	cis-1,3-Dichloropropene	0.0024	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0024	U	110-82-7	Cyclohexane	0.0024	U
106-93-4	1,2-Dibromoethane	0.0024	U	124-48-1	Dibromochloromethane	0.0024	U
95-50-1	1,2-Dichlorobenzene	0.0024	U	75-71-8	Dichlorodifluoromethane	0.0024	U
107-06-2	1,2-Dichloroethane	0.0024	U	100-41-4	Ethylbenzene	0.0012	U
78-87-5	1,2-Dichloropropane	0.0024	U	98-82-8	Isopropylbenzene	0.0012	U
541-73-1	1,3-Dichlorobenzene	0.0024	U	136777612	m&p-Xylenes	0.0012	U
106-46-7	1,4-Dichlorobenzene	0.0024	U	79-20-9	Methyl Acetate	0.0024	U
123-91-1	1,4-Dioxane	0.12	U	108-87-2	Methylcyclohexane	0.0024	U
78-93-3	2-Butanone	0.0024	U	75-09-2	Methylene Chloride	0.0024	U
110-75-8	2-Chloroethylvinylether	0.0024	U	1634-04-4	Methyl-t-butyl ether	0.0012	U
591-78-6	2-Hexanone	0.0024	U	95-47-6	o-Xylene	0.0012	U
108-10-1	4-Methyl-2-Pentanone	0.0024	U	100-42-5	Styrene	0.0024	U
67-64-1	Acetone	0.012	U	75-65-0	t-Butyl Alcohol	0.012	U
107-02-8	Acrolein	0.012	U	127-18-4	Tetrachloroethene	0.0024	U
107-13-1	Acrylonitrile	0.0060	U	108-88-3	Toluene	0.0012	U
71-43-2	Benzene	0.0012	U	156-60-5	trans-1,2-Dichloroethene	0.0024	U
74-97-5	Bromochloromethane	0.0024	U	10061-02-6	trans-1,3-Dichloropropene	0.0024	U
75-27-4	Bromodichloromethane	0.0024	U	79-01-6	Trichloroethene	0.0024	U
75-25-2	Bromoform	0.0024	U	75-69-4	Trichlorofluoromethane	0.0024	U
74-83-9	Bromomethane	0.0024	U	75-01-4	Vinyl Chloride	0.0024	U
1330-20-7	Xylenes (Total)	0.0012	U				

Worksheet #: 274706

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AC74177-001
Client Id: 002 SS-1B (1.5-2')
Data File: 6M01283.D
Analysis Date: 08/26/13 10:52
Date Rec/Extracted: 08/23/13-NA

Matrix: Soil
Initial Vol: 4.46g
Final Vol: NA
Dilution: 1.12
Solids: 94
Method: EPA 8260B

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		No Unknown Compounds Detected	0.00	0 J

Worksheet #: 274706

Total Tentatively Identified Concentration 0

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

3082313 0043

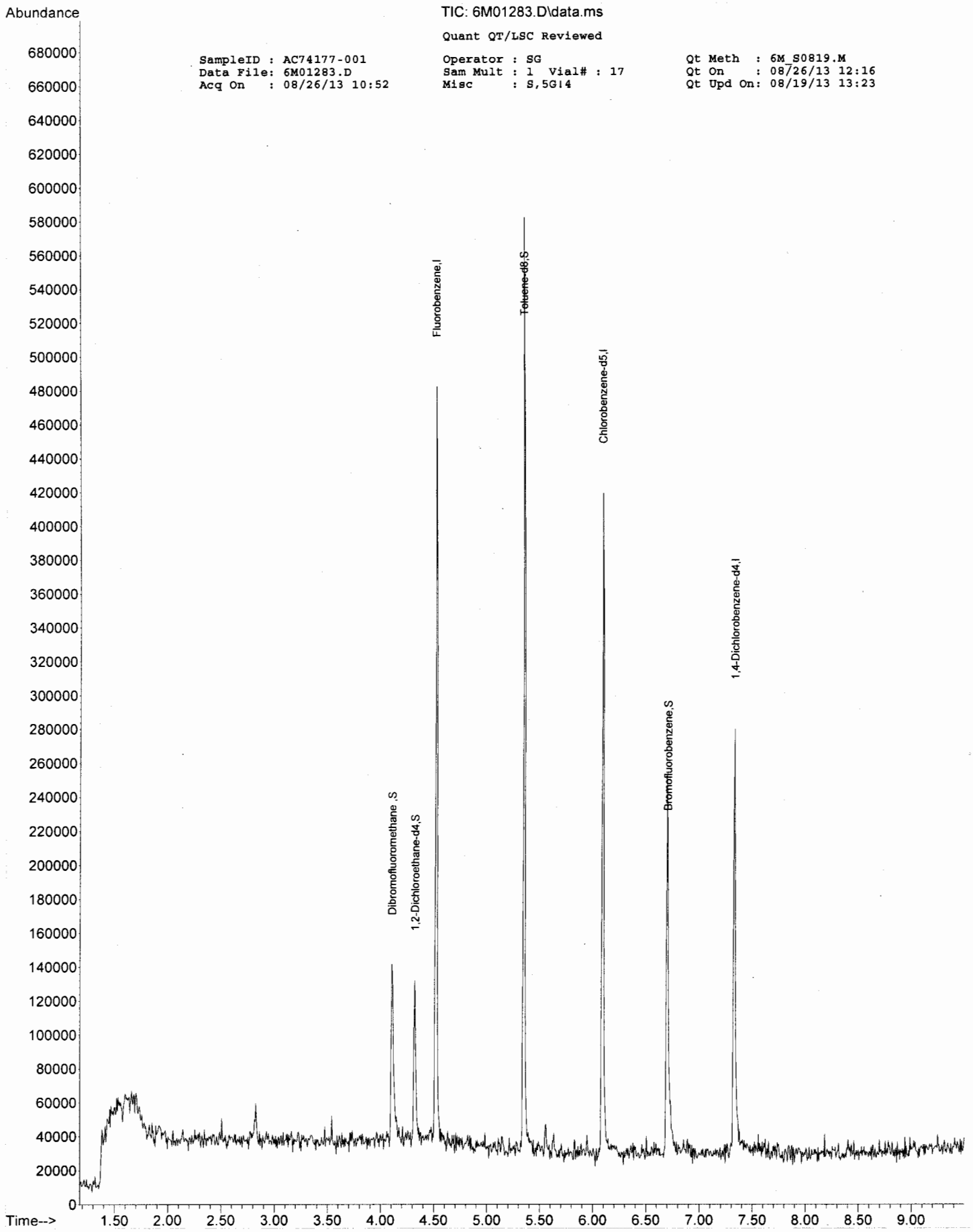
SampleID : AC74177-001 Operator : SG Qt Meth : 6M_S0819.M
Data File: 6M01283.D Sam Mult : 1 Vial# : 17 Qt On : 08/26/13 12:16
Acq On : 08/26/13 10:52 Misc : S,5G!4 Qt Upd On: 08/19/13 13:23

Data Path : G:\GcMsData\2013\GCMS_6\Data\08-26-13\
Qt Path : G:\GcMsData\2013\GCMS_6\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.521	96	230943	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.090	117	131330	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.328	152	57304	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.106	111	56707	33.28	ug/l	0.00
Spiked Amount 30.000			Recovery	=	110.93%	
39) 1,2-Dichloroethane-d4	4.323	67	24893	33.66	ug/l	0.00
Spiked Amount 30.000			Recovery	=	112.20%	
66) Toluene-d8	5.351	98	215570	28.18	ug/l	0.00
Spiked Amount 30.000			Recovery	=	93.93%	
76) Bromofluorobenzene	6.703	174	50187	31.18	ug/l	0.00
Spiked Amount 30.000			Recovery	=	103.93%	
Target Compounds						Qvalue
Library Search Internal Standards TIC Results						
1) Fluorobenzene	4.521		502918	30.00	ug/l	--
2) Chlorobenzene-d5	6.090		470149	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	7.328		359088	30.00	ug/l	--
Library Search Compounds						

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

Ile


Abundance
TIC: 6M01283.D\data.ms
Quant QT/LSC Reviewed
SampleID : AC74177-001
Data File: 6M01283.D
Acq On : 08/26/13 10:52
Operator : SG
Sam Mult : 1 Vial# : 17
Misc : S,5G14
Qt Meth : 6M_S0819.M
Qt On : 08/26/13 12:16
Qt Upd On: 08/19/13 13:23
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Form1

ORGANICS VOLATILE REPORT

Sample Number: AC74177-003
Client Id: 010 SS-2D (4-4.5')
Data File: 6M01284.D
Analysis Date: 08/26/13 11:09
Date Rec/Extracted: 08/23/13-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260B
Matrix: Soil
Initial Vol: 4.48g
Final Vol: NA
Dilution: 1.12
Solids: 94

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0024	U	75-15-0	Carbon Disulfide	0.0024	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0024	U	56-23-5	Carbon Tetrachloride	0.0024	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0024	U	108-90-7	Chlorobenzene	0.0024	U
79-00-5	1,1,2-Trichloroethane	0.0024	U	75-00-3	Chloroethane	0.0024	U
75-34-3	1,1-Dichloroethane	0.0024	U	67-66-3	Chloroform	0.0024	U
75-35-4	1,1-Dichloroethene	0.0024	U	74-87-3	Chloromethane	0.0024	U
87-61-6	1,2,3-Trichlorobenzene	0.0024	U	156-59-2	cis-1,2-Dichloroethene	0.0024	U
120-82-1	1,2,4-Trichlorobenzene	0.0024	U	10061-01-5	cis-1,3-Dichloropropene	0.0024	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0024	U	110-82-7	Cyclohexane	0.0024	U
106-93-4	1,2-Dibromoethane	0.0024	U	124-48-1	Dibromochloromethane	0.0024	U
95-50-1	1,2-Dichlorobenzene	0.0024	U	75-71-8	Dichlorodifluoromethane	0.0024	U
107-06-2	1,2-Dichloroethane	0.0024	U	100-41-4	Ethylbenzene	0.0012	U
78-87-5	1,2-Dichloropropane	0.0024	U	98-82-8	Isopropylbenzene	0.0012	U
541-73-1	1,3-Dichlorobenzene	0.0024	U	136777612	m&p-Xylenes	0.0012	U
106-46-7	1,4-Dichlorobenzene	0.0024	U	79-20-9	Methyl Acetate	0.0024	U
123-91-1	1,4-Dioxane	0.12	U	108-87-2	Methylcyclohexane	0.0024	U
78-93-3	2-Butanone	0.0024	U	75-09-2	Methylene Chloride	0.0024	U
110-75-8	2-Chloroethylvinylether	0.0024	U	1634-04-4	Methyl-t-butyl ether	0.0012	U
591-78-6	2-Hexanone	0.0024	U	95-47-6	o-Xylene	0.0012	U
108-10-1	4-Methyl-2-Pentanone	0.0024	U	100-42-5	Styrene	0.0024	U
67-64-1	Acetone	0.012	U	75-65-0	t-Butyl Alcohol	0.012	U
107-02-8	Acrolein	0.012	U	127-18-4	Tetrachloroethene	0.0024	U
107-13-1	Acrylonitrile	0.0059	U	108-88-3	Toluene	0.0012	U
71-43-2	Benzene	0.0012	U	156-60-5	trans-1,2-Dichloroethene	0.0024	U
74-97-5	Bromochloromethane	0.0024	U	10061-02-6	trans-1,3-Dichloropropene	0.0024	U
75-27-4	Bromodichloromethane	0.0024	U	79-01-6	Trichloroethene	0.0024	U
75-25-2	Bromoform	0.0024	U	75-69-4	Trichlorofluoromethane	0.0024	U
74-83-9	Bromomethane	0.0024	U	75-01-4	Vinyl Chloride	0.0024	U
1330-20-7	Xylenes (Total)	0.0012	U				

Worksheet #: 274706

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AC74177-003
Client Id: 010 SS-2D (4-4.5')
Data File: 6M01284.D
Analysis Date: 08/26/13 11:09
Date Rec/Extracted: 08/23/13-NA

Matrix: Soil
Initial Vol: 4.48g
Final Vol: NA
Dilution: 1.12
Solids: 94
Method: EPA 8260B

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	2.82	0.0061 J

Worksheet #: 274706

Total Tentatively Identified Concentration 0.0061

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

3082313 0047

SampleID : AC74177-003 Operator : SG Qt Meth : 6M_S0819.M
Data File: 6M01284.D Sam Mult : 1 Vial# : 18 Qt On : 08/26/13 12:16
Acq On : 08/26/13 11:09 Misc : S,5G!4 Qt Upd On: 08/19/13 13:23

Data Path : G:\GcMsData\2013\GCMS_6\Data\08-26-13\
Qt Path : G:\GcMsData\2013\GCMS_6\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.522	96	235018	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.091	117	148705	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.329	152	56919	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.107	111	57070	32.91	ug/l	0.00
Spiked Amount 30.000			Recovery = 109.70%			
39) 1,2-Dichloroethane-d4	4.324	67	25909	34.43	ug/l	0.00
Spiked Amount 30.000			Recovery = 114.77%			
66) Toluene-d8	5.352	98	225594	26.04	ug/l	0.00
Spiked Amount 30.000			Recovery = 86.80%			
76) Bromofluorobenzene	6.698	174	50317	31.47	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.90%			
Target Compounds						Qvalue
Library Search Internal Standards TIC Results						
1) Fluorobenzene	4.522		567158	30.00	ug/l	--
2) Chlorobenzene-d5	6.091		481449	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	7.329		339177	30.00	ug/l	--
Library Search Compounds						
1) UNKNOWN	2.820		96545	5.11	ug/l	--

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

Ve

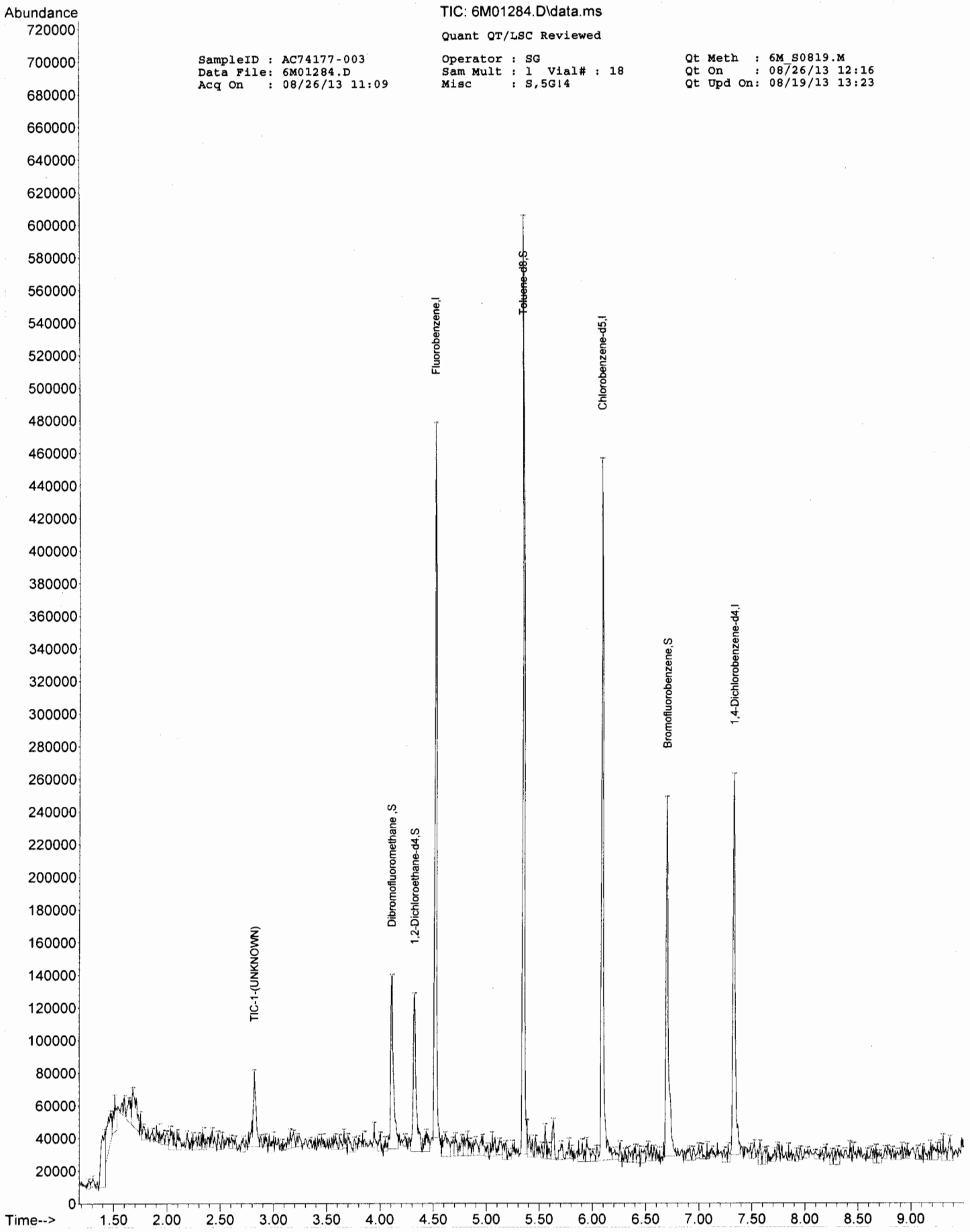
TIC: 6M01284.D\data.ms

Quant QT/LSC Reviewed

SampleID : AC74177-003
Data File: 6M01284.D
Acq On : 08/26/13 11:09

Operator : SG
Sam Mult : 1 Vial# : 18
Misc : S,5G!4

Qt Meth : 6M_S0819.M
Qt On : 08/26/13 12:16
Qt Upd On: 08/19/13 13:23



Form1

ORGANICS VOLATILE REPORT

Sample Number: AC74177-005
Client Id: 017 SS-3E (8-8.5')
Data File: 6M01285.D
Analysis Date: 08/26/13 11:25
Date Rec/Extracted: 08/23/13-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260B
Matrix: Soil
Initial Vol: 4.2g
Final Vol: NA
Dilution: 1.19
Solids: 92

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0026	U	75-15-0	Carbon Disulfide	0.0026	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0026	U	56-23-5	Carbon Tetrachloride	0.0026	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0026	U	108-90-7	Chlorobenzene	0.0026	U
79-00-5	1,1,2-Trichloroethane	0.0026	U	75-00-3	Chloroethane	0.0026	U
75-34-3	1,1-Dichloroethane	0.0026	U	67-66-3	Chloroform	0.0026	U
75-35-4	1,1-Dichloroethene	0.0026	U	74-87-3	Chloromethane	0.0026	U
87-61-6	1,2,3-Trichlorobenzene	0.0026	U	156-59-2	cis-1,2-Dichloroethene	0.0026	U
120-82-1	1,2,4-Trichlorobenzene	0.0026	U	10061-01-5	cis-1,3-Dichloropropene	0.0026	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0026	U	110-82-7	Cyclohexane	0.0026	U
106-93-4	1,2-Dibromoethane	0.0026	U	124-48-1	Dibromochloromethane	0.0026	U
95-50-1	1,2-Dichlorobenzene	0.0026	U	75-71-8	Dichlorodifluoromethane	0.0026	U
107-06-2	1,2-Dichloroethane	0.0026	U	100-41-4	Ethylbenzene	0.0013	U
78-87-5	1,2-Dichloropropane	0.0026	U	98-82-8	Isopropylbenzene	0.0013	U
541-73-1	1,3-Dichlorobenzene	0.0026	U	136777612	m&p-Xylenes	0.0013	U
106-46-7	1,4-Dichlorobenzene	0.0026	U	79-20-9	Methyl Acetate	0.0026	U
123-91-1	1,4-Dioxane	0.13	U	108-87-2	Methylcyclohexane	0.0026	U
78-93-3	2-Butanone	0.0026	U	75-09-2	Methylene Chloride	0.0026	U
110-75-8	2-Chloroethylvinylether	0.0026	U	1634-04-4	Methyl-t-butyl ether	0.0013	U
591-78-6	2-Hexanone	0.0026	U	95-47-6	o-Xylene	0.0013	U
108-10-1	4-Methyl-2-Pentanone	0.0026	U	100-42-5	Styrene	0.0026	U
67-64-1	Acetone	0.013	U	75-65-0	t-Butyl Alcohol	0.013	U
107-02-8	Acrolein	0.013	U	127-18-4	Tetrachloroethene	0.0026	U
107-13-1	Acrylonitrile	0.0065	U	108-88-3	Toluene	0.0013	U
71-43-2	Benzene	0.0013	U	156-60-5	trans-1,2-Dichloroethene	0.0026	U
74-97-5	Bromochloromethane	0.0026	U	10061-02-6	trans-1,3-Dichloropropene	0.0026	U
75-27-4	Bromodichloromethane	0.0026	U	79-01-6	Trichloroethene	0.0026	U
75-25-2	Bromoform	0.0026	U	75-69-4	Trichlorofluoromethane	0.0026	U
74-83-9	Bromomethane	0.0026	U	75-01-4	Vinyl Chloride	0.0026	U
1330-20-7	Xylenes (Total)	0.0013	U				

Worksheet #: 274706

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AC74177-005
Client Id: 017 SS-3E (8-8.5')
Data File: 6M01285.D
Analysis Date: 08/26/13 11:25
Date Rec/Extracted: 08/23/13-NA

Matrix: Soil
Initial Vol: 4.2g
Final Vol: NA
Dilution: 1.19
Solids: 92
Method: EPA 8260B

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		No Unknown Compounds Detected	0.00	0 J

Worksheet #: 274706

Total Tentatively Identified Concentration 0

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

3082313 0051

SampleID : AC74177-005 Operator : SG Qt Meth : 6M_S0819.M
Data File: 6M01285.D Sam Mult : 1 Vial# : 19 Qt On : 08/26/13 12:16
Acq On : 08/26/13 11:25 Misc : S,5G!4 Qt Upd On: 08/19/13 13:23

Data Path : G:\GcMsData\2013\GCMS_6\Data\08-26-13\
Qt Path : G:\GcMsData\2013\GCMS_6\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.527	96	230982	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.102	117	138284	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.340	152	53022	30.00	ug/l	0.01
System Monitoring Compounds						
37) Dibromofluoromethane	4.112	111	52391	30.74	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.47%			
39) 1,2-Dichloroethane-d4	4.328	67	25030	33.84	ug/l	0.00
Spiked Amount 30.000			Recovery = 112.80%			
66) Toluene-d8	5.356	98	226374	28.10	ug/l	0.00
Spiked Amount 30.000			Recovery = 93.67%			
76) Bromofluorobenzene	6.709	174	48240	32.39	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.97%			
Target Compounds						Qvalue
Library Search Internal Standards TIC Results						
1) Fluorobenzene	4.527		522426	30.00	ug/l	--
2) Chlorobenzene-d5	6.102		456990	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	7.334		347703	30.00	ug/l	--
Library Search Compounds						

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

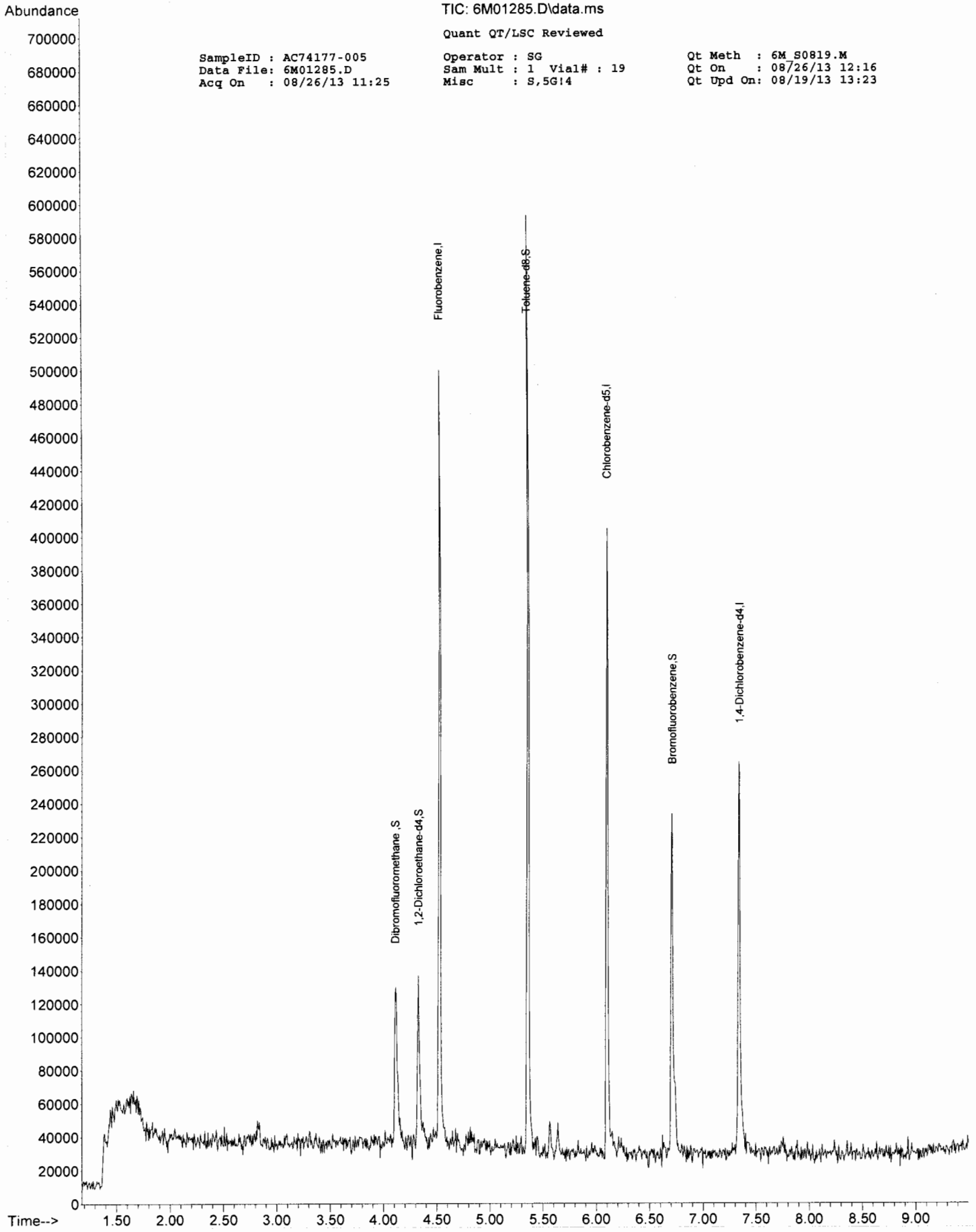
TIC: 6M01285.D\data.ms

Quant QT/LSC Reviewed

SampleID : AC74177-005
Data File: 6M01285.D
Acq On : 08/26/13 11:25

Operator : SG
Sam Mult : 1 Vial# : 19
Misc : S,5G!4

Qt Meth : 6M_S0819.M
Qt On : 08/26/13 12:16
Qt Upd On: 08/19/13 13:23



Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 6M01274.D
Analysis Date: 08/26/13 08:24
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260B
Matrix: Soil
Initial Vol: 5g
Final Vol: NA
Dilution: 1.00
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0020	U	75-15-0	Carbon Disulfide	0.0020	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0020	U	56-23-5	Carbon Tetrachloride	0.0020	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0020	U	108-90-7	Chlorobenzene	0.0020	U
79-00-5	1,1,2-Trichloroethane	0.0020	U	75-00-3	Chloroethane	0.0020	U
75-34-3	1,1-Dichloroethane	0.0020	U	67-66-3	Chloroform	0.0020	U
75-35-4	1,1-Dichloroethene	0.0020	U	74-87-3	Chloromethane	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	0.0020	U	156-59-2	cis-1,2-Dichloroethene	0.0020	U
120-82-1	1,2,4-Trichlorobenzene	0.0020	U	10061-01-5	cis-1,3-Dichloropropene	0.0020	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0020	U	110-82-7	Cyclohexane	0.0020	U
106-93-4	1,2-Dibromoethane	0.0020	U	124-48-1	Dibromochloromethane	0.0020	U
95-50-1	1,2-Dichlorobenzene	0.0020	U	75-71-8	Dichlorodifluoromethane	0.0020	U
107-06-2	1,2-Dichloroethane	0.0020	U	100-41-4	Ethylbenzene	0.0010	U
78-87-5	1,2-Dichloropropane	0.0020	U	98-82-8	Isopropylbenzene	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.0020	U	136777612	m&p-Xylenes	0.0010	U
106-46-7	1,4-Dichlorobenzene	0.0020	U	79-20-9	Methyl Acetate	0.0020	U
123-91-1	1,4-Dioxane	0.10	U	108-87-2	Methylcyclohexane	0.0020	U
78-93-3	2-Butanone	0.0020	U	75-09-2	Methylene Chloride	0.0020	U
110-75-8	2-Chloroethylvinylether	0.0020	U	1634-04-4	Methyl-t-butyl ether	0.0010	U
591-78-6	2-Hexanone	0.0020	U	95-47-6	o-Xylene	0.0010	U
108-10-1	4-Methyl-2-Pentanone	0.0020	U	100-42-5	Styrene	0.0020	U
67-64-1	Acetone	0.010	U	75-65-0	t-Butyl Alcohol	0.010	U
107-02-8	Acrolein	0.010	U	127-18-4	Tetrachloroethene	0.0020	U
107-13-1	Acrylonitrile	0.0050	U	108-88-3	Toluene	0.0010	U
71-43-2	Benzene	0.0010	U	156-60-5	trans-1,2-Dichloroethene	0.0020	U
74-97-5	Bromochloromethane	0.0020	U	10061-02-6	trans-1,3-Dichloropropene	0.0020	U
75-27-4	Bromodichloromethane	0.0020	U	79-01-6	Trichloroethene	0.0020	U
75-25-2	Bromoform	0.0020	U	75-69-4	Trichlorofluoromethane	0.0020	U
74-83-9	Bromomethane	0.0020	U	75-01-4	Vinyl Chloride	0.0020	U

Worksheet #: 274706

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: DAILY BLANK
Client Id:
Data File: 6M01274.D
Analysis Date: 08/26/13 08:24
Date Rec/Extracted:

Matrix: Soil
Initial Vol: 5g
Final Vol: NA
Dilution: 1.00
Solids: 100
Method: EPA 8260B

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		No Unknown Compounds Detected	0.00	0 J

Worksheet #: 274706

Total Tentatively Identified Concentration 0

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

3082313 0055

SampleID : DAILY BLANK
Data File: 6M01274.D
Acq On : 08/26/13 08:24

Operator : SG
Sam Mult : 1 Vial# : 9
Misc : S,5G

Qt Meth : 6M_S0819.M
Qt On : 08/26/13 09:05
Qt Upd On: 08/19/13 13:23

Data Path : G:\GcMsData\2013\GCMS_6\Data\08-26-13\
Qt Path : G:\GcMsData\2013\GCMS_6\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.521	96	247011	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.090	117	148426	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.328	152	62533	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.112	111	60211	33.04	ug/l	0.00
Spiked Amount 30.000			Recovery = 110.13%			
39) 1,2-Dichloroethane-d4	4.323	67	24682	31.20	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.00%			
66) Toluene-d8	5.351	98	233928	27.05	ug/l	0.00
Spiked Amount 30.000			Recovery = 90.17%			
76) Bromofluorobenzene	6.697	174	48515	27.62	ug/l	0.00
Spiked Amount 30.000			Recovery = 92.07%			

Target Compounds — Qvalue

Library Search Internal Standards TIC Results

1) Fluorobenzene	4.521	571544	30.00	ug/l	--
2) Chlorobenzene-d5	6.090	506146	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	7.328	400080	30.00	ug/l	--

Library Search Compounds

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

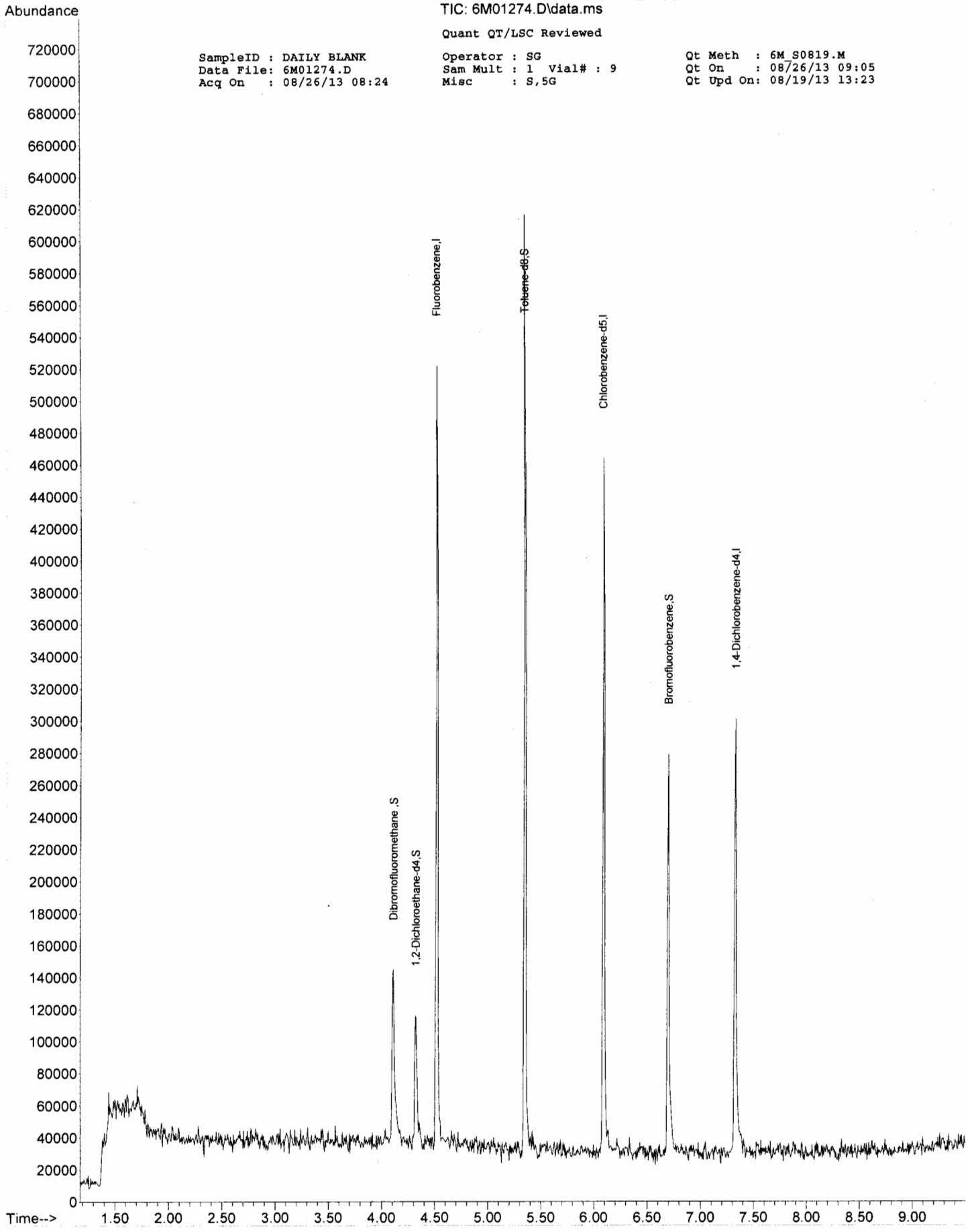
TIC: 6M01274.D\data.ms

Quant QT/LSC Reviewed

SampleID : DAILY BLANK
Data File: 6M01274.D
Acq On : 08/26/13 08:24

Operator : SG
Sam Mult : 1 Vial# : 9
Misc : S,5G

Qt Meth : 6M_S0819.M
Qt On : 08/26/13 09:05
Qt Upd On: 08/19/13 13:23



FORM2

Surrogate Recovery

Method: EPA 8260B

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
6M01274.D	DAILY BLANK	Soil	08/26/13 08:24	1		110	104	90	92		
6M01283.D	AC74177-001	Soil	08/26/13 10:52	1		111	112	94	104		
6M01284.D	AC74177-003	Soil	08/26/13 11:09	1		110	115	87	105		
6M01285.D	AC74177-005	Soil	08/26/13 11:25	1		102	113	94	108		
6M01275.D	MBS28298	Soil	08/26/13 08:41	1		105	114	93	103		
6M01279.D	AC73985-011	Soil	08/26/13 09:47	1		108	109	93	103		
6M01280.D	AC73985-011(	Soil	08/26/13 10:04	1		101	106	98	98		
6M01281.D	AC73985-011(	Soil	08/26/13 10:20	1		103	95	105	95		
6M01297.D	MBS28303	Soil	08/26/13 14:40	1		108	104	95	100		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8260B

Soil Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	63-140
S2=1,2-Dichloroethane-d4	30	63-143
S3=Toluene-d8	30	68-122
S4=Bromofluorobenzene	30	64-129

Form3
Recovery Data
QC Batch: MBS28298

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M01275.D	MBS28298	8/26/2013 8:41:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	33.3935	0	50	67	20	130
1,1-Dichloroethene	1	39.5927	0	50	79	50	130
1,1-Dichloroethane	1	37.6086	0	50	75	50	130
Chloroform	1	37.2108	0	50	74	50	130
1,2-Dichloroethane	1	37.7381	0	50	75	50	130
2-Butanone	1	41.8541	0	50	84	20	130
Carbon Tetrachloride	1	35.2178	0	50	70	50	130
Trichloroethene	1	33.929	0	50	68	50	130
Benzene	1	36.9707	0	50	74	50	130
Tetrachloroethene	1	31.9408	0	50	64	50	130
Toluene	1	29.7085	0	50	59	50	130
Chlorobenzene	1	30.4547	0	50	61	50	130
1,4-Dichlorobenzene	1	31.7609	0	50	64	50	130
1,2-Dichlorobenzene	1	32.4561	0	50	65	50	130
n-Propylbenzene	1	32.2643	0	50	65	50	130
sec-Butylbenzene	1	34.5749	0	50	69	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS28303

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M01297.D	MBS28303	8/26/2013 2:40:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	37.6374	0	50	75	20	130
1,1-Dichloroethene	1	46.9532	0	50	94	50	130
1,1-Dichloroethane	1	43.4344	0	50	87	50	130
Chloroform	1	43.122	0	50	86	50	130
1,2-Dichloroethane	1	44.5875	0	50	89	50	130
2-Butanone	1	42.1331	0	50	84	20	130
Carbon Tetrachloride	1	37.447	0	50	75	50	130
Trichloroethene	1	39.2998	0	50	79	50	130
Benzene	1	42.6495	0	50	85	50	130
Tetrachloroethene	1	32.1286	0	50	64	50	130
Toluene	1	30.7516	0	50	62	50	130
Chlorobenzene	1	32.0936	0	50	64	50	130
1,4-Dichlorobenzene	1	32.0656	0	50	64	50	130
1,2-Dichlorobenzene	1	32.2994	0	50	65	50	130
n-Propylbenzene	1	33.4878	0	50	67	50	130
sec-Butylbenzene	1	34.1839	0	50	68	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS28298

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M01280.D	AC73985-011(MS)	8/26/2013 10:04:00 AM
Non Spike(If applicable):	6M01279.D	AC73985-011	8/26/2013 9:47:00 AM
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	31.3724	0	50	63	20	130
1,1-Dichloroethene	1	37.5647	0	50	75	50	130
1,1-Dichloroethane	1	36.8714	0	50	74	50	130
Chloroform	1	33.0037	0	50	66	50	130
1,2-Dichloroethane	1	32.6735	0	50	65	50	130
2-Butanone	1	46.0191	0	50	92	20	130
Carbon Tetrachloride	1	31.8921	0	50	64	50	130
Trichloroethene	1	31.6661	0	50	63	50	130
Benzene	1	32.9601	0	50	66	50	130
Tetrachloroethene	1	25.7789	0	50	52	50	130
Toluene	1	27.9727	0	50	56	50	130
Chlorobenzene	1	26.6531	0	50	53	50	130
1,4-Dichlorobenzene	1	20.4556	0	50	41*	50	130
1,2-Dichlorobenzene	1	19.3499	0	50	39*	50	130
n-Propylbenzene	1	22.3449	0	50	45*	50	130
sec-Butylbenzene	1	20.0378	0	50	40*	50	130

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M01281.D	AC73985-011(MSD)	8/26/2013 10:20:00 AM
Non Spike(If applicable):	6M01279.D	AC73985-011	8/26/2013 9:47:00 AM
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	33.8118	0	50	68	20	130
1,1-Dichloroethene	1	38.7915	0	50	78	50	130
1,1-Dichloroethane	1	37.9183	0	50	76	50	130
Chloroform	1	34.7233	0	50	69	50	130
1,2-Dichloroethane	1	33.9067	0	50	68	50	130
2-Butanone	1	38.4455	0	50	77	20	130
Carbon Tetrachloride	1	30.0008	0	50	60	50	130
Trichloroethene	1	30.783	0	50	62	50	130
Benzene	1	32.7121	0	50	65	50	130
Tetrachloroethene	1	22.9326	0	50	46*	50	130
Toluene	1	25.403	0	50	51	50	130
Chlorobenzene	1	24.6637	0	50	49*	50	130
1,4-Dichlorobenzene	1	15.0115	0	50	30*	50	130
1,2-Dichlorobenzene	1	14.2184	0	50	28*	50	130
n-Propylbenzene	1	16.6593	0	50	33*	50	130
sec-Butylbenzene	1	14.4598	0	50	29*	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA

QC Batch: MBS28298

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M01281.D	AC73985-011(MSD)	8/26/2013 10:20:00 AM
Duplicate(If applicable):	6M01280.D	AC73985-011(MS)	8/26/2013 10:04:00 AM
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Vinyl Chloride	1	33.8118	31.3724	7.5	40
1,1-Dichloroethene	1	38.7915	37.5647	3.2	40
1,1-Dichloroethane	1	37.9183	36.8714	2.8	40
Chloroform	1	34.7233	33.0037	5.1	40
1,2-Dichloroethane	1	33.9067	32.6735	3.7	40
2-Butanone	1	38.4455	46.0191	18	40
Carbon Tetrachloride	1	30.0008	31.8921	6.1	40
Trichloroethene	1	30.783	31.6661	2.8	40
Benzene	1	32.7121	32.9601	0.76	40
Tetrachloroethene	1	22.9326	25.7789	12	40
Toluene	1	25.403	27.9727	9.6	40
Chlorobenzene	1	24.6637	26.6531	7.8	40
1,4-Dichlorobenzene	1	15.0115	20.4556	31	40
1,2-Dichlorobenzene	1	14.2184	19.3499	31	40
n-Propylbenzene	1	16.6593	22.3449	29	40
sec-Butylbenzene	1	14.4598	20.0378	32	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 6M01274.D
Matrix: Soil

Blank Analysis Date: 08/26/13 08:24
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260B

Sample Number	Data File	Analysis Date
AC74177-001	6M01283.D	08/26/13 10:52
AC74177-003	6M01284.D	08/26/13 11:09
AC74177-005	6M01285.D	08/26/13 11:25
MBS28303	6M01297.D	08/26/13 14:40
AC73985-011(MSD	6M01281.D	08/26/13 10:20
AC73985-011(MS)	6M01280.D	08/26/13 10:04
AC73985-011	6M01279.D	08/26/13 09:47
MBS28298	6M01275.D	08/26/13 08:41

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6

Data File: 6M01029.D
Analysis Date: 08/19/13 10:26
Method: EPA 8260B

Tune Scan/Time Range: Average of 3.982 to 4.021 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	25.2	9076	PASS
75	95	30	60	59.1	21294	PASS
95	95	100	100	100.0	36001	PASS
96	95	5	9	6.9	2468	PASS
173	174	0.00	2	0.9	296	PASS
174	95	50	100	91.6	32966	PASS
175	174	5	9	6.0	1994	PASS
176	174	95	101	100.9	33258	PASS
177	176	5	9	6.2	2064	PASS

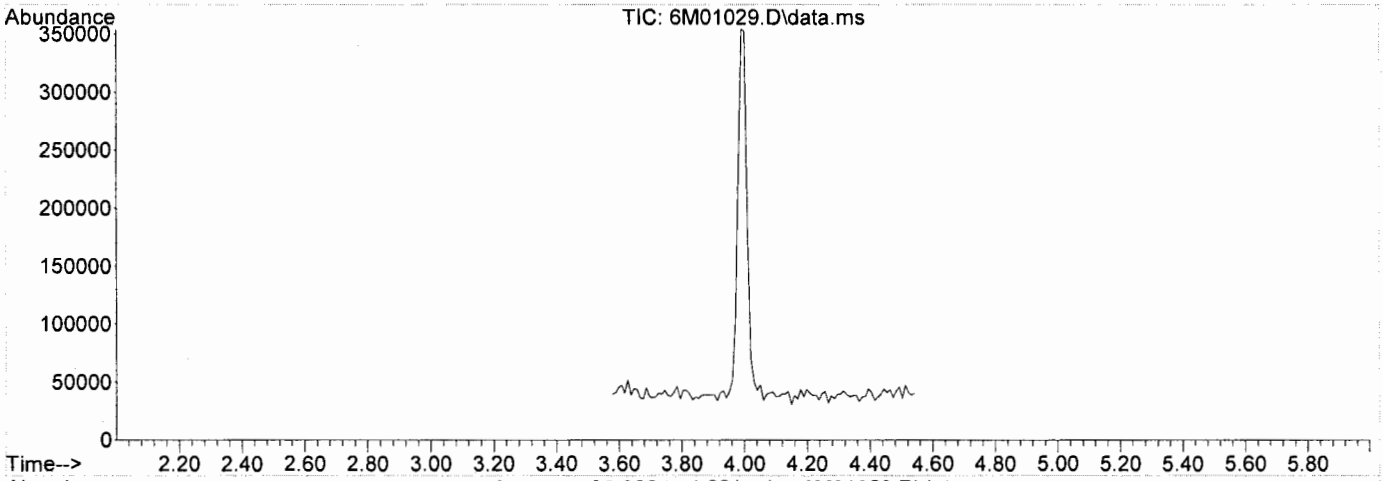
Data File	Sample Number	Analysis Date:
6M01030.D	BLK	08/19/13 10:36
6M01031.D	CAL @ 0.5 PPB	08/19/13 10:52
6M01032.D	CAL @ 1 PPB	08/19/13 11:08
6M01033.D	CAL @ 2 PPB	08/19/13 11:24
6M01034.D	CAL @ 5 PPB	08/19/13 11:41
6M01035.D	CAL @ 500 PPB	08/19/13 11:57
6M01036.D	CAL @ 250 PPB	08/19/13 12:13
6M01037.D	CAL @ 100 PPB	08/19/13 12:29
6M01038.D	CAL @ 50 PPB	08/19/13 12:45
6M01039.D	CAL @ 20 PPB	08/19/13 13:06
6M01040.D	ICV	08/19/13 13:23
6M01041.D	STDTEST	08/19/13 13:39
6M01042.D	BLK	08/19/13 13:55
6M01043.D	BLK	08/19/13 14:11
6M01044.D	DAILY BLANK	08/19/13 14:27
6M01045.D	MBS27852	08/19/13 14:44
6M01046.D	BLK	08/19/13 15:00
6M01047.D	BLK	08/19/13 15:17
6M01048.D	AC73868-012	08/19/13 15:33
6M01049.D	AC73868-018	08/19/13 15:49
6M01050.D	AC73868-027	08/19/13 16:05
6M01051.D	BLK	08/19/13 16:17
6M01052.D	STD	08/19/13 16:27
6M01053.D	BLK	08/19/13 16:44
6M01054.D	AC73868-027	08/19/13 17:00
6M01055.D	AC74046-001	08/19/13 17:16
6M01056.D	AC74046-002	08/19/13 17:32
6M01057.D	AC74046-003	08/19/13 17:48
6M01058.D	AC74046-004	08/19/13 18:04
6M01059.D	AC74046-005	08/19/13 18:20
6M01060.D	AC74046-006	08/19/13 18:37
6M01061.D	AC74046-007	08/19/13 18:53
6M01062.D	AC74046-008	08/19/13 19:09
6M01063.D	AC74046-009	08/19/13 19:25
6M01064.D	AC74046-010	08/19/13 19:41
6M01065.D	AC74046-011	08/19/13 19:57
6M01066.D	AC74046-012	08/19/13 20:13
6M01067.D	AC74046-013	08/19/13 20:29
6M01068.D	AC74046-014	08/19/13 20:46
6M01069.D	AC74046-015	08/19/13 21:02
6M01070.D	AC74046-016	08/19/13 21:18
6M01071.D	BLK	08/19/13 21:34
6M01072.D	AC73968-010	08/19/13 21:50
6M01073.D	AC73841-031	08/19/13 22:06
6M01074.D	MBS27853	08/19/13 22:22
6M01075.D	BLK	08/19/13 22:38
6M01076.D	BLK	08/19/13 22:54
6M01077.D	BLK	08/19/13 23:10
6M01078.D	BLK	08/19/13 23:26
6M01079.D	BLK	08/19/13 23:42
6M01080.D	BLK	08/19/13 23:58
6M01081.D	BLK	08/20/13 00:14

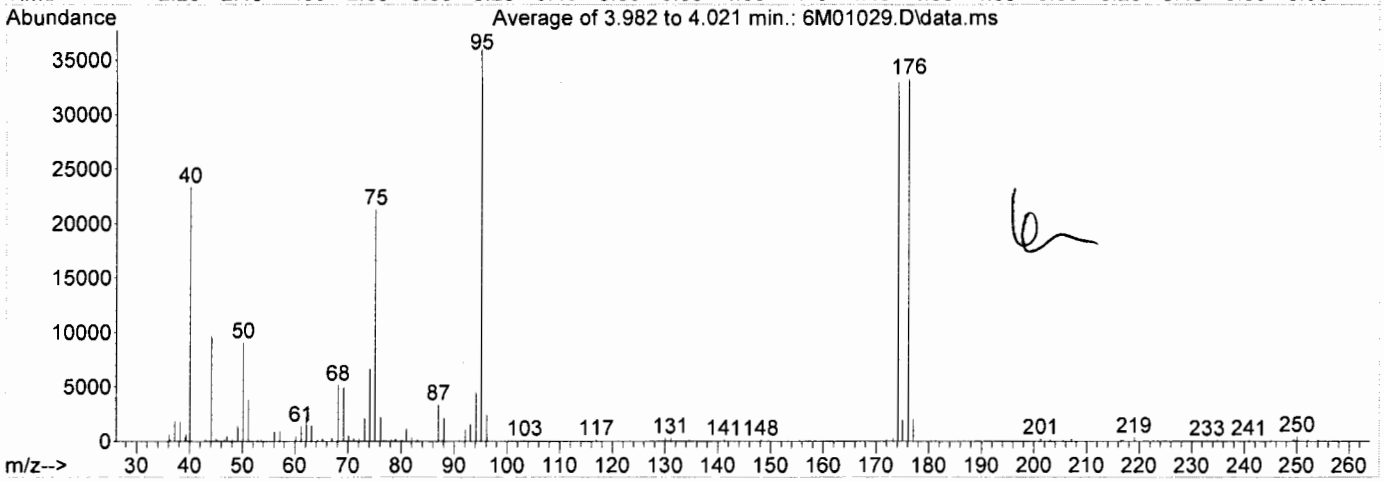
3082313 0064

Data Path : G:\GcMsData\2013\GCMS_6\Data\08-19-13\
Data File : 6M01029.D
Acq On : 19 Aug 2013 10:26
Operator : WP
Sample : BFB TUNE
Misc : S,5g
ALS Vial : 8 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2013\GCMS_6\MethodQt\6M_S0718.M
Title : @GCMS_6,ug,624,8260
Last Update : Thu Jul 18 10:53:43 2013





Spectrum Information: Average of 3.982 to 4.021 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.2	9076	PASS
75	95	30	60	59.1	21294	PASS
95	95	100	100	100.0	36001	PASS
96	95	5	9	6.9	2468	PASS
173	174	0.00	2	0.9	296	PASS
174	95	50	100	91.6	32966	PASS
175	174	5	9	6.0	1994	PASS
176	174	95	101	100.9	33258	PASS
177	176	5	9	6.2	2064	PASS

Form 5

Tune Name: BFB TUNE **Data File:** 6M01267.D
Instrument: GCMS 6 **Analysis Date:** 08/26/13 06:35
Method: EPA 8260B

Tune Scan/Time Range: Average of 3.965 to 4.004 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	18.1	15915	PASS
75	95	30	60	51.0	44962	PASS
95	95	100	100	100.0	88082	PASS
96	95	5	9	6.4	5608	PASS
173	174	0.00	2	1.1	837	PASS
174	95	50	100	87.5	77051	PASS
175	174	5	9	8.0	6162	PASS
176	174	95	101	98.7	76046	PASS
177	176	5	9	5.9	4472	PASS

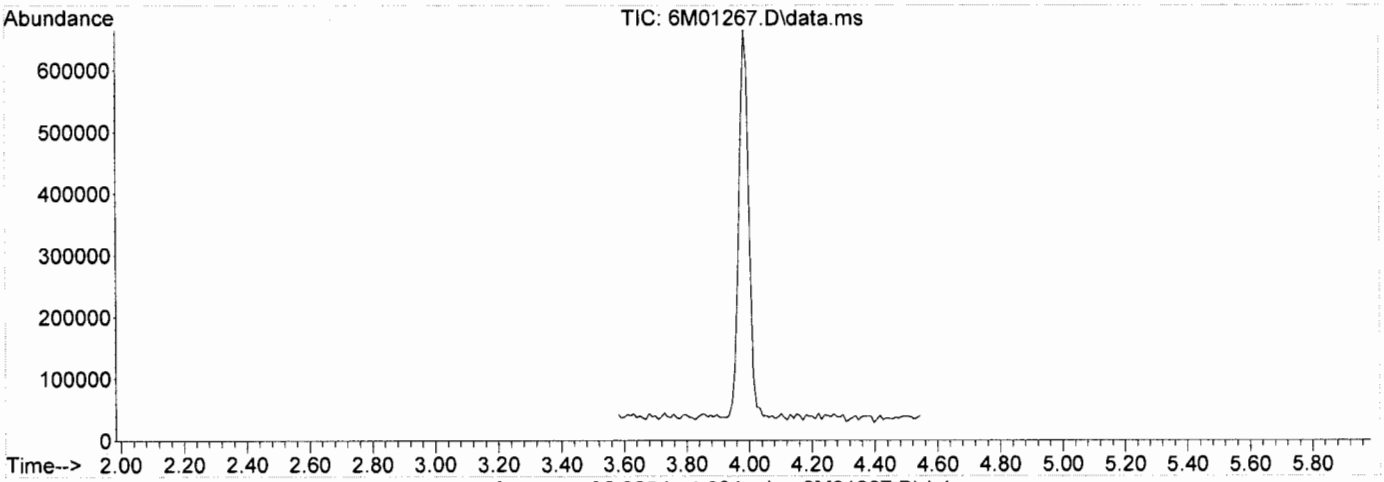
Data File	Sample Number	Analysis Date:
6M01268.D	BLK	08/26/13 06:45
6M01269.D	BLK	08/26/13 07:02
6M01270.D	50 PPB	08/26/13 07:18
6M01271.D	CAL @ 50 PPB	08/26/13 07:34
6M01272.D	BLK	08/26/13 07:52
6M01273.D	BLK	08/26/13 08:08
6M01274.D	DAILY BLANK	08/26/13 08:24
6M01275.D	MBS28298	08/26/13 08:41
6M01276.D	BLK	08/26/13 08:57
6M01277.D	AC74164-013	08/26/13 09:14
6M01278.D	BLK	08/26/13 09:30
6M01279.D	AC73985-011	08/26/13 09:47
6M01280.D	AC73985-011(MS)	08/26/13 10:04
6M01281.D	AC73985-011(MSD	08/26/13 10:20
6M01282.D	BLK	08/26/13 10:36
6M01283.D	AC74177-001	08/26/13 10:52
6M01284.D	AC74177-003	08/26/13 11:09
6M01285.D	AC74177-005	08/26/13 11:25
6M01286.D	AC74163-004	08/26/13 11:41
6M01287.D	AC74163-007	08/26/13 11:57
6M01288.D	AC74163-011	08/26/13 12:14
6M01289.D	AC74163-013	08/26/13 12:30
6M01290.D	AC74173-004	08/26/13 12:46
6M01291.D	BLK	08/26/13 13:02
6M01292.D	AC74182-001	08/26/13 13:18
6M01293.D	AC74182-005	08/26/13 13:35
6M01294.D	AC74182-006	08/26/13 13:51
6M01295.D	AC74182-009	08/26/13 14:07
6M01296.D	AC74182-007	08/26/13 14:23
6M01297.D	MBS28303	08/26/13 14:40
6M01298.D	BLK	08/26/13 14:56
6M01299.D	AC74203-001	08/26/13 15:12
6M01300.D	AC74203-002	08/26/13 15:28
6M01301.D	AC74203-003	08/26/13 15:44
6M01302.D	AC74203-004	08/26/13 16:00
6M01303.D	AC74203-005	08/26/13 16:17
6M01304.D	AC74182-010	08/26/13 16:33
6M01305.D	BLK	08/26/13 16:54
6M01306.D	BLK	08/26/13 17:10
6M01307.D	BLK	08/26/13 17:26
6M01308.D	BLK	08/26/13 17:42
6M01309.D	BLK	08/26/13 17:58
6M01310.D	BLK	08/26/13 18:14

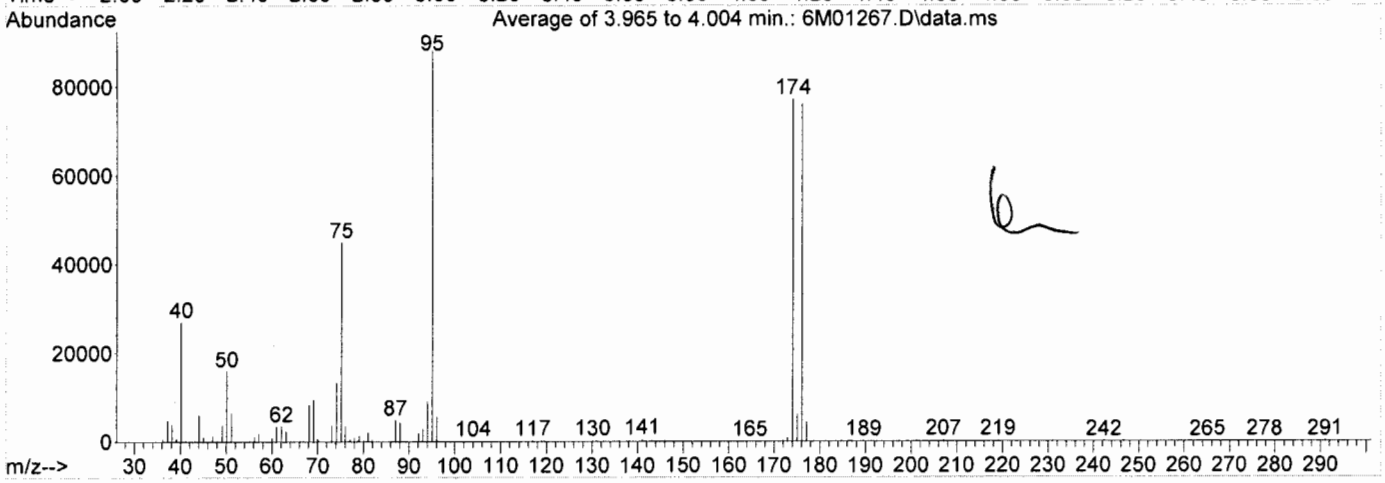
3082313 0066

Data Path : G:\GcMsData\2013\GCMS_6\Data\08-26-13\
Data File : 6M01267.D
Acq On : 26 Aug 2013 6:35
Operator : SG
Sample : BFB TUNE
Misc : S,5G
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2013\GCMS_6\MethodQt\6M_S0819.M
Title : @GCMS_6,ug,624,8260
Last Update : Mon Aug 19 13:18:23 2013





Spectrum Information: Average of 3.965 to 4.004 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.1	15915	PASS
75	95	30	60	51.0	44962	PASS
95	95	100	100	100.0	88082	PASS
96	95	5	9	6.4	5608	PASS
173	174	0.00	2	1.1	837	PASS
174	95	50	100	87.5	77051	PASS
175	174	5	9	8.0	6162	PASS
176	174	95	101	98.7	76046	PASS
177	176	5	9	5.9	4472	PASS

Form 6
Initial Calibration

Method: EPA 8260B

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M01039.	CAL @ 20 PPB	08/19/13 13:06	2	6M01034.	CAL @ 5 PPB	08/19/13 11:41
3	6M01033.	CAL @ 2 PPB	08/19/13 11:24	4	6M01038.	CAL @ 50 PPB	08/19/13 12:45
5	6M01037.	CAL @ 100 PPB	08/19/13 12:29	6	6M01036.	CAL @ 250 PPB	08/19/13 12:13
7	6M01035.	CAL @ 500 PPB	08/19/13 11:57	8	6M01032.	CAL @ 1 PPB	08/19/13 11:08
9	6M01031.	CAL @ 0.5 PPB	08/19/13 10:52				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.8706	0.8179	0.8209	0.8545	0.8061	0.7597	0.8203	-----	-----	0.821	1.31	0.999	1.00	4.3		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dichlorodifluoromethan	1	0	Avg	0.5835	0.5286	0.5678	0.5540	0.5222	0.4879	0.5287	-----	-----	0.539	1.31	0.998	0.999	5.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloromethane	1	0	Avg	0.5727	0.5414	0.6990	0.5297	0.4615	0.4729	0.5138	-----	-----	0.542	1.44	0.998	1.00	15	**(0.100)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromomethane	1	0	Avg	0.2046	0.3072	0.3095	0.2454	0.2813	0.2268	0.2846	-----	-----	0.266	1.78	0.990	0.997	15		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Vinyl Chloride	1	0	LinF	0.4242	0.4896	0.6499	0.4581	0.4259	0.4372	0.4320	-----	-----	0.474	1.53	1.00	1.00	17	*(30)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloroethane	1	0	Avg	0.3116	0.3505	0.3760	0.3200	0.3054	0.2825	0.2981	-----	-----	0.321	1.86	0.999	1.00	10		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Trichlorofluoromethane	1	0	Avg	0.6258	0.5142	0.7190	0.5971	0.5925	0.5778	0.5847	-----	-----	0.602	2.06	1.00	1.00	10		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl ether	1	0	Avg	0.1571	0.1232	0.1312	0.1413	0.1409	0.1384	0.1488	-----	-----	0.140	2.27	0.999	1.00	7.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Furan	1	0	Avg	0.6113	0.5964	0.4799	0.5924	0.5620	0.5278	0.5536	-----	-----	0.561	2.29	0.999	1.00	8.1		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1.1.2-Trichloro-1.2.2-tri	1	0	Avg	0.5277	0.4343	0.5370	0.4600	0.4251	0.3782	0.3995	-----	-----	0.452	2.45	0.999	0.999	13		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methylene Chloride	1	0	Avg	0.3368	0.3497	0.3695	0.3208	0.2959	0.2903	0.2967	-----	-----	0.323	2.79	1.00	1.00	9.4		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Acrolein	1	0	Avg	0.0162	0.0164	0.0119	0.0183	0.0154	0.0158	0.0172	-----	-----	0.0159	2.35	0.998	1.00	13		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Acrylonitrile	1	0	Avg	0.0261	0.0339	0.0290	0.0272	0.0257	0.0279	0.0304	-----	-----	0.0286	2.98	0.998	1.00	10		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Iodomethane	1	0	Avg	0.4462	0.3895	0.4654	0.4316	0.4067	0.4189	0.4123	-----	-----	0.424	2.56	1.00	1.00	6.0		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Acetone	1	0	LinF	0.0314	0.0343	0.0485	0.0302	0.0279	0.0249	0.0273	-----	-----	0.0321	2.47	0.998	0.999	24		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Carbon Disulfide	1	0	Avg	1.5623	1.6352	1.9381	1.5155	1.4161	1.3286	1.3972	-----	-----	1.54	2.62	0.999	1.00	13		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
t-Butyl Alcohol	1	0	LinF	0.0063	0.0036	0.0043	0.0046	0.0052	0.0051	0.0056	-----	-----	0.00498	2.86	0.998	1.00	18		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
n-Hexane	1	0	Avg	0.6625	0.6970	0.6797	0.7508	0.6722	0.6140	0.6469	-----	-----	0.675	3.24	0.999	0.999	6.3		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Di-isopropyl-ether	1	0	Avg	0.9764	1.0020	0.9124	1.0307	0.9483	0.9311	0.9973	-----	-----	0.971	3.39	0.999	1.00	4.4		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1.1-Dichloroethene	1	0	Avg	0.6510	0.5786	0.7635	0.6312	0.6099	0.5572	0.6014	-----	-----	0.628	2.44	0.999	0.999	11	*(30)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl Acetate	1	0	Avg	0.1241	0.1308	0.1006	0.1231	0.1154	0.1066	0.1204	-----	-----	0.117	2.71	0.997	0.999	9.0		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl-t-butyl ether	1	0	Avg	0.3879	0.3269	0.3651	0.4228	0.3995	0.3691	0.3825	0.2997	-----	0.369	3.01	0.999	1.00	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1.1-Dichloroethane	1	0	Avg	0.8126	0.6433	0.6166	0.7241	0.6871	0.6656	0.7124	-----	-----	0.695	3.34	0.999	1.00	9.2	**(0.100)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
trans-1.2-Dichloroether	1	0	Avg	0.4622	0.4002	0.4276	0.4057	0.3924	0.3825	0.4020	-----	-----	0.410	3.01	0.999	1.00	6.5		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl-t-butyl ether	1	0	Avg	0.6555	0.6601	0.6534	0.7085	0.6305	0.6551	0.6724	-----	-----	0.662	3.68	1.00	1.00	3.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
cis-1.2-Dichloroethene	1	0	Avg	0.7620	0.5814	0.6972	0.6894	0.6099	0.5832	0.6310	-----	-----	0.651	3.79	0.998	0.999	10		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromochloromethane	1	0	Avg	0.2896	0.2245	0.2097	0.2156	0.2264	0.2114	0.2227	-----	-----	0.229	3.96	0.999	1.00	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2.2-Dichloropropane	1	0	Avg	0.5831	0.4699	0.5541	0.4812	0.4655	0.4738	0.4839	-----	-----	0.502	3.80	1.00	1.00	9.4		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl acetate	1	0	Avg	0.1165	0.1343	0.1748	0.1456	0.1338	0.1461	0.1623	-----	-----	0.145	3.84	0.997	1.00	13		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1.4-Dioxane	1	0	Avg	0.0012	0.0009	0.0007	0.0010	0.0010	0.0009	0.0010	-----	-----	0.00101	4.91	1.00	1.00	15		1000.	250.0	100.0	2500.	5000.	1250	2500		
1.1-Dichloropropene	1	0	Avg	0.6596	0.6665	0.6791	0.6640	0.6200	0.5828	0.5809	-----	-----	0.636	4.25	1.00	1.00	6.5		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloroform	1	0	Avg	0.6674	0.6071	0.6235	0.6073	0.5949	0.5655	0.6046	-----	-----	0.610	4.02	0.999	1.00	5.1	*(30)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromofluoromethane	1	0	Avg	0.2273	0.2131	0.2324	0.2218	0.2116	0.2084	0.2087	0.2325	0.2361	0.221	4.11	-1	-1	5.0		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.9940	0.8221	0.9505	0.8683	0.8179	0.7198	0.7676	-----	-----	0.849	4.20	0.998	0.999	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1.2-Dichloroethane-d4	1	0	Avg	0.1049	0.0946	0.0940	0.0939	0.0864	0.0950	0.0972	0.0990	0.0992	0.0961	4.33	-1	-1	5.2		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
1.2-Dichloroethane	1	0	Avg	0.3134	0.2706	0.3375	0.3071	0.3131	0.2678	0.2878	-----	-----	0.300	4.38	0.998	0.999	8.5		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Butanone	1	0	LinF	0.0668	0.0657	0.0951	0.0545	0.0538	0.0495	0.0506	-----	-----	0.0624	3.81	1.00	1.00	26		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1.1.1-Trichloroethane	1	0	Avg	0.6853	0.5490	0.6826	0.5965	0.5662	0.5402	0.5604	-----	-----	0.597	4.15	1.00	1.00	10		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Carbon Tetrachloride	1	0	Avg	0.5671	0.4722	0.5732	0.4622	0.4348	0.4011	0.3944	-----	-----	0.472	4.26	1.00	1.00	15		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Vinyl Acetate	1	0	Avg	0.5001	0.4411	0.5866	0.5098	0.4808	0.4639	0.5079	-----	-----	0.499	3.39	0.998	1.00	9.3		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromodichloromethane	1	0	Avg	0.4881	0.4185	0.3610	0.4247	0.3812	0.3645	0.3725	-----	-----	0.402	4.98	1.00	1.00	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		

Flags

a - failed the spcc criteria — ** - ccc compound*

b - failed the ccc criteria — *** - spcc compound*

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.8

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

3082313 0067

Form 6
Initial Calibration

Method: EPA 8260B

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M01039.	CAL @ 20 PPB	08/19/13 13:06	2	6M01034.	CAL @ 5 PPB	08/19/13 11:41
3	6M01033.	CAL @ 2 PPB	08/19/13 11:24	4	6M01038.	CAL @ 50 PPB	08/19/13 12:45
5	6M01037.	CAL @ 100 PPB	08/19/13 12:29	6	6M01036.	CAL @ 250 PPB	08/19/13 12:13
7	6M01035.	CAL @ 500 PPB	08/19/13 11:57	8	6M01032.	CAL @ 1 PPB	08/19/13 11:08
9	6M01031.	CAL @ 0.5 PPB	08/19/13 10:52				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.8767	0.7197	0.7561	0.8100	0.7603	0.6914	0.6971	-----	-----	0.759	4.84	0.999	1.00	8.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromomethane	1	0	Avg	0.1261	0.1180	0.1101	0.1067	0.1125	0.1052	0.1036	-----	-----	0.112	4.91	1.00	1.00	7.1		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichloropropane	1	0	Avg	0.3891	0.4018	0.3918	0.3749	0.3441	0.3285	0.3386	-----	-----	0.367	4.84	1.00	1.00	8.0	*(30)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Trichloroethene	1	0	Avg	0.3840	0.4147	0.4091	0.3981	0.3917	0.3749	0.3669	-----	-----	0.391	4.73	1.00	1.00	4.5		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Benzene	1	0	Avg	1.7181	1.5982	1.5968	1.6716	1.4857	1.3155	1.3815	1.6264	-----	1.55	4.38	0.999	0.999	9.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
tert-Amyl methyl ether	1	0	Avg	0.4146	0.3306	0.3386	0.4543	0.4178	0.3983	0.4208	-----	-----	0.396	4.44	0.999	1.00	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Iso-propylacetate	1	0	Avg	0.2285	0.3305	0.2823	0.3083	0.3105	0.3051	0.3368	-----	-----	0.300	4.39	0.998	1.00	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl methacrylate	1	0	Avg	0.1890	0.2048	0.2068	0.1915	0.1895	0.1893	0.2110	-----	-----	0.197	4.88	0.997	1.00	4.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromochloromethane	1	0	Avg	0.3405	0.3511	0.4763	0.3806	0.3509	0.3242	0.3566	-----	-----	0.369	5.79	0.998	0.999	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Chloroethylvinylether	1	0	LinF	0.1227	0.1199	0.0588	0.1604	0.1622	0.1661	0.1883	-----	-----	0.140	5.12	0.997	1.00	31		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
cis-1,3-Dichloropropene	1	0	Avg	0.7553	0.8055	0.8543	0.8725	0.8827	0.8177	0.8753	-----	-----	0.838	5.21	0.999	1.00	5.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
trans-1,3-Dichloroprope	1	0	Avg	0.5429	0.5350	0.5571	0.5654	0.5881	0.5770	0.5991	-----	-----	0.566	5.48	1.00	1.00	4.1		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl methacrylate	1	0	LinF	0.2884	0.2618	0.1010	0.3231	0.3260	0.3196	0.3471	-----	-----	0.281	5.52	0.999	1.00	30		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,2-Trichloroethane	1	0	Avg	0.3274	0.3962	0.3867	0.3361	0.3096	0.2915	0.3037	-----	-----	0.336	5.58	0.999	1.00	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dibromoethane	1	0	Avg	0.2575	0.2621	0.2908	0.2713	0.2587	0.2443	0.2571	-----	-----	0.263	5.86	0.999	1.00	5.5		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3-Dichloropropane	1	0	Avg	0.6137	0.6200	0.7143	0.5991	0.5881	0.5556	0.5409	-----	-----	0.605	5.67	1.00	1.00	9.3		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
4-Methyl-2-Pentanone	1	0	Avg	0.1538	0.1742	0.1501	0.1667	0.1695	0.1725	0.1811	-----	-----	0.167	5.28	0.999	1.00	6.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Hexanone	1	0	LinF	0.0852	0.0524	0.0813	0.1148	0.1068	0.1111	0.1189	-----	-----	0.0958	5.71	0.999	1.00	25		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Tetrachloroethene	1	0	Avg	0.5875	0.6556	0.6400	0.5889	0.5891	0.5270	0.5102	-----	-----	0.586	5.68	0.999	1.00	9.1		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Toluene-d8	1	0	Avg	1.5788	1.7391	1.8423	1.7945	1.7516	1.8306	1.8742	1.6855	1.6322	1.75	5.36	-1	-1	5.7		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Toluene	1	0	Avg	1.5061	1.8305	1.7141	1.5947	1.4854	1.5422	1.4221	1.7812	-----	1.61	5.39	0.998	1.00	9.3	*(30)	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.4627	0.4371	0.4652	0.4149	0.4216	0.3768	0.3791	-----	-----	0.423	6.14	1.00	1.00	8.5		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chlorobenzene	1	0	Avg	1.4697	1.5465	1.5752	1.4570	1.4787	1.3255	1.3168	-----	-----	1.45	6.11	0.999	1.00	6.9	**(0.300)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Butyl acrylate	1	0	LinF	0.9797	0.4638	0.3783	1.1476	1.2661	1.1530	1.2567	-----	-----	0.949	6.37	0.998	0.999	39		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Amyl acetate	1	0	LinF	0.7318	0.2238	0.3314	0.7206	0.8503	0.8141	0.8030	-----	-----	0.639	6.49	1.00	1.00	40		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromoform	1	0	Avg	0.4403	0.5150	0.4229	0.3818	0.4051	0.3759	0.4058	-----	-----	0.421	6.54	0.999	1.00	11	**(0.100)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethylbenzene	1	0	Avg	1.7655	1.5062	1.7991	1.5885	1.8716	1.6684	1.5666	1.6204	-----	1.67	6.16	0.998	1.00	7.6	*(30)	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.7679	0.6813	0.7797	0.6798	0.6528	0.6264	0.6180	-----	-----	0.687	6.75	1.00	1.00	9.4	**(0.300)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromofluorobenzene	1	0	Avg	0.8394	0.8489	0.8814	0.7926	0.8677	0.8546	0.9012	0.7291	0.8698	0.843	6.70	-1	-1	6.2		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Styrene	1	0	Avg	2.7735	2.7317	2.3893	2.8324	2.9002	2.5661	2.4510	-----	-----	2.66	6.43	0.999	1.00	7.4		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
m&p-Xylenes	1	0	Avg	2.1850	2.1348	2.0123	2.0343	2.1127	1.9030	1.7674	1.7410	2.8115	2.08	6.22	0.998	1.00	15		40.00	10.00	4.00	100.0	200.0	500.0	1000.	2.00	1.00
o-Xylene	1	0	Avg	1.8353	1.9691	2.1557	1.9810	2.0396	1.8141	1.7251	1.3932	-----	1.86	6.43	0.998	1.00	13		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
trans-1,4-Dichloro-2-bu	1	0	Avg	0.6971	0.5444	0.4237	0.5696	0.6562	0.6144	0.5988	-----	-----	0.586	6.77	0.999	1.00	15		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3-Dichlorobenzene	1	0	Avg	1.9384	1.8100	2.0374	1.7941	1.8505	1.7363	1.5524	-----	-----	1.82	7.30	0.996	1.00	8.5		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,4-Dichlorobenzene	1	0	Avg	1.9405	1.9159	1.8846	1.7004	1.8569	1.7637	1.6737	-----	-----	1.82	7.35	0.999	1.00	5.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichlorobenzene	1	0	Avg	1.5911	1.5917	1.2215	1.4322	1.5160	1.4572	1.3629	-----	-----	1.45	7.56	0.999	1.00	9.1		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Isopropylbenzene	1	0	Avg	5.8645	5.8530	5.7399	5.6224	5.7653	5.5704	4.9870	5.8634	-----	5.66	6.61	0.997	1.00	5.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Cyclohexanone	1	0	Avg	0.0213	0.0162	0.0211	0.0198	0.0219	0.0237	0.0202	-----	-----	0.0206	6.68	0.993	0.998	11		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Camphene	1	0	Avg	2.7760	2.4147	2.1927	2.8794	3.1317	2.7888	2.6355	-----	-----	2.69	6.77	0.998	1.00	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,3-Trichloropropane	1	0	Avg	0.8390	0.9169	0.8413	0.7733	0.8113	0.7424	0.7072	-----	-----	0.805	6.79	0.999	1.00	8.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Chlorotoluene	1	0	Avg	4.4428	4.1522	3.6971	3.9893	4.4658	3.7015	3.1564	-----	-----	3.94	6.89	0.990	0.999	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		

Avg Rsd: 11.8

Flags

a - failed the spcc criteria — ** - ccc compound*

b - failed the ccc criteria — *** - spcc compound*

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

3082313 0068

Form 6
Initial Calibration

Method: EPA 8260B

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M01039.	CAL @ 20 PPB	08/19/13 13:06	2	6M01034.	CAL @ 5 PPB	08/19/13 11:41
3	6M01033.	CAL @ 2 PPB	08/19/13 11:24	4	6M01038.	CAL @ 50 PPB	08/19/13 12:45
5	6M01037.	CAL @ 100 PPB	08/19/13 12:29	6	6M01036.	CAL @ 250 PPB	08/19/13 12:13
7	6M01035.	CAL @ 500 PPB	08/19/13 11:57	8	6M01032.	CAL @ 1 PPB	08/19/13 11:08
9	6M01031.	CAL @ 0.5 PPB	08/19/13 10:52				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	5.9936	4.6920	4.5582	5.8518	6.4221	5.3736	4.8889	-----	-----	5.40	6.89	0.995	0.999	13	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
4-Chlorotoluene	1	0	Avg	3.9128	3.6556	2.7965	3.3166	3.4276	3.1990	3.0368	-----	-----	3.34	6.95	0.999	1.00	11	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Propylbenzene	1	0	Avg	7.4819	7.2903	6.3778	7.2693	7.6268	6.8628	5.9203	6.5523	-----	6.92	6.83	0.993	1.00	8.6	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Bromobenzene	1	0	Avg	2.6955	2.2916	2.4260	2.6071	2.5722	2.4365	2.4163	-----	-----	2.49	6.79	1.00	1.00	5.5	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3,5-Trimethylbenzene	1	0	Avg	3.9422	3.2334	4.2047	3.9357	4.1518	3.9131	3.4031	3.3684	-----	3.77	6.92	0.994	1.00	10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Butyl methacrylate	1	0	LinF	1.5298	1.0250	0.9688	1.5168	1.7284	1.5655	1.4824	-----	-----	1.40	6.93	0.998	1.00	21	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
t-Butylbenzene	1	0	Avg	3.8241	3.3570	2.8245	3.9238	4.0195	3.7869	3.5566	3.8321	-----	3.64	7.11	0.999	1.00	11	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trimethylbenzene	1	0	Avg	3.6264	2.9974	2.5259	3.6455	3.9433	3.7153	3.5186	2.8557	-----	3.35	7.13	0.999	1.00	15	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
sec-Butylbenzene	1	0	Avg	6.2133	5.4751	4.6384	6.1992	5.9994	5.6407	5.1839	5.2025	-----	5.57	7.23	0.998	1.00	10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
4-Isopropyltoluene	1	0	LinF	3.9751	2.7157	2.7430	3.9176	4.1486	3.9480	3.4326	3.0188	-----	3.49	7.29	0.994	1.00	17	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
n-Butylbenzene	1	0	LinF	5.5389	4.1891	3.7317	5.3862	5.7563	5.3688	4.8691	3.3507	-----	4.77	7.52	0.997	1.00	19	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
p-Diethylbenzene	1	0	LinF	1.9524	1.6129	1.4299	2.2046	2.2930	2.1501	2.1098	-----	-----	1.96	7.51	1.00	1.00	17	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,4,5-Tetramethylben	1	0	LinF	1.9601	1.6924	1.3641	2.1164	2.4116	2.6797	2.6427	-----	-----	2.12	7.95	0.999	0.999	23	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dibromo-3-Chloropr	1	0	LinF	0.0721	0.0547	0.0296	0.0603	0.0700	0.0598	0.0578	-----	-----	0.0578	7.98	0.998	0.999	24	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Camphor	1	0	LinF	0.0242	0.0180	0.0072	0.0255	0.0318	0.0262	-----	0.0138	-----	0.0210	8.41	0.992	0.997	40	200.0	50.00	20.00	500.0	1000.	2500.		10.00	
Hexachlorobutadiene	1	0	Avg	0.7063	0.5734	0.4829	0.6986	0.7649	0.7310	0.7275	-----	-----	0.669	8.56	1.00	1.00	15	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,4-Trichlorobenzene	1	0	LinF	0.7778	0.4752	0.5631	0.6889	0.8134	0.7720	0.7287	-----	-----	0.688	8.47	0.999	1.00	18	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,3-Trichlorobenzene	1	0	Avg	0.6293	0.3789	0.5469	0.5914	0.6136	0.5740	0.5299	-----	-----	0.552	8.76	0.998	1.00	15	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Naphthalene	1	0	LinF	0.9289	0.5561	0.7076	0.8837	0.9816	0.8607	0.8164	0.9815	-----	0.840	8.62	0.998	1.00	17	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	

Flags
a - failed the spcc criteria ** - ccc compound*
b - failed the ccc criteria *** - spcc compound*
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.8
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

3082313 0069

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M01271.D **Instrument:** GCMS 6

Cont Calibration Date/Time 8/26/2013 7:34:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.52	30.00	30				0.000	0.00	
Chlorodifluoromethane	1	0		1.31	53.30				0.821			
Dichlorodifluoromethane	1	0		1.31	37.02	50			0.539	0.399	25.96	
Chloromethane	1	0	CP	1.44	42.64	50	0.1		0.542	0.462	14.72	
Bromomethane	1	0		1.77	49.79	50			0.266	0.265	0.42	
Vinyl Chloride	1	0	CC	1.52	48.36	50	20		0.474	0.419	3.27	
Chloroethane	1	0		1.85	49.50	50			0.321	0.317	1.00	
Trichlorofluoromethane	1	0		2.05	48.20	50			0.602	0.580	3.59	
Ethyl ether	1	0		2.26	43.21	50			0.140	0.121	13.58	
Furan	1	0		2.29	48.19	50			0.561	0.540	3.62	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.44	51.22	50			0.452	0.463	2.44	
Methylene Chloride	1	0		2.78	46.79	50			0.323	0.302	6.41	
Acrolein	1	0		2.35	220.32	250			0.016	0.014	11.87	
Acrylonitrile	1	0		2.96	37.90	50			0.029	0.022	24.20	
Iodomethane	1	0		2.54	49.70	50			0.424	0.422	0.60	
Acetone	1	0		2.45	263.12	250			0.032	0.028	5.25	
Carbon Disulfide	1	0		2.61	46.72	50			1.542	1.441	6.56	
t-Butyl Alcohol	1	0		2.86	57.41	250			0.005	0.001	77.04	
n-Hexane	1	0		3.23	50.44	50			0.675	0.681	0.87	
Di-isopropyl-ether	1	0		3.39	43.71	50			0.971	0.849	12.59	
1,1-Dichloroethene	1	0	CC	2.44	46.97	50	20		0.628	0.590	6.05	
Methyl Acetate	1	0		2.70	45.48	50			0.117	0.107	9.04	
Methyl-t-butyl ether	1	0		3.01	49.50	50			0.369	0.366	0.99	
1,1-Dichloroethane	1	0	CP	3.33	48.43	50	0.1		0.695	0.673	3.13	
trans-1,2-Dichloroethene	1	0		3.01	50.48	50			0.410	0.414	0.96	
Ethyl-t-butyl ether	1	0		3.67	40.38				0.662			
cis-1,2-Dichloroethene	1	0		3.79	49.42	50			0.651	0.643	1.16	
Bromochloromethane	1	0		3.96	45.37	50			0.229	0.207	9.26	
2,2-Dichloropropane	1	0		3.79	49.43	50			0.502	0.496	1.15	
Ethyl acetate	1	0		3.83	38.57				0.145			
1,4-Dioxane	1	0		4.91	2242.58	2500			0.001	0.001	10.30	
1,1-Dichloropropene	1	0		4.25	50.54	50			0.636	0.643	1.07	
Chloroform	1	0	CC	4.01	47.73	50	20		0.610	0.582	4.53	
Dibromofluoromethane	1	0	S	4.11	30.51	75			0.221	0.225	1.70	
Cyclohexane	1	0		4.20	50.01	50			0.849	0.849	0.02	
1,2-Dichloroethane-d4	1	0	S	4.32	26.88	75			0.096	0.086	10.40	
1,2-Dichloroethane	1	0		4.37	49.69	50			0.300	0.298	0.61	
2-Butanone	1	0		3.79	50.06	50			0.062	0.051	0.12	
1,1,1-Trichloroethane	1	0		4.15	51.14	50			0.597	0.611	2.29	
Carbon Tetrachloride	1	0		4.26	53.94	50			0.472	0.509	7.87	
Vinyl Acetate	1	0		3.39	43.20	50			0.499	0.431	13.59	
Bromodichloromethane	1	0		4.97	53.55	50			0.402	0.430	7.10	
Methylcyclohexane	1	0		4.84	55.15	50			0.759	0.837	10.31	
Dibromomethane	1	0		4.91	49.09	50			0.112	0.110	1.82	
1,2-Dichloropropane	1	0	CC	4.84	47.70	50	20		0.367	0.350	4.59	
Trichloroethene	1	0		4.73	51.05	50			0.391	0.400	2.09	
Benzene	1	0		4.37	47.61	50			1.549	1.475	4.78	
tert-Amyl methyl ether	1	0		4.43	43.77	50			0.396	0.347	12.46	
Chlorobenzene-d5	1	0	I	6.10	30.00	30				0.000	0.00	
Iso-propylacetate	1	0		4.39	34.75				0.300			
Methyl methacrylate	1	0		4.88	33.10				0.197			
Dibromochloromethane	1	0		5.79	41.77	50			0.369	0.308	16.46	
2-Chloroethylvinylether	1	0		5.12	32.61	50			0.140	0.119	34.78	
cis-1,3-Dichloropropene	1	0		5.21	44.83	50			0.838	0.751	10.35	
trans-1,3-Dichloropropene	1	0		5.48	42.41	50			0.566	0.480	15.18	
Ethyl methacrylate	1	0		5.52	34.31				0.281			

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M01271.D **Instrument:** GCMS 6

Cont Calibration Date/Time 8/26/2013 7:34:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
1,1,2-Trichloroethane	1	0		5.58	42.73	50			0.336	0.287	14.54	
1,2-Dibromoethane	1	0		5.86	42.34	50			0.263	0.223	15.33	
1,3-Dichloropropane	1	0		5.67	42.55	50			0.605	0.515	14.90	
4-Methyl-2-Pentanone	1	0		5.27	35.73	50			0.167	0.119	28.55	
2-Hexanone	1	0		5.70	34.48	50			0.096	0.081	31.04	
Tetrachloroethene	1	0		5.68	49.57	50			0.586	0.580	0.86	
Toluene-d8	1	0	S	5.36	29.75	75			1.748	1.733	0.84	
Toluene	1	0	CC	5.39	46.69	50	20		1.610	1.503	6.63	
1,1,1,2-Tetrachloroethane	1	0		6.14	49.35	50			0.423	0.417	1.30	
Chlorobenzene	1	0	CP	6.11	46.75	50	0.3		1.453	1.359	6.49	
1,4-Dichlorobenzene-d4	1	0	I	7.33	30.00	30				0.000	0.00	
n-Butyl acrylate	1	0		6.37	26.03				0.949			
n-Amyl acetate	1	0		6.48	33.30				0.639			
Bromoform	1	0	CP	6.54	41.34	50	0.1		0.421	0.348	17.33	
Ethylbenzene	1	0	CC	6.16	45.77	50	20		1.673	1.532	8.47	
1,1,2,2-Tetrachloroethane	1	0	CP	6.75	41.20	50	0.3		0.687	0.566	17.60	
Bromofluorobenzene	1	0	S	6.70	27.03	75			0.843	0.759	9.89	
Styrene	1	0		6.43	45.37	50			2.663	2.417	9.26	
m&p-Xylenes	1	0		6.22	94.72	100			2.078	1.968	5.28	
o-Xylene	1	0		6.43	45.70	50			1.864	1.704	8.60	
trans-1,4-Dichloro-2-butene	1	0		6.78	44.02	50			0.586	0.516	11.96	
1,3-Dichlorobenzene	1	0		7.30	42.63	50			1.817	1.549	14.75	
1,4-Dichlorobenzene	1	0		7.35	44.18	50			1.819	1.608	11.63	
1,2-Dichlorobenzene	1	0		7.56	44.36	50			1.453	1.289	11.29	
Isopropylbenzene	1	0		6.61	46.74	50			5.658	5.289	6.53	
Cyclohexanone	1	0		6.67	221.74				0.021			
Camphene	1	0		6.78	46.15	50			2.688	2.481	7.70	
1,2,3-Trichloropropane	1	0		6.78	35.90	50			0.805	0.578	28.19	
2-Chlorotoluene	1	0		6.89	51.07	50			3.944	4.028	2.14	
p-Ethyltoluene	1	0		6.89	47.90				5.397			
4-Chlorotoluene	1	0		6.94	48.01	50			3.335	3.202	3.99	
n-Propylbenzene	1	0		6.83	50.35	50			6.923	6.971	0.70	
Bromobenzene	1	0		6.79	44.33	50			2.492	2.209	11.35	
1,3,5-Trimethylbenzene	1	0		6.92	51.46	50			3.769	3.879	2.91	
Butyl methacrylate	1	0		6.93	37.79				1.402			
t-Butylbenzene	1	0		7.11	48.63	50			3.641	3.541	2.73	
1,2,4-Trimethylbenzene	1	0		7.12	49.16	50			3.354	3.297	1.68	
sec-Butylbenzene	1	0		7.22	51.30	50			5.569	5.713	2.59	
4-Isopropyltoluene	1	0		7.29	49.90	50			3.487	3.551	0.21	
n-Butylbenzene	1	0		7.52	49.94	50			4.774	4.991	0.11	
p-Diethylbenzene	1	0		7.50	43.19				1.965			
1,2,4,5-Tetramethylbenzene	1	0		7.95	35.00				2.124			
1,2-Dibromo-3-Chloropropane	1	0		7.98	35.87	50			0.058	0.042	28.25	
Camphor	1	0		8.40	245.35	500			0.021	0.013	50.93	
Hexachlorobutadiene	1	0		8.56	53.33	50			0.669	0.714	6.66	
1,2,4-Trichlorobenzene	1	0		8.47	43.14	50			0.688	0.638	13.72	
1,2,3-Trichlorobenzene	1	0		8.76	41.57	50			0.552	0.459	16.85	
Naphthalene	1	0		8.62	39.24	50			0.840	0.652	21.53	
1,2-Dioxane	1	100		0.00	0.00	5000				0.000	100.00	
Freon 113	1	100		0.00	0.00	50				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M01039.D Method: EPA 8260B

Analysis Date/Time: 08/19/13 13:06

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	246284	4.52	148660	6.09	69089	7.33						
Eval File Area Limit:	123142-492568		74330-297320		34544-138178							
Eval File Rt Limit:	4.02-5.02		5.59-6.59		6.83-7.83							

Data File	Sample											
6M01030.D	BLK	245998	4.52	153748	6.10	61699	7.33					
6M01031.D	CAL @ 0.5 PF	254468	4.52	151059	6.09	57577	7.33					
6M01032.D	CAL @ 1 PPB	258958	4.53	139523	6.11	64186	7.35					
6M01033.D	CAL @ 2 PPB	248642	4.52	127542	6.09	57210	7.33					
6M01034.D	CAL @ 5 PPB	263548	4.52	134706	6.09	60505	7.33					
6M01035.D	CAL @ 500 P	282260	4.52	153168	6.09	68323	7.33					
6M01036.D	CAL @ 250 P	299122	4.52	158642	6.10	70685	7.33					
6M01037.D	CAL @ 100 P	298511	4.52	157873	6.09	69839	7.33					
6M01038.D	CAL @ 50 PP	278867	4.52	154300	6.10	71906	7.33					
6M01039.D	CAL @ 20 PP	246284	4.52	148660	6.09	69089	7.33					
6M01040.D	ICV	303232	4.52	156015	6.10	71938	7.33					
6M01041.D	STDTEST	299742	4.52	148655	6.09	69119	7.33					
6M01042.D	BLK	258936	4.52	140023	6.10	55872	7.33					
6M01043.D	BLK	240916	4.53	145047	6.10	60100	7.33					
6M01044.D	DAILY BLANK	268536	4.52	144106	6.10	58485	7.33					
6M01045.D	MBS27852	299476	4.52	141804	6.09	65667	7.33					
6M01046.D	BLK	270853	4.53	137215	6.10	54938	7.33					
6M01047.D	BLK	279709	4.52	139142	6.10	56146	7.33					
6M01048.D	AC73868-012	255649	4.53	137269	6.10	57427	7.34					
6M01049.D	AC73868-018	252975	4.52	133554	6.10	54145	7.33					
6M01050.D	AC73868-027	0 A	0.00 R	593 A	6.06	0 A	0.00 R					
6M01051.D	BLK	0 A	0.00 R	0 A	0.00 R	0 A	0.00 R					
6M01052.D	STD	261575	4.52	147440	6.10	68941	7.33					
6M01053.D	BLK	263400	4.53	138880	6.10	53203	7.33					
6M01054.D	AC73868-027	282448	4.52	151239	6.10	57381	7.33					
6M01055.D	AC74046-001	251183	4.52	121671	6.10	48003	7.33					
6M01056.D	AC74046-002	243675	4.53	119353	6.10	47046	7.33					
6M01057.D	AC74046-003	240637	4.53	120621	6.10	44089	7.34					
6M01058.D	AC74046-004	233230	4.52	118746	6.10	43593	7.34					
6M01059.D	AC74046-005	228280	4.52	120438	6.10	47578	7.33					
6M01060.D	AC74046-006	227213	4.52	111018	6.10	48155	7.33					
6M01061.D	AC74046-007	240547	4.52	123315	6.10	50243	7.33					
6M01062.D	AC74046-008	222349	4.52	121034	6.10	44455	7.33					
6M01063.D	AC74046-009	232960	4.52	116910	6.10	45927	7.34					
6M01064.D	AC74046-010	249309	4.53	132907	6.10	42918	7.33					
6M01065.D	AC74046-011	232822	4.52	113805	6.10	43381	7.34					
6M01066.D	AC74046-012	224671	4.53	137001	6.10	48243	7.33					
6M01067.D	AC74046-013	229451	4.53	119080	6.10	45873	7.33					
6M01068.D	AC74046-014	227748	4.53	124960	6.10	45711	7.33					
6M01069.D	AC74046-015	234481	4.52	116051	6.09	48344	7.33					
6M01070.D	AC74046-016	244904	4.52	132642	6.10	51426	7.33					
6M01071.D	BLK	236441	4.53	116840	6.10	48979	7.34					
6M01072.D	AC73968-010	227590	4.52	120989	6.10	52570	7.33					
6M01073.D	AC73841-031	255385	4.52	133714	6.10	59981	7.33					
6M01074.D	MBS27853	267330	4.52	136214	6.10	65020	7.33					
6M01075.D	BLK	216019	4.52	104813	6.09	47054	7.33					
6M01076.D	BLK	217492	4.52	126720	6.10	51730	7.33					
6M01077.D	BLK	236059	4.52	136721	6.10	54594	7.33					
6M01078.D	BLK	259147	4.52	137127	6.10	58665	7.33					
6M01079.D	BLK	232620	4.52	118378	6.10	53966	7.33					
6M01080.D	BLK	248131	4.52	132246	6.10	51283	7.33					
6M01081.D	BLK	229090	4.53	109705	6.10	49542	7.33					

I1 =	Fluorobenzene	I4 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =	624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =	524 Internal Standard concentration =5ug/L

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M01271.D Method: EPA 8260B

Analysis Date/Time: 08/26/13 07:34

Lab File ID: CAL @ 50 PPB

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	242693	4.52	144022	6.10	71183	7.33						
Eval File Area Limit:	121346-485386		72011-288044		35592-142366							
Eval File Rt Limit:	4.02-5.02		5.6-6.6		6.83-7.83							

Data File	Sample												
6M01268.D	BLK	173919	4.52	127396	6.09	59404	7.32						
6M01269.D	BLK	239435	4.52	145235	6.09	64727	7.33						
6M01270.D	50 PPB	257757	4.52	155561	6.09	69670	7.33						
6M01272.D	BLK	215009	4.52	142777	6.09	64946	7.32						
6M01273.D	BLK	224854	4.52	136766	6.09	63849	7.33						
6M01274.D	DAILY BLANK	247011	4.52	148426	6.09	62533	7.33						
6M01275.D	MBS28298	236954	4.52	149976	6.09	68186	7.32						
6M01276.D	BLK	250169	4.52	133858	6.09	60123	7.33						
6M01277.D	AC74164-013	226500	4.52	143374	6.09	67802	7.33						
6M01278.D	BLK	223821	4.52	127977	6.09	53216	7.33						
6M01279.D	AC73985-011	225689	4.52	134470	6.09	57109	7.33						
6M01280.D	AC73985-011(	253723	4.52	142950	6.09	64833	7.32						
6M01281.D	AC73985-011(	253507	4.52	141080	6.09	68951	7.32						
6M01282.D	BLK	216770	4.52	134527	6.09	56340	7.33						
6M01283.D	AC74177-001	230943	4.52	131330	6.09	57304	7.33						
6M01284.D	AC74177-003	235018	4.52	148705	6.09	56919	7.33						
6M01285.D	AC74177-005	230982	4.53	138284	6.10	53022	7.34						
6M01286.D	AC74163-004	230758	4.52	134030	6.09	54001	7.33						
6M01287.D	AC74163-007	251434	4.52	136724	6.09	48635	7.33						
6M01288.D	AC74163-011	222237	4.52	127251	6.09	50976	7.33						
6M01289.D	AC74163-013	216394	4.52	127237	6.09	52159	7.33						
6M01290.D	AC74173-004	224856	4.52	140816	6.09	51850	7.33						
6M01291.D	BLK	234363	4.52	134227	6.09	56617	7.33						
6M01292.D	AC74182-001	213133	4.52	121517	6.10	44929	7.33						
6M01293.D	AC74182-005	208321	4.53	120347	6.11	49336	7.35						
6M01294.D	AC74182-006	219190	4.52	114048	6.09	48886	7.33						
6M01295.D	AC74182-009	211849	4.52	126672	6.10	46992	7.33						
6M01296.D	AC74182-007	205475	4.52	118475	6.10	44275	7.33						
6M01297.D	MBS28303	214747	4.52	136593	6.10	60882	7.33						
6M01298.D	BLK	214443	4.52	117317	6.10	52050	7.33						
6M01299.D	AC74203-001	194277	4.52	113690	6.10	50506	7.33						
6M01300.D	AC74203-002	210991	4.52	120372	6.10	52497	7.33						
6M01301.D	AC74203-003	198327	4.53	122701	6.10	53619	7.33						
6M01302.D	AC74203-004	196295	4.52	118142	6.10	50409	7.33						
6M01303.D	AC74203-005	208641	4.52	124393	6.10	51853	7.33						
6M01304.D	AC74182-010	216033	4.53	115319	6.10	41578	7.33						
6M01305.D	BLK	180396	4.52	117759	6.10	48709	7.33						
6M01306.D	BLK	219926	4.53	131786	6.09	54700	7.33						
6M01307.D	BLK	215509	4.52	128297	6.10	57841	7.34						
6M01308.D	BLK	211920	4.52	117155	6.10	50883	7.33						
6M01309.D	BLK	206158	4.53	120783	6.10	48643	7.33						
6M01310.D	BLK	205157	4.53	117645	6.10	47528	7.33						

I1 =	Fluorobenzene	I4 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =	624/8260 Internal Standard concentration = 30ug/L
I3 =	1.4-Dichlorobenzene-d4	I6 =	524 Internal Standard concentration =5ug/L

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

TCLP Volatile Data

Form1

ORGANICS VOLATILE REPORT

Sample Number: AC74177-001(T)
Client Id: 002 SS-1B (1.5-2')
Data File: 3M38039.D
Analysis Date: 08/29/13 12:41
Date Rec/Extracted: 08/23/13-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260B
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
75-35-4	1,1-Dichloroethene	0.0010	U	108-90-7	Chlorobenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.00050	U	67-66-3	Chloroform	0.0010	U
106-46-7	1,4-Dichlorobenzene	0.0010	U	127-18-4	Tetrachloroethene	0.0010	U
78-93-3	2-Butanone	0.0010	U	79-01-6	Trichloroethene	0.0010	U
71-43-2	**Benzene**	**0.00050**	**0.18**	75-01-4	Vinyl Chloride	0.0010	U
56-23-5	Carbon Tetrachloride	0.0010	U				

Worksheet #: 275160

Total Target Concentration 0.18

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3082313 0076

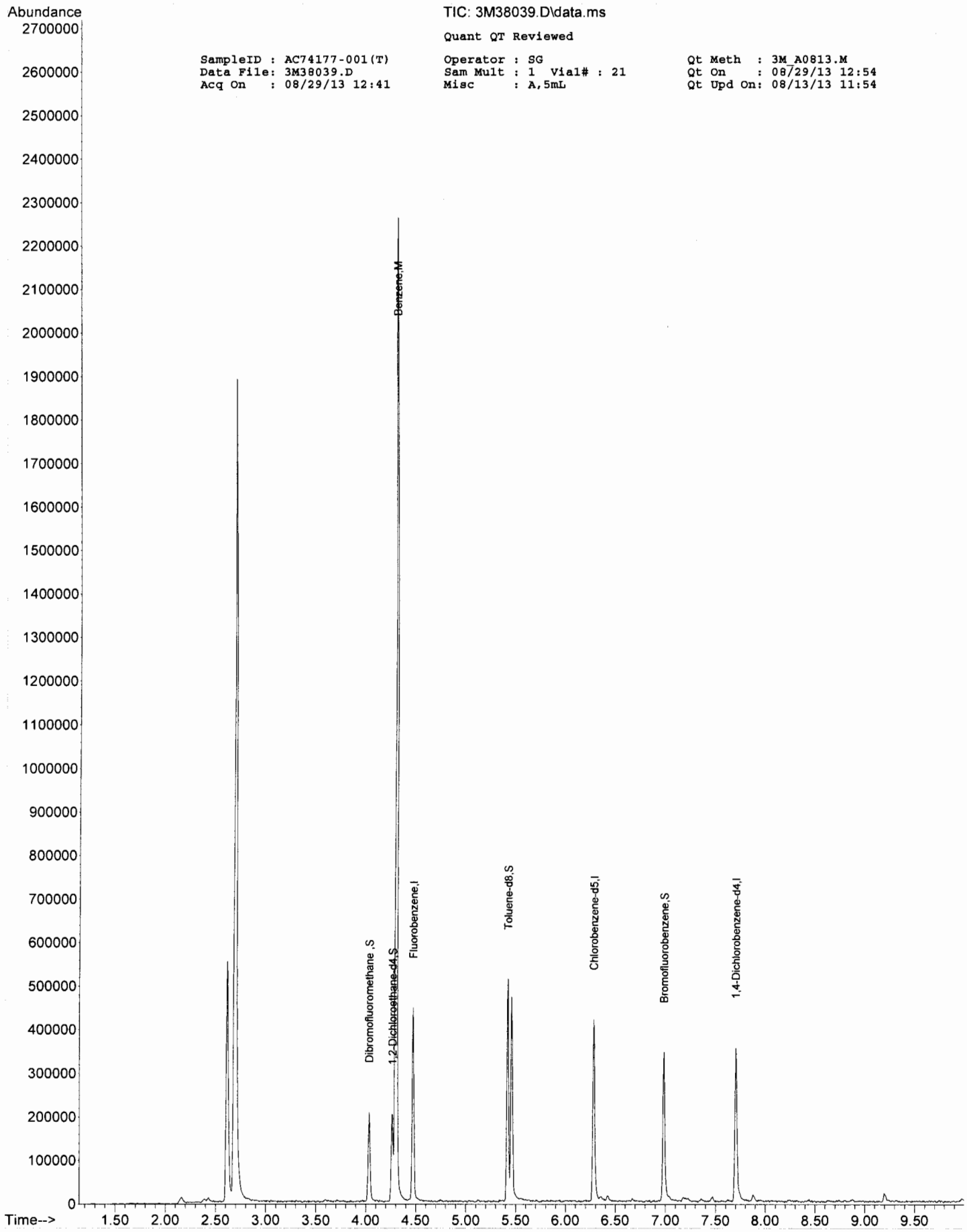
SampleID : AC74177-001(T) Operator : SG Qt Meth : 3M_A0813.M
Data File: 3M38039.D Sam Mult : 1 Vial# : 21 Qt On : 08/29/13 12:54
Acq On : 08/29/13 12:41 Misc : A,5mL Qt Upd On: 08/13/13 11:54

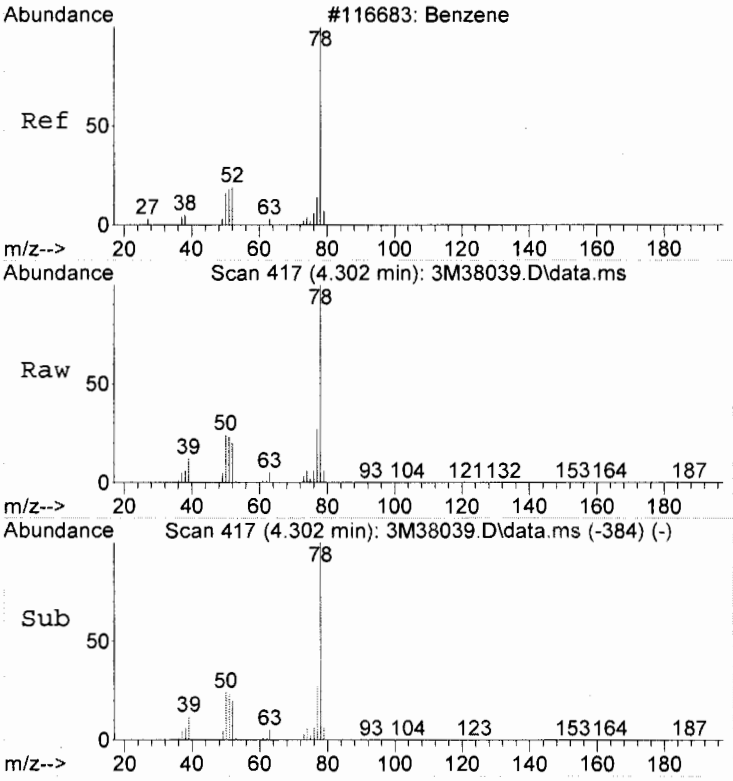
Data Path : G:\GcMsData\2013\GCMS_3\Data\08-29-13\
Qt Path : G:\GcMsData\2013\GCMS_3\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.471	96	216093	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.281	117	148957	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.700	152	75862	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.032	111	84277	31.47	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.90%			
39) 1,2-Dichloroethane-d4	4.266	67	51657	32.90	ug/l	0.00
Spiked Amount 30.000			Recovery = 109.67%			
66) Toluene-d8	5.421	98	204129	29.82	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.40%			
76) Bromofluorobenzene	6.984	174	72453	30.09	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.30%			
Target Compounds						Qvalue
50) Benzene	4.302	78	1162552	184.1686	ug/l	100

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

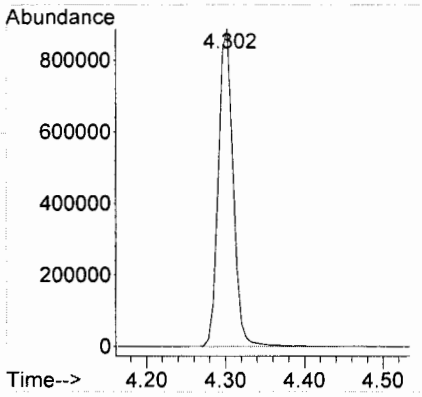
Ve


Abundance
TIC: 3M38039.D\data.ms
Quant QT Reviewed
SampleID : AC74177-001(T)
Data File: 3M38039.D
Acq On : 08/29/13 12:41
Operator : SG
Sam Mult : 1 Vial# : 21
Misc : A,5mL
Qt Meth : 3M_A0813.M
Qt On : 08/29/13 12:54
Qt Upd On: 08/13/13 11:54
Benzene,M
Dibromofluoromethane ,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->



#50
Benzene
Concen: 184.17 ug/l
RT: 4.302 min Scan# 417
Delta R.T. -0.001 min
Lab File: 3M38039.D
Acq: 29 Aug 2013 12:41

Tgt Ion: 78 Resp: 1162552



Form1

ORGANICS VOLATILE REPORT

Sample Number: AC74177-003(T)
Client Id: 010 SS-2D (4-4.5')
Data File: 3M38040.D
Analysis Date: 08/29/13 12:57
Date Rec/Extracted: 08/23/13-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260B
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
75-35-4	1,1-Dichloroethene	0.0010	U	108-90-7	Chlorobenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.00050	U	67-66-3	Chloroform	0.0010	U
106-46-7	1,4-Dichlorobenzene	0.0010	U	127-18-4	Tetrachloroethene	0.0010	U
78-93-3	2-Butanone	0.0010	U	79-01-6	Trichloroethene	0.0010	U
71-43-2	Benzene	0.00050	U	75-01-4	Vinyl Chloride	0.0010	U
56-23-5	Carbon Tetrachloride	0.0010	U				

Worksheet #: 275160

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3082313 0080

SampleID : AC74177-003(T) Operator : SG Qt Meth : 3M_A0813.M
Data File: 3M38040.D Sam Mult : 1 Vial# : 22 Qt On : 08/29/13 13:46
Acq On : 08/29/13 12:57 Misc : A,5mL Qt Upd On: 08/13/13 11:54

Data Path : G:\GcMsData\2013\GCMS_3\Data\08-29-13\
Qt Path : G:\GcMsData\2013\GCMS_3\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.470	96	216927	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.280	117	146758	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.699	152	74819	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.031	111	86359	32.13	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.10%			
39) 1,2-Dichloroethane-d4	4.260	67	49627	31.48	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.93%			
66) Toluene-d8	5.414	98	204199	30.28	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.93%			
76) Bromofluorobenzene	6.977	174	70657	29.76	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.20%			

Target Compounds Qvalue

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

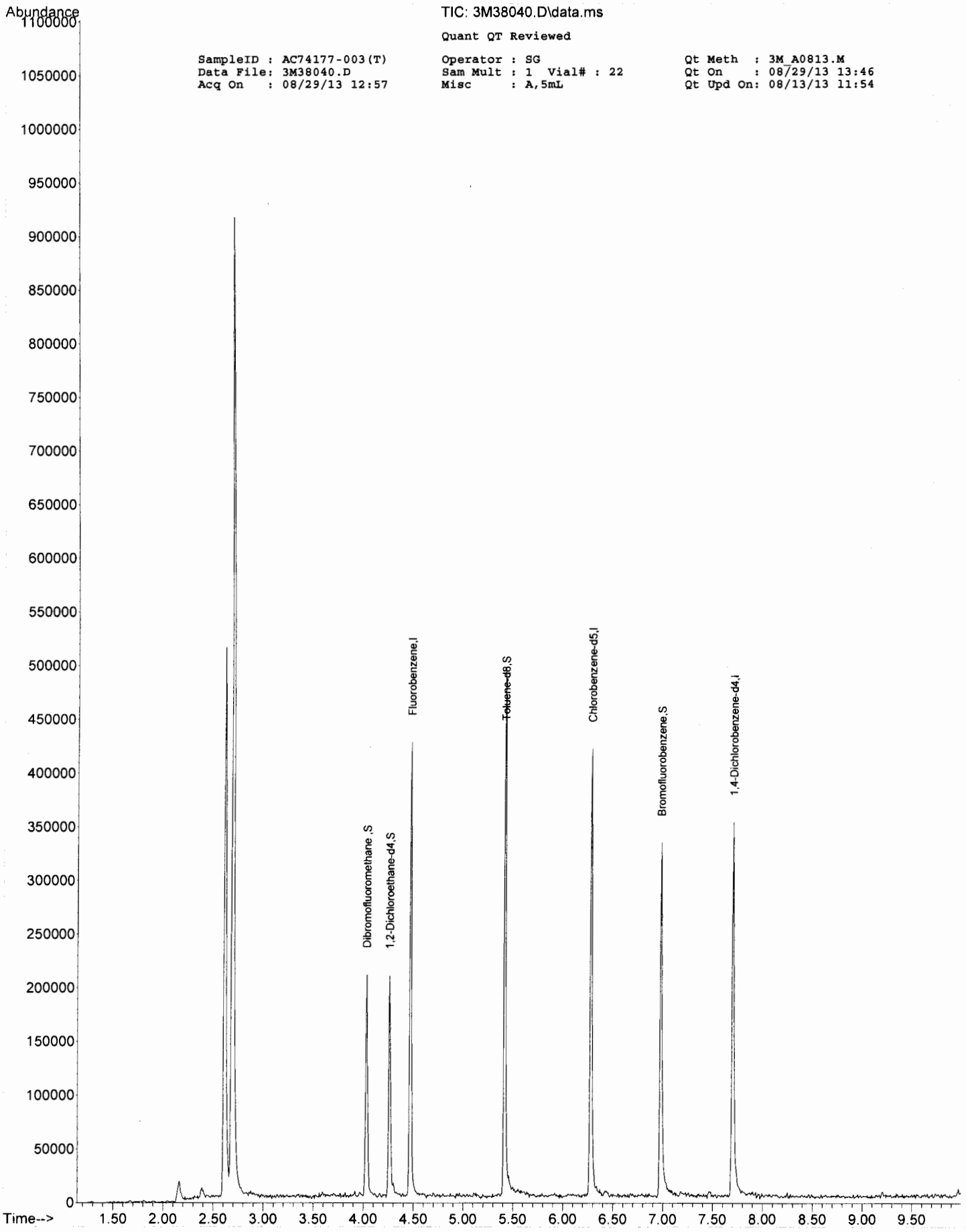
TIC: 3M38040.D\data.ms

Quant QT Reviewed

SampleID : AC74177-003(T)
Data File: 3M38040.D
Acq On : 08/29/13 12:57

Operator : SG
Sam Mult : 1 Vial# : 22
Misc : A,5mL

Qt Meth : 3M_A0813.M
Qt On : 08/29/13 13:46
Qt Upd On: 08/13/13 11:54



Form1

ORGANICS VOLATILE REPORT

Sample Number: AC74177-005(T)
Client Id: 017 SS-3E (8-8.5')
Data File: 3M38041.D
Analysis Date: 08/29/13 13:14
Date Rec/Extracted: 08/23/13-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260B
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
75-35-4	1,1-Dichloroethene	0.0010	U	108-90-7	Chlorobenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.00050	U	67-66-3	Chloroform	0.0010	U
106-46-7	1,4-Dichlorobenzene	0.0010	U	127-18-4	Tetrachloroethene	0.0010	U
78-93-3	2-Butanone	0.0010	U	79-01-6	Trichloroethene	0.0010	U
71-43-2	Benzene	0.00050	U	75-01-4	Vinyl Chloride	0.0010	U
56-23-5	Carbon Tetrachloride	0.0010	U				

Worksheet #: 275160

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3082313 0083

SampleID : AC74177-005(T) Operator : SG Qt Meth : 3M_A0813.M
Data File: 3M38041.D Sam Mult : 1 Vial# : 23 Qt On : 08/29/13 13:46
Acq On : 08/29/13 13:14 Misc : A,5mL Qt Upd On: 08/13/13 11:54

Data Path : G:\GcMsData\2013\GCMS_3\Data\08-29-13\
Qt Path : G:\GcMsData\2013\GCMS_3\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.472	96	215383	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.281	117	146042	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.701	152	70016	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.033	111	85601	32.07	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.90%			
39) 1,2-Dichloroethane-d4	4.261	67	50714	32.40	ug/l	0.00
Spiked Amount 30.000			Recovery = 108.00%			
66) Toluene-d8	5.416	98	200386	29.86	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.53%			
76) Bromofluorobenzene	6.979	174	70491	31.72	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.73%			

Target Compounds Qvalue

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

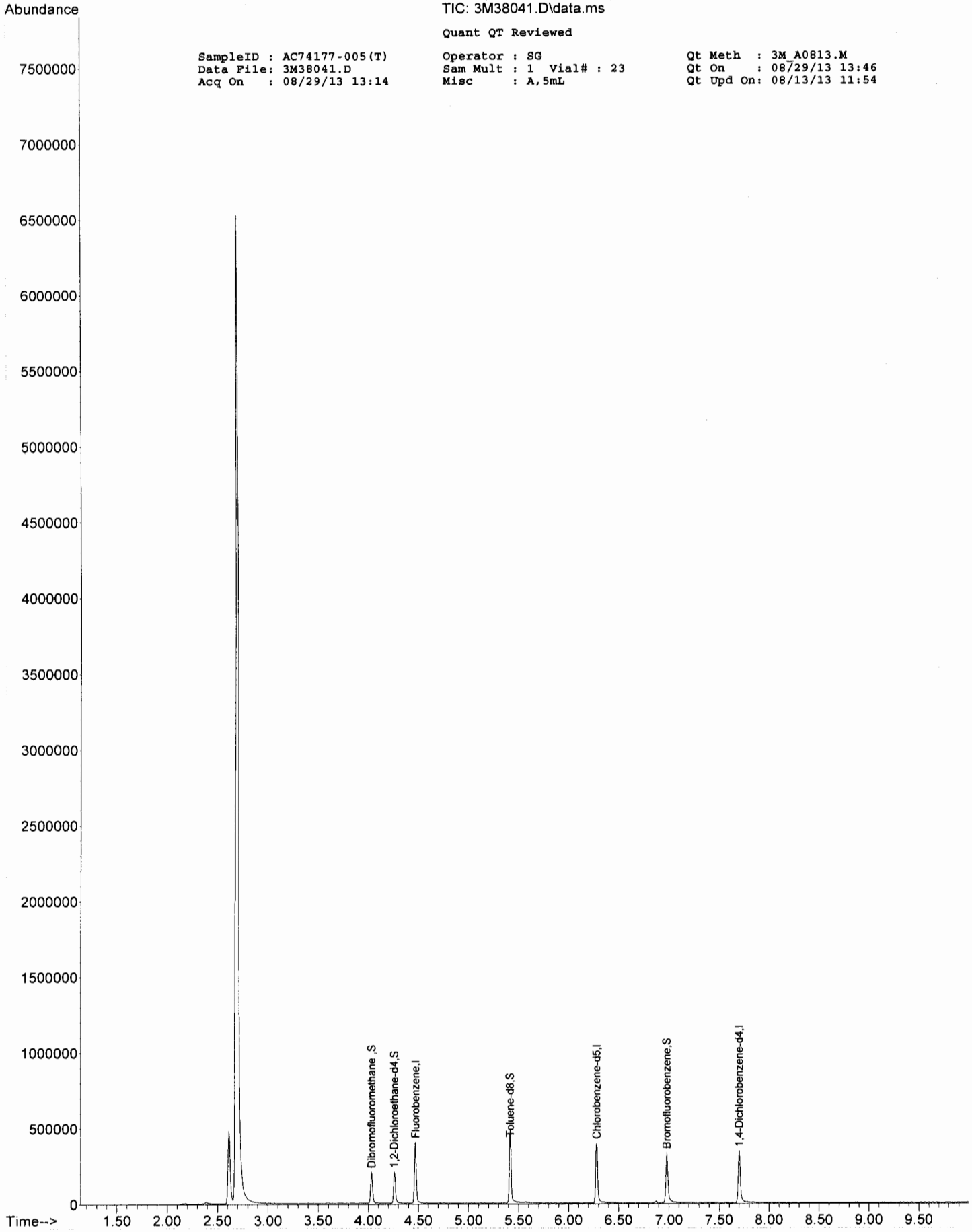
TIC: 3M38041.D\data.ms

Quant QT Reviewed

SampleID : AC74177-005(T)
Data File: 3M38041.D
Acq On : 08/29/13 13:14

Operator : SG
Sam Mult : 1 Vial# : 23
Misc : A,5mL

Qt Meth : 3M_A0813.M
Qt On : 08/29/13 13:46
Qt Upd On: 08/13/13 11:54



Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 3M38026.D
Analysis Date: 08/29/13 09:07
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260B
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
75-35-4	1,1-Dichloroethene	0.0010	U	108-90-7	Chlorobenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.00050	U	67-66-3	Chloroform	0.0010	U
106-46-7	1,4-Dichlorobenzene	0.0010	U	127-18-4	Tetrachloroethene	0.0010	U
78-93-3	2-Butanone	0.0010	U	79-01-6	Trichloroethene	0.0010	U
71-43-2	Benzene	0.00050	U	75-01-4	Vinyl Chloride	0.0010	U
56-23-5	Carbon Tetrachloride	0.0010	U				

Worksheet #: 275160

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3082313 0086

SampleID : DAILY BLANK
Data File: 3M38026.D
Acq On : 08/29/13 09:07

Operator : SG
Sam Mult : 1 Vial# : 8
Misc : A,5mL

Qt Meth : 3M_A0813.M
Qt On : 08/29/13 09:30
Qt Upd On: 08/13/13 11:54

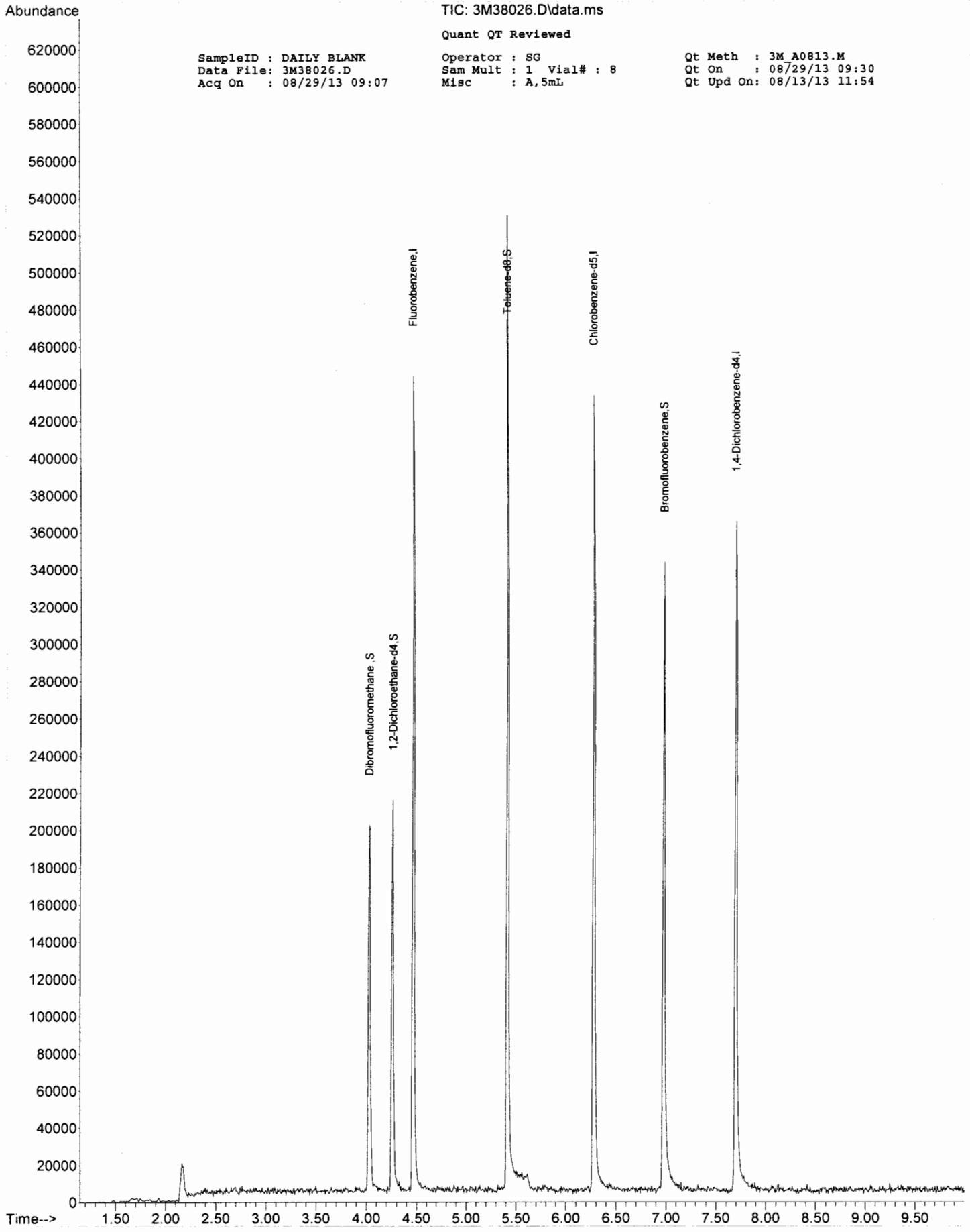
Data Path : G:\GcMsData\2013\GCMS_3\Data\08-29-13\
Qt Path : G:\GcMsData\2013\GCMS_3\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
4) Fluorobenzene	4.465	96	226202	30.00 ug/l	-0.01
52) Chlorobenzene-d5	6.275	117	157475	30.00 ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.700	152	79500	30.00 ug/l	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	4.026	111	85629	30.55 ug/l	-0.01
Spiked Amount 30.000			Recovery	= 101.83%	
39) 1,2-Dichloroethane-d4	4.261	67	50971	31.01 ug/l	0.00
Spiked Amount 30.000			Recovery	= 103.37%	
66) Toluene-d8	5.415	98	212970	29.43 ug/l	0.00
Spiked Amount 30.000			Recovery	= 98.10%	
76) Bromofluorobenzene	6.979	174	74352	29.47 ug/l	0.00
Spiked Amount 30.000			Recovery	= 98.23%	

Target Compounds Qvalue

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

Ice


Abundance
TIC: 3M38026.D\data.ms
Quant QT Reviewed
SampleID : DAILY BLANK
Data File: 3M38026.D
Acq On : 08/29/13 09:07
Operator : SG
Sam Mult : 1 Vial# : 8
Misc : A,5mL
Qt Meth : 3M_A0813.M
Qt On : 08/29/13 09:30
Qt Upd On: 08/13/13 11:54
Dibromofluoromethane ,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Form1

ORGANICS VOLATILE REPORT

Sample Number: EF-1V-171617(082913)
Client Id:
Data File: 3M38046.D
Analysis Date: 08/29/13 14:39
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260B
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
75-35-4	1,1-Dichloroethene	0.0010	U	108-90-7	Chlorobenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.00050	U	67-66-3	Chloroform	0.0010	U
106-46-7	1,4-Dichlorobenzene	0.0010	U	127-18-4	Tetrachloroethene	0.0010	U
78-93-3	2-Butanone	0.0010	U	79-01-6	Trichloroethene	0.0010	U
71-43-2	**Benzene**	**0.00050**	**0.044**	75-01-4	Vinyl Chloride	0.0010	U
56-23-5	Carbon Tetrachloride	0.0010	U				

Worksheet #: 275160

Total Target Concentration 0.044

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0089

SampleID : EF-1V-171617(082913 Operator : SG Qt Meth : 3M_A0813.M
Data File: 3M38046.D Sam Mult : 1 Vial# : 28 Qt On : 08/29/13 14:54
Acq On : 08/29/13 14:39 Misc : A,5mL Qt Upd On: 08/13/13 11:54

Data Path : G:\GcMsData\2013\GCMS_3\Data\08-29-13\
Qt Path : G:\GcMsData\2013\GCMS_3\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.470	96	204739	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.280	117	136913	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.699	152	67763	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.031	111	82203	32.40	ug/l	0.00
Spiked Amount 30.000			Recovery = 108.00%			
39) 1,2-Dichloroethane-d4	4.259	67	48797	32.80	ug/l	0.00
Spiked Amount 30.000			Recovery = 109.33%			
66) Toluene-d8	5.414	98	193759	30.80	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.67%			
76) Bromofluorobenzene	6.977	174	64982	30.22	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.73%			
Target Compounds						Qvalue
50) Benzene	4.296	78	263622	44.0783	ug/l	100

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

Ve

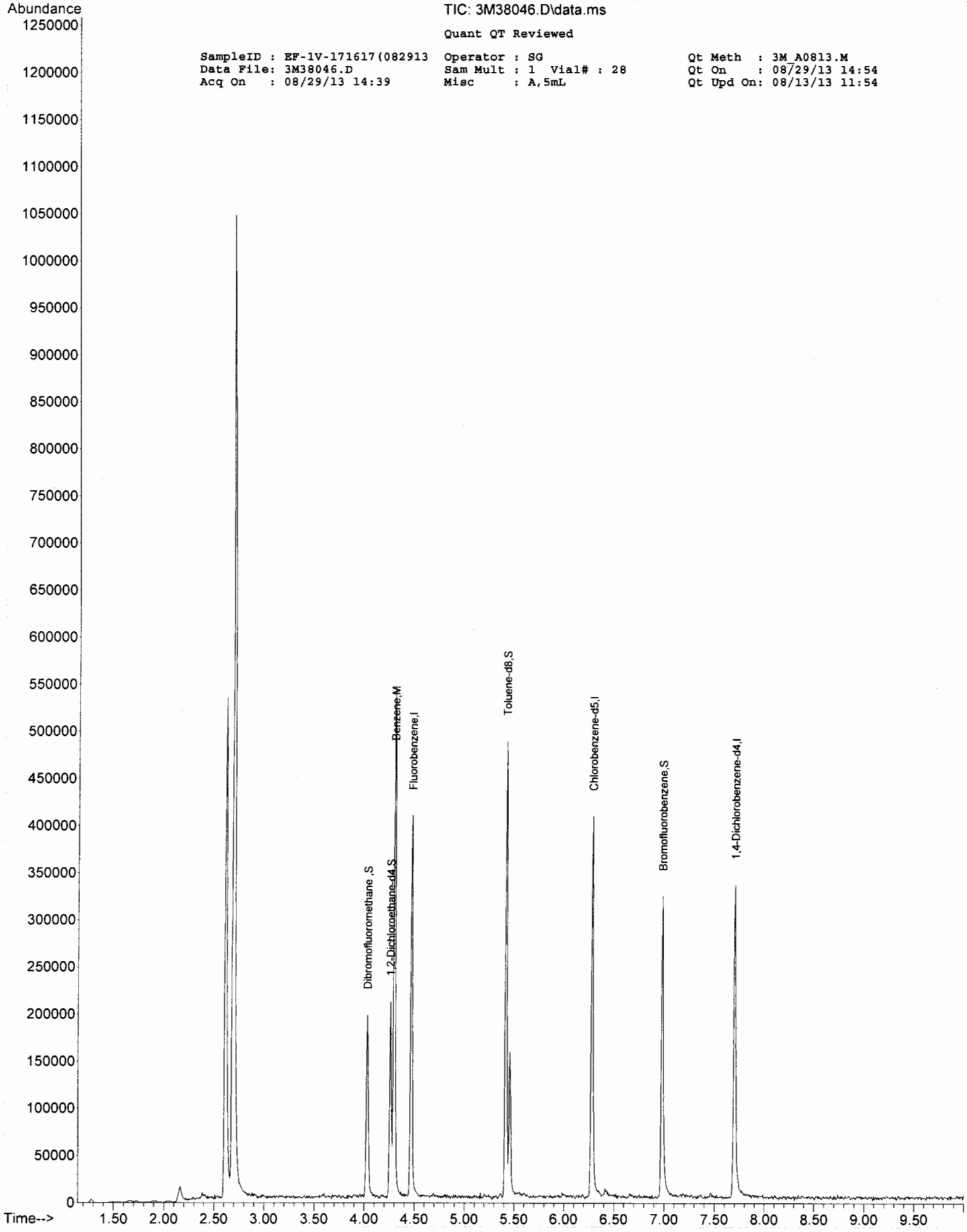
TIC: 3M38046.D\data.ms

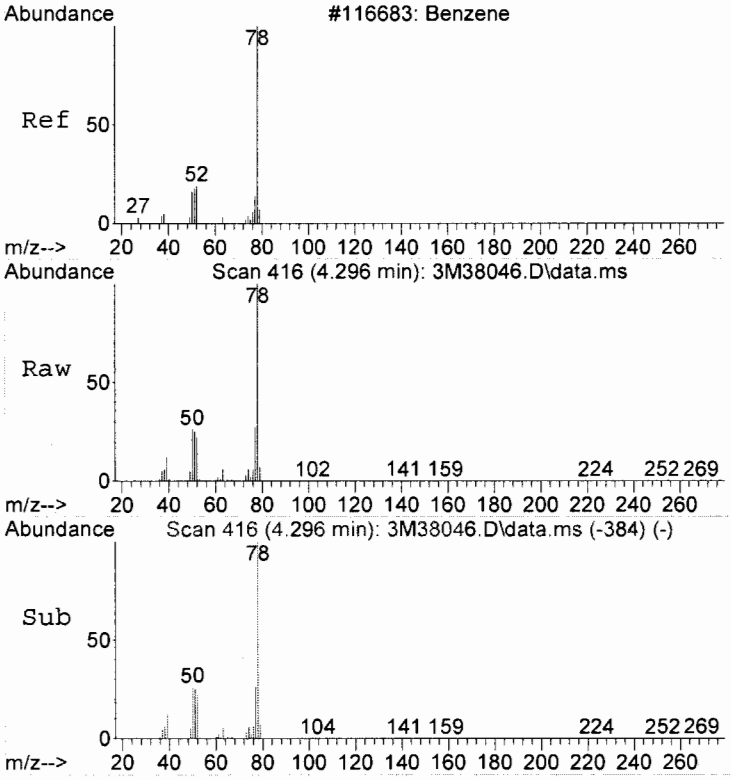
Quant QT Reviewed

SampleID : EF-1V-171617(082913
Data File: 3M38046.D
Acq On : 08/29/13 14:39

Operator : SG
Sam Mult : 1 Vial# : 28
Misc : A,5mL

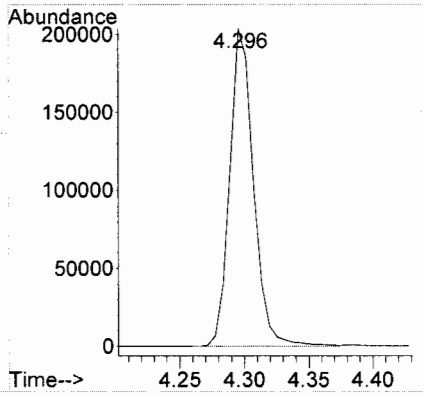
Qt Meth : 3M_A0813.M
Qt On : 08/29/13 14:54
Qt Upd On: 08/13/13 11:54





#50
Benzene
Concen: 44.08 ug/l
RT: 4.296 min Scan# 416
Delta R.T. -0.007 min
Lab File: 3M38046.D
Acq: 29 Aug 2013 14:39

Tgt Ion: 78 Resp: 263622



FORM2

Surrogate Recovery

Method: EPA 8260B

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
3M37596.D	DAILY BLANK	Aqueous	08/22/13 10:15	1		101	105	103	101		
3M37768.D	DAILY BLANK	Aqueous	08/26/13 09:18	1		99	104	102	98		
3M38026.D	DAILY BLANK	Aqueous	08/29/13 09:07	1		102	103	98	98		
3M38046.D	EF-1V-171617	Aqueous	08/29/13 14:39	1		108	109	103	101		
3M38039.D	AC74177-001(	Aqueous	08/29/13 12:41	1		105	110	99	100		
3M38040.D	AC74177-003(	Aqueous	08/29/13 12:57	1		107	105	101	99		
3M38041.D	AC74177-005(	Aqueous	08/29/13 13:14	1		107	108	100	106		
3M37598.D	MBS27877	Aqueous	08/22/13 10:48	1		103	101	102	95		
3M37609.D	AC74097-001(	Aqueous	08/22/13 13:44	1		107	105	104	101		
3M37614.D	MBS27881	Aqueous	08/22/13 15:01	1		97	97	98	98		
3M37632.D	MBS27884	Aqueous	08/22/13 19:39	1		97	98	97	102		
3M37774.D	MBS28302	Aqueous	08/26/13 10:57	1		96	93	94	98		
3M37776.D	AC74097-001(	Aqueous	08/26/13 11:30	1		97	95	96	103		
3M37777.D	AC74097-001(	Aqueous	08/26/13 11:46	1		98	97	96	98		
3M38028.D	MBS28347	Aqueous	08/29/13 09:40	1		106	105	98	99		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8260B

Aqueous Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	73-131
S2=1,2-Dichloroethane-d4	30	78-128
S3=Toluene-d8	30	79-111
S4=Bromofluorobenzene	30	82-112

Form3
Recovery Data
QC Batch: MBS27877

	Data File	Sample ID:	Analysis Date
Spike or Dup:	3M37598.D	MBS27877	8/22/2013 10:48:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260 Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	15.8523	0	20	79	20	130
1,1-Dichloroethene	1	19.745	0	20	99	50	130
1,1-Dichloroethane	1	15.8615	0	20	79	50	130
Chloroform	1	16.4733	0	20	82	50	130
1,2-Dichloroethane	1	20.3089	0	20	102	50	130
2-Butanone	1	15.201	0	20	76	20	130
Carbon Tetrachloride	1	17.1409	0	20	86	50	130
Trichloroethene	1	15.6593	0	20	78	50	130
Benzene	1	16.3435	0	20	82	50	130
Tetrachloroethene	1	15.8309	0	20	79	50	130
Toluene	1	14.829	0	20	74	50	130
Chlorobenzene	1	14.5267	0	20	73	50	130
1,4-Dichlorobenzene	1	14.2561	0	20	71	50	130
1,2-Dichlorobenzene	1	14.5921	0	20	73	50	130
n-Propylbenzene	1	15.6707	0	20	78	50	130
sec-Butylbenzene	1	15.8646	0	20	79	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS27881

	Data File	Sample ID:	Analysis Date
Spike or Dup:	3M37614.D	MBS27881	8/22/2013 3:01:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260 Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	18.2454	0	20	91	20	130
1,1-Dichloroethene	1	22.7759	0	20	114	50	130
1,1-Dichloroethane	1	19.2124	0	20	96	50	130
Chloroform	1	18.0715	0	20	90	50	130
1,2-Dichloroethane	1	22.4953	0	20	112	50	130
2-Butanone	1	13.7826	0	20	69	20	130
Carbon Tetrachloride	1	19.6031	0	20	98	50	130
Trichloroethene	1	19.6792	0	20	98	50	130
Benzene	1	19.9585	0	20	100	50	130
Tetrachloroethene	1	18.2396	0	20	91	50	130
Toluene	1	18.6215	0	20	93	50	130
Chlorobenzene	1	17.8029	0	20	89	50	130
1,4-Dichlorobenzene	1	17.5892	0	20	88	50	130
1,2-Dichlorobenzene	1	17.8673	0	20	89	50	130
n-Propylbenzene	1	19.5091	0	20	98	50	130
sec-Butylbenzene	1	19.6709	0	20	98	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS27884

	Data File	Sample ID:	Analysis Date
Spike or Dup:	3M37632.D	MBS27884	8/22/2013 7:39:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260 Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	17.799	0	20	89	20	130
1,1-Dichloroethene	1	22.9347	0	20	115	50	130
1,1-Dichloroethane	1	18.6422	0	20	93	50	130
Chloroform	1	18.3903	0	20	92	50	130
1,2-Dichloroethane	1	22.3127	0	20	112	50	130
2-Butanone	1	15.5154	0	20	78	20	130
Carbon Tetrachloride	1	19.694	0	20	98	50	130
Trichloroethene	1	20.4245	0	20	102	50	130
Benzene	1	20.0158	0	20	100	50	130
Tetrachloroethene	1	18.806	0	20	94	50	130
Toluene	1	18.8455	0	20	94	50	130
Chlorobenzene	1	17.9815	0	20	90	50	130
1,4-Dichlorobenzene	1	17.6345	0	20	88	50	130
1,2-Dichlorobenzene	1	18.716	0	20	94	50	130
n-Propylbenzene	1	19.0438	0	20	95	50	130
sec-Butylbenzene	1	19.0892	0	20	95	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS28347

	Data File	Sample ID:	Analysis Date
Spike or Dup:	3M38028.D	MBS28347	8/29/2013 9:40:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260 Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	15.6033	0	20	78	20	130
1,1-Dichloroethene	1	23.4703	0	20	117	50	130
1,1-Dichloroethane	1	19.5903	0	20	98	50	130
Chloroform	1	19.584	0	20	98	50	130
1,2-Dichloroethane	1	24.1746	0	20	121	50	130
2-Butanone	1	12.379	0	20	62	20	130
Carbon Tetrachloride	1	21.4208	0	20	107	50	130
Trichloroethene	1	19.5358	0	20	98	50	130
Benzene	1	20.283	0	20	101	50	130
Tetrachloroethene	1	18.6867	0	20	93	50	130
Toluene	1	17.9285	0	20	90	50	130
Chlorobenzene	1	16.9893	0	20	85	50	130
1,4-Dichlorobenzene	1	16.5481	0	20	83	50	130
1,2-Dichlorobenzene	1	17.3551	0	20	87	50	130
n-Propylbenzene	1	18.8264	0	20	94	50	130
sec-Butylbenzene	1	19.1186	0	20	96	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS28302

	Data File	Sample ID:	Analysis Date
Spike or Dup:	3M37774.D	MBS28302	8/26/2013 10:57:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260 Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	15.0854	0	20	75	20	130
1,1-Dichloroethene	1	19.7168	0	20	99	50	130
1,1-Dichloroethane	1	16.9931	0	20	85	50	130
Chloroform	1	16.0275	0	20	80	50	130
1,2-Dichloroethane	1	18.8535	0	20	94	50	130
2-Butanone	1	13.6783	0	20	68	20	130
Carbon Tetrachloride	1	16.3198	0	20	82	50	130
Trichloroethene	1	18.0156	0	20	90	50	130
Benzene	1	17.683	0	20	88	50	130
Tetrachloroethene	1	18.1156	0	20	91	50	130
Toluene	1	16.1329	0	20	81	50	130
Chlorobenzene	1	15.3504	0	20	77	50	130
1,4-Dichlorobenzene	1	15.4464	0	20	77	50	130
1,2-Dichlorobenzene	1	15.7349	0	20	79	50	130
n-Propylbenzene	1	15.8477	0	20	79	50	130
sec-Butylbenzene	1	16.3724	0	20	82	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS28302

	Data File	Sample ID:	Analysis Date
Spike or Dup:	3M37776.D	AC74097-001(T:MS)	8/26/2013 11:30:00 AM
Non Spike(If applicable):	3M37609.D	AC74097-001(T)	8/22/2013 1:44:00 PM
Inst Blank(If applicable):			

Method: 8260 Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	15.1437	0	20	76	20	130
1,1-Dichloroethene	1	21.8593	0	20	109	50	130
1,1-Dichloroethane	1	18.5911	0	20	93	50	130
Chloroform	1	18.438	0	20	92	50	130
1,2-Dichloroethane	1	21.7208	0	20	109	50	130
2-Butanone	1	15.995	0	20	80	20	130
Carbon Tetrachloride	1	19.6892	0	20	98	50	130
Trichloroethene	1	19.4917	0	20	97	50	130
Benzene	1	19.4794	0	20	97	50	130
Tetrachloroethene	1	18.5308	0	20	93	50	130
Toluene	1	17.3249	0	20	87	50	130
Chlorobenzene	1	17.3988	0	20	87	50	130
1,4-Dichlorobenzene	1	17.7724	0	20	89	50	130
1,2-Dichlorobenzene	1	17.8047	0	20	89	50	130
n-Propylbenzene	1	18.5662	0	20	93	50	130
sec-Butylbenzene	1	19.7395	0	20	99	50	130

	Data File	Sample ID:	Analysis Date
Spike or Dup:	3M37777.D	AC74097-001(T:MSD)	8/26/2013 11:46:00 AM
Non Spike(If applicable):	3M37609.D	AC74097-001(T)	8/22/2013 1:44:00 PM
Inst Blank(If applicable):			

Method: 8260 Matrix: Aqueous QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	16.3138	0	20	82	20	130
1,1-Dichloroethene	1	21.2074	0	20	106	50	130
1,1-Dichloroethane	1	18.2626	0	20	91	50	130
Chloroform	1	17.9169	0	20	90	50	130
1,2-Dichloroethane	1	21.2176	0	20	106	50	130
2-Butanone	1	14.8362	0	20	74	20	130
Carbon Tetrachloride	1	18.9862	0	20	95	50	130
Trichloroethene	1	18.8647	0	20	94	50	130
Benzene	1	18.7651	0	20	94	50	130
Tetrachloroethene	1	18.9112	0	20	95	50	130
Toluene	1	17.2953	0	20	86	50	130
Chlorobenzene	1	16.7671	0	20	84	50	130
1,4-Dichlorobenzene	1	16.0232	0	20	80	50	130
1,2-Dichlorobenzene	1	16.3828	0	20	82	50	130
n-Propylbenzene	1	17.4245	0	20	87	50	130
sec-Butylbenzene	1	17.6935	0	20	88	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA
QC Batch: MBS28302

	Data File	Sample ID:	Analysis Date
Spike or Dup:	3M37777.D	AC74097-001(T:MSD)	8/26/2013 11:46:00 AM
Duplicate(If applicable):	3M37776.D	AC74097-001(T:MS)	8/26/2013 11:30:00 AM
Inst Blank(If applicable):			

Method: 8260 Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Vinyl Chloride	1	16.3138	15.1437	7.4	40
1,1-Dichloroethene	1	21.2074	21.8593	3	40
1,1-Dichloroethane	1	18.2626	18.5911	1.8	40
Chloroform	1	17.9169	18.438	2.9	40
1,2-Dichloroethane	1	21.2176	21.7208	2.3	40
2-Butanone	1	14.8362	15.995	7.5	40
Carbon Tetrachloride	1	18.9862	19.6892	3.6	40
Trichloroethene	1	18.8647	19.4917	3.3	40
Benzene	1	18.7651	19.4794	3.7	40
Tetrachloroethene	1	18.9112	18.5308	2	40
Toluene	1	17.2953	17.3249	0.17	40
Chlorobenzene	1	16.7671	17.3988	3.7	40
1,4-Dichlorobenzene	1	16.0232	17.7724	10	40
1,2-Dichlorobenzene	1	16.3828	17.8047	8.3	40
n-Propylbenzene	1	17.4245	18.5662	6.3	40
sec-Butylbenzene	1	17.6935	19.7395	11	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 3M37596.D
Matrix: Aqueous

Blank Analysis Date: 08/22/13 10:15
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260B

Sample Number	Data File	Analysis Date
MBS27877	3M37598.D	08/22/13 10:48
MBS27884	3M37632.D	08/22/13 19:39
MBS27881	3M37614.D	08/22/13 15:01
AC74097-001(T)	3M37609.D	08/22/13 13:44

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 3M37768.D
Matrix: Aqueous

Blank Analysis Date: 08/26/13 09:18
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260B

Sample Number	Data File	Analysis Date
AC74097-001(T:M	3M37777.D	08/26/13 11:46
AC74097-001(T:M	3M37776.D	08/26/13 11:30
MBS28302	3M37774.D	08/26/13 10:57

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 3M38026.D
Matrix: Aqueous

Blank Analysis Date: 08/29/13 09:07
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260B

Sample Number	Data File	Analysis Date
AC74177-001(T)	3M38039.D	08/29/13 12:41
AC74177-003(T)	3M38040.D	08/29/13 12:57
AC74177-005(T)	3M38041.D	08/29/13 13:14
EF-1V-171617(082	3M38046.D	08/29/13 14:39
MBS28347	3M38028.D	08/29/13 09:40

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 3

Data File: 3M37120.D
Analysis Date: 08/13/13 06:26
Method: EPA 8260B

Tune Scan/Time Range: Scan 38

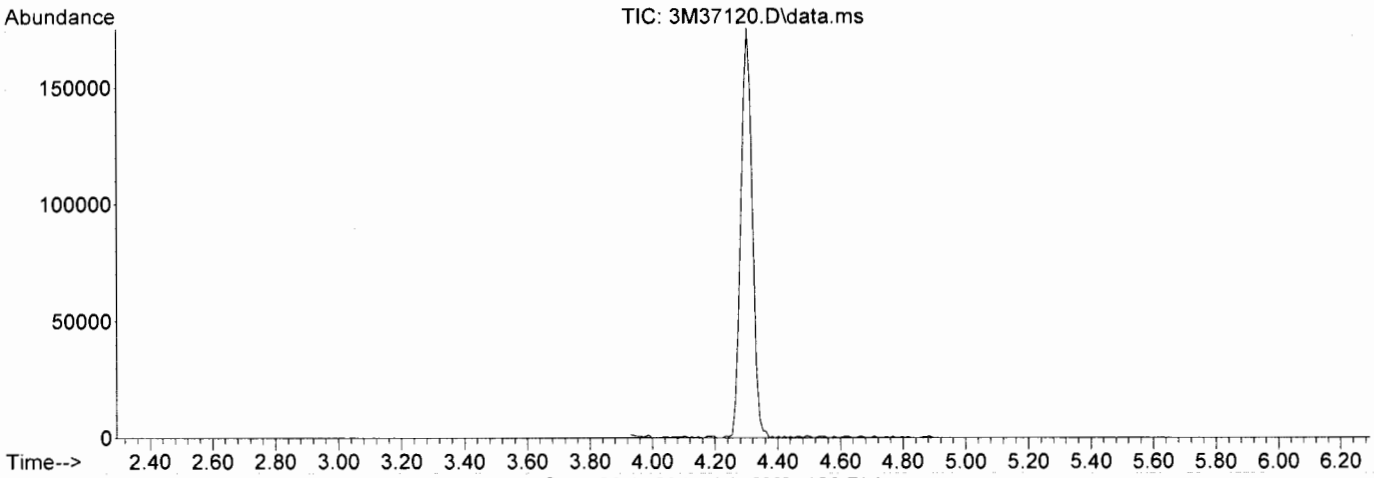
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	27.1	7897	PASS
75	95	30	60	57.7	16808	PASS
95	95	100	100	100.0	29152	PASS
96	95	5	9	7.3	2128	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	70.9	20672	PASS
175	174	5	9	8.5	1761	PASS
176	174	95	101	100.8	20832	PASS
177	176	5	9	6.8	1413	PASS

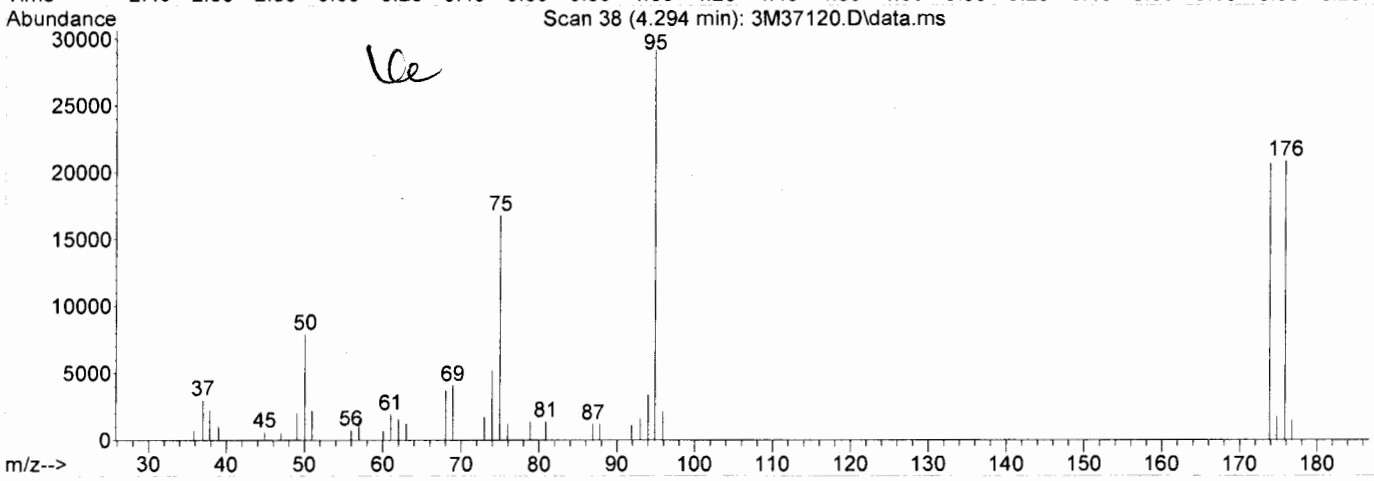
Data File	Sample Number	Analysis Date:
3M37121.D	BLK	08/13/13 06:36
3M37122.D	BLKJUG2	08/13/13 06:47
3M37123.D	BLK	08/13/13 07:06
3M37124.D	BLK	08/13/13 07:23
3M37125.D	BLK	08/13/13 07:39
3M37126.D	1 PPB	08/13/13 07:56
3M37127.D	CAL @ 0.5 PPB	08/13/13 08:12
3M37128.D	CAL @ 5 PPB	08/13/13 08:29
3M37129.D	CAL @ 500 PPB	08/13/13 08:45
3M37130.D	CAL @ 250 PPB	08/13/13 09:01
3M37131.D	CAL @ 100 PPB	08/13/13 09:18
3M37132.D	CAL @ 50 PPB	08/13/13 09:34
3M37133.D	CAL @ 20 PPB	08/13/13 09:51
3M37134.D	CAL @ 10 PPB	08/13/13 10:07
3M37135.D	BLK	08/13/13 10:24
3M37136.D	20 PPB	08/13/13 10:40
3M37138.D	CAL @ 1 PPB	08/13/13 11:13
3M37139.D	BLKJUG2	08/13/13 11:29
3M37140.D	20 PPB	08/13/13 11:46
3M37141.D	BLKJUG3	08/13/13 12:02
3M37142.D	ICV	08/13/13 12:19
3M37143.D	BLK	08/13/13 12:40
3M37144.D	DAILY BLANK	08/13/13 12:56
3M37145.D	DAILY BLANK	08/13/13 13:13
3M37146.D	MBS27795	08/13/13 13:29
3M37147.D	MBS27796	08/13/13 13:45
3M37148.D	BLKJUG3	08/13/13 14:02
3M37149.D	AC73763-005(T)	08/13/13 14:18
3M37150.D	MBS27798	08/13/13 14:35
3M37151.D	AC73907-009(MS)	08/13/13 14:51
3M37152.D	AC73907-009(MSD	08/13/13 15:08
3M37153.D	AC73947-002(MS)	08/13/13 15:23
3M37154.D	AC73947-002(MSD	08/13/13 15:39
3M37155.D	AC73947-002	08/13/13 15:54
3M37156.D	AC73763-005(T:M	08/13/13 16:09
3M37157.D	AC73763-005(T:M	08/13/13 16:25
3M37158.D	BLK	08/13/13 16:40
3M37159.D	AC73950-007	08/13/13 16:56
3M37160.D	AC73950-001	08/13/13 17:11
3M37161.D	AC73950-003	08/13/13 17:27
3M37162.D	BLK	08/13/13 17:42

Data Path : G:\GcMsData\2013\GCMS_3\Data\08-13-13\
Data File : 3M37120.D
Acq On : 13 Aug 2013 6:26
Operator : SG
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2013\GCMS_3\MethodQt\3M_A0712.M
Title : @GCMS_3,ug,624,8260
Last Update : Fri Jul 12 12:33:40 2013





Spectrum Information: Scan 38

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	27.1	7897	PASS
75	95	30	60	57.7	16808	PASS
95	95	100	100	100.0	29152	PASS
96	95	5	9	7.3	2128	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	70.9	20672	PASS
175	174	5	9	8.5	1761	PASS
176	174	95	101	100.8	20832	PASS
177	176	5	9	6.8	1413	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 3

Data File: 3M37589.D
Analysis Date: 08/22/13 07:50
Method: EPA 8260B

Tune Scan/Time Range: Average of 4.271 to 4.330 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	23.9	2079	PASS
75	95	30	60	58.2	5060	PASS
95	95	100	100	100.0	8693	PASS
96	95	5	9	6.1	532	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	83.3	7244	PASS
175	174	5	9	7.3	528	PASS
176	174	95	101	98.4	7128	PASS
177	176	5	9	5.5	391	PASS

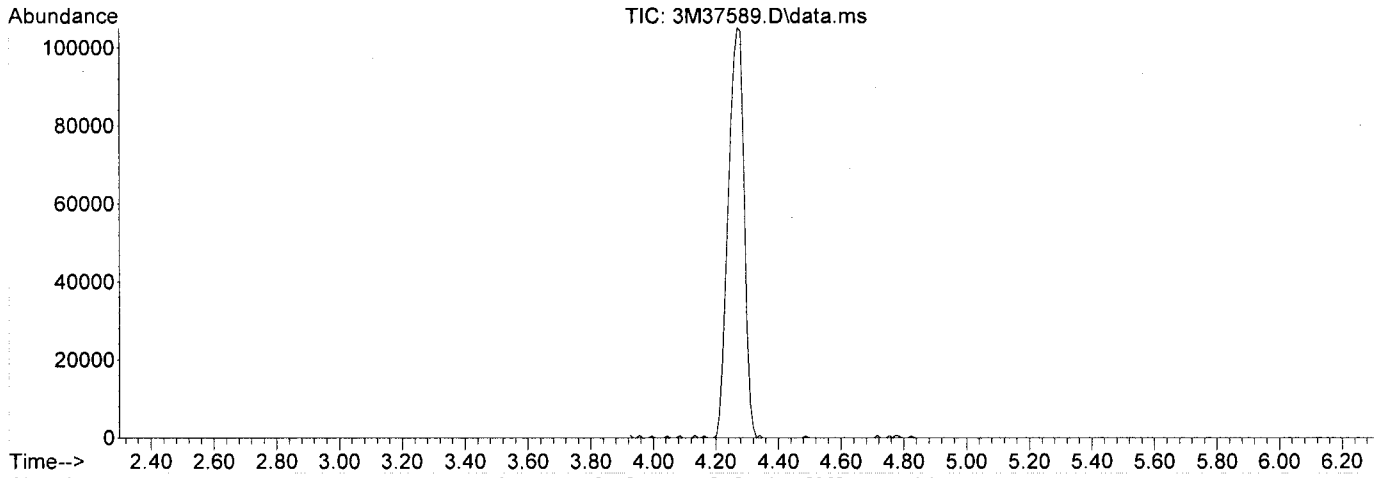
Data File	Sample Number	Analysis Date:
3M37590.D	BLK	08/22/13 08:02
3M37591.D	20 PPB	08/22/13 08:18
3M37592.D	BLK	08/22/13 08:51
3M37593.D	CAL @ 20 PPB	08/22/13 09:25
3M37594.D	BLK	08/22/13 09:42
3M37595.D	DAILY BLANK	08/22/13 09:58
3M37596.D	DAILY BLANK	08/22/13 10:15
3M37597.D	MBS27876	08/22/13 10:31
3M37598.D	MBS27877	08/22/13 10:48
3M37599.D	BLK	08/22/13 11:04
3M37600.D	AC74127-002	08/22/13 11:21
3M37601.D	AC74127-001	08/22/13 11:37
3M37602.D	AC74087-003	08/22/13 11:54
3M37603.D	AC74087-005(MS)	08/22/13 12:10
3M37604.D	AC74087-005(MSD	08/22/13 12:27
3M37605.D	AC73841-031(T)	08/22/13 12:42
3M37606.D	AC73841-034(T)	08/22/13 12:57
3M37607.D	AC73904-026(T)	08/22/13 13:13
3M37608.D	EF-3V-1014(08221	08/22/13 13:29
3M37609.D	AC74097-001(T)	08/22/13 13:44
3M37610.D	EF-1-V-170460(08	08/22/13 14:00
3M37611.D	BLK	08/22/13 14:15
3M37612.D	AC74112-001	08/22/13 14:31
3M37613.D	AC74109-006	08/22/13 14:46
3M37614.D	MBS27881	08/22/13 15:01
3M37615.D	AC74109-009	08/22/13 15:17
3M37616.D	AC74109-001	08/22/13 15:32
3M37617.D	AC74109-002	08/22/13 15:48
3M37618.D	AC74109-003(MS:	08/22/13 16:03
3M37619.D	AC74109-004(MSD	08/22/13 16:19
3M37620.D	AC74109-005	08/22/13 16:34
3M37621.D	AC74109-007	08/22/13 16:50
3M37622.D	AC74033-001(T)	08/22/13 17:05
3M37623.D	AC74085-001(T)	08/22/13 17:20
3M37624.D	AC74085-002(T)	08/22/13 17:36
3M37625.D	AC74085-003(T)	08/22/13 17:51
3M37626.D	AC74085-004(T)	08/22/13 18:07
3M37627.D	AC74085-008(T)	08/22/13 18:22
3M37628.D	AC73841-034(T:M	08/22/13 18:38
3M37629.D	AC73841-034(T:M	08/22/13 18:53
3M37630.D	AC74095-001(MS)	08/22/13 19:08
3M37631.D	AC74095-001(MSD	08/22/13 19:24
3M37632.D	MBS27884	08/22/13 19:39
3M37633.D	BLK	08/22/13 19:54
3M37634.D	BLK	08/22/13 20:10
3M37635.D	AC74106-003	08/22/13 20:25
3M37636.D	AC74106-004	08/22/13 20:41
3M37637.D	AC74107-005	08/22/13 20:56
3M37638.D	AC74107-006	08/22/13 21:12
3M37639.D	AC74108-002	08/22/13 21:27
3M37640.D	AC74108-003	08/22/13 21:42
3M37641.D	AC74111-002	08/22/13 21:58
3M37642.D	AC74113-002	08/22/13 22:13
3M37643.D	AC74113-009	08/22/13 22:28
3M37644.D	AC74111-003	08/22/13 22:44
3M37645.D	AC74115-001	08/22/13 22:59
3M37646.D	AC74115-002	08/22/13 23:15
3M37647.D	AC74124-001	08/22/13 23:30
3M37648.D	AC74124-002	08/22/13 23:46
3M37649.D	BLK	08/22/13 00:01
3M37650.D	BLK	08/23/13 00:16

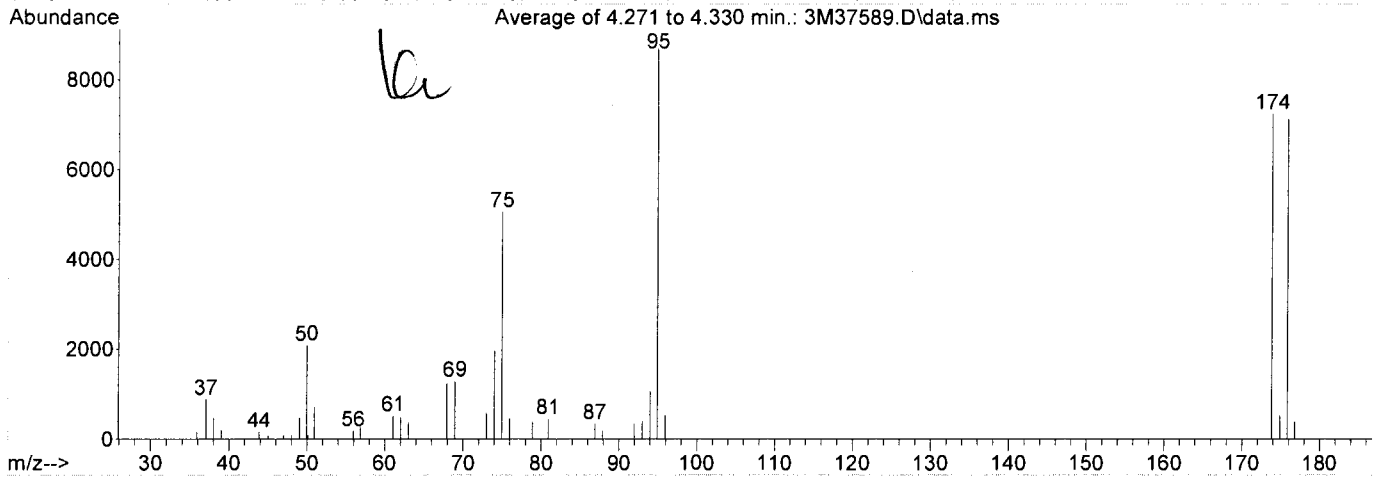
3082313 0106

Data Path : G:\GcMsData\2013\GCMS_3\Data\08-22-13\
Data File : 3M37589.D
Acq On : 22 Aug 2013 7:50
Operator : DB
Sample : BFB TUNE
Misc : A,5mL
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2013\GCMS_3\MethodQt\3M_A0813.M
Title : @GCMS_3,ug,624,8260
Last Update : Tue Aug 13 11:38:48 2013





Spectrum Information: Average of 4.271 to 4.330 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.9	2079	PASS
75	95	30	60	58.2	5060	PASS
95	95	100	100	100.0	8693	PASS
96	95	5	9	6.1	532	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	83.3	7244	PASS
175	174	5	9	7.3	528	PASS
176	174	95	101	98.4	7128	PASS
177	176	5	9	5.5	391	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 3

Data File: 3M37760.D
Analysis Date: 08/26/13 07:04
Method: EPA 8260B

Tune Scan/Time Range: Average of 4.281 to 4.291 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	25.4	3337	PASS
75	95	30	60	59.7	7852	PASS
95	95	100	100	100.0	13149	PASS
96	95	5	9	6.8	900	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	98.5	12957	PASS
175	174	5	9	8.3	1069	PASS
176	174	95	101	99.0	12832	PASS
177	176	5	9	7.3	943	PASS

Data File	Sample Number	Analysis Date:
3M37761.D	BLK	08/26/13 07:14
3M37762.D	BLKHCL	08/26/13 07:31
3M37763.D	20 PPB	08/26/13 07:49
3M37764.D	BLK	08/26/13 08:08
3M37765.D	CAL @ 20 PPB	08/26/13 08:25
3M37766.D	BLK	08/26/13 08:45
3M37767.D	DAILY BLANK	08/26/13 09:01
3M37768.D	DAILY BLANK	08/26/13 09:18
3M37769.D	AC73985-012	08/26/13 09:34
3M37770.D	BLK	08/26/13 09:51
3M37771.D	AC73985-009	08/26/13 10:07
3M37772.D	AC74157-004	08/26/13 10:24
3M37773.D	MBS28301	08/26/13 10:40
3M37774.D	MBS28302	08/26/13 10:57
3M37775.D	TCLP TEST1(0822	08/26/13 11:13
3M37776.D	AC74097-001(T:M	08/26/13 11:30
3M37777.D	AC74097-001(T:M	08/26/13 11:46
3M37778.D	BLK	08/26/13 12:01
3M37779.D	AC74146-017(500	08/26/13 12:17
3M37780.D	AC74146-012(1000	08/26/13 12:33
3M37781.D	AC74146-010(1000	08/26/13 12:48
3M37782.D	AC74146-011(1000	08/26/13 13:04
3M37783.D	AC74146-010(100	08/26/13 13:19
3M37784.D	BLK	08/26/13 13:35
3M37785.D	AC74146-007(5X)	08/26/13 13:53
3M37786.D	AC74146-013(5X)	08/26/13 14:11
3M37787.D	AC74124-008(5X)	08/26/13 14:29
3M37788.D	BLK	08/26/13 14:45
3M37789.D	AC74146-015	08/26/13 15:00
3M37790.D	AC74146-014	08/26/13 15:15
3M37791.D	AC74124-010(10X)	08/26/13 15:31
3M37792.D	BLK	08/26/13 15:46
3M37793.D	AC74146-016(10X)	08/26/13 16:02
3M37794.D	AC74146-003(20X)	08/26/13 16:17
3M37795.D	AC74146-004(50X)	08/26/13 16:33
3M37796.D	74182-003(MS:AC	08/26/13 16:48
3M37797.D	74182-004(MSD:A	08/26/13 17:04
3M37798.D	74182-002	08/26/13 17:19
3M37799.D	AC74107-004(MS)	08/26/13 17:34
3M37800.D	AC74107-004(MSD	08/26/13 17:50
3M37801.D	MBS28305	08/26/13 18:05
3M37802.D	BLK	08/26/13 18:21
3M37803.D	BLK	08/26/13 18:36
3M37804.D	BLK	08/26/13 18:52
3M37805.D	MBS28306	08/26/13 19:07
3M37806.D	BLK	08/26/13 19:23
3M37807.D	AC74176-003	08/26/13 19:38
3M37808.D	AC74176-004	08/26/13 19:54
3M37809.D	AC74171-002	08/26/13 20:09
3M37810.D	AC74171-003	08/26/13 20:25
3M37811.D	AC74194-007	08/26/13 20:40
3M37812.D	BLK	08/26/13 20:55
3M37813.D	AC74169-001	08/26/13 21:11
3M37815.D	AC74169-002	08/26/13 21:27
3M37816.D	AC74176-001	08/26/13 21:44
3M37817.D	AC74176-002	08/26/13 22:00
3M37818.D	AC74188-002	08/26/13 22:17
3M37819.D	AC74188-004	08/26/13 22:33
3M37820.D	AC74188-001(5X)	08/26/13 22:50
3M37821.D	AC74188-003(50X)	08/26/13 23:06
3M37822.D	AC74188-006(50X)	08/26/13 23:22
3M37823.D	AC74188-005(100	08/26/13 23:39
3M37824.D	AC74186-001(50X)	08/26/13 23:55
3M37825.D	BLK	08/27/13 00:12
3M37826.D	AC74192-001	08/27/13 00:28

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 3

Data File: 3M37760.D
Analysis Date: 08/26/13 07:04
Method: EPA 8260B

Tune Scan/Time Range: Average of 4.281 to 4.291 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	25.4	3337	PASS
75	95	30	60	59.7	7852	PASS
95	95	100	100	100.0	13149	PASS
96	95	5	9	6.8	900	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	98.5	12957	PASS
175	174	5	9	8.3	1069	PASS
176	174	95	101	99.0	12832	PASS
177	176	5	9	7.3	943	PASS

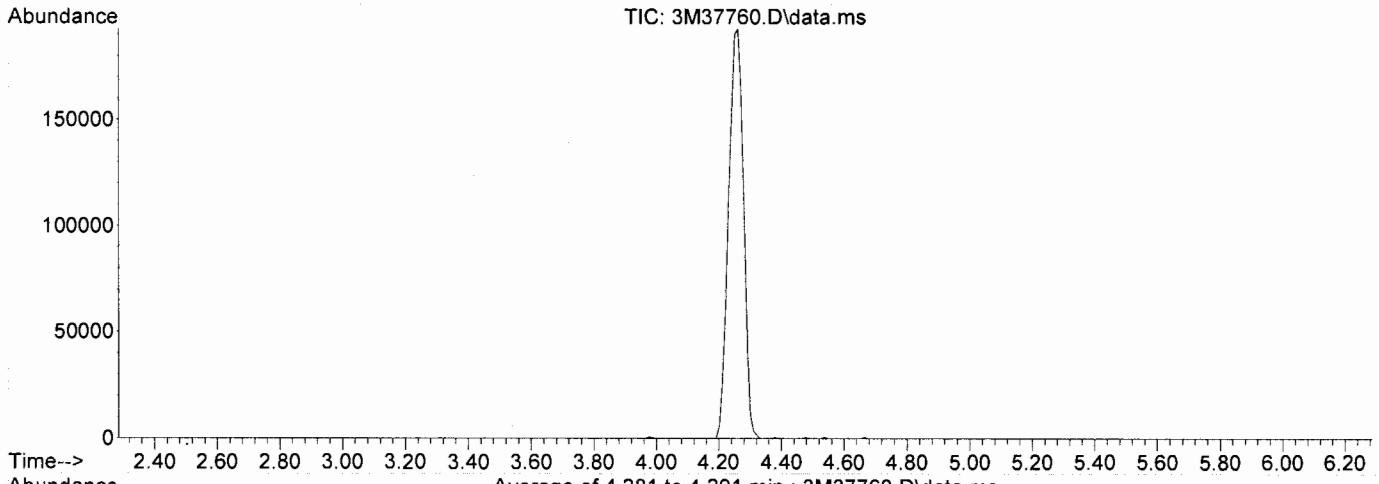
3M37827.D	AC74193-001	08/27/13 00:45
3M37828.D	BLK	08/27/13 01:01
3M37829.D	AC74171-001(50X)	08/27/13 01:17
3M37830.D	AC74194-005(50X)	08/27/13 01:34
3M37831.D	AC74194-006(50X)	08/27/13 01:50
3M37832.D	MBS28307	08/27/13 02:07
3M37833.D	AC74146-009(MS)	08/27/13 02:23
3M37834.D	AC74146-009(MSD	08/27/13 02:40
3M37835.D	MBS28308	08/27/13 02:56
3M37836.D	74158-001	08/27/13 03:12
3M37837.D	74159-001	08/27/13 03:29
3M37838.D	BLK	08/27/13 03:45
3M37839.D	JUG2	08/27/13 04:02
3M37840.D	BLK	08/27/13 04:17
3M37841.D	BLK	08/27/13 04:32
3M37842.D	BLK	08/27/13 04:48
3M37843.D	BLK	08/27/13 05:03
3M37844.D	BLK	08/27/13 05:18
3M37845.D	BLK	08/27/13 05:33
3M37846.D	BLK	08/27/13 05:48
3M37847.D	BLK	08/27/13 06:03
3M37848.D	BLK	08/27/13 06:19
3M37849.D	AC74171-001	08/27/13 06:34

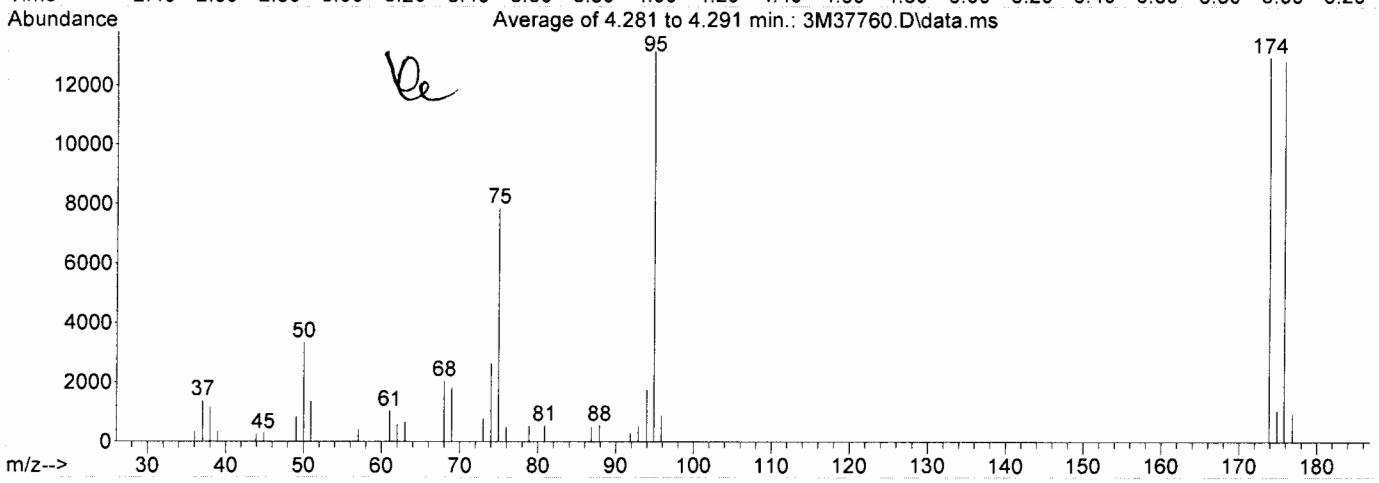
3082313 0109

Data Path : G:\GcMsData\2013\GCMS_3\Data\08-26-13\
Data File : 3M37760.D
Acq On : 26 Aug 2013 7:04
Operator : SG
Sample : BFB TUNE
Misc : A,5mL
ALS Vial : 5 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2013\GCMS_3\MethodQt\3M_A0813.M
Title : @GCMS_3,ug,624,8260
Last Update : Tue Aug 13 11:38:48 2013





Spectrum Information: Average of 4.281 to 4.291 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.4	3337	PASS
75	95	30	60	59.7	7852	PASS
95	95	100	100	100.0	13149	PASS
96	95	5	9	6.8	900	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	98.5	12957	PASS
175	174	5	9	8.3	1069	PASS
176	174	95	101	99.0	12832	PASS
177	176	5	9	7.3	943	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 3

Data File: 3M38020.D
Analysis Date: 08/29/13 07:31
Method: EPA 8260B

Tune Scan/Time Range: Average of 4.236 to 4.295 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	27.2	9021	PASS
75	95	30	60	59.8	19819	PASS
95	95	100	100	100.0	33119	PASS
96	95	5	9	7.6	2511	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	80.8	26749	PASS
175	174	5	9	7.8	2078	PASS
176	174	95	101	96.1	25699	PASS
177	176	5	9	6.9	1770	PASS

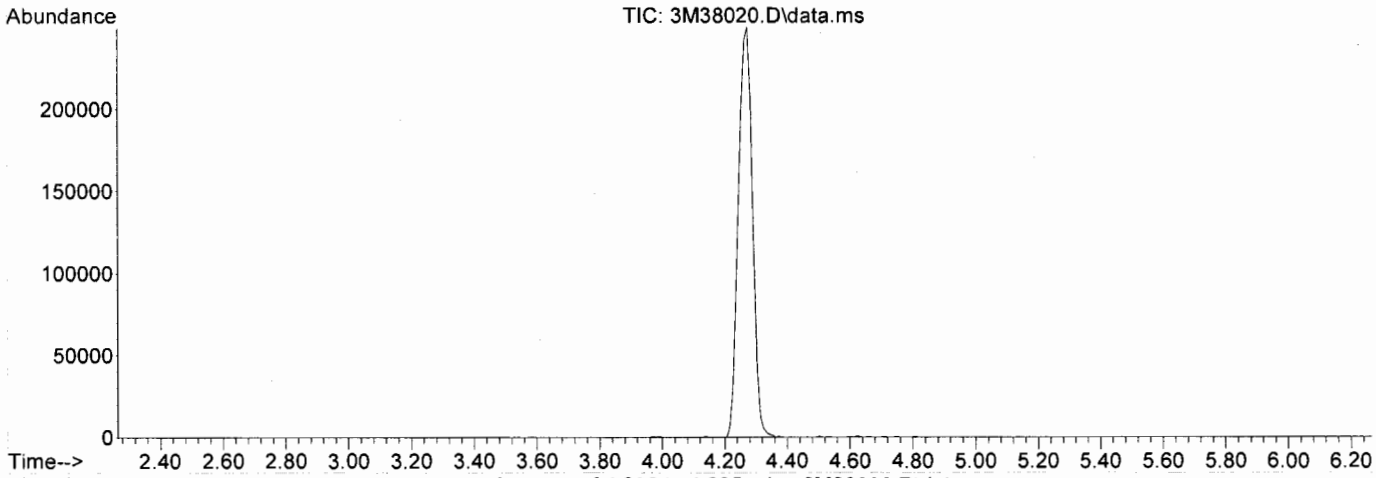
Data File	Sample Number	Analysis Date:
3M38022.D	20 PPB	08/29/13 07:57
3M38023.D	CAL @ 20 PPB	08/29/13 08:17
3M38024.D	BLK	08/29/13 08:34
3M38025.D	DAILY BLANK	08/29/13 08:50
3M38026.D	DAILY BLANK	08/29/13 09:07
3M38027.D	MBS28346	08/29/13 09:23
3M38028.D	MBS28347	08/29/13 09:40
3M38029.D	BLK	08/29/13 09:56
3M38030.D	AC74222-003	08/29/13 10:13
3M38031.D	AC74210-001	08/29/13 10:29
3M38032.D	AC74270-001(50X)	08/29/13 10:46
3M38033.D	AC74270-002(50X)	08/29/13 11:02
3M38034.D	AC74270-001	08/29/13 11:19
3M38035.D	AC74270-002	08/29/13 11:35
3M38036.D	AC74222-003	08/29/13 11:51
3M38037.D	AC74210-001	08/29/13 12:08
3M38038.D	AC74213-014	08/29/13 12:24
3M38039.D	AC74177-001(T)	08/29/13 12:41
3M38040.D	AC74177-003(T)	08/29/13 12:57
3M38041.D	AC74177-005(T)	08/29/13 13:14
3M38042.D	EF-1V-171617(082	08/29/13 13:30
3M38043.D	BLK	08/29/13 13:47
3M38044.D	AC74202-002(5X)	08/29/13 14:06
3M38045.D	AC74202-001(20X)	08/29/13 14:24
3M38046.D	EF-1V-171617(082	08/29/13 14:39

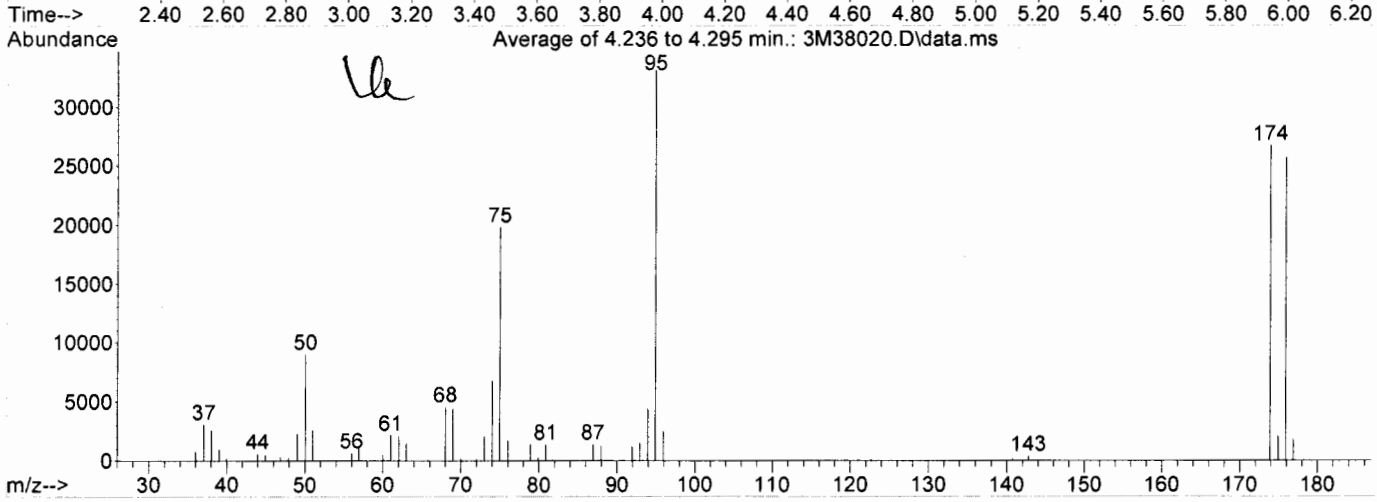
3082313 0111

Data Path : G:\GcMsData\2013\GCMS_3\Data\08-29-13\
Data File : 3M38020.D
Acq On : 29 Aug 2013 7:31
Operator : SG
Sample : BFB TUNE
Misc : A,5mL
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2013\GCMS_3\MethodQt\3M_A0813.M
Title : @GCMS_3,ug,624,8260
Last Update : Tue Aug 13 11:38:48 2013





Spectrum Information: Average of 4.236 to 4.295 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	27.2	9021	PASS
75	95	30	60	59.8	19819	PASS
95	95	100	100	100.0	33119	PASS
96	95	5	9	7.6	2511	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	80.8	26749	PASS
175	174	5	9	7.8	2078	PASS
176	174	95	101	96.1	25699	PASS
177	176	5	9	6.9	1770	PASS

3082313 0112

Method: EPA 8260B

Form 6
Initial Calibration

Instrument: GCMS_3

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	3M37133.	CAL @ 20 PPB	08/13/13 09:51	2	3M37128.	CAL @ 5 PPB	08/13/13 08:29
3	3M37134.	CAL @ 10 PPB	08/13/13 10:07	4	3M37132.	CAL @ 50 PPB	08/13/13 09:34
5	3M37131.	CAL @ 100 PPB	08/13/13 09:18	6	3M37130.	CAL @ 250 PPB	08/13/13 09:01
7	3M37129.	CAL @ 500 PPB	08/13/13 08:45	8	3M37138.	CAL @ 1 PPB	08/13/13 11:13
9	3M37127.	CAL @ 0.5 PPB	08/13/13 08:12				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.6240	0.9088	0.5746	0.6833	0.7124	0.7422	0.6647	0.7668	-----	0.710	1.31	0.997	0.999	14		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dichlorodifluoromethan	1	0	Avg	0.3757	0.4260	0.3864	0.3839	0.4053	0.3583	0.3740	0.4888	-----	0.400	1.31	0.999	0.999	10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloromethane	1	0	Avg	0.3296	0.4584	0.3370	0.3627	0.4025	0.4062	0.3646	0.4244	-----	0.386	1.43	0.997	1.00	12	**(0.100)	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromomethane	1	0	LinF	0.1431	0.2109	0.1490	0.1418	0.1375	-----	-----	0.1239	-----	0.151	1.74	0.999	0.999	20		20.00	5.00	10.00	50.00	100.0			1.00	
Vinyl Chloride	1	0	Avg	0.2523	0.2889	0.2608	0.2491	0.2586	0.2466	0.3180	0.3156	-----	0.274	1.51	0.988	0.999	11	*(30)	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroethane	1	0	LinF	0.1357	0.1983	0.1486	0.1380	0.1340	0.1128	-----	0.1882	-----	0.151	1.81	0.994	1.00	21		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Trichlorofluoromethane	1	0	Avg	0.3247	0.4002	0.3409	0.3275	0.3371	0.3107	0.3292	0.4111	-----	0.348	1.97	0.999	1.00	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl ether	1	0	Avg	0.2488	0.2503	0.2601	0.2551	0.2690	0.2331	0.2324	0.3413	-----	0.261	2.18	0.999	0.999	13		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Furan	1	0	Avg	0.6552	0.5063	0.6316	0.6872	0.7524	0.7189	0.6511	0.6302	-----	0.654	2.21	0.997	1.00	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.1.2-Trichloro-1.2.2-tri	1	0	Avg	0.2064	0.2493	0.2118	0.2109	0.2240	0.2061	0.1976	0.2311	-----	0.217	2.34	0.999	1.00	7.7		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methylene Chloride	1	0	Avg	0.2383	0.2901	0.2513	0.2589	0.2744	0.2666	0.2580	0.2866	-----	0.266	2.70	1.00	1.00	6.6		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acrolein	1	0	Avg	0.0318	0.0347	0.0340	0.0357	0.0409	0.0390	0.0383	0.0326	-----	0.0359	2.28	1.00	1.00	9.0		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Acrylonitrile	1	0	Avg	0.0770	0.0897	0.0825	0.0897	0.0966	0.0899	0.0818	0.0664	-----	0.0843	2.89	0.997	1.00	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iodomethane	1	0	Avg	0.3470	0.2939	0.3367	0.4002	0.4469	0.4124	0.3834	0.3126	-----	0.367	2.46	0.998	1.00	14		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acetone	1	0	Avg	0.0745	0.1023	0.0833	0.0832	0.0902	0.0889	0.0894	0.1075	-----	0.0899	2.39	1.00	1.00	12		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Carbon Disulfide	1	0	Avg	0.5992	0.6121	0.6069	0.6677	0.7324	0.7191	0.7319	0.6403	-----	0.664	2.52	1.00	1.00	8.6		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
t-Butyl Alcohol	1	0	LinF	0.0147	0.0142	0.0161	0.0176	0.0200	0.0193	0.0200	0.0138	-----	0.0170	2.78	1.00	1.00	15		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
n-Hexane	1	0	Avg	0.1702	0.1473	0.1712	0.1684	0.1906	0.1821	0.1833	0.2077	-----	0.178	3.10	1.00	1.00	10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Di-isopropyl-ether	1	0	Avg	0.9255	0.7715	0.9495	1.0088	1.1241	1.0839	1.0270	0.8216	-----	0.964	3.26	0.999	1.00	13		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.1-Dichloroethene	1	0	Avg	0.3244	0.3912	0.3523	0.3617	0.3759	0.3518	0.3551	0.3539	-----	0.358	2.34	1.00	1.00	5.4	*(30)	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl Acetate	1	0	Avg	0.2768	0.3269	0.3190	0.3289	0.3623	0.3554	0.3645	0.3380	-----	0.334	2.62	1.00	1.00	8.6		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl-t-butyl ether	1	0	Avg	0.5738	0.5509	0.5918	0.6483	0.6787	0.6069	0.5233	0.5574	0.6030	0.593	2.90	0.993	1.00	8.2		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
1.1-Dichloroethane	1	0	Avg	0.4538	0.4795	0.4782	0.4780	0.5303	0.5043	0.4994	0.4909	-----	0.489	3.23	1.00	1.00	4.6	**(0.100)	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1.2-Dichloroether	1	0	Avg	0.2232	0.2314	0.2325	0.2408	0.2469	0.2187	0.1892	0.2202	-----	0.225	2.90	0.993	1.00	7.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl-t-butyl ether	1	0	Avg	0.7436	0.6282	0.7416	0.8244	0.9059	0.8605	0.7973	0.6034	-----	0.763	3.55	0.998	1.00	14		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1.2-Dichloroethene	1	0	Avg	0.4415	0.4371	0.4597	0.4811	0.5109	0.4662	0.4306	0.4791	-----	0.463	3.69	0.998	1.00	5.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromochloromethane	1	0	Avg	0.2562	0.2745	0.2538	0.2703	0.2928	0.2747	0.2682	0.2830	-----	0.272	3.87	1.00	1.00	4.7		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2.2-Dichloropropane	1	0	Avg	0.3113	0.3172	0.3130	0.3552	0.3838	0.3593	0.3284	0.3326	-----	0.338	3.68	0.997	1.00	7.7		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl acetate	1	0	Avg	0.3689	0.3309	0.3898	0.4029	0.4551	0.4655	0.4486	0.3634	-----	0.403	3.74	1.00	1.00	12		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.4-Dioxane	1	0	Avg	0.0023	0.0020	0.0024	0.0026	0.0028	0.0025	0.0023	0.0017	-----	0.00237	4.91	0.996	1.00	14		1000.	250.0	500.0	2500.	5000.	1250	2500	50.00	
1.1-Dichloropropene	1	0	Avg	0.3150	0.2975	0.3195	0.3370	0.3572	0.3140	0.2693	0.3291	-----	0.317	4.16	0.992	1.00	8.3		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroform	1	0	Avg	0.5154	0.5696	0.5268	0.5334	0.5784	0.5411	0.5169	0.5276	-----	0.539	3.92	0.999	1.00	4.4	*(30)	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromofluoromethane	1	0	Avg	0.3634	0.3959	0.3681	0.3616	0.3754	0.3616	0.3483	0.3742	0.3967	0.372	4.04	-1	-1	4.3		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.3075	0.2550	0.3014	0.3336	0.3708	0.3546	0.3376	0.2982	-----	0.320	4.09	0.999	1.00	12		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.2-Dichloroethane-d4	1	0	Avg	0.2089	0.2369	0.2166	0.1997	0.2096	0.2088	0.2175	0.2175	0.2461	0.218	4.27	-1	-1	6.7		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
1.2-Dichloroethane	1	0	LinF	0.4793	0.5633	0.5142	0.5084	0.5330	0.4647	0.3979	0.6440	0.6790	0.532	4.31	0.992	1.00	16		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
2-Butanone	1	0	LinF	0.0890	0.0907	0.1095	0.1061	0.1285	0.1178	0.1169	0.0769	-----	0.104	3.70	0.999	0.999	17		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.1.1-Trichloroethane	1	0	Avg	0.4137	0.4336	0.4394	0.4567	0.4939	0.4602	0.4318	0.4483	-----	0.447	4.06	0.998	1.00	5.4		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Carbon Tetrachloride	1	0	Avg	0.3768	0.4153	0.3777	0.4057	0.4256	0.3780	0.3326	0.3697	-----	0.385	4.16	0.994	1.00	7.7		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Vinyl Acetate	1	0	Avg	0.5490	0.5480	0.5701	0.6330	0.6811	0.6526	0.6266	0.5610	-----	0.603	3.26	0.999	1.00	8.6		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromodichloromethane	1	0	Avg	0.3958	0.4038	0.4048	0.4505	0.4934	0.4692	0.4466	0.4045	-----	0.434	4.99	0.999	1.00	8.4		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags
a - failed the spcc criteria ** - ccc compound*
b - failed the ccc criteria *** - spcc compound*
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 12.2
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

3082313 0113

Form 6
Initial Calibration

Method: EPA 8260B

Instrument: GCMS_3

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	3M37133.	CAL @ 20 PPB	08/13/13 09:51	2	3M37128.	CAL @ 5 PPB	08/13/13 08:29
3	3M37134.	CAL @ 10 PPB	08/13/13 10:07	4	3M37132.	CAL @ 50 PPB	08/13/13 09:34
5	3M37131.	CAL @ 100 PPB	08/13/13 09:18	6	3M37130.	CAL @ 250 PPB	08/13/13 09:01
7	3M37129.	CAL @ 500 PPB	08/13/13 08:45	8	3M37138.	CAL @ 1 PPB	08/13/13 11:13
9	3M37127.	CAL @ 0.5 PPB	08/13/13 08:12				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.2055	0.1699	0.2091	0.2142	0.2394	0.2265	0.2178	0.2148	-----	0.212	4.81	0.999	1.00	9.5		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromomethane	1	0	Avg	0.2308	0.2144	0.2280	0.2516	0.2724	0.2515	0.2216	0.1622	-----	0.229	4.91	0.995	1.00	14		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.2-Dichloropropane	1	0	Avg	0.2625	0.2689	0.2713	0.2967	0.3048	0.2909	0.2650	0.2827	-----	0.280	4.83	0.997	1.00	5.6	*(30)	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichloroethene	1	0	Avg	0.2671	0.2340	0.2672	0.2919	0.3159	0.2917	0.2574	0.2554	-----	0.273	4.69	0.995	1.00	9.5		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Benzene	1	0	Avg	0.8470	0.8582	0.9035	0.9331	0.9696	0.8770	0.7582	0.8439	0.8963	0.876	4.30	0.993	1.00	6.9		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
tert-Amyl methyl ether	1	0	Avg	0.5906	0.4720	0.5701	0.6713	0.7106	0.6515	0.5837	0.5246	-----	0.597	4.36	0.996	1.00	13		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iso-propylacetate	1	0	LinF	0.5498	0.5779	0.5428	0.6581	0.7116	0.7623	0.7675	0.5055	-----	0.634	4.33	1.00	1.00	16		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl methacrylate	1	0	LinF	0.3223	0.3324	0.2737	0.3813	0.4018	0.4151	0.4231	0.2027	-----	0.344	4.89	1.00	1.00	22		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromochloromethane	1	0	LinF	0.4585	0.4430	0.4335	0.5206	0.5642	0.5538	0.5320	0.3453	-----	0.481	5.94	0.999	1.00	16		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chloroethylvinylether	1	0	LinF	0.2074	0.2067	0.2025	0.2540	0.2667	0.2623	0.2688	0.1253	-----	0.224	5.16	1.00	1.00	22		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1.3-Dichloropropene	1	0	LinF	0.5553	0.5199	0.5236	0.6422	0.6926	0.6853	0.6770	0.3810	-----	0.585	5.26	1.00	1.00	19		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1.3-Dichloroprope	1	0	LinF	0.4826	0.4331	0.4508	0.6026	0.6447	0.6508	0.6445	0.3407	-----	0.531	5.58	1.00	1.00	22		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl methacrylate	1	0	LinF	0.5228	0.4958	0.5394	0.6132	0.6559	0.6622	0.6546	0.3707	-----	0.564	5.61	1.00	1.00	18		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.1.2-Trichloroethane	1	0	Avg	0.3186	0.3440	0.3161	0.3388	0.3539	0.3368	0.3302	0.2508	-----	0.324	5.70	1.00	1.00	9.9		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.2-Dibromoethane	1	0	Avg	0.3734	0.3538	0.3761	0.4137	0.4355	0.4254	0.4204	0.3118	-----	0.389	6.02	1.00	1.00	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.3-Dichloropropane	1	0	Avg	0.5713	0.6123	0.5843	0.6210	0.6425	0.5980	0.5393	0.5326	-----	0.588	5.80	0.997	1.00	6.6		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Methyl-2-Pentanone	1	0	LinF	0.3133	0.3208	0.3213	0.3937	0.4199	0.4349	0.4524	0.1994	-----	0.357	5.34	1.00	1.00	24		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Hexanone	1	0	LinF	0.1866	0.1897	0.1985	0.2792	0.2884	0.3059	0.3171	0.1004	-----	0.233	5.84	1.00	1.00	33		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Tetrachloroethene	1	0	Avg	0.3144	0.2792	0.3094	0.3297	0.3424	0.3141	0.2703	0.3374	-----	0.312	5.79	0.993	1.00	8.3		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Toluene-d8	1	0	Avg	1.3578	1.4681	1.3467	1.3622	1.3443	1.3515	1.4013	1.3907	1.3841	1.38	5.42	-1	-1	2.8		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Toluene	1	0	Avg	0.7557	0.8414	0.7535	0.8259	0.8432	0.7797	0.7162	0.8769	-----	0.799	5.46	0.998	1.00	7.0	*(30)	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.1.1.2-Tetrachloroeth	1	0	Avg	0.3603	0.3585	0.3542	0.4082	0.4069	0.3557	0.3056	0.3251	-----	0.359	6.34	0.992	1.00	9.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chlorobenzene	1	0	Avg	0.8506	0.8984	0.8786	0.9484	0.9702	0.9090	0.8547	1.0270	-----	0.917	6.31	0.999	1.00	6.7	**(0.300)	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butyl acrylate	1	0	LinF	1.2176	0.8539	1.0880	1.4752	1.6430	1.6630	1.6917	0.5075	-----	1.27	6.60	1.00	1.00	34		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Amyl acetate	1	0	LinF	1.0413	0.8810	0.9579	1.2155	1.3592	1.3876	1.4510	0.3295	-----	1.08	6.73	1.00	1.00	34		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromoform	1	0	Lin	0.5423	0.4920	0.4922	0.6154	0.6994	0.7062	0.7094	0.4086	-----	0.583	6.80	1.00	1.00	20	**(0.100)	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethylbenzene	1	0	Avg	0.5524	0.5458	0.5541	0.5852	0.6191	0.5010	-----	0.3796	-----	0.534	6.35	0.991	0.999	14	*(30)	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
1.1.2.2-Tetrachloroeth	1	0	Avg	0.6556	0.7312	0.6923	0.6860	0.7492	0.6932	0.6358	0.7684	-----	0.702	7.05	0.998	1.00	6.5	**(0.300)	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromofluorobenzene	1	0	Avg	0.9630	0.9170	0.9536	0.9317	0.9705	0.9550	0.9919	0.9522	0.9335	0.952	6.98	-1	-1	2.4		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Styrene	1	0	Avg	1.5330	1.4060	1.4648	1.6099	1.6921	1.4396	-----	1.0921	-----	1.46	6.67	0.995	1.00	13		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
m&p-Xylenes	1	0	Avg	0.8451	0.8190	0.8441	0.8603	0.8892	0.7348	0.5902	0.8068	0.6192	0.779	6.42	0.983	1.00	14		40.00	10.00	20.00	100.0	200.0	500.0	1000.	2.00	1.00
o-Xylene	1	0	Avg	0.8603	0.8468	0.9141	0.8817	0.9377	0.7769	-----	0.8383	-----	0.865	6.66	0.993	0.999	6.1		20.00	5.00	10.00	50.00	100.0	250.0		1.00	
trans-1.4-Dichloro-2-bu	1	0	LinF	0.2516	0.3052	0.2164	0.2773	0.2673	0.2555	0.2243	0.1148	-----	0.239	7.09	0.995	1.00	24		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.3-Dichlorobenzene	1	0	Avg	1.0729	1.0437	1.1222	1.1259	1.1871	1.1047	0.9958	1.1392	-----	1.10	7.67	0.997	1.00	5.4		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.4-Dichlorobenzene	1	0	Avg	1.1412	1.1448	1.1742	1.1662	1.2572	1.1769	1.0953	1.4210	-----	1.20	7.72	0.998	1.00	8.5		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.2-Dichlorobenzene	1	0	Avg	1.0452	0.9940	1.0537	1.0816	1.1794	1.1082	1.0688	1.0182	-----	1.07	7.97	0.999	1.00	5.4		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Isopropylbenzene	1	0	Avg	2.1272	1.8077	2.0923	2.1182	2.3338	2.1464	1.9833	1.7544	-----	2.05	6.88	0.998	1.00	9.3		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Cyclohexanone	1	0	LinF	0.0283	0.0402	0.0297	0.0293	0.0319	0.0311	0.0314	0.0673	-----	0.0362	6.96	1.00	1.00	36		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Camphene	1	0	Avg	0.6542	0.6359	0.6586	0.6471	0.7028	0.6381	0.5871	0.7710	-----	0.662	7.05	0.997	1.00	8.2		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1.2.3-Trichloropropane	1	0	LinF	0.8291	0.8584	0.8260	0.9003	1.0073	0.9060	0.7871	1.3302	-----	0.931	7.09	0.993	1.00	19		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chlorotoluene	1	0	Avg	1.4103	1.3852	1.5382	1.4632	1.5597	1.2871	-----	1.3608	-----	1.43	7.20	0.993	0.999	6.8		20.00	5.00	10.00	50.00	100.0	250.0		1.00	

Flags

a - failed the spcc criteria — ** - ccc compound*

b - failed the ccc criteria — *** - spcc compound*

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 12.2

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

3082313 0114

Method: EPA 8260B

Form 6
Initial Calibration

Instrument: GCMS_3

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	3M37133.	CAL @ 20 PPB	08/13/13 09:51	2	3M37128.	CAL @ 5 PPB	08/13/13 08:29
3	3M37134.	CAL @ 10 PPB	08/13/13 10:07	4	3M37132.	CAL @ 50 PPB	08/13/13 09:34
5	3M37131.	CAL @ 100 PPB	08/13/13 09:18	6	3M37130.	CAL @ 250 PPB	08/13/13 09:01
7	3M37129.	CAL @ 500 PPB	08/13/13 08:45	8	3M37138.	CAL @ 1 PPB	08/13/13 11:13
9	3M37127.	CAL @ 0.5 PPB	08/13/13 08:12				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.1252	1.9708	2.2256	2.1779	2.2603	2.0133	-----	1.7870	-----	2.08	7.19	0.998	1.00	8.0	20.00	5.00	10.00	50.00	100.0	250.0		1.00	
4-Chlorotoluene	1	0	Avg	1.4129	1.2408	1.3917	1.4751	1.5344	1.4357	1.2813	1.1591	-----	1.37	7.26	0.996	1.00	9.3	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Propylbenzene	1	0	Avg	2.3369	2.2566	2.3270	2.4098	2.6044	2.4308	2.3241	2.3768	-----	2.38	7.12	0.999	1.00	4.4	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromobenzene	1	0	Avg	1.4897	1.6267	1.5196	1.5453	1.6798	1.4788	1.2713	1.7785	-----	1.55	7.09	0.992	1.00	9.8	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3,5-Trimethylbenzene	1	0	Avg	1.7536	1.7384	1.6618	1.7695	1.8536	1.5639	1.4352	1.6341	-----	1.68	7.23	0.996	0.999	7.9	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Butyl methacrylate	1	0	Avg	1.5146	1.3356	1.4335	1.6555	1.7871	1.6986	1.5472	1.1327	-----	1.51	7.24	0.997	1.00	14	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
t-Butylbenzene	1	0	Avg	1.4210	1.2765	1.4011	1.4902	1.5827	1.4596	1.3735	1.2059	-----	1.40	7.44	0.999	1.00	8.5	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trimethylbenzene	1	0	Avg	1.8308	1.7011	1.8858	1.8553	2.0069	1.8323	1.6980	1.6682	-----	1.81	7.47	0.998	1.00	6.3	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
sec-Butylbenzene	1	0	Avg	1.6844	1.4631	1.6390	1.6644	1.8290	1.7356	1.6958	1.4568	-----	1.65	7.57	1.00	1.00	7.8	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Isopropyltoluene	1	0	Avg	1.3954	1.1154	1.3858	1.4174	1.5215	1.3862	1.2461	1.2720	-----	1.34	7.65	0.996	1.00	9.3	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butylbenzene	1	0	Avg	1.6059	1.4201	1.5686	1.5970	1.7174	1.5734	1.5211	1.4997	-----	1.56	7.92	0.999	1.00	5.6	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
p-Diethylbenzene	1	0	Avg	0.7298	0.5242	0.6905	0.7649	0.8202	0.7540	0.7092	0.5781	-----	0.696	7.89	0.998	1.00	14	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4,5-Tetramethylber	1	0	LinF	1.3824	0.9073	1.2801	1.5014	1.6399	1.5377	1.4427	0.9226	-----	1.33	8.40	0.998	1.00	21	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dibromo-3-Chloropr	1	0	LinF	0.1075	0.0639	0.1107	0.1302	0.1478	0.1551	0.1623	0.0527	-----	0.116	8.48	0.999	1.00	35	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Camphor	1	0	LinF	0.0475	0.0295	0.0433	0.0536	0.0605	0.0569	0.0582	0.0251	0.0257	0.0445	8.96	1.00	1.00	32	200.0	50.00	100.0	500.0	1000.	2500.	5000.	10.00	5.00
Hexachlorobutadiene	1	0	LinF	0.3215	0.2019	0.3166	0.3169	0.3425	0.3046	0.2730	0.3747	-----	0.306	9.11	0.996	1.00	17	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trichlorobenzene	1	0	LinF	0.5677	0.4002	0.5720	0.5859	0.6326	0.6083	0.5870	0.4004	-----	0.544	9.02	0.999	1.00	17	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,3-Trichlorobenzene	1	0	Avg	0.5247	0.3686	0.5264	0.5317	0.6003	0.5723	0.5329	0.5208	-----	0.522	9.36	0.998	1.00	13	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Naphthalene	1	0	LinF	1.1915	0.7650	1.1752	1.2887	1.4104	1.4159	1.3773	0.6447	-----	1.16	9.20	1.00	1.00	26	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags

a - failed the spcc criteria — ** - ccc compound*

b - failed the ccc criteria — *** - spcc compound*

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 12.2

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 3M37593.D **Instrument:** GCMS 3

Cont Calibration Date/Time 8/22/2013 9:25:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.47	30.00	30				0.000	0.00	
Chlorodifluoromethane	1	0		1.31	15.40				0.710			
Dichlorodifluoromethane	1	0		1.31	18.78	20			0.400	0.376	6.08	
Chloromethane	1	0	CP	1.43	22.52	20	0.1		0.386	0.434	12.58	
Bromomethane	1	0		1.73	26.36	20			0.151	0.183	31.79	
Vinyl Chloride	1	0	CC	1.51	19.42	20	20		0.274	0.266	2.92	
Chloroethane	1	0		1.79	28.23	20			0.151	0.165	41.13	
Trichlorofluoromethane	1	0		1.97	21.50	20			0.348	0.374	7.51	
Ethyl ether	1	0		2.17	19.30	20			0.261	0.252	3.50	
Furan	1	0		2.20	20.91	20			0.654	0.684	4.55	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.33	20.81	20			0.217	0.226	4.03	
Methylene Chloride	1	0		2.69	18.49	20			0.266	0.246	7.53	
Acrolein	1	0		2.28	87.60	100			0.036	0.031	12.40	
Acrylonitrile	1	0		2.88	17.62	20			0.084	0.074	11.88	
Iodomethane	1	0		2.46	18.85	20			0.367	0.346	5.74	
Acetone	1	0		2.38	85.50	100			0.090	0.077	14.50	
Carbon Disulfide	1	0		2.51	18.23	20			0.664	0.605	8.85	
t-Butyl Alcohol	1	0		2.77	64.98	100			0.017	0.013	35.02	
n-Hexane	1	0		3.09	19.10	20			0.178	0.170	4.48	
Di-isopropyl-ether	1	0		3.25	17.71	20			0.964	0.854	11.44	
1,1-Dichloroethene	1	0	CC	2.34	20.59	20	20		0.358	0.369	2.94	
Methyl Acetate	1	0		2.62	16.47	20			0.334	0.275	17.64	
Methyl-t-butyl ether	1	0		2.88	19.10	20			0.593	0.566	4.51	
1,1-Dichloroethane	1	0	CP	3.21	18.08	20	0.1		0.489	0.442	9.62	
trans-1,2-Dichloroethene	1	0		2.89	19.80	20			0.225	0.223	1.00	
Ethyl-t-butyl ether	1	0		3.54	18.67				0.763			
cis-1,2-Dichloroethene	1	0		3.68	19.41	20			0.463	0.450	2.96	
Bromochloromethane	1	0		3.86	17.49	20			0.272	0.238	12.54	
2,2-Dichloropropane	1	0		3.68	19.91	20			0.338	0.336	0.44	
Ethyl acetate	1	0		3.73	15.07				0.403			
1,4-Dioxane	1	0		4.91	765.92	1000			0.002	0.002	23.41	
1,1-Dichloropropene	1	0		4.16	19.20	20			0.317	0.305	4.02	
Chloroform	1	0	CC	3.92	18.52	20	20		0.539	0.499	7.41	
Dibromofluoromethane	1	0	S	4.03	31.67	30			0.372	0.392	5.56	
Cyclohexane	1	0		4.09	18.94	20			0.320	0.303	5.29	
1,2-Dichloroethane-d4	1	0	S	4.26	32.15	30			0.218	0.234	7.18	
1,2-Dichloroethane	1	0		4.31	23.34	20			0.532	0.485	16.68	
2-Butanone	1	0		3.69	16.85	20			0.104	0.099	15.76	
1,1,1-Trichloroethane	1	0		4.05	19.21	20			0.447	0.430	3.93	
Carbon Tetrachloride	1	0		4.16	20.17	20			0.385	0.389	0.85	
Vinyl Acetate	1	0		3.25	18.02	20			0.603	0.543	9.89	
Bromodichloromethane	1	0		4.99	17.74	20			0.434	0.385	11.31	
Methylcyclohexane	1	0		4.81	17.89	20			0.212	0.190	10.54	
Dibromomethane	1	0		4.91	16.89	20			0.229	0.193	15.55	
1,2-Dichloropropane	1	0	CC	4.83	17.27	20	20		0.280	0.242	13.65	
Trichloroethene	1	0		4.69	17.66	20			0.273	0.241	11.72	
Benzene	1	0		4.30	18.55	20			0.876	0.813	7.24	
tert-Amyl methyl ether	1	0		4.36	18.43	20			0.597	0.550	7.85	
Chlorobenzene-d5	1	0	I	6.28	30.00	30				0.000	0.00	
Iso-propylacetate	1	0		4.33	14.82				0.634			
Methyl methacrylate	1	0		4.88	13.88				0.344			
Dibromochloromethane	1	0		5.94	15.31	20			0.481	0.411	23.43	
2-Chloroethylvinylether	1	0		5.16	13.42	20			0.224	0.179	32.88	
cis-1,3-Dichloropropene	1	0		5.26	14.83	20			0.585	0.503	25.87	
trans-1,3-Dichloropropene	1	0		5.58	13.98	20			0.531	0.451	30.08	
Ethyl methacrylate	1	0		5.61	14.36				0.564			

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 3M37593.D **Instrument:** GCMS 3

Cont Calibration Date/Time 8/22/2013 9:25:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
1,1,2-Trichloroethane	1	0		5.69	18.14	20			0.324	0.294	9.30	
1,2-Dibromoethane	1	0		6.02	17.91	20			0.389	0.348	10.44	
1,3-Dichloropropane	1	0		5.79	18.08	20			0.588	0.531	9.58	
4-Methyl-2-Pentanone	1	0		5.34	13.14	20			0.357	0.294	34.30	
2-Hexanone	1	0		5.83	10.30	20			0.233	0.162	48.50	
Tetrachloroethene	1	0		5.78	16.56	20			0.312	0.258	17.19	
Toluene-d8	1	0	S	5.41	30.76	30			1.379	1.414	2.55	
Toluene	1	0	CC	5.46	18.07	20	20		0.799	0.722	9.65	
1,1,1,2-Tetrachloroethane	1	0		6.34	19.33	20			0.359	0.347	3.36	
Chlorobenzene	1	0	CP	6.30	16.99	20	0.3		0.917	0.779	15.04	
1,4-Dichlorobenzene-d4	1	0	I	7.70	30.00	30				0.000	0.00	
n-Butyl acrylate	1	0		6.59	12.84				1.268			
n-Amyl acetate	1	0		6.73	13.37				1.078			
Bromoform	1	0	CP	6.80	15.81	20	0.1		0.583	0.455	20.94	
Ethylbenzene	1	0	CC	6.35	19.20	20	20		0.534	0.513	4.01	
1,1,2,2-Tetrachloroethane	1	0	CP	7.05	17.56	20	0.3		0.702	0.616	12.20	
Bromofluorobenzene	1	0	S	6.98	29.22	30			0.952	0.927	2.59	
Styrene	1	0		6.67	19.01	20			1.463	1.390	4.96	
m&p-Xylenes	1	0		6.41	39.76	40			0.779	0.774	0.61	
o-Xylene	1	0		6.66	18.76	20			0.865	0.811	6.21	
trans-1,4-Dichloro-2-butene	1	0		7.08	20.37	20			0.239	0.236	1.85	
1,3-Dichlorobenzene	1	0		7.66	17.32	20			1.099	0.952	13.40	
1,4-Dichlorobenzene	1	0		7.72	16.58	20			1.197	0.993	17.08	
1,2-Dichlorobenzene	1	0		7.96	16.61	20			1.069	0.888	16.93	
Isopropylbenzene	1	0		6.87	18.58	20			2.045	1.900	7.12	
Cyclohexanone	1	0		6.95	91.76				0.036			
Camphene	1	0		7.05	19.22	20			0.662	0.636	3.92	
1,2,3-Trichloropropane	1	0		7.09	18.05	20			0.931	0.738	9.75	
2-Chlorotoluene	1	0		7.19	20.11	20			1.429	1.437	0.54	
p-Ethyltoluene	1	0		7.19	19.22				2.080			
4-Chlorotoluene	1	0		7.26	18.46	20			1.366	1.261	7.70	
n-Propylbenzene	1	0		7.12	18.27	20			2.383	2.177	8.66	
Bromobenzene	1	0		7.09	18.28	20			1.549	1.416	8.58	
1,3,5-Trimethylbenzene	1	0		7.22	19.74	20			1.676	1.654	1.32	
Butyl methacrylate	1	0		7.24	19.37				1.513			
t-Butylbenzene	1	0		7.43	18.74	20			1.401	1.313	6.29	
1,2,4-Trimethylbenzene	1	0		7.46	18.71	20			1.810	1.693	6.46	
sec-Butylbenzene	1	0		7.57	17.89	20			1.646	1.472	10.56	
4-Isopropyltoluene	1	0		7.65	19.09	20			1.343	1.281	4.55	
n-Butylbenzene	1	0		7.91	20.05	20			1.563	1.567	0.23	
p-Diethylbenzene	1	0		7.89	18.98				0.696			
1,2,4,5-Tetramethylbenzene	1	0		8.40	16.11				1.327			
1,2-Dibromo-3-Chloropropane	1	0		8.46	10.63	20			0.116	0.085	46.85	
Camphor	1	0		8.96	122.58	200			0.045	0.036	38.71	
Hexachlorobutadiene	1	0		9.11	16.63	20			0.307	0.234	16.83	
1,2,4-Trichlorobenzene	1	0		9.02	13.63	20			0.544	0.404	31.87	
1,2,3-Trichlorobenzene	1	0		9.35	13.55	20			0.522	0.354	32.26	
Naphthalene	1	0		9.20	12.19	20			1.159	0.844	39.07	
1,2-Dioxane	1	100		0.00	0.00	2000				0.000	100.00	
Freon 113	1	100		0.00	0.00	20				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 3M37765.D **Instrument:** GCMS 3

Cont Calibration Date/Time 8/26/2013 8:25:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.46	30.00	30				0.000	0.00	
Chlorodifluoromethane	1	0		1.31	20.94				0.710			
Dichlorodifluoromethane	1	0		1.31	14.25	20			0.400	0.285	28.77	
Chloromethane	1	0	CP	1.42	19.60	20	0.1		0.386	0.378	2.00	
Bromomethane	1	0		1.72	28.49	20			0.151	0.198	42.46	
Vinyl Chloride	1	0	CC	1.49	20.44	20	20		0.274	0.280	2.22	
Chloroethane	1	0		1.79	30.83	20			0.151	0.180	54.17	
Trichlorofluoromethane	1	0		1.96	22.96	20			0.348	0.399	14.78	
Ethyl ether	1	0		2.17	19.72	20			0.261	0.258	1.41	
Furan	1	0		2.20	21.10	20			0.654	0.690	5.51	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.32	21.02	20			0.217	0.228	5.07	
Methylene Chloride	1	0		2.68	21.00	20			0.266	0.279	5.00	
Acrolein	1	0		2.27	101.22	100			0.036	0.036	1.22	
Acrylonitrile	1	0		2.88	20.40	20			0.084	0.086	1.98	
Iodomethane	1	0		2.45	20.81	20			0.367	0.382	4.06	
Acetone	1	0		2.38	92.53	100			0.090	0.083	7.47	
Carbon Disulfide	1	0		2.50	19.45	20			0.664	0.645	2.77	
t-Butyl Alcohol	1	0		2.76	70.51	100			0.017	0.014	29.49	
n-Hexane	1	0		3.08	19.01	20			0.178	0.169	4.94	
Di-isopropyl-ether	1	0		3.24	19.41	20			0.964	0.936	2.94	
1,1-Dichloroethene	1	0	CC	2.34	21.50	20	20		0.358	0.385	7.48	
Methyl Acetate	1	0		2.61	17.28	20			0.334	0.289	13.62	
Methyl-t-butyl ether	1	0		2.88	20.99	20			0.593	0.622	4.97	
1,1-Dichloroethane	1	0	CP	3.21	20.30	20	0.1		0.489	0.497	1.49	
trans-1,2-Dichloroethene	1	0		2.88	21.74	20			0.225	0.245	8.70	
Ethyl-t-butyl ether	1	0		3.53	19.69				0.763			
cis-1,2-Dichloroethene	1	0		3.67	21.52	20			0.463	0.498	7.59	
Bromochloromethane	1	0		3.86	20.42	20			0.272	0.277	2.12	
2,2-Dichloropropane	1	0		3.67	21.84	20			0.338	0.369	9.22	
Ethyl acetate	1	0		3.72	18.49				0.403			
1,4-Dioxane	1	0		4.90	835.24	1000			0.002	0.002	16.48	
1,1-Dichloropropene	1	0		4.15	20.96	20			0.317	0.333	4.78	
Chloroform	1	0	CC	3.91	20.89	20	20		0.539	0.563	4.46	
Dibromofluoromethane	1	0	S	4.02	32.01	30			0.372	0.397	6.70	
Cyclohexane	1	0		4.07	19.50	20			0.320	0.312	2.50	
1,2-Dichloroethane-d4	1	0	S	4.25	31.24	30			0.218	0.227	4.15	
1,2-Dichloroethane	1	0		4.30	26.36	20			0.532	0.548	31.81	
2-Butanone	1	0		3.68	14.99	20			0.104	0.088	25.03	
1,1,1-Trichloroethane	1	0		4.04	21.02	20			0.447	0.470	5.09	
Carbon Tetrachloride	1	0		4.15	21.69	20			0.385	0.418	8.46	
Vinyl Acetate	1	0		3.24	20.23	20			0.603	0.610	1.13	
Bromodichloromethane	1	0		4.98	20.25	20			0.434	0.439	1.25	
Methylcyclohexane	1	0		4.80	18.49	20			0.212	0.196	7.55	
Dibromomethane	1	0		4.90	19.33	20			0.229	0.221	3.35	
1,2-Dichloropropane	1	0	CC	4.82	19.46	20	20		0.280	0.273	2.68	
Trichloroethene	1	0		4.68	19.40	20			0.273	0.264	2.99	
Benzene	1	0		4.29	20.58	20			0.876	0.902	2.92	
tert-Amyl methyl ether	1	0		4.34	19.17	20			0.597	0.572	4.15	
Chlorobenzene-d5	1	0	I	6.27	30.00	30				0.000	0.00	
Iso-propylacetate	1	0		4.31	15.07				0.634			
Methyl methacrylate	1	0		4.87	15.55				0.344			
Dibromochloromethane	1	0		5.93	18.10	20			0.481	0.486	9.49	
2-Chloroethylvinylether	1	0		5.15	16.26	20			0.224	0.217	18.68	
cis-1,3-Dichloropropene	1	0		5.25	16.90	20			0.585	0.573	15.51	
trans-1,3-Dichloropropene	1	0		5.57	16.65	20			0.531	0.537	16.74	
Ethyl methacrylate	1	0		5.60	16.29				0.564			

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 3M37765.D **Instrument:** GCMS 3

Cont Calibration Date/Time 8/26/2013 8:25:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
1,1,2-Trichloroethane	1	0		5.69	20.10	20			0.324	0.325	0.47	
1,2-Dibromoethane	1	0		6.00	20.02	20			0.389	0.389	0.09	
1,3-Dichloropropane	1	0		5.79	20.75	20			0.588	0.610	3.73	
4-Methyl-2-Pentanone	1	0		5.33	15.26	20			0.357	0.341	23.72	
2-Hexanone	1	0		5.82	13.36	20			0.233	0.210	33.19	
Tetrachloroethene	1	0		5.78	20.15	20			0.312	0.315	0.76	
Toluene-d8	1	0	S	5.41	30.73	30			1.379	1.412	2.43	
Toluene	1	0	CC	5.45	19.02	20	20		0.799	0.760	4.89	
1,1,1,2-Tetrachloroethane	1	0		6.33	21.12	20			0.359	0.379	5.59	
Chlorobenzene	1	0	CP	6.29	18.90	20	0.3		0.917	0.867	5.48	
1,4-Dichlorobenzene-d4	1	0	I	7.69	30.00	30				0.000	0.00	
n-Butyl acrylate	1	0		6.58	14.49				1.268			
n-Amyl acetate	1	0		6.71	14.57				1.078			
Bromoform	1	0	CP	6.79	18.22	20	0.1		0.583	0.541	8.90	
Ethylbenzene	1	0	CC	6.34	21.13	20	20		0.534	0.564	5.66	
1,1,2,2-Tetrachloroethane	1	0	CP	7.04	19.70	20	0.3		0.702	0.691	1.51	
Bromofluorobenzene	1	0	S	6.97	29.51	30			0.952	0.936	1.65	
Styrene	1	0		6.65	21.43	20			1.463	1.567	7.16	
m&p-Xylenes	1	0		6.40	43.74	40			0.779	0.852	9.36	
o-Xylene	1	0		6.65	20.13	20			0.865	0.871	0.64	
trans-1,4-Dichloro-2-butene	1	0		7.07	21.22	20			0.239	0.246	6.12	
1,3-Dichlorobenzene	1	0		7.65	17.98	20			1.099	0.988	10.11	
1,4-Dichlorobenzene	1	0		7.71	17.93	20			1.197	1.074	10.33	
1,2-Dichlorobenzene	1	0		7.95	17.44	20			1.069	0.932	12.79	
Isopropylbenzene	1	0		6.86	20.18	20			2.045	2.064	0.91	
Cyclohexanone	1	0		6.95	75.62				0.036			
Camphene	1	0		7.04	19.12	20			0.662	0.633	4.40	
1,2,3-Trichloropropane	1	0		7.07	22.40	20			0.931	0.916	11.98	
2-Chlorotoluene	1	0		7.18	20.77	20			1.429	1.485	3.87	
p-Ethyltoluene	1	0		7.18	19.57				2.080			
4-Chlorotoluene	1	0		7.24	20.68	20			1.366	1.413	3.39	
n-Propylbenzene	1	0		7.11	19.48	20			2.383	2.321	2.61	
Bromobenzene	1	0		7.07	20.01	20			1.549	1.550	0.05	
1,3,5-Trimethylbenzene	1	0		7.21	20.78	20			1.676	1.742	3.91	
Butyl methacrylate	1	0		7.23	20.24				1.513			
t-Butylbenzene	1	0		7.42	19.77	20			1.401	1.385	1.17	
1,2,4-Trimethylbenzene	1	0		7.45	19.90	20			1.810	1.801	0.51	
sec-Butylbenzene	1	0		7.56	19.21	20			1.646	1.581	3.95	
4-Isopropyltoluene	1	0		7.63	19.86	20			1.343	1.333	0.70	
n-Butylbenzene	1	0		7.90	19.41	20			1.563	1.517	2.95	
p-Diethylbenzene	1	0		7.88	19.06				0.696			
1,2,4,5-Tetramethylbenzene	1	0		8.39	16.53				1.327			
1,2-Dibromo-3-Chloropropane	1	0		8.46	11.85	20			0.116	0.095	40.74	
Camphor	1	0		8.94	136.14	200			0.045	0.040	31.93	
Hexachlorobutadiene	1	0		9.10	16.29	20			0.307	0.229	18.54	
1,2,4-Trichlorobenzene	1	0		9.00	14.45	20			0.544	0.428	27.76	
1,2,3-Trichlorobenzene	1	0		9.34	14.22	20			0.522	0.371	28.90	
Naphthalene	1	0		9.18	13.03	20			1.159	0.902	34.85	
Freon 113	1	100		0.00	0.00	20				0.000	100.00	
1,2-Dioxane	1	100		0.00	0.00	2000				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 3M38023.D **Instrument:** GCMS 3

Cont Calibration Date/Time 8/29/2013 8:17:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.46	30.00	30				0.000	0.00	
Chlorodifluoromethane	1	0		1.31	20.70				0.710			
Dichlorodifluoromethane	1	0		1.31	13.50	20			0.400	0.270	32.50	
Chloromethane	1	0	CP	1.43	19.02	20	0.1		0.386	0.367	4.88	
Bromomethane	1	0		1.73	28.80	20			0.151	0.200	43.99	
Vinyl Chloride	1	0	CC	1.49	21.15	20	20		0.274	0.289	5.73	
Chloroethane	1	0		1.79	31.80	20			0.151	0.186	58.98	
Trichlorofluoromethane	1	0		1.98	24.64	20			0.348	0.428	23.21	
Ethyl ether	1	0		2.17	22.27	20			0.261	0.291	11.36	
Furan	1	0		2.20	20.89	20			0.654	0.683	4.44	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.33	24.22	20			0.217	0.263	21.08	
Methylene Chloride	1	0		2.69	21.11	20			0.266	0.280	5.56	
Acrolein	1	0		2.28	91.56	100			0.036	0.033	8.44	
Acrylonitrile	1	0		2.88	18.64	20			0.084	0.079	6.81	
Iodomethane	1	0		2.46	21.49	20			0.367	0.394	7.47	
Acetone	1	0		2.38	97.45	100			0.090	0.088	2.55	
Carbon Disulfide	1	0		2.51	20.82	20			0.664	0.691	4.12	
t-Butyl Alcohol	1	0		2.77	66.63	100			0.017	0.013	33.37	
n-Hexane	1	0		3.09	20.67	20			0.178	0.184	3.35	
Di-isopropyl-ether	1	0		3.25	20.47	20			0.964	0.986	2.33	
1,1-Dichloroethene	1	0	CC	2.34	23.18	20	20		0.358	0.415	15.91	
Methyl Acetate	1	0		2.61	17.22	20			0.334	0.288	13.91	
Methyl-t-butyl ether	1	0		2.89	21.94	20			0.593	0.650	9.69	
1,1-Dichloroethane	1	0	CP	3.21	21.50	20	0.1		0.489	0.526	7.50	
trans-1,2-Dichloroethene	1	0		2.89	22.64	20			0.225	0.255	13.19	
Ethyl-t-butyl ether	1	0		3.54	20.82				0.763			
cis-1,2-Dichloroethene	1	0		3.68	22.89	20			0.463	0.530	14.43	
Bromochloromethane	1	0		3.86	20.75	20			0.272	0.282	3.74	
2,2-Dichloropropane	1	0		3.68	24.35	20			0.338	0.411	21.76	
Ethyl acetate	1	0		3.73	17.92				0.403			
1,4-Dioxane	1	0		4.90	856.16	1000			0.002	0.002	14.38	
1,1-Dichloropropene	1	0		4.16	22.90	20			0.317	0.363	14.48	
Chloroform	1	0	CC	3.92	22.73	20	20		0.539	0.612	13.64	
Dibromofluoromethane	1	0	S	4.03	33.42	30			0.372	0.414	11.41	
Cyclohexane	1	0		4.09	21.36	20			0.320	0.342	6.81	
1,2-Dichloroethane-d4	1	0	S	4.26	32.07	30			0.218	0.233	6.91	
1,2-Dichloroethane	1	0		4.31	26.19	20			0.532	0.545	30.97	
2-Butanone	1	0		3.70	14.67	20			0.104	0.086	26.63	
1,1,1-Trichloroethane	1	0		4.05	23.02	20			0.447	0.515	15.10	
Carbon Tetrachloride	1	0		4.16	23.92	20			0.385	0.461	19.59	
Vinyl Acetate	1	0		3.25	20.85	20			0.603	0.628	4.24	
Bromodichloromethane	1	0		4.99	21.63	20			0.434	0.469	8.15	
Methylcyclohexane	1	0		4.80	21.18	20			0.212	0.225	5.88	
Dibromomethane	1	0		4.90	19.89	20			0.229	0.228	0.54	
1,2-Dichloropropane	1	0	CC	4.82	20.23	20	20		0.280	0.284	1.16	
Trichloroethene	1	0		4.69	21.25	20			0.273	0.290	6.27	
Benzene	1	0		4.30	21.19	20			0.876	0.929	5.96	
tert-Amyl methyl ether	1	0		4.36	20.57	20			0.597	0.614	2.84	
Chlorobenzene-d5	1	0	I	6.28	30.00	30				0.000	0.00	
Iso-propylacetate	1	0		4.33	13.15				0.634			
Methyl methacrylate	1	0		4.88	12.81				0.344			
Dibromochloromethane	1	0		5.94	16.27	20			0.481	0.437	18.63	
2-Chloroethylvinylether	1	0		5.16	15.39	20			0.224	0.206	23.06	
cis-1,3-Dichloropropene	1	0		5.25	16.86	20			0.585	0.572	15.69	
trans-1,3-Dichloropropene	1	0		5.58	15.73	20			0.531	0.507	21.37	
Ethyl methacrylate	1	0		5.61	15.23				0.564			

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 3M38023.D **Instrument:** GCMS 3

Cont Calibration Date/Time 8/29/2013 8:17:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
1,1,2-Trichloroethane	1	0		5.69	19.31	20			0.324	0.313	3.43	
1,2-Dibromoethane	1	0		6.02	18.19	20			0.389	0.354	9.05	
1,3-Dichloropropane	1	0		5.79	19.85	20			0.588	0.583	0.75	
4-Methyl-2-Pentanone	1	0		5.34	12.95	20			0.357	0.290	35.27	
2-Hexanone	1	0		5.83	11.81	20			0.233	0.185	40.96	
Tetrachloroethene	1	0		5.78	19.83	20			0.312	0.310	0.85	
Toluene-d8	1	0	S	5.41	29.51	30			1.379	1.356	1.65	
Toluene	1	0	CC	5.46	19.15	20	20		0.799	0.765	4.24	
1,1,1,2-Tetrachloroethane	1	0		6.33	19.75	20			0.359	0.355	1.26	
Chlorobenzene	1	0	CP	6.30	18.37	20	0.3		0.917	0.842	8.15	
1,4-Dichlorobenzene-d4	1	0	I	7.70	30.00	30				0.000	0.00	
n-Butyl acrylate	1	0		6.59	13.47				1.268			
n-Amyl acetate	1	0		6.72	14.19				1.078			
Bromoform	1	0	CP	6.80	17.51	20	0.1		0.583	0.516	12.47	
Ethylbenzene	1	0	CC	6.35	21.94	20	20		0.534	0.586	9.71	
1,1,2,2-Tetrachloroethane	1	0	CP	7.04	18.13	20	0.3		0.702	0.636	9.33	
Bromofluorobenzene	1	0	S	6.98	30.68	30			0.952	0.974	2.26	
Styrene	1	0		6.66	21.45	20			1.463	1.569	7.27	
m&p-Xylenes	1	0		6.41	45.63	40			0.779	0.888	14.06	
o-Xylene	1	0		6.65	21.36	20			0.865	0.924	6.81	
trans-1,4-Dichloro-2-butene	1	0		7.08	19.99	20			0.239	0.232	0.06	
1,3-Dichlorobenzene	1	0		7.66	18.41	20			1.099	1.012	7.96	
1,4-Dichlorobenzene	1	0		7.71	18.32	20			1.197	1.096	8.42	
1,2-Dichlorobenzene	1	0		7.96	18.29	20			1.069	0.977	8.55	
Isopropylbenzene	1	0		6.87	20.96	20			2.045	2.143	4.78	
Cyclohexanone	1	0		6.95	89.33				0.036			
Camphene	1	0		7.04	21.60	20			0.662	0.715	8.01	
1,2,3-Trichloropropane	1	0		7.09	19.59	20			0.931	0.801	2.03	
2-Chlorotoluene	1	0		7.19	21.78	20			1.429	1.557	8.91	
p-Ethyltoluene	1	0		7.18	21.23				2.080			
4-Chlorotoluene	1	0		7.25	21.15	20			1.366	1.445	5.73	
n-Propylbenzene	1	0		7.12	20.86	20			2.383	2.486	4.30	
Bromobenzene	1	0		7.09	20.23	20			1.549	1.566	1.13	
1,3,5-Trimethylbenzene	1	0		7.22	22.18	20			1.676	1.859	10.92	
Butyl methacrylate	1	0		7.24	19.86				1.513			
t-Butylbenzene	1	0		7.43	20.71	20			1.401	1.451	3.55	
1,2,4-Trimethylbenzene	1	0		7.46	20.87	20			1.810	1.889	4.35	
sec-Butylbenzene	1	0		7.57	20.53	20			1.646	1.690	2.64	
4-Isopropyltoluene	1	0		7.64	21.62	20			1.343	1.451	8.08	
n-Butylbenzene	1	0		7.91	21.22	20			1.563	1.658	6.08	
p-Diethylbenzene	1	0		7.89	20.68				0.696			
1,2,4,5-Tetramethylbenzene	1	0		8.40	17.59				1.327			
1,2-Dibromo-3-Chloropropane	1	0		8.47	10.87	20			0.116	0.087	45.66	
Camphor	1	0		8.96	119.03	200			0.045	0.035	40.48	
Hexachlorobutadiene	1	0		9.11	19.36	20			0.307	0.273	3.22	
1,2,4-Trichlorobenzene	1	0		9.02	15.56	20			0.544	0.461	22.21	
1,2,3-Trichlorobenzene	1	0		9.36	14.75	20			0.522	0.385	26.25	
Naphthalene	1	0		9.20	13.35	20			1.159	0.924	33.27	
Freon 113	1	100		0.00	0.00	20				0.000	100.00	
1,2-Dioxane	1	100		0.00	0.00	2000				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

FORM8

Internal Standard Areas

Evaluation Std Data File: 3M37133.D Method: EPA 8260B

Analysis Date/Time: 08/13/13 09:51

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	289683	4.48	200882	6.28	110692	7.71						
Eval File Area Limit:	144842-579366		100441-401764		55346-221384							
Eval File Rt Limit:	3.98-4.98		5.78-6.78		7.21-8.21							

Data File	Sample												
3M37121.D	BLK	0	0.00	0	0.00	0	0.00						
3M37122.D	BLKJUG2	237992	4.47	166547	6.28	81860	7.71						
3M37123.D	BLK	240956	4.47	159661	6.28	77134	7.71						
3M37124.D	BLK	231940	4.48	149401	6.29	72181	7.71						
3M37125.D	BLK	217019	4.48	138380	6.29	69375	7.72						
3M37126.D	1 PPB	227739	4.47	150481	6.28	75836	7.70						
3M37127.D	CAL @ 0.5 P	227453	4.47	151049	6.28	74265	7.70						
3M37128.D	CAL @ 5 PPB	224465	4.48	141098	6.28	78691	7.70						
3M37129.D	CAL @ 500 P	288695	4.48	197386	6.29	110749	7.71						
3M37130.D	CAL @ 250 P	293092	4.47	210037	6.28	120517	7.70						
3M37131.D	CAL @ 100 P	282821	4.48	208088	6.29	116859	7.71						
3M37132.D	CAL @ 50 PP	288333	4.48	202542	6.29	117222	7.70						
3M37133.D	CAL @ 20 PP	289683	4.48	200882	6.28	110692	7.71						
3M37134.D	CAL @ 10 PP	281469	4.48	198983	6.29	108622	7.71						
3M37135.D	BLK	264037	4.48	179405	6.29	92582	7.71						
3M37136.D	20 PPB	273446	4.48	191829	6.29	105586	7.71						
3M37138.D	CAL @ 1 PPB	262346	4.48	175668	6.29	92216	7.71						
3M37139.D	BLKJUG2	255050	4.48	166217	6.29	89078	7.71						
3M37140.D	20 PPB	263976	4.48	180531	6.29	100280	7.70						
3M37141.D	BLKJUG3	261929	4.48	175058	6.29	89590	7.71						
3M37142.D	ICV	264882	4.48	182236	6.29	101558	7.71						
3M37143.D	BLK	259678	4.48	174567	6.29	89042	7.71						
3M37144.D	DAILY BLANK	269530	4.47	180367	6.29	90519	7.71						
3M37145.D	DAILY BLANK	263230	4.48	176542	6.29	90537	7.71						
3M37146.D	MBS27795	277342	4.47	193801	6.29	109694	7.71						
3M37147.D	MBS27796	278210	4.48	193262	6.29	106294	7.71						
3M37148.D	BLKJUG3	258345	4.48	171429	6.29	88674	7.71						
3M37149.D	AC73763-005(	259197	4.48	175959	6.29	84341	7.71						
3M37150.D	MBS27798	269883	4.48	183125	6.29	98833	7.71						
3M37151.D	AC73907-009(	272310	4.48	185516	6.29	105207	7.71						
3M37152.D	AC73907-009(	278853	4.48	185767	6.29	104407	7.70						
3M37153.D	AC73947-002(	286538	4.48	200410	6.29	114233	7.71						
3M37154.D	AC73947-002(	297340	4.48	208570	6.29	120379	7.71						
3M37155.D	AC73947-002	299648	4.48	201769	6.29	112125	7.71						
3M37156.D	AC73763-005(	286359	4.48	204774	6.29	112315	7.71						
3M37157.D	AC73763-005(	284117	4.48	198072	6.29	112168	7.71						
3M37158.D	BLK	270883	4.48	182742	6.29	97294	7.71						
3M37162.D	BLK	237992	4.48	160507	6.29	81236	7.71						

I1 =	Fluorobenzene	I4 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =	624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =	524 Internal Standard concentration =5ug/L

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 3M37593.D Method: EPA 8260B

Analysis Date/Time: 08/22/13 09:25

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	243075	4.47	163629	6.28	88482	7.70						
Eval File Area Limit:	121538-486150		81814-327258		44241-176964							
Eval File Rt Limit:	3.97-4.97		5.78-6.78		7.2-8.2							

Data File	Sample												
3M37590.D	BLK	227478	4.46	152217	6.27	71507	7.70						
3M37591.D	20 PPB	236914	4.47	158560	6.28	84816	7.69						
3M37592.D	BLK	226327	4.46	147991	6.27	74208	7.69						
3M37594.D	BLK	228518	4.47	154392	6.27	75410	7.70						
3M37595.D	DAILY BLANK	249431	4.47	164546	6.28	80601	7.71						
3M37596.D	DAILY BLANK	237249	4.46	154439	6.28	75476	7.70						
3M37597.D	MBS27876	252350	4.47	175896	6.28	96753	7.69						
3M37598.D	MBS27877	252888	4.47	174841	6.28	97024	7.70						
3M37599.D	BLK	234189	4.47	153441	6.28	77894	7.70						
3M37603.D	AC74087-005(	239919	4.47	161180	6.28	86144	7.70						
3M37604.D	AC74087-005(	231484	4.47	159099	6.28	84553	7.70						
3M37605.D	AC73841-031(	235621	4.47	159004	6.28	79375	7.70						
3M37606.D	AC73841-034(	230769	4.47	149379	6.28	77120	7.70						
3M37607.D	AC73904-026(	223374	4.47	146141	6.28	74722	7.70						
3M37608.D	EF-3V-1014(0	219590	4.47	145469	6.28	72245	7.70						
3M37609.D	AC74097-001(	217492	4.47	137973	6.28	67801	7.70						
3M37610.D	EF-1-V-17046	212862	4.48	142057	6.29	72051	7.71						
3M37611.D	BLK	208884	4.47	135579	6.28	66067	7.70						
3M37612.D	AC74112-001	238818	4.47	163188	6.29	93846	7.71						
3M37613.D	AC74109-006	253159	4.47	182939	6.28	99123	7.70						
3M37614.D	MBS27881	259620	4.48	184537	6.29	98905	7.71						
3M37615.D	AC74109-009	255194	4.46	184095	6.28	100486	7.70						
3M37616.D	AC74109-001	263679	4.47	184985	6.28	105757	7.70						
3M37617.D	AC74109-002	269772	4.47	194572	6.29	109874	7.71						
3M37618.D	AC74109-003(	275656	4.48	203216	6.29	115303	7.71						
3M37619.D	AC74109-004(	276848	4.47	205015	6.28	115644	7.71						
3M37620.D	AC74109-005	277045	4.48	204992	6.29	109001	7.71						
3M37621.D	AC74109-007	281764	4.47	214823	6.28	122459	7.70						
3M37622.D	AC74033-001(	278727	4.48	212404	6.29	115386	7.71						
3M37623.D	AC74085-001(	261701	4.48	194250	6.29	110121	7.71						
3M37624.D	AC74085-002(	274301	4.48	209804	6.29	111888	7.71						
3M37625.D	AC74085-003(	274023	4.48	211247	6.29	111659	7.71						
3M37626.D	AC74085-004(	273701	4.48	203840	6.29	105967	7.71						
3M37627.D	AC74085-008(	270406	4.48	202816	6.29	109805	7.71						
3M37628.D	AC73841-034(	277071	4.48	198697	6.29	108099	7.71						
3M37629.D	AC73841-034(	273636	4.48	202333	6.29	106362	7.71						
3M37630.D	AC74095-001(	274081	4.48	193116	6.29	105297	7.71						
3M37631.D	AC74095-001(	266630	4.48	190519	6.29	102769	7.71						
3M37632.D	MBS27884	267738	4.48	193595	6.29	102972	7.71						
3M37633.D	BLK	262255	4.48	191628	6.29	98309	7.71						
3M37634.D	BLK	252022	4.48	179097	6.29	94274	7.71						
3M37649.D	BLK	229167	4.48	151738	6.29	80004	7.71						
3M37650.D	BLK	227303	4.48	150965	6.29	76931	7.71						

I1 =	Fluorobenzene	I4 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =	624/8260 Internal Standard concentration = 30ug/L
I3 =	1.4-Dichlorobenzene-d4	I6 =	524 Internal Standard concentration =5ug/L

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 3M37765.D Method: EPA 8260B

Analysis Date/Time: 08/26/13 08:25

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	240142	4.46	164223	6.27	90612	7.69						
Eval File Area Limit:	120071-480284		82112-328446		45306-181224							
Eval File Rt Limit:	3.96-4.96		5.77-6.77		7.19-8.190001							

Data File	Sample												
3M37761.D	BLK	231369	4.46	159770	6.27	75350	7.69						
3M37762.D	BLKHCL	215015	4.46	145863	6.27	70877	7.69						
3M37763.D	20 PPB	233572	4.46	157474	6.27	86439	7.69						
3M37764.D	BLK	225639	4.47	154427	6.28	73989	7.70						
3M37766.D	BLK	232821	4.46	158480	6.27	75814	7.69						
3M37767.D	DAILY BLANK	248608	4.46	173042	6.27	85037	7.70						
3M37768.D	DAILY BLANK	231045	4.46	153985	6.27	79449	7.69						
3M37769.D	AC73985-012	257792	4.46	196901	6.27	108825	7.69						
3M37770.D	BLK	261172	4.47	194240	6.28	101224	7.69						
3M37771.D	AC73985-009	269618	4.46	202690	6.27	115172	7.69						
3M37772.D	AC74157-004	276202	4.46	211300	6.28	126109	7.69						
3M37773.D	MBS28301	283000	4.46	216773	6.27	122674	7.69						
3M37774.D	MBS28302	281340	4.46	211896	6.27	118617	7.69						
3M37775.D	TCLP TEST1(	269928	4.46	196391	6.27	103668	7.69						
3M37776.D	AC74097-001(	265929	4.46	198404	6.27	103568	7.69						
3M37777.D	AC74097-001(	267207	4.46	198271	6.27	108532	7.69						
3M37778.D	BLK	259156	4.46	187746	6.27	101144	7.69						
3M37784.D	BLK	241013	4.46	165355	6.27	85421	7.69						
3M37788.D	BLK	237468	4.47	162835	6.27	83120	7.70						
3M37792.D	BLK	237727	4.47	156026	6.28	78460	7.70						
3M37796.D	74182-003(M	247866	4.46	170265	6.28	97608	7.70						
3M37797.D	74182-004(M	256502	4.47	185709	6.28	104523	7.70						
3M37798.D	74182-002	263939	4.46	190385	6.28	105617	7.70						
3M37799.D	AC74107-004(	276826	4.47	203322	6.28	109425	7.70						
3M37800.D	AC74107-004(	274083	4.47	202612	6.28	109106	7.70						
3M37801.D	MBS28305	272036	4.48	198056	6.29	107257	7.71						
3M37802.D	BLK	254059	4.47	182025	6.28	95843	7.70						
3M37803.D	BLK	256117	4.47	181734	6.28	93073	7.70						
3M37804.D	BLK	250010	4.47	170225	6.28	88305	7.70						
3M37805.D	MBS28306	255472	4.47	183439	6.28	95376	7.70						
3M37806.D	BLK	245759	4.47	174413	6.28	89872	7.70						
3M37812.D	BLK	227525	4.47	159260	6.28	81824	7.71						
3M37825.D	BLK	221192	4.47	154917	6.28	75851	7.70						
3M37828.D	BLK	228344	4.47	151809	6.28	78097	7.71						
3M37832.D	MBS28307	218521	4.47	152709	6.29	80989	7.70						
3M37833.D	AC74146-009(	237350	4.47	171783	6.28	88591	7.70						
3M37834.D	AC74146-009(	236166	4.47	172546	6.28	91670	7.70						
3M37835.D	MBS28308	236140	4.47	166981	6.28	89138	7.70						
3M37836.D	74158-001	244104	4.47	172949	6.29	89354	7.71						
3M37837.D	74159-001	247556	4.47	176786	6.29	94657	7.70						
3M37838.D	BLK	247344	4.47	178375	6.28	89495	7.71						
3M37839.D	JUG2	240636	4.48	168955	6.29	85388	7.71						
3M37840.D	BLK	235881	4.48	166106	6.29	82656	7.70						
3M37841.D	BLK	235581	4.48	159167	6.29	76984	7.71						
3M37842.D	BLK	217376	4.48	151275	6.29	70660	7.71						
3M37843.D	BLK	215839	4.48	148618	6.29	69890	7.71						
3M37844.D	BLK	218879	4.48	148658	6.29	68933	7.71						
3M37845.D	BLK	215257	4.48	143710	6.29	67735	7.71						
3M37846.D	BLK	216219	4.48	140514	6.29	67019	7.71						
3M37847.D	BLK	211973	4.48	143695	6.29	66918	7.71						
3M37848.D	BLK	213017	4.48	139665	6.29	65423	7.71						

I1 =	Fluorobenzene	I4 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =	624/8260 Internal Standard concentration = 30ug/L
I3 =	1.4-Dichlorobenzene-d4	I6 =	524 Internal Standard concentration =5ug/L

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 3M38023.D Method: EPA 8260B

Analysis Date/Time: 08/29/13 08:17

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	223780	4.46	167084	6.28	86653	7.70						
Eval File Area Limit:	111890-447560		83542-334168		43326-173306							
Eval File Rt Limit:	3.96-4.96		5.78-6.78		7.2-8.2							

Data File	Sample												
3M38022.D	20 PPB	232408	4.46	163790	6.27	87977	7.69						
3M38024.D	BLK	222078	4.47	154589	6.28	76205	7.70						
3M38025.D	DAILY BLANK	235455	4.46	162324	6.27	81199	7.70						
3M38026.D	DAILY BLANK	226202	4.47	157475	6.28	79500	7.70						
3M38027.D	MBS28346	240699	4.46	170010	6.28	94736	7.70						
3M38028.D	MBS28347	240392	4.47	175390	6.28	95095	7.70						
3M38029.D	BLK	227416	4.47	154650	6.28	77865	7.70						
3M38039.D	AC74177-001(	216093	4.47	148957	6.28	75862	7.70						
3M38040.D	AC74177-003(	216927	4.47	146758	6.28	74819	7.70						
3M38041.D	AC74177-005(	215383	4.47	146042	6.28	70016	7.70						
3M38042.D	EF-1V-171617	220354	4.47	155745	6.28	75548	7.70						
3M38043.D	BLK	202323	4.47	141417	6.28	69338	7.70						
3M38046.D	EF-1V-171617	204739	4.47	136913	6.28	67763	7.70						

I1 =	Fluorobenzene	I4 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =	624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =	524 Internal Standard concentration =5ug/L

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

Semi-Volatile Data

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AC74177-002
Client Id: 006 SS-1 Composite
Data File: 9M52326.D
Analysis Date: 08/26/13 18:09
Date Rec/Extracted: 08/23/13-08/26/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270C
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.036	U	**50-32-8**	**Benzo[a]pyrene**	**0.036**	**0.15**
95-94-3	1,2,4,5-Tetrachlorobenzene	0.036	U	**205-99-2**	**Benzo[b]fluoranthene**	**0.036**	**0.21**
120-82-1	1,2,4-Trichlorobenzene	0.036	U	**191-24-2**	**Benzo[g,h,i]perylene**	**0.036**	**0.11**
122-66-7	1,2-Diphenylhydrazine	0.036	U	**207-08-9**	**Benzo[k]fluoranthene**	**0.036**	**0.076**
58-90-2	2,3,4,6-Tetrachlorophenol	0.036	U	111-91-1	bis(2-Chloroethoxy)methan	0.036	U
95-95-4	2,4,5-Trichlorophenol	0.036	U	111-44-4	bis(2-Chloroethyl)ether	0.0090	U
88-06-2	2,4,6-Trichlorophenol	0.036	U	108-60-1	bis(2-chloroisopropyl)ether	0.036	U
120-83-2	2,4-Dichlorophenol	0.0090	U	**117-81-7**	**bis(2-Ethylhexyl)phthalate**	**0.036**	**0.037**
105-67-9	2,4-Dimethylphenol	0.0090	U	85-68-7	Butylbenzylphthalate	0.036	U
51-28-5	2,4-Dinitrophenol	0.18	U	105-60-2	Caprolactam	0.036	U
121-14-2	2,4-Dinitrotoluene	0.036	U	86-74-8	Carbazole	0.036	U
606-20-2	2,6-Dinitrotoluene	0.036	U	**218-01-9**	**Chrysene**	**0.036**	**0.17**
91-58-7	2-Chloronaphthalene	0.036	U	53-70-3	Dibenzo[a,h]anthracene	0.036	U
95-57-8	2-Chlorophenol	0.036	U	132-64-9	Dibenzofuran	0.0090	U
91-57-6	2-Methylnaphthalene	0.036	U	84-66-2	Diethylphthalate	0.036	U
95-48-7	2-Methylphenol	0.0090	U	131-11-3	Dimethylphthalate	0.036	U
88-74-4	2-Nitroaniline	0.036	U	84-74-2	Di-n-butylphthalate	0.018	U
88-75-5	2-Nitrophenol	0.036	U	117-84-0	Di-n-octylphthalate	0.036	U
106-44-5	3&4-Methylphenol	0.0090	U	**206-44-0**	**Fluoranthene**	**0.036**	**0.25**
91-94-1	3,3'-Dichlorobenzidine	0.036	U	86-73-7	Fluorene	0.036	U
99-09-2	3-Nitroaniline	0.036	U	118-74-1	Hexachlorobenzene	0.036	U
534-52-1	4,6-Dinitro-2-methylphenol	0.18	U	87-68-3	Hexachlorobutadiene	0.036	U
101-55-3	4-Bromophenyl-phenylether	0.036	U	77-47-4	Hexachlorocyclopentadiene	0.036	U
59-50-7	4-Chloro-3-methylphenol	0.036	U	67-72-1	Hexachloroethane	0.036	U
106-47-8	4-Chloroaniline	0.017	U	**193-39-5**	**Indeno[1,2,3-cd]pyrene**	**0.036**	**0.10**
7005-72-3	4-Chlorophenyl-phenylether	0.036	U	78-59-1	Isophorone	0.036	U
100-01-6	4-Nitroaniline	0.036	U	**91-20-3**	**Naphthalene**	**0.0090**	**0.020**
100-02-7	4-Nitrophenol	0.036	U	98-95-3	Nitrobenzene	0.036	U
83-32-9	Acenaphthene	0.036	U	62-75-9	N-Nitrosodimethylamine	0.036	U
208-96-8	Acenaphthylene	0.036	U	621-64-7	N-Nitroso-di-n-propylamine	0.0090	U
98-86-2	Acetophenone	0.036	U	86-30-6	n-Nitrosodiphenylamine	0.036	U
120-12-7	**Anthracene**	**0.036**	**0.042**	87-86-5	Pentachlorophenol	0.18	U
1912-24-9	Atrazine	0.036	U	**85-01-8**	**Phenanthrene**	**0.036**	**0.15**
100-52-7	Benzaldehyde	0.036	U	108-95-2	Phenol	0.036	U
92-87-5	Benzidine	0.036	U	**129-00-0**	**Pyrene**	**0.036**	**0.33**
56-55-3	**Benzo[a]anthracene**	**0.036**	**0.18**				

Worksheet #: 274829 ***Total Target Concentration*** 1.8 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AC74177-002
Client Id: 006 SS-1 Composite
Data File: 9M52326.D
Analysis Date: 08/26/13 18:09
Date Rec/Extracted: 08/23/13-08/26/13

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 93
Method: EPA 8270C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	3.54	0.12 J
2		unknown	4.07	2.0 JB
3	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.40	76 JAB
4		unknown	5.03	0.48 JB
5	76-09-5	2,3-Butanediol, 2,3-dimethyl-	6.78	0.085 J
6	61141-72-8	Dodecane, 4,6-dimethyl-	9.12	0.073 J
7	90-60-8	Benzaldehyde, 3,5-dichloro-2-hydroxy-	10.41	0.081 J
8	297-03-0	Cyclotetracosane	12.67	0.074 J
9	112-88-9	1-Octadecene	13.44	0.19 J
10	124-25-4	Tetradecanal	13.96	0.22 J
11	297-03-0	Cyclotetracosane	14.18	0.49 J
12	192-97-2	Benzo[e]pyrene	14.31	0.13 J
13		unknown	14.59	0.12 J
14		unknown	14.72	0.10 J
15	629-92-5	Nonadecane	14.93	0.20 J
16	56554-87-1	16-Octadecenal	15.64	0.13 J
17	629-99-2	Pentacosane	15.90	0.076 J
18		unknown	15.93	0.10 J
19		unknown	16.07	0.096 J
20	83-47-6	Stigmast-5-en-3-ol, (3.beta.,24S)-	16.29	0.30 J

Worksheet #: 274829 ***Total Tentatively Identified Concentration*** 81

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

3082313 0128

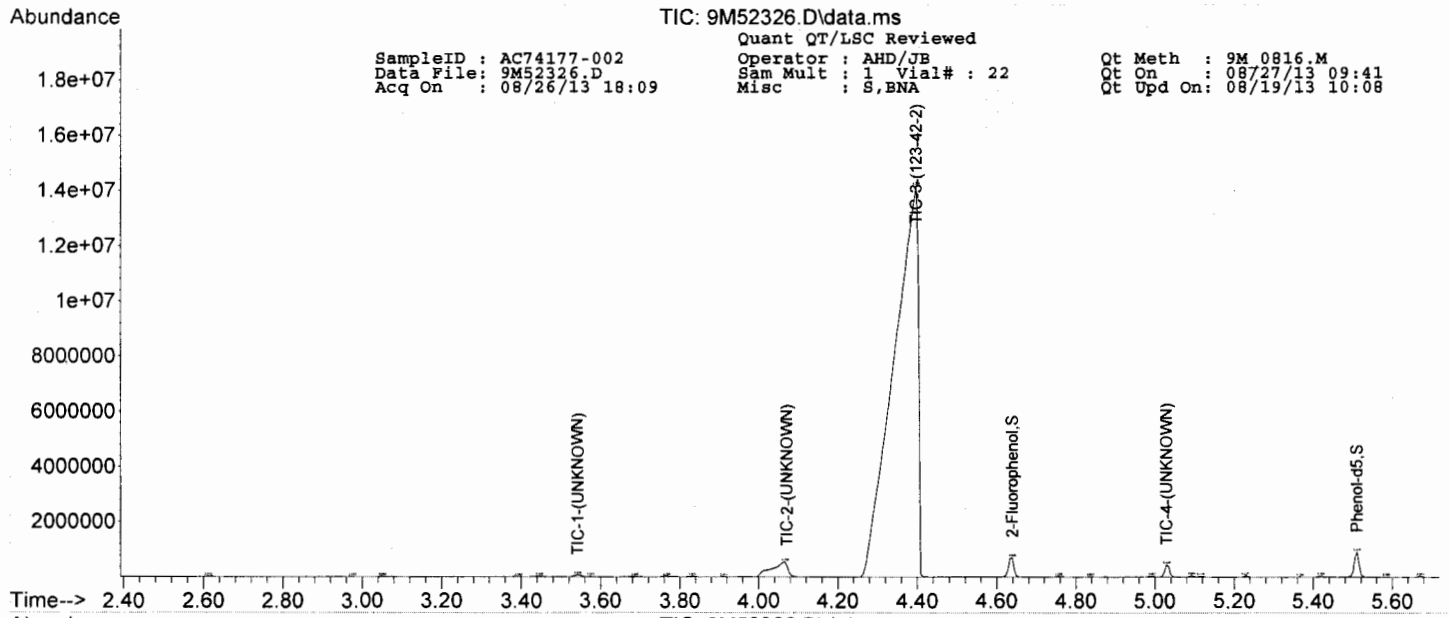
SampleID : AC74177-002 Operator : AHD/JB Qt Meth : 9M_0816.M
Data File: 9M52326.D Sam Mult : 1 Vial# : 22 Qt On : 08/27/13 09:41
Acq On : 08/26/13 18:09 Misc : S,BNA Qt Upd On: 08/19/13 10:08

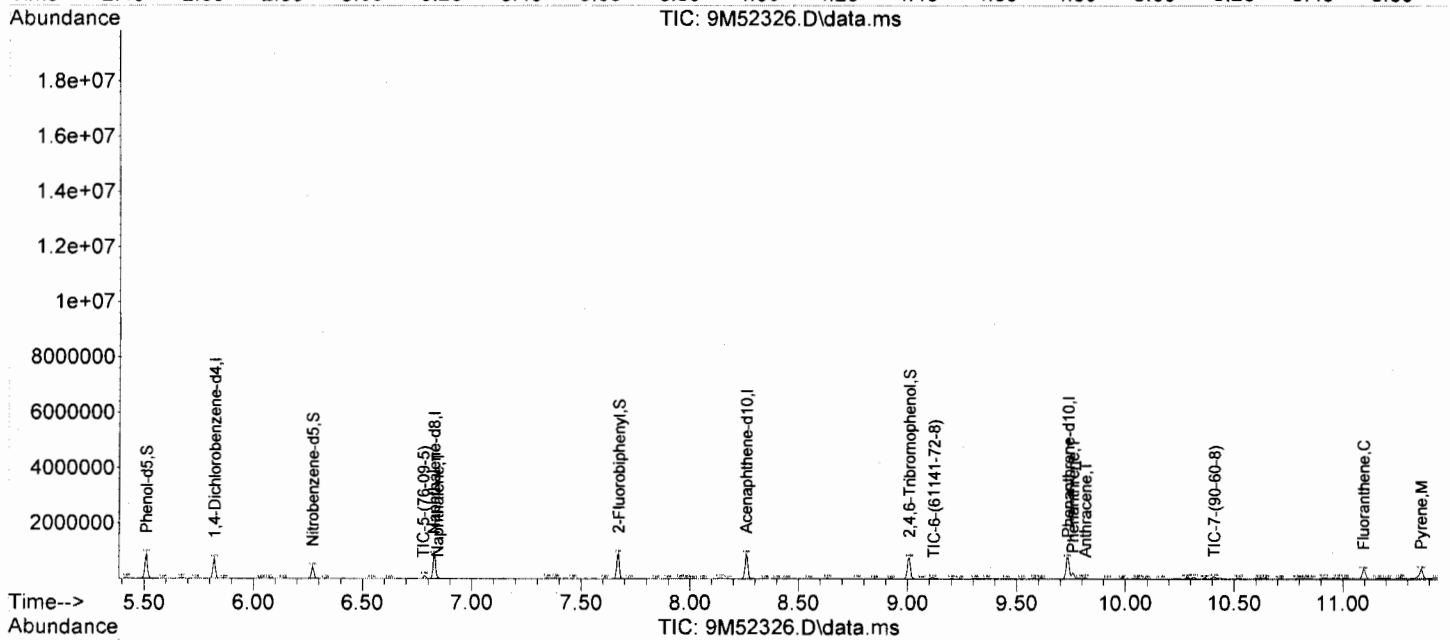
Data Path : G:\GcMsData\2013\GCMS_9\Data\08-26-13\
Qt Path : G:\GCMSDATA\2013\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

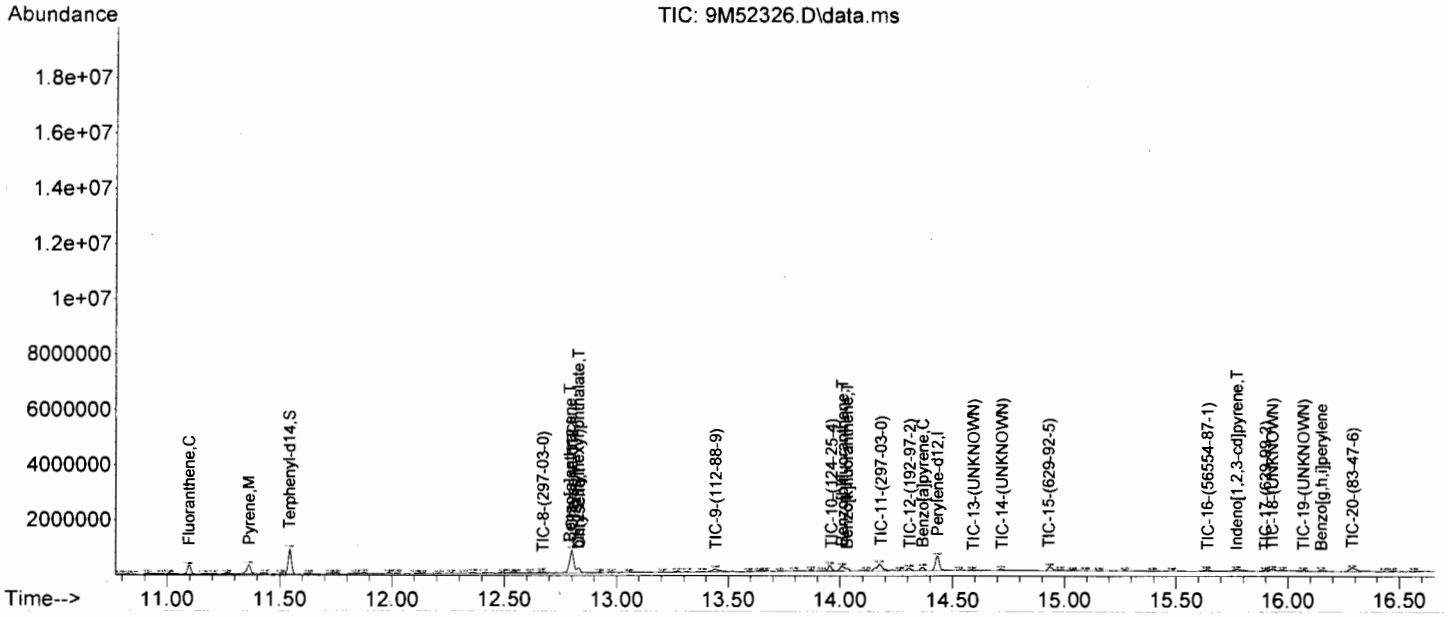
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dichlorobenzene-d4	5.821	152	92888	40.00	ng	-0.04
29) Naphthalene-d8	6.826	136	344150	40.00	ng	-0.05
47) Acenaphthene-d10	8.260	164	187290	40.00	ng	-0.05
74) Phenanthrene-d10	9.736	188	308065	40.00	ng	-0.05
88) Chrysene-d12	12.801	240	302434	40.00	ng	-0.05
100) Perylene-d12	14.432	264	251276	40.00	ng	-0.05
System Monitoring Compounds						
10) 2-Fluorophenol	4.639	112	173505	54.34	ng	-0.02
Spiked Amount 100.000			Recovery = 54.34%			
15) Phenol-d5	5.510	99	247691	61.36	ng	-0.03
Spiked Amount 100.000			Recovery = 61.36%			
30) Nitrobenzene-d5	6.270	128	52455	33.70	ng	-0.04
Spiked Amount 50.000			Recovery = 67.40%			
52) 2-Fluorobiphenyl	7.671	172	263618	40.08	ng	-0.04
Spiked Amount 50.000			Recovery = 80.16%			
77) 2,4,6-Tribromophenol	9.008	330	85394	91.36	ng	-0.05
Spiked Amount 100.000			Recovery = 91.36%			
91) Terphenyl-d14	11.544	244	284544	48.86	ng	-0.05
Spiked Amount 50.000			Recovery = 97.72%			
Target Compounds						Qvalue
39) Naphthalene	6.842	128	10618	1.1265	ng	96
83) Phenanthrene	9.757	178	68832	8.2417	ng	98
84) Anthracene	9.816	178	19961	2.3711	ng	99
87) Fluoranthene	11.094	202	141935	13.9415	ng	85
89) Pyrene	11.362	202	147408	18.4779	ng	80
97) Benzo[a]anthracene	12.790	228	77117	9.8215	ng	93
98) Chrysene	12.833	228	67137	9.5250	ng	99
99) bis(2-Ethylhexyl)phtha...	12.827	149	9817	2.0603	ng	95
102) Benzo[b]fluoranthene	14.009	252	89517m	11.8693	ng	
103) Benzo[k]fluoranthene	14.031	252	31664m	4.2280	ng	
104) Benzo[a]pyrene	14.368	252	60150	8.4211	ng	87
105) Indeno[1,2,3-cd]pyrene	15.769	276	44053	5.6047	ng	68
107) Benzo[g,h,i]perylene	16.149	276	38893	5.9998	ng	70
Library Search Internal Standards TIC Results						
1) 1,4-Dichlorobenzene-d4	5.821		569143	40.00	ng	--
2) Naphthalene-d8	6.826		758920	40.00	ng	--
3) Acenaphthene-d10	8.260		831934	40.00	ng	--
4) Phenanthrene-d10	9.731		803339m	40.00	ng	--
5) Chrysene-d12	12.801		885862m	40.00	ng	--
6) Perylene-d12	14.432		708759	40.00	ng	--
Library Search Compounds						
1) UNKNOWN	3.540		94259	6.62	ng	--
2) UNKNOWN	4.070		1556508	109.39	ng	--
3) 123-42-2	4.400		60655427	4262.93	ng	50
4) UNKNOWN	5.030		383691	26.97	ng	--
5) 76-09-5	6.780		89781	4.73	ng	50
6) 61141-72-8	9.120		81894	4.08	ng	95
7) 90-60-8	10.410		91228	4.54	ng	64
8) 297-03-0	12.670		91137	4.12	ng	91
9) 112-88-9	13.440		235158	10.62	ng	70
10) 124-25-4	13.960		220200	12.43	ng	80
11) 297-03-0	14.180		486669	27.47	ng	95
12) 192-97-2	14.310		123813	6.99	ng	95
13) UNKNOWN	14.590		119866	6.76	ng	--
14) UNKNOWN	14.720		102620	5.79	ng	--
15) 629-92-5	14.930		194334	10.97	ng	94
16) 56554-87-1	15.640		123916	6.99	ng	70
17) 629-99-2	15.900		75406	4.26	ng	90
18) UNKNOWN	15.930		99901	5.64	ng	--
19) UNKNOWN	16.070		94530	5.33	ng	--
20) 83-47-6	16.290		294667	16.63	ng	90

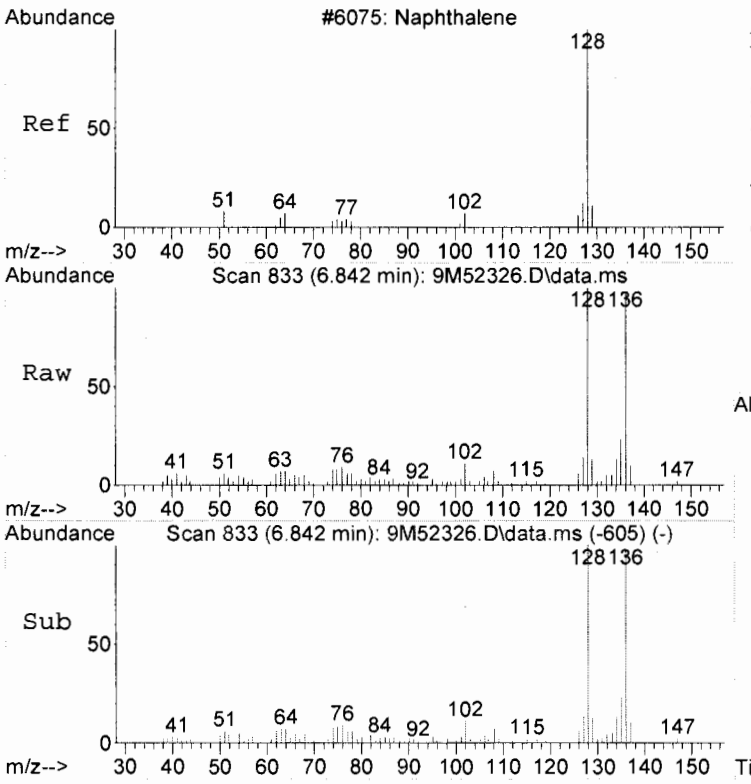
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Ve


Abundance
TIC: 9M52326.D\data.ms
Quant QT/LSC Reviewed
SampleID : AC74177-002
Data File: 9M52326.D
Acq On : 08/26/13 18:09
Operator : AHD/JB
Sam Mult : 1 Vial# : 22
Misc : S,BNA
Qt Meth : 9M_0816.M
Qt On : 08/27/13 09:41
Qt Upd On: 08/19/13 10:08
TIC-1-(UNKNOWN)
TIC-2-(UNKNOWN)
TIC-3-(123-42-2)
2-Fluorophenol,S
TIC-4-(UNKNOWN)
Phenol-d5,S
Time-->


Abundance
TIC: 9M52326.D\data.ms
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
TIC-5-(76-09-5)
2-Fluorobiphenyl,S
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
TIC-6-(61141-72-8)
Phenanthrene-d10,I
TIC-7-(90-60-8)
Fluoranthene,C
Pyrene,M
Time-->

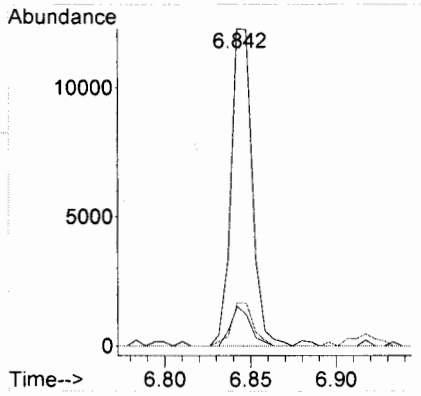

Abundance
TIC: 9M52326.D\data.ms
Fluoranthene,C
Pyrene,M
Terphenyl-d14,S
TIC-8-(297-03-0)
TIC-9-(112-88-9)
TIC-11-(297-03-0)
TIC-12-(192-97-2)
Benzo[a]pyrene,C
Perylene-d12,I
TIC-13-(UNKNOWN)
TIC-14-(UNKNOWN)
TIC-15-(629-92-5)
TIC-16-(56554-87-1)
Indeno[1,2,3-cd]pyrene,T
TIC-19-(UNKNOWN)
Benzo[g,h,i]perylene
TIC-20-(83-47-6)
Time-->

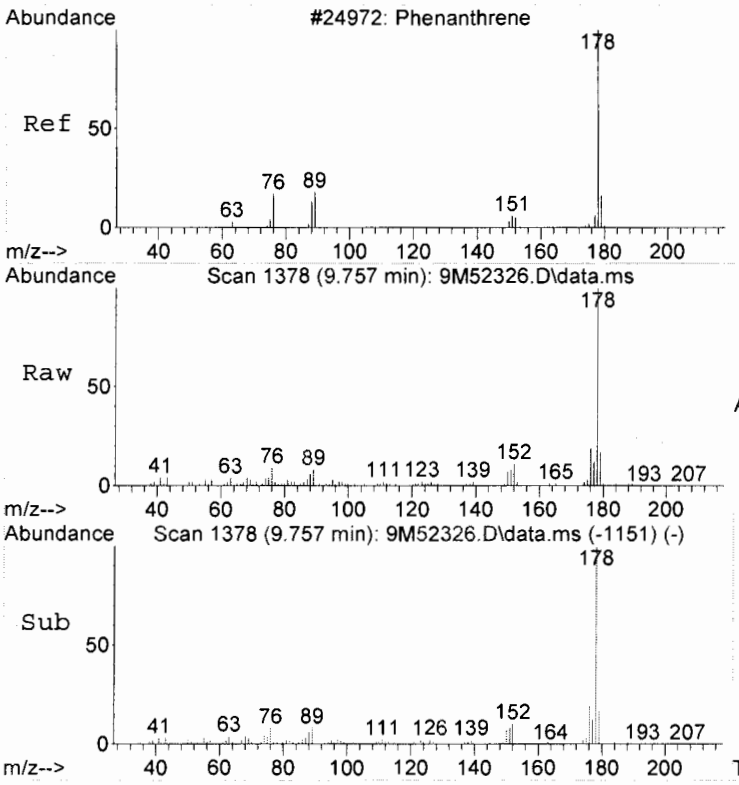


#39
Naphthalene
Concen: 1.13 ng
RT: 6.842 min Scan# 833
Delta R.T. -0.048 min
Lab File: 9M52326.D
Acq: 26 Aug 2013 18:09

Tgt Ion:128 Resp: 10618

Ion	Ratio	Lower	Upper
128	100		
129	12.6	0.0	50.9
127	13.7	0.0	52.4

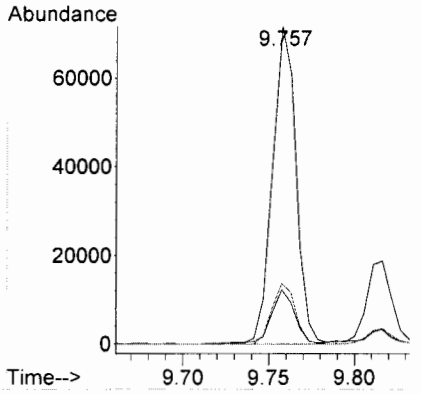


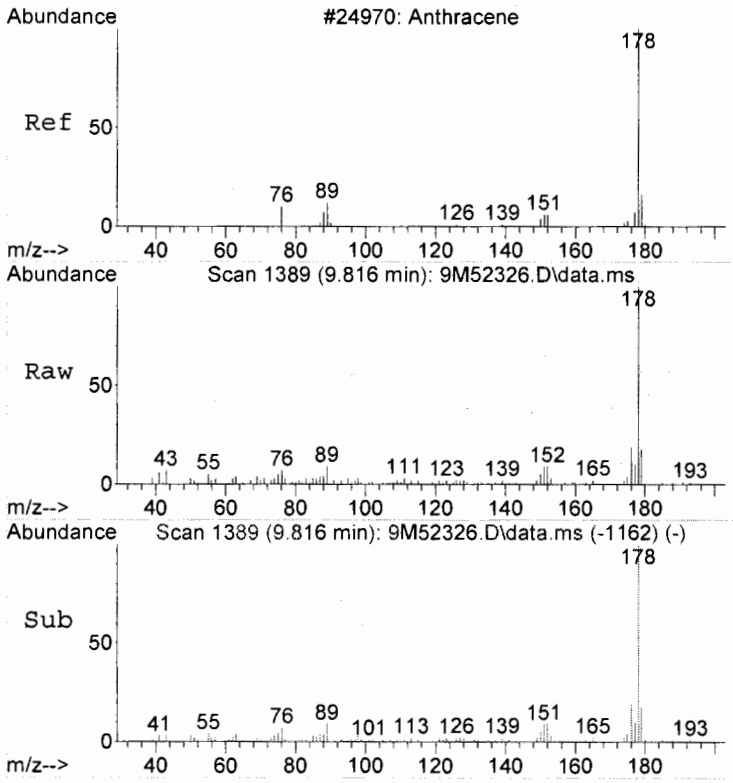


#83
Phenanthrene
Concen: 8.24 ng
RT: 9.757 min Scan# 1378
Delta R.T. -0.053 min
Lab File: 9M52326.D
Acq: 26 Aug 2013 18:09

Tgt Ion:178 Resp: 68832

Ion	Ratio	Lower	Upper
178	100		
179	17.0	0.0	55.5
176	19.0	0.0	59.3

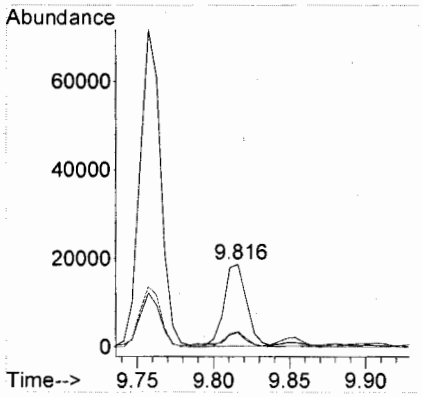


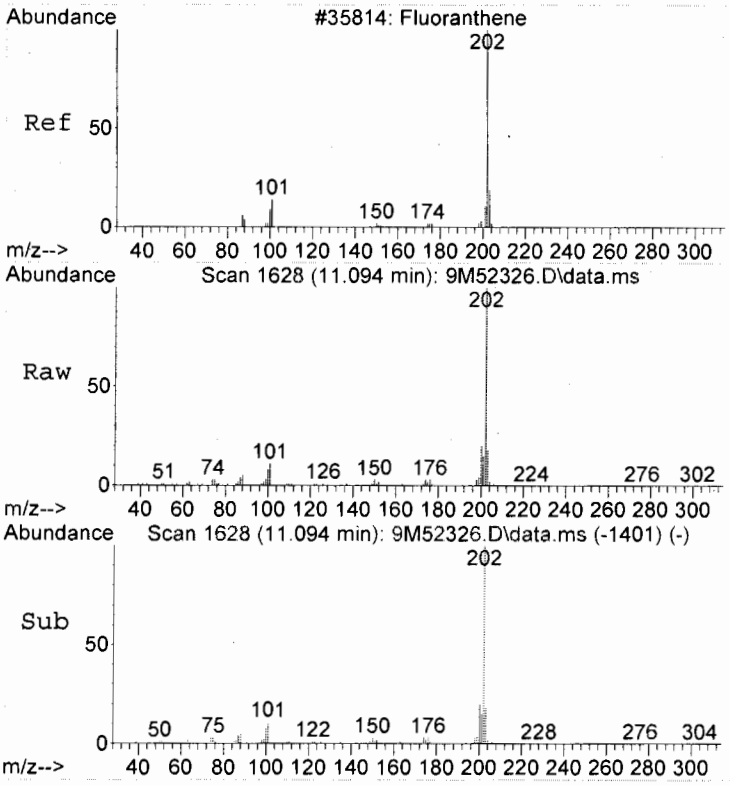


#84
Anthracene
Concen: 2.37 ng
RT: 9.816 min Scan# 1389
Delta R.T. -0.053 min
Lab File: 9M52326.D
Acq: 26 Aug 2013 18:09

Tgt Ion:178 Resp: 19961

Ion	Ratio	Lower	Upper
178	100		
179	15.6	0.0	55.2
176	19.0	0.0	58.1

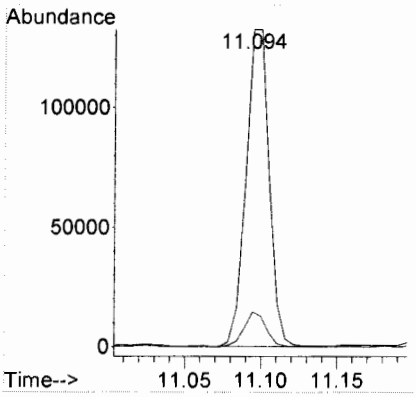


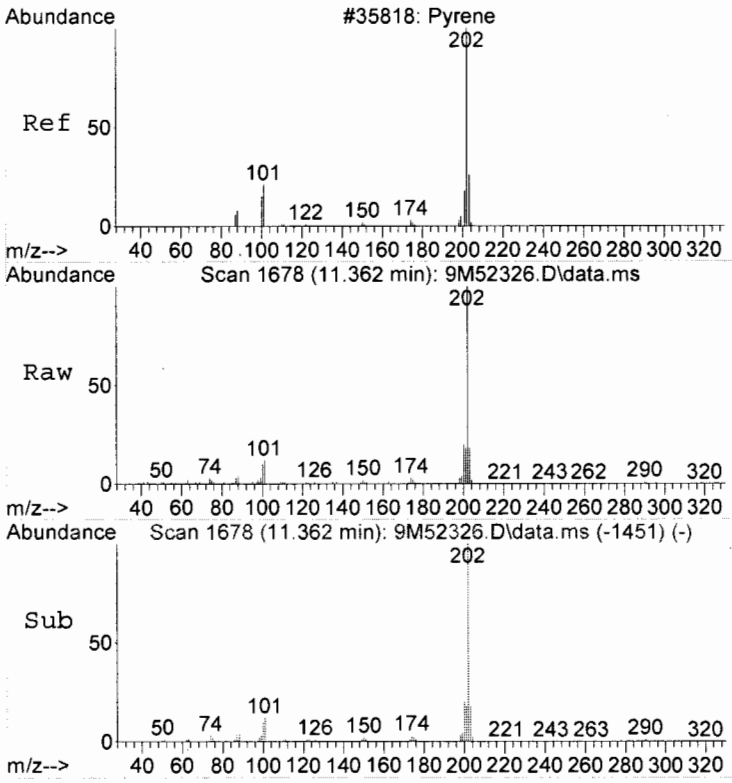


#87
Fluoranthene
Concen: 13.94 ng
RT: 11.094 min Scan# 1628
Delta R.T. -0.053 min
Lab File: 9M52326.D
Acq: 26 Aug 2013 18:09

Tgt Ion:202 Resp: 141935

Ion	Ratio	Lower	Upper
202	100		
101	10.9	0.0	57.6

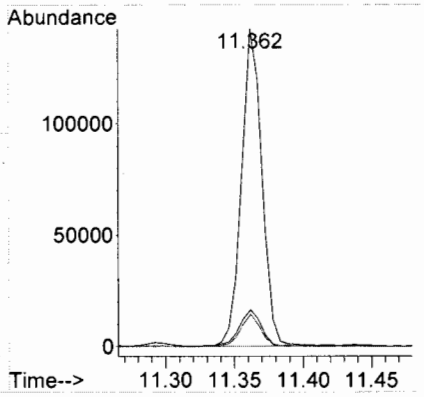


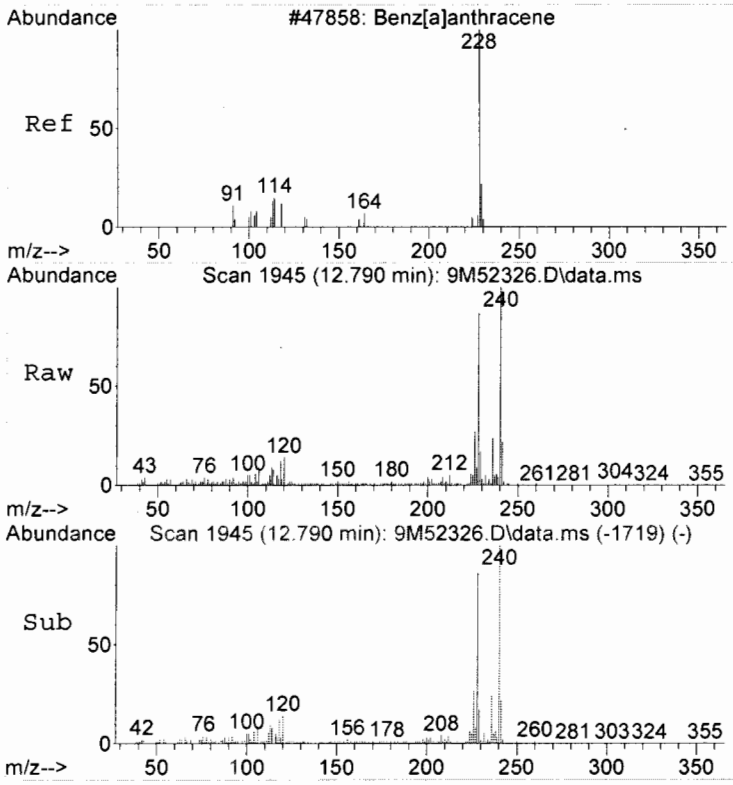


#89
Pyrene
Concen: 18.48 ng
RT: 11.362 min Scan# 1678
Delta R.T. -0.053 min
Lab File: 9M52326.D
Acq: 26 Aug 2013 18:09

Tgt Ion:202 Resp: 147408

Ion	Ratio	Lower	Upper
202	100		
101	11.5	0.0	62.2
100	10.2	0.0	57.8

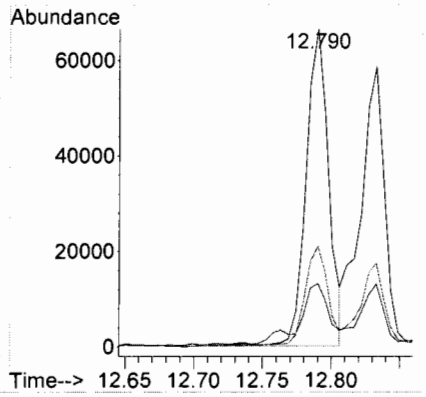


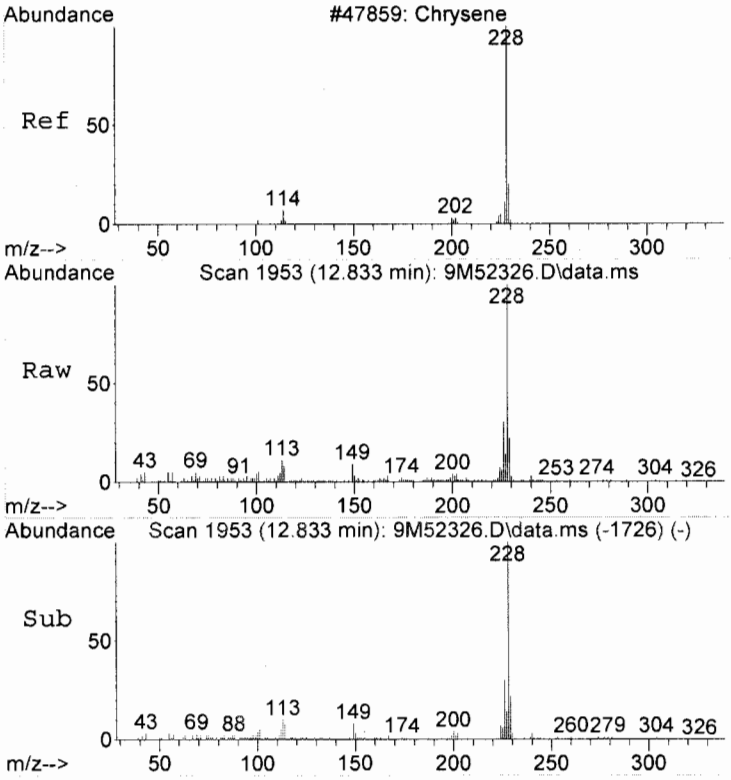


#97
Benzo[a]anthracene
Concen: 9.82 ng
RT: 12.790 min Scan# 1945
Delta R.T. -0.053 min
Lab File: 9M52326.D
Acq: 26 Aug 2013 18:09

Tgt Ion:228 Resp: 77117

Ion	Ratio	Lower	Upper
228	100		
229	19.1	0.0	59.5
226	31.5	0.0	66.0

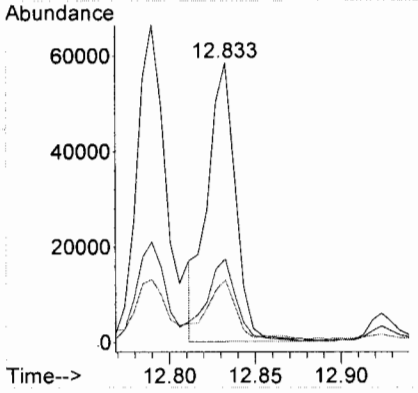


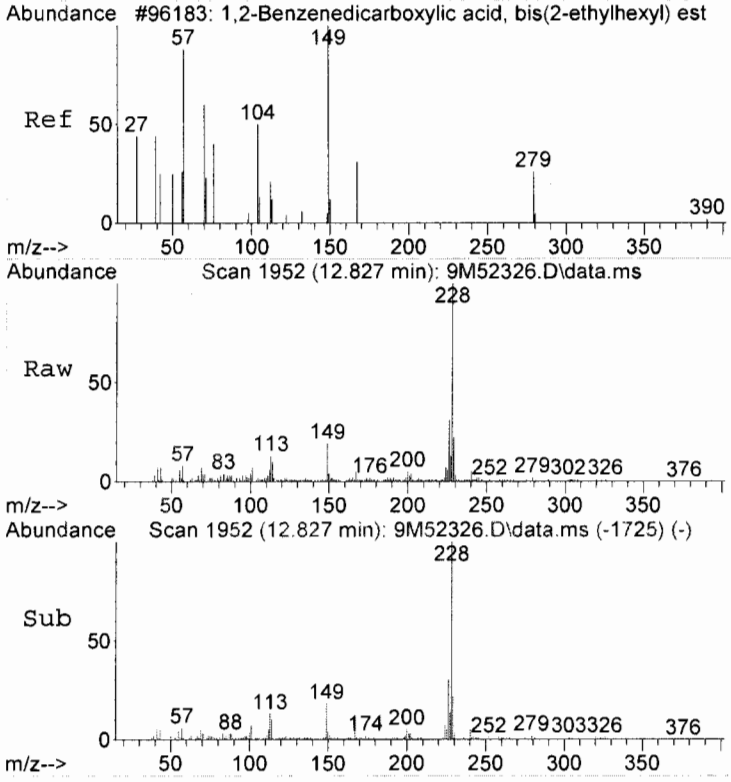


#98
Chrysene
Concen: 9.53 ng
RT: 12.833 min Scan# 1953
Delta R.T. -0.053 min
Lab File: 9M52326.D
Acq: 26 Aug 2013 18:09

Tgt Ion:228 Resp: 67137

Ion	Ratio	Lower	Upper
228	100		
226	29.2	9.5	49.5
229	21.3	0.0	60.2

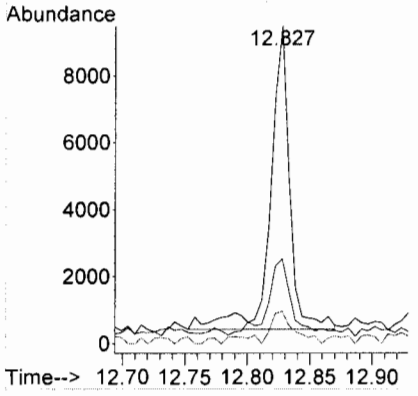


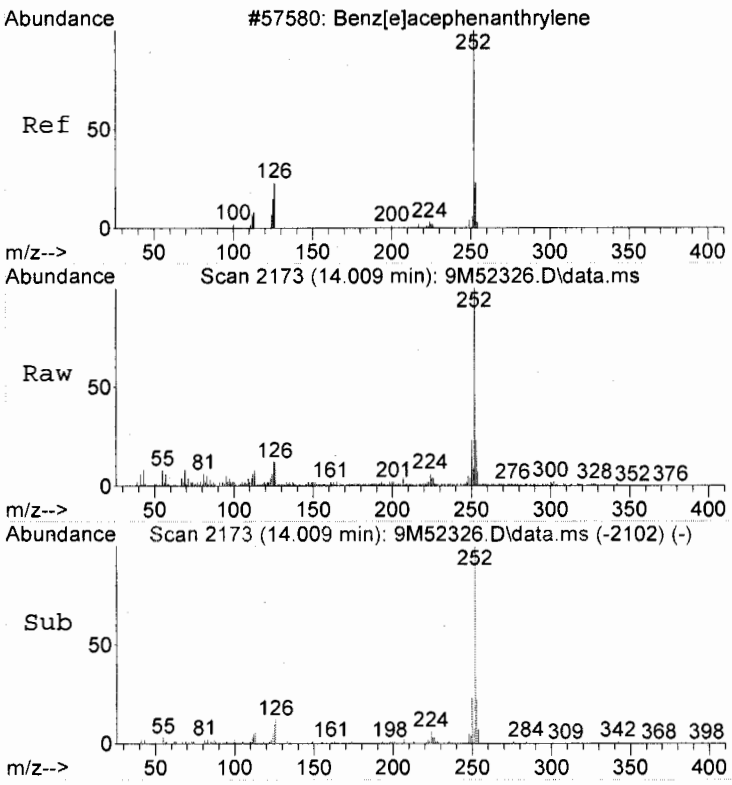


#99
bis(2-Ethylhexyl)phthalate
Concen: 2.06 ng
RT: 12.827 min Scan# 1952
Delta R.T. -0.053 min
Lab File: 9M52326.D
Acq: 26 Aug 2013 18:09

Tgt Ion:149 Resp: 9817

Ion	Ratio	Lower	Upper
149	100		
167	24.4	0.0	54.4
279	8.4	0.0	43.5

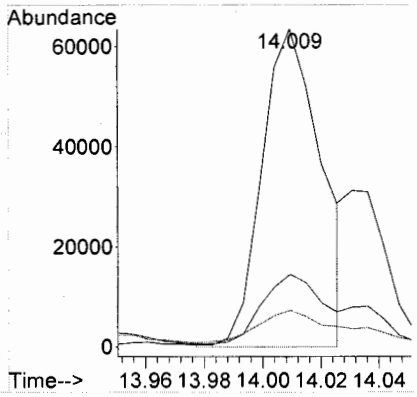


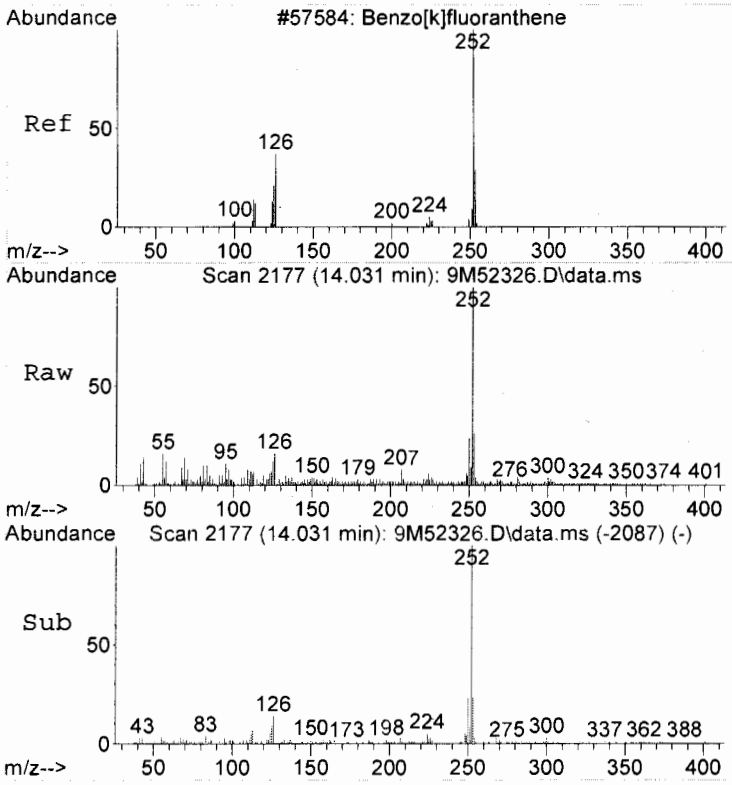


#102
Benzo[b]fluoranthene
Concen: 11.87 ng m
RT: 14.009 min Scan# 2173
Delta R.T. -0.053 min
Lab File: 9M52326.D
Acq: 26 Aug 2013 18:09

Tgt Ion:252 Resp: 89517

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	62.3
125	11.6	0.0	58.4

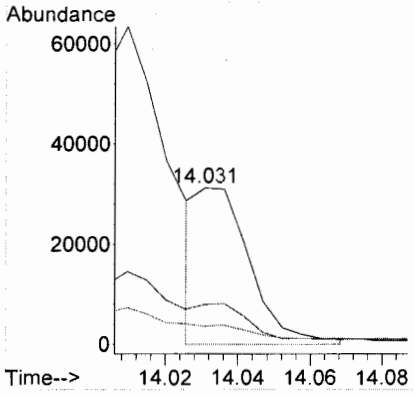


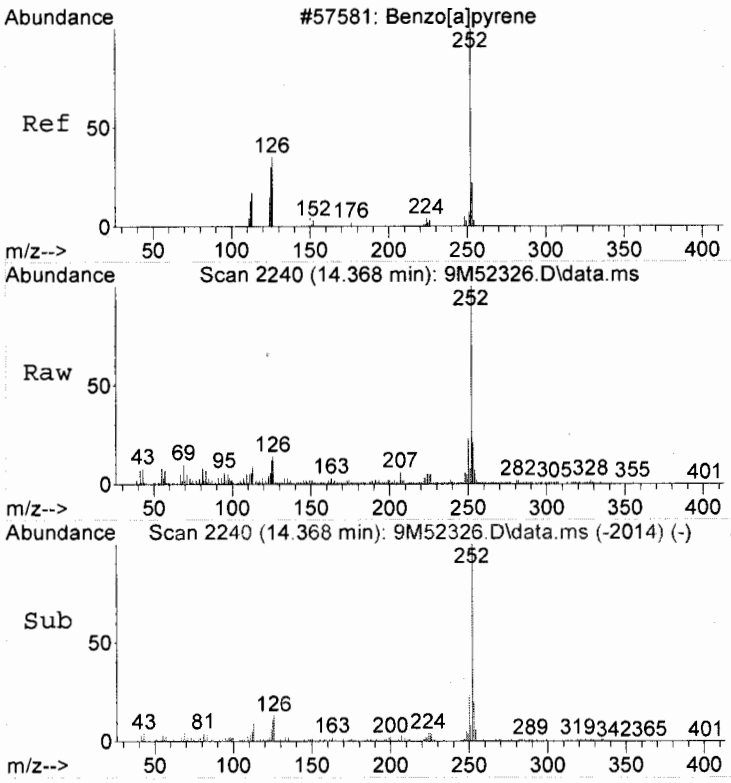


#103
Benzo[k]fluoranthene
Concen: 4.23 ng m
RT: 14.031 min Scan# 2177
Delta R.T. -0.059 min
Lab File: 9M52326.D
Acq: 26 Aug 2013 18:09

Tgt Ion:252 Resp: 31664

Ion	Ratio	Lower	Upper
252	100		
253	25.5	0.0	52.2
125	11.7	0.0	48.9

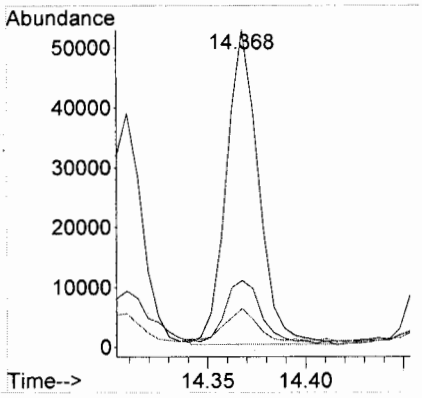


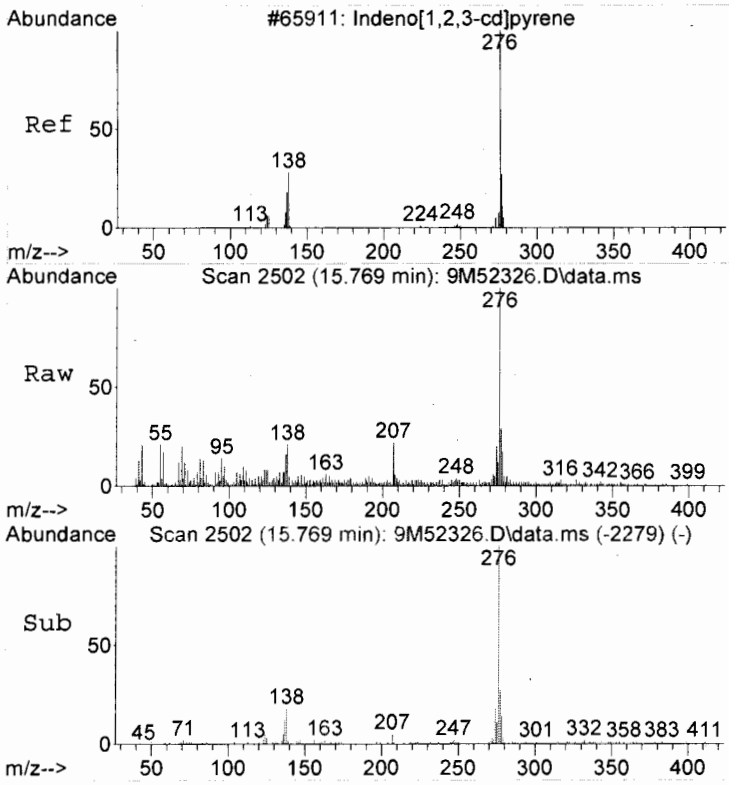


#104
Benzo[a]pyrene
Concen: 8.42 ng
RT: 14.368 min Scan# 2240
Delta R.T. -0.059 min
Lab File: 9M52326.D
Acq: 26 Aug 2013 18:09

Tgt Ion:252 Resp: 60150

Ion	Ratio	Lower	Upper
252	100		
253	20.6	0.0	62.4
125	10.5	0.0	60.9

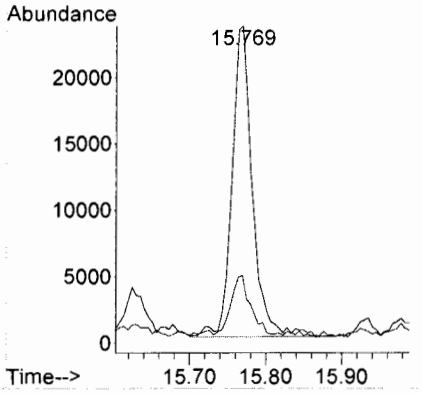


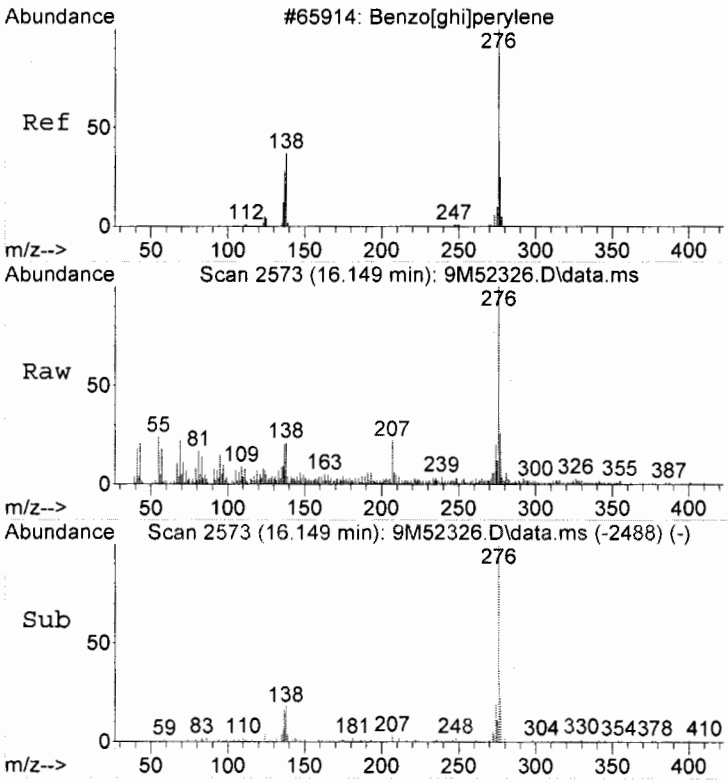


#105
Indeno[1,2,3-cd]pyrene
Concen: 5.60 ng
RT: 15.769 min Scan# 2502
Delta R.T. -0.075 min
Lab File: 9M52326.D
Acq: 26 Aug 2013 18:09

Tgt Ion:276 Resp: 44053

Ion	Ratio	Lower	Upper
276	100		
138	19.6	0.0	78.9

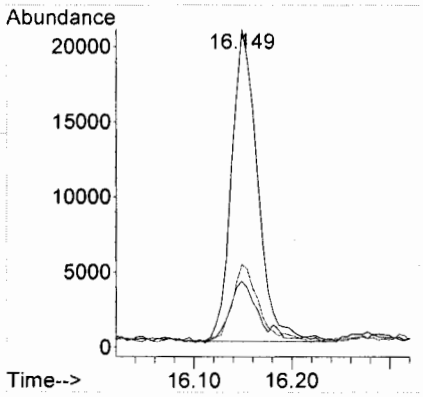




#107
Benzo[g,h,i]perylene
Concen: 6.00 ng
RT: 16.149 min Scan# 2573
Delta R.T. -0.085 min
Lab File: 9M52326.D
Acq: 26 Aug 2013 18:09

Tgt Ion:276 Resp: 38893

Ion	Ratio	Lower	Upper
276	100		
138	19.8	0.0	100.0
277	25.7	0.0	60.0



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AC74177-004
Client Id: 012 SS-2 Composite
Data File: 9M52327.D
Analysis Date: 08/26/13 18:32
Date Rec/Extracted: 08/23/13-08/26/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270C
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.036	U	**50-32-8**	**Benzo[a]pyrene**	**0.036**	**0.066**
95-94-3	1,2,4,5-Tetrachlorobenzene	0.036	U	**205-99-2**	**Benzo[b]fluoranthene**	**0.036**	**0.10**
120-82-1	1,2,4-Trichlorobenzene	0.036	U	**191-24-2**	**Benzo[g,h,i]perylene**	**0.036**	**0.054**
122-66-7	1,2-Diphenylhydrazine	0.036	U	207-08-9	Benzo[k]fluoranthene	0.036	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.036	U	111-91-1	bis(2-Chloroethoxy)methan	0.036	U
95-95-4	2,4,5-Trichlorophenol	0.036	U	111-44-4	bis(2-Chloroethyl)ether	0.0090	U
88-06-2	2,4,6-Trichlorophenol	0.036	U	108-60-1	bis(2-chloroisopropyl)ether	0.036	U
120-83-2	2,4-Dichlorophenol	0.0090	U	**117-81-7**	**bis(2-Ethylhexyl)phthalate**	**0.036**	**0.046**
105-67-9	2,4-Dimethylphenol	0.0090	U	85-68-7	Butylbenzylphthalate	0.036	U
51-28-5	2,4-Dinitrophenol	0.18	U	105-60-2	Caprolactam	0.036	U
121-14-2	2,4-Dinitrotoluene	0.036	U	86-74-8	Carbazole	0.036	U
606-20-2	2,6-Dinitrotoluene	0.036	U	**218-01-9**	**Chrysene**	**0.036**	**0.074**
91-58-7	2-Chloronaphthalene	0.036	U	53-70-3	Dibenzo[a,h]anthracene	0.036	U
95-57-8	2-Chlorophenol	0.036	U	132-64-9	Dibenzofuran	0.0090	U
91-57-6	2-Methylnaphthalene	0.036	U	84-66-2	Diethylphthalate	0.036	U
95-48-7	2-Methylphenol	0.0090	U	131-11-3	Dimethylphthalate	0.036	U
88-74-4	2-Nitroaniline	0.036	U	84-74-2	Di-n-butylphthalate	0.018	U
88-75-5	2-Nitrophenol	0.036	U	117-84-0	Di-n-octylphthalate	0.036	U
106-44-5	3&4-Methylphenol	0.0090	U	**206-44-0**	**Fluoranthene**	**0.036**	**0.094**
91-94-1	3,3'-Dichlorobenzidine	0.036	U	86-73-7	Fluorene	0.036	U
99-09-2	3-Nitroaniline	0.036	U	118-74-1	Hexachlorobenzene	0.036	U
534-52-1	4,6-Dinitro-2-methylphenol	0.18	U	87-68-3	Hexachlorobutadiene	0.036	U
101-55-3	4-Bromophenyl-phenylether	0.036	U	77-47-4	Hexachlorocyclopentadiene	0.036	U
59-50-7	4-Chloro-3-methylphenol	0.036	U	67-72-1	Hexachloroethane	0.036	U
106-47-8	4-Chloroaniline	0.017	U	**193-39-5**	**Indeno[1,2,3-cd]pyrene**	**0.036**	**0.047**
7005-72-3	4-Chlorophenyl-phenylether	0.036	U	78-59-1	Isophorone	0.036	U
100-01-6	4-Nitroaniline	0.036	U	**91-20-3**	**Naphthalene**	**0.0090**	**0.019**
100-02-7	4-Nitrophenol	0.036	U	98-95-3	Nitrobenzene	0.036	U
83-32-9	Acenaphthene	0.036	U	62-75-9	N-Nitrosodimethylamine	0.036	U
208-96-8	Acenaphthylene	0.036	U	621-64-7	N-Nitroso-di-n-propylamine	0.0090	U
98-86-2	Acetophenone	0.036	U	86-30-6	n-Nitrosodiphenylamine	0.036	U
120-12-7	Anthracene	0.036	U	87-86-5	Pentachlorophenol	0.18	U
1912-24-9	Atrazine	0.036	U	**85-01-8**	**Phenanthrene**	**0.036**	**0.050**
100-52-7	Benzaldehyde	0.036	U	108-95-2	Phenol	0.036	U
92-87-5	Benzidine	0.036	U	**129-00-0**	**Pyrene**	**0.036**	**0.12**
56-55-3	**Benzo[a]anthracene**	**0.036**	**0.073**				

Worksheet #: 274829

Total Target Concentration 0.74

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AC74177-004
Client Id: 012 SS-2 Composite
Data File: 9M52327.D
Analysis Date: 08/26/13 18:32
Date Rec/Extracted: 08/23/13-08/26/13

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 93
Method: EPA 8270C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1	57-55-6	1,2-Propanediol	3.04	0.11 J
2		unknown	3.54	0.090 J
3		unknown	4.06	1.9 JB
4	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.39	70 JAB
5		unknown	5.03	0.47 JB
6	18720-66-6	3-Heptanol, 6-methyl-	6.78	0.084 J
7	102-76-1	1,2,3-Propanetriol, triacetate	7.40	0.12 J
8	61141-72-8	Dodecane, 4,6-dimethyl-	9.12	0.075 J
9	86392-48-5	6-tert-Butyl-7-methoxy-8-methyl-1-napht	11.27	0.082 J
10	88256-09-1	1,2,4-Trimethoxydibenzofuran	11.44	0.082 J
11	3386-33-2	Octadecane, 1-chloro-	12.67	0.12 J
12		unknown	13.24	0.35 J
13	112-88-9	1-Octadecene	13.44	0.31 J
14	638-66-4	Octadecanal	13.95	0.17 J
15	297-03-0	Cyclotetracosane	14.18	0.76 J
16	55334-11-7	1,1'-Bicyclopentyl, 2-hexadecyl-	14.72	0.078 J
17	629-99-2	Pentacosane	14.93	0.28 J
18		unknown	15.64	0.081 J
19	4651-51-8	Ergost-5-en-3-ol, (3.beta.)-	15.80	0.26 J
20	81575-28-2	(5'Z,8'Z,11'Z)-6-(Heptadeca-5',8',11'-tr	15.93	0.45 J
21		unknown	16.07	0.17 J
22	83-47-6	Stigmast-5-en-3-ol, (3.beta.,24S)-	16.29	0.53 J
23	22260-46-4	(24R)-4-ERGOSTEN-3-ONE	16.57	0.11 J

Worksheet #: 274829

Total Tentatively Identified Concentration 77

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

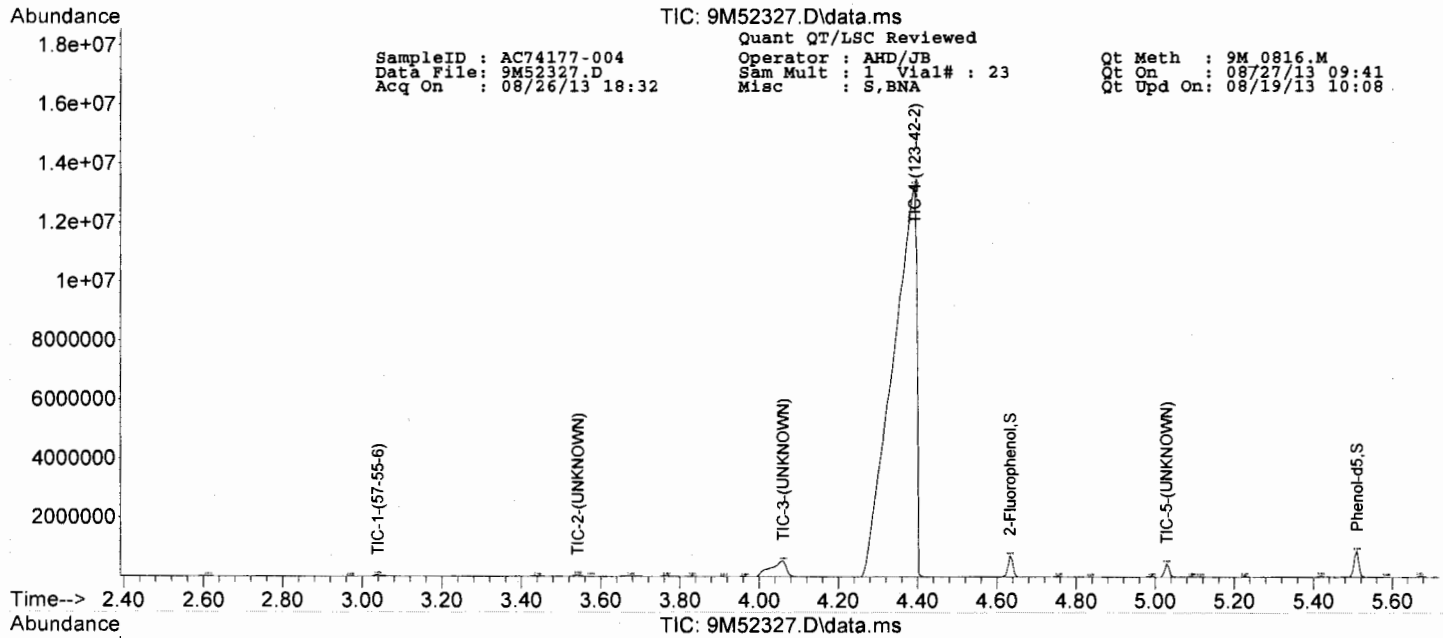
3082313 0139

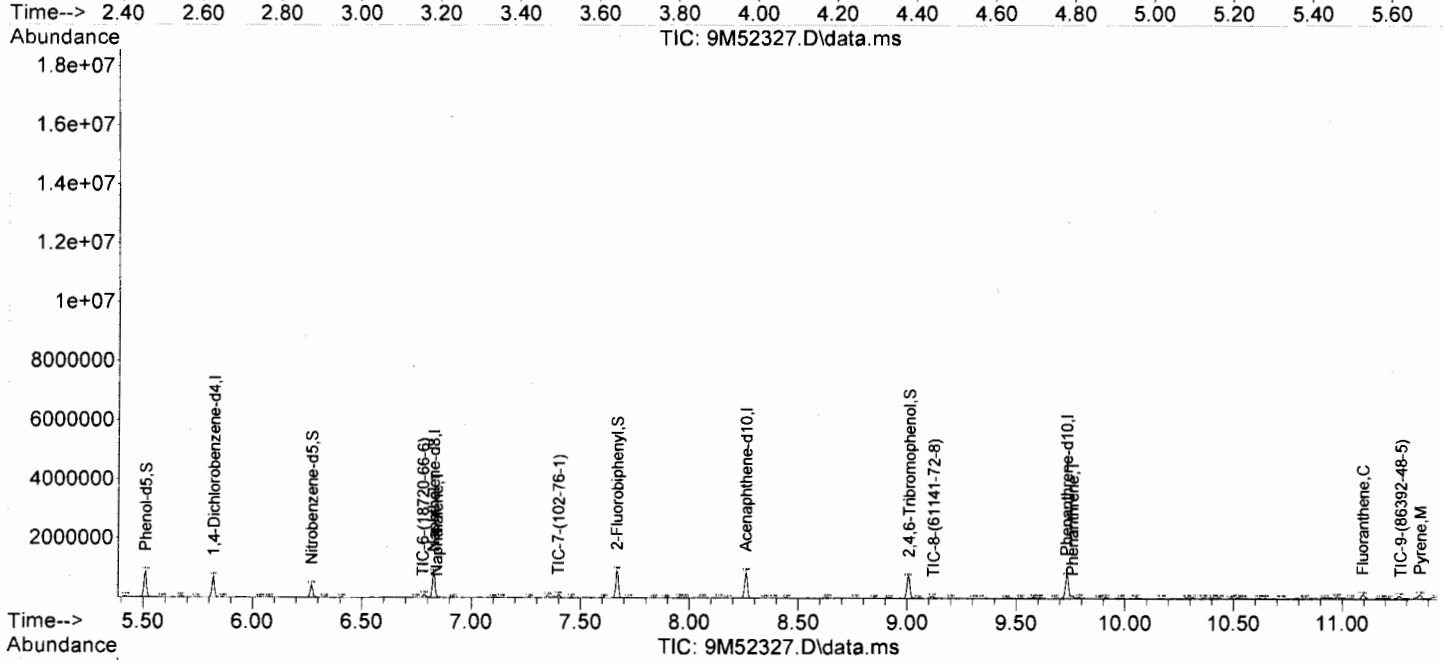
SampleID : AC74177-004 Operator : AHD/JB Qt Meth : 9M_0816.M
Data File: 9M52327.D Sam Mult : 1 Vial# : 23 Qt On : 08/27/13 09:41
Acq On : 08/26/13 18:32 Misc : S,BNA Qt Upd On: 08/19/13 10:08

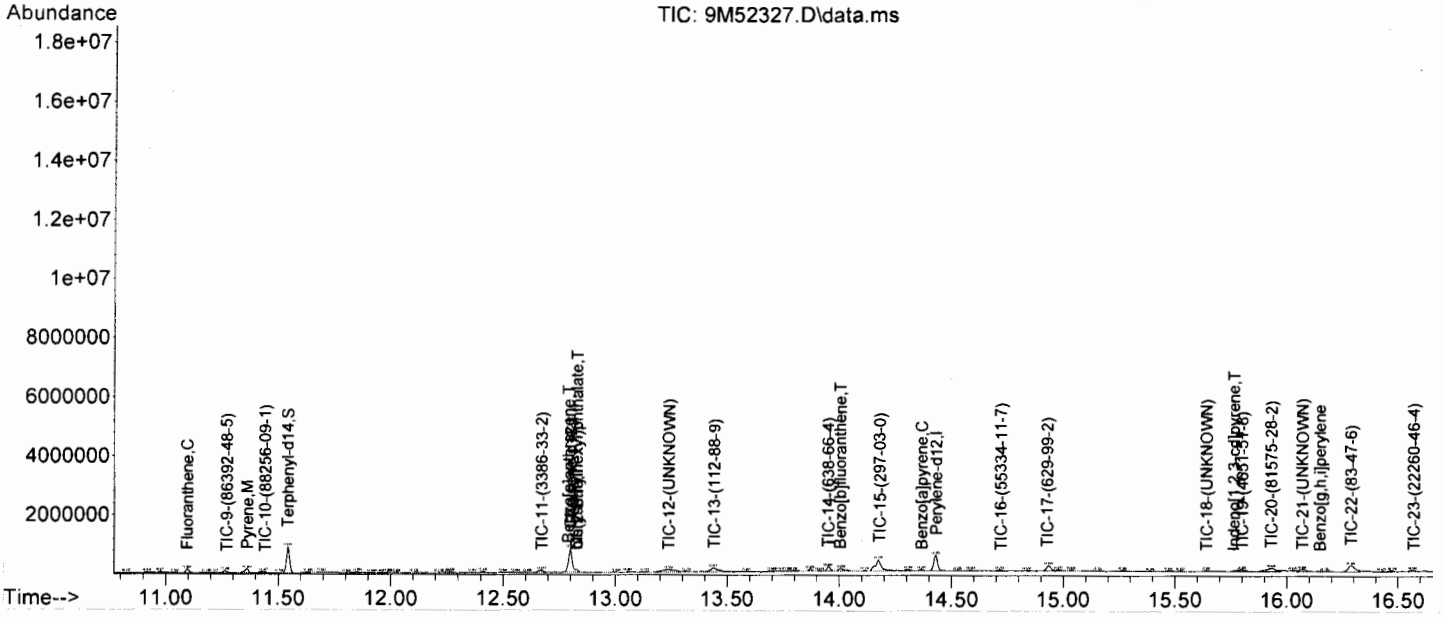
Data Path : G:\GcMsData\2013\GCMS_9\Data\08-26-13\
Qt Path : G:\GCMSDATA\2013\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

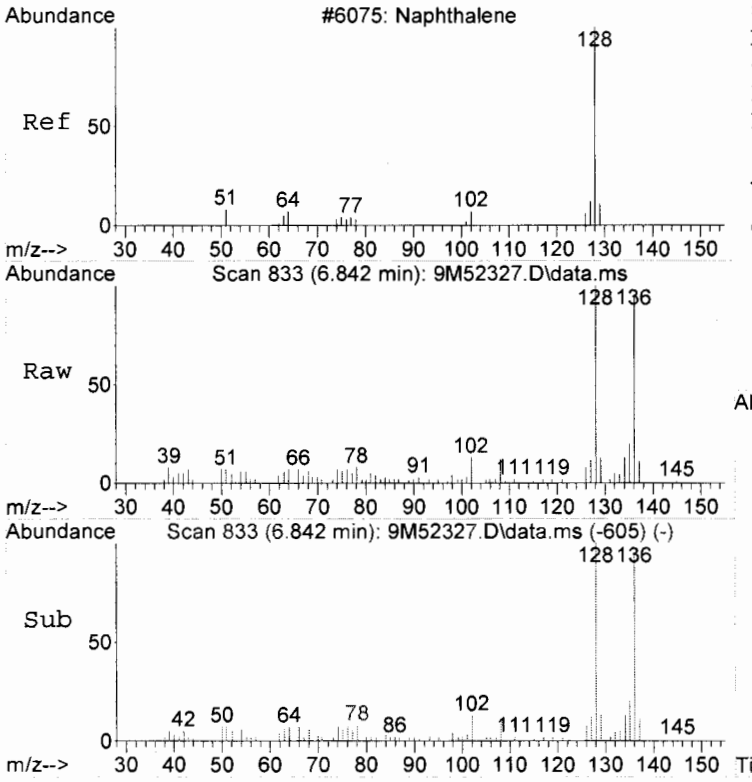
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dichlorobenzene-d4	5.821	152	91797	40.00	ng	-0.04
29) Naphthalene-d8	6.826	136	331123	40.00	ng	-0.05
47) Acenaphthene-d10	8.260	164	180858	40.00	ng	-0.05
74) Phenanthrene-d10	9.730	188	300377	40.00	ng	-0.05
88) Chrysene-d12	12.801	240	301386	40.00	ng	-0.05
100) Perylene-d12	14.432	264	246918	40.00	ng	-0.05
System Monitoring Compounds						
10) 2-Fluorophenol	4.633	112	168446	53.38	ng	-0.03
Spiked Amount 100.000			Recovery = 53.38%			
15) Phenol-d5	5.510	99	245839	61.62	ng	-0.03
Spiked Amount 100.000			Recovery = 61.62%			
30) Nitrobenzene-d5	6.270	128	49901	33.32	ng	-0.04
Spiked Amount 50.000			Recovery = 66.64%			
52) 2-Fluorobiphenyl	7.666	172	257299	40.51	ng	-0.05
Spiked Amount 50.000			Recovery = 81.02%			
77) 2,4,6-Tribromophenol	9.008	330	83343	91.45	ng	-0.05
Spiked Amount 100.000			Recovery = 91.45%			
91) Terphenyl-d14	11.544	244	279547	48.17	ng	-0.05
Spiked Amount 50.000			Recovery = 96.34%			
Target Compounds						Qvalue
39) Naphthalene	6.842	128	9752	1.0754	ng	97
83) Phenanthrene	9.757	178	22911	2.8135	ng	98
87) Fluoranthene	11.094	202	51998	5.2382	ng	83
89) Pyrene	11.362	202	52945	6.6598	ng	80
97) Benzo[a]anthracene	12.790	228	31746	4.0572	ng	92
98) Chrysene	12.827	228	29041	4.1345	ng	99
99) bis(2-Ethylhexyl)phtha...	12.827	149	12225	2.5746	ng	94
102) Benzo[b]fluoranthene	14.004	252	41283m	5.5704	ng	
104) Benzo[a]pyrene	14.368	252	25697	3.6611	ng	89
105) Indeno[1,2,3-cd]pyrene	15.764	276	20249	2.6217	ng	71
107) Benzo[g,h,i]perylene	16.149	276	19141	3.0049	ng	72
Library Search Internal Standards TIC Results						
1) 1,4-Dichlorobenzene-d4	5.821		563630	40.00	ng	--
2) Naphthalene-d8	6.826		740623	40.00	ng	--
3) Acenaphthene-d10	8.260		792913	40.00	ng	--
4) Phenanthrene-d10	9.730		868376	40.00	ng	--
5) Chrysene-d12	12.801		814679m	40.00	ng	--
6) Perylene-d12	14.432		672973	40.00	ng	--
Library Search Compounds						
1) 57-55-6	3.040		87413	6.20	ng	86
2) UNKNOWN	3.540		70812	5.03	ng	--
3) UNKNOWN	4.060		1463452	103.86	ng	--
4) 123-42-2	4.390		55144184	3913.50	ng	50
5) UNKNOWN	5.030		370070	26.26	ng	--
6) 18720-66-6	6.780		86831	4.69	ng	59
7) 102-76-1	7.400		123531	6.67	ng	83
8) 61141-72-8	9.120		91203	4.20	ng	93
9) 86392-48-5	11.270		92744	4.55	ng	83
10) 88256-09-1	11.440		93403	4.59	ng	70
11) 3386-33-2	12.670		138579	6.80	ng	91
12) UNKNOWN	13.240		396115	19.45	ng	--
13) 112-88-9	13.440		347685	17.07	ng	95
14) 638-66-4	13.950		160220	9.52	ng	83
15) 297-03-0	14.180		712064	42.32	ng	95
16) 55334-11-7	14.720		73627	4.38	ng	64
17) 629-99-2	14.930		267223	15.88	ng	93
18) UNKNOWN	15.640		76418	4.54	ng	--
19) 4651-51-8	15.800		243090	14.45	ng	70
20) 81575-28-2	15.930		424204	25.21	ng	91
21) UNKNOWN	16.070		160154	9.52	ng	--
22) 83-47-6	16.290		501771	29.82	ng	98
23) 22260-46-4	16.570		107317	6.38	ng	64

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


TIC: 9M52327.D\data.ms
Quant QT/LSC Reviewed
SampleID : AC74177-004
Data File: 9M52327.D
Acq On : 08/26/13 18:32
Operator : AHD/JB
Sam Mult : 1 Vial# : 23
Misc : S,BNA
Qt Meth : 9M 0816.M
Qt On : 08727/13 09:41
Qt Upd On: 08/19/13 10:08
Abundance
TIC-1-(57-55-6)
TIC-2-(UNKNOWN)
TIC-3-(UNKNOWN)
TIC-4-(123-42-2)
2-Fluorophenol,S
TIC-5-(UNKNOWN)
Phenol-d5,S
Time-->


TIC: 9M52327.D\data.ms
Abundance
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
TIC-6-(18720-66-6)
TIC-7-(102-76-1)
2-Fluorobiphenyl,S
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
TIC-8-(61141-72-8)
Phenanthrene-d10,I
Fluoranthene,C
TIC-9-(86392-48-5)
Pyrene,M
Time-->

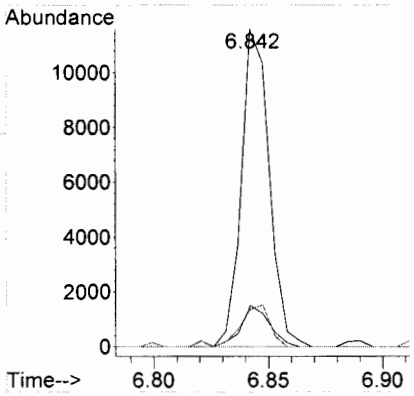

TIC: 9M52327.D\data.ms
Abundance
Fluoranthene,C
TIC-9-(86392-48-5)
Pyrene,M
TIC-10-(88256-09-1)
Terphenyl-d14,S
TIC-11-(3386-33-2)
TIC-12-(UNKNOWN)
TIC-13-(112-88-9)
TIC-14-(638-66-4)
Benzo(b)fluoranthene,T
TIC-15-(297-03-0)
Benzo(a)pyrene,C
Perylene-d12,I
TIC-16-(55334-11-7)
TIC-17-(629-99-2)
TIC-18-(UNKNOWN)
TIC-20-(81575-28-2)
TIC-21-(UNKNOWN)
Benzo(g,h,i)perylene
TIC-22-(83-47-6)
TIC-23-(22260-46-4)
Time-->

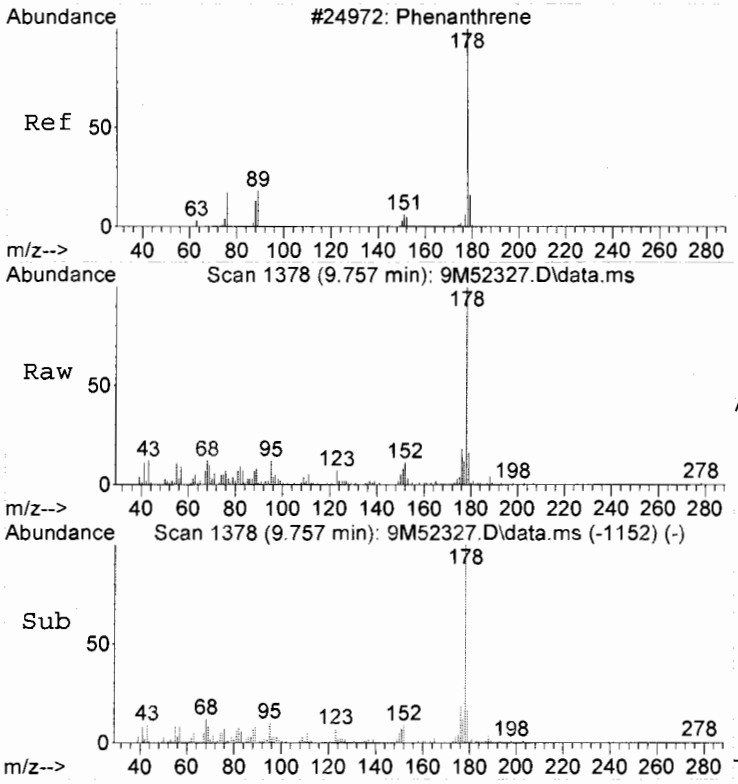


#39
Naphthalene
Concen: 1.08 ng
RT: 6.842 min Scan# 833
Delta R.T. -0.048 min
Lab File: 9M52327.D
Acq: 26 Aug 2013 18:32

Tgt Ion:128 Resp: 9752

Ion	Ratio	Lower	Upper
128	100		
129	13.0	0.0	50.9
127	11.8	0.0	52.4

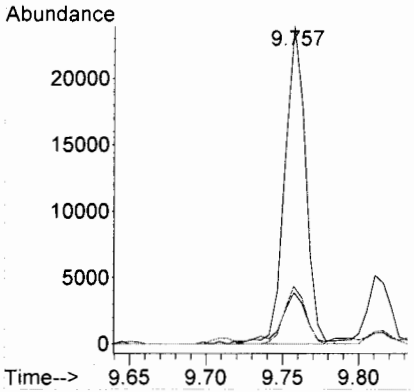


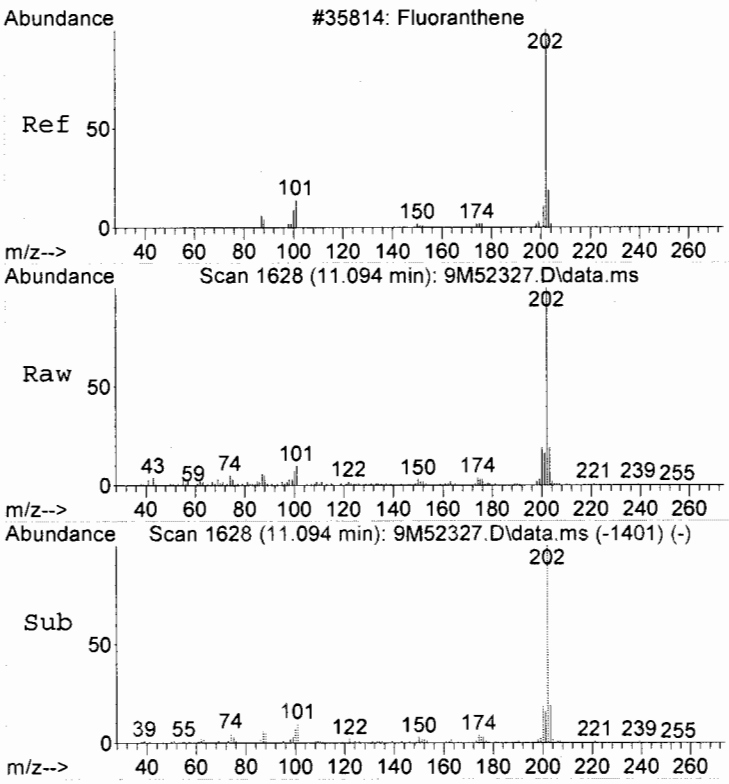


#83
Phenanthrene
Concen: 2.81 ng
RT: 9.757 min Scan# 1378
Delta R.T. -0.054 min
Lab File: 9M52327.D
Acq: 26 Aug 2013 18:32

Tgt Ion:178 Resp: 22911

Ion	Ratio	Lower	Upper
178	100		
179	16.1	0.0	55.5
176	18.1	0.0	59.3

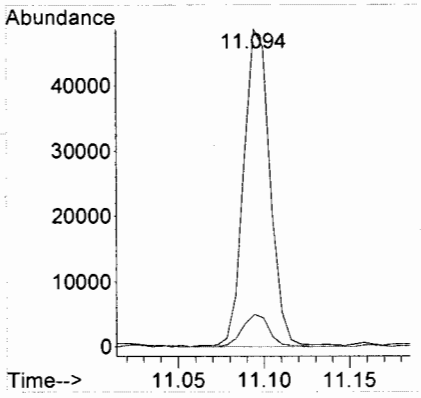


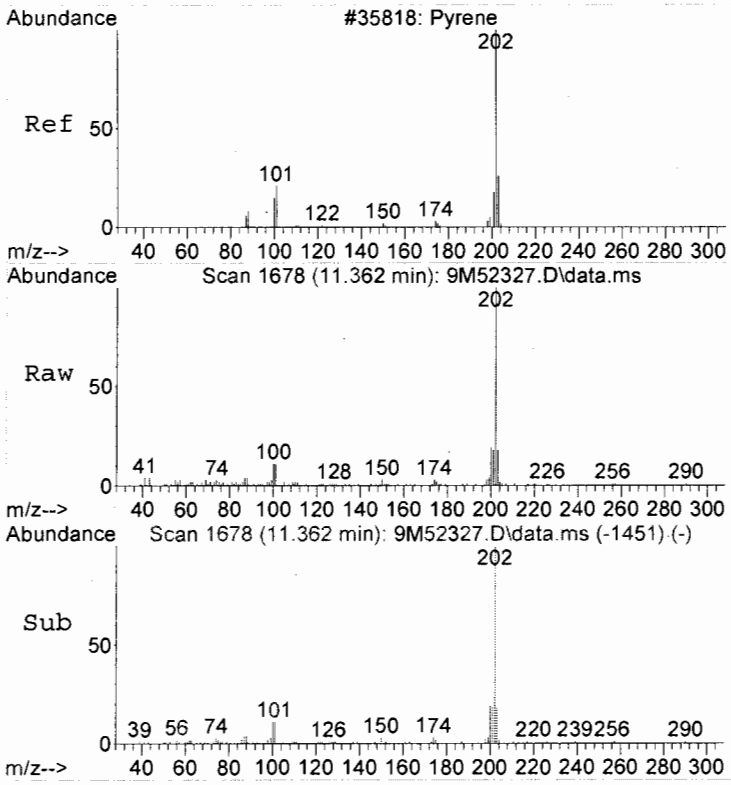


#87
Fluoranthene
Concen: 5.24 ng
RT: 11.094 min Scan# 1628
Delta R.T. -0.054 min
Lab File: 9M52327.D
Acq: 26 Aug 2013 18:32

Tgt Ion:202 Resp: 51998

Ion	Ratio	Lower	Upper
202	100		
101	10.3	0.0	57.6

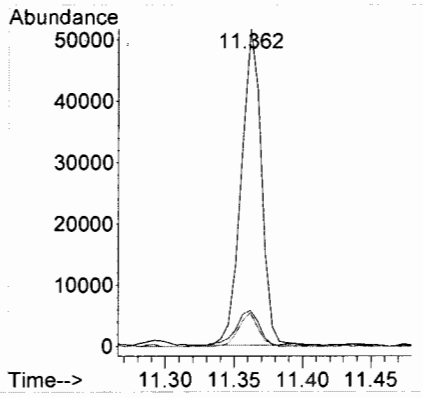


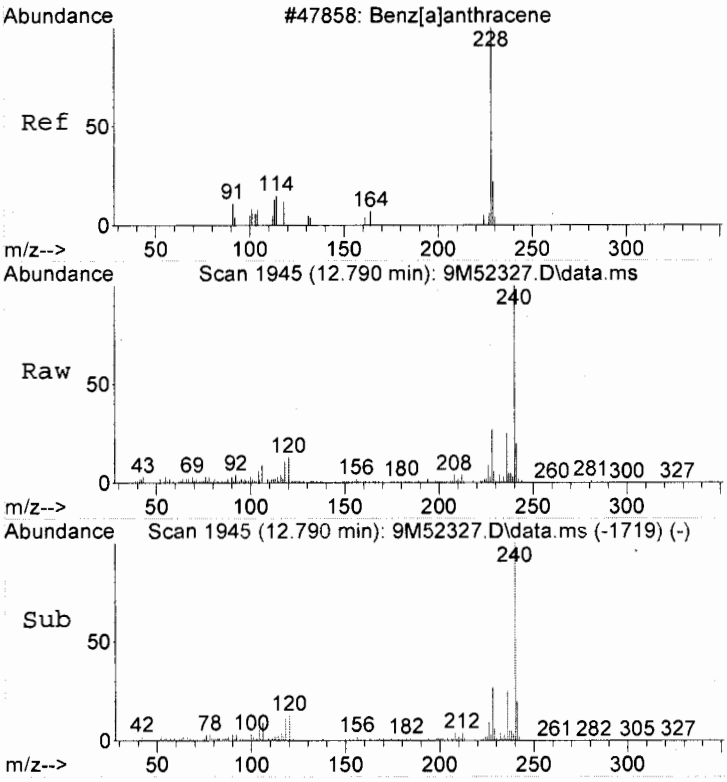


#89
Pyrene
Concen: 6.66 ng
RT: 11.362 min Scan# 1678
Delta R.T. -0.054 min
Lab File: 9M52327.D
Acq: 26 Aug 2013 18:32

Tgt Ion:202 Resp: 52945

Ion	Ratio	Lower	Upper
202	100		
101	10.9	0.0	62.2
100	10.7	0.0	57.8

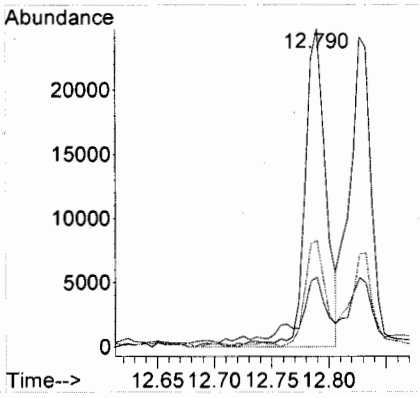


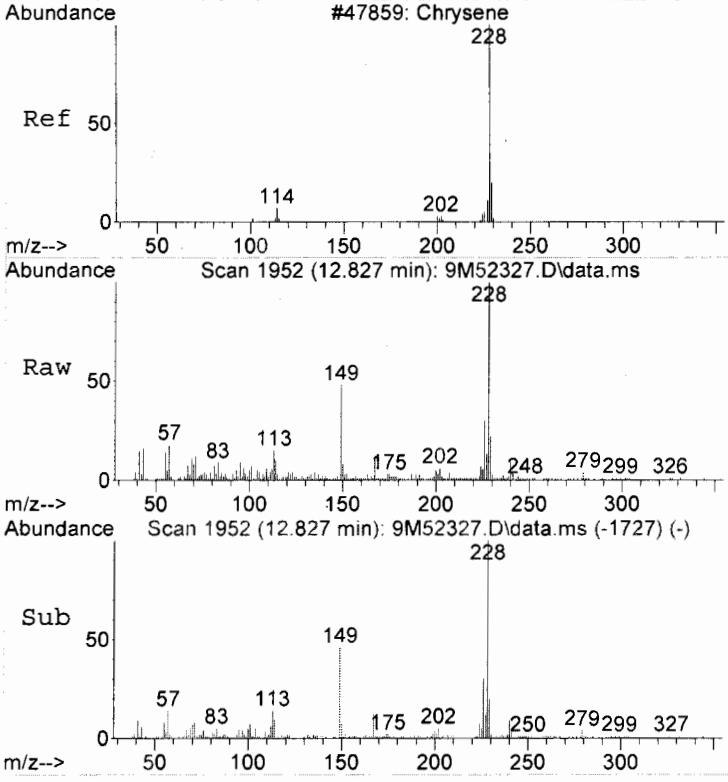


#97
Benzo[a]anthracene
Concen: 4.06 ng
RT: 12.790 min Scan# 1945
Delta R.T. -0.054 min
Lab File: 9M52327.D
Acq: 26 Aug 2013 18:32

Tgt Ion:228 Resp: 31746

Ion	Ratio	Lower	Upper
228	100		
229	20.7	0.0	59.5
226	32.2	0.0	66.0

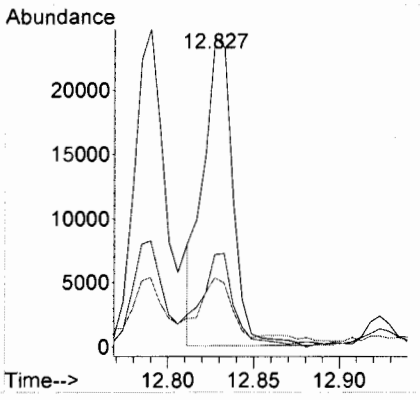


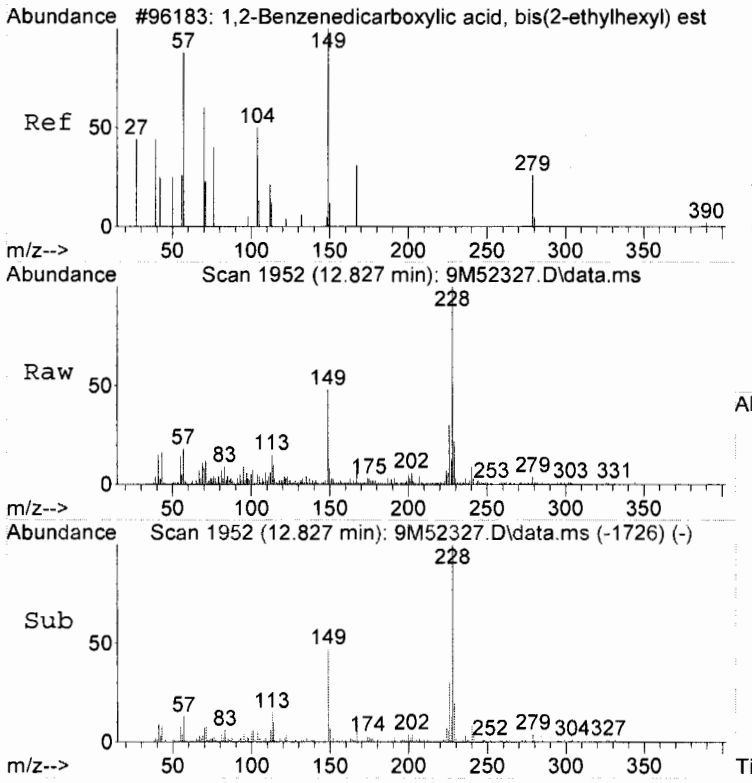


#98
Chrysene
Concen: 4.13 ng
RT: 12.827 min Scan# 1952
Delta R.T. -0.059 min
Lab File: 9M52327.D
Acq: 26 Aug 2013 18:32

Tgt Ion:228 Resp: 29041

Ion	Ratio	Lower	Upper
228	100		
226	28.7	9.5	49.5
229	20.7	0.0	60.2

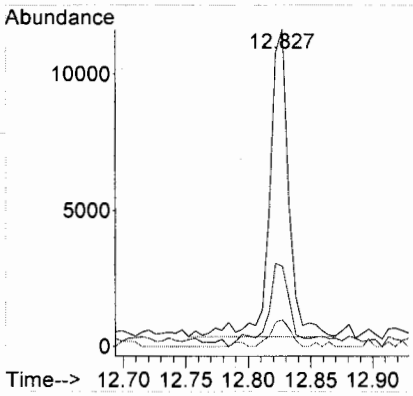


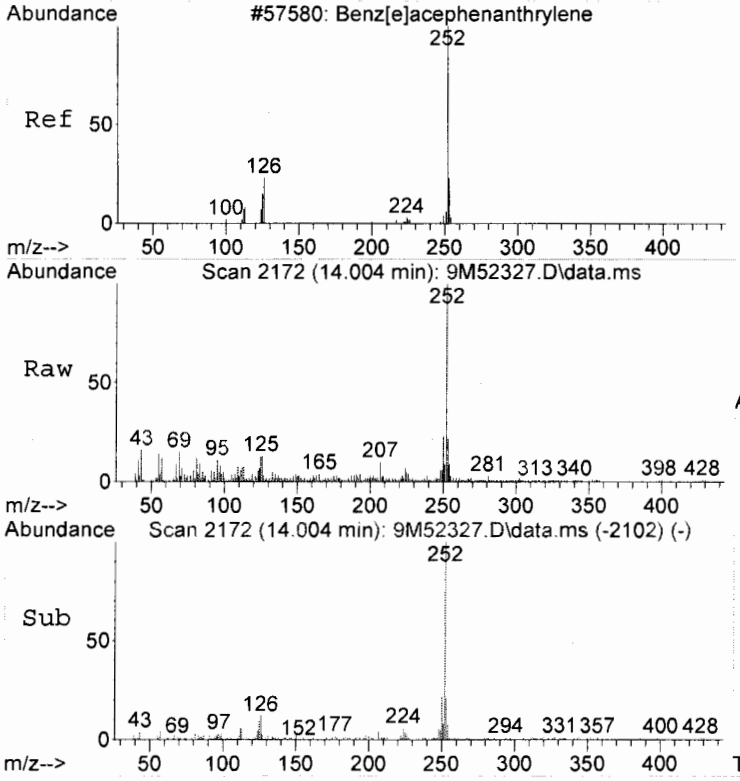


#99
bis(2-Ethylhexyl)phthalate
Concen: 2.57 ng
RT: 12.827 min Scan# 1952
Delta R.T. -0.054 min
Lab File: 9M52327.D
Acq: 26 Aug 2013 18:32

Tgt Ion:149 Resp: 12225

Ion	Ratio	Lower	Upper
149	100		
167	23.9	0.0	54.4
279	8.8	0.0	43.5

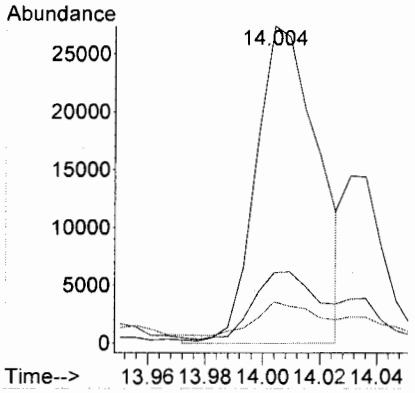


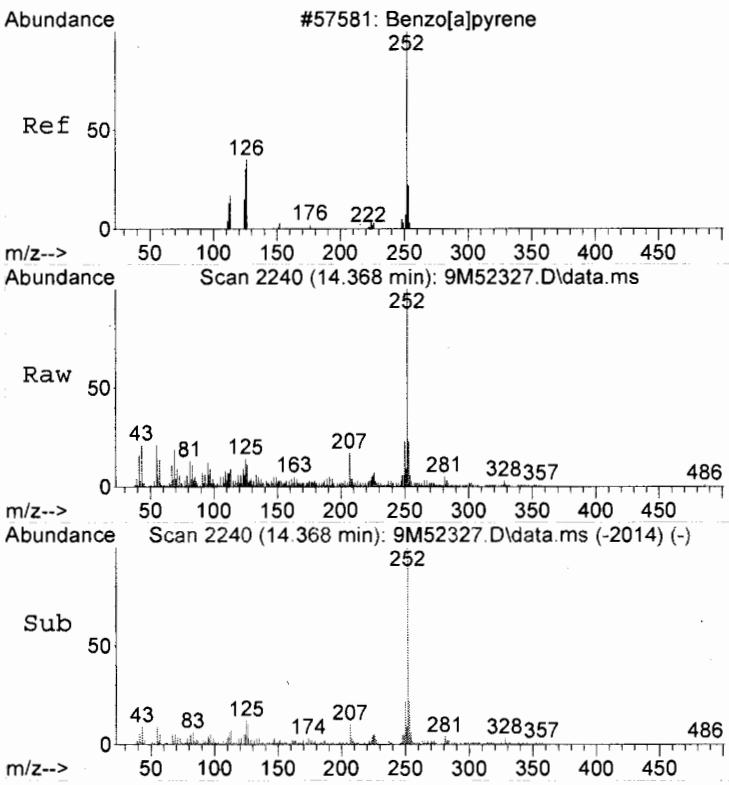


#102
Benzo[b]fluoranthene
Concen: 5.57 ng m
RT: 14.004 min Scan# 2172
Delta R.T. -0.059 min
Lab File: 9M52327.D
Acq: 26 Aug 2013 18:32

Tgt Ion:252 Resp: 41283

Ion	Ratio	Lower	Upper
252	100		
253	22.3	0.0	62.3
125	13.0	0.0	58.4

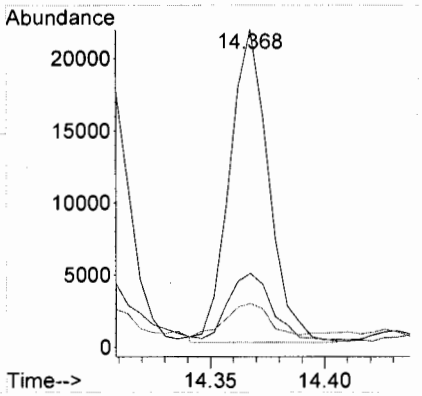


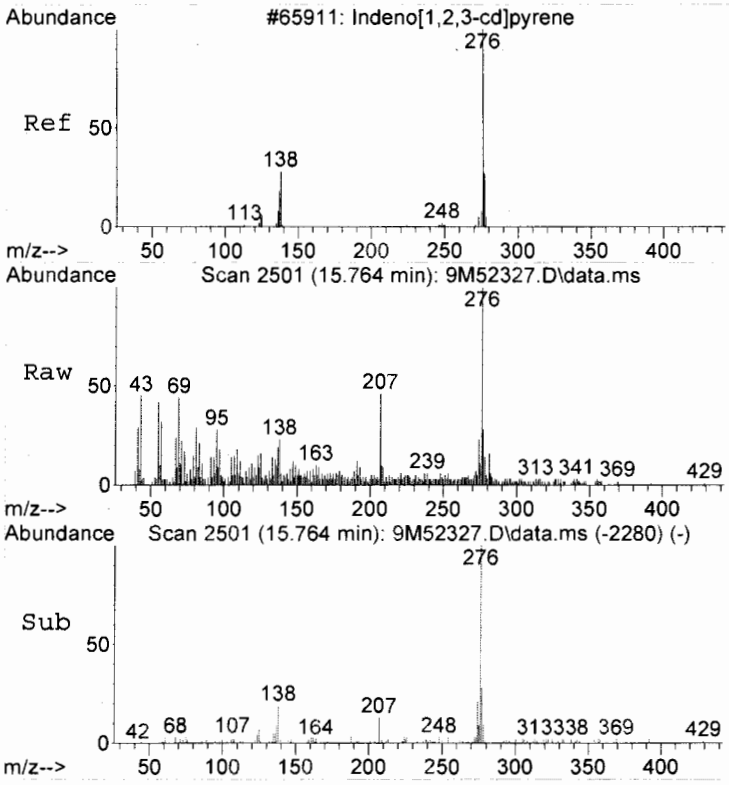


#104
Benzo[a]pyrene
Concen: 3.66 ng
RT: 14.368 min Scan# 2240
Delta R.T. -0.059 min
Lab File: 9M52327.D
Acq: 26 Aug 2013 18:32

Tgt Ion:252 Resp: 25697

Ion	Ratio	Lower	Upper
252	100		
253	21.9	0.0	62.4
125	10.8	0.0	60.9

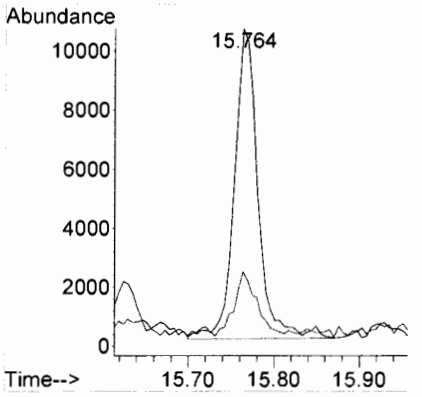


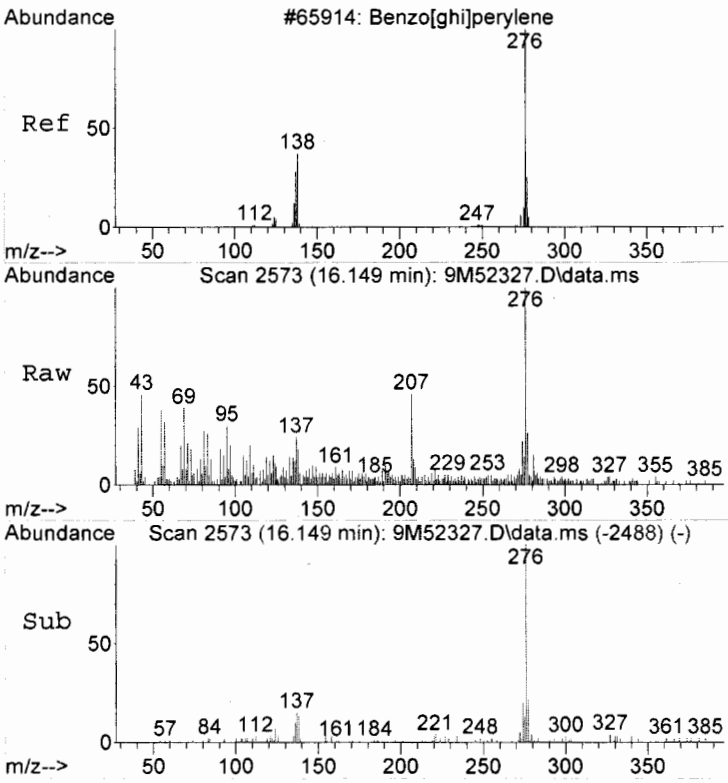


#105
Indeno[1,2,3-cd]pyrene
Concen: 2.62 ng
RT: 15.764 min Scan# 2501
Delta R.T. -0.080 min
Lab File: 9M52327.D
Acq: 26 Aug 2013 18:32

Tgt Ion:276 Resp: 20249

Ion	Ratio	Lower	Upper
276	100		
138	21.0	0.0	78.9

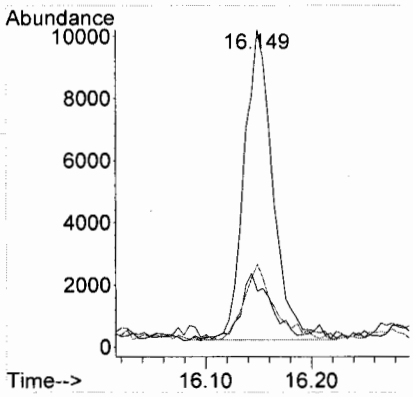




#107
Benzo[g,h,i]perylene
Concen: 3.00 ng
RT: 16.149 min Scan# 2573
Delta R.T. -0.086 min
Lab File: 9M52327.D
Acq: 26 Aug 2013 18:32

Tgt Ion:276 Resp: 19141

Ion	Ratio	Lower	Upper
276	100		
138	21.0	0.0	100.0
277	27.3	0.0	60.0



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AC74177-006
Client Id: 018 SS-3 Composite
Data File: 9M52328.D
Analysis Date: 08/26/13 18:55
Date Rec/Extracted: 08/23/13-08/26/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270C
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 92

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.036	U	**50-32-8**	**Benzo[a]pyrene**	**0.036**	**0.070**
95-94-3	1,2,4,5-Tetrachlorobenzene	0.036	U	**205-99-2**	**Benzo[b]fluoranthene**	**0.036**	**0.11**
120-82-1	1,2,4-Trichlorobenzene	0.036	U	**191-24-2**	**Benzo[g,h,i]perylene**	**0.036**	**0.058**
122-66-7	1,2-Diphenylhydrazine	0.036	U	**207-08-9**	**Benzo[k]fluoranthene**	**0.036**	**0.037**
58-90-2	2,3,4,6-Tetrachlorophenol	0.036	U	111-91-1	bis(2-Chloroethoxy)methan	0.036	U
95-95-4	2,4,5-Trichlorophenol	0.036	U	111-44-4	bis(2-Chloroethyl)ether	0.0091	U
88-06-2	2,4,6-Trichlorophenol	0.036	U	108-60-1	bis(2-chloroisopropyl)ether	0.036	U
120-83-2	2,4-Dichlorophenol	0.0091	U	**117-81-7**	**bis(2-Ethylhexyl)phthalate**	**0.036**	**0.044**
105-67-9	2,4-Dimethylphenol	0.0091	U	85-68-7	Butylbenzylphthalate	0.036	U
51-28-5	2,4-Dinitrophenol	0.18	U	105-60-2	Caprolactam	0.036	U
121-14-2	2,4-Dinitrotoluene	0.036	U	86-74-8	Carbazole	0.036	U
606-20-2	2,6-Dinitrotoluene	0.036	U	**218-01-9**	**Chrysene**	**0.036**	**0.086**
91-58-7	2-Chloronaphthalene	0.036	U	53-70-3	Dibenzo[a,h]anthracene	0.036	U
95-57-8	2-Chlorophenol	0.036	U	132-64-9	Dibenzofuran	0.0091	U
91-57-6	2-Methylnaphthalene	0.036	U	84-66-2	Diethylphthalate	0.036	U
95-48-7	2-Methylphenol	0.0091	U	131-11-3	Dimethylphthalate	0.036	U
88-74-4	2-Nitroaniline	0.036	U	84-74-2	Di-n-butylphthalate	0.018	U
88-75-5	2-Nitrophenol	0.036	U	117-84-0	Di-n-octylphthalate	0.036	U
106-44-5	3&4-Methylphenol	0.0091	U	**206-44-0**	**Fluoranthene**	**0.036**	**0.12**
91-94-1	3,3'-Dichlorobenzidine	0.036	U	86-73-7	Fluorene	0.036	U
99-09-2	3-Nitroaniline	0.036	U	118-74-1	Hexachlorobenzene	0.036	U
534-52-1	4,6-Dinitro-2-methylphenol	0.18	U	87-68-3	Hexachlorobutadiene	0.036	U
101-55-3	4-Bromophenyl-phenylether	0.036	U	77-47-4	Hexachlorocyclopentadiene	0.036	U
59-50-7	4-Chloro-3-methylphenol	0.036	U	67-72-1	Hexachloroethane	0.036	U
106-47-8	4-Chloroaniline	0.017	U	**193-39-5**	**Indeno[1,2,3-cd]pyrene**	**0.036**	**0.050**
7005-72-3	4-Chlorophenyl-phenylether	0.036	U	78-59-1	Isophorone	0.036	U
100-01-6	4-Nitroaniline	0.036	U	91-20-3	Naphthalene	0.0091	U
100-02-7	4-Nitrophenol	0.036	U	98-95-3	Nitrobenzene	0.036	U
83-32-9	Acenaphthene	0.036	U	62-75-9	N-Nitrosodimethylamine	0.036	U
208-96-8	Acenaphthylene	0.036	U	621-64-7	N-Nitroso-di-n-propylamine	0.0091	U
98-86-2	Acetophenone	0.036	U	86-30-6	n-Nitrosodiphenylamine	0.036	U
120-12-7	Anthracene	0.036	U	87-86-5	Pentachlorophenol	0.18	U
1912-24-9	Atrazine	0.036	U	**85-01-8**	**Phenanthrene**	**0.036**	**0.063**
100-52-7	Benzaldehyde	0.036	U	108-95-2	Phenol	0.036	U
92-87-5	Benzidine	0.036	U	**129-00-0**	**Pyrene**	**0.036**	**0.14**
56-55-3	**Benzo[a]anthracene**	**0.036**	**0.083**				

Worksheet #: 274829

Total Target Concentration 0.86

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AC74177-006
Client Id: 018 SS-3 Composite
Data File: 9M52328.D
Analysis Date: 08/26/13 18:55
Date Rec/Extracted: 08/23/13-08/26/13

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 92
Method: EPA 8270C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	3.54	0.094 J
2		unknown	4.06	1.7 JB
3	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.39	66 JAB
4		unknown	5.03	0.44 JB
5		unknown	6.78	0.080 J
6	1058-61-3	Stigmast-4-en-3-one	11.70	0.24 J
7	2885-00-9	1-Octadecanethiol	12.67	0.12 J
8		unknown	13.24	0.64 J
9	6765-39-5	1-Heptadecene	13.44	0.36 J
10		unknown	13.74	0.18 J
11	59681-06-0	10-DEMETHYLSQUALENE	13.87	0.093 J
12	56554-87-1	16-Octadecenal	13.96	0.32 J
13	297-03-0	Cyclotetracosane	14.18	0.86 J
14	56554-92-8	10-Octadecenal	14.72	0.12 J
15	630-04-6	Hentriacontane	14.93	0.29 J
16	27519-02-4	9-Tricosene, (Z)-	14.98	0.093 J
17	124-25-4	Tetradecanal	15.64	0.11 J
18		unknown	15.80	0.27 J
19	646-31-1	Tetracosane	15.90	0.086 J
20	38485-29-9	Stigmasta-5,23-dien-3.beta.-ol	15.93	0.25 J
21	489-29-2	.beta.-Maaliene	16.07	0.15 J
22	83-47-6	Stigmast-5-en-3-ol, (3.beta.,24S)-	16.29	0.63 J
23		unknown	16.35	0.12 J
24	6831-17-0	Aristolone	16.48	0.27 J
25		unknown	16.57	0.12 J

Worksheet #: 274829

Total Tentatively Identified Concentration 74

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

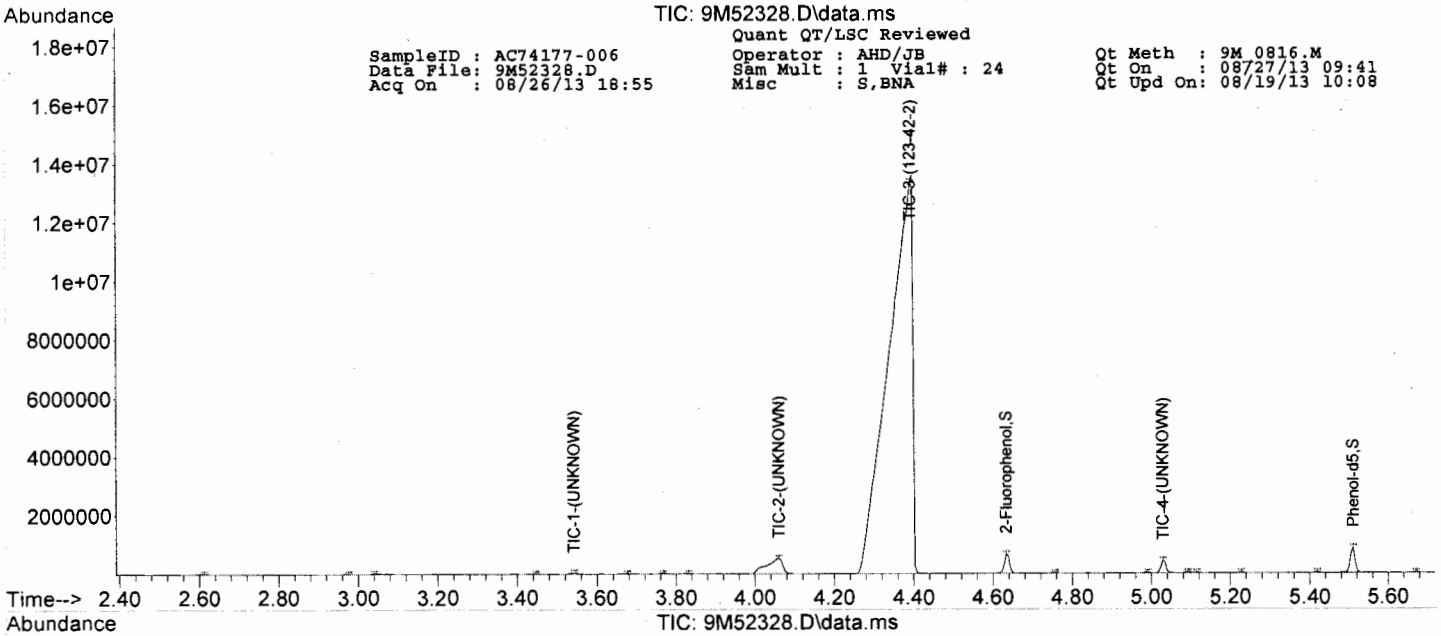
3082313 0149

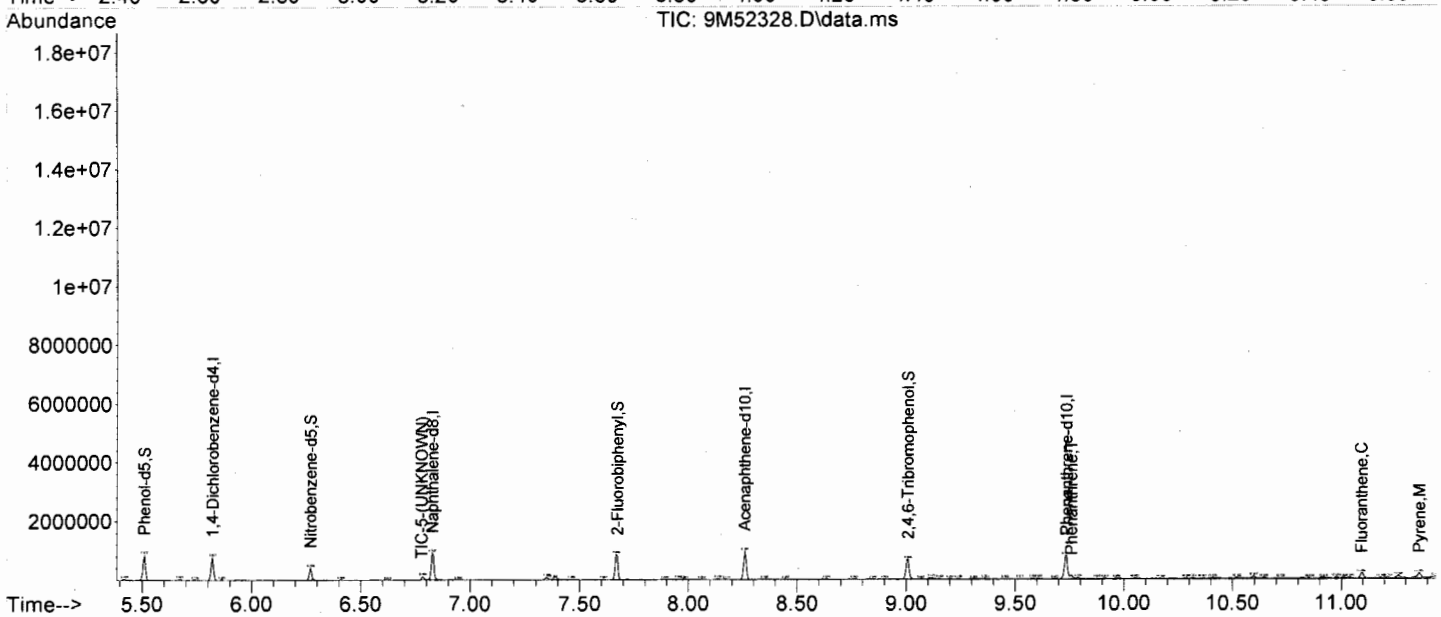
SampleID : AC74177-006 Operator : AHD/JB Qt Meth : 9M_0816.M
Data File: 9M52328.D Sam Mult : 1 Vial# : 24 Qt On : 08/27/13 09:41
Acq On : 08/26/13 18:55 Misc : S,BNA Qt Upd On: 08/19/13 10:08

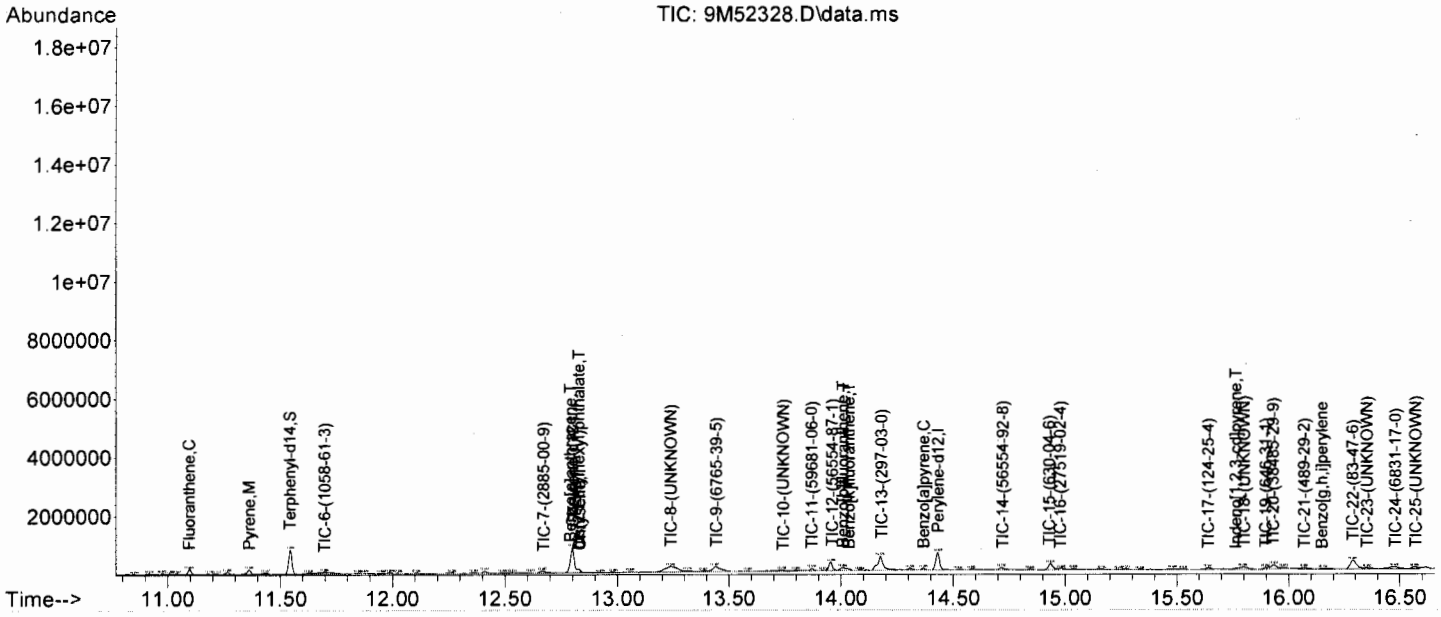
Data Path : G:\GcMsData\2013\GCMS_9\Data\08-26-13\
Qt Path : G:\GCMSDATA\2013\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

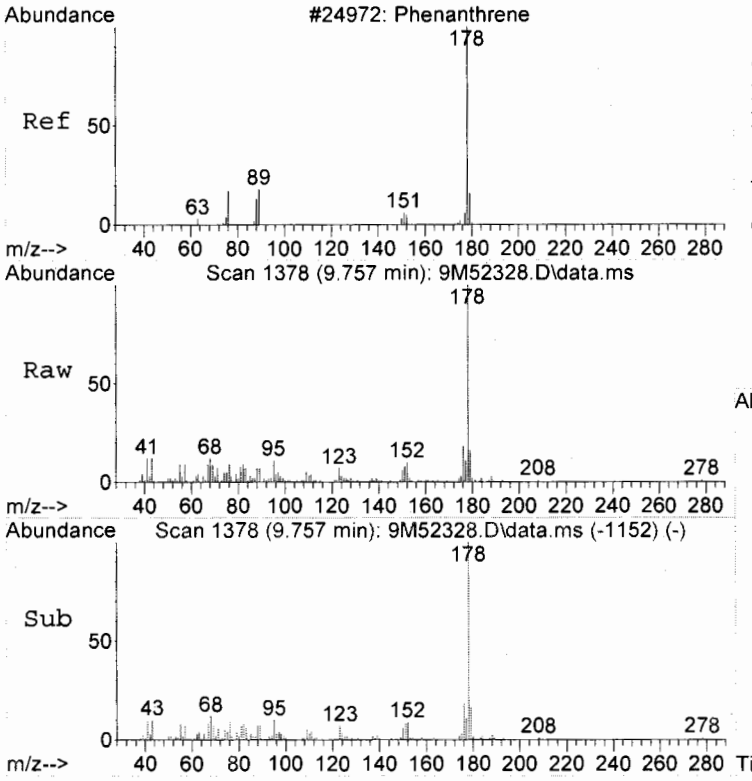
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dichlorobenzene-d4	5.821	152	98669	40.00	ng	-0.04
29) Naphthalene-d8	6.826	136	356609	40.00	ng	-0.05
47) Acenaphthene-d10	8.259	164	194041	40.00	ng	-0.05
74) Phenanthrene-d10	9.736	188	314737	40.00	ng	-0.05
88) Chrysene-d12	12.800	240	327954	40.00	ng	-0.05
100) Perylene-d12	14.432	264	275593	40.00	ng	-0.05
System Monitoring Compounds						
10) 2-Fluorophenol	4.633	112	160524	47.33	ng	-0.03
Spiked Amount 100.000			Recovery = 47.33%			
15) Phenol-d5	5.510	99	233443	54.44	ng	-0.03
Spiked Amount 100.000			Recovery = 54.44%			
30) Nitrobenzene-d5	6.270	128	47987	29.76	ng	-0.04
Spiked Amount 50.000			Recovery = 59.52%			
52) 2-Fluorobiphenyl	7.671	172	246123	36.12	ng	-0.04
Spiked Amount 50.000			Recovery = 72.24%			
77) 2,4,6-Tribromophenol	9.008	330	78516	82.22	ng	-0.05
Spiked Amount 100.000			Recovery = 82.22%			
91) Terphenyl-d14	11.544	244	266378	42.18	ng	-0.05
Spiked Amount 50.000			Recovery = 84.36%			
Target Compounds						Qvalue
83) Phenanthrene	9.757	178	29733	3.4846	ng	98
87) Fluoranthene	11.094	202	71693	6.8927	ng	83
89) Pyrene	11.362	202	66956	7.7400	ng	81
97) Benzo[a]anthracene	12.790	228	39040	4.5851	ng	94
98) Chrysene	12.833	228	36333	4.7536	ng	95
99) bis(2-Ethylhexyl)phtha...	12.827	149	12675	2.4531	ng	97
102) Benzo[b]fluoranthene	14.009	252	51631m	6.2418	ng	
103) Benzo[k]fluoranthene	14.036	252	16698m	2.0329	ng	
104) Benzo[a]pyrene	14.368	252	30299	3.8676	ng	87
105) Indeno[1,2,3-cd]pyrene	15.764	276	23600	2.7376	ng	72
107) Benzo[g,h,i]perylene	16.149	276	22624	3.1821	ng	69
Library Search Internal Standards TIC Results						
1) 1,4-Dichlorobenzene-d4	5.821		611056	40.00	ng	--
2) Naphthalene-d8	6.826		797843	40.00	ng	--
3) Acenaphthene-d10	8.259		854137	40.00	ng	--
4) Phenanthrene-d10	9.730		845167	40.00	ng	--
5) Chrysene-d12	12.801		922974m	40.00	ng	--
6) Perylene-d12	14.432		740625	40.00	ng	--
Library Search Compounds						
1) UNKNOWN	3.540		79642	5.21	ng	--
2) UNKNOWN	4.060		1466799	96.02	ng	--
3) 123-42-2	4.390		55397589	3626.35	ng	64
4) UNKNOWN	5.030		369044	24.16	ng	--
5) UNKNOWN	6.780		87547	4.39	ng	--
6) 1058-61-3	11.700		305472	13.24	ng	76
7) 2885-00-9	12.670		146905	6.37	ng	87
8) UNKNOWN	13.240		809490	35.08	ng	--
9) 6765-39-5	13.440		462864	20.06	ng	94
10) UNKNOWN	13.740		188191	10.16	ng	--
11) 59681-06-0	13.870		95042	5.13	ng	72
12) 56554-87-1	13.960		323830	17.49	ng	90
13) 297-03-0	14.180		880339	47.55	ng	97
14) 56554-92-8	14.720		118439	6.40	ng	62
15) 630-04-6	14.930		292183	15.78	ng	96
16) 27519-02-4	14.980		95035	5.13	ng	55
17) 124-25-4	15.640		108173	5.84	ng	90
18) UNKNOWN	15.800		276148	14.91	ng	--
19) 646-31-1	15.900		87402	4.72	ng	91
20) 38485-29-9	15.930		252552	13.64	ng	93
21) 489-29-2	16.070		156507	8.45	ng	50
22) 83-47-6	16.290		639326	34.53	ng	99
23) UNKNOWN	16.350		120424	6.50	ng	--
24) 6831-17-0	16.480		271049	14.64	ng	86
25) UNKNOWN	16.570		125520	6.78	ng	--

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


Abundance
TIC: 9M52328.D\data.ms
Quant QT/LSC Reviewed
SampleID : AC74177-006
Data File: 9M52328.D
Acq On : 08/26/13 18:55
Operator : AHD/JB
Sam Mult : 1 Vial# : 24
Misc : S,BNA
Qt Meth : 9M_0816.M
Qt On : 08/27/13 09:41
Qt Upd On: 08/19/13 10:08
TIC-1-(UNKNOWN)
TIC-2-(UNKNOWN)
TIC-3-(123-42-2)
2-Fluorophenol,S
TIC-4-(UNKNOWN)
Phenol-d5,S
Time-->


Abundance
TIC: 9M52328.D\data.ms
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
TIC-5-(UNKNOWN)
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Phenanthrene-d10,I
Fluoranthene,C
Pyrene,M
Time-->

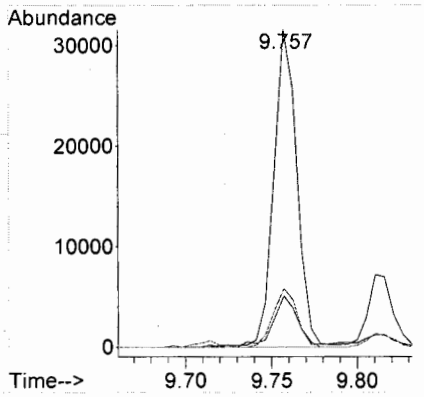

Abundance
TIC: 9M52328.D\data.ms
Fluoranthene,C
Pyrene,M
Terphenyl-d14,S
TIC-6-(1058-61-3)
TIC-7-(2885-00-9)
TIC-8-(UNKNOWN)
TIC-9-(6765-39-5)
TIC-10-(UNKNOWN)
TIC-11-(59681-06-0)
TIC-13-(297-03-0)
Benzo[a]pyrene,C
Perylene-d12,I
TIC-14-(56554-92-8)
TIC-17-(124-25-4)
TIC-21-(489-29-2)
Benzo[g,h,i]perylene
TIC-22-(83-47-6)
TIC-23-(UNKNOWN)
TIC-24-(6831-17-0)
TIC-25-(UNKNOWN)
Time-->

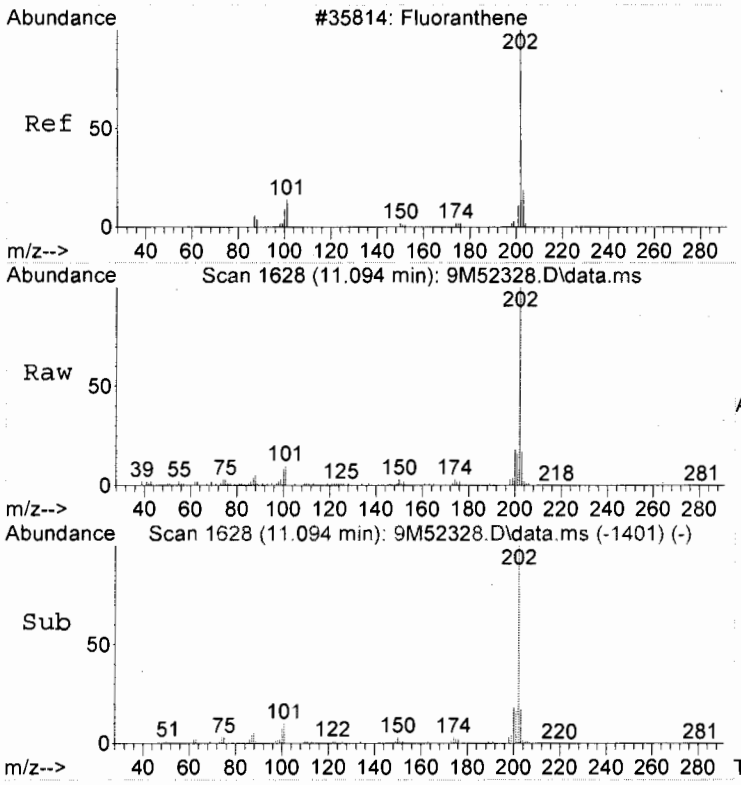


#83
Phenanthrene
Concen: 3.48 ng
RT: 9.757 min Scan# 1378
Delta R.T. -0.054 min
Lab File: 9M52328.D
Acq: 26 Aug 2013 18:55

Tgt Ion:178 Resp: 29733

Ion	Ratio	Lower	Upper
178	100		
179	16.1	0.0	55.5
176	18.5	0.0	59.3

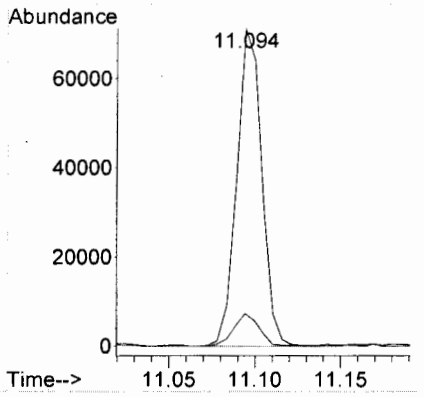


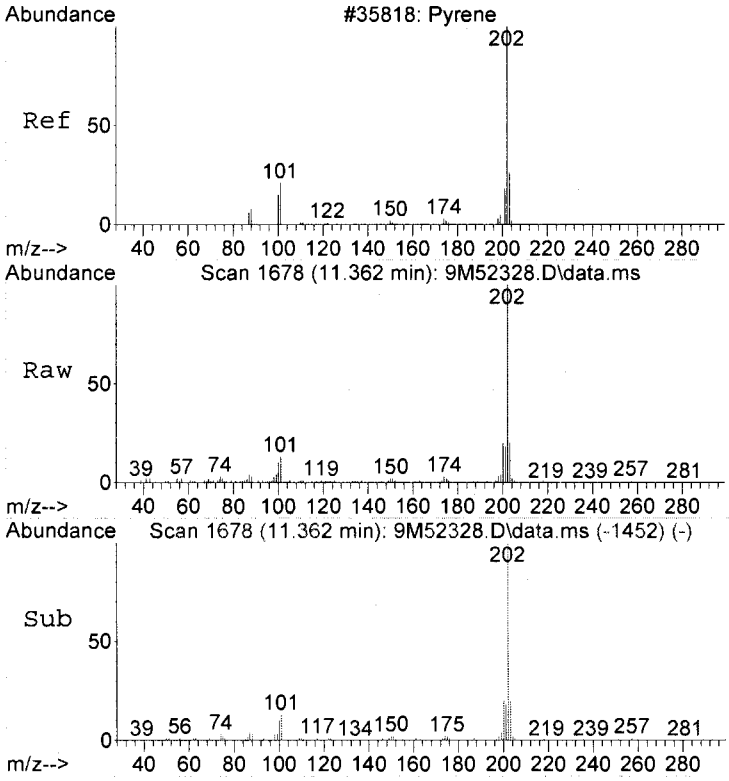


#87
Fluoranthene
Concen: 6.89 ng
RT: 11.094 min Scan# 1628
Delta R.T. -0.054 min
Lab File: 9M52328.D
Acq: 26 Aug 2013 18:55

Tgt Ion:202 Resp: 71693

Ion	Ratio	Lower	Upper
202	100		
101	10.3	0.0	57.6

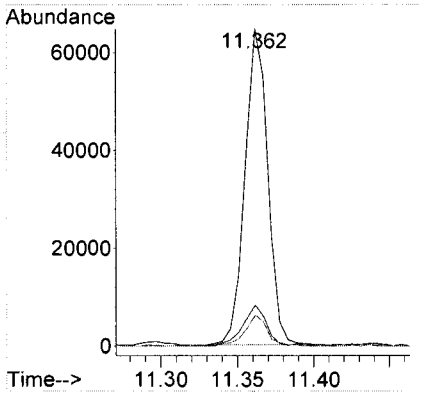


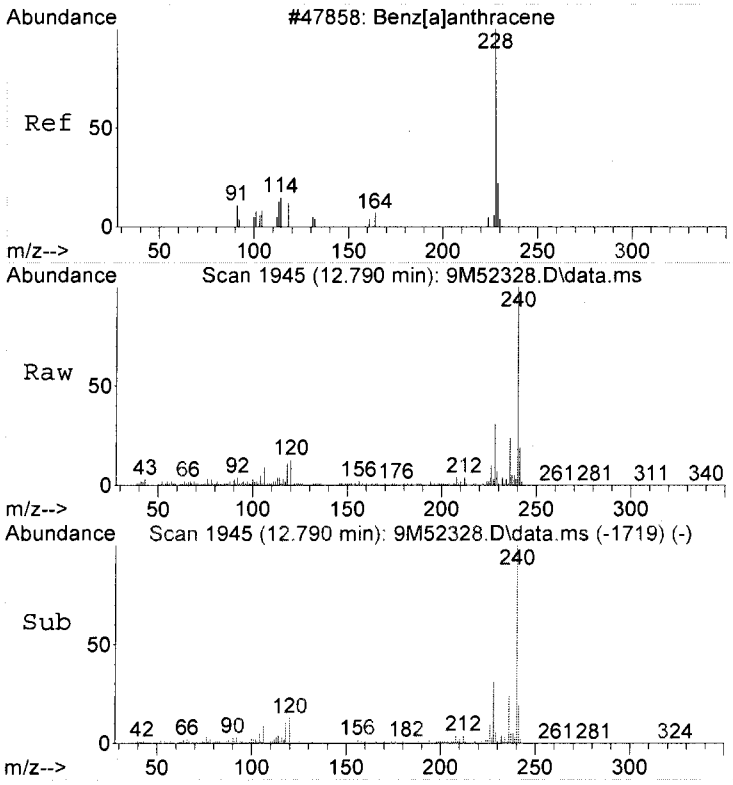


#89
Pyrene
Concen: 7.74 ng
RT: 11.362 min Scan# 1678
Delta R.T. -0.054 min
Lab File: 9M52328.D
Acq: 26 Aug 2013 18:55

Tgt Ion:202 Resp: 66956

Ion	Ratio	Lower	Upper
202	100		
101	13.0	0.0	62.2
100	9.8	0.0	57.8

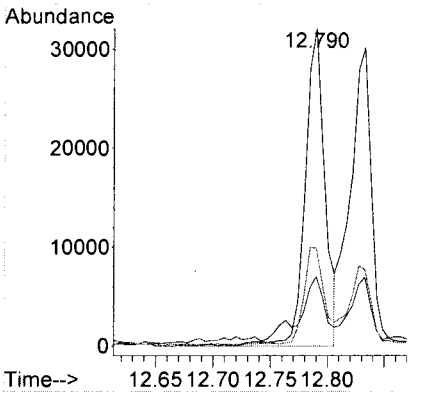


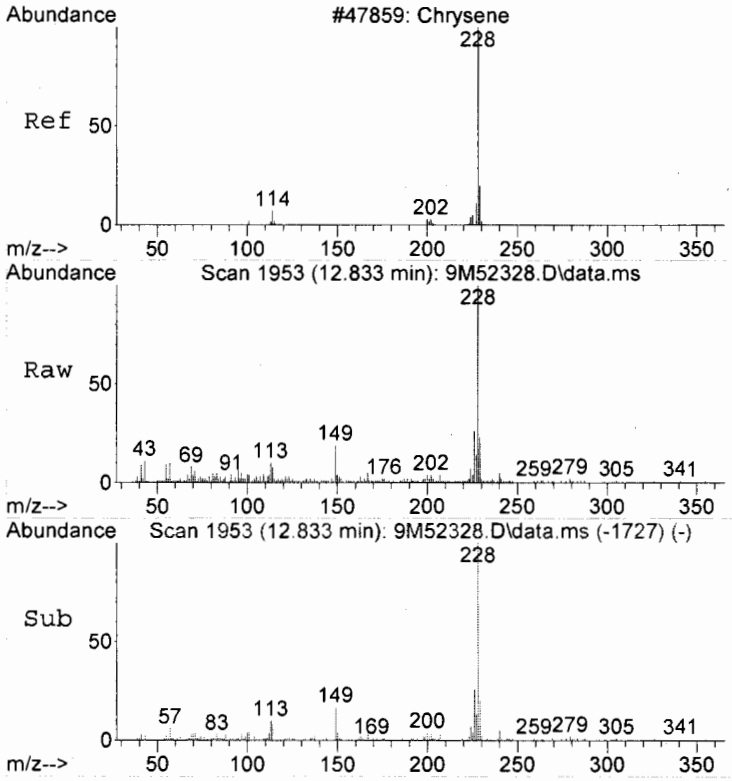


#97
Benzo[a]anthracene
Concen: 4.59 ng
RT: 12.790 min Scan# 1945
Delta R.T. -0.054 min
Lab File: 9M52328.D
Acq: 26 Aug 2013 18:55

Tgt Ion:228 Resp: 39040

Ion	Ratio	Lower	Upper
228	100		
229	20.9	0.0	59.5
226	30.2	0.0	66.0

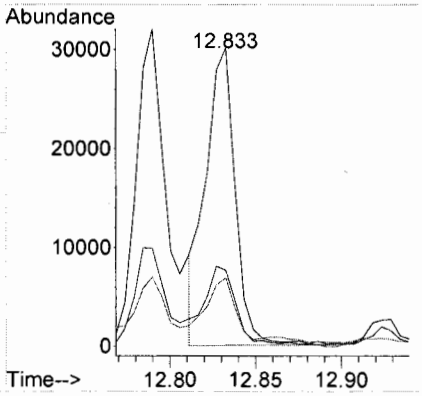


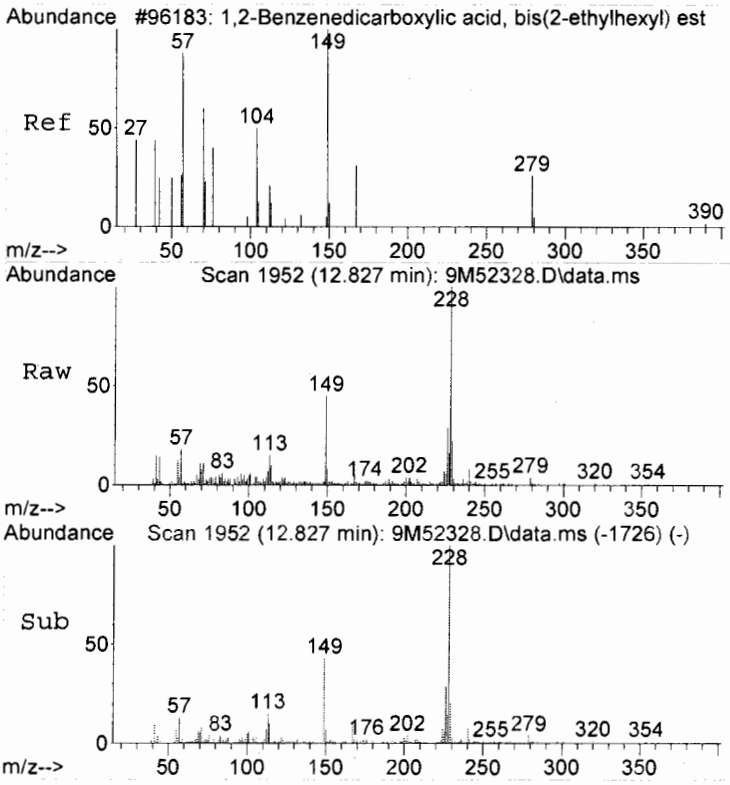


#98
Chrysene
Concen: 4.75 ng
RT: 12.833 min Scan# 1953
Delta R.T. -0.054 min
Lab File: 9M52328.D
Acq: 26 Aug 2013 18:55

Tgt Ion:228 Resp: 36333

Ion	Ratio	Lower	Upper
228	100		
226	25.9	9.5	49.5
229	22.0	0.0	60.2

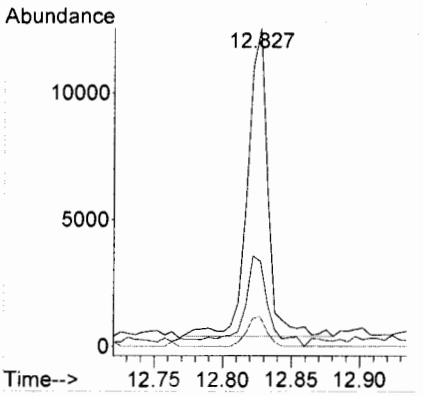


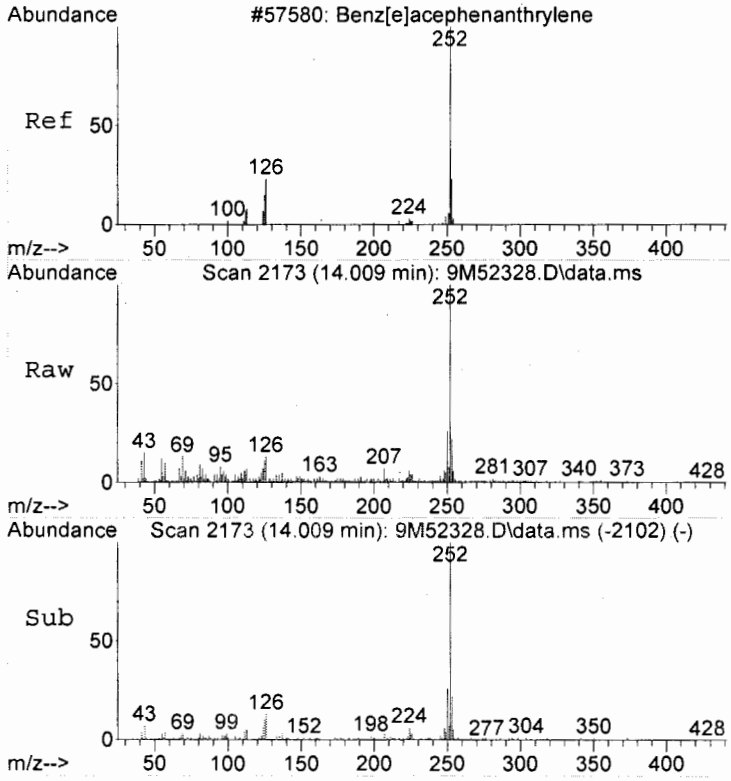


#99
bis(2-Ethylhexyl)phthalate
Concen: 2.45 ng
RT: 12.827 min Scan# 1952
Delta R.T. -0.054 min
Lab File: 9M52328.D
Acq: 26 Aug 2013 18:55

Tgt Ion:149 Resp: 12675

Ion	Ratio	Lower	Upper
149	100		
167	26.0	0.0	54.4
279	9.6	0.0	43.5

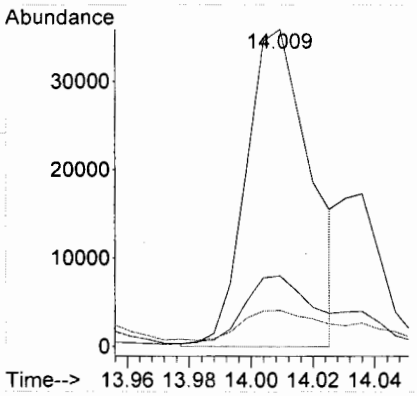


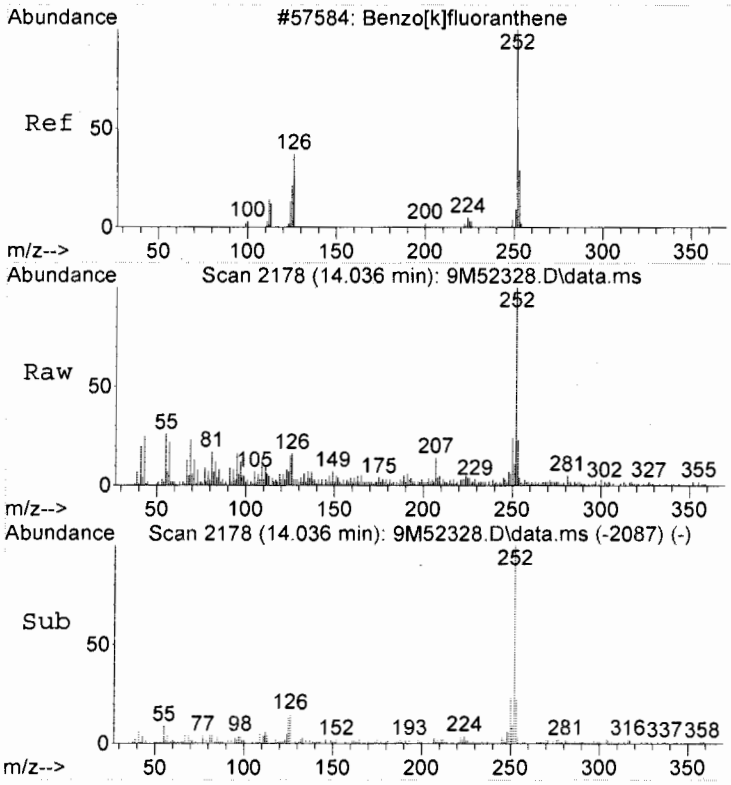


#102
Benzo[b]fluoranthene
Concen: 6.24 ng m
RT: 14.009 min Scan# 2173
Delta R.T. -0.054 min
Lab File: 9M52328.D
Acq: 26 Aug 2013 18:55

Tgt Ion:252 Resp: 51631

Ion	Ratio	Lower	Upper
252	100		
253	22.3	0.0	62.3
125	11.4	0.0	58.4

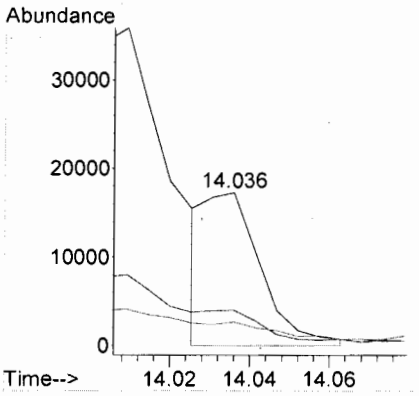


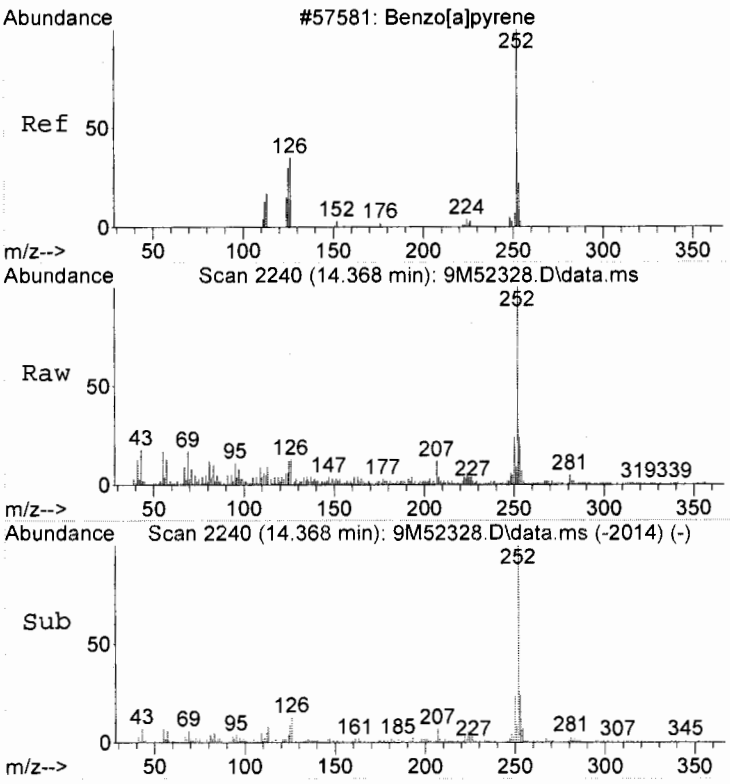


#103
Benzo[k]fluoranthene
Concen: 2.03 ng m
RT: 14.036 min Scan# 2178
Delta R.T. -0.054 min
Lab File: 9M52328.D
Acq: 26 Aug 2013 18:55

Tgt Ion:252 Resp: 16698

Ion	Ratio	Lower	Upper
252	100		
253	23.1	0.0	52.2
125	15.4	0.0	48.9

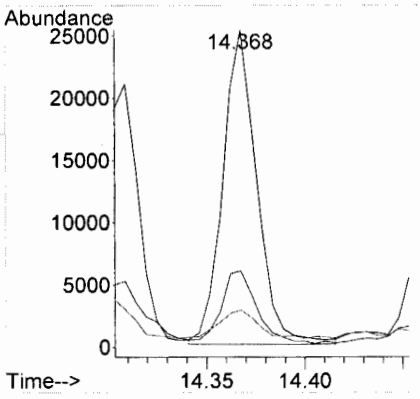


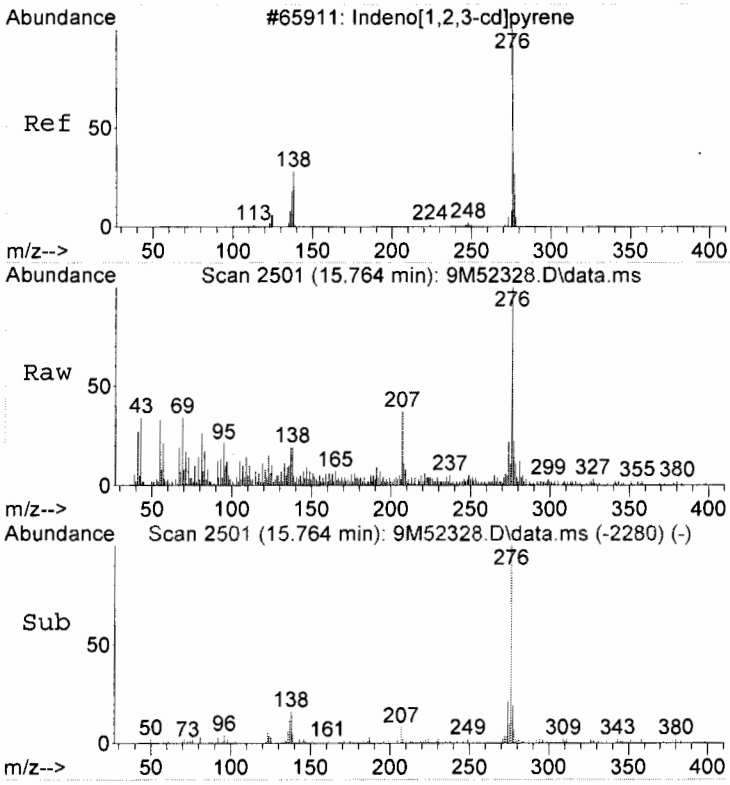


#104
Benzo[a]pyrene
Concen: 3.87 ng
RT: 14.368 min Scan# 2240
Delta R.T. -0.059 min
Lab File: 9M52328.D
Acq: 26 Aug 2013 18:55

Tgt Ion:252 Resp: 30299

Ion	Ratio	Lower	Upper
252	100		
253	23.3	0.0	62.4
125	9.1	0.0	60.9

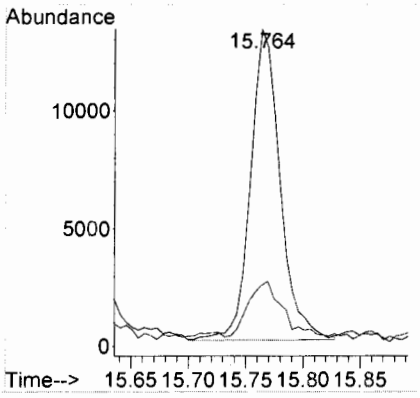


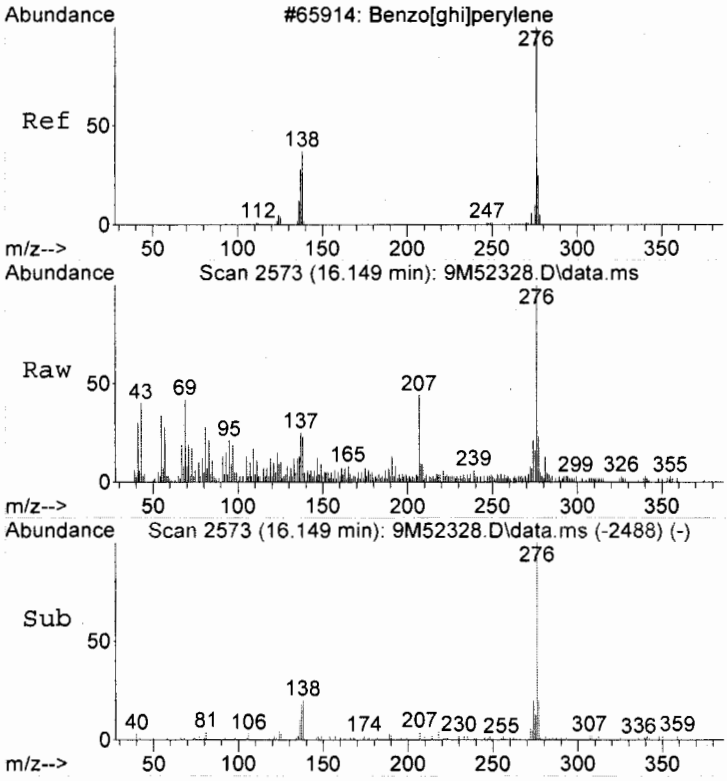


#105
Indeno[1,2,3-cd]pyrene
Concen: 2.74 ng
RT: 15.764 min Scan# 2501
Delta R.T. -0.080 min
Lab File: 9M52328.D
Acq: 26 Aug 2013 18:55

Tgt Ion:276 Resp: 23600

Ion	Ratio	Lower	Upper
276	100		
138	21.6	0.0	78.9

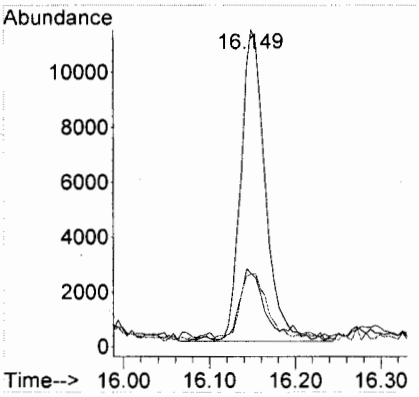




#107
Benzo[g,h,i]perylene
Concen: 3.18 ng
RT: 16.149 min Scan# 2573
Delta R.T. -0.086 min
Lab File: 9M52328.D
Acq: 26 Aug 2013 18:55

Tgt Ion:276 Resp: 22624

Ion	Ratio	Lower	Upper
276	100		
138	20.5	0.0	100.0
277	23.9	0.0	60.0



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: SMB25990
Client Id:
Data File: 9M52340.D
Analysis Date: 08/27/13 09:56
Date Rec/Extracted: NA-08/26/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270C
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.033	U	50-32-8	Benzo[a]pyrene	0.033	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.033	U	205-99-2	Benzo[b]fluoranthene	0.033	U
120-82-1	1,2,4-Trichlorobenzene	0.033	U	191-24-2	Benzo[g,h,i]perylene	0.033	U
122-66-7	1,2-Diphenylhydrazine	0.033	U	207-08-9	Benzo[k]fluoranthene	0.033	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.033	U	111-91-1	bis(2-Chloroethoxy)methan	0.033	U
95-95-4	2,4,5-Trichlorophenol	0.033	U	111-44-4	bis(2-Chloroethyl)ether	0.0083	U
88-06-2	2,4,6-Trichlorophenol	0.033	U	108-60-1	bis(2-chloroisopropyl)ether	0.033	U
120-83-2	2,4-Dichlorophenol	0.0083	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.033	U
105-67-9	2,4-Dimethylphenol	0.0083	U	85-68-7	Butylbenzylphthalate	0.033	U
51-28-5	2,4-Dinitrophenol	0.17	U	105-60-2	Caprolactam	0.033	U
121-14-2	2,4-Dinitrotoluene	0.033	U	86-74-8	Carbazole	0.033	U
606-20-2	2,6-Dinitrotoluene	0.033	U	218-01-9	Chrysene	0.033	U
91-58-7	2-Chloronaphthalene	0.033	U	53-70-3	Dibenzo[a,h]anthracene	0.033	U
95-57-8	2-Chlorophenol	0.033	U	132-64-9	Dibenzofuran	0.0083	U
91-57-6	2-Methylnaphthalene	0.033	U	84-66-2	Diethylphthalate	0.033	U
95-48-7	2-Methylphenol	0.0083	U	131-11-3	Dimethylphthalate	0.033	U
88-74-4	2-Nitroaniline	0.033	U	84-74-2	Di-n-butylphthalate	0.017	U
88-75-5	2-Nitrophenol	0.033	U	117-84-0	Di-n-octylphthalate	0.033	U
106-44-5	3&4-Methylphenol	0.0083	U	206-44-0	Fluoranthene	0.033	U
91-94-1	3,3'-Dichlorobenzidine	0.033	U	86-73-7	Fluorene	0.033	U
99-09-2	3-Nitroaniline	0.033	U	118-74-1	Hexachlorobenzene	0.033	U
534-52-1	4,6-Dinitro-2-methylphenol	0.17	U	87-68-3	Hexachlorobutadiene	0.033	U
101-55-3	4-Bromophenyl-phenylether	0.033	U	77-47-4	Hexachlorocyclopentadiene	0.033	U
59-50-7	4-Chloro-3-methylphenol	0.033	U	67-72-1	Hexachloroethane	0.033	U
106-47-8	4-Chloroaniline	0.016	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.033	U
7005-72-3	4-Chlorophenyl-phenylether	0.033	U	78-59-1	Isophorone	0.033	U
100-01-6	4-Nitroaniline	0.033	U	91-20-3	Naphthalene	0.0083	U
100-02-7	4-Nitrophenol	0.033	U	98-95-3	Nitrobenzene	0.033	U
83-32-9	Acenaphthene	0.033	U	62-75-9	N-Nitrosodimethylamine	0.033	U
208-96-8	Acenaphthylene	0.033	U	621-64-7	N-Nitroso-di-n-propylamine	0.0083	U
98-86-2	Acetophenone	0.033	U	86-30-6	n-Nitrosodiphenylamine	0.033	U
120-12-7	Anthracene	0.033	U	87-86-5	Pentachlorophenol	0.17	U
1912-24-9	Atrazine	0.033	U	85-01-8	Phenanthrene	0.033	U
100-52-7	Benzaldehyde	0.033	U	108-95-2	Phenol	0.033	U
92-87-5	Benzidine	0.033	U	129-00-0	Pyrene	0.033	U
56-55-3	Benzo[a]anthracene	0.033	U				

Worksheet #: 274829

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: SMB25990
Client Id:
Data File: 9M52340.D
Analysis Date: 08/27/13 09:56
Date Rec/Extracted: NA-08/26/13

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 100
Method: EPA 8270C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1	79-00-5	Ethane, 1,1,2-trichloro-	3.53	0.13 J
2		unknown	4.05	1.5 J
3	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.38	54 JA
4		unknown	5.02	0.35 J
5	79-34-5	Ethane, 1,1,2,2-tetrachloro-	5.08	0.070 J

Worksheet #: 274829

Total Tentatively Identified Concentration 56

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

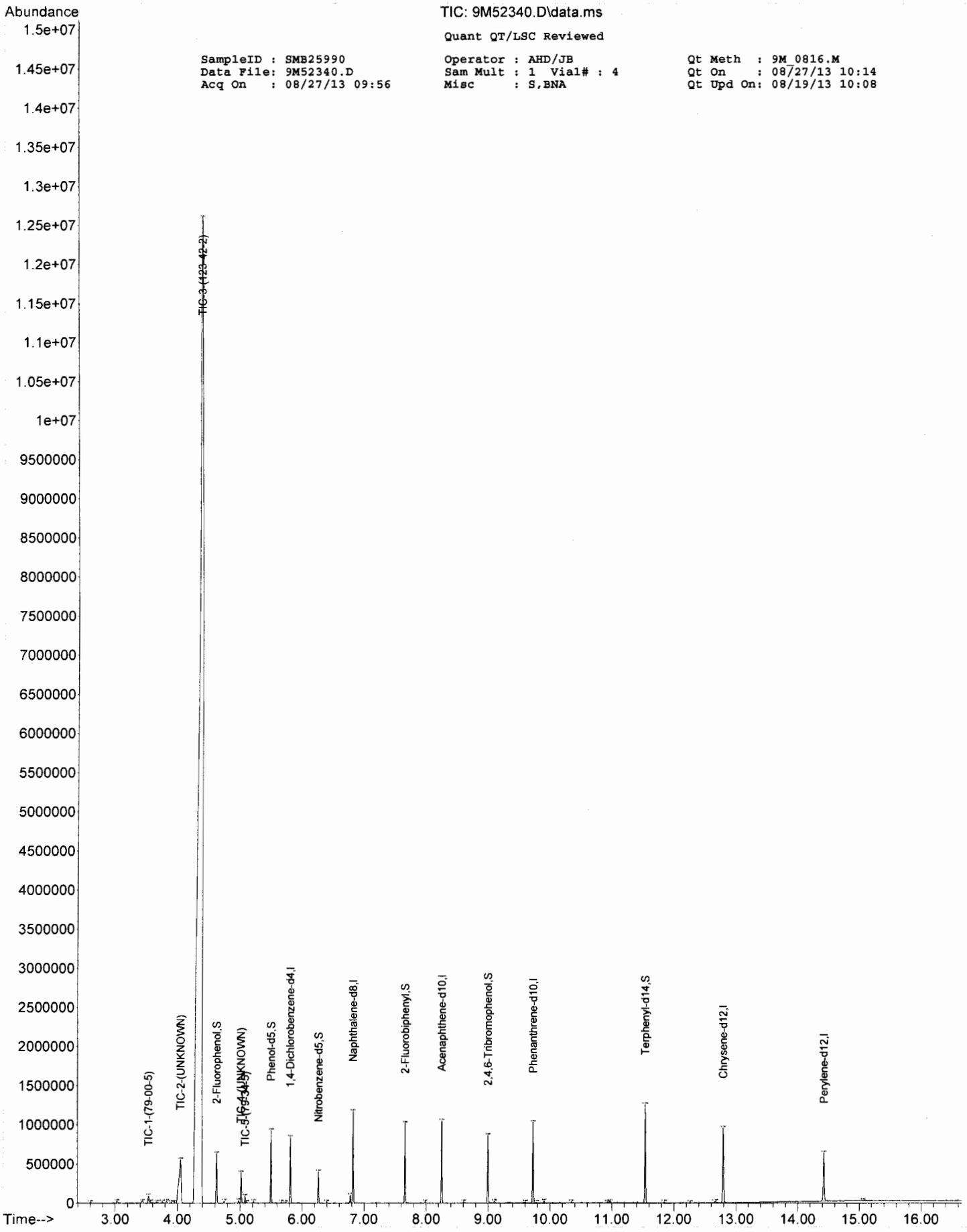
3082313 0159

SampleID : SMB25990 Operator : AHD/JB Qt Meth : 9M_0816.M
Data File: 9M52340.D Sam Mult : 1 Vial# : 4 Qt On : 08/27/13 10:14
Acq On : 08/27/13 09:56 Misc : S,BNA Qt Upd On: 08/19/13 10:08

Data Path : G:\GcMsData\2013\GCMS_9\Data\08-27-13\
Qt Path : G:\GCMSDATA\2013\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dichlorobenzene-d4	5.810	152	105747	40.00	ng	-0.05
29) Naphthalene-d8	6.821	136	399595	40.00	ng	-0.05
47) Acenaphthene-d10	8.254	164	225022	40.00	ng	-0.06
74) Phenanthrene-d10	9.725	188	380859	40.00	ng	-0.06
88) Chrysene-d12	12.790	240	381983	40.00	ng	-0.06
100) Perylene-d12	14.421	264	276950	40.00	ng	-0.06
System Monitoring Compounds						
10) 2-Fluorophenol	4.628	112	160522	44.16	ng	-0.03
Spiked Amount 100.000			Recovery = 44.16%			
15) Phenol-d5	5.500	99	249127	54.21	ng	-0.04
Spiked Amount 100.000			Recovery = 54.21%			
30) Nitrobenzene-d5	6.264	128	51963	28.75	ng	-0.05
Spiked Amount 50.000			Recovery = 57.50%			
52) 2-Fluorobiphenyl	7.660	172	267273	33.82	ng	-0.05
Spiked Amount 50.000			Recovery = 67.64%			
77) 2,4,6-Tribromophenol	8.998	330	91460	79.15	ng	-0.06
Spiked Amount 100.000			Recovery = 79.15%			
91) Terphenyl-d14	11.538	244	398654	54.20	ng	-0.06
Spiked Amount 50.000			Recovery = 108.40%			
Target Compounds						Qvalue
Library Search Internal Standards TIC Results						
1) 1,4-Dichlorobenzene-d4	5.810		651787	40.00	ng	--
2) Naphthalene-d8	6.821		858133	40.00	ng	--
3) Acenaphthene-d10	8.254		967133	40.00	ng	--
4) Phenanthrene-d10	9.725		964473	40.00	ng	--
5) Chrysene-d12	12.790		1003390	40.00	ng	--
6) Perylene-d12	14.421		729997	40.00	ng	--
Library Search Compounds						
1) 79-00-5	3.530		125512	7.70	ng	91
2) UNKNOWN	4.050		1436673	88.17	ng	--
3) 123-42-2	4.380		52905153	3246.78	ng	64
4) UNKNOWN	5.020		344574	21.15	ng	--
5) 79-34-5	5.080		68712	4.22	ng	95

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


Abundance
TIC: 9M52340.D\data.ms
Quant QT/LSC Reviewed
SampleID : SMB25990
Data File: 9M52340.D
Acq On : 08/27/13 09:56
Operator : AHD/JB
Sam Mult : 1 Vial# : 4
Misc : S,BNA
Qt Meth : 9M_0816.M
Qt On : 08/27/13 10:14
Qt Upd On: 08/19/13 10:08
TIC-1-(79-00-5)
TIC-2-(UNKNOWN)
TIC-3-(123-42-2)
2-Fluorophenol,S
TIC-5-(UNKNOWN)
TIC-4-(UNKNOWN)
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

FORM2

Surrogate Recovery

Method: EPA 8270C

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column1 S5 Recov	Column1 S6 Recov
10M39568.D	SMB25990	Soil	08/26/13 18:38	1		46	52	52	62	71	100
9M52340.D	SMB25990	Soil	08/27/13 09:56	1		44	54	58	68	79	108
9M52326.D	AC74177-002	Soil	08/26/13 18:09	1		54	61	67	80	91	98
9M52327.D	AC74177-004	Soil	08/26/13 18:32	1		53	62	67	81	91	96
9M52328.D	AC74177-006	Soil	08/26/13 18:55	1		47	54	60	72	82	84
10M39567.D	SMB25990(M	Soil	08/26/13 18:16	1		53	56	59	63	74	87
10M39569.D	AC74093-003	Soil	08/26/13 19:01	1		69	71	74	79	82	82
10M39570.D	AC74093-003(	Soil	08/26/13 19:23	1		59	64	65	76	82	80
10M39571.D	AC74093-003(	Soil	08/26/13 19:46	1		60	64	68	76	78	80

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8270C

Soil Limits

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	43-128
S2=Phenol-d5	100	49-129
S3=Nitrobenzene-d5	50	52-129
S4=2-Fluorobiphenyl	50	58-125
S5=2,4,6-Tribromophenol	100	54-145
S6=Terphenyl-d14	50	58-148

Form3
Recovery Data
QC Batch: SMB25990

	Data File	Sample ID:	Analysis Date
Spike or Dup:	10M39567.D	SMB25990(MS)	8/26/2013 6:16:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8270 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Phenol	1	52.8057	0	100	53	20	130
2-Chlorophenol	1	56.7797	0	100	57	50	130
1,4-Dichlorobenzene	1	26.1369	0	50	52	50	130
2-Methylphenol	1	57.5201	0	100	58	50	130
N-Nitroso-di-n-propylamine	1	29.8642	0	50	60	20	130
2,4-Dimethylphenol	1	57.6334	0	100	58	50	130
1,2,4-Trichlorobenzene	1	28.5499	0	50	57	50	130
Naphthalene	1	27.8099	0	50	56	50	130
4-Chloro-3-methylphenol	1	64.1854	0	100	64	50	130
Acenaphthene	1	30.9347	0	50	62	50	130
2,4-Dinitrotoluene	1	30.5552	0	50	61	50	130
4-Nitrophenol	1	57.8888	0	100	58	20	130
Fluorene	1	32.4674	0	50	65	50	130
Pentachlorophenol	1	51.3138	0	100	51	40	130
Pyrene	1	40.9673	0	50	82	50	130
Butylbenzylphthalate	1	43.164	0	50	86	50	130

	Data File	Sample ID:	Analysis Date
Spike or Dup:	10M39570.D	AC74093-003(MS)	8/26/2013 7:23:00 PM
Non Spike(If applicable):	10M39569.D	AC74093-003	8/26/2013 7:01:00 PM
Inst Blank(If applicable):			

Method: 8270 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Phenol	1	56.1195	0	100	56	20	130
2-Chlorophenol	1	59.4892	0	100	59	50	130
1,4-Dichlorobenzene	1	26.9642	0	50	54	50	130
2-Methylphenol	1	61.8382	0	100	62	50	130
N-Nitroso-di-n-propylamine	1	32.0683	0	50	64	20	130
2,4-Dimethylphenol	1	68.4049	0	100	68	50	130
1,2,4-Trichlorobenzene	1	31.2406	0	50	62	50	130
Naphthalene	1	29.6364	0	50	59	50	130
4-Chloro-3-methylphenol	1	64.8852	0	100	65	50	130
Acenaphthene	1	34.7553	0	50	70	50	130
2,4-Dinitrotoluene	1	31.3386	0	50	63	50	130
4-Nitrophenol	1	66.9223	0	100	67	20	130
Fluorene	1	33.8427	2.8293	50	62	50	130
Pentachlorophenol	1	52.1703	0	100	52	40	130
Pyrene	1	44.4322	10.5217	50	68	50	130
Butylbenzylphthalate	1	37.3167	0	50	75	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB25990

	Data File	Sample ID:	Analysis Date
Spike or Dup:	10M39571.D	AC74093-003(MSD)	8/26/2013 7:46:00 PM
Non Spike(If applicable):	10M39569.D	AC74093-003	8/26/2013 7:01:00 PM
Inst Blank(If applicable):			

Method: 8270 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Phenol	1	57.1958	0	100	57	20	130
2-Chlorophenol	1	61.4225	0	100	61	50	130
1,4-Dichlorobenzene	1	27.2558	0	50	55	50	130
2-Methylphenol	1	62.7256	0	100	63	50	130
N-Nitroso-di-n-propylamine	1	31.7196	0	50	63	20	130
2,4-Dimethylphenol	1	71.0158	0	100	71	50	130
1,2,4-Trichlorobenzene	1	31.2917	0	50	63	50	130
Naphthalene	1	30.8006	0	50	62	50	130
4-Chloro-3-methylphenol	1	66.1476	0	100	66	50	130
Acenaphthene	1	36.8472	0	50	74	50	130
2,4-Dinitrotoluene	1	34.3887	0	50	69	50	130
4-Nitrophenol	1	69.7704	0	100	70	20	130
Fluorene	1	36.6187	2.8293	50	68	50	130
Pentachlorophenol	1	51.6326	0	100	52	40	130
Pyrene	1	45.5462	10.5217	50	70	50	130
Butylbenzylphthalate	1	38.6512	0	50	77	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA

QC Batch: SMB25990

	Data File	Sample ID:	Analysis Date
Spike or Dup:	10M39571.D	AC74093-003(MSD)	8/26/2013 7:46:00 PM
Duplicate(If applicable):	10M39570.D	AC74093-003(MS)	8/26/2013 7:23:00 PM
Inst Blank(If applicable):			

Method: 8270 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Phenol	1	57.1958	56.1195	1.9	40
2-Chlorophenol	1	61.4225	59.4892	3.2	40
1,4-Dichlorobenzene	1	27.2558	26.9642	1.1	40
2-Methylphenol	1	62.7256	61.8382	1.4	40
N-Nitroso-di-n-propylamine	1	31.7196	32.0683	1.1	40
2,4-Dimethylphenol	1	71.0158	68.4049	3.7	40
1,2,4-Trichlorobenzene	1	31.2917	31.2406	0.16	40
Naphthalene	1	30.8006	29.6364	3.9	40
4-Chloro-3-methylphenol	1	66.1476	64.8852	1.9	40
Acenaphthene	1	36.8472	34.7553	5.8	40
2,4-Dinitrotoluene	1	34.3887	31.3386	9.3	40
4-Nitrophenol	1	69.7704	66.9223	4.2	40
Fluorene	1	36.6187	33.8427	7.9	40
Pentachlorophenol	1	51.6326	52.1703	1	40
Pyrene	1	45.5462	44.4322	2.5	40
Butylbenzylphthalate	1	38.6512	37.3167	3.5	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: SMB25990
Blank Data File: 10M39568.D
Matrix: Soil

Blank Analysis Date: 08/26/13 18:38
Blank Extraction Date: 08/26/13
(If Applicable)
Method: EPA 8270C

Sample Number	Data File	Analysis Date
AC74093-003(MSD	10M39571.D	08/26/13 19:46
AC74093-003(MS)	10M39570.D	08/26/13 19:23
AC74093-003	10M39569.D	08/26/13 19:01
SMB25990(MS)	10M39567.D	08/26/13 18:16

FORM 4
Blank Summary

Blank Number: SMB25990
Blank Data File: 9M52340.D
Matrix: Soil

Blank Analysis Date: 08/27/13 09:56
Blank Extraction Date: 08/26/13
(If Applicable)
Method: EPA 8270C

Sample Number	Data File	Analysis Date
AC74177-002	9M52326.D	08/26/13 18:09
AC74177-004	9M52327.D	08/26/13 18:32
AC74177-006	9M52328.D	08/26/13 18:55

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 10

Data File: 10M39295.D
Analysis Date: 08/14/13 07:55
Method: EPA 8270C

Tune Scan/Time Range: Average of 10.105 to 10.121 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	31.6	23466	PASS
68	69	0.00	2	0.9	282	PASS
69	198	0.00	100	40.0	29772	PASS
70	69	0.00	2	1.5	440	PASS
127	198	40	60	40.4	30024	PASS
197	198	0.00	1	0.6	459	PASS
198	198	100	100	100.0	74360	PASS
199	198	5	9	7.0	5236	PASS
275	198	10	30	28.4	21127	PASS
365	198	1	100	4.1	3043	PASS
441	443	0.01	100	72.2	7679	PASS
442	198	40	100	70.0	52072	PASS
443	442	17	23	20.4	10634	PASS

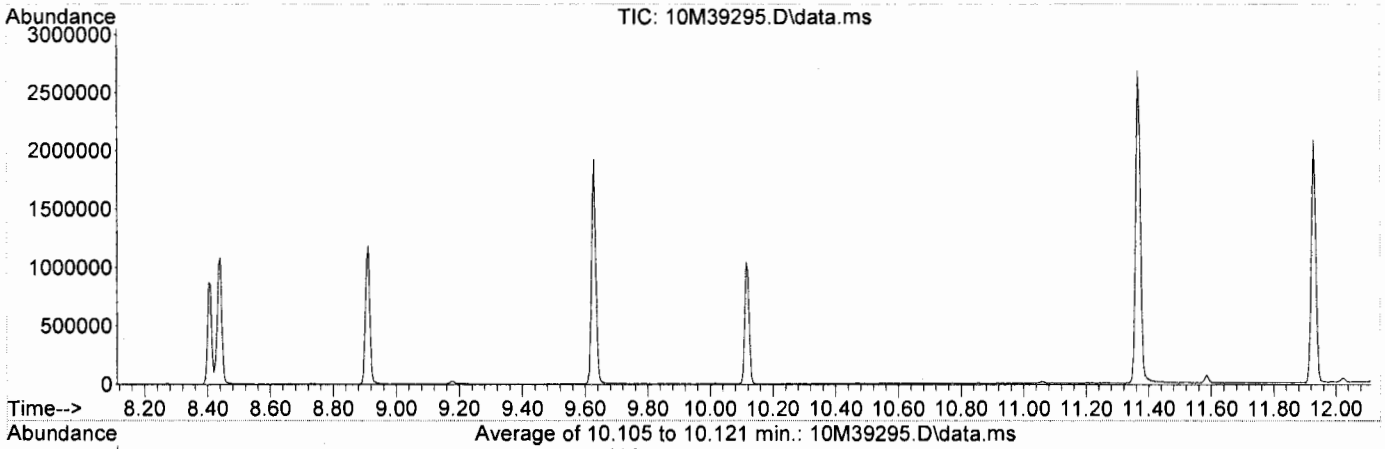
Data File	Sample Number	Analysis Date:
10M39296.D	CAL BNA@50PPM	08/14/13 08:30
10M39297.D	CAL BNA@10PPM	08/14/13 09:13
10M39298.D	CAL BNA@2PPM	08/14/13 09:36
10M39299.D	CAL BNA@.5PPM	08/14/13 09:58
10M39300.D	CAL BNA@20PPM	08/14/13 10:20
10M39301.D	CAL BNA@196PP	08/14/13 10:42
10M39302.D	CAL BNA@160PP	08/14/13 11:04
10M39303.D	CAL BNA@120PP	08/14/13 11:27
10M39304.D	CAL BNA@80PPM	08/14/13 11:49
10M39305.D	CAL BNA@50PPM	08/14/13 12:11
10M39306.D	ICV BNA@50PPM	08/14/13 12:33

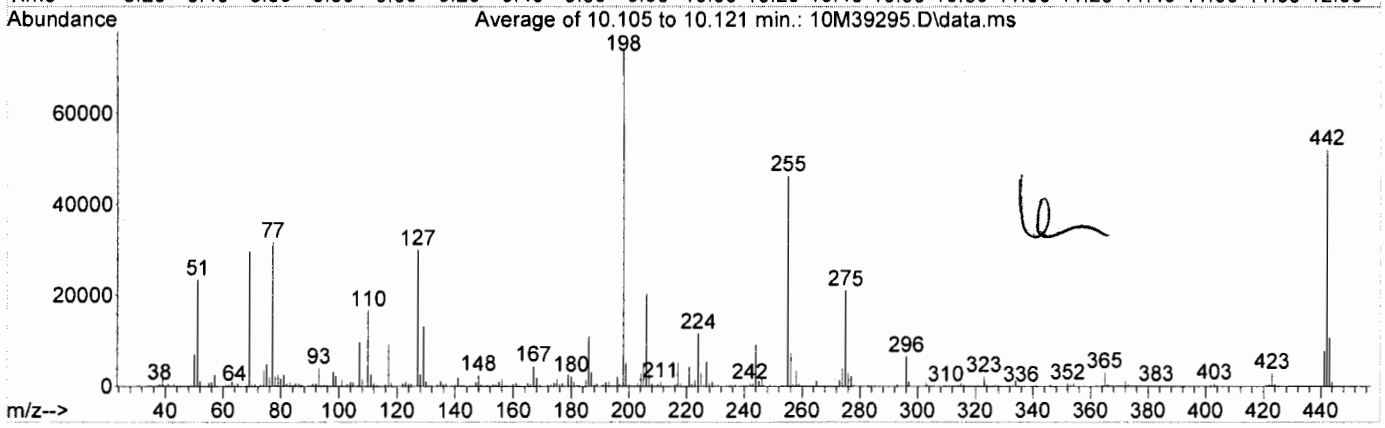
3082313 0168

Data Path : G:\GcMsData\2013\GCMS_10\Data\08-14-13\
Data File : 10M39295.D
Acq On : 14 Aug 2013 7:55
Operator : AHD/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2013\GCMS_10\MethodQt\10M_0812.M
Title : @GCMS_10,mg,625,8270
Last Update : Mon Aug 12 14:46:55 2013





Spectrum Information: Average of 10.105 to 10.121 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	31.6	23466	PASS
68	69	0.00	2	0.9	282	PASS
69	198	0.00	100	40.0	29772	PASS
70	69	0.00	2	1.5	440	PASS
127	198	40	60	40.4	30024	PASS
197	198	0.00	1	0.6	459	PASS
198	198	100	100	100.0	74360	PASS
199	198	5	9	7.0	5236	PASS
275	198	10	30	28.4	21127	PASS
365	198	1	100	4.1	3043	PASS
441	443	0.01	100	72.2	7679	PASS
442	198	40	100	70.0	52072	PASS
443	442	17	23	20.4	10634	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 9

Data File: 9M52103.D
Analysis Date: 08/16/13 09:14
Method: EPA 8270C

Tune Scan/Time Range: Scan 1439

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	44.1	42464	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	60.0	57776	PASS
70	69	0.00	2	0.7	412	PASS
127	198	40	60	58.1	55904	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	96216	PASS
199	198	5	9	7.3	7020	PASS
275	198	10	30	28.8	27728	PASS
365	198	1	100	3.5	3342	PASS
441	443	0.01	100	72.5	9632	PASS
442	198	40	100	69.4	66800	PASS
443	442	17	23	19.9	13288	PASS

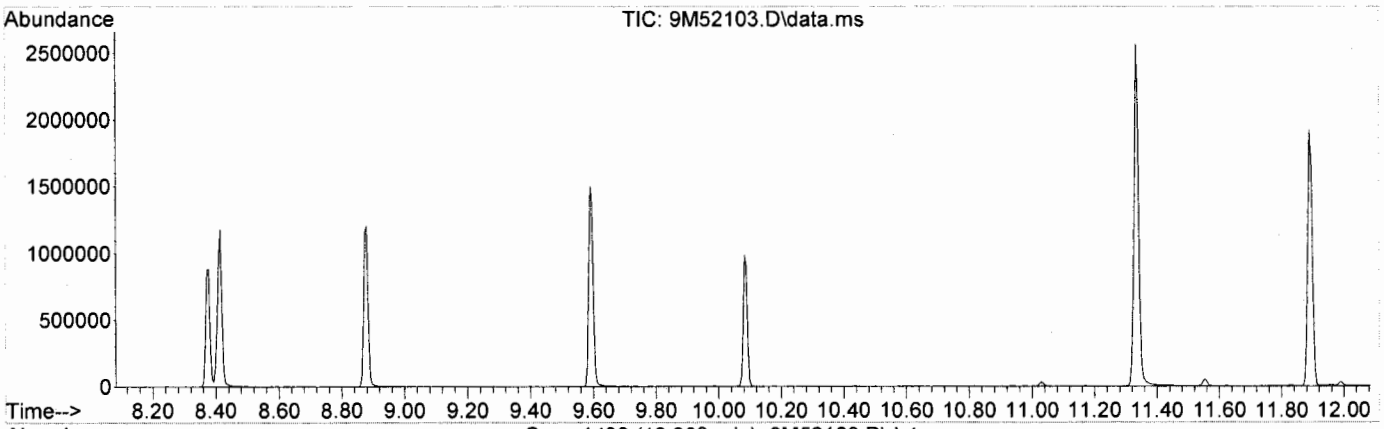
Data File	Sample Number	Analysis Date:
9M52104.D	CAL BNA@50PPM	08/16/13 09:39
9M52105.D	CAL BNA@10PPM	08/16/13 10:30
9M52106.D	CAL BNA@20PPM	08/16/13 10:53
9M52107.D	CAL BNA@2PPM	08/16/13 11:16
9M52108.D	CAL BNA@.5PPM	08/16/13 11:39
9M52109.D	CAL BNA@196PP	08/16/13 12:01
9M52110.D	CAL BNA@160PP	08/16/13 12:24
9M52111.D	CAL BNA@50PPM	08/16/13 12:47
9M52112.D	CAL BNA@120PP	08/16/13 13:10
9M52113.D	CAL BNA@80PPM	08/16/13 13:32
9M52114.D	ICV BNA@50PPM	08/16/13 13:59

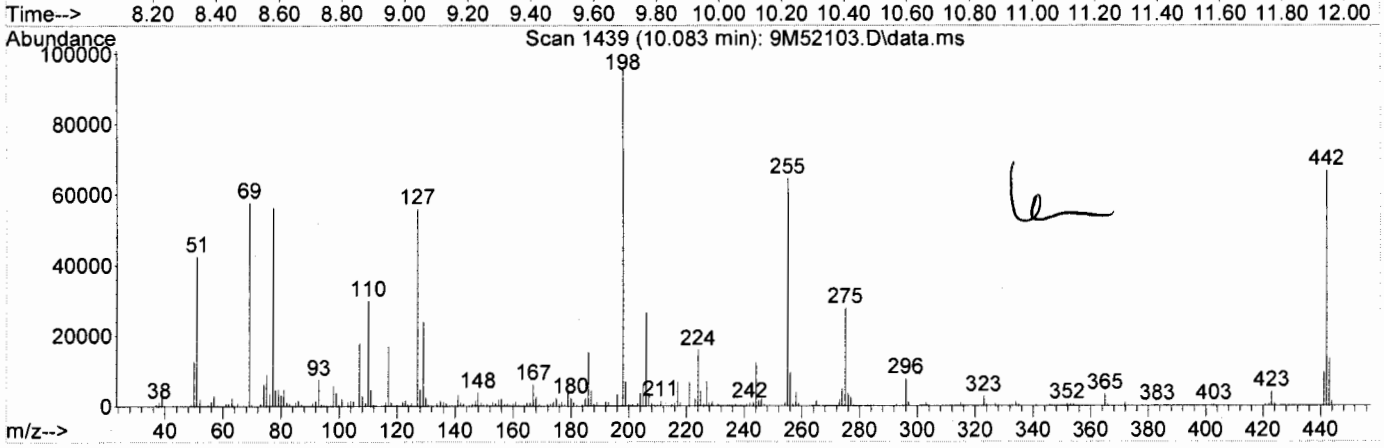
3082313 0170

Data Path : G:\GcMsData\2013\GCMS_9\Data\08-16-13\
Data File : 9M52103.D
Acq On : 16 Aug 2013 9:14
Operator : AHD/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2013\GCMS_9\METHODQT\9M_0812.M
Title : @GCMS_9,mg,625,8270
Last Update : Mon Aug 12 15:29:37 2013





Spectrum Information: Scan 1439

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.1	42464	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	60.0	57776	PASS
70	69	0.00	2	0.7	412	PASS
127	198	40	60	58.1	55904	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	96216	PASS
199	198	5	9	7.3	7020	PASS
275	198	10	30	28.8	27728	PASS
365	198	1	100	3.5	3342	PASS
441	443	0.01	100	72.5	9632	PASS
442	198	40	100	69.4	66800	PASS
443	442	17	23	19.9	13288	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 10M39543.D
Instrument: GCMS 10 **Analysis Date:** 08/26/13 08:55
Method: EPA 8270C
Tune Scan/Time Range: Average of 10.094 to 10.100 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	39.2	25456	PASS
68	69	0.00	2	1.8	555	PASS
69	198	0.00	100	46.8	30384	PASS
70	69	0.00	2	1.4	426	PASS
127	198	40	60	46.7	30328	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	64960	PASS
199	198	5	9	6.8	4436	PASS
275	198	10	30	24.5	15948	PASS
365	198	1	100	2.8	1791	PASS
441	443	0.01	100	81.3	5323	PASS
442	198	40	100	48.8	31674	PASS
443	442	17	23	20.7	6544	PASS

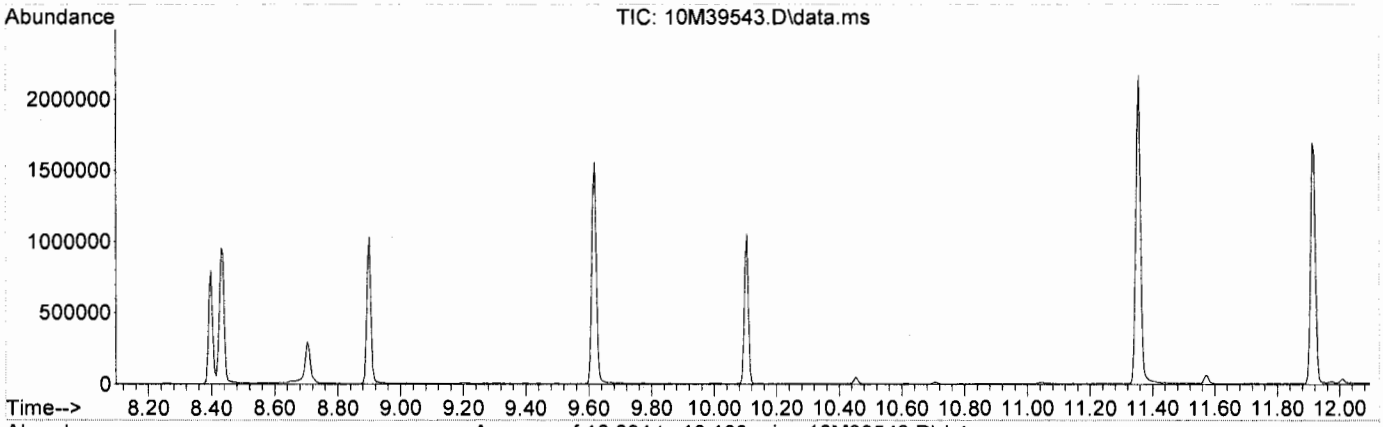
Data File	Sample Number	Analysis Date:
10M39544.D	CAL BNA@50PPM	08/26/13 09:27
10M39545.D	AC73985-012	08/26/13 09:57
10M39546.D	AC74144-001	08/26/13 10:19
10M39547.D	AC74032-002(3X)	08/26/13 10:42
10M39548.D	AC74109-002(50X)	08/26/13 11:04
10M39549.D	AC73985-012(5X)	08/26/13 11:26
10M39550.D	AC74109-005(50X)	08/26/13 11:52
10M39551.D	AC74109-003(50X)	08/26/13 12:15
10M39552.D	AC74109-004(50X)	08/26/13 12:37
10M39553.D	AC74109-006(50X)	08/26/13 12:59
10M39554.D	AC74109-009(20X)	08/26/13 13:22
10M39555.D	AC74143-001(30X)	08/26/13 13:44
10M39556.D	AC74085-001(200X	08/26/13 14:06
10M39557.D	AC74109-001(50X)	08/26/13 14:29
10M39558.D	AC74109-007(50X)	08/26/13 14:51
10M39559.D	AC74085-002(250X	08/26/13 15:13
10M39560.D	AC74085-003(150X	08/26/13 15:36
10M39561.D	WMB25993	08/26/13 16:01
10M39562.D	WMB25994	08/26/13 16:24
10M39563.D	AC74140-006	08/26/13 16:46
10M39564.D	AC74123-006	08/26/13 17:09
10M39565.D	AC74123-007	08/26/13 17:31
10M39566.D	AC74123-008	08/26/13 17:53
10M39567.D	SMB25990(MS)	08/26/13 18:16
10M39568.D	SMB25990	08/26/13 18:38
10M39569.D	AC74093-003	08/26/13 19:01
10M39570.D	AC74093-003(MS)	08/26/13 19:23
10M39571.D	AC74093-003(MSD	08/26/13 19:46
10M39572.D	AC74064-001	08/26/13 20:08
10M39573.D	AC74101-001	08/26/13 20:31

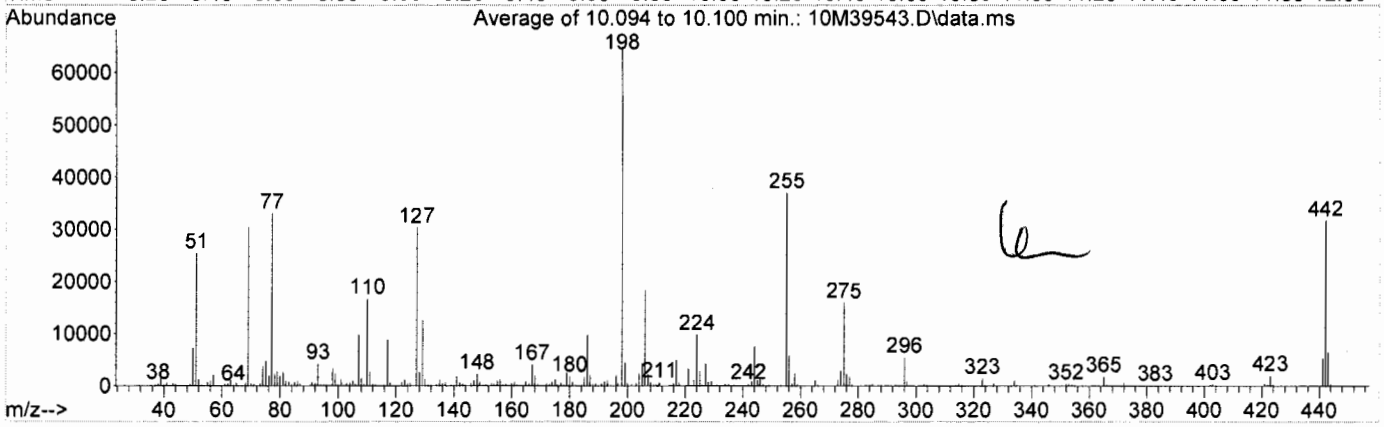
3082313 0172

Data Path : G:\GcMsData\2013\GCMS_10\Data\08-26-13\
Data File : 10M39543.D
Acq On : 26 Aug 2013 8:55
Operator : AHD/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2013\GCMS_10\MethodQt\10M_0814.M
Title : @GCMS_10,mg,625,8270
Last Update : Wed Aug 14 12:27:58 2013





Spectrum Information: Average of 10.094 to 10.100 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	39.2	25456	PASS
68	69	0.00	2	1.8	555	PASS
69	198	0.00	100	46.8	30384	PASS
70	69	0.00	2	1.4	426	PASS
127	198	40	60	46.7	30328	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	64960	PASS
199	198	5	9	6.8	4436	PASS
275	198	10	30	24.5	15948	PASS
365	198	1	100	2.8	1791	PASS
441	443	0.01	100	81.3	5323	PASS
442	198	40	100	48.8	31674	PASS
443	442	17	23	20.7	6544	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 9M52305.D
Instrument: GCMS 9 **Analysis Date:** 08/26/13 10:09
Method: EPA 8270C
Tune Scan/Time Range: Average of 10.003 to 10.014 min

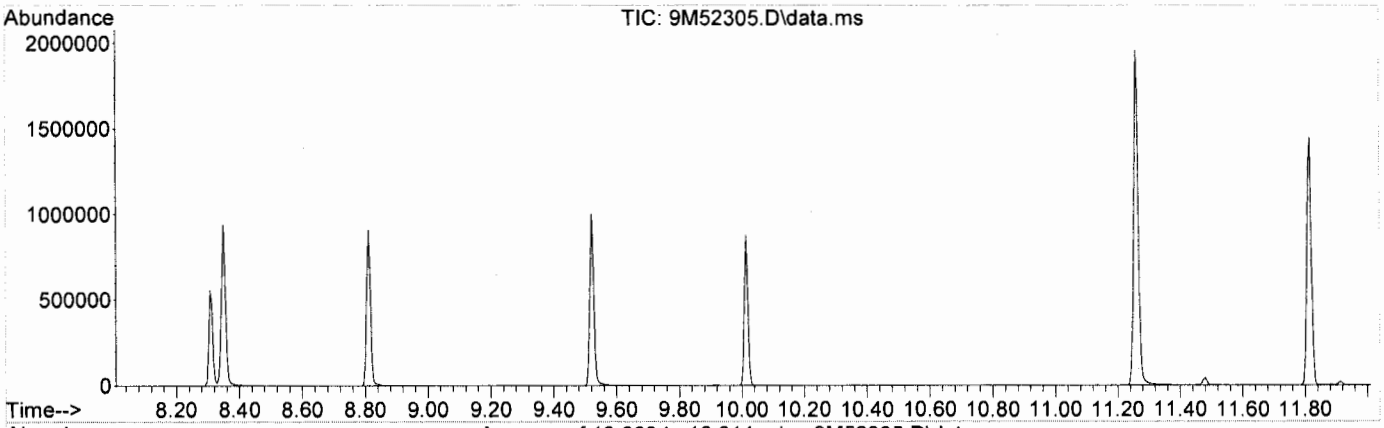
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	49.4	24059	PASS
68	69	0.00	2	0.3	98	PASS
69	198	0.00	100	63.2	30760	PASS
70	69	0.00	2	0.3	78	PASS
127	198	40	60	59.6	28985	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	48660	PASS
199	198	5	9	7.0	3415	PASS
275	198	10	30	29.9	14569	PASS
365	198	1	100	4.0	1932	PASS
441	443	0.01	100	77.0	5259	PASS
442	198	40	100	69.7	33915	PASS
443	442	17	23	20.1	6826	PASS

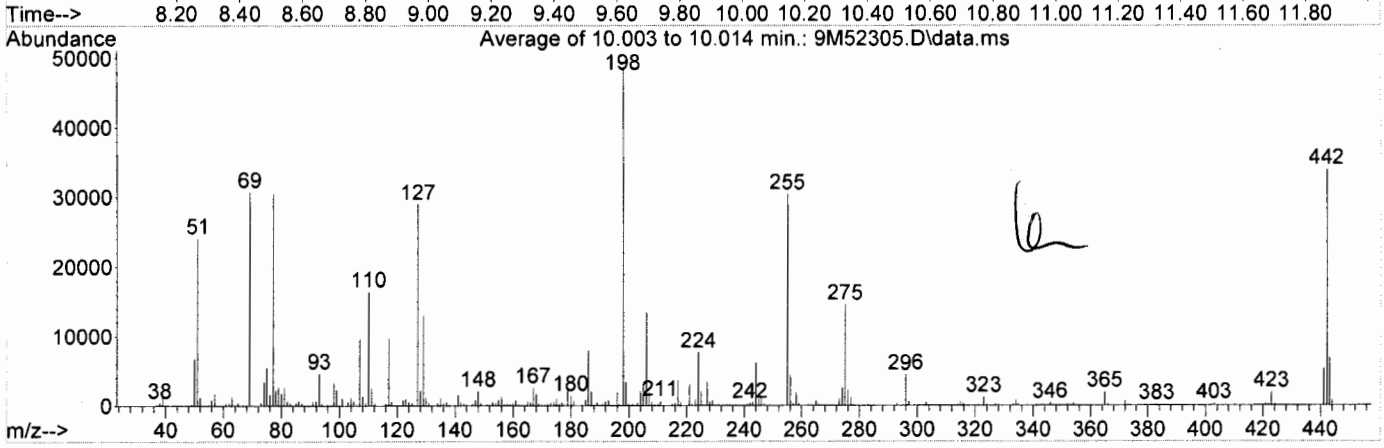
Data File	Sample Number	Analysis Date:
9M52306.D	CAL BNA@50PPM	08/26/13 10:31
9M52307.D	SMB25984	08/26/13 10:53
9M52308.D	AC74143-001(10X)	08/26/13 11:16
9M52309.D	AC74085-001(50X)	08/26/13 11:39
9M52310.D	AC73985-002(20X)	08/26/13 12:01
9M52311.D	AC73985-005(20X)	08/26/13 12:24
9M52312.D	AC73985-006(20X)	08/26/13 12:47
9M52313.D	AC73985-009(20X)	08/26/13 13:10
9M52314.D	AC73985-011(20X)	08/26/13 13:33
9M52315.D	AC73985-002	08/26/13 13:56
9M52316.D	AC74085-002(50X)	08/26/13 14:19
9M52317.D	AC74085-003(50X)	08/26/13 14:42
9M52318.D	AC74085-004(10X)	08/26/13 15:05
9M52319.D	AC73985-005	08/26/13 15:27
9M52320.D	AC73985-009	08/26/13 15:50
9M52321.D	AC73985-011(3X)	08/26/13 16:13
9M52322.D	SMB25990	08/26/13 16:36
9M52323.D	AC73985-006(3X)	08/26/13 17:00
9M52324.D	AC74109-009(3X)	08/26/13 17:23
9M52325.D	AC74085-004(3X)	08/26/13 17:46
9M52326.D	AC74177-002	08/26/13 18:09
9M52327.D	AC74177-004	08/26/13 18:32
9M52328.D	AC74177-006	08/26/13 18:55
9M52329.D	AC74101-016	08/26/13 19:18
9M52330.D	AC74101-028	08/26/13 19:41
9M52331.D	AC74101-010	08/26/13 20:04
9M52332.D	AC74144-001(R)	08/26/13 20:27
9M52333.D	AC74085-008(50X)	08/26/13 20:50
9M52334.D	AC74101-021(10X)	08/26/13 21:13
9M52335.D	AC74101-033(10X)	08/26/13 21:36
9M52336.D	AC74101-015(10X)	08/26/13 21:59

Data Path : G:\GcMsData\2013\GCMS_9\Data\08-26-13\
Data File : 9M52305.D
Acq On : 26 Aug 2013 10:09
Operator : AHD/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2013\GCMS_9\METHODQT\9M_0816.M
Title : @GCMS_9,mg,625,8270
Last Update : Fri Aug 16 13:53:06 2013





Spectrum Information: Average of 10.003 to 10.014 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	49.4	24059	PASS
68	69	0.00	2	0.3	98	PASS
69	198	0.00	100	63.2	30760	PASS
70	69	0.00	2	0.3	78	PASS
127	198	40	60	59.6	28985	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	48660	PASS
199	198	5	9	7.0	3415	PASS
275	198	10	30	29.9	14569	PASS
365	198	1	100	4.0	1932	PASS
441	443	0.01	100	77.0	5259	PASS
442	198	40	100	69.7	33915	PASS
443	442	17	23	20.1	6826	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 9M52337.D
Instrument: GCMS 9 **Analysis Date:** 08/27/13 08:36
Method: EPA 8270C
Tune Scan/Time Range: Average of 9.998 to 10.003 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	42.6	29820	PASS
68	69	0.00	2	1.3	542	PASS
69	198	0.00	100	58.8	41180	PASS
70	69	0.00	2	0.6	244	PASS
127	198	40	60	57.0	39884	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	70000	PASS
199	198	5	9	7.2	5035	PASS
275	198	10	30	29.6	20712	PASS
365	198	1	100	3.6	2523	PASS
441	443	0.01	100	77.0	7989	PASS
442	198	40	100	73.1	51140	PASS
443	442	17	23	20.3	10375	PASS

Data File	Sample Number	Analysis Date:
9M52338.D	CAL BNA@50PPM	08/27/13 09:10
9M52339.D	AC74101-004	08/27/13 09:33
9M52340.D	SMB25990	08/27/13 09:56
9M52341.D	AC74101-007	08/27/13 10:19
9M52342.D	AC74101-022	08/27/13 10:42
9M52343.D	AC74101-027	08/27/13 11:04
9M52344.D	AC74101-034	08/27/13 11:27
9M52345.D	AC74101-039	08/27/13 11:50
9M52346.D	AC74101-010(3X)	08/27/13 12:13
9M52347.D	AC74157-003	08/27/13 12:36
9M52348.D	SMB26001	08/27/13 12:59
9M52349.D	AC74157-005	08/27/13 13:22
9M52350.D	AC74157-008	08/27/13 13:45
9M52351.D	AC74157-004	08/27/13 14:07
9M52352.D	AC74157-002	08/27/13 14:30

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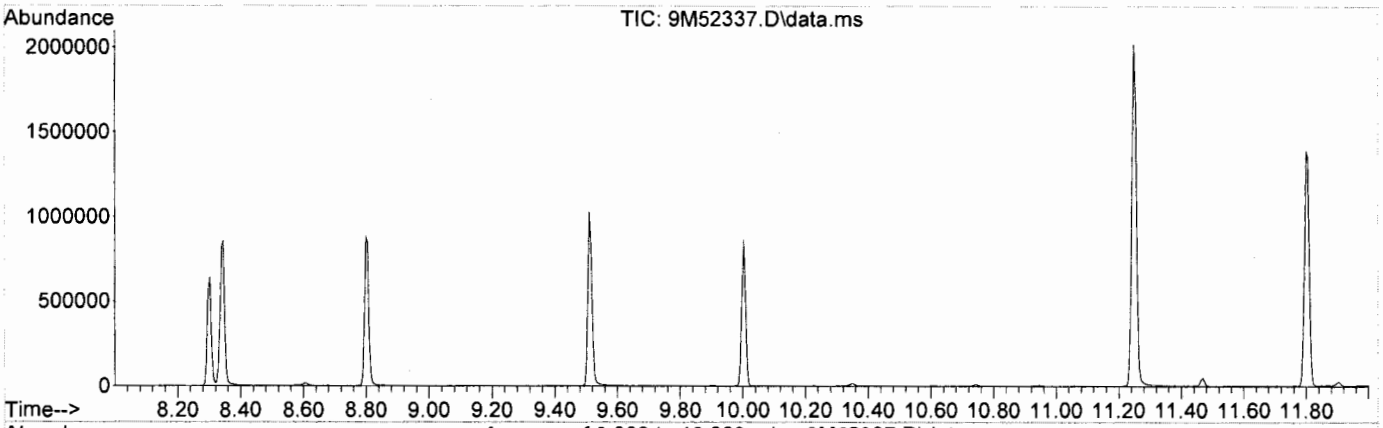
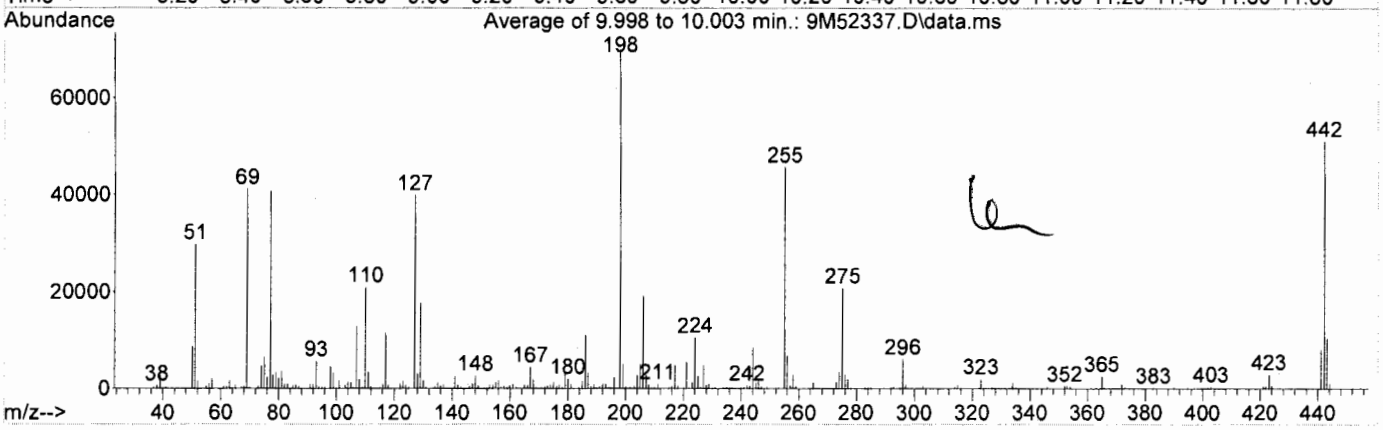
Data Path : G:\GcMsData\2013\GCMS_9\Data\08-27-13\
Data File : 9M52337.D
Acq On : 27 Aug 2013 8:36
Operator : AHD/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2013\GCMS_9\METHODQT\9M_0816.M
Title : @GCMS_9,mg,625,8270
Last Update : Fri Aug 16 13:53:06 2013





Spectrum Information: Average of 9.998 to 10.003 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	42.6	29820	PASS
68	69	0.00	2	1.3	542	PASS
69	198	0.00	100	58.8	41180	PASS
70	69	0.00	2	0.6	244	PASS
127	198	40	60	57.0	39884	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	70000	PASS
199	198	5	9	7.2	5035	PASS
275	198	10	30	29.6	20712	PASS
365	198	1	100	3.6	2523	PASS
441	443	0.01	100	77.0	7989	PASS
442	198	40	100	73.1	51140	PASS
443	442	17	23	20.3	10375	PASS

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Method: EPA 8270C

Form 6
Initial Calibration

Instrument: GCMS_10

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	10M39296.	CAL BNA@50PPM	08/14/13 08:30	2	10M39298.	CAL BNA@2PPM	08/14/13 09:36
3	10M39297.	CAL BNA@10PPM	08/14/13 09:13	4	10M39300.	CAL BNA@20PPM	08/14/13 10:20
5	10M39304.	CAL BNA@80PPM	08/14/13 11:49	6	10M39303.	CAL BNA@120PPM	08/14/13 11:27
7	10M39302.	CAL BNA@160PPM	08/14/13 11:04	8	10M39301.	CAL BNA@196PPM	08/14/13 10:42
9	10M39299.	CAL BNA@.5PPM	08/14/13 09:58				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Pyridine	1	0	Avg	1.2402	1.1316	1.3162	1.1764	1.2927	1.2760	1.2689	1.3118	-----	1.25	3.24	0.999	1.00	5.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitrosodimethylamin	1	0	Avg	0.7353	0.6776	0.7384	0.7143	0.7755	0.7671	0.7702	0.7943	-----	0.747	3.17	0.999	1.00	5.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorophenol	1	0	Avg	1.1697	0.9851	1.1631	1.1363	1.2334	1.2179	1.2471	1.2739	-----	1.18	4.73	0.999	1.00	7.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzaldehyde	1	0	Qua	0.6880	0.8213	0.8792	0.8256	0.6146	0.4495	0.3319	0.2370	-----	0.606	5.55	0.716	0.996	40		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Aniline	1	0	Avg	1.7622	1.3999	1.7824	1.8223	1.7789	1.7065	1.6933	1.6331	1.3938	1.66	5.64	0.999	1.00	9.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.4278	0.3942	0.4515	0.4376	0.4372	0.4260	0.4265	0.4291	-----	0.429	5.69	1.00	1.00	3.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethyl)ether	1	0	Avg	1.1066	1.1614	1.2090	1.1922	1.1487	1.1099	1.1047	1.1283	1.2119	1.15	5.70	1.00	1.00	3.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	1.4992	1.4347	1.5418	1.5105	1.5690	1.5672	1.5992	1.6134	-----	1.54	5.60	1.00	1.00	3.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenol	1	0	Avg	1.6687	1.5502	1.7218	1.6020	1.6820	1.6624	1.6846	1.6921	-----	1.66	5.61	1.00	1.00	3.3	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Chlorophenol	1	0	Avg	1.2647	1.2614	1.3613	1.2837	1.2952	1.2598	1.2766	1.3002	-----	1.29	5.74	1.00	1.00	2.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Decane	1	0	Avg	0.9568	1.1190	1.0744	0.9662	0.9894	0.9673	0.9443	0.9852	-----	1.00	5.78	0.999	0.999	6.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1.3-Dichlorobenzene	1	0	Avg	1.4715	1.5238	1.6331	1.5440	1.5393	1.4815	1.4744	1.5079	-----	1.52	5.87	1.00	1.00	3.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1.4-Dichlorobenzene	1	0	Avg	1.4968	1.5576	1.5881	1.5447	1.5267	1.4729	1.4755	1.5024	-----	1.52	5.94	1.00	1.00	2.7	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1.2-Dichlorobenzene	1	0	Avg	1.4174	1.4491	1.5794	1.4614	1.4526	1.3802	1.3916	1.4165	-----	1.44	6.06	1.00	1.00	4.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzyl alcohol	1	0	Avg	0.8528	0.7624	0.8842	0.8502	0.8687	0.8637	0.8728	0.8916	-----	0.856	6.03	1.00	1.00	4.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-chloroisopropyl)e	1	0	Avg	1.0086	1.0388	1.0925	1.0372	1.0483	1.0091	1.0081	1.0151	-----	1.03	6.14	1.00	1.00	2.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylphenol	1	0	Avg	1.1761	1.1446	1.2014	1.1827	1.1789	1.1752	1.2072	1.2044	1.1219	1.18	6.11	1.00	1.00	2.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	1.8975	1.8883	2.0592	1.9316	1.9128	1.8252	1.8407	1.8306	-----	1.90	6.25	1.00	1.00	4.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachloroethane	1	0	Avg	0.5382	0.5284	0.5853	0.5639	0.5576	0.5397	0.5450	0.5550	-----	0.552	6.33	1.00	1.00	3.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitroso-di-n-propylar	1	0	Avg	0.9665	0.9556	1.0405	0.9925	0.9624	0.9317	0.9443	0.9424	0.9085	0.961	6.25	1.00	1.00	4.0	**(0.050)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3&4-Methylphenol	1	0	Avg	1.2756	1.2162	1.2746	1.2433	1.2808	1.2370	1.2455	1.2619	1.3151	1.26	6.24	1.00	1.00	2.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Avg	0.1747	0.1699	0.1716	0.1682	0.1805	0.1761	0.1767	0.1820	-----	0.175	6.37	1.00	1.00	2.8		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0	Avg	0.3898	0.4044	0.4274	0.3826	0.3930	0.3834	0.3791	0.3939	-----	0.394	6.39	0.999	0.999	4.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Isophorone	1	0	Avg	0.6761	0.6502	0.7023	0.6677	0.6825	0.6832	0.6795	0.6998	-----	0.680	6.57	1.00	1.00	2.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitrophenol	1	0	Avg	0.2163	0.1664	0.2168	0.1986	0.2236	0.2175	0.2168	0.2254	-----	0.210	6.63	0.999	1.00	9.2	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2.4-Dimethylphenol	1	0	Avg	0.3949	0.3816	0.3987	0.3887	0.3845	0.3811	0.3786	0.3922	0.3945	0.388	6.66	0.999	1.00	1.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.2707	-----	0.1437	0.1441	0.3019	0.3217	0.3352	0.3529	-----	0.267	6.72	0.998	1.00	33		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethoxy)mel	1	0	Avg	0.3986	0.3904	0.4326	0.3967	0.3956	0.3940	0.3917	0.4041	-----	0.401	6.73	1.00	1.00	3.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2.4-Dichlorophenol	1	0	Avg	0.3504	0.3199	0.3717	0.3456	0.3532	0.3469	0.3452	0.3543	0.3249	0.346	6.81	1.00	1.00	4.5	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1.2.4-Trichlorobenzene	1	0	Avg	0.4021	0.4161	0.4373	0.4000	0.4057	0.3904	0.3824	0.3967	-----	0.404	6.88	0.999	0.999	4.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Naphthalene	1	0	Avg	1.0303	1.0861	1.1302	1.0319	1.0270	1.0088	0.9958	1.0429	1.1903	1.06	6.94	0.999	0.999	6.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Qua	0.4293	0.3311	0.4259	0.4375	0.4022	0.3571	0.3195	0.2986	0.3138	0.368	6.98	0.980	0.999	15		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.2466	0.2649	0.2558	0.2553	0.2506	0.2472	0.2399	0.2521	-----	0.252	7.03	0.999	0.999	3.0	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Caprolactam	1	0	Avg	0.1323	0.1042	0.1362	0.1250	0.1350	0.1460	0.1455	0.1515	-----	0.134	7.26	0.998	1.00	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chloro-3-methylphen	1	0	Avg	0.3587	0.3243	0.3631	0.3348	0.3538	0.3499	0.3467	0.3598	-----	0.349	7.34	0.999	0.999	3.8	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylnaphthalene	1	0	Avg	0.8158	0.7927	0.8712	0.8063	0.8058	0.7777	0.7688	0.7942	-----	0.804	7.48	0.999	0.999	3.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Methylnaphthalenes (T	1	0	Avg	1.5542	1.5540	1.6603	1.5461	1.5340	1.4893	1.4696	1.5223	-----	1.54	7.48	0.999	0.999	3.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1.1'-Biphenyl	1	0	Avg	1.1013	1.1016	1.1778	1.0993	1.0718	1.0534	1.0419	1.0771	-----	1.09	7.86	0.999	0.999	3.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1.2.4.5-Tetrachloroben	1	0	Avg	0.6677	0.7514	0.7210	0.7141	0.6604	0.6368	0.6239	0.6366	-----	0.677	7.62	0.999	1.00	6.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorocyclopentac	1	0	Avg	0.3808	0.3016	0.3504	0.3601	0.4007	0.3974	0.3993	0.4098	-----	0.375	7.60	1.00	1.00	9.7	**(0.050)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2.4.6-Trichlorophenol	1	0	Avg	0.4357	0.3968	0.4431	0.4292	0.4416	0.4290	0.4292	0.4384	-----	0.430	7.70	1.00	1.00	3.4	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags

a - failed the spcc criteria — ** - ccc compound*

b - failed the ccc criteria — *** - spcc compound*

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 6.05

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form 6
Initial Calibration

Method: EPA 8270C

Instrument: GCMS_10

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	10M39296.	CAL BNA@50PPM	08/14/13 08:30	2	10M39298.	CAL BNA@2PPM	08/14/13 09:36
3	10M39297.	CAL BNA@10PPM	08/14/13 09:13	4	10M39300.	CAL BNA@20PPM	08/14/13 10:20
5	10M39304.	CAL BNA@80PPM	08/14/13 11:49	6	10M39303.	CAL BNA@120PPM	08/14/13 11:27
7	10M39302.	CAL BNA@160PPM	08/14/13 11:04	8	10M39301.	CAL BNA@196PPM	08/14/13 10:42
9	10M39299.	CAL BNA@.5PPM	08/14/13 09:58				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
2,4,5-Trichlorophenol	1	0	Avg	0.4504	0.4177	0.4266	0.4500	0.4450	0.4363	0.4245	0.4309	-----	0.435	7.74	1.00	1.00	2.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.4510	1.6216	1.5474	1.5256	1.4538	1.4213	1.4004	1.4392	-----	1.48	7.77	0.999	1.00	5.1		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.1112	1.1748	1.2663	1.1921	1.1392	1.0812	1.0638	1.0822	-----	1.14	7.89	0.999	0.999	6.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dimethylnaphthalei	1	0	Avg	0.8876	1.0040	0.9617	0.9492	0.8809	0.8480	0.8208	0.8214	-----	0.897	8.17	0.999	1.00	7.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.8876	1.0040	0.9617	0.9492	0.8809	0.8480	0.8208	0.8214	-----	0.897	8.17	0.999	1.00	7.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.8565	0.8941	0.9017	0.8835	0.8512	0.8197	0.8028	0.8200	-----	0.854	7.95	0.999	1.00	4.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.3955	0.3774	0.4219	0.4104	0.3903	0.3981	0.3869	0.3966	-----	0.397	7.97	1.00	1.00	3.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4345	0.4917	0.4859	0.4568	0.4340	0.4140	0.3985	0.4041	-----	0.440	8.15	0.999	0.999	8.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.7924	1.8411	1.9353	1.8313	1.8030	1.7436	1.7193	1.7681	-----	1.80	8.25	1.00	1.00	3.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.3611	1.4666	1.4694	1.4233	1.3745	1.3376	1.3134	1.3499	-----	1.39	8.10	1.00	1.00	4.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrotoluene	1	0	Avg	0.3161	0.3259	0.3467	0.3254	0.3175	0.2974	0.2877	0.2884	-----	0.313	8.17	0.998	1.00	6.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.1677	1.2242	1.2710	1.2139	1.1709	1.1383	1.1102	1.1551	-----	1.18	8.40	0.999	0.999	4.4	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Avg	0.3256	0.2689	0.3233	0.3405	0.3246	0.2979	0.2853	0.2814	-----	0.306	8.32	0.996	1.00	8.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dinitrophenol	1	0	Qua	0.2201	-----	0.1392	0.1727	0.2250	0.2278	0.2298	0.2386	-----	0.208	8.41	1.00	1.00	18	**(0.050)	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Avg	1.7228	1.8299	1.8490	1.7854	1.7036	1.6596	1.6231	1.6622	2.0476	1.76	8.56	1.00	1.00	7.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dinitrotoluene	1	0	Avg	0.4599	0.3778	0.4398	0.4538	0.4672	0.4583	0.4526	0.4625	-----	0.447	8.53	1.00	1.00	6.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Avg	0.2707	0.1914	0.2547	0.2643	0.2764	0.2680	0.2645	0.2699	-----	0.258	8.44	1.00	1.00	11	**(0.050)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,3,4,6-Tetrachlorophe	1	0	Avg	0.4135	0.3637	0.4225	0.4087	0.4181	0.4064	0.3984	0.4092	-----	0.405	8.66	1.00	1.00	4.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.4269	1.5638	1.5424	1.5020	1.4203	1.3681	1.3393	1.3734	-----	1.44	8.89	0.999	0.999	5.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.7684	0.7812	0.8134	0.7750	0.7582	0.7467	0.7270	0.7529	-----	0.765	8.87	0.999	0.999	3.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.3389	1.3495	1.4182	1.3740	1.3561	1.3233	1.3069	1.3459	-----	1.35	8.75	1.00	1.00	2.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Avg	0.3259	0.3024	0.3395	0.3295	0.3305	0.3154	0.3120	0.3221	-----	0.322	8.89	0.999	0.999	3.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.4706	0.4745	0.4768	0.4724	0.4592	0.4469	0.4416	0.4577	-----	0.463	9.52	0.999	0.999	2.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,6-Dinitro-2-methylphe	1	0	Qua	0.1474	-----	0.1196	0.1273	0.1423	0.1439	0.1437	0.1483	-----	0.139	8.91	1.00	1.00	7.9		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamine	1	0	Avg	0.6111	0.6196	0.6680	0.6243	0.6030	0.5935	0.5834	0.5875	-----	0.611	8.99	1.00	1.00	4.5	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Tribromophenol	1	0	Avg	0.1200	0.0986	0.1200	0.1150	0.1191	0.1156	0.1164	0.1188	-----	0.115	9.12	1.00	1.00	6.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Diphenylhydrazine	1	0	Avg	0.6165	0.6140	0.6696	0.6402	0.6216	0.6005	0.6485	0.6685	-----	0.635	9.03	0.997	0.999	4.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.2373	0.2184	0.2532	0.2335	0.2360	0.2278	0.2279	0.2308	-----	0.233	9.37	1.00	1.00	4.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.2495	0.2532	0.2715	0.2470	0.2400	0.2330	0.2296	0.2352	-----	0.245	9.43	0.999	0.999	5.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.3063	0.2827	0.3268	0.3138	0.3082	0.2999	0.2965	0.3034	-----	0.305	9.69	1.00	1.00	4.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Qua	0.1719	-----	0.1353	0.1482	0.1753	0.1717	0.1735	0.1768	-----	0.165	9.63	1.00	1.00	9.8	*(30)	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0526	1.1289	1.1415	1.0759	1.0411	1.0009	0.9913	1.0122	-----	1.06	9.88	1.00	1.00	5.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.0774	1.1096	1.1682	1.1013	1.0735	1.0311	1.0155	1.0337	-----	1.08	9.93	1.00	1.00	4.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	1.0375	1.0460	1.0379	1.0421	1.0062	0.9872	0.9701	0.9875	-----	1.01	10.10	1.00	1.00	3.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Avg	1.2391	1.0255	1.2016	1.1724	1.1902	1.1532	1.1264	1.1537	0.9914	1.14	10.47	0.999	0.999	7.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0	Avg	1.3426	1.2580	1.4050	1.3231	1.3101	1.2700	1.2439	1.2627	-----	1.30	11.21	1.00	1.00	4.2	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	1.0610	0.9897	1.1247	1.0656	1.0949	1.0624	1.0522	1.1001	-----	1.07	11.48	0.999	0.999	3.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzidine	1	0	Qua	0.4559	0.1882	0.3589	0.4474	0.3962	0.3092	0.2727	-----	-----	0.347	11.37	0.953	0.997	28		50.00	2.00	10.00	20.00	80.00	120.0	160.0		
Terphenyl-d14	1	0	Avg	0.7807	0.7260	0.7969	0.7424	0.7929	0.7812	0.7853	0.8427	0.7279	0.775	11.66	0.998	0.999	4.8		25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	0.25
4,4'-DDE	1	0	Avg	0.2561	0.2361	0.2656	0.2493	0.2613	0.2591	0.2611	0.2724	-----	0.258	11.59	0.999	1.00	4.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.4116	0.3372	0.4085	0.3871	0.4244	0.4145	0.4143	0.4324	-----	0.404	11.99	0.999	0.999	7.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Avg Rsd: 6.05

Flags

a - failed the spcc criteria — ** - ccc compound*

b - failed the ccc criteria — *** - spcc compound*

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

3082313 0178

Form 6
Initial Calibration

Method: EPA 8270C

Instrument: GCMS_10

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	10M39296.	CAL BNA@50PPM	08/14/13 08:30	2	10M39298.	CAL BNA@2PPM	08/14/13 09:36
3	10M39297.	CAL BNA@10PPM	08/14/13 09:13	4	10M39300.	CAL BNA@20PPM	08/14/13 10:20
5	10M39304.	CAL BNA@80PPM	08/14/13 11:49	6	10M39303.	CAL BNA@120PPM	08/14/13 11:27
7	10M39302.	CAL BNA@160PPM	08/14/13 11:04	8	10M39301.	CAL BNA@196PPM	08/14/13 10:42
9	10M39299.	CAL BNA@.5PPM	08/14/13 09:58				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Butylbenzylphthalate	1	0	Avg	0.4281	0.3313	0.4173	0.3889	0.4415	0.4332	0.4360	0.4596	-----	0.417	12.24	0.999	0.999	9.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.3700	0.2867	0.3622	0.3636	0.3803	0.3675	0.3634	0.3827	-----	0.360	12.35	0.999	0.999	8.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Qua	0.3566	0.2673	0.3601	0.3557	0.3392	0.3037	0.2912	0.2978	-----	0.322	12.87	0.996	0.997	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]anthracene	1	0	Avg	1.0519	1.0801	1.1108	1.0375	1.0331	0.9955	0.9826	1.0613	-----	1.04	12.90	0.997	0.998	4.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	0.9314	0.9929	1.0308	0.9450	0.9307	0.8829	0.8865	0.9415	-----	0.943	12.95	0.998	0.998	5.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Avg	0.5496	0.4629	0.5442	0.5141	0.5649	0.5545	0.5591	0.5879	-----	0.542	12.93	0.999	0.999	7.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Qua	1.0794	0.7291	0.9684	0.9226	1.1547	1.1428	1.1311	1.1993	-----	1.04	13.68	0.998	0.999	15	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[b]fluoranthene	1	0	Avg	1.1411	1.0030	1.1699	1.0989	1.1529	1.1538	1.0845	1.1307	-----	1.12	14.12	0.999	0.999	4.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[k]fluoranthene	1	0	Avg	1.1552	1.2050	1.3098	1.1773	1.1767	1.0877	1.0940	1.1808	-----	1.17	14.15	0.996	0.997	5.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]pyrene	1	0	Avg	1.0948	0.9482	1.1784	1.0853	1.1300	1.0818	1.0621	1.1238	-----	1.09	14.49	0.998	0.999	6.2	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyrene	1	0	Avg	1.1670	0.9779	1.1985	1.1200	1.1846	1.1489	1.1175	1.2194	-----	1.14	15.93	0.999	0.999	6.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzo[a,h]anthracene	1	0	Avg	0.9498	0.8361	0.9413	0.9159	0.9789	0.9429	0.9153	0.9960	-----	0.935	15.96	0.997	0.998	5.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[g,h,i]perylene	1	0	Avg	0.9798	0.9481	1.0474	0.9575	1.0162	0.9939	0.9683	1.0359	-----	0.993	16.33	0.999	0.999	3.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the spcc criteria ** - ccc compound*
b - failed the ccc criteria *** - spcc compound*
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 6.05
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form 6
Initial Calibration

Method: EPA 8270C

Instrument: GCMS_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9M52111.	CAL BNA@50PPM	08/16/13 12:47	2	9M52107.	CAL BNA@2PPM	08/16/13 11:16
3	9M52105.	CAL BNA@10PPM	08/16/13 10:30	4	9M52106.	CAL BNA@20PPM	08/16/13 10:53
5	9M52113.	CAL BNA@80PPM	08/16/13 13:32	6	9M52112.	CAL BNA@120PPM	08/16/13 13:10
7	9M52110.	CAL BNA@160PPM	08/16/13 12:24	8	9M52109.	CAL BNA@196PPM	08/16/13 12:01
9	9M52108.	CAL BNA@.5PPM	08/16/13 11:39				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Pyridine	1	0	Avg	1.3702	1.1454	1.2781	1.2423	1.3943	1.4114	1.4147	1.4852	-----	1.34	3.11	0.999	1.00	8.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitrosodimethylamin	1	0	Avg	0.8129	0.7457	0.7720	0.7648	0.8342	0.8602	0.8630	0.9073	-----	0.820	3.06	0.998	1.00	6.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorophenol	1	0	Avg	1.3462	1.2659	1.2905	1.2381	1.4152	1.4477	1.4651	1.5307	-----	1.37	4.66	0.998	1.00	7.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzaldehyde	1	0	Qua	0.7915	0.9093	0.9465	0.9189	0.6793	0.4604	0.3068	0.1689	-----	0.648	5.49	0.720	0.999	46		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Aniline	1	0	Avg	2.0160	1.6167	1.9837	1.9576	1.9523	1.8811	1.8112	1.7975	1.4223	1.83	5.58	0.998	1.00	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.4920	0.4975	0.5119	0.4750	0.4920	0.4941	0.4836	0.5003	-----	0.493	5.62	1.00	1.00	2.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethyl)ether	1	0	Avg	1.2463	1.2900	1.2825	1.2448	1.2362	1.2369	1.2194	1.2532	1.2038	1.25	5.64	1.00	1.00	2.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	1.7372	1.6238	1.6676	1.5658	1.7615	1.8183	1.8229	1.9092	-----	1.74	5.54	0.999	1.00	6.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenol	1	0	Avg	1.8752	1.8106	1.8859	1.7590	1.8962	1.9241	1.8943	1.9526	-----	1.87	5.55	1.00	1.00	3.3	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Chlorophenol	1	0	Avg	1.4637	1.3967	1.5108	1.3848	1.4529	1.4791	1.4567	1.5102	-----	1.46	5.68	0.999	1.00	3.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Decane	1	0	Avg	1.0728	1.0793	1.1589	1.0767	1.0975	1.0869	1.0808	1.1317	-----	1.10	5.72	0.999	0.999	2.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,3-Dichlorobenzene	1	0	Avg	1.5579	1.5945	1.6600	1.5517	1.5763	1.5822	1.5555	1.6357	-----	1.59	5.82	0.999	0.999	2.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dichlorobenzene	1	0	Avg	1.5412	1.6503	1.6604	1.5259	1.5558	1.5607	1.5547	1.6213	-----	1.58	5.88	0.999	1.00	3.3	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Dichlorobenzene	1	0	Avg	1.4413	1.4824	1.5541	1.4371	1.4466	1.4619	1.4259	1.4797	-----	1.47	6.00	0.999	1.00	2.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzyl alcohol	1	0	Avg	0.8830	0.8387	0.9290	0.8550	0.8989	0.9168	0.9199	0.9475	-----	0.899	5.98	0.999	1.00	4.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-chloroisopropyl)et	1	0	Avg	1.0231	1.1367	1.1052	1.0222	1.0136	1.0153	0.9883	1.0193	-----	1.04	6.08	1.00	1.00	5.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylphenol	1	0	Avg	1.2420	1.2764	1.2516	1.1809	1.2380	1.2655	1.2522	1.3007	1.2002	1.25	6.06	0.999	1.00	2.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	2.0774	2.0706	2.1022	1.9440	2.0931	2.1490	2.1674	2.2483	-----	2.11	6.19	0.998	0.999	4.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachloroethane	1	0	Avg	0.5926	0.5989	0.6112	0.5495	0.5907	0.6042	0.5988	0.6245	-----	0.596	6.28	0.999	1.00	3.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitroso-di-n-propylan	1	0	Avg	1.0682	0.9618	1.0437	0.9899	1.0402	1.0852	1.0814	1.1217	1.1346	1.06	6.19	0.999	1.00	5.4	**(0.050)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3&4-Methylphenol	1	0	Avg	1.3671	1.2855	1.3473	1.2669	1.3914	1.4618	1.4870	1.5557	1.5275	1.41	6.19	0.998	1.00	7.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Avg	0.1794	0.1763	0.1870	0.1743	0.1799	0.1796	0.1804	0.1900	-----	0.181	6.31	0.999	0.999	2.9		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0	Avg	0.3973	0.4035	0.4252	0.3921	0.3891	0.3895	0.3842	0.4055	-----	0.398	6.33	0.999	0.999	3.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Isophorone	1	0	Avg	0.6821	0.6325	0.7021	0.6523	0.6854	0.6916	0.6895	0.7135	-----	0.681	6.52	0.999	1.00	3.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitrophenol	1	0	Avg	0.2094	0.1729	0.2095	0.1941	0.2145	0.2174	0.2189	0.2287	-----	0.208	6.57	0.999	1.00	8.3	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dimethylphenol	1	0	Avg	0.3795	0.3626	0.4046	0.3694	0.3830	0.3811	0.3763	0.3946	0.4026	0.384	6.60	1.00	1.00	3.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.1149	-----	0.0070	0.0044	0.1595	0.2111	0.2315	0.2614	-----	0.141	6.68	0.969	0.996	74		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethoxy)met	1	0	Avg	0.3952	0.3877	0.4124	0.3887	0.3961	0.3974	0.3963	0.4146	-----	0.399	6.68	0.999	1.00	2.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dichlorophenol	1	0	Avg	0.3155	0.2961	0.3233	0.3059	0.3193	0.3190	0.3207	0.3348	0.2774	0.312	6.76	0.999	1.00	5.5	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzene	1	0	Avg	0.3533	0.3523	0.3732	0.3469	0.3539	0.3569	0.3570	0.3765	-----	0.359	6.83	0.998	0.999	2.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Naphthalene	1	0	Avg	1.0564	1.0859	1.1325	1.0614	1.0789	1.0755	1.0642	1.1381	1.1662	1.10	6.89	0.998	0.999	3.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Qua	0.4292	0.3356	0.4451	0.4322	0.4124	0.3691	0.3405	0.3222	0.3443	0.381	6.92	0.988	1.00	13		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.2053	0.2176	0.2190	0.1983	0.2084	0.2088	0.2079	0.2242	-----	0.211	6.98	0.997	0.999	4.0	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Caprolactam	1	0	Avg	0.1262	0.1218	0.1269	0.1208	0.1300	0.1430	0.1445	0.1506	-----	0.133	7.20	0.997	1.00	8.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chloro-3-methylphen	1	0	Avg	0.3368	0.3042	0.3373	0.3149	0.3424	0.3420	0.3486	0.3599	-----	0.336	7.29	0.999	1.00	5.4	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylnaphthalene	1	0	Avg	0.7905	0.7840	0.8236	0.7669	0.7947	0.8005	0.7952	0.8366	-----	0.799	7.43	0.999	0.999	2.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Methylnaphthalenes (T	1	0	Avg	1.4975	1.4972	1.5706	1.4578	1.4995	1.5093	1.5127	1.6002	-----	1.52	7.43	0.998	0.999	3.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,1'-Biphenyl	1	0	Avg	0.9788	0.9805	1.0441	0.9588	0.9887	1.0129	1.0140	1.0877	-----	1.01	7.80	0.997	0.999	4.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2,4,5-Tetrachloroben	1	0	Avg	0.6226	0.6851	0.6700	0.6443	0.6201	0.6119	0.6131	0.6425	-----	0.639	7.56	0.999	0.999	4.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorocyclopentac	1	0	Qua	0.3159	0.1644	0.2775	0.2857	0.3410	0.3504	0.3562	0.3804	-----	0.309	7.54	0.997	1.00	22	**(0.050)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Avg	0.4101	0.3354	0.4537	0.4007	0.4175	0.4428	0.4312	0.4452	-----	0.417	7.64	0.999	0.999	9.1	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags

a - failed the spcc criteria — ** - ccc compound*

b - failed the ccc criteria — *** - spcc compound*

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 7.07

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

3082313 0180

Form 6
Initial Calibration

Method: EPA 8270C

Instrument: GCMS_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9M52111.	CAL BNA@50PPM	08/16/13 12:47	2	9M52107.	CAL BNA@2PPM	08/16/13 11:16
3	9M52105.	CAL BNA@10PPM	08/16/13 10:30	4	9M52106.	CAL BNA@20PPM	08/16/13 10:53
5	9M52113.	CAL BNA@80PPM	08/16/13 13:32	6	9M52112.	CAL BNA@120PPM	08/16/13 13:10
7	9M52110.	CAL BNA@160PPM	08/16/13 12:24	8	9M52109.	CAL BNA@196PPM	08/16/13 12:01
9	9M52108.	CAL BNA@.5PPM	08/16/13 11:39				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
2.4.5-Trichlorophenol	1	0	Avg	0.4200	0.3654	0.3789	0.4129	0.4158	0.3944	0.3957	0.4250	-----	0.401	7.68	0.997	0.998	5.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.3906	1.3651	1.5641	1.4369	1.3991	1.3569	1.3280	1.3975	-----	1.40	7.71	0.999	0.999	5.1		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.1378	1.2966	1.2628	1.1869	1.1426	1.1242	1.1148	1.1718	-----	1.18	7.83	0.999	0.999	5.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1.4-Dimethylnaphthalei	1	0	Avg	0.9401	0.9751	1.0273	0.9635	0.9428	0.9557	0.9635	1.0479	-----	0.977	8.11	0.998	0.999	4.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.9401	0.9751	1.0273	0.9635	0.9428	0.9557	0.9635	1.0479	-----	0.977	8.11	0.998	0.999	4.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.8244	0.8535	0.9134	0.8607	0.8326	0.8294	0.8288	0.8861	-----	0.854	7.89	0.998	0.999	3.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.4533	0.4437	0.4941	0.4643	0.4480	0.4442	0.4349	0.4559	-----	0.455	7.91	0.999	0.999	4.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4517	0.4721	0.4908	0.4674	0.4619	0.4702	0.4714	0.5033	-----	0.474	8.09	0.997	0.999	3.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.8056	1.8467	1.9537	1.8723	1.8255	1.7973	1.7927	1.9031	-----	1.85	8.19	0.999	0.999	3.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.3750	1.3548	1.4610	1.3964	1.4018	1.3795	1.3736	1.4450	-----	1.40	8.05	0.999	0.999	2.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2.6-Dinitrotoluene	1	0	Avg	0.3170	0.3033	0.3438	0.3214	0.3244	0.3301	0.3293	0.3553	-----	0.328	8.11	0.998	0.999	4.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.1922	1.2682	1.2345	1.2062	1.2170	1.2188	1.2197	1.2993	-----	1.23	8.34	0.998	0.999	2.9	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Avg	0.3494	0.3031	0.3504	0.3552	0.3464	0.3216	0.3099	0.3133	-----	0.331	8.26	0.998	0.999	6.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2.4-Dinitrophenol	1	0	Qua	0.1740	-----	0.0955	0.1156	0.1825	0.1939	0.2007	0.2182	-----	0.169	8.35	0.996	0.999	27	**(0.050)	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Avg	1.6714	1.6188	1.7915	1.7059	1.6821	1.6483	1.6389	1.7243	1.8332	1.70	8.49	0.999	0.999	4.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2.4-Dinitrotoluene	1	0	Avg	0.4393	0.3731	0.4406	0.4374	0.4483	0.4460	0.4518	0.4775	-----	0.439	8.47	0.998	0.999	6.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Avg	0.2642	0.2067	0.2543	0.2559	0.2756	0.2742	0.2754	0.2875	-----	0.262	8.39	0.999	1.00	9.5	**(0.050)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2.3.4.6-Tetrachlorophe	1	0	Qua	0.3550	0.2275	0.3260	0.3427	0.3700	0.3785	0.3750	0.3974	-----	0.347	8.60	0.999	1.00	15		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.4103	1.3642	1.5049	1.4338	1.4175	1.4121	1.3957	1.4962	-----	1.43	8.82	0.998	0.999	3.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyle	1	0	Avg	0.7244	0.7036	0.7623	0.7109	0.7413	0.7445	0.7619	0.8162	-----	0.746	8.81	0.997	0.999	4.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.3957	1.4478	1.4908	1.4096	1.4002	1.4001	1.4037	1.4869	-----	1.43	8.69	0.998	0.999	2.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Avg	0.3359	0.3098	0.3722	0.3544	0.3418	0.3339	0.3327	0.3496	-----	0.341	8.83	0.999	0.999	5.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.3996	0.4183	0.4223	0.4094	0.4100	0.4029	0.4078	0.4298	-----	0.413	9.46	0.999	0.999	2.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4.6-Dinitro-2-methylphe	1	0	Qua	0.1286	-----	0.0962	0.1127	0.1336	0.1376	0.1390	0.1489	-----	0.128	8.86	0.998	1.00	14		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamine	1	0	Avg	0.6364	0.6454	0.6912	0.6323	0.6499	0.6396	0.6392	0.6636	-----	0.650	8.92	1.00	1.00	3.0	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2.4.6-Tribromophenol	1	0	Avg	0.1216	0.0981	0.1206	0.1116	0.1286	0.1271	0.1291	0.1339	-----	0.121	9.06	0.999	1.00	9.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1.2-Diphenylhydrazine	1	0	Avg	0.7346	0.7495	0.7852	0.7344	0.7466	0.7269	0.7199	0.7463	-----	0.743	8.97	1.00	1.00	2.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyle	1	0	Avg	0.2441	0.2353	0.2436	0.2310	0.2463	0.2471	0.2513	0.2623	-----	0.245	9.30	0.999	1.00	3.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.2665	0.2704	0.2802	0.2600	0.2705	0.2674	0.2695	0.2763	-----	0.270	9.37	0.999	0.999	2.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.3695	0.3400	0.3679	0.3540	0.3786	0.3771	0.3766	0.3889	-----	0.369	9.63	0.999	1.00	4.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Qua	0.1410	-----	0.0709	0.0927	0.1560	0.1658	0.1702	0.1813	-----	0.140	9.57	0.997	0.999	30	*(30)	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0386	1.1375	1.1250	1.0455	1.0741	1.0706	1.0707	1.1127	-----	1.08	9.81	0.999	1.00	3.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.0619	1.0862	1.1504	1.0664	1.0939	1.0715	1.0889	1.1250	-----	1.09	9.87	0.999	1.00	2.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	1.0324	1.0430	1.1008	1.0191	1.0571	1.0593	1.0579	1.0971	-----	1.06	10.04	0.999	1.00	2.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Avg	1.3142	1.1328	1.2948	1.2346	1.3656	1.3633	1.3713	1.4148	1.0269	1.28	10.42	0.999	1.00	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0	Avg	1.3053	1.1960	1.3456	1.2737	1.3695	1.3464	1.3415	1.3967	-----	1.32	11.15	0.999	1.00	4.8	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	1.0680	0.9866	1.0828	1.0100	1.0722	1.0625	1.0623	1.0961	-----	1.06	11.42	1.00	1.00	3.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzidine	1	0	Qua	0.4559	0.2230	0.4600	0.4891	0.4105	0.3175	0.2673	0.2697	-----	0.362	11.31	0.945	0.993	29		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Terphenyl-d14	1	0	Avg	0.7745	0.7027	0.7895	0.7415	0.7853	0.7637	0.7698	0.8341	-----	0.770	11.60	0.998	0.999	4.9		25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	
4.4'-DDE	1	0	Avg	0.2452	0.2039	0.2351	0.2266	0.2508	0.2460	0.2523	0.2654	-----	0.241	11.53	0.998	0.999	7.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4.4'-DDD	1	0	Avg	0.4098	0.3344	0.3925	0.3640	0.4259	0.4242	0.4255	0.4526	-----	0.404	11.93	0.998	0.999	9.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the spcc criteria ** - ccc compound*
b - failed the ccc criteria *** - spcc compound*
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 7.07
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0082313 0181

Method: EPA 8270C

Form 6
Initial Calibration

Instrument: GCMS_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9M52111.	CAL BNA@50PPM	08/16/13 12:47	2	9M52107.	CAL BNA@2PPM	08/16/13 11:16
3	9M52105.	CAL BNA@10PPM	08/16/13 10:30	4	9M52106.	CAL BNA@20PPM	08/16/13 10:53
5	9M52113.	CAL BNA@80PPM	08/16/13 13:32	6	9M52112.	CAL BNA@120PPM	08/16/13 13:10
7	9M52110.	CAL BNA@160PPM	08/16/13 12:24	8	9M52109.	CAL BNA@196PPM	08/16/13 12:01
9	9M52108.	CAL BNA@.5PPM	08/16/13 11:39				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Butylbenzylphthalate	1	0	Avg	0.4753	0.3876	0.4687	0.4399	0.5023	0.4941	0.5051	0.5254	-----	0.475	12.19	0.999	1.00	9.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	LinF	0.3620	0.2210	0.3342	0.3240	0.3775	0.3806	0.3819	0.4068	-----	0.349	12.29	0.998	1.00	17		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Qua	0.3764	0.2750	0.3849	0.3841	0.3721	0.3402	0.3372	0.3435	-----	0.352	12.82	0.998	0.999	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]anthracene	1	0	Avg	1.0256	1.0277	1.0931	1.0089	1.0383	1.0250	1.0130	1.0759	-----	1.04	12.84	0.998	0.999	2.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	0.9146	0.9279	0.9853	0.8985	0.9305	0.9118	0.9227	0.9663	-----	0.932	12.89	0.999	0.999	3.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Avg	0.6263	0.5237	0.6120	0.5850	0.6597	0.6587	0.6691	0.7066	-----	0.630	12.88	0.998	1.00	9.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Avg	1.2561	0.9026	1.1926	1.1218	1.3341	1.3494	1.3938	1.5072	-----	1.26	13.63	0.996	1.00	15	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[b]fluoranthene	1	0	Avg	1.1537	1.0932	1.1707	1.1362	1.2860	1.2010	1.2570	1.3066	-----	1.20	14.06	0.998	0.999	6.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[k]fluoranthene	1	0	Avg	1.2121	1.1304	1.2747	1.1185	1.1623	1.2151	1.1514	1.2725	-----	1.19	14.09	0.996	0.997	5.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]pyrene	1	0	Avg	1.1258	0.9897	1.1151	1.0840	1.1898	1.1694	1.1744	1.2477	-----	1.14	14.43	0.998	0.999	6.9	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyrene	1	0	Avg	1.2377	1.0788	1.2812	1.1771	1.3098	1.2746	1.2769	1.3733	-----	1.25	15.84	0.998	0.999	7.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzo[a,h]anthracene	1	0	Avg	0.9999	0.9248	1.0379	0.9948	1.0691	1.0313	1.0325	1.1119	-----	1.03	15.87	0.997	0.998	5.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[g,h,i]perylene	1	0	Avg	1.0073	0.9569	1.0775	0.9977	1.0650	1.0336	1.0236	1.0934	-----	1.03	16.23	0.998	0.999	4.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the spcc criteria ** - ccc compound*
b - failed the ccc criteria *** - spcc compound*
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 7.07
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 10M39544.D **Instrument:** GCMS 10

Cont Calibration Date/Time 8/26/2013 9:27:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
1,4-Dichlorobenzene-d4	1	0	I	5.91	40.00	40				0.000	0.00	
Pyridine	1	0		3.23	49.16	50			1.252	1.231	1.69	
N-Nitrosodimethylamine	1	0		3.17	49.13	50			0.747	0.734	1.74	
2-Fluorophenol	1	0	S	4.72	50.16	50			1.178	1.182	0.32	
Benzaldehyde	1	0		5.54	51.78	50			0.606	0.701	3.56	
Aniline	1	0		5.63	53.51	50			1.664	1.780	7.01	
Pentachloroethane	1	0		5.68	50.85	50			0.429	0.436	1.69	
bis(2-Chloroethyl)ether	1	0		5.69	49.49	50			1.153	1.141	1.02	
Phenol-d5	1	0	S	5.59	49.84	50			1.542	1.537	0.32	
Phenol	1	0	CC	5.60	50.75	50	20		1.658	1.683	1.49	
2-Chlorophenol	1	0		5.73	49.31	50			1.288	1.270	1.37	
N-Decane	1	0		5.77	48.83	50			1.000	0.977	2.35	
1,3-Dichlorobenzene	1	0		5.86	49.38	50			1.522	1.503	1.24	
1,4-Dichlorobenzene	1	0	CC	5.93	49.06	50	20		1.521	1.492	1.88	
1,2-Dichlorobenzene	1	0		6.05	49.69	50			1.444	1.435	0.61	
Benzyl alcohol	1	0		6.02	49.25	50			0.856	0.843	1.50	
bis(2-chloroisopropyl)ether	1	0		6.13	48.84	50			1.032	1.008	2.32	
2-Methylphenol	1	0		6.11	50.05	50			1.177	1.178	0.11	
Acetophenone	1	0		6.24	50.17	50			1.898	1.905	0.34	
Hexachloroethane	1	0		6.32	50.53	50			0.552	0.558	1.07	
N-Nitroso-di-n-propylamine	1	0	CP	6.23	51.28	50	0.05		0.961	0.985	2.56	
3&4-Methylphenol	1	0		6.23	49.92	50			1.261	1.259	0.16	
Naphthalene-d8	1	0	I	6.92	40.00	40				0.000	0.00	
Nitrobenzene-d5	1	0	S	6.36	24.56	25			0.175	0.172	1.75	
Nitrobenzene	1	0		6.38	50.56	50			0.394	0.399	1.12	
Isophorone	1	0		6.56	49.76	50			0.680	0.677	0.47	
2-Nitrophenol	1	0	CC	6.62	51.03	50	20		0.210	0.215	2.05	
2,4-Dimethylphenol	1	0		6.64	49.94	50			0.388	0.388	0.12	
Benzoic Acid	1	0		6.71	42.06	50			0.267	0.230	15.88	
bis(2-Chloroethoxy)methane	1	0		6.72	49.29	50			0.401	0.395	1.42	
2,4-Dichlorophenol	1	0	CC	6.80	50.66	50	20		0.346	0.350	1.33	
1,2,4-Trichlorobenzene	1	0		6.87	50.00	50			0.404	0.404	0.01	
Naphthalene	1	0		6.93	48.19	50			1.060	1.022	3.62	
4-Chloroaniline	1	0		6.97	51.99	50			0.368	0.434	3.98	
Hexachlorobutadiene	1	0	CC	7.02	49.84	50	20		0.252	0.251	0.32	
Caprolactam	1	0		7.25	48.01	50			0.135	0.129	3.98	
4-Chloro-3-methylphenol	1	0	CC	7.33	50.38	50	20		0.349	0.352	0.77	
2-Methylnaphthalene	1	0		7.47	50.26	50			0.804	0.808	0.51	
Methylnaphthalenes	1	0		7.47	49.95	50	20			1.540	0.10	
1,1'-Biphenyl	1	0		7.85	49.67	50			1.091	1.083	0.66	
Acenaphthene-d10	1	0	I	8.36	40.00	40				0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.60	50.84	50			0.677	0.688	1.69	
Hexachlorocyclopentadiene	1	0	CP	7.59	44.58	50	0.05		0.375	0.334	10.85	
2,4,6-Trichlorophenol	1	0	CC	7.69	51.13	50	20		0.430	0.440	2.25	
2,4,5-Trichlorophenol	1	0		7.72	51.35	50			0.435	0.447	2.69	
2-Fluorobiphenyl	1	0	S	7.76	24.87	25			1.483	1.475	0.52	
2-Chloronaphthalene	1	0		7.87	52.99	50			1.139	1.207	5.98	
1,4-Dimethylnaphthalene	1	0		8.16	50.58	50			0.897	0.907	1.15	
Dimethylnaphthalenes	1	0		8.16	50.58	50	20			0.907	1.15	
Diphenyl Ether	1	0		7.93	50.51	50			0.854	0.862	1.01	
2-Nitroaniline	1	0		7.95	51.74	50			0.397	0.411	3.48	
Coumarin	1	0		8.14	49.98				0.440			
Acenaphthylene	1	0		8.24	50.04	50			1.804	1.806	0.07	
Dimethylphthalate	1	0		8.09	50.58	50			1.387	1.403	1.17	
2,6-Dinitrotoluene	1	0		8.16	51.13	50			0.313	0.320	2.26	
Acenaphthene	1	0	CC	8.39	50.21	50	20		1.181	1.186	0.41	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 10M39544.D **Instrument:** GCMS 10

Cont Calibration Date/Time 8/26/2013 9:27:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
3-Nitroaniline	1	0		8.31	54.74	50			0.306	0.335	9.48	
2,4-Dinitrophenol	1	0	CP	8.40	45.07	50	0.05		0.208	0.186	9.85	
Dibenzofuran	1	0		8.55	48.69	50			1.765	1.718	2.63	
2,4-Dinitrotoluene	1	0		8.52	52.31	50			0.447	0.467	4.63	
4-Nitrophenol	1	0	CP	8.43	48.98	50	0.05		0.258	0.252	2.04	
2,3,4,6-Tetrachlorophenol	1	0		8.65	50.86	50			0.405	0.412	1.71	
Fluorene	1	0		8.87	50.50	50			1.442	1.456	0.99	
4-Chlorophenyl-phenylether	1	0		8.86	50.17	50			0.765	0.768	0.33	
Diethylphthalate	1	0		8.73	51.88	50			1.352	1.402	3.76	
4-Nitroaniline	1	0		8.88	51.16	50			0.322	0.330	2.32	
Atrazine	1	0		9.51	50.25	50			0.463	0.465	0.50	
Phenanthrene-d10	1	0	I	9.84	40.00	40				0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.91	46.51	50			0.139	0.129	6.99	
n-Nitrosodiphenylamine	1	0	CC	8.97	49.68	50	20		0.611	0.607	0.63	
2,4,6-Tribromophenol	1	0	S	9.10	50.95	50			0.115	0.118	1.90	
1,2-Diphenylhydrazine	1	0		9.01	48.85	50			0.635	0.620	2.30	
4-Bromophenyl-phenylether	1	0		9.35	50.39	50			0.233	0.235	0.77	
Hexachlorobenzene	1	0		9.42	49.45	50			0.245	0.242	1.10	
N-Octadecane	1	0		9.68	50.49	50			0.305	0.308	0.99	
Pentachlorophenol	1	0	CC	9.62	45.08	50	20		0.165	0.149	9.85	
Phenanthrene	1	0		9.86	49.58	50			1.056	1.047	0.83	
Anthracene	1	0		9.92	49.73	50			1.076	1.070	0.55	
Carbazole	1	0		10.09	50.34	50			1.014	1.021	0.68	
Di-n-butylphthalate	1	0		10.46	53.00	50			1.139	1.208	6.00	
Fluoranthene	1	0	CC	11.20	51.29	50	20		1.302	1.336	2.59	
Chrysene-d12	1	0	I	12.91	40.00	40				0.000	0.00	
Pyrene	1	0		11.47	49.68	50			1.069	1.062	0.64	
Benzidine	1	0		11.36	54.85	50			0.347	0.449	9.71	
Terphenyl-d14	1	0	S	11.65	24.89	25			0.775	0.772	0.45	
4,4'-DDE	1	0		11.58	48.94				0.258			
4,4'-DDD	1	0		11.98	51.07				0.404			
Butylbenzylphthalate	1	0		12.23	51.59	50			0.417	0.430	3.18	
4,4'-DDT	1	0		12.34	50.74				0.360			
3,3'-Dichlorobenzidine	1	0		12.86	56.38	50			0.322	0.374	12.75	
Benzo[a]anthracene	1	0		12.89	50.20	50			1.044	1.048	0.40	
Chrysene	1	0		12.93	49.13	50			0.943	0.926	1.74	
bis(2-Ethylhexyl)phthalate	1	0		12.92	53.58	50			0.542	0.581	7.15	
Perylene-d12	1	0	I	14.54	40.00	40				0.000	0.00	
Di-n-octylphthalate	1	0	CC	13.67	53.95	50	20		1.041	1.176	7.90	
Benzo[b]fluoranthene	1	0		14.11	49.98	50			1.117	1.116	0.04	
Benzo[k]fluoranthene	1	0		14.14	50.58	50			1.173	1.187	1.17	
Benzo[a]pyrene	1	0	CC	14.48	51.48	50	20		1.088	1.120	2.96	
Indeno[1,2,3-cd]pyrene	1	0		15.92	53.36	50			1.142	1.219	6.72	
Dibenzo[a,h]anthracene	1	0		15.95	53.94	50			0.935	1.008	7.89	
Benzo[g,h,i]perylene	1	0		16.33	51.90	50			0.993	1.031	3.80	
4-Methylphenol	1	100		0.00	0.00	50				0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50			0.897	0.000	100.00	
Endrin	1	100		0.00	0.00	50				0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10				0.000	100.00	
Heptachlor	1	100		0.00	0.00	10				0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10				0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10				0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50			1.541	0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50				0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50				0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 10M39544.D **Instrument:** GCMS 10

Cont Calibration Date/Time 8/26/2013 9:27:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M52306.D **Instrument:** GCMS 9

Cont Calibration Date/Time 8/26/2013 10:31:00 Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
1,4-Dichlorobenzene-d4	1	0	I	5.82	40.00	40				0.000	0.00	
Pyridine	1	0		3.04	46.78	50			1.343	1.256	6.44	
N-Nitrosodimethylamine	1	0		2.98	46.89	50			0.820	0.769	6.21	
2-Fluorophenol	1	0	S	4.62	46.95	50			1.375	1.291	6.10	
Benzaldehyde	1	0		5.44	46.00	50			0.648	0.737	8.00	
Aniline	1	0		5.54	53.63	50			1.827	1.959	7.25	
Pentachloroethane	1	0		5.57	48.08	50			0.493	0.474	3.84	
bis(2-Chloroethyl)ether	1	0		5.60	48.52	50			1.246	1.209	2.96	
Phenol-d5	1	0	S	5.50	47.81	50			1.738	1.662	4.39	
Phenol	1	0	CC	5.52	48.06	50	20		1.875	1.802	3.88	
2-Chlorophenol	1	0		5.64	48.55	50			1.457	1.415	2.89	
N-Decane	1	0		5.68	46.43	50			1.098	1.020	7.15	
1,3-Dichlorobenzene	1	0		5.77	47.28	50			1.589	1.503	5.44	
1,4-Dichlorobenzene	1	0	CC	5.83	46.81	50	20		1.584	1.483	6.37	
1,2-Dichlorobenzene	1	0		5.95	47.81	50			1.466	1.402	4.38	
Benzyl alcohol	1	0		5.93	48.02	50			0.899	0.863	3.96	
bis(2-chloroisopropyl)ether	1	0		6.04	47.33	50			1.041	0.985	5.34	
2-Methylphenol	1	0		6.02	48.36	50			1.245	1.205	3.27	
Acetophenone	1	0		6.15	48.87	50			2.107	2.059	2.26	
Hexachloroethane	1	0		6.23	47.45	50			0.596	0.566	5.09	
N-Nitroso-di-n-propylamine	1	0	CP	6.14	49.50	50	0.05		1.059	1.048	1.00	
3&4-Methylphenol	1	0		6.15	47.32	50			1.410	1.334	5.37	
Naphthalene-d8	1	0	I	6.83	40.00	40				0.000	0.00	
Nitrobenzene-d5	1	0	S	6.27	24.38	25			0.181	0.176	2.48	
Nitrobenzene	1	0		6.29	48.77	50			0.398	0.389	2.46	
Isophorone	1	0		6.47	48.06	50			0.681	0.655	3.87	
2-Nitrophenol	1	0	CC	6.53	49.89	50	20		0.208	0.208	0.21	
2,4-Dimethylphenol	1	0		6.56	48.97	50			0.384	0.376	2.05	
Benzoic Acid	1	0		6.63	4.26	50			0.141	0.005	91.48	
bis(2-Chloroethoxy)methane	1	0		6.63	48.43	50			0.399	0.386	3.15	
2,4-Dichlorophenol	1	0	CC	6.71	49.71	50	20		0.312	0.311	0.57	
1,2,4-Trichlorobenzene	1	0		6.78	48.99	50			0.359	0.352	2.01	
Naphthalene	1	0		6.84	47.69	50			1.096	1.045	4.62	
4-Chloroaniline	1	0		6.88	52.19	50			0.381	0.439	4.38	
Hexachlorobutadiene	1	0	CC	6.93	47.18	50	20		0.211	0.199	5.64	
Caprolactam	1	0		7.15	46.21	50			0.133	0.123	7.58	
4-Chloro-3-methylphenol	1	0	CC	7.24	49.06	50	20		0.336	0.330	1.87	
2-Methylnaphthalene	1	0		7.38	48.74	50			0.799	0.779	2.52	
Methylnaphthalenes	1	0		7.38	48.95	50	20			1.486	2.09	
1,1'-Biphenyl	1	0		7.75	48.68	50			1.008	0.982	2.64	
Acenaphthene-d10	1	0	I	8.26	40.00	40				0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.51	50.30	50			0.639	0.643	0.59	
Hexachlorocyclopentadiene	1	0	CP	7.49	33.89	50	0.05		0.309	0.208	32.22	
2,4,6-Trichlorophenol	1	0	CC	7.60	49.95	50	20		0.417	0.417	0.10	
2,4,5-Trichlorophenol	1	0		7.63	49.36	50			0.401	0.396	1.27	
2-Fluorobiphenyl	1	0	S	7.67	24.90	25			1.405	1.399	0.38	
2-Chloronaphthalene	1	0		7.78	49.31	50			1.180	1.164	1.37	
1,4-Dimethylnaphthalene	1	0		8.06	48.67	50			0.977	0.951	2.67	
Dimethylnaphthalenes	1	0		8.06	48.67	50	20			0.951	2.67	
Diphenyl Ether	1	0		7.84	49.33	50			0.854	0.842	1.33	
2-Nitroaniline	1	0		7.86	50.34	50			0.455	0.458	0.69	
Coumarin	1	0		8.05	49.28				0.474			
Acenaphthylene	1	0		8.14	49.02	50			1.850	1.813	1.97	
Dimethylphthalate	1	0		8.00	50.29	50			1.398	1.407	0.58	
2,6-Dinitrotoluene	1	0		8.06	50.25	50			0.328	0.330	0.51	
Acenaphthene	1	0	CC	8.29	49.92	50	20		1.232	1.230	0.16	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M52306.D **Instrument:** GCMS 9

Cont Calibration Date/Time 8/26/2013 10:31:00 Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
3-Nitroaniline	1	0		8.22	53.19	50			0.331	0.352	6.38	
2,4-Dinitrophenol	1	0	CP	8.31	48.05	50	0.05		0.169	0.154	3.90	
Dibenzofuran	1	0		8.45	48.98	50			1.702	1.667	2.04	
2,4-Dinitrotoluene	1	0		8.43	50.83	50			0.439	0.447	1.66	
4-Nitrophenol	1	0	CP	8.35	50.37	50	0.05		0.262	0.264	0.74	
2,3,4,6-Tetrachlorophenol	1	0		8.55	51.69	50			0.347	0.366	3.38	
Fluorene	1	0		8.77	50.91	50			1.429	1.455	1.81	
4-Chlorophenyl-phenylether	1	0		8.76	49.17	50			0.746	0.733	1.66	
Diethylphthalate	1	0		8.64	50.01	50			1.429	1.430	0.02	
4-Nitroaniline	1	0		8.78	50.85	50			0.341	0.347	1.71	
Atrazine	1	0		9.41	49.88	50			0.413	0.412	0.23	
Phenanthrene-d10	1	0	I	9.74	40.00	40				0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.81	49.44	50			0.128	0.123	1.11	
n-Nitrosodiphenylamine	1	0	CC	8.87	48.97	50	20		0.650	0.636	2.07	
2,4,6-Tribromophenol	1	0	S	9.01	50.56	50			0.121	0.123	1.12	
1,2-Diphenylhydrazine	1	0		8.92	48.62	50			0.743	0.723	2.75	
4-Bromophenyl-phenylether	1	0		9.25	49.22	50			0.245	0.241	1.56	
Hexachlorobenzene	1	0		9.32	50.53	50			0.270	0.273	1.06	
N-Octadecane	1	0		9.58	48.80	50			0.369	0.360	2.40	
Pentachlorophenol	1	0	CC	9.52	47.71	50	20		0.140	0.128	4.58	
Phenanthrene	1	0		9.76	49.20	50			1.084	1.067	1.60	
Anthracene	1	0		9.82	49.36	50			1.093	1.079	1.28	
Carbazole	1	0		9.99	49.28	50			1.058	1.043	1.44	
Di-n-butylphthalate	1	0		10.36	52.14	50			1.280	1.335	4.29	
Fluoranthene	1	0	CC	11.10	50.92	50	20		1.322	1.346	1.84	
Chrysene-d12	1	0	I	12.80	40.00	40				0.000	0.00	
Pyrene	1	0		11.36	48.92	50			1.055	1.032	2.15	
Benzidine	1	0		11.25	52.70	50			0.362	0.446	5.39	
Terphenyl-d14	1	0	S	11.54	24.45	25			0.770	0.753	2.21	
4,4'-DDE	1	0		11.48	49.00				0.241			
4,4'-DDD	1	0		11.88	49.27				0.404			
Butylbenzylphthalate	1	0		12.14	48.57	50			0.475	0.461	2.85	
4,4'-DDT	1	0		12.24	46.18				0.349			
3,3'-Dichlorobenzidine	1	0		12.76	52.35	50			0.352	0.379	4.71	
Benzo[a]anthracene	1	0		12.79	49.44	50			1.038	1.027	1.12	
Chrysene	1	0		12.83	48.60	50			0.932	0.906	2.79	
bis(2-Ethylhexyl)phthalate	1	0		12.83	48.96	50			0.630	0.617	2.08	
Perylene-d12	1	0	I	14.43	40.00	40				0.000	0.00	
Di-n-octylphthalate	1	0	CC	13.58	48.59	50	20		1.257	1.222	2.81	
Benzo[b]fluoranthene	1	0		14.01	47.36	50			1.201	1.137	5.28	
Benzo[k]fluoranthene	1	0		14.04	50.31	50			1.192	1.200	0.62	
Benzo[a]pyrene	1	0	CC	14.37	49.57	50	20		1.137	1.127	0.86	
Indeno[1,2,3-cd]pyrene	1	0		15.77	49.92	50			1.251	1.249	0.15	
Dibenzo[a,h]anthracene	1	0		15.79	49.30	50			1.025	1.011	1.40	
Benzo[g,h,i]perylene	1	0		16.15	50.03	50			1.032	1.032	0.05	
4-Methylphenol	1	100		0.00	0.00	50				0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50			0.977	0.000	100.00	
Endrin	1	100		0.00	0.00	50				0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10				0.000	100.00	
Heptachlor	1	100		0.00	0.00	10				0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10				0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10				0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50			1.518	0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50				0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50				0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M52306.D **Instrument:** GCMS 9

Cont Calibration Date/Time 8/26/2013 10:31:00 Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M52338.D **Instrument:** GCMS 9

Cont Calibration Date/Time 8/27/2013 9:10:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
1,4-Dichlorobenzene-d4	1	0	I	5.81	40.00	40				0.000	0.00	
Pyridine	1	0		3.03	46.23	50			1.343	1.241	7.55	
N-Nitrosodimethylamine	1	0		2.97	44.92	50			0.820	0.737	10.15	
2-Fluorophenol	1	0	S	4.61	46.74	50			1.375	1.285	6.52	
Benzaldehyde	1	0		5.44	40.99	50			0.648	0.674	18.02	
Aniline	1	0		5.53	53.76	50			1.827	1.964	7.52	
Pentachloroethane	1	0		5.57	48.82	50			0.493	0.482	2.35	
bis(2-Chloroethyl)ether	1	0		5.59	48.36	50			1.246	1.205	3.29	
Phenol-d5	1	0	S	5.50	48.22	50			1.738	1.676	3.56	
Phenol	1	0	CC	5.51	48.91	50	20		1.875	1.834	2.18	
2-Chlorophenol	1	0		5.63	49.90	50			1.457	1.454	0.19	
N-Decane	1	0		5.67	46.12	50			1.098	1.013	7.77	
1,3-Dichlorobenzene	1	0		5.76	48.83	50			1.589	1.552	2.33	
1,4-Dichlorobenzene	1	0	CC	5.83	48.45	50	20		1.584	1.535	3.11	
1,2-Dichlorobenzene	1	0		5.95	49.53	50			1.466	1.452	0.93	
Benzyl alcohol	1	0		5.93	48.93	50			0.899	0.879	2.14	
bis(2-chloroisopropyl)ether	1	0		6.03	45.68	50			1.041	0.951	8.64	
2-Methylphenol	1	0		6.02	48.07	50			1.245	1.197	3.85	
Acetophenone	1	0		6.14	48.80	50			2.107	2.056	2.40	
Hexachloroethane	1	0		6.23	48.35	50			0.596	0.577	3.29	
N-Nitroso-di-n-propylamine	1	0	CP	6.14	49.53	50	0.05		1.059	1.049	0.94	
3&4-Methylphenol	1	0		6.14	47.95	50			1.410	1.352	4.10	
Naphthalene-d8	1	0	I	6.83	40.00	40				0.000	0.00	
Nitrobenzene-d5	1	0	S	6.26	24.73	25			0.181	0.179	1.06	
Nitrobenzene	1	0		6.28	47.86	50			0.398	0.381	4.27	
Isophorone	1	0		6.47	48.26	50			0.681	0.657	3.49	
2-Nitrophenol	1	0	CC	6.53	50.81	50	20		0.208	0.212	1.62	
2,4-Dimethylphenol	1	0		6.55	48.96	50			0.384	0.376	2.08	
Benzoic Acid	1	0		6.63	11.57	50			0.141	0.016	76.86	
bis(2-Chloroethoxy)methane	1	0		6.63	48.11	50			0.399	0.384	3.77	
2,4-Dichlorophenol	1	0	CC	6.71	50.83	50	20		0.312	0.318	1.66	
1,2,4-Trichlorobenzene	1	0		6.78	49.18	50			0.359	0.353	1.64	
Naphthalene	1	0		6.84	48.33	50			1.096	1.059	3.34	
4-Chloroaniline	1	0		6.88	51.92	50			0.381	0.436	3.83	
Hexachlorobutadiene	1	0	CC	6.92	47.97	50	20		0.211	0.203	4.06	
Caprolactam	1	0		7.16	48.37	50			0.133	0.129	3.26	
4-Chloro-3-methylphenol	1	0	CC	7.24	49.55	50	20		0.336	0.333	0.90	
2-Methylnaphthalene	1	0		7.38	49.59	50			0.799	0.793	0.81	
Methylnaphthalenes	1	0		7.38	49.22	50	20			1.495	1.56	
1,1'-Biphenyl	1	0		7.75	49.61	50			1.008	1.000	0.78	
Acenaphthene-d10	1	0	I	8.26	40.00	40				0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.51	50.69	50			0.639	0.648	1.38	
Hexachlorocyclopentadiene	1	0	CP	7.49	31.69	50	0.05		0.309	0.194	36.63	
2,4,6-Trichlorophenol	1	0	CC	7.60	49.63	50	20		0.417	0.414	0.75	
2,4,5-Trichlorophenol	1	0		7.63	51.50	50			0.401	0.413	3.00	
2-Fluorobiphenyl	1	0	S	7.67	24.67	25			1.405	1.386	1.33	
2-Chloronaphthalene	1	0		7.78	48.87	50			1.180	1.153	2.25	
1,4-Dimethylnaphthalene	1	0		8.06	48.84	50			0.977	0.954	2.33	
Dimethylnaphthalenes	1	0		8.06	48.84	50	20			0.954	2.33	
Diphenyl Ether	1	0		7.84	50.13	50			0.854	0.856	0.26	
2-Nitroaniline	1	0		7.86	48.07	50			0.455	0.437	3.87	
Coumarin	1	0		8.05	48.37				0.474			
Acenaphthylene	1	0		8.14	49.49	50			1.850	1.831	1.01	
Dimethylphthalate	1	0		8.00	49.60	50			1.398	1.387	0.80	
2,6-Dinitrotoluene	1	0		8.06	49.00	50			0.328	0.322	1.99	
Acenaphthene	1	0	CC	8.29	49.63	50	20		1.232	1.223	0.73	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M52338.D **Instrument:** GCMS 9

Cont Calibration Date/Time 8/27/2013 9:10:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
3-Nitroaniline	1	0		8.22	52.49	50			0.331	0.348	4.99	
2,4-Dinitrophenol	1	0	CP	8.31	51.63	50	0.05		0.169	0.167	3.27	
Dibenzofuran	1	0		8.45	49.25	50			1.702	1.676	1.51	
2,4-Dinitrotoluene	1	0		8.43	50.45	50			0.439	0.443	0.90	
4-Nitrophenol	1	0	CP	8.35	52.45	50	0.05		0.262	0.275	4.89	
2,3,4,6-Tetrachlorophenol	1	0		8.55	52.24	50			0.347	0.370	4.47	
Fluorene	1	0		8.77	50.44	50			1.429	1.442	0.88	
4-Chlorophenyl-phenylether	1	0		8.76	48.65	50			0.746	0.726	2.69	
Diethylphthalate	1	0		8.63	49.58	50			1.429	1.417	0.85	
4-Nitroaniline	1	0		8.78	50.30	50			0.341	0.343	0.60	
Atrazine	1	0		9.41	49.76	50			0.413	0.411	0.47	
Phenanthrene-d10	1	0	I	9.73	40.00	40				0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.81	51.44	50			0.128	0.128	2.87	
n-Nitrosodiphenylamine	1	0	CC	8.87	49.46	50	20		0.650	0.643	1.08	
2,4,6-Tribromophenol	1	0	S	9.01	52.39	50			0.121	0.127	4.78	
1,2-Diphenylhydrazine	1	0		8.92	47.98	50			0.743	0.713	4.03	
4-Bromophenyl-phenylether	1	0		9.25	49.87	50			0.245	0.245	0.26	
Hexachlorobenzene	1	0		9.32	50.41	50			0.270	0.272	0.82	
N-Octadecane	1	0		9.58	48.68	50			0.369	0.359	2.64	
Pentachlorophenol	1	0	CC	9.52	48.82	50	20		0.140	0.131	2.35	
Phenanthrene	1	0		9.76	48.96	50			1.084	1.062	2.08	
Anthracene	1	0		9.82	49.69	50			1.093	1.086	0.62	
Carbazole	1	0		9.99	49.51	50			1.058	1.048	0.97	
Di-n-butylphthalate	1	0		10.36	52.30	50			1.280	1.339	4.61	
Fluoranthene	1	0	CC	11.09	50.75	50	20		1.322	1.342	1.50	
Chrysene-d12	1	0	I	12.80	40.00	40				0.000	0.00	
Pyrene	1	0		11.36	51.02	50			1.055	1.077	2.04	
Benzidine	1	0		11.25	54.08	50			0.362	0.456	8.17	
Terphenyl-d14	1	0	S	11.54	25.22	25			0.770	0.777	0.86	
4,4'-DDE	1	0		11.47	51.16				0.241			
4,4'-DDD	1	0		11.88	51.30				0.404			
Butylbenzylphthalate	1	0		12.13	49.37	50			0.475	0.469	1.27	
4,4'-DDT	1	0		12.23	47.14				0.349			
3,3'-Dichlorobenzidine	1	0		12.76	51.89	50			0.352	0.375	3.78	
Benzo[a]anthracene	1	0		12.79	49.09	50			1.038	1.020	1.82	
Chrysene	1	0		12.83	48.72	50			0.932	0.908	2.56	
bis(2-Ethylhexyl)phthalate	1	0		12.82	49.49	50			0.630	0.624	1.02	
Perylene-d12	1	0	I	14.43	40.00	40				0.000	0.00	
Di-n-octylphthalate	1	0	CC	13.58	49.95	50	20		1.257	1.256	0.09	
Benzo[b]fluoranthene	1	0		14.01	48.80	50			1.201	1.172	2.41	
Benzo[k]fluoranthene	1	0		14.04	46.81	50			1.192	1.116	6.37	
Benzo[a]pyrene	1	0	CC	14.37	48.79	50	20		1.137	1.109	2.43	
Indeno[1,2,3-cd]pyrene	1	0		15.77	48.18	50			1.251	1.206	3.64	
Dibenzo[a,h]anthracene	1	0		15.79	47.60	50			1.025	0.976	4.80	
Benzo[g,h,i]perylene	1	0		16.15	48.66	50			1.032	1.004	2.67	
4-Methylphenol	1	100		0.00	0.00	50				0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50			0.977	0.000	100.00	
Endrin	1	100		0.00	0.00	50				0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10				0.000	100.00	
Heptachlor	1	100		0.00	0.00	10				0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10				0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10				0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50			1.518	0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50				0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50				0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M52338.D **Instrument:** GCMS 9

Cont Calibration Date/Time 8/27/2013 9:10:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

FORM8

Internal Standard Areas

Evaluation Std Data File: 10M39296.D Method: EPA 8270C

Analysis Date/Time: 08/14/13 08:30

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	96066	5.92	341612	6.93	233128	8.37	476308	9.85	601735	12.91	520101	14.56
Eval File Area Limit:	48033-192132		170806-683224		116564-466256		238154-952616		300868-1203470		260050-1040202	
Eval File Rt Limit:	5.42-6.42		6.43-7.43		7.87-8.87		9.35-10.35		12.41-13.41		14.06-15.06	

Data File	Sample												
10M39296.	CAL BNA@5C	96066	5.92	341612	6.93	233128	8.37	476308	9.85	601735	12.91	520101	14.56
10M39297.	CAL BNA@1C	84185	5.92	297657	6.93	205783	8.37	408807	9.85	528298	12.91	439239	14.55
10M39298.	CAL BNA@2F	97187	5.92	347887	6.93	227553	8.37	463617	9.85	617190	12.91	511765	14.55
10M39299.	CAL BNA@.5	91487	5.92	331135	6.93	223397	8.37	453138	9.85	589498	12.91	502239	14.55
10M39300.	CAL BNA@2C	90694	5.92	328497	6.93	216949	8.37	446677	9.85	575602	12.91	488191	14.55
10M39301.	CAL BNA@19	80042	5.93	284970	6.93	195346	8.38	409957	9.85	467911	12.92	408813	14.55
10M39302.	CAL BNA@16	87837	5.93	324060	6.93	220645	8.38	457801	9.85	534750	12.92	465457	14.56
10M39303.	CAL BNA@12	92138	5.93	330140	6.93	222067	8.37	462132	9.85	547332	12.92	464786	14.55
10M39304.	CAL BNA@8C	92572	5.92	331299	6.93	220013	8.37	453266	9.85	546350	12.91	467097	14.55
10M39306.	ICV BNA@50	93423	5.92	329133	6.93	213773	8.37	437261	9.85	546976	12.91	461749	14.55

I1 =	1,4-Dichlorobenzene-d4	I4 =	Phenanthrene-d10	**625/8270 Internal Standard concentration = 40 mg/L (in final extract)**
I2 =	Naphthalene-d8	I5 =	Chrysene-d12	**624/8260 Internal Standard concentration = 30ug/L**
I3 =	Acenaphthene-d10	I6 =	Perylene-d12	**524 Internal Standard concentration =5ug/L**

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 9M52111.D Method: EPA 8270C

Analysis Date/Time: 08/16/13 12:47

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	91591	5.86	345871	6.87	202614	8.31	380883	9.78	453691	12.85	384487	14.49
Eval File Area Limit:	45796-183182		172936-691742		101307-405228		190442-761766		226846-907382		192244-768974	
Eval File Rt Limit:	5.36-6.36		6.37-7.37		7.81-8.81		9.28-10.28		12.35-13.35		13.99-14.99	

Data File	Sample												
9M52105.D	CAL BNA@1C	84136	5.86	313741	6.87	184084	8.31	344723	9.78	444350	12.85	388812	14.49
9M52106.D	CAL BNA@2C	85656	5.86	317914	6.87	180635	8.31	347761	9.78	440306	12.85	381431	14.49
9M52107.D	CAL BNA@2F	92928	5.86	354132	6.87	207356	8.31	379267	9.78	483780	12.85	411960	14.49
9M52108.D	CAL BNA@.5	88979	5.86	352666	6.87	209987	8.31	387015	9.78	495620	12.85	420553	14.49
9M52109.D	CAL BNA@1S	69156	5.86	258609	6.87	157795	8.31	310027	9.79	375532	12.86	310710	14.49
9M52110.D	CAL BNA@16	77735	5.86	296580	6.87	179275	8.31	344034	9.79	416093	12.86	350063	14.49
9M52111.D	CAL BNA@5C	91591	5.86	345871	6.87	202614	8.31	380883	9.78	453691	12.85	384487	14.49
9M52112.D	CAL BNA@12	79005	5.86	300150	6.87	179563	8.31	341767	9.79	415903	12.86	351017	14.49
9M52113.D	CAL BNA@8C	80287	5.86	300493	6.87	176445	8.31	330822	9.78	402663	12.85	341758	14.49
9M52114.D	ICV BNA@50	88985	5.86	328853	6.87	191913	8.31	359193	9.79	445536	12.85	359235	14.49

I1 =	1,4-Dichlorobenzene-d4	I4 =	Phenanthrene-d10	**625/8270 Internal Standard concentration = 40 mg/L (in final extract)**
I2 =	Naphthalene-d8	I5 =	Chrysene-d12	**624/8260 Internal Standard concentration = 30ug/L**
I3 =	Acenanhthene-d10	I6 =	Perylene-d12	**524 Internal Standard concentration =5ug/L**

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 9M52306.D Method: EPA 8270C

Analysis Date/Time: 08/26/13 10:31

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	77292	5.82	290760	6.83	169266	8.26	326225	9.74	417848	12.80	360677	14.43
Eval File Area Limit:	38646-154584		145380-581520		84633-338532		163112-652450		208924-835696		180338-721354	
Eval File Rt Limit:	5.32-6.32		6.33-7.33		7.76-8.76		9.24-10.24		12.3-13.3		13.93-14.93	

Data File	Sample												
9M52307.D	SMB25984	105202	5.82	404013	6.83	231324	8.26	411155	9.73	472630	12.80	353913	14.43
9M52308.D	AC74143-001	86550	5.82	299587	6.83	173962	8.26	314398	9.74	404207	12.80	349232	14.43
9M52309.D	AC74085-001	83326	5.82	297512	6.83	164762	8.26	297852	9.73	380504	12.80	325801	14.43
9M52310.D	AC73985-002	89569	5.82	345808	6.83	202846	8.26	368993	9.73	426804	12.80	336166	14.43
9M52311.D	AC73985-005	87374	5.82	333236	6.83	199363	8.26	358339	9.73	402674	12.80	312141	14.43
9M52312.D	AC73985-006	83301	5.82	302675	6.83	161262	8.26	287571	9.73	367456	12.80	308397	14.43
9M52313.D	AC73985-009	79894	5.82	288178	6.83	179736	8.26	338265	9.73	387468	12.80	295548	14.43
9M52314.D	AC73985-011	82712	5.82	316428	6.83	185607	8.26	338020	9.73	363703	12.80	279060	14.43
9M52315.D	AC73985-002	93962	5.82	337722	6.83	181664	8.26	276302	9.73	283764	12.80	262898	14.45
9M52316.D	AC74085-002	82124	5.82	295604	6.83	161332	8.26	281953	9.74	307807	12.80	262628	14.43
9M52317.D	AC74085-003	86144	5.82	309719	6.83	166923	8.26	288553	9.74	316787	12.80	266871	14.43
9M52318.D	AC74085-004	93729	5.82	359062	6.83	208806	8.26	362452	9.73	378604	12.80	298142	14.43
9M52319.D	AC73985-005	83648	5.82	302518	6.83	163386	8.26	254234	9.73	268572	12.80	244496	14.44
9M52320.D	AC73985-009	78094	5.82	268307	6.83	162395	8.26	272448	9.74	283775	12.80	264458	14.44
9M52321.D	AC73985-011	94926	5.82	359482	6.83	207222	8.26	348042	9.74	318634	12.80	290842	14.43
9M52322.D	SMB25990	90174	5.82	334069	6.83	185083	8.26	304454	9.74	277876	12.80	242817	14.43
9M52323.D	AC73985-006	84425	5.82	284525	6.83	174651	8.26	299237	9.74	325910	12.80	272435	14.43
9M52324.D	AC74109-009	94673	5.82	350775	6.83	180741	8.27	312258	9.74	349304	12.81	303426	14.44
9M52325.D	AC74085-004	93828	5.82	356079	6.83	197590	8.26	332395	9.74	342002	12.80	290978	14.43
9M52326.D	AC74177-002	92888	5.82	344150	6.83	187290	8.26	308065	9.74	302434	12.80	251276	14.43
9M52327.D	AC74177-004	91797	5.82	331123	6.83	180858	8.26	300377	9.73	301386	12.80	246918	14.43
9M52328.D	AC74177-006	98669	5.82	356609	6.83	194041	8.26	314737	9.74	327954	12.80	275593	14.43
9M52329.D	AC74101-016	83214	5.82	314208	6.83	177721	8.26	301329	9.74	314053	12.81	263092	14.44
9M52330.D	AC74101-028	108698	5.82	392450	6.83	205601	8.26	310308	9.74	299004	12.81	271267	14.44
9M52331.D	AC74101-010	96468	5.82	351960	6.83	189060	8.26	294959	9.74	339786	12.81	299163	14.44
9M52332.D	AC74144-001	89833	5.82	304291	6.83	150840	8.26	227958	9.74	373273	12.82	323707	14.46
9M52333.D	AC74085-008	88593	5.82	322831	6.83	171220	8.26	296115	9.74	300799	12.80	260785	14.43
9M52334.D	AC74101-021	90950	5.82	348835	6.83	200614	8.26	343031	9.74	331285	12.80	272570	14.43
9M52335.D	AC74101-033	59972	5.82	302449	6.83	175915	8.26	305049	9.74	298977	12.80	254714	14.44
9M52336.D	AC74101-015	86728	5.82	330113	6.83	189643	8.26	328782	9.74	327488	12.80	269523	14.43

I1 =	1,4-Dichlorobenzene-d4	I4 =	Phenanthrene-d10	**625/8270 Internal Standard concentration = 40 mg/L (in final extract)**
I2 =	Naphthalene-d8	I5 =	Chrysene-d12	**624/8260 Internal Standard concentration = 30ug/L**
I3 =	Acenaphthene-d10	I6 =	Perylene-d12	**524 Internal Standard concentration =5ug/L**

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 10M39544.D Method: EPA 8270C

Analysis Date/Time: 08/26/13 09:27

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	94234	5.91	336783	6.92	222520	8.36	461975	9.84	586409	12.91	517622	14.54
Eval File Area Limit:	47117-188468		168392-673566		111260-445040		230988-923950		293204-1172818		258811-1035244	
Eval File Rt Limit:	5.41-6.41		6.42-7.42		7.86-8.86		9.34-10.34		12.41-13.41		14.04-15.04	

Data File	Sample												
10M39545.	AC73985-012	97260	5.92	288244	6.92	224156	8.36	426966	9.84	452973	12.90	362484	14.54
10M39546.	AC74144-001	97073	5.91	330355	6.92	203259	8.36	349235	9.84	412253	12.92	366676	14.56
10M39547.	AC74032-002(	110025	5.91	347406	6.92	233408	8.37	440781	9.85	600744	12.90	482502	14.54
10M39548.	AC74109-002(	93560	5.91	318953	6.92	200790	8.36	400623	9.84	504295	12.90	411798	14.54
10M39549.	AC73985-012(	107659	5.91	356647	6.92	253372	8.36	501611	9.83	613410	12.90	481699	14.54
10M39550.	AC74109-005(	97132	5.91	338121	6.92	219474	8.36	440707	9.84	545608	12.90	439519	14.54
10M39551.	AC74109-003(	98287	5.91	335138	6.92	212916	8.36	432968	9.84	545016	12.90	443565	14.54
10M39552.	AC74109-004(	94093	5.91	321466	6.92	206603	8.36	415322	9.84	516894	12.90	426317	14.54
10M39553.	AC74109-006(	98010	5.91	340517	6.92	219482	8.36	438623	9.84	533919	12.90	426676	14.54
10M39554.	AC74109-009(	99727	5.91	346568	6.92	221967	8.36	441027	9.84	530170	12.90	423178	14.54
10M39555.	AC74143-001(	107680	5.91	374320	6.92	236858	8.36	477704	9.84	606983	12.90	486013	14.54
10M39556.	AC74085-001(	99872	5.91	347292	6.92	229300	8.36	464537	9.84	567391	12.90	449504	14.54
10M39557.	AC74109-001(	90683	5.91	314326	6.92	203114	8.36	400639	9.84	474151	12.90	398128	14.54
10M39558.	AC74109-007(	86716	5.91	301456	6.92	194915	8.36	380085	9.84	463788	12.90	379008	14.54
10M39559.	AC74085-002(	108934	5.91	380627	6.92	245880	8.36	495465	9.84	602523	12.90	481802	14.54
10M39560.	AC74085-003(	104819	5.91	373487	6.92	238990	8.36	480522	9.84	585678	12.90	467108	14.54
10M39561.	WMB25993	93303	5.91	330290	6.92	216685	8.36	430312	9.84	534178	12.90	424454	14.54
10M39562.	WMB25994	80692	5.91	288648	6.92	189068	8.36	378296	9.83	462887	12.90	369097	14.54
10M39564.	AC74123-006	88022	5.91	306006	6.92	200119	8.36	402110	9.84	474267	12.90	384774	14.54
10M39565.	AC74123-007	90163	5.91	297968	6.92	210871	8.36	427692	9.83	506854	12.90	398873	14.54
10M39566.	AC74123-008	90192	5.91	321545	6.92	209109	8.36	419088	9.84	507856	12.90	400034	14.54
10M39567.	SMB25990(M	107655	5.91	372217	6.92	240524	8.36	442677	9.84	444741	12.90	365909	14.54
10M39568.	SMB25990	111703	5.91	374697	6.92	233386	8.36	436505	9.84	448841	12.90	376597	14.54
10M39569.	AC74093-003	81168	5.91	274932	6.92	164165	8.36	299024	9.85	417176	12.91	357450	14.54
10M39570.	AC74093-003(	136238	5.91	452824	6.92	257395	8.37	445463	9.85	543974	12.91	497601	14.54
10M39571.	AC74093-003(	118446	5.91	386925	6.92	217949	8.37	398690	9.85	490598	12.91	434548	14.54
10M39572.	AC74064-001	112046	5.92	313970	6.92	285112	8.38	404922	9.86	508380	12.91	461581	14.54
10M39573.	AC74101-001	96078	5.91	326040	6.92	201026	8.36	374904	9.84	404884	12.90	335545	14.54

I1 =	1,4-Dichlorobenzene-d4	I4 =	Phenanthrene-d10	**625/8270 Internal Standard concentration = 40 mg/L (in final extract)**
I2 =	Naphthalene-d8	I5 =	Chrysene-d12	**624/8260 Internal Standard concentration = 30ug/L**
I3 =	Acenaphthene-d10	I6 =	Perylene-d12	**524 Internal Standard concentration =5ug/L**

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 9M52338.D Method: EPA 8270C

Analysis Date/Time: 08/27/13 09:10

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	88352	5.81	333606	6.83	195260	8.26	373076	9.73	451708	12.80	374635	14.43
Eval File Area Limit:	44176-176704		166803-667212		97630-390520		186538-746152		225854-903416		187318-749270	
Eval File Rt Limit:	5.31-6.31		6.33-7.33		7.76-8.76		9.23-10.23		12.3-13.3		13.93-14.93	

Data File	Sample												
9M52339.D	AC74101-004	114025	5.81	428552	6.82	240885	8.25	400605	9.72	393466	12.80	291150	14.42
9M52340.D	SMB25990	105747	5.81	399595	6.82	225022	8.25	380859	9.73	381983	12.79	276950	14.42
9M52341.D	AC74101-007	115505	5.81	428571	6.82	240428	8.25	404135	9.73	394809	12.80	290326	14.42
9M52342.D	AC74101-022	110063	5.81	407243	6.82	227167	8.25	369157	9.73	341822	12.79	257630	14.42
9M52343.D	AC74101-027	95871	5.81	359483	6.82	202648	8.25	334485	9.72	337933	12.79	250589	14.42
9M52344.D	AC74101-034	78409	5.81	293967	6.82	170145	8.25	295578	9.73	333891	12.79	259869	14.42
9M52345.D	AC74101-039	91083	5.81	346444	6.82	200321	8.25	341815	9.73	334451	12.79	245988	14.42
9M52346.D	AC74101-010	90369	5.81	336004	6.82	196278	8.25	338969	9.73	363266	12.80	299480	14.43
9M52347.D	AC74157-003	105280	5.81	372861	6.82	204007	8.25	314398	9.73	261706	12.79	229453	14.43
9M52348.D	SMB26001	92885	5.81	343819	6.82	191302	8.25	315381	9.73	265236	12.79	195945	14.43
9M52349.D	AC74157-005	94720	5.81	344219	6.82	189697	8.25	312804	9.73	292771	12.80	251931	14.43
9M52350.D	AC74157-008	84805	5.81	315354	6.82	177084	8.25	295225	9.73	291865	12.80	240312	14.43
9M52351.D	AC74157-004	81049	5.82	299977	6.83	160895	8.25	261934	9.73	412069	12.84	460950	14.51
9M52352.D	AC74157-002	95391	5.81	347653	6.82	183926	8.25	276009	9.73	291322	12.80	273308	14.44

I1 =	1,4-Dichlorobenzene-d4	I4 =	Phenanthrene-d10	**625/8270 Internal Standard concentration = 40 mg/L (in final extract)**
I2 =	Naphthalene-d8	I5 =	Chrysene-d12	**624/8260 Internal Standard concentration = 30ug/L**
I3 =	Acenaphthene-d10	I6 =	Perylene-d12	**524 Internal Standard concentration =5ug/L**

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

TCLP Semi-Volatile Data

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AC74177-002(T)
Client Id: 006 SS-1 Composite
Data File: 5M81738.D
Analysis Date: 08/28/13 15:25
Date Rec/Extracted: 08/23/13-08/28/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270C
Matrix: Aqueous
Initial Vol: 250ml
Final Vol: 1ml
Dilution: 1
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
95-95-4	2,4,5-Trichlorophenol	0.0080	U	87-68-3	Hexachlorobutadiene	0.0080	U
88-06-2	2,4,6-Trichlorophenol	0.0080	U	67-72-1	Hexachloroethane	0.0080	U
121-14-2	2,4-Dinitrotoluene	0.0080	U	98-95-3	Nitrobenzene	0.0080	U
95-48-7	2-Methylphenol	0.0020	U	87-86-5	Pentachlorophenol	0.040	U
106-44-5	3&4-Methylphenol	0.0020	U	110-86-1	Pyridine	0.040	U
118-74-1	Hexachlorobenzene	0.0080	U				

Worksheet #: 275029

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0199

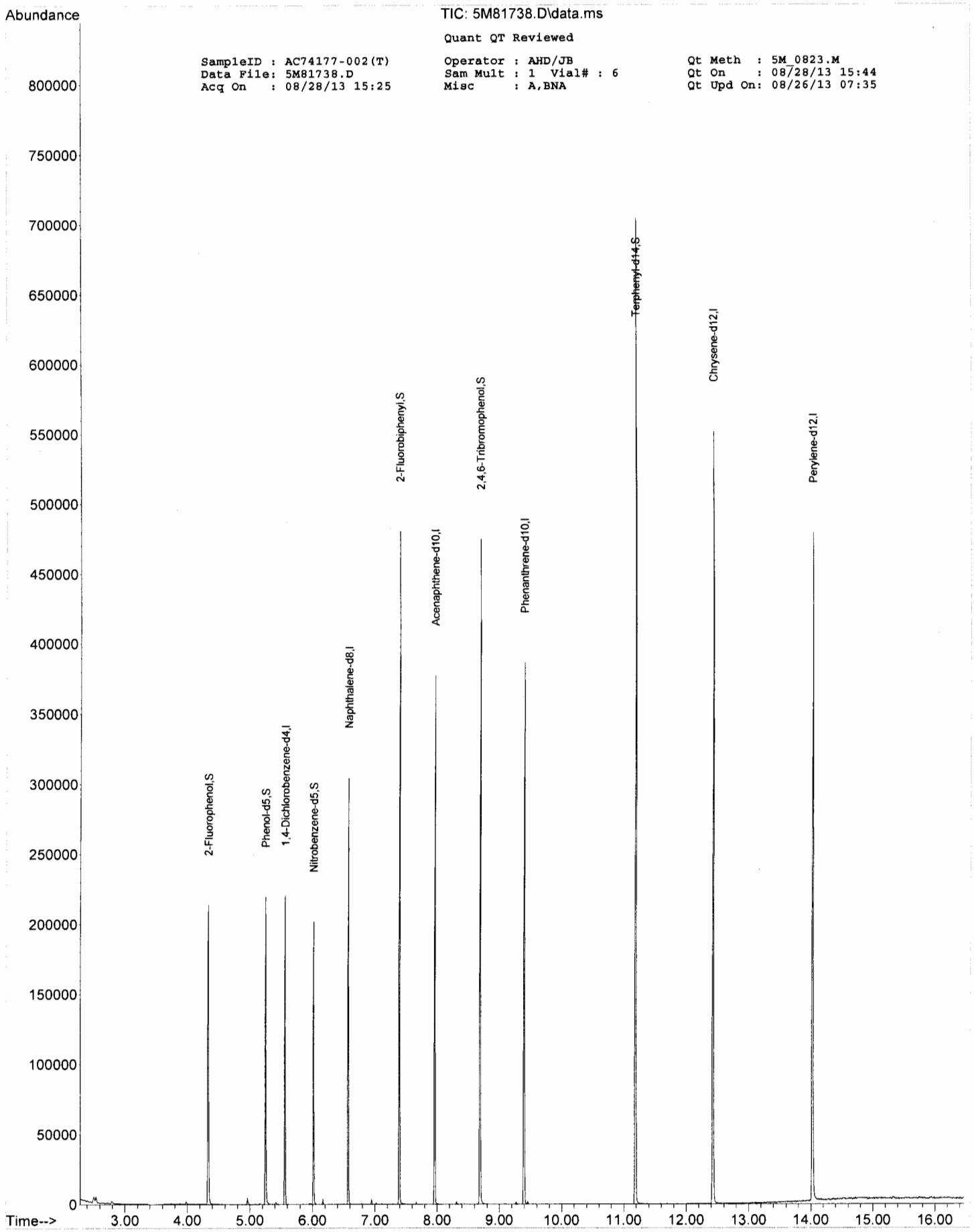
SampleID : AC74177-002(T) Operator : AHD/JB Qt Meth : 5M_0823.M
Data File: 5M81738.D Sam Mult : 1 Vial# : 6 Qt On : 08/28/13 15:44
Acq On : 08/28/13 15:25 Misc : A,BNA Qt Upd On: 08/26/13 07:35

Data Path : G:\GcMsData\2013\GCMS_5\Data\08-28-13\
Qt Path : G:\GCMSDATA\2013\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
7) 1,4-Dichlorobenzene-d4	5.557	152	27784	40.00 ng	0.00
29) Naphthalene-d8	6.572	136	105575	40.00 ng	0.00
47) Acenaphthene-d10	7.961	164	74037	40.00 ng	0.00
74) Phenanthrene-d10	9.393	188	154601	40.00 ng	0.00
88) Chrysene-d12	12.427	240	231755	40.00 ng	0.00
100) Perylene-d12	14.024	264	215620	40.00 ng	0.00
System Monitoring Compounds					
10) 2-Fluorophenol	4.333	112	58954	74.51 ng	0.00
Spiked Amount 100.000			Recovery = 74.51%		
15) Phenol-d5	5.247	99	61587	57.47 ng	0.00
Spiked Amount 100.000			Recovery = 57.47%		
30) Nitrobenzene-d5	6.016	128	22382	48.70 ng	0.00
Spiked Amount 50.000			Recovery = 97.40%		
52) 2-Fluorobiphenyl	7.395	172	135080	49.23 ng	0.00
Spiked Amount 50.000			Recovery = 98.46%		
77) 2,4,6-Tribromophenol	8.687	330	61915	94.30 ng	0.00
Spiked Amount 100.000			Recovery = 94.30%		
91) Terphenyl-d14	11.188	244	238781	57.83 ng	0.00
Spiked Amount 50.000			Recovery = 115.66%		

Target Compounds Qvalue

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


Abundance
TIC: 5M81738.D\data.ms
Quant QT Reviewed
SampleID : AC74177-002(T)
Data File: 5M81738.D
Acq On : 08/28/13 15:25
Operator : AHD/JB
Sam Mult : 1 Vial# : 6
Misc : A,BNA
Qt Meth : 5M_0823.M
Qt On : 08/28/13 15:44
Qt Upd On: 08/26/13 07:35
2-Fluorophenol,S
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AC74177-004(T)
Client Id: 012 SS-2 Composite
Data File: 5M81739.D
Analysis Date: 08/28/13 15:48
Date Rec/Extracted: 08/23/13-08/28/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270C
Matrix: Aqueous
Initial Vol: 250ml
Final Vol: 1ml
Dilution: 1
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
95-95-4	2,4,5-Trichlorophenol	0.0080	U	87-68-3	Hexachlorobutadiene	0.0080	U
88-06-2	2,4,6-Trichlorophenol	0.0080	U	67-72-1	Hexachloroethane	0.0080	U
121-14-2	2,4-Dinitrotoluene	0.0080	U	98-95-3	Nitrobenzene	0.0080	U
95-48-7	2-Methylphenol	0.0020	U	87-86-5	Pentachlorophenol	0.040	U
106-44-5	3&4-Methylphenol	0.0020	U	110-86-1	Pyridine	0.040	U
118-74-1	Hexachlorobenzene	0.0080	U				

Worksheet #: 275029

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3082313 0202

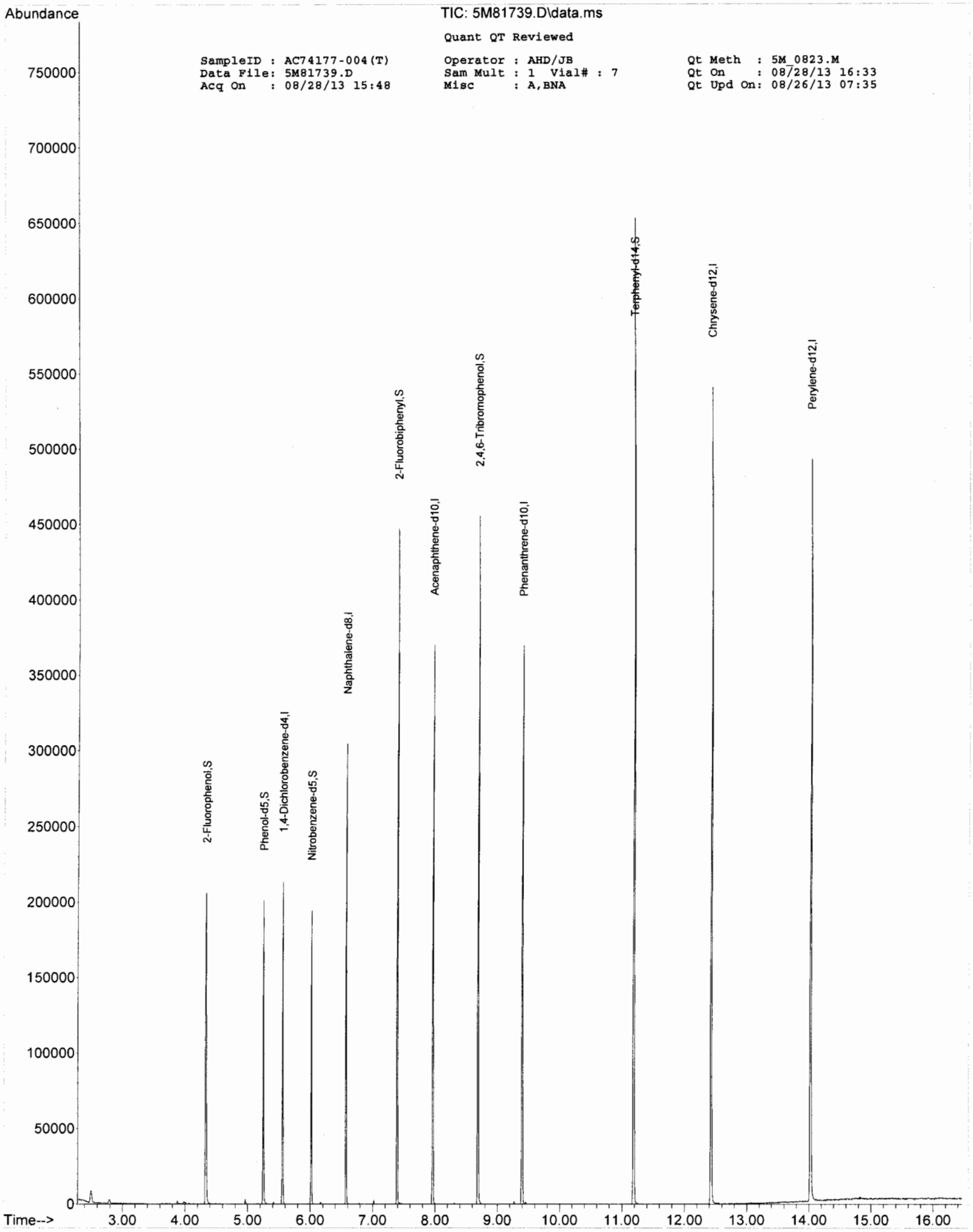
SampleID : AC74177-004(T) Operator : AHD/JB Qt Meth : 5M_0823.M
Data File: 5M81739.D Sam Mult : 1 Vial# : 7 Qt On : 08/28/13 16:33
Acq On : 08/28/13 15:48 Misc : A,BNA Qt Upd On: 08/26/13 07:35

Data Path : G:\GcMsData\2013\GCMS_5\Data\08-28-13\
Qt Path : G:\GCMSDATA\2013\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dichlorobenzene-d4	5.557	152	27385	40.00	ng	0.00
29) Naphthalene-d8	6.572	136	102087	40.00	ng	0.00
47) Acenaphthene-d10	7.961	164	71573	40.00	ng	0.00
74) Phenanthrene-d10	9.393	188	148505	40.00	ng	0.00
88) Chrysene-d12	12.427	240	227242	40.00	ng	0.00
100) Perylene-d12	14.024	264	209717	40.00	ng	0.00
System Monitoring Compounds						
10) 2-Fluorophenol	4.334	112	55487	71.15	ng	0.00
Spiked Amount 100.000			Recovery = 71.15%			
15) Phenol-d5	5.247	99	57158	54.11	ng	0.00
Spiked Amount 100.000			Recovery = 54.11%			
30) Nitrobenzene-d5	6.016	128	20441	46.00	ng	0.00
Spiked Amount 50.000			Recovery = 92.00%			
52) 2-Fluorobiphenyl	7.395	172	120121	45.28	ng	0.00
Spiked Amount 50.000			Recovery = 90.56%			
77) 2,4,6-Tribromophenol	8.687	330	57055	90.83	ng	0.00
Spiked Amount 100.000			Recovery = 90.83%			
91) Terphenyl-d14	11.188	244	223625	55.23	ng	0.00
Spiked Amount 50.000			Recovery = 110.46%			

Target Compounds Qvalue

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


Abundance
TIC: 5M81739.D\data.ms
Quant QT Reviewed
SampleID : AC74177-004(T)
Data File: 5M81739.D
Acq On : 08/28/13 15:48
Operator : AHD/JB
Sam Mult : 1 Vial# : 7
Misc : A,BNA
Qt Meth : 5M_0823.M
Qt On : 08/28/13 16:33
Qt Upd On: 08/26/13 07:35
2-Fluorophenol,S
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AC74177-006(T)
Client Id: 018 SS-3 Composite
Data File: 5M81740.D
Analysis Date: 08/28/13 16:11
Date Rec/Extracted: 08/23/13-08/28/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270C
Matrix: Aqueous
Initial Vol: 250ml
Final Vol: 1ml
Dilution: 1
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
95-95-4	2,4,5-Trichlorophenol	0.0080	U	87-68-3	Hexachlorobutadiene	0.0080	U
88-06-2	2,4,6-Trichlorophenol	0.0080	U	67-72-1	Hexachloroethane	0.0080	U
121-14-2	2,4-Dinitrotoluene	0.0080	U	98-95-3	Nitrobenzene	0.0080	U
95-48-7	2-Methylphenol	0.0020	U	87-86-5	Pentachlorophenol	0.040	U
106-44-5	3&4-Methylphenol	0.0020	U	110-86-1	Pyridine	0.040	U
118-74-1	Hexachlorobenzene	0.0080	U				

Worksheet #: 275029 ***Total Target Concentration*** 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3082313 0205

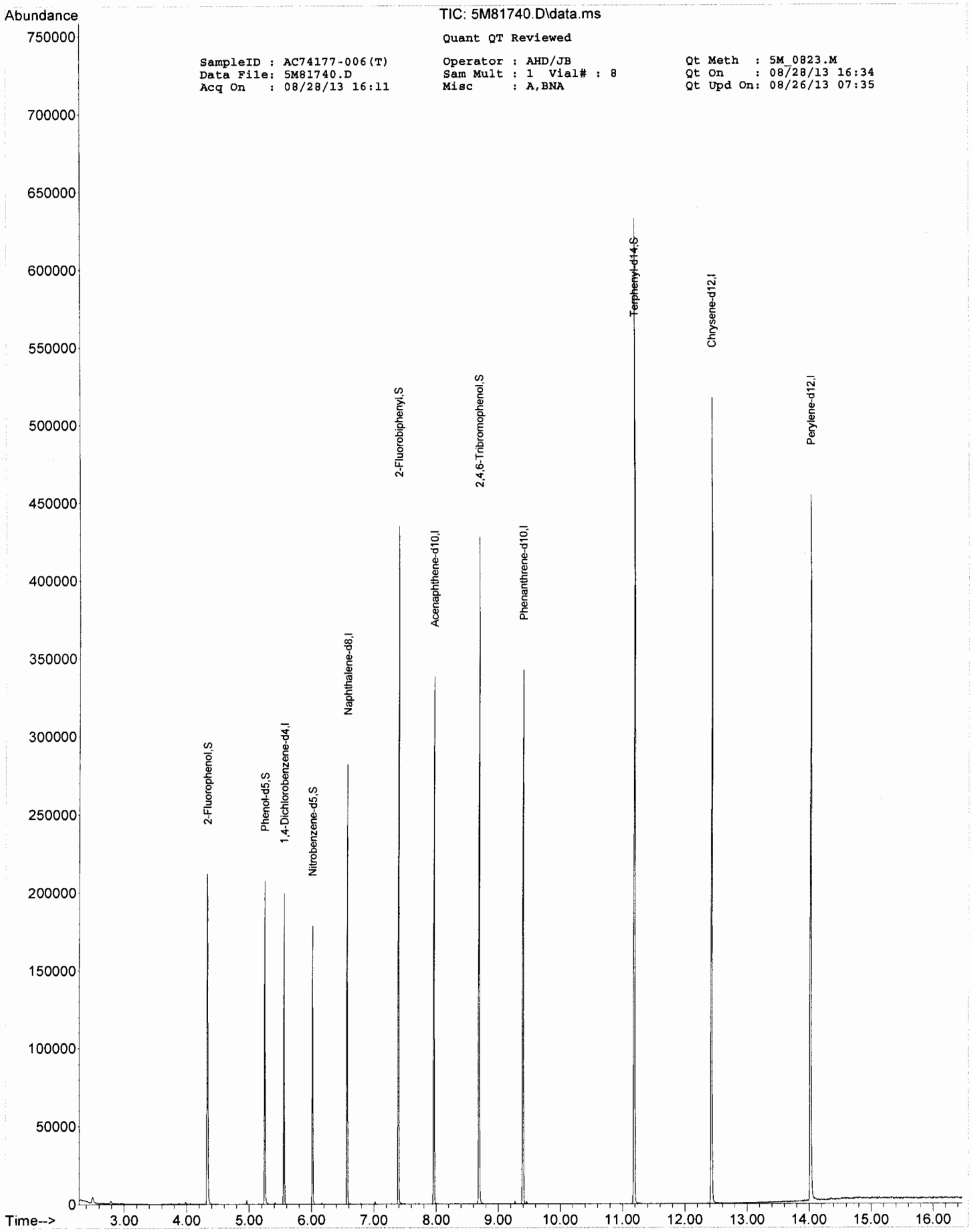
SampleID : AC74177-006(T) Operator : AHD/JB Qt Meth : 5M_0823.M
Data File: 5M81740.D Sam Mult : 1 Vial# : 8 Qt On : 08/28/13 16:34
Acq On : 08/28/13 16:11 Misc : A,BNA Qt Upd On: 08/26/13 07:35

Data Path : G:\GcMsData\2013\GCMS_5\Data\08-28-13\
Qt Path : G:\GCMSDATA\2013\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
7) 1,4-Dichlorobenzene-d4	5.557	152	25252	40.00 ng	0.00
29) Naphthalene-d8	6.572	136	95804	40.00 ng	0.00
47) Acenaphthene-d10	7.961	164	66441	40.00 ng	0.00
74) Phenanthrene-d10	9.393	188	141954	40.00 ng	0.00
88) Chrysene-d12	12.427	240	222154	40.00 ng	0.00
100) Perylene-d12	14.024	264	211543	40.00 ng	0.00
System Monitoring Compounds					
10) 2-Fluorophenol	4.328	112	54405	75.65 ng	0.00
Spiked Amount 100.000			Recovery = 75.65%		
15) Phenol-d5	5.247	99	56252	57.75 ng	0.00
Spiked Amount 100.000			Recovery = 57.75%		
30) Nitrobenzene-d5	6.016	128	19658	47.14 ng	0.00
Spiked Amount 50.000			Recovery = 94.28%		
52) 2-Fluorobiphenyl	7.395	172	119753	48.63 ng	0.00
Spiked Amount 50.000			Recovery = 97.26%		
77) 2,4,6-Tribromophenol	8.687	330	60333	99.48 ng	0.00
Spiked Amount 100.000			Recovery = 99.48%		
91) Terphenyl-d14	11.188	244	211565	53.45 ng	0.00
Spiked Amount 50.000			Recovery = 106.90%		

Target Compounds Qvalue

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


Abundance
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Quant QT Reviewed
SampleID : AC74177-006(T)
Data File: 5M81740.D
Acq On : 08/28/13 16:11
Operator : AHD/JB
Sam Mult : 1 Vial# : 8
Misc : A,BNA
Qt Meth : 5M_0823.M
Qt On : 08/28/13 16:34
Qt Upd On: 08/26/13 07:35
2-Fluorophenol,S
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: WMB26013
Client Id:
Data File: 5M81735.D
Analysis Date: 08/28/13 14:16
Date Rec/Extracted: NA-08/28/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270C
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 1ml
Dilution: 1
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
95-95-4	2,4,5-Trichlorophenol	0.0020	U	87-68-3	Hexachlorobutadiene	0.0020	U
88-06-2	2,4,6-Trichlorophenol	0.0020	U	67-72-1	Hexachloroethane	0.0020	U
121-14-2	2,4-Dinitrotoluene	0.0020	U	98-95-3	Nitrobenzene	0.0020	U
95-48-7	2-Methylphenol	0.00050	U	87-86-5	Pentachlorophenol	0.010	U
106-44-5	3&4-Methylphenol	0.00050	U	110-86-1	Pyridine	0.010	U
118-74-1	Hexachlorobenzene	0.0020	U				

Worksheet #: 275029 ***Total Target Concentration*** 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3082313 0208

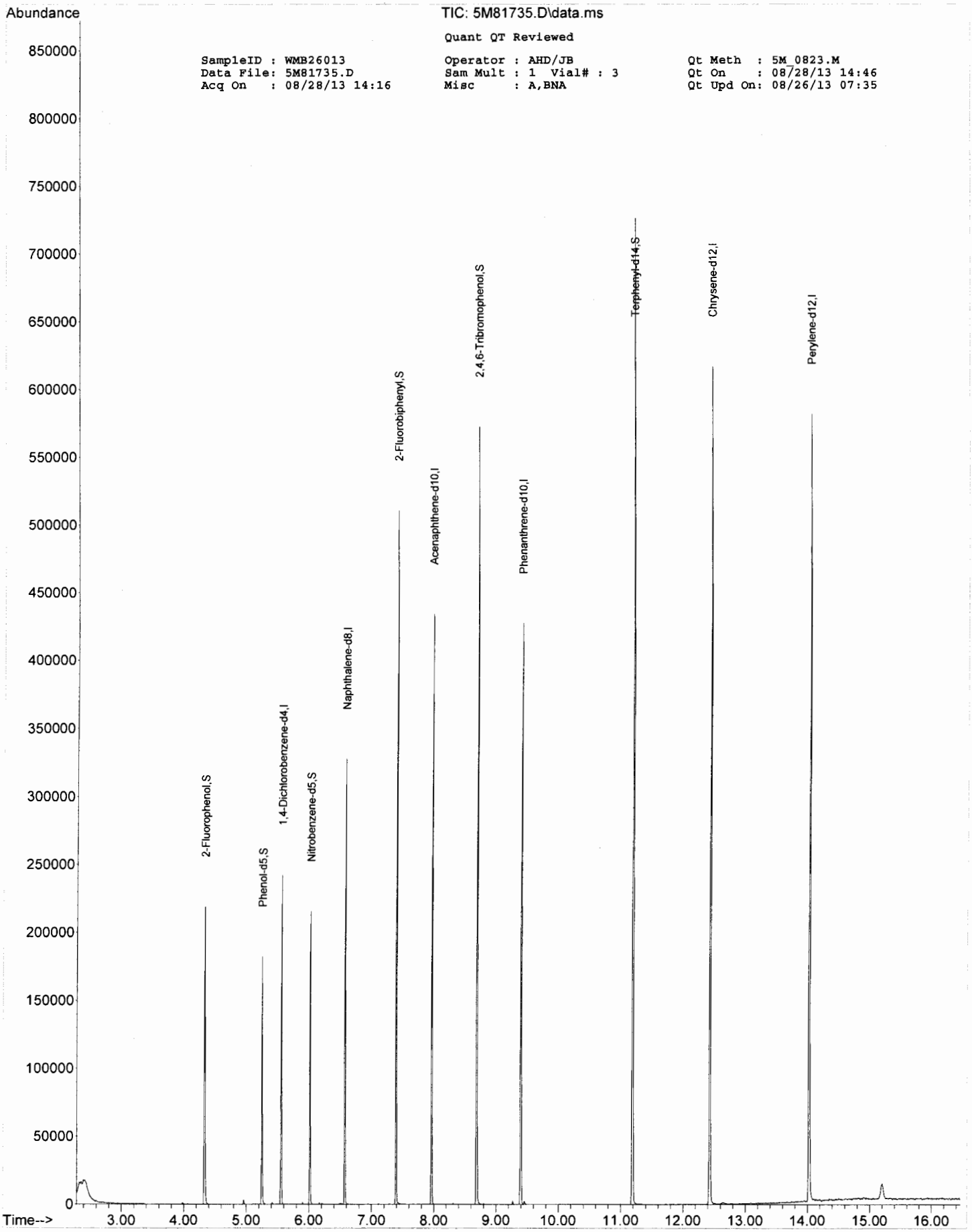
SampleID : WMB26013 Operator : AHD/JB Qt Meth : 5M_0823.M
Data File: 5M81735.D Sam Mult : 1 Vial# : 3 Qt On : 08/28/13 14:46
Acq On : 08/28/13 14:16 Misc : A,BNA Qt Upd On: 08/26/13 07:35

Data Path : G:\GcMsData\2013\GCMS_5\Data\08-28-13\
Qt Path : G:\GCMSDATA\2013\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
7) 1,4-Dichlorobenzene-d4	5.557	152	32903	40.00 ng	0.00
29) Naphthalene-d8	6.572	136	118706	40.00 ng	0.00
47) Acenaphthene-d10	7.961	164	83252	40.00 ng	0.00
74) Phenanthrene-d10	9.393	188	174348	40.00 ng	0.00
88) Chrysene-d12	12.427	240	269196	40.00 ng	0.00
100) Perylene-d12	14.024	264	261246	40.00 ng	0.00
System Monitoring Compounds					
10) 2-Fluorophenol	4.328	112	58510	62.44 ng	0.00
Spiked Amount 100.000			Recovery = 62.44%		
15) Phenol-d5	5.247	99	49202	38.77 ng	0.00
Spiked Amount 100.000			Recovery = 38.77%		
30) Nitrobenzene-d5	6.016	128	25285	48.94 ng	0.00
Spiked Amount 50.000			Recovery = 97.88%		
52) 2-Fluorobiphenyl	7.395	172	145737	47.23 ng	0.00
Spiked Amount 50.000			Recovery = 94.46%		
77) 2,4,6-Tribromophenol	8.687	330	77445	103.49 ng	0.00
Spiked Amount 100.000			Recovery = 103.49%		
91) Terphenyl-d14	11.188	244	262968	54.83 ng	0.00
Spiked Amount 50.000			Recovery = 109.66%		

Target Compounds Qvalue

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


Abundance
TIC: 5M81735.D\data.ms
Quant QT Reviewed
SampleID : WMB26013
Data File: 5M81735.D
Acq On : 08/28/13 14:16
Operator : AHD/JB
Sam Mult : 1 Vial# : 3
Misc : A,BNA
Qt Meth : 5M_0823.M
Qt On : 08/28/13 14:46
Qt Upd On: 08/26/13 07:35
2-Fluorophenol,S
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time->

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: EF1 V-171314(DT:8/27/
Client Id:
Data File: 5M81741.D
Analysis Date: 08/28/13 16:35
Date Rec/Extracted: NA-08/28/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270C
Matrix: Aqueous
Initial Vol: 250ml
Final Vol: 1ml
Dilution: 1
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
95-95-4	2,4,5-Trichlorophenol	0.0080	U	87-68-3	Hexachlorobutadiene	0.0080	U
88-06-2	2,4,6-Trichlorophenol	0.0080	U	67-72-1	Hexachloroethane	0.0080	U
121-14-2	2,4-Dinitrotoluene	0.0080	U	98-95-3	Nitrobenzene	0.0080	U
95-48-7	2-Methylphenol	0.0020	U	87-86-5	Pentachlorophenol	0.040	U
106-44-5	3&4-Methylphenol	0.0020	U	110-86-1	Pyridine	0.040	U
118-74-1	Hexachlorobenzene	0.0080	U				

Worksheet #: 275029

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3082313 0211

SampleID : EF1 V-171314(DT:8/2 Operator : AHD/JB Qt Meth : 5M_0823.M
Data File: 5M81741.D Sam Mult : 1 Vial# : 9 Qt On : 08/28/13 16:53
Acq On : 08/28/13 16:35 Misc : A,BNA Qt Upd On: 08/26/13 07:35

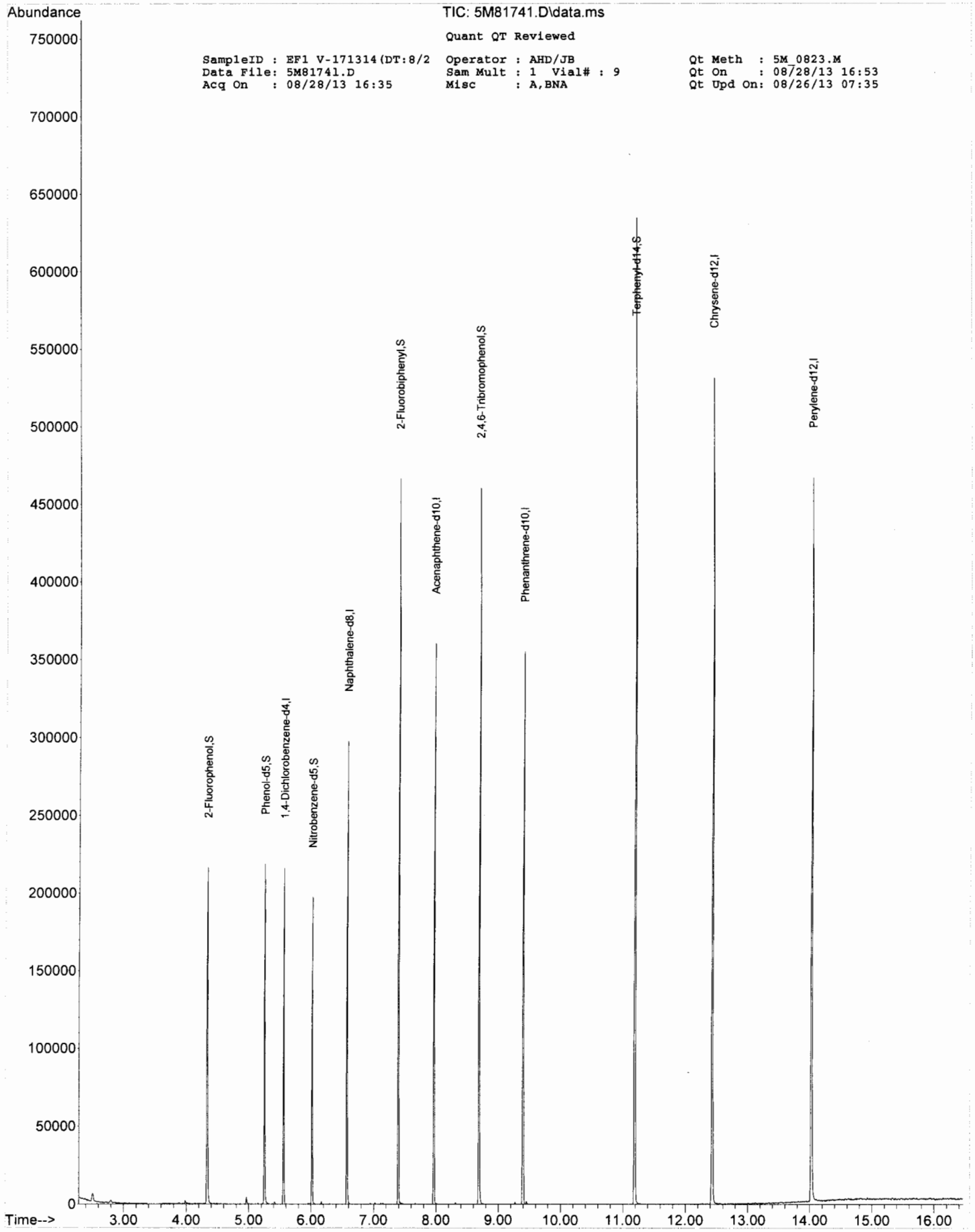
Data Path : G:\GcMsData\2013\GCMS_5\Data\08-28-13\
Qt Path : G:\GCMSDATA\2013\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
7) 1,4-Dichlorobenzene-d4	5.557	152	27008	40.00 ng	0.00
29) Naphthalene-d8	6.572	136	99250	40.00 ng	0.00
47) Acenaphthene-d10	7.961	164	67742	40.00 ng	0.00
74) Phenanthrene-d10	9.393	188	142899	40.00 ng	0.00
88) Chrysene-d12	12.427	240	221150	40.00 ng	0.00
100) Perylene-d12	14.024	264	203887	40.00 ng	0.00
System Monitoring Compounds					
10) 2-Fluorophenol	4.334	112	56704	73.72 ng	0.00
Spiked Amount 100.000			Recovery = 73.72%		
15) Phenol-d5	5.247	99	59807	57.41 ng	0.00
Spiked Amount 100.000			Recovery = 57.41%		
30) Nitrobenzene-d5	6.016	128	20757	48.05 ng	0.00
Spiked Amount 50.000			Recovery = 96.10%		
52) 2-Fluorobiphenyl	7.395	172	126367	50.33 ng	0.00
Spiked Amount 50.000			Recovery = 100.66%		
77) 2,4,6-Tribromophenol	8.688	330	57552	94.78 ng	0.00
Spiked Amount 100.000			Recovery = 94.78%		
91) Terphenyl-d14	11.188	244	221495	56.21 ng	0.00
Spiked Amount 50.000			Recovery = 112.42%		

Target Compounds Qvalue

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

Ke


Abundance
TIC: 5M81741.D\data.ms
Quant QT Reviewed
SampleID : EF1 V-171314(DT:8/2
Data File: 5M81741.D
Acq On : 08/28/13 16:35
Operator : AHD/JB
Sam Mult : 1 Vial# : 9
Misc : A,BNA
Qt Meth : 5M_0823.M
Qt On : 08/28/13 16:53
Qt Upd On: 08/26/13 07:35
2-Fluorophenol,S
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

FORM2

Surrogate Recovery

Method: EPA 8270C

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column1 S5 Recov	Column1 S6 Recov
5M81735.D	WMB26013	Aqueous	08/28/13 14:16	1		62	39	98	94	103	110
5M81741.D	EF1 V-171314	Aqueous	08/28/13 16:35	1		74	57	96	101	95	112
5M81738.D	AC74177-002(	Aqueous	08/28/13 15:25	1		75	57	97	98	94	116
5M81739.D	AC74177-004(	Aqueous	08/28/13 15:48	1		71	54	92	91	91	110
5M81740.D	AC74177-006(	Aqueous	08/28/13 16:11	1		76	58	94	97	99	107
5M81746.D	AC74177-002(	Aqueous	08/28/13 18:31	1		79	65	99	81	91	104
5M81747.D	AC74177-002(	Aqueous	08/28/13 18:54	1		74	63	97	74	92	101
5M81763.D	WMB26013(M	Aqueous	08/29/13 12:15	1		48	29	99	95	106	117

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8270C

Aqueous Limits

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	29-113
S2=Phenol-d5	100	27-115
S3=Nitrobenzene-d5	50	51-139
S4=2-Fluorobiphenyl	50	53-129
S5=2,4,6-Tribromophenol	100	54-149
S6=Terphenyl-d14	50	55-146

Form3
Recovery Data
QC Batch: WMB26013

	Data File	Sample ID:	Analysis Date
Spike or Dup:	5M81763.D	WMB26013(MS)	8/29/2013 12:15:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8270 Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	82.8798	0	100	83	10	130
Phenol	1	28.6494	0	100	29	20	130
2-Chlorophenol	1	86.0845	0	100	86	50	130
1,4-Dichlorobenzene	1	89.2304	0	100	89	50	130
2-Methylphenol	1	66.5232	0	100	67	50	130
Hexachloroethane	1	92.9973	0	100	93	50	130
N-Nitroso-di-n-propylamine	1	81.7528	0	100	82	20	130
3&4-Methylphenol	1	60.4023	0	100	60	50	130
Nitrobenzene	1	87.6376	0	100	88	50	130
2,4-Dimethylphenol	1	80.7046	0	100	81	50	130
1,2,4-Trichlorobenzene	1	90.786	0	100	91	50	130
Naphthalene	1	90.1546	0	100	90	50	130
Hexachlorobutadiene	1	93.3362	0	100	93	50	130
4-Chloro-3-methylphenol	1	84.2845	0	100	84	50	130
2,4,6-Trichlorophenol	1	99.3219	0	100	99	50	130
2,4,5-Trichlorophenol	1	103.5543	0	100	104	50	130
Acenaphthene	1	88.4719	0	100	88	50	130
2,4-Dinitrotoluene	1	96.5837	0	100	97	50	130
4-Nitrophenol	1	27.0543	0	100	27	20	130
Fluorene	1	88.1999	0	100	88	50	130
Hexachlorobenzene	1	97.5025	0	100	98	50	130
Pentachlorophenol	1	120.0699	0	100	120	40	130
Pyrene	1	101.4176	0	100	101	50	130
Butylbenzylphthalate	1	109.7516	0	100	110	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: WMB26013

	Data File	Sample ID:	Analysis Date
Spike or Dup:	5M81746.D	AC74177-002(T)(MS)	8/28/2013 6:31:00 PM
Non Spike(If applicable):	5M81738.D	AC74177-002(T)	8/28/2013 3:25:00 PM
Inst Blank(If applicable):			

Method: 8270 Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	70.186	0	100	70	10	130
Phenol	1	79.7567	0	100	80	20	130
2-Chlorophenol	1	123.3566	0	100	123	50	130
1,4-Dichlorobenzene	1	102.0026	0	100	102	50	130
2-Methylphenol	1	123.2998	0	100	123	50	130
Hexachloroethane	1	107.1135	0	100	107	50	130
N-Nitroso-di-n-propylamine	1	103.5217	0	100	104	20	130
3&4-Methylphenol	1	117.1541	0	100	117	50	130
Nitrobenzene	1	105.4663	0	100	105	50	130
2,4-Dimethylphenol	1	125.4327	0	100	125	50	130
1,2,4-Trichlorobenzene	1	96.3883	0	100	96	50	130
Naphthalene	1	100.6537	0	100	101	50	130
Hexachlorobutadiene	1	98.2664	0	100	98	50	130
4-Chloro-3-methylphenol	1	126.8633	0	100	127	50	130
2,4,6-Trichlorophenol	1	133.7837	0	100	134*	50	130
2,4,5-Trichlorophenol	1	138.2679	0	100	138*	50	130
Acenaphthene	1	102.9703	0	100	103	50	130
2,4-Dinitrotoluene	1	113.656	0	100	114	50	130
4-Nitrophenol	1	82.3123	0	100	82	20	130
Fluorene	1	107.5361	0	100	108	50	130
Hexachlorobenzene	1	101.8841	0	100	102	50	130
Pentachlorophenol	1	143.6421	0	100	144*	40	130
Pyrene	1	109.1035	0	100	109	50	130
Butylbenzylphthalate	1	112.8865	0	100	113	50	130

	Data File	Sample ID:	Analysis Date
Spike or Dup:	5M81747.D	AC74177-002(T)(MSD)	8/28/2013 6:54:00 PM
Non Spike(If applicable):	5M81738.D	AC74177-002(T)	8/28/2013 3:25:00 PM
Inst Blank(If applicable):			

Method: 8270 Matrix: Aqueous QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	72.6723	0	100	73	10	130
Phenol	1	79.3856	0	100	79	20	130
2-Chlorophenol	1	122.5192	0	100	123	50	130
1,4-Dichlorobenzene	1	99.092	0	100	99	50	130
2-Methylphenol	1	123.9139	0	100	124	50	130
Hexachloroethane	1	109.4761	0	100	109	50	130
N-Nitroso-di-n-propylamine	1	112.3038	0	100	112	20	130
3&4-Methylphenol	1	120.2826	0	100	120	50	130
Nitrobenzene	1	116.4692	0	100	116	50	130
2,4-Dimethylphenol	1	126.0915	0	100	126	50	130
1,2,4-Trichlorobenzene	1	100.105	0	100	100	50	130
Naphthalene	1	103.4056	0	100	103	50	130
Hexachlorobutadiene	1	101.0838	0	100	101	50	130
4-Chloro-3-methylphenol	1	131.9455	0	100	132*	50	130
2,4,6-Trichlorophenol	1	133.345	0	100	133*	50	130
2,4,5-Trichlorophenol	1	140.073	0	100	140*	50	130
Acenaphthene	1	102.9312	0	100	103	50	130
2,4-Dinitrotoluene	1	110.7982	0	100	111	50	130
4-Nitrophenol	1	86.0072	0	100	86	20	130
Fluorene	1	105.3682	0	100	105	50	130
Hexachlorobenzene	1	101.0035	0	100	101	50	130
Pentachlorophenol	1	143.6798	0	100	144*	40	130
Pyrene	1	108.1062	0	100	108	50	130
Butylbenzylphthalate	1	112.8414	0	100	113	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA

QC Batch: WMB26013

	Data File	Sample ID:	Analysis Date
Spike or Dup:	5M81747.D	AC74177-002(T)(MSD)	8/28/2013 6:54:00 PM
Duplicate(If applicable):	5M81746.D	AC74177-002(T)(MS)	8/28/2013 6:31:00 PM
Inst Blank(If applicable):			

Method: 8270 Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Pyridine	1	72.6723	70.186	3.5	40
Phenol	1	79.3856	79.7567	0.47	40
2-Chlorophenol	1	122.5192	123.3566	0.68	40
1,4-Dichlorobenzene	1	99.092	102.0026	2.9	40
2-Methylphenol	1	123.9139	123.2998	0.5	40
Hexachloroethane	1	109.4761	107.1135	2.2	40
N-Nitroso-di-n-propylamine	1	112.3038	103.5217	8.1	40
3&4-Methylphenol	1	120.2826	117.1541	2.6	40
Nitrobenzene	1	116.4692	105.4663	9.9	40
2,4-Dimethylphenol	1	126.0915	125.4327	0.52	40
1,2,4-Trichlorobenzene	1	100.105	96.3883	3.8	40
Naphthalene	1	103.4056	100.6537	2.7	40
Hexachlorobutadiene	1	101.0838	98.2664	2.8	40
4-Chloro-3-methylphenol	1	131.9455	126.8633	3.9	40
2,4,6-Trichlorophenol	1	133.345	133.7837	0.33	40
2,4,5-Trichlorophenol	1	140.073	138.2679	1.3	40
Acenaphthene	1	102.9312	102.9703	0.04	40
2,4-Dinitrotoluene	1	110.7982	113.656	2.5	40
4-Nitrophenol	1	86.0072	82.3123	4.4	40
Fluorene	1	105.3682	107.5361	2	40
Hexachlorobenzene	1	101.0035	101.8841	0.87	40
Pentachlorophenol	1	143.6798	143.6421	0.03	40
Pyrene	1	108.1062	109.1035	0.92	40
Butylbenzylphthalate	1	112.8414	112.8865	0.04	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: WMB26013
Blank Data File: 5M81735.D
Matrix: Aqueous

Blank Analysis Date: 08/28/13 14:16
Blank Extraction Date: 08/28/13
(If Applicable)
Method: EPA 8270C

Sample Number	Data File	Analysis Date
AC74177-002(T)	5M81738.D	08/28/13 15:25
AC74177-004(T)	5M81739.D	08/28/13 15:48
AC74177-006(T)	5M81740.D	08/28/13 16:11
EF1 V-171314(DT:	5M81741.D	08/28/13 16:35
WMB26013(MS)	5M81763.D	08/29/13 12:15
AC74177-002(T)(M	5M81747.D	08/28/13 18:54
AC74177-002(T)(M	5M81746.D	08/28/13 18:31

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 5

Data File: 5M81689.D
Analysis Date: 08/23/13 10:34
Method: EPA 8270C

Tune Scan/Time Range: Scan 1389

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	47.4	8505	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	50.5	9051	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	48.0	8618	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	17936	PASS
199	198	5	9	7.3	1317	PASS
275	198	10	30	27.2	4883	PASS
365	198	1	100	2.7	487	PASS
441	443	0.01	100	79.1	1409	PASS
442	198	40	100	50.8	9113	PASS
443	442	17	23	19.5	1781	PASS

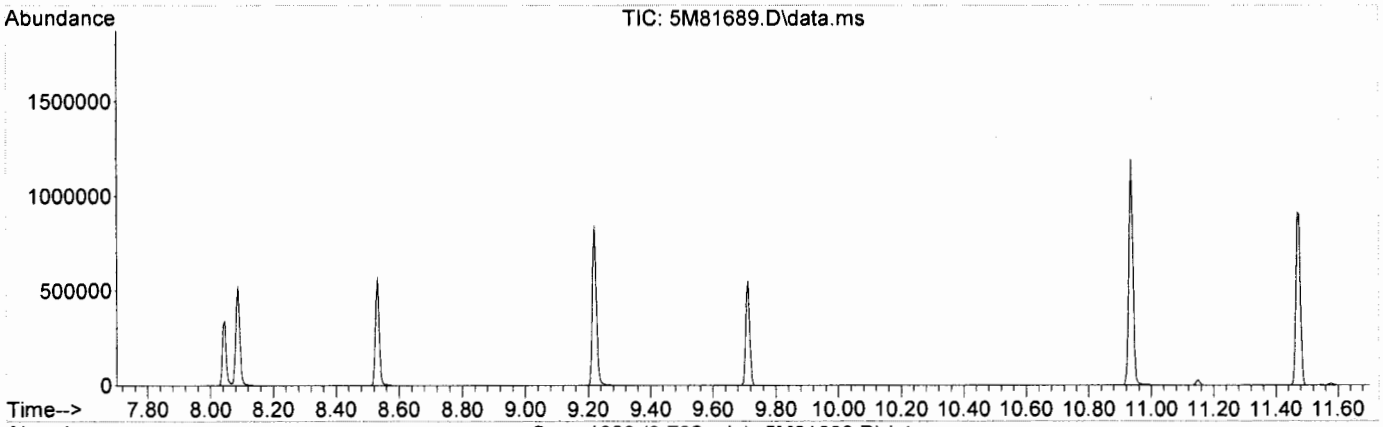
Data File	Sample Number	Analysis Date:
5M81690.D	CAL BNA@50PPM	08/23/13 11:01
5M81691.D	CAL BNA@10PPM	08/23/13 11:55
5M81692.D	CAL BNA@20PPM	08/23/13 12:18
5M81693.D	CAL BNA@2PPM	08/23/13 12:42
5M81694.D	CAL BNA@.5PPM	08/23/13 13:05
5M81695.D	CAL BNA@50PPM	08/23/13 13:28
5M81696.D	CAL BNA@196PP	08/23/13 13:51
5M81697.D	CAL BNA@160PP	08/23/13 14:14
5M81698.D	CAL BNA@120PP	08/23/13 14:38
5M81699.D	CAL BNA@80PPM	08/23/13 15:01
5M81700.D	ICVBNA@50PPM	08/23/13 15:24

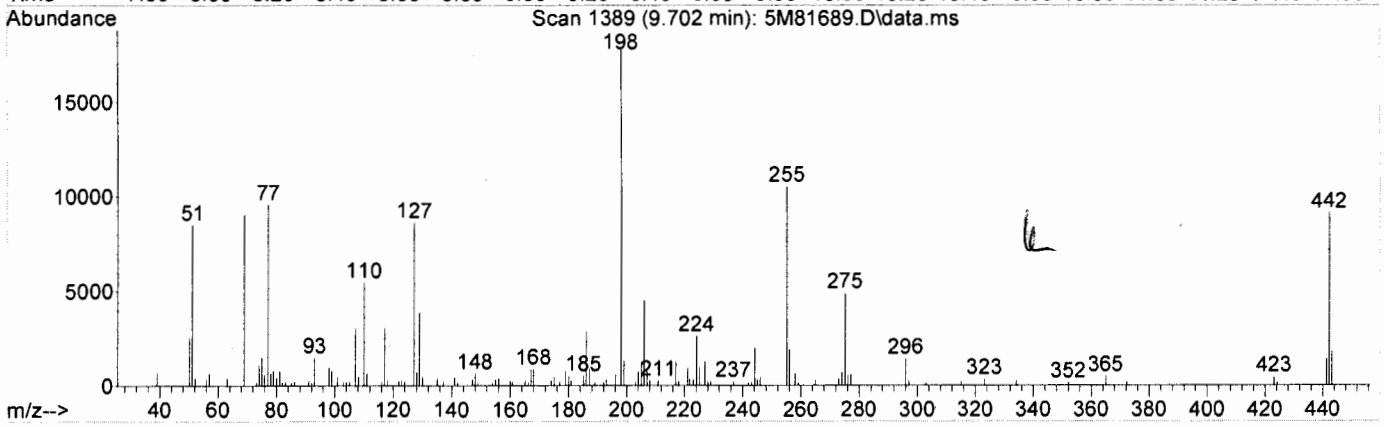
3082313 0219

Data Path : G:\GcMsData\2013\GCMS_5\Data\08-23-13\
Data File : 5M81689.D
Acq On : 23 Aug 2013 10:34
Operator : AHD/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2013\GCMS_5\METHODQT\5M_0813.M
Title : @GCMS_5,mg,625,8270
Last Update : Tue Aug 13 15:59:42 2013





Spectrum Information: Scan 1389

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.4	8505	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	50.5	9051	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	48.0	8618	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	17936	PASS
199	198	5	9	7.3	1317	PASS
275	198	10	30	27.2	4883	PASS
365	198	1	100	2.7	487	PASS
441	443	0.01	100	79.1	1409	PASS
442	198	40	100	50.8	9113	PASS
443	442	17	23	19.5	1781	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 5M81733.D
Instrument: GCMS 5 **Analysis Date:** 08/28/13 08:02
Method: EPA 8270C
Tune Scan/Time Range: Average of 9.670 to 9.676 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	53.5	5477	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	50.0	5118	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	49.6	5081	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	10233	PASS
199	198	5	9	7.8	794	PASS
275	198	10	30	29.7	3043	PASS
365	198	1	100	2.9	300	PASS
441	443	0.01	100	66.8	761	PASS
442	198	40	100	53.7	5499	PASS
443	442	17	23	20.7	1140	PASS

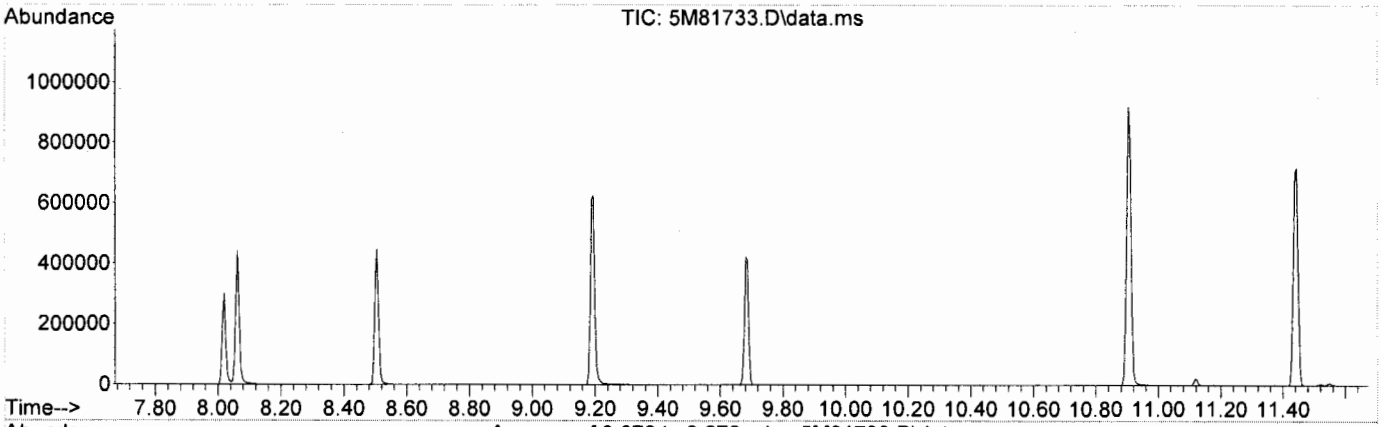
Data File	Sample Number	Analysis Date:
5M81734.D	CAL BNA@50PPM	08/28/13 08:29
5M81735.D	WMB26013	08/28/13 14:16
5M81736.D	TEST	08/28/13 14:39
5M81737.D	AC74062-002(T)	08/28/13 15:02
5M81738.D	AC74177-002(T)	08/28/13 15:25
5M81739.D	AC74177-004(T)	08/28/13 15:48
5M81740.D	AC74177-006(T)	08/28/13 16:11
5M81741.D	EF1 V-171314(DT:	08/28/13 16:35
5M81742.D	WMB26013(MS)	08/28/13 16:58
5M81743.D	WMB26014	08/28/13 17:21
5M81744.D	EF1- V-171043(DT:	08/28/13 17:44
5M81745.D	WMB26013(MS)	08/28/13 18:08
5M81746.D	AC74177-002(T)(M	08/28/13 18:31
5M81747.D	AC74177-002(T)(M	08/28/13 18:54
5M81748.D	AC74151-001	08/28/13 19:18
5M81749.D	AC74151-002	08/28/13 19:41
5M81750.D	AC74153-001	08/28/13 20:04
5M81751.D	AC74153-002	08/28/13 20:28
5M81752.D	AC74154-001	08/28/13 20:51
5M81753.D	AC74154-002	08/28/13 21:14
5M81754.D	AC74154-003	08/28/13 21:37
5M81755.D	AC74154-004	08/28/13 22:00
5M81756.D	AC74155-001	08/28/13 22:23
5M81757.D	AC74155-002	08/28/13 22:46
5M81758.D	AC74176-001	08/28/13 23:09

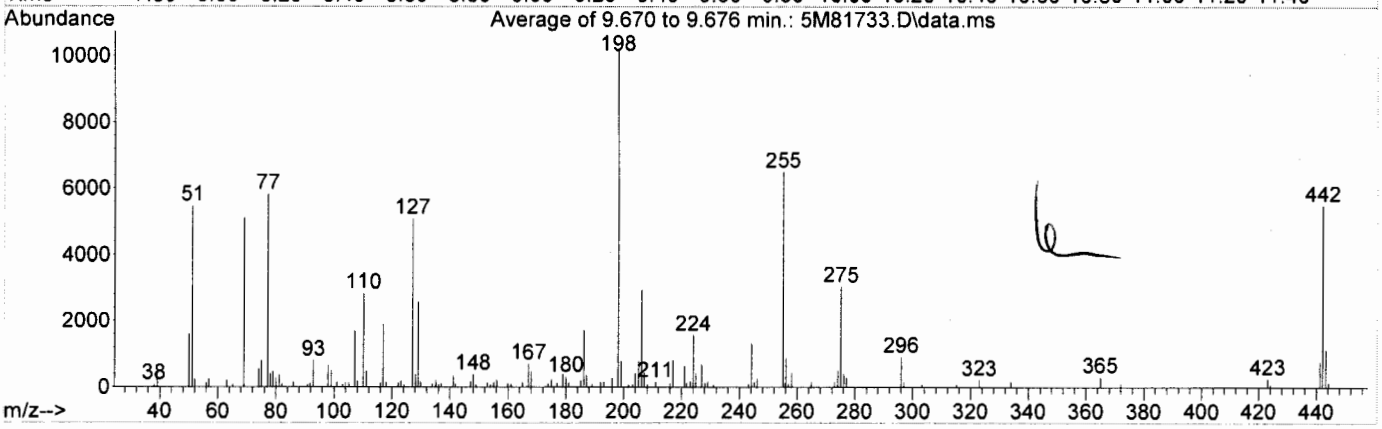
3082313 0221

Data Path : G:\GcMsData\2013\GCMS_5\Data\08-28-13\
Data File : 5M81733.D
Acq On : 28 Aug 2013 8:02
Operator : AHD/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2013\GCMS_5\METHODQT\5M_0823.M
Title : @GCMS_5,mg,625,8270
Last Update : Fri Aug 23 15:18:19 2013





Spectrum Information: Average of 9.670 to 9.676 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	53.5	5477	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	50.0	5118	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	49.6	5081	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	10233	PASS
199	198	5	9	7.8	794	PASS
275	198	10	30	29.7	3043	PASS
365	198	1	100	2.9	300	PASS
441	443	0.01	100	66.8	761	PASS
442	198	40	100	53.7	5499	PASS
443	442	17	23	20.7	1140	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 5

Data File: 5M81760.D
Analysis Date: 08/29/13 10:04
Method: EPA 8270C

Tune Scan/Time Range: Average of 9.665 to 9.670 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	55.7	3853	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	51.4	3557	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	54.6	3781	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	6923	PASS
199	198	5	9	6.8	468	PASS
275	198	10	30	27.9	1929	PASS
365	198	1	100	3.6	250	PASS
441	443	0.01	100	70.9	471	PASS
442	198	40	100	45.6	3157	PASS
443	442	17	23	21.0	664	PASS

Data File	Sample Number	Analysis Date:
5M81761.D	50PPM	08/29/13 11:00
5M81762.D	CAL BNA@50PPM	08/29/13 11:25
5M81763.D	WMB26013(MS)	08/29/13 12:15

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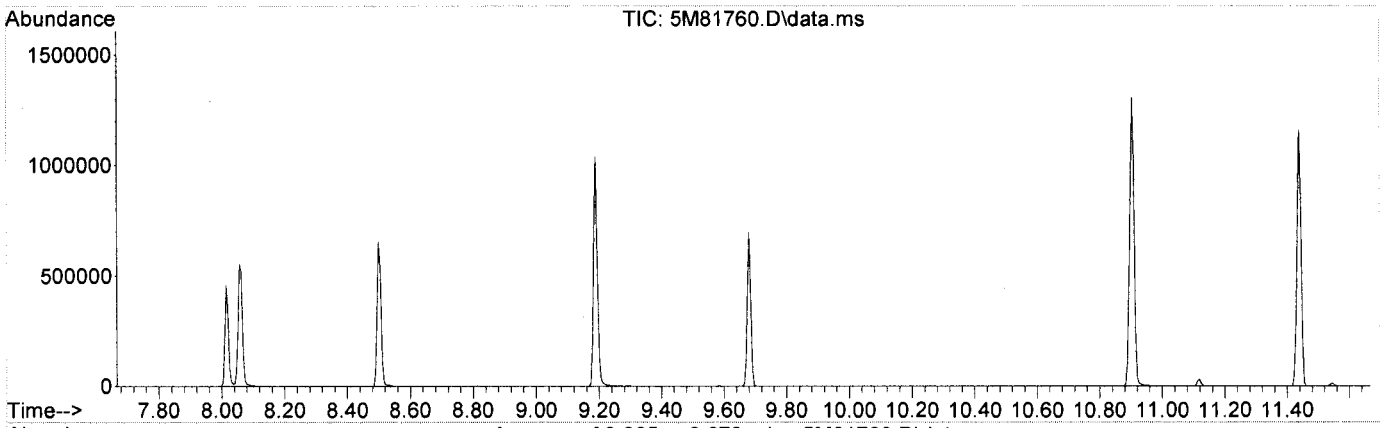
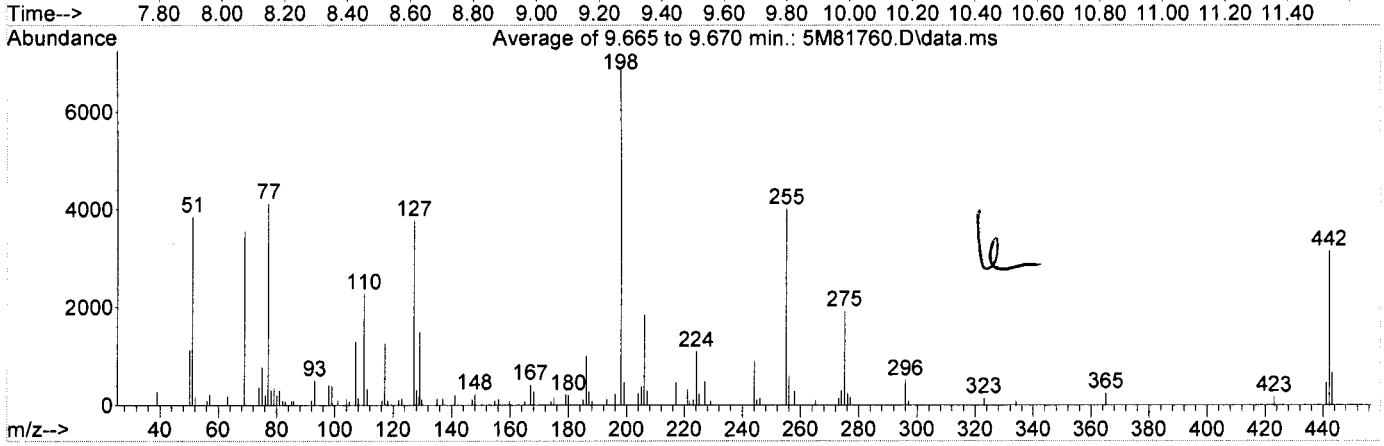
Data Path : G:\GcMsData\2013\GCMS_5\Data\08-29-13\
Data File : 5M81760.D
Acq On : 29 Aug 2013 10:04
Operator : AHD/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2013\GCMS_5\METHODQT\5M_0823.M
Title : @GCMS_5,mg,625,8270
Last Update : Fri Aug 23 15:18:19 2013





Spectrum Information: Average of 9.665 to 9.670 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	55.7	3853	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	51.4	3557	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	54.6	3781	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	6923	PASS
199	198	5	9	6.8	468	PASS
275	198	10	30	27.9	1929	PASS
365	198	1	100	3.6	250	PASS
441	443	0.01	100	70.9	471	PASS
442	198	40	100	45.6	3157	PASS
443	442	17	23	21.0	664	PASS

Form 6
Initial Calibration

Method: EPA 8270C

Instrument: GCMS_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5M81695.	CAL BNA@50PPM	08/23/13 13:28	2	5M81693.	CAL BNA@2PPM	08/23/13 12:42
3	5M81691.	CAL BNA@10PPM	08/23/13 11:55	4	5M81692.	CAL BNA@20PPM	08/23/13 12:18
5	5M81699.	CAL BNA@80PPM	08/23/13 15:01	6	5M81698.	CAL BNA@120PPM	08/23/13 14:38
7	5M81697.	CAL BNA@160PPM	08/23/13 14:14	8	5M81696.	CAL BNA@196PPM	08/23/13 13:51
9	5M81694.	CAL BNA@.5PPM	08/23/13 13:05				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Pyridine	1	0	LinF	1.3199	0.5665	1.3356	1.3255	1.3679	1.3391	1.4213	1.4707	-----	1.27	2.65	0.999	0.999	23		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitrosodimethylamin	1	0	Avg	0.8035	0.5665	0.7774	0.7910	0.8833	0.8235	0.8541	0.8705	-----	0.796	2.59	0.999	0.999	13		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorophenol	1	0	Avg	1.1136	0.9225	1.1698	1.1056	1.1699	1.1505	1.2145	1.2665	-----	1.14	4.33	0.998	1.00	8.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzaldehyde	1	0	Qua	0.5824	0.6950	0.8162	0.8325	0.4982	0.2535	-----	-----	-----	0.613	5.18	0.822	0.995	36		50.00	2.00	10.00	20.00	80.00	120.0			
Aniline	1	0	LinF	1.6463	1.6007	2.0151	1.8931	1.7097	1.7252	1.7424	1.7855	0.9536	1.67	5.27	0.999	1.00	18		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.4131	0.4380	0.4667	0.4306	0.4229	0.4353	0.4289	0.4569	-----	0.437	5.31	0.999	0.999	4.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethyl)ether	1	0	Avg	1.0398	1.0409	1.1979	1.1574	1.0836	1.1204	1.0587	1.1538	0.9454	1.09	5.34	0.997	0.998	7.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	1.4920	1.3578	1.5676	1.5347	1.4983	1.5886	1.6107	1.6935	-----	1.54	5.25	0.997	1.00	6.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenol	1	0	Avg	1.6541	1.5449	1.7581	1.7402	1.6209	1.7309	1.7326	1.8098	-----	1.70	5.26	0.998	1.00	5.0	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Chlorophenol	1	0	Avg	1.2575	1.2031	1.3443	1.2652	1.2903	1.3625	1.3505	1.4479	-----	1.32	5.38	0.997	0.999	5.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Decane	1	0	Avg	1.1092	1.1936	1.2576	1.2473	1.0757	1.1809	1.0846	1.2211	-----	1.17	5.42	0.996	0.996	6.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,3-Dichlorobenzene	1	0	Avg	1.5118	1.5678	1.6524	1.5346	1.5178	1.5407	1.5584	1.6569	-----	1.57	5.51	0.997	0.999	3.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dichlorobenzene	1	0	Avg	1.5439	1.6155	1.6938	1.5941	1.5601	1.5684	1.5862	1.7076	-----	1.61	5.57	0.997	0.999	3.8	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Dichlorobenzene	1	0	Avg	1.4552	1.5065	1.6545	1.5027	1.4564	1.4502	1.4925	1.6005	-----	1.51	5.70	0.998	0.999	4.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzyl alcohol	1	0	Avg	0.8054	0.5766	0.8599	0.8491	0.8246	0.8514	0.8700	0.9222	-----	0.820	5.68	0.997	1.00	13		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-chloroisopropyl)et	1	0	Avg	1.1655	1.1546	1.3299	1.3343	1.1373	1.2303	1.1599	1.2252	-----	1.22	5.79	0.998	0.998	6.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylphenol	1	0	Avg	1.1365	1.1116	1.2068	1.2194	1.1575	1.2063	1.2255	1.3050	0.8232	1.15	5.78	0.997	1.00	12		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	1.8971	1.8477	2.0414	1.9753	1.8905	1.9170	1.9120	2.0689	-----	1.94	5.89	0.997	0.999	4.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachloroethane	1	0	Avg	0.5302	0.5046	0.5968	0.5382	0.5309	0.5437	0.5391	0.5660	-----	0.544	5.97	0.998	0.998	5.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitroso-di-n-propylan	1	0	Avg	0.8856	0.8094	0.9652	0.9712	0.8460	0.8790	0.8620	0.9442	0.6601	0.869	5.89	0.996	0.998	11	**(0.050)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3&4-Methylphenol	1	0	Qua	1.2061	1.1412	1.3402	1.2600	1.2065	1.2275	1.2437	1.3410	0.6330	1.18	5.90	0.997	0.999	18		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	LinF	0.1704	0.1020	0.1620	0.1609	0.1727	0.1717	0.1712	0.1820	-----	0.162	6.02	0.999	1.00	15		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0	Avg	0.3687	0.3103	0.3810	0.3778	0.3597	0.3715	0.3501	0.3909	-----	0.364	6.03	0.995	0.996	6.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Isophorone	1	0	Avg	0.6167	0.5416	0.6393	0.6234	0.6015	0.6702	0.6070	0.6653	-----	0.621	6.22	0.995	0.996	6.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitrophenol	1	0	Avg	0.2027	0.1391	0.2025	0.1927	0.2100	0.2038	0.2073	0.2172	-----	0.197	6.28	0.999	1.00	12	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dimethylphenol	1	0	Avg	0.3900	0.3418	0.4070	0.3920	0.3906	0.3891	0.3929	0.4074	0.3131	0.380	6.32	0.999	1.00	8.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	LinF	0.2122	-----	0.1467	0.1420	0.2442	0.2792	0.2638	-----	-----	0.215	6.40	0.992	0.995	27		50.00		10.00	20.00	80.00	120.0	160.0		
bis(2-Chloroethoxy)met	1	0	Avg	0.3644	0.3855	0.4090	0.3716	0.3559	0.3599	0.3567	0.3818	-----	0.373	6.38	0.998	0.999	4.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dichlorophenol	1	0	Avg	0.3466	0.3091	0.3616	0.3328	0.3514	0.3495	0.3509	0.3776	0.2620	0.338	6.46	0.999	0.999	10	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzene	1	0	Avg	0.4161	0.4234	0.4377	0.4005	0.4120	0.4041	0.4098	0.4359	-----	0.417	6.53	0.998	0.999	3.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Naphthalene	1	0	Avg	1.0782	1.1576	1.1788	1.1076	1.0630	1.0790	1.0757	1.1268	1.1949	1.12	6.59	0.999	1.00	4.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Qua	0.4397	0.3247	0.4747	0.4441	0.4331	0.3947	0.3673	0.3596	0.2798	0.391	6.63	0.993	0.999	16		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.2920	0.2927	0.3001	0.2840	0.2976	0.2968	0.2914	0.3073	-----	0.295	6.67	0.999	0.999	2.3	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Caprolactam	1	0	Avg	0.1133	0.0747	0.1113	0.1127	0.1186	0.1169	0.1171	0.1073	-----	0.109	6.90	0.996	0.998	13		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chloro-3-methylphen	1	0	Avg	0.3455	0.3102	0.3670	0.3457	0.3453	0.3483	0.3505	0.3808	-----	0.349	6.99	0.996	0.999	5.8	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylnaphthalene	1	0	Avg	0.7968	0.8039	0.8583	0.7999	0.8135	0.7972	0.8080	0.8368	-----	0.814	7.11	0.999	1.00	2.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Methylnaphthalenes (T	1	0	Avg	1.5365	1.5068	1.6456	1.5435	1.5428	1.5266	1.5471	1.6014	-----	1.56	7.11	0.999	1.00	2.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,1'-Biphenyl	1	0	Avg	1.1154	1.1114	1.1848	1.1129	1.1053	1.1177	1.1014	1.1601	-----	1.13	7.47	0.999	0.999	2.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2,4,5-Tetrachloroben	1	0	Avg	0.7146	0.7900	0.7843	0.7415	0.7272	0.7434	0.7282	0.7279	-----	0.745	7.24	1.00	1.00	3.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorocyclopentac	1	0	Qua	0.2847	0.0605	0.2085	0.2288	0.3392	0.3738	0.3891	0.4018	-----	0.286	7.23	0.989	0.999	41	**(0.050)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Avg	0.4238	0.3328	0.4293	0.4175	0.4387	0.4519	0.4424	0.4655	-----	0.425	7.33	0.999	1.00	9.5	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags

a - failed the spcc criteria — ** - ccc compound*

b - failed the ccc criteria — *** - spcc compound*

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.87

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

3082313 0224

Form 6
Initial Calibration

Method: EPA 8270C

Instrument: GCMS_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5M81695.	CAL BNA@50PPM	08/23/13 13:28	2	5M81693.	CAL BNA@2PPM	08/23/13 12:42
3	5M81691.	CAL BNA@10PPM	08/23/13 11:55	4	5M81692.	CAL BNA@20PPM	08/23/13 12:18
5	5M81699.	CAL BNA@80PPM	08/23/13 15:01	6	5M81698.	CAL BNA@120PPM	08/23/13 14:38
7	5M81697.	CAL BNA@160PPM	08/23/13 14:14	8	5M81696.	CAL BNA@196PPM	08/23/13 13:51
9	5M81694.	CAL BNA@.5PPM	08/23/13 13:05				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
2.4.5-Trichlorophenol	1	0	Avg	0.4322	0.3589	0.4519	0.4346	0.4502	0.4526	0.4485	0.4732	-----	0.438	7.36	0.999	0.999	7.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.4439	1.5658	1.5536	1.4515	1.4624	1.4679	1.4286	1.4855	-----	1.48	7.39	0.999	0.999	3.4		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.1156	1.2092	1.2523	1.1858	1.1500	1.1750	1.1443	1.2016	-----	1.18	7.50	0.999	0.999	3.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1.4-Dimethylnaphthalei	1	0	Avg	0.9168	0.9338	1.0027	0.9587	0.9211	0.9381	0.9253	0.9445	-----	0.943	7.77	1.00	1.00	2.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.9168	0.9338	1.0027	0.9587	0.9211	0.9381	0.9253	0.9445	-----	0.943	7.77	1.00	1.00	2.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.8815	0.9153	0.9655	0.9035	0.8781	0.9291	0.8940	0.9569	-----	0.916	7.56	0.998	0.999	3.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.2967	0.2386	0.3920	0.3170	0.2927	0.3003	0.2925	0.3084	-----	0.305	7.58	0.998	0.999	14		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4398	0.3960	0.4660	0.4439	0.4277	0.4342	0.4262	0.4483	-----	0.435	7.76	0.999	0.999	4.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.7527	1.6306	1.8853	1.7800	1.7320	1.7710	1.7554	1.8379	-----	1.77	7.84	0.999	1.00	4.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.3600	1.4220	1.5471	1.4279	1.3712	1.3904	1.3790	1.4202	-----	1.41	7.72	0.999	1.00	4.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2.6-Dinitrotoluene	1	0	Avg	0.3108	0.2493	0.3239	0.3055	0.3056	0.3066	0.3101	0.3204	-----	0.304	7.78	0.999	1.00	7.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.1708	1.1928	1.2906	1.1793	1.1673	1.1824	1.1841	1.2546	-----	1.20	7.99	0.998	0.999	3.7	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Avg	0.3009	0.2224	0.3167	0.3123	0.3010	0.2861	0.2740	0.2844	-----	0.287	7.93	0.998	0.999	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2.4-Dinitrophenol	1	0	Qua	0.1572	-----	0.0953	0.1187	0.1707	0.1943	0.1969	0.2247	-----	0.165	8.02	0.990	0.999	28	**(0.050)	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Avg	1.7521	1.7859	1.9019	1.7832	1.7301	1.7759	1.7514	1.8268	1.9620	1.81	8.15	0.999	1.00	4.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2.4-Dinitrotoluene	1	0	Avg	0.4326	0.3169	0.4273	0.4206	0.4377	0.4506	0.4488	0.4843	-----	0.427	8.13	0.998	0.999	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Qua	0.2125	0.1039	0.2199	0.2217	0.2081	0.2221	0.2227	0.2430	-----	0.207	8.06	0.995	0.999	21	**(0.050)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2.3.4.6-Tetrachlorophe	1	0	Avg	0.4316	0.3143	0.4363	0.4233	0.4415	0.4650	0.4661	0.4960	-----	0.434	8.25	0.998	1.00	12		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.4378	1.4022	1.5549	1.4757	1.4416	1.4702	1.4622	1.5792	-----	1.48	8.46	0.997	0.999	4.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.8125	0.7996	0.8880	0.8230	0.8063	0.8397	0.8458	0.8978	-----	0.839	8.45	0.997	1.00	4.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.3223	1.2988	1.4425	1.3722	1.3159	1.3804	1.3554	1.4683	-----	1.37	8.33	0.997	0.999	4.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Avg	0.3089	0.1916	0.3132	0.3080	0.3100	0.3160	0.3320	0.3179	-----	0.300	8.48	0.999	0.999	15		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.4288	0.3965	0.4655	0.4527	0.4532	0.4500	0.4626	0.4768	-----	0.448	9.09	0.999	1.00	5.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4.6-Dinitro-2-methylphe	1	0	Avg	0.1349	-----	0.1056	0.1155	0.1324	0.1383	0.1421	0.1592	-----	0.133	8.51	0.995	0.998	13		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamine	1	0	Avg	0.5843	0.5553	0.6470	0.6105	0.5998	0.6027	0.6062	0.6271	-----	0.604	8.56	0.999	1.00	4.5	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2.4.6-Tribromophenol	1	0	Qua	0.1633	0.1045	0.1572	0.1352	0.1737	0.1751	0.1831	0.1884	-----	0.160	8.69	0.997	0.999	17		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1.2-Diphenylhydrazine	1	0	Avg	0.5363	0.4885	0.5927	0.6407	0.5285	0.5383	0.5200	0.5677	-----	0.552	8.60	0.996	0.998	8.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.2702	0.2533	0.2899	0.2561	0.2810	0.2837	0.2855	0.2977	-----	0.277	8.93	0.999	1.00	5.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.3333	0.3439	0.3519	0.3053	0.3524	0.3525	0.3511	0.3660	-----	0.345	8.99	0.999	1.00	5.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.3018	0.2634	0.3336	0.3571	0.2987	0.3065	0.2893	0.2985	-----	0.306	9.26	0.999	0.999	9.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Qua	0.1646	-----	0.1260	0.1287	0.1814	0.1970	0.2005	0.2203	-----	0.174	9.19	0.994	0.999	21	*(30)	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0457	1.0978	1.1344	1.0692	1.0439	1.0730	1.0504	1.0901	-----	1.08	9.42	0.999	1.00	2.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.0605	1.0126	1.1486	1.0634	1.0769	1.0984	1.0933	1.1398	-----	1.09	9.48	0.999	1.00	4.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	0.9749	0.8966	1.0446	0.9581	0.9599	0.9790	0.9741	1.0434	-----	0.979	9.65	0.997	0.999	4.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Qua	1.0634	0.7685	1.0791	1.0395	1.0841	1.1834	1.1419	1.1956	0.6616	1.02	10.03	0.998	0.999	18		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0	Avg	1.3648	1.2093	1.4144	1.3061	1.3525	1.4211	1.4076	1.5020	-----	1.37	10.74	0.998	0.999	6.4	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	0.8667	0.7849	0.9240	0.8430	0.8799	0.8764	0.8268	0.8793	-----	0.860	11.00	0.998	0.998	4.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzidine	1	0	Qua	0.3075	0.1968	0.3412	0.3487	0.2955	0.2414	-----	-----	-----	0.289	10.90	0.976	0.999	20		50.00	2.00	10.00	20.00	80.00	120.0			
Terphenyl-d14	1	0	Avg	0.6901	0.6644	0.7680	0.6721	0.7396	0.7032	0.7005	0.7632	-----	0.713	11.19	0.996	0.998	5.6		25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	
4.4'-DDE	1	0	Avg	0.2377	0.2062	0.2549	0.2232	0.2469	0.2444	0.2378	0.2623	-----	0.239	11.12	0.996	0.998	7.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4.4'-DDD	1	0	Avg	0.3595	0.2667	0.3685	0.3369	0.3763	0.3706	0.3657	0.4001	-----	0.356	11.52	0.996	0.998	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the spcc criteria — ** - ccc compound*
b - failed the ccc criteria — *** - spcc compound*
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.87
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

3082313 0225

Form 6
Initial Calibration

Method: EPA 8270C

Instrument: GCMS_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5M81695.	CAL BNA@50PPM	08/23/13 13:28	2	5M81693.	CAL BNA@2PPM	08/23/13 12:42
3	5M81691.	CAL BNA@10PPM	08/23/13 11:55	4	5M81692.	CAL BNA@20PPM	08/23/13 12:18
5	5M81699.	CAL BNA@80PPM	08/23/13 15:01	6	5M81698.	CAL BNA@120PPM	08/23/13 14:38
7	5M81697.	CAL BNA@160PPM	08/23/13 14:14	8	5M81696.	CAL BNA@196PPM	08/23/13 13:51
9	5M81694.	CAL BNA@.5PPM	08/23/13 13:05				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Butylbenzylphthalate	1	0	Avg	0.3154	0.1994	0.3088	0.2839	0.3198	0.3336	0.3119	0.3353	-----	0.301	11.78	0.999	0.999	15		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.3333	0.2160	0.3323	0.3178	0.3440	0.3500	0.3379	0.3685	-----	0.325	11.87	0.997	0.998	14		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Qua	0.3518	0.2375	0.3775	0.3656	0.3766	0.3492	0.3405	0.3539	-----	0.344	12.39	0.998	0.998	13		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]anthracene	1	0	Avg	0.9509	0.9108	1.0371	0.9501	0.9714	0.9633	0.9362	0.9794	-----	0.962	12.42	0.999	0.999	3.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	0.8905	0.8952	0.9560	0.8813	0.8813	0.9053	0.8570	0.8873	-----	0.894	12.46	0.999	0.999	3.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Qua	0.4508	0.2696	0.4318	0.4098	0.4503	0.4922	0.4493	0.4629	-----	0.427	12.47	0.998	0.998	16		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Qua	0.8015	0.4312	0.7265	0.6892	0.7818	0.8895	0.8923	0.9744	-----	0.773	13.22	0.994	0.999	22	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[b]fluoranthene	1	0	Avg	1.1291	1.0411	1.0961	1.0617	1.1213	1.1790	1.1493	1.2961	-----	1.13	13.63	0.993	0.997	7.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[k]fluoranthene	1	0	Avg	1.0868	0.9957	1.1931	1.1039	1.1289	1.1332	1.1736	1.2387	-----	1.13	13.66	0.997	1.00	6.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]pyrene	1	0	Avg	1.0699	0.8983	1.0455	1.0013	1.0819	1.1273	1.1211	1.2270	-----	1.07	13.97	0.996	0.999	9.0	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyrene	1	0	Avg	1.3267	1.1628	1.3326	1.3269	1.3910	1.4637	1.3977	1.4777	-----	1.36	15.23	0.998	0.999	7.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzo[a,h]anthracen	1	0	Avg	1.1277	0.9919	1.1710	1.1461	1.1888	1.2492	1.2115	1.2819	-----	1.17	15.24	0.998	0.999	7.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[g,h,i]perylene	1	0	Avg	1.0896	0.9701	1.0880	1.0983	1.1162	1.1417	1.0952	1.1493	-----	1.09	15.57	0.999	0.999	5.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the spcc criteria ** - ccc compound*
b - failed the ccc criteria *** - spcc compound*
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.87
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

3082313 0226

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 5M81734.D **Instrument:** GCMS 5

Cont Calibration Date/Time 8/28/2013 8:29:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
1,4-Dichlorobenzene-d4	1	0	I	5.56	40.00	40				0.000	0.00	
Pyridine	1	0		2.65	53.16	50			1.268	1.488	6.32	
N-Nitrosodimethylamine	1	0		2.59	56.39	50			0.796	0.898	12.79	
2-Fluorophenol	1	0	S	4.33	49.98	50			1.139	1.139	0.04	
Benzaldehyde	1	0		5.18	55.58	50			0.613	0.661	11.15	
Aniline	1	0		5.27	53.20	50			1.675	1.867	6.40	
Pentachloroethane	1	0		5.31	48.73	50			0.437	0.425	2.55	
bis(2-Chloroethyl)ether	1	0		5.34	52.17	50			1.089	1.136	4.33	
Phenol-d5	1	0	S	5.25	50.59	50			1.543	1.561	1.18	
Phenol	1	0	CC	5.26	50.30	50	20		1.699	1.709	0.60	
2-Chlorophenol	1	0		5.38	50.88	50			1.315	1.338	1.76	
N-Decane	1	0		5.42	48.29	50			1.171	1.131	3.43	
1,3-Dichlorobenzene	1	0		5.50	49.46	50			1.568	1.551	1.08	
1,4-Dichlorobenzene	1	0	CC	5.57	48.96	50	20		1.609	1.575	2.07	
1,2-Dichlorobenzene	1	0		5.70	48.28	50			1.515	1.463	3.44	
Benzyl alcohol	1	0		5.68	51.92	50			0.820	0.851	3.84	
bis(2-chloroisopropyl)ether	1	0		5.79	50.86	50			1.217	1.238	1.71	
2-Methylphenol	1	0		5.78	51.14	50			1.155	1.181	2.28	
Acetophenone	1	0		5.89	51.04	50			1.944	1.984	2.09	
Hexachloroethane	1	0		5.97	50.88	50			0.544	0.553	1.75	
N-Nitroso-di-n-propylamine	1	0	CP	5.89	54.87	50	0.05		0.869	0.954	9.74	
3&4-Methylphenol	1	0		5.90	54.48	50			1.178	1.267	8.97	
Naphthalene-d8	1	0	I	6.57	40.00	40				0.000	0.00	
Nitrobenzene-d5	1	0	S	6.02	24.87	25			0.162	0.173	0.53	
Nitrobenzene	1	0		6.03	49.13	50			0.364	0.357	1.74	
Isophorone	1	0		6.22	49.71	50			0.621	0.617	0.58	
2-Nitrophenol	1	0	CC	6.28	50.82	50	20		0.197	0.200	1.65	
2,4-Dimethylphenol	1	0		6.31	50.64	50			0.380	0.385	1.27	
Benzoic Acid	1	0		6.41	38.43	50			0.215	0.192	23.14	
bis(2-Chloroethoxy)methane	1	0		6.38	48.54	50			0.373	0.362	2.92	
2,4-Dichlorophenol	1	0	CC	6.46	50.34	50	20		0.338	0.340	0.68	
1,2,4-Trichlorobenzene	1	0		6.53	47.94	50			0.417	0.400	4.11	
Naphthalene	1	0		6.59	47.54	50			1.118	1.063	4.92	
4-Chloroaniline	1	0		6.63	49.52	50			0.391	0.433	0.97	
Hexachlorobutadiene	1	0	CC	6.67	48.70	50	20		0.295	0.288	2.60	
Caprolactam	1	0		6.90	51.90	50			0.109	0.113	3.79	
4-Chloro-3-methylphenol	1	0	CC	6.99	49.13	50	20		0.349	0.343	1.74	
2-Methylnaphthalene	1	0		7.11	48.47	50			0.814	0.789	3.07	
Methylnaphthalenes	1	0		7.11	48.91	50	20			1.522	2.17	
1,1'-Biphenyl	1	0		7.47	48.50	50			1.126	1.092	3.00	
Acenaphthene-d10	1	0	I	7.97	40.00	40				0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.24	48.15	50			0.745	0.717	3.69	
Hexachlorocyclopentadiene	1	0	CP	7.23	48.79	50	0.05		0.286	0.287	2.42	
2,4,6-Trichlorophenol	1	0	CC	7.33	50.63	50	20		0.425	0.431	1.25	
2,4,5-Trichlorophenol	1	0		7.36	50.30	50			0.438	0.440	0.60	
2-Fluorobiphenyl	1	0	S	7.39	24.09	25			1.482	1.428	3.66	
2-Chloronaphthalene	1	0		7.50	48.57	50			1.179	1.146	2.85	
1,4-Dimethylnaphthalene	1	0		7.77	48.93	50			0.943	0.922	2.14	
Dimethylnaphthalenes	1	0		7.77	48.93	50	20			0.922	2.14	
Diphenyl Ether	1	0		7.56	48.38	50			0.916	0.886	3.25	
2-Nitroaniline	1	0		7.58	51.03	50			0.305	0.311	2.05	
Coumarin	1	0		7.76	49.47				0.435			
Acenaphthylene	1	0		7.84	49.31	50			1.768	1.744	1.37	
Dimethylphthalate	1	0		7.72	49.81	50			1.415	1.409	0.38	
2,6-Dinitrotoluene	1	0		7.78	51.84	50			0.304	0.315	3.68	
Acenaphthene	1	0	CC	7.99	47.73	50	20		1.203	1.148	4.53	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 5M81734.D **Instrument:** GCMS 5

Cont Calibration Date/Time 8/28/2013 8:29:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
3-Nitroaniline	1	0		7.93	54.32	50			0.287	0.312	8.64	
2,4-Dinitrophenol	1	0	CP	8.02	54.85	50	0.05		0.165	0.168	9.69	
Dibenzofuran	1	0		8.15	47.74	50			1.808	1.726	4.52	
2,4-Dinitrotoluene	1	0		8.13	51.78	50			0.427	0.443	3.57	
4-Nitrophenol	1	0	CP	8.06	52.74	50	0.05		0.207	0.214	5.49	
2,3,4,6-Tetrachlorophenol	1	0		8.25	50.10	50			0.434	0.435	0.21	
Fluorene	1	0		8.46	48.89	50			1.478	1.445	2.22	
4-Chlorophenyl-phenylether	1	0		8.45	48.58	50			0.839	0.815	2.83	
Diethylphthalate	1	0		8.34	49.96	50			1.370	1.368	0.09	
4-Nitroaniline	1	0		8.48	52.06	50			0.300	0.312	4.13	
Atrazine	1	0		9.09	51.32	50			0.448	0.460	2.63	
Phenanthrene-d10	1	0	I	9.40	40.00	40				0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.51	51.07	50			0.133	0.135	2.14	
n-Nitrosodiphenylamine	1	0	CC	8.56	49.95	50	20		0.604	0.604	0.09	
2,4,6-Tribromophenol	1	0	S	8.69	51.10	50			0.160	0.165	2.20	
1,2-Diphenylhydrazine	1	0		8.60	50.50	50			0.552	0.557	1.00	
4-Bromophenyl-phenylether	1	0		8.93	49.70	50			0.277	0.276	0.60	
Hexachlorobenzene	1	0		8.99	49.27	50			0.345	0.340	1.45	
N-Octadecane	1	0		9.26	52.49	50			0.306	0.321	4.98	
Pentachlorophenol	1	0	CC	9.19	52.40	50	20		0.174	0.171	4.81	
Phenanthrene	1	0		9.42	49.35	50			1.076	1.062	1.31	
Anthracene	1	0		9.48	49.44	50			1.087	1.075	1.11	
Carbazole	1	0		9.65	49.50	50			0.979	0.969	1.01	
Di-n-butylphthalate	1	0		10.03	51.15	50			1.024	1.100	2.31	
Fluoranthene	1	0	CC	10.74	49.74	50	20		1.372	1.365	0.52	
Chrysene-d12	1	0	I	12.43	40.00	40				0.000	0.00	
Pyrene	1	0		11.00	50.38	50			0.860	0.867	0.76	
Benzidine	1	0		10.90	53.58	50			0.289	0.337	7.16	
Terphenyl-d14	1	0	S	11.19	25.20	25			0.713	0.718	0.82	
4,4'-DDE	1	0		11.12	51.07				0.239			
4,4'-DDD	1	0		11.52	51.68				0.356			
Butylbenzylphthalate	1	0		11.78	51.83	50			0.301	0.312	3.66	
4,4'-DDT	1	0		11.87	53.60				0.325			
3,3'-Dichlorobenzidine	1	0		12.39	52.63	50			0.344	0.376	5.26	
Benzo[a]anthracene	1	0		12.42	49.87	50			0.962	0.960	0.26	
Chrysene	1	0		12.46	49.49	50			0.894	0.885	1.02	
bis(2-Ethylhexyl)phthalate	1	0		12.47	47.82	50			0.427	0.444	4.37	
Perylene-d12	1	0	I	14.02	40.00	40				0.000	0.00	
Di-n-octylphthalate	1	0	CC	13.22	51.42	50	20		0.773	0.787	2.84	
Benzo[b]fluoranthene	1	0		13.63	49.75	50			1.134	1.129	0.50	
Benzo[k]fluoranthene	1	0		13.66	48.72	50			1.132	1.103	2.56	
Benzo[a]pyrene	1	0	CC	13.97	49.63	50	20		1.072	1.064	0.73	
Indeno[1,2,3-cd]pyrene	1	0		15.23	49.05	50			1.360	1.334	1.90	
Dibenzo[a,h]anthracene	1	0		15.24	48.47	50			1.171	1.135	3.05	
Benzo[g,h,i]perylene	1	0		15.57	49.08	50			1.094	1.074	1.83	
4-Methylphenol	1	100		0.00	0.00	50				0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50			0.943	0.000	100.00	
Endrin	1	100		0.00	0.00	50				0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10				0.000	100.00	
Heptachlor	1	100		0.00	0.00	10				0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10				0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10				0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50			1.556	0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50				0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50				0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 5M81734.D **Instrument:** GCMS 5

Cont Calibration Date/Time 8/28/2013 8:29:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 5M81762.D **Instrument:** GCMS 5

Cont Calibration Date/Time 8/29/2013 11:25:00 Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
1,4-Dichlorobenzene-d4	1	0	I	5.55	40.00	40				0.000	0.00	
Pyridine	1	0		2.63	41.14	50			1.268	1.151	17.72	
N-Nitrosodimethylamine	1	0		2.59	42.81	50			0.796	0.682	14.38	
2-Fluorophenol	1	0	S	4.33	46.94	50			1.139	1.069	6.13	
Benzaldehyde	1	0		5.18	59.19	50			0.613	0.682	18.39	
Aniline	1	0		5.27	53.16	50			1.675	1.865	6.32	
Pentachloroethane	1	0		5.31	50.08	50			0.437	0.437	0.15	
bis(2-Chloroethyl)ether	1	0		5.33	51.12	50			1.089	1.113	2.24	
Phenol-d5	1	0	S	5.25	50.41	50			1.543	1.555	0.81	
Phenol	1	0	CC	5.26	50.79	50	20		1.699	1.726	1.59	
2-Chlorophenol	1	0		5.37	51.63	50			1.315	1.358	3.26	
N-Decane	1	0		5.41	46.65	50			1.171	1.093	6.69	
1,3-Dichlorobenzene	1	0		5.50	49.76	50			1.568	1.560	0.47	
1,4-Dichlorobenzene	1	0	CC	5.57	50.49	50	20		1.609	1.625	0.99	
1,2-Dichlorobenzene	1	0		5.69	49.59	50			1.515	1.502	0.82	
Benzyl alcohol	1	0		5.67	52.78	50			0.820	0.865	5.55	
bis(2-chloroisopropyl)ether	1	0		5.79	50.64	50			1.217	1.233	1.28	
2-Methylphenol	1	0		5.77	53.69	50			1.155	1.240	7.38	
Acetophenone	1	0		5.89	52.73	50			1.944	2.050	5.46	
Hexachloroethane	1	0		5.97	51.36	50			0.544	0.559	2.72	
N-Nitroso-di-n-propylamine	1	0	CP	5.89	56.33	50	0.05		0.869	0.979	12.66	
3&4-Methylphenol	1	0		5.90	55.97	50			1.178	1.303	11.94	
Naphthalene-d8	1	0	I	6.57	40.00	40				0.000	0.00	
Nitrobenzene-d5	1	0	S	6.02	26.15	25			0.162	0.182	4.59	
Nitrobenzene	1	0		6.03	53.63	50			0.364	0.390	7.25	
Isophorone	1	0		6.21	53.57	50			0.621	0.665	7.14	
2-Nitrophenol	1	0	CC	6.28	56.14	50	20		0.197	0.221	12.27	
2,4-Dimethylphenol	1	0		6.31	56.22	50			0.380	0.428	12.44	
Benzoic Acid	1	0		6.41	46.63	50			0.215	0.234	6.74	
bis(2-Chloroethoxy)methane	1	0		6.38	51.78	50			0.373	0.386	3.57	
2,4-Dichlorophenol	1	0	CC	6.47	52.09	50	20		0.338	0.352	4.17	
1,2,4-Trichlorobenzene	1	0		6.52	49.15	50			0.417	0.410	1.71	
Naphthalene	1	0		6.58	47.89	50			1.118	1.071	4.22	
4-Chloroaniline	1	0		6.63	50.17	50			0.391	0.438	0.33	
Hexachlorobutadiene	1	0	CC	6.67	50.35	50	20		0.295	0.297	0.71	
Caprolactam	1	0		6.90	52.90	50			0.109	0.115	5.80	
4-Chloro-3-methylphenol	1	0	CC	6.99	48.66	50	20		0.349	0.340	2.68	
2-Methylnaphthalene	1	0		7.11	50.71	50			0.814	0.826	1.42	
Methylnaphthalenes	1	0		7.11	50.62	50	20			1.576	1.25	
1,1'-Biphenyl	1	0		7.47	50.55	50			1.126	1.139	1.11	
Acenaphthene-d10	1	0	I	7.96	40.00	40				0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.23	51.16	50			0.745	0.762	2.32	
Hexachlorocyclopentadiene	1	0	CP	7.22	59.45	50	0.05		0.286	0.360	18.89	
2,4,6-Trichlorophenol	1	0	CC	7.33	55.04	50	20		0.425	0.468	10.08	
2,4,5-Trichlorophenol	1	0		7.36	53.85	50			0.438	0.472	7.70	
2-Fluorobiphenyl	1	0	S	7.39	26.32	25			1.482	1.561	5.28	
2-Chloronaphthalene	1	0		7.50	51.90	50			1.179	1.224	3.80	
1,4-Dimethylnaphthalene	1	0		7.77	52.17	50			0.943	0.984	4.33	
Dimethylnaphthalenes	1	0		7.77	52.17	50	20			0.984	4.33	
Diphenyl Ether	1	0		7.55	51.42	50			0.916	0.941	2.83	
2-Nitroaniline	1	0		7.58	47.85	50			0.305	0.292	4.30	
Coumarin	1	0		7.76	52.30				0.435			
Acenaphthylene	1	0		7.84	53.15	50			1.768	1.880	6.31	
Dimethylphthalate	1	0		7.72	52.60	50			1.415	1.488	5.21	
2,6-Dinitrotoluene	1	0		7.78	54.53	50			0.304	0.332	9.06	
Acenaphthene	1	0	CC	7.99	47.42	50	20		1.203	1.141	5.17	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 5M81762.D **Instrument:** GCMS 5

Cont Calibration Date/Time 8/29/2013 11:25:00 Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
3-Nitroaniline	1	0		7.92	58.28	50			0.287	0.335	16.57	
2,4-Dinitrophenol	1	0	CP	8.02	60.10	50	0.05		0.165	0.187	20.20	
Dibenzofuran	1	0		8.14	51.50	50			1.808	1.862	3.00	
2,4-Dinitrotoluene	1	0		8.13	53.21	50			0.427	0.455	6.42	
4-Nitrophenol	1	0	CP	8.06	46.47	50	0.05		0.207	0.187	7.05	
2,3,4,6-Tetrachlorophenol	1	0		8.25	56.22	50			0.434	0.488	12.44	
Fluorene	1	0		8.46	52.19	50			1.478	1.543	4.39	
4-Chlorophenyl-phenylether	1	0		8.45	52.76	50			0.839	0.885	5.52	
Diethylphthalate	1	0		8.33	53.78	50			1.370	1.473	7.56	
4-Nitroaniline	1	0		8.48	55.14	50			0.300	0.331	10.27	
Atrazine	1	0		9.09	55.65	50			0.448	0.499	11.29	
Phenanthrene-d10	1	0	I	9.39	40.00	40				0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.51	54.45	50			0.133	0.144	8.89	
n-Nitrosodiphenylamine	1	0	CC	8.56	50.29	50	20		0.604	0.608	0.58	
2,4,6-Tribromophenol	1	0	S	8.69	57.49	50			0.160	0.187	14.98	
1,2-Diphenylhydrazine	1	0		8.60	45.37	50			0.552	0.501	9.26	
4-Bromophenyl-phenylether	1	0		8.92	51.56	50			0.277	0.286	3.13	
Hexachlorobenzene	1	0		8.99	53.17	50			0.345	0.366	6.35	
N-Octadecane	1	0		9.25	47.04	50			0.306	0.288	5.91	
Pentachlorophenol	1	0	CC	9.19	56.71	50	20		0.174	0.187	13.41	
Phenanthrene	1	0		9.42	48.88	50			1.076	1.052	2.23	
Anthracene	1	0		9.47	49.75	50			1.087	1.081	0.51	
Carbazole	1	0		9.64	48.84	50			0.979	0.956	2.32	
Di-n-butylphthalate	1	0		10.02	51.34	50			1.024	1.104	2.68	
Fluoranthene	1	0	CC	10.73	48.94	50	20		1.372	1.343	2.12	
Chrysene-d12	1	0	I	12.43	40.00	40				0.000	0.00	
Pyrene	1	0		11.00	52.79	50			0.860	0.908	5.58	
Benzidine	1	0		10.90	57.25	50			0.289	0.356	14.50	
Terphenyl-d14	1	0	S	11.18	27.98	25			0.713	0.798	11.94	
4,4'-DDE	1	0		11.12	55.65				0.239			
4,4'-DDD	1	0		11.52	55.00				0.356			
Butylbenzylphthalate	1	0		11.78	53.62	50			0.301	0.323	7.24	
4,4'-DDT	1	0		11.87	57.15				0.325			
3,3'-Dichlorobenzidine	1	0		12.39	54.35	50			0.344	0.388	8.70	
Benzo[a]anthracene	1	0		12.42	50.06	50			0.962	0.964	0.12	
Chrysene	1	0		12.46	49.18	50			0.894	0.880	1.64	
bis(2-Ethylhexyl)phthalate	1	0		12.46	48.82	50			0.427	0.454	2.36	
Perylene-d12	1	0	I	14.02	40.00	40				0.000	0.00	
Di-n-octylphthalate	1	0	CC	13.21	53.03	50	20		0.773	0.814	6.07	
Benzo[b]fluoranthene	1	0		13.62	49.39	50			1.134	1.120	1.22	
Benzo[k]fluoranthene	1	0		13.66	49.41	50			1.132	1.119	1.17	
Benzo[a]pyrene	1	0	CC	13.97	48.38	50	20		1.072	1.037	3.25	
Indeno[1,2,3-cd]pyrene	1	0		15.22	45.19	50			1.360	1.229	9.61	
Dibenzo[a,h]anthracene	1	0		15.24	45.35	50			1.171	1.062	9.31	
Benzo[g,h,i]perylene	1	0		15.56	46.77	50			1.094	1.023	6.45	
4-Methylphenol	1	100		0.00	0.00	50				0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50			0.943	0.000	100.00	
Endrin	1	100		0.00	0.00	50				0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10				0.000	100.00	
Heptachlor	1	100		0.00	0.00	10				0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10				0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10				0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50			1.556	0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50				0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50				0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 5M81762.D **Instrument:** GCMS 5

Cont Calibration Date/Time 8/29/2013 11:25:00 Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

FORM8

Internal Standard Areas

Evaluation Std Data File: 5M81695.D Method: EPA 8270C

Analysis Date/Time: 08/23/13 13:28

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	30597	5.56	108467	6.57	76265	7.97	162726	9.40	260244	12.43	243605	14.02
Eval File Area Limit:	15298-61194		54234-216934		38132-152530		81363-325452		130122-520488		121802-487210	
Eval File Rt Limit:	5.06-6.06		6.07-7.07		7.47-8.469999		8.9-9.9		11.93-12.93		13.52-14.52	

Data File	Sample												
5M81691.D	CAL BNA@1C	28109	5.56	104443	6.57	71950	7.97	150439	9.40	237708	12.43	227501	14.02
5M81692.D	CAL BNA@2C	30964	5.56	111239	6.57	75740	7.97	159104	9.40	258996	12.43	249828	14.02
5M81693.D	CAL BNA@2F	29723	5.56	111282	6.57	76608	7.96	160643	9.39	255264	12.43	238406	14.02
5M81694.D	CAL BNA@.5	29446	5.56	108059	6.57	74371	7.96	155487	9.40	244918	12.43	230095	14.02
5M81695.D	CAL BNA@5C	30597	5.56	108467	6.57	76265	7.97	162726	9.40	260244	12.43	243605	14.02
5M81696.D	CAL BNA@1S	26476	5.56	99688	6.58	70699	7.97	152785	9.40	256451	12.44	225232	14.03
5M81697.D	CAL BNA@16	28716	5.56	107811	6.58	74447	7.97	158572	9.40	270744	12.44	246131	14.03
5M81698.D	CAL BNA@12	31547	5.56	113765	6.57	76933	7.97	162102	9.40	263827	12.43	239681	14.03
5M81699.D	CAL BNA@8C	30179	5.56	108458	6.57	74959	7.97	156295	9.40	245816	12.43	243272	14.02
5M81700.D	ICVBNA@50F	31538	5.56	116637	6.57	78610	7.97	160147	9.40	266913	12.43	246154	14.02

I1 =	1,4-Dichlorobenzene-d4	I4 =	Phenanthrene-d10	**625/8270 Internal Standard concentration = 40 mg/L (in final extract)**
I2 =	Naphthalene-d8	I5 =	Chrysene-d12	**624/8260 Internal Standard concentration = 30ug/L**
I3 =	Acenaphthene-d10	I6 =	Perylene-d12	**524 Internal Standard concentration =5ug/L**

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 5M81734.D Method: EPA 8270C

Analysis Date/Time: 08/28/13 08:29

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	29617	5.56	112700	6.57	77618	7.97	164162	9.40	265662	12.43	250403	14.02
Eval File Area Limit:	14808-59234		56350-225400		38809-155236		82081-328324		132831-531324		125202-500806	
Eval File Rt Limit:	5.06-6.06		6.07-7.07		7.47-8.469999		8.9-9.9		11.93-12.93		13.52-14.52	

Data File	Sample												
5M81735.D	WMB26013	32903	5.56	118706	6.57	83252	7.96	174348	9.39	269196	12.43	261246	14.02
5M81736.D	TEST	28908	5.56	103421	6.57	73185	7.97	157458	9.40	251657	12.43	231529	14.03
5M81737.D	AC74062-002(	32300	5.56	119118	6.57	80620	7.96	167313	9.39	268389	12.43	258128	14.02
5M81738.D	AC74177-002(	27784	5.56	105575	6.57	74037	7.96	154601	9.39	231755	12.43	215620	14.02
5M81739.D	AC74177-004(	27385	5.56	102087	6.57	71573	7.96	148505	9.39	227242	12.43	209717	14.02
5M81740.D	AC74177-006(	25252	5.56	95804	6.57	66441	7.96	141954	9.39	222154	12.43	211543	14.02
5M81741.D	EF1 V-171314	27008	5.56	99250	6.57	67742	7.96	142899	9.39	221150	12.43	203887	14.02
5M81742.D	WMB26013(M	28679	5.56	105997	6.57	75089	7.96	163771	9.40	260660	12.43	233648	14.03
5M81743.D	WMB26014	26674	5.56	97458	6.57	67541	7.96	139374	9.39	220205	12.43	211022	14.02
5M81744.D	EF1- V-17104	28005	5.56	106174	6.57	73425	7.96	153388	9.39	238130	12.43	222521	14.02
5M81745.D	WMB26013(M	27805	5.56	98734	6.57	70792	7.97	153120	9.40	258294	12.43	226143	14.03
5M81746.D	AC74177-002(	26144	5.56	98516	6.57	67952	7.96	148143	9.40	238841	12.43	213454	14.03
5M81747.D	AC74177-002(	27755	5.56	100084	6.57	69855	7.97	145233	9.40	242125	12.43	217640	14.03

I1 =	1,4-Dichlorobenzene-d4	I4 =	Phenanthrene-d10	**625/8270 Internal Standard concentration = 40 mg/L (in final extract)**
I2 =	Naphthalene-d8	I5 =	Chrysene-d12	**624/8260 Internal Standard concentration = 30ug/L**
I3 =	Acenaphthene-d10	I6 =	Perylene-d12	**524 Internal Standard concentration =5ug/L**

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 5M81762.D Method: EPA 8270C

Analysis Date/Time: 08/29/13 11:25

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	40143	5.55	143350	6.57	95645	7.96	216281	9.39	322845	12.43	294262	14.02
Eval File Area Limit:	20072-80286		71675-286700		47822-191290		108140-432562		161422-645690		147131-588524	
Eval File Rt Limit:	5.05-6.05		6.07-7.07		7.46-8.46		8.89-9.89		11.93-12.93		13.52-14.52	

Data File	Sample												
5M81761.D	50PPM	40817	5.55	149781	6.57	107158	7.96	223518	9.39	333051	12.43	306881	14.02
5M81763.D	WMB26013(M	34752	5.55	123734	6.57	88535	7.96	182587	9.39	265854	12.43	239296	14.02

I1 =	1,4-Dichlorobenzene-d4	I4 =	Phenanthrene-d10	**625/8270 Internal Standard concentration = 40 mg/L (in final extract)**
I2 =	Naphthalene-d8	I5 =	Chrysene-d12	**624/8260 Internal Standard concentration = 30ug/L**
I3 =	Acenaphthene-d10	I6 =	Perylene-d12	**524 Internal Standard concentration =5ug/L**

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

PCB Data

Form 5

Method: EPA 8082

Instrument: GC_3

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
3G77333.D	50	07/15/13 10:22	Aqueous					
3G77334.D	BLK	07/15/13 11:32	Aqueous					
3G77335.D	BLK	07/15/13 11:47	Aqueous					
3G77336.D	BLK	07/15/13 12:02	Aqueous					
3G77337.D	BLK	07/15/13 12:17	Aqueous					
3G77338.D	BLK	07/15/13 12:32	Aqueous					
3G77339.D	BLK	07/15/13 12:47	Aqueous					
3G77340.D	BLK	07/15/13 13:03	Aqueous					
3G77341.D	CAL 1660@50PPB	07/15/13 13:23	Aqueous	3G77341.	10.0901	0	10.7221	0
3G77342.D	CAL 1660@200PPB	07/15/13 13:38	Aqueous	3G77341.	10.0856	0.0446	10.7199	0.0205
3G77343.D	CAL 1660@500PPB	07/15/13 13:54	Aqueous	3G77341.	10.0836	0.0644	10.7195	0.0243
3G77344.D	CAL 1660@1000PPB	07/15/13 14:09	Aqueous	3G77341.	10.0838	0.0625	10.7205	0.0149
3G77345.D	CAL 1660@2000PPB	07/15/13 14:24	Aqueous	3G77341.	10.0829	0.0714	10.7192	0.0271
3G77346.D	CAL 1660@4000PPB	07/15/13 14:40	Aqueous	3G77341.	10.0824	0.0763	10.7180	0.0382
3G77347.D	CAL 3268@500PPB	07/15/13 14:55	Aqueous	3G77341.	10.0825	0.0753	10.7188	0.0308
3G77348.D	CAL 1242@500PPB	07/15/13 15:10	Aqueous	3G77341.	10.0846	0.0545	10.7201	0.0187
3G77349.D	CAL 1248@500PPB	07/15/13 15:26	Aqueous	3G77341.	10.0846	0.0545	10.7206	0.014
3G77350.D	CAL 2154@500PPB	07/15/13 15:41	Aqueous	3G77341.	10.0835	0.0654	10.7197	0.0224
3G77351.D	CAL 1262@500PPB	07/15/13 15:57	Aqueous	3G77341.	10.0825	0.0753	10.7184	0.0345
3G77352.D	ICV	07/15/13 16:12	Aqueous	3G77341.	10.0822	0.0783	10.7199	0.0205
3G77353.D	PEST WS	07/15/13 16:27	Aqueous	3G77341.	0.0000	200 *	0.0000	200 *
3G77354.D	AC73377-001	07/15/13 19:22	Aqueous	3G77341.	10.0901	0	10.7222	0.0009
3G77355.D	AC73377-002	07/15/13 19:38	Aqueous	3G77341.	10.0832	0.0684	10.7185	0.0336
3G77356.D	AC73377-003	07/15/13 19:53	Aqueous	3G77341.	10.0812	0.0883	10.7186	0.0326
3G77357.D	AC73377-004	07/15/13 20:08	Aqueous	3G77341.	10.0827	0.0734	10.7187	0.0317
3G77358.D	AC73377-005	07/15/13 20:24	Aqueous	3G77341.	10.0813	0.0873	10.7196	0.0233
3G77359.D	AC73416-002	07/15/13 20:39	Aqueous	3G77341.	10.0820	0.0803	10.7181	0.0373
3G77360.D	AC73433-002	07/15/13 20:54	Aqueous	3G77341.	10.0829	0.0714	10.7187	0.0317
3G77361.D	CAL 1660@1000PPB	07/15/13 21:10	Aqueous	3G77341.	10.0818	0.0823	10.7191	0.028
3G77362.D	2000PPB	07/15/13 21:25	Aqueous	3G77361.	10.0814	0.004	10.7198	0.0065

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8082

Instrument: GC_2

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
2G82586.D	1000	07/16/13 09:06	Soil					
2G82587.D	1000	07/16/13 09:21	Soil					
2G82588.D	1000	07/16/13 09:36	Soil					
2G82589.D	1000	07/16/13 09:51	Soil					
2G82590.D	1000	07/16/13 10:06	Soil					
2G82591.D	1000	07/16/13 10:22	Soil					
2G82592.D	PEST WS	07/16/13 11:37	Soil					
2G82593.D	CAL 1660@50PPB	07/16/13 11:52	Soil	2G82593.	10.2438	0	11.0490	0
2G82594.D	CAL 1660@200PPB	07/16/13 12:08	Soil	2G82593.	10.2413	0.0244	11.0473	0.0154
2G82595.D	CAL 1660@500PPB	07/16/13 12:23	Soil	2G82593.	10.2418	0.0195	11.0485	0.0045
2G82596.D	CAL 1660@1000PPB	07/16/13 12:38	Soil	2G82593.	10.2400	0.0371	11.0483	0.0063
2G82597.D	CAL 1660@2000PPB	07/16/13 12:53	Soil	2G82593.	10.2391	0.0459	11.0474	0.0145
2G82598.D	CAL 1660@4000PPB	07/16/13 13:08	Soil	2G82593.	10.2381	0.0557	11.0458	0.029
2G82599.D	CAL 3268@500PPB	07/16/13 13:24	Soil	2G82593.	10.2392	0.0449	11.0476	0.0127
2G82600.D	CAL 1242@500PPB	07/16/13 13:39	Soil	2G82593.	10.2410	0.0273	11.0464	0.0235
2G82601.D	CAL 1248@500PPB	07/16/13 13:54	Soil	2G82593.	10.2399	0.0381	11.0469	0.019
2G82602.D	CAL 2154@500PPB	07/16/13 14:09	Soil	2G82593.	10.2407	0.0303	11.0476	0.0127
2G82603.D	CAL 1262@500PPB	07/16/13 14:24	Soil	2G82593.	10.2407	0.0303	11.0471	0.0172
2G82604.D	ICV	07/16/13 14:39	Soil	2G82593.	10.2402	0.0352	11.0480	0.009

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8082

Instrument: GC_2

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
2G82995.D	CAL 1660@200PPB	08/02/13 07:35	Soil	2G82995.	10.2434	0	11.0559	0
2G82996.D	AC73759-047	08/02/13 07:55	Aqueous	2G82995.	10.2433	0.001	11.0555	0.0036
2G82997.D	AC73759-048	08/02/13 08:10	Aqueous	2G82995.	10.2385	0.0478	11.0537	0.0199
2G82998.D	AC73759-049	08/02/13 08:29	Aqueous	2G82995.	10.2399	0.0342	11.0542	0.0154
2G82999.D	AC73652-044	08/02/13 08:44	Soil	2G82995.	10.2379	0.0537	11.0539	0.0181
2G83000.D	AC73652-049	08/02/13 08:59	Soil	2G82995.	10.2364	0.0684	11.0538	0.019
2G83001.D	AC73652-062	08/02/13 09:14	Soil	2G82995.	10.2369	0.0635	11.0539	0.0181
2G83002.D	AC73652-064	08/02/13 09:30	Soil	2G82995.	10.2379	0.0537	11.0540	0.0172
2G83003.D	AC73652-066	08/02/13 09:45	Soil	2G82995.	10.2392	0.041	11.0557	0.0018
2G83004.D	AC73652-068	08/02/13 10:00	Soil	2G82995.	10.2371	0.0615	11.0546	0.0118
2G83005.D	AC73652-070	08/02/13 10:15	Soil	2G82995.	10.2366	0.0664	11.0536	0.0208
2G83006.D	AC73652-072	08/02/13 10:30	Soil	2G82995.	10.2378	0.0547	11.0548	0.0099
2G83007.D	AC73652-074	08/02/13 10:45	Soil	2G82995.	10.2358	0.0742	11.0539	0.0181
2G83008.D	CAL 1660@200PPB	08/02/13 11:24	Soil	2G82995.	10.2444	0.0098	11.0559	0
2G83009.D	WMB25770(MS)	08/02/13 11:40	Aqueous	2G83008.	10.2408	0.0351	11.0561	0.0018
2G83010.D	SMB25779	08/02/13 11:56	Soil	2G83008.	10.2380	0.0625	11.0562	0.0027
2G83011.D	SMB25779(MS)	08/02/13 12:11	Soil	2G83008.	10.2380	0.0625	11.0546	0.0118
2G83012.D	AC73787-010(10X)	08/02/13 12:26	Soil	2G83008.	10.2392	0.0508	11.0558	0.0009
2G83013.D	AC73787-011(10X)	08/02/13 12:41	Soil	2G83008.	10.2385	0.0576	11.0566	0.0063
2G83014.D	73787-012(10X)	08/02/13 12:56	Soil	2G83008.	10.2379	0.0635	11.0546	0.0118
2G83015.D	AC73787-013(10X)	08/02/13 13:11	Soil	2G83008.	10.2381	0.0615	11.0553	0.0054
2G83016.D	AC73787-014(10X)	08/02/13 13:27	Soil	2G83008.	10.2377	0.0654	11.0543	0.0145
2G83017.D	AC73787-015(10X)	08/02/13 13:42	Soil	2G83008.	10.2384	0.0586	11.0540	0.0172
2G83018.D	AC73787-016(10X)	08/02/13 13:57	Soil	2G83008.	10.2387	0.0557	11.0549	0.009
2G83019.D	AC73787-017(10X)	08/02/13 14:12	Soil	2G83008.	10.2377	0.0654	11.0550	0.0081
2G83020.D	AC73656-001	08/02/13 14:27	Soil	2G83008.	10.2348	0.0938	11.0516	0.0389
2G83021.D	AC73787-012	08/02/13 14:42	Soil	2G83008.	10.2358	0.084	11.0529	0.0271
2G83022.D	CAL 1660@500PPB	08/02/13 14:58	Soil	2G83008.	10.2387	0.0557	11.0548	0.0099
2G83023.D	WMB25783(MS)	08/02/13 15:58	Aqueous	2G83022.	10.2256	0.128	11.0444	0.0941
2G83024.D	AC73731-001	08/02/13 16:13	Aqueous	2G83022.	10.2272	0.1124	11.0470	0.0706
2G83025.D	AC73731-002	08/02/13 16:28	Aqueous	2G83022.	10.2273	0.1114	11.0453	0.086
2G83026.D	AC73731-004	08/02/13 16:43	Aqueous	2G83022.	10.2278	0.1065	11.0476	0.0652
2G83027.D	AC73731-005	08/02/13 16:59	Aqueous	2G83022.	10.2274	0.1104	11.0472	0.0688
2G83028.D	AC73731-007	08/02/13 17:14	Aqueous	2G83022.	10.2280	0.1046	11.0456	0.0833
2G83029.D	AC73731-008	08/02/13 17:29	Aqueous	2G83022.	10.2280	0.1046	11.0476	0.0652
2G83030.D	AC73731-009	08/02/13 17:44	Aqueous	2G83022.	10.2276	0.1085	11.0471	0.0697
2G83031.D	AC73731-010	08/02/13 17:59	Aqueous	2G83022.	10.2281	0.1036	11.0475	0.0661
2G83032.D	AC73731-011	08/02/13 18:15	Aqueous	2G83022.	10.2278	0.1065	11.0463	0.0769
2G83033.D	CAL 1660@200PPB	08/02/13 18:30	Aqueous	2G83022.	10.2308	0.0772	11.0488	0.0543
2G83034.D	500PPB	08/02/13 18:45	Aqueous	2G83033.	10.2300	0.0078	11.0481	0.0063
2G83035.D	AC73668-008(R)	08/02/13 19:00	Aqueous	2G83033.	10.2280	0.0274	11.0465	0.0208
2G83036.D	AC73668-005(R)	08/02/13 19:15	Aqueous	2G83033.	10.2299	0.0088	11.0481	0.0063
2G83037.D	AC73723-001(MS)	08/02/13 19:30	Soil	2G83033.	10.2295	0.0127	11.0491	0.0027
2G83038.D	AC73723-001(MSD)	08/02/13 19:46	Soil	2G83033.	10.2319	0.0108	11.0512	0.0217
2G83039.D	AC73723-001	08/02/13 20:01	Soil	2G83033.	10.2331	0.0225	11.0512	0.0217
2G83040.D	AC73758-005	08/02/13 20:16	Soil	2G83033.	10.2305	0.0029	11.0488	0
2G83041.D	AC73652-044(MS)	08/02/13 20:31	Soil	2G83033.	10.2327	0.0186	11.0506	0.0163
2G83042.D	AC73652-044(MSD)	08/02/13 20:46	Soil	2G83033.	10.2322	0.0137	11.0501	0.0118
2G83043.D	BLK	08/02/13 21:02	Soil	2G83033.	10.2338	0.0293	11.0515	0.0244
2G83044.D	BLK	08/02/13 21:17	Soil	2G83033.	10.2343	0.0342	11.0522	0.0308
2G83045.D	BLK	08/02/13 21:32	Soil	2G83033.	10.2342	0.0332	11.0519	0.028
2G83046.D	200PPB	08/02/13 21:47	Soil	2G83033.	10.2343	0.0342	11.0521	0.0299
2G83047.D	CAL 1660@500PPB	08/02/13 22:02	Soil	2G83033.	10.2349	0.0401	11.0527	0.0353

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8082

Instrument: GC_3

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
3G77902.D	CAL 1660@1000PPB	08/02/13 07:37	Soil	3G77902.	10.0733	0	10.7213	0
3G77903.D	AC73759-013(10X)	08/02/13 07:54	Soil	3G77902.	10.0704	0.0288	10.7189	0.0224
3G77904.D	CAL 1660@2000PPB	08/02/13 08:10	Soil	3G77902.	10.0673	0.0596	10.7189	0.0224
3G77905.D	AC73787-001	08/02/13 08:37	Aqueous	3G77904.	10.0735	0.0616	10.7212	0.0215
3G77906.D	AC73787-018	08/02/13 08:52	Aqueous	3G77904.	10.0669	0.004	10.7175	0.0131
3G77907.D	AC73787-019	08/02/13 09:07	Aqueous	3G77904.	10.0662	0.0109	10.7179	0.0093
3G77908.D	AC73652-054	08/02/13 09:23	Soil	3G77904.	10.0664	0.0089	10.7175	0.0131
3G77909.D	AC73652-059	08/02/13 09:38	Soil	3G77904.	10.0670	0.003	10.7189	0
3G77910.D	AC73656-001	08/02/13 09:53	Soil	3G77904.	10.0655	0.0179	10.7171	0.0168
3G77911.D	AC73767-001	08/02/13 10:08	OIL/OTHER	3G77904.	10.0665	0.0079	10.7182	0.0065
3G77912.D	AC73787-002(10X)	08/02/13 10:23	Soil	3G77904.	10.0666	0.007	10.7181	0.0075
3G77913.D	AC73787-003(10X)	08/02/13 10:38	Soil	3G77904.	10.0672	0.001	10.7171	0.0168
3G77914.D	AC73787-004(10X)	08/02/13 10:53	Soil	3G77904.	10.0672	0.001	10.7169	0.0187
3G77915.D	AC73787-005(10X)	08/02/13 11:08	Soil	3G77904.	10.0674	0.001	10.7167	0.0205
3G77916.D	AC73787-006(10X)	08/02/13 11:23	Soil	3G77904.	10.0660	0.0129	10.7166	0.0215
3G77917.D	AC73787-007(10X)	08/02/13 11:37	Soil	3G77904.	10.0669	0.004	10.7169	0.0187
3G77918.D	73787-008(10X)	08/02/13 11:52	Soil	3G77904.	10.0661	0.0119	10.7170	0.0177
3G77919.D	AC73787-009(10X)	08/02/13 12:07	Soil	3G77904.	10.0668	0.005	10.7169	0.0187
3G77920.D	AC73787-008(50X)	08/02/13 12:22	Soil	3G77904.	0.0000	200 *	0.0000	200 *
3G77921.D	CAL 1660@2000PPB	08/02/13 12:37	Soil	3G77904.	10.0650	0.0229	10.7172	0.0159
3G77922.D	AC73615-026	08/02/13 12:56	Soil	3G77921.	10.0719	0.0685	10.7217	0.042
3G77923.D	AC73771-001	08/02/13 13:11	Soil	3G77921.	10.0677	0.0268	10.7202	0.028
3G77924.D	AC73771-002	08/02/13 13:26	Soil	3G77921.	10.0699	0.0487	10.7180	0.0075
3G77925.D	AC73742-001	08/02/13 13:41	Soil	3G77921.	10.0670	0.0199	10.7184	0.0112
3G77926.D	AC73748-001	08/02/13 13:56	Soil	3G77921.	10.0666	0.0159	10.7189	0.0159
3G77927.D	AC73749-001	08/02/13 14:11	Soil	3G77921.	10.0682	0.0318	10.7187	0.014
3G77928.D	AC73758-001	08/02/13 14:26	Soil	3G77921.	10.0689	0.0387	10.7203	0.0289
3G77929.D	WMB25783	08/02/13 14:41	Aqueous	3G77921.	10.0668	0.0179	10.7193	0.0196
3G77930.D	AC73758-002	08/02/13 14:55	Soil	3G77921.	10.0687	0.0368	10.7193	0.0196
3G77931.D	AC73758-003	08/02/13 15:10	Soil	3G77921.	10.0672	0.0219	10.7196	0.0224
3G77932.D	AC73758-004	08/02/13 15:26	Soil	3G77921.	10.0677	0.0268	10.7188	0.0149
3G77933.D	SMB25777	08/02/13 15:41	Soil	3G77921.	10.0676	0.0258	10.7195	0.0215
3G77934.D	OMB25776(MS)	08/02/13 15:56	OIL/OTHER	3G77921.	10.0685	0.0348	10.7198	0.0243
3G77935.D	OMB25776	08/02/13 16:12	OIL/OTHER	3G77921.	10.0680	0.0298	10.7188	0.0149
3G77936.D	CAL 1660@2000PPB	08/02/13 16:27	Soil	3G77921.	10.0674	0.0238	10.7196	0.0224
3G77937.D	SMB25784	08/02/13 16:42	Soil	3G77936.	10.0671	0.003	10.7194	0.0019
3G77938.D	SMB25784(MS)	08/02/13 16:58	Soil	3G77936.	10.0669	0.005	10.7193	0.0028
3G77939.D	SMB25777(MS)	08/02/13 17:13	Soil	3G77936.	10.0668	0.006	10.7177	0.0177
3G77940.D	AC73789-008(MS)	08/02/13 17:28	Soil	3G77936.	10.0676	0.002	10.7195	0.0009
3G77941.D	AC73789-008(MSD)	08/02/13 17:44	Soil	3G77936.	10.0671	0.003	10.7190	0.0056
3G77942.D	AC73789-001	08/02/13 17:59	Soil	3G77936.	10.0692	0.0179	10.7201	0.0047
3G77943.D	AC73789-002	08/02/13 18:14	Soil	3G77936.	10.0689	0.0149	10.7211	0.014
3G77944.D	AC73789-003	08/02/13 18:30	Soil	3G77936.	10.0692	0.0179	10.7206	0.0093
3G77945.D	AC73789-004	08/02/13 18:45	Soil	3G77936.	10.0677	0.003	10.7205	0.0084
3G77946.D	AC73789-005	08/02/13 19:00	Soil	3G77936.	10.0682	0.0079	10.7192	0.0037
3G77947.D	AC73789-006	08/02/13 19:16	Soil	3G77936.	10.0692	0.0179	10.7196	0
3G77948.D	AC73789-007	08/02/13 19:31	Soil	3G77936.	10.0684	0.0099	10.7198	0.0019
3G77949.D	AC73789-008	08/02/13 19:46	Soil	3G77936.	10.0684	0.0099	10.7202	0.0056
3G77950.D	AC73789-009	08/02/13 20:02	Soil	3G77936.	10.0674	0	10.7207	0.0103
3G77951.D	AC73789-010	08/02/13 20:17	Soil	3G77936.	10.0678	0.004	10.7203	0.0065
3G77952.D	1000PPB	08/02/13 20:32	Soil	3G77936.	10.0680	0.006	10.7201	0.0047
3G77953.D	CAL 1660@2000PPB	08/02/13 20:47	Soil	3G77936.	10.0684	0.0099	10.7192	0.0037

Drift Compound: DCB-Surrogate

Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph)

* - Values outside of limits for this column/run

3080110 0138

Form 6
Initial Calibration

Method: EPA 8082

Instrument: GC_3

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	3G77341.	CAL 1660@50PPB	07/15/13 13:23	2	3G77342.	CAL 1660@200PPB	07/15/13 13:38
3	3G77343.	CAL 1660@500PPB	07/15/13 13:54	4	3G77344.	CAL 1660@1000PPB	07/15/13 14:09
5	3G77345.	CAL 1660@2000PPB	07/15/13 14:24	6	3G77346.	CAL 1660@4000PPB	07/15/13 14:40
7	3G77347.	CAL 3268@500PPB	07/15/13 14:55	8	3G77348.	CAL 1242@500PPB	07/15/13 15:10
9	3G77349.	CAL 1248@500PPB	07/15/13 15:26	10	3G77350.	CAL 2154@500PPB	07/15/13 15:41
11	3G77351.	CAL 1262@500PPB	07/15/13 15:57				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Avg	1.8427	1.8034	1.8246	1.8622	1.8882	1.8229	----	----	1.84	4.02	1.00	1.00	1.7	5.00	20.00	50.00	100.0	200.0	400.0		
Aroclor-1016	1	1	Qua	0.0544	0.0486	0.0461	0.0436	0.0414	0.0381	----	----	0.0454	4.46	0.998	1.00	13	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	2	Qua	0.1058	0.0902	0.0827	0.0782	0.0730	0.0661	----	----	0.0827	4.80	0.997	1.00	17	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	3	Qua	0.2154	0.1873	0.1701	0.1647	0.1543	0.1422	----	----	0.172	5.25	0.998	1.00	15	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	4	Qua	0.0832	0.0788	0.0715	0.0703	0.0670	0.0628	----	----	0.0723	5.38	0.999	1.00	10	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	5	Avg	0.0586	0.0564	0.0525	0.0524	0.0508	0.0475	----	----	0.0531	5.48	0.999	1.00	7.4	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	1	Qua	0.1251	0.1140	0.1015	0.0979	0.0911	0.0844	----	----	0.102	7.06	0.998	1.00	15	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	2	Qua	0.1460	0.1312	0.1164	0.1132	0.1062	0.0988	----	----	0.119	7.31	0.998	1.00	15	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	3	Avg	0.0559	0.0533	0.0500	0.0511	0.0508	0.0489	----	----	0.0517	7.79	1.00	1.00	4.9	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	4	Qua	0.1013	0.0868	0.0791	0.0788	0.0750	0.0713	----	----	0.0821	8.08	0.999	1.00	13	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	5	Avg	0.1356	0.1324	0.1241	0.1289	0.1262	0.1248	----	----	0.129	8.79	1.00	1.00	3.6	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1221	1	1	Avg	----	----	----	----	----	----	----	----	0.0231	4.26	-1	-1	Lvl=10	500.0							
Aroclor-1221	1	2	Avg	----	----	----	----	----	----	----	----	0.0137	4.39	-1	-1	Lvl=10	500.0							
Aroclor-1221	1	3	Avg	----	----	----	----	----	----	----	----	0.0634	4.45	-1	-1	Lvl=10	500.0							
Aroclor-1232	1	1	Avg	----	----	----	----	----	----	----	----	0.0450	4.46	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	2	Avg	----	----	----	----	----	----	----	----	0.0382	4.80	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	3	Avg	----	----	----	----	----	----	----	----	0.0787	5.26	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	4	Avg	----	----	----	----	----	----	----	----	0.0325	5.38	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	5	Avg	----	----	----	----	----	----	----	----	0.0360	5.82	-1	-1	Lvl=7	500.0							
Aroclor-1242	1	1	Avg	----	----	----	----	----	----	----	----	0.0386	4.46	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	2	Avg	----	----	----	----	----	----	----	----	0.0672	4.80	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	3	Avg	----	----	----	----	----	----	----	----	0.141	5.25	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	4	Avg	----	----	----	----	----	----	----	----	0.0939	5.59	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	5	Avg	----	----	----	----	----	----	----	----	0.0605	5.82	-1	-1	Lvl=8	500.0							
Aroclor-1248	1	1	Avg	----	----	----	----	----	----	----	----	0.0352	4.80	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	2	Avg	----	----	----	----	----	----	----	----	0.0861	5.25	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	3	Avg	----	----	----	----	----	----	----	----	0.146	5.58	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	4	Avg	----	----	----	----	----	----	----	----	0.0838	5.93	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	5	Avg	----	----	----	----	----	----	----	----	0.0973	6.50	-1	-1	Lvl=9	500.0							
Aroclor-1254	1	1	Avg	----	----	----	----	----	----	----	----	0.0411	6.70	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	2	Avg	----	----	----	----	----	----	----	----	0.129	6.90	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	3	Avg	----	----	----	----	----	----	----	----	0.0758	7.07	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	4	Avg	----	----	----	----	----	----	----	----	0.113	7.18	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	5	Avg	----	----	----	----	----	----	----	----	0.0566	7.56	-1	-1	Lvl=10	500.0							
Aroclor-1262	1	1	Avg	----	----	----	----	----	----	----	----	0.135	7.74	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	2	Avg	----	----	----	----	----	----	----	----	0.0781	8.73	-1	-1	Lvl=11	500.0							

Avg Rsd Col 1: 10.3 Avg Rsd Col 2: 13.7

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3080110 0139

Form 6
Initial Calibration

Method: EPA 8082

Instrument: GC_3

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	3G77341.	CAL 1660@50PPB	07/15/13 13:23	2	3G77342.	CAL 1660@200PPB	07/15/13 13:38
3	3G77343.	CAL 1660@500PPB	07/15/13 13:54	4	3G77344.	CAL 1660@1000PPB	07/15/13 14:09
5	3G77345.	CAL 1660@2000PPB	07/15/13 14:24	6	3G77346.	CAL 1660@4000PPB	07/15/13 14:40
7	3G77347.	CAL 3268@500PPB	07/15/13 14:55	8	3G77348.	CAL 1242@500PPB	07/15/13 15:10
9	3G77349.	CAL 1248@500PPB	07/15/13 15:26	10	3G77350.	CAL 2154@500PPB	07/15/13 15:41
11	3G77351.	CAL 1262@500PPB	07/15/13 15:57				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aroclor-1262	1	3	Avg	----	----	----	----	----	----	----	----	0.174	8.79	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	4	Avg	----	----	----	----	----	----	----	----	0.0843	9.49	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	5	Avg	----	----	----	----	----	----	----	----	0.0266	9.85	-1	-1	Lvl=11	500.0							
Aroclor-1268	1	1	Avg	----	----	----	----	----	----	----	----	0.0355	8.09	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	2	Avg	----	----	----	----	----	----	----	----	0.0314	8.39	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	3	Avg	----	----	----	----	----	----	----	----	0.198	8.98	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	4	Avg	----	----	----	----	----	----	----	----	0.0628	9.08	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	5	Avg	----	----	----	----	----	----	----	----	0.550	9.85	-1	-1	Lvl=7	500.0							
DCB-Surrogate	1	0	Avg	2.0251	1.8929	1.7235	1.7342	1.6589	1.5869	----	----	1.77	10.08	0.999	1.00	9.1	5.00	20.00	50.00	100.0	200.0	400.0		
TCMX-Surrogate	2	0	Avg	3.0418	2.7834	2.7670	2.8151	2.8567	2.7922	----	----	2.84	3.97	1.00	1.00	3.6	5.00	20.00	50.00	100.0	200.0	400.0		
Aroclor-1016	2	1	Qua	0.0904	0.0741	0.0673	0.0642	0.0608	0.0557	----	----	0.0688	4.55	0.998	1.00	18	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	2	Qua	0.1685	0.1543	0.1330	0.1245	0.1146	0.1039	----	----	0.133	4.95	0.997	1.00	18	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	3	Qua	0.3503	0.2984	0.2631	0.2519	0.2375	0.2255	----	----	0.271	5.33	0.999	1.00	17	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	4	Qua	0.1532	0.1235	0.1071	0.1020	0.0955	0.0882	----	----	0.112	5.65	0.998	1.00	21	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	5	Qua	0.0941	0.0857	0.0753	0.0728	0.0680	0.0627	----	----	0.0765	6.01	0.998	1.00	15	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	1	Qua	0.2290	0.1923	0.1636	0.1546	0.1433	0.1345	----	----	0.170	7.29	0.999	1.00	21	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	2	Qua	0.2438	0.2088	0.1817	0.1752	0.1630	0.1536	----	----	0.188	7.38	0.999	1.00	18	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	3	Qua	0.1879	0.1727	0.1560	0.1533	0.1462	0.1436	----	----	0.160	8.36	1.00	1.00	11	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	4	Avg	0.1766	0.1572	0.1448	0.1492	0.1474	0.1504	----	----	0.154	9.05	1.00	1.00	7.6	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	5	Avg	0.1202	0.1089	0.1016	0.1060	0.1050	0.1062	----	----	0.108	9.64	1.00	1.00	5.9	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1221	2	1	Avg	----	----	----	----	----	----	----	----	0.0372	4.34	-1	-1	Lvl=10	500.0							
Aroclor-1221	2	2	Avg	----	----	----	----	----	----	----	----	0.0206	4.49	-1	-1	Lvl=10	500.0							
Aroclor-1221	2	3	Avg	----	----	----	----	----	----	----	----	0.0794	4.55	-1	-1	Lvl=10	500.0							
Aroclor-1232	2	1	Avg	----	----	----	----	----	----	----	----	0.0655	4.55	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	2	Avg	----	----	----	----	----	----	----	----	0.0634	4.96	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	3	Avg	----	----	----	----	----	----	----	----	0.118	5.33	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	4	Avg	----	----	----	----	----	----	----	----	0.0400	6.01	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	5	Avg	----	----	----	----	----	----	----	----	0.0375	6.15	-1	-1	Lvl=7	500.0							
Aroclor-1242	2	1	Avg	----	----	----	----	----	----	----	----	0.0560	4.55	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	2	Avg	----	----	----	----	----	----	----	----	0.103	4.95	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	3	Avg	----	----	----	----	----	----	----	----	0.211	5.33	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	4	Avg	----	----	----	----	----	----	----	----	0.0867	5.65	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	5	Avg	----	----	----	----	----	----	----	----	0.0682	6.01	-1	-1	Lvl=8	500.0							
Aroclor-1248	2	1	Avg	----	----	----	----	----	----	----	----	0.0540	4.95	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	2	Avg	----	----	----	----	----	----	----	----	0.136	5.33	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	3	Avg	----	----	----	----	----	----	----	----	0.0982	5.64	-1	-1	Lvl=9	500.0							

Avg Rsd Col 1: 10.3 Avg Rsd Col 2: 13.7

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3080110 0140

Form 6
Initial Calibration

Method: EPA 8082

Instrument: GC_3

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	3G77341.	CAL 1660@50PPB	07/15/13 13:23	2	3G77342.	CAL 1660@200PPB	07/15/13 13:38
3	3G77343.	CAL 1660@500PPB	07/15/13 13:54	4	3G77344.	CAL 1660@1000PPB	07/15/13 14:09
5	3G77345.	CAL 1660@2000PPB	07/15/13 14:24	6	3G77346.	CAL 1660@4000PPB	07/15/13 14:40
7	3G77347.	CAL 3268@500PPB	07/15/13 14:55	8	3G77348.	CAL 1242@500PPB	07/15/13 15:10
9	3G77349.	CAL 1248@500PPB	07/15/13 15:26	10	3G77350.	CAL 2154@500PPB	07/15/13 15:41
11	3G77351.	CAL 1262@500PPB	07/15/13 15:57				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aroclor-1248	2	4	Avg	----	----	----	----	----	----	----	----	0.100	6.15	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	5	Avg	----	----	----	----	----	----	----	----	0.125	6.29	-1	-1	Lvl=9	500.0							
Aroclor-1254	2	1	Avg	----	----	----	----	----	----	----	----	0.161	6.50	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	2	Avg	----	----	----	----	----	----	----	----	0.0520	6.83	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	3	Avg	----	----	----	----	----	----	----	----	0.134	7.23	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	4	Avg	----	----	----	----	----	----	----	----	0.0690	7.74	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	5	Avg	----	----	----	----	----	----	----	----	0.0695	8.42	-1	-1	Lvl=10	500.0							
Aroclor-1262	2	1	Avg	----	----	----	----	----	----	----	----	0.169	7.79	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	2	Avg	----	----	----	----	----	----	----	----	0.133	8.94	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	3	Avg	----	----	----	----	----	----	----	----	0.165	9.05	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	4	Avg	----	----	----	----	----	----	----	----	0.198	9.64	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	5	Avg	----	----	----	----	----	----	----	----	0.0459	10.18	-1	-1	Lvl=11	500.0							
Aroclor-1268	2	1	Avg	----	----	----	----	----	----	----	----	0.0356	8.45	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	2	Avg	----	----	----	----	----	----	----	----	0.0647	8.49	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	3	Avg	----	----	----	----	----	----	----	----	0.351	9.38	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	4	Avg	----	----	----	----	----	----	----	----	0.103	9.54	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	5	Avg	----	----	----	----	----	----	----	----	0.979	10.18	-1	-1	Lvl=7	500.0							
DCB-Surrogate	2	0	Avg	3.5426	3.2252	2.9455	2.9891	2.8984	2.8576	----	----	3.08	10.72	1.00	1.00	8.5	5.00	20.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 10.3 Avg Rsd Col 2: 13.7

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3080110 0141

Form 6
Initial Calibration

Method: EPA 8082

Instrument: GC_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2G82593.	CAL 1660@50PPB	07/16/13 11:52	2	2G82594.	CAL 1660@200PPB	07/16/13 12:08
3	2G82595.	CAL 1660@500PPB	07/16/13 12:23	4	2G82596.	CAL 1660@1000PPB	07/16/13 12:38
5	2G82597.	CAL 1660@2000PPB	07/16/13 12:53	6	2G82598.	CAL 1660@4000PPB	07/16/13 13:08
7	2G82599.	CAL 3268@500PPB	07/16/13 13:24	8	2G82600.	CAL 1242@500PPB	07/16/13 13:39
9	2G82601.	CAL 1248@500PPB	07/16/13 13:54	10	2G82602.	CAL 2154@500PPB	07/16/13 14:09
11	2G82603.	CAL 1262@500PPB	07/16/13 14:24				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Avg	0.5182	0.5155	0.4924	0.5202	0.5324	0.5193	----	----	0.516	3.91	1.00	1.00	2.5	5.00	20.00	50.00	100.0	200.0	400.0		
Aroclor-1016	1	1	Qua	0.0164	0.0157	0.0138	0.0132	0.0123	0.0112	----	----	0.0138	4.43	0.997	1.00	14	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	2	Qua	0.0326	0.0300	0.0256	0.0243	0.0224	0.0199	----	----	0.0258	4.80	0.996	1.00	18	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	3	Qua	0.0642	0.0567	0.0485	0.0470	0.0440	0.0404	----	----	0.0502	5.27	0.998	1.00	17	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	4	Avg	0.0182	0.0176	0.0155	0.0156	0.0151	0.0141	----	----	0.0161	5.52	0.999	1.00	9.7	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	5	Qua	0.0441	0.0410	0.0351	0.0342	0.0319	0.0291	----	----	0.0360	5.63	0.997	1.00	16	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	1	Qua	0.0381	0.0347	0.0300	0.0285	0.0266	0.0241	----	----	0.0304	7.15	0.997	1.00	17	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	2	Qua	0.0433	0.0397	0.0341	0.0326	0.0305	0.0279	----	----	0.0347	7.41	0.998	1.00	17	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	3	Avg	0.0195	0.0199	0.0178	0.0181	0.0180	0.0173	----	----	0.0185	7.61	1.00	1.00	5.6	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	4	Avg	0.0262	0.0257	0.0228	0.0230	0.0223	0.0211	----	----	0.0236	8.20	0.999	1.00	8.6	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	5	Avg	0.0381	0.0382	0.0369	0.0370	0.0360	0.0342	----	----	0.0368	8.92	0.999	1.00	4.1	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1221	1	1	Avg	----	----	----	----	----	----	----	----	0.00707	4.22	-1	-1	Lvl=10	500.0							
Aroclor-1221	1	2	Avg	----	----	----	----	----	----	----	----	0.00417	4.37	-1	-1	Lvl=10	500.0							
Aroclor-1221	1	3	Avg	----	----	----	----	----	----	----	----	0.0193	4.43	-1	-1	Lvl=10	500.0							
Aroclor-1232	1	1	Avg	----	----	----	----	----	----	----	----	0.0145	4.43	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	2	Avg	----	----	----	----	----	----	----	----	0.0128	4.80	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	3	Avg	----	----	----	----	----	----	----	----	0.0231	5.27	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	4	Avg	----	----	----	----	----	----	----	----	0.0112	5.41	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	5	Avg	----	----	----	----	----	----	----	----	0.0114	5.88	-1	-1	Lvl=7	500.0							
Aroclor-1242	1	1	Avg	----	----	----	----	----	----	----	----	0.0118	4.43	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	2	Avg	----	----	----	----	----	----	----	----	0.0205	4.80	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	3	Avg	----	----	----	----	----	----	----	----	0.0394	5.27	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	4	Avg	----	----	----	----	----	----	----	----	0.0278	5.63	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	5	Avg	----	----	----	----	----	----	----	----	0.0180	5.88	-1	-1	Lvl=8	500.0							
Aroclor-1248	1	1	Avg	----	----	----	----	----	----	----	----	0.0104	4.80	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	2	Avg	----	----	----	----	----	----	----	----	0.0253	5.27	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	3	Avg	----	----	----	----	----	----	----	----	0.0429	5.61	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	4	Avg	----	----	----	----	----	----	----	----	0.0229	5.98	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	5	Avg	----	----	----	----	----	----	----	----	0.0266	6.58	-1	-1	Lvl=9	500.0							
Aroclor-1254	1	1	Avg	----	----	----	----	----	----	----	----	0.0119	6.78	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	2	Avg	----	----	----	----	----	----	----	----	0.0366	6.99	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	3	Avg	----	----	----	----	----	----	----	----	0.0217	7.16	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	4	Avg	----	----	----	----	----	----	----	----	0.0318	7.27	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	5	Avg	----	----	----	----	----	----	----	----	0.0148	7.66	-1	-1	Lvl=10	500.0							
Aroclor-1262	1	1	Avg	----	----	----	----	----	----	----	----	0.0445	7.84	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	2	Avg	----	----	----	----	----	----	----	----	0.0225	8.85	-1	-1	Lvl=11	500.0							

Avg Rsd Col 1: 11.9 Avg Rsd Col 2: 14.5

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3080110 0142

Form 6
Initial Calibration

Method: EPA 8082

Instrument: GC_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2G82593.	CAL 1660@50PPB	07/16/13 11:52
3	2G82595.	CAL 1660@500PPB	07/16/13 12:23
5	2G82597.	CAL 1660@2000PPB	07/16/13 12:53
7	2G82599.	CAL 3268@500PPB	07/16/13 13:24
9	2G82601.	CAL 1248@500PPB	07/16/13 13:54
11	2G82603.	CAL 1262@500PPB	07/16/13 14:24

Level #:	Data File:	Cal Identifier:	Analysis Date/Time
2	2G82594.	CAL 1660@200PPB	07/16/13 12:08
4	2G82596.	CAL 1660@1000PPB	07/16/13 12:38
6	2G82598.	CAL 1660@4000PPB	07/16/13 13:08
8	2G82600.	CAL 1242@500PPB	07/16/13 13:39
10	2G82602.	CAL 2154@500PPB	07/16/13 14:09

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aroclor-1262	1	3	Avg	----	----	----	----	----	----	----	----	0.0491	8.91	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	4	Avg	----	----	----	----	----	----	----	----	0.0242	9.66	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	5	Avg	----	----	----	----	----	----	----	----	0.00711	10.02	-1	-1	Lvl=11	500.0							
Aroclor-1268	1	1	Avg	----	----	----	----	----	----	----	----	0.0103	8.19	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	2	Avg	----	----	----	----	----	----	----	----	0.00875	8.51	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	3	Avg	----	----	----	----	----	----	----	----	0.0547	9.09	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	4	Avg	----	----	----	----	----	----	----	----	0.0182	9.19	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	5	Avg	----	----	----	----	----	----	----	----	0.144	10.02	-1	-1	Lvl=7	500.0							
DCB-Surrogate	1	0	Qua	0.5568	0.5353	0.4670	0.4631	0.4405	0.4093	----	----	0.479	10.24	0.998	1.00	12	5.00	20.00	50.00	100.0	200.0	400.0		
TCMX-Surrogate	2	0	Avg	0.5035	0.4769	0.4512	0.4805	0.4859	0.4791	----	----	0.480	3.98	1.00	1.00	3.5	5.00	20.00	50.00	100.0	200.0	400.0		
Aroclor-1016	2	1	Qua	0.0172	0.0144	0.0125	0.0127	0.0120	0.0107	----	----	0.0133	4.60	0.996	1.00	17	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	2	Qua	0.0321	0.0284	0.0239	0.0235	0.0218	0.0190	----	----	0.0248	5.03	0.994	1.00	19	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	3	Qua	0.0626	0.0548	0.0467	0.0450	0.0426	0.0387	----	----	0.0484	5.42	0.997	1.00	18	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	4	Qua	0.0286	0.0246	0.0210	0.0200	0.0186	0.0174	----	----	0.0218	5.75	0.999	1.00	19	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	5	Qua	0.0185	0.0171	0.0148	0.0144	0.0136	0.0128	----	----	0.0152	6.13	0.999	1.00	14	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	1	Qua	0.0387	0.0338	0.0283	0.0268	0.0247	0.0227	----	----	0.0292	7.45	0.998	1.00	21	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	2	Qua	0.0396	0.0352	0.0295	0.0282	0.0264	0.0243	----	----	0.0306	7.53	0.998	1.00	19	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	3	Qua	0.0163	0.0150	0.0131	0.0133	0.0128	0.0122	----	----	0.0138	8.17	0.999	1.00	11	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	4	Avg	0.0308	0.0290	0.0260	0.0251	0.0250	0.0241	----	----	0.0267	8.54	1.00	1.00	9.8	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	5	Qua	0.0271	0.0246	0.0210	0.0217	0.0216	0.0208	----	----	0.0228	9.26	1.00	1.00	11	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1221	2	1	Avg	----	----	----	----	----	----	----	----	0.00675	4.38	-1	-1	Lvl=10	500.0							
Aroclor-1221	2	2	Avg	----	----	----	----	----	----	----	----	0.00445	4.53	-1	-1	Lvl=10	500.0							
Aroclor-1221	2	3	Avg	----	----	----	----	----	----	----	----	0.0146	4.60	-1	-1	Lvl=10	500.0							
Aroclor-1232	2	1	Avg	----	----	----	----	----	----	----	----	0.0132	4.60	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	2	Avg	----	----	----	----	----	----	----	----	0.0124	5.03	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	3	Avg	----	----	----	----	----	----	----	----	0.0223	5.42	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	4	Avg	----	----	----	----	----	----	----	----	0.0106	5.75	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	5	Avg	----	----	----	----	----	----	----	----	0.00643	6.27	-1	-1	Lvl=7	500.0							
Aroclor-1242	2	1	Avg	----	----	----	----	----	----	----	----	0.0110	4.60	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	2	Avg	----	----	----	----	----	----	----	----	0.0194	5.03	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	3	Avg	----	----	----	----	----	----	----	----	0.0376	5.42	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	4	Avg	----	----	----	----	----	----	----	----	0.0167	5.75	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	5	Avg	----	----	----	----	----	----	----	----	0.0137	6.13	-1	-1	Lvl=8	500.0							
Aroclor-1248	2	1	Avg	----	----	----	----	----	----	----	----	0.00957	5.03	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	2	Avg	----	----	----	----	----	----	----	----	0.0245	5.41	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	3	Avg	----	----	----	----	----	----	----	----	0.0192	5.75	-1	-1	Lvl=9	500.0							

Avg Rsd Col 1: 11.9 Avg Rsd Col 2: 14.5

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc.)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 ; Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3080110 0143

Form 6
Initial Calibration

Method: EPA 8082

Instrument: GC_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2G82593.	CAL 1660@50PPB	07/16/13 11:52	2	2G82594.	CAL 1660@200PPB	07/16/13 12:08
3	2G82595.	CAL 1660@500PPB	07/16/13 12:23	4	2G82596.	CAL 1660@1000PPB	07/16/13 12:38
5	2G82597.	CAL 1660@2000PPB	07/16/13 12:53	6	2G82598.	CAL 1660@4000PPB	07/16/13 13:08
7	2G82599.	CAL 3268@500PPB	07/16/13 13:24	8	2G82600.	CAL 1242@500PPB	07/16/13 13:39
9	2G82601.	CAL 1248@500PPB	07/16/13 13:54	10	2G82602.	CAL 2154@500PPB	07/16/13 14:09
11	2G82603.	CAL 1262@500PPB	07/16/13 14:24				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aroclor-1248	2	4	Avg	----	----	----	----	----	----	----	----	0.0169	6.27	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	5	Avg	----	----	----	----	----	----	----	----	0.0215	6.41	-1	-1	Lvl=9	500.0							
Aroclor-1254	2	1	Avg	----	----	----	----	----	----	----	----	0.0284	6.63	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	2	Avg	----	----	----	----	----	----	----	----	0.00954	6.98	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	3	Avg	----	----	----	----	----	----	----	----	0.0241	7.38	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	4	Avg	----	----	----	----	----	----	----	----	0.0118	7.90	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	5	Avg	----	----	----	----	----	----	----	----	0.0108	8.60	-1	-1	Lvl=10	500.0							
Aroclor-1262	2	1	Avg	----	----	----	----	----	----	----	----	0.0489	8.09	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	2	Avg	----	----	----	----	----	----	----	----	0.0211	9.14	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	3	Avg	----	----	----	----	----	----	----	----	0.0267	9.26	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	4	Avg	----	----	----	----	----	----	----	----	0.0275	9.88	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	5	Avg	----	----	----	----	----	----	----	----	0.00638	10.46	-1	-1	Lvl=11	500.0							
Aroclor-1268	2	1	Avg	----	----	----	----	----	----	----	----	0.00600	8.64	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	2	Avg	----	----	----	----	----	----	----	----	0.00998	8.68	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	3	Avg	----	----	----	----	----	----	----	----	0.0469	9.61	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	4	Avg	----	----	----	----	----	----	----	----	0.0146	9.78	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	5	Avg	----	----	----	----	----	----	----	----	0.131	10.46	-1	-1	Lvl=7	500.0							
DCB-Surrogate	2	0	Qua	0.5149	0.4749	0.4151	0.4157	0.4025	0.3821	----	----	0.434	11.05	0.999	1.00	12	5.00	20.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 11.9 Avg Rsd Col 2: 14.5

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc.)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Form7
Continuing Calibration

Method: EPA 8082

Data File:				2G83008.D			2G83022.D			2G83033.D			2G83047.D			3G77921.D		
Method:				8082			8082			8082			8082			8082		
Calibration Name:				CAL 1660@200PP			CAL 1660@500PP			CAL 1660@200PP			CAL 1660@500PP			CAL 1660@2000PP		
Calibration Date/Time				08/02/13 11:24			08/02/13 14:58			08/02/13 18:30			08/02/13 22:02			08/02/13 12:37		
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff
TCMX-Surrogate	15	1	0	19.24	20	3.8	49.09	50	1.8	19.95	20	0.2	49.26	50	1.5	222.4	200	11.2
Aroclor-1016	15	1	1	222.7	200	11.3	535.3	500	7.1	219.6	200	9.8	526.1	500	5.2	2195	2000	9.8
Aroclor-1016	15	1	2	227.7	200	13.8	532.1	500	6.4	232.5	200	16.2*	528.7	500	5.7	2151	2000	7.6
Aroclor-1016	15	1	3	227.3	200	13.6	537.1	500	7.4	236.4	200	18.2*	529.0	500	5.8	2133	2000	6.6
Aroclor-1016	15	1	4	207.5	200	3.7	509.4	500	1.9	216.1	200	8.0	505.3	500	1.1	2188	2000	9.4
Aroclor-1016	15	1	5	220.7	200	10.3	528.6	500	5.7	209.0	200	4.5	522.1	500	4.4	2049	2000	2.4
Aroclor-1260	15	1	1	217.6	200	8.8	524.9	500	5.0	227.4	200	13.7	515.2	500	3.0	2100	2000	5.0
Aroclor-1260	15	1	2	219.0	200	9.5	529.9	500	6.0	228.8	200	14.4	516.5	500	3.3	2093	2000	4.6
Aroclor-1260	15	1	3	192.1	200	4.0	484.6	500	3.1	204.1	200	2.0	483.5	500	3.3	2129	2000	6.5
Aroclor-1260	15	1	4	194.1	200	2.9	478.4	500	4.3	205.9	200	2.9	499.8	500	0.0	2049	2000	2.4
Aroclor-1260	15	1	5	183.9	200	8.0	471.4	500	5.7	200.2	200	0.1	455.5	500	8.9	1987	2000	0.7
DCB-Surrogate	15	1	0	12.22	20	38.9*	30.4	50	39.2*	21.29	20	6.5	49.77	50	0.5	181.7	200	9.2
Average Difference	15	1	0			10.7			7.8			8.0			3.6			6.3
TCMX-Surrogate	15	2	0	19.54	20	2.3	48.28	50	3.4	19.02	20	4.9	46.6	50	6.8	176.1	200	12.0
Aroclor-1016	15	2	1	214.5	200	7.3	546.6	500	9.3	205.7	200	2.8	473.2	500	5.4	1737	2000	13.1
Aroclor-1016	15	2	2	225.9	200	12.9	512.6	500	2.5	224.4	200	12.2	509.1	500	1.8	1713	2000	14.4
Aroclor-1016	15	2	3	229.5	200	14.7	532.2	500	6.4	224.9	200	12.5	506.3	500	1.3	1744	2000	12.8
Aroclor-1016	15	2	4	234.3	200	17.1*	528	500	5.6	222.9	200	11.4	507.1	500	1.4	1697	2000	15.2
Aroclor-1016	15	2	5	226.3	200	13.2	519.8	500	4.0	219.6	200	9.8	506.3	500	1.3	1712	2000	14.4
Aroclor-1260	15	2	1	226.6	200	13.3	525.9	500	5.2	226.1	200	13.1	501.5	500	0.3	1701	2000	14.9
Aroclor-1260	15	2	2	229.8	200	14.9	526.5	500	5.3	223.8	200	11.9	499.8	500	0.0	1766	2000	11.7
Aroclor-1260	15	2	3	203.3	200	1.7	479.6	500	4.1	213.1	200	6.6	447.0	500	10.6	1828	2000	8.6
Aroclor-1260	15	2	4	177.4	200	11.3	448.3	500	10.3	196.9	200	1.6	442	500	11.6	1921	2000	3.9
Aroclor-1260	15	2	5	174.4	200	12.8	451.3	500	9.7	195.4	200	2.3	459.3	500	8.1	1763	2000	11.9
DCB-Surrogate	15	2	0	12.87	20	35.7*	32.1	50	35.8*	21.22	20	6.1	45.41	50	9.2	154.8	200	22.6*
Average Difference	15	2	0			13.1			8.5			7.9			4.8			13.0

Flags/Notes: **** - Values outside of limits for this column/run***

Form7
Continuing Calibration

Method: EPA 8082

Data File:				3G77936.D															
Method:				8082															
Calibration Name:				CAL 1660@2000PP															
Calibration Date/Time				08/02/13 16:27															
					Conc			Conc			Conc			Conc			Conc		
Compound	Limit	Col	Mr	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff
TCMX-Surrogate	15	1	0	232.6	200	16.3*												
Aroclor-1016	15	1	1	2314	2000	15.7*												
Aroclor-1016	15	1	2	2268	2000	13.4												
Aroclor-1016	15	1	3	2260	2000	13.0												
Aroclor-1016	15	1	4	2269	2000	13.4												
Aroclor-1016	15	1	5	2163	2000	8.1												
Aroclor-1260	15	1	1	2213	2000	10.6												
Aroclor-1260	15	1	2	2193	2000	9.6												
Aroclor-1260	15	1	3	2250	2000	12.5												
Aroclor-1260	15	1	4	2146	2000	7.3												
Aroclor-1260	15	1	5	2068	2000	3.4												
DCB-Surrogate	15	1	0	181.6	200	9.2												
Average Difference	15	1	0			11.1												
TCMX-Surrogate	15	2	0	181.1	200	9.5												
Aroclor-1016	15	2	1	1798	2000	10.1												
Aroclor-1016	15	2	2	1776	2000	11.2												
Aroclor-1016	15	2	3	1811	2000	9.5												
Aroclor-1016	15	2	4	1760	2000	12.0												
Aroclor-1016	15	2	5	1780	2000	11.0												
Aroclor-1260	15	2	1	1727	2000	13.7												
Aroclor-1260	15	2	2	1833	2000	8.3												
Aroclor-1260	15	2	3	1869	2000	6.6												
Aroclor-1260	15	2	4	1962	2000	1.9												
Aroclor-1260	15	2	5	1748	2000	12.6												
DCB-Surrogate	15	2	0	144.8	200	27.6*												
Average Difference	15	2	0			11.2												

Flags/Notes: **** - Values outside of limits for this column/run***

Form7

RtWindow Summary

Method: EPA 8082

3080110 0146

Data File:			2G82593.D		3G77341.D		2G83008.D		2G83033.D		3G77921.D	
Calibration Name:			CAL 1660@50PPB		CAL 1660@50PPB		CAL 1660@200PPB		CAL 1660@200PPB		CAL 1660@2000PPB	
Calibration Date/Time			7/16/2013 11:52:00 AM		7/15/2013 1:23:00 PM		8/2/2013 11:24:00 AM		8/2/2013 6:30:00 PM		8/2/2013 12:37:00 PM	
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
TCMX-Surrogate	1	0	3.91	(3.85 - 3.97)	4.02	(3.96 - 4.08)	3.92	(3.86 - 3.98)	3.91	(3.85 - 3.97)	4.01	(3.95 - 4.07)
Aroclor-1016	1	1	4.43	(4.39 - 4.47)	4.45	(4.41 - 4.49)	4.44	(4.40 - 4.48)	4.43	(4.39 - 4.47)	4.44	(4.40 - 4.48)
Aroclor-1016	1	2	4.80	(4.76 - 4.84)	4.80	(4.76 - 4.84)	4.81	(4.77 - 4.85)	4.79	(4.75 - 4.83)	4.78	(4.74 - 4.82)
Aroclor-1016	1	3	5.27	(5.23 - 5.31)	5.25	(5.21 - 5.29)	5.27	(5.23 - 5.31)	5.26	(5.22 - 5.30)	5.24	(5.20 - 5.28)
Aroclor-1016	1	4	5.52	(5.48 - 5.56)	5.38	(5.34 - 5.42)	5.52	(5.48 - 5.56)	5.51	(5.47 - 5.55)	5.36	(5.32 - 5.40)
Aroclor-1016	1	5	5.63	(5.59 - 5.67)	5.48	(5.44 - 5.52)	5.63	(5.59 - 5.67)	5.62	(5.58 - 5.66)	5.47	(5.43 - 5.51)
Aroclor-1260	1	1	7.15	(7.11 - 7.19)	7.06	(7.02 - 7.10)	7.16	(7.12 - 7.20)	7.15	(7.11 - 7.19)	7.05	(7.01 - 7.09)
Aroclor-1260	1	2	7.40	(7.36 - 7.44)	7.31	(7.27 - 7.35)	7.41	(7.37 - 7.45)	7.40	(7.36 - 7.44)	7.29	(7.25 - 7.33)
Aroclor-1260	1	3	7.61	(7.57 - 7.65)	7.79	(7.75 - 7.83)	7.61	(7.57 - 7.65)	7.60	(7.56 - 7.64)	7.78	(7.74 - 7.82)
Aroclor-1260	1	4	8.20	(8.16 - 8.24)	8.08	(8.04 - 8.12)	8.20	(8.16 - 8.24)	8.19	(8.15 - 8.23)	8.06	(8.02 - 8.10)
Aroclor-1260	1	5	8.92	(8.88 - 8.96)	8.79	(8.75 - 8.83)	8.92	(8.88 - 8.96)	8.91	(8.87 - 8.95)	8.78	(8.73 - 8.81)
Aroclor-1221	1	1	4.22	(4.18 - 4.26)	4.26	(4.22 - 4.30)					4.26	(4.22 - 4.30)
Aroclor-1221	1	2	4.37	(4.33 - 4.41)	4.39	(4.35 - 4.43)					4.38	(4.34 - 4.42)
Aroclor-1221	1	3	4.43	(4.39 - 4.47)	4.45	(4.41 - 4.49)					4.44	(4.40 - 4.48)
Aroclor-1232	1	1	4.43	(4.39 - 4.47)	4.46	(4.42 - 4.50)					4.44	(4.40 - 4.48)
Aroclor-1232	1	2	4.80	(4.76 - 4.84)	4.80	(4.76 - 4.84)					4.78	(4.74 - 4.82)
Aroclor-1232	1	3	5.27	(5.23 - 5.31)	5.26	(5.22 - 5.30)					5.24	(5.20 - 5.28)
Aroclor-1232	1	4	5.41	(5.37 - 5.45)	5.38	(5.34 - 5.42)					5.36	(5.32 - 5.40)
Aroclor-1232	1	5	5.88	(5.84 - 5.92)	5.82	(5.78 - 5.86)					5.80	(5.76 - 5.84)
Aroclor-1242	1	1	4.43	(4.39 - 4.47)	4.46	(4.42 - 4.50)					4.44	(4.40 - 4.48)
Aroclor-1242	1	2	4.80	(4.76 - 4.84)	4.80	(4.76 - 4.84)					4.78	(4.74 - 4.82)
Aroclor-1242	1	3	5.27	(5.23 - 5.31)	5.25	(5.21 - 5.29)					5.24	(5.20 - 5.28)
Aroclor-1242	1	4	5.63	(5.59 - 5.67)	5.59	(5.55 - 5.63)					5.58	(5.54 - 5.62)
Aroclor-1242	1	5	5.88	(5.84 - 5.92)	5.82	(5.78 - 5.86)					5.80	(5.76 - 5.84)
Aroclor-1248	1	1	4.80	(4.76 - 4.84)	4.80	(4.76 - 4.84)					4.78	(4.74 - 4.82)
Aroclor-1248	1	2	5.27	(5.23 - 5.31)	5.25	(5.21 - 5.29)					5.24	(5.20 - 5.28)
Aroclor-1248	1	3	5.61	(5.57 - 5.65)	5.58	(5.54 - 5.62)					5.58	(5.54 - 5.62)
Aroclor-1248	1	4	5.98	(5.94 - 6.02)	5.93	(5.89 - 5.97)					5.91	(5.87 - 5.95)
Aroclor-1248	1	5	6.58	(6.54 - 6.62)	6.50	(6.46 - 6.54)					6.49	(6.45 - 6.53)
Aroclor-1254	1	1	6.78	(6.74 - 6.82)	6.70	(6.66 - 6.74)					6.69	(6.65 - 6.73)
Aroclor-1254	1	2	6.99	(6.95 - 7.03)	6.90	(6.86 - 6.94)					6.89	(6.85 - 6.93)
Aroclor-1254	1	3	7.16	(7.12 - 7.20)	7.07	(7.03 - 7.11)					7.05	(7.01 - 7.09)
Aroclor-1254	1	4	7.27	(7.23 - 7.31)	7.18	(7.14 - 7.22)					7.22	(7.18 - 7.26)
Aroclor-1254	1	5	7.66	(7.62 - 7.70)	7.56	(7.52 - 7.60)					7.49	(7.45 - 7.53)
Aroclor-1262	1	1	7.84	(7.80 - 7.88)	7.74	(7.70 - 7.78)					7.72	(7.68 - 7.76)
Aroclor-1262	1	2	8.85	(8.81 - 8.89)	8.73	(8.69 - 8.77)					8.72	(8.68 - 8.76)
Aroclor-1262	1	3	8.91	(8.87 - 8.95)	8.79	(8.75 - 8.83)					8.78	(8.73 - 8.81)
Aroclor-1262	1	4	9.66	(9.62 - 9.70)	9.49	(9.45 - 9.53)					9.47	(9.43 - 9.51)
Aroclor-1262	1	5	10.02	(9.98 - 10.06)	9.85	(9.81 - 9.89)					9.84	(9.80 - 9.88)
Aroclor-1268	1	1	8.19	(8.15 - 8.23)	8.09	(8.05 - 8.13)					8.12	(8.08 - 8.16)
Aroclor-1268	1	2	8.51	(8.47 - 8.55)	8.39	(8.35 - 8.43)						
Aroclor-1268	1	3	9.09	(9.05 - 9.13)	8.98	(8.94 - 9.02)					9.07	(9.03 - 9.11)
Aroclor-1268	1	4	9.19	(9.15 - 9.23)	9.08	(9.04 - 9.12)					9.14	(9.10 - 9.18)
Aroclor-1268	1	5	10.02	(9.98 - 10.06)	9.85	(9.81 - 9.89)						
DCB-Surrogate	1	0	10.24	(10.18 - 10.30)	10.08	(10.02 - 10.14)	10.24	(10.18 - 10.30)	10.23	(10.17 - 10.29)	10.07	(10.00 - 10.12)
TCMX-Surrogate	2	0	3.98	(3.92 - 4.04)	3.97	(3.91 - 4.03)	3.99	(3.93 - 4.05)	3.98	(3.92 - 4.04)	3.97	(3.91 - 4.03)
Aroclor-1016	2	1	4.60	(4.56 - 4.64)	4.55	(4.51 - 4.59)	4.60	(4.56 - 4.64)	4.60	(4.56 - 4.64)	4.55	(4.51 - 4.59)
Aroclor-1016	2	2	5.03	(4.99 - 5.07)	4.95	(4.91 - 4.99)	5.03	(4.99 - 5.07)	5.03	(4.99 - 5.07)	4.95	(4.91 - 4.99)
Aroclor-1016	2	3	5.42	(5.38 - 5.46)	5.33	(5.29 - 5.37)	5.42	(5.38 - 5.46)	5.42	(5.38 - 5.46)	5.33	(5.29 - 5.37)
Aroclor-1016	2	4	5.75	(5.71 - 5.79)	5.65	(5.61 - 5.69)	5.76	(5.72 - 5.80)	5.75	(5.71 - 5.79)	5.64	(5.60 - 5.68)
Aroclor-1016	2	5	6.13	(6.09 - 6.17)	6.01	(5.97 - 6.05)	6.13	(6.09 - 6.17)	6.13	(6.09 - 6.17)	6.01	(5.97 - 6.05)
Aroclor-1260	2	1	7.45	(7.41 - 7.49)	7.29	(7.25 - 7.33)	7.46	(7.42 - 7.50)	7.45	(7.41 - 7.49)	7.29	(7.25 - 7.33)
Aroclor-1260	2	2	7.53	(7.49 - 7.57)	7.38	(7.34 - 7.42)	7.55	(7.51 - 7.59)	7.54	(7.50 - 7.58)	7.37	(7.33 - 7.41)
Aroclor-1260	2	3	8.17	(8.13 - 8.21)	8.36	(8.32 - 8.40)	8.18	(8.14 - 8.22)	8.18	(8.14 - 8.22)	8.36	(8.32 - 8.40)
Aroclor-1260	2	4	8.54	(8.50 - 8.58)	9.05	(9.01 - 9.09)	8.55	(8.51 - 8.59)	8.54	(8.50 - 8.58)	9.05	(9.01 - 9.09)
Aroclor-1260	2	5	9.26	(9.22 - 9.30)	9.64	(9.60 - 9.68)	9.26	(9.22 - 9.30)	9.26	(9.22 - 9.30)	9.64	(9.60 - 9.68)
Aroclor-1221	2	1	4.38	(4.34 - 4.42)	4.34	(4.30 - 4.38)					4.34	(4.30 - 4.38)
Aroclor-1221	2	2	4.53	(4.49 - 4.57)	4.49	(4.45 - 4.53)					4.49	(4.45 - 4.53)
Aroclor-1221	2	3	4.60	(4.56 - 4.64)	4.55	(4.51 - 4.59)					4.55	(4.51 - 4.59)
Aroclor-1232	2	1	4.60	(4.56 - 4.64)	4.55	(4.51 - 4.59)					4.55	(4.51 - 4.59)
Aroclor-1232	2	2	5.03	(4.99 - 5.07)	4.96	(4.92 - 5.00)					4.95	(4.91 - 4.99)
Aroclor-1232	2	3	5.42	(5.38 - 5.46)	5.33	(5.29 - 5.37)					5.33	(5.29 - 5.37)
Aroclor-1232	2	4	5.75	(5.71 - 5.79)	6.01	(5.97 - 6.05)					6.01	(5.97 - 6.05)
Aroclor-1232	2	5	6.27	(6.23 - 6.31)	6.15	(6.11 - 6.19)					6.15	(6.11 - 6.19)
Aroclor-1242	2	1	4.60	(4.56 - 4.64)	4.55	(4.51 - 4.59)					4.55	(4.51 - 4.59)
Aroclor-1242	2	2	5.03	(4.99 - 5.07)	4.95	(4.91 - 4.99)					4.95	(4.91 - 4.99)
Aroclor-1242	2	3	5.41	(5.37 - 5.45)	5.33	(5.29 - 5.37)					5.33	(5.29 - 5.37)
Aroclor-1242	2	4	5.75	(5.71 - 5.79)	5.65	(5.61 - 5.69)					5.64	(5.60 - 5.68)
Aroclor-1242	2	5	6.13	(6.09 - 6.17)	6.01	(5.97 - 6.05)					6.01	(5.97 - 6.05)
Aroclor-1248	2	1	5.03	(4.99 - 5.07)	4.95	(4.91 - 4.99)					4.95	(4.91 - 4.99)
Aroclor-1248	2	2	5.41	(5.37 - 5.45)	5.33	(5.29 - 5.37)					5.33	(5.29 - 5.37)
Aroclor-1248	2	3	5.75	(5.71 - 5.79)	5.64	(5.60 - 5.68)					5.64	(5.60 - 5.68)
Aroclor-1248	2	4	6.27	(6.23 - 6.31)	6.15	(6.11 - 6.19)					6.15	(6.11 - 6.19)
Aroclor-1248	2	5	6.41	(6.37 - 6.45)	6.29	(6.25 - 6.33)					6.29	(6.25 - 6.33)
Aroclor-1254	2	1	6.63	(6.59 - 6.67)	6.50	(6.46 - 6.54)					6.50	(6.46 - 6.54)
Aroclor-1254	2	2	6.98	(6.94 - 7.02)	6.83	(6.79 - 6.87)					6.83	(6.79 - 6.87)
Aroclor-1254	2	3	7.38	(7.34 - 7.42)	7.23	(7.19 - 7.27)					7.22	(7.18 - 7.26)
Aroclor-1254	2	4	7.90	(7.86 - 7.94)	7.74	(7.70 - 7.78)					7.79	(7.75 - 7.83)
Aroclor-1254	2	5	8.60	(8.56 - 8.64)	8.42	(8.38 - 8.46)					8.36	(8.32 - 8.40)
Aroclor-1262	2	1	8.09	(8.05 - 8.13)	7.79	(7.75 - 7.83)					7.79	(7.75 - 7.83)
Aroclor-1262	2	2	9.14	(9.10 - 9.18)	8.94	(8.90 - 8.98)					8.94	(8.90 - 8.98)
Aroclor-1262	2	3	9.26	(9.22 - 9.30)	9.05	(9.01 - 9.09)					9.05	(9.01 - 9.09)
Aroclor-1262	2	4	9.88	(9.84 - 9.92)	9.64	(9.60 - 9.68)					9.64	(9.60 - 9.68)
Aroclor-1262	2	5	10.46	(10.42 - 10.50)	10.18	(10.14 - 10.22)					10.18	(10.14 - 10.22)
Aroclor-1268	2	1	8.64	(8.60 - 8.68)	8.45	(8.41 - 8.49)					8.49	(8.45 - 8.53)
Aroclor-1268	2	2	8.68	(8.64 - 8.72)	8.49	(8.45 - 8.53)					8.49	(8.45 - 8.53)
Aroclor-1268	2	3	9.61	(9.57 - 9.65)	9.38	(9.34 - 9.42)					9.38	(9.34 - 9.42)
Aroclor-1268	2	4	9.78	(9.74 - 9.82)	9.54	(9.50 - 9.58)					9.54	(9.50 - 9.58)
Aroclor-1268	2	5	10.46	(10.42 - 10.50)	10.18	(10.14 - 10.22)					10.18	(10.14 - 10.22)
DCB-Surrogate	2	0	11.05	(10.99 - 11.11)	10.72	(10.66 - 10.78)	11.06	(11.00 - 11.12)	11.05	(10.99 - 11.11)	10.72	(10.66 - 10.78)

Pesticide Data

Form1

ORGANICS PESTICIDE REPORT

Sample Number: AC73771-001
Client Id: BB-COMP-1-0801113
Data File: 6G42655.D
Analysis Date: 08/05/13 11:29
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 91

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0055	U	53494-70-5	Endrin Ketone	0.0055	U
309-00-2	Aldrin	0.0055	U	58-89-9	gamma-BHC	0.0011	U
319-84-6	alpha-BHC	0.0011	U	76-44-8	Heptachlor	0.0055	U
319-85-7	beta-BHC	0.0011	U	1024-57-3	Heptachlor Epoxide	0.0055	U
319-86-8	delta-BHC	0.0055	U	72-43-5	Methoxychlor	0.0055	U
60-57-1	Dieldrin	0.0011	U	**72-54-8**	**p,p'-DDD**	**0.0027**	**0.0034**
959-98-8	Endosulfan I	0.0055	U	**72-55-9**	**(^)p,p'-DDE**	**0.0027**	**0.059**
33213-65-9	Endosulfan II	0.0055	U	**50-29-3**	**(^)p,p'-DDT**	**0.0027**	**0.037**
1031-07-8	Endosulfan Sulfate	0.0055	U	8001-35-2	Toxaphene	0.027	U
72-20-8	Endrin	0.0055	U	5103-74-2	y-chlordane	0.0055	U
7421-93-4	Endrin Aldehyde	0.0055	U				

Worksheet #: 272498

Total Target Concentration 0.0034

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3080110 0149

Data Path : G:\Gcdata\2013\GC_6\Data\08-05-13\
Data File : 6G42655.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 5 Aug 2013 11:29
Operator : MS
Sample : AC73771-001
Misc : S,PEST
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 06 12:42:23 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0705.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Jul 05 13:03:33 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	5.093	5.047	1392588	1790248	118.314	113.666
12)p,p'-DDE	8.869	8.824	1192278	1633008	105.904	108.073m
15)p,p'-DDD	9.828	9.510	54496	71782	6.198m	6.065m
17)p,p'-DDT	10.039	9.901	462161	801255	53.302	67.340m#
22)DCB-Surrogate	12.425	12.886	1054622	1744078	108.904	118.329

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

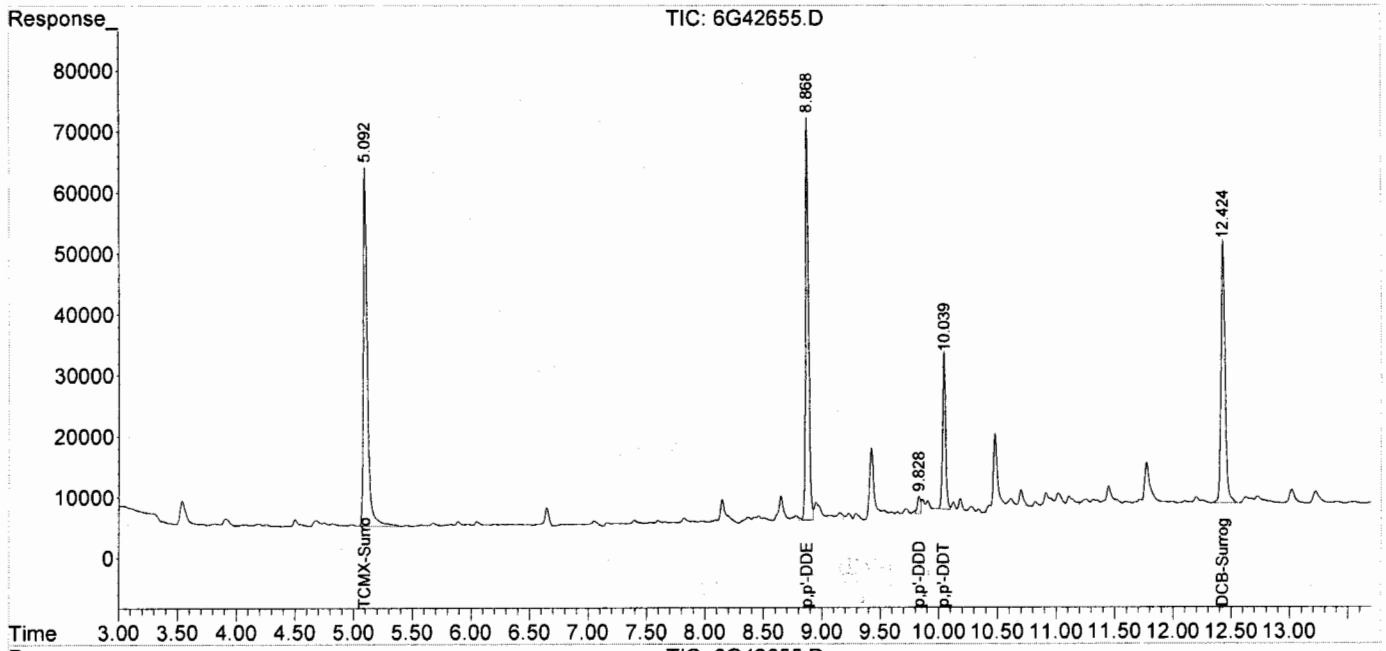
Quantitation Report (QT Reviewed)

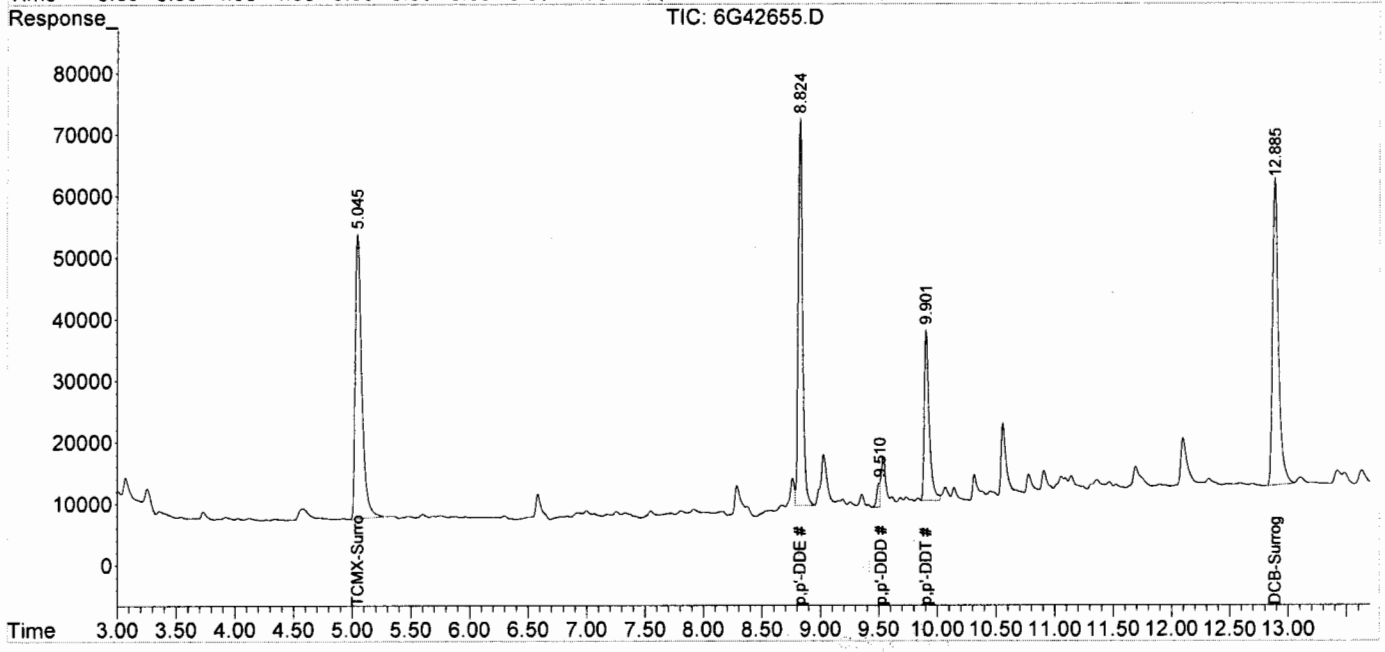
3080110 0150

Data Path : G:\Gcdata\2013\GC_6\Data\08-05-13\
Data File : 6G42655.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 5 Aug 2013 11:29
Operator : MS
Sample : AC73771-001
Misc : S,PEST
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 06 12:42:23 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0705.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Jul 05 13:03:33 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PESTICIDE REPORT

Sample Number: AC73771-002
Client Id: BB-COMP-2-0801113
Data File: 6G42656.D
Analysis Date: 08/05/13 11:47
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 89

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0056	U	53494-70-5	Endrin Ketone	0.0056	U
309-00-2	Aldrin	0.0056	U	58-89-9	gamma-BHC	0.0011	U
319-84-6	alpha-BHC	0.0011	U	76-44-8	Heptachlor	0.0056	U
319-85-7	beta-BHC	0.0011	U	1024-57-3	Heptachlor Epoxide	0.0056	U
319-86-8	delta-BHC	0.0056	U	72-43-5	Methoxychlor	0.0056	U
60-57-1	Dieldrin	0.0011	U	72-54-8	p,p'-DDD	0.0028	U
959-98-8	Endosulfan I	0.0056	U	**72-55-9**	**p,p'-DDE**	**0.0028**	**0.0090**
33213-65-9	Endosulfan II	0.0056	U	**50-29-3**	**(^)p,p'-DDT**	**0.0028**	**0.012**
1031-07-8	Endosulfan Sulfate	0.0056	U	8001-35-2	Toxaphene	0.028	U
72-20-8	Endrin	0.0056	U	5103-74-2	y-chlordane	0.0056	U
7421-93-4	Endrin Aldehyde	0.0056	U				

Worksheet #: 272498

Total Target Concentration 0.009

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3080110 0152

Data Path : G:\Gcdata\2013\GC_6\Data\08-05-13\
Data File : 6G42656.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 5 Aug 2013 11:47
Operator : MS
Sample : AC73771-002
Misc : S,PEST
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 06 12:42:46 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0705.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Jul 05 13:03:33 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	5.093	5.047	1277524	1703505	108.010	108.159
12)p,p'-DDE	8.870	8.823	180272	172897	16.013m	11.442m#
17)p,p'-DDT	10.040	9.903	133309	264067	15.375m	22.193m#
22)DCB-Surrogate	12.425	12.887	1032956	1693244	106.525	114.735

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

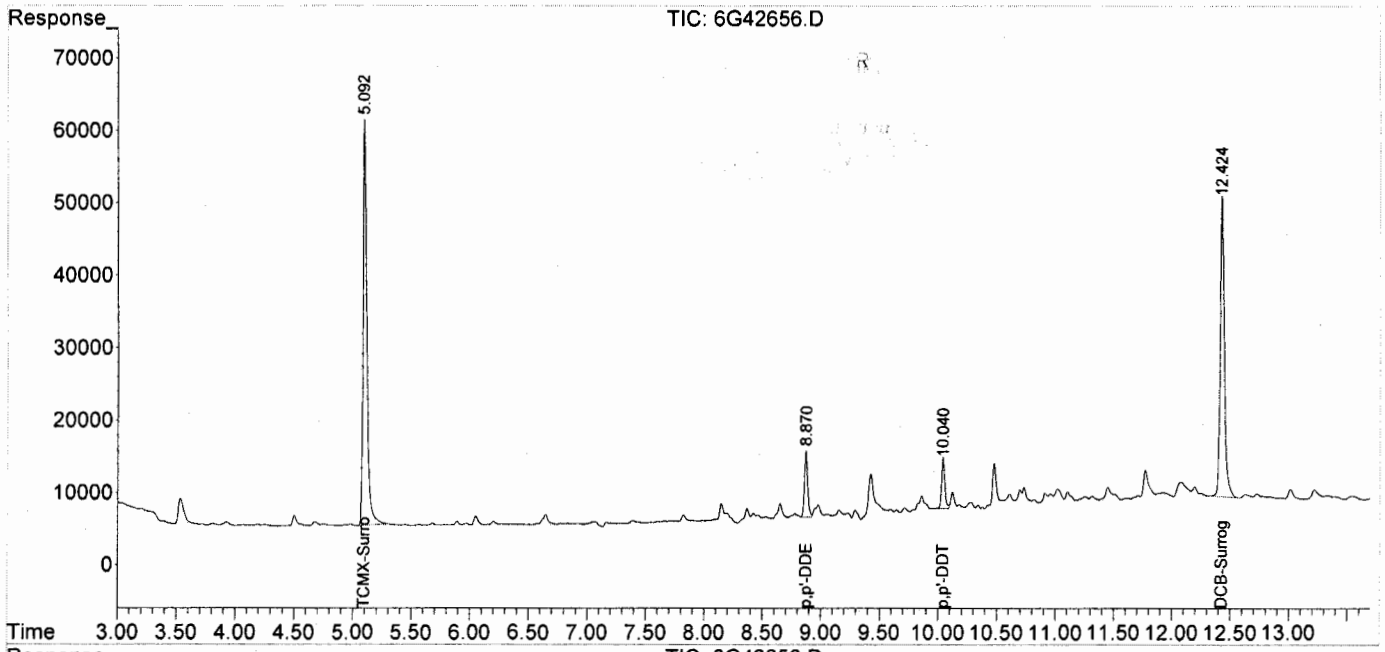
Quantitation Report (QT Reviewed)

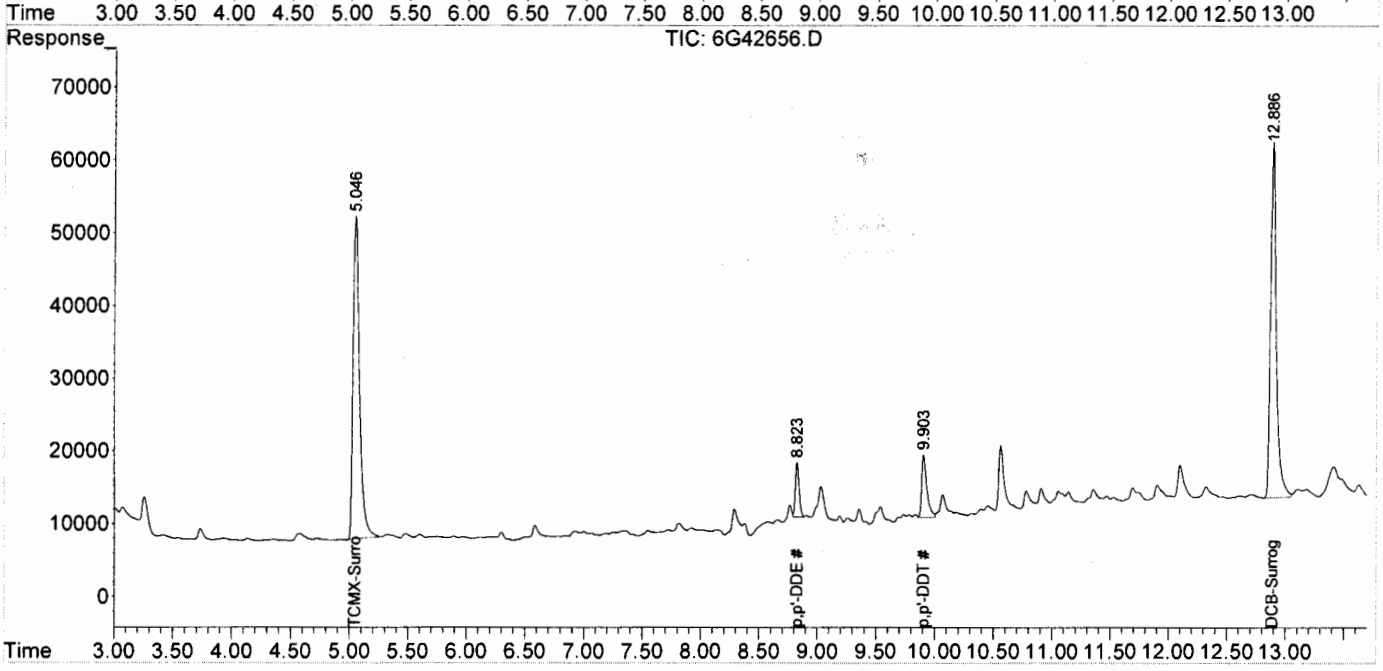
3080110 0153

Data Path : G:\Gcdata\2013\GC_6\Data\08-05-13\
Data File : 6G42656.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 5 Aug 2013 11:47
Operator : MS
Sample : AC73771-002
Misc : S,PEST
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 06 12:42:46 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0705.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Jul 05 13:03:33 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PESTICIDE REPORT

Sample Number: SMB25778
Client Id:
Data File: 5G47145.D
Analysis Date: 08/02/13 20:38
Date Rec/Extracted: NA-08/02/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0050	U	53494-70-5	Endrin Ketone	0.0050	U
309-00-2	Aldrin	0.0050	U	58-89-9	gamma-BHC	0.0010	U
319-84-6	alpha-BHC	0.0010	U	76-44-8	Heptachlor	0.0050	U
319-85-7	beta-BHC	0.0010	U	1024-57-3	Heptachlor Epoxide	0.0050	U
319-86-8	delta-BHC	0.0050	U	72-43-5	Methoxychlor	0.0050	U
60-57-1	Dieldrin	0.0010	U	72-54-8	p,p'-DDD	0.0025	U
959-98-8	Endosulfan I	0.0050	U	72-55-9	p,p'-DDE	0.0025	U
33213-65-9	Endosulfan II	0.0050	U	50-29-3	p,p'-DDT	0.0025	U
1031-07-8	Endosulfan Sulfate	0.0050	U	8001-35-2	Toxaphene	0.025	U
72-20-8	Endrin	0.0050	U	5103-74-2	y-chlordane	0.0050	U
7421-93-4	Endrin Aldehyde	0.0050	U				

Worksheet #: 272498

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3080110 0155

Data Path : G:\Gcdata\2013\GC_5\Data\08-02-13\
Data File : 5G47145.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02-Aug-13, 20:38:04
Operator : MS/BS
Sample : SMB25778
Misc : S,PEST
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 05 12:39:30 2013
Quant Method : G:\GCDATA\2013\GC_5\METHODQT\5G_PEST0711.M
Quant Title : @GC_5,ug,608,8081
QLast Update : Fri Jul 12 09:57:58 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	6.265	6.198	172.5E6	121.0E6	80.788	84.206
22)DCB-Surrogate	13.290	13.672	151.2E6	93775540	100.355	95.092

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

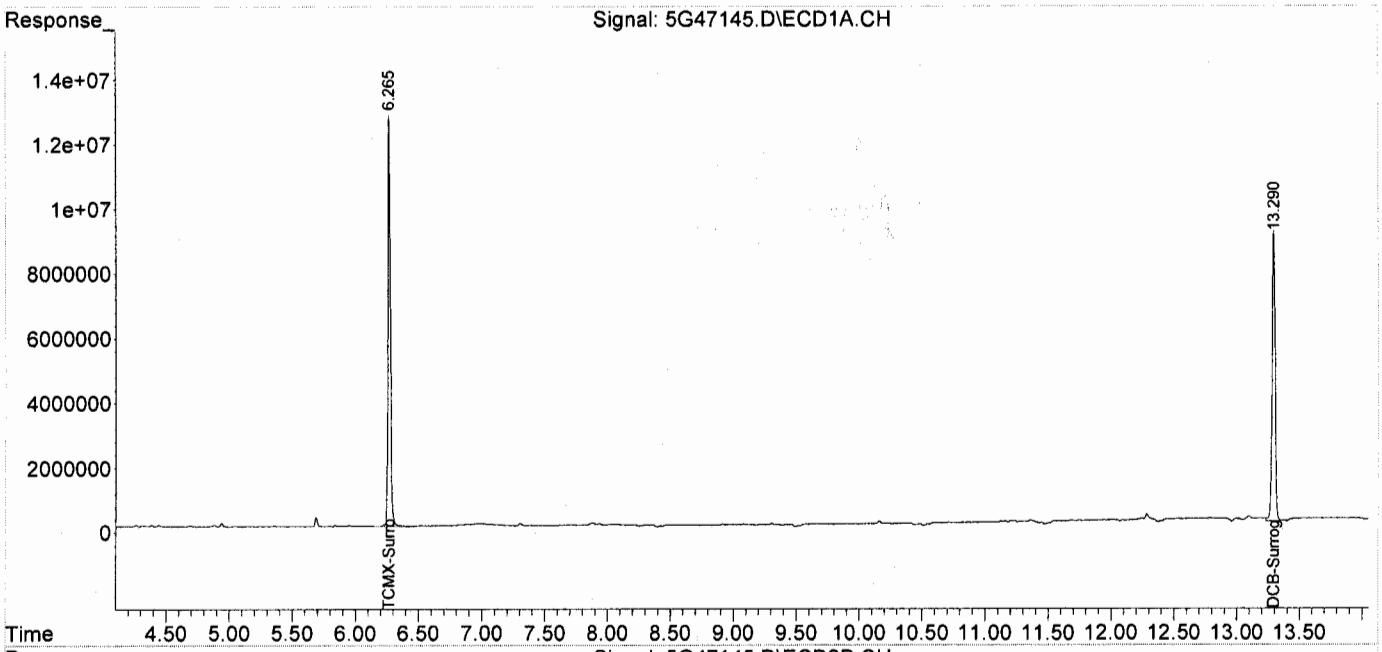
Quantitation Report (QT Reviewed)

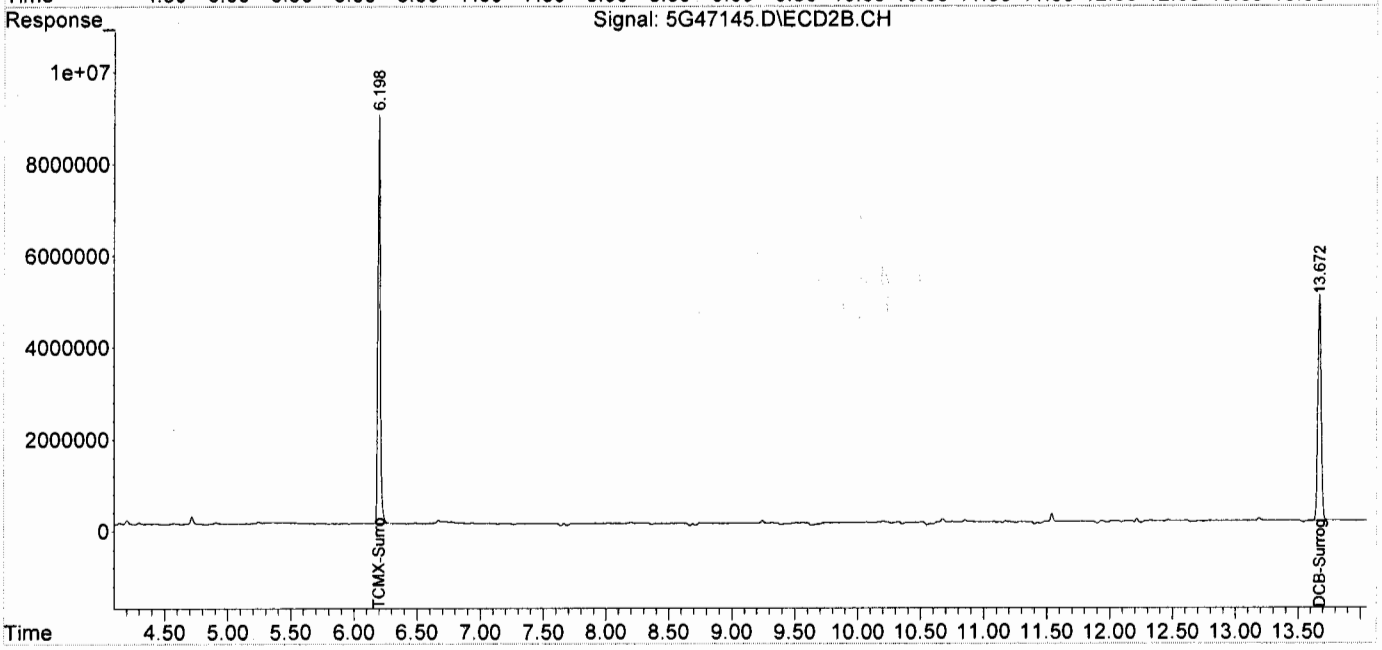
3080110 0156

Data Path : G:\Gcdata\2013\GC_5\Data\08-02-13\
Data File : 5G47145.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02-Aug-13, 20:38:04
Operator : MS/BS
Sample : SMB25778
Misc : S,PEST
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 05 12:39:30 2013
Quant Method : G:\GCDATA\2013\GC_5\METHODQT\5G_PEST0711.M
Quant Title : @GC_5,ug,608,8081
QLast Update : Fri Jul 12 09:57:58 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32





FORM2

Surrogate Recovery

Method: EPA 8081A

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column2 S2 Recov	Column1 S3 Recov	Column2 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
5G47145.D	SMB25778	Soil	08/02/13 20:38	1		81	84	100	95		
6G42655.D	AC73771-001	Soil	08/05/13 11:29	1		118	114	109	118		
6G42656.D	AC73771-002	Soil	08/05/13 11:47	1		108	108	107	115		
6G42659.D	AC73723-001(	Soil	08/05/13 12:40	1		116	123	59	83		
6G42660.D	AC73723-001(	Soil	08/05/13 12:57	1		100	107	41	60		
6G42661.D	AC73723-001	Soil	08/05/13 13:15	1		106	111	31 *	47		
6G42667.D	SMB25778(M	Soil	08/05/13 15:45	1		110	122	104	116		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8081A

Soil Limits

Compound	Spike Amt	Limits
S1=TCMX-Surrogate	100	37-141
S2=TCMX-Surrogate	100	37-141
S3=DCB-Surrogate	100	33-146
S4=DCB-Surrogate	100	33-146

Form3
Recovery Data
QC Batch: SMB25778

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G42667.D	SMB25778(MS)	8/5/2013 3:45:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	2	92.4	0	100	92	60	130
gamma-BHC	2	99.46	0	100	99	60	130
beta-BHC	2	116.79	0	100	117	60	130
Heptachlor	2	114.56	0	100	115	60	130
delta-BHC	2	83.65	0	100	84	60	130
Aldrin	2	112.36	0	100	112	70	130
Heptachlor Epoxide	2	106.04	0	100	106	70	130
Endosulfan I	2	108.38	0	100	108	70	130
p,p'-DDE	2	99.38	0	100	99	70	130
Dieldrin	2	110.31	0	100	110	70	130
Endrin	2	130.07	0	100	130	70	130
p,p'-DDD	2	108.41	0	100	108	70	130
Endosulfan II	2	109.54	0	100	110	70	130
p,p'-DDT	2	98.65	0	100	99	70	130
Endrin Aldehyde	2	52.84	0	100	53	10	130
Endosulfan Sulfate	2	96.43	0	100	96	70	130
Methoxychlor	2	99.43	0	100	99	60	130
Endrin Ketone	2	85.37	0	100	85	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB25778

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G42659.D	AC73723-001(MS)	8/5/2013 12:40:00 PM
Non Spike(If applicable):	6G42661.D	AC73723-001	8/5/2013 1:15:00 PM
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	2	95.64	0	100	96	60	130
gamma-BHC	2	106.19	0	100	106	60	130
beta-BHC	2	211.44	0	100	211 *	60	130
Heptachlor	2	128.26	0	100	128	60	130
delta-BHC	2	93.88	0	100	94	60	130
Aldrin	2	121.17	0	100	121	70	130
Heptachlor Epoxide	2	120.93	0	100	121	70	130
Endosulfan I	2	119.56	0	100	120	70	130
p,p'-DDE	2	145.87	0	100	146 *	70	130
Dieldrin	2	265.34	0	100	265 *	70	130
Endrin	2	162.92	0	100	163 *	70	130
p,p'-DDD	2	166.05	0	100	166 *	70	130
Endosulfan II	2	152.78	0	100	153 *	70	130
p,p'-DDT	2	136.77	0	100	137 *	70	130
Endrin Aldehyde	2	98.06	0	100	98	10	130
Endosulfan Sulfate	2	107.26	0	100	107	70	130
Methoxychlor	2	149.93	0	100	150 *	60	130
Endrin Ketone	2	136.86	0	100	137 *	70	130

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G42660.D	AC73723-001(MSD)	8/5/2013 12:57:00 PM
Non Spike(If applicable):	6G42661.D	AC73723-001	8/5/2013 1:15:00 PM
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	2	77.42	0	100	77	60	130
gamma-BHC	2	88.32	0	100	88	60	130
beta-BHC	2	158.09	0	100	158 *	60	130
Heptachlor	2	107.69	0	100	108	60	130
delta-BHC	2	76.56	0	100	77	60	130
Aldrin	2	105.93	0	100	106	70	130
Heptachlor Epoxide	2	99.71	0	100	100	70	130
Endosulfan I	2	133.06	0	100	133 *	70	130
p,p'-DDE	2	116.91	0	100	117	70	130
Dieldrin	2	129.49	0	100	129	70	130
Endrin	2	132.16	0	100	132 *	70	130
p,p'-DDD	2	127.39	0	100	127	70	130
Endosulfan II	2	120.75	0	100	121	70	130
p,p'-DDT	2	100.76	0	100	101	70	130
Endrin Aldehyde	2	79.39	0	100	79	10	130
Endosulfan Sulfate	2	83.73	0	100	84	70	130
Methoxychlor	2	107.18	0	100	107	60	130
Endrin Ketone	2	96.25	0	100	96	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA

QC Batch: SMB25778

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G42660.D	AC73723-001(MSD)	8/5/2013 12:57:00 PM
Duplicate(If applicable):	6G42659.D	AC73723-001(MS)	8/5/2013 12:40:00 PM
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
alpha-BHC	2	77.42	95.64	21	40
gamma-BHC	2	88.32	106.19	18	40
beta-BHC	2	158.09	211.44	29	40
Heptachlor	2	107.69	128.26	17	40
delta-BHC	2	76.56	93.88	20	40
Aldrin	2	105.93	121.17	13	40
Heptachlor Epoxide	2	99.71	120.93	19	40
Endosulfan I	2	133.06	119.56	11	40
p,p'-DDE	2	116.91	145.87	22	40
Dieldrin	2	129.49	265.34	69 *	40
Endrin	2	132.16	162.92	21	40
p,p'-DDD	2	127.39	166.05	26	40
Endosulfan II	2	120.75	152.78	23	40
p,p'-DDT	2	100.76	136.77	30	40
Endrin Aldehyde	2	79.39	98.06	21	40
Endosulfan Sulfate	2	83.73	107.26	25	40
Methoxychlor	2	107.18	149.93	33	40
Endrin Ketone	2	96.25	136.86	35	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: SMB25778
Blank Data File: 5G47145.D
Matrix: Soil

Blank Analysis Date: 08/02/13 20:38
Blank Extraction Date: 08/02/13
(If Applicable)
Method: EPA 8081A

Sample Number	Data File	Analysis Date
AC73771-001	6G42655.D	08/05/13 11:29
AC73771-002	6G42656.D	08/05/13 11:47
SMB25778(MS)	6G42667.D	08/05/13 15:45
AC73723-001	6G42661.D	08/05/13 13:15
AC73723-001(MSD	6G42660.D	08/05/13 12:57
AC73723-001(MS)	6G42659.D	08/05/13 12:40

Form 5

Method: EPA 8081A

Instrument: GC_6

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G42094.D	BLK	07/05/13 08:18	Soil					
6G42095.D	BLK	07/05/13 08:35	Soil					
6G42096.D	CAL EVAL	07/05/13 08:53	Soil					
6G42097.D	200PPB	07/05/13 09:13	Soil					
6G42098.D	CAL PEST@200PPB	07/05/13 09:31	Soil	6G42102.	12.4273	0.0346	12.8867	0.0116
6G42099.D	CAL PEST@100PPB	07/05/13 09:48	Soil	6G42102.	12.4290	0.0209	12.8879	0.0023
6G42100.D	CAL PEST@50PPB	07/05/13 10:06	Soil	6G42102.	12.4290	0.0209	12.8878	0.0031
6G42101.D	CAL PEST@10PPB	07/05/13 10:24	Soil	6G42102.	12.4300	0.0129	12.8870	0.0093
6G42102.D	CAL PEST@2PPB	07/05/13 10:41	Soil	6G42102.	12.4316	0	12.8882	0
6G42103.D	CAL PEST@400PPB	07/05/13 11:00	Soil	6G42102.	12.4303	0.0105	12.8897	0.0116
6G42104.D	CAL CHLOR@100PPB	07/05/13 11:17	Soil	6G42102.	12.4284	0.0257	12.8870	0.0093
6G42105.D	CAL TOX@500PPB	07/05/13 11:35	Soil	6G42102.	12.4297	0.0153	12.8886	0.0031
6G42106.D	ICV	07/05/13 11:52	Soil	6G42102.	12.4272	0.0354	12.8869	0.0101
6G42107.D	SMB25523(MS)	07/05/13 12:11	Soil	6G42102.	12.4280	0.029	12.8872	0.0078
6G42108.D	AC73220-015(MS)	07/05/13 12:28	Soil	6G42102.	12.4272	0.0354	12.8881	0.0008
6G42109.D	AC73220-015(MSD)	07/05/13 12:46	Soil	6G42102.	12.4271	0.0362	12.8874	0.0062
6G42110.D	AC73166-041(5X)	07/05/13 13:03	Soil	6G42102.	12.4284	0.0257	12.8861	0.0163
6G42111.D	AC73180-015	07/05/13 13:21	Soil	6G42102.	12.4278	0.0306	12.8868	0.0109
6G42112.D	AC73149-001	07/05/13 13:38	Soil	6G42102.	12.4287	0.0233	12.8897	0.0116
6G42113.D	CAL PEST@200PPB	07/05/13 14:13	Soil	6G42102.	12.4280	0.029	12.8882	0
6G42114.D	CAL EVAL	07/05/13 14:34	Soil					
6G42115.D	SMB25523	07/05/13 14:52	Soil	6G42113.	12.4299	0.0153	12.8891	0.007
6G42116.D	OMB25539	07/05/13 15:10	OIL/OTHER	6G42113.	12.4303	0.0185	12.8902	0.0155
6G42117.D	MBS	07/05/13 15:27	OIL/OTHER	6G42113.	12.4291	0.0088	12.8892	0.0078
6G42118.D	73281-001(MS)	07/05/13 15:45	OIL/OTHER	6G42113.	12.4292	0.0097	12.8883	0.0008
6G42119.D	73281-001(MSD)	07/05/13 16:02	OIL/OTHER	6G42113.	12.4286	0.0048	12.8876	0.0047
6G42120.D	EF-SPLP-V-168108(7/2)	07/05/13 16:20	Aqueous	6G42113.	12.4288	0.0064	12.8882	0
6G42121.D	EF1-V-167902(7/2)	07/05/13 16:37	Aqueous	6G42113.	12.4295	0.0121	12.8896	0.0109
6G42122.D	SMB25536	07/05/13 16:55	Soil	6G42113.	12.4278	0.0016	12.8864	0.014
6G42123.D	MBS-1	07/05/13 17:12	Soil	6G42113.	12.4279	0.0008	12.8880	0.0016
6G42124.D	MBS-2	07/05/13 17:30	Soil	6G42113.	12.4278	0.0016	12.8878	0.0031
6G42125.D	MBS-3	07/05/13 17:47	Soil	6G42113.	12.4279	0.0008	12.8878	0.0031
6G42126.D	MBS-4	07/05/13 18:05	Soil	6G42113.	12.4266	0.0113	12.8856	0.0202
6G42127.D	SMB25532	07/05/13 18:22	Soil	6G42113.	12.4271	0.0072	12.8858	0.0186
6G42128.D	MBS	07/05/13 18:40	Soil	6G42113.	12.4266	0.0113	12.8858	0.0186
6G42129.D	CAL PEST@100PPB	07/05/13 18:57	Soil	6G42113.	12.4304	0.0193	12.8903	0.0163
6G42130.D	200PPB	07/05/13 19:15	Soil	6G42129.	12.4290	0.0113	12.8891	0.0093
6G42131.D	BLK	07/06/13 11:01	Soil	6G42129.	12.4420	0.0933	12.8918	0.0116
6G42132.D	BLK	07/07/13 11:01	Soil	6G42129.	12.4419	0.0925	12.8913	0.0078
6G42133.D	BLK	07/08/13 05:01	Soil	6G42129.	12.4440	0.1094	12.8921	0.014
6G42134.D	BLK	07/08/13 05:18	Soil	6G42129.	12.4335	0.0249	12.8887	0.0124
6G42135.D	BLK	07/08/13 05:36	Soil	6G42129.	12.4324	0.0161	12.8904	0.0008
6G42136.D	BLK	07/08/13 05:53	Soil	6G42129.	12.4315	0.0089	12.8897	0.0047
6G42137.D	BLK	07/08/13 06:11	Soil	6G42129.	12.4319	0.0121	12.8889	0.0109
6G42138.D	BLK	07/08/13 06:28	Soil	6G42129.	12.4314	0.008	12.8901	0.0016
6G42139.D	BLK	07/08/13 06:46	Soil	6G42129.	12.4309	0.004	12.8886	0.0132
6G42140.D	BLK	07/08/13 07:03	Soil	6G42129.	12.4320	0.0129	12.8905	0.0016
6G42141.D	BLK	07/08/13 07:21	Soil	6G42129.	0.0000	200 *	0.0000	200 *
6G42142.D	BLK	07/08/13 07:37	Soil	6G42129.	12.4315	0.0089	12.8897	0.0047

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081A

Instrument: GC_5

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
5G46830.D	BLK	07/11/13 13:45	Soil					
5G46831.D	BLK	07/11/13 14:03	Soil					
5G46832.D	BLK	07/11/13 14:21	Soil					
5G46833.D	BLK	07/11/13 14:38	Soil					
5G46834.D	CAL EVAL	07/11/13 14:57	Soil					
5G46835.D	CAL PEST@2PPB	07/11/13 15:15	Soil	5G46835.	13.2978	0	13.6785	0
5G46836.D	CAL PEST@10PPB	07/11/13 15:33	Soil	5G46835.	13.2979	0.0008	13.6807	0.0161
5G46837.D	CAL PEST@50PPB	07/11/13 15:51	Soil	5G46835.	13.2970	0.006	13.6799	0.0102
5G46838.D	CAL PEST@100PPB	07/11/13 16:09	Soil	5G46835.	13.2965	0.0098	13.6789	0.0029
5G46839.D	CAL PEST@200PPB	07/11/13 16:26	Soil	5G46835.	13.2957	0.0158	13.6786	0.0007
5G46840.D	CAL PEST@400PPB	07/11/13 16:50	Soil	5G46835.	13.2978	0	13.6771	0.0102
5G46841.D	CAL CHLOR@100PPB	07/11/13 17:08	Soil	5G46835.	13.2970	0.006	13.6796	0.008
5G46842.D	CAL TOX@500PPB	07/11/13 17:26	Soil	5G46835.	13.2982	0.003	13.6806	0.0154
5G46843.D	ICV	07/11/13 17:44	Soil	5G46835.	13.2940	0.0286	13.6755	0.0219
5G46844.D	CAL EVAL	07/11/13 18:01	Soil					
5G46845.D	MBS-1	07/11/13 18:19	Aqueous	5G46835.	13.2936	0.0316	13.6749	0.0263
5G46846.D	MBS-1	07/11/13 18:37	Aqueous	5G46835.	13.2938	0.0301	13.6781	0.0029
5G46847.D	MBS-1	07/11/13 18:55	Aqueous	5G46835.	13.2924	0.0406	13.6751	0.0249
5G46848.D	MBS-1	07/11/13 19:13	Aqueous	5G46835.	13.2938	0.0301	13.6763	0.0161
5G46849.D	CAL PEST@100PPB	07/11/13 19:31	Soil	5G46835.	13.2967	0.0083	13.6791	0.0044
5G46850.D	200PPB	07/11/13 19:48	Soil	5G46849.	13.2958	0.0068	13.6784	0.0051
5G46851.D	WMB25579(MS)	07/11/13 20:06	Aqueous	5G46849.	13.2965	0.0015	13.6788	0.0022
5G46852.D	WMB25579	07/11/13 20:24	Aqueous	5G46849.	13.2960	0.0053	13.6792	0.0007
5G46853.D	AC73359-003(MS)	07/11/13 20:42	Aqueous	5G46849.	13.2933	0.0256	13.6756	0.0256
5G46854.D	AC73359-003(MSD)	07/11/13 20:59	Aqueous	5G46849.	13.2936	0.0233	13.6777	0.0102
5G46855.D	AC73359-003	07/11/13 21:17	Aqueous	5G46849.	13.2934	0.0248	13.6765	0.019
5G46856.D	AC73365-001	07/11/13 21:35	Aqueous	5G46849.	13.2918	0.0369	13.6760	0.0227
5G46857.D	AC73365-002	07/11/13 21:53	Aqueous	5G46849.	13.2935	0.0241	13.6767	0.0175
5G46858.D	AC73365-003	07/11/13 22:11	Aqueous	5G46849.	13.2923	0.0331	13.6739	0.038
5G46859.D	AC73365-004	07/11/13 22:28	Aqueous	5G46849.	13.2932	0.0263	13.6767	0.0175
5G46860.D	AC73365-005	07/11/13 22:46	Aqueous	5G46849.	13.2927	0.0301	13.6748	0.0314
5G46861.D	AC73365-006	07/11/13 23:04	Aqueous	5G46849.	13.2914	0.0399	13.6725	0.0483
5G46862.D	AC73365-007	07/11/13 23:22	Aqueous	5G46849.	13.2958	0.0068	13.6774	0.0124
5G46863.D	AC73365-009	07/11/13 23:39	Aqueous	5G46849.	13.2919	0.0361	13.6752	0.0285
5G46864.D	CAL PEST@100PPB	07/11/13 23:57	Aqueous	5G46849.	13.2959	0.006	13.6782	0.0066
5G46865.D	200PPB	07/12/13 00:15	Aqueous	5G46864.	13.2961	0.0015	13.6786	0.0029

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081A

Instrument: GC_5 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
5G47112.D	CAL EVAL	08/02/13 08:42	Soil					
5G47113.D	CAL PEST@100PPB	08/02/13 09:06	Soil	5G47113.	13.2955	0	13.6741	0
5G47114.D	WMB25769	08/02/13 09:26	Aqueous	5G47113.	13.2940	0.0113	13.6739	0.0015
5G47115.D	WMB25769(MS)	08/02/13 09:44	Aqueous	5G47113.	13.2913	0.0316	13.6725	0.0117
5G47116.D	AC73655-003(100X)	08/02/13 10:02	Soil	5G47113.	0.0000	200*	0.0000	200*
5G47117.D	AC73655-006(100X)	08/02/13 10:20	Soil	5G47113.	0.0000	200*	0.0000	200*
5G47118.D	AC73655-008(10X)	08/02/13 10:37	Soil	5G47113.	13.2903	0.0391	13.6725	0.0117
5G47119.D	AC73655-010(10X)	08/02/13 10:55	Soil	5G47113.	13.2893	0.0466	13.6716	0.0183
5G47120.D	AC73655-015(1000X)	08/02/13 11:13	Soil	5G47113.	0.0000	200*	0.0000	200*
5G47121.D	AC73709-004(50X)	08/02/13 11:31	Soil	5G47113.	13.2889	0.0496	13.6721	0.0146
5G47122.D	AC73655-013(1000X)	08/02/13 11:48	Soil	5G47113.	13.2921	0.0256	13.6763	0.0161
5G47123.D	AC73655-019(1000X)	08/02/13 12:06	Soil	5G47113.	13.2898	0.0429	13.6744	0.0022
5G47124.D	AC73655-026(1000X)	08/02/13 12:24	Soil	5G47113.	13.2935	0.015	13.6746	0.0037
5G47125.D	AC73655-011(1000X)	08/02/13 12:42	Soil	5G47113.	13.2912	0.0323	13.6734	0.0051
5G47126.D	AC73655-009(1000X)	08/02/13 13:00	Soil	5G47113.	13.2898	0.0429	13.6748	0.0051
5G47127.D	AC73655-002(100X)	08/02/13 13:34	Soil	5G47113.	13.2941	0.0105	13.6714	0.0197
5G47128.D	AC73655-007(100X)	08/02/13 13:51	Soil	5G47113.	0.0000	200*	0.0000	200*
5G47129.D	AC73758-001	08/02/13 14:09	Soil	5G47113.	13.2907	0.0361	13.6727	0.0102
5G47130.D	AC73758-002	08/02/13 14:27	Soil	5G47113.	13.2913	0.0316	13.6745	0.0029
5G47131.D	AC73758-003	08/02/13 14:45	Soil	5G47113.	13.2904	0.0384	13.6729	0.0088
5G47132.D	CAL PEST@100PPB	08/02/13 15:16	Soil	5G47113.	13.2904	0.0384	13.6744	0.0022
5G47133.D	CAL EVAL	08/02/13 17:04	Soil					
5G47134.D	WMB25782	08/02/13 17:22	Aqueous	5G47132.	13.2938	0.0256	13.6733	0.008
5G47135.D	WMB25782(MS)	08/02/13 17:40	Aqueous	5G47132.	13.2915	0.0083	13.6730	0.0102
5G47136.D	AC73751-001(T)	08/02/13 17:57	Aqueous	5G47132.	13.2916	0.009	13.6728	0.0117
5G47137.D	AC73697-001(T)	08/02/13 18:15	Aqueous	5G47132.	13.2921	0.0128	13.6744	0
5G47138.D	EF1-V-170078(8/1)	08/02/13 18:33	Aqueous	5G47132.	13.2934	0.0226	13.6752	0.0059
5G47139.D	AC73668-008(R)	08/02/13 18:51	Aqueous	5G47132.	13.2923	0.0143	13.6738	0.0044
5G47140.D	AC73596-001(T)	08/02/13 19:09	Aqueous	5G47132.	13.2913	0.0068	13.6735	0.0066
5G47141.D	AC73596-002(T)	08/02/13 19:26	Aqueous	5G47132.	13.2925	0.0158	13.6736	0.0059
5G47142.D	AC73596-003(T)	08/02/13 19:44	Aqueous	5G47132.	13.2917	0.0098	13.6737	0.0051
5G47143.D	AC73596-004(T)	08/02/13 20:02	Aqueous	5G47132.	13.2910	0.0045	13.6733	0.008
5G47144.D	EF1-V-169300((7/25)	08/02/13 20:20	Aqueous	5G47132.	13.2930	0.0196	13.6748	0.0029
5G47145.D	SMB25778	08/02/13 20:38	Soil	5G47132.	13.2904	0	13.6723	0.0154
5G47146.D	BLK	08/02/13 20:55	Soil	5G47132.	13.2913	0.0068	13.6735	0.0066
5G47147.D	BLK	08/02/13 21:13	Soil	5G47132.	13.2905	0.0008	13.6717	0.0198
5G47148.D	CAL PEST@100PPB	08/02/13 21:31	Soil	5G47132.	13.2919	0.0113	13.6734	0.0073
5G47149.D	200PPB	08/02/13 21:49	Soil	5G47148.	13.2911	0.006	13.6729	0.0037
5G47150.D	73751-002	08/02/13 22:07	Aqueous	5G47148.	13.2898	0.0158	13.6721	0.0095
5G47151.D	73668-005	08/02/13 22:24	Aqueous	5G47148.	13.2901	0.0135	13.6722	0.0088
5G47152.D	73752-001	08/02/13 22:42	Aqueous	5G47148.	13.2967	0.0361	13.6799	0.0475

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081A

Instrument: GC_6

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G42647.D	CAL EVAL	08/05/13 08:37	Soil					
6G42648.D	CAL PEST@200PPB	08/05/13 09:02	Soil	6G42648.	12.4253	0	12.8804	0
6G42649.D	AC73751-002(T)	08/05/13 09:30	Aqueous	6G42648.	12.4250	0.0024	12.8780	0.0186
6G42650.D	AC73668-005(R)	08/05/13 09:48	Aqueous	6G42648.	12.4174	0.0636	12.8740	0.0497
6G42651.D	AC73752-001(T)	08/05/13 10:05	Aqueous	6G42648.	12.4291	0.0306	12.8859	0.0427
6G42652.D	MBS	08/05/13 10:23	Soil	6G42648.	12.4264	0.0089	12.8869	0.0505
6G42653.D	AC73758-004	08/05/13 10:54	Soil	6G42648.	12.4366	0.0909	12.8932	0.0993
6G42654.D	AC73758-005	08/05/13 11:12	Soil	6G42648.	12.4264	0.0089	12.8886	0.0636
6G42655.D	AC73771-001	08/05/13 11:29	Soil	6G42648.	12.4247	0.0048	12.8863	0.0458
6G42656.D	AC73771-002	08/05/13 11:47	Soil	6G42648.	12.4249	0.0032	12.8874	0.0543
6G42657.D	AC73748-001	08/05/13 12:05	Soil	6G42648.	12.4244	0.0072	12.8860	0.0435
6G42658.D	AC73749-001	08/05/13 12:22	Soil	6G42648.	12.4244	0.0072	12.8857	0.0411
6G42659.D	AC73723-001(MS)	08/05/13 12:40	Soil	6G42648.	12.4260	0.0056	12.8870	0.0512
6G42660.D	AC73723-001(MSD)	08/05/13 12:57	Soil	6G42648.	12.4271	0.0145	12.8892	0.0683
6G42661.D	AC73723-001	08/05/13 13:15	Soil	6G42648.	12.4266	0.0105	12.8895	0.0706
6G42662.D	CAL PEST@200PPB	08/05/13 13:52	Soil	6G42648.	12.4246	0.0056	12.8886	0.0636
6G42663.D	AC73655-011	08/05/13 14:10	Soil	6G42662.	12.4237	0.0072	12.8859	0.021
6G42665.D	AC73655-011(10X)	08/05/13 14:45	Soil	6G42662.	12.4254	0.0064	12.8860	0.0202
6G42666.D	100PPB	08/05/13 15:02	Soil	6G42662.	12.4265	0.0153	12.8904	0.014
6G42667.D	SMB25778(MS)	08/05/13 15:45	Soil	6G42662.	12.4379	0.107	12.8949	0.0489
6G42668.D	CAL PEST@100PPB	08/05/13 16:09	Soil	6G42662.	12.4365	0.0957	12.8947	0.0473

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

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Form 6
Initial Calibration

Method: EPA 8081A

Instrument: GC_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6G42102.	CAL PEST@2PPB	07/05/13 10:41	2	6G42101.	CAL PEST@10PPB	07/05/13 10:24
3	6G42100.	CAL PEST@50PPB	07/05/13 10:06	4	6G42099.	CAL PEST@100PPB	07/05/13 09:48
5	6G42098.	CAL PEST@200PPB	07/05/13 09:31	6	6G42103.	CAL PEST@400PPB	07/05/13 11:00
7	6G42104.	CAL CHLOR@100PP	07/05/13 11:17	8	6G42105.	CAL TOX@500PPB	07/05/13 11:35

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Qua	1.6581	1.4421	1.2641	1.2093	1.1167	1.0211	----	----	1.29	5.09	0.997	1.00	18	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	1	0	Avg	1.4550	1.3469	1.4645	1.5062	1.4776	1.4026	----	----	1.44	6.28	0.999	1.00	4.0	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	1	0	Avg	1.4686	1.3659	1.4113	1.4162	1.3620	1.2834	----	----	1.38	6.81	0.999	1.00	4.6	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	1	0	Qua	1.1313	0.9050	0.7701	0.7322	0.6764	0.6148	----	----	0.805	7.71	0.997	1.00	23	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	1	0	Qua	1.8487	1.4741	1.2860	1.2405	1.1665	1.0784	----	----	1.35	7.10	0.998	1.00	21	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	1	0	Qua	1.6553	1.3589	1.3169	1.3419	1.3004	1.2326	----	----	1.37	8.05	0.999	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Aldrin	1	0	Avg	1.4795	1.2592	1.2336	1.2303	1.1809	1.1078	----	----	1.25	7.47	0.999	1.00	10	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	1	0	Qua	1.5152	1.2893	1.1787	1.1399	1.0661	0.9801	----	----	1.19	8.31	0.997	1.00	16	2.00	10.00	50.00	100.0	200.0	400.0		
γ-chlordane	1	0	Qua	1.7212	1.4552	1.2984	1.2841	1.2287	1.1476	----	----	1.36	8.71	0.998	1.00	15	2.00	10.00	50.00	100.0	200.0	400.0		
a-chlordane	1	0	Qua	1.8133	1.4248	1.2314	1.1921	1.1216	1.0456	----	----	1.30	8.78	0.998	1.00	21	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	1	0	Qua	1.3546	1.1613	0.9979	0.9526	0.8864	0.8107	----	----	1.03	8.68	0.997	1.00	19	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	1	0	Avg	1.3016	1.1354	1.1098	1.1128	1.0734	1.0216	----	----	1.13	8.87	0.999	1.00	8.4	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	1	0	Avg	1.2611	1.1251	1.0883	1.0848	1.0361	0.9689	----	----	1.09	9.13	0.998	1.00	9.0	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	1	0	Qua	1.0745	0.9149	0.8805	0.8895	0.8557	0.7842	----	----	0.900	9.39	0.998	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	1	0	Qua	1.1216	0.9075	0.8464	0.8685	0.8430	0.8057	----	----	0.899	9.83	0.999	1.00	13	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	1	0	Qua	1.5313	1.1899	1.0491	1.0158	0.9568	0.8853	----	----	1.10	9.96	0.998	1.00	21	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	1	0	Avg	1.0235	0.8799	0.8424	0.8415	0.8195	0.7954	----	----	0.867	10.04	1.00	1.00	9.4	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	1	0	Qua	1.2270	0.8699	0.7625	0.7919	0.7633	0.7166	----	----	0.855	10.45	0.999	1.00	22	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	1	0	Qua	1.5036	1.0991	0.9829	0.9821	0.9295	0.8723	----	----	1.06	10.83	0.999	1.00	22	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	1	0	Qua	0.7163	0.5597	0.5138	0.4943	0.4620	0.4276	----	----	0.529	10.74	0.998	1.00	19	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	1	0	Qua	1.5926	1.2205	1.0895	1.0755	1.0118	0.9444	----	----	1.16	11.36	0.998	1.00	20	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	1	0	Qua	1.7160	1.3938	1.0922	1.0027	0.8962	0.8138	----	----	1.15	12.43	0.996	1.00	30	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane	1	1	Avg	----	----	----	----	----	----	----	----	0.0856	7.10	-1	-1	Lvl=7	100.0							
Chlordane	1	2	Avg	----	----	----	----	----	----	----	----	0.161	8.72	-1	-1	Lvl=7	100.0							
Chlordane	1	3	Avg	----	----	----	----	----	----	----	----	0.234	8.78	-1	-1	Lvl=7	100.0							
Toxaphene	1	1	Avg	----	----	----	----	----	----	----	----	0.0147	9.38	-1	-1	Lvl=8	500.0							
Toxaphene	1	2	Avg	----	----	----	----	----	----	----	----	0.0126	9.64	-1	-1	Lvl=8	500.0							
Toxaphene	1	3	Avg	----	----	----	----	----	----	----	----	0.0332	10.32	-1	-1	Lvl=8	500.0							
Toxaphene	1	4	Avg	----	----	----	----	----	----	----	----	0.0318	10.69	-1	-1	Lvl=8	500.0							
Toxaphene	1	5	Avg	----	----	----	----	----	----	----	----	0.0237	11.09	-1	-1	Lvl=8	500.0							
TCMX-Surrogate	2	0	Avg	1.7040	1.5866	1.5892	1.5620	1.5375	1.4704	----	----	1.58	5.02	0.999	1.00	4.9	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	2	0	Qua	1.5313	1.5130	1.8065	2.0012	2.0803	2.0691	----	----	1.83	5.95	1.00	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	2	0	Avg	1.6331	1.5110	1.7163	1.8446	1.8721	1.8182	----	----	1.73	6.48	1.00	1.00	8.1	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	2	0	Avg	1.2735	1.1585	1.0314	1.0467	1.0402	1.0163	----	----	1.09	6.56	1.00	1.00	9.3	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	2	0	Qua	2.4055	1.7833	1.6320	1.6670	1.6628	1.6155	----	----	1.79	6.93	1.00	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	2	0	Avg	1.7315	1.4679	1.6374	1.8204	1.8801	1.8544	----	----	1.73	7.06	1.00	1.00	9.1	2.00	10.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 15.8 Avg Rsd Col 2: 9.65

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

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Form 6
Initial Calibration

Method: EPA 8081A

Instrument: GC_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6G42102.	CAL PEST@2PPB	07/05/13 10:41	2	6G42101.	CAL PEST@10PPB	07/05/13 10:24
3	6G42100.	CAL PEST@50PPB	07/05/13 10:06	4	6G42099.	CAL PEST@100PPB	07/05/13 09:48
5	6G42098.	CAL PEST@200PPB	07/05/13 09:31	6	6G42103.	CAL PEST@400PPB	07/05/13 11:00
7	6G42104.	CAL CHLOR@100PP	07/05/13 11:17	8	6G42105.	CAL TOX@500PPB	07/05/13 11:35

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aldrin	2	0	Avg	1.6168	1.4523	1.5554	1.6692	1.7129	1.6884	----	----	1.62	7.38	1.00	1.00	6.1	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	2	0	Avg	1.7873	1.5293	1.4997	1.5446	1.5344	1.4782	----	----	1.56	8.10	1.00	1.00	7.2	2.00	10.00	50.00	100.0	200.0	400.0		
v-chlordane	2	0	Avg	1.8842	1.6171	1.6123	1.6775	1.6922	1.6605	----	----	1.69	8.31	1.00	1.00	5.9	2.00	10.00	50.00	100.0	200.0	400.0		
a-chlordane	2	0	Avg	1.7861	1.5390	1.4767	1.5115	1.4728	1.3946	----	----	1.53	8.51	0.999	1.00	8.8	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	2	0	Avg	1.7502	1.5071	1.5300	1.6330	1.6741	1.6390	----	----	1.62	8.57	1.00	1.00	5.6	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	2	0	Avg	1.7244	1.3289	1.3856	1.5090	1.5630	1.5549	----	----	1.51	8.80	1.00	1.00	9.3	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	2	0	Avg	1.6613	1.3538	1.3781	1.4817	1.5140	1.4857	----	----	1.48	8.96	1.00	1.00	7.4	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	2	0	Avg	1.1691	1.0275	1.0406	1.1153	1.1460	1.0943	----	----	1.10	9.43	0.999	1.00	5.1	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	2	0	Avg	1.2442	1.0907	1.0869	1.1879	1.2440	1.2473	----	----	1.18	9.51	1.00	1.00	6.5	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	2	0	Avg	1.6816	1.4370	1.3769	1.4193	1.4178	1.3762	----	----	1.45	9.65	1.00	1.00	7.9	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	2	0	Avg	1.1612	1.0772	1.1496	1.2191	1.2641	1.2677	----	----	1.19	9.89	1.00	1.00	6.2	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	2	0	Qua	1.9191	1.2901	1.0926	1.1515	1.1373	1.1005	----	----	1.28	10.05	1.00	1.00	25	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	2	0	Avg	1.5079	1.2151	1.1815	1.2204	1.2301	1.2124	----	----	1.26	10.20	1.00	1.00	9.7	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	2	0	Avg	0.8676	0.7732	0.7315	0.7285	0.7128	0.6824	----	----	0.749	10.95	0.999	1.00	8.7	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	2	0	Qua	1.8666	1.4942	1.4397	1.4874	1.4742	1.4376	----	----	1.53	11.20	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	2	0	Qua	2.1943	1.8055	1.5612	1.5015	1.4176	1.3293	----	----	1.63	12.89	0.999	1.00	19	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane	2	1	Avg	----	----	----	----	----	----	----	----	0.118	6.93	-1	-1	Lvl=7	100.0							
Chlordane	2	2	Avg	----	----	----	----	----	----	----	----	0.348	8.31	-1	-1	Lvl=7	100.0							
Chlordane	2	3	Avg	----	----	----	----	----	----	----	----	0.193	8.51	-1	-1	Lvl=7	100.0							
Toxaphene	2	1	Avg	----	----	----	----	----	----	----	----	0.0230	9.12	-1	-1	Lvl=8	500.0							
Toxaphene	2	2	Avg	----	----	----	----	----	----	----	----	0.0105	9.42	-1	-1	Lvl=8	500.0							
Toxaphene	2	3	Avg	----	----	----	----	----	----	----	----	0.0271	10.21	-1	-1	Lvl=8	500.0							
Toxaphene	2	4	Avg	----	----	----	----	----	----	----	----	0.0246	10.46	-1	-1	Lvl=8	500.0							
Toxaphene	2	5	Avg	----	----	----	----	----	----	----	----	0.0738	10.78	-1	-1	Lvl=8	500.0							

Avg Rsd Col 1: 15.8 Avg Rsd Col 2: 9.65

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 ; Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3080110 0168

Form 6
Initial Calibration

Method: EPA 8081A

Instrument: GC_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5G46835.	CAL PEST@2PPB	07/11/13 15:15	2	5G46836.	CAL PEST@10PPB	07/11/13 15:33
3	5G46837.	CAL PEST@50PPB	07/11/13 15:51	4	5G46838.	CAL PEST@100PPB	07/11/13 16:09
5	5G46839.	CAL PEST@200PPB	07/11/13 16:26	6	5G46840.	CAL PEST@400PPB	07/11/13 16:50
7	5G46841.	CAL CHLOR@100PP	07/11/13 17:08	8	5G46842.	CAL TOX@500PPB	07/11/13 17:26

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Avg	239.14	230.91	205.67	207.50	202.86	195.34	---	---	214	6.27	1.00	1.00	8.1	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	1	0	Avg	284.46	289.38	280.85	294.53	298.44	302.73	---	---	292	7.54	1.00	1.00	2.9	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	1	0	Avg	274.73	273.94	254.31	261.93	265.45	261.87	---	---	265	8.06	1.00	1.00	3.0	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	1	0	Avg	112.94	111.16	102.26	105.90	105.41	102.15	---	---	107	8.96	1.00	1.00	4.2	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	1	0	Avg	239.58	227.97	214.94	214.97	209.70	201.00	---	---	218	8.35	0.999	1.00	6.3	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	1	0	Avg	189.49	254.62	228.80	240.48	243.00	235.07	---	---	232	9.28	1.00	1.00	9.7	2.00	10.00	50.00	100.0	200.0	400.0		
Aldrin	1	0	Avg	241.97	242.14	231.83	235.97	232.56	222.74	---	---	235	8.71	0.999	1.00	3.1	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	1	0	Qua	111.61	209.91	199.94	203.85	200.41	190.67	---	---	186	9.52	0.999	1.00	20	2.00	10.00	50.00	100.0	200.0	400.0		
γ-chlordane	1	0	Qua	108.32	162.57	200.82	208.73	209.20	204.44	---	---	182	9.90	1.00	1.00	22	2.00	10.00	50.00	100.0	200.0	400.0		
α-chlordane	1	0	Qua	136.03	140.52	194.34	200.79	200.67	195.46	---	---	178	9.97	1.00	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	1	0	Qua	96.907	150.73	175.00	181.49	179.47	173.28	---	---	159	9.86	1.00	1.00	20	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	1	0	Qua	127.89	127.45	195.83	203.00	201.72	197.05	---	---	175	10.06	1.00	1.00	21	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	1	0	Avg	194.53	198.11	192.38	199.83	197.50	193.42	---	---	196	10.29	1.00	1.00	1.5	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	1	0	Avg	146.74	148.80	146.84	153.07	151.74	146.16	---	---	149	10.53	1.00	1.00	1.9	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	1	0	Avg	149.27	151.75	137.91	150.36	153.13	152.61	---	---	149	10.97	1.00	1.00	3.8	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	1	0	Avg	165.68	170.08	160.16	168.23	168.36	165.36	---	---	166	11.07	1.00	1.00	2.1	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	1	0	Qua	106.36	118.09	129.41	136.86	141.36	143.93	---	---	129	11.16	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	1	0	Avg	128.10	118.65	108.14	122.42	123.33	121.70	---	---	120	11.54	1.00	1.00	5.6	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	1	0	Avg	146.37	149.01	140.19	152.30	151.99	149.41	---	---	148	11.89	1.00	1.00	3.0	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	1	0	Avg	69.060	60.691	58.303	61.832	63.565	63.818	---	---	62.9	11.82	1.00	1.00	5.8	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	1	0	Avg	158.30	146.44	143.97	160.56	161.93	162.99	---	---	156	12.38	1.00	1.00	5.3	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	1	0	Avg	173.67	155.80	137.17	145.34	146.09	145.83	---	---	151	13.30	1.00	1.00	8.5	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane	1	1	Avg	---	---	---	---	---	---	---	---	10.5	8.15	-1	-1	Lvl=7	100.0							
Chlordane	1	2	Avg	---	---	---	---	---	---	---	---	25.6	9.90	-1	-1	Lvl=7	100.0							
Chlordane	1	3	Avg	---	---	---	---	---	---	---	---	36.4	9.97	-1	-1	Lvl=7	100.0							
Toxaphene	1	1	Avg	---	---	---	---	---	---	---	---	1.07	10.32	-1	-1	Lvl=8	500.0							
Toxaphene	1	2	Avg	---	---	---	---	---	---	---	---	2.04	10.53	-1	-1	Lvl=8	500.0							
Toxaphene	1	3	Avg	---	---	---	---	---	---	---	---	2.16	11.11	-1	-1	Lvl=8	500.0							
Toxaphene	1	4	Avg	---	---	---	---	---	---	---	---	5.12	11.42	-1	-1	Lvl=8	500.0							
Toxaphene	1	5	Avg	---	---	---	---	---	---	---	---	3.89	12.13	-1	-1	Lvl=8	500.0							
TCMX-Surrogate	2	0	Qua	191.28	158.02	139.08	143.32	138.58	128.57	---	---	150	6.20	0.998	1.00	15	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	2	0	Avg	208.37	205.93	199.97	206.67	206.68	197.90	---	---	204	7.21	0.999	1.00	2.1	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	2	0	Avg	182.69	177.50	169.69	175.99	175.37	167.19	---	---	175	7.75	0.999	1.00	3.2	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	2	0	Avg	84.700	83.505	71.898	77.596	76.623	71.421	---	---	77.6	7.84	0.998	1.00	7.2	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	2	0	Qua	219.77	160.22	137.29	138.93	134.56	125.76	---	---	153	8.18	0.999	1.00	23	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	2	0	Avg	181.17	170.16	155.72	171.84	171.10	164.42	---	---	169	8.32	0.999	1.00	5.0	2.00	10.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 8.50 Avg Rsd Col 2: 6.80

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt.calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3080110 0169

Form 6
Initial Calibration

Method: EPA 8081A

Instrument: GC_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5G46835.	CAL PEST@2PPB	07/11/13 15:15	2	5G46836.	CAL PEST@10PPB	07/11/13 15:33
3	5G46837.	CAL PEST@50PPB	07/11/13 15:51	4	5G46838.	CAL PEST@100PPB	07/11/13 16:09
5	5G46839.	CAL PEST@200PPB	07/11/13 16:26	6	5G46840.	CAL PEST@400PPB	07/11/13 16:50
7	5G46841.	CAL CHLOR@100PP	07/11/13 17:08	8	5G46842.	CAL TOX@500PPB	07/11/13 17:26

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aldrin	2	0	Avg	166.64	162.78	152.09	159.17	154.50	144.38	----	----	157	8.62	0.999	1.00	5.1	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	2	0	Avg	162.45	142.98	131.29	135.45	132.49	123.93	----	----	138	9.32	0.999	1.00	9.7	2.00	10.00	50.00	100.0	200.0	400.0		
γ-chlordane	2	0	Avg	144.73	139.12	128.03	137.84	137.25	130.71	----	----	136	9.52	0.999	1.00	4.4	2.00	10.00	50.00	100.0	200.0	400.0		
a-chlordane	2	0	Avg	136.81	131.81	122.59	130.01	129.60	124.76	----	----	129	9.72	1.00	1.00	3.9	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	2	0	Avg	138.95	134.30	120.64	125.11	121.59	113.89	----	----	126	9.76	0.999	1.00	7.4	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	2	0	Avg	126.87	127.11	120.67	129.33	129.40	124.99	----	----	126	10.00	1.00	1.00	2.6	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	2	0	Avg	136.59	134.14	126.54	133.92	130.21	125.49	----	----	131	10.13	0.999	1.00	3.4	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	2	0	Avg	103.25	100.09	93.769	99.814	98.651	94.469	----	----	98.3	10.58	0.999	1.00	3.7	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	2	0	Avg	102.08	99.020	89.873	100.62	101.53	100.72	----	----	99.0	10.67	1.00	1.00	4.6	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	2	0	Avg	117.04	116.61	107.55	115.47	116.61	110.13	----	----	114	10.79	0.999	1.00	3.5	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	2	0	Avg	101.14	86.659	84.345	94.544	95.642	96.038	----	----	93.1	11.03	1.00	1.00	6.8	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	2	0	Qua	114.80	91.421	76.326	90.323	89.458	87.324	----	----	91.6	11.17	0.999	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	2	0	Avg	117.54	105.18	98.006	107.96	107.15	103.78	----	----	107	11.31	1.00	1.00	6.0	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	2	0	Avg	51.360	45.951	39.897	43.695	43.845	44.037	----	----	44.8	12.02	1.00	1.00	8.4	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	2	0	Avg	124.98	118.63	106.75	117.36	117.16	116.55	----	----	117	12.24	1.00	1.00	5.0	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	2	0	Avg	108.38	102.00	91.176	97.232	97.430	95.471	----	----	98.6	13.68	1.00	1.00	6.0	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane	2	1	Avg	----	----	----	----	----	----	----	----	7.39	7.97	-1	-1	Lvl=7	100.0							
Chlordane	2	2	Avg	----	----	----	----	----	----	----	----	17.9	9.52	-1	-1	Lvl=7	100.0							
Chlordane	2	3	Avg	----	----	----	----	----	----	----	----	15.5	9.72	-1	-1	Lvl=7	100.0							
Toxaphene	2	1	Avg	----	----	----	----	----	----	----	----	1.76	10.29	-1	-1	Lvl=8	500.0							
Toxaphene	2	2	Avg	----	----	----	----	----	----	----	----	2.81	10.83	-1	-1	Lvl=8	500.0							
Toxaphene	2	3	Avg	----	----	----	----	----	----	----	----	2.52	11.32	-1	-1	Lvl=8	500.0							
Toxaphene	2	4	Avg	----	----	----	----	----	----	----	----	5.37	11.85	-1	-1	Lvl=8	500.0							
Toxaphene	2	5	Avg	----	----	----	----	----	----	----	----	2.47	12.21	-1	-1	Lvl=8	500.0							

Avg Rsd Col 1: 8.50 Avg Rsd Col 2: 6.80

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Form7
Continuing Calibration

Method: EPA 8081A

3080110 0170

				5G47132.D			5G47148.D			6G42648.D			6G42662.D			6G42668.D		
Data File:				5G47132.D			5G47148.D			6G42648.D			6G42662.D			6G42668.D		
Method:				8081			8081			8081			8081			8081		
Calibration Name:				CAL PEST@100PP			CAL PEST@100PP			CAL PEST@200PP			CAL PEST@200PP			CAL PEST@100PP		
Calibration Date/Time				08/02/13 15:16			08/02/13 21:31			08/05/13 09:02			08/05/13 13:52			08/05/13 16:09		
Compound	Limit	Col	Mr	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff
TCMX-Surrogate	15	1	0	99.99	100	0.0	97.98	100	2.0	208.7	200	4.3	220.6	200	10.3	117.6	100	17.6*
alpha-BHC	15	1	0	104.5	100	4.5	104.3	100	4.3	213.3	200	6.7	189.8	200	5.1	104.2	100	4.2
gamma-BHC	15	1	0	102.2	100	2.2	102.8	100	2.8	207	200	3.5	195.6	200	2.2	110	100	10.0
beta-BHC	15	1	0	102.4	100	2.4	103.7	100	3.7	203.4	200	1.7	193.9	200	3.1	109.5	100	9.5
Heptachlor	15	1	0	107.2	100	7.2	106.9	100	6.9	212.7	200	6.3	219.5	200	9.8	117.7	100	17.7*
delta-BHC	15	1	0	107.5	100	7.5	106.8	100	6.8	200.6	200	0.3	171.7	200	14.2	93.83	100	6.2
Aldrin	15	1	0	102.6	100	2.6	103.3	100	3.3	197.4	200	1.3	196.9	200	1.6	109.6	100	9.6
Heptachlor Epoxide	15	1	0	101.6	100	1.6	102.9	100	2.9	206	200	3.0	205.2	200	2.6	111.7	100	11.7
y-chlordane	15	1	0	98.42	100	1.6	103.1	100	3.1	206.3	200	3.1	199.5	200	0.2	109.6	100	9.6
a-chlordane	15	1	0	99.69	100	0.3	102.9	100	2.9	202.3	200	1.1	193.0	200	3.5	106.7	100	6.7
Endosulfan I	15	1	0	102.3	100	2.3	103.7	100	3.7	204.9	200	2.4	199.2	200	0.4	107.6	100	7.6
p,p'-DDE	15	1	0	101.1	100	1.1	102.8	100	2.8	194.9	200	2.6	191.4	200	4.3	103.9	100	3.9
Dieldrin	15	1	0	100.8	100	0.8	106.3	100	6.3	196.1	200	1.9	191.7	200	4.1	106.2	100	6.2
Endrin	15	1	0	109.1	100	9.1	109.8	100	9.8	212.1	200	6.0	210.4	200	5.2	110.4	100	10.4
p,p'-DDD	15	1	0	106.5	100	6.5	106.4	100	6.4	203.5	200	1.8	198.1	200	0.9	101.9	100	1.9
Endosulfan II	15	1	0	101.7	100	1.7	106.4	100	6.4	206.7	200	3.3	200.4	200	0.2	107	100	7.0
p,p'-DDT	15	1	0	104.7	100	4.7	110.3	100	10.3	190.2	200	4.9	171.9	200	14.0	86.75	100	13.3
Endrin Aldehyde	15	1	0	92.26	100	7.7	106.4	100	6.4	217.9	200	8.9	182.9	200	8.6	96.12	100	3.9
Endosulfan Sulfate	15	1	0	99.39	100	0.6	104.8	100	4.8	197.1	200	1.5	186.3	200	6.8	95.75	100	4.3
Methoxychlor	15	1	0	110.5	100	10.5	104.4	100	4.4	199.2	200	0.4	173.5	200	13.3	88.34	100	11.7
Endrin Ketone	15	1	0	102.1	100	2.1	106.7	100	6.7	198.6	200	0.7	136.2	200	31.9*	70.9	100	29.1*
DCB-Surrogate	15	1	0	97.68	100	2.3	101.9	100	1.9	185.6	200	7.2	172.2	200	13.9	95.77	100	4.2
Average Difference	15	1	0			3.6			4.9			3.3			7.1			9.4
TCMX-Surrogate	15	2	0	102.3	100	2.3	100.2	100	0.2	201.1	200	0.5	242.4	200	21.2*	131.2	100	31.2*
alpha-BHC	15	2	0	103.8	100	3.8	104.0	100	4.0	211	200	5.5	220.9	200	10.5	110.5	100	10.5
gamma-BHC	15	2	0	103.3	100	3.3	103.8	100	3.8	222.3	200	11.2	228	200	14.0	116.6	100	16.6*
beta-BHC	15	2	0	99.63	100	0.4	99.45	100	0.6	195.4	200	2.3	243.5	200	21.7*	132.1	100	32.1*
Heptachlor	15	2	0	109.3	100	9.3	109.3	100	9.3	209.8	200	4.9	256.9	200	28.5*	133.7	100	33.6*
delta-BHC	15	2	0	104.0	100	4.0	101.6	100	1.6	216	200	8.0	206.7	200	3.3	102.1	100	2.1
Aldrin	15	2	0	102.3	100	2.3	103	100	3.0	217.4	200	8.7	244.7	200	22.3*	129.1	100	29.1*
Heptachlor Epoxide	15	2	0	99.9	100	0.1	101.8	100	1.8	199.6	200	0.2	223.3	200	11.7	121.0	100	21.0*
y-chlordane	15	2	0	99.39	100	0.6	103.5	100	3.5	200.6	200	0.3	212.9	200	6.4	115.4	100	15.4
a-chlordane	15	2	0	102.1	100	2.1	104.2	100	4.2	194.4	200	2.8	200.4	200	0.2	110.6	100	10.6
Endosulfan I	15	2	0	99.9	100	0.1	101.4	100	1.4	210.6	200	5.3	234.1	200	17.0*	123.9	100	23.9*
p,p'-DDE	15	2	0	104.0	100	4.0	104.5	100	4.5	207.0	200	3.5	214.6	200	7.3	107.9	100	7.9
Dieldrin	15	2	0	103.9	100	3.9	104.8	100	4.8	209.8	200	4.9	239.8	200	19.9*	120.5	100	20.5*
Endrin	15	2	0	107.5	100	7.5	105.0	100	5.0	223.1	200	11.5	238.5	200	19.3*	123.1	100	23.1*
p,p'-DDD	15	2	0	106.2	100	6.2	105.2	100	5.2	209	200	4.5	198.8	200	0.6	101.9	100	1.9
Endosulfan II	15	2	0	102.5	100	2.5	104.9	100	4.9	203.1	200	1.5	211.3	200	5.6	114.7	100	14.7
p,p'-DDT	15	2	0	109.8	100	9.8	108.7	100	8.7	218.3	200	9.1	202.7	200	1.4	98.38	100	1.6
Endrin Aldehyde	15	2	0	108.2	100	8.2	103.6	100	3.6	215.2	200	7.6	183.6	200	8.2	94.47	100	5.5
Endosulfan Sulfate	15	2	0	101.6	100	1.6	102.6	100	2.6	205.3	200	2.6	211.6	200	5.8	109.1	100	9.1
Methoxychlor	15	2	0	104.8	100	4.8	104.8	100	4.8	196.6	200	1.7	212.2	200	6.1	106.6	100	6.6
Endrin Ketone	15	2	0	100.6	100	0.6	103.1	100	3.1	211.1	200	5.5	194.9	200	2.6	97.29	100	2.7
DCB-Surrogate	15	2	0	98.75	100	1.3	101.8	100	1.8	185.5	200	7.2	203.8	200	1.9	101.8	100	1.8
Average Difference	15	2	0			3.6			3.7			5.0			10.7			14.6

Flags/Notes: **** - Values outside of limits for this column/run***

Form7
RtWindow Summary

Method: EPA 8081A

3080110 0171

Data File:			5G46835.D		6G42102.D		5G47132.D		6G42648.D		6G42662.D	
Calibration Name:			CAL PEST@2PPB		CAL PEST@2PPB		CAL PEST@100PPB		CAL PEST@200PPB		CAL PEST@200PPB	
Calibration Date/Time			7/11/2013 3:15:40 PM		7/5/2013 10:41:00 AM		8/2/2013 3:16:02 PM		8/5/2013 9:02:00 AM		8/5/2013 1:52:00 PM	
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
TCMX-Surrogate	1	0	6.27	(6.21 - 6.33)	5.09	(5.03 - 5.15)	6.27	(6.20 - 6.32)	5.09	(5.03 - 5.15)	5.09	(5.03 - 5.15)
alpha-BHC	1	0	7.54	(7.50 - 7.58)	6.28	(6.24 - 6.32)	7.54	(7.50 - 7.58)	6.28	(6.24 - 6.32)	6.28	(6.24 - 6.32)
gamma-BHC	1	0	8.07	(8.03 - 8.11)	6.81	(6.77 - 6.85)	8.06	(8.02 - 8.10)	6.80	(6.76 - 6.84)	6.80	(6.76 - 6.84)
beta-BHC	1	0	8.96	(8.88 - 9.04)	7.71	(7.63 - 7.79)	8.95	(8.87 - 9.03)	7.70	(7.62 - 7.78)	7.70	(7.62 - 7.78)
Heptachlor	1	0	8.35	(8.31 - 8.39)	7.10	(7.06 - 7.14)	8.34	(8.30 - 8.38)	7.10	(7.06 - 7.14)	7.10	(7.06 - 7.14)
delta-BHC	1	0	9.28	(9.20 - 9.36)	8.05	(7.97 - 8.13)	9.28	(9.20 - 9.36)	8.04	(7.96 - 8.12)	8.04	(7.96 - 8.12)
Aldrin	1	0	8.71	(8.63 - 8.79)	7.47	(7.39 - 7.55)	8.70	(8.62 - 8.78)	7.47	(7.39 - 7.55)	7.47	(7.39 - 7.55)
Heptachlor Epoxide	1	0	9.52	(9.48 - 9.56)	8.31	(8.27 - 8.35)	9.52	(9.48 - 9.56)	8.31	(8.27 - 8.35)	8.31	(8.27 - 8.35)
v-chlordane	1	0	9.90	(9.86 - 9.94)	8.71	(8.67 - 8.75)	9.90	(9.86 - 9.94)	8.71	(8.67 - 8.75)	8.71	(8.67 - 8.75)
a-chlordane	1	0	9.97	(9.93 - 10.01)	8.78	(8.74 - 8.82)	9.97	(9.93 - 10.01)	8.78	(8.74 - 8.82)	8.78	(8.74 - 8.82)
Endosulfan I	1	0	9.86	(9.82 - 9.90)	8.68	(8.64 - 8.72)	9.86	(9.82 - 9.90)	8.67	(8.63 - 8.71)	8.67	(8.63 - 8.71)
p,p'-DDE	1	0	10.06	(9.98 - 10.14)	8.87	(8.79 - 8.95)	10.05	(9.97 - 10.13)	8.86	(8.78 - 8.94)	8.87	(8.79 - 8.95)
Dieldrin	1	0	10.29	(10.21 - 10.37)	9.13	(9.05 - 9.21)	10.28	(10.20 - 10.36)	9.12	(9.04 - 9.20)	9.12	(9.04 - 9.20)
Endrin	1	0	10.53	(10.49 - 10.57)	9.39	(9.35 - 9.43)	10.53	(10.49 - 10.57)	9.38	(9.34 - 9.42)	9.38	(9.34 - 9.42)
p,p'-DDD	1	0	10.97	(10.89 - 11.05)	9.83	(9.75 - 9.91)	10.96	(10.88 - 11.04)	9.82	(9.74 - 9.90)	9.83	(9.75 - 9.91)
Endosulfan II	1	0	11.08	(11.00 - 11.16)	9.96	(9.88 - 10.04)	11.07	(10.99 - 11.15)	9.95	(9.87 - 10.03)	9.95	(9.87 - 10.03)
p,p'-DDT	1	0	11.16	(11.08 - 11.24)	10.04	(9.96 - 10.12)	11.15	(11.07 - 11.23)	10.04	(9.96 - 10.12)	10.04	(9.96 - 10.12)
Endrin Aldehyde	1	0	11.54	(11.46 - 11.62)	10.46	(10.38 - 10.54)	11.54	(11.46 - 11.62)	10.45	(10.37 - 10.53)	10.45	(10.37 - 10.53)
Endosulfan Sulfate	1	0	11.89	(11.85 - 11.93)	10.83	(10.79 - 10.87)	11.89	(11.85 - 11.93)	10.81	(10.77 - 10.85)	10.81	(10.77 - 10.85)
Methoxychlor	1	0	11.82	(11.78 - 11.86)	10.74	(10.70 - 10.78)	11.81	(11.77 - 11.85)	10.73	(10.69 - 10.77)	10.73	(10.69 - 10.77)
Endrin Ketone	1	0	12.38	(12.30 - 12.46)	11.36	(11.28 - 11.44)	12.37	(12.29 - 12.45)	11.35	(11.27 - 11.43)	11.35	(11.27 - 11.43)
DCB-Surrogate	1	0	13.30	(13.24 - 13.36)	12.43	(12.37 - 12.49)	13.29	(13.23 - 13.35)	12.43	(12.37 - 12.49)	12.42	(12.36 - 12.48)
Chlordane	1	1	8.15	(8.11 - 8.19)	7.10	(7.06 - 7.14)						
Chlordane	1	2	9.90	(9.86 - 9.94)	8.72	(8.68 - 8.76)						
Chlordane	1	3	9.97	(9.93 - 10.01)	8.78	(8.74 - 8.82)						
Toxaphene	1	1	10.32	(10.28 - 10.36)	9.38	(9.34 - 9.42)						
Toxaphene	1	2	10.53	(10.49 - 10.57)	9.64	(9.60 - 9.68)						
Toxaphene	1	3	11.11	(11.07 - 11.15)	10.32	(10.28 - 10.36)						
Toxaphene	1	4	11.42	(11.38 - 11.46)	10.69	(10.65 - 10.73)						
Toxaphene	1	5	12.13	(12.09 - 12.17)	11.09	(11.05 - 11.13)						
TCMX-Surrogate	2	0	6.20	(6.14 - 6.26)	5.02	(4.96 - 5.08)	6.20	(6.14 - 6.26)	5.01	(4.95 - 5.07)	5.05	(4.99 - 5.11)
alpha-BHC	2	0	7.21	(7.17 - 7.25)	5.95	(5.91 - 5.99)	7.21	(7.17 - 7.25)	5.94	(5.90 - 5.98)	5.96	(5.92 - 6.00)
gamma-BHC	2	0	7.75	(7.71 - 7.79)	6.48	(6.44 - 6.52)	7.75	(7.71 - 7.79)	6.48	(6.44 - 6.52)	6.49	(6.45 - 6.53)
beta-BHC	2	0	7.84	(7.76 - 7.92)	6.56	(6.48 - 6.64)	7.84	(7.76 - 7.92)	6.55	(6.47 - 6.63)	6.59	(6.51 - 6.67)
Heptachlor	2	0	8.18	(8.14 - 8.22)	6.93	(6.89 - 6.97)	8.18	(8.14 - 8.22)	6.92	(6.88 - 6.96)	6.93	(6.89 - 6.97)
delta-BHC	2	0	8.32	(8.24 - 8.40)	7.06	(6.98 - 7.14)	8.32	(8.24 - 8.40)	7.05	(6.97 - 7.13)	7.09	(7.01 - 7.17)
Aldrin	2	0	8.62	(8.54 - 8.70)	7.38	(7.30 - 7.46)	8.62	(8.54 - 8.70)	7.37	(7.29 - 7.45)	7.38	(7.30 - 7.46)
Heptachlor Epoxide	2	0	9.32	(9.28 - 9.36)	8.10	(8.06 - 8.14)	9.32	(9.28 - 9.36)	8.10	(8.06 - 8.14)	8.10	(8.06 - 8.14)
v-chlordane	2	0	9.52	(9.48 - 9.56)	8.31	(8.27 - 8.35)	9.52	(9.48 - 9.56)	8.31	(8.27 - 8.35)	8.31	(8.27 - 8.35)
a-chlordane	2	0	9.72	(9.68 - 9.76)	8.51	(8.47 - 8.55)	9.71	(9.67 - 9.75)	8.51	(8.47 - 8.55)	8.51	(8.47 - 8.55)
Endosulfan I	2	0	9.76	(9.72 - 9.80)	8.57	(8.53 - 8.61)	9.76	(9.72 - 9.80)	8.56	(8.52 - 8.60)	8.57	(8.53 - 8.61)
p,p'-DDE	2	0	10.00	(9.92 - 10.08)	8.80	(8.72 - 8.88)	10.00	(9.92 - 10.08)	8.80	(8.72 - 8.88)	8.83	(8.75 - 8.91)
Dieldrin	2	0	10.13	(10.05 - 10.21)	8.96	(8.88 - 9.04)	10.13	(10.05 - 10.21)	8.95	(8.87 - 9.03)	8.96	(8.88 - 9.04)
Endrin	2	0	10.58	(10.54 - 10.62)	9.43	(9.39 - 9.47)	10.58	(10.54 - 10.62)	9.43	(9.39 - 9.47)	9.43	(9.39 - 9.47)
p,p'-DDD	2	0	10.67	(10.59 - 10.75)	9.51	(9.43 - 9.59)	10.66	(10.58 - 10.74)	9.50	(9.42 - 9.58)	9.53	(9.45 - 9.61)
Endosulfan II	2	0	10.79	(10.71 - 10.87)	9.65	(9.57 - 9.73)	10.79	(10.71 - 10.87)	9.64	(9.56 - 9.72)	9.65	(9.57 - 9.73)
p,p'-DDT	2	0	11.03	(10.95 - 11.11)	9.89	(9.81 - 9.97)	11.02	(10.94 - 11.10)	9.89	(9.81 - 9.97)	9.90	(9.82 - 9.98)
Endrin Aldehyde	2	0	11.17	(11.09 - 11.25)	10.05	(9.97 - 10.13)	11.17	(11.09 - 11.25)	10.05	(9.97 - 10.13)	10.06	(9.98 - 10.14)
Endosulfan Sulfate	2	0	11.31	(11.27 - 11.35)	10.20	(10.16 - 10.24)	11.31	(11.27 - 11.35)	10.20	(10.16 - 10.24)	10.21	(10.17 - 10.25)
Methoxychlor	2	0	12.02	(11.98 - 12.06)	10.95	(10.91 - 10.99)	12.02	(11.98 - 12.06)	10.94	(10.90 - 10.98)	10.96	(10.92 - 11.00)
Endrin Ketone	2	0	12.24	(12.16 - 12.32)	11.20	(11.12 - 11.28)	12.23	(12.15 - 12.31)	11.20	(11.11 - 11.27)	11.20	(11.12 - 11.28)
DCB-Surrogate	2	0	13.68	(13.62 - 13.74)	12.89	(12.83 - 12.95)	13.67	(13.61 - 13.73)	12.88	(12.82 - 12.94)	12.89	(12.83 - 12.95)
Chlordane	2	1	7.97	(7.93 - 8.01)	6.93	(6.89 - 6.97)						
Chlordane	2	2	9.52	(9.48 - 9.56)	8.31	(8.27 - 8.35)						
Chlordane	2	3	9.72	(9.68 - 9.76)	8.51	(8.47 - 8.55)						
Toxaphene	2	1	10.29	(10.25 - 10.33)	9.12	(9.08 - 9.16)						
Toxaphene	2	2	10.83	(10.79 - 10.87)	9.42	(9.38 - 9.46)						
Toxaphene	2	3	11.32	(11.28 - 11.36)	10.21	(10.17 - 10.25)						
Toxaphene	2	4	11.85	(11.81 - 11.89)	10.46	(10.42 - 10.50)						
Toxaphene	2	5	12.21	(12.17 - 12.25)	10.78	(10.74 - 10.82)						

EPH Category 1 Data

EPH Category 1 Data
Sample Data

Form1

ORGANICS REPORT

Sample Number: AC73771-001
Client Id: BB-COMP-1-0801113
Data File: 8G42168.D
Analysis Date: 08/03/13 21:47
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: NJEPHRev3A
Matrix: Soil
Initial Vol: 10g
Final Vol: 1ml
Dilution: 1
Solids: 91

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
ephc28c40	>C28-C40	66	U	c9toc28	C9-C28	66	U
ephcat1tot	C9-C40 Cat1 Total EPH	66	U				

Worksheet #: 272465 ***Total Target Concentration*** 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3080110 0175

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42168.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 21:47:46
Operator : KD/RAK/MS
Sample : AC73771-001
Misc : S.TPH
ALS Vial : 37 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:00:04 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.410	296538	87.981		
22)S	1-Chlorooctadecane	13.693	227822	88.781		
	Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		d
5)	2-Methylnaphthalene	0.000	0	N.D.		d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	12.410f	1278319	474.675		m
24)B	>C28-C40(Total)	18.801f	1518958	628.024		m
25)t	C9-C40(TOTAL)	12.410f	2796524	1074.937		m

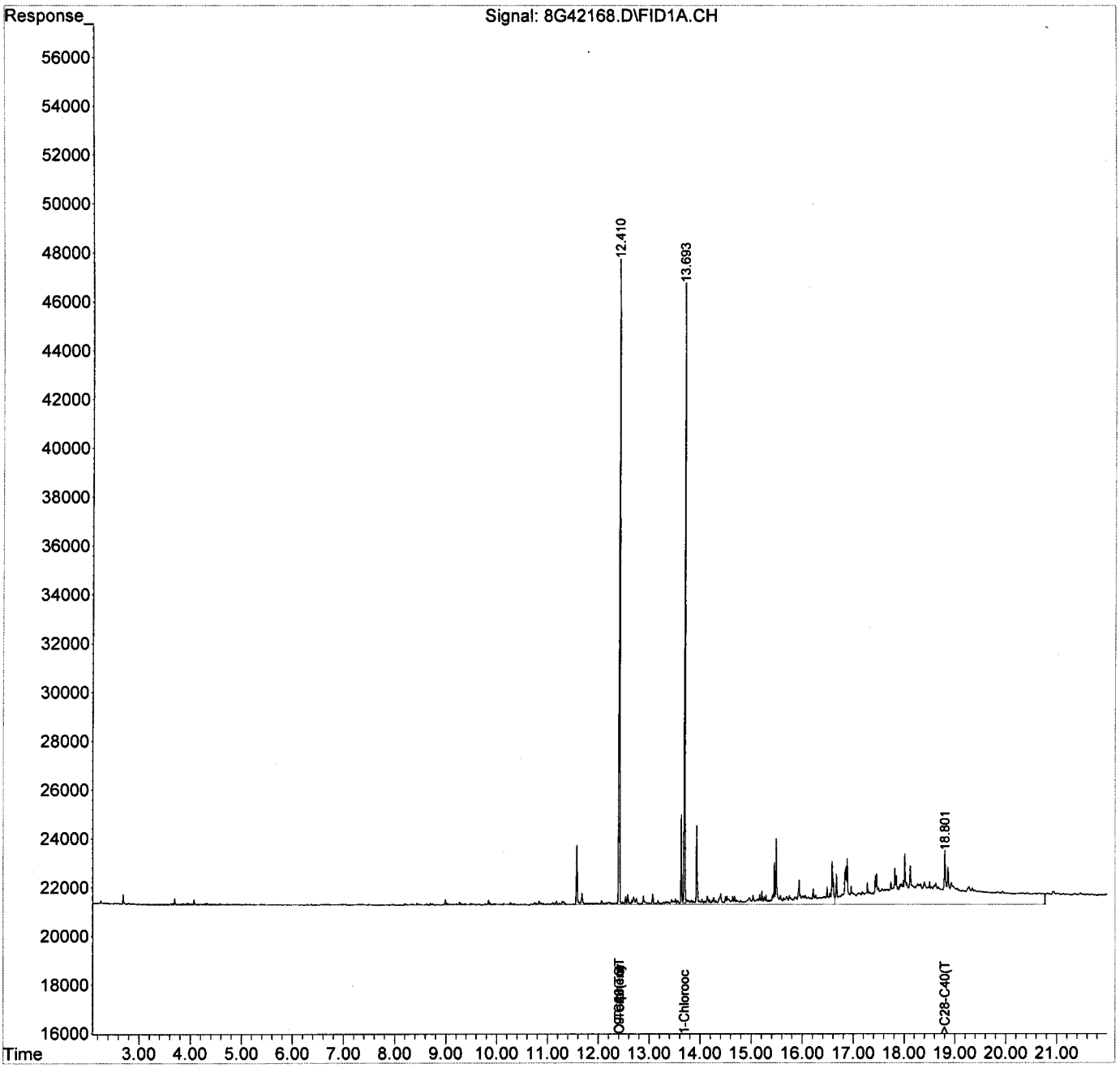
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42168.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 21:47:46
Operator : KD/RAK/MS
Sample : AC73771-001
Misc : S.TPH
ALS Vial : 37 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:00:04 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Form1

ORGANICS REPORT

Sample Number: AC73771-002
Client Id: BB-COMP-2-0801113
Data File: 8G42169.D
Analysis Date: 08/03/13 22:17
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: NJEPHRev3A
Matrix: Soil
Initial Vol: 10g
Final Vol: 1ml
Dilution: 1
Solids: 89

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
ephc28c40	>C28-C40	67	U	c9toc28	C9-C28	67	U
ephcat1tot	C9-C40 Cat1 Total EPH	67	U				

Worksheet #: 272465

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3080110 0178

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42169.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 22:17:43
Operator : KD/RAK/MS
Sample : AC73771-002
Misc : S.TPH
ALS Vial : 38 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:02:10 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units
System Monitoring Compounds					
21)S	O-Terphenyl	12.410	289030	85.753	
22)S	1-Chlorooctadecane	13.693	219034	85.357	
Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.	
2)AT	n-Decane (C10)	0.000	0	N.D.	d
3)	Naphthalene	0.000	0	N.D.	d
4)AT	n-Dodecane (C12)	0.000	0	N.D.	d
5)	2-Methylnaphthalene	0.000	0	N.D.	d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.	d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.	d
8)AT	n-Octadecane (C18)	0.000	0	N.D.	d
9)AT	n-Eicosane (C20)	0.000	0	N.D.	d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.	d
11)AT	n-Docosane (C22)	0.000	0	N.D.	d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.	d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.	d
14)AT	n-Octacosane (C28)	0.000	0	N.D.	d
15)BT	n-Triacontane (C30)	0.000	0	N.D.	d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.	d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.	d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.	d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.	d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.	d
23)A	C9-C28(Total)	12.410f	1003473	372.617	m
24)B	>C28-C40(Total)	16.854	1419064	586.722	m
25)t	C9-C40(TOTAL)	12.410f	2421858	930.921	m

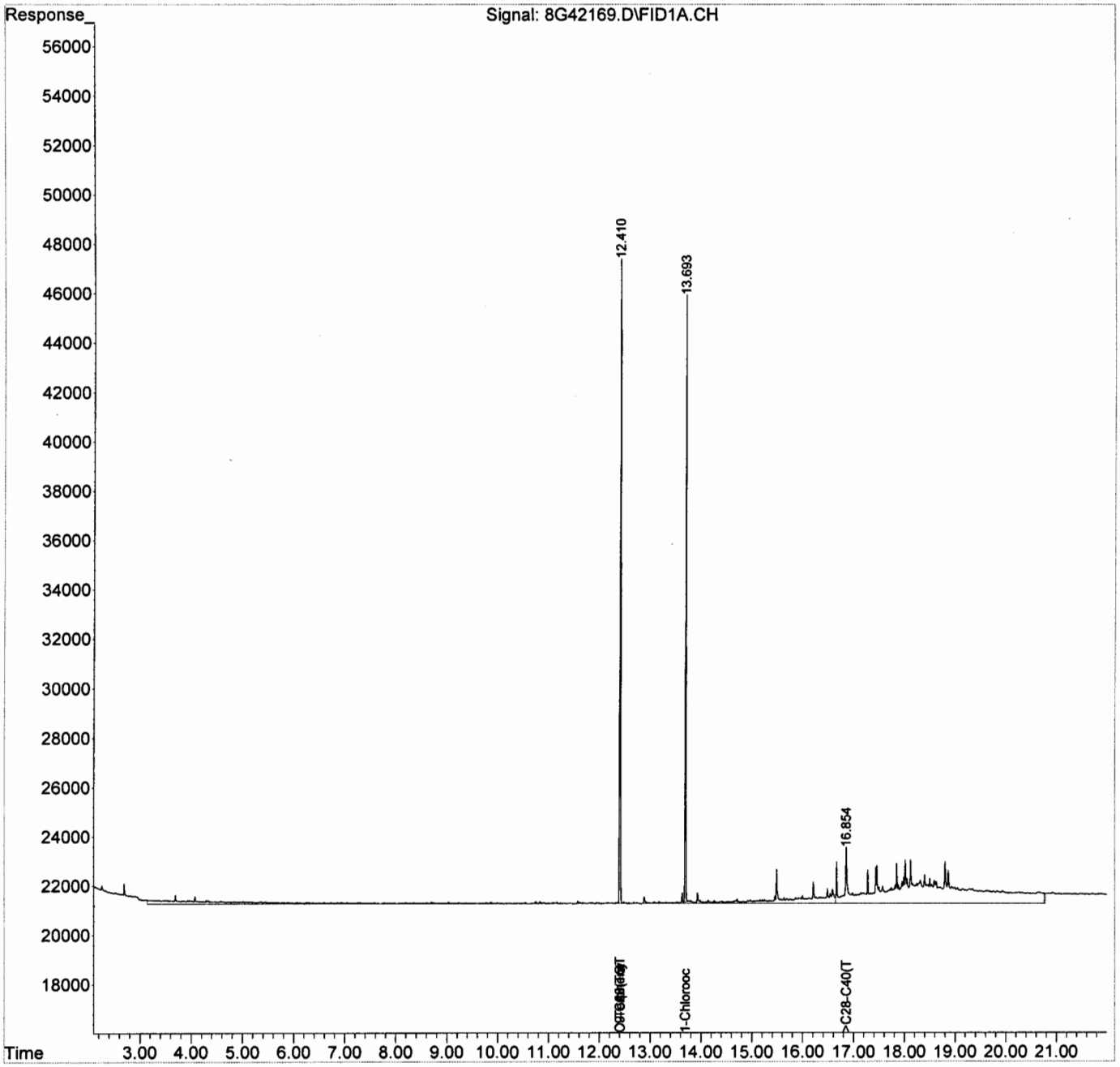
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42169.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 22:17:43
Operator : KD/RAK/MS
Sample : AC73771-002
Misc : S.TPH
ALS Vial : 38 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:02:10 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



EPH Category 1 Data
QC Summary

FORM2

Surrogate Recovery

Method: NJEPHRev3A

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column0 S3 Recov	Column0 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
8G42131.D	SMB25787	Soil	08/02/13 16:46	1		85	87				
8G42168.D	AC73771-001	Soil	08/03/13 21:47	1		88	89				
8G42169.D	AC73771-002	Soil	08/03/13 22:17	1		86	85				
8G42132.D	SMB25787(M	Soil	08/02/13 17:17	1		100	103				
8G42133.D	SMB25787(M	Soil	08/02/13 17:47	1		107	109				
8G42134.D	SMB25787(DI	Soil	08/02/13 18:18	1		95	95				
8G42135.D	SMB25787(DI	Soil	08/02/13 18:48	1		115	115				
8G42197.D	AC73723-001(	Soil	08/04/13 13:49	10		105	104				
8G42198.D	AC73723-001(	Soil	08/04/13 14:19	10		81	75				
8G42199.D	AC73723-001(	Soil	08/04/13 14:50	10		89	93				

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: NJEPHRev3A

Soil Limits

Compound	Spike Amt	Limits
S1=O-Terphenyl	100	40-140
S2=1-Chlorooctadecane	100	40-140

Form3
Recovery Data
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42132.D	SMB25787(MS)	8/2/2013 5:17:22 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	65.98	0	100	66	25	140
n-Decane (C10)	1	88.55	0	100	89	40	140
n-Dodecane (C12)	1	108.25	0	100	108	40	140
n-Tetradecane (C14)	1	111.02	0	100	111	40	140
n-Hexadecane (C16)	1	110.08	0	100	110	40	140
n-Octadecane (C18)	1	104.86	0	100	105	40	140
n-Eicosane (C20)	1	103.68	0	100	104	40	140
n-Heneicosane (C21)	1	102.65	0	100	103	40	140
n-Docosane (C22)	1	101.33	0	100	101	40	140
n-Tetracosane (C24)	1	99.72	0	100	100	40	140
n-Hexacosane (C26)	1	101.24	0	100	101	40	140
n-Octacosane (C28)	1	100.01	0	100	100	40	140
n-Triacontane (C30)	1	100.35	0	100	100	40	140
n-Dotriacontane(C32)	1	101.17	0	100	101	40	140
n-Tetratriacontane (C34)	1	102.99	0	100	103	40	140
n-Hexatriacontane (C36)	1	104.33	0	100	104	40	140
n-Octatriacontane (C38)	1	104.66	0	100	105	40	140
n-Tetracontane (C40)	1	106.1	0	100	106	40	140

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42133.D	SMB25787(MSD)	8/2/2013 5:47:46 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	78.21	0	100	78	25	140
n-Decane (C10)	1	98.51	0	100	99	40	140
n-Dodecane (C12)	1	117.76	0	100	118	40	140
n-Tetradecane (C14)	1	122.66	0	100	123	40	140
n-Hexadecane (C16)	1	124.16	0	100	124	40	140
n-Octadecane (C18)	1	118.69	0	100	119	40	140
n-Eicosane (C20)	1	115.04	0	100	115	40	140
n-Heneicosane (C21)	1	111.89	0	100	112	40	140
n-Docosane (C22)	1	109.56	0	100	110	40	140
n-Tetracosane (C24)	1	103.69	0	100	104	40	140
n-Hexacosane (C26)	1	102.23	0	100	102	40	140
n-Octacosane (C28)	1	98.82	0	100	99	40	140
n-Triacontane (C30)	1	98.74	0	100	99	40	140
n-Dotriacontane(C32)	1	100.02	0	100	100	40	140
n-Tetratriacontane (C34)	1	102.66	0	100	103	40	140
n-Hexatriacontane (C36)	1	104.08	0	100	104	40	140
n-Octatriacontane (C38)	1	105.44	0	100	105	40	140
n-Tetracontane (C40)	1	107.49	0	100	107	40	140

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42134.D	SMB25787(DIESEL)(MS)	8/2/2013 6:18:13 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
C9-C28	1	3081.19	0	3000	103	40	140

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42135.D	SMB25787(DIESEL)(MSD)	8/2/2013 6:48:43 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
C9-C28	1	3639.08	0	3000	121	40	140

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42133.D	SMB25787(MSD)	8/2/2013 5:47:46 PM
Duplicate(If applicable):	8G42132.D	SMB25787(MS)	8/2/2013 5:17:22 PM
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Nonane (C9)	1	78.21	65.98	17	25
n-Decane (C10)	1	98.51	88.55	11	25
n-Dodecane (C12)	1	117.76	108.25	8.4	25
n-Tetradecane (C14)	1	122.66	111.02	10	25
n-Hexadecane (C16)	1	124.16	110.08	12	25
n-Octadecane (C18)	1	118.69	104.86	12	25
n-Eicosane (C20)	1	115.04	103.68	10	25
n-Heneicosane (C21)	1	111.89	102.65	8.6	25
n-Docosane (C22)	1	109.56	101.33	7.8	25
n-Tetracosane (C24)	1	103.69	99.72	3.9	25
n-Hexacosane (C26)	1	102.23	101.24	0.97	25
n-Octacosane (C28)	1	98.82	100.01	1.2	25
n-Triacontane (C30)	1	98.74	100.35	1.6	25
n-Dotriacontane(C32)	1	100.02	101.17	1.1	25
n-Tetratriacontane (C34)	1	102.66	102.99	0.32	25
n-Hexatriacontane (C36)	1	104.08	104.33	0.24	25
n-Octatriacontane (C38)	1	105.44	104.66	0.74	25
n-Tetracontane (C40)	1	107.49	106.1	1.3	25

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42135.D	SMB25787(DIESEL)(MSD)	8/2/2013 6:48:43 PM
Duplicate(If applicable):	8G42134.D	SMB25787(DIESEL)(MS)	8/2/2013 6:18:13 PM
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
C9-C28	1	3639.08	3081.19	17	25

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Form3
Recovery Data
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42197.D	AC73723-001(10X)(MS)	8/4/2013 1:49:50 PM
Non Spike(If applicable):	8G42199.D	AC73723-001(10X)	8/4/2013 2:50:19 PM
Inst Blank(If applicable):	8G42190.D	INST BLK(MECL2)	8/4/2013 10:18:27 AM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	0	0	100	0*	25	140
n-Decane (C10)	1	0	0	100	0*	40	140
n-Dodecane (C12)	1	103	0	100	103	40	140
n-Tetradecane (C14)	1	110.7	0	100	111	40	140
n-Hexadecane (C16)	1	119.8	0	100	120	40	140
n-Octadecane (C18)	1	115.3	0	100	115	40	140
n-Eicosane (C20)	1	110.5	0	100	110	40	140
n-Heneicosane (C21)	1	112	0	100	112	40	140
n-Docosane (C22)	1	110.9	0	100	111	40	140
n-Tetracosane (C24)	1	0	0	100	0*	40	140
n-Hexacosane (C26)	1	100	0	100	100	40	140
n-Octacosane (C28)	1	0	0	100	0*	40	140
n-Triacontane (C30)	1	0	0	100	0*	40	140
n-Dotriacontane(C32)	1	0	0	100	0*	40	140
n-Tetratriacontane (C34)	1	100.6	0	100	101	40	140
n-Hexatriacontane (C36)	1	112.4	0	100	112	40	140
n-Octatriacontane (C38)	1	102.8	0	100	103	40	140
n-Tetracontane (C40)	1	110.4	0	100	110	40	140

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42198.D	AC73723-001(10X)(DUP)	8/4/2013 2:19:57 PM
Duplicate(If applicable):	8G42199.D	AC73723-001(10X)	8/4/2013 2:50:19 PM
Inst Blank(If applicable):	8G42190.D	INST BLK(MECL2)	8/4/2013 10:18:27 AM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: DUP

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
C9-C28	1	0	0	NA	50
>C28-C40	1	7217.9	10146.4	34	50
C9-C40	1	8580.7	13141.5	42	50

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: SMB25787
Blank Data File: 8G42131.D
Matrix: Soil

Blank Analysis Date: 08/02/13 16:46
Blank Extraction Date: 08/02/13
(If Applicable)
Method: NJEPHRev3A

Sample Number	Data File	Analysis Date
AC73771-001	8G42168.D	08/03/13 21:47
AC73771-002	8G42169.D	08/03/13 22:17
AC73723-001(10X)	8G42199.D	08/04/13 14:50
AC73723-001(10X)	8G42198.D	08/04/13 14:19
AC73723-001(10X)	8G42197.D	08/04/13 13:49
SMB25787(DIESE	8G42135.D	08/02/13 18:48
SMB25787(DIESE	8G42134.D	08/02/13 18:18
SMB25787(MSD)	8G42133.D	08/02/13 17:47
SMB25787(MS)	8G42132.D	08/02/13 17:17

Form 5

Method: NJEPHRev3A

Instrument: GC_8 Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8G41617.D	INST BLK(MECL2)	07/15/13 08:12	Soil					
8G41618.D	CALDTH AL@100PPM	07/15/13 09:13	Soil	8G41618.	12.4312	0		
8G41619.D	CALDTH AL@500PPM	07/15/13 09:45	Soil	8G41618.	12.4501	0.1519		
8G41620.D	CALDTH AL@300PPM	07/15/13 10:15	Soil	8G41618.	12.4405	0.0748		
8G41621.D	CALDTH AL@200PPM	07/15/13 10:45	Soil	8G41618.	12.4358	0.037		
8G41622.D	CALDTH AL@100PPM	07/15/13 11:16	Soil	8G41618.	12.4302	0.008		
8G41623.D	CALDTH AL@50PPM	07/15/13 11:46	Soil	8G41618.	12.4278	0.0274		
8G41624.D	CALDTH AL@10PPM	07/15/13 12:17	Soil	8G41618.	12.4250	0.0499		
8G41625.D	@100PPM	07/15/13 12:48	Soil	8G41618.	12.4309	0.0024		
8G41626.D	@100PPM	07/15/13 13:19	Soil	8G41618.	12.4313	0.0008		
8G41627.D	ICV DTH AL@100PPM	07/15/13 13:57	Soil	8G41618.	12.4322	0.008		
8G41628.D	INST BLK(MECL2)	07/15/13 14:28	Soil	8G41618.	0.0000	200*		
8G41629.D	AC73363-005	07/15/13 14:59	Soil	8G41618.	12.4290	0.0177		
8G41630.D	AC73363-004(5X)	07/15/13 15:30	Soil	8G41618.	12.4266	0.037		
8G41631.D	AC73406-002	07/15/13 16:01	Soil	8G41618.	12.4300	0.0097		
8G41632.D	AC73382-001	07/15/13 16:32	Soil	8G41618.	12.4302	0.008		
8G41633.D	AC73382-002	07/15/13 17:03	Soil	8G41618.	12.4304	0.0064		
8G41634.D	AC73382-003	07/15/13 17:34	Soil	8G41618.	12.4302	0.008		
8G41635.D	AC73383-001	07/15/13 18:05	Soil	8G41618.	12.4303	0.0072		
8G41636.D	AC73406-003	07/15/13 18:36	Soil	8G41618.	12.4318	0.0048		
8G41637.D	AC73406-005	07/15/13 19:06	Soil	8G41618.	12.4305	0.0056		
8G41638.D	AC73406-004	07/15/13 19:37	Soil	8G41618.	12.4315	0.0024		
8G41639.D	AC73348-005	07/15/13 20:08	Soil	8G41618.	12.4319	0.0056		
8G41640.D	TEST	07/15/13 20:39	Soil	8G41618.	0.0000	200*		
8G41641.D	CALDTH AL@100PPM	07/15/13 21:10	Soil	8G41618.	12.4322	0.008		
8G41642.D	100PPM	07/15/13 22:11	Soil	8G41641.	12.4326	0.0032		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: NJEPHRev3A

Instrument: GC_8 Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8G42127.D	INST BLK(MECL2)	08/02/13 14:45	Soil					
8G42128.D	100PPM	08/02/13 15:15	Soil					
8G42129.D	CALDTH AL@100PPM	08/02/13 15:45	Soil	8G42129.	12.4141	0		
8G42130.D	INST BLK(MECL2)	08/02/13 16:16	Soil	8G42129.	0.0000	200 *		
8G42131.D	SMB25787	08/02/13 16:46	Soil	8G42129.	12.4127	0.0113		
8G42132.D	SMB25787(MS)	08/02/13 17:17	Soil	8G42129.	12.4133	0.0064		
8G42133.D	SMB25787(MSD)	08/02/13 17:47	Soil	8G42129.	12.4138	0.0024		
8G42134.D	SMB25787(DIESEL)(MS	08/02/13 18:18	Soil	8G42129.	12.4140	0.0008		
8G42135.D	SMB25787(DIESEL)(MS	08/02/13 18:48	Soil	8G42129.	12.4150	0.0073		
8G42136.D	SMB25742(DIESEL)(MS	08/02/13 19:19	Soil	8G42129.	12.4146	0.004		
8G42137.D	SMB25742(DIESEL)(MS	08/02/13 19:49	Soil	8G42129.	12.4160	0.0153		
8G42138.D	SMB25772(MS)	08/02/13 20:19	Soil	8G42129.	12.4136	0.004		
8G42139.D	SMB25772(MSD)	08/02/13 20:50	Soil	8G42129.	12.4136	0.004		
8G42140.D	AC73713-001(MS)	08/02/13 21:20	Soil	8G42129.	12.4110	0.025		
8G42141.D	AC73713-001(DUP)	08/02/13 21:50	Soil	8G42129.	12.4120	0.0169		
8G42142.D	AC73713-001	08/02/13 22:20	Soil	8G42129.	12.4127	0.0113		
8G42143.D	AC73713-002	08/02/13 22:51	Soil	8G42129.	12.4137	0.0032		
8G42144.D	AC73716-008	08/02/13 23:21	Soil	8G42129.	12.4115	0.0209		
8G42145.D	AC73706-007	08/02/13 23:51	Soil	8G42129.	12.4115	0.0209		
8G42146.D	AC73706-013	08/03/13 00:21	Soil	8G42129.	12.4110	0.025		
8G42147.D	AC73706-001	08/03/13 00:51	Soil	8G42129.	12.4114	0.0218		
8G42148.D	TEST	08/03/13 01:21	Soil	8G42129.	0.0000	200 *		
8G42149.D	100PPM	08/03/13 11:43	Soil	8G42129.	12.4156	0.0121		
8G42150.D	CALDTH AL@100PPM	08/03/13 12:15	Soil	8G42129.	12.4134	0.0056		
8G42151.D	INST BLK(MECL2)	08/03/13 13:15	Soil	8G42150.	0.0000	200 *		
8G42152.D	SMB25786	08/03/13 13:45	Soil	8G42150.	12.4119	0.0121		
8G42153.D	SMB25786(DIESEL)(MS	08/03/13 14:15	Soil	8G42150.	12.4121	0.0105		
8G42154.D	AC73713-006	08/03/13 14:45	Soil	8G42150.	12.4097	0.0298		
8G42155.D	AC73713-007	08/03/13 15:16	Soil	8G42150.	12.4107	0.0218		
8G42156.D	AC73713-009	08/03/13 15:46	Soil	8G42150.	12.4106	0.0226		
8G42157.D	AC73672-002(R)	08/03/13 16:16	Soil	8G42150.	12.4105	0.0234		
8G42158.D	AC73706-010	08/03/13 16:46	Soil	8G42150.	12.4110	0.0193		
8G42159.D	AC73706-019	08/03/13 17:16	Soil	8G42150.	12.4104	0.0242		
8G42160.D	AC73706-025	08/03/13 17:47	Soil	8G42150.	12.4110	0.0193		
8G42161.D	AC73713-008	08/03/13 18:17	Soil	8G42150.	12.4121	0.0105		
8G42162.D	73732-001	08/03/13 18:47	Soil	8G42150.	12.4221	0.0701		
8G42163.D	AC73732-005	08/03/13 19:17	Soil	8G42150.	12.4688	0.4453		
8G42164.D	AC73669-007	08/03/13 19:47	Soil	8G42150.	12.4111	0.0185		
8G42165.D	AC73706-028	08/03/13 20:17	Soil	8G42150.	12.4106	0.0226		
8G42166.D	AC73706-022	08/03/13 20:47	Soil	8G42150.	12.4105	0.0234		
8G42167.D	AC73706-031	08/03/13 21:17	Soil	8G42150.	12.4103	0.025		
8G42168.D	AC73771-001	08/03/13 21:47	Soil	8G42150.	12.4103	0.025		
8G42169.D	AC73771-002	08/03/13 22:17	Soil	8G42150.	12.4100	0.0274		
8G42170.D	TEST	08/03/13 22:47	Soil	8G42150.	0.0000	200 *		
8G42171.D	CALDTH AL@100PPM	08/03/13 23:17	Soil	8G42150.	12.4119	0.0121		
8G42172.D	100PPM	08/04/13 00:17	Soil	8G42171.	12.4127	0.0064		
8G42173.D	INST BLK(MECL2)	08/04/13 01:17	Soil	8G42171.	0.0000	200 *		
8G42174.D	AC73706-016	08/04/13 01:47	Soil	8G42171.	12.4104	0.0121		
8G42175.D	AC73706-004	08/04/13 02:17	Soil	8G42171.	12.4103	0.0129		
8G42176.D	AC73713-004	08/04/13 02:47	Soil	8G42171.	12.4199	0.0644		
8G42177.D	AC73713-012	08/04/13 03:17	Soil	8G42171.	12.4423	0.2446		
8G42178.D	AC73708-001	08/04/13 03:47	Soil	8G42171.	12.4113	0.0048		
8G42179.D	AC73708-004	08/04/13 04:17	Soil	8G42171.	12.4098	0.0169		
8G42180.D	AC73672-001(5X)	08/04/13 04:47	Soil	8G42171.	12.4073	0.0371		
8G42181.D	AC73685-015(5X)	08/04/13 05:17	Soil	8G42171.	12.4074	0.0363		
8G42182.D	AC73685-017(10X)	08/04/13 05:47	Soil	8G42171.	12.4066	0.0427		
8G42183.D	AC73723-001(20X)(MS)	08/04/13 06:17	Soil	8G42171.	12.4069	0.0403		
8G42184.D	AC73723-001(20X)(DUP	08/04/13 06:47	Soil	8G42171.	12.4063	0.0451		
8G42185.D	AC73723-001(20X)	08/04/13 07:17	Soil	8G42171.	12.4065	0.0435		
8G42186.D	TEST	08/04/13 07:47	Soil	8G42171.	0.0000	200 *		
8G42187.D	CALDTH AL@100PPM	08/04/13 08:17	Soil	8G42171.	12.4114	0.004		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: NJEPHRev3A

Instrument: GC_8 Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8G42188.D	INST BLK(MECL2)	08/04/13 08:48	Soil					
8G42189.D	CALDTH AL@100PPM	08/04/13 09:48	Soil	8G42189.	12.4103	0		
8G42190.D	INST BLK(MECL2)	08/04/13 10:18	Soil	8G42189.	0.0000	200 *		
8G42191.D	SMB25791	08/04/13 10:48	Soil	8G42189.	12.4096	0.0056		
8G42192.D	MBS25791	08/04/13 11:18	Soil	8G42189.	12.4094	0.0073		
8G42193.D	SMB25791(MSD)	08/04/13 11:49	Soil	8G42189.	12.4117	0.0113		
8G42194.D	AC73729-001(MS)	08/04/13 12:19	Soil	8G42189.	12.4114	0.0089		
8G42195.D	AC73729-001DUP)	08/04/13 12:49	Soil	8G42189.	12.4098	0.004		
8G42196.D	AC73729-001	08/04/13 13:19	Soil	8G42189.	12.4104	0.0008		
8G42197.D	AC73723-001(10X)(MS)	08/04/13 13:49	Soil	8G42189.	12.4062	0.033		
8G42198.D	AC73723-001(10X)(DUP	08/04/13 14:19	Soil	8G42189.	12.4058	0.0363		
8G42199.D	AC73723-001(10X)	08/04/13 14:50	Soil	8G42189.	12.4059	0.0355		
8G42200.D	AC73760-001(10X)	08/04/13 15:20	Soil	8G42189.	12.4056	0.0379		
8G42201.D	AC73760-002(10X)	08/04/13 15:50	Soil	8G42189.	12.4052	0.0411		
8G42202.D	AC73713-008(10X)	08/04/13 16:20	Soil	8G42189.	12.4060	0.0347		
8G42203.D	AC73713-012(10X)	08/04/13 16:50	Soil	8G42189.	12.4058	0.0363		
8G42204.D	AC73760-003(10X)	08/04/13 17:20	Soil	8G42189.	12.4050	0.0427		
8G42205.D	AC73708-002	08/04/13 17:50	Soil	8G42189.	12.4100	0.0024		
8G42206.D	AC73708-003	08/04/13 18:20	Soil	8G42189.	12.4097	0.0048		
8G42207.D	AC73672-001(5X)	08/04/13 18:50	Soil	8G42189.	12.4061	0.0338		
8G42208.D	AC73729-022	08/04/13 19:20	Soil	8G42189.	12.4084	0.0153		
8G42209.D	AC73729-010	08/04/13 19:50	Soil	8G42189.	12.4094	0.0073		
8G42210.D	AC73729-013	08/04/13 20:20	Soil	8G42189.	12.4094	0.0073		
8G42211.D	CALDTH AL@100PPM	08/05/13 08:00	Soil	8G42189.	12.4154	0.0411		
8G42212.D	INST BLK(MECL2)	08/05/13 08:37	Soil	8G42211.	0.0000	200 *		
8G42213.D	AC73729-007	08/05/13 09:16	Soil	8G42211.	12.4103	0.0411		
8G42214.D	TEST	08/05/13 09:46	Soil	8G42211.	12.4098	0.0451		
8G42215.D	AC73729-031	08/05/13 10:19	Soil	8G42211.	12.4073	0.0653		
8G42216.D	AC73729-028	08/05/13 10:49	Soil	8G42211.	12.4065	0.0717		
8G42217.D	AC73729-019	08/05/13 11:19	Soil	8G42211.	12.4053	0.0814		
8G42218.D	AC73729-016	08/05/13 11:49	Soil	8G42211.	12.4060	0.0757		
8G42219.D	AC73729-055	08/05/13 12:20	Soil	8G42211.	12.4059	0.0765		
8G42220.D	AC73729-058	08/05/13 12:50	Soil	8G42211.	12.4057	0.0782		
8G42221.D	AC73729-034	08/05/13 13:20	Soil	8G42211.	12.4069	0.0685		
8G42222.D	AC73732-005(100X)	08/05/13 13:50	Soil	8G42211.	12.3906	0.1999		
8G42223.D	AC73760-002(20X)	08/05/13 14:20	Soil	8G42211.	0.0000	200 *		
8G42224.D	CALDTH AL@100PPM	08/05/13 14:50	Soil	8G42211.	12.4092	0.0499		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form8

EPH Surrogate Initial Calibration Areas And Area Recovery Limits

Inital Calibration File: 8G41618.D
Analysis Date: 7/15/2013 9:13:00 AM
Analytical Method: NJEPHRev3A

Surrogate	Area Found	Area Limit
1-Chlorooctadecane	253233	126616-506466
O-Terphenyl	326899	163450-653798

Continuing Calibration Data

Data File	TxtSamNum:	Analysis Date	Surrogate: 1-Chlorooctadecane	Surrogate O-Terphenyl
8G42129.D	CALDTH AL@100PPM	8/2/13 15:45	248125	329095
8G42150.D	CALDTH AL@100PPM	8/3/13 12:15	252623	344150
8G42171.D	CALDTH AL@100PPM	8/3/13 23:17	288876	385978
8G42189.D	CALDTH AL@100PPM	8/4/13 09:48	244228	325646
8G42211.D	CALDTH AL@100PPM	8/5/13 08:00	277370	371720

* - Indicates Area Failed Criteria

EPH Category 1 Data
Standards Data

3080110 0193

Form 6
Initial Calibration

Method: NJEPHRev3A

Instrument: GC_8

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	8G41618.	CALDTH AL@100PP	07/15/13 09:13	2	8G41624.	CALDTH AL@10PPM	07/15/13 12:17
3	8G41623.	CALDTH AL@50PPM	07/15/13 11:46	4	8G41621.	CALDTH AL@200PP	07/15/13 10:45
5	8G41620.	CALDTH AL@300PP	07/15/13 10:15	6	8G41619.	CALDTH AL@500PP	07/15/13 09:45

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
n-Nonane (C9)	1	0	Avg	0.2470	0.2406	0.2576	0.2523	0.2732	0.3087	----	----	0.263	3.29	0.992	1.00	9.4	100.0	10.00	50.00	200.0	300.0	500.0		
n-Decane (C10)	1	0	Avg	0.2537	0.2490	0.2664	0.2586	0.2760	0.3102	----	----	0.269	4.35	0.993	1.00	8.3	100.0	10.00	50.00	200.0	300.0	500.0		
Naphthalene	1	0	Avg	0.2932	0.2928	0.3129	0.3030	0.3139	0.3513	----	----	0.311	6.32	0.994	1.00	7.0	100.0	10.00	50.00	200.0	300.0	500.0		
n-Dodecane (C12)	1	0	Avg	0.2566	0.2581	0.2739	0.2655	0.2748	0.3073	----	----	0.273	6.39	0.995	1.00	6.8	100.0	10.00	50.00	200.0	300.0	500.0		
2-Methylnaphthalene	1	0	Avg	0.2896	0.2836	0.3085	0.3009	0.3070	0.3422	----	----	0.305	7.37	0.995	1.00	6.7	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetradecane (C14)	1	0	Avg	0.2611	0.2597	0.2748	0.2694	0.2712	0.3026	----	----	0.273	8.22	0.995	1.00	5.7	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexadecane (C16)	1	0	Avg	0.2610	0.2622	0.2768	0.2732	0.2690	0.2955	----	----	0.273	9.89	0.997	1.00	4.6	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octadecane (C18)	1	0	Avg	0.2622	0.2680	0.2788	0.2744	0.2649	0.2846	----	----	0.272	11.65	0.998	0.999	3.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Eicosane (C20)	1	0	Avg	0.2642	0.2735	0.2801	0.2774	0.2635	0.2745	----	----	0.272	13.19	0.999	0.999	2.5	100.0	10.00	50.00	200.0	300.0	500.0		
n-Heneicosane (C21)	1	0	Avg	0.2668	0.2758	0.2833	0.2805	0.2647	0.2706	----	----	0.274	13.77	0.999	0.999	2.7	100.0	10.00	50.00	200.0	300.0	500.0		
n-Docosane (C22)	1	0	Avg	0.2657	0.2765	0.2813	0.2796	0.2627	0.2629	----	----	0.271	14.28	0.999	0.999	3.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetracosane (C24)	1	0	Avg	0.2671	0.2723	0.2828	0.2805	0.2612	0.2504	----	----	0.269	15.14	0.998	0.999	4.5	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexacosane (C26)	1	0	Avg	0.2639	0.2700	0.2784	0.2760	0.2557	0.2347	----	----	0.263	15.89	0.994	1.00	6.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octacosane (C28)	1	0	Avg	0.2629	0.2653	0.2761	0.2716	0.2521	0.2233	----	----	0.259	16.55	0.990	1.00	7.4	100.0	10.00	50.00	200.0	300.0	500.0		
n-Triacontane (C30)	1	0	Avg	0.2647	0.2633	0.2768	0.2700	0.2523	0.2189	----	----	0.258	17.16	0.988	1.00	8.0	100.0	10.00	50.00	200.0	300.0	500.0		
n-Dotriacontane(C32)	1	0	Avg	0.2600	0.2577	0.2702	0.2627	0.2471	0.2163	----	----	0.252	17.74	0.989	1.00	7.6	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetratriacontane (C34)	1	0	Avg	0.2505	0.2468	0.2569	0.2517	0.2388	0.2159	----	----	0.243	18.30	0.994	1.00	6.1	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexatriacontane (C36)	1	0	Avg	0.2445	0.2387	0.2505	0.2492	0.2381	0.2221	----	----	0.241	18.91	0.997	1.00	4.3	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octatriacontane (C38)	1	0	Avg	0.2330	0.2306	0.2389	0.2401	0.2313	0.2197	----	----	0.232	19.68	0.998	1.00	3.1	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetracontane (C40)	1	0	Avg	0.2242	0.2232	0.2286	0.2318	0.2249	0.2155	----	----	0.225	20.69	0.999	1.00	2.5	100.0	10.00	50.00	200.0	300.0	500.0		
O-Terphenyl	1	0	Avg	0.3269	0.3329	0.3415	0.3385	0.3257	0.3566	----	----	0.337	12.43	0.997	0.999	3.4	100.0	10.00	50.00	200.0	300.0	500.0		
1-Chlorooctadecane	1	0	Avg	0.2532	0.2554	0.2631	0.2610	0.2470	0.2597	----	----	0.257	13.71	0.999	0.999	2.3	100.0	10.00	50.00	200.0	300.0	500.0		
C9-C28(Total)	1	0	Avg	0.2610	0.2642	0.2759	0.2716	0.2658	0.2771	----	----	0.269	3.29	0.999	1.00	2.4	1200.	120.0	600.0	2400.	3600.	6000.		
>C28-C40(Total)	1	0	Avg	0.2461	0.2434	0.2537	0.2509	0.2387	0.2181	----	----	0.242	16.65	0.995	1.00	5.3	600.0	60.00	300.0	1200.	1800.	3000.		
C9-C40(TOTAL)	1	0	Avg	0.2561	0.2573	0.2685	0.2647	0.2567	0.2574	----	----	0.260	3.29	1.00	1.00	2.0	1800.	180.0	900.0	3600.	5400.	9000.		

Avg Rsd Col 1: 5.25 Avg Rsd Col 2: -1

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Quantitation Report (QT Reviewed)

3080110 0194

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41618.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 09:13:00
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:18:06 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

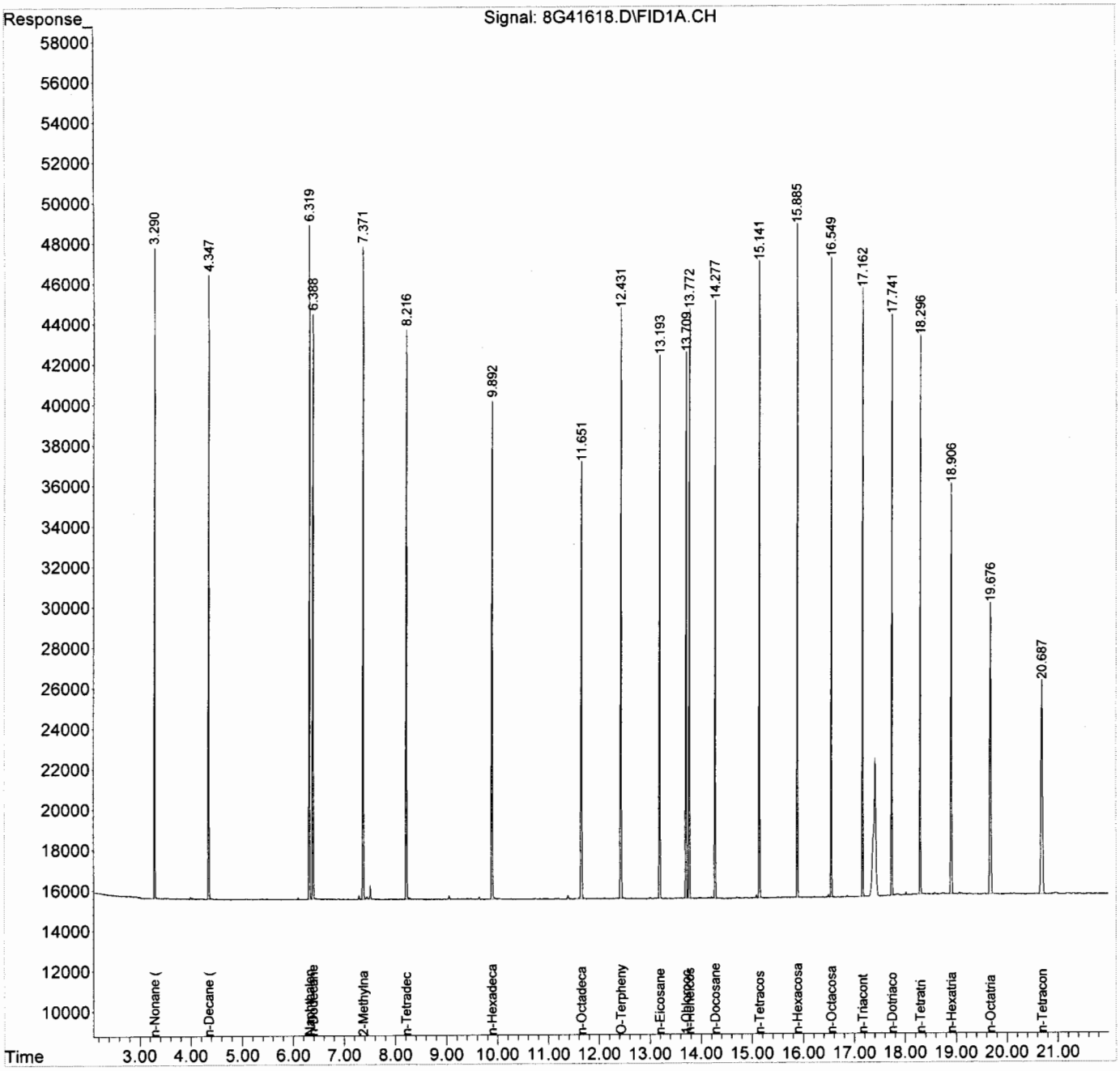
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.431	326899	110.578		
22)S	1-Chlorooctadecane	13.709	253233	110.947		
	Target Compounds					
1)AT	n-Nonane (C9)	3.290	247094	110.367		
2)AT	n-Decane (C10)	4.348	253774	111.243		
3)	Naphthalene	6.319	293239	110.334		
4)AT	n-Dodecane (C12)	6.388	256646	110.669		
5)	2-Methylnaphthalene	7.371	289639	110.289		
6)AT	n-Tetradecane (C14)	8.216	261184	110.715		
7)AT	n-Hexadecane (C16)	9.892	261026	109.717		
8)AT	n-Octadecane (C18)	11.652	262261	109.669		
9)AT	n-Eicosane (C20)	13.193	264260	109.102		
10)AT	n-Heneicosane (C21)	13.773	266837	108.901		
11)AT	n-Docosane (C22)	14.277	265738	108.586		
12)AT	n-Tetracosane (C24)	15.142	267126	108.579		
13)AT	n-Hexacosane (C26)	15.885	263966	108.506		
14)AT	n-Octacosane (C28)	16.549	262899	108.971		
15)BT	n-Triacontane (C30)	17.162	264697	109.248		
16)BT	n-Dotriacontane(C32)	17.741	260075	109.217		
17)BT	n-Tetratriacontane (C34	18.296	250513	109.537		
18)BT	n-Hexatriacontane (C36)	18.906	244549	108.222		
19)BT	n-Octatriacontane (C38)	19.677	233027	107.284		
20)BT	n-Tetracontane (C40)	20.687	224217	107.477		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41618.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 09:13:00
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:18:06 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0196

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41624.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 12:17:34
Operator : KD/RAK/MS
Sample : CALDTH AL@10PPM
Misc : S.TPH
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 13:01:59 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.425	33293	11.262		
22)S	1-Chlorooctadecane	13.705	25543	11.191		
Target Compounds						
1)AT	n-Nonane (C9)	3.289	24061	10.747		
2)AT	n-Decane (C10)	4.346	24907	10.918		
3)	Naphthalene	6.316	29280	11.017		
4)AT	n-Dodecane (C12)	6.386	25811	11.130		
5)	2-Methylnaphthalene	7.367	28365	10.801		
6)AT	n-Tetradecane (C14)	8.213	25974	11.010		
7)AT	n-Hexadecane (C16)	9.889	26223	11.022		
8)AT	n-Octadecane (C18)	11.646	26805	11.209		
9)AT	n-Eicosane (C20)	13.190	27355	11.294		
10)AT	n-Heneicosane (C21)	13.769	27583	11.257		
11)AT	n-Docosane (C22)	14.274	27659	11.302		
12)AT	n-Tetracosane (C24)	15.139	27234	11.070		
13)AT	n-Hexacosane (C26)	15.882	27002	11.099		
14)AT	n-Octacosane (C28)	16.554	26533	10.998		
15)BT	n-Triacontane (C30)	17.189	26333	10.868		
16)BT	n-Dotriacontane(C32)	17.806	25777	10.825		
17)BT	n-Tetratriacontane (C34	18.412	24683	10.792		
18)BT	n-Hexatriacontane (C36)	19.039	23878	10.567		
19)BT	n-Octatriacontane (C38)	19.819	23064	10.618		
20)BT	n-Tetracontane (C40)	20.835	22326	10.702		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

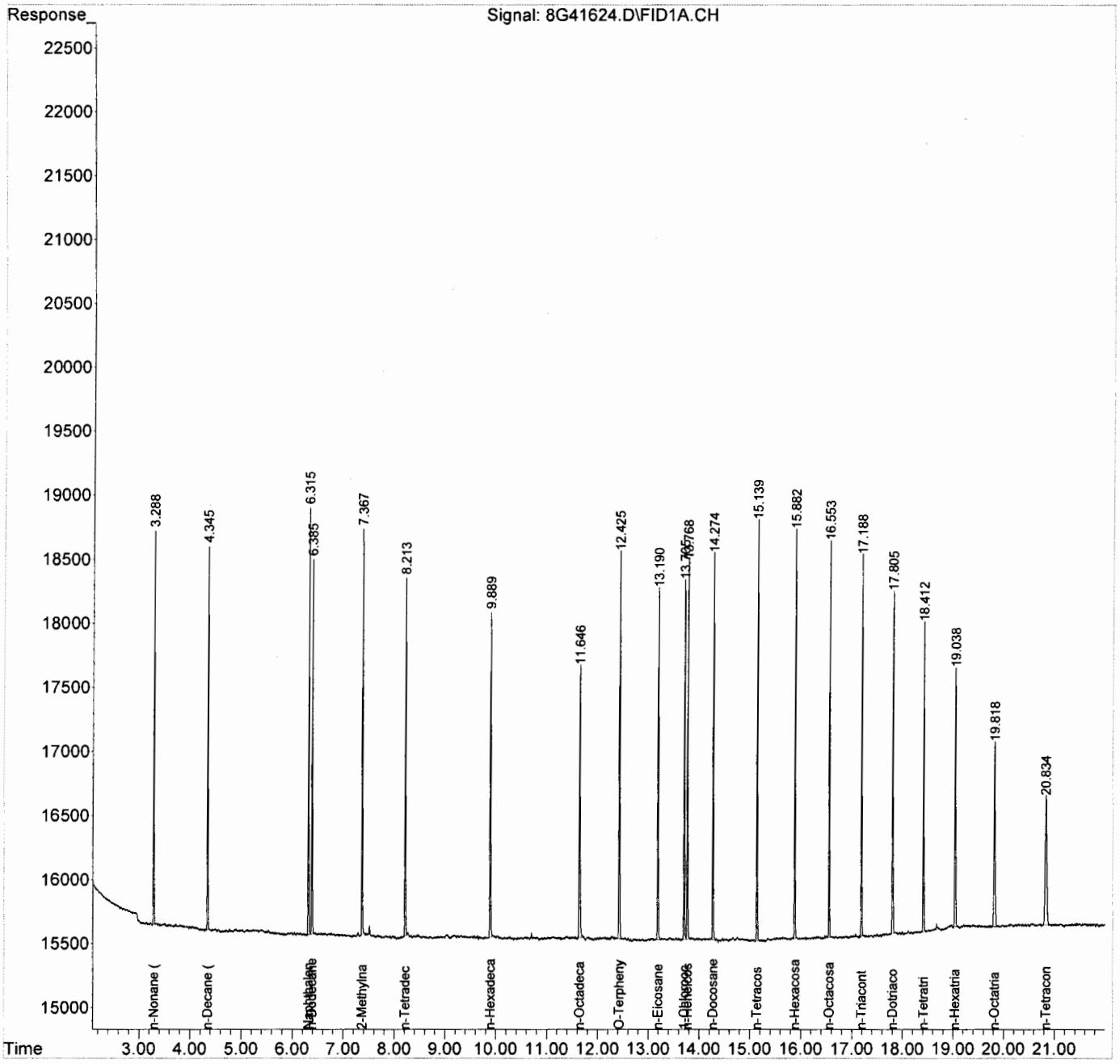
Quantitation Report (QT Reviewed)

3080110 0197

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41624.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 12:17:34
Operator : KD/RAK/MS
Sample : CALDTH AL@10PPM
Misc : S.TPH
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 13:01:59 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0198

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41623.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 11:46:55
Operator : KD/RAK/MS
Sample : CALDTH AL@50PPM
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 12:31:25 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.428	170765	57.763		
22)S	1-Chlorooctadecane	13.707	131587	57.652		
	Target Compounds					
1)AT	n-Nonane (C9)	3.290	128837	57.547		
2)AT	n-Decane (C10)	4.347	133244	58.408		
3)	Naphthalene	6.317	156480	58.877		
4)AT	n-Dodecane (C12)	6.387	136964	59.061		
5)	2-Methylnaphthalene	7.369	154297	58.753		
6)AT	n-Tetradecane (C14)	8.214	137398	58.243		
7)AT	n-Hexadecane (C16)	9.890	138411	58.178		
8)AT	n-Octadecane (C18)	11.648	139428	58.305		
9)AT	n-Eicosane (C20)	13.191	140077	57.832		
10)AT	n-Heneicosane (C21)	13.770	141664	57.816		
11)AT	n-Docosane (C22)	14.275	140655	57.475		
12)AT	n-Tetracosane (C24)	15.139	141407	57.478		
13)AT	n-Hexacosane (C26)	15.882	139242	57.237		
14)AT	n-Octacosane (C28)	16.550	138086	57.236		
15)BT	n-Triacontane (C30)	17.174	138438	57.137		
16)BT	n-Dotriacontane(C32)	17.773	135145	56.753		
17)BT	n-Tetratriacontane (C34	18.355	128453	56.166		
18)BT	n-Hexatriacontane (C36)	18.971	125284	55.443		
19)BT	n-Octatriacontane (C38)	19.747	119462	54.999		
20)BT	n-Tetracontane (C40)	20.761	114306	54.792		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

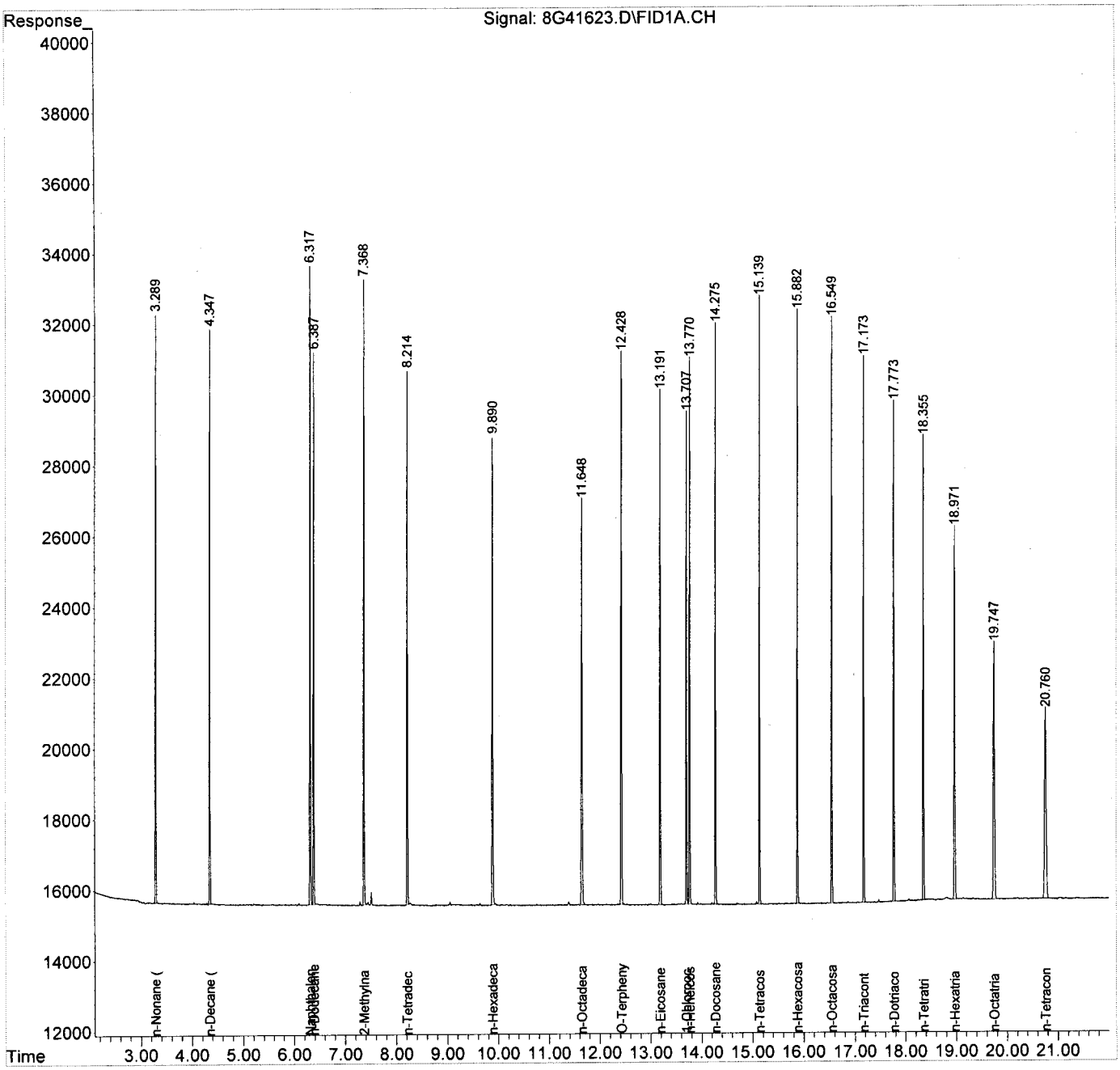
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41623.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 11:46:55
Operator : KD/RAK/MS
Sample : CALDTH AL@50PPM
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 12:31:25 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0200

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41621.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 10:45:52
Operator : KD/RAK/MS
Sample : CALDTH AL@200PPM
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 11:36:32 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

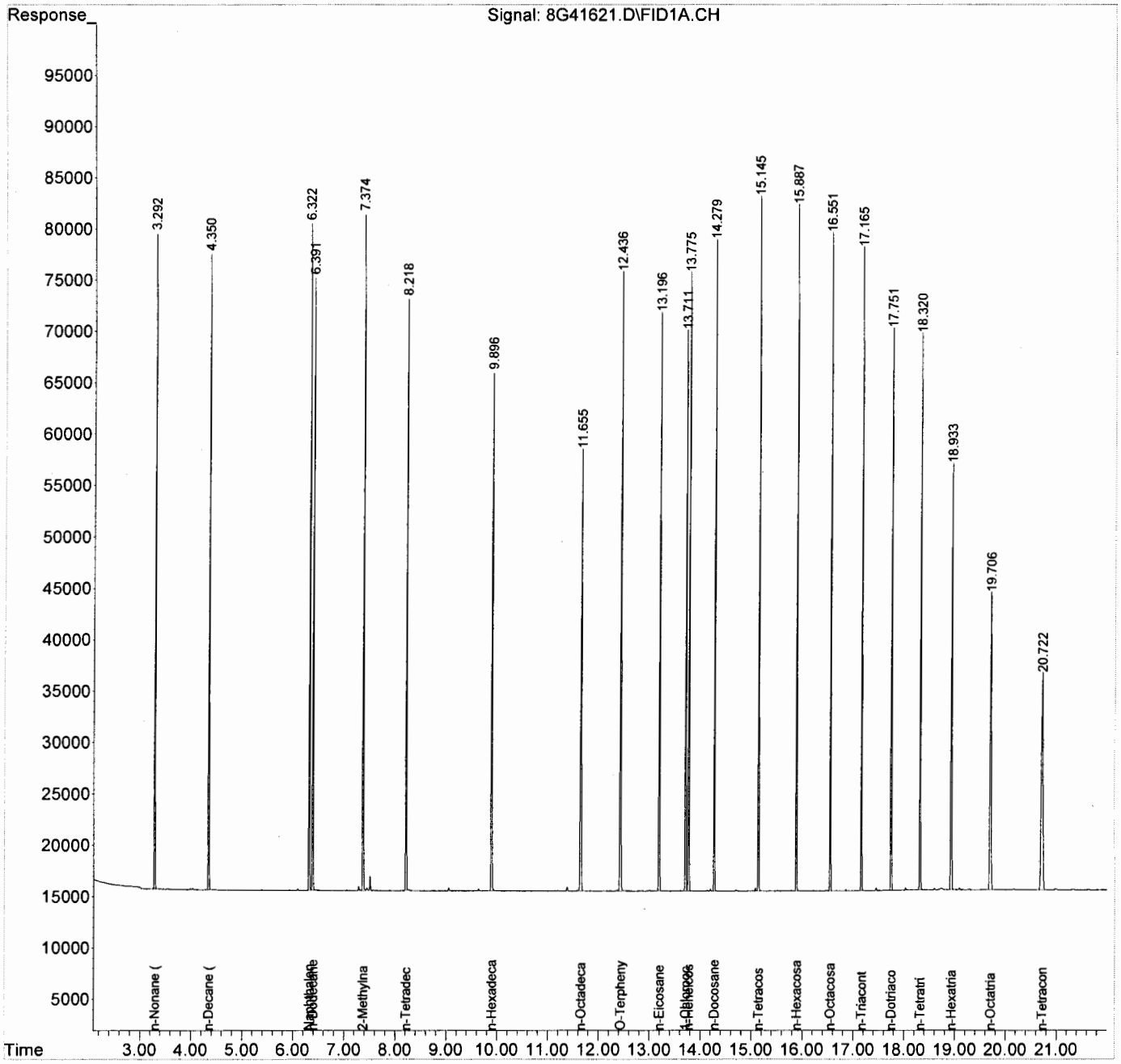
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.436	677022	229.011		
22)S	1-Chlorooctadecane	13.712	522162	228.771		
	Target Compounds					
1)AT	n-Nonane (C9)	3.293	504775	225.463		
2)AT	n-Decane (C10)	4.351	517199	226.716		
3)	Naphthalene	6.322	606087	228.045		
4)AT	n-Dodecane (C12)	6.391	531177	229.051		
5)	2-Methylnaphthalene	7.374	601987	229.225		
6)AT	n-Tetradecane (C14)	8.219	538961	228.465		
7)AT	n-Hexadecane (C16)	9.896	546475	229.700		
8)AT	n-Octadecane (C18)	11.656	548947	229.553		
9)AT	n-Eicosane (C20)	13.196	554812	229.058		
10)AT	n-Heneicosane (C21)	13.775	561131	229.008		
11)AT	n-Docosane (C22)	14.279	559234	228.515		
12)AT	n-Tetracosane (C24)	15.145	561061	228.054		
13)AT	n-Hexacosane (C26)	15.887	552096	226.944		
14)AT	n-Octacosane (C28)	16.551	543297	225.196		
15)BT	n-Triacontane (C30)	17.165	540131	222.927		
16)BT	n-Dotriacontane(C32)	17.751	525452	220.660		
17)BT	n-Tetratriacontane (C34	18.320	503549	220.177		
18)BT	n-Hexatriacontane (C36)	18.934	498587	220.643		
19)BT	n-Octatriacontane (C38)	19.706	480264	221.109		
20)BT	n-Tetracontane (C40)	20.722	463656	222.252		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41621.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 10:45:52
Operator : KD/RAK/MS
Sample : CALDTH AL@200PPM
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 11:36:32 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0202

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41620.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 10:15:28
Operator : KD/RAK/MS
Sample : CALDTH AL@300PPM
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:38:57 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.440	977336	330.596		
22)S	1-Chlorooctadecane	13.714	741044	324.669		
Target Compounds						
1)AT	n-Nonane (C9)	3.296	819746	366.149		
2)AT	n-Decane (C10)	4.354	828043	362.976		
3)	Naphthalene	6.326	941704	354.323		
4)AT	n-Dodecane (C12)	6.394	824461	355.519		
5)	2-Methylnaphthalene	7.378	921071	350.726		
6)AT	n-Tetradecane (C14)	8.222	813731	344.939		
7)AT	n-Hexadecane (C16)	9.899	807092	339.245		
8)AT	n-Octadecane (C18)	11.659	794795	332.359		
9)AT	n-Eicosane (C20)	13.199	790726	326.457		
10)AT	n-Heneicosane (C21)	13.778	794326	324.179		
11)AT	n-Docosane (C22)	14.283	788134	322.048		
12)AT	n-Tetracosane (C24)	15.146	783702	318.551		
13)AT	n-Hexacosane (C26)	15.889	767328	315.417		
14)AT	n-Octacosane (C28)	16.554	756559	313.593		
15)BT	n-Triacontane (C30)	17.170	756954	312.415		
16)BT	n-Dotriacontane(C32)	17.757	741445	311.365		
17)BT	n-Tetratriacontane (C34	18.327	716416	313.253		
18)BT	n-Hexatriacontane (C36)	18.943	714339	316.121		
19)BT	n-Octatriacontane (C38)	19.717	694104	319.559		
20)BT	n-Tetracontane (C40)	20.733	674763	323.445		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

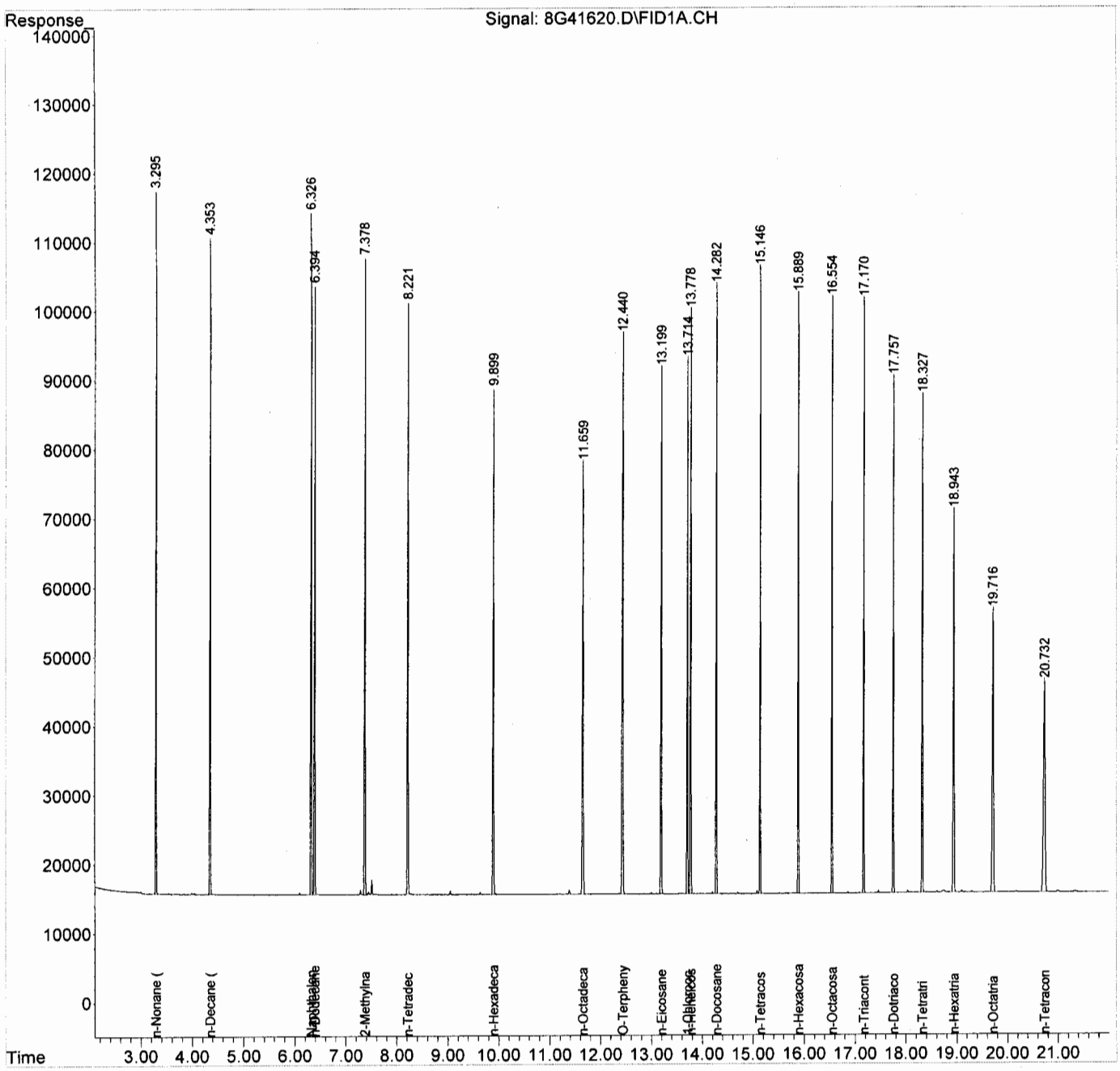
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41620.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 10:15:28
Operator : KD/RAK/MS
Sample : CALDTH AL@300PPM
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:38:57 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0204

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41619.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 09:45:05
Operator : KD/RAK/MS
Sample : CALDTH AL@500PPM
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:18:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.450	1783225	603.197		
22)S	1-Chlorooctadecane	13.720	1298611	568.952		
Target Compounds						
1)AT	n-Nonane (C9)	3.302	1543495	689.419		
2)AT	n-Decane (C10)	4.360	1551256	679.999		
3)	Naphthalene	6.333	1756479	660.888		
4)AT	n-Dodecane (C12)	6.401	1536749	662.667		
5)	2-Methylnaphthalene	7.386	1711111	651.558		
6)AT	n-Tetradecane (C14)	8.228	1513025	641.368		
7)AT	n-Hexadecane (C16)	9.908	1477636	621.096		
8)AT	n-Octadecane (C18)	11.668	1423159	595.122		
9)AT	n-Eicosane (C20)	13.206	1372655	566.710		
10)AT	n-Heneicosane (C21)	13.784	1353391	552.344		
11)AT	n-Docosane (C22)	14.287	1314593	537.170		
12)AT	n-Tetracosane (C24)	15.151	1252240	508.997		
13)AT	n-Hexacosane (C26)	15.894	1173555	482.400		
14)AT	n-Octacosane (C28)	16.558	1116637	462.844		
15)BT	n-Triacontane (C30)	17.172	1094946	451.914		
16)BT	n-Dotriacontane(C32)	17.758	1081825	454.305		
17)BT	n-Tetratriacontane (C34	18.325	1079688	472.093		
18)BT	n-Hexatriacontane (C36)	18.941	1110579	491.472		
19)BT	n-Octatriacontane (C38)	19.719	1098924	505.935		
20)BT	n-Tetracontane (C40)	20.737	1077652	516.569		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

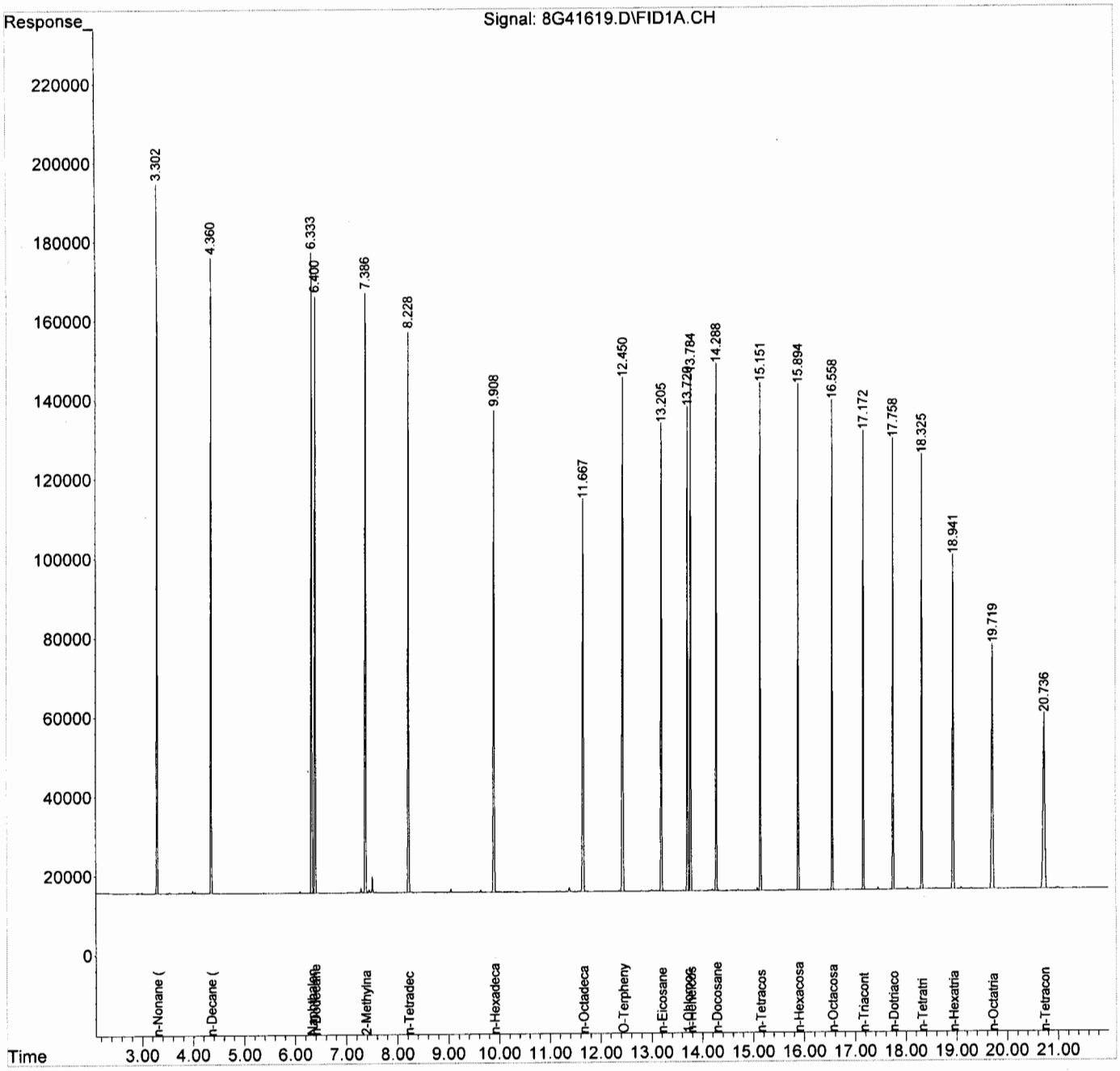
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41619.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 09:45:05
Operator : KD/RAK/MS
Sample : CALDTH AL@500PPM
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:18:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Form7
Continuing Calibration

Method: NJEPHRev3A

Data File:				8G42129.D			8G42150.D			8G42171.D			8G42189.D			8G42211.D		
Method:				8015-EPHCA			8015-EPHCA			8015-EPHCA			8015-EPHCA			8015-EPHCA		
Calibration Name:				CALDTH AL@100			CALDTH AL@100			CALDTH AL@100			CALDTH AL@100			CALDTH AL@100		
Calibration Date/Time				08/02/13 15:45			08/03/13 12:15			08/03/13 23:17			08/04/13 09:48			08/05/13 08:00		
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff
n-Nonane (C9)	30	1	0	109.8	100	9.8	108.2	100	8.2	126.4	100	26.4	108	100	8.0	118.3	100	18.3
n-Decane (C10)	30	1	0	110.4	100	10.4	107.9	100	7.9	126.7	100	26.7	108.4	100	8.4	121.4	100	21.4
Naphthalene	30	1	0	108.3	100	8.3	108.9	100	8.9	126.1	100	26.1	107.0	100	7.0	123.2	100	23.2
n-Dodecane (C12)	30	1	0	112	100	12.0	109.8	100	9.8	128.0	100	28.0	109	100	9.0	126.2	100	26.2
2-Methylnaphthalene	30	1	0	109.9	100	9.9	111.3	100	11.3	128.7	100	28.7	108.8	100	8.8	126.1	100	26.1
n-Tetradecane (C14)	30	1	0	110.6	100	10.6	107.9	100	7.9	126.3	100	26.3	106.5	100	6.5	127	100	27.0
n-Hexadecane (C16)	30	1	0	108.4	100	8.4	106	100	6.0	123.9	100	23.9	104.3	100	4.3	126.6	100	26.6
n-Octadecane (C18)	30	1	0	107	100	7.0	104.4	100	4.4	121.1	100	21.1	103.0	100	3.0	123.6	100	23.6
n-Eicosane (C20)	30	1	0	103.3	100	3.3	103.3	100	3.3	118.7	100	18.7	100.4	100	0.4	118.3	100	18.3
n-Heneicosane (C21)	30	1	0	101.7	100	1.7	102.5	100	2.5	117.7	100	17.7	99.71	100	0.3	115.4	100	15.4
n-Docosane (C22)	30	1	0	100.3	100	0.3	101.2	100	1.2	116.6	100	16.6	98.95	100	1.1	112.6	100	12.6
n-Tetracosane (C24)	30	1	0	98.57	100	1.4	100.3	100	0.3	116.3	100	16.3	98.65	100	1.3	107.2	100	7.2
n-Hexacosane (C26)	30	1	0	96.37	100	3.6	98.36	100	1.6	114.6	100	14.6	97.78	100	2.2	102.2	100	2.2
n-Octacosane (C28)	30	1	0	96.48	100	3.5	97.14	100	2.9	114.2	100	14.2	98.46	100	1.5	99.68	100	0.3
n-Triacontane (C30)	30	1	0	97.92	100	2.1	97.43	100	2.6	114.6	100	14.6	99.31	100	0.7	99.65	100	0.3
n-Dotriacontane(C32)	30	1	0	100.2	100	0.2	97.78	100	2.2	115.3	100	15.3	101.1	100	1.1	101.9	100	1.9
n-Tetratriacontane (C	30	1	0	105	100	5.0	101.2	100	1.2	118.7	100	18.7	105	100	4.9	106.3	100	6.3
n-Hexatriacontane (C	30	1	0	104.4	100	4.4	99.86	100	0.1	118.9	100	18.9	104.5	100	4.5	106.5	100	6.5
n-Octatriacontane (C3	30	1	0	105.7	100	5.7	102	100	2.0	119.4	100	19.4	107.3	100	7.3	110.0	100	10.0
n-Tetracontane (C40)	30	1	0	105.7	100	5.7	103.7	100	3.7	122.5	100	22.5	110.2	100	10.2	115.2	100	15.2
O-Terphenyl	30	1	0	97.64	100	2.4	102.1	100	2.1	114.5	100	14.5	96.62	100	3.4	110.3	100	10.3
1-Chlorooctadecane	30	1	0	96.69	100	3.3	98.45	100	1.6	112.6	100	12.6	95.17	100	4.8	108.1	100	8.1
C9-C28	25	1	0	1255	1200	4.6	1247	1200	3.9	1451	1200	20.9	1233	1200	2.8	1398	1200	16.5
>C28-C40	25	1	0	618.9	600	3.2	601.9	600	0.3	709.3	600	18.2	627.3	600	4.5	639.5	600	6.6
C9-C40	25	1	0	1874	1800	4.1	1849	1800	2.7	2160	1800	20.0	1860	1800	3.4	2038	1800	13.2

Flags/Notes: **** - Values outside of limits for this column/run***

Form7

RtWindow Summary

Method: NJEPHRev3A

Data File:			8G41618.D		8G42129.D		8G42150.D		8G42189.D			
Calibration Name:			CALDTH AL@100PPM		CALDTH AL@100PPM		CALDTH AL@100PPM		CALDTH AL@100PPM			
Calibration Date/Time			7/15/2013 9:13:00 AM		8/2/2013 3:45:54 PM		8/3/2013 12:15:06 PM		8/4/2013 9:48:20 AM			
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
n-Nonane (C9)	1	0	3.29	(3.24 - 3.34)	3.28	(3.23 - 3.33)	3.28	(3.23 - 3.33)	3.28	(3.23 - 3.33)		
n-Decane (C10)	1	0	4.35	(4.30 - 4.40)	4.33	(4.28 - 4.38)	4.33	(4.28 - 4.38)	4.33	(4.28 - 4.38)		
Naphthalene	1	0	6.32	(6.27 - 6.37)	6.30	(6.25 - 6.35)	6.30	(6.25 - 6.35)	6.30	(6.25 - 6.35)		
n-Dodecane (C12)	1	0	6.39	(6.34 - 6.44)	6.37	(6.32 - 6.42)	6.37	(6.32 - 6.42)	6.37	(6.32 - 6.42)		
2-Methylnaphthalene	1	0	7.37	(7.32 - 7.42)	7.36	(7.31 - 7.41)	7.36	(7.31 - 7.41)	7.35	(7.30 - 7.40)		
n-Tetradecane (C14)	1	0	8.22	(8.17 - 8.27)	8.20	(8.15 - 8.25)	8.20	(8.15 - 8.25)	8.20	(8.15 - 8.25)		
n-Hexadecane (C16)	1	0	9.90	(9.85 - 9.95)	9.88	(9.83 - 9.93)	9.88	(9.83 - 9.93)	9.87	(9.82 - 9.92)		
n-Octadecane (C18)	1	0	11.65	(11.60 - 11.70)	11.63	(11.58 - 11.68)	11.63	(11.58 - 11.68)	11.63	(11.58 - 11.68)		
n-Eicosane (C20)	1	0	13.20	(13.15 - 13.25)	13.18	(13.13 - 13.23)	13.18	(13.13 - 13.23)	13.18	(13.13 - 13.23)		
n-Heneicosane (C21)	1	0	13.77	(13.72 - 13.82)	13.76	(13.71 - 13.81)	13.76	(13.71 - 13.81)	13.76	(13.71 - 13.81)		
n-Docosane (C22)	1	0	14.28	(14.23 - 14.33)	14.27	(14.22 - 14.32)	14.26	(14.21 - 14.31)	14.26	(14.21 - 14.31)		
n-Tetracosane (C24)	1	0	15.14	(15.09 - 15.19)	15.13	(15.08 - 15.18)	15.13	(15.08 - 15.18)	15.13	(15.08 - 15.18)		
n-Hexacosane (C26)	1	0	15.89	(15.84 - 15.94)	15.87	(15.82 - 15.92)	15.87	(15.82 - 15.92)	15.87	(15.82 - 15.92)		
n-Octacosane (C28)	1	0	16.55	(16.50 - 16.60)	16.54	(16.49 - 16.59)	16.54	(16.49 - 16.59)	16.54	(16.49 - 16.59)		
n-Triacontane (C30)	1	0	17.17	(17.12 - 17.22)	17.16	(17.11 - 17.21)	17.15	(17.10 - 17.20)	17.15	(17.10 - 17.20)		
n-Dotriacontane(C32)	1	0	17.76	(17.71 - 17.81)	17.76	(17.71 - 17.81)	17.72	(17.67 - 17.77)	17.71	(17.66 - 17.76)		
n-Tetratriacontane (C	1	0	18.34	(18.29 - 18.39)	18.35	(18.30 - 18.40)	18.25	(18.20 - 18.30)	18.25	(18.20 - 18.30)		
n-Hexatriacontane (C	1	0	18.96	(18.91 - 19.01)	18.97	(18.92 - 19.02)	18.86	(18.81 - 18.91)	18.85	(18.80 - 18.90)		
n-Octatriacontane (C	1	0	19.73	(19.68 - 19.78)	19.74	(19.69 - 19.79)	19.62	(19.57 - 19.67)	19.62	(19.57 - 19.67)		
n-Tetracontane (C40)	1	0	20.75	(20.70 - 20.80)	20.75	(20.70 - 20.80)	20.62	(20.57 - 20.67)	20.62	(20.57 - 20.67)		
O-Terphenyl	1	0	12.44	(12.40 - 12.48)	12.41	(12.37 - 12.45)	12.41	(12.37 - 12.45)	12.41	(12.37 - 12.45)		
1-Chlorooctadecane	1	0	13.71	(13.67 - 13.75)	13.70	(13.66 - 13.74)	13.69	(13.65 - 13.73)	13.69	(13.65 - 13.73)		
C9-C28	1	0										
>C28-C40	1	0										
C9-C40	1	0										

Quantitation Report (QT Reviewed)

3080110 0208

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42129.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 15:45:54
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 02 16:09:08 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.414	329095	97.640		
22)S	1-Chlorooctadecane	13.696	248125	96.693		
Target Compounds						
1)AT	n-Nonane (C9)	3.278	288997	109.766		
2)AT	n-Decane (C10)	4.334	296981	110.388		
3)	Naphthalene	6.305	337131	108.330		
4)AT	n-Dodecane (C12)	6.373	305472	112.001		
5)	2-Methylnaphthalene	7.357	335565	109.894		
6)AT	n-Tetradecane (C14)	8.201	301994	110.550		
7)AT	n-Hexadecane (C16)	9.876	295881	108.390		
8)AT	n-Octadecane (C18)	11.632	291245	106.997		
9)AT	n-Eicosane (C20)	13.179	281210	103.293		
10)AT	n-Heneicosane (C21)	13.760	278275	101.683		
11)AT	n-Docosane (C22)	14.265	272300	100.302		
12)AT	n-Tetracosane (C24)	15.132	265244	98.574		
13)AT	n-Hexacosane (C26)	15.875	253606	96.367		
14)AT	n-Octacosane (C28)	16.540	249497	96.482		
15)BT	n-Triacontane (C30)	17.161	252357	97.922		
16)BT	n-Dotriacontane(C32)	17.764	252875	100.190		
17)BT	n-Tetratriacontane (C34	18.349	255566	104.972		
18)BT	n-Hexatriacontane (C36)	18.966	251203	104.420		
19)BT	n-Octatriacontane (C38)	19.739	245606	105.722		
20)BT	n-Tetracontane (C40)	20.750	237507	105.686		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

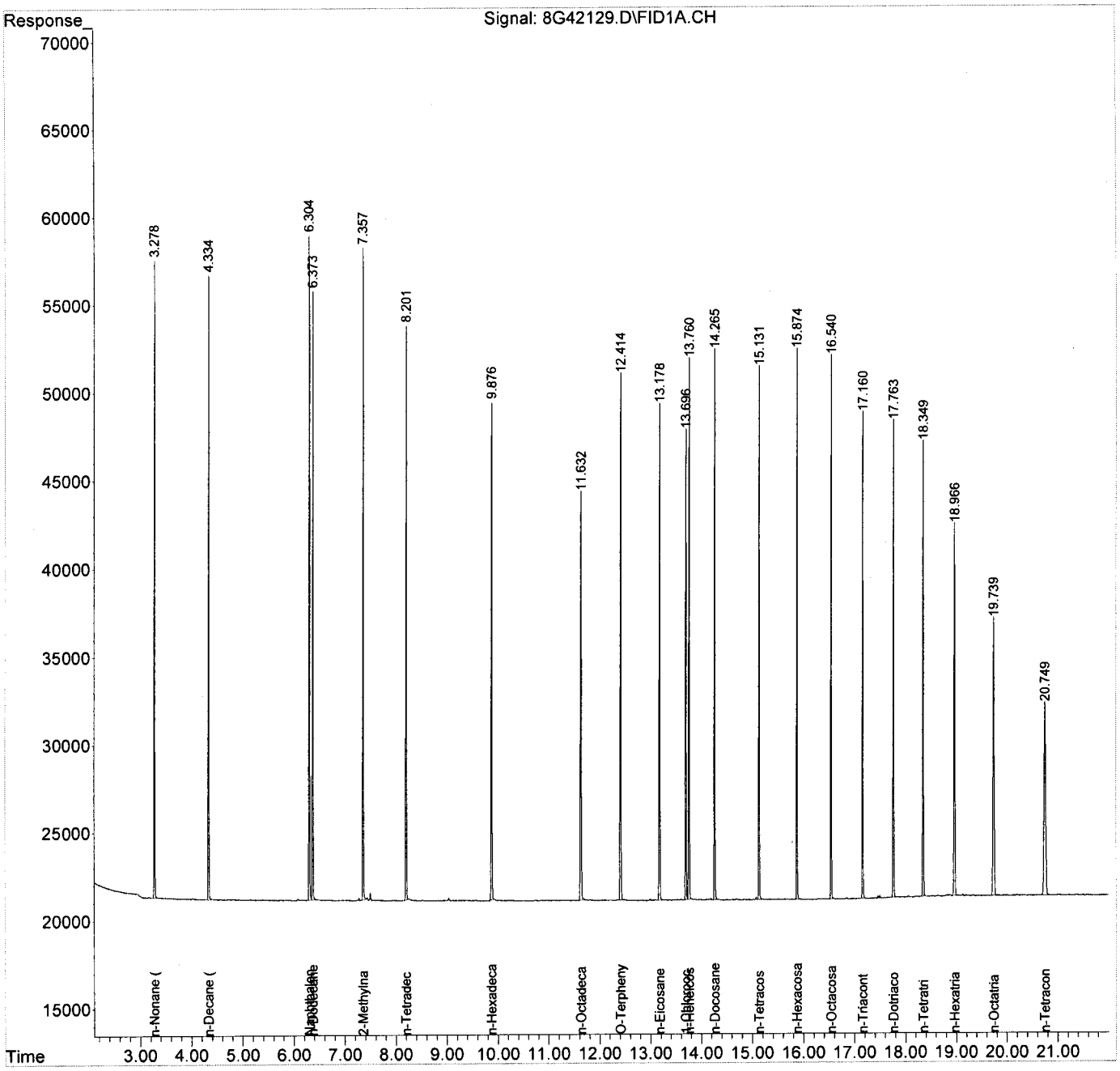
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42129.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 15:45:54
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 02 16:09:08 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0210

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42150.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 12:15:06
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 08:12:13 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.413	344150	102.107		
22)S	1-Chlorooctadecane	13.695	252623	98.446		
Target Compounds						
1)AT	n-Nonane (C9)	3.277	284770	108.160		
2)AT	n-Decane (C10)	4.333	290305	107.907		
3)	Naphthalene	6.304	339006	108.933		
4)AT	n-Dodecane (C12)	6.373	299470	109.800		
5)	2-Methylnaphthalene	7.356	339979	111.339		
6)AT	n-Tetradecane (C14)	8.200	294819	107.924		
7)AT	n-Hexadecane (C16)	9.875	289294	105.977		
8)AT	n-Octadecane (C18)	11.632	284085	104.366		
9)AT	n-Eicosane (C20)	13.178	281294	103.323		
10)AT	n-Heneicosane (C21)	13.758	280447	102.477		
11)AT	n-Docosane (C22)	14.264	274613	101.154		
12)AT	n-Tetracosane (C24)	15.131	269935	100.317		
13)AT	n-Hexacosane (C26)	15.875	258849	98.359		
14)AT	n-Octacosane (C28)	16.539	251210	97.145		
15)BT	n-Triacontane (C30)	17.149	251100	97.434		
16)BT	n-Dotriacontane(C32)	17.715	246798	97.782		
17)BT	n-Tetratriacontane (C34	18.251	246313	101.172		
18)BT	n-Hexatriacontane (C36)	18.857	240229	99.858		
19)BT	n-Octatriacontane (C38)	19.621	236900	101.975		
20)BT	n-Tetracontane (C40)	20.624	232990	103.676		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

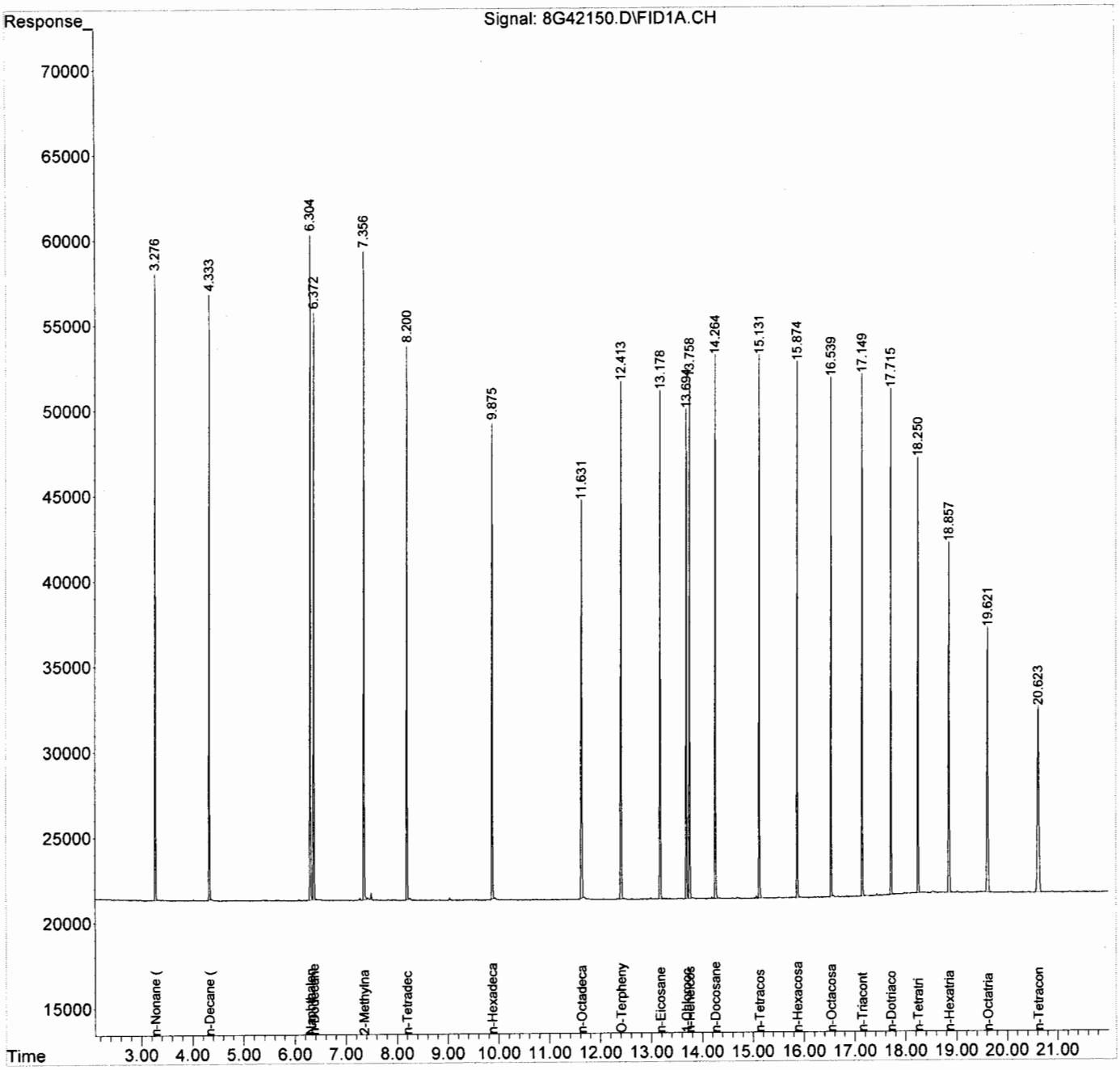
Quantitation Report (QT Reviewed)

3080110 0211

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42150.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 12:15:06
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 08:12:13 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0212

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42171.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 23:17:33
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 39 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 13:22:58 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.412	385978	114.517		
22)S	1-Chlorooctadecane	13.694	288876	112.574		
Target Compounds						
1)AT	n-Nonane (C9)	3.276	332877	126.432		
2)AT	n-Decane (C10)	4.332	340906	126.715		
3)	Naphthalene	6.303	392532	126.132		
4)AT	n-Dodecane (C12)	6.372	349174	128.024		
5)	2-Methylnaphthalene	7.356	392970	128.693		
6)AT	n-Tetradecane (C14)	8.199	345087	126.325		
7)AT	n-Hexadecane (C16)	9.874	338180	123.885		
8)AT	n-Octadecane (C18)	11.630	329536	121.063		
9)AT	n-Eicosane (C20)	13.177	323225	118.725		
10)AT	n-Heneicosane (C21)	13.757	322020	117.668		
11)AT	n-Docosane (C22)	14.263	316563	116.606		
12)AT	n-Tetracosane (C24)	15.130	312897	116.283		
13)AT	n-Hexacosane (C26)	15.873	301639	114.619		
14)AT	n-Octacosane (C28)	16.538	295278	114.186		
15)BT	n-Triacontane (C30)	17.147	295271	114.574		
16)BT	n-Dotriacontane(C32)	17.714	291099	115.334		
17)BT	n-Tetratriacontane (C34	18.249	288871	118.652		
18)BT	n-Hexatriacontane (C36)	18.854	285938	118.858		
19)BT	n-Octatriacontane (C38)	19.617	277356	119.389		
20)BT	n-Tetracontane (C40)	20.622	275233	122.474		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

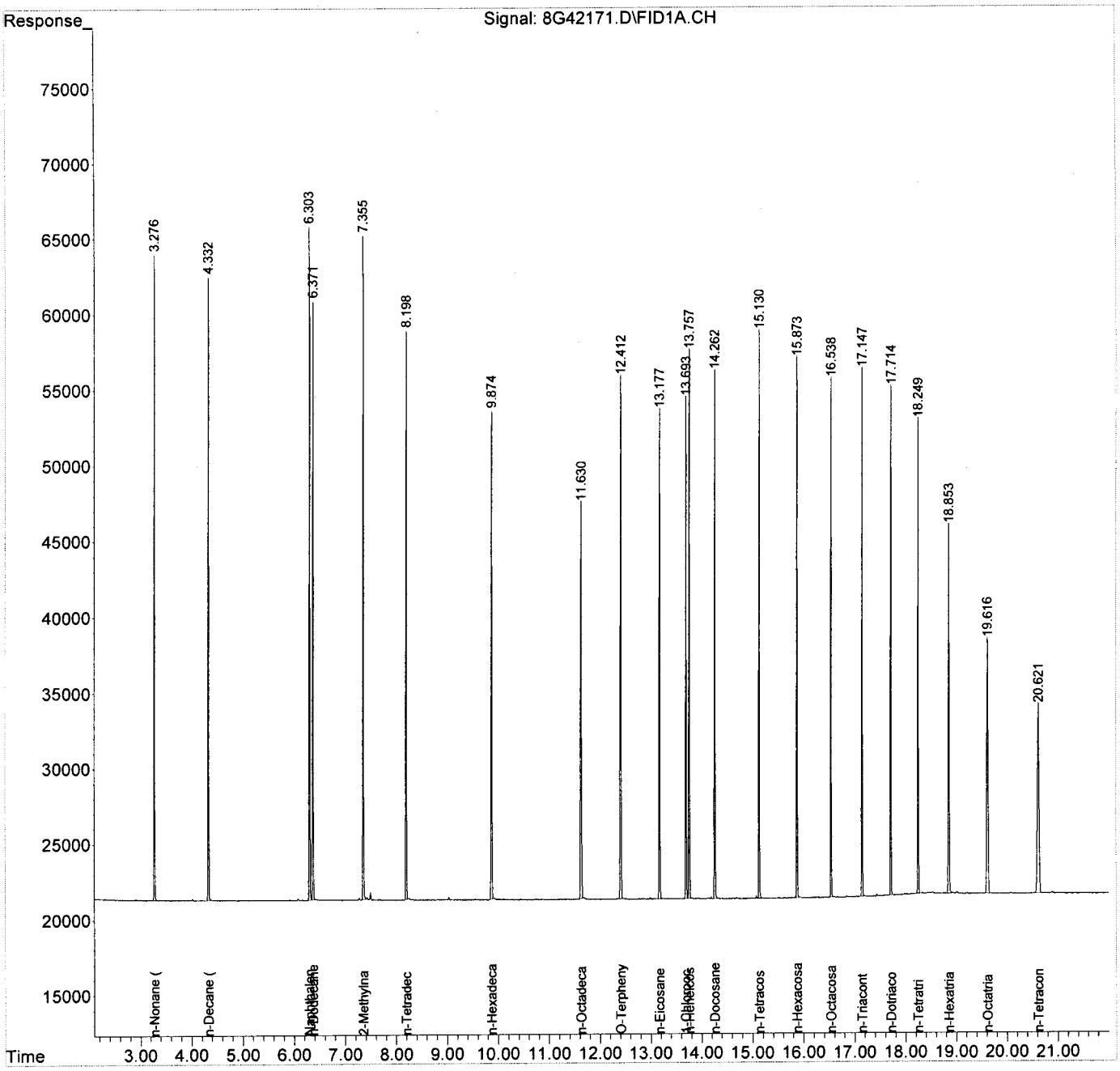
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42171.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 23:17:33
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 39 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 13:22:58 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0214

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42189.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 09:48:20
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:22:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.410	325646	96.617		
22)S	1-Chlorooctadecane	13.694	244228	95.175		
Target Compounds						
1)AT	n-Nonane (C9)	3.275	284237	107.958		
2)AT	n-Decane (C10)	4.331	291522	108.359		
3)	Naphthalene	6.302	333088	107.031		
4)AT	n-Dodecane (C12)	6.371	297232	108.980		
5)	2-Methylnaphthalene	7.354	332188	108.788		
6)AT	n-Tetradecane (C14)	8.198	290984	106.520		
7)AT	n-Hexadecane (C16)	9.873	284670	104.283		
8)AT	n-Octadecane (C18)	11.629	280443	103.028		
9)AT	n-Eicosane (C20)	13.176	273373	100.414		
10)AT	n-Heneicosane (C21)	13.756	272878	99.711		
11)AT	n-Docosane (C22)	14.263	268643	98.955		
12)AT	n-Tetracosane (C24)	15.129	265459	98.653		
13)AT	n-Hexacosane (C26)	15.872	257323	97.780		
14)AT	n-Octacosane (C28)	16.537	254606	98.458		
15)BT	n-Triacontane (C30)	17.146	255936	99.311		
16)BT	n-Dotriacontane(C32)	17.714	255063	101.057		
17)BT	n-Tetratriacontane (C34	18.248	255518	104.953		
18)BT	n-Hexatriacontane (C36)	18.854	251325	104.471		
19)BT	n-Octatriacontane (C38)	19.618	249262	107.296		
20)BT	n-Tetracontane (C40)	20.620	247658	110.203		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

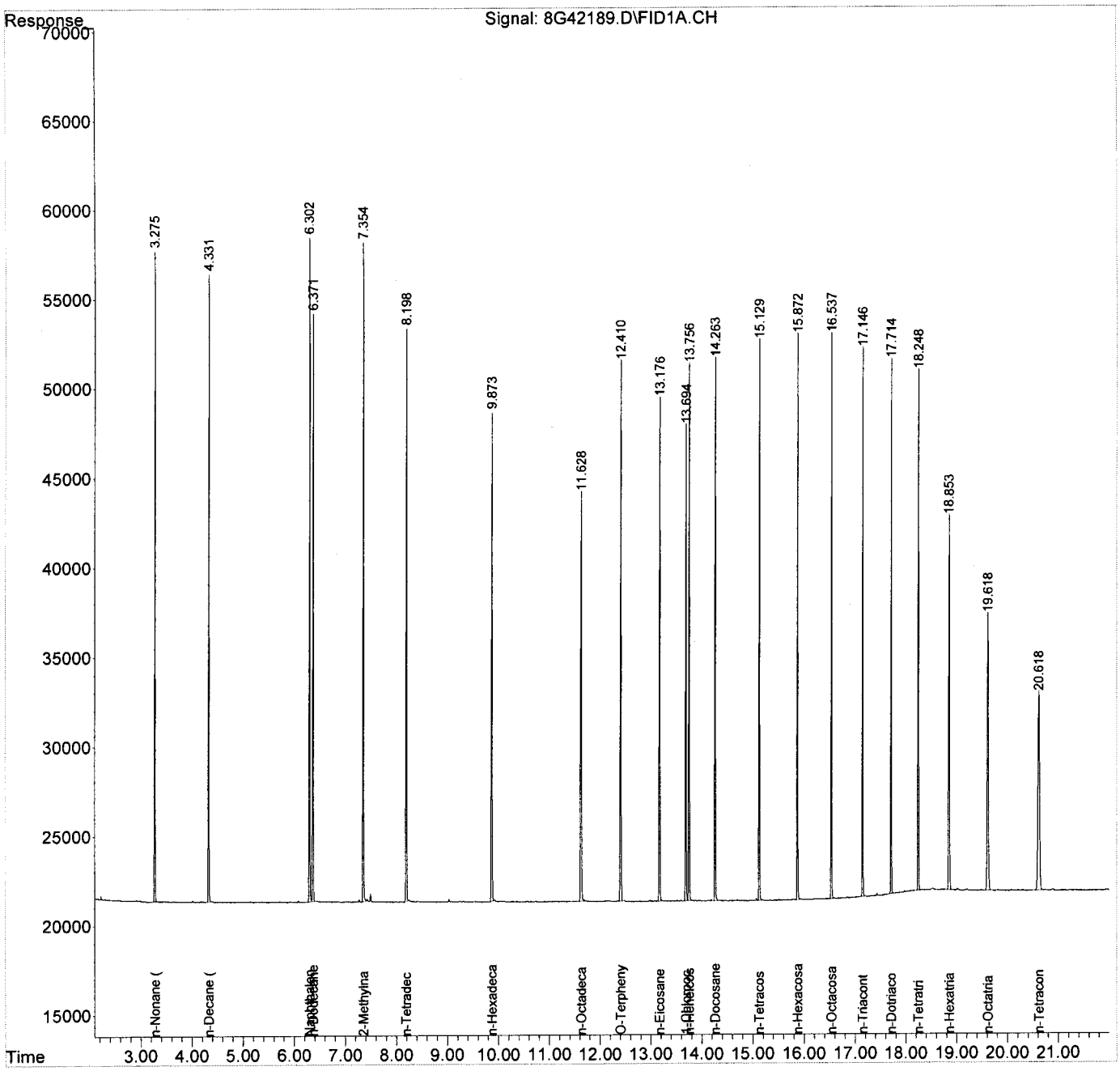
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42189.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 09:48:20
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:22:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0216

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42211.D
Signal(s) : FID1A.CH
Acq On : 05-Aug-13, 08:00:06
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 08:31:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.415	371720	110.286		
22)S	1-Chlorooctadecane	13.697	277370	108.090		
Target Compounds						
1)AT	n-Nonane (C9)	3.275	311508	118.316		
2)AT	n-Decane (C10)	4.332	326667	121.423		
3)	Naphthalene	6.305	383468	123.220		
4)AT	n-Dodecane (C12)	6.373	344156	126.184		
5)	2-Methylnaphthalene	7.357	385141	126.129		
6)AT	n-Tetradecane (C14)	8.200	346864	126.975		
7)AT	n-Hexadecane (C16)	9.877	345501	126.567		
8)AT	n-Octadecane (C18)	11.634	336556	123.643		
9)AT	n-Eicosane (C20)	13.180	321996	118.274		
10)AT	n-Heneicosane (C21)	13.760	315671	115.348		
11)AT	n-Docosane (C22)	14.265	305604	112.570		
12)AT	n-Tetracosane (C24)	15.131	288435	107.192		
13)AT	n-Hexacosane (C26)	15.874	269025	102.226		
14)AT	n-Octacosane (C28)	16.539	257763	99.678		
15)BT	n-Triacontane (C30)	17.149	256800	99.646		
16)BT	n-Dotriacontane(C32)	17.721	257203	101.905		
17)BT	n-Tetratriacontane (C34	18.269	258771	106.289		
18)BT	n-Hexatriacontane (C36)	18.876	256150	106.476		
19)BT	n-Octatriacontane (C38)	19.642	255579	110.015		
20)BT	n-Tetracontane (C40)	20.648	258840	115.179		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

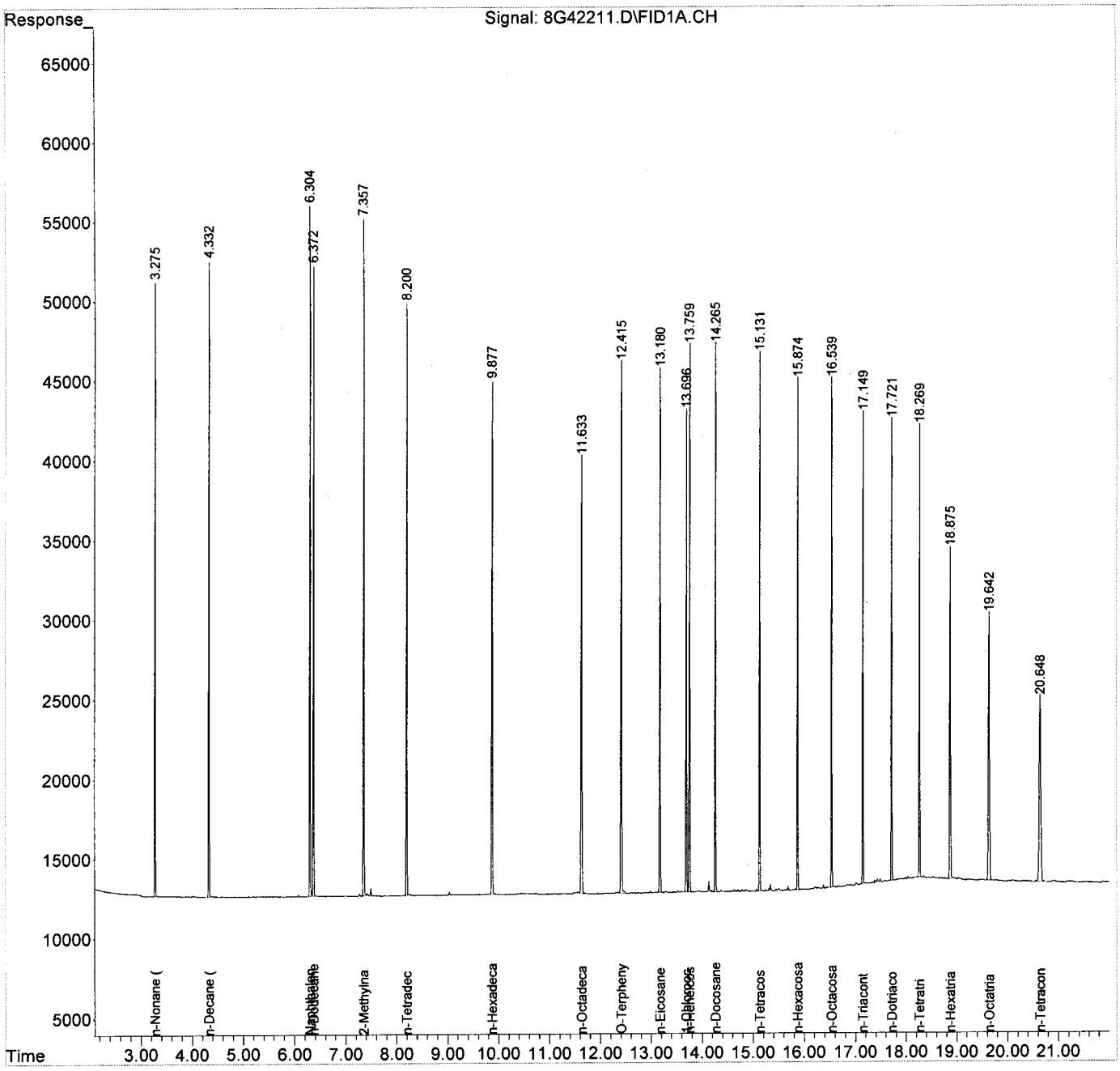
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42211.D
Signal(s) : FID1A.CH
Acq On : 05-Aug-13, 08:00:06
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 08:31:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



EPH Category 1 Data
Raw QC Data

Form1

ORGANICS REPORT

Sample Number: SMB25787
Client Id:
Data File: 8G42131.D
Analysis Date: 08/02/13 16:46
Date Rec/Extracted: NA-08/02/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: NJEPHRev3A
Matrix: Soil
Initial Vol: 10g
Final Vol: 1ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
ephc28c40	>C28-C40	60	U	c9toc28	C9-C28	60	U

Worksheet #: 272465

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42131.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 16:46:53
Operator : KD/RAK/MS
Sample : SMB25787
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:07:07 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.413	285806	84.796		
22)S	1-Chlorooctadecane	13.695	222594	86.744		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		
9)AT	n-Eicosane (C20)	0.000	0	N.D.		
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	12.412f	760181	282.276		m
24)B	>C28-C40(Total)	18.038f	373377	154.375		m
25)t	C9-C40(TOTAL)	12.412f	1132217	435.205		m

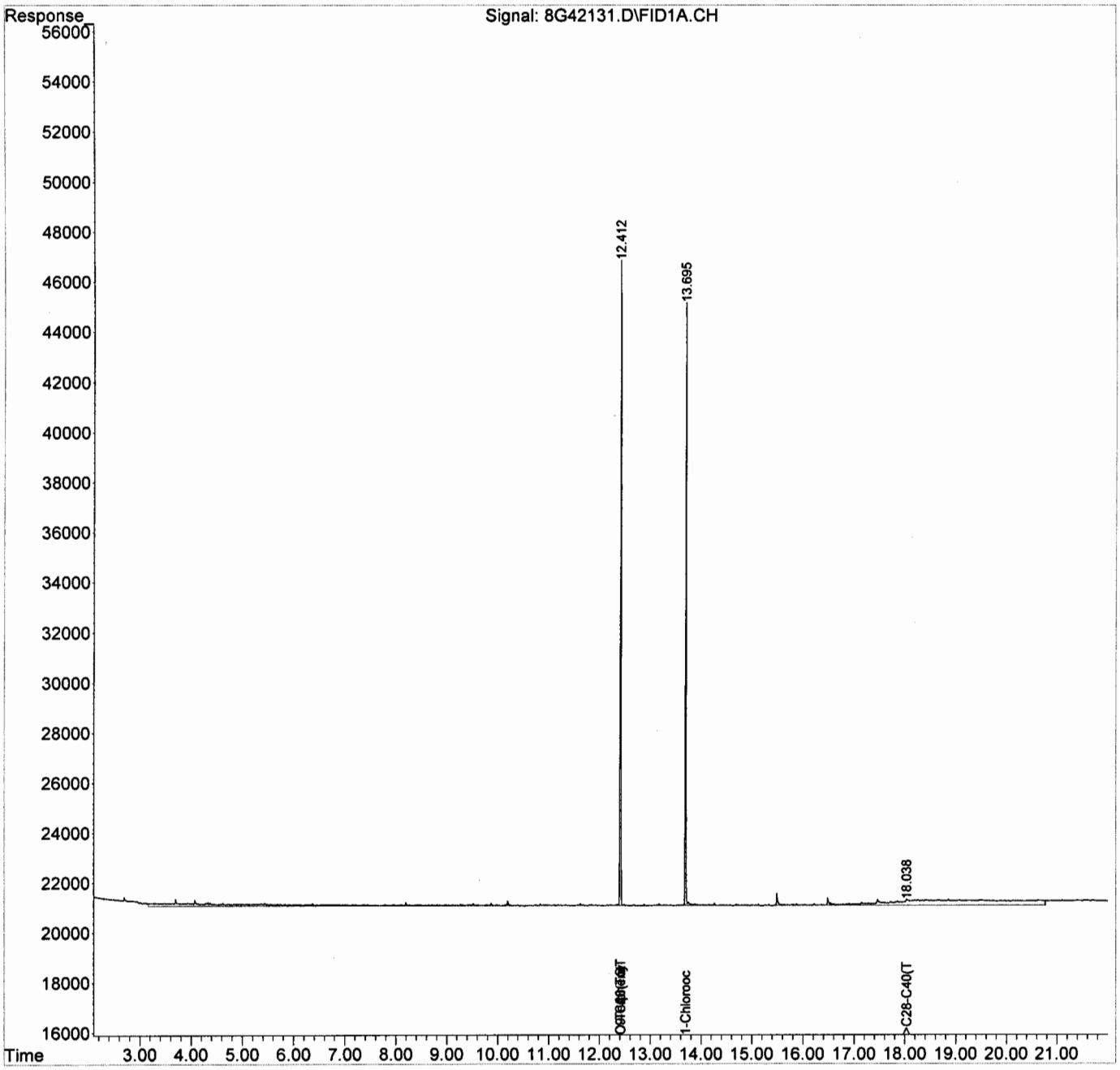
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42131.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 16:46:53
Operator : KD/RAK/MS
Sample : SMB25787
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:07:07 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42130.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 16:16:18
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 08:58:23 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	0.000	0	N.D.		
22)S	1-Chlorooctadecane	0.000	0	N.D.		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		
9)AT	n-Eicosane (C20)	0.000	0	N.D.		
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		
11)AT	n-Docosane (C22)	0.000	0	N.D.		
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		
14)AT	n-Octacosane (C28)	0.000	0	N.D.		
15)BT	n-Triacontane (C30)	0.000	0	N.D.		
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	3.187	251750	93.482		m
24)B	>C28-C40(Total)	18.725f	445002	183.989		m
25)t	C9-C40(TOTAL)	18.725f	694627	267.003		m

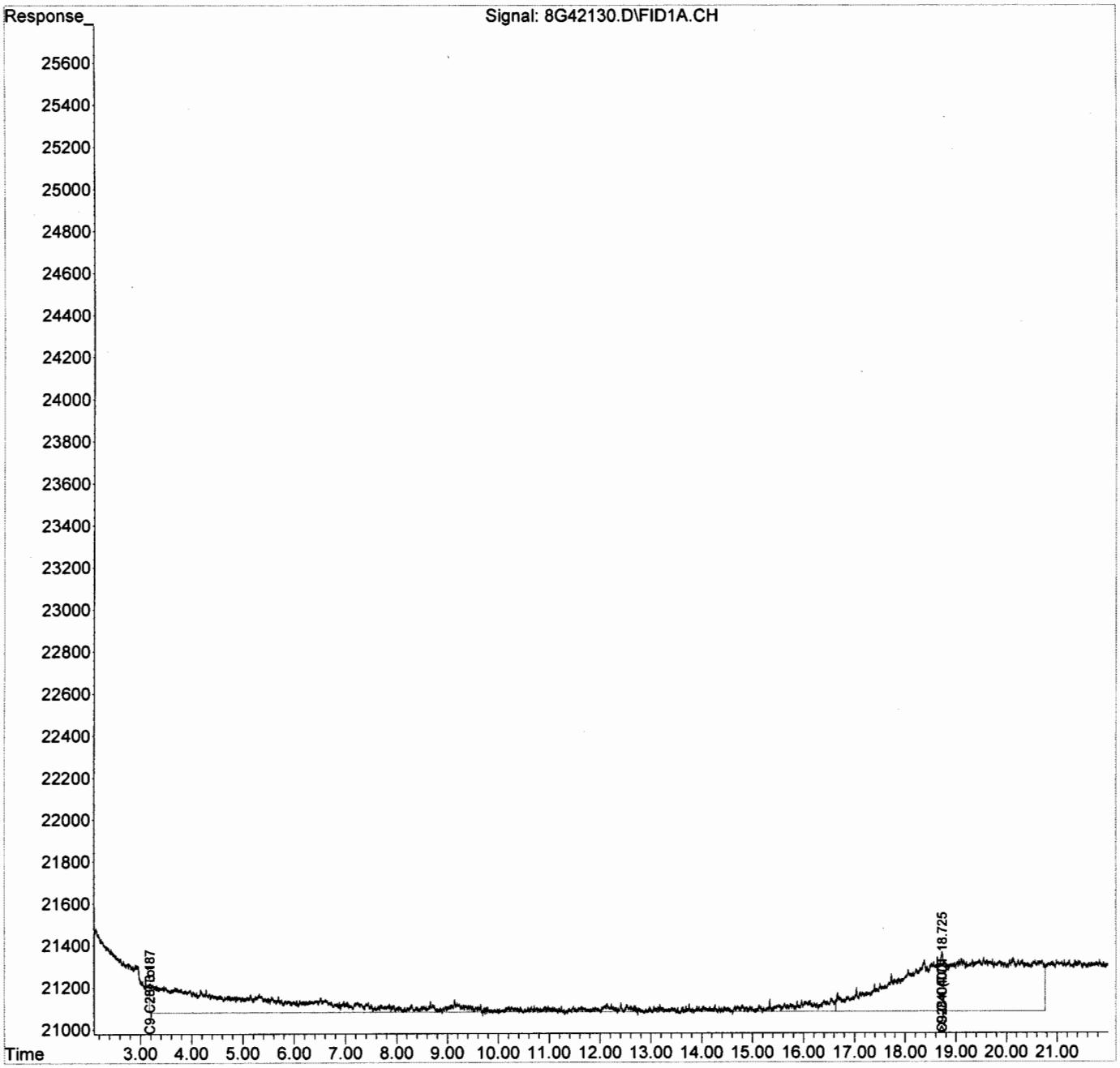
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42130.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 16:16:18
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 08:58:23 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42151.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 13:15:26
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:14:16 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	0.000	0	N.D.		
22)S	1-Chlorooctadecane	0.000	0	N.D.		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		
9)AT	n-Eicosane (C20)	0.000	0	N.D.		
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		
11)AT	n-Docosane (C22)	0.000	0	N.D.		
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		
14)AT	n-Octacosane (C28)	0.000	0	N.D.		
15)BT	n-Triacontane (C30)	0.000	0	N.D.		
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	3.198	228448	84.829		m
24)B	>C28-C40(Total)	18.536f	455341	188.264		m
25)t	C9-C40(TOTAL)	18.536f	683622	262.773		m

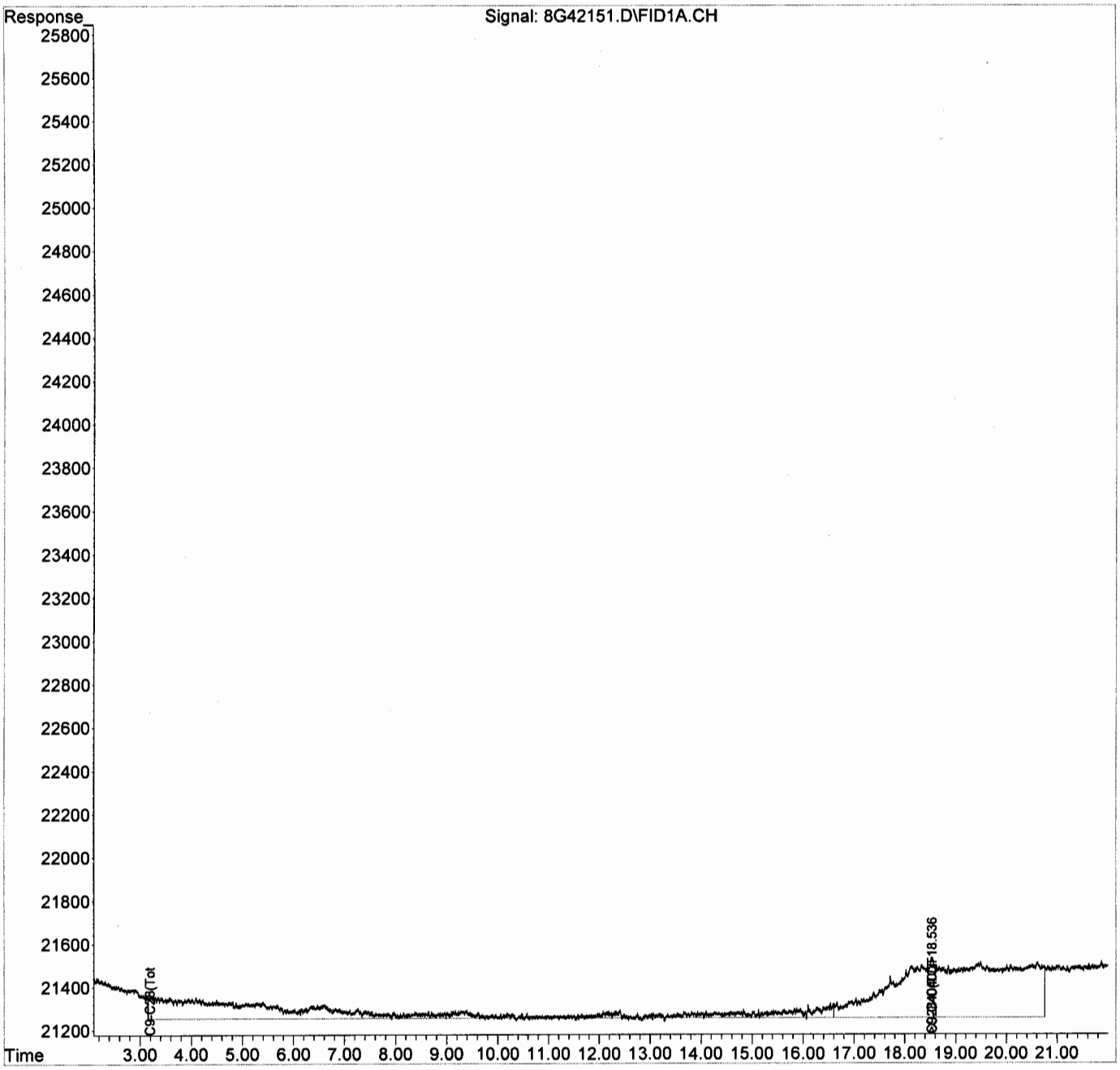
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42151.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 13:15:26
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:14:16 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0226

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42190.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 10:18:27
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:23:54 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units
System Monitoring Compounds					
21)S	O-Terphenyl	0.000	0	N.D.	
22)S	1-Chlorooctadecane	0.000	0	N.D.	
Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.	
2)AT	n-Decane (C10)	0.000	0	N.D.	
3)	Naphthalene	0.000	0	N.D.	
4)AT	n-Dodecane (C12)	0.000	0	N.D.	
5)	2-Methylnaphthalene	0.000	0	N.D.	
6)AT	n-Tetradecane (C14)	0.000	0	N.D.	
7)AT	n-Hexadecane (C16)	0.000	0	N.D.	
8)AT	n-Octadecane (C18)	0.000	0	N.D.	
9)AT	n-Eicosane (C20)	0.000	0	N.D.	
10)AT	n-Heneicosane (C21)	0.000	0	N.D.	
11)AT	n-Docosane (C22)	0.000	0	N.D.	
12)AT	n-Tetracosane (C24)	0.000	0	N.D.	
13)AT	n-Hexacosane (C26)	0.000	0	N.D.	
14)AT	n-Octacosane (C28)	0.000	0	N.D.	
15)BT	n-Triacontane (C30)	0.000	0	N.D.	
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.	
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.	
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.	
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.	
20)BT	n-Tetracontane (C40)	0.000	0	N.D.	
23)A	C9-C28(Total)	16.265f	259169	96.236	m
24)B	>C28-C40(Total)	17.356	1072017	443.233	m
25)t	C9-C40(TOTAL)	17.356f	1324167	508.987	m

(f)=RT Delta > 1/2 Window (m)=manual int.

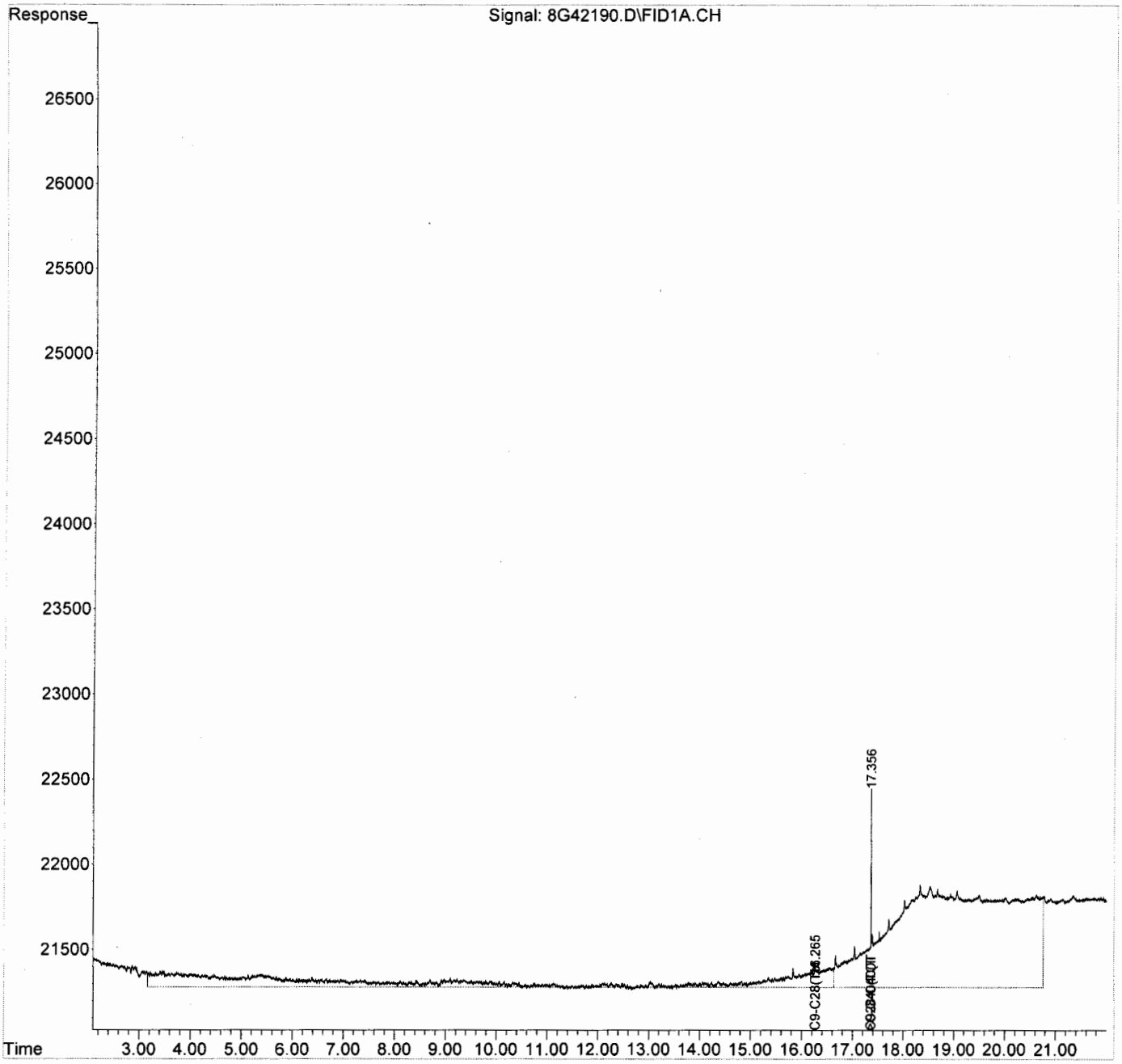
Quantitation Report (QT Reviewed)

3080110 0227

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42190.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 10:18:27
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:23:54 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0228

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42132.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 17:17:22
Operator : KD/RAK/MS
Sample : SMB25787(MS)
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:02:14 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.413	337660	100.181		
22)S	1-Chlorooctadecane	13.696	263536	102.699		
Target Compounds						
1)AT	n-Nonane (C9)	3.277	173707	65.977		
2)AT	n-Decane (C10)	4.334	238219	88.547		
3)	Naphthalene	6.305	332405	106.812		
4)AT	n-Dodecane (C12)	6.374	295255	108.255		
5)	2-Methylnaphthalene	7.357	326547	106.941		
6)AT	n-Tetradecane (C14)	8.202	303282	111.021		
7)AT	n-Hexadecane (C16)	9.876	300508	110.085		
8)AT	n-Octadecane (C18)	11.631	285417	104.856		
9)AT	n-Eicosane (C20)	13.179	282276	103.684		
10)AT	n-Heneicosane (C21)	13.759	280909	102.646		
11)AT	n-Docosane (C22)	14.265	275090	101.330		
12)AT	n-Tetracosane (C24)	15.131	268327	99.719		
13)AT	n-Hexacosane (C26)	15.876	266427	101.239		
14)AT	n-Octacosane (C28)	16.540	258632	100.015		
15)BT	n-Triacontane (C30)	17.150	258627	100.355		
16)BT	n-Dotriacontane(C32)	17.720	255353	101.172		
17)BT	n-Tetratriacontane (C34	18.264	250734	102.988		
18)BT	n-Hexatriacontane (C36)	18.870	250978	104.326		
19)BT	n-Octatriacontane (C38)	19.635	243135	104.658		
20)BT	n-Tetracontane (C40)	20.639	238443	106.103		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

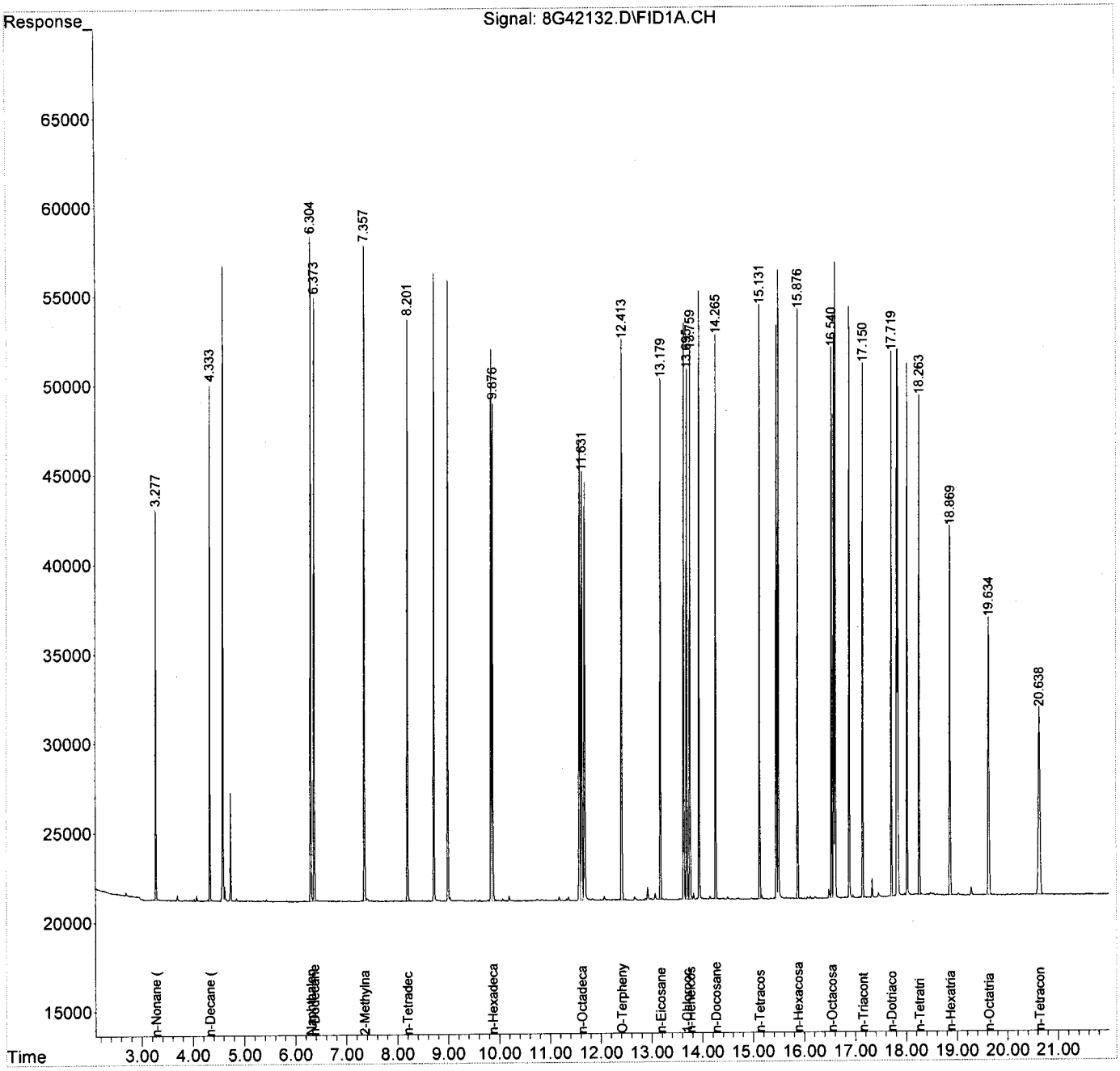
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42132.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 17:17:22
Operator : KD/RAK/MS
Sample : SMB25787(MS)
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:02:14 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0230

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42133.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 17:47:46
Operator : KD/RAK/MS
Sample : SMB25787(MSD)
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:02:38 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.414	360761	107.035		
22)S	1-Chlorooctadecane	13.696	279831	109.049		
Target Compounds						
1)AT	n-Nonane (C9)	3.277	205910	78.208		
2)AT	n-Decane (C10)	4.334	265018	98.507		
3)	Naphthalene	6.305	367509	118.092		
4)AT	n-Dodecane (C12)	6.373	321176	117.759		
5)	2-Methylnaphthalene	7.357	363301	118.977		
6)AT	n-Tetradecane (C14)	8.202	335078	122.661		
7)AT	n-Hexadecane (C16)	9.876	338943	124.164		
8)AT	n-Octadecane (C18)	11.633	323070	118.688		
9)AT	n-Eicosane (C20)	13.179	313196	115.041		
10)AT	n-Heneicosane (C21)	13.759	306204	111.889		
11)AT	n-Docosane (C22)	14.265	297425	109.557		
12)AT	n-Tetracosane (C24)	15.132	279002	103.687		
13)AT	n-Hexacosane (C26)	15.876	269035	102.230		
14)AT	n-Octacosane (C28)	16.540	255533	98.816		
15)BT	n-Triacontane (C30)	17.149	254459	98.738		
16)BT	n-Dotriacontane(C32)	17.722	252437	100.016		
17)BT	n-Tetratriacontane (C34	18.269	249933	102.659		
18)BT	n-Hexatriacontane (C36)	18.877	250380	104.077		
19)BT	n-Octatriacontane (C38)	19.644	244939	105.435		
20)BT	n-Tetracontane (C40)	20.647	241560	107.490		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

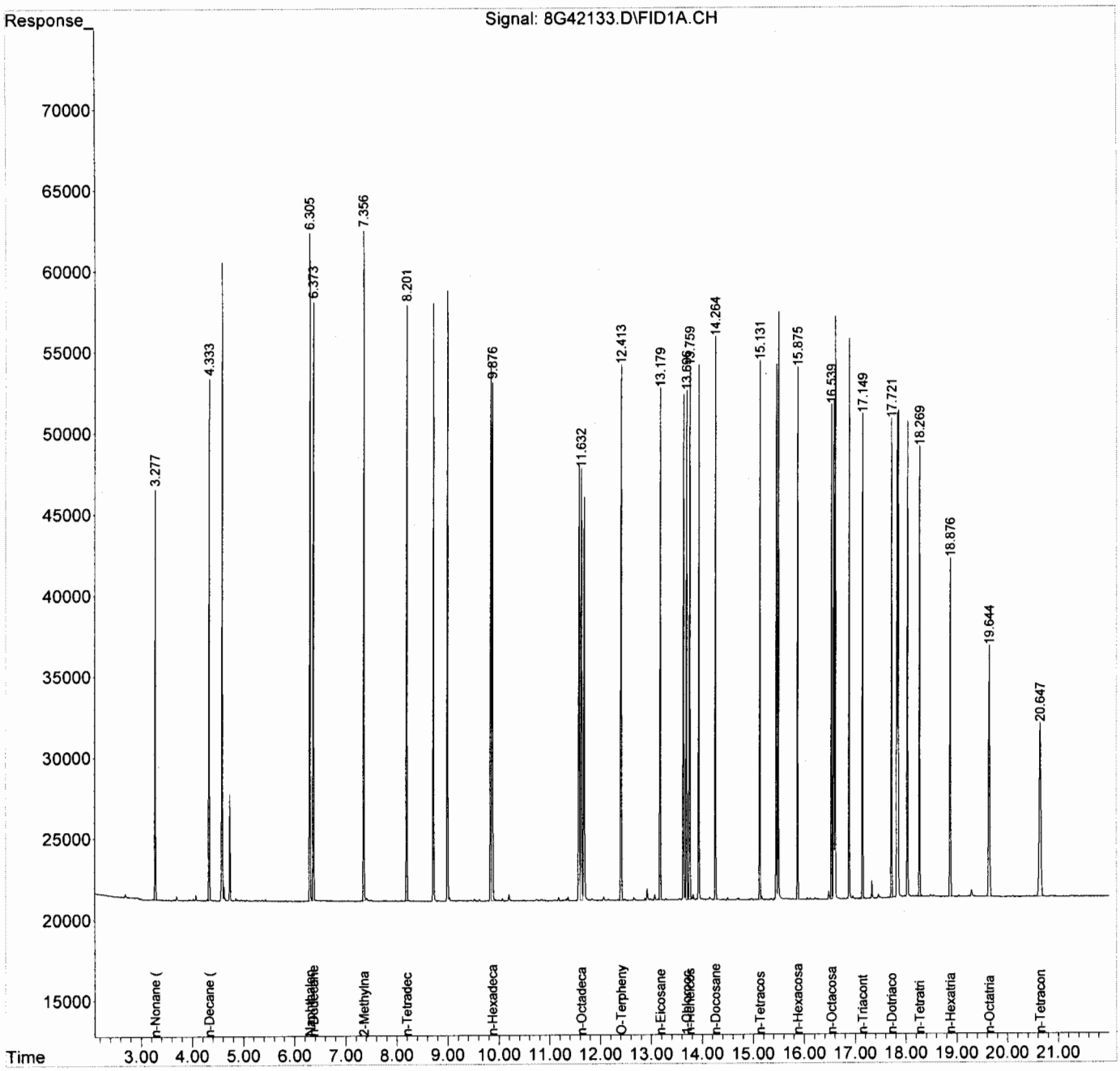
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42133.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 17:47:46
Operator : KD/RAK/MS
Sample : SMB25787(MSD)
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:02:38 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0232

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42134.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 18:18:13
Operator : KD/RAK/MS
Sample : SMB25787(DIESEL)(MS)
Misc : S.TPH
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:04:26 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.414	318968	94.635		
22)S	1-Chlorooctadecane	13.695	243443	94.869		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		d
2)AT	n-Decane (C10)	0.000	0	N.D.		d
3)	Naphthalene	0.000	0	N.D.		d
4)AT	n-Dodecane (C12)	0.000	0	N.D.		d
5)	2-Methylnaphthalene	0.000	0	N.D.		d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	12.414f	9059873	3364.179		m
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

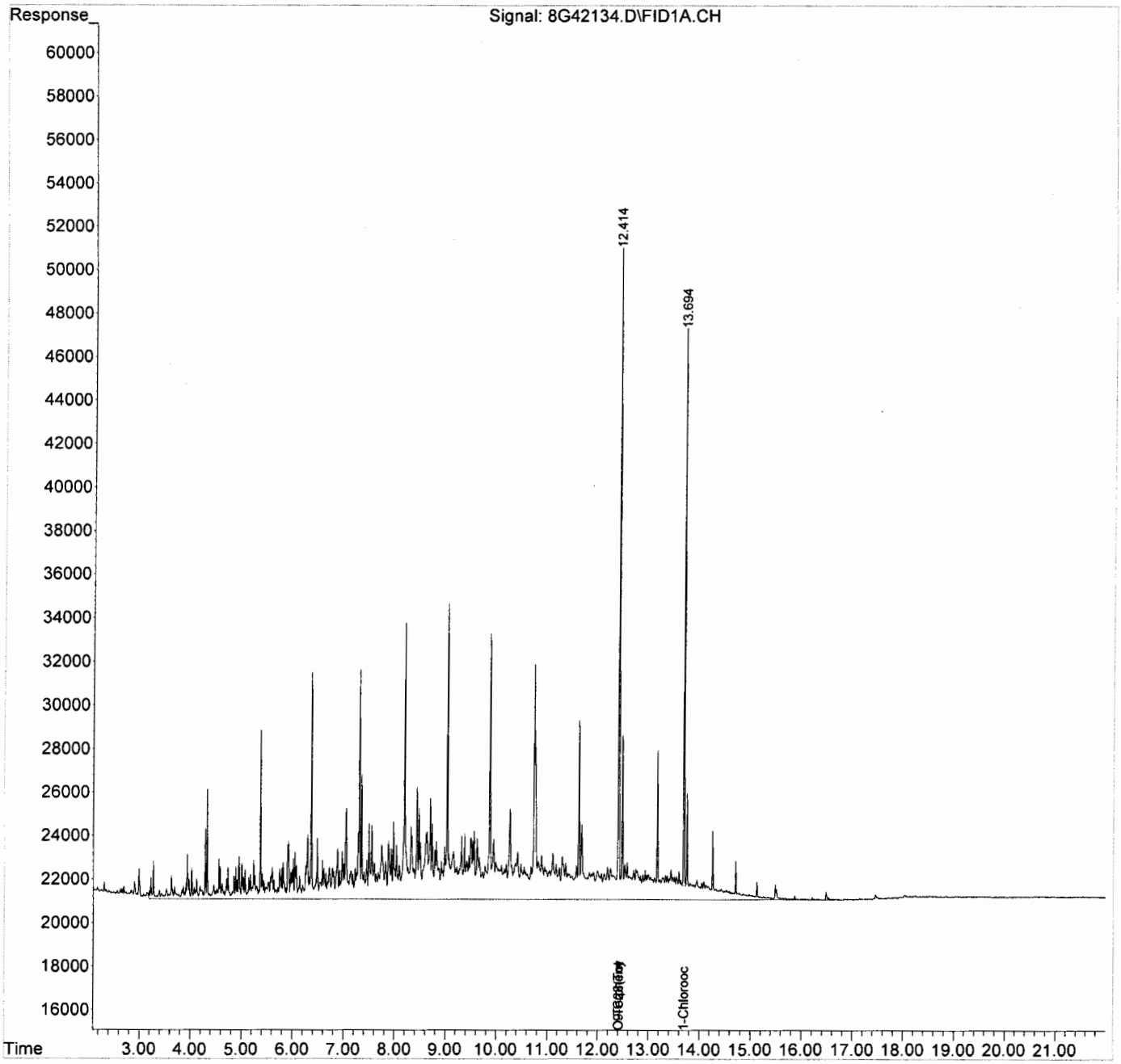
Quantitation Report (QT Reviewed)

3080110 0233

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42134.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 18:18:13
Operator : KD/RAK/MS
Sample : SMB25787(DIESEL)(MS)
Misc : S.TPH
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:04:26 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0234

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42135.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 18:48:43
Operator : KD/RAK/MS
Sample : SMB25787(DIESEL)(MSD)
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:04:06 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units
System Monitoring Compounds					
21)S	O-Terphenyl	12.415	388013	115.120	
22)S	1-Chlorooctadecane	13.696	295431	115.129	
Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.	d
2)AT	n-Decane (C10)	0.000	0	N.D.	d
3)	Naphthalene	0.000	0	N.D.	d
4)AT	n-Dodecane (C12)	0.000	0	N.D.	d
5)	2-Methylnaphthalene	0.000	0	N.D.	d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.	d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.	d
8)AT	n-Octadecane (C18)	0.000	0	N.D.	d
9)AT	n-Eicosane (C20)	0.000	0	N.D.	d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.	d
11)AT	n-Docosane (C22)	0.000	0	N.D.	d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.	d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.	d
14)AT	n-Octacosane (C28)	0.000	0	N.D.	d
15)BT	n-Triacontane (C30)	0.000	0	N.D.	d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.	d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.	d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.	d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.	d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.	
23)A	C9-C28(Total)	12.415f	10672013	3962.810	m
24)B	>C28-C40(Total)	0.000	0	N.D.	d
25)t	C9-C40(TOTAL)	0.000	0	N.D.	d

(f)=RT Delta > 1/2 Window (m)=manual int.

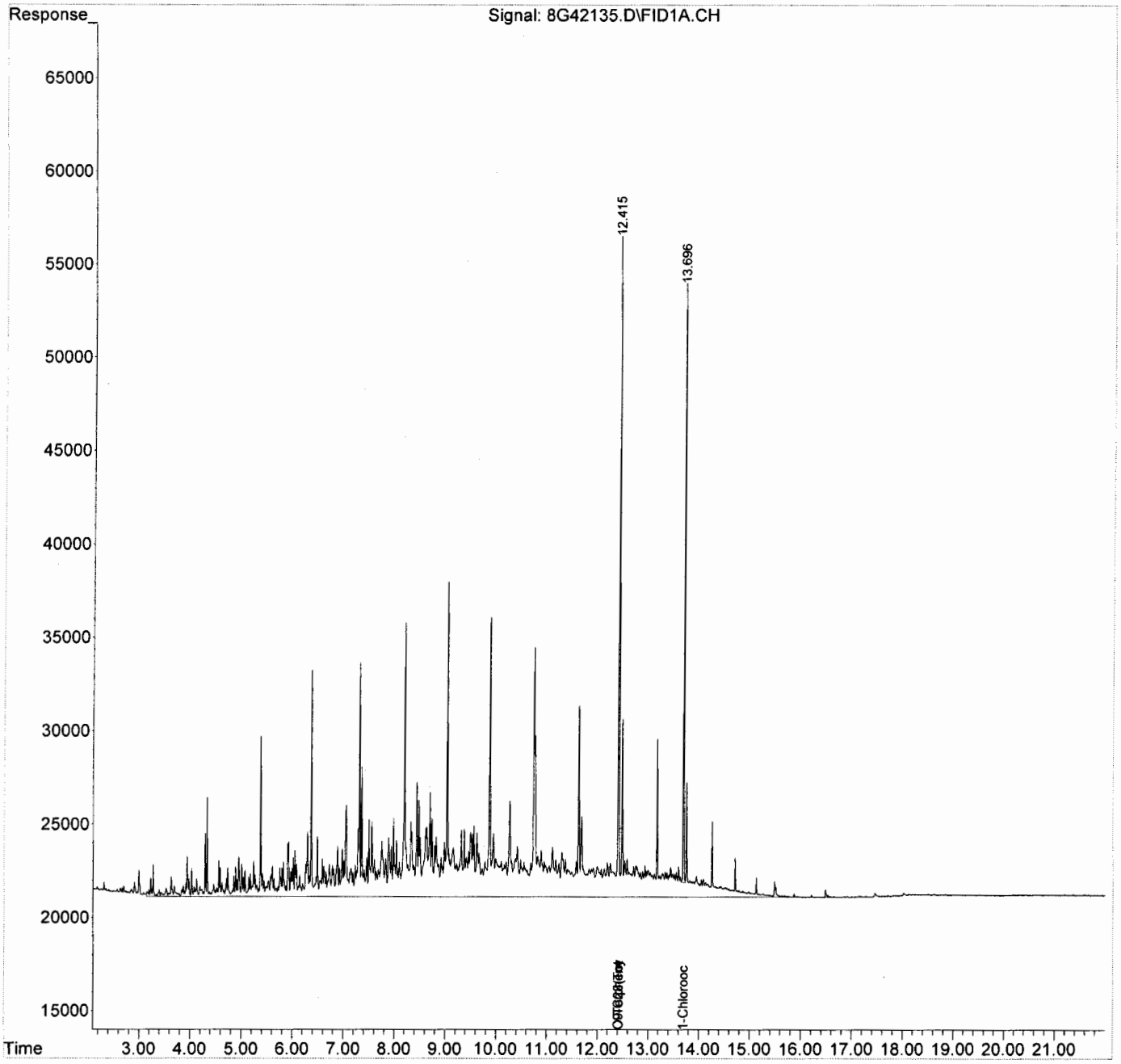
Quantitation Report (QT Reviewed)

3080110 0235

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42135.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 18:48:43
Operator : KD/RAK/MS
Sample : SMB25787(DIESEL)(MSD)
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:04:06 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0236

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42197.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 13:49:50
Operator : KD/RAK/MS
Sample : AC73723-001(10X)(MS)
Misc : S.TPH:10
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:21:56 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.406	35395	10.501		
22)S	1-Chlorooctadecane	13.691	26718	10.412		
	Target Compounds					
1)AT	n-Nonane (C9)	3.273	17824	6.770		
2)AT	n-Decane (C10)	4.329	22417	8.333		
3)	Naphthalene	6.299	33049	10.620		
4)AT	n-Dodecane (C12)	6.368	28088	10.298		
5)	2-Methylnaphthalene	7.351	31667	10.371		
6)AT	n-Tetradecane (C14)	8.195	30254	11.075		
7)AT	n-Hexadecane (C16)	9.869	32714	11.984		
8)AT	n-Octadecane (C18)	11.624	31397	11.534		
9)AT	n-Eicosane (C20)	13.173	30072	11.046		
10)AT	n-Heneicosane (C21)	13.754	30647	11.199		
11)AT	n-Docosane (C22)	14.260	30099	11.087		
12)AT	n-Tetracosane (C24)	15.127	26387	9.806		
13)AT	n-Hexacosane (C26)	15.871	26317	10.000		
14)AT	n-Octacosane (C28)	16.535	24399	9.435		
15)BT	n-Triacontane (C30)	17.144	22186	8.609		
16)BT	n-Dotriacontane(C32)	17.711	22061	8.741		m
17)BT	n-Tetratriacontane (C34	18.246	24480	10.055		
18)BT	n-Hexatriacontane (C36)	18.851	27048	11.243		m
19)BT	n-Octatriacontane (C38)	19.614	23879	10.279		
20)BT	n-Tetracontane (C40)	20.614	24813	11.041		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

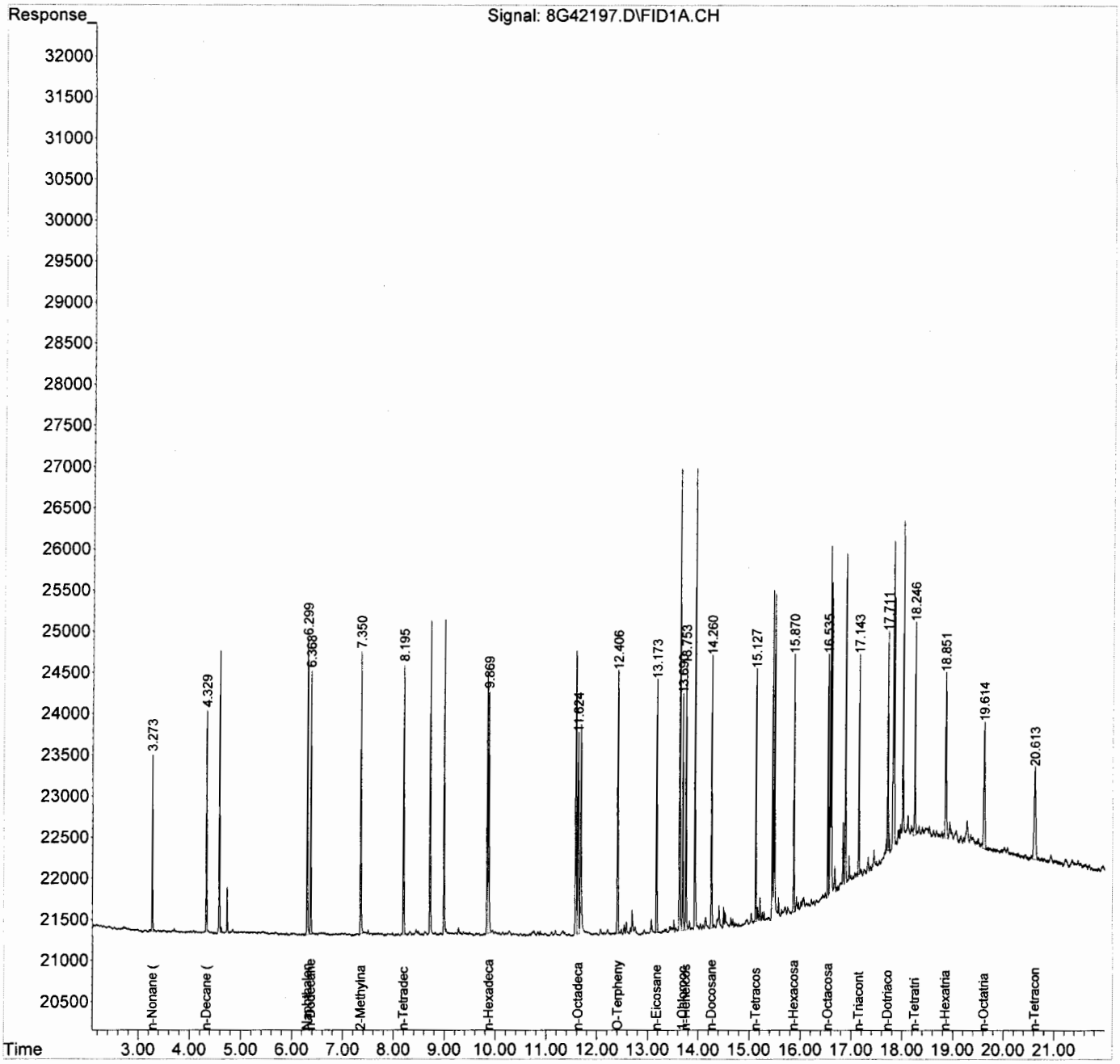
Quantitation Report (QT Reviewed)

3080110 0237

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42197.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 13:49:50
Operator : KD/RAK/MS
Sample : AC73723-001(10X)(MS)
Misc : S.TPH:10
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:21:56 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0238

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42198.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 14:19:57
Operator : KD/RAK/MS
Sample : AC73723-001(10X)(DUP)
Misc : S.TPH:10
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:23:44 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.406	27234	8.080		
22)S	1-Chlorooctadecane	13.691	19194	7.480		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		d
2)AT	n-Decane (C10)	0.000	0	N.D.		d
3)	Naphthalene	0.000	0	N.D.		d
4)AT	n-Dodecane (C12)	0.000	0	N.D.		d
5)	2-Methylnaphthalene	0.000	0	N.D.		d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	13.629f	780816	289.938		m
24)B	>C28-C40(Total)	18.010f	2817744	1165.016		m
25)t	C9-C40(TOTAL)	13.629f	3596973	1382.615		m

(f)=RT Delta > 1/2 Window (m)=manual int.

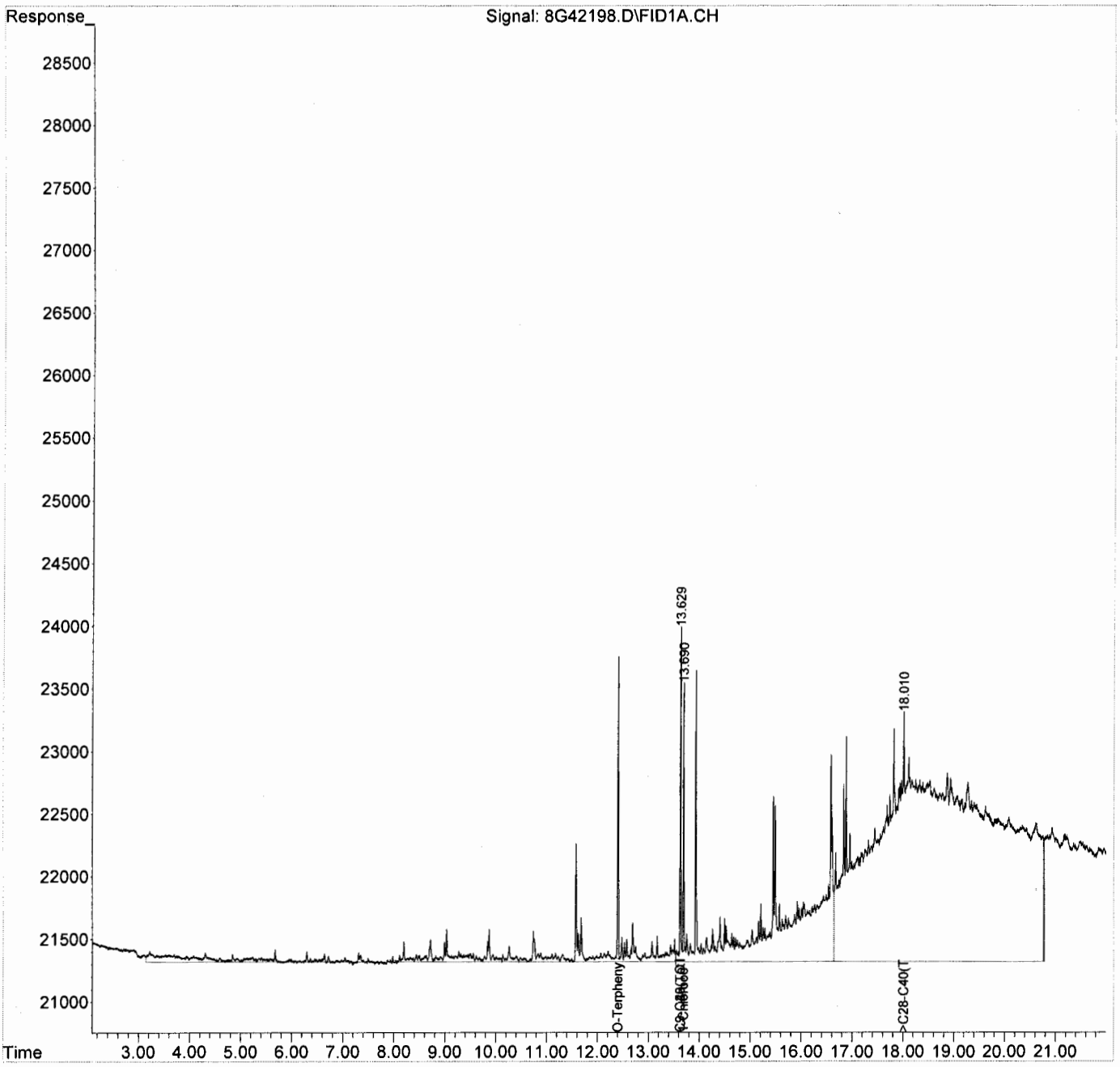
Quantitation Report (QT Reviewed)

3080110 0239

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42198.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 14:19:57
Operator : KD/RAK/MS
Sample : AC73723-001(10X)(DUP)
Misc : S.TPH:10
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:23:44 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0240

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42199.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 14:50:19
Operator : KD/RAK/MS
Sample : AC73723-001(10X)
Misc : S.TPH:10
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:30:13 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units
System Monitoring Compounds					
21)S	O-Terphenyl	12.406	29924	8.878	
22)S	1-Chlorooctadecane	13.690	23812	9.279	
Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.	d
2)AT	n-Decane (C10)	0.000	0	N.D.	d
3)	Naphthalene	0.000	0	N.D.	d
4)AT	n-Dodecane (C12)	0.000	0	N.D.	d
5)	2-Methylnaphthalene	0.000	0	N.D.	d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.	d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.	d
8)AT	n-Octadecane (C18)	0.000	0	N.D.	d
9)AT	n-Eicosane (C20)	0.000	0	N.D.	d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.	d
11)AT	n-Docosane (C22)	0.000	0	N.D.	d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.	d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.	d
14)AT	n-Octacosane (C28)	0.000	0	N.D.	d
15)BT	n-Triacontane (C30)	0.000	0	N.D.	d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.	d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.	d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.	d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.	d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.	d
23)A	C9-C28(Total)	13.629f	1263031	468.998	m
24)B	>C28-C40(Total)	16.878	3526060	1457.874	m
25)t	C9-C40(TOTAL)	13.629f	4790271	1841.299	m

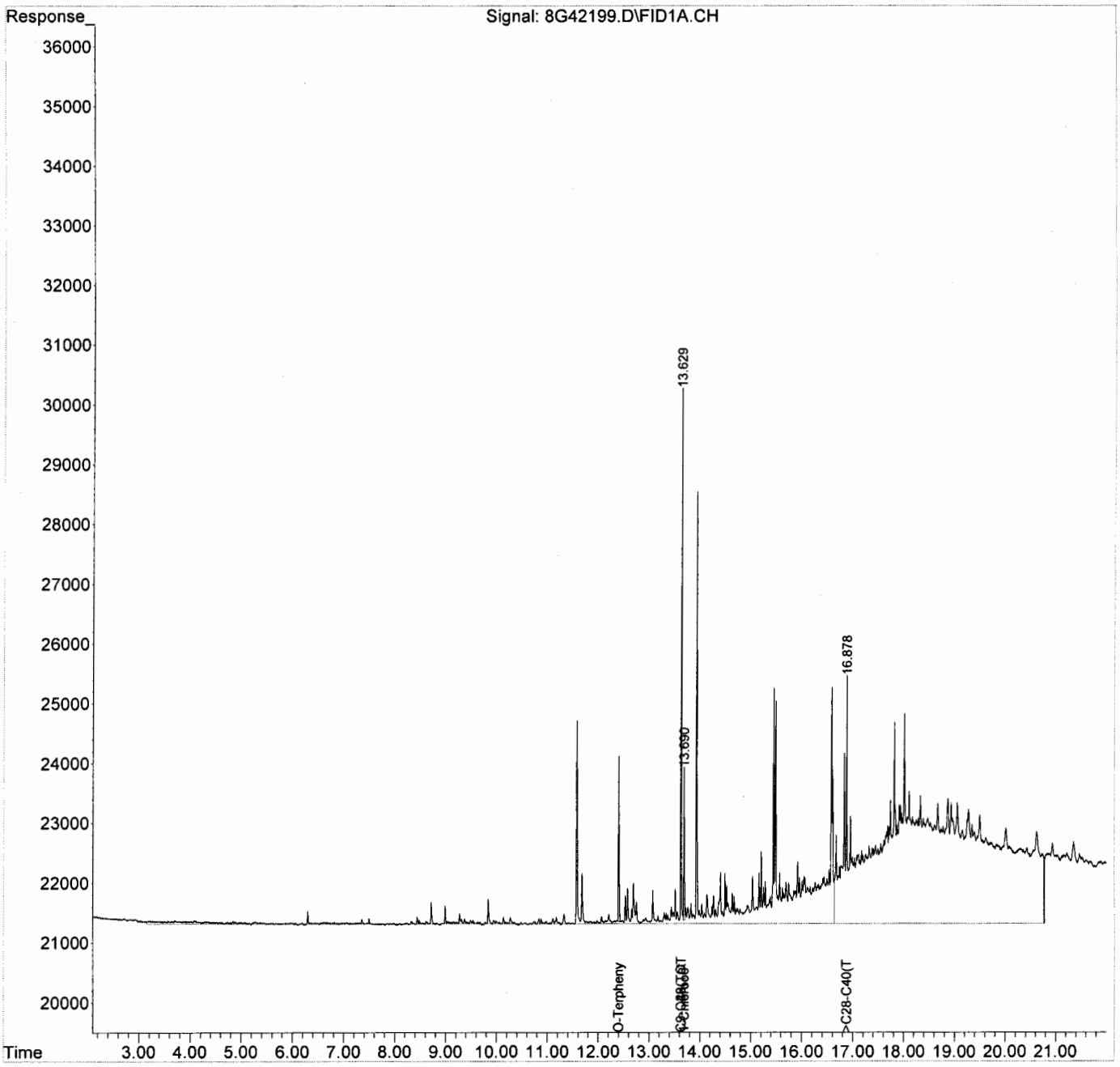
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42199.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 14:50:19
Operator : KD/RAK/MS
Sample : AC73723-001(10X)
Misc : S.TPH:10
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:30:13 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



EPH Category 2 Data

EPH Category 2 Data
Sample Data

Form1

ORGANICS REPORT

Sample Number: AC73771-001
Client Id: BB-COMP-1-0801113
Data File: 8G42168.D
Analysis Date: 08/03/13 21:47
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: NJEPHRev3B
Matrix: Soil
Initial Vol: 10g
Final Vol: 1ml
Dilution: 1
Solids: 91

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
ephc9c40	**C9-C40**	**66**	**70**				

Worksheet #: 272475 ***Total Target Concentration*** 70 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42168.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 21:47:46
Operator : KD/RAK/MS
Sample : AC73771-001
Misc : S.TPH
ALS Vial : 37 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:00:04 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.410	296538	87.981		
22)S	1-Chlorooctadecane	13.693	227822	88.781		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		d
5)	2-Methylnaphthalene	0.000	0	N.D.		d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	12.410f	1278319	474.675		m
24)B	>C28-C40(Total)	18.801f	1518958	628.024		m
25)t	C9-C40(TOTAL)	12.410f	2796524	1074.937		m

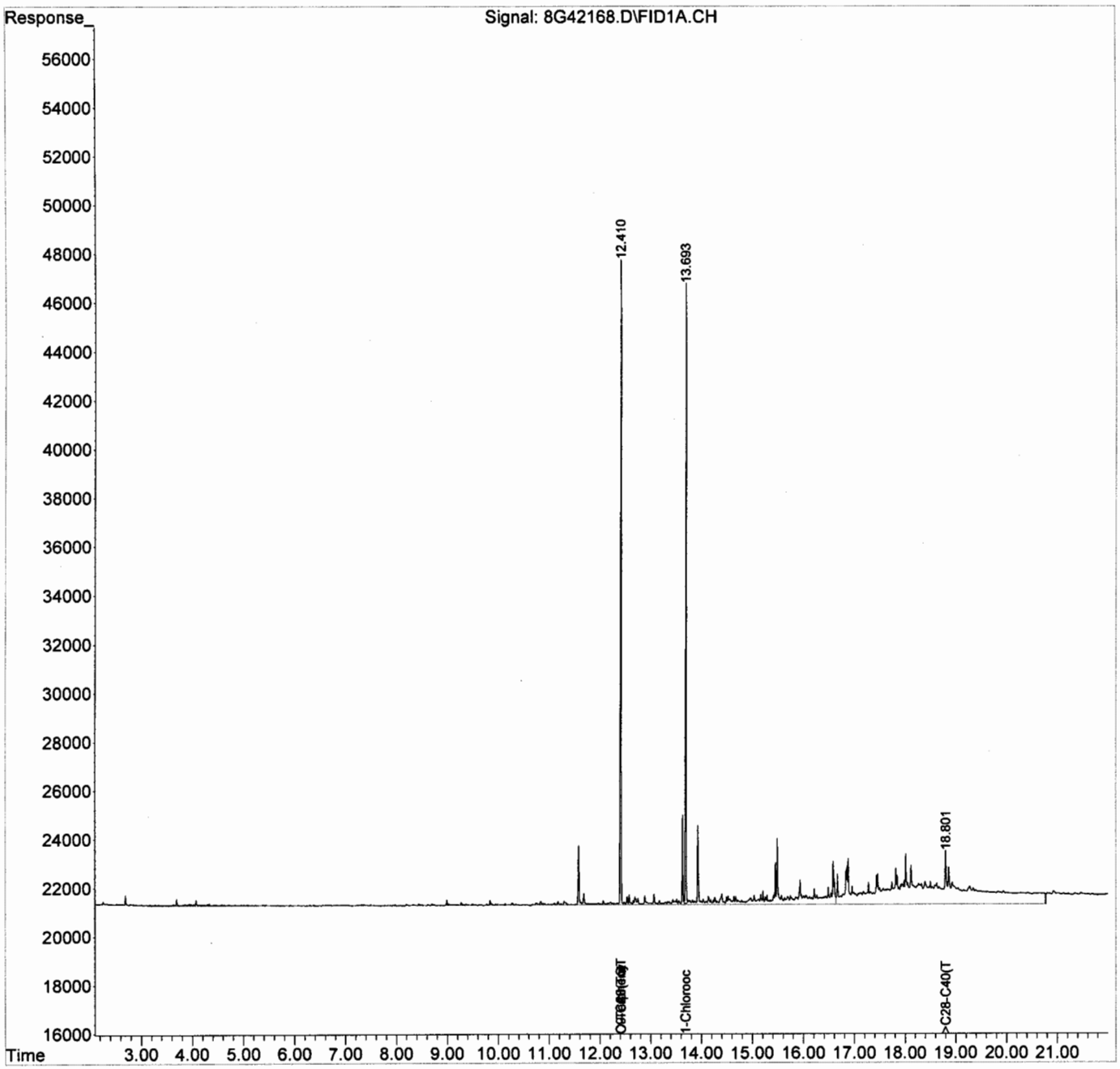
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42168.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 21:47:46
Operator : KD/RAK/MS
Sample : AC73771-001
Misc : S.TPH
ALS Vial : 37 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:00:04 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Form1

ORGANICS REPORT

Sample Number: AC73771-002
Client Id: BB-COMP-2-0801113
Data File: 8G42169.D
Analysis Date: 08/03/13 22:17
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: NJEPHRev3B
Matrix: Soil
Initial Vol: 10g
Final Vol: 1ml
Dilution: 1
Solids: 89

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
ephc9c40	C9-C40	67	U				

Worksheet #: 272475

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42169.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 22:17:43
Operator : KD/RAK/MS
Sample : AC73771-002
Misc : S.TPH
ALS Vial : 38 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:02:10 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units
System Monitoring Compounds					
21)S	O-Terphenyl	12.410	289030	85.753	
22)S	1-Chlorooctadecane	13.693	219034	85.357	
Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.	
2)AT	n-Decane (C10)	0.000	0	N.D.	d
3)	Naphthalene	0.000	0	N.D.	d
4)AT	n-Dodecane (C12)	0.000	0	N.D.	d
5)	2-Methylnaphthalene	0.000	0	N.D.	d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.	d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.	d
8)AT	n-Octadecane (C18)	0.000	0	N.D.	d
9)AT	n-Eicosane (C20)	0.000	0	N.D.	d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.	d
11)AT	n-Docosane (C22)	0.000	0	N.D.	d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.	d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.	d
14)AT	n-Octacosane (C28)	0.000	0	N.D.	d
15)BT	n-Triacontane (C30)	0.000	0	N.D.	d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.	d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.	d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.	d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.	d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.	d
23)A	C9-C28(Total)	12.410f	1003473	372.617	m
24)B	>C28-C40(Total)	16.854	1419064	586.722	m
25)t	C9-C40(TOTAL)	12.410f	2421858	930.921	m

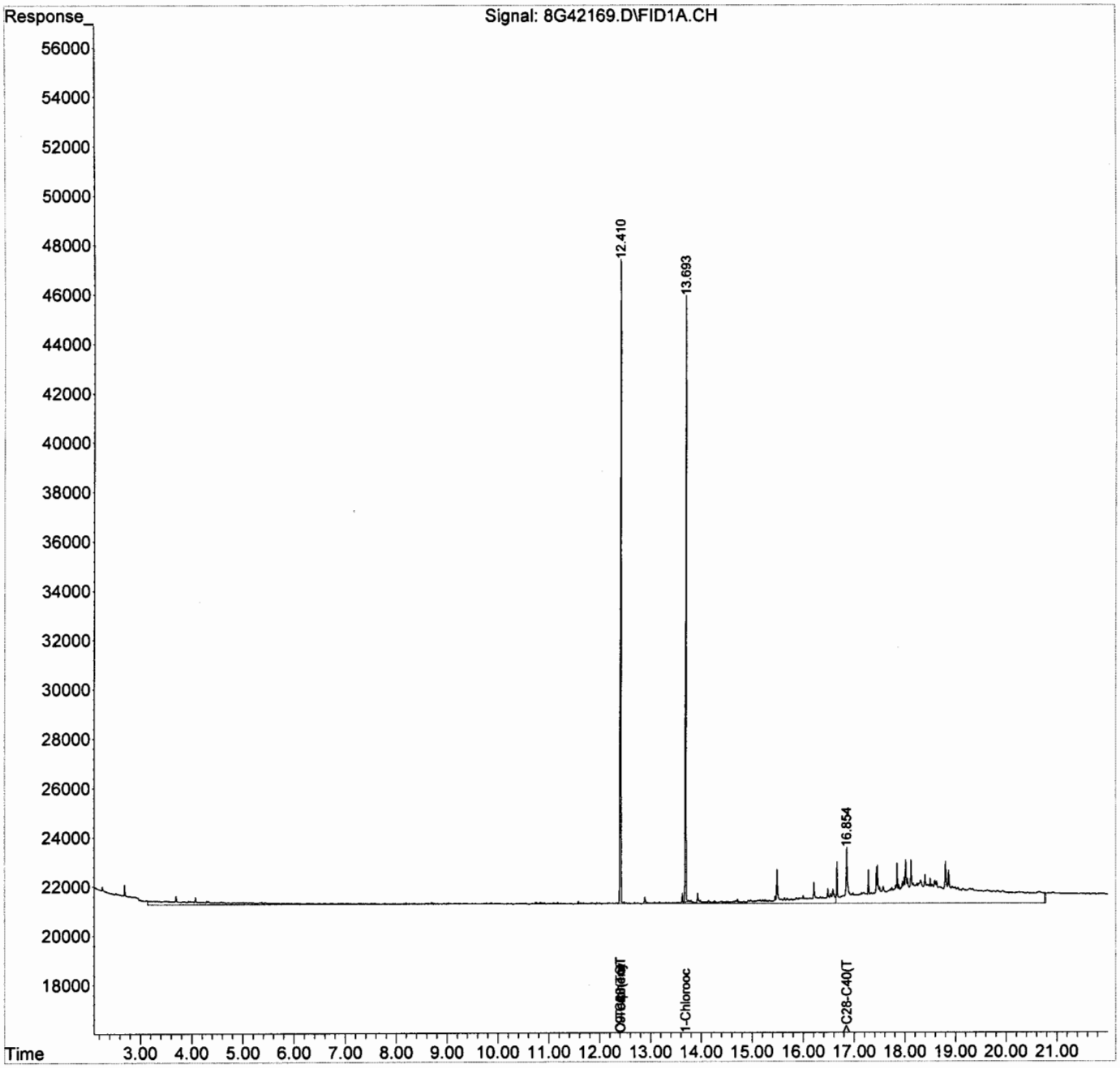
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42169.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 22:17:43
Operator : KD/RAK/MS
Sample : AC73771-002
Misc : S.TPH
ALS Vial : 38 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:02:10 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



EPH Category 2 Data
QC Summary

FORM2

Surrogate Recovery

Method: NJEPHRev3B

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column0 S3 Recov	Column0 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
8G42131.D	SMB25787	Soil	08/02/13 16:46	1		85	87				
8G42168.D	AC73771-001	Soil	08/03/13 21:47	1		88	89				
8G42169.D	AC73771-002	Soil	08/03/13 22:17	1		86	85				
8G42132.D	SMB25787(M	Soil	08/02/13 17:17	1		100	103				
8G42133.D	SMB25787(M	Soil	08/02/13 17:47	1		107	109				
8G42134.D	SMB25787(DI	Soil	08/02/13 18:18	1		95	95				
8G42135.D	SMB25787(DI	Soil	08/02/13 18:48	1		115	115				
8G42197.D	AC73723-001(	Soil	08/04/13 13:49	10		105	104				
8G42198.D	AC73723-001(	Soil	08/04/13 14:19	10		81	75				
8G42199.D	AC73723-001(	Soil	08/04/13 14:50	10		89	93				

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: NJEPHRev3B

Soil Limits

Compound	Spike Amt	Limits
S1=O-Terphenyl	100	40-140
S2=1-Chlorooctadecane	100	40-140

Form3
Recovery Data
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42132.D	SMB25787(MS)	8/2/2013 5:17:22 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	65.98	0	100	66	25	140
n-Decane (C10)	1	88.55	0	100	89	40	140
n-Dodecane (C12)	1	108.25	0	100	108	40	140
n-Tetradecane (C14)	1	111.02	0	100	111	40	140
n-Hexadecane (C16)	1	110.08	0	100	110	40	140
n-Octadecane (C18)	1	104.86	0	100	105	40	140
n-Eicosane (C20)	1	103.68	0	100	104	40	140
n-Heneicosane (C21)	1	102.65	0	100	103	40	140
n-Docosane (C22)	1	101.33	0	100	101	40	140
n-Tetracosane (C24)	1	99.72	0	100	100	40	140
n-Hexacosane (C26)	1	101.24	0	100	101	40	140
n-Octacosane (C28)	1	100.01	0	100	100	40	140
n-Triacontane (C30)	1	100.35	0	100	100	40	140
n-Dotriacontane(C32)	1	101.17	0	100	101	40	140
n-Tetratriacontane (C34)	1	102.99	0	100	103	40	140
n-Hexatriacontane (C36)	1	104.33	0	100	104	40	140
n-Octatriacontane (C38)	1	104.66	0	100	105	40	140
n-Tetracontane (C40)	1	106.1	0	100	106	40	140

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42133.D	SMB25787(MSD)	8/2/2013 5:47:46 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	78.21	0	100	78	25	140
n-Decane (C10)	1	98.51	0	100	99	40	140
n-Dodecane (C12)	1	117.76	0	100	118	40	140
n-Tetradecane (C14)	1	122.66	0	100	123	40	140
n-Hexadecane (C16)	1	124.16	0	100	124	40	140
n-Octadecane (C18)	1	118.69	0	100	119	40	140
n-Eicosane (C20)	1	115.04	0	100	115	40	140
n-Heneicosane (C21)	1	111.89	0	100	112	40	140
n-Docosane (C22)	1	109.56	0	100	110	40	140
n-Tetracosane (C24)	1	103.69	0	100	104	40	140
n-Hexacosane (C26)	1	102.23	0	100	102	40	140
n-Octacosane (C28)	1	98.82	0	100	99	40	140
n-Triacontane (C30)	1	98.74	0	100	99	40	140
n-Dotriacontane(C32)	1	100.02	0	100	100	40	140
n-Tetratriacontane (C34)	1	102.66	0	100	103	40	140
n-Hexatriacontane (C36)	1	104.08	0	100	104	40	140
n-Octatriacontane (C38)	1	105.44	0	100	105	40	140
n-Tetracontane (C40)	1	107.49	0	100	107	40	140

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42134.D	SMB25787(DIESEL)(MS)	8/2/2013 6:18:13 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
C9-C28	1	3081.19	0	3000	103	40	140

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42135.D	SMB25787(DIESEL)(MSD)	8/2/2013 6:48:43 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
C9-C28	1	3639.08	0	3000	121	40	140

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42133.D	SMB25787(MSD)	8/2/2013 5:47:46 PM
Duplicate(If applicable):	8G42132.D	SMB25787(MS)	8/2/2013 5:17:22 PM
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Nonane (C9)	1	78.21	65.98	17	25
n-Decane (C10)	1	98.51	88.55	11	25
n-Dodecane (C12)	1	117.76	108.25	8.4	25
n-Tetradecane (C14)	1	122.66	111.02	10	25
n-Hexadecane (C16)	1	124.16	110.08	12	25
n-Octadecane (C18)	1	118.69	104.86	12	25
n-Eicosane (C20)	1	115.04	103.68	10	25
n-Heneicosane (C21)	1	111.89	102.65	8.6	25
n-Docosane (C22)	1	109.56	101.33	7.8	25
n-Tetracosane (C24)	1	103.69	99.72	3.9	25
n-Hexacosane (C26)	1	102.23	101.24	0.97	25
n-Octacosane (C28)	1	98.82	100.01	1.2	25
n-Triacontane (C30)	1	98.74	100.35	1.6	25
n-Dotriacontane(C32)	1	100.02	101.17	1.1	25
n-Tetratriacontane (C34)	1	102.66	102.99	0.32	25
n-Hexatriacontane (C36)	1	104.08	104.33	0.24	25
n-Octatriacontane (C38)	1	105.44	104.66	0.74	25
n-Tetracontane (C40)	1	107.49	106.1	1.3	25

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42135.D	SMB25787(DIESEL)(MSD)	8/2/2013 6:48:43 PM
Duplicate(If applicable):	8G42134.D	SMB25787(DIESEL)(MS)	8/2/2013 6:18:13 PM
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
C9-C28	1	3639.08	3081.19	17	25

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Form3
Recovery Data
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42197.D	AC73723-001(10X)(MS)	8/4/2013 1:49:50 PM
Non Spike(If applicable):	8G42199.D	AC73723-001(10X)	8/4/2013 2:50:19 PM
Inst Blank(If applicable):	8G42190.D	INST BLK(MECL2)	8/4/2013 10:18:27 AM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	0	0	100	0*	25	140
n-Decane (C10)	1	0	0	100	0*	40	140
n-Dodecane (C12)	1	103	0	100	103	40	140
n-Tetradecane (C14)	1	110.7	0	100	111	40	140
n-Hexadecane (C16)	1	119.8	0	100	120	40	140
n-Octadecane (C18)	1	115.3	0	100	115	40	140
n-Eicosane (C20)	1	110.5	0	100	110	40	140
n-Heneicosane (C21)	1	112	0	100	112	40	140
n-Docosane (C22)	1	110.9	0	100	111	40	140
n-Tetracosane (C24)	1	0	0	100	0*	40	140
n-Hexacosane (C26)	1	100	0	100	100	40	140
n-Octacosane (C28)	1	0	0	100	0*	40	140
n-Triacontane (C30)	1	0	0	100	0*	40	140
n-Dotriacontane(C32)	1	0	0	100	0*	40	140
n-Tetratriacontane (C34)	1	100.6	0	100	101	40	140
n-Hexatriacontane (C36)	1	112.4	0	100	112	40	140
n-Octatriacontane (C38)	1	102.8	0	100	103	40	140
n-Tetracontane (C40)	1	110.4	0	100	110	40	140

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42198.D	AC73723-001(10X)(DUP)	8/4/2013 2:19:57 PM
Duplicate(If applicable):	8G42199.D	AC73723-001(10X)	8/4/2013 2:50:19 PM
Inst Blank(If applicable):	8G42190.D	INST BLK(MECL2)	8/4/2013 10:18:27 AM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: DUP

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
C9-C28	1	0	0	NA	50
>C28-C40	1	7217.9	10146.4	34	50
C9-C40	1	8580.7	13141.5	42	50

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: SMB25787
Blank Data File: 8G42131.D
Matrix: Soil

Blank Analysis Date: 08/02/13 16:46
Blank Extraction Date: 08/02/13
(If Applicable)
Method: NJEPHRev3B

Sample Number	Data File	Analysis Date
AC73771-001	8G42168.D	08/03/13 21:47
AC73771-002	8G42169.D	08/03/13 22:17
AC73723-001(10X)	8G42199.D	08/04/13 14:50
AC73723-001(10X)	8G42198.D	08/04/13 14:19
AC73723-001(10X)	8G42197.D	08/04/13 13:49
SMB25787(DIESE	8G42135.D	08/02/13 18:48
SMB25787(DIESE	8G42134.D	08/02/13 18:18
SMB25787(MSD)	8G42133.D	08/02/13 17:47
SMB25787(MS)	8G42132.D	08/02/13 17:17

Form 5

Method: NJEPHRev3B

Instrument: GC_8 Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8G41617.D	INST BLK(MECL2)	07/15/13 08:12	Soil					
8G41618.D	CALDTH AL@100PPM	07/15/13 09:13	Soil	8G41618.	12.4312	0		
8G41619.D	CALDTH AL@500PPM	07/15/13 09:45	Soil	8G41618.	12.4501	0.1519		
8G41620.D	CALDTH AL@300PPM	07/15/13 10:15	Soil	8G41618.	12.4405	0.0748		
8G41621.D	CALDTH AL@200PPM	07/15/13 10:45	Soil	8G41618.	12.4358	0.037		
8G41622.D	CALDTH AL@100PPM	07/15/13 11:16	Soil	8G41618.	12.4302	0.008		
8G41623.D	CALDTH AL@50PPM	07/15/13 11:46	Soil	8G41618.	12.4278	0.0274		
8G41624.D	CALDTH AL@10PPM	07/15/13 12:17	Soil	8G41618.	12.4250	0.0499		
8G41625.D	@100PPM	07/15/13 12:48	Soil	8G41618.	12.4309	0.0024		
8G41626.D	@100PPM	07/15/13 13:19	Soil	8G41618.	12.4313	0.0008		
8G41627.D	ICV DTH AL@100PPM	07/15/13 13:57	Soil	8G41618.	12.4322	0.008		
8G41628.D	INST BLK(MECL2)	07/15/13 14:28	Soil	8G41618.	0.0000	200 *		
8G41629.D	AC73363-005	07/15/13 14:59	Soil	8G41618.	12.4290	0.0177		
8G41630.D	AC73363-004(5X)	07/15/13 15:30	Soil	8G41618.	12.4266	0.037		
8G41631.D	AC73406-002	07/15/13 16:01	Soil	8G41618.	12.4300	0.0097		
8G41632.D	AC73382-001	07/15/13 16:32	Soil	8G41618.	12.4302	0.008		
8G41633.D	AC73382-002	07/15/13 17:03	Soil	8G41618.	12.4304	0.0064		
8G41634.D	AC73382-003	07/15/13 17:34	Soil	8G41618.	12.4302	0.008		
8G41635.D	AC73383-001	07/15/13 18:05	Soil	8G41618.	12.4303	0.0072		
8G41636.D	AC73406-003	07/15/13 18:36	Soil	8G41618.	12.4318	0.0048		
8G41637.D	AC73406-005	07/15/13 19:06	Soil	8G41618.	12.4305	0.0056		
8G41638.D	AC73406-004	07/15/13 19:37	Soil	8G41618.	12.4315	0.0024		
8G41639.D	AC73348-005	07/15/13 20:08	Soil	8G41618.	12.4319	0.0056		
8G41640.D	TEST	07/15/13 20:39	Soil	8G41618.	0.0000	200 *		
8G41641.D	CALDTH AL@100PPM	07/15/13 21:10	Soil	8G41618.	12.4322	0.008		
8G41642.D	100PPM	07/15/13 22:11	Soil	8G41641.	12.4326	0.0032		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: NJEPHRev3B

Instrument: GC_8 Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8G42127.D	INST BLK(MECL2)	08/02/13 14:45	Soil					
8G42128.D	100PPM	08/02/13 15:15	Soil					
8G42129.D	CALDTH AL@100PPM	08/02/13 15:45	Soil	8G42129.	12.4141	0		
8G42130.D	INST BLK(MECL2)	08/02/13 16:16	Soil	8G42129.	0.0000	200 *		
8G42131.D	SMB25787	08/02/13 16:46	Soil	8G42129.	12.4127	0.0113		
8G42132.D	SMB25787(MS)	08/02/13 17:17	Soil	8G42129.	12.4133	0.0064		
8G42133.D	SMB25787(MSD)	08/02/13 17:47	Soil	8G42129.	12.4138	0.0024		
8G42134.D	SMB25787(DIESEL)(MS	08/02/13 18:18	Soil	8G42129.	12.4140	0.0008		
8G42135.D	SMB25787(DIESEL)(MS	08/02/13 18:48	Soil	8G42129.	12.4150	0.0073		
8G42136.D	SMB25742(DIESEL)(MS	08/02/13 19:19	Soil	8G42129.	12.4146	0.004		
8G42137.D	SMB25742(DIESEL)(MS	08/02/13 19:49	Soil	8G42129.	12.4160	0.0153		
8G42138.D	SMB25772(MS)	08/02/13 20:19	Soil	8G42129.	12.4136	0.004		
8G42139.D	SMB25772(MSD)	08/02/13 20:50	Soil	8G42129.	12.4136	0.004		
8G42140.D	AC73713-001(MS)	08/02/13 21:20	Soil	8G42129.	12.4110	0.025		
8G42141.D	AC73713-001(DUP)	08/02/13 21:50	Soil	8G42129.	12.4120	0.0169		
8G42142.D	AC73713-001	08/02/13 22:20	Soil	8G42129.	12.4127	0.0113		
8G42143.D	AC73713-002	08/02/13 22:51	Soil	8G42129.	12.4137	0.0032		
8G42144.D	AC73716-008	08/02/13 23:21	Soil	8G42129.	12.4115	0.0209		
8G42145.D	AC73706-007	08/02/13 23:51	Soil	8G42129.	12.4115	0.0209		
8G42146.D	AC73706-013	08/03/13 00:21	Soil	8G42129.	12.4110	0.025		
8G42147.D	AC73706-001	08/03/13 00:51	Soil	8G42129.	12.4114	0.0218		
8G42148.D	TEST	08/03/13 01:21	Soil	8G42129.	0.0000	200 *		
8G42149.D	100PPM	08/03/13 11:43	Soil	8G42129.	12.4156	0.0121		
8G42150.D	CALDTH AL@100PPM	08/03/13 12:15	Soil	8G42129.	12.4134	0.0056		
8G42151.D	INST BLK(MECL2)	08/03/13 13:15	Soil	8G42150.	0.0000	200 *		
8G42152.D	SMB25786	08/03/13 13:45	Soil	8G42150.	12.4119	0.0121		
8G42153.D	SMB25786(DIESEL)(MS	08/03/13 14:15	Soil	8G42150.	12.4121	0.0105		
8G42154.D	AC73713-006	08/03/13 14:45	Soil	8G42150.	12.4097	0.0298		
8G42155.D	AC73713-007	08/03/13 15:16	Soil	8G42150.	12.4107	0.0218		
8G42156.D	AC73713-009	08/03/13 15:46	Soil	8G42150.	12.4106	0.0226		
8G42157.D	AC73672-002(R)	08/03/13 16:16	Soil	8G42150.	12.4105	0.0234		
8G42158.D	AC73706-010	08/03/13 16:46	Soil	8G42150.	12.4110	0.0193		
8G42159.D	AC73706-019	08/03/13 17:16	Soil	8G42150.	12.4104	0.0242		
8G42160.D	AC73706-025	08/03/13 17:47	Soil	8G42150.	12.4110	0.0193		
8G42161.D	AC73713-008	08/03/13 18:17	Soil	8G42150.	12.4121	0.0105		
8G42162.D	73732-001	08/03/13 18:47	Soil	8G42150.	12.4221	0.0701		
8G42163.D	AC73732-005	08/03/13 19:17	Soil	8G42150.	12.4688	0.4453		
8G42164.D	AC73669-007	08/03/13 19:47	Soil	8G42150.	12.4111	0.0185		
8G42165.D	AC73706-028	08/03/13 20:17	Soil	8G42150.	12.4106	0.0226		
8G42166.D	AC73706-022	08/03/13 20:47	Soil	8G42150.	12.4105	0.0234		
8G42167.D	AC73706-031	08/03/13 21:17	Soil	8G42150.	12.4103	0.025		
8G42168.D	AC73771-001	08/03/13 21:47	Soil	8G42150.	12.4103	0.025		
8G42169.D	AC73771-002	08/03/13 22:17	Soil	8G42150.	12.4100	0.0274		
8G42170.D	TEST	08/03/13 22:47	Soil	8G42150.	0.0000	200 *		
8G42171.D	CALDTH AL@100PPM	08/03/13 23:17	Soil	8G42150.	12.4119	0.0121		
8G42172.D	100PPM	08/04/13 00:17	Soil	8G42171.	12.4127	0.0064		
8G42173.D	INST BLK(MECL2)	08/04/13 01:17	Soil	8G42171.	0.0000	200 *		
8G42174.D	AC73706-016	08/04/13 01:47	Soil	8G42171.	12.4104	0.0121		
8G42175.D	AC73706-004	08/04/13 02:17	Soil	8G42171.	12.4103	0.0129		
8G42176.D	AC73713-004	08/04/13 02:47	Soil	8G42171.	12.4199	0.0644		
8G42177.D	AC73713-012	08/04/13 03:17	Soil	8G42171.	12.4423	0.2446		
8G42178.D	AC73708-001	08/04/13 03:47	Soil	8G42171.	12.4113	0.0048		
8G42179.D	AC73708-004	08/04/13 04:17	Soil	8G42171.	12.4098	0.0169		
8G42180.D	AC73672-001(5X)	08/04/13 04:47	Soil	8G42171.	12.4073	0.0371		
8G42181.D	AC73685-015(5X)	08/04/13 05:17	Soil	8G42171.	12.4074	0.0363		
8G42182.D	AC73685-017(10X)	08/04/13 05:47	Soil	8G42171.	12.4066	0.0427		
8G42183.D	AC73723-001(20X)(MS)	08/04/13 06:17	Soil	8G42171.	12.4069	0.0403		
8G42184.D	AC73723-001(20X)(DUP	08/04/13 06:47	Soil	8G42171.	12.4063	0.0451		
8G42185.D	AC73723-001(20X)	08/04/13 07:17	Soil	8G42171.	12.4065	0.0435		
8G42186.D	TEST	08/04/13 07:47	Soil	8G42171.	0.0000	200 *		
8G42187.D	CALDTH AL@100PPM	08/04/13 08:17	Soil	8G42171.	12.4114	0.004		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: NJEPHRev3B

Instrument: GC_8 Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8G42188.D	INST BLK(MECL2)	08/04/13 08:48	Soil					
8G42189.D	CALDTH AL@100PPM	08/04/13 09:48	Soil	8G42189.	12.4103	0		
8G42190.D	INST BLK(MECL2)	08/04/13 10:18	Soil	8G42189.	0.0000	200*		
8G42191.D	SMB25791	08/04/13 10:48	Soil	8G42189.	12.4096	0.0056		
8G42192.D	MBS25791	08/04/13 11:18	Soil	8G42189.	12.4094	0.0073		
8G42193.D	SMB25791(MSD)	08/04/13 11:49	Soil	8G42189.	12.4117	0.0113		
8G42194.D	AC73729-001(MS)	08/04/13 12:19	Soil	8G42189.	12.4114	0.0089		
8G42195.D	AC73729-001DUP)	08/04/13 12:49	Soil	8G42189.	12.4098	0.004		
8G42196.D	AC73729-001	08/04/13 13:19	Soil	8G42189.	12.4104	0.0008		
8G42197.D	AC73723-001(10X)(MS)	08/04/13 13:49	Soil	8G42189.	12.4062	0.033		
8G42198.D	AC73723-001(10X)(DUP	08/04/13 14:19	Soil	8G42189.	12.4058	0.0363		
8G42199.D	AC73723-001(10X)	08/04/13 14:50	Soil	8G42189.	12.4059	0.0355		
8G42200.D	AC73760-001(10X)	08/04/13 15:20	Soil	8G42189.	12.4056	0.0379		
8G42201.D	AC73760-002(10X)	08/04/13 15:50	Soil	8G42189.	12.4052	0.0411		
8G42202.D	AC73713-008(10X)	08/04/13 16:20	Soil	8G42189.	12.4060	0.0347		
8G42203.D	AC73713-012(10X)	08/04/13 16:50	Soil	8G42189.	12.4058	0.0363		
8G42204.D	AC73760-003(10X)	08/04/13 17:20	Soil	8G42189.	12.4050	0.0427		
8G42205.D	AC73708-002	08/04/13 17:50	Soil	8G42189.	12.4100	0.0024		
8G42206.D	AC73708-003	08/04/13 18:20	Soil	8G42189.	12.4097	0.0048		
8G42207.D	AC73672-001(5X)	08/04/13 18:50	Soil	8G42189.	12.4061	0.0338		
8G42208.D	AC73729-022	08/04/13 19:20	Soil	8G42189.	12.4084	0.0153		
8G42209.D	AC73729-010	08/04/13 19:50	Soil	8G42189.	12.4094	0.0073		
8G42210.D	AC73729-013	08/04/13 20:20	Soil	8G42189.	12.4094	0.0073		
8G42211.D	CALDTH AL@100PPM	08/05/13 08:00	Soil	8G42189.	12.4154	0.0411		
8G42212.D	INST BLK(MECL2)	08/05/13 08:37	Soil	8G42211.	0.0000	200*		
8G42213.D	AC73729-007	08/05/13 09:16	Soil	8G42211.	12.4103	0.0411		
8G42214.D	TEST	08/05/13 09:46	Soil	8G42211.	12.4098	0.0451		
8G42215.D	AC73729-031	08/05/13 10:19	Soil	8G42211.	12.4073	0.0653		
8G42216.D	AC73729-028	08/05/13 10:49	Soil	8G42211.	12.4065	0.0717		
8G42217.D	AC73729-019	08/05/13 11:19	Soil	8G42211.	12.4053	0.0814		
8G42218.D	AC73729-016	08/05/13 11:49	Soil	8G42211.	12.4060	0.0757		
8G42219.D	AC73729-055	08/05/13 12:20	Soil	8G42211.	12.4059	0.0765		
8G42220.D	AC73729-058	08/05/13 12:50	Soil	8G42211.	12.4057	0.0782		
8G42221.D	AC73729-034	08/05/13 13:20	Soil	8G42211.	12.4069	0.0685		
8G42222.D	AC73732-005(100X)	08/05/13 13:50	Soil	8G42211.	12.3906	0.1999		
8G42223.D	AC73760-002(20X)	08/05/13 14:20	Soil	8G42211.	0.0000	200*		
8G42224.D	CALDTH AL@100PPM	08/05/13 14:50	Soil	8G42211.	12.4092	0.0499		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form8

EPH Surrogate Initial Calibration Areas And Area Recovery Limits

Inital Calibration File: 8G41618.D
Analysis Date: 7/15/2013 9:13:00 AM
Analytical Method: NJEPHRev3B

Surrogate	Area Found	Area Limit
1-Chlorooctadecane	253233	126616-506466
O-Terphenyl	326899	163450-653798

Continuing Calibration Data

Data File	TxtSamNum:	Analysis Date	Surrogate: 1-Chlorooctadecane	Surrogate O-Terphenyl
8G42129.D	CALDTH AL@100PPM	8/2/13 15:45	248125	329095
8G42150.D	CALDTH AL@100PPM	8/3/13 12:15	252623	344150
8G42171.D	CALDTH AL@100PPM	8/3/13 23:17	288876	385978
8G42189.D	CALDTH AL@100PPM	8/4/13 09:48	244228	325646
8G42211.D	CALDTH AL@100PPM	8/5/13 08:00	277370	371720

* - Indicates Area Failed Criteria

EPH Category 2 Data
Standards Data

3080110 0263

Form 6
Initial Calibration

Method: NJEPHRev3B

Instrument: GC_8

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	8G41618.	CALDTH AL@100PP	07/15/13 09:13	2	8G41624.	CALDTH AL@10PPM	07/15/13 12:17
3	8G41623.	CALDTH AL@50PPM	07/15/13 11:46	4	8G41621.	CALDTH AL@200PP	07/15/13 10:45
5	8G41620.	CALDTH AL@300PP	07/15/13 10:15	6	8G41619.	CALDTH AL@500PP	07/15/13 09:45

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
n-Nonane (C9)	1	0	Avg	0.2470	0.2406	0.2576	0.2523	0.2732	0.3087	----	----	0.263	3.29	0.992	1.00	9.4	100.0	10.00	50.00	200.0	300.0	500.0		
n-Decane (C10)	1	0	Avg	0.2537	0.2490	0.2664	0.2586	0.2760	0.3102	----	----	0.269	4.35	0.993	1.00	8.3	100.0	10.00	50.00	200.0	300.0	500.0		
Naphthalene	1	0	Avg	0.2932	0.2928	0.3129	0.3030	0.3139	0.3513	----	----	0.311	6.32	0.994	1.00	7.0	100.0	10.00	50.00	200.0	300.0	500.0		
n-Dodecane (C12)	1	0	Avg	0.2566	0.2581	0.2739	0.2655	0.2748	0.3073	----	----	0.273	6.39	0.995	1.00	6.8	100.0	10.00	50.00	200.0	300.0	500.0		
2-Methylnaphthalene	1	0	Avg	0.2896	0.2836	0.3085	0.3009	0.3070	0.3422	----	----	0.305	7.37	0.995	1.00	6.7	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetradecane (C14)	1	0	Avg	0.2611	0.2597	0.2748	0.2694	0.2712	0.3026	----	----	0.273	8.22	0.995	1.00	5.7	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexadecane (C16)	1	0	Avg	0.2610	0.2622	0.2768	0.2732	0.2690	0.2955	----	----	0.273	9.89	0.997	1.00	4.6	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octadecane (C18)	1	0	Avg	0.2622	0.2680	0.2788	0.2744	0.2649	0.2846	----	----	0.272	11.65	0.998	0.999	3.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Eicosane (C20)	1	0	Avg	0.2642	0.2735	0.2801	0.2774	0.2635	0.2745	----	----	0.272	13.19	0.999	0.999	2.5	100.0	10.00	50.00	200.0	300.0	500.0		
n-Heneicosane (C21)	1	0	Avg	0.2668	0.2758	0.2833	0.2805	0.2647	0.2706	----	----	0.274	13.77	0.999	0.999	2.7	100.0	10.00	50.00	200.0	300.0	500.0		
n-Docosane (C22)	1	0	Avg	0.2657	0.2765	0.2813	0.2796	0.2627	0.2629	----	----	0.271	14.28	0.999	0.999	3.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetracosane (C24)	1	0	Avg	0.2671	0.2723	0.2828	0.2805	0.2612	0.2504	----	----	0.269	15.14	0.998	0.999	4.5	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexacosane (C26)	1	0	Avg	0.2639	0.2700	0.2784	0.2760	0.2557	0.2347	----	----	0.263	15.89	0.994	1.00	6.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octacosane (C28)	1	0	Avg	0.2629	0.2653	0.2761	0.2716	0.2521	0.2233	----	----	0.259	16.55	0.990	1.00	7.4	100.0	10.00	50.00	200.0	300.0	500.0		
n-Triacontane (C30)	1	0	Avg	0.2647	0.2633	0.2768	0.2700	0.2523	0.2189	----	----	0.258	17.16	0.988	1.00	8.0	100.0	10.00	50.00	200.0	300.0	500.0		
n-Dotriacontane(C32)	1	0	Avg	0.2600	0.2577	0.2702	0.2627	0.2471	0.2163	----	----	0.252	17.74	0.989	1.00	7.6	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetratriacontane (C34)	1	0	Avg	0.2505	0.2468	0.2569	0.2517	0.2388	0.2159	----	----	0.243	18.30	0.994	1.00	6.1	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexatriacontane (C36)	1	0	Avg	0.2445	0.2387	0.2505	0.2492	0.2381	0.2221	----	----	0.241	18.91	0.997	1.00	4.3	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octatriacontane (C38)	1	0	Avg	0.2330	0.2306	0.2389	0.2401	0.2313	0.2197	----	----	0.232	19.68	0.998	1.00	3.1	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetracontane (C40)	1	0	Avg	0.2242	0.2232	0.2286	0.2318	0.2249	0.2155	----	----	0.225	20.69	0.999	1.00	2.5	100.0	10.00	50.00	200.0	300.0	500.0		
O-Terphenyl	1	0	Avg	0.3269	0.3329	0.3415	0.3385	0.3257	0.3566	----	----	0.337	12.43	0.997	0.999	3.4	100.0	10.00	50.00	200.0	300.0	500.0		
1-Chlorooctadecane	1	0	Avg	0.2532	0.2554	0.2631	0.2610	0.2470	0.2597	----	----	0.257	13.71	0.999	0.999	2.3	100.0	10.00	50.00	200.0	300.0	500.0		
C9-C28(Total)	1	0	Avg	0.2610	0.2642	0.2759	0.2716	0.2658	0.2771	----	----	0.269	3.29	0.999	1.00	2.4	1200.	120.0	600.0	2400.	3600.	6000.		
>C28-C40(Total)	1	0	Avg	0.2461	0.2434	0.2537	0.2509	0.2387	0.2181	----	----	0.242	16.65	0.995	1.00	5.3	600.0	60.00	300.0	1200.	1800.	3000.		
C9-C40(TOTAL)	1	0	Avg	0.2561	0.2573	0.2685	0.2647	0.2567	0.2574	----	----	0.260	3.29	1.00	1.00	2.0	1800.	180.0	900.0	3600.	5400.	9000.		

Avg Rsd Col 1: 5.25 Avg Rsd Col 2: -1

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Quantitation Report (QT Reviewed)

3080110 0264

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41618.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 09:13:00
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:18:06 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.431	326899	110.578		
22)S	1-Chlorooctadecane	13.709	253233	110.947		
Target Compounds						
1)AT	n-Nonane (C9)	3.290	247094	110.367		
2)AT	n-Decane (C10)	4.348	253774	111.243		
3)	Naphthalene	6.319	293239	110.334		
4)AT	n-Dodecane (C12)	6.388	256646	110.669		
5)	2-Methylnaphthalene	7.371	289639	110.289		
6)AT	n-Tetradecane (C14)	8.216	261184	110.715		
7)AT	n-Hexadecane (C16)	9.892	261026	109.717		
8)AT	n-Octadecane (C18)	11.652	262261	109.669		
9)AT	n-Eicosane (C20)	13.193	264260	109.102		
10)AT	n-Heneicosane (C21)	13.773	266837	108.901		
11)AT	n-Docosane (C22)	14.277	265738	108.586		
12)AT	n-Tetracosane (C24)	15.142	267126	108.579		
13)AT	n-Hexacosane (C26)	15.885	263966	108.506		
14)AT	n-Octacosane (C28)	16.549	262899	108.971		
15)BT	n-Triacontane (C30)	17.162	264697	109.248		
16)BT	n-Dotriacontane(C32)	17.741	260075	109.217		
17)BT	n-Tetratriacontane (C34	18.296	250513	109.537		
18)BT	n-Hexatriacontane (C36)	18.906	244549	108.222		
19)BT	n-Octatriacontane (C38)	19.677	233027	107.284		
20)BT	n-Tetracontane (C40)	20.687	224217	107.477		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

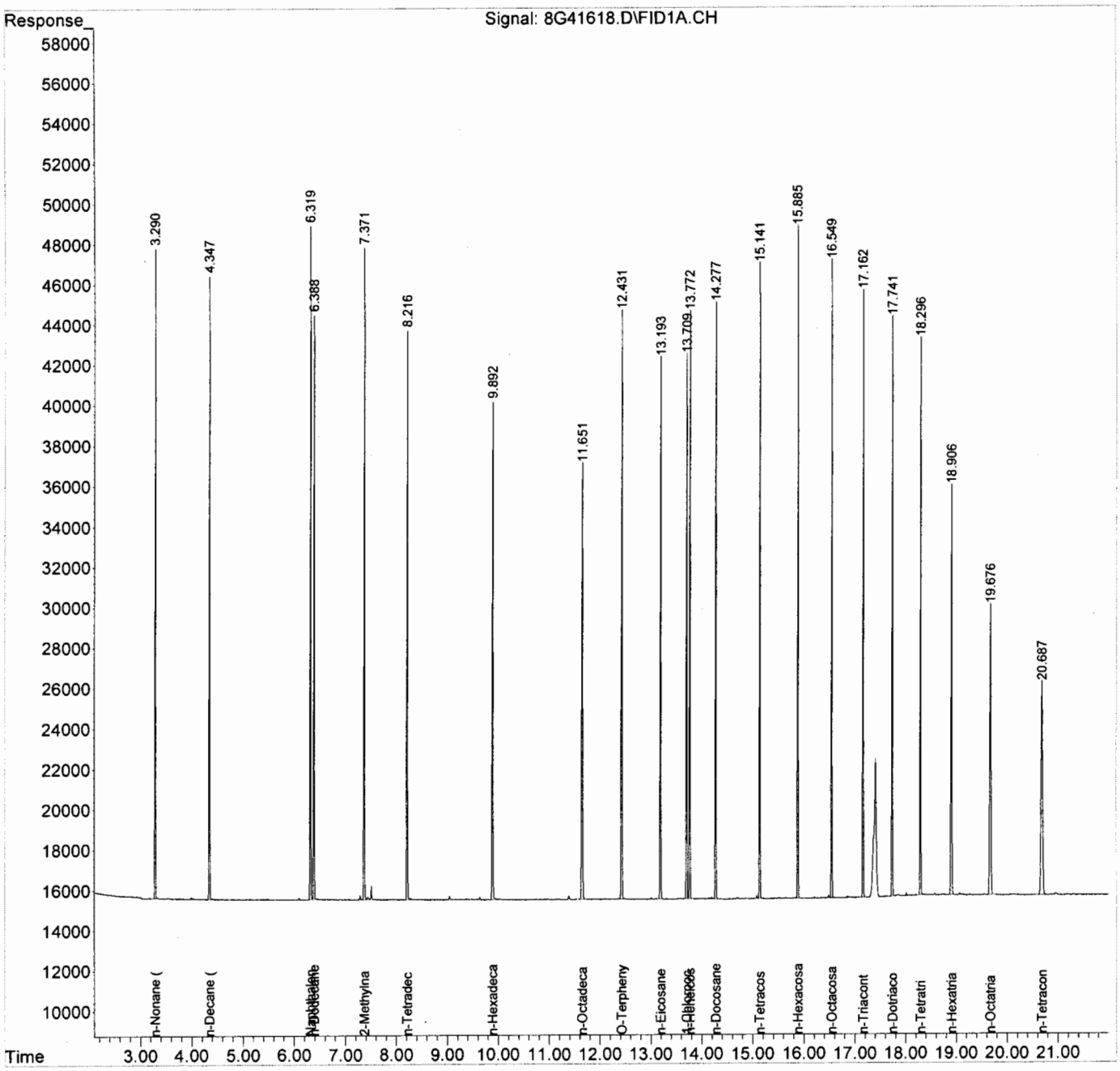
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41618.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 09:13:00
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:18:06 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0266

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41624.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 12:17:34
Operator : KD/RAK/MS
Sample : CALDTH AL@10PPM
Misc : S.TPH
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 13:01:59 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.425	33293	11.262		
22)S	1-Chlorooctadecane	13.705	25543	11.191		
Target Compounds						
1)AT	n-Nonane (C9)	3.289	24061	10.747		
2)AT	n-Decane (C10)	4.346	24907	10.918		
3)	Naphthalene	6.316	29280	11.017		
4)AT	n-Dodecane (C12)	6.386	25811	11.130		
5)	2-Methylnaphthalene	7.367	28365	10.801		
6)AT	n-Tetradecane (C14)	8.213	25974	11.010		
7)AT	n-Hexadecane (C16)	9.889	26223	11.022		
8)AT	n-Octadecane (C18)	11.646	26805	11.209		
9)AT	n-Eicosane (C20)	13.190	27355	11.294		
10)AT	n-Heneicosane (C21)	13.769	27583	11.257		
11)AT	n-Docosane (C22)	14.274	27659	11.302		
12)AT	n-Tetracosane (C24)	15.139	27234	11.070		
13)AT	n-Hexacosane (C26)	15.882	27002	11.099		
14)AT	n-Octacosane (C28)	16.554	26533	10.998		
15)BT	n-Triacontane (C30)	17.189	26333	10.868		
16)BT	n-Dotriacontane(C32)	17.806	25777	10.825		
17)BT	n-Tetratriacontane (C34	18.412	24683	10.792		
18)BT	n-Hexatriacontane (C36)	19.039	23878	10.567		
19)BT	n-Octatriacontane (C38)	19.819	23064	10.618		
20)BT	n-Tetracontane (C40)	20.835	22326	10.702		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

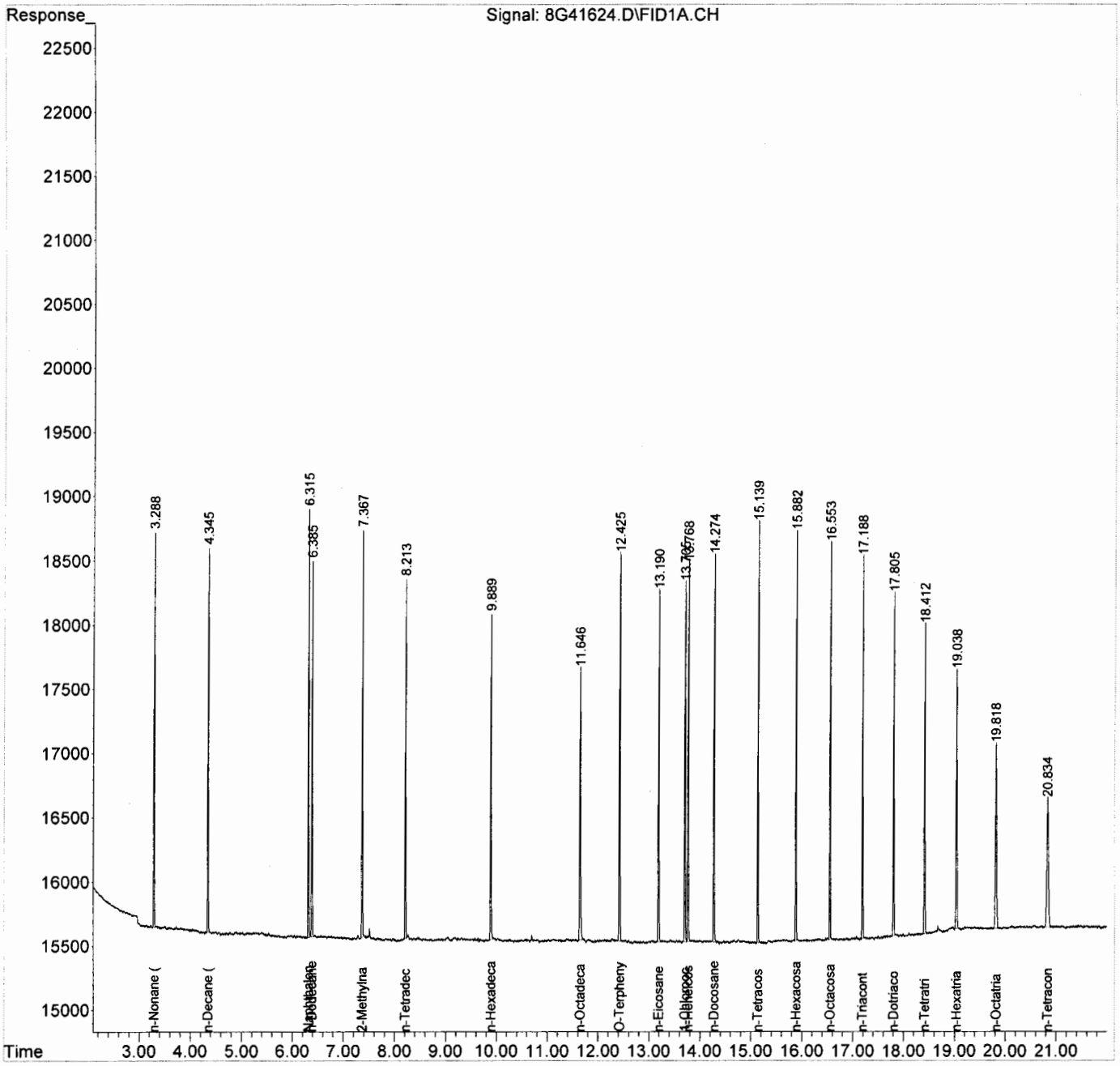
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41624.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 12:17:34
Operator : KD/RAK/MS
Sample : CALDTH AL@10PPM
Misc : S.TPH
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 13:01:59 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0268

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41623.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 11:46:55
Operator : KD/RAK/MS
Sample : CALDTH AL@50PPM
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 12:31:25 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.428	170765	57.763		
22)S	1-Chlorooctadecane	13.707	131587	57.652		
Target Compounds						
1)AT	n-Nonane (C9)	3.290	128837	57.547		
2)AT	n-Decane (C10)	4.347	133244	58.408		
3)	Naphthalene	6.317	156480	58.877		
4)AT	n-Dodecane (C12)	6.387	136964	59.061		
5)	2-Methylnaphthalene	7.369	154297	58.753		
6)AT	n-Tetradecane (C14)	8.214	137398	58.243		
7)AT	n-Hexadecane (C16)	9.890	138411	58.178		
8)AT	n-Octadecane (C18)	11.648	139428	58.305		
9)AT	n-Eicosane (C20)	13.191	140077	57.832		
10)AT	n-Heneicosane (C21)	13.770	141664	57.816		
11)AT	n-Docosane (C22)	14.275	140655	57.475		
12)AT	n-Tetracosane (C24)	15.139	141407	57.478		
13)AT	n-Hexacosane (C26)	15.882	139242	57.237		
14)AT	n-Octacosane (C28)	16.550	138086	57.236		
15)BT	n-Triacontane (C30)	17.174	138438	57.137		
16)BT	n-Dotriacontane(C32)	17.773	135145	56.753		
17)BT	n-Tetratriacontane (C34	18.355	128453	56.166		
18)BT	n-Hexatriacontane (C36)	18.971	125284	55.443		
19)BT	n-Octatriacontane (C38)	19.747	119462	54.999		
20)BT	n-Tetracontane (C40)	20.761	114306	54.792		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

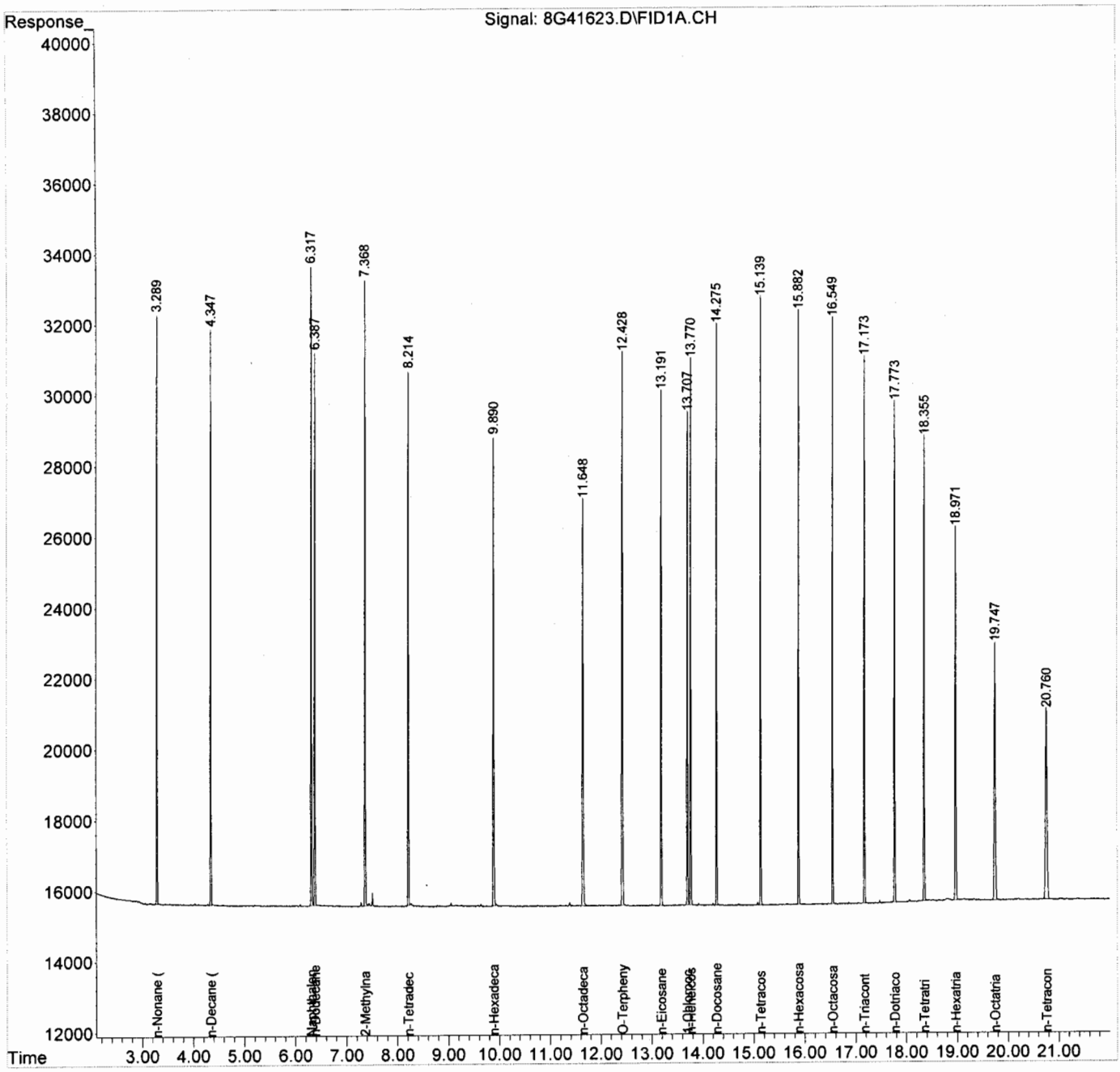
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41623.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 11:46:55
Operator : KD/RAK/MS
Sample : CALDTH AL@50PPM
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 12:31:25 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0270

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41621.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 10:45:52
Operator : KD/RAK/MS
Sample : CALDTH AL@200PPM
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 11:36:32 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.436	677022	229.011		
22)S	1-Chlorooctadecane	13.712	522162	228.771		
Target Compounds						
1)AT	n-Nonane (C9)	3.293	504775	225.463		
2)AT	n-Decane (C10)	4.351	517199	226.716		
3)	Naphthalene	6.322	606087	228.045		
4)AT	n-Dodecane (C12)	6.391	531177	229.051		
5)	2-Methylnaphthalene	7.374	601987	229.225		
6)AT	n-Tetradecane (C14)	8.219	538961	228.465		
7)AT	n-Hexadecane (C16)	9.896	546475	229.700		
8)AT	n-Octadecane (C18)	11.656	548947	229.553		
9)AT	n-Eicosane (C20)	13.196	554812	229.058		
10)AT	n-Heneicosane (C21)	13.775	561131	229.008		
11)AT	n-Docosane (C22)	14.279	559234	228.515		
12)AT	n-Tetracosane (C24)	15.145	561061	228.054		
13)AT	n-Hexacosane (C26)	15.887	552096	226.944		
14)AT	n-Octacosane (C28)	16.551	543297	225.196		
15)BT	n-Triacontane (C30)	17.165	540131	222.927		
16)BT	n-Dotriacontane(C32)	17.751	525452	220.660		
17)BT	n-Tetratriacontane (C34	18.320	503549	220.177		
18)BT	n-Hexatriacontane (C36)	18.934	498587	220.643		
19)BT	n-Octatriacontane (C38)	19.706	480264	221.109		
20)BT	n-Tetracontane (C40)	20.722	463656	222.252		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

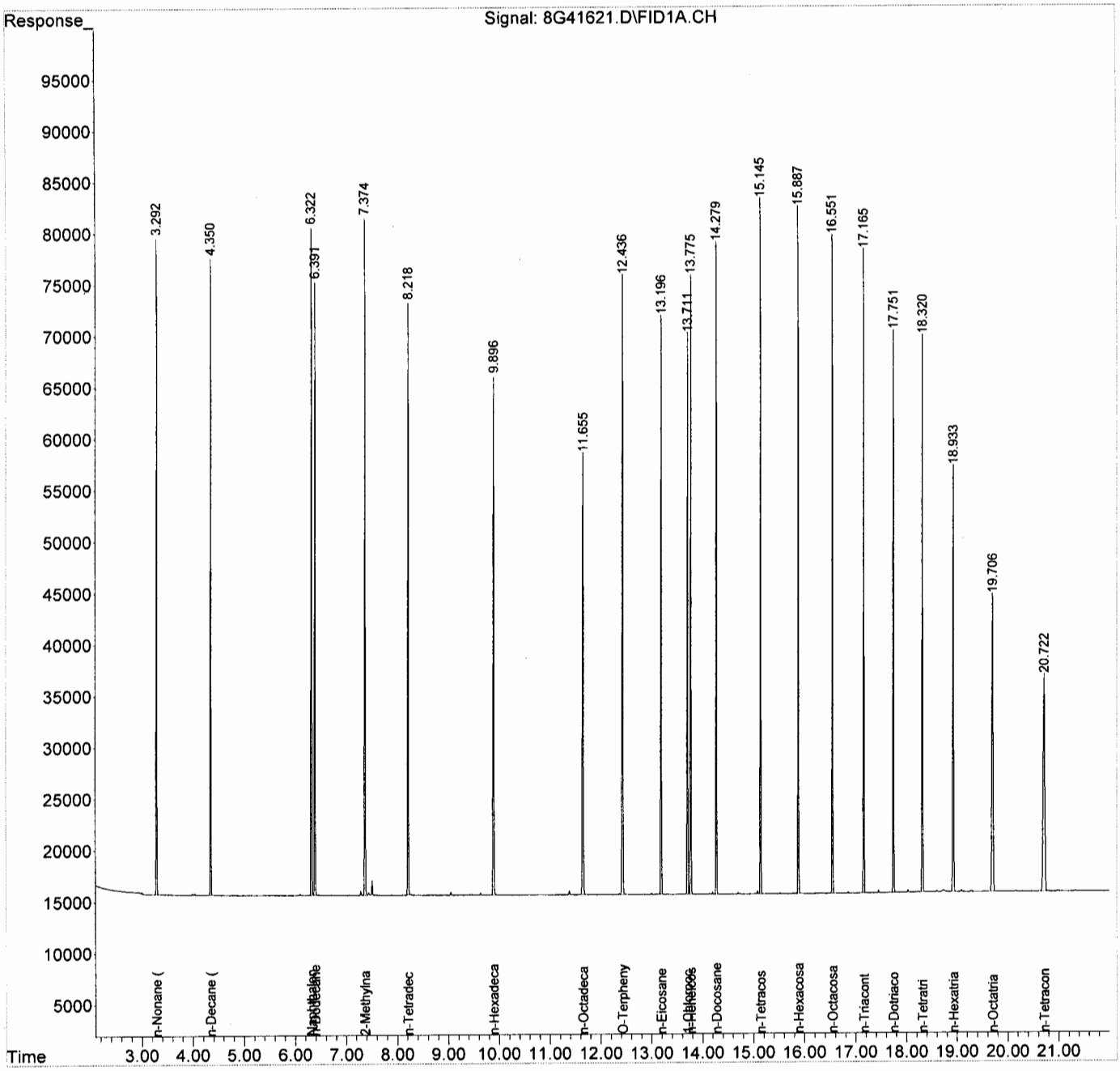
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41621.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 10:45:52
Operator : KD/RAK/MS
Sample : CALDTH AL@200PPM
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 11:36:32 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0272

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41620.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 10:15:28
Operator : KD/RAK/MS
Sample : CALDTH AL@300PPM
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:38:57 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.440	977336	330.596		
22)S	1-Chlorooctadecane	13.714	741044	324.669		
	Target Compounds					
1)AT	n-Nonane (C9)	3.296	819746	366.149		
2)AT	n-Decane (C10)	4.354	828043	362.976		
3)	Naphthalene	6.326	941704	354.323		
4)AT	n-Dodecane (C12)	6.394	824461	355.519		
5)	2-Methylnaphthalene	7.378	921071	350.726		
6)AT	n-Tetradecane (C14)	8.222	813731	344.939		
7)AT	n-Hexadecane (C16)	9.899	807092	339.245		
8)AT	n-Octadecane (C18)	11.659	794795	332.359		
9)AT	n-Eicosane (C20)	13.199	790726	326.457		
10)AT	n-Heneicosane (C21)	13.778	794326	324.179		
11)AT	n-Docosane (C22)	14.283	788134	322.048		
12)AT	n-Tetracosane (C24)	15.146	783702	318.551		
13)AT	n-Hexacosane (C26)	15.889	767328	315.417		
14)AT	n-Octacosane (C28)	16.554	756559	313.593		
15)BT	n-Triacontane (C30)	17.170	756954	312.415		
16)BT	n-Dotriacontane(C32)	17.757	741445	311.365		
17)BT	n-Tetratriacontane (C34	18.327	716416	313.253		
18)BT	n-Hexatriacontane (C36)	18.943	714339	316.121		
19)BT	n-Octatriacontane (C38)	19.717	694104	319.559		
20)BT	n-Tetracontane (C40)	20.733	674763	323.445		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

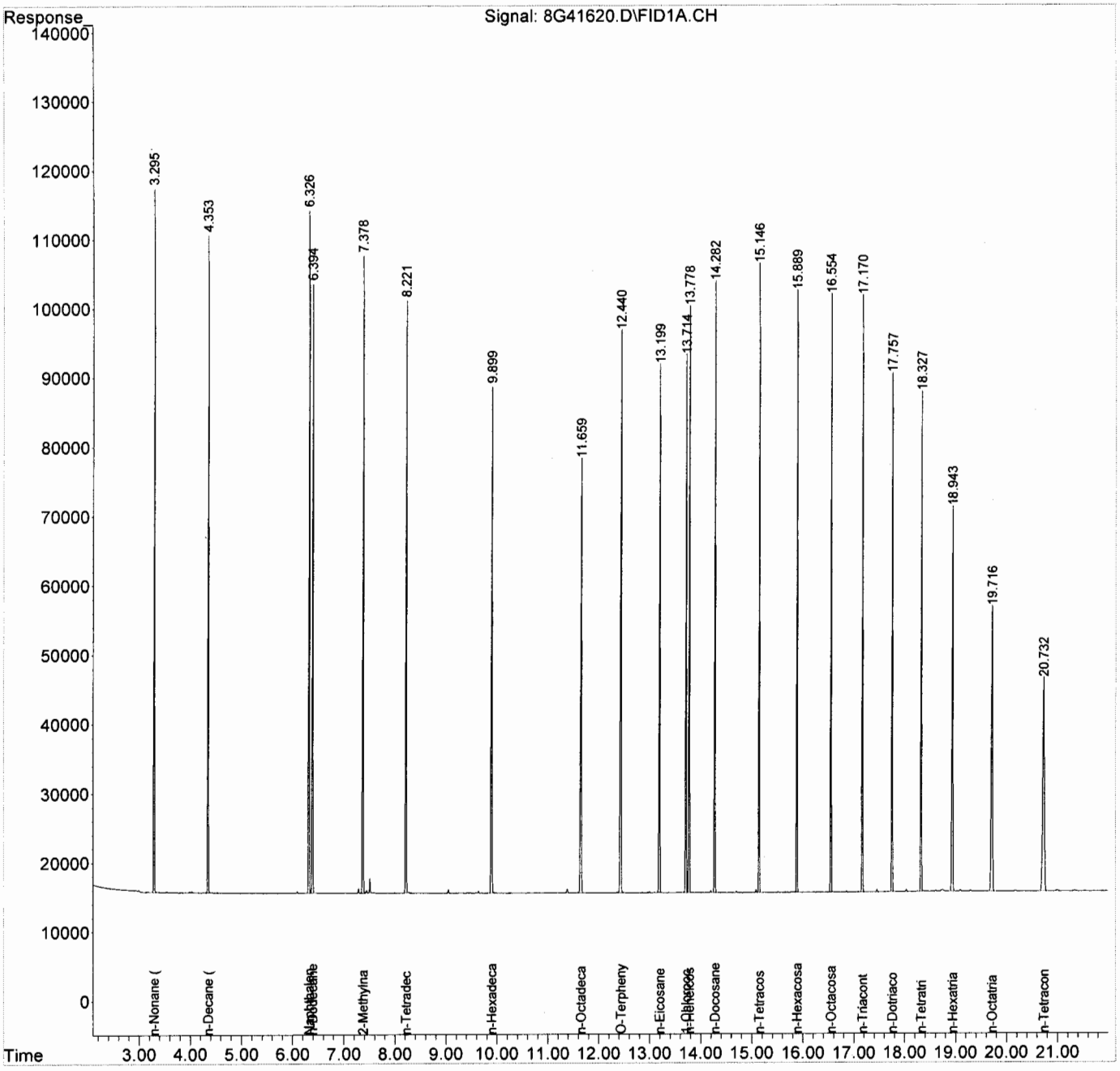
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41620.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 10:15:28
Operator : KD/RAK/MS
Sample : CALDTH AL@300PPM
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:38:57 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0274

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41619.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 09:45:05
Operator : KD/RAK/MS
Sample : CALDTH AL@500PPM
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:18:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.450	1783225	603.197		
22)S	1-Chlorooctadecane	13.720	1298611	568.952		
Target Compounds						
1)AT	n-Nonane (C9)	3.302	1543495	689.419		
2)AT	n-Decane (C10)	4.360	1551256	679.999		
3)	Naphthalene	6.333	1756479	660.888		
4)AT	n-Dodecane (C12)	6.401	1536749	662.667		
5)	2-Methylnaphthalene	7.386	1711111	651.558		
6)AT	n-Tetradecane (C14)	8.228	1513025	641.368		
7)AT	n-Hexadecane (C16)	9.908	1477636	621.096		
8)AT	n-Octadecane (C18)	11.668	1423159	595.122		
9)AT	n-Eicosane (C20)	13.206	1372655	566.710		
10)AT	n-Heneicosane (C21)	13.784	1353391	552.344		
11)AT	n-Docosane (C22)	14.287	1314593	537.170		
12)AT	n-Tetracosane (C24)	15.151	1252240	508.997		
13)AT	n-Hexacosane (C26)	15.894	1173555	482.400		
14)AT	n-Octacosane (C28)	16.558	1116637	462.844		
15)BT	n-Triacontane (C30)	17.172	1094946	451.914		
16)BT	n-Dotriacontane(C32)	17.758	1081825	454.305		
17)BT	n-Tetratriacontane (C34	18.325	1079688	472.093		
18)BT	n-Hexatriacontane (C36)	18.941	1110579	491.472		
19)BT	n-Octatriacontane (C38)	19.719	1098924	505.935		
20)BT	n-Tetracontane (C40)	20.737	1077652	516.569		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

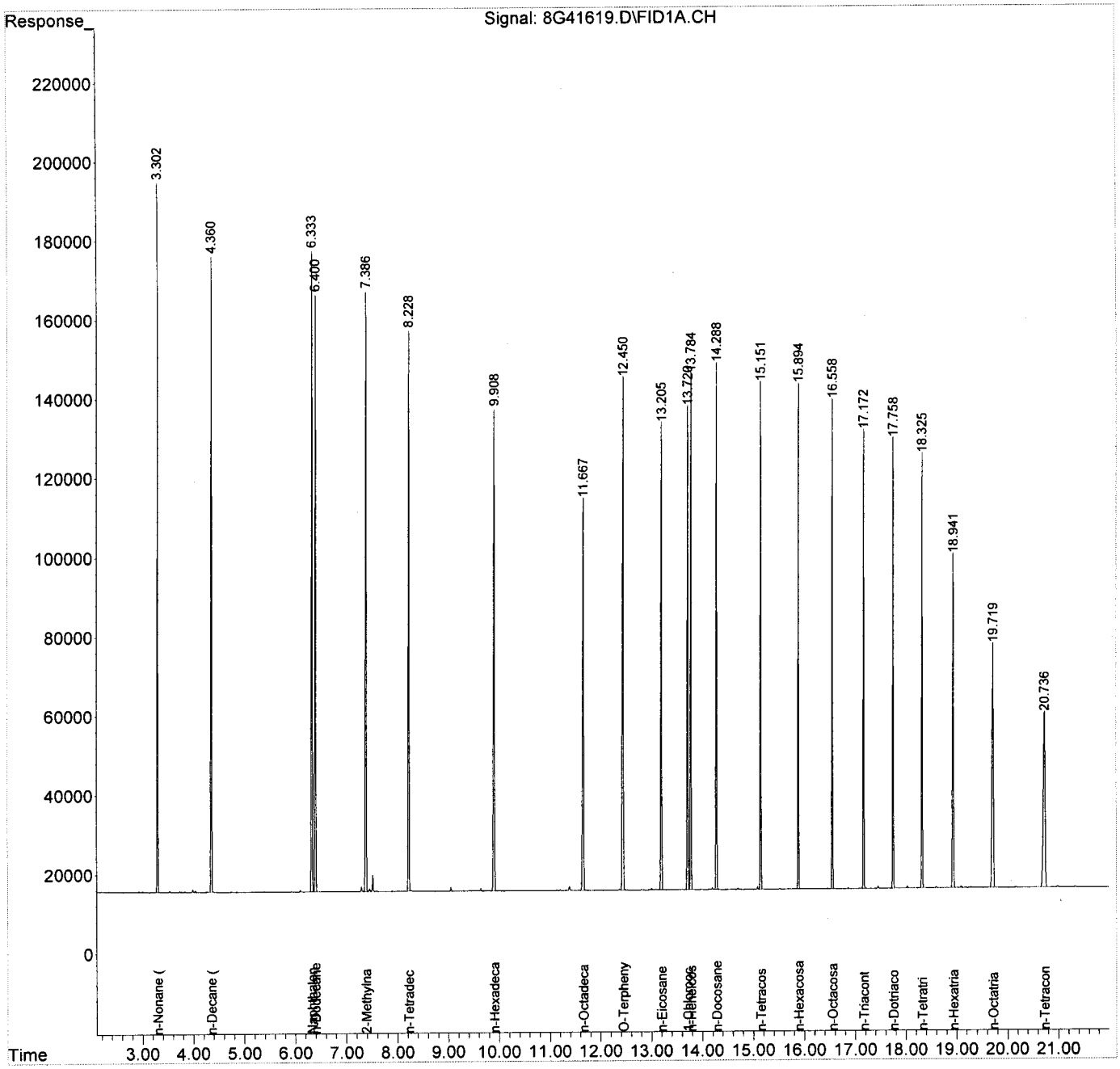
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41619.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 09:45:05
Operator : KD/RAK/MS
Sample : CALDTH AL@500PPM
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:18:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Form7
Continuing Calibration

Method: NJEPHRev3B

Data File:				8G42129.D			8G42150.D			8G42171.D			8G42189.D			8G42211.D		
Method:				8015-EPHCA			8015-EPHCA			8015-EPHCA			8015-EPHCA			8015-EPHCA		
Calibration Name:				CALDTH AL@100			CALDTH AL@100			CALDTH AL@100			CALDTH AL@100			CALDTH AL@100		
Calibration Date/Time				08/02/13 15:45			08/03/13 12:15			08/03/13 23:17			08/04/13 09:48			08/05/13 08:00		
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff
n-Nonane (C9)	30	1	0	109.8	100	9.8	108.2	100	8.2	126.4	100	26.4	108	100	8.0	118.3	100	18.3
n-Decane (C10)	30	1	0	110.4	100	10.4	107.9	100	7.9	126.7	100	26.7	108.4	100	8.4	121.4	100	21.4
Naphthalene	30	1	0	108.3	100	8.3	108.9	100	8.9	126.1	100	26.1	107.0	100	7.0	123.2	100	23.2
n-Dodecane (C12)	30	1	0	112	100	12.0	109.8	100	9.8	128.0	100	28.0	109	100	9.0	126.2	100	26.2
2-Methylnaphthalene	30	1	0	109.9	100	9.9	111.3	100	11.3	128.7	100	28.7	108.8	100	8.8	126.1	100	26.1
n-Tetradecane (C14)	30	1	0	110.6	100	10.6	107.9	100	7.9	126.3	100	26.3	106.5	100	6.5	127	100	27.0
n-Hexadecane (C16)	30	1	0	108.4	100	8.4	106	100	6.0	123.9	100	23.9	104.3	100	4.3	126.6	100	26.6
n-Octadecane (C18)	30	1	0	107	100	7.0	104.4	100	4.4	121.1	100	21.1	103.0	100	3.0	123.6	100	23.6
n-Eicosane (C20)	30	1	0	103.3	100	3.3	103.3	100	3.3	118.7	100	18.7	100.4	100	0.4	118.3	100	18.3
n-Heneicosane (C21)	30	1	0	101.7	100	1.7	102.5	100	2.5	117.7	100	17.7	99.71	100	0.3	115.4	100	15.4
n-Docosane (C22)	30	1	0	100.3	100	0.3	101.2	100	1.2	116.6	100	16.6	98.95	100	1.1	112.6	100	12.6
n-Tetracosane (C24)	30	1	0	98.57	100	1.4	100.3	100	0.3	116.3	100	16.3	98.65	100	1.3	107.2	100	7.2
n-Hexacosane (C26)	30	1	0	96.37	100	3.6	98.36	100	1.6	114.6	100	14.6	97.78	100	2.2	102.2	100	2.2
n-Octacosane (C28)	30	1	0	96.48	100	3.5	97.14	100	2.9	114.2	100	14.2	98.46	100	1.5	99.68	100	0.3
n-Triacontane (C30)	30	1	0	97.92	100	2.1	97.43	100	2.6	114.6	100	14.6	99.31	100	0.7	99.65	100	0.3
n-Dotriacontane(C32)	30	1	0	100.2	100	0.2	97.78	100	2.2	115.3	100	15.3	101.1	100	1.1	101.9	100	1.9
n-Tetratriacontane (C	30	1	0	105	100	5.0	101.2	100	1.2	118.7	100	18.7	105	100	4.9	106.3	100	6.3
n-Hexatriacontane (C	30	1	0	104.4	100	4.4	99.86	100	0.1	118.9	100	18.9	104.5	100	4.5	106.5	100	6.5
n-Octatriacontane (C3	30	1	0	105.7	100	5.7	102	100	2.0	119.4	100	19.4	107.3	100	7.3	110.0	100	10.0
n-Tetracontane (C40)	30	1	0	105.7	100	5.7	103.7	100	3.7	122.5	100	22.5	110.2	100	10.2	115.2	100	15.2
O-Terphenyl	30	1	0	97.64	100	2.4	102.1	100	2.1	114.5	100	14.5	96.62	100	3.4	110.3	100	10.3
1-Chlorooctadecane	30	1	0	96.69	100	3.3	98.45	100	1.6	112.6	100	12.6	95.17	100	4.8	108.1	100	8.1
C9-C28	25	1	0	1255	1200	4.6	1247	1200	3.9	1451	1200	20.9	1233	1200	2.8	1398	1200	16.5
>C28-C40	25	1	0	618.9	600	3.2	601.9	600	0.3	709.3	600	18.2	627.3	600	4.5	639.5	600	6.6
C9-C40	25	1	0	1874	1800	4.1	1849	1800	2.7	2160	1800	20.0	1860	1800	3.4	2038	1800	13.2

Flags/Notes: **** - Values outside of limits for this column/run***

Form7

RtWindow Summary

Method: NJEPHRev3B

			8G41618.D		8G42129.D		8G42150.D		8G42189.D			
Data File:			8G41618.D		8G42129.D		8G42150.D		8G42189.D			
Calibration Name:			CALDTH AL@100PPM		CALDTH AL@100PPM		CALDTH AL@100PPM		CALDTH AL@100PPM			
Calibration Date/Time			7/15/2013 9:13:00 AM		8/2/2013 3:45:54 PM		8/3/2013 12:15:06 PM		8/4/2013 9:48:20 AM			
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
n-Nonane (C9)	1	0	3.29	(3.24 - 3.34)	3.28	(3.23 - 3.33)	3.28	(3.23 - 3.33)	3.28	(3.23 - 3.33)		
n-Decane (C10)	1	0	4.35	(4.30 - 4.40)	4.33	(4.28 - 4.38)	4.33	(4.28 - 4.38)	4.33	(4.28 - 4.38)		
Naphthalene	1	0	6.32	(6.27 - 6.37)	6.30	(6.25 - 6.35)	6.30	(6.25 - 6.35)	6.30	(6.25 - 6.35)		
n-Dodecane (C12)	1	0	6.39	(6.34 - 6.44)	6.37	(6.32 - 6.42)	6.37	(6.32 - 6.42)	6.37	(6.32 - 6.42)		
2-Methylnaphthalene	1	0	7.37	(7.32 - 7.42)	7.36	(7.31 - 7.41)	7.36	(7.31 - 7.41)	7.35	(7.30 - 7.40)		
n-Tetradecane (C14)	1	0	8.22	(8.17 - 8.27)	8.20	(8.15 - 8.25)	8.20	(8.15 - 8.25)	8.20	(8.15 - 8.25)		
n-Hexadecane (C16)	1	0	9.90	(9.85 - 9.95)	9.88	(9.83 - 9.93)	9.88	(9.83 - 9.93)	9.87	(9.82 - 9.92)		
n-Octadecane (C18)	1	0	11.65	(11.60 - 11.70)	11.63	(11.58 - 11.68)	11.63	(11.58 - 11.68)	11.63	(11.58 - 11.68)		
n-Eicosane (C20)	1	0	13.20	(13.15 - 13.25)	13.18	(13.13 - 13.23)	13.18	(13.13 - 13.23)	13.18	(13.13 - 13.23)		
n-Heneicosane (C21)	1	0	13.77	(13.72 - 13.82)	13.76	(13.71 - 13.81)	13.76	(13.71 - 13.81)	13.76	(13.71 - 13.81)		
n-Docosane (C22)	1	0	14.28	(14.23 - 14.33)	14.27	(14.22 - 14.32)	14.26	(14.21 - 14.31)	14.26	(14.21 - 14.31)		
n-Tetracosane (C24)	1	0	15.14	(15.09 - 15.19)	15.13	(15.08 - 15.18)	15.13	(15.08 - 15.18)	15.13	(15.08 - 15.18)		
n-Hexacosane (C26)	1	0	15.89	(15.84 - 15.94)	15.87	(15.82 - 15.92)	15.87	(15.82 - 15.92)	15.87	(15.82 - 15.92)		
n-Octacosane (C28)	1	0	16.55	(16.50 - 16.60)	16.54	(16.49 - 16.59)	16.54	(16.49 - 16.59)	16.54	(16.49 - 16.59)		
n-Triacontane (C30)	1	0	17.17	(17.12 - 17.22)	17.16	(17.11 - 17.21)	17.15	(17.10 - 17.20)	17.15	(17.10 - 17.20)		
n-Dotriacontane(C32)	1	0	17.76	(17.71 - 17.81)	17.76	(17.71 - 17.81)	17.72	(17.67 - 17.77)	17.71	(17.66 - 17.76)		
n-Tetratriacontane (C	1	0	18.34	(18.29 - 18.39)	18.35	(18.30 - 18.40)	18.25	(18.20 - 18.30)	18.25	(18.20 - 18.30)		
n-Hexatriacontane (C	1	0	18.96	(18.91 - 19.01)	18.97	(18.92 - 19.02)	18.86	(18.81 - 18.91)	18.85	(18.80 - 18.90)		
n-Octatriacontane (C	1	0	19.73	(19.68 - 19.78)	19.74	(19.69 - 19.79)	19.62	(19.57 - 19.67)	19.62	(19.57 - 19.67)		
n-Tetracontane (C40)	1	0	20.75	(20.70 - 20.80)	20.75	(20.70 - 20.80)	20.62	(20.57 - 20.67)	20.62	(20.57 - 20.67)		
O-Terphenyl	1	0	12.44	(12.40 - 12.48)	12.41	(12.37 - 12.45)	12.41	(12.37 - 12.45)	12.41	(12.37 - 12.45)		
1-Chlorooctadecane	1	0	13.71	(13.67 - 13.75)	13.70	(13.66 - 13.74)	13.69	(13.65 - 13.73)	13.69	(13.65 - 13.73)		
C9-C28	1	0										
>C28-C40	1	0										
C9-C40	1	0										

Quantitation Report (QT Reviewed)

3080110 0278

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42129.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 15:45:54
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 02 16:09:08 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.414	329095	97.640		
22)S	1-Chlorooctadecane	13.696	248125	96.693		
Target Compounds						
1)AT	n-Nonane (C9)	3.278	288997	109.766		
2)AT	n-Decane (C10)	4.334	296981	110.388		
3)	Naphthalene	6.305	337131	108.330		
4)AT	n-Dodecane (C12)	6.373	305472	112.001		
5)	2-Methylnaphthalene	7.357	335565	109.894		
6)AT	n-Tetradecane (C14)	8.201	301994	110.550		
7)AT	n-Hexadecane (C16)	9.876	295881	108.390		
8)AT	n-Octadecane (C18)	11.632	291245	106.997		
9)AT	n-Eicosane (C20)	13.179	281210	103.293		
10)AT	n-Heneicosane (C21)	13.760	278275	101.683		
11)AT	n-Docosane (C22)	14.265	272300	100.302		
12)AT	n-Tetracosane (C24)	15.132	265244	98.574		
13)AT	n-Hexacosane (C26)	15.875	253606	96.367		
14)AT	n-Octacosane (C28)	16.540	249497	96.482		
15)BT	n-Triacontane (C30)	17.161	252357	97.922		
16)BT	n-Dotriacontane(C32)	17.764	252875	100.190		
17)BT	n-Tetratriacontane (C34	18.349	255566	104.972		
18)BT	n-Hexatriacontane (C36)	18.966	251203	104.420		
19)BT	n-Octatriacontane (C38)	19.739	245606	105.722		
20)BT	n-Tetracontane (C40)	20.750	237507	105.686		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

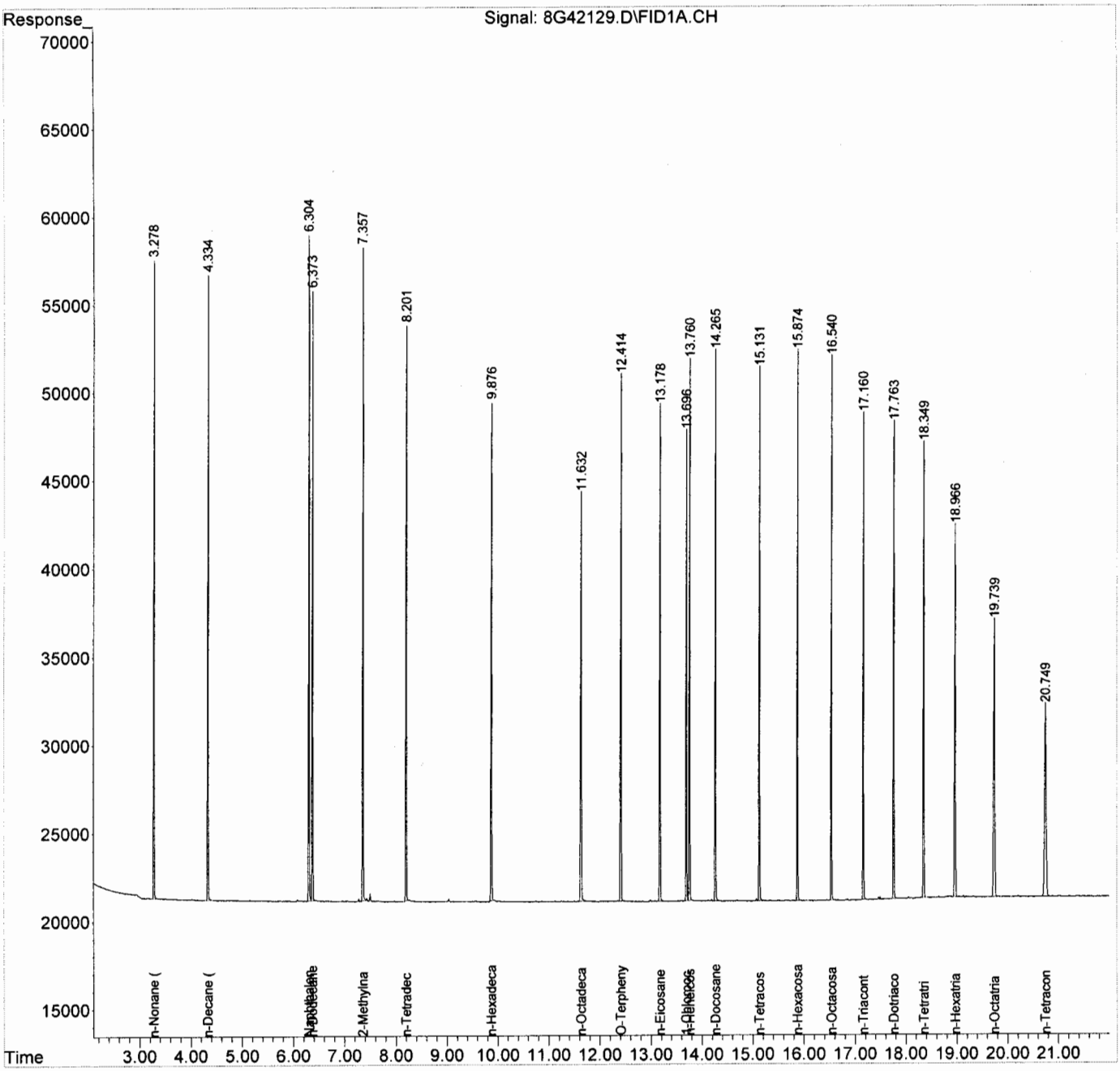
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42129.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 15:45:54
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 02 16:09:08 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0280

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42150.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 12:15:06
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 08:12:13 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.413	344150	102.107		
22)S	1-Chlorooctadecane	13.695	252623	98.446		
Target Compounds						
1)AT	n-Nonane (C9)	3.277	284770	108.160		
2)AT	n-Decane (C10)	4.333	290305	107.907		
3)	Naphthalene	6.304	339006	108.933		
4)AT	n-Dodecane (C12)	6.373	299470	109.800		
5)	2-Methylnaphthalene	7.356	339979	111.339		
6)AT	n-Tetradecane (C14)	8.200	294819	107.924		
7)AT	n-Hexadecane (C16)	9.875	289294	105.977		
8)AT	n-Octadecane (C18)	11.632	284085	104.366		
9)AT	n-Eicosane (C20)	13.178	281294	103.323		
10)AT	n-Heneicosane (C21)	13.758	280447	102.477		
11)AT	n-Docosane (C22)	14.264	274613	101.154		
12)AT	n-Tetracosane (C24)	15.131	269935	100.317		
13)AT	n-Hexacosane (C26)	15.875	258849	98.359		
14)AT	n-Octacosane (C28)	16.539	251210	97.145		
15)BT	n-Triacontane (C30)	17.149	251100	97.434		
16)BT	n-Dotriacontane(C32)	17.715	246798	97.782		
17)BT	n-Tetratriacontane (C34	18.251	246313	101.172		
18)BT	n-Hexatriacontane (C36)	18.857	240229	99.858		
19)BT	n-Octatriacontane (C38)	19.621	236900	101.975		
20)BT	n-Tetracontane (C40)	20.624	232990	103.676		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

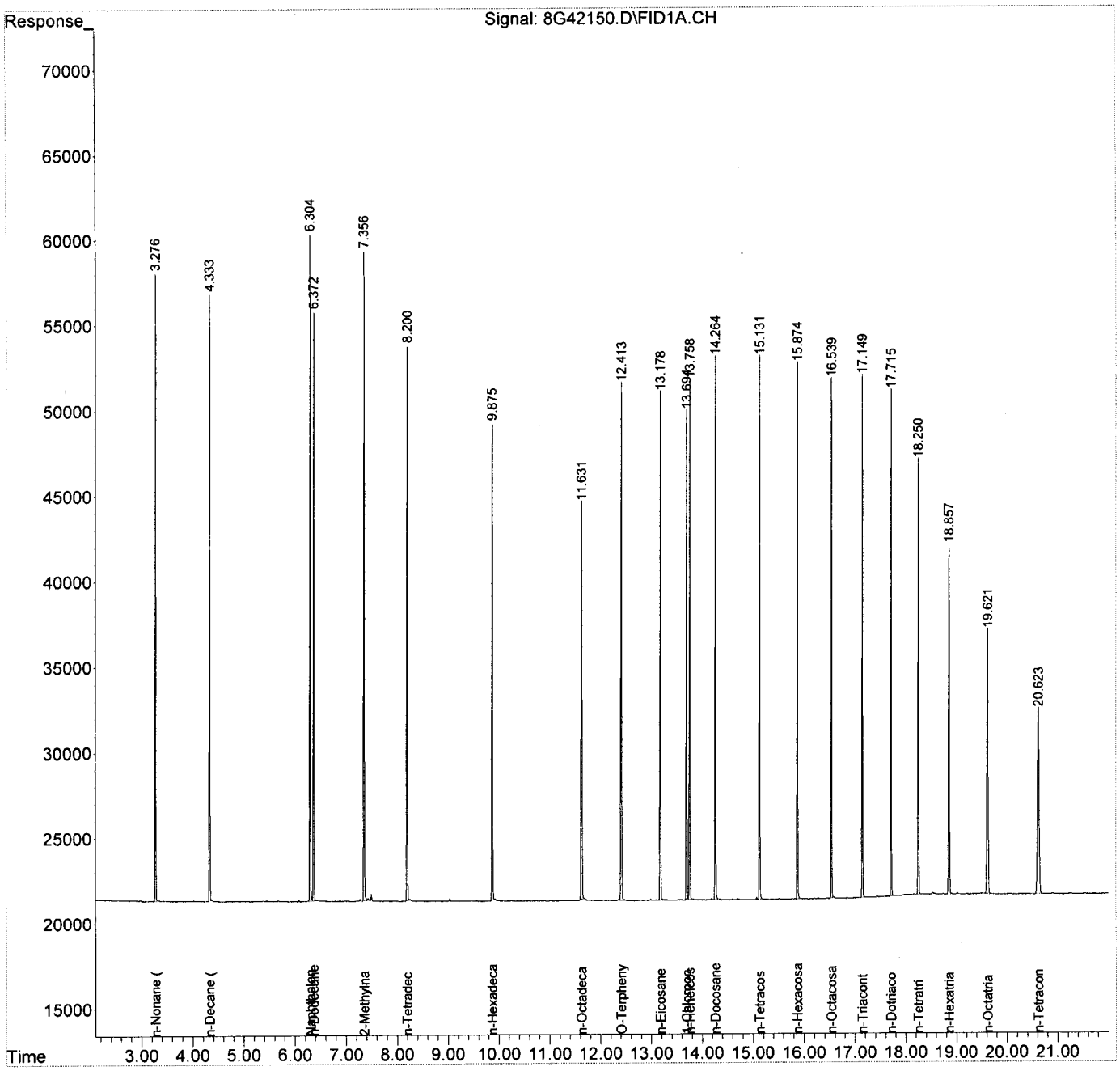
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42150.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 12:15:06
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 08:12:13 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0282

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42171.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 23:17:33
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 39 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 13:22:58 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.412	385978	114.517		
22)S	1-Chlorooctadecane	13.694	288876	112.574		
Target Compounds						
1)AT	n-Nonane (C9)	3.276	332877	126.432		
2)AT	n-Decane (C10)	4.332	340906	126.715		
3)	Naphthalene	6.303	392532	126.132		
4)AT	n-Dodecane (C12)	6.372	349174	128.024		
5)	2-Methylnaphthalene	7.356	392970	128.693		
6)AT	n-Tetradecane (C14)	8.199	345087	126.325		
7)AT	n-Hexadecane (C16)	9.874	338180	123.885		
8)AT	n-Octadecane (C18)	11.630	329536	121.063		
9)AT	n-Eicosane (C20)	13.177	323225	118.725		
10)AT	n-Heneicosane (C21)	13.757	322020	117.668		
11)AT	n-Docosane (C22)	14.263	316563	116.606		
12)AT	n-Tetracosane (C24)	15.130	312897	116.283		
13)AT	n-Hexacosane (C26)	15.873	301639	114.619		
14)AT	n-Octacosane (C28)	16.538	295278	114.186		
15)BT	n-Triacontane (C30)	17.147	295271	114.574		
16)BT	n-Dotriacontane(C32)	17.714	291099	115.334		
17)BT	n-Tetratriacontane (C34	18.249	288871	118.652		
18)BT	n-Hexatriacontane (C36)	18.854	285938	118.858		
19)BT	n-Octatriacontane (C38)	19.617	277356	119.389		
20)BT	n-Tetracontane (C40)	20.622	275233	122.474		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

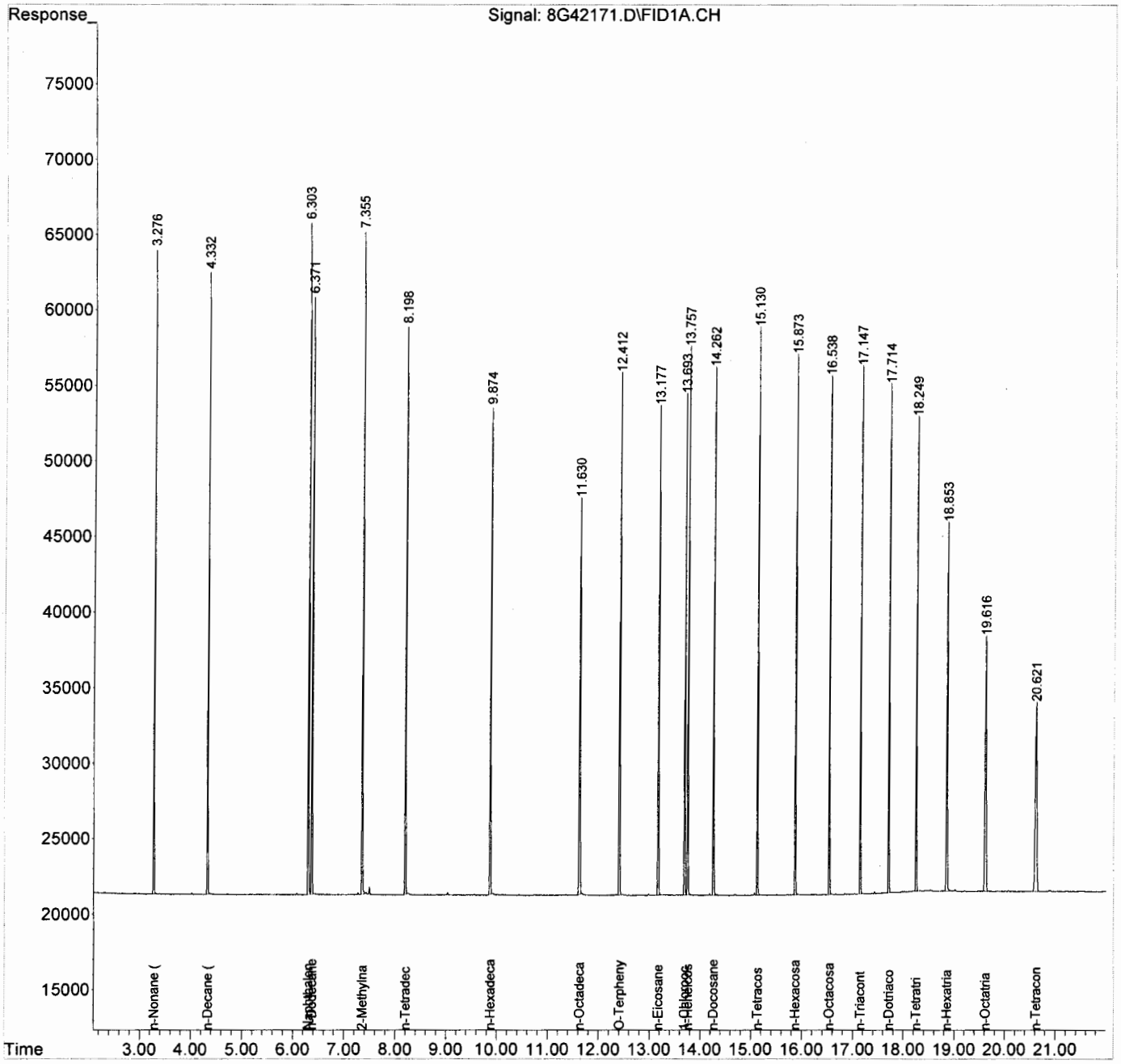
Quantitation Report (QT Reviewed)

3080110 0283

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42171.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 23:17:33
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 39 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 13:22:58 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0284

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42189.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 09:48:20
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:22:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.410	325646	96.617		
22)S	1-Chlorooctadecane	13.694	244228	95.175		
Target Compounds						
1)AT	n-Nonane (C9)	3.275	284237	107.958		
2)AT	n-Decane (C10)	4.331	291522	108.359		
3)	Naphthalene	6.302	333088	107.031		
4)AT	n-Dodecane (C12)	6.371	297232	108.980		
5)	2-Methylnaphthalene	7.354	332188	108.788		
6)AT	n-Tetradecane (C14)	8.198	290984	106.520		
7)AT	n-Hexadecane (C16)	9.873	284670	104.283		
8)AT	n-Octadecane (C18)	11.629	280443	103.028		
9)AT	n-Eicosane (C20)	13.176	273373	100.414		
10)AT	n-Heneicosane (C21)	13.756	272878	99.711		
11)AT	n-Docosane (C22)	14.263	268643	98.955		
12)AT	n-Tetracosane (C24)	15.129	265459	98.653		
13)AT	n-Hexacosane (C26)	15.872	257323	97.780		
14)AT	n-Octacosane (C28)	16.537	254606	98.458		
15)BT	n-Triacontane (C30)	17.146	255936	99.311		
16)BT	n-Dotriacontane(C32)	17.714	255063	101.057		
17)BT	n-Tetratriacontane (C34	18.248	255518	104.953		
18)BT	n-Hexatriacontane (C36)	18.854	251325	104.471		
19)BT	n-Octatriacontane (C38)	19.618	249262	107.296		
20)BT	n-Tetracontane (C40)	20.620	247658	110.203		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

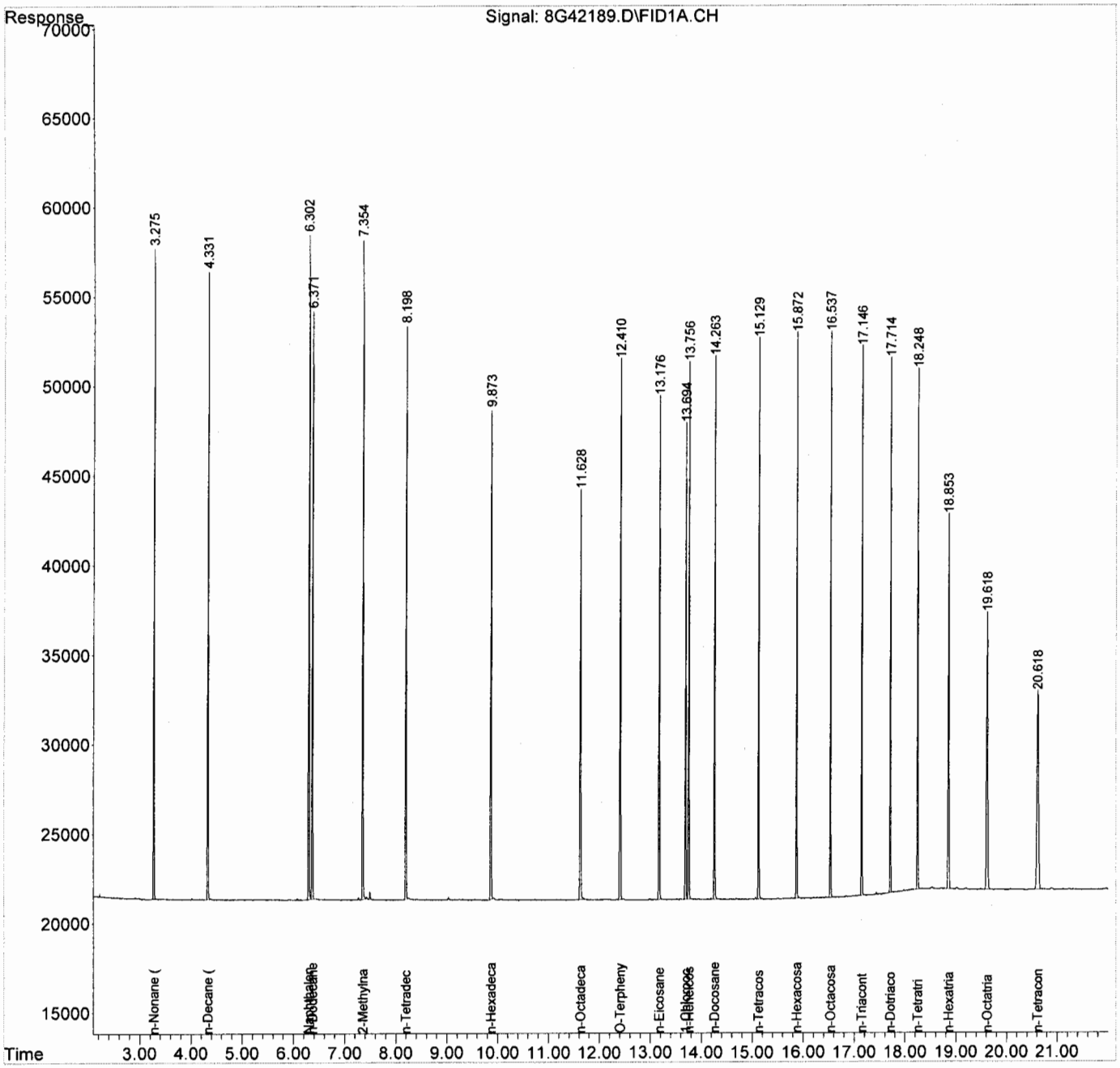
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42189.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 09:48:20
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:22:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0286

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42211.D
Signal(s) : FID1A.CH
Acq On : 05-Aug-13, 08:00:06
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 08:31:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.415	371720	110.286		
22)S	1-Chlorooctadecane	13.697	277370	108.090		
Target Compounds						
1)AT	n-Nonane (C9)	3.275	311508	118.316		
2)AT	n-Decane (C10)	4.332	326667	121.423		
3)	Naphthalene	6.305	383468	123.220		
4)AT	n-Dodecane (C12)	6.373	344156	126.184		
5)	2-Methylnaphthalene	7.357	385141	126.129		
6)AT	n-Tetradecane (C14)	8.200	346864	126.975		
7)AT	n-Hexadecane (C16)	9.877	345501	126.567		
8)AT	n-Octadecane (C18)	11.634	336556	123.643		
9)AT	n-Eicosane (C20)	13.180	321996	118.274		
10)AT	n-Heneicosane (C21)	13.760	315671	115.348		
11)AT	n-Docosane (C22)	14.265	305604	112.570		
12)AT	n-Tetracosane (C24)	15.131	288435	107.192		
13)AT	n-Hexacosane (C26)	15.874	269025	102.226		
14)AT	n-Octacosane (C28)	16.539	257763	99.678		
15)BT	n-Triacontane (C30)	17.149	256800	99.646		
16)BT	n-Dotriacontane(C32)	17.721	257203	101.905		
17)BT	n-Tetratriacontane (C34	18.269	258771	106.289		
18)BT	n-Hexatriacontane (C36)	18.876	256150	106.476		
19)BT	n-Octatriacontane (C38)	19.642	255579	110.015		
20)BT	n-Tetracontane (C40)	20.648	258840	115.179		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

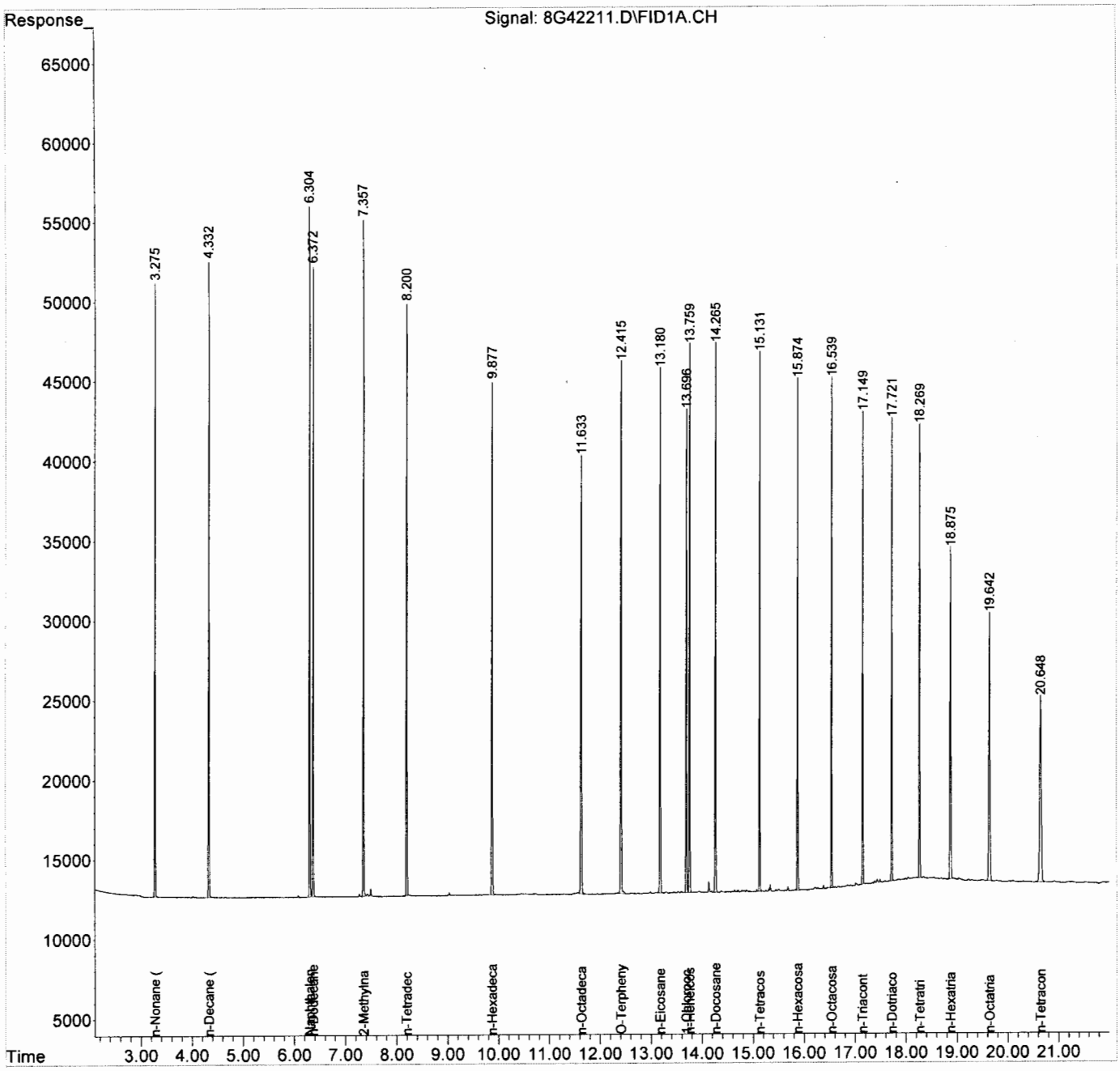
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42211.D
Signal(s) : FID1A.CH
Acq On : 05-Aug-13, 08:00:06
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 08:31:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



EPH Category 2 Data
Raw QC Data

Form1

ORGANICS REPORT

Sample Number: SMB25787
Client Id:
Data File: 8G42131.D
Analysis Date: 08/02/13 16:46
Date Rec/Extracted: NA-08/02/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: NJEPHRev3B
Matrix: Soil
Initial Vol: 10g
Final Vol: 1ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
ephc9c40	C9-C40	60	U				

Worksheet #: 272475 ***Total Target Concentration*** 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42131.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 16:46:53
Operator : KD/RAK/MS
Sample : SMB25787
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:07:07 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

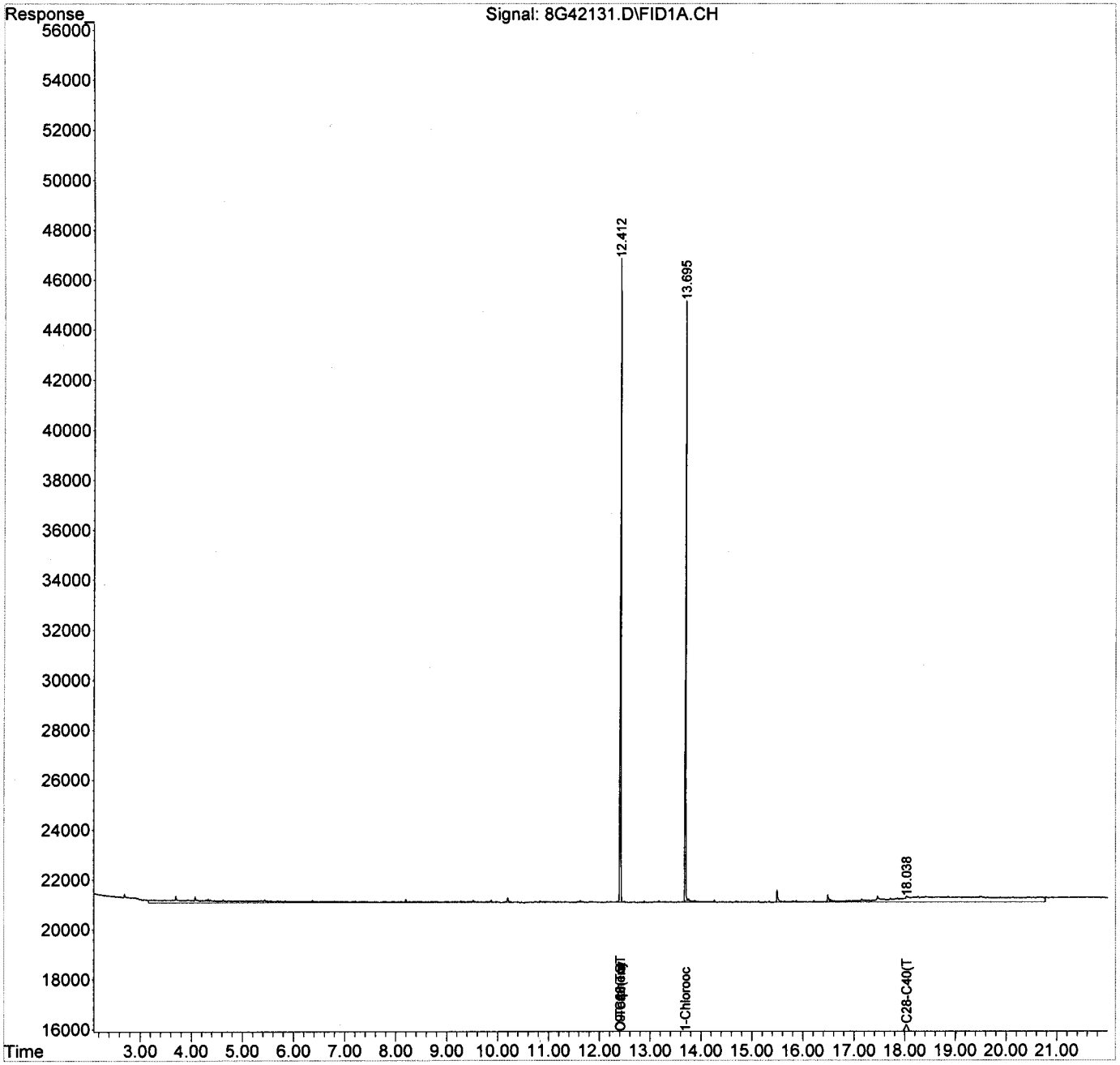
	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.413	285806	84.796		
22)S	1-Chlorooctadecane	13.695	222594	86.744		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		
9)AT	n-Eicosane (C20)	0.000	0	N.D.		
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	12.412f	760181	282.276		m
24)B	>C28-C40(Total)	18.038f	373377	154.375		m
25)t	C9-C40(TOTAL)	12.412f	1132217	435.205		m

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42131.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 16:46:53
Operator : KD/RAK/MS
Sample : SMB25787
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:07:07 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42130.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 16:16:18
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 08:58:23 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

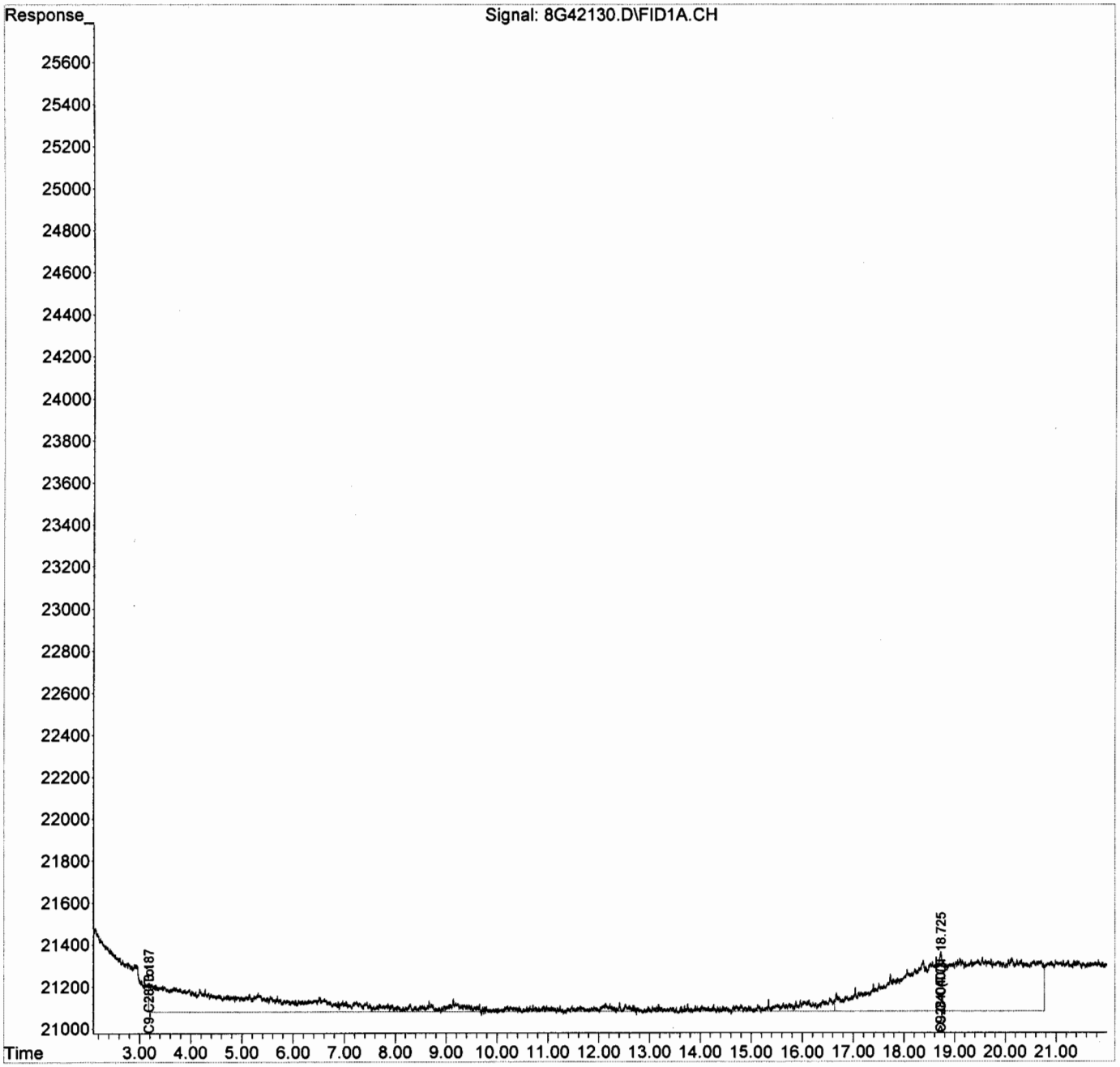
	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	0.000	0	N.D.		
22)S	1-Chlorooctadecane	0.000	0	N.D.		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		
9)AT	n-Eicosane (C20)	0.000	0	N.D.		
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		
11)AT	n-Docosane (C22)	0.000	0	N.D.		
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		
14)AT	n-Octacosane (C28)	0.000	0	N.D.		
15)BT	n-Triacontane (C30)	0.000	0	N.D.		
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	3.187	251750	93.482		m
24)B	>C28-C40(Total)	18.725f	445002	183.989		m
25)t	C9-C40(TOTAL)	18.725f	694627	267.003		m

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42130.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 16:16:18
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 08:58:23 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42151.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 13:15:26
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:14:16 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	0.000	0	N.D.		
22)S	1-Chlorooctadecane	0.000	0	N.D.		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		
9)AT	n-Eicosane (C20)	0.000	0	N.D.		
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		
11)AT	n-Docosane (C22)	0.000	0	N.D.		
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		
14)AT	n-Octacosane (C28)	0.000	0	N.D.		
15)BT	n-Triacontane (C30)	0.000	0	N.D.		
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	3.198	228448	84.829		m
24)B	>C28-C40(Total)	18.536f	455341	188.264		m
25)t	C9-C40(TOTAL)	18.536f	683622	262.773		m

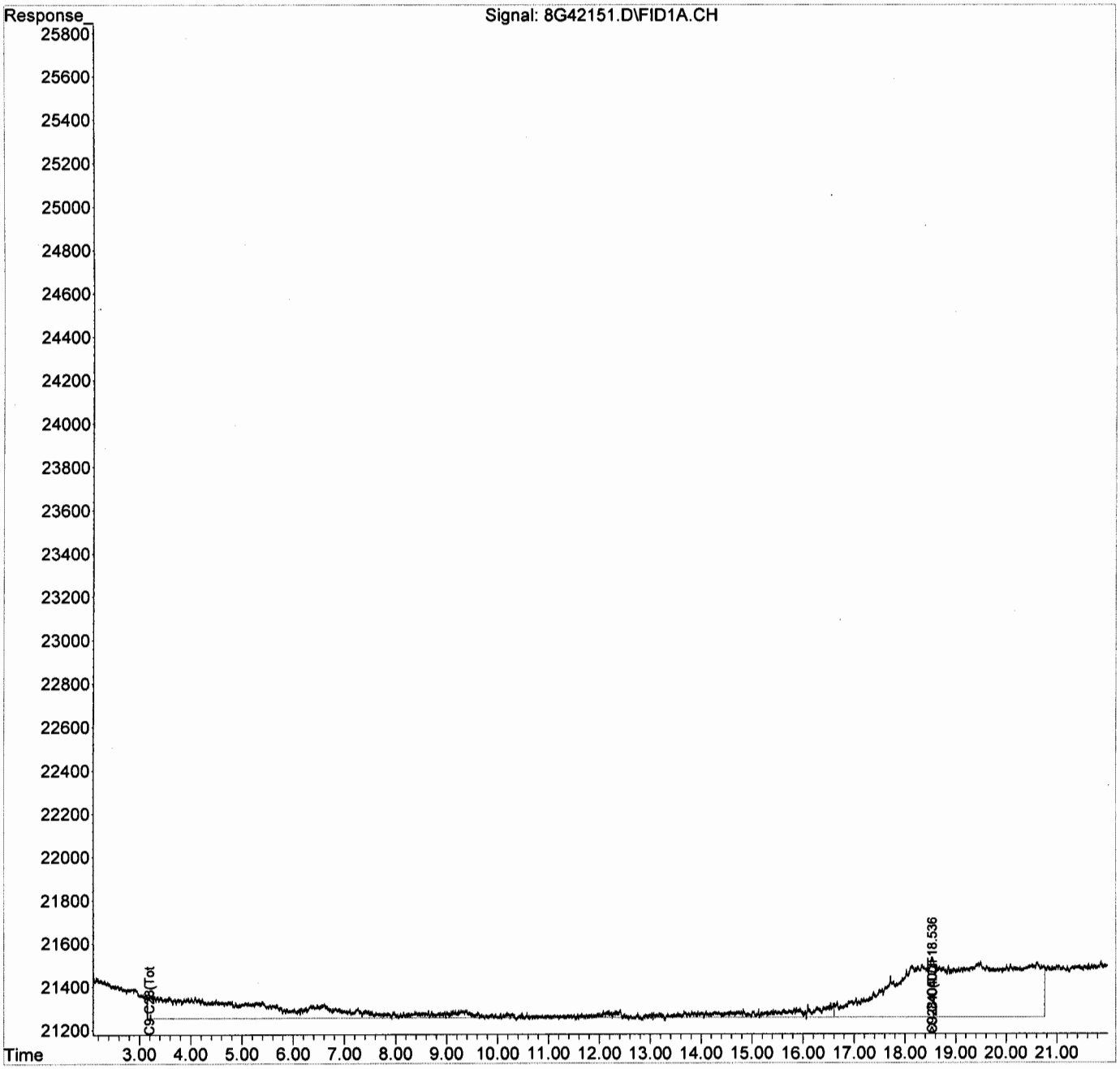
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42151.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 13:15:26
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:14:16 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0296

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42190.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 10:18:27
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:23:54 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

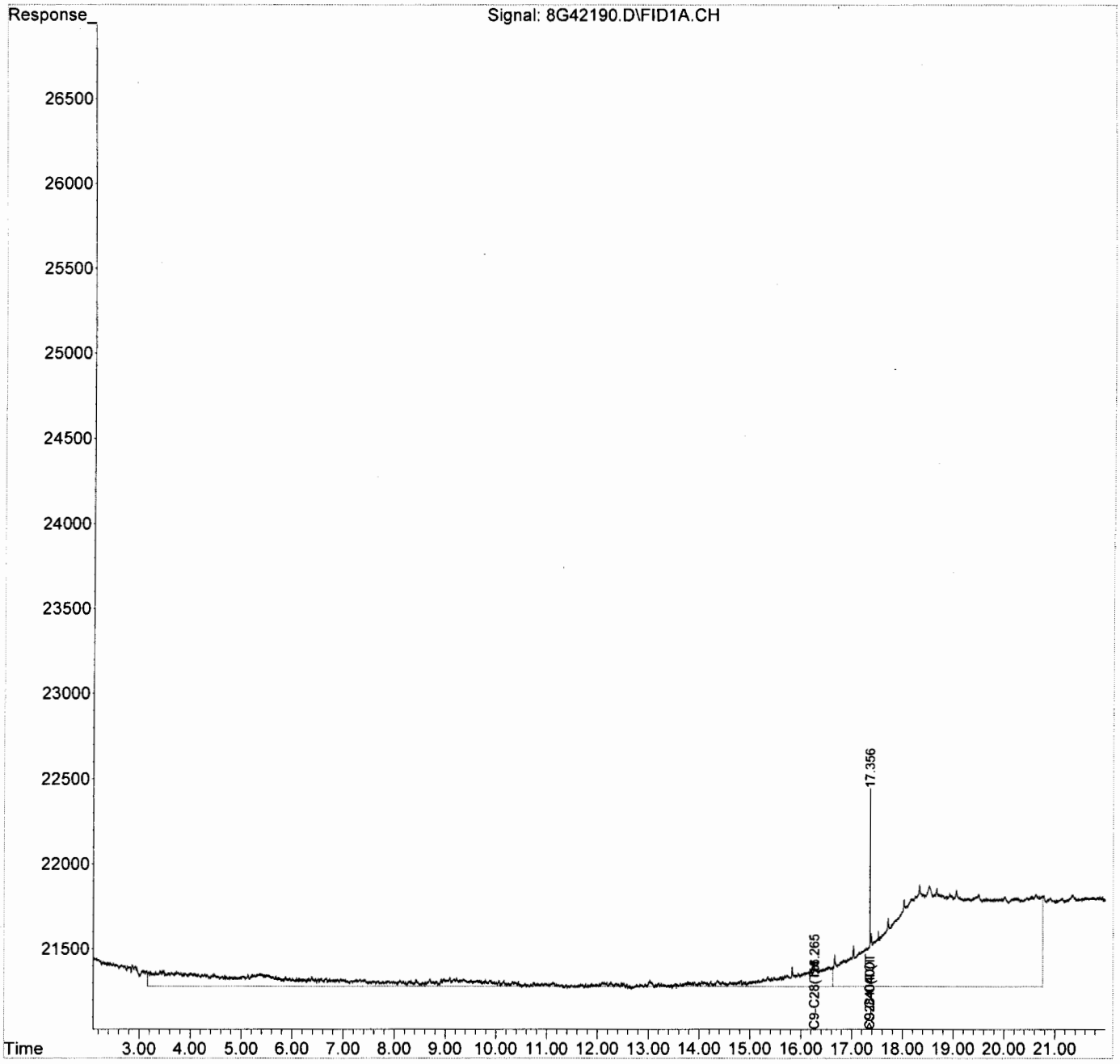
	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	0.000	0	N.D.		
22)S	1-Chlorooctadecane	0.000	0	N.D.		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		
9)AT	n-Eicosane (C20)	0.000	0	N.D.		
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		
11)AT	n-Docosane (C22)	0.000	0	N.D.		
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		
14)AT	n-Octacosane (C28)	0.000	0	N.D.		
15)BT	n-Triacontane (C30)	0.000	0	N.D.		
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	16.265f	259169	96.236		m
24)B	>C28-C40(Total)	17.356	1072017	443.233		m
25)t	C9-C40(TOTAL)	17.356f	1324167	508.987		m

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42190.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 10:18:27
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:23:54 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0298

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42132.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 17:17:22
Operator : KD/RAK/MS
Sample : SMB25787(MS)
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:02:14 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.413	337660	100.181		
22)S	1-Chlorooctadecane	13.696	263536	102.699		
Target Compounds						
1)AT	n-Nonane (C9)	3.277	173707	65.977		
2)AT	n-Decane (C10)	4.334	238219	88.547		
3)	Naphthalene	6.305	332405	106.812		
4)AT	n-Dodecane (C12)	6.374	295255	108.255		
5)	2-Methylnaphthalene	7.357	326547	106.941		
6)AT	n-Tetradecane (C14)	8.202	303282	111.021		
7)AT	n-Hexadecane (C16)	9.876	300508	110.085		
8)AT	n-Octadecane (C18)	11.631	285417	104.856		
9)AT	n-Eicosane (C20)	13.179	282276	103.684		
10)AT	n-Heneicosane (C21)	13.759	280909	102.646		
11)AT	n-Docosane (C22)	14.265	275090	101.330		
12)AT	n-Tetracosane (C24)	15.131	268327	99.719		
13)AT	n-Hexacosane (C26)	15.876	266427	101.239		
14)AT	n-Octacosane (C28)	16.540	258632	100.015		
15)BT	n-Triacontane (C30)	17.150	258627	100.355		
16)BT	n-Dotriacontane(C32)	17.720	255353	101.172		
17)BT	n-Tetratriacontane (C34	18.264	250734	102.988		
18)BT	n-Hexatriacontane (C36)	18.870	250978	104.326		
19)BT	n-Octatriacontane (C38)	19.635	243135	104.658		
20)BT	n-Tetracontane (C40)	20.639	238443	106.103		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

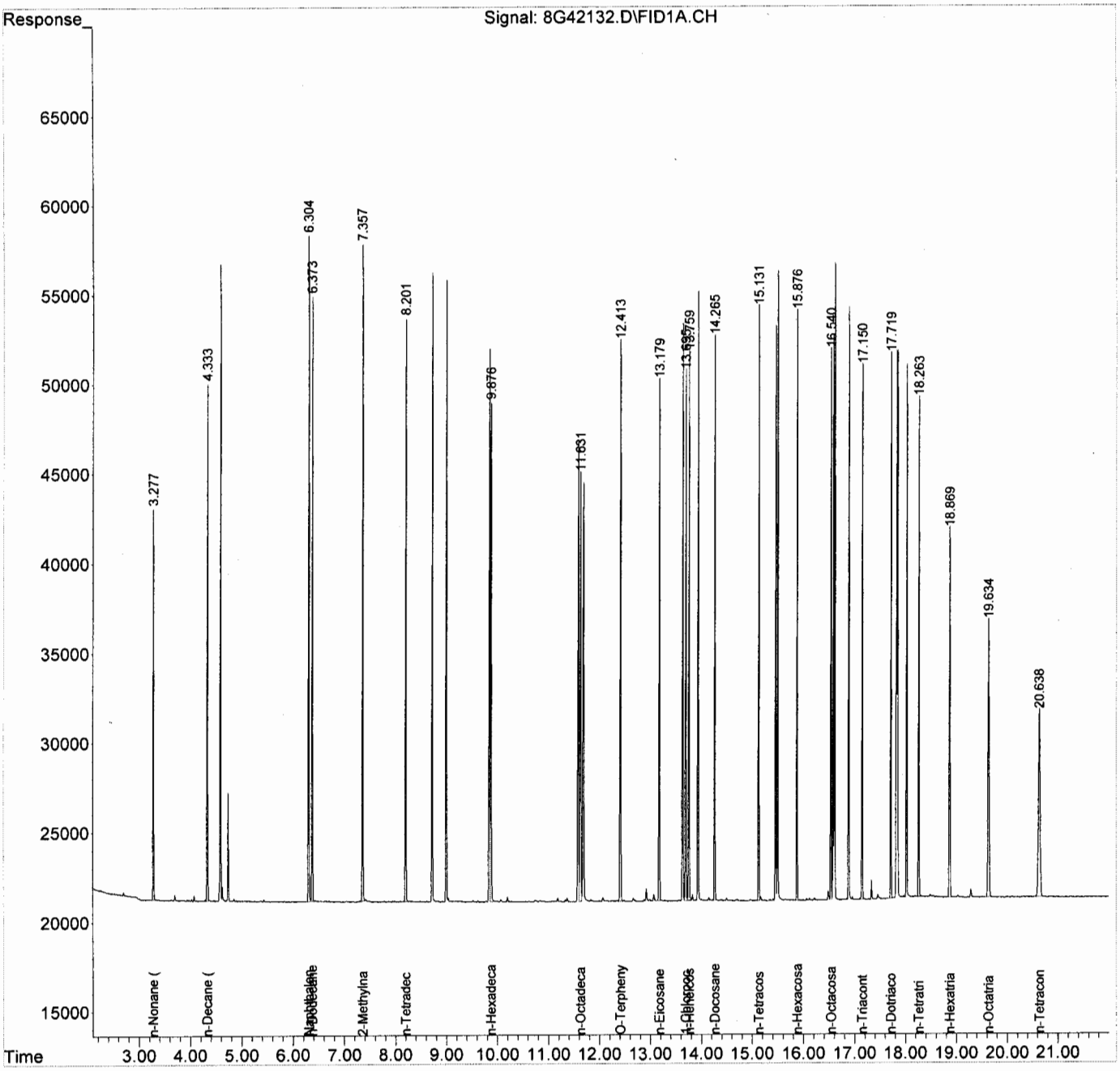
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42132.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 17:17:22
Operator : KD/RAK/MS
Sample : SMB25787(MS)
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:02:14 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0300

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42133.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 17:47:46
Operator : KD/RAK/MS
Sample : SMB25787(MSD)
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:02:38 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.414	360761	107.035		
22)S	1-Chlorooctadecane	13.696	279831	109.049		
Target Compounds						
1)AT	n-Nonane (C9)	3.277	205910	78.208		
2)AT	n-Decane (C10)	4.334	265018	98.507		
3)	Naphthalene	6.305	367509	118.092		
4)AT	n-Dodecane (C12)	6.373	321176	117.759		
5)	2-Methylnaphthalene	7.357	363301	118.977		
6)AT	n-Tetradecane (C14)	8.202	335078	122.661		
7)AT	n-Hexadecane (C16)	9.876	338943	124.164		
8)AT	n-Octadecane (C18)	11.633	323070	118.688		
9)AT	n-Eicosane (C20)	13.179	313196	115.041		
10)AT	n-Heneicosane (C21)	13.759	306204	111.889		
11)AT	n-Docosane (C22)	14.265	297425	109.557		
12)AT	n-Tetracosane (C24)	15.132	279002	103.687		
13)AT	n-Hexacosane (C26)	15.876	269035	102.230		
14)AT	n-Octacosane (C28)	16.540	255533	98.816		
15)BT	n-Triacontane (C30)	17.149	254459	98.738		
16)BT	n-Dotriacontane(C32)	17.722	252437	100.016		
17)BT	n-Tetratriacontane (C34	18.269	249933	102.659		
18)BT	n-Hexatriacontane (C36)	18.877	250380	104.077		
19)BT	n-Octatriacontane (C38)	19.644	244939	105.435		
20)BT	n-Tetracontane (C40)	20.647	241560	107.490		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

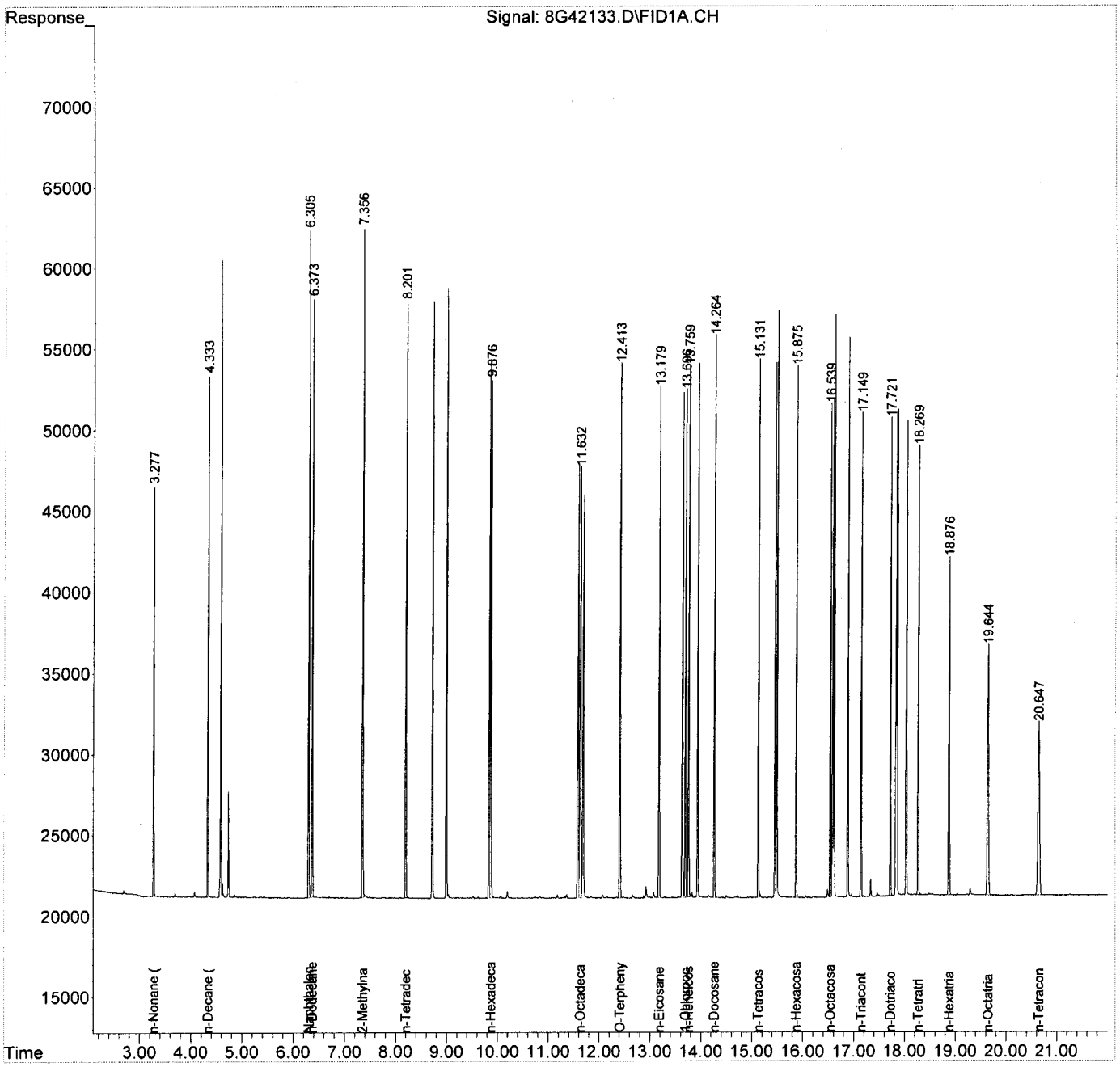
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42133.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 17:47:46
Operator : KD/RAK/MS
Sample : SMB25787(MSD)
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:02:38 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0302

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42134.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 18:18:13
Operator : KD/RAK/MS
Sample : SMB25787(DIESEL)(MS)
Misc : S.TPH
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:04:26 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.414	318968	94.635		
22)S	1-Chlorooctadecane	13.695	243443	94.869		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		d
2)AT	n-Decane (C10)	0.000	0	N.D.		d
3)	Naphthalene	0.000	0	N.D.		d
4)AT	n-Dodecane (C12)	0.000	0	N.D.		d
5)	2-Methylnaphthalene	0.000	0	N.D.		d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	12.414f	9059873	3364.179		m
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

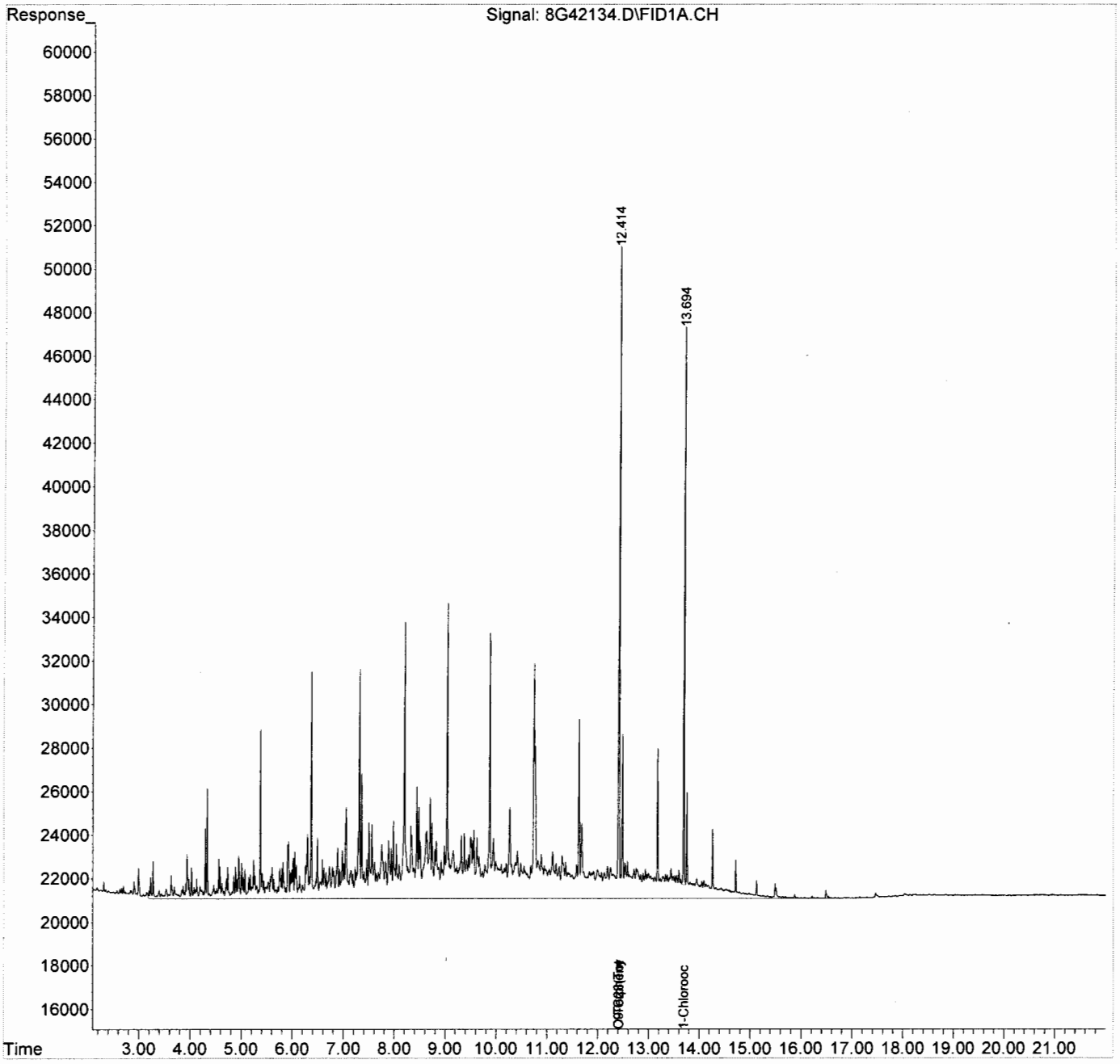
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42134.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 18:18:13
Operator : KD/RAK/MS
Sample : SMB25787(DIESEL)(MS)
Misc : S.TPH
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:04:26 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0304

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42135.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 18:48:43
Operator : KD/RAK/MS
Sample : SMB25787(DIESEL)(MSD)
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:04:06 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

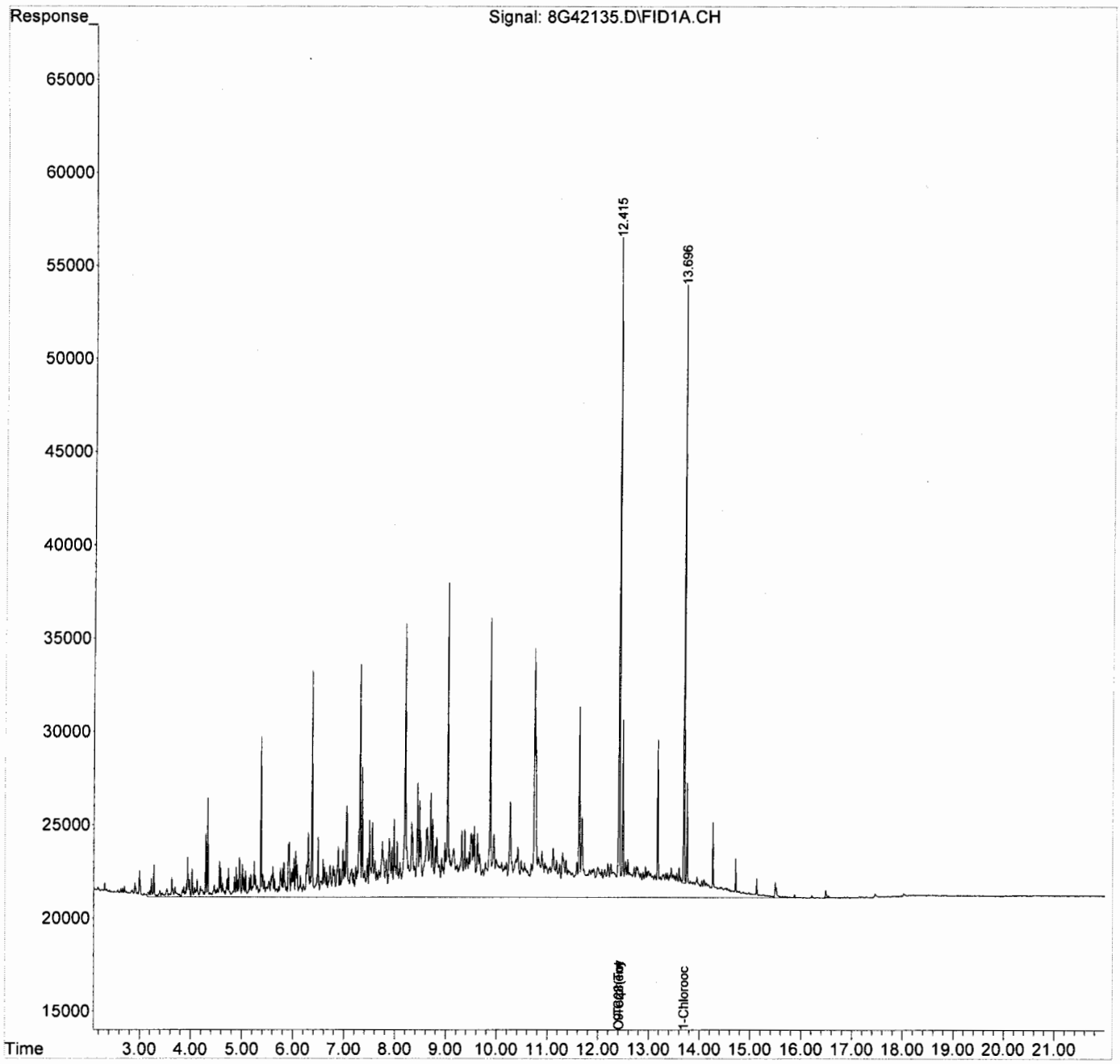
	Compound	R.T.	Response	Conc	Units
System Monitoring Compounds					
21)S	O-Terphenyl	12.415	388013	115.120	
22)S	1-Chlorooctadecane	13.696	295431	115.129	
Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.	d
2)AT	n-Decane (C10)	0.000	0	N.D.	d
3)	Naphthalene	0.000	0	N.D.	d
4)AT	n-Dodecane (C12)	0.000	0	N.D.	d
5)	2-Methylnaphthalene	0.000	0	N.D.	d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.	d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.	d
8)AT	n-Octadecane (C18)	0.000	0	N.D.	d
9)AT	n-Eicosane (C20)	0.000	0	N.D.	d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.	d
11)AT	n-Docosane (C22)	0.000	0	N.D.	d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.	d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.	d
14)AT	n-Octacosane (C28)	0.000	0	N.D.	d
15)BT	n-Triacontane (C30)	0.000	0	N.D.	d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.	d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.	d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.	d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.	d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.	
23)A	C9-C28(Total)	12.415f	10672013	3962.810	m
24)B	>C28-C40(Total)	0.000	0	N.D.	d
25)t	C9-C40(TOTAL)	0.000	0	N.D.	d

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42135.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 18:48:43
Operator : KD/RAK/MS
Sample : SMB25787(DIESEL)(MSD)
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:04:06 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0306

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42197.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 13:49:50
Operator : KD/RAK/MS
Sample : AC73723-001(10X)(MS)
Misc : S.TPH:10
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:21:56 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

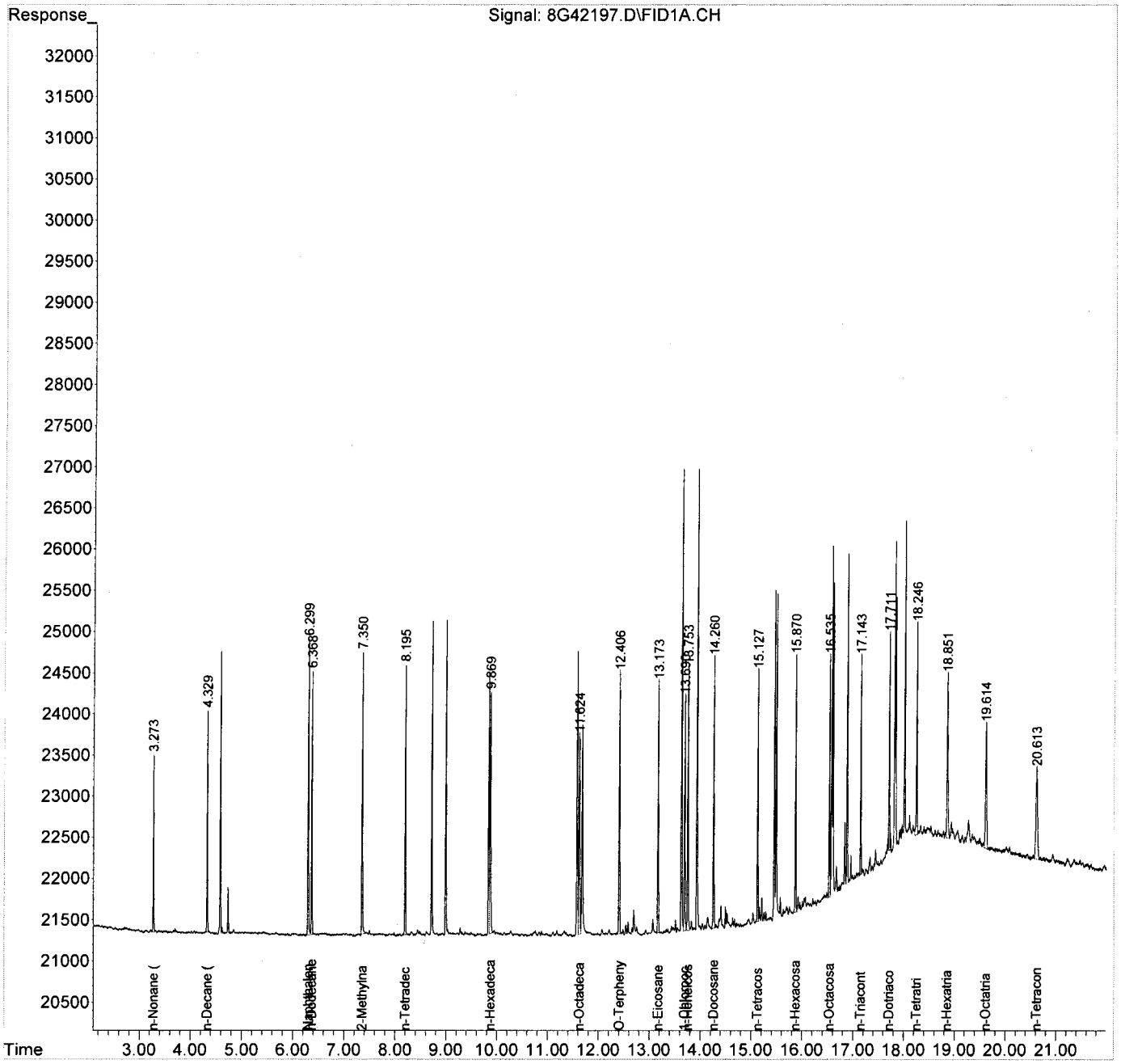
	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.406	35395	10.501		
22)S	1-Chlorooctadecane	13.691	26718	10.412		
Target Compounds						
1)AT	n-Nonane (C9)	3.273	17824	6.770		
2)AT	n-Decane (C10)	4.329	22417	8.333		
3)	Naphthalene	6.299	33049	10.620		
4)AT	n-Dodecane (C12)	6.368	28088	10.298		
5)	2-Methylnaphthalene	7.351	31667	10.371		
6)AT	n-Tetradecane (C14)	8.195	30254	11.075		
7)AT	n-Hexadecane (C16)	9.869	32714	11.984		
8)AT	n-Octadecane (C18)	11.624	31397	11.534		
9)AT	n-Eicosane (C20)	13.173	30072	11.046		
10)AT	n-Heneicosane (C21)	13.754	30647	11.199		
11)AT	n-Docosane (C22)	14.260	30099	11.087		
12)AT	n-Tetracosane (C24)	15.127	26387	9.806		
13)AT	n-Hexacosane (C26)	15.871	26317	10.000		
14)AT	n-Octacosane (C28)	16.535	24399	9.435		
15)BT	n-Triacontane (C30)	17.144	22186	8.609		
16)BT	n-Dotriacontane(C32)	17.711	22061	8.741		m
17)BT	n-Tetratriacontane (C34	18.246	24480	10.055		
18)BT	n-Hexatriacontane (C36)	18.851	27048	11.243		m
19)BT	n-Octatriacontane (C38)	19.614	23879	10.279		
20)BT	n-Tetracontane (C40)	20.614	24813	11.041		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42197.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 13:49:50
Operator : KD/RAK/MS
Sample : AC73723-001(10X)(MS)
Misc : S.TPH:10
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:21:56 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0308

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42198.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 14:19:57
Operator : KD/RAK/MS
Sample : AC73723-001(10X)(DUP)
Misc : S.TPH:10
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:23:44 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.406	27234	8.080		
22)S	1-Chlorooctadecane	13.691	19194	7.480		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		d
2)AT	n-Decane (C10)	0.000	0	N.D.		d
3)	Naphthalene	0.000	0	N.D.		d
4)AT	n-Dodecane (C12)	0.000	0	N.D.		d
5)	2-Methylnaphthalene	0.000	0	N.D.		d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	13.629f	780816	289.938		m
24)B	>C28-C40(Total)	18.010f	2817744	1165.016		m
25)t	C9-C40(TOTAL)	13.629f	3596973	1382.615		m

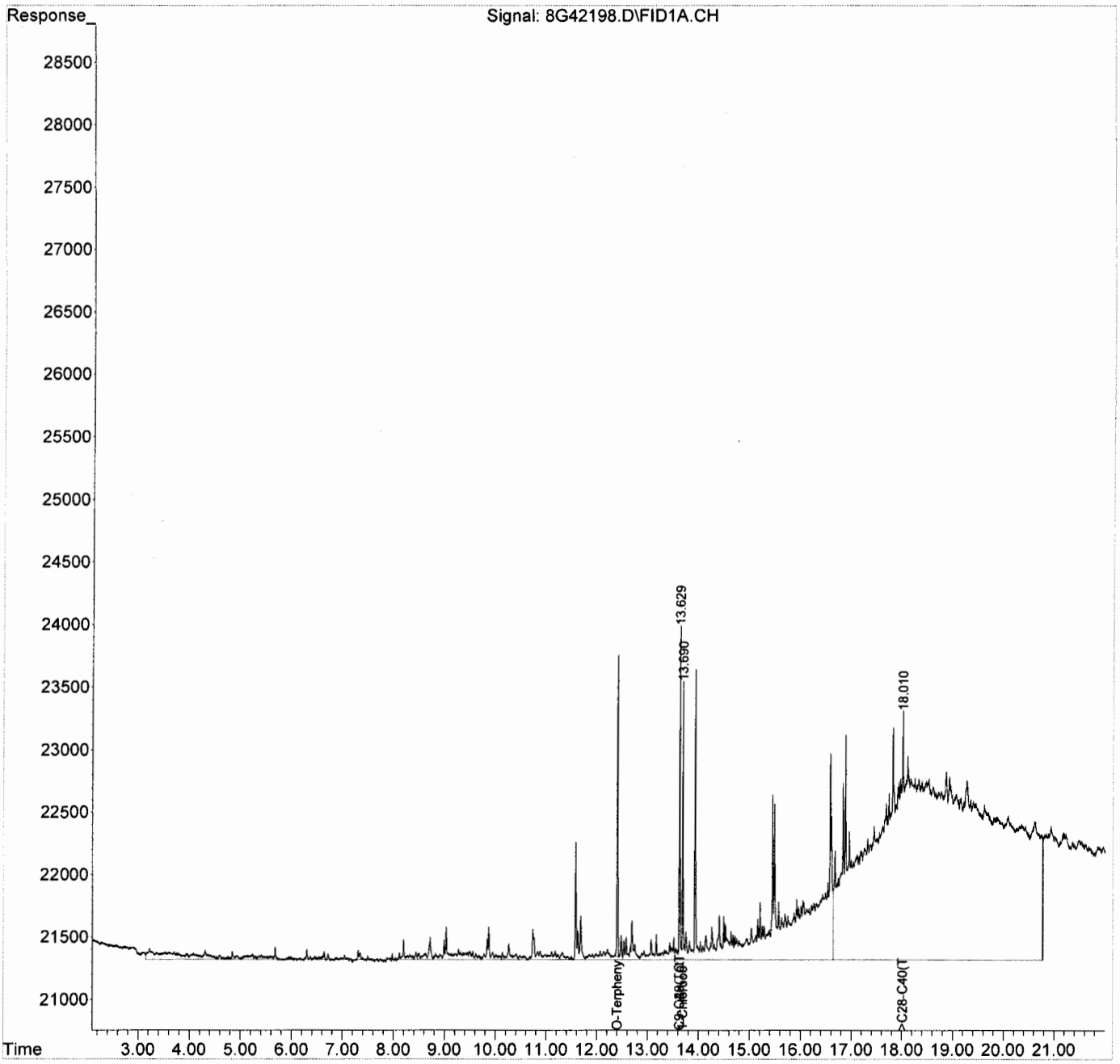
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42198.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 14:19:57
Operator : KD/RAK/MS
Sample : AC73723-001(10X)(DUP)
Misc : S.TPH:10
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:23:44 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0310

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42199.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 14:50:19
Operator : KD/RAK/MS
Sample : AC73723-001(10X)
Misc : S.TPH:10
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:30:13 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.406	29924	8.878		
22)S	1-Chlorooctadecane	13.690	23812	9.279		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		d
2)AT	n-Decane (C10)	0.000	0	N.D.		d
3)	Naphthalene	0.000	0	N.D.		d
4)AT	n-Dodecane (C12)	0.000	0	N.D.		d
5)	2-Methylnaphthalene	0.000	0	N.D.		d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		d
23)A	C9-C28(Total)	13.629f	1263031	468.998		m
24)B	>C28-C40(Total)	16.878	3526060	1457.874		m
25)t	C9-C40(TOTAL)	13.629f	4790271	1841.299		m

(f)=RT Delta > 1/2 Window (m)=manual int.

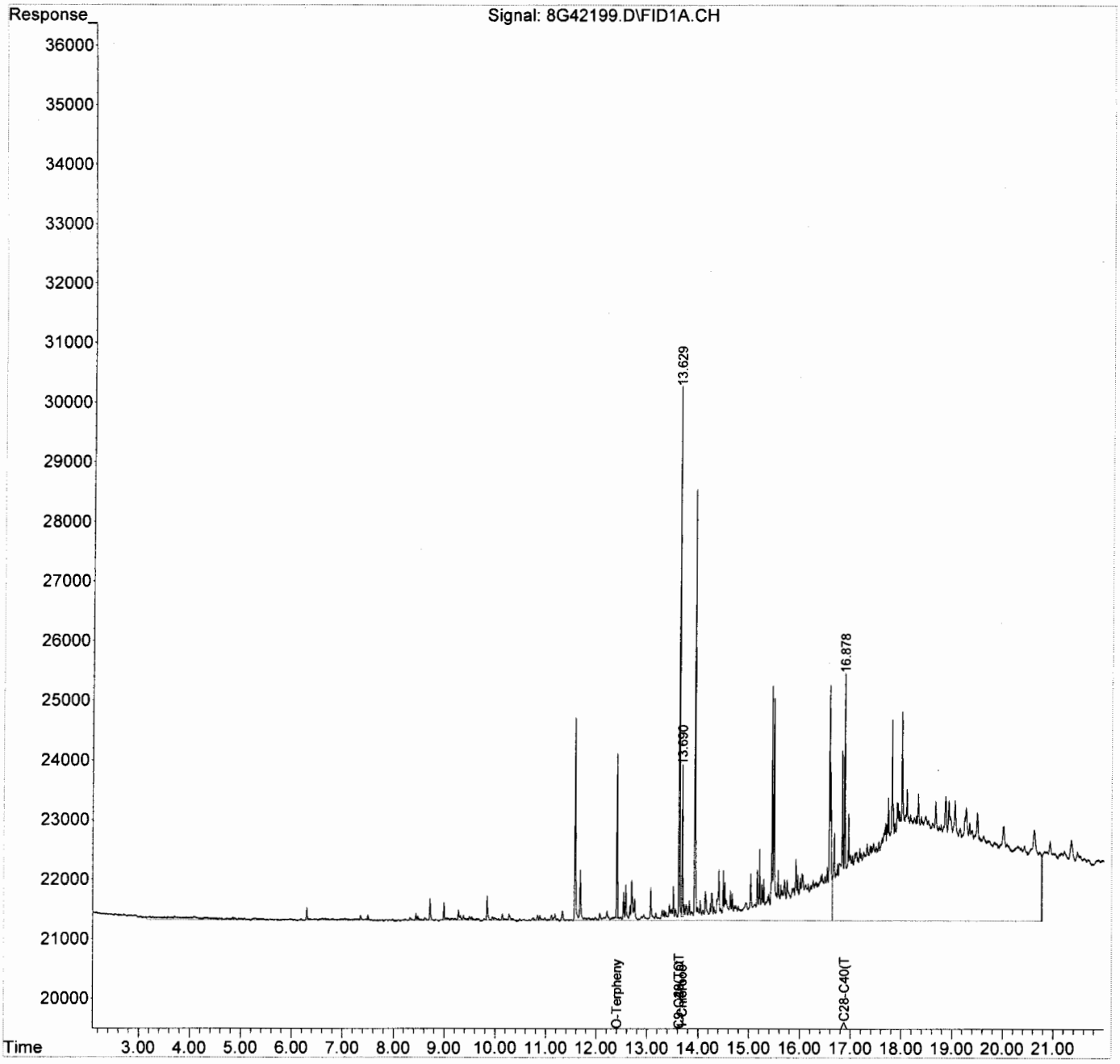
Quantitation Report (QT Reviewed)

3080110 0311

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42199.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 14:50:19
Operator : KD/RAK/MS
Sample : AC73723-001(10X)
Misc : S.TPH:10
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:30:13 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Metal Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC73771-001	% Solid:	91	Lab Name:	Veritech	Nras No:	
Client Id:	BB-COMP-1-0801113	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/1/2013	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	220	8900	1	0.5	50	08/06/13	26592	S15344D3	21	P	PEICPRAD3A
7440-36-0	Antimony	2.2	ND	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-38-2	Arsenic	2.2	8.1	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-39-3	Barium	11	74	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-41-7	Beryllium	0.66	0.80	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-43-9	Cadmium	0.66	ND	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-70-2	Calcium	1100	2600	1	0.5	50	08/06/13	26592	S15344D3	21	P	PEICPRAD3A
7440-47-3	Chromium	5.5	21	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-48-4	Cobalt	2.7	9.4	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-50-8	Copper	5.5	38	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7439-89-6	Iron	220	17000	1	0.5	50	08/06/13	26592	S15344D3	21	P	PEICPRAD3A
7439-92-1	Lead	5.5	80	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7439-95-4	Magnesium	550	4300	1	0.5	50	08/06/13	26592	S15344D3	21	P	PEICPRAD3A
7439-96-5	Manganese	11	450	1	0.5	50	08/06/13	26592	S15344D3	21	P	PEICPRAD3A
7439-97-6	Mercury	0.092	ND	1	0.15	25	08/06/13	26592	H15344Sb	20	CV	HGCV1A
7440-02-0	Nickel	5.5	34	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-09-7	Potassium	550	1100	1	0.5	50	08/06/13	26592	S15344D3	21	P	PEICPRAD3A
7782-49-2	Selenium	2.0	ND	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-22-4	Silver	1.6	ND	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-23-5	Sodium	270	ND	1	0.5	50	08/06/13	26592	S15344D3	21	P	PEICPRAD3A
7440-28-0	Thallium	1.3	ND	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-62-2	Vanadium	11	35	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-66-6	Zinc	11	88	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC73771-002	% Solid:	89	Lab Name:	Veritech	Nras No:	
Client Id:	BB-COMP-2-0801113	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/1/2013	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	220	9500	1	0.5	50	08/06/13	26592	S15344D3	13	P	PEICPRAD3A
7440-36-0	Antimony	2.2	ND	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-38-2	Arsenic	2.2	8.3	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-39-3	Barium	11	78	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-41-7	Beryllium	0.67	0.85	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-43-9	Cadmium	0.67	ND	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-70-2	Calcium	1100	2100	1	0.5	50	08/06/13	26592	S15344D3	13	P	PEICPRAD3A
7440-47-3	Chromium	5.6	18	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-48-4	Cobalt	2.8	8.1	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-50-8	Copper	5.6	36	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7439-89-6	Iron	220	17000	1	0.5	50	08/06/13	26592	S15344D3	13	P	PEICPRAD3A
7439-92-1	Lead	5.6	69	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7439-95-4	Magnesium	560	4300	1	0.5	50	08/06/13	26592	S15344D3	13	P	PEICPRAD3A
7439-96-5	Manganese	11	430	1	0.5	50	08/06/13	26592	S15344D3	13	P	PEICPRAD3A
7439-97-6	Mercury	0.094	ND	1	0.15	25	08/06/13	26592	H15344Sb	16	CV	HGCV1A
7440-02-0	Nickel	5.6	16	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-09-7	Potassium	560	1200	1	0.5	50	08/06/13	26592	S15344D3	13	P	PEICPRAD3A
7782-49-2	Selenium	2.0	ND	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-22-4	Silver	1.7	ND	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-23-5	Sodium	280	ND	1	0.5	50	08/06/13	26592	S15344D3	13	P	PEICPRAD3A
7440-28-0	Thallium	1.3	ND	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-62-2	Vanadium	11	37	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-66-6	Zinc	11	76	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 26592 (100) % Solid: 0 Lab Name: Veritech
Client Id: MB 26592 (100) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	0.5	50	08/06/13	26592	S15344D3	10	P	PEICPRAD3A
7440-36-0	Antimony	2.0	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-38-2	Arsenic	2.0	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-39-3	Barium	10	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-41-7	Beryllium	0.60	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-43-9	Cadmium	0.60	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-70-2	Calcium	1000	ND	1	0.5	50	08/06/13	26592	S15344D3	10	P	PEICPRAD3A
7440-47-3	Chromium	5.0	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-48-4	Cobalt	2.5	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-50-8	Copper	5.0	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7439-89-6	Iron	200	ND	1	0.5	50	08/06/13	26592	S15344D3	10	P	PEICPRAD3A
7439-92-1	Lead	5.0	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7439-95-4	Magnesium	500	ND	1	0.5	50	08/06/13	26592	S15344D3	10	P	PEICPRAD3A
7439-96-5	Manganese	10	ND	1	0.5	50	08/06/13	26592	S15344D3	10	P	PEICPRAD3A
7439-98-7	Molybdenum	2.5	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-02-0	Nickel	5.0	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-09-7	Potassium	500	ND	1	0.5	50	08/06/13	26592	S15344D3	10	P	PEICPRAD3A
7782-49-2	Selenium	1.8	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-22-4	Silver	1.5	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-23-5	Sodium	250	ND	1	0.5	50	08/06/13	26592	S15344D3	10	P	PEICPRAD3A
7440-28-0	Thallium	1.2	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-31-5	Tin	5.7	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-32-6	Titanium	35	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-62-2	Vanadium	10	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-66-6	Zinc	10	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 26592 (167) % Solid: 0 Lab Name: Veritech
Client Id: MB 26592 (167) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7439-97-6	Mercury	0.083	ND	1	0.15	25	08/06/13	26592	H15344Sb	11	CV	HGCV1A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/02/13
Data File: S15344A3
Prep Batch: 26592
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV (2) V-168169-7	Rec	CCV V-168988-19	Rec	CCV V-168988-30	Rec	CCV V-168988-41	Rec	CCV V-168988-50	Rec		Rec		Rec		Rec
Antimony	1/.5	1.00829	101	0.49969	100	0.50163	100	0.49429	99	0.48541	97						
Arsenic	1/.5	1.01179	101	0.49564	99	0.49122	98	0.49663	99	0.48342	97						
Barium	1/.5	1.01605	102	0.51177	102	0.51462	103	0.51200	102	0.51227	102						
Beryllium	1/.5	1.00589	101	0.50577	101	0.50184	100	0.50438	101	0.50072	100						
Cadmium	1/.5	1.01027	101	0.50518	101	0.50856	102	0.50440	101	0.50829	102						
Chromium	1/.5	1.00753	101	0.50780	102	0.51463	103	0.51009	102	0.51158	102						
Cobalt	1/.5	1.01181	101	0.51385	103	0.51723	103	0.51625	103	0.51515	103						
Copper	1/.5	1.00088	100	0.50232	100	0.50863	102	0.50562	101	0.51261	103						
Lead	1/.5	1.00270	100	0.51161	102	0.51034	102	0.50945	102	0.50125	100						
Molybdenum	1/.5	1.01274	101	0.51201	102	0.51123	102	0.50748	101	0.50079	100						
Nickel	1/.5	0.99387	99	0.50521	101	0.51175	102	0.50984	102	0.50935	102						
Selenium	1/.5	1.01500	102	0.50515	101	0.50562	101	0.51065	102	0.49717	99						
Silver	0.2/0.1	0.20189	101	0.10097	101	0.10246	102	0.10137	101	0.10310	103						
Thallium	1/.5	1.02829	103	0.54658	109	0.53893	108	0.54206	108	0.54388	109						
Vanadium	1/.5	0.99703	100	0.50489	101	0.50962	102	0.50677	101	0.50693	101						
Zinc	1/.5	1.00743	101	0.50415	101	0.50803	102	0.50484	101	0.50588	101						

Notes:
a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits:
ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-11

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/06/13
Data File: S15344D3
Prep Batch: 26592
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICPRAD3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV (2) V-168169-6	Rec	CCV V-168988-18	Rec	CCV V-168988-26	Rec	CCV V-168988-33	Rec	CCV V-168988-40	Rec		Rec		Rec		Rec
Aluminum	10/5	9.73766	97	4.98308	100	5.13391	103	5.06707	101	5.07926	102						
Calcium	100/50	94.70030	95	49.92660	100	49.81070	100	49.97700	100	50.20360	100						
Iron	10/5	9.46969	95	5.00807	100	5.03235	101	5.25931	105	5.03060	101						
Magnesium	100/50	94.66540	95	49.65730	99	49.82520	100	49.91100	100	50.21500	100						
Manganese	1/.5	0.94347	94	0.49413	99	0.49219	98	0.49955	100	0.49485	99						
Potassium	100/50	94.70340	95	49.53350	99	48.95710	98	49.14840	98	48.83710	98						
Sodium	100/50	94.96500	95	49.56040	99	48.94010	98	49.17440	98	49.17920	98						

Notes: a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits: ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-11

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/06/13
Data File: H15344Sb
Prep Batch: 26592
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

		ICV (2)-9		CCV-21		CCV-33		CCV-38									
Analyte	ICV/CCV Amt		Rec		Rec		Rec		Rec		Rec		Rec		Rec		Rec
Mercury	20/10	20.73395	104	10.41688	104	10.20092	102	10.10901	101								

Notes:
a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits:
ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-11

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/02/13
Data File: S15344A3
Prep Batch: 26592
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-166272-8	CCB V-166272-20	CCB V-166272-31	CCB V-166272-42	CCB V-166272-51	MB 26592 (100)-11		
Antimony	.02 U	.02 U	.02 U	.02 U	.02 U	2 U		
Arsenic	.02 U	.02 U	.02 U	.02 U	.02 U	2 U		
Barium	.1 U	.1 U	.1 U	.1 U	.1 U	10 U		
Beryllium	.006 U	.006 U	.006 U	.006 U	.006 U	.6 U		
Cadmium	.006 U	.006 U	.006 U	.006 U	.006 U	.6 U		
Chromium	.05 U	.05 U	.05 U	.05 U	.05 U	5 U		
Cobalt	.025 U	.025 U	.025 U	.025 U	.025 U	2.5 U		
Copper	.05 U	.05 U	.05 U	.05 U	.05 U	5 U		
Lead	.05 U	.05 U	.05 U	.05 U	.05 U	5 U		
Molybdenum	.025 U	.025 U	.025 U	.025 U	.025 U	2.5 U		
Nickel	.05 U	.05 U	.05 U	.05 U	.05 U	5 U		
Selenium	.018 U	.018 U	.018 U	.018 U	.018 U	1.8 U		
Silver	.015 U	.015 U	.015 U	.015 U	.015 U	1.5 U		
Thallium	.012 U	.012 U	.012 U	.012 U	.012 U	1.2 U		
Vanadium	.1 U	.1 U	.1 U	.1 U	.1 U	10 U		
Zinc	.1 U	.1 U	.1 U	.1 U	.1 U	10 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/06/13
Data File: S15344D3
Prep Batch: 26592
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICPRAD3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-166272-7	CCB V-166272-19	CCB V-166272-27	CCB V-166272-34	CCB V-166272-41	MB 26592 (100)-10		
Aluminum	2 U	2 U	2 U	2 U	2 U	200 U		
Calcium	10 U	10 U	10 U	10 U	10 U	1000 U		
Iron	2 U	2 U	2 U	2 U	2 U	200 U		
Magnesium	5 U	5 U	5 U	5 U	5 U	500 U		
Manganese	.1 U	.1 U	.1 U	.1 U	.1 U	10 U		
Potassium	5 U	5 U	5 U	5 U	5 U	500 U		
Sodium	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	250 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/06/13
Data File: H15344Sb
Prep Batch: 26592
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-39	MB 26592 (167)-11			
Mercury	.5 U	.5 U	.5 U	.5 U	83 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 08/02/13
Data File: S15344A3
Prep Batch: 26592
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-169160-9	Rec	ICSAB V-169161-10	Rec	ICSA V-169160-28	Rec	ICSAB V-169161-29	Rec	ICSA V-169160-39	Rec	ICSAB V-169161-40	Rec	ICSA V-169160-48	Rec	ICSAB V-169161-49	Rec
Aluminum	500	508.254	102	506.56700	101	511.425	102	502.34300	100	500.877	100	501.29500	100	504.194	101	508.41800	102
Antimony	1	U		1.07215	107	U		1.05949	106	U		1.05080	105	U		1.04549	105
Arsenic	1	U		1.04387	104	U		1.03133	103	U		1.01898	102	U		1.01299	101
Barium	.5	U		0.53811	108	U		0.53363	107	U		0.52947	106	U		0.52913	106
Beryllium	.5	U		0.52019	104	U		0.51435	103	U		0.51136	102	U		0.51496	103
Cadmium	1	U		1.05959	106	U		1.04747	105	U		1.04449	104	U		1.05057	105
Calcium	500	473.451	95	467.70800	94	477.657	96	461.98200	92	467.105	93	460.87000	92	473.797	95	464.04500	93
Chromium	.5	U		0.50326	101	U		0.49831	100	U		0.49687	99	U		0.49995	100
Cobalt	.5	U		0.49478	99	U		0.48912	98	U		0.48659	97	U		0.48686	97
Copper	.5	U		0.53770	108	U		0.53164	106	U		0.53063	106	U		0.53935	108
Iron	200	187.303	94	187.37800	94	189.629	95	182.13900	91	185.908	93	180.94600	90	186.405	93	180.96700	90
Lead	1	U		0.97127	97	U		0.95618	96	U		0.95333	95	U		0.94572	95
Magnesium	500	513.074	103	517.39700	103	517.795	104	503.37100	101	504.883	101	495.41400	99	500.228	100	488.14600	98
Nickel	1	U		0.94372	94	U		0.93298	93	U		0.92805	93	U		0.93522	94
Selenium	1	U		1.03690	104	U		1.02533	103	U		1.02423	102	U		1.02570	103
Silver	1	U		1.11322	111	U		1.10709	111	U		1.10499	110	U		1.12164	112
Thallium	1	U		0.98186	98	U		0.98506	99	U		0.98349	98	U		1.01434	101
Vanadium	.5	U		0.49913	100	U		0.49386	99	U		0.48871	98	U		0.49198	98
Zinc	1	U		0.96276	96	U		0.95197	95	U		0.94692	95	U		0.94548	95

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 08/06/13
Data File: S15344D3
Prep Batch: 26592
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICPRAD3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-169160-8	Rec	ICSAB V-169161-9	Rec	ICSA V-169160-24	Rec	ICSAB V-169161-25	Rec	ICSA V-169160-38	Rec	ICSAB V-169161-39	Rec		Rec		Rec
Aluminum	500	470.63	94	466.87400	93	474.741	95	467.90900	94	469.725	94	468.51900	94				
Calcium	500	459.771	92	456.35800	91	465.104	93	458.24700	92	460.167	92	459.10200	92				
Iron	200	177.548	89	176.58800	88	179.736	90	177.35200	89	178.153	89	178.00700	89				
Magnesium	500	464.056	93	461.62600	92	470.522	94	464.33400	93	466.318	93	465.77900	93				
Manganese	.5	U		0.47341	95	U		0.47397	95	U		0.48059	96				

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

FORM5/FORM7
SPIKE RECOVERY DATA
PREP BATCH: 26592

Instrument Type: ICP/HG
Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 26592

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	26592	1	S15344D3	12	63.2310	90.6	70		46	153
Antimony	26592	1	S15344A3	13	0.7331	1.06	69		1.9	219
Arsenic	26592	1	S15344A3	13	1.6904	1.82	93		83	118
Barium	26592	1	S15344A3	13	1.3825	1.43	97		83	117
Beryllium	26592	1	S15344A3	13	0.9195	0.983	94		84	116
Cadmium	26592	1	S15344A3	13	0.5879	0.604	97		83	117
Calcium	26592	1	S15344D3	12	56.0479	60.4	93		83	117
Chromium	26592	1	S15344A3	13	1.1870	1.25	95		82	118
Cobalt	26592	1	S15344A3	13	1.6377	1.63	100		85	115
Copper	26592	1	S15344A3	13	0.7922	0.801	99		84	116
Iron	26592	1	S15344D3	12	106.1720	129	82		51	150
Lead	26592	1	S15344A3	13	1.3082	1.36	96		84	117
Magnesium	26592	1	S15344D3	12	23.3231	26.4	88		75	124
Manganese	26592	1	S15344D3	12	2.6033	2.79	93		83	118
Mercury	26592	5	H15344Sb	15	11.8875	55.5	107		72	129
Nickel	26592	1	S15344A3	13	1.2714	1.28	99		84	116
Potassium	26592	1	S15344D3	12	23.7439	28.2	84		73	127
Selenium	26592	1	S15344A3	13	0.7958	0.859	93		80	120
Silver	26592	1	S15344A3	13	0.5952	0.613	97		66	134
Sodium	26592	1	S15344D3	12	3.9335	4.39	90		74	126
Thallium	26592	1	S15344A3	13	1.4289	1.44	99		81	119
Vanadium	26592	1	S15344A3	13	0.9211	1.04	89		75	124
Zinc	26592	1	S15344A3	13	1.9302	2.04	95		82	118

TxtQcType: LCS Matrix: SOIL SampleID: LCS 26592

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	26592	1	S15344D3	11	59.7671	90.6	66		46	153
Antimony	26592	1	S15344A3	12	0.7316	1.06	69		1.9	219
Arsenic	26592	1	S15344A3	12	1.6693	1.82	92		83	118
Barium	26592	1	S15344A3	12	1.3286	1.43	93		83	117
Beryllium	26592	1	S15344A3	12	0.9116	0.983	93		84	116
Cadmium	26592	1	S15344A3	12	0.5739	0.604	95		83	117
Calcium	26592	1	S15344D3	11	53.3266	60.4	88		83	117
Chromium	26592	1	S15344A3	12	1.1602	1.25	93		82	118
Cobalt	26592	1	S15344A3	12	1.6108	1.63	99		85	115
Copper	26592	1	S15344A3	12	0.7702	0.801	96		84	116
Iron	26592	1	S15344D3	11	100.7800	129	78		51	150
Lead	26592	1	S15344A3	12	1.2535	1.36	92		84	117
Magnesium	26592	1	S15344D3	11	21.9062	26.4	83		75	124
Manganese	26592	1	S15344D3	11	2.4380	2.79	87		83	118
Mercury	26592	5	H15344Sb	14	11.0173	55.5	99		72	129
Nickel	26592	1	S15344A3	12	1.2428	1.28	97		84	116
Potassium	26592	1	S15344D3	11	22.3560	28.2	79		73	127
Selenium	26592	1	S15344A3	12	0.7856	0.859	91		80	120
Silver	26592	1	S15344A3	12	0.5797	0.613	95		66	134
Sodium	26592	1	S15344D3	11	3.7922	4.39	86		74	126
Thallium	26592	1	S15344A3	12	1.4058	1.44	98		81	119
Vanadium	26592	1	S15344A3	12	0.9042	1.04	87		75	124
Zinc	26592	1	S15344A3	12	1.8900	2.04	93		82	118

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 26592

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MSD Matrix: SOIL SampleID: AC73771-002

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	26592	1	S15344D3	16	S15344D3	13	99.9327	84.7397	5.0	304	b	75	125
Antimony	26592	1	S15344A3	17	S15344A3	14	0.2886	0.02U	0.5	58	a	75	125
Arsenic	26592	1	S15344A3	17	S15344A3	14	0.5371	0.0742	0.5	93		75	125
Barium	26592	1	S15344A3	17	S15344A3	14	1.0865	0.6942	0.5	78		75	125
Beryllium	26592	1	S15344A3	17	S15344A3	14	0.4804	0.0076	0.5	95		75	125
Cadmium	26592	1	S15344A3	17	S15344A3	14	0.4857	0.006U	0.5	97		75	125
Calcium	26592	1	S15344D3	16	S15344D3	13	63.0252	18.7361	50	89		75	125
Chromium	26592	1	S15344A3	17	S15344A3	14	0.6405	0.1619	0.5	96		75	125
Cobalt	26592	1	S15344A3	17	S15344A3	14	0.5723	0.0719	0.5	100		75	125
Copper	26592	1	S15344A3	17	S15344A3	14	0.7940	0.3231	0.5	94		75	125
Iron	26592	1	S15344D3	16	S15344D3	13	154.9240	149.6880	5.0	105		75	125
Lead	26592	1	S15344A3	17	S15344A3	14	1.0734	0.6156	0.5	92		75	125
Magnesium	26592	1	S15344D3	16	S15344D3	13	83.0300	38.3688	50	89		75	125
Manganese	26592	1	S15344D3	16	S15344D3	13	4.2557	3.8218	0.5	87		75	125
Mercury	26592	1	H15344Sb	19	H15344Sb	16	10.8829	.5U	10	109		75	125
Nickel	26592	1	S15344A3	17	S15344A3	14	0.6244	0.1394	0.5	97		75	125
Potassium	26592	1	S15344D3	16	S15344D3	13	57.4114	10.7367	50	93		75	125
Selenium	26592	1	S15344A3	17	S15344A3	14	0.4532	0.018U	0.5	91		75	125
Silver	26592	1	S15344A3	17	S15344A3	14	0.0938	0.015U	0.10	94		75	125
Sodium	26592	1	S15344D3	16	S15344D3	13	47.2879	2.5U	50	95		75	125
Thallium	26592	1	S15344A3	17	S15344A3	14	0.4877	0.012U	0.5	98		75	125
Vanadium	26592	1	S15344A3	17	S15344A3	14	0.7941	0.3306	0.5	93		75	125
Zinc	26592	1	S15344A3	17	S15344A3	14	1.1453	0.6802	0.5	93		75	125

TxtQcType: MS Matrix: SOIL SampleID: AC73771-002

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	26592	1	S15344D3	15	S15344D3	13	104.5730	84.7397	5.0	397	b	75	125
Antimony	26592	1	S15344A3	16	S15344A3	14	0.2646	0.02U	0.5	53	a	75	125
Arsenic	26592	1	S15344A3	16	S15344A3	14	0.5285	0.0742	0.5	91		75	125
Barium	26592	1	S15344A3	16	S15344A3	14	1.1571	0.6942	0.5	93		75	125
Beryllium	26592	1	S15344A3	16	S15344A3	14	0.4640	0.0076	0.5	91		75	125
Cadmium	26592	1	S15344A3	16	S15344A3	14	0.4703	0.006U	0.5	94		75	125
Calcium	26592	1	S15344D3	15	S15344D3	13	69.0046	18.7361	50	101		75	125
Chromium	26592	1	S15344A3	16	S15344A3	14	0.6394	0.1619	0.5	96		75	125
Cobalt	26592	1	S15344A3	16	S15344A3	14	0.5610	0.0719	0.5	98		75	125
Copper	26592	1	S15344A3	16	S15344A3	14	0.8788	0.3231	0.5	111		75	125
Iron	26592	1	S15344D3	15	S15344D3	13	172.7020	149.6880	5.0	460	b	75	125
Lead	26592	1	S15344A3	16	S15344A3	14	1.2741	0.6156	0.5	132	a	75	125
Magnesium	26592	1	S15344D3	15	S15344D3	13	82.4397	38.3688	50	88		75	125
Manganese	26592	1	S15344D3	15	S15344D3	13	5.7731	3.8218	0.5	390	b	75	125
Mercury	26592	1	H15344Sb	18	H15344Sb	16	10.6726	.5U	10	107		75	125
Nickel	26592	1	S15344A3	16	S15344A3	14	0.6175	0.1394	0.5	96		75	125
Potassium	26592	1	S15344D3	15	S15344D3	13	57.1548	10.7367	50	93		75	125
Selenium	26592	1	S15344A3	16	S15344A3	14	0.4256	0.018U	0.5	85		75	125
Silver	26592	1	S15344A3	16	S15344A3	14	0.0896	0.015U	0.10	90		75	125
Sodium	26592	1	S15344D3	15	S15344D3	13	45.6802	2.5U	50	91		75	125
Thallium	26592	1	S15344A3	16	S15344A3	14	0.4697	0.012U	0.5	94		75	125
Vanadium	26592	1	S15344A3	16	S15344A3	14	0.7837	0.3306	0.5	91		75	125
Zinc	26592	1	S15344A3	16	S15344A3	14	1.2854	0.6802	0.5	121		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 26592

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 26592

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	26592	S15344D3	12	S15344D3	11	63.2310	59.7671	5.6		20
Antimony	26592	S15344A3	13	S15344A3	12	0.7331	0.7316	.21		20
Arsenic	26592	S15344A3	13	S15344A3	12	1.6904	1.6693	1.3		20
Barium	26592	S15344A3	13	S15344A3	12	1.3825	1.3286	4		20
Beryllium	26592	S15344A3	13	S15344A3	12	0.9195	0.9116	.86		20
Cadmium	26592	S15344A3	13	S15344A3	12	0.5879	0.5739	2.4		20
Calcium	26592	S15344D3	12	S15344D3	11	56.0479	53.3266	5		20
Chromium	26592	S15344A3	13	S15344A3	12	1.1870	1.1602	2.3		20
Cobalt	26592	S15344A3	13	S15344A3	12	1.6377	1.6108	1.7		20
Copper	26592	S15344A3	13	S15344A3	12	0.7922	0.7702	2.8		20
Iron	26592	S15344D3	12	S15344D3	11	106.1720	100.7800	5.2		20
Lead	26592	S15344A3	13	S15344A3	12	1.3082	1.2535	4.3		20
Magnesium	26592	S15344D3	12	S15344D3	11	23.3231	21.9062	6.3		20
Manganese	26592	S15344D3	12	S15344D3	11	2.6033	2.4380	6.6		20
Mercury	26592	H15344Sb	15	H15344Sb	14	11.8875	11.0173	7.6		20
Nickel	26592	S15344A3	13	S15344A3	12	1.2714	1.2428	2.3		20
Potassium	26592	S15344D3	12	S15344D3	11	23.7439	22.3560	6		20
Selenium	26592	S15344A3	13	S15344A3	12	0.7958	0.7856	1.3		20
Silver	26592	S15344A3	13	S15344A3	12	0.5952	0.5797	2.6		20
Sodium	26592	S15344D3	12	S15344D3	11	3.9335	3.7922	3.7		20
Thallium	26592	S15344A3	13	S15344A3	12	1.4289	1.4058	1.6		20
Vanadium	26592	S15344A3	13	S15344A3	12	0.9211	0.9042	1.9		20
Zinc	26592	S15344A3	13	S15344A3	12	1.9302	1.8900	2.1		20

TxtQcType: MR Matrix: SOIL SampleID: AC73771-002

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	26592	S15344D3	14	S15344D3	13	80.0387	84.7397	5.7		20
Antimony	26592	S15344A3	15	S15344A3	14	0.02U	0.02U	---		20
Arsenic	26592	S15344A3	15	S15344A3	14	0.0734	0.0742	1		20
Barium	26592	S15344A3	15	S15344A3	14	0.6910	0.6942	0.46		20
Beryllium	26592	S15344A3	15	S15344A3	14	0.0068	0.0076	10		20
Cadmium	26592	S15344A3	15	S15344A3	14	0.006U	0.006U	---		20
Calcium	26592	S15344D3	14	S15344D3	13	15.0517	18.7361	22	b	20
Chromium	26592	S15344A3	15	S15344A3	14	0.1601	0.1619	1.2		20
Cobalt	26592	S15344A3	15	S15344A3	14	0.0640	0.0719	12		20
Copper	26592	S15344A3	15	S15344A3	14	0.3554	0.3231	9.5		20
Iron	26592	S15344D3	14	S15344D3	13	135.5560	149.6880	9.9		20
Lead	26592	S15344A3	15	S15344A3	14	0.7075	0.6156	14		20
Magnesium	26592	S15344D3	14	S15344D3	13	34.2992	38.3688	11		20
Manganese	26592	S15344D3	14	S15344D3	13	2.9603	3.8218	25	a	20
Mercury	26592	H15344Sb	17	H15344Sb	16	.5U	.5U	---		20
Nickel	26592	S15344A3	15	S15344A3	14	0.1329	0.1394	4.8		20
Potassium	26592	S15344D3	14	S15344D3	13	9.2961	10.7367	14		20
Selenium	26592	S15344A3	15	S15344A3	14	0.018U	0.018U	---		20
Silver	26592	S15344A3	15	S15344A3	14	0.015U	0.015U	---		20
Sodium	26592	S15344D3	14	S15344D3	13	2.5U	2.5U	---		20
Thallium	26592	S15344A3	15	S15344A3	14	0.012U	0.012U	---		20
Vanadium	26592	S15344A3	15	S15344A3	14	0.3419	0.3306	3.4		20
Zinc	26592	S15344A3	15	S15344A3	14	0.7739	0.6802	13		20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 26592

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MSD Matrix: SOIL SampleID: AC73771-002

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	26592	S15344D3	16	S15344D3	15	99.9327	104.5730	4.5		20
Antimony	26592	S15344A3	17	S15344A3	16	0.2886	0.2646	8.7		20
Arsenic	26592	S15344A3	17	S15344A3	16	0.5371	0.5285	1.6		20
Barium	26592	S15344A3	17	S15344A3	16	1.0865	1.1571	6.3		20
Beryllium	26592	S15344A3	17	S15344A3	16	0.4804	0.4640	3.5		20
Cadmium	26592	S15344A3	17	S15344A3	16	0.4857	0.4703	3.2		20
Calcium	26592	S15344D3	16	S15344D3	15	63.0252	69.0046	9.1		20
Chromium	26592	S15344A3	17	S15344A3	16	0.6405	0.6394	.16		20
Cobalt	26592	S15344A3	17	S15344A3	16	0.5723	0.5610	2		20
Copper	26592	S15344A3	17	S15344A3	16	0.7940	0.8788	10		20
Iron	26592	S15344D3	16	S15344D3	15	154.9240	172.7020	11		20
Lead	26592	S15344A3	17	S15344A3	16	1.0734	1.2741	17		20
Magnesium	26592	S15344D3	16	S15344D3	15	83.0300	82.4397	.71		20
Manganese	26592	S15344D3	16	S15344D3	15	4.2557	5.7731	30	a	20
Mercury	26592	H15344Sb	19	H15344Sb	18	10.8829	10.6726	2		20
Nickel	26592	S15344A3	17	S15344A3	16	0.6244	0.6175	1.1		20
Potassium	26592	S15344D3	16	S15344D3	15	57.4114	57.1548	.45		20
Selenium	26592	S15344A3	17	S15344A3	16	0.4532	0.4256	6.3		20
Silver	26592	S15344A3	17	S15344A3	16	0.0938	0.0896	4.6		20
Sodium	26592	S15344D3	16	S15344D3	15	47.2879	45.6802	3.5		20
Thallium	26592	S15344A3	17	S15344A3	16	0.4877	0.4697	3.8		20
Vanadium	26592	S15344A3	17	S15344A3	16	0.7941	0.7837	1.3		20
Zinc	26592	S15344A3	17	S15344A3	16	1.1453	1.2854	12		20

TxtQcType: SD Matrix: SOIL SampleID: AC73771-002

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Aluminum	26592	S15344D3	20	S15344D3	13	5	17.1734	84.7397	1.3		10
Antimony	26592	S15344A3	21	S15344A3	14	5	0.0009	0.0153	---		10
Arsenic	26592	S15344A3	21	S15344A3	14	5	0.0150	0.0742	0.95		10
Barium	26592	S15344A3	21	S15344A3	14	5	0.1433	0.6942	3.2		10
Beryllium	26592	S15344A3	21	S15344A3	14	5	0.0022	0.0076	46	a	10
Cadmium	26592	S15344A3	21	S15344A3	14	5	0.0018	0.0046	96	c	10
Calcium	26592	S15344D3	20	S15344D3	13	5	3.9368	18.7361	5.1		10
Chromium	26592	S15344A3	21	S15344A3	14	5	0.0338	0.1619	4.4		10
Cobalt	26592	S15344A3	21	S15344A3	14	5	0.0156	0.0719	8.3		10
Copper	26592	S15344A3	21	S15344A3	14	5	0.0669	0.3231	3.5		10
Iron	26592	S15344D3	20	S15344D3	13	5	30.9744	149.6880	3.5		10
Lead	26592	S15344A3	21	S15344A3	14	5	0.1305	0.6156	6		10
Magnesium	26592	S15344D3	20	S15344D3	13	5	7.9346	38.3688	3.4		10
Manganese	26592	S15344D3	20	S15344D3	13	5	0.7907	3.8218	3.4		10
Nickel	26592	S15344A3	21	S15344A3	14	5	0.0279	0.1394	0.099		10
Potassium	26592	S15344D3	20	S15344D3	13	5	2.3274	10.7367	8.4		10
Selenium	26592	S15344A3	21	S15344A3	14	5	-0.0028	-0.0122	---		10
Silver	26592	S15344A3	21	S15344A3	14	5	-0.0002	-0.0036	---		10
Sodium	26592	S15344D3	20	S15344D3	13	5	0.1955	0.9030	8.2		10
Thallium	26592	S15344A3	21	S15344A3	14	5	-0.0034	-0.0058	---		10
Vanadium	26592	S15344A3	21	S15344A3	14	5	0.0681	0.3306	3		10
Zinc	26592	S15344A3	21	S15344A3	14	5	0.1386	0.6802	1.9		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Hampton-Clarke/Veritech

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B (6020) 200.7/200.8 OTHER_____

Batch No.: 15344 Analyst: tm

QC Number: 26592 Prep Date: 8/2/13

Matrix: soil Reviewed By: [illegible]

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				--	
LCS	0.59					--	
LCSD						--	
1. ~~LC~~ 73771-002							
MR 73771-002							
MS 73771-002							
MSD 73771-002							
2. 73771-001							
3. 73763-004							
4. 73763-005							
5. 73763-006							
6. 73741-001							
7. 73741-002							
8. 73741-003							
9. 73741-004							
10. 73740-001							
11. 73740-002							
12. 73744-001							
13. 73744-002							
14. 73746-001							
15. 73746-002							
16. 73776-001							
17. 73624-004							
18. 73624-005							
19. 73624-006							
20.							

Hot Plate Temperature: 90.0 C (90-95° C)

	Volume mL	Lot #
LCS, LCSD	0.59	V- 7835
LLLCS, LLLCSD		V-
MS, MSD	0.5ml	V- 7685, 7686
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO_3	2.5ml	V- 7839
HCl	5ml	V- 7841
H_2O_2	1.5ml	V- 7423

Acid	Vol mL	Lot#
1:1 HNO_3	5ml	V- 168708
1:1 HCl		V-

Relinquished By tm Date 8/2/13

Received By [illegible] Date 08/06/2013

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HG SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 245.1 7470A (7471A) **OTHER**_____

Batch No.:* 15344

QC Number: 26592

Matrix: SOIL

Analyst: OA.

Prep Date: 08/06/2013

Review By: AB

LAB ID#	MERCURY		COMMENTS
	INITIAL	FINAL	
Method blank	25ml	25ml	
LCS	0.15g		
LCSD			
1 AC73771-002			
MR AC73771-002			
MS AC73771-002			
MSD AC73771-002			
2 AC73771-001			
3 AC73763-004			
4 AC73763-005			
5 AC73763-006			
6 AC73741-001			
7 AC73741-002			
8 AC73741-003			
9 AC73741-004			
10 AC73740-001			
11 AC73740-002			
12 AC73744-001			
13 AC73744-002			
14 AC73746-001			
15 AC73746-002			
16			
17			
18			
19			
20			

Lot Numbers	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 168354	HNO_3		V-
$K_2S_2O_8$: V-	HCl		V-
NH_2OH: V- 166613	H_2SO_4		V-
	Aqua Regia	1.25ml	V- 170391

**Block Temp.:	93.6 °C
Time In Block:	15:40
Time Out of Block:	16:10
** Required range = 90-95°	

Spike Volume & Lot #

☐ LCS V- 7835 (0.15g / 0.25 ml)

☐ MS V- 170355 0.250 ml

☐ Standards/Control Batch B- 16068.

Relinquished By: OA.

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S15344A3.txt

Analysis Date: 08/02/13

Instrument: PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calib Blank 1 V-166272	1	CAL	18:16	1							V-166272(ICB/CCB)
Calib 1 V-167308	1	CAL	18:20	2							V-167308(ICS1 Lowest std)
Calib 2 V-168853	1	CAL	18:23	3							V-168853(ICS2- Low Std)
Calib 3 V-168467	1	CAL	18:27	4							V-168467(ICS3 - Middle Std)
Calib 4 V-168987	1	CAL	18:30	5							V-168987(ICS4 - High std)
ICS3 V-168467	1	ICS	18:35	6							V-168467(ICS3 - Middle Std)
ICV (2) V-168169	1	ICV	18:38	7							V-168169(ICV)
ICB V-166272	1	ICB	18:43	8							V-166272(ICB/CCB)
ICSA V-169160	1	ICSA	18:46	9							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	18:51	10							V-169161(ICSAB)
MB 26592 (100)	1	MB	18:55	11	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
LCS 26592	1	LCS	18:59	12	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
LCS MR 26592	1	LCS	19:03	13	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	SMP	19:07	14	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	MR	19:11	15	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	MS	19:14	16	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	MSD	19:19	17	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	PS	19:22	18	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
CCV V-168988	1	CCV	19:26	19							V-168988(CCV)
CCB V-166272	1	CCB	19:29	20							V-166272(ICB/CCB)
AC73771-002	5	SD	19:33	21	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-001	1	SMP	19:36	22	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73763-004	1	SMP	19:40	23	MET-RCRA-S	SOIL	SOIL	SW846	26592		()
AC73763-005	1	SMP	19:43	24	MET-RCRA-S	SOIL	SOIL	SW846	26592		()
AC73763-006	1	SMP	19:48	25	MET-RCRA-S	SOIL	SOIL	SW846	26592		()
AC73741-001	1	SMP	19:52	26	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73741-002	1	SMP	19:56	27	METALS-TAL-S	SOIL	SOIL	SW846	26592	Sb NOT reported - high RSD	()
ICSA V-169160	1	ICSA	20:01	28							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	20:05	29							V-169161(ICSAB)
CCV V-168988	1	CCV	20:10	30							V-168988(CCV)
CCB V-166272	1	CCB	20:13	31							V-166272(ICB/CCB)
AC73741-003	1	SMP	20:17	32	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73741-004	1	SMP	20:21	33	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73740-001	1	SMP	20:26	34	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73740-002	1	SMP	20:30	35	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73744-001	1	SMP	20:34	36	METALS-TAL-S	SOIL	SOIL	SW846	26592	Sb NOT reported - high RSD	()
AC73744-002	1	SMP	20:38	37	METALS-TAL-S	SOIL	SOIL	SW846	26592	Sb NOT reported - high RSD	()
AC73746-001	1	SMP	20:43	38	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
ICSA V-169160	1	ICSA	20:47	39							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	20:51	40							V-169161(ICSAB)
CCV V-168988	1	CCV	20:56	41							V-168988(CCV)
CCB V-166272	1	CCB	20:59	42							V-166272(ICB/CCB)
AC73746-002	1	SMP	21:03	43	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73624-004	1	SMP	21:07	44	MET-1-SOIL	SOIL	SOIL	SW846	26592		()
AC73624-005	1	SMP	21:12	45	MET-1-SOIL	SOIL	SOIL	SW846	26592		()
AC73624-006	1	SMP	21:16	46	MET-1-SOIL	SOIL	SOIL	SW846	26592		()
AC73776-001	1	NA	21:21	47	METALS-TAL-S	SOIL	SOIL	SW846	26592	cancelled	()
ICSA V-169160	1	ICSA	21:25	48							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	21:29	49							V-169161(ICSAB)
CCV V-168988	1	CCV	21:34	50							V-168988(CCV)
CCB V-166272	1	CCB	21:37	51							V-166272(ICB/CCB)

Comments/Reviewedby:

OLUFEMI
192.168.1.85 8/6/2013 11:14:56 AM

RUN IS OK
All elements reported except Mn and the earth elements

8/7/13

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD3A\S15344D3.txt

Analysis Date: 08/06/13

Instrument: PEICPRAD3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calib Blk 1 V-166272	1	CAL	14:33	1							V-166272(ICB/CCB)
Calib 1 V-168853	1	CAL	14:37	2							V-168853(ICS2- Low Std)
Calib 2 V-168467	1	CAL	14:41	3							V-168467(ICS3 - Middle Std)
Calib 3 V-168987	1	CAL	14:44	4							V-168987(ICS4 - High std)
ICS3 V-168467	1	ICS	14:47	5							V-168467(ICS3 - Middle Std)
ICV (2) V-168169	1	ICV	14:50	6							V-168169(ICV)
ICB V-166272	1	ICB	14:53	7							V-166272(ICB/CCB)
ICSA V-169160	1	ICSA	14:56	8							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	15:00	9							V-169161(ICSAB)
MB 26592 (100)	1	MB	15:04	10	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
LCS 26592	1	LCS	15:08	11	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
LCS MR 26592	1	LCS	15:11	12	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	SMP	15:14	13	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	MR	15:16	14	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	MS	15:19	15	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	MSD	15:22	16	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	PS	15:24	17	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
CCV V-168988	1	CCV	15:27	18							V-168988(CCV)
CCB V-166272	1	CCB	15:30	19							V-166272(ICB/CCB)
AC73771-002	5	SD	15:34	20	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-001	1	SMP	15:37	21	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73741-001	1	SMP	15:40	22	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73741-002	1	SMP	15:43	23	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
ICSA V-169160	1	ICSA	15:47	24							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	15:51	25							V-169161(ICSAB)
CCV V-168988	1	CCV	15:55	26							V-168988(CCV)
CCB V-166272	1	CCB	15:58	27							V-166272(ICB/CCB)
AC73741-003	1	SMP	16:02	28	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73741-004	1	SMP	16:05	29	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73740-001	1	SMP	16:09	30	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73740-002	1	SMP	16:12	31	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73744-001	1	SMP	16:15	32	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
CCV V-168988	1	CCV	16:18	33							V-168988(CCV)
CCB V-166272	1	CCB	16:21	34							V-166272(ICB/CCB)
AC73744-002	1	SMP	16:25	35	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73746-001	1	SMP	16:28	36	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73746-002	1	SMP	16:33	37	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
ICSA V-169160	1	ICSA	16:36	38							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	16:40	39							V-169161(ICSAB)
CCV V-168988	1	CCV	16:44	40							V-168988(CCV)
CCB V-166272	1	CCB	16:47	41							V-166272(ICB/CCB)

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

OLUFEMI
192.168.1.85 8/6/2013 5:17:55 PM

RUN IS OK
Mn and the earth elements reported

8/7/13

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV1A\H15344Sb.txt

Analysis Date: 08/06/13

Instrument: HGCV1A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	16:28	1							0
.2 PPB	1	CAL	16:29	2							0
.5 PPB	1	CAL	16:31	3							0
1 PPB	1	CAL	16:32	4							0
2 PPB	1	CAL	16:34	5							0
5 PPB	1	CAL	16:35	6							0
10 PPB	1	CAL	16:37	7							0
25 PPB	1	CAL	16:38	8							0
ICV (2)	1	ICV	16:40	9							0
ICB	1	ICB	16:42	10							0
MB 26592 (167)	1	MB	16:43	11	HG-SOIL	SOIL	SOIL	SW846	26592		0
LCS 26592	1	NA	16:45	12	HG-SOIL	SOIL	SOIL	SW846	26592	higher than linear range	0
LCS MR 26592	1	NA	16:47	13	HG-SOIL	SOIL	SOIL	SW846	26592	higher than linear range	0
LCS 5D	5	LCS	16:49	14	HG-SOIL	SOIL	SOIL	SW846	26592		0
LCS MR 5D	5	LCS	16:50	15	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73771-002	1	SMP	16:52	16	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73771-002	1	MR	16:53	17	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73771-002	1	MS	16:55	18	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73771-002	1	MSD	16:56	19	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73771-001	1	SMP	16:58	20	HG-SOIL	SOIL	SOIL	SW846	26592		0
CCV	1	CCV	16:59	21							0
CCB	1	CCB	17:01	22							0
AC73763-004	1	SMP	17:02	23	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73763-005	1	SMP	17:04	24	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73763-006	1	SMP	17:05	25	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73741-001	1	SMP	17:07	26	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73741-002	1	SMP	17:09	27	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73741-003	1	SMP	17:10	28	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73741-004	1	SMP	17:12	29	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73740-001	1	SMP	17:13	30	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73740-002	1	SMP	17:15	31	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73744-001	1	SMP	17:16	32	HG-SOIL	SOIL	SOIL	SW846	26592		0
CCV	1	CCV	17:18	33							0
CCB	1	CCB	17:19	34							0
AC73744-002	1	SMP	17:21	35	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73746-001	1	SMP	17:22	36	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73746-002	1	SMP	17:24	37	HG-SOIL	SOIL	SOIL	SW846	26592		0
CCV	1	CCV	17:25	38							0
CCB	1	CCB	17:27	39							0

Comments/Reviewedby:

olufemi
192.168.1.89 8/6/2013 5:36:47 PM

RUN IS OK

Standard/Batch/SnCl2 Lot #:

V-170312

TCLP Metal Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC73771-001	% Solid:	0	Lab Name:	Veritech	Nras No:	
Client Id:	BB-COMP-1-0801113	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/1/2013	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.20	ND	1	50	50	08/05/13	26591	T15343A2	14	P	PEICP2A
7440-39-3	Barium	0.25	0.56	1	50	50	08/05/13	26591	T15343A2	14	P	PEICP2A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/05/13	26591	T15343A2	14	P	PEICP2A
7440-47-3	Chromium	0.20	ND	1	50	50	08/05/13	26591	T15343A2	14	P	PEICP2A
7439-92-1	Lead	0.15	ND	1	50	50	08/05/13	26591	T15343A2	14	P	PEICP2A
7439-97-6	Mercury	0.00070	ND	1	25	25	08/06/13	26591	H15343T	14	CV	HGCV1A
7782-49-2	Selenium	0.20	ND	1	50	50	08/05/13	26591	T15343A2	14	P	PEICP2A
7440-22-4	Silver	0.050	ND	1	50	50	08/05/13	26591	T15343A2	14	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC73771-002	% Solid:	0	Lab Name:	Veritech	Nras No:	
Client Id:	BB-COMP-2-0801113	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/1/2013	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.20	ND	1	50	50	08/05/13	26591	T15343A2	25	P	PEICP2A
7440-39-3	Barium	0.25	0.57	1	50	50	08/05/13	26591	T15343A2	25	P	PEICP2A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/05/13	26591	T15343A2	25	P	PEICP2A
7440-47-3	Chromium	0.20	ND	1	50	50	08/05/13	26591	T15343A2	25	P	PEICP2A
7439-92-1	Lead	0.15	ND	1	50	50	08/05/13	26591	T15343A2	25	P	PEICP2A
7439-97-6	Mercury	0.00070	ND	1	25	25	08/06/13	26591	H15343T	23	CV	HGCV1A
7782-49-2	Selenium	0.20	ND	1	50	50	08/05/13	26591	T15343A2	25	P	PEICP2A
7440-22-4	Silver	0.050	ND	1	50	50	08/05/13	26591	T15343A2	25	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 26591 (1) % Solid: 0 Lab Name: Veritech
Client Id: MB 26591 (1) Units: MG/L Lab Code:
Matrix: TCLP
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	1.0	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-36-0	Antimony	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-38-2	Arsenic	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-39-3	Barium	0.25	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-41-7	Beryllium	0.050	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-70-2	Calcium	5.0	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-47-3	Chromium	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-48-4	Cobalt	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-50-8	Copper	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7439-89-6	Iron	1.0	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7439-92-1	Lead	0.15	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7439-95-4	Magnesium	5.0	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7439-96-5	Manganese	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7439-97-6	Mercury	0.00070	ND	1	25	25	08/06/13	26591	H15343T	11	CV	HGCV1A
7439-98-7	Molybdenum	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-02-0	Nickel	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7782-49-2	Selenium	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-22-4	Silver	0.050	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-28-0	Thallium	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-31-5	Tin	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-32-6	Titanium	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-62-2	Vanadium	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-66-6	Zinc	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/05/13
Data File: T15343A2
Prep Batch: 26591
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V-165044 (2)-7	Rec	CCV V-165587-19	Rec	CCV V-165587-29	Rec		Rec		Rec		Rec		Rec		Rec
Arsenic	1/.5	1.00689	101	0.49161	98	0.49387	99										
Barium	1/.5	1.02116	102	0.50100	100	0.50847	102										
Cadmium	1/.5	1.01677	102	0.49277	99	0.50263	101										
Chromium	1/.5	1.00856	101	0.49507	99	0.50291	101										
Copper	1/.5	1.00878	101	0.49460	99	0.49932	100										
Lead	1/.5	1.00456	100	0.50081	100	0.50629	101										
Nickel	1/.5	1.00096	100	0.49369	99	0.50276	101										
Selenium	1/.5	1.01612	102	0.49469	99	0.50860	102										
Silver	0.2/0.1	0.19986	100	0.09745	97	0.09851	99										
Zinc	1/.5	0.99644	100	0.49289	99	0.50201	100										

Notes:
a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits:
ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-11

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/06/13
Data File: H15343T
Prep Batch: 26591
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

		ICV (2)-9		CCV-21		CCV-25											
Analyte	ICV/CCV Amt		Rec		Rec		Rec		Rec		Rec		Rec		Rec		Rec
Mercury	20/10	19.13774	96	10.03593	100	10.00777	100										

Notes:
a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits:
ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-11

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/05/13
Data File: T15343A2
Prep Batch: 26591
Reporting Limits Used: TCLP,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-166272-8	CCB-20	CCB-30	MB 26591 (1)-11	EF-V-170078-26			
Arsenic	.2 U	.2 U	.2 U	.2 U	.2 U			
Barium	.25 U	.25 U	.25 U	.25 U	.25 U			
Cadmium	.05 U	.05 U	.05 U	.05 U	.05 U			
Chromium	.2 U	.2 U	.2 U	.2 U	.2 U			
Copper	.2 U	.2 U	.2 U	.2 U	.2 U			
Lead	.15 U	.15 U	.15 U	.15 U	.15 U			
Nickel	.2 U	.2 U	.2 U	.2 U	.2 U			
Selenium	.2 U	.2 U	.2 U	.2 U	.2 U			
Silver	.05 U	.05 U	.05 U	.05 U	.05 U			
Zinc	.2 U	.2 U	.2 U	.2 U	.2 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/06/13
Data File: H15343T
Prep Batch: 26591
Reporting Limits Used: TCLP,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-26	MB 26591 (1)-11	EF-V-170078-24			
Mercury	.7 U	.7 U	.7 U	.7 U	.7 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 08/05/13
Data File: T15343A2
Prep Batch: 26591
Reporting Limits Used: TCLP,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-165588-9	Rec	ICSAB V-165589-10	Rec	ICSA V-165588-27	Rec	ICSAB V-165589-28	Rec	Rec	Rec	Rec	Rec
Aluminum	500	494.076	99	494.92800	99	500.065	100	489.71400	98				
Arsenic	1	U		1.05313	105	U		1.04564	105				
Barium	.5	U		0.51911	104	U		0.51536	103				
Cadmium	1	U		1.05778	106	U		1.04968	105				
Calcium	500	474.308	95	475.83000	95	481.111	96	470.20400	94				
Chromium	.5	U		0.50667	101	U		0.50281	101				
Copper	.5	U		0.53633	107	U		0.53202	106				
Iron	200	193.791	97	189.64800	95	192.583	96	188.18900	94				
Lead	1	U		0.98040	98	U		0.97755	98				
Magnesium	500	503.919	101	505.70500	101	511.966	102	505.85300	101				
Nickel	1	U		0.96979	97	U		0.96622	97				
Selenium	1	U		1.04755	105	U		1.03898	104				
Silver	1	U		1.07881	108	U		1.06959	107				
Zinc	1	U		0.96921	97	U		0.96426	96				

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 26591

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: TCLP SampleID: LCSW MR 26591

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	26591	1	T15343A2	13	0.4952	0.500	99		80	120
Barium	26591	1	T15343A2	13	0.5073	.5	101		80	120
Cadmium	26591	1	T15343A2	13	0.4998	0.500	100		80	120
Chromium	26591	1	T15343A2	13	0.5017	0.500	100		80	120
Lead	26591	1	T15343A2	13	0.5052	.5	101		80	120
Mercury	26591	1	H15343T	13	10.1260	10	101		80	120
Selenium	26591	1	T15343A2	13	0.4960	0.500	99		80	120
Silver	26591	1	T15343A2	13	0.0957	0.100	96		80	120

TxtQcType: LCS Matrix: TCLP SampleID: LCSW 26591

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	26591	1	T15343A2	12	0.5012	0.500	100		80	120
Barium	26591	1	T15343A2	12	0.5137	.5	103		80	120
Cadmium	26591	1	T15343A2	12	0.5061	0.500	101		80	120
Chromium	26591	1	T15343A2	12	0.5093	0.500	102		80	120
Lead	26591	1	T15343A2	12	0.5150	.5	103		80	120
Mercury	26591	1	H15343T	12	10.3449	10	103		80	120
Selenium	26591	1	T15343A2	12	0.5147	0.500	103		80	120
Silver	26591	1	T15343A2	12	0.0975	0.100	98		80	120

TxtQcType: MS Matrix: TCLP SampleID: AC73771-001

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	26591	1	T15343A2	16	T15343A2	14	0.5350	.2U	0.5	107		50	
Barium	26591	1	T15343A2	16	T15343A2	14	5.6245	0.5594	5	101		50	
Cadmium	26591	1	T15343A2	16	T15343A2	14	0.5258	.05U	0.5	105		50	
Chromium	26591	1	T15343A2	16	T15343A2	14	0.5028	.2U	0.5	101		50	
Lead	26591	1	T15343A2	16	T15343A2	14	5.0907	.15U	5	102		50	
Mercury	26591	1	H15343T	16	H15343T	14	10.2843	.70U	10	103		50	
Selenium	26591	1	T15343A2	16	T15343A2	14	0.5528	.2U	0.5	111		50	
Silver	26591	1	T15343A2	16	T15343A2	14	0.1018	0.05U	0.10	102		50	

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 26591

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: TCLP SampleID: LCSW MR 26591

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	26591	T15343A2	13	T15343A2	12	0.4952	0.5012	1.2	20
Barium	26591	T15343A2	13	T15343A2	12	0.5073	0.5137	1.2	20
Cadmium	26591	T15343A2	13	T15343A2	12	0.4998	0.5061	1.3	20
Chromium	26591	T15343A2	13	T15343A2	12	0.5017	0.5093	1.5	20
Lead	26591	T15343A2	13	T15343A2	12	0.5052	0.5150	1.9	20
Mercury	26591	H15343T	13	H15343T	12	10.1260	10.3449	2.1	20
Selenium	26591	T15343A2	13	T15343A2	12	0.4960	0.5147	3.7	20
Silver	26591	T15343A2	13	T15343A2	12	0.0957	0.0975	1.9	20

TxtQcType: MR Matrix: TCLP SampleID: AC73771-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	26591	T15343A2	15	T15343A2	14	.2U	.2U	---	20
Barium	26591	T15343A2	15	T15343A2	14	0.5737	0.5594	2.5	20
Cadmium	26591	T15343A2	15	T15343A2	14	.05U	.05U	---	20
Chromium	26591	T15343A2	15	T15343A2	14	.2U	.2U	---	20
Lead	26591	T15343A2	15	T15343A2	14	.15U	.15U	---	20
Mercury	26591	H15343T	15	H15343T	14	.70U	.70U	---	20
Selenium	26591	T15343A2	15	T15343A2	14	.2U	.2U	---	20
Silver	26591	T15343A2	15	T15343A2	14	0.05U	0.05U	---	20

TxtQcType: SD Matrix: TCLP SampleID: AC73771-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Arsenic	26591	T15343A2	18	T15343A2	14	5	-0.0003	0.0016	---	10
Barium	26591	T15343A2	18	T15343A2	14	5	0.1096	0.5594	2	10
Cadmium	26591	T15343A2	18	T15343A2	14	5	0.0001	0.0022	---	10
Chromium	26591	T15343A2	18	T15343A2	14	5	-0.0018	0.0008	---	10
Lead	26591	T15343A2	18	T15343A2	14	5	0.0054	0.0259	4.9	10
Selenium	26591	T15343A2	18	T15343A2	14	5	0.0006	-0.0079	---	10
Silver	26591	T15343A2	18	T15343A2	14	5	0.0002	0.0017	---	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP2A\T15343A2.txt

Analysis Date: 08/05/13

Instrument: PEICP2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calib Blk 1 V-166272	1	CAL	17:03	1							V-166272(ICB/CCB)
Calib 1 V-167307	1	CAL	17:06	2							V-167307(ICS1 Lowest std)
Calib 2 V-165042	1	CAL	17:10	3							V-165042(ICS2- Low Std)
Calib 3 V-166088	1	CAL	17:14	4							V-166088(ICS3 - Middle Std)
Calib 4 V-166089	1	CAL	17:17	5							V-166089(ICS4 - High std)
ICS3 V-166088	1	ICS	17:23	6							V-166088(ICS3 - Middle Std)
ICV V-165044 (2)	1	ICV	17:26	7							V-165044(ICV)
ICB V-166272	1	ICB	17:32	8							V-166272(ICB/CCB)
ICSA V-165588	1	ICSA	17:35	9							V-165588(ICSA)
ICSAB V-165589	1	ICSAB	17:41	10							V-165589(ICSAB)
MB 26591 (1)	1	MB	17:46	11		TCLP	TCLP	SW846	26591		0
LCSW 26591	1	LCS	17:50	12		TCLP	TCLP	SW846	26591		0
LCSW MR 26591	1	LCS	17:54	13		TCLP	TCLP	SW846	26591		0
AC73771-001	1	SMP	17:58	14	METALS-TCLP	TCLP	TCLP	SW846	26591		0
AC73771-001	1	MR	18:02	15	METALS-TCLP	TCLP	TCLP	SW846	26591		0
AC73771-001	1	MS	18:05	16	METALS-TCLP	TCLP	TCLP	SW846	26591		0
AC73771-001	1	PS	18:09	17	METALS-TCLP	TCLP	TCLP	SW846	26591		0
AC73771-001	5	SD	18:13	18	METALS-TCLP	TCLP	TCLP	SW846	26591		0
CCV V-165587	1	CCV	18:17	19							V-165587(CCV)
CCB	1	CCB	18:21	20							0
AC73742-001	1	SMP	18:25	21	METALS-TCLP	TCLP	TCLP	SW846	26591		0
AC73763-004	1	SMP	18:28	22	METALS-TCLP	TCLP	TCLP	SW846	26591		0
AC73763-005	1	SMP	18:32	23	METALS-TCLP	TCLP	TCLP	SW846	26591		0
AC73763-006	1	SMP	18:36	24	METALS-TCLP	TCLP	TCLP	SW846	26591		0
AC73771-002	1	SMP	18:40	25	METALS-TCLP	TCLP	TCLP	SW846	26591		0
EF-V-170078	1	EF	18:44	26		TCLP	TCLP	SW846	26591		V-170078(EF-1)
ICSA V-165588	1	ICSA	18:47	27							V-165588(ICSA)
ICSAB V-165589	1	ICSAB	18:53	28							V-165589(ICSAB)
CCV V-165587	1	CCV	18:58	29							V-165587(CCV)
CCB	1	CCB	19:02	30							0

Comments/Reviewedby:

sean
192.168.1.78 8/6/2013 10:03:13 AM

OK

8/6/13

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV1A\H15343T.txt

Analysis Date: 08/06/13

Instrument: HGCV1A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	12:53	1							0
.2 PPB	1	CAL	12:54	2							0
.5 PPB	1	CAL	12:55	3							0
1 PPB	1	CAL	12:57	4							0
2 PPB	1	CAL	12:58	5							0
5 PPB	1	CAL	12:59	6							0
10 PPB	1	CAL	13:01	7							0
25 PPB	1	CAL	13:02	8							0
ICV (2)	1	ICV	13:03	9							0
ICB	1	ICB	13:05	10							0
MB 26591 (1)	1	MB	13:06	11	HG-TCLP	TCLP	TCLP	SW846	26591		0
LCSW 26591	1	LCS	13:08	12	HG-TCLP	TCLP	TCLP	SW846	26591		0
LCSW MR 26591	1	LCS	13:09	13	HG-TCLP	TCLP	TCLP	SW846	26591		0
AC73771-001	1	SMP	13:10	14	HG-TCLP	TCLP	TCLP	SW846	26591		0
AC73771-001	1	MR	13:12	15	HG-TCLP	TCLP	TCLP	SW846	26591		0
AC73771-001	1	MS	13:13	16	HG-TCLP	TCLP	TCLP	SW846	26591		0
AC73742-001	1	SMP	13:14	17	HG-TCLP	TCLP	TCLP	SW846	26591		0
AC73763-004	1	SMP	13:16	18	HG-TCLP	TCLP	TCLP	SW846	26591		0
AC73763-005	1	SMP	13:17	19	HG-TCLP	TCLP	TCLP	SW846	26591		0
AC73763-006	1	SMP	13:19	20	HG-TCLP	TCLP	TCLP	SW846	26591		0
CCV	1	CCV	13:20	21							0
CCB	1	CCB	13:21	22							0
AC73771-002	1	SMP	13:23	23	HG-TCLP	TCLP	TCLP	SW846	26591		0
EF-V-170078	1	EF	13:24	24	HG-TCLP	TCLP	TCLP	SW846	26591		V-170078(EF-1)
CCV	1	CCV	13:25	25							0
CCB	1	CCB	13:27	26							0

Comments/Reviewedby:

olufemi
192.168.1.89 8/6/2013 2:09:31 PM

RUN IS OK

e 8/6/13

Standard/Batch/SnCl2 Lot #:

V-170312

HG SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 245.1 (7470A) 7471A **OTHER**_____

Batch No.:* 15343 Analyst: JY

QC Number: 26591 Prep Date: 8/5/13

Matrix: TCLP Review By: QA

LAB ID#	MERCURY		COMMENTS
	INITIAL	FINAL	
Method blank	25ul	25u	
LCS			
LCSD			
1 AC 73771-001			
MR 73771-001			
MS 73771-001			
~~MSD 73771-001~~			
2 73742-001	25ul	25ul	
3 73763-004			
4 73763-005			
5 73763-006			
6 73771-002			
7 V-170078			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

Lot Numbers	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 168354	HNO_3	0.625	V- 7838
$K_2S_2O_8$: V- 166616	HCl		V-
NH_2OH: V- 166613	H_2SO_4	1.25ul	V- 7331
	Aqua Regia		V-

**Block Temp. :	93.3° C
Time In Block:	13:15
Time Out of Block:	15:15
** Required range = 90-95° C	

Spike Volume & Lot #

☐ LCS V- 170264 0.156 / 0.25 ml

☐ MS V- 170264 0.250 ml

☐ Standards/Control Batch B- 16058

Relinquished By: JY

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

Hampton-Clarke/Veritech

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: (3010A) 3005A 3050B (6020) 200.7/200.8 OTHER_____

Batch No.: 15349 Analyst: BY

QC Number: 26591 Prep Date: 8/5/13.

Matrix: TCLP Reviewed By: SB

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				–	
LCS	↓	↓				–	
LCSD						–	
1. AC 73771-001					170078	73771-001	
MR 73771-001					↓	↓	
MS 73771-001	↓	↓			↓	↓	
MSD							
2. 73742-001	50ml	50ml			170078	73771-001	
3. 73763-004	↓	↓			↓	↓	
4. 73763-005							
5. 73763-006							
6. 73771-002						↓	
7. V-170078	↓	↓			↓		
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 93.1° C (90-95° C)

	Volume mL	Lot #
LCS, LCSD	0.5ml	V-7685, 7686
LLLCS, LLLCSD		V-
MS, ~~MSD~~	0.5; 0.225	V-7685, 7686; 7636
LLMS, LLMSD		V- 7650

Acid	Vol mL	Lot#
HNO_3	3	V-7839
HCl		V-
H_2O_2		V-

Acid	Vol mL	Lot#
1:1 HNO_3		V-
1:1 HCl	5	V-166179

Relinquished By BY Date 8/5/13.

Received By [illegible] Date 8/5/13

T:\QC\FORMS\LOGBOOK FORMS\METALS\ICP sample prep log 2012.DOC

Wet Chemistry Data

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AC73771-001
Matrix Soil
Client SampleID: BB-COMP-1-0801113

Project Number: 3080110
Received Date: 8/1/2013
Collect Date: 8/1/2013

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide (Reactive)	CN-REACTIVE	1	ND	mg/Kg	0.50	08/01/13	08/05/13
Cyanide	CN-S-9012	1	ND	mg/Kg	0.26	08/05/13	08/05/13
Eh	CR6-EH	**1**	**290**	**mv**		08/02/13	08/02/13
pH	CR6-PH	**1**	**7.3**	**pH**		08/02/13	08/02/13
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.1	08/06/13	08/06/13
Ignitability	IGNIT-MOD	**1**	**>141**	**Deg. F**			08/01/13
Sulfide (Reactive)	S-REACTIVE	1	ND	mg/kg	100	08/01/13	08/02/13

Lab#: AC73771-002
Matrix Soil
Client SampleID: BB-COMP-2-0801113

Project Number: 3080110
Received Date: 8/1/2013
Collect Date: 8/1/2013

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide (Reactive)	CN-REACTIVE	1	ND	mg/Kg	0.50	08/01/13	08/05/13
Cyanide	CN-S-9012	1	ND	mg/Kg	0.27	08/05/13	08/05/13
Eh	CR6-EH	**1**	**290**	**mv**		08/02/13	08/02/13
pH	CR6-PH	**1**	**6.8**	**pH**		08/02/13	08/02/13
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.1	08/06/13	08/06/13
Ignitability	IGNIT-MOD	**1**	**>141**	**Deg. F**			08/01/13
Sulfide (Reactive)	S-REACTIVE	1	ND	mg/kg	100	08/01/13	08/02/13

VERITECH Wet Chem Form1 Analysis Summary
% Solids

TestGroupName: % Solids SM2540G **Project #: 3080110**

TestGroup: %SOLIDS

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AC73771-001	BB-COMP-1-0801	Soil	**1**	**91**	**Percent**			08/02/13	08/01/13	08/01/13
AC73771-002	BB-COMP-2-0801	Soil	**1**	**89**	**Percent**			08/02/13	08/01/13	08/01/13
AC73771-003	BB-GRAB-5-0801	Soil/Encore	**1**	**90**	**Percent**			08/02/13	08/01/13	08/01/13
AC73771-004	BB-GRAB-10-080	Soil/Encore	**1**	**85**	**Percent**			08/02/13	08/01/13	08/01/13

% Solids Report

Analysis Type: SOLIDS-SS
BatchID: SOLIDS-SS-2123

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AC73763-016	87	86.58205	Percent	1.10	12.13	10.65	08/02/13	melissa	0.18	5
Sample	AC73763-016	86	86.42534	Percent	1.10	12.15	10.64	08/02/13	melissa		
Sample	AC73763-017	83	83.36079	Percent	1.10	13.24	11.20	08/02/13	melissa		
Sample	AC73763-018	86	86.45656	Percent	1.11	12.85	11.25	08/02/13	melissa		
Sample	AC73763-019	87	87.17703	Percent	1.11	11.56	10.21	08/02/13	melissa		
Sample	AC73763-020	87	86.69767	Percent	1.10	11.85	10.40	08/02/13	melissa		
Sample	AC73763-021	86	85.54572	Percent	1.10	11.27	9.79	08/02/13	melissa		
Sample	AC73763-022	85	85.07878	Percent	1.11	11.90	10.28	08/02/13	melissa		
Sample	AC73771-001	91	90.67642	Percent	1.10	12.04	11.01	08/02/13	melissa		
Sample	AC73771-002	89	89.36550	Percent	1.10	12.29	11.10	08/02/13	melissa		
Sample	AC73771-003	90	89.98127	Percent	1.11	11.79	10.72	08/02/13	melissa		
Sample	AC73771-004	85	85.12774	Percent	1.10	12.06	10.43	08/02/13	melissa		
Sample	AC73774-001	93	92.92413	Percent	1.09	12.82	12.00	08/02/13	melissa		
Sample	AC73774-002	96	96.07306	Percent	1.11	12.06	11.63	08/02/13	melissa		
Sample	AC73774-003	94	93.60236	Percent	1.10	11.26	10.62	08/02/13	melissa		
Sample	AC73774-004	94	94.24084	Percent	1.10	12.56	11.91	08/02/13	melissa		
Sample	AC73774-005	95	94.88491	Percent	1.09	12.82	12.24	08/02/13	melissa		
Sample	AC73776-001	96	95.99346	Percent	1.09	13.32	12.82	08/02/13	melissa		
Sample	AC73783-001	95	94.62891	Percent	1.09	11.33	10.77	08/02/13	melissa		
Sample	AC73783-002	98	97.53788	Percent	1.09	11.65	11.39	08/02/13	melissa		
Sample	AC73783-003	99	98.71912	Percent	1.12	12.05	11.90	08/02/13	melissa		

* - Indicates Failed Rpd Criteria

Calibration Summary:

3080110 0353

Instrument: DA1
Analysis Meth: SW846 7.3.3

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide (Reactive)	20130805100	9	ICV	98	0.4	90-110
Cyanide (Reactive)	20130805100	21	CCV	97	0.4	90-110
Cyanide (Reactive)	20130805100	30	CCV	102	0.4	90-110

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 8/1/13

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130805100	8/5/13 10:25	MBS-579	11	Cyanide (	ND	0.50

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130805100	8/5/13 10:23	CCB	10	Cyanide (	ND	0.02

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130805100	8/5/13 10:49	CCB	22	Cyanide (	ND	0.02
20130805100	8/5/13 11:05	CCB	31	Cyanide (	ND	0.02

LCS Recoveries

BatchRunID/RunID:===>			201308051005-12								
QcBatchID:===>			LCSS-579								
Date/Time:===>			08/05/13 10:28								
Analytical Method:===>			SW846 7.3.3								
Matrix:===>			Soil		Soil		Soil		Soil		Soil
Analyte	SW846 7.3. **Amt**	**Limits Amt**	**Limits**	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags
Cyanide (Rea	0.4	75-125		110									

MS/MSD/DUP Recovery

3080110 0356

Prep Batch: S-579 Sample ID: AC73748-001
Method: SW846 7.3.3 Matrix: Soil

Qc Type: MS		Limits			MS	Sample			MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov		Dil	Conc	Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide (Reactive)	0.4	75-125		1	0.4204	0	105		20130805100	13	08/05/13 10:30	20130805100	15	08/05/13 10:34

Qc Type: MSD		Limits			MSD	Sample				MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Rpd	Dil	Conc	Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide (Reactive)	0.4	75-125	20	1	0.4466	0	112	6		20130805100	14	08/05/13 10:32	20130805100	15	08/05/13 10:34

Calibration Summary:

Instrument: DA1
Analysis Meth: EPA 9012B

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20130805134	9	ICV	107	0.4	90-110
Cyanide	20130805134	21	CCV	105	0.4	90-110
Cyanide	20130805134	33	CCV	108	0.4	90-110
Cyanide	20130805134	40	CCV	109	0.4	90-110

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 8/5/13

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130805134	8/5/13 14:08	MBS-1212	11	Cyanide	ND	0.24

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130805134	8/5/13 14:31	CCB	22	Cyanide	ND	0.02
20130805134	8/5/13 14:56	CCB	34	Cyanide	ND	0.02
20130805134	8/5/13 15:08	CCB	41	Cyanide	ND	0.02

LCS Recoveries

BatchRunID/RunID:===>			201308051347-13									
QcBatchID:===>			LCSS-1212DUP									
Date/Time:===>			08/05/13 14:12									
Analytical Method:===>			EPA 9012B									
Matrix:===>			Soil		Soil		Soil		Soil		Soil	
Analyte	EPA 9012B **Amt**	**Limits**	**Amt**	**Limits**	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags
Cyanide	0.4	90-110			103							

MS/MSD/DUP Recovery

3080110 0360

Prep Batch: S-1212 Sample ID: AC73771-001
Method: EPA 9012B Matrix: Soil

Qc Type: DUP	Limits			DUP	Sample			MS/MSD/DUP			Non Spike		
Analyte		Rpd	Dil	Conc	Conc	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide		20	1	0	0	NA		20130805134	15	08/05/13 14:16	20130805134	14	08/05/13 14:14

Qc Type: MS		Limits		MS	Sample			MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Dil	Conc	Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125	1	0.3405	0	85		20130805134	16	08/05/13 14:18	20130805134	14	08/05/13 14:14

Qc Type: MSD		Limits			MSD	Sample			MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Rpd	Dil	Conc	Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125	20	1	0.3642	0	91	6.7		20130805134	17	08/05/13 14:20	20130805134	14	08/05/13 14:14

Analysis Type: IGNIT-MOD

Batch Number: IGNIT-MOD-175

Units: Deg. F

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-08/01/13	81	90-110	NA	~~81.94~~ 82.3	~~101~~ 102	NA	
DUP	AC73771-001	0	NA	20	#Error	NA	NA	Nc

PM 8/2/13

PM 8/2/13

Calibration Curve Information

Analytical Method(s)

EPA 1010

Sam #	Type	MB	Result	RL	Per Sol	Full Result	Obs FP	Press	p-Xylene Std	Prep Date	Prep By	Anal Date	Anal By
CAL-01-08/01/13	CAL-01		82		100	~~81.94~~ 82.3	82.12	757	82.3			08/01/13	sdl
AC73771-001	DUP		>141		100	0	>141	757	82.96			08/01/13	sdl
AC73690-001	Sample		>141		100	0	>141	757	82.3			08/01/13	sdl
AC73690-002	Sample		>141		100	0	>141	757	82.96			08/01/13	sdl
AC73751-001	Sample		>141		100	0	>141	757	82.3			08/01/13	sdl
AC73751-002	Sample		>141		100	0	>141	757	82.96			08/01/13	sdl
AC73752-001	Sample		>141		100	0	>141	757	82.3			08/01/13	sdl
AC73748-001	Sample		>141		100	0	>141	757	82.96			08/01/13	sdl
AC73749-001	Sample		>141		100	0	>141	757	82.3			08/01/13	sdl
AC73771-001	Sample		>141		100	0	>141	757	82.96			08/01/13	sdl
AC73771-002	Sample		>141		100	0	>141	757	82.3			08/01/13	sdl

SDL
8/2/13

PM
8/2/13

Flag Codes: Ra - Recovery failed specified criteria (PVS/LCS/MS/MSD/ICV/CAL)
Na - Not Applicable
Rp - RPD failed specified criteria.
Nc - Not Checked ..either one or both values =ND

Analysis Type: RS

Batch Number: RS-579

Units: mg/kg

Calibration Curve Information

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-08/02/13	16	90-110	NA	17.23225	108	NA	
LCS	LCS	400	75-125	NA	410.76875	103	NA	
MS	AC73748-001	400	75-125	NA	430.80625	108	NA	
MSD	AC73748-001	400	75-125	20	420.7875	105	2.4	

Analytical Method(s)

SW846 7.3.4

Sam #	Type	MB	Result	RL	Per Sol	Full Result	Titr Vol	Iod Vol	DF	Sam Wt (g)	Scrb Vol (ml)	Prep Date	Prep By	Anal Date	Anal By
CAL-01-08/02/13	CAL-01		17		100	17.232	5.7	10	1	250	250			08/02/13	BCT
MB-1-08/01/13	MB	MB-1-08/01/13	ND	100	100	0	10.0	10	1	10	250	08/01/13	HS	08/02/13	BCT
LCS	LCS	MB-1-08/01/13	410	100	100	410.77	5.9	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73748-001	MS	MB-1-08/01/13	430	100	94	430.81	5.7	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73748-001	MSD	MB-1-08/01/13	420	100	94	420.79	5.8	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73748-001	Sample	MB-1-08/01/13	ND	100	94	20.038	9.8	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73749-001	Sample	MB-1-08/01/13	ND	100	93	30.056	9.7	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73751-001	Sample	MB-1-08/01/13	ND	100	93	0	10.0	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73751-002	Sample	MB-1-08/01/13	ND	100	98	20.038	9.8	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73752-001	Sample	MB-1-08/01/13	ND	100	95	10.019	9.9	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73758-001	Sample	MB-1-08/01/13	ND	100	93	30.056	9.7	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73758-002	Sample	MB-1-08/01/13	ND	100	93	40.075	9.6	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73758-003	Sample	MB-1-08/01/13	ND	100	88	10.019	9.9	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73758-004	Sample	MB-1-08/01/13	ND	100	94	0	10.0	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73758-005	Sample	MB-1-08/01/13	ND	100	92	20.038	9.8	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73771-001	Sample	MB-1-08/01/13	ND	100	91	20.038	9.8	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73771-002	Sample	MB-1-08/01/13	ND	100	89	10.019	9.9	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73742-001	Sample	MB-1-08/01/13	ND	200	67	60.112	9.7	10	1	5.0	250	08/01/13	HS	08/02/13	BCT

HS 8/6/13

8/6/13

Flag Codes: Ra - Recovery failed specified criteria (PVS/LCS/MS/MSD/ICV/CAL)
Na - Not Applicable
Rp - RPD failed specified criteria.
Nc - Not Checked ..either one or both values =ND

3080110 0363

Hex-Cr Soil SW-846 3060A / 7196A

r6 soil curve		Date	8/6/2013			Batch #	163			TestGroupID	CR6-SOIL	
										TestID:	CR-HEX	
TD ppm			ABS									
0			0.0005		Intercept	Constant	-0.004992075					
0.025			0.0173									
0.25			0.1514		Slope	X Coefficients	0.696653734					
0.5			0.3495									
1			0.6929									

STD mg/L			ABS		PPM	DIFF						
0			0.0005		0.007883508	-0.007883508						
0.025			0.0173		0.031998788	-0.006998788						
0.25			0.1514		0.2244904	0.0255096						
0.5			0.3495		0.508849746	-0.008849746						
1			0.6929		1.001777557	-0.001777557						

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.999383185
R Square	0.99876675
Adjusted R Square	0.998355666
Standard Error	0.01168047
Observations	5

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.331477948	0.331477948	2429.59585	1.83877E-05
Residual	3	0.0004093	0.000136433		
Total	4	0.331887248			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	-0.004992075	0.007242992	-0.689228382	0.540203151	-0.028042529	0.018058378	-0.028042529	0.018058378
X Variable 1	0.696653734	0.014133507	49.29093071	1.83877E-05	0.651674563	0.741632904	0.651674563	0.741632904

BJ
8/6/13

#163

BA
8/7/13

30801100364

Hex-Cr Soil SW-846 3060A / 7196A

	Hex-Cr Soil		Q.C. DATA										
atch#	163		QC Sample	AC73763-005 NS.Sample									
ate	8/6/2013			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD	
nalyst	BCT/JW			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL	
repBy	BCT		LCS	20.00	19.71	19.71	99%	75-125%	NA	NA	PASS		
			MS(Sol)	20.00	20.54	20.54	103%	75-125%	NA	NA	PASS		
			MS(Insol)	850.21	463.27	463.27	54%	75-125%	NA	20%		PASS	
			Sample	NA	ND	NA	NA	NA	NA	NA			
			Sample Dup	NA	ND	NA	NA	NA	NA	20%		PASS	
			PVS	20.00	23.67	23.67	118%	75-125%	NA	NA	PASS		
Lead Chromate Added :	0.0115	g											
Upper Calibration Abbsorbance:	0.6929												

****

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3117	0.0000	0.3117	0.454590346	1	1	1	1	0.455	0.500	91	8/6/13 13:53	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	0.0011	0.0000	0.0011	0.008744768	1	1	1	1	0.009	0.025		8/6/13 13:53	
MB.Sample	0.0019	0.0000	0.0019	0.009893115	1	2.5	1	100	0.396	1.000		8/6/13 13:54	
LCS.Sample	0.3383	0.0000	0.3383	0.492772878	1	2.5	1	100	19.711	1.000		8/6/13 13:54	
AC73763-005 NS.Sample	0.0066	0.0024	0.0042	0.013194611	0.87	2.5	1	100	0.607	1.149		8/6/13 13:56	
AC73763-005 D.Sample	0.0017	0.0024	-0.0007	0.006160988	0.87	2.5	1	100	0.283	1.149		8/6/13 13:56	
AC73763-005 MS.Sample	0.3086	0.0024	0.3062	0.446695494	0.87	2.5	1	100	20.538	1.149		8/6/13 13:57	
AC73763-005 50X MSD.Sample	0.1378	0.0024	0.1354	0.201523457	0.87	2.5	50	100	463.272	57.471		8/6/13 13:57	
AC73763-005 PVS.Sample	0.3561	0.0024	0.3537	0.514878556	0.87	2.5	1	100	23.673	1.149		8/6/13 13:58	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3117		0.3117	0.454590346	1	1	1	1	0.455	0.025	91	8/6/13 13:53	PASS
ICB.Sample	0.0011		0.0011	0.008744768	1	1	1	1	0.009	0.025		8/6/13 13:53	
MB.Sample	0.0019		0.0019	0.009893115	1	2.5	1	100	0.396	1.000		8/6/13 13:54	
LCS.Sample	0.3383		0.3383	0.492772878	1	2.5	1	100	19.711	1.000		8/6/13 13:54	
AC73763-005 NS.Sample	0.0066	0.0024	0.0042	0.013194611	0.87	2.5	1	100	0.607	1.149		8/6/13 13:56	
AC73763-005 D.Sample	0.0017	0.0024	-0.0007	0.006160988	0.87	2.5	1	100	0.283	1.149		8/6/13 13:56	
AC73763-005 MS.Sample	0.3086	0.0024	0.3062	0.446695494	0.87	2.5	1	100	20.538	1.149		8/6/13 13:57	
AC73763-005 XXX.Sample	3.9290	0.0024	3.9266	5.643538227	0.87	2.5	1	100	259.473	1.149		8/6/13 13:57	
AC73763-005 50X MSD.Sample	0.1378	0.0024	0.1354	0.201523457	0.87	2.5	50	100	463.272	57.471		8/6/13 13:57	
AC73763-005 PVS.Sample	0.3561	0.0024	0.3537	0.514878556	0.87	2.5	1	100	23.673	1.149		8/6/13 13:58	
CCV.Control	0.3683		0.3683	0.53583588	1	1	1	1	0.536	0.025		8/6/13 13:59	
CCB.Sample	0.0008		0.0008	0.008314138	1	1	1	1	0.008	0.025		8/6/13 14:00	
AC73763-004.Sample	0.0053	0.0013	0.0040	0.012907525	0.87	2.5	1	100	0.593	1.149		8/6/13 14:00	
AC73763-006.Sample	0.0216	0.0217	-0.0001	0.007022248	0.79	2.5	1	100	0.356	1.266		8/6/13 14:01	
AC73771-001.Sample	0.0140	0.0068	0.0072	0.017500912	0.91	2.5	1	100	0.769	1.099		8/6/13 14:01	
AC73771-002.Sample	0.0310	0.0255	0.0055	0.015060675	0.89	2.5	1	100	0.677	1.124		8/6/13 14:02	
AC73804-001.Sample	0.0785	0.0707	0.0078	0.018362179	0.91	2.5	1	100	0.807	1.099		8/6/13 14:02	
AC73804-002.Sample	0.0532	0.0578	-0.0046	0.000562799	0.91	2.5	1	100	0.025	1.099		8/6/13 14:04	
CCV-2.Control	0.3663		0.3663	0.532965007	1	1	1	1	0.533	0.025	107	8/6/13 14:04	PASS
CCB-2.Sample	0.0003		0.0003	0.007596422	1	1	1	1	0.008	0.025		8/6/13 14:05	
AC73763-005 T.Sample	0.0024		0.0024	0.010610832	0.87	2.5	1	100	0.488	1.149		8/6/13 14:06	
AC73763-004 T.Sample	0.0013		0.0013	0.009031855	0.87	2.5	1	100	0.415	1.149		8/6/13 14:06	
AC73763-006 T.Sample	0.0217		0.0217	0.038314696	0.79	2.5	1	100	1.940	1.266		8/6/13 14:07	
AC73771-001 T.Sample	0.0068		0.0068	0.016926738	0.91	2.5	1	100	0.744	1.099		8/6/13 14:08	
AC73771-002 T.Sample	0.0255		0.0255	0.043769341	0.89	2.5	1	100	1.967	1.124		8/6/13 14:09	
AC73804-002 T.Sample	0.0578		0.0578	0.090133837	0.91	2.5	1	100	3.962	1.099		8/6/13 14:11	
AC73804-001 T.Sample.Cycle1	0.0707		0.0707	0.108650925	0.91	2.5	1	100	4.776	1.099		8/6/13 14:14	
CCV-3.Sample.Cycle1	0.3633		0.3633	0.52865872	1	1	1	1	0.529	0.025	106	8/6/13 14:14	PASS
CCB-3.Sample.Cycle1	0.0004		0.0004	0.007739965	1	1	1	1	0.008	0.025		8/6/13 14:15	

BT 8/6/13 #163

BT 8/7/13

Hex-Cr Soil SW-846 3060A / 7196A

	Hex-Cr Soil		Q.C. DATA										
Batch#	163 A		QC Sample	AC73763-005 NS.Sample									
Date	8/6/2013			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD	
Analyst	BCT/JW			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL	
PrepBy	BCT		LCS	20.00	19.52	19.52	98%	75-125%	NA	NA	PASS		
			MS(Sol)	20.00	21.73	21.73	109%	75-125%	NA	NA	PASS		
			MS(Insol)	850.21	562.93	562.93	66%	75-125%	NA	20%		PASS	
			Sample	NA	ND	NA	NA	NA	NA	NA			
			Sample Dup	NA	ND	NA	NA	NA	NA	20%		PASS	
			PVS	20.00	22.95	22.95	115%	75-125%	NA	NA	PASS		
Lead Chromate Added :	0.0115	g											
Upper Calibration Abbsorbance:	0.6929												

****

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3113	0.0000	0.3113	0.454016206	1	1	1	1	0.454	0.500	91	8/6/13 14:19	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	0.0001	0.0000	0.0001	0.007309335	1	1	1	1	0.007	0.025		8/6/13 14:19	
MB.Sample	0.0008	0.0000	0.0008	0.008314138	1	2.5	1	100	0.333	1.000		8/6/13 14:20	
LCS.Sample	0.3349	0.0000	0.3349	0.487892407	1	2.5	1	100	19.516	1.000		8/6/13 14:21	
AC73763-005 NS.Sample	0.0000	0.0010	-0.0010	0.005730358	0.87	2.5	1	100	0.263	1.149		8/6/13 14:21	
AC73763-005 D.Sample	0.0005	0.0010	-0.0005	0.006448075	0.87	2.5	1	100	0.296	1.149		8/6/13 14:22	
AC73763-005 MS.Sample	0.3252	0.0010	0.3242	0.47253327	0.87	2.5	1	100	21.726	1.149		8/6/13 14:22	
AC73763-005 50X MSD.Sample	0.1666	0.0010	0.1656	0.244873559	0.87	2.5	50	100	562.928	57.471		8/6/13 14:23	
AC73763-005 PVS.Sample	0.3438	0.0010	0.3428	0.499232354	0.87	2.5	1	100	22.953	1.149		8/6/13 14:23	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3113		0.3113	0.454016206	1	1	1	1	0.454	0.025	91	8/6/13 14:19	PASS
ICB.Sample	0.0001		0.0001	0.007309335	1	1	1	1	0.007	0.025		8/6/13 14:19	
MB.Sample	0.0008		0.0008	0.008314138	1	2.5	1	100	0.333	1.000		8/6/13 14:20	
LCS.Sample	0.3349		0.3349	0.487892407	1	2.5	1	100	19.516	1.000		8/6/13 14:21	
AC73763-005 NS.Sample	0.0000	0.0010	-0.0010	0.005730358	0.87	2.5	1	100	0.263	1.149		8/6/13 14:21	
AC73763-005 D.Sample	0.0005	0.0010	-0.0005	0.006448075	0.87	2.5	1	100	0.296	1.149		8/6/13 14:22	
AC73763-005 MS.Sample	0.3252	0.0010	0.3242	0.47253327	0.87	2.5	1	100	21.726	1.149		8/6/13 14:22	
AC73763-005 XXX.Sample	3.8239	0.0010	3.8229	5.494683909	0.87	2.5	1	100	252.629	1.149		8/6/13 14:23	
AC73763-005 50X MSD.Sample	0.1666	0.0010	0.1656	0.244873559	0.87	2.5	50	100	562.928	57.471		8/6/13 14:23	
AC73763-005 PVS.Sample	0.3438	0.0010	0.3428	0.499232354	0.87	2.5	1	100	22.953	1.149		8/6/13 14:23	
CCV.Control	0.3614		0.3614	0.525931415	1	1	1	1	0.526	0.025		8/6/13 14:24	
CCB.Sample	0.0010		0.0010	0.008601225	1	1	1	1	0.009	0.025		8/6/13 14:24	
AC73763-004.Sample	0.0069	0.0062	0.0007	0.008170594	0.87	2.5	1	100	0.376	1.149		8/6/13 14:25	
AC73763-006.Sample	0.0364	0.0314	0.0050	0.014342962	0.79	2.5	1	100	0.726	1.266		8/6/13 14:25	
AC73771-001.Sample	0.0131	0.0066	0.0065	0.016496108	0.91	2.5	1	100	0.725	1.099		8/6/13 14:26	
AC73771-002.Sample	0.0199	0.0101	0.0098	0.021233038	0.89	2.5	1	100	0.954	1.124		8/6/13 14:26	
AC73804-001.Sample	0.0458	0.0397	0.0061	0.015921933	0.91	2.5	1	100	0.700	1.099		8/6/13 14:27	
AC73804-002.Sample	0.0728	0.0664	0.0064	0.016352571	0.91	2.5	1	100	0.719	1.099		8/6/13 14:27	
CCV-2.Control	0.3604		0.3604	0.524495957	1	1	1	1	0.524	0.025	105	8/6/13 14:27	PASS
CCB-2.Sample	0.0008		0.0008	0.008314138	1	1	1	1	0.008	0.025		8/6/13 14:27	
AC73763-005 T.Sample	0.0010		0.0010	0.008601225	0.87	2.5	1	100	0.395	1.149		8/6/13 14:28	
AC73763-004 T.Sample	0.0062		0.0062	0.016065479	0.87	2.5	1	100	0.739	1.149		8/6/13 14:30	
AC73763-006 T.Sample	0.0314		0.0314	0.052238397	0.79	2.5	1	100	2.645	1.266		8/6/13 14:30	
AC73771-001 T.Sample	0.0066		0.0066	0.016639652	0.91	2.5	1	100	0.731	1.099		8/6/13 14:31	
AC73771-002 T.Sample	0.0101		0.0101	0.021663668	0.89	2.5	1	100	0.974	1.124		8/6/13 14:31	
AC73804-002 T.Sample	0.0664		0.0664	0.102478564	0.91	2.5	1	100	4.505	1.099		8/6/13 14:32	
AC73804-001 T.Sample	0.0397		0.0397	0.064152497	0.91	2.5	1	100	2.820	1.099		8/6/13 14:33	
CCV-3.Control	0.3588		0.3588	0.522199268	1	1	1	1	0.522	0.025	104	8/6/13 14:33	PASS
CCB-3.Sample	0.0011		0.0011	0.008744768	1	1	1	1	0.009	0.025		8/6/13 14:33	

BT
8/6/13
#163A

BT
8/7/13

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)

Method 3060A

Batch: 163 Analyst Beery Date 8/6/13
Digestion Start: 10:10 Finish: 11:10 Hot Plate Temp 1: 91°C Hot Plate Temp 2: 92°C

Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 From	0.0 ml	7.84	100	1.93	
Cal Curve 0.025 100	0.025	7.80		1.86	V. 170304
Cal Curve 0.25 ppm	0.25	7.69		1.79	V. 170305
Cal Curve 0.5	0.5	7.56		1.84	V. 170306
Cal Curve 1.0	1.0	7.44		2.11	V. 170307
MB	2.5gm	7.12		2.13	
LCS		7.31		2.10	V. 170310
QC Sample AC73763.005					
PDS		7.27		1.95	ICV V. 170308
DUP		7.20		1.97	CCV V. 170309
(Sol) MS		7.41		1.90	
(Insol) MSD		7.69		2.13	
1. AC73763.004		7.64		2.12	
2. 005		7.53		1.96	
3. 006		7.90		1.95	
4. AC73771.001		7.18		1.84	
5. 002		7.54		1.79	
6. AC73804.001		7.57		1.86	
7. 002					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
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16.					
17.					
18.					
19.					
20.					

Reagent	Lot #:		$MgCl_2$	# 7734
Digestion Solution - pH must be > 11.5. If not, discard	V- 167959	pH 13.34	Lead Chromate (PbCr)	# 6413
Phosphate Buffer	V- 164939		Weight of PbCr (10-20mg)	0.01159 mg
			PVS 100ppm Volume 0.5ml 1g ml	10% H_2SO_4 V: 167421
			Sample chosen for PVS should be spiked at 40 mg/kg. If sample is > 40 mg/kg, use 2X	5 M HNO_3 V: 168219
			Spike Volume 1ml & Lot # V- 167177	Col Rea. V: 169497

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)
Method 3060A

Batch: 163 A Analyst Beeva Date 8/6/13
Digestion Start: 10:10 Finish: 11:10 Hot Plate Temp 1: 91°C Hot Plate Temp 2: 92°C

Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 from	0.0 ml	7.84	100	1.93	
Cal Curve 0.025 100	0.025	7.80		1.86	V: 170304
Cal Curve 0.25 ppm	0.25	7.69		1.79	V. 170305
Cal Curve 0.5	0.5	7.56		1.84	V. 170306
Cal Curve 1.0	1.0	7.44		2.11	V. 170307
MB	2.5gm	7.43		1.97	
LCS		7.54		2.13	V. 170311
QC Sample AC73763.005					
PDS		7.70		2.14	ICV V.170308
DUP		7.63		2.10	CCV.V.170309
(Sol) MS		7.84		1.90	
(Insol) MSD		7.90		2.14	
1. AC73768.004		7.13		2.11	
2. 005		7.19		2.16	
3. 006		7.24		1.87	
4. AC73771.001		7.59		1.88	
5. 002		7.64		1.93	
6. AC73804.001		7.73		1.90	
7. 002		7.87		1.84	
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					

Reagent	Lot #:		$MgCl_2$	# 7734
Digestion Solution - pH must be > 11.5. If not, discard	V- 167959	pH 13.34	Lead Chromate (PbCr)	# 6413
Phosphate Buffer	V- 164939		Weight of PbCr (10-20mg)	0.01159 mg
			PVS 100 ppm Volume 0.5 ml 1 g	10% H_2SO_4 V: 167421
			Sample chosen for PVS should be spiked at 40 mg/kg. If sample is > 40 mg/kg, use 2X	5 M HNO_3 V: 168219
			Spike Volume 1ml & Lot # V- 167177	Col Rea. V: 169497

Hex-Cr Soil SW-846 3060A / 7196A

Cr6 soil curve		Date	8/6/2013			Batch #	163 A			TestGroupID	CR6-SOIL	
										TestID:	CR-HEX	
STD ppm			ABS									
0			0.0005		Intercept	Constant	-0.004992075					
0.025			0.0173									
0.25			0.1514		Slope	X Coefficients	0.696653734					
0.5			0.3495									
1			0.6929									
**********												
STD mg/L			ABS		PPM	DIFF						
0			0.0005		0.007883508	-0.007883508						
0.025			0.0173		0.031998788	-0.006998788						
0.25			0.1514		0.2244904	0.0255096						
0.5			0.3495		0.508849746	-0.008849746						
1			0.6929		1.001777557	-0.001777557						
**********												
SUMMARY OUTPUT												
Regression Statistics												
Multiple R	0.999383185											
R Square	0.99876675											
Adjusted R Square	0.998355666											
Standard Error	0.01168047											
Observations	5											
ANOVA												
	df	*SS*	*MS*	*F*	*Significance F*							
Regression	1	0.331477948	0.331477948	2429.59585	1.83877E-05							
Residual	3	0.0004093	0.000136433									
Total	4	0.331887248										
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*				
Intercept	-0.004992075	0.007242992	-0.689228382	0.540203151	-0.028042529	0.018058378	-0.028042529	0.018058378				
X Variable 1	0.696653734	0.014133507	49.29093071	1.83877E-05	0.651674563	0.741632904	0.651674563	0.741632904				

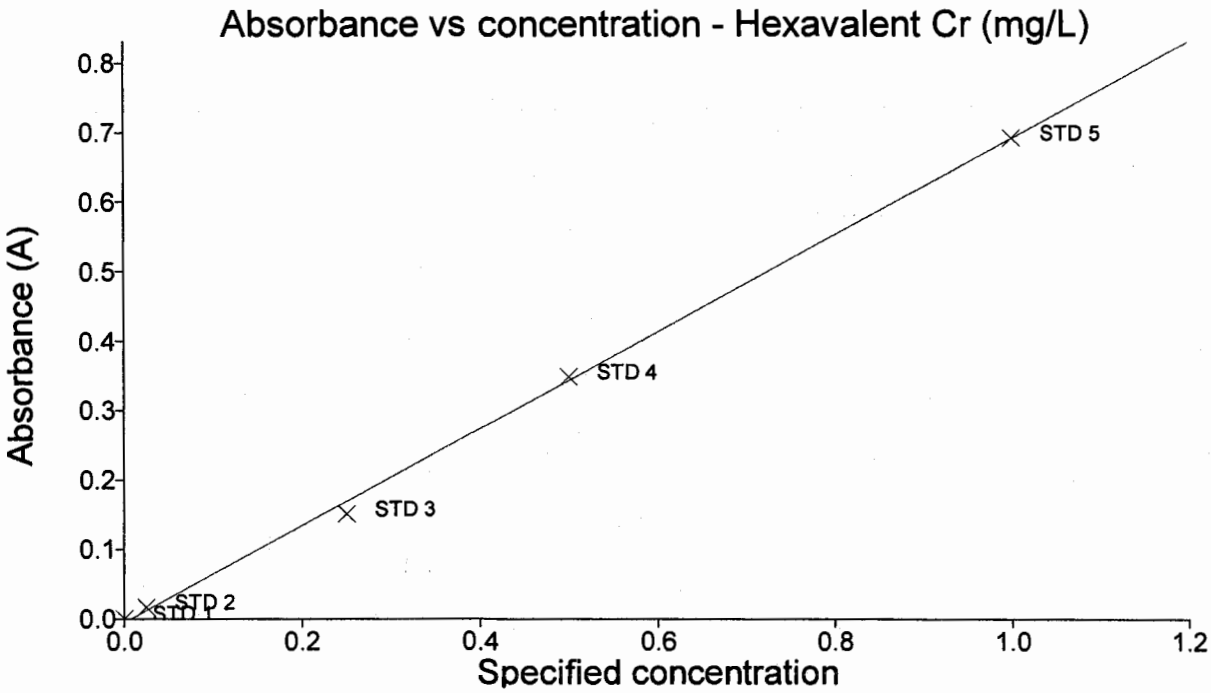
BM
8/6/13
#163A

BM
8/7/13

3080110 0368

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9994

Calibrated on: 08/06/13 17:44

User name: wet chem

Method name: Hexavalent Cr

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample.Cycle1	0.0000	0.0079	-0.0079	0.0005
STD 2.Sample.Cycle1	0.0250	0.0320	-0.0070	0.0173
STD 3.Sample.Cycle1	0.2500	0.2245	0.0255	0.1514
STD 4.Sample.Cycle1	0.5000	0.5088	-0.0088	0.3495
STD 5.Sample.Cycle1	1.0000	1.0018	-0.0018	0.6929

AB 8/7/13

AB 8/8/13

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		08/06/13 13:53:18	0.5000	0.0454	0.3117	0.4546
ICB.Sample		08/06/13 13:53:33			0.0011	0.0087
MB.Sample		08/06/13 13:54:34			0.0019	0.0098
LCS.Sample		08/06/13 13:54:48			0.3383	0.4927
AC73763-005 NS.Sample		08/06/13 13:56:10			0.0066	0.0166
AC73763-005 D.Sample		08/06/13 13:56:38			0.0017	0.0096
AC73763-005 MS.Sample		08/06/13 13:57:02			0.3086	0.4502
AC73763-005 XXX.Sample		08/06/13 13:57:33			3.9290	5.6474 : Exceeded calibration limits.
AC73763-005 50X MSD.Sample	50	08/06/13 13:57:48			0.1378	0.2049
AC73763-005 PVS.Sample		08/06/13 13:58:58			0.3561	0.5183
CCV.Control		08/06/13 13:59:33	0.5000	-0.0358	0.3683	0.5358
CCB.Sample		08/06/13 14:00:30			0.0008	0.0083
AC73763-004.Sample		08/06/13 14:00:51			0.0053	0.0148
AC73763-006.Sample		08/06/13 14:01:17			0.0216	0.0381
AC73771-001.Sample		08/06/13 14:01:45			0.0140	0.0272
AC73771-002.Sample		08/06/13 14:02:10			0.0310	0.0516
AC73804-001.Sample		08/06/13 14:02:34			0.0785	0.1198
AC73804-002.Sample		08/06/13 14:04:11			0.0532	0.0835
CCV-2.Control		08/06/13 14:04:47	0.5000	-0.0329	0.3663	0.5329
CCB-2.Sample		08/06/13 14:05:02			0.0003	0.0075
AC73763-005 T.Sample		08/06/13 14:06:06			0.0024	0.0106
AC73763-004 T.Sample		08/06/13 14:06:34			0.0013	0.0090
AC73763-006 T.Sample		08/06/13 14:07:50			0.0217	0.0383
AC73771-001 T.Sample		08/06/13 14:08:25			0.0068	0.0169
AC73771-002 T.Sample		08/06/13 14:09:33			0.0255	0.0437
AC73804-002 T.Sample		08/06/13 14:11:17			0.0578	0.0901

Report Generated On:08/06/2013 14:16

8/7/13 8/6/13 #163

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AC73804-001 T.Sample.Cycle1		08/06/13 14:14:43			0.0707	0.1086
CCV-3.Sample.Cycle1		08/06/13 14:14:55			0.3633	0.5287
CCB-3.Sample.Cycle1		08/06/13 14:15:05			0.0004	0.0077

JM 8/6/13

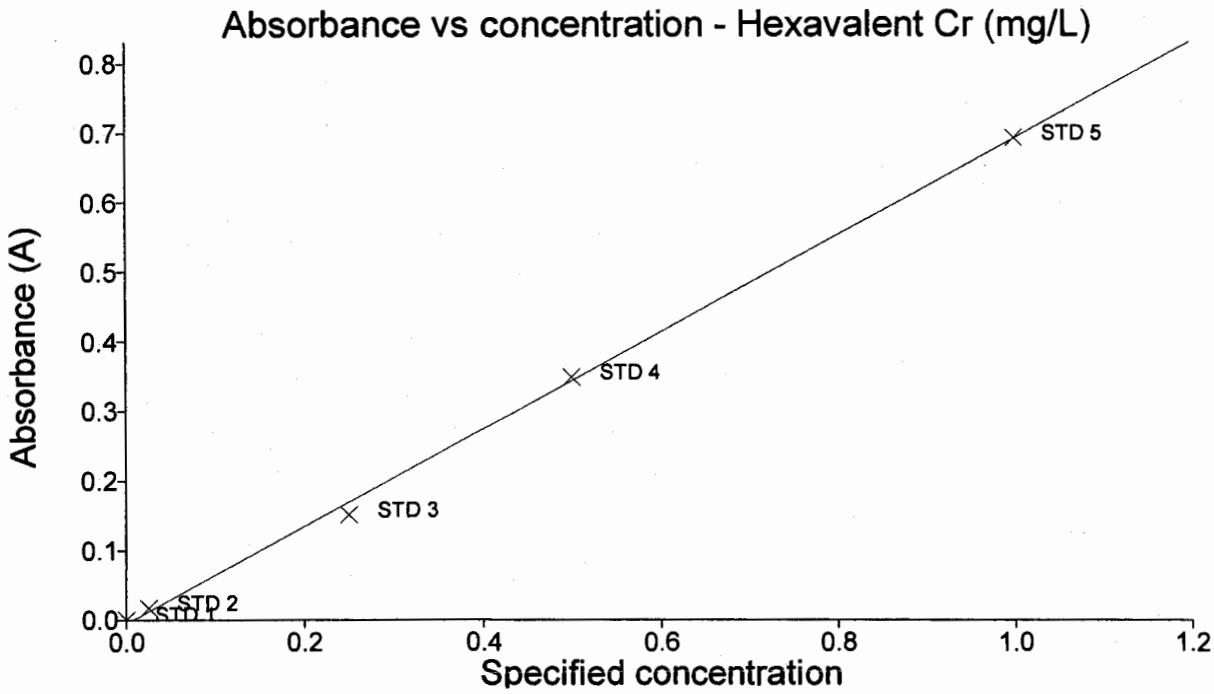
AA 8/7/13

Report Generated On:08/06/2013 14:16

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

- Calibration Graph



Correlation Coefficient: 0.9994

Calibrated on: 08/06/13 17:44

User name: wet chem

Method name: Hexavalent Cr

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample	0.0000	0.0079	-0.0079	0.0005
STD 2.Sample	0.0250	0.0320	-0.0070	0.0173
STD 3.Sample	0.2500	0.2245	0.0255	0.1514
STD 4.Sample	0.5000	0.5088	-0.0088	0.3495
STD 5.Sample	1.0000	1.0018	-0.0018	0.6929

BB 8/7/13 PM 8/6/13

Report Generated On:08/06/2013 14:34

163A

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		08/06/13 14:19:38	0.5000	0.0460	0.3113	0.4540
ICB.Sample		08/06/13 14:19:55			0.0001	0.0072
MB.Sample		08/06/13 14:20:37			0.0008	0.0083
LCS.Sample		08/06/13 14:21:02			0.3349	0.4878
AC73763-005 NS.Sample		08/06/13 14:21:30			0.0000	0.0072
AC73763-005 D.Sample		08/06/13 14:22:17			0.0005	0.0079
AC73763-005 MS.Sample		08/06/13 14:22:40			0.3252	0.4739
AC73763-005 XXX.Sample		08/06/13 14:23:07			3.8239	5.4965 : Exceeded calibration limits.
AC73763-005 50X MSD.Sample	50	08/06/13 14:23:27			0.1666	0.2462
AC73763-005 PVS.Sample		08/06/13 14:23:54			0.3438	0.5006
CCV.Control		08/06/13 14:24:10	0.5000	-0.0260	0.3614	0.5260
CCB.Sample		08/06/13 14:24:24			0.0010	0.0085
AC73763-004.Sample		08/06/13 14:25:17			0.0069	0.0170
AC73763-006.Sample		08/06/13 14:25:41			0.0364	0.0593
AC73771-001.Sample		08/06/13 14:26:11			0.0131	0.0259
AC73771-002.Sample		08/06/13 14:26:34			0.0199	0.0356
AC73804-001.Sample		08/06/13 14:27:09			0.0458	0.0728
AC73804-002.Sample		08/06/13 14:27:30			0.0728	0.1116
CCV-2.Control		08/06/13 14:27:42	0.5000	-0.0245	0.3604	0.5245
CCB-2.Sample		08/06/13 14:27:55			0.0008	0.0083
AC73763-005 T.Sample		08/06/13 14:28:43			0.0010	0.0085
AC73763-004 T.Sample		08/06/13 14:30:08			0.0062	0.0160
AC73763-006 T.Sample		08/06/13 14:30:46			0.0314	0.0521
AC73771-001 T.Sample		08/06/13 14:31:20			0.0066	0.0166
AC73771-002 T.Sample		08/06/13 14:31:51			0.0101	0.0217
AC73804-002 T.Sample		08/06/13 14:32:46			0.0664	0.1025

Report Generated On:08/06/2013 14:34

BA 8/7/13

BA 8/6/13 1634

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AC73804-001 T.Sample		08/06/13 14:33:17			0.0397	0.0641
CCV-3.Control		08/06/13 14:33:33	0.5000	-0.0222	0.3588	0.5222
CCB-3.Sample		08/06/13 14:33:46			0.0011	0.0088

AB
8/7/13

Report Generated On:08/06/2013 14:34

BD
8/6/13
163A

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-164939

Prepared By: Lewis, Simon D.
Description: Phosphate Buffer
Prep Date: 5/9/2013
Expiration Date: 11/8/2013
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: aurora
ApproveDate: 05/21/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7487	POTASSIUM PHOSPHATE MONOBASIC	68.04 g	NEAT neat	
6514	Potassium Phosphate Dibasic Anhydrous	87.09 g	neat neat	
	DI WATER (FILL TO VOLUME)			

Veritech Lot Number: V-167177

Prepared By: Wonge, Janee
Description: 100 ppm cr6 std
Prep Date: 6/17/2013
Expiration Date: 12/16/2013
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: aurora
ApproveDate: 06/19/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7906	Chromium 1000 ppm Standard	10 ml	1000 mg/l	100 mg/l
	DI WATER FILL TO THE VOLUME			

Veritech Lot Number: V-167178

Prepared By: Wonge, Janee
Description: 100 ppm CR6 FOR CCV
Prep Date: 6/17/2013
Expiration Date: 12/16/2013
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: aurora
ApproveDate: 06/19/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
6758	Hexavalent Chromium	10 ml	1000 mg/l	100 mg/l
	DI WATER FILL TO THE VOLUME			

Veritech Lot Number: V-167421

Prepared By: Saghari, Hossain
Description: 10 % H2SO4
Prep Date: 6/19/2013
Expiration Date: 12/18/2013
Department: WetChem
BatchNumber:
Concentration: 10 %
Final Volume: 2000 ml
ApprovedBy: aurora
ApproveDate: 06/21/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7577	Sulfuric Acid	200 ml	neat neat	
	DI WATER FILL TO THE VOLUME			

Veritech Lot Number: V-167959

Prepared By: Lewis, Simon D.
Description: Cr6 digestion solution
Prep Date: 6/27/2013
Expiration Date: 12/26/2013
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 3000 ml
ApprovedBy: aurora
ApproveDate: 07/25/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7864	Sodium Carbonate Anhydrous	90 g	neat neat	
7490	Sodium Hydroxide	60 g	neat neat	
	DI WATER FILL TO THE VOLUME			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-168219

Prepared By: Trivedi, Beena
Description: 5 M HNO3
Prep Date: 7/3/2013
Expiration Date: 1/2/2014
Department: WetChem
BatchNumber:
Concentration: 5 m
Final Volume: 2000 ml
ApprovedBy: aurora
ApproveDate: 07/03/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7592	Nitric Acid	640 ml	neat neat	
	DI WATER FILL TO THE VOLUME			

Veritech Lot Number: V-169497

Prepared By: Trivedi, Beena
Description: Cr6 Color Reagent
Prep Date: 7/24/2013
Expiration Date: 8/31/2013
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 200 ml
ApprovedBy: aurora
ApproveDate: 07/25/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7705	1,5-Diphenylcarbezide	1 g	NEAT neat	
7517	Acetone	200 ml	neat neat	

Veritech Lot Number: V-170304

Prepared By: Trivedi, Beena
Description: 0.025 ppm
Prep Date: 8/6/2013
Expiration Date: 8/6/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.025 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

8/7/13

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	.025 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-167959	Cr6 digestion solution	50	Reagent reag	

Veritech Lot Number: V-170305

Prepared By: Trivedi, Beena
Description: 0.25 ppm
Prep Date: 8/6/2013
Expiration Date: 8/6/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.25 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	.25 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-167959	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-170306

Prepared By: Trivedi, Beena
Description: 0.5 ppm
Prep Date: 8/6/2013
Expiration Date: 8/6/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	.5 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-167959	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Internally Prepared Standard Log

BB 8/7/13

Veritech Lot Number: V-170307

Prepared By: Trivedi, Beena
Description: 1.0 ppm
Prep Date: 8/6/2013
Expiration Date: 8/6/2013
Department: Wet Lab
BatchNumber:
Concentration: 1.0 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	1 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-167959	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-170308

Prepared By: Trivedi, Beena
Description: ICV
Prep Date: 8/6/2013
Expiration Date: 8/6/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167178	100 ppm CR6 FOR CCV	.5 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-167959	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-170309

Prepared By: Trivedi, Beena
Description: CCV
Prep Date: 8/6/2013
Expiration Date: 8/6/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167178	100 ppm CR6 FOR CCV	.5 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-167959	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-170310

Prepared By: Trivedi, Beena
Description: LCS
Prep Date: 8/6/2013
Expiration Date: 8/6/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	.5 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-167959	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-170311

Prepared By: Trivedi, Beena
Description: LCS-2
Prep Date: 8/6/2013
Expiration Date: 8/6/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	.5 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-167959	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 6514

Description
Potassium Phosphate Dibasic Anhydrous

ApprovedBy: jean
ApproveDate: 08/17/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	m-8391	112839	12/02/11	12/01/15	Soules, John	1	500g	neat	neat

Veritech Control/Receipt Number: 6758

Description
Hexavalent Chromium

ApprovedBy: melissa
ApproveDate: 02/17/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
HACH	14664-42	A1320	02/17/12	11/01/16	Dalmeida, Melissa	2	100m	1000	mg/L

Veritech Control/Receipt Number: 7487

Description
POTASSIUM PHOSPHATE MONOBASIC

ApprovedBy: jean
ApproveDate: 11/27/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	P 285-500	124970	11/26/12	11/25/20	Trivedi, Beena	1	500 G	NEAT	NEAT

Veritech Control/Receipt Number: 7490

Description
Sodium Hydroxide

ApprovedBy: richq
ApproveDate: 11/27/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EMD	SX0590-7	B0729269 152	11/21/12	11/20/16	Quimby, Richard	4	12KG	neat	neat

Veritech Control/Receipt Number: 7517

Description
Acetone

ApprovedBy: jean
ApproveDate: 12/14/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T Baker	9254-03	022620	12/12/12	10/11/15	Batts, Alvin	32	4L	neat	neat

Veritech Control/Receipt Number: 7577

Description
Sulfuric Acid

ApprovedBy: jean
ApproveDate: 01/10/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	A510-P212	3112052	01/10/13	11/19/15	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 7592

Description
Nitric Acid

ApprovedBy: shiamala
ApproveDate: 02/13/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	25627	01/18/13	11/07/17	Lopez, Jose	8	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number:7705

Description
1,5-Diphenylcarbezide

ApprovedBy: melissa
ApproveDate: 02/19/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	D85-25	120894	02/19/13	02/18/18	Trivedi, Beena	1	25G	NEAT	NEAT

Veritech Control/Receipt Number:7864

Description
Sodium Carbonate Anhydrous

ApprovedBy: melissa
ApproveDate: 04/24/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LabChem	LC22965-1	C046-24	04/24/13	04/23/15	Dalmeida, Melissa	11	500g	neat	neat

Veritech Control/Receipt Number:7906

Description
Chromium 1000 ppm Standard

ApprovedBy: melissa
ApproveDate: 06/13/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	SC192-100	125581	05/22/13	09/30/14	Dalmeida, Melissa	1	100 m	1000	mg/L

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 6413

Description
Lead Chromate

ApprovedBy: melissa
ApproveDate: 01/23/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Pfaltz & Bauer inc	L01745	A056-5	10/27/11	10/26/14	Soules, John	1	500g	neat	neat

Veritech Control/Receipt Number: 7734

Description
Magnesium Chloride, Anhydrous

ApprovedBy: melissa
ApproveDate: 02/25/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
AMRESCO	J364-500G	1932C182	02/25/13	02/24/18	Dalmeida, Melissa	2	500g	Neat	Neat

3080110 0381

Hampton-Clarke/Veritech

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 209

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Meter #: 16004

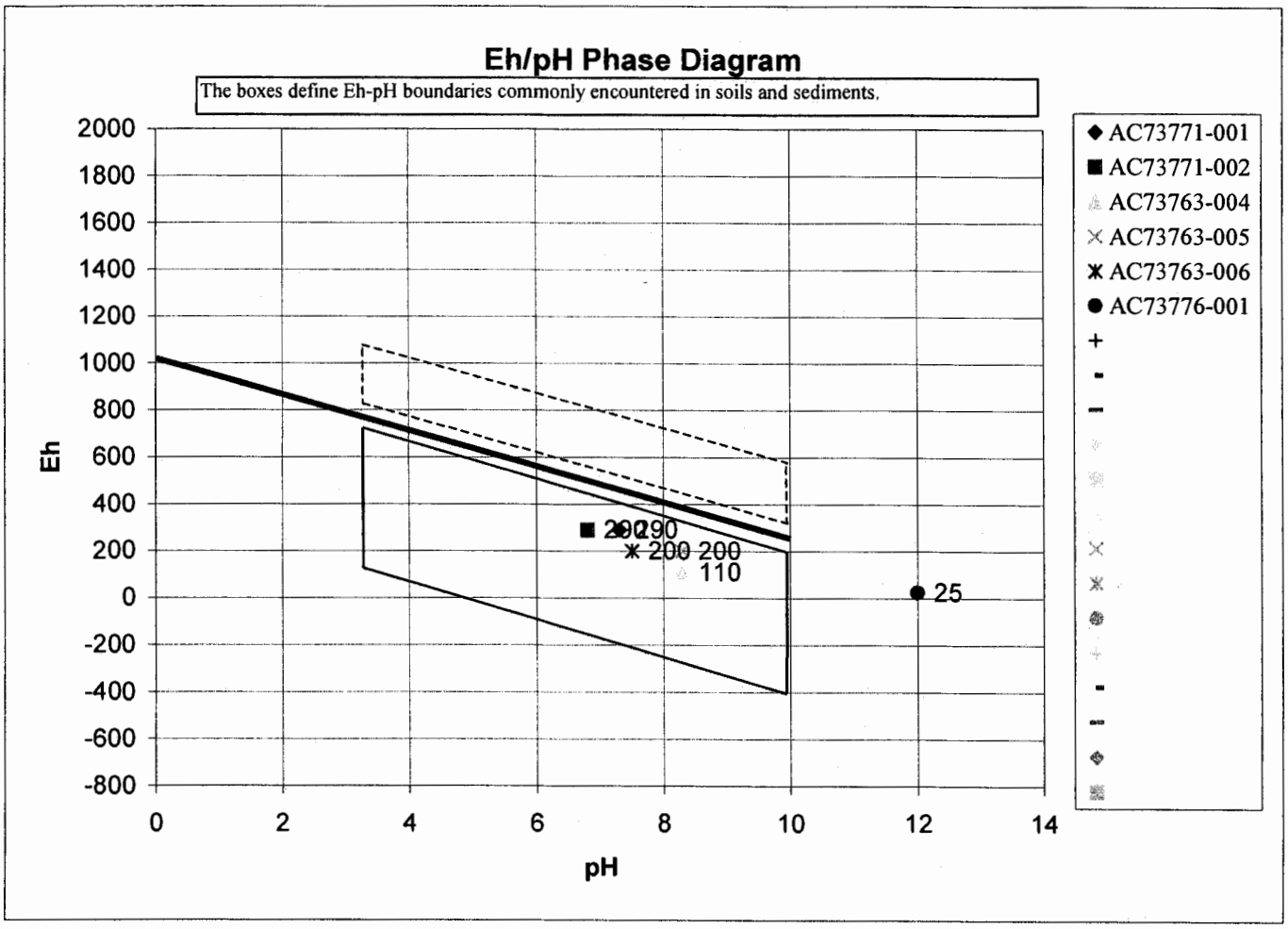
Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	223.3	20.6	223.3	20.6	LCS: 4.44	—	—	08/02/13 10:35	SY
DUP AC73771-001	316.7	23.4	316.8	23.4	DUP: 7.01	25	25		
1. AC73771-001	291.2	23.0	291.4	23.0	7.28				
2. AC73771-002	291.4	23.1	291.2	23.1	6.77				
3. AC73763-004	105.5	23.8	104.8	23.8	8.30				
4. AC73763-005	197.5	23.7	193.5	23.7	8.29				
5. AC73763-006	194.6	23.5	194.8	23.5	7.53				
6. AC73776-001	24.7	24.5	24.8	24.5	12.38				
7.									
8.									
9.									
10.									
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									

* Reading 1 and Reading 2 must agree within ± 10 mV

Reviewed by: _____

Date Reviewed: _____

Solution	Manufacturer's Lot #
ZoBell's Solution	7792
4 M KCl Filling Solution	5456
LCS	V- 169601



Sample	Eh	pH
AC73771-001	290	7.3
AC73771-002	290	6.8
AC73763-004	110	8.3
AC73763-005	200	8.3
AC73763-006	200	7.5
AC73776-001	25	12

Reducing

Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units must be added for the combination platinum electrode used.

8-08/04/13

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-169601

Prepared By: Trivedi, Beena	Department: WetChem	ApprovedBy: aurora
Description: KHP LCS	BatchNumber:	ApproveDate: 07/26/13
Prep Date: 7/24/2013	Concentration: 300 ppm	Checked: Yes
Expiration Date: 1/24/2014	Final Volume: 2000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
5981	POTASSIUM HYDROGEN PHTHALATE DI WATER FILL TO THE VOLUME	600 mg	NEAT	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 5981

Description
POTASSIUM HYDROGEN PHTHALATE

ApprovedBy: jean
ApproveDate: 05/24/11
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	P243-500	101727	05/24/11	05/31/21	Revolus, Jean	1	500g	NEAT	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 5456

Description
Redox reference probe solution

ApprovedBy: brent
ApproveDate: 06/15/11
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
fisher	SP135-500	105440	11/19/10	11/18/13	Miller,Gael E.	1	500ml	4	M

Veritech Control/Receipt Number: 7792

Description
ZoBell's Solution

ApprovedBy: melissa
ApproveDate: 03/25/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Ricca	9880-32	2302653	03/25/13	11/30/13	Dalmeida, Melissa	1	1L	Neat	Neat

Hampton-Clarke/Veritech

pH CALIBRATION RECORD

pH Meter: Orion 3 Star

Serial # B16004

Date	Calibration				Checks				Buffer Lot #s		
	Initials	Calibrate		Read	Initials	Read	Initials	Read	pH 4.0	pH 10.0	pH 7.0
	Time	Buffer 1	Buffer 2	pH 7.0 Buffer	Time	pH 7.0 Buffer	Time	pH 7.0 Buffer			
07/22/13	SJ 7:30	4.00	10.00	7.06	SJ 14:15	7.07			7601	7691	7922
07/23/13	SJ 7:00	4.00	10.00	7.05	HS 10:20	7.05			7601	7691	7922
07/24/13	SJ 7:50	4.00	10.00	7.05	BY 10:20	7.05			7601	7691	7922
07/25/13	SJ 7:40	4.00	10.00	7.05	SDC 11:20	7.06	MM 14:00	7.02	7601	7691	7922
07/26/13	SJ 7:55	4.00	10.00	7.05	BY 11:30	7.06	SDC 14:35	7.06	7601	7691	7922
07/29/13	SJ 7:40	4.00	10.00	7.05	SDC 10:30	7.06			7601	7691	7922
7/30/13	SJ 7:40	4.00	10.00	7.05	BY 10:40	7.05			7601	7691	7922
07/31/13	SJ 7:50	4.00	10.00	7.02	SDC 10:00	7.03			7601	8004	7922
08/01/13	SJ 7:45	4.00	10.00	7.01	BY 12:30	7.02	BY 15:30	7.02	7601	8004	7922
08/02/13	SJ 7:45	4.00	10.00	7.02	SJ 10:35	7.02			7601	8004	7922

Calibrate using pH 4.0 and pH 10.0/Read and record pH 7.0 (the pH 7.0 must agree within ± 0.1 pH units)
When using the pH meter more for analysis and more than 3 hours has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.

Miscellaneous Data

30801110 0388

Hampton-Clarke/Veritech

LEACHATE PREPARATION LOG
(TCLP, SPLP)

Start Date: 8/1/13

Finish Date: 8/2/13

**TCLP Ext. Fluid #1 pH: 4.88 (criteria: 4.93 ± 0.5)
**TCLP Ext. Fluid #2 pH: (criteria: 2.88 ± 0.05)
**SPLP Ext. Fluid #3 pH: 4.20 (criteria: 4.20 ± 0.5)

Sample #	pH (units)	pH in HCL (units)	Final pH (units)	Ext. Fluid (number)	Wt./Vol of Sample (g or mL)	Start Time	Finish Time	Analyst (s)	Ext. Type*	Comments
AC 73742-001	7.56	1.80	5.91	EF1170078	100g/2L	20:00	1:45	E.R.	T	Metals Only.
AC 73763-004	8.09	1.76	4.96		150g/3L					Metals and Organics.
AC 73763-005	10.18	1.82	4.87							
AC 73763-006	8.26	1.74	5.02							
AC 73771-001	8.63	1.74	5.03		100g/2L					Metals Only.
AC 73771-002	7.93	1.65	5.01							
AC 73329-001	—	—	9.21	SPLP109862					P	
AC 73329-002			9.28							
AC 73329-005			9.47							
AC 73745-001			9.84							
AC 73745-002			9.90							
AC 73745-003			97.1							
AC 73747-001			9.83							
AC 73747-002			9.68							
AC 73747-003			9.29							
AC 73655-001			7.12							Organics Only.
SPLP109862	4.20		9.62		3L					Metals and Organics
EF1170078	4.88		4.89	EF170078					T	

* Ext. Type: TCLP = T (Method 1311) LAMP=L (Methods 1311 / ANSI/NEMA C78.LL 1256-2003)
SPLP = P (Method 1312) MEP=M (Method 1320)
ZHE = Z (Method 1311/1312)

** The pH of the extraction fluid must be checked prior to use and must be within limits specified above

0065

HC·V
HamptonClarke·Veritech

Last Page of Report

LEIGHTON
ASSOCIATES, INC.
ENVIRONMENTAL HEALTH & SAFETY
CONSULTANTS & TRAINERS

July 2, 2013

Ms. John Pouso
Skanska Kiewit
400 Roosevelt Avenue
Carteret, NJ 07008

RE: Contract # AKB-264.039

email: john.pouso@skanska.com

Dear John:

As requested, on June 21, 2013 we collected pre-job surface soil samples on the New York and New Jersey side of the Bayonne Bridge. A total of eight samples were collected, then forwarded to Schneider Laboratories, Inc. and were analyzed for total concentrations of lead, arsenic and polychlorinated biphenyls (PCBs). All soil samples were collected in the field using the ASTM E1727 sample collection method. Results of the testing are summarized on the following pages in parts per million (ppm) along with the attached laboratory analytical reports.

Lead Results

EPA guidelines for lead in soil recommend abatement of soil containing 5,000 ppm lead or greater and establishment of interim controls (ie. barriers to public access) at concentrations of 400 ppm or greater. For areas inaccessible to the public, interim controls are recommended at soil lead levels of 2,000 ppm or greater.

Soil samples identified as number three, four and five collected on the Staten Island, NY side indicated lead in soil concentrations above the EPA guideline of 400 ppm for areas accessible to the public. The three samples identified as samples eight, nine and ten collected on the Bayonne also indicated lead concentrations above this guideline.

Arsenic Results

The EPA has not established an action level for clean-up of arsenic contaminated soil at this time. The NYS DEC has established clean-up objectives for arsenic contaminated soils in residential areas at concentrations of 16 ppm or higher. The NJ DEP has similar recommendations for residential areas when arsenic in soil levels are 20 ppm or higher. The four samples collected on the Staten Island side of the bridge indicated non-detectable concentration of arsenic or less than 5 ppm and were below the NYS DEC criteria of 16 ppm.

The three samples collected on the Bayonne side of the bridge indicated arsenic in soil concentrations of 17 ppm or less. The results were below the NJ DEP threshold level of 20 ppm for residential areas.

PCB Results

The NYS DEC clean-up objective for PCB contaminated soils in residential areas is 1 ppm or higher. The NJ DEP has established a clean-up criteria for PCB contaminated soils in residential areas at concentrations of 2 ppm and higher. The samples identified as numbers one, two and three collected on the Staten Island side of the bridge indicated non- detectable amounts of PCBs or less than 0.021 ppm. Sample numbers four and five collected on the NY side indicated PCB in surface soil concentrations at 0.139 ppm 0r less. The results were below the NYS DEC threshold value of 1 ppm. The three samples collected on the NJ side of the bridge indicated PCB in soil concentrations of 0.225 ppm or less. These results were below the NJ DEP threshold level for residential areas of 2 ppm.

Conclusion

These results indicate only slightly elevated levels of lead in surface soil contamination in the eight locations tested on the Bayonne, NJ and Staten Island, NY side of the bridge. The results also show only minor amounts of surface soil PCB and arsenic contamination. The detectable levels found were all below the clean-up criteria established for these materials by the NJ DEP and NYS DEP respectively. However since detectable levels of arsenic were found in the soil samples collected on the Bayonne NJ side, you may want to consider collecting additional soil samples for arsenic analysis as a precautionary measure. Based these soil sample results lead appears to the material of consequence in the areas tested. Consideration of these pre-project levels should be taken into account when and if any post job soil sampling is performed. Please let me know if you have any questions at this time.

Sincerely,

Adam McGreevy
Sr. Industrial Hygienist

Skanska Kiewit
PANYNJ Contract # AKB-264.039
Bayonne Bridge
Pre-Job Soil Samples

06/21/13

Sample #	Location Description	Lead (ppm)	Arsenic (ppm)	PCB* (ppm)
1	NY side – 1.5 feet south of southwest corner of pier 59 E	397	<5	<.02
2	NY side – 1 foot east of northeast corner of pier 58W	394	<4	<.02
3	NY side – 6 feet north of pier 10S (west)	632	<4	<.021
4	NY side – 11 feet south of pier 7S (west)	671	<4	.139
5	NY side – 11 feet southeast of southeast corner of pier 3S (east)	823	<4	.76
8	NJ side – 25 feet southeast of pier 12N	628	17	<.02
9	NJ side – 20 feet southwest of pier 12N	1,289	10	.225
10	NJ side – inside park @ fence; between piers 3N and 4N	680	5	.187

*Detected in the form of Aroclor 1254

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LABORATORY ANALYSIS REPORT

ACCOUNT #: 213-13-30592
CLIENT: LEIGHTON ASSOCIATES
ADDRESS: 70-20 AUSTIN ST STE 115
FOREST HILLS, NY 11375
PROJECT NAME: SKANSKA
JOB LOCATION: Bayonne Bridge
PROJECT NO.:
PO NO.:

DATE COLLECTED: 6/21/2013
DATE RECEIVED: 6/24/2013
DATE ANALYZED: 6/25/2013
DATE REPORTED: 6/25/2013

Sample Type: SOIL

SLI ID: 31929535 **Client ID:** 1 **Description:** NY-1.5ft S Of SW Corner
Date Collected: 6/21/2013 4:00 PM

Analyte	Sample Wt(mg)	Total (µg)*	Conc. (% by wt)	Conc. PPM	Analysis Method	MRL** (µg)
Arsenic (As)	527	2.5	< 0.001	5	EPA 6010C	2.0
Lead (Pb)	527	209.4	0.040	397	EPA 6010C	2.0

SLI ID: 31929536 **Client ID:** 2 **Description:** NY-1ft Of NE Corner
Date Collected: 6/21/2013 4:00 PM

Analyte	Sample Wt(mg)	Total (µg)*	Conc. (% by wt)	Conc. PPM	Analysis Method	MRL** (µg)
Arsenic (As)	512	< 2.0	< 0.001	< 4	EPA 6010C	2.0
Lead (Pb)	512	201.7	0.039	394	EPA 6010C	2.0

SLI ID: 31929537 **Client ID:** 3 **Description:** NY-6ft N Of Pier
Date Collected: 6/21/2013 4:00 PM

Analyte	Sample Wt(mg)	Total (µg)*	Conc. (% by wt)	Conc. PPM	Analysis Method	MRL** (µg)
Arsenic (As)	534	< 2.0	< 0.001	< 4	EPA 6010C	2.0
Lead (Pb)	534	337.4	0.063	632	EPA 6010C	2.0

Total Number of Pages in Report: 2

Results relate only to samples as received by the laboratory.

*Soil samples are tested as received unless noted as "Dried before analysis." Equivalent units: PPM = mg/kg. **MRL=Minimum Reporting Limit. Quality Control data available upon request. Unusual sample conditions, if any, are described. All testing is performed in strict accordance with Schneider Laboratories, Inc. protocol.*

SLI ID: 31929538 **Client ID:** 4 **Description:** NY-11ft S Of Pier

Date Collected: 6/21/2013 4:00 PM

Analyte	Sample Wt(mg)	Total (µg)*	Conc. (% by wt)	Conc. PPM	Analysis Method	MRL** (µg)
Arsenic (As)	517	< 2.0	< 0.001	< 4	EPA 6010C	2.0
Lead (Pb)	517	347.1	0.067	671	EPA 6010C	2.0

SLI ID: 31929539 **Client ID:** 5 **Description:** NY-11ft SE Of SE Corner

Date Collected: 6/21/2013 4:00 PM

Analyte	Sample Wt(mg)	Total (µg)*	Conc. (% by wt)	Conc. PPM	Analysis Method	MRL** (µg)
Arsenic (As)	512	< 2.0	< 0.001	< 4	EPA 6010C	2.0
Lead (Pb)	512	421.2	0.082	823	EPA 6010C	2.0

Analyst: ABISOLA O. KASALI

Total Number of Pages in Report: 2

Results relate only to samples as received by the laboratory.

Reviewed By **Derek L. Jackson, Analyst**

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*Soil samples are tested as received unless noted as "Dried before analysis." Equivalent units: PPM = mg/kg. **MRL=Minimum Reporting Limit. Quality Control data available upon request. Unusual sample conditions, if any, are described. All testing is performed in strict accordance with Schneider Laboratories, Inc. protocol.*

WorkOrderKey
V : \ 961 \ 961558

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Submitting Co.	LEIGHTON ASSOCIATES	Lab Use-WO #	
		Acct #	213
70-30 AUSTIN ST STE 115		Phone #	1-800-269-2284
FOREST HILLS, NY 11375		Fax # & E-mail	1-718-268-6317

Project Name:	SKANSKA	Special Instructions (include requests for special reporting or data packages):	
Project Location:	Bayonne Bridge	* analyze for total lead, arsenic, + PCBs	
Project Number:			
PO Number:		State Of Collection	NY / NJ

Turn Around Time
- ☐ 2 hours*
- ☐ Same day*
- ☑ 1 business day*
- ☐ 2 business day*
- ☐ 3 business days*
- ☐ 5 business days*
- ☐ Full TCLP (10d)
- ☐ Weekend*

* not available for all tests

Schedule rush organics, multi-metals & weekend tests in advance.

Matrix / Sample Type (Select ONE)

All samples on form should be of SAME matrix type. Use additional forms as needed

- ☐ Air
- ☐ Aqueous
- ☐ Bulk
- ☐ Hi-Vol Filter (PM10)
- ☐ Hi-Vol Filter (TSP)
- ☐ Oil
- ☐ Paint
- ☐ Sludge
- ☑ Soil
- ☐ Solid
- ☐ Waste
- ☐ Wastewater
- ☐ Water,Drinking
- ☐ Compliance
- ☐ Wipe
- ☐ Wipe, Composite
- ☐ _____
- ☐ _____

Tests / Analytes (Select ALL that Apply)

Asbestos Air / Fiber Counts
- ☐ PCM (NIOSH 7400)
- ☐ TEM (AHERA)
- ☐ TEM (EPA Level II)
- ☐ _____

Miscellaneous Tests
- ☐ Total Dust (NIOSH 0500)
- ☐ Resp. Dust (NIOSH 0600)
- ☐ Silica - FTIR (NIOSH 7602)
- ☐ Silica - XRD (NIOSH 7500)
- ☐ _____

Asbestos Bulk / Asb ID
- ☐ PLM (EPA 600, 1982)
- ☐ PLM (EPA Point Count)
- ☐ PLM (Qualitative only)
- ☐ NYELAP 198.1/.4/.6
- ☐ CAELAP (EPA Level II)
- ☐ TEM (Qualitative)
- ☐ _____

FOR ASBESTOS AIR: TYPE OF RESPIRATOR USED:

Metals-Total Conc.
- ☑ Lead
- ☐ RCRA Metals
- ☑ arsenic
- ☑ PCBs

Metals-Extract
- ☐ TCLP / Lead
- ☐ TCLP / RCRA Metals
- ☐ TCLP / Full (w/ organics)

Others
- ☐ _____

Sample #	Date Sampled	Time Sampled	Sample Identification (e.g. Employee, SSN, Bldg, Material)	Wipe Area (ft²)	Type[1] A,B,P,E	Time[2] Start	Time[2] Stop	Flow Rate[3] Start	Flow Rate[3] Stop	Total[4] Air Vol
1	6.21		NY - 1.5 ft S of SW							
			corner of Pier 59E							
2	6.21		NY - 1 ft E of NE							
			corner of Pier 58W							
3	6.21		NY - 6 ft N of							
			Pier 10S (west)							
4	6.21		NY - 11 ft S of							
			Pier 7S (west)							
5	6.21		NY - 11 ft SE of							
			SE corner of Pier							
			3S (east)							
						cont'd →				

[1]Type: A=area B=blank P=personal E=excursion [2]Beginning/End of Sample Period [3]Pump Calibration in Liters/Minute [4]Volume in Liters (time in min * flow in L/min)

Sampled by	Relinquished to lab by
NAME Thomas Storck	NAME
SIGNATURE	SIGNATURE
DATE/TIME 6.19.13 1600	DATE/TIME

☐ FX ☐ UPS ☐ USM ☐ HD ☐ DB

☐ Sample return requested ☐ Ambient temp ☐ Ice °C pH Cl ☐ R ☐ S ☐ X

Customer Signature acknowledges that all information provided is correct and agrees to terms and conditions page 2

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LABORATORY ANALYSIS REPORT

ACCOUNT #: 213-13-30590
CLIENT: LEIGHTON ASSOCIATES
ADDRESS: 70-20 AUSTIN ST STE 115
FOREST HILLS NY 11375

DATE COLLECTED: 6/21/2013
DATE RECEIVED: 6/24/2013
DATE ANALYZED: 6/25/2013
DATE REPORTED: 6/25/2013

PROJECT NAME: SKANSKA
JOB LOCATION: Bayonne Bridge
PROJECT NO.:
PO NO.:

Sample Type: SOIL

SLI ID: 31929515 **Client ID:** 8 **Description:** NJ-25ft SE Of Pier 12N
Date Collected: 6/21/2013 4:00 PM

Analyte	Sample Wt(mg)	Total (µg)*	Conc. (% by wt)	Conc. PPM	Analysis Method	MRL** (µg)
Arsenic (As)	524	8.7	0.002	17	EPA 6010C	2.0
Lead (Pb)	524	329.3	0.063	628	EPA 6010C	2.0

SLI ID: 31929516 **Client ID:** 9 **Description:** NJ-20ft SW Of Pier 12N
Date Collected: 6/21/2013 4:00 PM

Analyte	Sample Wt(mg)	Total (µg)*	Conc. (% by wt)	Conc. PPM	Analysis Method	MRL** (µg)
Arsenic (As)	530	5.2	< 0.001	10	EPA 6010C	2.0
Lead (Pb)	530	683.2	0.129	1,289	EPA 6010C	2.0

SLI ID: 31929517 **Client ID:** 10 **Description:** NJ-Inside Park At Fence
Date Collected: 6/21/2013 4:00 PM

Analyte	Sample Wt(mg)	Total (µg)*	Conc. (% by wt)	Conc. PPM	Analysis Method	MRL** (µg)
Arsenic (As)	511	2.7	< 0.001	5	EPA 6010C	2.0
Lead (Pb)	511	347.7	0.068	680	EPA 6010C	2.0

Analyst: ABISOLA O. KASALI
Total Number of Pages in Report: 1
Results relate only to samples as received by the laboratory.

Reviewed By: Derek L. Jackson, Analyst
Visit www.slabinc.com for current certifications.

*Soil samples are tested as received unless noted as "Dried before analysis". Equivalent units: PPM = mg/kg. **MRL=Minimum Reporting Limit. Quality Control data available upon request. Unusual sample conditions, if any, are described. All testing is performed in strict accordance with Schneider Laboratories, Inc. protocol.*

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Submitting Co.	LEIGHTON ASSOCIATES	Lab Use- WO #	
70-20 AUSTIN ST STE 115		Acct #	
FOREST HILLS, NY 11375		213	

Phone # 1-800-269-2284
Fax # & E-mail 1-718-268-6317

Project Name: SKANSKA
Project Location: Bayonne Bridge
Project Number:
PO Number:

Special Instructions (include requests for special reporting or data packages): *analyze for total lead, arsenic, + PCBs

State Of Collection: NY/NJ

Turn Around Time

- ☐ 2 hours*
- ☐ Same day*
- ☑ 1 business day*
- ☐ 2 business day*
- ☐ 3 business days*
- ☐ 5 business days*
- ☐ Full TCLP (10d)
- ☐ Weekend*

* not available for all tests

Schedule rush organics, multi-metals & weekend tests in advance.

Matrix / Sample Type (Select ONE)

All samples on form should be of SAME matrix type. Use additional forms as needed.

- ☐ Air
- ☐ Aqueous
- ☐ Bulk
- ☐ Hi-Vol Filter (PM10)
- ☐ Hi-Vol Filter (TSP)
- ☐ Oil
- ☐ Paint
- ☐ Sludge
- ☑ Soil
- ☐ Solid
- ☐ Waste
- ☐ Wastewater
- ☐ Water,Drinking
- ☐ Compliance
- ☐ Wipe
- ☐ Wipe, Composite
- ☐ _____
- ☐

Tests / Analytes (Select ALL that Apply)

Asbestos Air / Fiber Counts
- ☐ PCM (NIOSH 7400)
- ☐ TEM (AHERA)
- ☐ TEM (EPA Level II)
- ☐

Miscellaneous Tests
- ☐ Total Dust (NIOSH 0500)
- ☐ Resp. Dust (NIOSH 0600)
- ☐ Silica - FTIR (NIOSH 7602)
- ☐ Silica - XRD (NIOSH 7500)
- ☐

Asbestos Bulk / Asb ID
- ☐ PLM (EPA 600, 1982)
- ☐ PLM (EPA Point Count)
- ☐ PLM (Qualitative only)
- ☐ NYELAP 198.1/4/6
- ☐ CARB AP (EPA Interim)
- ☐ TEM (Chatfield)
- ☐

FOR ASBESTOS AIR: TYPE OF RESPIRATOR USED:

Metals-Total Conc.
- ☑ Lead
- ☐ RCRA Metals
- ☑ arsenic
- ☑ PCBs

Metals-Extract
- ☐ TCLP / Lead
- ☐ TCLP / RCRA Metals
- ☐ TCLP / Full (w/ organics)

Others
- ☐

Sample #	Date Sampled	Time Sampled	Sample Identification (e.g. Employee, SSN, Bldg. Material)	Wiped Area (ft²)	Type[1] A,B,P,E	Time[2] Start	Time[2] Stop	Flow Rate[3] Start	Flow Rate[3] Stop	Total[4] Air Vol
8	6.21		NJ - 25ft SE of							
			Pier 12N							
9	6.21		NJ - 20ft SW							
			of Pier 12N							
10	6.21		NJ - Inside perim							
			at fence, between							
			Piers 3N + 4N,							
			29ft South of							
			fence corner, near							
			NW corner of							
			volley ball court							

[1]Type: A=area B=blank P=personal E=excursion [2]Beginning/End of Sample Period [3]Pump Calibration in Liters/Minute [4]Volume in Liters [time in min * flow in L/min]

Sampled by
NAME Thomas Storck
SIGNATURE
DATE/TIME 6.19.13 1600

Relinquished to lab by
NAME
SIGNATURE
DATE/TIME

☑ FX
☐ UPS
☐ USM
☐ HD
☐ DB

WB: 245

☐ Sample return requested ☐ Ambient temp ☐ Ice °C pH Cl ☐ S ☐ X Chain of Custody signature acknowledges acceptance of Lab Terms and conditions page 2

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LABORATORY ANALYSIS REPORT

Account:	213-13-30593	Date/Time Collected:	06/21/2013	4:00 PM
Client:	LEIGHTON ASSOCIATES	Date/Time Received:	06/24/2013	9:10 AM
Address:	70-20 AUSTIN ST STE 115 FOREST HILLS, NY 11375	Date Reported:	06/25/2013	
		Receipt Temp., °C:		
Project Name:	SKANSKA	Sample Matrix:	SOIL	
Project No.:				
Job Location:	Bayonne Bridge			
P.O.#:				
Sample Description:	NY-1.5ft S Of SW Corner	SLI Sample No.:	31929545	
		Client Sample No.:	1	

Analyte	Analysis Result	Quantitation Limit	Units	Dilution Factor	Analysis Date/Time	Analyst
Polychlorinated Biphenyls based on SW846 8082						
Aroclor - 1016	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1221	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1232	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1242	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1248	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1254	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1260	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1268	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1262	BQL	20	µg/kg	1	06/25/2013	APS

Polychlorinated Biphenyls based on SW846 8082 – Surrogate Recoveries

Surrogate	Recovery
DCB	90%
TCMX	46%

All samples for organics testing should be shipped in cool conditions, 1 to 6°C. Quality Control Data available upon request. Sample concentrations below the Quantitation Limit are noted as BQL (Below Quantitation Limit) or ND (None Detected) or with a "less than" (<) sign. Values designated with a "B" indicate presence of the analyte in the laboratory blank at a concentration above the Quantitation Limit. Surrogate Spike results designated with "D" indicate that the analyte was diluted out. "MI" indicates matrix interference. Soil results are reported on a dry weight basis. Results relate only to samples as received by the laboratory. Unusual sample conditions, if any, are described. All testing is done in strict accordance with SLI. protocol. Visit www.slabinc.com for current certifications.

Sample Description: NY-1ft Of NE Corner

SLI Sample No.: 31929546
Client Sample No.: 2

Analyte	Analysis Result	Quantitation Limit	Units	Dilution Factor	Analysis Date/Time	Analyst
Polychlorinated Biphenyls based on SW846 8082						
Aroclor - 1016	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1221	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1232	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1242	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1248	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1254	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1260	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1268	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1262	BQL	20	µg/kg	1	06/25/2013	APS

Polychlorinated Biphenyls based on SW846 8082 -- Surrogate Recoveries

Surrogate	Recovery
DCB	90%
TCMX	48%

Sample Description: NY-6ft N Of Pier

SLI Sample No.: 31929547
Client Sample No.: 3

Analyte	Analysis Result	Quantitation Limit	Units	Dilution Factor	Analysis Date/Time	Analyst
Polychlorinated Biphenyls based on SW846 8082						
Aroclor - 1016	BQL	21	µg/kg	1	06/25/2013	APS
Aroclor - 1221	BQL	21	µg/kg	1	06/25/2013	APS
Aroclor - 1232	BQL	21	µg/kg	1	06/25/2013	APS
Aroclor - 1242	BQL	21	µg/kg	1	06/25/2013	APS
Aroclor - 1248	BQL	21	µg/kg	1	06/25/2013	APS
Aroclor - 1254	BQL	21	µg/kg	1	06/25/2013	APS
Aroclor - 1260	BQL	21	µg/kg	1	06/25/2013	APS
Aroclor - 1268	BQL	21	µg/kg	1	06/25/2013	APS
Aroclor - 1262	BQL	21	µg/kg	1	06/25/2013	APS

Polychlorinated Biphenyls based on SW846 8082 -- Surrogate Recoveries

Surrogate	Recovery
DCB	83%
TCMX	48%

All samples for organics testing should be shipped in cool conditions, 1 to 6°C. Quality Control Data available upon request. Sample concentrations below the Quantitation Limit are noted as BQL (Below Quantitation Limit) or ND (None Detected) or with a "less than" (<) sign. Values designated with a "B" indicate presence of the analyte in the laboratory blank at a concentration above the Quantitation Limit. Surrogate Spike results designated with "D" indicate that the analyte was diluted out. "MI" indicates matrix interference. Soil results are reported on a dry weight basis. Results relate only to samples as received by the laboratory. Unusual sample conditions, if any, are described. All testing is done in strict accordance with SLI. protocol. Visit www.slabinc.com for current certifications.

Sample Description: NY-11ft S Of Pier

SLI Sample No.: 31929548
Client Sample No.: 4

Analyte	Analysis Result	Quantitation Limit	Units	Dilution Factor	Analysis Date/Time	Analyst
Polychlorinated Biphenyls based on SW846 8082						
Aroclor - 1016	BQL	24	µg/kg	1	06/25/2013	APS
Aroclor - 1221	BQL	24	µg/kg	1	06/25/2013	APS
Aroclor - 1232	BQL	24	µg/kg	1	06/25/2013	APS
Aroclor - 1242	BQL	24	µg/kg	1	06/25/2013	APS
Aroclor - 1248	BQL	24	µg/kg	1	06/25/2013	APS
Aroclor - 1254	139	24	µg/kg	1	06/25/2013	APS
Aroclor - 1260	BQL	24	µg/kg	1	06/25/2013	APS
Aroclor - 1268	BQL	24	µg/kg	1	06/25/2013	APS
Aroclor - 1262	BQL	24	µg/kg	1	06/25/2013	APS

Polychlorinated Biphenyls based on SW846 8082 – Surrogate Recoveries

Surrogate	Recovery
DCB	70%
TCMX	48%

Sample Description: NY-11ft SE Of SE Corner

SLI Sample No.: 31929549
Client Sample No.: 5

Analyte	Analysis Result	Quantitation Limit	Units	Dilution Factor	Analysis Date/Time	Analyst
Polychlorinated Biphenyls based on SW846 8082						
Aroclor - 1016	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1221	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1232	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1242	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1248	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1254	76	20	µg/kg	1	06/25/2013	APS
Aroclor - 1260	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1268	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1262	BQL	20	µg/kg	1	06/25/2013	APS

Polychlorinated Biphenyls based on SW846 8082 – Surrogate Recoveries

Surrogate	Recovery
DCB	54%
TCMX	54%

All samples for organics testing should be shipped in cool conditions, 1 to 6°C. Quality Control Data available upon request. Sample concentrations below the Quantitation Limit are noted as BQL (Below Quantitation Limit) or ND (None Detected) or with a "less than" (<) sign. Values designated with a "B" indicate presence of the analyte in the laboratory blank at a concentration above the Quantitation Limit. Surrogate Spike results designated with "D" indicate that the analyte was diluted out. "MI" indicates matrix interference. Soil results are reported on a dry weight basis. Results relate only to samples as received by the laboratory. Unusual sample conditions, if any, are described. All testing is done in strict accordance with SLI protocol. Visit www.slabinc.com for current certifications.

Reviewed By: Bernard H. Howard, Supervisor

All samples for organics testing should be shipped in cool conditions, 1 to 6°C. Quality Control Data available upon request. Sample concentrations below the Quantitation Limit are noted as BQL (Below Quantitation Limit) or ND (None Detected) or with a "less than" (<) sign. Values designated with a "B" indicate presence of the analyte in the laboratory blank at a concentration above the Quantitation Limit. Surrogate Spike results designated with "D" indicate that the analyte was diluted out. "MI" indicates matrix interference. Soil results are reported on a dry weight basis. Results relate only to samples as received by the laboratory. Unusual sample conditions, if any, are described. All testing is done in strict accordance with SLI. protocol. Visit www.slabinc.com for current certifications.

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2512 West Cary Street, Richmond, Virginia 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475
www.slabinc.com e-mail: info@slabinc.com

WO Labi WorkOrderKey V : \ 961 \ 961559

Submitting Co.	LEIGHTON ASSOCIATES	Lab Use-WO #	
70-20 AUSTIN ST STE 115		Acct #	213
FOREST HILLS, NY 11375		Phone # / Fax # & E-mail	1-800-269-2284 / 1-718-268-6317

Project Name: SKANSKA
Project Location: Bayonne Bridge
Project Number:
PO Number:

Special Instructions (include requests for special reporting or data packages): *analyze for total lead, arsenic, + PCBs

State Of Collection: NY / NJ

Turn Around Time
- ☐ 2 hours*
- ☐ Same day*
- ☑ 1 business day*
- ☐ 2 business day*
- ☐ 3 business days*
- ☐ 5 business days*
- ☐ Full TCLP (10d)
- ☐ Weekend*

* not available for all tests

Schedule rush organics, multi-metals & weekend tests in advance.

Matrix / Sample Type (Select ONE)

All samples on form should be of SAME matrix type. Use additional forms as needed.

- ☐ Air
- ☐ Aqueous
- ☐ Bulk
- ☐ Hi-Vol Filter (PM10)
- ☐ Hi-Vol Filter (TSP)
- ☐ Oil
- ☐ Paint
- ☐ Sludge
- ☑ Soil
- ☐ Solid
- ☐ Waste
- ☐ Wastewater
- ☐ Water, Drinking
- ☐ Compliance
- ☐ Wipe
- ☐ Wipe, Composite
- ☐ _____

Tests / Analytes (Select ALL that Apply)

Asbestos Air Fiber Counting
- ☐ PCM (NIOSH 7400)
- ☐ TEM (AHERA)
- ☐ TEM (EPA Level II)
- ☐

Miscellaneous Tests
- ☐ Total Dust (NIOSH 0500)
- ☐ Resp. Dust (NIOSH 0600)
- ☐ Silica - FTIR (NIOSH 7602)
- ☐ Silica - XRD (NIOSH 7500)

Asbestos Bulk / Asb ID
- ☐ PLM (EPA 600, 1982)
- ☐ PLM (EPA Point Count)
- ☐ PLM (Qualitative only)
- ☐ NYELAP 198.1/4/6
- ☐ CARLAP (EPA Interim)
- ☐ TEM (Chatfield)
- ☐

FOR ASBESTOS AIR: TYPE OF RESPIRATOR USED:

Metals-Total Conc.
- ☑ Lead
- ☐ RCRA Metals
- ☑ arsenic
- ☑ PCBs

Metals-Extract
- ☐ TCLP / Lead
- ☐ TCLP / RCRA Metals
- ☐ TCLP / Full (w/ organics)

Others
- ☐

Sample #	Date Sampled	Time Sampled	Sample Identification (e.g. Employee, SSN, Bldg, Material)	Wipe Area (in²)	Type[1] A,B,P,E	Time[2] Start	Time[2] Stop	Flow Rate[3] Start	Flow Rate[3] Stop	Total[4] Air Vol
1	6.21		NY - 1.5 ft S of SW							
			corner of Pier 59E							
2	6.21		NY - 1 ft E of NE							
			corner of Pier 58W							
3	6.21		NY - 6 ft N of							
			Pier 10S (west)							
4	6.21		NY - 11 ft S of							
			Pier 7S (west)							
5	6.21		NY - 11 ft SE of							
			SE corner of Pier							
			3S (east)							

cont'd →

[1]Type: A=area B=blank P=personal E=execution [2]Beginning/End of Sample Period [3]Pump Calibrator in Liters/Minute [4]Volume in Liters (min x flow in L/min)

Sampled by
NAME Thomas Storck
SIGNATURE
DATE/TIME 6.19.12 1600

Relinquished to lab by
NAME
SIGNATURE
DATE/TIME

☐ FX ☐ UPS ☐ USM ☐ HD ☐ DB

WB 215

☐ Sample return requested ☐ Ambient temp ☐ Ice °C pH Cl ☐ PES ☑ Chain of custody completed properly with all forms and containers?

SCHNEIDER LABORATORIES GLOBAL

INCORPORATED

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • (Fax) 804-359-1475

Over 25 Years of Excellence in Service and Technology

AIHA/ELLAP 100527, ISO/IEC 17025, NVLAP 101150-0, NYELAP 11413, VELAP/NELAC 460135

LABORATORY ANALYSIS REPORT

Account:	213-13-30591	Date/Time Collected:	06/21/2013	4:00 PM
Client:	LEIGHTON ASSOCIATES	Date/Time Received:	06/24/2013	9:10 AM
Address:	70-20 AUSTIN ST STE 115 FOREST HILLS, NY 11375	Date Reported:	06/25/2013	
		Receipt Temp. °C		
Project Name:	SKANSKA	Sample Matrix:	SOIL	
Project No.:				
Job Location:	Bayonne Bridge			
P.O.#:				
Sample Description:	NJ-25ft SE Of Pier 12N	SLI Sample No.:	31929522	
		Client Sample No.:	8	

Analyte	Analysis Result	Quantitation Limit	Units	Dilution Factor	Analysis Date/Time	Analyst
Polychlorinated Biphenyls based on SW846 8082						
Aroclor - 1016	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1221	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1232	BQL	20	ug/kg	1	06/25/2013	APS
Aroclor - 1242	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1248	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1254	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1260	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1268	BQL	20	µg/kg	1	06/25/2013	APS
Aroclor - 1262	BQL	20	µg/kg	1	06/25/2013	APS

Polychlorinated Biphenyls based on SW846 8082 -- Surrogate Recoveries

Surrogate	Recovery
DCB	94%
TCMX	42%

All samples for organics testing should be shipped in cool conditions, 1 to 6°C. Quality Control Data available upon request. Sample concentrations below the Quantitation Limit are noted as BQL (Below Quantitation Limit) or ND (None Detected) or with a "less than" (<) sign. Values designated with a "B" indicate presence of the analyte in the laboratory blank at a concentration above the Quantitation Limit. Surrogate Spike results designated with "D" indicate that the analyte was diluted out. "MI" indicates matrix interference. Soil results are reported on a dry weight basis. Results relate only to samples as received by the laboratory. Unusual sample conditions, if any, are described. All testing is done in strict accordance with SLI protocol. Visit www.slabinc.com for current certifications.

Sample Description: NJ-20ft SW Of Pier 12N

SLI Sample No.: 31929523
Client Sample No.: 9

Analyte	Analysis Result	Quantitation Limit	Units	Dilution Factor	Analysis Date/Time	Analyst
Polychlorinated Biphenyls based on SW846 8082						
Aroclor - 1016	BQL	22	µg/kg	1	06/25/2013	APS
Aroclor - 1221	BQL	22	µg/kg	1	06/25/2013	APS
Aroclor - 1232	BQL	22	µg/kg	1	06/25/2013	APS
Aroclor - 1242	BQL	22	µg/kg	1	06/25/2013	APS
Aroclor - 1248	BQL	22	µg/kg	1	06/25/2013	APS
Aroclor - 1254	225	22	µg/kg	1	06/25/2013	APS
Aroclor - 1260	BQL	22	µg/kg	1	06/25/2013	APS
Aroclor - 1268	BQL	22	µg/kg	1	06/25/2013	APS
Aroclor - 1262	BQL	22	µg/kg	1	06/25/2013	APS

Polychlorinated Biphenyls based on SW846 8082 -- Surrogate Recoveries

Surrogate	Recovery
DCB	116%
TCMX	48%

Sample Description: NJ-Inside Park At Fence

SLI Sample No.: 31929524
Client Sample No.: 10

Analyte	Analysis Result	Quantitation Limit	Units	Dilution Factor	Analysis Date/Time	Analyst
Polychlorinated Biphenyls based on SW846 8082						
Aroclor - 1016	BQL	21	µg/kg	1	06/25/2013	APS
Aroclor - 1221	BQL	21	µg/kg	1	06/25/2013	APS
Aroclor - 1232	BQL	21	µg/kg	1	06/25/2013	APS
Aroclor - 1242	BQL	21	µg/kg	1	06/25/2013	APS
Aroclor - 1248	BQL	21	µg/kg	1	06/25/2013	APS
Aroclor - 1254	187	21	µg/kg	1	06/25/2013	APS
Aroclor - 1260	BQL	21	µg/kg	1	06/25/2013	APS
Aroclor - 1268	BQL	21	µg/kg	1	06/25/2013	APS
Aroclor - 1262	BQL	21	µg/kg	1	06/25/2013	APS

Polychlorinated Biphenyls based on SW846 8082 -- Surrogate Recoveries

Surrogate	Recovery
DCB	102%
TCMX	48%

All samples for organics testing should be shipped in cool conditions, 1 to 6°C. Quality Control Data is available upon request. Sample concentrations below the Quantitation Limit are noted as BQL (Below Quantitation Limit) or ND (None Detected) or with a "less than" (<) sign. Values designated with a "B" indicate presence of the analyte in the laboratory blank at a concentration above the Quantitation Limit. Surrogate Spike results designated with "D" indicate that the analyte was diluted out. "MI" indicates matrix interference. Soil results are reported on a dry weight basis. Results relate only to samples as received by the laboratory. Unusual sample conditions, if any, are described. All testing is done in strict accordance with SLI protocol. Visit www.slabinc.com for current certifications.

Reviewed By: Bernard H. Howard, Supervisor

All samples for organics testing should be shipped in cool conditions, 1 to 6°C. Quality Control Data available upon request. Sample concentrations below the Quantitation Limit are noted as BQL (Below Quantitation Limit) or ND (None Detected) or with a "less than" (<) sign. Values designated with a "B" indicate presence of the analyte in the laboratory blank at a concentration above the Quantitation Limit. Surrogate Spike results designated with "D" indicate that the analyte was diluted out. "MI" indicates matrix interference. Soil results are reported on a dry weight basis. Results relate only to samples as received by the laboratory. Unusual sample conditions, if any, are described. All testing is done in strict accordance with SLI. protocol. Visit www.slabinc.com for current certifications.

SCHNEIDER LABORATORIES, INC.

2512 West Cary Street, Richmond, Virginia 23220-5[illegible]7
804-353-6778 • 800-765-LABS (5227) • Fax 804-359-[illegible]75
www.slabinc.com e-mail: info@slabinc.com

WorkOrderKey
V: 1961 \ 961561

Submitting Co.	LEIGHTON ASSOCIATES	Lab Use-WO #	
70-20 AUSTIN ST STE 115		Acct #	
FOREST HILLS, NY 11375			213
Phone #	1-800-269-2284		
Fax # & E-mail	1-718-268-6317		

Project Name: SKANSKA
Project Location: Bayonne Bridge
Project Number:
PO Number:

Special Instructions (include requests for special reporting or data packages): *analyze for total lead, arsenic, + PCBs

State Of Collection: NY, NJ

Turn Around Time: ☐ 2 hours* ☐ Same day* ☑ 1 business day* ☐ 2 business day* ☐ 3 business days* ☐ 5 business days* ☐ Full TCLP (10d) ☐ Weekend* — * not available for all tests. Schedule run organics, multi-metals & weekend tests in advance.

Matrix / Sample Type (Select ONE): All samples on form should be of SAME matrix type. Use additional forms as needed.
☐ Air ☐ Solid ☐ Aqueous ☐ Waste ☐ Bulk ☐ Wastewater ☐ Hi-Vol Filter (PM10) ☐ Water, Drinking ☐ Hi-Vol Filter (TSP) ☐ Compliance ☐ Oil ☐ Wipe ☐ Paint ☐ Wipe, Composite ☐ Sludge ☐ _____ ☑ Soil ☐

Tests / Analytes (Select all that Apply):

Asbestos Air / Fiber Count: ☐ PCM (NIOSH 7400) ☐ TEM (AHERA) ☐ TEM (EPA Level II) ☐

Asbestos Bulk / Asb ID: ☐ PLM (EPA 600, 1993) ☐ PLM (EPA Point Count) ☐ PLM (Qualitative only) ☐ NYELAP 198.1/.4/.6 ☐ CAELAP (EPA Interim) ☐ TEM (Chatfield) ☐

Miscellaneous Tests: ☐ Total Dust (NIOSH 0500) ☐ Resp. Dust (NIOSH 0500) ☐ Silica - FTIR (NIOSH 7602) ☐ Silica - XRD (NIOSH 7500) ☐

FOR ASBESTOS ONLY: TYPE OF RESPIRATOR USED:

Metals-Total Conc.: ☑ Lead ☐ RCRA Metals ☑ arsenic ☑ PCBs

Metals-Extract: ☐ TCLP / Lead ☐ TCLP / RCRA Metals ☐ TCLP (Full Vol organics)

Others: ☐

Sample #	Date Sampled	Time Sampled	Sample Identification (e.g. Employee, SSN, Bldg, Material)	Wiped Area (ft²)	Type[1] (A,B,P,E)	Time[2] Start	Time[2] Stop	Flow Rate[3] Start	Flow Rate[3] Stop	Total[4] Air Vol
8	6.21		NJ - 25ft SE of							
			Pier 12N							
9	6.21		NJ - 20ft SW							
			of Pier 12N							
10	6.21		NJ - Inside park							
			at fence, between							
			Piers 3N + 4N,							
			29 ft South of							
			fence corner, near							
			NW corner of							
			volley ball court							

[1]Type: A=area B=blank P=personal E=execution [2]Beginning/End of Sample Period [3]Sample Rate in Liters/Minute [4]Total Air Volume (Flow Rate * Time in L/min)

Sampled by
NAME: Thomas Storck
SIGNATURE:
DATE/TIME: 6.19.13 1600

Relinquished to lab by
NAME:
SIGNATURE:
DATE/TIME:

☐ FX ☐ UPS ☐ USM ☐ HD ☐ DB

WB: 245

☐ Sample return requested ☐ Ambient temp ☐ Ice °C pH Cl ☐ N ☐ S ☐ X

By signing this form you agree to our terms and conditions page 2.

LEIGHTON
ASSOCIATES, INC.
ENVIRONMENTAL HEALTH & SAFETY
CONSULTANTS & TRAINERS

July 16, 2013

Mr. John Pouso
Skanska Kiewit
400 Roosevelt Avenue
Carteret, NJ 07008

RE: Contract # AKB-264.039

Mr. John Pouso:

As requested, on July 1, 2013 we collected pre-job ground water samples from four excavation wells located at the Bayonne Bridge Replacement of Main Span project. Water samples were collected from two wells located on the Staten Island, NY side of the bridge and from two wells located on the NJ side of the bridge. Three water samples were collected at each well for a total of twelve water samples. The samples were sent to Schneider Laboratories, Inc. and for each well one sample was analyzed for total concentrations of semi-volatile organic compounds (SVOCs), one for volatile organic compounds (VOCs) and one for the eight RCRA metals.

Attached with this report are the laboratory analytical data sheets. The SVOC and VOC results are reported in micrograms per liter (µg/l) which is equivalent to parts per billion (ppb). The results for the RCRA metals are reported in milligrams per liter (mg/l) which is equivalent to parts per million (ppm).

Well # 1

This well was identified as being located on the NY side of the bridge between pillars 8S and 7S. The groundwater level from the surface was measured at seven feet four inches deep. As you can see from the attached laboratory reports, the sample collected for SVOCs indicated non-detectable for all of the SVOC compounds or below the laboratory quantitation limit of 10 ppb. For the VOC sample, the results were non-detectable or below the quantitation limit of 5 ppb for the all of the VOC compounds analyzed. The results for the RCRA metal sample indicated a total concentration of barium of 0.07 ppm. The results were non-detectable or below the laboratory detection limit for the other seven metals.

CORPORATE HEADQUARTERS
70-20 Austin Street, Suite 115, Forest Hills, New York 11375 Tel: 718-268-6314 Fax: 718-268-6317
LeightonAssociates.com

Well # 2

This well was identified as being located on the NY side of the bridge between pillars 6S and 7S. The groundwater level from the surface was measured at four feet eight inches deep. The sample collected for SVOCs indicated non-detectable for all of the SVOC compounds or below the laboratory quantitation limit of 10 ppb. For the VOC sample, the results were non-detectable or below the quantitation limit of 5 ppb for the all of the VOC compounds analyzed. The results for the RCRA metal sample indicated detectable concentrations of barium and lead at 0.22 ppm and 0.11 ppm, respectively. The results were non-detectable or below the laboratory detection limit for the other six RCRA metals.

Well # 3

This well was identified as being located on the NJ side of the bridge between pillars 4N and 3N. The groundwater level from the surface was measured at four feet five inches deep. The sample collected for SVOCs indicated non-detectable for all of the SVOC compounds or below the laboratory quantitation limit of 10 ppb. For the VOC sample, the results were non-detectable or below the quantitation limit of 5 ppb for the all of the VOC compounds analyzed. The results for the RCRA metal sample indicated detectable concentrations of barium and lead at 0.26 ppm and 0.46 ppm, respectively. The results were non-detectable or below the laboratory detection limit for the other six RCRA metals.

Well # 4

This well was identified as being located on the NJ side of the bridge between pillars 2N and 3N. The groundwater level from the surface was measured at six feet zero inches deep. The sample collected for SVOCs indicated non-detectable for all of the SVOC compounds or below the laboratory quantitation limit of 10 ppb. For the VOC sample, the results were non-detectable or below the quantitation limit of 5 ppb for the all of the VOC compounds analyzed. The results for the RCRA metal sample indicated detectable concentrations of barium and lead at 0.12 ppm and 0.59 ppm, respectively. The results were non-detectable or below the laboratory detection limit for the other six RCRA metals.

Please let me know if you any questions at this time.

Sincerely,

Adam McGreevy
Sr. Industrial Hygienist

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone: (856) 303-2500 Fax: (856) 858-4571 Email: jsmith@emsl.com

Attn: **John Pouso**
Skanska Koch
400 Roosevelt Avenue
Carteret, NJ 07008

Phone: (732) 969-1700
Fax: (732) 969-0197

7/11/2013

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 7/9/2013. The results are tabulated on the attached data pages for the following client designated project:

Bayonne Bridge

The reference number for these samples is EMSL Order #011303099. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Reviewed and Approved By:

Julie Smith - Laboratory Director

The test results contained within this report meet the requirements of NELAC and/or the specific certification program that is applicable, unless otherwise noted.
NELAP Certifications: NJ 03036, NY 10872, PA 68-00367

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The QC data associated with the sample results meet the recovery and precision requirements established by the NELAP, unless specifically indicated. All results for soil samples are reported on a dry weight basis, unless otherwise noted. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (856) 303-2500 / (856) 858-4571
http://www.emsl.com jsmith@emsl.com

EMSL Order:	011303099
CustomerID:	SKNJ25
CustomerPO:	012100-JP
ProjectID:	

Attn: **John Pouso**
Skanska Koch
400 Roosevelt Avenue
Carteret, NJ 07008

Phone:	(732) 969-1700
Fax:	(732) 969-0197
Received:	07/09/13 9:00 AM
Collected:	7/8/2013

Project: **Bayonne Bridge**

Analytical Results

Client Sample Description 012100-07082013 ***Collected:*** 7/8/2013 ***Lab ID:*** *0001*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
SM 2540G	Total Solids	91	N/A	%	7/10/2013	AA	7/11/2013	MM
3550B/8082A	Aroclor-1016	ND	18	µg/Kg	7/10/2013	AB	7/11/2013	EH
3550B/8082A	Aroclor-1221	ND	18	µg/Kg	7/10/2013	AB	7/11/2013	EH
3550B/8082A	Aroclor-1232	ND	18	µg/Kg	7/10/2013	AB	7/11/2013	EH
3550B/8082A	Aroclor-1242	ND	18	µg/Kg	7/10/2013	AB	7/11/2013	EH
3550B/8082A	Aroclor-1248	ND	18	µg/Kg	7/10/2013	AB	7/11/2013	EH
3550B/8082A	Aroclor-1254	ND	18	µg/Kg	7/10/2013	AB	7/11/2013	EH
3550B/8082A	Aroclor-1260	ND	18	µg/Kg	7/10/2013	AB	7/11/2013	EH
3550B/8082A	Aroclor-1262	ND	18	µg/Kg	7/10/2013	AB	7/11/2013	EH
3550B/8082A	Aroclor-1268	ND	18	µg/Kg	7/10/2013	AB	7/11/2013	EH
6010C	Arsenic	2.7	2.0	mg/Kg	7/9/2013	JS	7/10/2013	BE
6010C	Lead	8.8	2.0	mg/Kg	7/9/2013	JS	7/10/2013	BE
8015B	Diesel Range Organics	1300	370	mg/Kg	7/10/2013	AB	7/11/2013	EA
8015B	Gasoline Range Organics	ND	1.1	mg/Kg	7/10/2013	EA	7/10/2013	EA

Definitions:

ND - indicates that the analyte was not detected at the reporting limit
RL - Reporting Limit

SKANSKA KIEWIT

Attachment C

In-Situ Sampling Plan and Analytical Criteria

Appendix A

SL 100
1/06

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Materials Engineering

Boring Report

Project	Bayonne Bridge Arsenic Site	**Contractor**	Craig	**Boring No.**	PA-MW-16	**Date**	1/9/12
Location	PA-MW-16	**Contract No.**	426-11-014	**Surface Elev.**			
Spoon	2" O.D. 1.375" I.D.	**Hammer/ Fall (in.)**	140 lbs./30"	**Ground Water Level**			
Hammer Type	Safety	**Hole Type**	A Monitor Well	Date	Time	Depth (ft)	Remarks
Inspector	B. Ouimet			1/9/12	1:55pm	2.0	
Driller	M. Gorski			1/10/12	7:25am	2.0	Before well installation
site_code							

Sample No.	Start Depth (ft)	End Depth (ft)	Method	Spoon Blows/6"	Re-cov'd	PID Reading	Sample Description and Remarks
01	0.0	2.0	HA	Hand Auger	Full	0.0	Fill: light grey fine Gravel and c-f Sand, trace Silt
02	2.0	4.0	HA	Hand Auger	Full	0.0	Fill: brown c-f Sand and fine Gravel, little Silt, with sheen
03	4.0	6.0	HA	Hand Auger	Full	0.0	Fill: brown grey c-f Sand and Silt, little f Gravel, with wood fibers
	6.0						Change of Strata
04	6.0	8.0	SS	4-5-8-8	14"	0.0	Fill: grey brown Silty Clay, some c-f Sand, little f Gravel
05	8.0	10.0	SS	19-20-13-16	16"	0.0	Fill: light grey Silt, little f Sand, trace f Gravel, mottled
	10.0						Bottom of Boring
							Monitoring well installed to 8.0 feet
							Note: Concrete to 1.0 feet re-enforced with rebar

SL 102
1/06

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Materials Engineering

Well Installation Report

PROJECT: Bayonne Bridge Arsenic Site		**CONTRACT NO.** 426-11-014	
LOCATION: PA-MW-16		**CONTRACTOR** Craig	
WELL NO. PA-MW-16	**WELL TYPE** A		**DATE:** 1/10/12
DRILLER: M. Gorski		**INSPECTOR:** B. Ouimet	

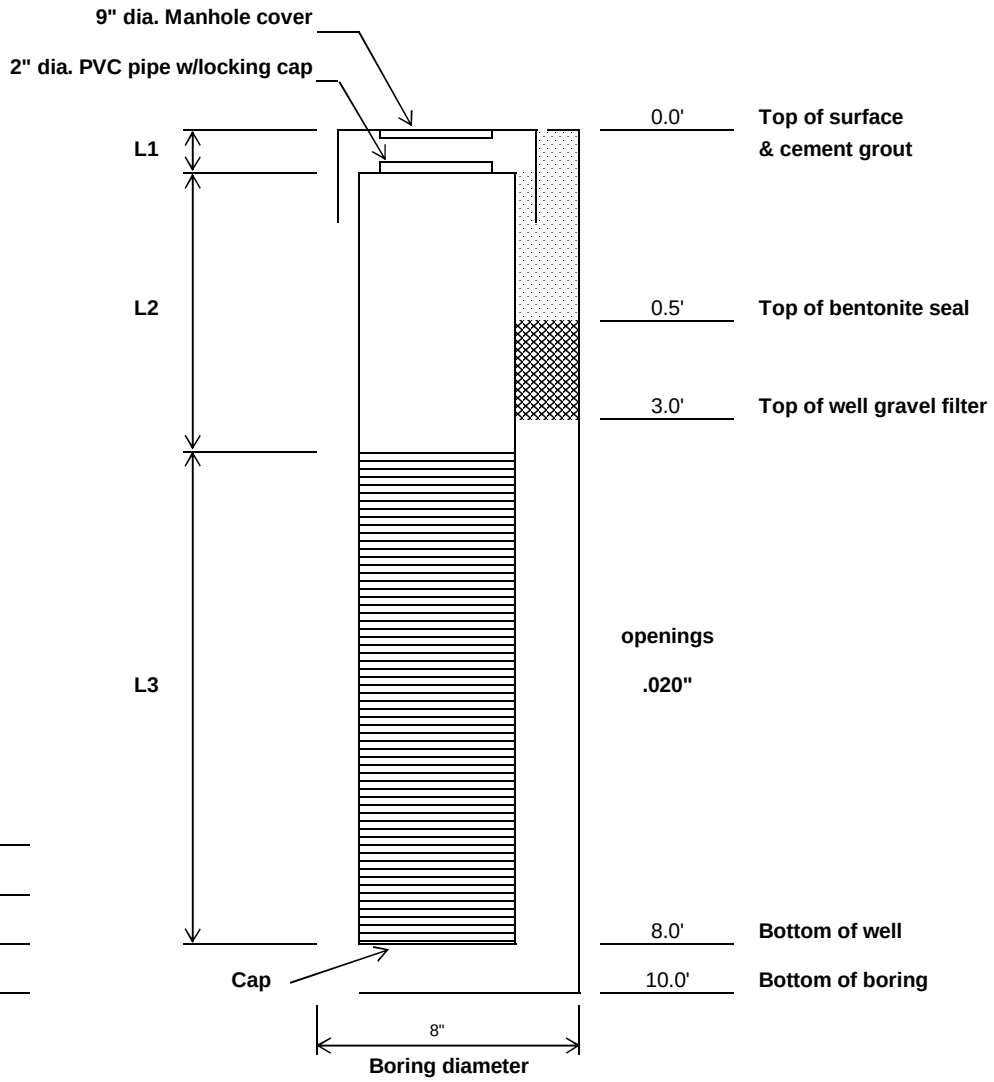
Well Development Report (NOTE: WATER LEVEL READINGS FROM TOP OF PVC)

DATE: 1/10/12	**WATER LEVEL BEFORE:** 2.0'	**WATER LEVEL AFTER:**
TAKEN	**MINUTES AFTER DEVELOPMENT**	

L1 = 0.5'

L2 = 3.5'

L3 = 4.0'



Remarks:

SL 100
1/06

THE PORT AUTHORITY OF NY & NJ

Engineering Department
Materials Engineering

Boring Report

Project	Bayonne Bridge Arsenic Site		**Contractor**	Craig	**Boring No.**	PA-MW-17	**Date** 1/3/12
Location				**Contract No.**	426-11-014	**Surface Elev.**	
Spoon	2" O.D. 1.375" I.D.	**Hammer/ Fall (in.)**	140 lbs./30"	**Ground Water Level**			
Hammer Type	Auto	**Hole Type**	A Monitor Well	Date	Time	Depth (ft)	Remarks
Inspector	B. Ouimet			1/3/12	9:30 AM	4.0	Observed during hand augering
Driller	M. Gorski						
site_code							

Sample No.	Start Depth (ft)	End Depth (ft)	Method	Spoon Blows/6"	Re-cov'd	PID Reading	Sample Description and Remarks
01	0.0	2.0	HA	Hand Auger	Full	0.0	brown c-f Sand, little Silt, little Gravel (Topsoil - partially grass covered)
02	2.0	4.0	HA	Hand Auger	Full	0.0	Fill: grey brown c-f Sand, some fine Gravel, little Silt, with Concrete fragments
03	4.0	6.0	HA	Hand Auger	Full	0.0	Fill: brown Silty Clay, some c-f Sand, little fine Gravel
04	6.0	8.0	SS	2-3-7-50/0"	12"	0.0	Fill: brown c-f Sand (layered) and Silt, with Organic fibers. Concrete obstruction was encountered at 6.5' from surface.
05	8.0	8.2	SS	100/2"	2"	0.0	Fill: brown c-f Sand and fine Gravel (Course gravel fragments)
	8.2						Bottom of Boring

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THE PORT AUTHORITY OF NY & NJ

Engineering Department

Materials Engineering

Well Installation Report

PROJECT: Bayonne Bridge Arsenic Site		**CONTRACT NO.** 426-11-014	
LOCATION:		**CONTRACTOR** Craig	
WELL NO. PA-MW-17	**WELL TYPE** A		**DATE:** 1/3/12
DRILLER: M. Gorski		**INSPECTOR:** B. Ouimet	

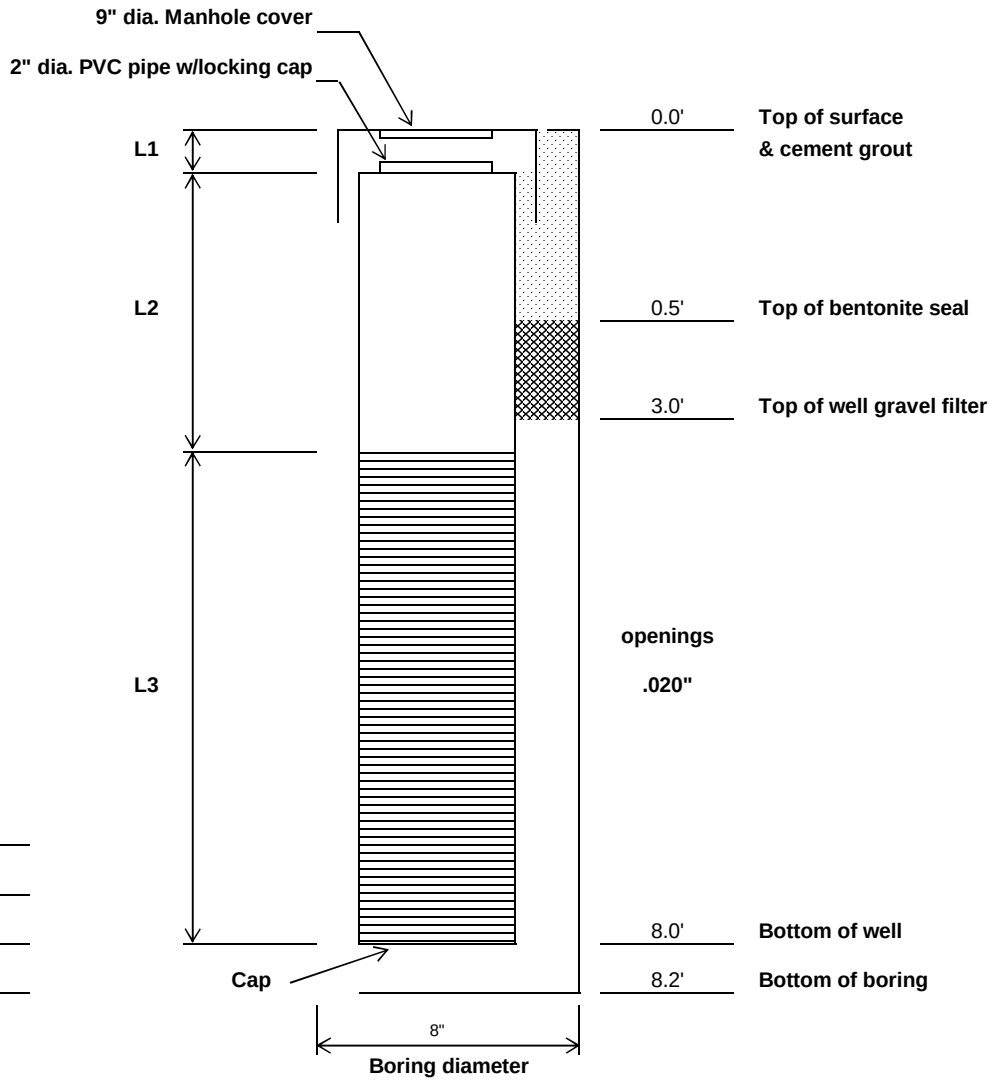
Well Development Report (NOTE: WATER LEVEL READINGS FROM TOP OF PVC)

DATE:	**WATER LEVEL BEFORE:**	**WATER LEVEL AFTER:**
TAKEN	**MINUTES AFTER DEVELOPMENT**	

L1 = 0.5'

L2 = 3.5'

L3 = 4.0'



Remarks:

SL 100
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THE PORT AUTHORITY OF NY & NJ

Engineering Department
Materials Engineering

Boring Report

Project	Bayonne Bridge Arsenic Site		**Contractor**	Craig	**Boring No.**	PA-MW-18	**Date** 1/5/12
Location	PA-MW-18			**Contract No.**	426-11-014	**Surface Elev.**	
Spoon	2" O.D. 1.375" I.D.	**Hammer/ Fall (in.)**	140 lbs./30"	**Ground Water Level**			
Hammer Type	Auto	**Hole Type**	A Monitor Well	Date	Time	Depth (ft)	Remarks
Inspector	B. Ouimet			1/5/12	12:38pm	7.4	Observed during well installation
Driller	M. Gorski						
site_code							

Sample No.	Start Depth (ft)	End Depth (ft)	Method	Spoon Blows/6"	Re-cov'd	PID Reading	Sample Description and Remarks
01	0.0	2.0	HA	Hand Auger	Full	0.0	Fill: grey c-f Sand, some f Gravel, little Silt, w/ organic fibers
	2.0						Change of Strata
02	2.0	4.0	HA	Hand Auger	Full	0.0	Fill: grey to red brown Silty Clay, some c-f Sand, trace f Gravel w/ brick particles
03	4.0	6.0	HA	Hand Auger	Full	0.0	red brown Silty Clay, little c-f Sand, trace f Gravel
04	6.0	8.0	SS	4-4-7-4	12"	0.0	red brown Silty Clay and f Gravel (w/ c Gravel fragments), little c-f Sand
05	8.0	10.0	SS	5-6-18-9	14"	0.0	red brown Silty Clay, some c-f Sand, little f Gravel
	10.0						Bottom of Boring
							Monitoring well installed to 10 feet

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THE PORT AUTHORITY OF NY & NJ

Engineering Department

Materials Engineering

Well Installation Report

PROJECT: Bayonne Bridge Arsenic Site		**CONTRACT NO.** 426-11-014	
LOCATION: PA-MW-18		**CONTRACTOR** Craig	
WELL NO. PA-MW-18	**WELL TYPE** A		**DATE:** 1/5/12
DRILLER: M. Gorski		**INSPECTOR:** B. Ouimet	

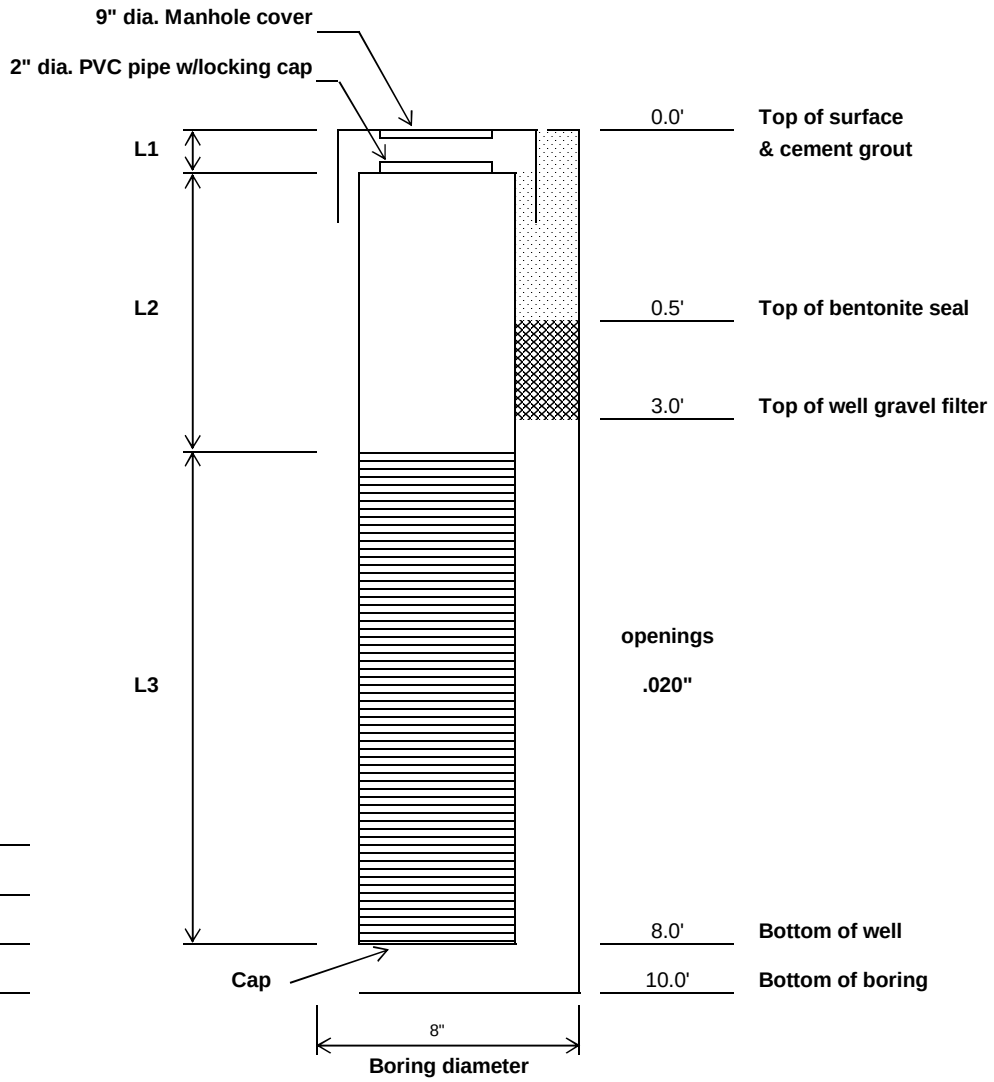
Well Development Report (NOTE: WATER LEVEL READINGS FROM TOP OF PVC)

DATE:	**WATER LEVEL BEFORE:**	**WATER LEVEL AFTER:**
TAKEN	**MINUTES AFTER DEVELOPMENT**	

L1 = 0.5'

L2 = 3.5'

L3 = 4.0'



Remarks:

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THE PORT AUTHORITY OF NY & NJ

Engineering Department
Materials Engineering

Boring Report

Project	Bayonne Bridge Arsenic Site		**Contractor**	Craig	**Boring No.**	PA-SB-19	**Date** 1/10/12
Location	PA-SB-19			**Contract No.**	426-11-014	**Surface Elev.**	
Spoon	2" O.D. 1.375" I.D.	**Hammer/ Fall (in.)**	140 lbs./30"	**Ground Water Level**			
Hammer Type	Safety	**Hole Type**		Date	Time	Depth (ft)	Remarks
Inspector	B. Ouimet			1/10/12	11:40am	3.2	Observed during hand augering
Driller	M. Gorski						
site_code							

Sample No.	Start Depth (ft)	End Depth (ft)	Method	Spoon Blows/6"	Re-cov'd	PID Reading	Sample Description and Remarks
01	0.0	2.0	HA	Hand Auger	Full	0.0	Fill: light grey tan f Gravel and c-f Sand (CONCRETE FRAGMENTS), trace Silt, w/ organic fibers
02	2.0	4.0	HA	Hand Auger	Full	0.0	Fill: dark grey c-f SAND, some f Gravel, little Silt w/ cinders, w/ sheen
	4.0						Change in Strata
03	4.0	6.0	HA	Hand Auger	Full	0.0	dark grey c-f Sand and Silt, little f Gravel, w/ Peat
04	6.0	8.0	SS	5-3-6-10	18"	0.0	tan - light grey c-f Sand, some Silt, trace f Gravel
05A	8.0	8.5	SS	8	6"	0.0	Same
	8.5						Change in Strata
05B	8.5	8.8	SS	50/3"		0.0	grey Clayey Silt, some f Sand, mottled, layered
	8.8						Bottom of Boring
							Note: Concrete to 1.0' reinforced w/ rebar, with stabilization fabric at 1.5'

Boring Report

Project	Bayonne Bridge Arsenic Site				**Contractor**		Craig	**Boring No.**	PA-SB-19	**Date**	1/10/12

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THE PORT AUTHORITY OF NY & NJ

Engineering Department
Materials Engineering

Boring Report

Project	Bayonne Bridge Arsenic Site		**Contractor**	Craig	**Boring No.**	PA-SB-20	**Date** 1/10/12
Location	PA-SB-20			**Contract No.**	426-11-014	**Surface Elev.**	
Spoon	2" O.D. 1.375" I.D.	**Hammer/ Fall (in.)**	140 lbs./30"	**Ground Water Level**			
Hammer Type	Safety	**Hole Type**		Date	Time	Depth (ft)	Remarks
Inspector	B. Ouimet			1/10/12	1:47pm	2.5	Observed during hand augering
Driller	M. Gorski						
site_code							

Sample No.	Start Depth (ft)	End Depth (ft)	Method	Spoon Blows/6"	Re-cov'd	PID Reading	Sample Description and Remarks
01	0.0	2.0	HA	Hand Auger	Full	0.0	Fill: grey c-f Sand and f Gravel, little Silt, w/ organic fibers
02	2.0	4.0	HA	Hand Auger	Full	0.0	Fill: brown red f Gravel and c-f Sand, little Silt w/ brick particles
03	4.0	6.0	HA	Hand Auger	Full	0.0	Fill: brown c-f Sand and f Gravel, trace Silt, w/ brick particles
	6.0						Change in strata
04	6.0	8.0	SS	3-5-7-9	16"	0.0	grey Clayey Silt, little c-f Sand, trace f Gravel, w/ organic fibers, mottled
	8.0						Change in strata
05	8.0	10.0	SS	10-16-22-29	18"	0.0	grey c-f Sand, some Silt, trace f Gravel
	10.0						Bottom of Boring

Boring Report

Project	Bayonne Bridge Arsenic Site				**Contractor**		Craig	**Boring No.**	PA-SB-20	**Date**	1/10/12

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THE PORT AUTHORITY OF NY & NJ

Engineering Department
Materials Engineering

Boring Report

Project	Bayonne Bridge Arsenic Site	**Contractor**	Craig	**Boring No.**	PA-SB-21	**Date**	1/10/12
Location	As proposed	**Contract No.**	426-11-014	**Surface Elev.**			
Spoon	2" O.D. 1.375" I.D.	**Hammer/ Fall (in.)**	140 lbs./30"	**Ground Water Level**			
Hammer Type	Auto	**Hole Type**	1	Date	Time	Depth (ft)	Remarks
Inspector	B. Ouimet			1/10/12	9:30am	2.5	Observed during Hand Auger
Driller	M. Gorski			1/10/12	10:08am	2.3	Before backfilled
site_code							

Sample No.	Start Depth (ft)	End Depth (ft)	Method	Spoon Blows/6"	Re-cov'd	PID Reading	Sample Description and Remarks
01	0.0	2.0	HA	Hand Auger	Full	0.0	Fill: light grey f Gravel and c-f Sand (CONCRETE FRAGMENTS), trace Silt
02	2.0	4.0	HA	Hand Auger	Full	0.0	Fill: brown grey f Gravel, and c-f Sand, little Silt w/ cinders, w/ brick particles
	4.0						Change in Strata
03	4.0	5.0	HA	Hand Auger	Full	0.0	Fill: grey c-f Sand and f Gravel, little Silt, w/ cinders
	5.0						Change in Strata
04	5.0	6.0	HA	Hand Auger	Full	0.0	grey Silty Clay, little c-f Sand, trace f Gravel, w/ Peat
05	6.0	6.5	SS	50/6"	5"	0.0	grey Silty Clay, little f Gravel, little c-f Sand. Spoon bounced at 6.5'.
	6.5						Bottom of Boring
							Note: Concrete 0.2' to 1.5' reinforced w/ rebar, with stabilization fabric at 1.5'

Boring Report

Project	Bayonne Bridge Arsenic Site				**Contractor**		Craig	**Boring No.**	PA-SB-21	**Date**	1/10/12

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THE PORT AUTHORITY OF NY & NJ

Engineering Department
Materials Engineering

Boring Report

Project	Bayonne Bridge Arsenic Site			**Contractor**	Craig	**Boring No.** PA-SB-22	**Date** 1/9/12
Location	As proposed			**Contract No.**	426-11-014	**Surface Elev.**	
Spoon	2" O.D. 1.375" I.D.	**Hammer/ Fall (in.)**	140 lbs./30"	**Ground Water Level**			
Hammer Type	Auto	**Hole Type**	1	Date	Time	Depth (ft)	Remarks
Inspector	B. Ouimet			1/9/12	10:55am	6.0	Observed during sampling
Driller	M. Gorski						
site_code							

Sample No.	Start Depth (ft)	End Depth (ft)	Method	Spoon Blows/6"	Re-cov'd	PID Reading	Sample Description and Remarks
01	0.0	2.0	HA	Hand Auger	Full	0.0	Fill: grey brown f Gravel (with c gravel fragments), some c-f Sand, little Silt, with brick particles
02	2.0	4.0	HA	Hand Auger	Full	0.0	Fill: brown grey f Gravel, and c-f Sand, little Silt w/ cinders, w/ brick particles
03	4.0	6.0	HA	Hand Auger	Full	0.0	Fill: grey brown c-f Sand and Silt, little f Gravel, w/ organic fibers
	6.0						Change in Strata
04	6.0	8.0	HA	Hand Auger	Full	0.0	grey Organic Silt, little c-f Sand, trace f Gravel, w/ Peat
05	8.0	10.0	SS	50/6	5"	0.0	grey Silty Clay, little c-f Sand, trace f Gravel, w/ organic fibers
	10.0						Bottom of Boring

Boring Report

Project	Bayonne Bridge Arsenic Site				**Contractor**		Craig	**Boring No.**	PA-SB-22	**Date**	1/9/12

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Engineering Department
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Boring Report

Project	Bayonne Bridge Arsenic Site	**Contractor**	Craig	**Boring No.**	PA-SB-23	**Date**	1/11/12
Location	As laid out by Survey	**Contract No.**	426-11-014	**Surface Elev.**			
Spoon	2" O.D. 1.375" I.D.	**Hammer/ Fall (in.)**	140 lbs./30"	**Ground Water Level**			
Hammer Type	Safety	**Hole Type**		Date	Time	Depth (ft)	Remarks
Inspector	B. Ouimet			1/11/12	10:45pm	Dry	Not encountered during sampling
Driller	M. Gorski						
site_code							

Sample No.	Start Depth (ft)	End Depth (ft)	Method	Spoon Blows/6"	Re-cov'd	PID Reading	Sample Description and Remarks
01	0.0	2.0	HA	Hand Auger	Full	0.0	Fill: c-f SAND, some Silt, trace f Gravel, w/ roots, w/ glass
02	2.0	4.0	HA	Hand Auger	Full	0.0	Fill: Gy Bwn f Gravel, and Silt, little c-f Sand, w/ brick particles, w/ glass
03	4.0	6.0	HA	Hand Auger	Full	0.0	Fill: Gy c-f SAND, and Silt, little f Gravel
04	6.0	8.0	SS	4-2-4-5	18"	0.0	Rd Bwn SILTY CLAY, little c-f Sand, little f Gravel, w/ organic fibers at 7.5'
05	8.0	10.0	SS	5-4-7-13	18"	0.0	Lt Gy SILT to CLAYEY SILT, little c-f Sand, w/ organic fibers, mottled
							END OF BORING AT 10.0'
							Note: Observed concrete fragments in borehole 0' to 5'

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Boring Report

Project	Bayonne Bridge Arsenic Site		**Contractor**	Craig	**Boring No.**	PA-SB-24	**Date** 1/11/12
Location	As laid out by Survey			**Contract No.**	426-11-014	**Surface Elev.**	
Spoon	2" O.D. 1.375" I.D.	**Hammer/ Fall (in.)**	140 lbs./30"	**Ground Water Level**			
Hammer Type	Safety	**Hole Type**		Date	Time	Depth (ft)	Remarks
Inspector	B. Ouimet			1/11/12	1:30pm	Dry	Not encountered during sampling
Driller	M. Gorski						
site_code							

Sample No.	Start Depth (ft)	End Depth (ft)	Method	Spoon Blows/6"	Re-cov'd	PID Reading	Sample Description and Remarks
01	0.0	2.0	HA	Hand Auger	Full	0.0	Fill: Gy f Gravel, and c-f Sand, little Silt, w/ roots
02	2.0	4.0	HA	Hand Auger	Full	0.0	Fill: Rd Bwn c-f SAND, and Silt,little f Gravel, w/ brick particles
03	4.0	6.0	HA	Hand Auger	Full	0.0	Fill: Bwn SILT, Some c-f Sand, little f Gravel
04	6.0	8.0	SS	4-4-4-5	18"	0.0	Rd Bwn SILTY CLAY, little c-f Sand, trace f Gravel, w/ organic fibers to 7.0', to Dk Gy ORGANIC CLAYEY SILT, little c-f Sand, trace f Gravel
05	8.0	10.0	SS	3-4-8-16	20"	0.0	Gy f SAND, Some Silt, w/ organic fibers
							END OF BORING AT 10.0'

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THE PORT AUTHORITY OF NY & NJ

Engineering Department
Materials Engineering

Boring Report

Project	Bayonne Bridge Arsenic Site		**Contractor**	Craig	**Boring No.**	PA-SB-25	**Date** 1/5/12
Location	As proposed			**Contract No.**	426-11-014	**Surface Elev.**	
Spoon	2" O.D. 1.375" I.D.	**Hammer/ Fall (in.)**	140 lbs./30"	**Ground Water Level**			
Hammer Type	Auto	**Hole Type**	1	Date	Time	Depth (ft)	Remarks
Inspector	B. Ouimet			1/5/12	2:15pm	4.2	Observed during hand augering
Driller	M. Gorski						
site_code							

Sample No.	Start Depth (ft)	End Depth (ft)	Method	Spoon Blows/6"	Re-cov'd	PID Reading	Sample Description and Remarks
01	0.0	2.0	HA	Hand Auger	Full	0.0	Fill: dark grey f Gravel and c-f Sand, little Silt, w/ asphalt fragments
	2.0						Change in Strata
02	2.0	4.0	HA	Hand Auger	Full	0.0	red brown Silty Clay, little f Gravel, little c-f Sand, w/ organic fibers
03	4.0	6.0	HA	Hand Auger	Full	0.0	red brown Silty Clay, little c-f Sand, trace f Gravel
04	6.0	8.0	SS	5-3-4-3	16"	0.0	red brown to grey Silty Clay to Clayey Silt, some c-f Sand, trace f Gravel, w/ organics, wood fibers
05	8.0	10.0	SS	5-5-6-5	18"	0.0	red brown Silty Clay to Clayey Silt, and c-f Sand, little f Gravel
	10.0						Bottom of Boring

Boring Report

Project	Bayonne Bridge Arsenic Site				**Contractor**		Craig	**Boring No.**	PA-SB-25	**Date**	1/5/12

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THE PORT AUTHORITY OF NY & NJ

Engineering Department
Materials Engineering

Boring Report

Project	Bayonne Bridge Arsenic Site	**Contractor**	Craig	**Boring No.**	PA-SB-26	**Date**	1/11/12
Location	As laid out by Survey	**Contract No.**	426-11-014	**Surface Elev.**			
Spoon	2" O.D. 1.375" I.D.	**Hammer/ Fall (in.)**	140 lbs./30"	**Ground Water Level**			
Hammer Type	Safety	**Hole Type**		Date	Time	Depth (ft)	Remarks
Inspector	B. Ouimet			1/11/12	2:10pm	Dry	Not encountered during sampling
Driller	M. Gorski						
site_code							

Sample No.	Start Depth (ft)	End Depth (ft)	Method	Spoon Blows/6"	Re-cov'd	PID Reading	Sample Description and Remarks
01	0.0	2.0	HA	Hand Auger	Full	0.0	Fill: Dk Gy SILT and c-f Sand, little f Gravel, w/ roots, w/ metal fragments
02	2.0	4.0	HA	Hand Auger	Full	0.0	Fill: Bwn c-f SAND, Some Silt, trace f Gravel
03	4.0	6.0	HA	Hand Auger	Full	0.0	Rd Bwn SILTY CLAY, Some c-f Sand, little f Gravel
04	6.0	8.0	SS	4-4-4-3	20"	0.0	Gy SILTY CLAY, little c-f Sand, trace f Gravel, w/ organic fibers
05	8.0	10.0	SS	4-4-8-16	20"	0.0	Gy Tan f SAND, Some Silt, w/ organic fibers
							END OF BORING AT 10.0'

Appendix B

Bayonne Survey Data

Location ID	Installation Date	State plane NAD 83	
		East	North
PA-MW-1	12/1/2003	592095	661082
PA-MW-2	12/1/2003	592078	661043
PA-MW-3	12/1/2003	592100	660999
PA-MW-4	11/26/2003	592069	660959
PA-MW-5	11/26/2003	592072	660873
PA-MW-6	12/1/2003	592008	660862
PA-MW-7	6/28/2004	592071	661054
PA-MW-8	5/20/2004	592086	661053
PA-MW-9	5/21/2004	592084	661037
PA-MW-10	5/20/2004	592073	661034
PA-MW-11	5/21/2004	592079	661024
PA-MW-12	11/24/2004	592074	661081
PA-MW-13	11/24/2004	592050	661044
PA-MW-14	11/24/2004	592139	661029
WP-MW-12	8/15/2008	591966	660895
WP-MW-13	8/15/2008	591943	660964
WP-MW-14	8/15/2008	591952	661005
WP-MW-15	8/15/2008	591999	660980
PA-MW-16	1/27/2012	591961	660923
PA-MW-17	1/27/2012	592050	660972
PA-MW-18	1/27/2012	592063	661030
SB-19	1/27/2012	591954	660897
SB-20	1/27/2012	591995	660905
SB-21	1/27/2012	591976	660907
SB-22	1/27/2012	592083	661005
SB-23	1/27/2012	592098	661015
SB-24	1/27/2012	592111	661045
SB-25	1/27/2012	592076	661029
SB-26	1/27/2012	592090	661082

MONITORING WELL CERTIFICATION FORM B - LOCATION CERTIFICATION

Name of Owner: The Port Authority of New York & New Jersey
Name of Facility: Bayonne Bridge
Location: W. 2nd. St. and W. 1st. St.
Case Number(s): --

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: E201203142
(This number must be permanently affixed to the well casing.)

Owners Well Number (As shown on application or plans): MW-16

Geographic Coordinate NAD 83 (to nearest 1/10 of second):

Longitude: West 74° 08' 24.7" Latitude: North 40° 38' 50.4"

New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 660923.17 East 591961.31

Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): NAVD1988 6.73

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

Significant observations and notes:

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

3/12/12

PROFESSIONAL LAND SURVEYOR'S SIGNATURE **DATE**

Peter J. Moore 24GS03760200

PROFESSIONAL LAND SURVEYOR'S NAME AND LICENSE NUMBER
(Please print or type)

KS Engineers, P.C. 494 Broad Street, 4th. Floor, NJ 071023 973-623-2999

PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

MONITORING WELL CERTIFICATION FORM B - LOCATION CERTIFICATION

Name of Owner: The Port Authority of New York & New Jersey
Name of Facility: Bayonne Bridge
Location: W. 2nd. St. and W. 1st. St.
Case Number(s): --

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: E201203143
(This number must be permanently affixed to the well casing.)

Owners Well Number (As shown on application or plans): MW-17

Geographic Coordinate NAD 83 (to nearest 1/10 of second):

Longitude: West 74° 08' 23.5" Latitude: North 40° 38' 50.9"

New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 660971.63 East 592049.88

Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): NAVD1988 8.26

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

Significant observations and notes:

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

3/12/12

PROFESSIONAL LAND SURVEYOR'S SIGNATURE **DATE**

Peter J. Moore 24GS03760200

PROFESSIONAL LAND SURVEYOR'S NAME AND LICENSE NUMBER
(Please print or type)

KS Engineers, P.C. 494 Broad Street, 4th. Floor, NJ 071023 973-623-2999

PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

MONITORING WELL CERTIFICATION FORM B - LOCATION CERTIFICATION

Name of Owner: The Port Authority of New York & New Jersey
Name of Facility: Bayonne Bridge
Location: W. 2nd. St. and W. 1st. St.
Case Number(s): --

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: E201203144
(This number must be permanently affixed to the well casing.)

Owners Well Number (As shown on application or plans): MW-18

Geographic Coordinate NAD 83 (to nearest 1/10 of second):

Longitude: West 74° 08' 23.4" Latitude: North 40° 38' 51.4"

New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 661029.56 East 592062.64

Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): NAVD1988 8.79

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

Significant observations and notes:

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

3/12/12

PROFESSIONAL LAND SURVEYOR'S SIGNATURE **DATE**

Peter J. Moore 24GS03760200

PROFESSIONAL LAND SURVEYOR'S NAME AND LICENSE NUMBER
(Please print or type)

KS Engineers, P.C. 494 Broad Street, 4th. Floor, NJ 071023 973-623-2999

PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

Appendix C

PUBLIC NOTICE SIGN

BAYONNE BRIDGE
235 WEST 1ST STREET PROPERTY
BAYONNE, NJ 07002

Appendix D

DEED NOTICE

IN ACCORDANCE WITH N.J.S.A. 58:10B-13, THIS DOCUMENT IS TO BE RECORDED IN THE SAME MANNER AS ARE DEEDS AND OTHER INTERESTS IN REAL PROPERTY.

Prepared by: _____
[Signature]

_____
[Print name below signature]

Recorded by:

_____
[Signature, Officer of County Recording Office]

_____
[Print name below signature]

DEED NOTICE

This Deed Notice is made as of the _____ day of _____, ____, by **The Port Authority of NY & NJ having its address as 235 West First St. Bayonne, New Jersey** (together with his/her/its/their successors and assigns, collectively "Owner").

1. THE PROPERTY. **The Port Authority of NY & NJ having its address as 235 West First St. Bayonne, New Jersey *is*** the owner in fee simple of certain real property designated as Block(s) 373 Lot(s) 3, on the tax map of the City of Bayonne, Hudson County; the New Jersey Department of Environmental Protection Program Interest Number (Preferred ID) for the contaminated site which includes this property is **the Bayonne Bridge MOA (PI#G000021830)**; and the property is more particularly described in Exhibit A, which is attached hereto and made a part hereof (the "Property").

2. DEPARTMENT'S ASSIGNED BUREAU. The **VCP-ISRA** was the New Jersey Department of Environmental Protection program that was responsible for the oversight of the remediation of the Property. The matter was Case No. **91-03-13-SP02**.

3. SOIL CONTAMINATION. **The Port Authority of NY & NJ** has remediated contaminated soil at the Property, and the New Jersey Department of Environmental Protection approved a remedial action on ***[Insert date of Department's approval]***, such that soil contamination remains in certain areas of the Property which contains contaminants in

concentrations that do not allow for the unrestricted use of the Property; this soil contamination is described, including the type, concentration and specific location of such contaminants, in Exhibit B, which is attached hereto and made a part hereof. As a result, there is a statutory requirement for this Deed Notice and engineering controls in accordance with N.J.S.A. 58:10B-13.

4. CONSIDERATION. In accordance with the New Jersey Department of Environmental Protection's approval of the remedial action work plan for the remediation of the site which included the Property, and in consideration of the terms and conditions of that approval, and other good and valuable consideration, Owner has agreed to subject the Property to certain statutory and regulatory requirements which impose restrictions upon the use of the Property, to restrict certain uses of the Property, and to provide notice to subsequent owners, lessees and operators of the restrictions and the monitoring, maintenance, and biennial certification requirements outlined in this Deed Notice and required by law, as set forth herein.

5A. RESTRICTED AREAS. Due to the presence of these contaminants, the Owner has agreed, as part of the remedial action for the Property, to restrict the use of certain parts of the Property (the "Restricted Areas"); a narrative description of these restrictions, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C, which is attached hereto and made a part hereof. The Owner has also agreed to maintain a list of these restrictions on site for inspection by governmental enforcement officials.

5B. ENGINEERING CONTROLS. Due to the presence and concentration of these contaminants, the Owner has also agreed, as part of the remedial action for the Property, to the placement of certain engineering controls on the Property; a narrative description of these engineering controls, along with the associated monitoring and maintenance activities and the biennial certification requirements are provided in Exhibit C.]

6A. ALTERATIONS, IMPROVEMENTS, AND DISTURBANCES.

i. Except as provided in Paragraph 6B, below, no person shall make, or allow to be made, any alteration, improvement, or disturbance in, to, or about the Property which disturbs any engineering control at the Property without first obtaining the express written consent of the Department of Environmental Protection. Nothing herein shall constitute a waiver of the obligation of any person to comply with all applicable laws and regulations including, without limitation, the applicable rules of the Occupational Safety and Health Administration. To request the consent of the Department of Environmental Protection, contact:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance, and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413

ii. Notwithstanding subparagraph 6A.i., above, the Department of Environmental Protection's express written consent is not required for any alteration, improvement, or disturbance provided that the owner, lessee or operator:

(A) Notifies the Department of Environmental Protection of the activity by calling the DEP Hotline, at 1-877-WARN-DEP or 1-877-927-6337, within twenty-four (24) hours after the beginning of each alteration, improvement, or disturbance;

(B) Restores any disturbance of an engineering control to pre-disturbance conditions within sixty (60) calendar days after the initiation of the alteration, improvement or disturbance;

(C) Ensures that all applicable worker health and safety laws and regulations are followed during the alteration, improvement, or disturbance, and during the restoration;

(D) Ensures that exposure to contamination in excess of the applicable remediation standards does not occur;

(E) Submits a written report, describing the alteration, improvement, or disturbance, to the Department of Environmental Protection within sixty (60) calendar days after the end of each alteration, improvement, or disturbance. The owner, lessee or operator shall include in the report the nature of the alteration, improvement, or disturbance, the dates and duration of the alteration, improvement, or disturbance, the name of key individuals and their affiliations conducting the alteration, improvement, or disturbance, a description of the notice the Owner gave to those persons prior to the disturbance, the amounts of soil generated for disposal, if any, the final disposition and any precautions taken to prevent exposure. The owner, lessee, or operator shall submit the report to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance, and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413

6B. EMERGENCIES. In the event of an emergency which presents, or may present, an unacceptable risk to the public health and safety, or to the environment, any person may temporarily breach any engineering control provided that that person complies with each of the following:

i. Immediately notifies the Department of Environmental Protection of the emergency, by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337;

ii. Limits both the actual disturbance and the time needed for the disturbance to the minimum reasonably necessary to adequately respond to the emergency;

iii. Implements all measures necessary to limit actual or potential, present or future risk of exposure to humans or the environment to the contamination;

iv. Notifies the Department of Environmental Protection when the emergency has ended by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337;

v. Restores the engineering control to the pre-emergency conditions as soon as possible, and provides a written report to the Department of Environmental Protection of such emergency and restoration efforts within sixty (60) calendar days after completion of the restoration of the engineering control. The report must include all information pertinent to the emergency, potential discharges of contaminants, and restoration measures that were implemented, which, at a minimum, should specify: (a) the nature and likely cause of the emergency, (b) the potential discharges of or exposures to contaminants, if any, that may have occurred, (c) the measures that have been taken to mitigate the effects of the emergency on human health and the environment, (d) the measures completed or implemented to restore the engineering control, and (e) the changes to the engineering control or site operation and maintenance plan to prevent reoccurrence of such conditions in the future. The owner, lessee, or operator shall submit the report to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance, and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413]

7A. MONITORING AND MAINTENANCE OF DEED NOTICE, AND PROTECTIVENESS CERTIFICATION. The persons in any way responsible, pursuant to the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11a et seq., for the hazardous substances that remain at the Property, the persons responsible for conducting the remediation, the Owner, and the subsequent owners, lessees, and operators, shall monitor and maintain this Deed Notice, and certify to the Department on a biennial basis that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment. The subsequent owners, lessees and operators have this obligation only during

their ownership, tenancy, or operation. The specific obligations to monitor and maintain the deed notice shall include all of the following:

i. Monitoring and maintaining this Deed Notice according to the requirements in Exhibit C, to ensure that the remedial action that includes the Deed Notice continues to be protective of the public health and safety and of the environment;

ii. Conducting any additional remedial investigations and implement any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the site prior to the date that the certification is due to the Department pursuant to iii, below, in order to ensure that the remedial action that includes this Deed Notice remains protective of the public health and safety and of the environment.

iii. Certify to the Department of Environmental Protection as to the continued protectiveness of the remedial action that includes this Deed Notice, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on the anniversary of the date stamped on the deed notice that indicates when the deed notice was recorded;

7B. MONITORING AND MAINTENANCE OF ENGINEERING CONTROLS, AND PROTECTIVENESS CERTIFICATION. The persons in any way responsible, pursuant to the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11a et seq., for the hazardous substances that remain at the Property, the person responsible for conducting the remediation, and, the Owner, and the subsequent owners, lessees, and operators, shall maintain all engineering controls at the Property and certify to the Department on a biennial basis that the remedial action of which each engineering control is a part remains protective of the public health and safety and of the environment. The subsequent owners, lessees and operators have this obligation only during their ownership, tenancy, or operation. The specific obligations to monitor and maintain the engineering controls shall include the following:

i. Monitoring and maintaining each engineering control according to the requirements in Exhibit C, to ensure that the remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment;

ii. Conducting any additional remedial investigations and implement any additional remedial actions, that are necessary to correct, mitigate, or abate each problem related to the protectiveness of the remedial action for the Property prior to the date that the certification is due to the Department pursuant to iii, below, in order to ensure that the remedial action that includes the engineering control remains protective of the public health and safety and of the environment.

iii. Certify to the Department of Environmental Protection as to the continued protectiveness of the remedial action that includes the engineering control, on a form provided by the Department and consistent with N.J.A.C. 7:26C-1.2 (a)1, every two years on

the anniversary of the date stamped on the deed notice that indicates when the deed notice was recorded.

8. ACCESS. The Owner and the subsequent owners, lessees and operators agree to allow the Department, its agents and representatives access to the Property to inspect and evaluate the continued protectiveness of the remedial action that includes this Deed Notice and to conduct additional remediation to ensure the protection of the public health and safety and of the environment if persons responsible for monitoring the protectiveness of the remedial action, as described in Paragraph 7, above, fail to conduct such remediation pursuant to this Deed Notice as required by law. The Owner, and the subsequent owners and lessees, shall also cause all leases, subleases, grants, and other written transfers of an interest in the Restricted Areas to contain a provision expressly requiring that all holders thereof provide such access to the Department.

9. NOTICES.

i. The Owner and the subsequent owners and lessees, shall cause all leases, grants, and other written transfers of an interest in the Restricted Areas to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. Owner and all subsequent owners and lessees shall notify any person intending to conduct invasive work or excavate within the Restricted Areas at the Property, including, without limitation, tenants, employees of tenants, and contractors of the nature and location of contamination in the Restricted Areas, and, of the precautions necessary to minimize potential human exposure to contaminants.

iii. The Owner and the subsequent owners shall provide written notice to the Department of Environmental Protection at least thirty (30) calendar days before the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the owner's interest in the Restricted Area.

iv. The Owner and the subsequent owners shall provide written notice to the Department within thirty (30) calendar days following the owner's petition for or filing of any document initiating a rezoning of the Property. The Owner and the subsequent owners shall submit the written notice to:

Department of Environmental Protection
Division of Remediation Management and Response
Bureau of Operation, Maintenance, and Monitoring
Deed Notice Inspection Program
P.O. Box 413
401 E. State Street
Trenton, NJ 08625-0413.

10. ENFORCEMENT OF VIOLATIONS.

i. This Deed Notice itself is not intended to create any interest in real estate in favor of the Department of Environmental Protection, nor to create a lien against the Property, but merely is intended to provide notice of certain conditions and restrictions on the Property and to reflect the regulatory and statutory obligations imposed as a conditional remedial action for this site.

ii. The restrictions provided herein may be enforceable solely by the Department against any person who violates this Deed Notice. To enforce violations of this Deed Notice, the Department may initiate one or more enforcement actions pursuant to N.J.S.A. 58:10-23.11u and require additional remediation and assess damages pursuant to N.J.S.A. 58:10-23.11g.

11. SEVERABILITY. If any court of competent jurisdiction determines that any provision of this Deed Notice requires modification, such provision shall be deemed to have been modified automatically to conform to such requirements. If a court of competent jurisdiction determines that any provision of this Deed Notice is invalid or unenforceable and the provision is of such a nature that it cannot be modified, the provision shall be deemed deleted from this instrument as though the provision had never been included herein. In either case, the remaining provisions of this Deed Notice shall remain in full force and effect.

12. SUCCESSORS AND ASSIGNS. This Deed Notice shall be binding upon Owner and upon Owner's successors and assigns, and subsequent owners, lessees and operators while each is an owner, lessee, or operator of the Property.

13. MODIFICATION AND TERMINATION.

i. Any person may request in writing, at any time, that the Department modify this Deed Notice where performance of subsequent remedial actions, a change of conditions at the Property, or the adoption of revised remediation standards suggest that modification of the Deed Notice would be appropriate.

ii. Any person may request in writing, at any time, that the Department terminate this Deed Notice because the conditions which triggered the need for this Deed Notice are no longer applicable.

iii. This Deed Notice may be revised or terminated only upon filing of an instrument, executed by the Department, in the office of the **County Clerk/Register of Deeds and Mortgages** of **Hudson County**, New Jersey, expressly modifying or terminating this Deed Notice.

14A. EXHIBIT A. Exhibit A includes the following maps of the Property and the vicinity:

i. Exhibit A-1: Vicinity Map - A map that identifies by name the roads, and other important geographical features in the vicinity of the Property (for example, Hagstrom County Maps);

ii. Exhibit A-2: Metes and Bounds Description - A metes and bounds description of the Property, including reference to tax lot and block numbers for the Property;

iii. Exhibit A-3: Property Map - A scaled map of the Property, scaled at one inch to 200 feet or less, and if more than one map is submitted, the maps shall be presented as overlays, keyed to a base map; and the Property Map shall include diagrams of major surface topographical features such as buildings, roads, and parking lots.

14B. EXHIBIT B. Exhibit B includes the following descriptions of the Restricted Areas:

i. Exhibit B-1: Restricted Area Map - A separate map for each restricted area that includes:

(A) As-built diagrams of each engineering control, including caps, fences, slurry walls, ground water monitoring wells, and ground water pumping system;

(B) As-built diagrams of any buildings, roads, parking lots and other structures that function as engineering controls; and

(C) Designation of all soil and sediment sample locations within the restricted areas that exceed any soil or sediment standard that are keyed into one of the tables described in the following paragraph.

ii. Exhibit B-2: Restricted Area Data Table - A separate table for each restricted area that includes:

(A) Sample location designation from Restricted Area map (Exhibit B-1);

(B) Sample elevation based upon mean sea level;

(C) Name and chemical abstract service registry number of each contaminant with a concentration that exceeds the unrestricted use standard;

(D) The restricted and unrestricted use standards for each contaminant in the table; and

(E) The remaining concentration of each contaminant at each sample location at each elevation (or if historic fill, include data from the Department's default concentrations at N.J.A.C. 7:26E-4.6, Table 4-2).

14C. EXHIBIT C. Exhibit C includes narrative descriptions of the institutional controls [*Insert as appropriate:* and engineering controls] as follows:

i. Exhibit C-1: Deed Notice as Institutional Control: Exhibit C-1 includes a narrative description of the restriction and obligations of this Deed Notice that are in addition to those describe above, as follows:

(A) General Description of this Deed Notice:

(1) Description and estimated size of the Restricted Areas as described above;

(2) Description of the restrictions on the Property by operation of this Deed Notice; and

(3) The objective of the restrictions.

(B) Description of the monitoring necessary to determine whether:

(1) Any disturbances of the soil in the Restricted Areas did not result in the unacceptable exposure to the soil contamination;

(2) There have been any land use changes subsequent to the filing of this Deed Notice or the most recent biennial certification, whichever is more recent;

(3) The current land use on the Property is consistent with the restrictions in this Deed Notice;

(4) Any newly promulgated or modified requirements of applicable regulations or laws apply to the site; and

(5) Any new standards, regulations, or laws apply to the site that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling.

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) Land use at the Property is consistent with the restrictions in this Deed Notice; and

(3) The remedial action that includes this Deed Notice continues to be protective of the public health and safety and of the environment.

ii. Exhibit C-2: **Soil Capping System**: Exhibit C-2 includes a narrative description of the **Soil Capping System** as follows:

(A) General Description of the engineering control:

(1) Description of the engineering control;

(2) The objective of the engineering control; and

(3) How the engineering control is intended to function.

(B) Description of the operation and maintenance necessary to ensure that:

(1) Periodic inspections of each engineering control are performed in order to determine its integrity, operability, and effectiveness;

(2) Each engineering control continues as designed and intended to protect the public health and safety and the environment;

(3) Each alteration, excavation or disturbance of any engineering control is timely and appropriately addressed to maintain the integrity of the engineering control;

(4) This engineering control is being inspected and maintained and its integrity remains so that the remedial action continues to be protective of the public health and safety and of the environment;

(5) A record of the self-inspection dates, name of the inspector, results of the inspection and condition(s) of this engineering control. Sampling, for example, may be necessary if it is not possible to visually evaluate the integrity/ performance of this engineering control; and

(6) Any new standards, regulations, or laws apply to the site that might necessitate additional sampling in order to evaluate the protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling.

(C) Description of the following items that will be included in the biennial certification:

(1) A monitoring report that describes the specific activities, pursuant to (A) and (B), above, conducted in support of the biennial certification of the protectiveness of the remedial action that includes this Deed Notice;

(2) The engineering controls continue to operate as designed; and

(3) The remedial action that includes the engineering control continues to be protective of the public health and safety and of the environment.

15. SIGNATURES. IN WITNESS WHEREOF, Owner has executed this Deed Notice as of the date first written above.

ATTEST:

The Port Authority of New York and New Jersey

_____

By_____

_____
[Print name and title]

_____
[Signature]

STATE OF **NEW JERSEY** SS.:
COUNTY OF **HUDSON**

I certify that on _____, 20__, ***[Name of person executing document on behalf of Owner]*** personally came before me, and this person acknowledged under oath, to my satisfaction, that:

(a) this person is the [secretary/assistant secretary] of **The Port Authority of New York and New Jersey**, the corporation named in this document;

(b) this person is the attesting witness to the signing of this document by the proper corporate officer who is the [president/vice president] of the corporation;

(c) this document was signed and delivered by the corporation as its voluntary act and was duly authorized;

(d) this person knows the proper seal of the corporation which was affixed to this document; and

(e) this person signed this proof to attest to the truth of these facts.

_____
[Signature]

_____
[Print name and title of attesting witness]

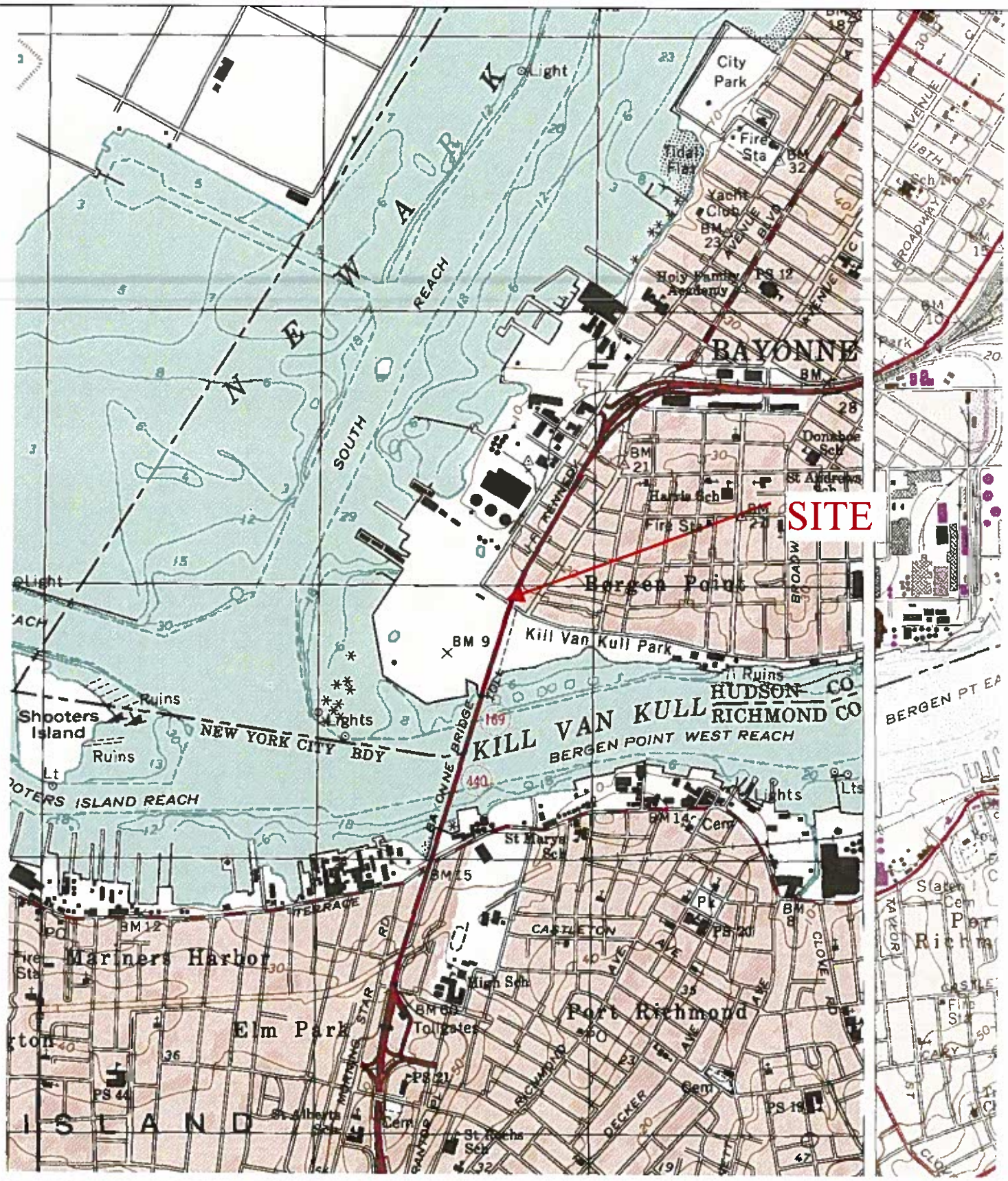
Signed and sworn before me on _____, 20__

_____, Notary Public

_____
[Print name and title]

Exhibit A

- A-1: Vicinity Map
- A-2: Metes and Bounds Description/Property Map



0 0.5 Mi

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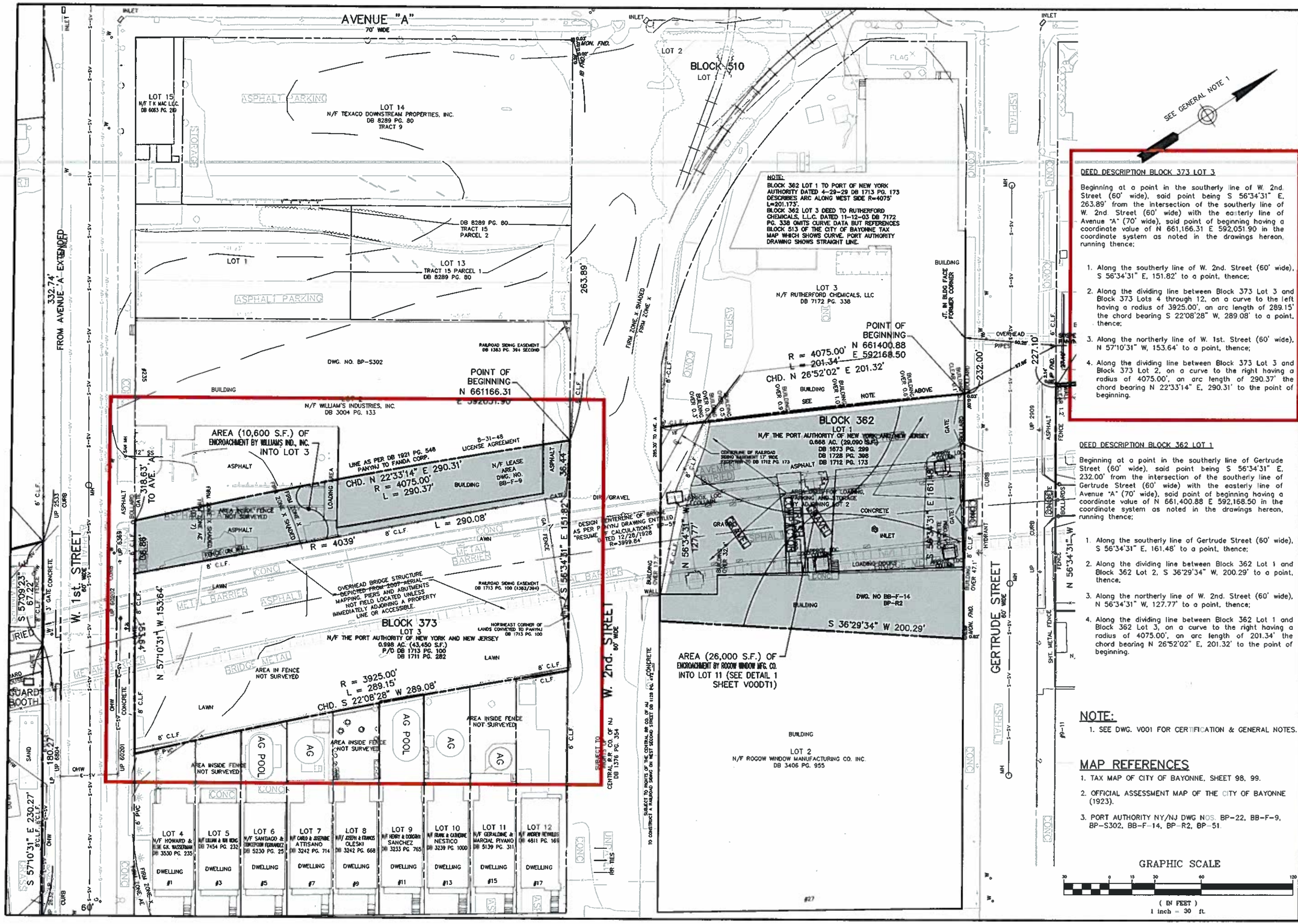
SITE LOCATION MAP
ELIZABETH QUADRANGLE
PROJECTION IS UTM ZONE 18 NAD83 DATUM

THE PORT AUTHORITY OF
NEW YORK & NEW JERSEY
2 GATEWAY CENTER, 14TH Fl.
NEWARK, NJ 07102

BAYONNE BRIDGE
235 WEST 1ST ST.
BAYONNE, NJ

A-1



DEED DESCRIPTION BLOCK 373 LOT 3

Beginning at a point in the southerly line of W. 2nd. Street (60' wide), said point being S 56°34'31" E. 263.89' from the intersection of the southerly line of W. 2nd. Street (60' wide) with the easterly line of Avenue "A" (70' wide), said point of beginning having a coordinate value of N 661,166.31 E 592,051.90 in the coordinate system as noted in the drawings hereon, running thence;

1. Along the southerly line of W. 2nd. Street (60' wide), S 56°34'31" E, 151.82' to a point, thence;
2. Along the dividing line between Block 373 Lot 3 and Block 373 Lots 4 through 12, on a curve to the left having a radius of 3925.00', an arc length of 289.15' the chord bearing S 22°08'28" W, 289.08' to a point, thence;
3. Along the northerly line of W. 1st. Street (60' wide), N 57°10'31" W, 153.64' to a point, thence;
4. Along the dividing line between Block 373 Lot 3 and Block 373 Lot 2, on a curve to the right having a radius of 4075.00', an arc length of 290.37' the chord bearing N 22°33'14" E, 290.31' to the point of beginning.

DEED DESCRIPTION BLOCK 362 LOT 1

Beginning at a point in the southerly line of Gertrude Street (60' wide), said point being S 56°34'31" E, 232.00' from the intersection of the southerly line of Gertrude Street (60' wide) with the easterly line of Avenue "A" (70' wide), said point of beginning having a coordinate value of N 661,400.88 E 592,168.50 in the coordinate system as noted in the drawings hereon, running thence;

1. Along the southerly line of Gertrude Street (60' wide), S 56°34'31" E, 161.48' to a point, thence;
2. Along the dividing line between Block 362 Lot 1 and Block 362 Lot 2, S 36°29'34" W, 200.29' to a point, thence;
3. Along the northerly line of W. 2nd. Street (60' wide), N 56°34'31" W, 127.77' to a point, thence;
4. Along the dividing line between Block 362 Lot 1 and Block 362 Lot 3, on a curve to the right having a radius of 4075.00', an arc length of 201.34' the chord bearing N 26°52'02" E, 201.32' to the point of beginning.

NOTE:

1. SEE DWG. V001 FOR CERTIFICATION & GENERAL NOTES.

MAP REFERENCES

1. TAX MAP OF CITY OF BAYONNE, SHEET 98, 99.
2. OFFICIAL ASSESSMENT MAP OF THE CITY OF BAYONNE (1923).
3. PORT AUTHORITY NY/NJ DWG NOS. BP-22, BB-F-9, BP-S302, BB-F-14, BP-R2, BP-51.

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

Sheet 6 of 16

THE PORT AUTHORITY
OF NY & NJ

KUPPER, LLC
A JMT COMPANY

JMT JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future

KUPPER, L.L.C., A JMT COMPANY
1200 LENOX DRIVE, TRENTON, N.J. 08648-2329
(609)512-3900
N.J. CERTIFICATE OF AUTHORIZATION #24GA28152000

AMBROSE E. GMEINER, II
N.J. Professional Land Surveyor # 24GS04318400

No.	Date	Revision	Approved
1	9/14/11	UPDATED AERIAL MAPPING REFERENCED	

ENGINEERING DEPARTMENT

BAYONNE BRIDGE

Title ALTA/ACSM LAND TITLE SURVEY

BLOCK 302 LOTS 3 & 4, BLOCK 312 LOT 16
BLOCK 334 LOT 5, BLOCK 345 LOT 1
BLOCK 346 LOT 11, BLOCK 361 LOT 1
BLOCK 362 LOT 1, BLOCK 373 LOT 3
BLOCK 391 LOTS 3, 4 & 5
CITY OF BAYONNE
HUDSON COUNTY
NEW JERSEY

PLAN OF SURVEY - 4

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE DATES INDICATED AND CAN BE CONSIDERED AS THE GENERAL CONDITIONS AT THAT TIME. BE ADVISED THAT ADDITIONAL INFORMATION MAY REMAIN ON DIGITAL FILES AND MAY NOT BE PLOTTED ON THIS MAP.

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.
All recipients of Contract documents, including bidders and those who do not bid and their prospective subcontractors and suppliers who may receive all or a part of the Contract documents or copies thereof, shall make every effort to ensure the secure and appropriate disposal of the Contract documents to prevent further disclosure of the information contained in the documents. Secure and appropriate disposal includes methods of document destruction such as shredding or arrangements with refuse handlers that ensure that third persons will not have access to the documents' contents either before, during, or after disposal. Documents may also be returned for disposal purposes to the Contract Desk on the 3rd Floor, 3 Gateway Center, Newark NJ 07102 or the office of the Director of Procurement, One Madison Avenue, 7th Floor, New York NY 10010.
It is a violation of law for any person to alter a document in any way, unless acting under the direction of a licensed professional surveyor. If this document, bearing the seal of a surveyor is altered, the altering surveyor shall affix to the document their seal and the notation "altered by" followed by their signature and the date of such alteration, and a specific description of the alterations.

KUPPER LLC/JMT	RL	PJM/AEG
Surveyed by	Drawn by	Checked by

Date 08/26/2011

Contract Number BBNCP

Drawing Number V004

Survey # 2011-065

Exhibit B

- B-1: Draft Restricted Area Map
- B-2: Restricted Area Data Table

Acad Version : R18.1s (LMS Tech)
User Name : BSSmoll

Date\Time : Thu, 13 Dec 2012 – 2:29pm
Path\Name : G:\ENVCAD\Manchester\ACT\04907098\0000\00200\Drawing Files\FIGURES_recovered00 UPDATED 4-3-12.dwg

Current Plotsyle : ByColor
Layout Tab: B-1

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REV.	ISSUED	DATE	DESCRIPTION
–	–	–	–
–	–	–	–

KEYPLAN

SEAL

SEAL

ARCADIS

ARCADIS U.S., Inc.
Suite 1250
1100 Superior Avenue
Cleveland, Ohio 44114
Tel: 216-781-6177 Fax: 216-781-6243
www.arcadis-us.com

THE PORT AUTHORITY
OF NY & NJ
BAYONNE BRIDGE
REMEDIAL ACTION WORKPLAN

PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF.	CHECKED BY
Project Manager		J. FREDERICK	G. JEAN-PIERRE
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
PROPOSED SITE RESTORATION			K. IAMICELI
		PROJECT NUMBER	DRAWING NUMBER
		04907098.0000	B-1
			SHEET OF

The restricted area map and data results will be finalized following source removal and completion of the Bayonne Bridge Redevelopment project.

Exhibit C

- C-1: Narrative Description of the Institutional Control
- C-2: Narrative Description of the Engineering Control (Soil Capping System)

C-1: Narrative Description of Deed Notice as Institutional Control

The restricted area consists of Block #373, Lot #3 located at 235 West First St., Bayonne, Hudson County, New Jersey. The property is approximately one acre (including a small parcel of land measuring approximately 0.2-acres that is leased by Williams Industries, Inc.) and measures approximately 290 feet in length, 130 feet along West Second Street, and 110 feet along West First Street.

The property is the current and future location of bridge piers (Bayonne Bridge).

The deed notice on the property as part of the institutional controls pursuant to N.J.A.C. 7:26E-8.2 to protect the health and safety and environment at the Site for as long as the arsenic impacts exist above a concentration that would restrict use of the Site.

The biennial certification will include a report that describes the protectiveness of the remedial action that includes this Deed Notice, including but not limited to the following elements:

1. Current land use on the Property is consistent with the restrictions in this Deed Notice;
2. The remedial action that includes this Deed Notice continues to be protective of the public health and safety and of the environment.
3. Any disturbances of the soil in the Restricted Areas did not result in the unacceptable exposure to the soil contamination;
4. There have been any land use changes subsequent to the filing of this Deed Notice or the most recent biennial certification, whichever is more recent;
5. Any newly promulgated or modified requirements of applicable regulations or laws apply to the Site; and
6. Any new standards, regulations, or laws apply to the Site that might necessitate additional sampling in order to evaluate the

protectiveness of the remedial action which includes this Deed Notice, and conduct the necessary sampling.

C-2: Narrative Description of Engineering Control

The engineering control included a capping system placed over the impacted soil to protect the public health and safety and the environment. The engineering control (cap) consists of the following, except in those areas where bridge piers and the storm water retention basin will be constructed:

- Geotextile fabric
- A 6-inch lift of crushed, ¾-inch diameter stone
- 6-inch asphalt cap

A retention basin is also proposed for the Site and will act as a cap for this area. The retention basin will be lined with geosynthetic clay liner, and designed to resist groundwater uplift pressures. The retention basin will also be designed to prevent groundwater infiltration into the subsurface.

Semi-annual visual inspections will be performed by the owner to determine the integrity, operability, and effectiveness of the cap. Maintenance will be conducted as necessary and in a timely manner to continually maintain the integrity of the cap, and all maintenance activities will be documented in the biennial report outlined above.

Appendix E

New Jersey Department of Environmental Protection
Site Remediation Program

CLASSIFICATION EXCEPTION AREA / WELL RESTRICTION AREA (CEA/WRA) PERMIT FACT SHEET

☒ Non-LSRP (Existing Cases) ☐ LSRP ☐ Subsurface Evaluator

Date Stamp
(For Department use only)

SECTION A. CASE INFORMATION

Case Name: Bayonne Bridge

Case ID/Case Number: _____ Preferred ID (PI Number): G000021830

CEA Component Information

1. **Contaminant(s):** This CEA/WRA applies only to the contaminants above the applicable numeric values established by Ground Water Quality Standards (GWQS), N.J.A.C. 7:9C, listed in the table below. List below the maximum value for all contaminants included in Exhibit A using any well or sampling point used to establish the CEA.

Contaminant	Concentration [1]	GWQS [2]	SWQS[3]	GWSL[4]
ARSENIC	306,000	3	N/A	N/A

Notes: [1] Maximum concentration in Micrograms Per Liter
[2] New Jersey Ground Water Quality Standards, N.J.A.C. 7:9C
[3] Surface Water Quality Standards, N.J.A.C. 7:9B - Applicable only where contaminants in the CEA may discharge to a surface water body.
[4] Ground Water Screening Levels from most current NJDEP Vapor Intrusion Guidance

☐ If attaching an Addendum to list additional contaminants and associated information.

☒ **Exhibit A: Monitor Well/Sampling Point Data** – Per N.J.A.C 7:26E-8.3(b) submit a copy of a table that includes the most recent 24 months of ground water sampling.

2. **CEA Boundaries:**
Lot(s) and Block(s) included in the areal extent of the Classification Exception Area:
Year of tax map used: 2012

Block(s)	Lot(s)	Check if off-site
373	3	☐
		☐
		☐
		☐
		☐

Block(s)	Lot(s)	Check if off-site
		☐
		☐
		☐
		☐
		☐

☐ If attaching an Addendum to list additional Blocks/Lots and associated information.

☒ **Exhibit B: Site Location Maps** – USGS Quadrangle Map and Tax Lot and Block Map (N.J.A.C. 7:26E-8.3(b)3i and ii)

☒ **Exhibit C: Site Map(s) and Cross Section** – Including actual/predicted contaminant isopleths, ground water flow direction, CEA boundary, monitor well/sampling point/boring locations/IDs, area(s) of concern. N.J.A.C 7:26E-8.3(b)3iii through v.

Insert NAICS responsible for area(s) of concern, if known: _____

Narrative description of proposed CEA:

See Exhibit C

Name of the affected Geologic Formation/Unit: Rahway Till/Shallow Overburden

Direction of ground water flow: Southwest

Ground Water Classification: Class II-A

Vertical Depth of CEA (ft bgs and msl)	Horizontal Extent of CEA (acres or square ft)
unknown	0.99

☐ **Exhibit D: Vertical Contaminant Data** – A table, for the most recent 24 months of data, for each sampling point used to establish the CEA, or the subset of wells indicated in N.J.A.C 7:26E-8.3(b)3iii, iv and v, that includes the following:

Depth (in feet bgs and msl elevation) to:

Water Table	Approximate Bottom of Plume[5]	Top of Plume[6]	Thickness of Clean Water Lens[6]

Notes: [5] Approximate maximum depth of contamination based on data included in Remedial Investigation Report (RIR); [6] Required only if plume is known to be below the water table based on vertical profiling or monitor well data in RIR.

Exhibit E: Fate and Transport Description and Model Documentation

☐ Historic Fill exemption

☐ All information required pursuant to N.J.A.C. 7:26E-8.3(b)2 and applicable guidance is included.

3. Projected Term of CEA: Based on modeling/calculations in Exhibit E

Proposed Duration in Years: See Exhibit C

SECTION B. CURRENT AND PROJECTED GROUND WATER USE DOCUMENTATION

☒ **Exhibit F: Well Search Results** – Include most recent well search per N.J.A.C. 7:26E-1.17.

Check each item where, pursuant to N.J.A.C. 7:26E-8.3(b)4, written documentation was obtained regarding future ground water use for a 25-year planning horizon based on:

☐ Municipal master plans

☐ Zoning plans

☐ Local water purveyor plans and planning data pertaining to the existence of water lines and proposed future installation of water lines

☐ Local planning officials

☐ County and local boards of health

☐ Local and/or county ordinances restricting installation of potable wells

SECTION C. WELL RESTRICTION INFORMATION

For Class II-A ground water and pursuant to the GWQS at N.J.A.C. 7:9C-1.6(d), where ground water quality data indicate contaminants exceed the values listed in the Primary Drinking Water Regulations, the Department shall restrict, or require the restriction of, potable ground water uses within any CEA. Therefore, the CEA established for this site is also a Well Restriction Area, the extent of which coincides with the boundaries of the CEA.

Well Restrictions set within the boundaries of the CEA:

☒ Double Case Wells

☒ Sample Potable Wells

☒ Evaluate Production Wells

☐ Other

SECTION D. PUBLIC NOTIFICATION REQUIREMENTS

Notify Department that letters were sent per N.J.A.C. 7:26E-8.3(b)5 (check all applicable categories):

- ☐ Municipal and county clerk(s)
- ☐ Local, county or regional health department(s)
- ☐ Designated County Environmental Health Act agency (if applicable)
- ☐ County Planning Board
- ☐ Pinelands Commission (if applicable)
- ☐ Owners of real property overlying CEA foot print

☐ **Exhibit G: List of Names and Addresses** – Include all persons notified pursuant to N.J.A.C. 7:26E-8.3(b) based on the proposed CEA extent.

Property Owner Name	Property Owner Address	Date Property Owner was notified	Property was evaluated for vapor impacts ☒ if "Yes"
			☐
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			☐
			☐

SECTION E. NON-LSRP SITE REMEDIATION PROFESSIONAL STATEMENT

First Name: Robert Last Name: Pruno

Phone Number: (973) 565-7620 Ext: Fax:

Mailing Address: 2 Gateway Center, 14th Floor - Environmental

City/Town: Newark State: NJ Zip Code: 07102

Email Address: rpruno@panynj.gov

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

Signature: Date:

Name/Title: Robert Pruno / Chief Environmental Engineer **No Changes Since Last Submittal** ☐

Company Name: Port Authority of New York & New Jersey

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

Exhibit A

- Exhibit A-1: Groundwater Analytical Results

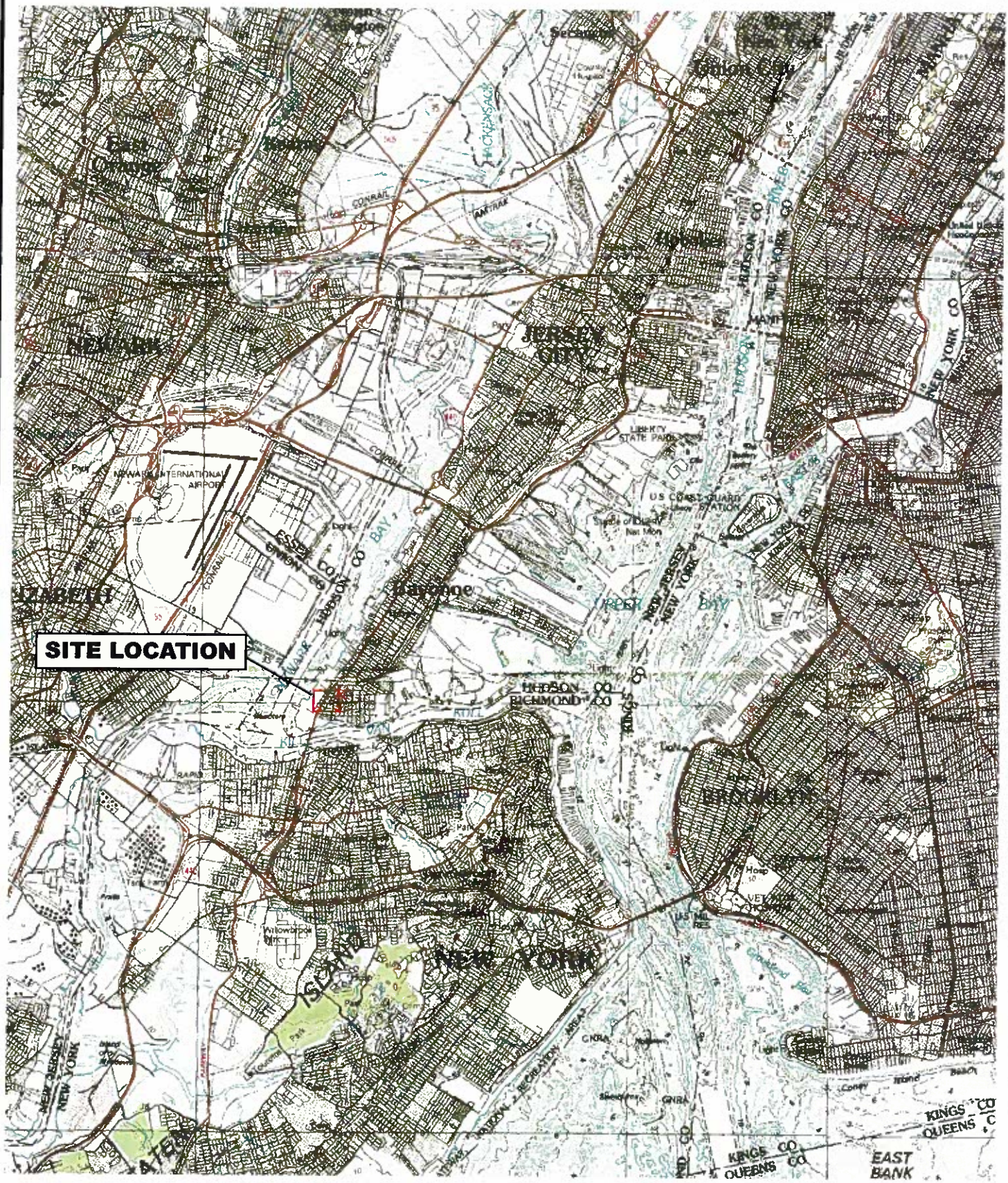
Exhibit A-1
Groundwater Analytical Results
Bayonne Bridge, Bayonne, NJ

Sample ID	NJDEP PQL	Units	1992	1995	February 1998	March 1998	December 2003	July 2004	August 2008	November 2008	Decmeber 2009	January 2012
PA-MW-1	3	ug/L	NS	NS	NS	NS	989	31,300	8,260	351	1,600	615
PA-MW-2	3	ug/L	NS	NS	NS	NS	116,000	91,700	183,000	224,000	144,000	244,000
PA-MW-3	3	ug/L	NS	NS	NS	NS	325	NS	321	163	260	80.1
PA-MW-4	3	ug/L	NS	NS	NS	NS	556	NS	438	192	140	160
PA-MW-5	3	ug/L	NS	NS	NS	NS	1,830	NS	360	331	320	329
PA-MW-6	3	ug/L	NS	NS	NS	NS	2,080	NS	269	328	430	372
PA-MW-7	3	ug/L	NS	NS	NS	NS	NS	2270	11,200	2,420	1,600	2,640
PA-MW-8	3	ug/L	NS	NS	NS	NS	NS	43,700	39,500	126,000	68,500	306,000
PA-MW-9	3	ug/L	NS	NS	NS	NS	NS	54,300	34,600	5,360	2,000	3,630
PA-MW-10	3	ug/L	NS	NS	NS	NS	NS	16,000	19,000	11,200	10,600	12,200
PA-MW-11	3	ug/L	NS	NS	NS	NS	NS	5,810	2,940	557	440	287
PA-MW-12	3	ug/L	NS	NS	NS	NS	NS	NS	NS	NS	280	1,430
PA-MW-13	3	ug/L	NS	NS	NS	NS	NS	NS	NS	NS	1,500	1,150
PA-MW-14	3	ug/L	NS	NS	NS	NS	NS	NS	NS	NS	230	5.2
PA-MW-15	3	ug/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	15,700
PA-MW-16	3	ug/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	9,340
PA-MW-17	3	ug/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	8,910
PA-MW-18	3	ug/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	4,370
WP-MW-12	3	ug/L	NS	NS	NS	NS	NS	NS	15,800	13,300	NS	23,200
WP-MW-13	3	ug/L	NS	NS	NS	NS	NS	NS	17,300	6,630	NS	6,950
WP-MW-14	3	ug/L	NS	NS	NS	NS	NS	NS	141,000	73,300	NS	19,800
WP-MW-15	3	ug/L	NS	NS	NS	NS	NS	NS	19,200	13,700	NS	15,700
MW-1	3	ug/L	55,800	31,600	15,400	NS	NS	NS	NS	NS	NS	NS
MW-2	3	ug/L	1,360	1,630	2,620	NS	NS	NS	NS	NS	NS	NS
MW-3	3	ug/L	386	898	644	NS	NS	NS	NS	NS	NS	NS
MW-4	3	ug/L	321	403	113	NS	NS	NS	NS	159	NS	15,700
MW-5	3	ug/L	NA	NA	9,370	7,940	NS	NS	NS	NS	NS	NS
MW-6A	3	ug/L	NA	NA	90	NS	NS	NS	NS	NS	NS	NS

Notes:
ug/L - micrograms per liter
NJDEP PQL - New Jersey Department of Environmental Protection Practical Quantitation Level
NS - not sampled
WP-MW-14 same location as previous MW-1
WP-MW-15 same location as previuos MW-5
Vault removed September/October 1998

Exhibit B

- Exhibit B-1: Site Location
- Exhibit B-2: Tax Lot and Block Map



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	BAYONNE BRIDGE **Bayonne, NJ**	**February 2012**
	SITE LOCATION	**EXHIBIT B-1**

PAMS PIN	County	Municipality	Block	Lot	Address/Location	Owner	Zoning
0901_373_14	Hudson	Bayonne	373	14	4-22 AVENUE A	TEXACO DOWNSTREAM PROPERTIES INC, %CHEVRON PROP-PO BOX 285, HOUSTON, TX 77002	INDUSTRIAL
0901_362_2	Hudson	Bayonne	362	2	19-45 BOULEVARD	IDEAL WINDOW MFG INC, 100 WEST 7TH ST, BAYONNE, N J 07002	INDUSTRIAL
0901_362_1	Hudson	Bayonne	362	1	GERTRUDE & W 2ND STS	PORT OF N Y AUTHORITY, 80-90 8TH AVE, NEW YORK, N Y 10011	OTHER EXEMPT
0901_510_1	Hudson	Bayonne	510	1	AVENUE A & W 2ND ST	CONRAIL, 452 FIFTH AVE, NEW YORK, N Y 10018	RAILROAD CLASS II
0901_362_3	Hudson	Bayonne	362	3	AVENUE A-W 2ND GERTRUDE	RUTHERFORD CHEMICALS, LLC, 40 AVENUE A, BAYONNE, NJ 07002	INDUSTRIAL
0901_391_5	Hudson	Bayonne	391	5	NA		NA
0901_392_1	Hudson	Bayonne	392	1	W 1ST ST	CITY OF BAYONNE, 630 AVENUE C, BAYONNE, NJ 07002	PUBLIC PROPERTY
0901_391_3	Hudson	Bayonne	391	3	W 1ST ST	PORT OF N Y AUTHORITY, 80-90 8TH AVE, NEW YORK, N Y 10011	OTHER EXEMPT
0901_391_1	Hudson	Bayonne	391	1	AVENUE A & W 1ST ST	TEXACO DOWNSTREAM PROPERTIES INC, %CHEVRON PROP-PO BOX 285, HOUSTON, TX 77001	INDUSTRIAL
0901_373_13	Hudson	Bayonne	373	13	218-222 W 2ND ST	TEXACO DOWNSTREAM PROPERTIES INC, %CHEVRON PROP-PO BOX 285, HOUSTON, TX 77001	INDUSTRIAL
0901_373_2	Hudson	Bayonne	373	2	233-243 W 1ST ST	WILLIAMS IND, INC, 101 EAST MAIN ST, LITTLE FALLS, NJ 07424	INDUSTRIAL
0901_373_15	Hudson	Bayonne	373	15	2 AVENUE A	T K MAC LIMITED LIABILITY CO., 86 E 21ST ST, BAYONNE, NJ 07002	COMMERCIAL
0901_373_1	Hudson	Bayonne	373	1	247-251 W 1ST ST	TEXACO DOWNSTREAM PROPERTIES INC, %CHEVRON PROP-PO BOX 285, HOUSTON, TX 77001	INDUSTRIAL
0901_373_3	Hudson	Bayonne	373	3	W 2ND & 1ST STS	PORT OF N Y AUTHORITY, 80-90 8TH AVE, NEW YORK, N Y 10011	OTHER EXEMPT
0901_373_12	Hudson	Bayonne	373	12	17 BOULEVARD	REYNOLDS, ANDREW, 17 KENNEDY BLVD, BAYONNE, N. J. 07002	RESIDENTIAL PROPERTY
0901_373_10	Hudson	Bayonne	373	10	13 BOULEVARD	NESTICO, FRANK J & CATHERINE, 13 KENNEDY BLVD, BAYONNE, N J 07002	RESIDENTIAL PROPERTY
0901_373_11	Hudson	Bayonne	373	11	15 BOULEVARD	PIVANO, GERALDINE, 15 KENNEDY BLVD, BAYONNE, N J 07002	RESIDENTIAL PROPERTY
0901_373_4	Hudson	Bayonne	373	4	1 BOULEVARD	WASSERMAN, HOWARD & ELSIE, 1 KENNEDY BLVD, BAYONNE, N J 07002	RESIDENTIAL PROPERTY
0901_373_5	Hudson	Bayonne	373	5	3 BOULEVARD	WONG, LILLIAN & WAI, 3 KENNEDY BLVD, BAYONNE, NJ 07002	RESIDENTIAL PROPERTY
0901_373_6	Hudson	Bayonne	373	6	5 BOULEVARD	FERNANDEZ, SANTIAGO & CONCEPCION, 5 KENNEDY BLVD, BAYONNE, N J 07002	RESIDENTIAL PROPERTY
0901_373_7	Hudson	Bayonne	373	7	7 BOULEVARD	ATTISANO, CARLO & JOSEPHINE, 7 KENNEDY BLVD, BAYONNE, N J 07002	RESIDENTIAL PROPERTY
0901_373_8	Hudson	Bayonne	373	8	9 BOULEVARD	OLESKI, JOSEPH J & FRANCES, 9 KENNEDY BLVD, BAYONNE, N J 07002	RESIDENTIAL PROPERTY
0901_373_9	Hudson	Bayonne	373	9	11 BOULEVARD	SANCHEZ, HENRY, 11 KENNEDY BLVD, BAYONNE, N J 07002	RESIDENTIAL PROPERTY

LEGEND:

- SITE BOUNDARY
- 200 ft RADIUS
- PARCEL BOUNDARY

BLOCK

- 362
- 373
- 391
- 392
- 510

0 260 520
Feet

BAYONNE BRIDGE
BAYONNE, NEW JERSEY

TAX LOT AND BLOCK MAP

ARCADIS

EXHIBIT
B-2

CITY: SF DIV/GROUP: ENV/IM DB: MESTIFANOS LD: PIC: PM: TM: TR:
PROJECT (PROJECT #) PATH: C:\Projects\CSX_BayonneBridge\mxd\Landuse_BayonneBr.mxd 2/29/2012 11:17:31 PM

Exhibit C

- Exhibit C – Narrative Description
- Exhibit C-1: Bayonne Bridge Proposed Classification Exemption Area
- Exhibit C-2: NJDEP GeoWeb – Existing CEA Location
- Exhibit C-3: NJDEP GeoWeb – Details of CEA

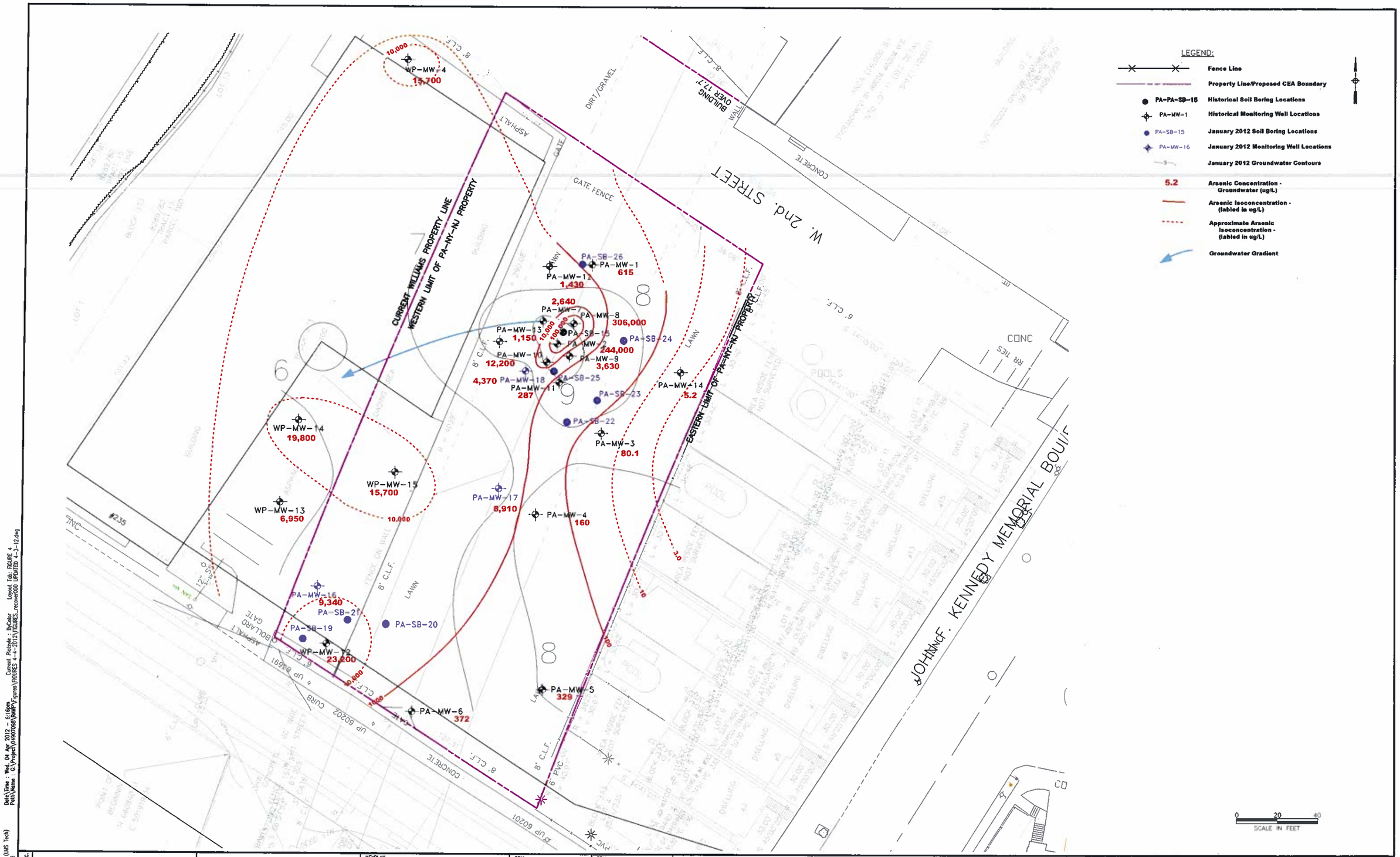
Exhibit C: Narrative Description of Classification Exemption Area as an Institutional Control

The proposed Classification Exemption Area (CEA) consists of Block #373, Lot #3 located at 235 West First St., Bayonne, Hudson County, New Jersey. The property is approximately one acre and measures approximately 290 feet in length, 185 feet along West Second Street, and 155 feet along West First Street. The property is the current and future location of bridge piers (Bayonne Bridge). The contaminant of concern (COC) at the Site is arsenic, which is present in soil and groundwater as shown on Exhibit C-1.

This CEA application is being submitted as part of a Remedial Action Workplan for the site. Remedial actions proposed for the site include: source area soil removal/off-site disposal and institutional/engineering controls. Following the removal of the arsenic source material, engineering controls in the form of a cap will be installed and quarterly groundwater monitoring will be performed for a period of 24 months.

Following the implementation of the remedial action, this CEA application will be revised to include required components not yet completed. Following analysis of the quarterly groundwater data, a fate and transport model will be completed for the Site. Additional monitoring wells will be installed to vertically delineate impacts at the Site and a geologic cross section will be completed. A full well search will be compiled for the Site and written documentation of the well search, planning board, and board of health records will be obtained including a 25-year water use planning horizon. Public notification will be required with the municipality, county planning board, health department and residential properties within 200 feet of the established Site boundary. Additional requirements including an updated receptor evaluation and a baseline ecological evaluation will also be completed as part of the final remedy for the Site.

Based on NJDEP's GeoWeb GIS service, a CEA has been established across the western portion of the site as shown on Exhibit C-2. This CEA (#1346) was established by Texaco Refining & Marketing Co., 1st Street West, Bayonne, NJ. Arsenic, as well as several other contaminants, is listed as a COC on this CEA as shown on Exhibit C-3.



Acad Version : R18.1s (LMS Tech)
User Name : Francesco B
Date\Time : Wed, 04 Apr 2012 - 6:16pm
Path\Name : G:\Project\04907098\WMP\Figures\FIGURES 4-4-2012\FIGURES_recover000 (UPDATED 4-3-12.dwg
Current Plotstyle : ByColor
Layout Tab: FIGURE 4

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REV.	ISSUED DATE	DESCRIPTION
-	-	-
-	-	-

KEYPLAN

SEAL

SEAL

ARCADIS
ARCADIS U.S., Inc.
Suite 1250
1100 Superior Avenue
Cleveland, Ohio 44114
Tel: 216-781-6177 Fax: 216-781-6243
www.arcadis-us.com

THE PORT AUTHORITY
OF NY & NJ
BAYONNE BRIDGE
REMEDIAL ACTION WORKPLAN

PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF.	CHECKED BY
Project Manager		J. FREDERICK	G. JEAN-PIERRE
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
BAYONNE BRIDGE PROPOSED CLASSIFICATION EXEMPTION AREA			K. IANICELI
		PROJECT NUMBER	DRAWING NUMBER
		04907098.0000	EXHIBIT C-1
			SHEET OF

LEGEND:

- CLOSED LOOP GEOTHERMAL
- DOMESTIC
- INDUSTRIAL
- SITE BOUNDARY
- GROUNDWATER CLASSIFICATION EXEMPTION AREA (CEA)
- PARCEL BOUNDARY

0 400 800
Feet

BAYONNE BRIDGE
BAYONNE, NEW JERSEY

NJDEP GeoWeb -
EXISTING CEA LOCATION

ARCADIS

EXHIBIT
C-2

CITY: SF DIV/GROUP: ENV/IM DB: MESTIFANOS LD: PIC: PM: TM: TR:
PROJECT: (PROJECT #)
PATH: C:\Projects\CSX_BayonneBridge\mxd\ReceptorEvaluation_BayonneBr.mxd 2/29/2012 11:21:46 PM

*

Details of " Groundwater Contamination Areas (CEA) "

Attribute	Value
CEA Number	1346
Site Name	Texaco Refining & Marketing Co.
Address	1st St. W.
Block and Lot	332-3
Municipality	Bayonne City
County	Hudson
KCSL ID	NJD067505958
Lead Program	BISR
Start Date	12/27/1996
Duration (yrs)	Indeterm.
Final Remedy	
Closed	No
Well Restriction Area	Yes
Groundwater Classification	II-A
Restriction Depth (ft)	50.000
Acres	79.05918938
Benzene	Yes
MTBE	
t-Butyl Alcohol	
Trichloroethylene (TCE)	
Tetrachloroethylene (PCE)	
Naphthalene	
Vinyl Chloride	
Benzo[a]pyrene	
Lead (Pb)	Yes
Arsenic	
Chromium	
Cadmium	
Mercury	
Tentatively Identified Compounds (TICs)	
Volatile Organic (VO)	Toluene, ethylbenzene, xylenes
Base Neutral	
Metal	
Pesticide	
Polychlorinated Biphenyls (PCBs)	
Dioxin	
Radionuclides	
Free Product	
Other	Ammonia

EXHIBIT C-3

Exhibit D

- Exhibit D-1: Vertical Contaminant Data

The vertical extents of the arsenic impacts will be determined following soil remediation, completion of the Bayonne Bridge Redevelopment project and well reinstallation.

Exhibit E

- Exhibit E-1: Fate and Transport Description and Model Documentation

The fate and transport description and model documentation associated with the arsenic impacts will be determined following soil remediation, completion of the Bayonne Bridge Redevelopment project, and well reinstallation.

Exhibit F

- Exhibit F-1: Well Search Results
- Exhibit F-2: Well Search Table

LEGEND:

- CLOSED LOOP GEOTHERMAL
- DOMESTIC
- INDUSTRIAL

0 1,100 2,200
Feet

BAYONNE BRIDGE
BAYONNE, NEW JERSEY

WELL SEARCH RESULTS

ARCADIS

EXHIBIT
F-1

CITY: SF DIV/GROUP: ENV/IM DB: MESTIFANOS LD: PIC: PM: TM: TR:
PROJECT: (PROJECT #)
PATH: C:\Projects\CSX_BayonneBridge\mxd\WellSearchResults_BayonneBr.mxd 2/29/2012 9:23:11 PM

Well Search for

PROGRAM INTEREST (PI) ID # :	G000021830
SOURCE COORDINATE X	592014
SOURCE COORDINATE Y	661014
GROUNDWATER FLOW DIRECTION USED (if any)	SW
WERE APPLICABLE WELL TYPES FOUND? (Yes/No)	Yes
IS THIS SUBMISSION AN UPDATE? (Yes/No)	Yes
AUTHOR (name of company)	ARCADIS Inc.
AUTHOR STREET ADDRESS (include town and zip code)	17-17 Route 208, Fair Lawn, NJ
LSRP OVERSEEING WORK (name and license number)	
PROFESSIONAL WHO PREPARED SUBMISSION	Roger Reiersen
EMAIL CONTACT	roger.reiersen@arcadis-us.com
PHONE CONTACT	201-398-4340

Exhibit F-2
Well Search Table

Download Document	Permit Number	Well Use	Potentially Potable	Physical Address	County	Municipality	Block	Lot	Easting (X)	Northing (Y)	Distance (miles)	Proposed Depth (feet)	Proposed Capacity (gal/min)
1384	2600089027	Closed Loop	No	354 AVENUE C	Hudson	Bayonne City	246	59	596194	665238	1.12	500	0
1385	2600089027	Closed Loop	No	354 AVENUE C	Hudson	Bayonne City	246	59	596194	665238	1.12	500	0
1	2500018406	Domestic	Yes		Somerset	Warren	501	18 D	595057	661237	0.56	100	10
643	2600054146	Industrial	Yes	119 LINNET AVE.	Hudson	Bayonne City	309	5	596071	658509	0.89	300	20
644	2600054146	Industrial	Yes	119 LINNET AVE.	Hudson	Bayonne City	309	5	596071	658509	0.89	300	20
661	2600055379	Industrial	Yes	EAST 2ND ST	Hudson	Bayonne City	359	3	596059	661241	0.75	300	65
662	2600055379	Industrial	Yes	EAST 2ND ST	Hudson	Bayonne City	359	3	596059	661241	0.75	300	65
1490	E201102336	Industrial	Yes	415-423 Avenue C	Hudson	Bayonne City	230	18.01	596426	666249	1.29	400	50
1491	E201102337	Industrial	Yes	455-461 Avenue C	Hudson	Bayonne City	219	26	596722	666736	1.4	400	50

Appendix F

(Attached CD)

Imagine the result

The Port Authority of New York and New Jersey

Remedial Investigation Report/Remedial Action Workplan

Staten Island Bridges
Bayonne Bridge

Bayonne, New Jersey

April 2012

Revised October 2012

ARCADIS

Remedial Investigation Report/Remedial Action Workplan

Bayonne Bridge
Bayonne, New Jersey

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EXECUTIVE SUMMARY

The following Remedial Investigation Report/Remedial Action Work Plan (RIR/RAWP) was prepared by ARCADIS U.S., Inc. (ARCADIS) on behalf of the Port Authority of NY & NJ (Port Authority) to address arsenic impacts in the soil and groundwater at 235 West First St. Bayonne, New Jersey (Site) under the existing Bayonne Bridge Memorandum of Understanding (MOA) (PI#G000021830).

The Site is currently unpaved and utilized to store construction materials such as jersey barriers. The Site is approximately 1-acre and measures approximately 290 feet in length, 130 feet along West Second Street, and 110 feet along West First Street. The Site also includes a small parcel of land measuring approximately 0.2-acres that is leased by Williams Industries, Inc. (Williams) and located immediately to the west of Port Authority's 0.8-acre Site. Portions of the Site are proposed for bridge piers and a detention basin for the renovation of the Bayonne Bridge.

Multiple investigations have been performed at the Site between 2003 and 2009 to characterize the extent of the arsenic impacts in soil and groundwater. In January 2012, the Port Authority installed eleven soil borings and three borings were completed as groundwater monitoring wells. A total of 58 soil samples (including duplicates) and 23 groundwater samples were collected in January, 2012. Based on the results, elevated arsenic concentrations were measured in soil and groundwater in the vicinity of monitoring wells PA-MW-2, PA-MW-17, and WP-MW-12.

It is proposed to excavate the arsenic-impacted soil in three areas (in the vicinity of PA-MW-2, PA-MW-17, and WP-MW-12) for disposal offsite. Remedial excavation activities are proposed in conjunction with the bridge pier construction for the Bayonne Bridge renovation. The plan is to mitigate the impacts of the soil to groundwater pathway in the potential source areas through the partial removal of source soil and limited dewatering activities. For the purposes of this RIR/RAWP, it is estimated that the source material will be removed to a depth of 3 feet below the ground surface in the area of PA-MW-2, to a depth of 5 feet below ground surface in the area of PA-MW-17, and to a depth of 8 feet below ground surface in the area of WP-MW-12, as practical using standard construction techniques.

The surficial soils may also represent a direct contact pathway and potential pathway for fugitive dust. Therefore, to eliminate these pathways, a 12-inch cap is proposed for the site consisting of compacted crushed stone or clean fill with 4 – 8 inches of asphalt pavement on top.

Following removal of the arsenic-impacted source soil in three areas, a Deed Notice will be prepared and filed to address the presence of residual arsenic impacts and impacts attributed to the presence of historic fill materials. The Port Authority will also file a Classification Exception Area (CEA) to address the presence of elevated concentrations of arsenic in the groundwater.

1 Introduction

The following Remedial Investigation Report/Remedial Action Work Plan (RIR/RAWP) was prepared by ARCADIS U.S., Inc. (ARCADIS) on behalf of the Port Authority of NY & NJ (Port Authority) to address arsenic impacts in the soil and groundwater at 235 West First St. Bayonne, New Jersey (Site) under the existing Bayonne Bridge MOA (PI#G000021830).

1.1 Site Location Description

The Site is located at 235 West First St. (Block #373, Lot #3), Bayonne, New Jersey in Bayonne, Hudson County, New Jersey (Figure 1). A Site Map is provided as Figure 2.

The Site is currently unpaved and utilized to store construction materials such as jersey barriers. The Site is approximately 1-acre and measures approximately 290 feet in length, 130 feet along West Second Street, and 110 feet along West First Street. There are currently no above ground structures on the property. A one-story warehouse, a brick boiler house, and a nitric acid restoring plant previously existed on the Site and were demolished prior to the Bayonne Bridge construction in the late 1920's. There are six piers located on the property supporting the access to the Bayonne Bridge.

The Site also includes a small parcel of land measuring approximately 0.2-acres that is leased by Williams Industries, Inc. (Williams) and located immediately to the west of Port Authority's 0.8-acre Site. This leased parcel has continued to support industrial operations as summarized in the following sections of this RIR/RAWP.

Surrounding properties include residential properties to the east, small industrial companies to the north, and a Little League Baseball field to the south, which separates the Site from the Kill Van Kull. The Site is currently fenced with limited access.

1.2 Geology and Hydrogeology

The Site is relatively flat and the elevation of the site is approximately 9 feet above mean sea level (MSL). According to the data collected during the installation of borings and monitoring wells at the Site, there is an upper layer of fill consisting of brown course to fine sand containing cinders, trace silts, little gravel, and trace

cobbles. The fill layer is generally five to eight feet thick although in some locations it extends deeper than eight feet. Beneath the fill layer is an organic clay layer with peat fibers that is approximately one to two feet thick. The organic clay was not observed at some locations. As reported in previous Williams reports there is a silty sand stratum with layers of silt and sand below the organic layer, extending to bedrock, which was previously encountered at depths of eight to 11 feet. Therefore, the Site consists primarily of fill soils placed over organic clays/peat underlain by a relatively thin alluvial layer and shallow bedrock.

During the most recent monitoring well gauging event (January 2012), groundwater was encountered at depths ranging 0.08 to 2.46 feet below ground surface (ft bgs). The monitoring locations and associated groundwater elevations are shown on Figure 3 and Figure 4, respectively. Groundwater elevation measurements indicate that groundwater movement is westerly towards Newark Bay (Figure 4). According to Woodward-Clyde Consultants groundwater elevation monitoring conducted between August 11, 1995 and September 13, 1995, there is no significant influence on the groundwater elevation from the tidal changes in the Kill Van Kull or Newark Bay, however it is unclear if tidal influences are present during winter and summer peak tides.

The Site is situated approximately 800 feet away from the Kill Van Kull, quarter mile away from the Newark Bay, and 3 miles away from the Upper New York Bay. All three water bodies are tidally influenced.

1.3 Receptor Summary

Well Search

Utilizing NJDEP i-MapNJ program, the nearest commercial public water supply wells to the Site are in the City of Roselle, 5.8 miles to the west of the Sites. The public water supply in Roselle is located outside the hydraulic region of the Site.

Site Ecological Evaluation

The Port Authority Site is unpaved and visual observation of the Site indicated that no stressed vegetation is present. The closest water body to the Site is the Kill Van Kull located 800 feet from the site. The Site and the surrounding area appear to have no sensitive ecological receptors.

The Site was mapped on the NJDEP i-MapNJ program, and, because the Site is located in an urban area, sensitive receptors were not detected in the immediate vicinity of the Site.

All sensitive ecological receptors were inspected in i-MapNJ, including: public community water supply wells, CAFRA boundary, state open space, category 1 waters, all landscape projects, and well head protection areas. Due to printing and selection limitations, only a few receptors are shown on the attached i-MapNJ legend. Only one sensitive receptor, wetlands, was detected on i-MapNJ in the area of the Site, but this sensitive receptor is approximately 0.19 miles to the southeast of the Site and will not be negatively impacted by actions taken at the Site.

1.4 Proposed Site Redevelopment

The Bayonne Bridge connects Bayonne, New Jersey, with Staten Island, New York, spanning the Kill Van Kull. Construction began in September 1928 and was completed in 1931. The primary purpose of the bridge was to allow vehicular traffic from Staten Island to reach Manhattan via the Holland Tunnel. Today, the 151-foot air draft restriction beneath the Bayonne Bridge is an obstacle for larger ships doing business with marine terminals west of the Bridge -- at Port Newark and the Elizabeth Port Authority Marine Terminals in New Jersey, and at Howland Hook on Staten Island, New York.

On December 29, 2010, the Port Authority announced the "Raise the Roadway" alternative to provide the most effective solution to the Bayonne Bridge clearance issue — raising the bridge's roadway to approximately 215 feet to increase the existing 151-foot navigational clearance restrictions. The proposed Bayonne Bridge Redevelopment construction activities will result in the relocation of the bridge support piers and a retention basin on the Site.

1.5 Purpose and Scope

The purpose of this RIR/RAWP is to summarize the remedial investigation completed at the Site and propose a remedial action strategy. This report includes a summary of soil and groundwater investigation results, a discussion of the extent of the arsenic impacts to soil and groundwater, and proposes remedial actions.

2 Previous Investigation History

2.1 Abbey Enterprises, Inc. Investigations (Williams Site)

Investigations were conducted by Williams tenant Abbey Enterprises, Inc., between 1986 and 1988 in regards to four underground tanks and other areas of environmental concern under jurisdiction of the New Jersey Environmental Cleanup Responsibility Act (ECRA Case #85434). During the installation of soil borings on the Williams Site (Block 373, Lot 2), a 5,000-gallon concrete vault was discovered. The location of the former vault is shown on Figure 2. Sediment samples collected from the vault and soils surrounding the vault indicated the presence of arsenic in the vault; the actual use of the vault (storage or drainage) was not ascertained. A liquid sediment sample collected from the vault in 1988 contained arsenic at 74.3 ug/L. A soil sample collected from a soil boring located immediately downgradient to the vault had an arsenic concentration of 14,200 mg/kg.

2.1.1 January 1995 Remedial Investigation (Williams Site)

Initially, the Williams Site was placed into the ECRA program based on a pending sale. The ECRA application was withdrawn due to termination of a sales contract and Williams entered into a Memorandum of Agreement (MOA) dated September 17, 1993 under the Voluntary Cleanup Program of the Industrial Site Recovery Act (ISRA). The NJDEP Case Number is 91-03-13-SP02.

In accordance with the MOA, a remedial investigation (RI) was performed in 1992 and 1993 by Paulus, Sokolowski, and Sartor, LLC (PS&S) and a RI Report was submitted in January 1995. The following is a summary of the RI Report:

2.1.1.1 Soil Investigation

Thirteen soil borings were installed and 2 soil samples were collected from each boring between one and two feet and between four and six feet. Four samples were analyzed for the United States Environmental Protection Agency (USEPA) priority pollutants (PP+40) and total petroleum hydrocarbons (TPHC). Nine borings were analyzed for priority pollutant metals (PP metals) and TPHC. In addition, toxicity characteristic leaching procedure (TCLP) metals analyses were conducted on four surface soil samples.

Arsenic concentrations in surface soil samples ranged from 62.8 to 17,200 mg/kg and in subsurface soil samples from non-detect to 1,440 mg/kg. The NJDEP Soil Remediation Standards for arsenic are currently 19 mg/kg (former Soil Cleanup Criteria was 20 mg/kg).

TCLP arsenic concentrations ranged from 5.64 to 52 mg/kg, which exceeds the 5.0mg/kg Resource Conservation and Recovery Act (RCRA) hazardous waste criterion.

A few inorganic compounds and base neutral compounds were detected in soil in exceedance of their respective soil cleanup criteria.

Arsenic concentrations were significantly higher in the surface soil samples (11 out 13 sampling locations) and in soil samples containing cinders.

2.1.1.2 Groundwater Investigation

Four monitoring wells were installed to bedrock and four groundwater samples were collected and analyzed for PP+40.

Arsenic concentrations in groundwater ranged from 321 to 1,360 ug/L, which exceeds the NJDEP Groundwater Quality Standard (GWQS) of 3 ug/L.

Lead was marginally detected in exceedance of its respective GWQS. Concentrations of all other compounds were non-detected or detected below their respective GWQS.

2.1.1.3 Concrete Vault

Vault was estimated to be 18 feet long, 8 feet wide, and 6 feet deep and the volume of sediment inside was estimated to be 4,320 gallons. One composite sample of both sediment and liquid were collected and analyzed for PP metals and full TCLP analysis.

TCLP arsenic concentrations were 829 mg/L in the liquid sample and 578 mg/L in the sediment sample, which exceeds the 5.0 mg/L RCRA hazardous waste criterion. All other results indicate the sediment and liquid to be non-hazardous. TPHC concentrations were 270 mg/L in the liquid and 1,500 mg/L in the sediment.

Arsenic concentrations located immediately downgradient from the vault were several orders of magnitude higher than in the other samples and therefore was determined to be the source of arsenic contamination of greatest concern.

2.1.2 January 1995 Remedial Action Work Plan (Williams Site)

On behalf of the Williams, Woodward Clyde Consultants prepared a Remedial Action Work Plan (RAWP) to address the soil and groundwater contamination at the Williams Site. Although other priority metals and organic compounds were detected at the site, the remedial approach was focused on minimizing the direct contact with arsenic contaminated soil and groundwater and mitigating the leaching of arsenic.

The arsenic sources were reported to be a buried concrete vault containing arsenic-rich sediment and liquid and site soils. The arsenic contamination found in the soil was also attributed partly to historic fill. Up to eight feet of industrial fill containing cinders were placed on the site in the past. Leaching of arsenic from the soils was described as the source of arsenic in the groundwater.

The described remedial approach included completely removing the buried concrete vault and any associated piping, and utilizing a low permeability cap on the Site not occupied by building to minimize infiltration. Based on transport modeling, potential receptors, presence of historic fill, and groundwater uses, natural attenuation was selected as the proposed remedy for arsenic contained in the groundwater. Natural attenuation (via adsorption, dispersion, and diffusion) would be verified through groundwater monitoring for a period of five years. Institutional controls and inspection and maintenance would also be performed.

A Groundwater Monitoring Program, which included modeling arsenic migration, concluded the following:

- there are no significant uses of the groundwater within miles of the Site;
- the nearest significant potential receptor of contaminated groundwater flow from the Site is the Kill Van Kull;
- based on arsenic mass calculations, flow rate calculation, and infiltration rates, historic fill will load groundwater beneath the site with arsenic concentration in the 1,000 ug/L range; and

- transport modeling analysis indicated that, depending on the retardation factor selected for arsenic transport in the groundwater, the time for arsenic to reach the river would be 750 years or more.

The RAWP also detailed necessary permits and approvals, monitoring, health and safety, site restoration, cost estimate, and reporting requirements.

2.1.3 July 28, 1995 Preliminary Assessment (Williams Site)

Woodward-Clyde Consultants submitted a letter report describing Phase I Environmental Site Assessment activities to the NJDEP. This Preliminary Assessment was completed as required by the NJDEP in their response to the 1995 RAWP following requirements listed in N.J.A.C 7:26E-3.1.

The Preliminary Assessment provided a description of the site, a summary of a historical information review, and a summary of their findings. Sanborn Fire Insurance Maps, the Industrial Directory of New Jersey, title and deed search, and review of government files were utilized in order to gather historical information for the site.

The following are the findings of the Preliminary Assessment:

The site was undeveloped until 1920. From 1920 to 1929 the site was owned by Nitrate Agencies Company, an agricultural insecticide manufacturer. The Port Authority owned the site from 1929 to 1938. Fanda Corporation owned the site from 1938 to 1965. Dunbar Sales Company owned the site from 1965 to 1966. Williams Industries has since owned the site from 1966 to the present date in which it has been utilized as a warehouse and distribution facility.

Sandborn maps indicated the presence of underground storage tanks (USTs). Five USTs were removed as part of an ECRA investigation in 1988 by J.M. Sorge, Inc. During the UST investigations, an underground concrete vault and an abandoned “wooden drainage sluiceway” were identified. The vault was likely related to the Nitrate Agencies operations, which manufactured arsenic acid.

A file review of NJDEP case files for the Texaco Refining and Marketing Company Site was conducted on June 12, 1995. This site has been divided into three sections (the former Pirelli Cable Company property, The Bayonne Terminal, and the plant II area). The Texaco Sites are located along the Newark Bay and the Kill Von Kull at the corner of West First Street and Avenue A (northwest of Williams and Port Authority Sites). The descriptions of the fill throughout the former Pirelli Cable Company property and

Texaco Bayonne Terminal are similar to the historical fill that was used at the Williams and Port Authority Sites. Arsenic concentrations in the historic fill located at the Texaco sites ranged from non-detect to 2,440 mg/kg. Thirty-nine of the 123 soil samples exceeded the previous NJDEP soil cleanup criteria of 20 mg/kg.

2.1.4 December 28, 1995 Supplemental Investigation of Groundwater Flow and Quality (Williams Site)

As requested by the NJDEP, Woodward-Clyde Consultants prepared a Supplemental Investigation of Groundwater Flow and Quality at the Williams Site on behalf of Williams Industries. The purpose of this investigation was to:

- re-evaluate the groundwater flow at the site using transducers to be monitored continuously for a period no less than 30 days in order to evaluate the possible influence that tidal fluctuations may have on the groundwater flow at the site;
- re-sample all monitoring wells; and
- re-calculate the arsenic migration model provided in the January 1995 RAWP, if appropriate.

The results of this investigation indicated that groundwater quality was not significantly different then the data collected three years prior and as a result recalculation of the arsenic migration model using the new data was not necessary. The data collected from the continuous groundwater elevation monitoring indicated the there is no significant influence on the groundwater elevation from the tidal changes in the Kill Van Kull or Newark Bay and that the principal direction of migration of dissolved arsenic is in a south/southeast direction towards Kill Van Kull. Therefore, Woodward-Clyde concluded that the results of the previous arsenic migration model provided in the January 1995 RAWP continue to be a valid representation of arsenic transport from the Williams Site.

2.1.5 April 22, 1998 Groundwater Sampling Baseline (Williams Site)

The NJDEP requested that Williams Industries conduct a groundwater sampling baseline, which included the installation of two additional monitoring wells and one additional round of groundwater levels and sampling. One new monitoring well was installed on the most western side of the Williams Site and the other was installed on the land leased from the Port Authority.

The groundwater sampling results indicate that groundwater quality is similar to the results of the previous investigations and has not degraded further since the 1992 and 1995 sampling events. The groundwater flow is generally towards the south based on the collection of groundwater levels.

In order to request the NJDEP to establish a Classification Exception Area (CEA), Woodward-Clyde proposed to obtain grab groundwater samples on the Port Authority property in order to determine the limit of arsenic contamination associated with the vault. The results would be used to identify future locations of monitoring wells used for evaluating groundwater quality while the proposed CEA is in effect.

2.1.6 February 2002 Remedial Action Report (Williams Site)

On behalf of Williams Industries, Remedium Group, Inc. prepared a Remedial Action Report (RAR) that summarizes the remedial actions that took place on the Williams site and the Port Authority leasehold. The remedial actions included removal of a concrete vault containing higher concentrations of arsenic, installations of a concrete/asphalt cap over non-building areas of the Site, and implementing a natural remediation program for groundwater.

Preconstruction activities included the preparation of a site-specific Health and Safety Plan (HASP) that detailed the protection of workers as well as extensive air monitoring and sampling for the protection of the public. Appropriate permits were obtained from the Bayonne Building Department.

The contractor mobilized to the site and setup the site support equipment and installed work area barriers. Remedial activities began with the cleaning and removal of the concrete vault. Concrete vault cleaning and associated soil excavation removal resulted in the disposal of 160,547 gallons of wastewater and 1,837.18 tons of non-wastewater. Two soil samples were collected from the sidewalls of the excavation and their results indicated the presence of arsenic at concentrations consistent with subsurface site conditions. The vault excavation was then backfilled with compacted aggregate.

Prior to the installation of the cap, the parking area and loading docks were demolished. Soil materials were excavated in order to achieve appropriate subgrade for proposed footings and slabs, and transported and disposed of as hazardous waste. The non-building areas were capped with a six-inch thick, reinforced-concrete layer overlain by a three-inch thick asphalt layer. In order to provide a suitable base, a four-

inch thick layer of compacted aggregate was installed under the cap. This subgrade was compacted to a minimum of 95 percent maximum density.

Air monitoring results indicated that airborne chemicals were not detected above applicable standards.

Proposed institutional controls included a Declaration of Environmental Restriction (DER) with the Port Authority for the Port Authority leasehold portion of the site and a deed restriction. Site Inspection and Maintenance Plan included ground water monitoring under the natural remediation program and periodic inspection of the cap.

"No Further Action" was requested for the site.

2.2 Port Authority Subsurface Investigations

In February 1999, Port Authority collected six grab samples and two composite samples and analyzed for TCLP arsenic. Results ranged from 28 mg/L to 1,800 mg/L all of which exceed the EPA's regulatory level of 5 mg/L for the toxicity characteristic. The Port Authority notified the NJDEP of the contamination and notified W.R. Grace & Company to request that they undertake the responsibility of full delineation and remediation of the contamination on the Williams leasehold as well as the adjacent Port Authority owned property.

2.2.1 2003 Port Authority Remedial Investigation

Port Authority conducted a RI in November and December 2003 in order to determine the extent of arsenic contamination on the Port Authority Site. Six soil borings were installed and completed as groundwater monitoring wells, and a total of 12 soil samples and six groundwater samples were collected between November 26th, 2003 and December 16th, 2003. The soil boring and monitoring well installations were performed by Aquifer Drilling & Testing, Inc. The samples were analyzed for arsenic and sent to Test America located at New Durham Road, Edison, NJ 08817 (EPA Method 200.7/SW846 6010B). Boring logs and monitoring well construction logs are provided in Appendix A, and survey information including Form Bs are included in Appendix B.

Arsenic concentrations exceeded the SRS of 19 mg/kg in all soil samples collected ranging from 29.8 mg/kg to 10,400 mg/kg. Arsenic was found in all six groundwater samples in exceedance of the GWQS of 3 ug/L. The arsenic concentrations found in

the six monitoring wells ranged from 325 ug/L to 116,000 ug/L. Figure 5 shows the location of the borings and the 2003 soil sampling results, and Figure 6 shows the location of the monitoring wells and the 2003 groundwater sampling results.

The soil sample collected from PA-MW-2 at 2.0 to 3.0 ft bgs (10,400 mg/kg) and the groundwater sample (116,000 ug/L) indicated the presence of a source in the immediate area of PA-MW-2. It was determined that additional delineation was necessary in order to determine the extent of contamination in the area adjacent to PA-MW-2.

2.2.2 2004 Port Authority Remedial Investigation

An additional five soil borings were installed and completed as groundwater monitoring wells between May 20, 2004 and June 28th, 2004 in order to delineate the arsenic contamination in the vicinity of PA-MW-2. The soil boring and monitoring well installations were performed by Testwell Craig Drillers. The samples were analyzed for arsenic and sent to Test America located at New Durham Road, Edison, NJ 08817 (EPA Method 200.7/SW846 6010B). Boring logs and monitoring well construction logs are provided in Appendix A and survey information including Form Bs are included in Appendix B.

Arsenic concentrations ranged from 216 mg/kg to 3,490 mg/kg in the 10 soil samples that were collected. Groundwater samples were collected from 7 monitoring wells and ranged from 2,270 ug/L to 91,700 ug/L. Arsenic was found in the groundwater sample collected from PA-MW-2 at similar elevated levels as found in the December 2003 sampling event (116,000 ug/L in 2003 and 91,700 ug/L in 2004). Figure 5 shows the location of the borings and the 2004 soil sampling results, and Figure 6 shows the location of the monitoring wells and the 2004 groundwater sampling results.

It was concluded that a soil source area in the immediate vicinity of PA-MW-2 potentially exists, however the nature and historical cause of the potential source was not determined.

2.2.3 2008 Port Authority Remedial Investigation

Port Authority installed four additional monitoring wells (WP-MW-12 through WP-MW-15) on Williams Site between July 19th, and July 21st, 2008 and sampled all wells located on the Williams Site and Port Authority Site between August 6th, and August 15th, 2008 as previously agreed upon. The soil boring and monitoring well installations

were performed by Testwell Craig Drillers. Groundwater samples were analyzed for inorganic arsenic, arsenite, and arsenate (EPA Method 1632) and sent to Brook Rand Labs, WA for analysis.

Boring logs and monitoring well construction logs are provided in Appendix A and survey information including Form Bs are included in Appendix B.

2.2.3.1 Port Authority Site

Eleven existing monitoring wells on the Port Authority Site were gauged and sampled and a total of 12 groundwater samples were collected, one of which served as a duplicate sample.

Laboratory analysis of the groundwater on the Port Authority Site indicated that the extent of arsenic contamination remained similar to that found in the 2004 Port Authority investigation. All groundwater samples collected from the Port Authority Site exceeded the GWQS of 3 ug/L. Arsenic concentrations ranged from 269 ug/L found in PA-MW-06 to 183,000 ug/L found in PA-MW-02. Figure 6 shows the location of the monitoring wells and the 2008 groundwater sampling results.

2.2.3.2 Williams Site

Arsenic concentrations in the groundwater on the Williams Site were found at greater concentrations when compared to previous groundwater data collected by Williams (See Figure 6). WP-MW-14 was installed immediately downgradient from the previously removed vault in the location of Williams former monitoring well MW-1. The August 2008 sampling event concluded that arsenic concentrations have increased on-site since the removal of the vault (15,400 mg/kg in February 1998 and 73,300 mg/kg in November 2008).

Since the results are significantly higher since the vault has been removed, a confirmatory round of groundwater sampling was conducted between November 12th, 2008 and November 26th, 2008. The confirmatory sampling event included the four monitoring wells on the William's Site, and 11 Port Authority monitoring wells. The samples were sent to Test America Laboratories, Inc. and analyzed for total arsenic (EPA Method 200.7/SW846 6010B).

The November 2008 sampling results are consistent with the results of the August 2008 sampling event (Figure 6).

Based on the results of the 2008 RI, it was concluded that:

- source material still exists on the Williams Site;
- the groundwater contamination is not fully delineated on the Williams Site; and
- the arsenic contamination has probably migrated off the Williams Site.

In August 2009, the Port Authority, in discussions with the NJDEP, decided to handle the Port Authority Site separately from the Williams Site. It was also decided that a CEA could not be obtained for the Williams Site since there was an apparent arsenic source remaining. Therefore, this RIR/RAWP addresses only the activities conducted on the Port Authority Site under an existing Bayonne Bridge MOA (PI#G000021830).

2.2.4 2009 Port Authority Remedial Investigation

The objectives of the RI conducted in November and December 2009 were as follows:

- delineate the horizontal and vertical extent of arsenic contamination in the soil;
- delineate the horizontal extent of arsenic contamination in the groundwater; and
- propose remedial actions for soil and groundwater to be taken at the Site.

Findings and recommendations of the RI are summarized below.

2.2.4.1 Soil

Arsenic exceeded the SRS of 19 mg/kg in all but one of the 12 soil samples collected during the December 2009 RI. The arsenic concentrations ranged from 18.3 mg/kg to 9,760 mg/kg with the highest arsenic concentration found in the center of source area (PA-SB-15) in the 2.0-4.0 ft interval.

Arsenic concentrations are two orders of magnitude higher in soils surrounding PA-MW-2 than found in other areas of the Site to date. Based on the elevated arsenic concentrations surrounding PA-MW-2, it has been determined that a source of arsenic contamination in soil is present in the vicinity of PA-MW-2. Figure 5 shows the location of the borings and the 2009 soil sampling results.

Historic fill, which is found at the Site at generally five to eight feet thick, is a potential contributing source of arsenic contamination at the Sites. Arsenic concentrations in the historic fill located at the nearby Pirelli Cable Company and Texaco Bayonne Terminal

properties ranged from non-detect to 2,440 mg/kg. The contamination at the Texaco site was identified during an ECRA investigation and it was determined that Texaco was not responsible for this contamination. The descriptions of the fill throughout these properties are similar to the historical fill that was used on the Port Authority Site (consisting of sand, gravel, clay, cobbles, wood, bricks, and cinders).

2.2.4.2 Groundwater

The results of the groundwater remedial investigation indicated that the extent of arsenic contamination remained relatively consistent since 2003 with a source area surrounding PA-MW-2. Figure 6 shows the location of the monitoring wells and the 2009 groundwater sampling results.

2.2.5 2012 Port Authority Additional Remedial Investigation Activities

Additional soil and groundwater sampling was conducted in January 2012 to document groundwater conditions at the Site and the adjacent Williams Property, and to provide supplemental soils data to refine the remedial action design.

Eleven soil borings were installed and three borings were completed as groundwater monitoring wells. A total of 58 soil samples (including duplicates) and 23 groundwater samples were collected in January, 2012. The soil boring and monitoring well installations were performed by Aquifer Drilling & Testing, Inc. The samples were analyzed for arsenic and sent to Test America located at New Durham Road, Edison, NJ 08817 (EPA Method 200.7/SW846 6010B). Boring logs and monitoring well construction logs are provided in Appendix A and survey information including Form Bs are included in Appendix B. The findings of the 2012 soil and groundwater investigation are summarized below.

2.2.5.1 Soil

Arsenic exceeded the SRS of 19 mg/kg in all but 12 of the 58 soil samples collected during the January 2012 investigation. The arsenic concentrations ranged from 1.6 mg/kg to 24,100 mg/kg.

The delineation of previously identified soil source near PA-MW-2 was attempted with the advancement of five additional borings (PA-SB-22 through PA-SB-26) and the collection of 26 additional soil samples, ranging in depth from 0-0.5 feet bgs to 9.5-10 feet bgs. Figure 5 shows the location of the borings and the 2012 soil sampling results.

Sampling results at newly installed well PA-MW-17 ranged from 108 mg/kg to 5,220 mg/kg with the highest arsenic concentration found in the 2.0 to 2.5 foot interval. Based on the elevated arsenic concentrations at PA-MW-17, an undelineated source of arsenic contamination in soil is present in the vicinity of PA-MW-17.

Arsenic concentrations are two orders of magnitude higher in soils surrounding WP-MW-12 than measured in other areas of the Site. Four additional soil delineation borings (PA-MW-16, and PA-SB-19 through PA-SB-21) were advanced, one of which was finished as a monitoring well. The concentrations ranged from 1.6 mg/kg to 24,100 mg/kg with the highest arsenic concentration at PA-MW-16 in the 2.0-2.5 foot interval. Arsenic concentrations at PA-SB-20 measured 2,700 mg/Kg in the 7.0-7.5 foot interval. In addition, arsenic concentrations at PA–SB-21 measured 3,110 mg/Kg and 3,204 mg/Kg in the 5.0-5.5 foot interval and the 6.0-6.5 foot interval, respectively. Based on the elevated arsenic concentrations at WP-MW-12, PA-MW-16, and PA-SB-19 through PA-SB-21, an undelineated source of arsenic contamination in soil is present in the vicinity of WP-MW-12.

2.2.5.2 Groundwater

Figure 3 shows the location of the monitoring wells and the 2012 groundwater sampling results. Groundwater elevation measurements indicate that groundwater movement is westerly towards Newark Bay. A Groundwater Contour Map is included as Figure 4.Groundwater sampling analytical results are summarized on Figure 6.

In January 2012, samples collected from the monitoring wells adjacent to PA-MW-2 ranged from 1,150 ug/L to 306,000 ug/L, with increases in concentration at PA-MW-2 and PA-MW-8. These results suggest the presence of the suspected soil source in the immediate vicinity of PA-MW-2 is a continuing source of groundwater impacts.

Samples collected to the south and east of PA-MW-2 (PA-MW-3 through PA-MW-6, PA-MW-11, and PA-MW-14) are upgradient and side gradient from the identified soil source. The results ranged from 5.2 ug/L to 372 ug/L, all of which are below the 1,000 ug/L loading range calculated for the fill by Woodward Clyde Consultants in the Williams 1995 RAWP. The sample collected from WP-MW-4 (15,700 ug/L) to the north of PA-MW-2 is thought to be upgradient, but the surveyed elevation of the well cannot be verified.

Samples collected immediately downgradient of PA-MW-2 (PA-MW-13 and PA-MW-18) were 1,150 ug/L and 4,370 ug/L respectively, and can be attributed to arsenic loading from the delineated soil source near PA-MW-2.

Samples collected from WP-MW-15 and PA-MW-17 were 15,700 ug/L and 8,910 ug/L, respectively. The groundwater impacts at PA-MW-17 are likely attributable to a potential soil source near PA-MW-17, discussed in the previous section. Additionally, the downgradient sample collected from WP-MW-13 (6,950 ug/L) may also be attributable to the potential source near PA-MW-17.

Samples collected from PA-MW-16 and WP-MW-12 were 9,340 ug/L and 23,100 ug/L respectively. The groundwater impacts in this area are likely attributable to the above referenced potential soil source at WP-MW-12.

Lastly, a sample was collected at WP-MW-14 (19,800 ug/L), which was installed immediately downgradient from the previously removed vault in the location of Williams former monitoring well MW-1. The January 2012 sampling event shows that arsenic concentrations in groundwater have decreased since 2008 (Figure 6).

3 Applicable Remediation Standards

The following major regulations are applicable to the proposed remediation program:

- N.J.A.C. 7:9C – Groundwater Quality Standards
- N.J.A.C 7:26D – Remediation Standards
- N.J.A.C. 7:26E – Technical Requirements for Site Remediation
- N.J.A.C 7:26G – Solid & Hazardous Waste Rules
- OSHA for worker health and safety

In accordance with N.J.A.C. 7:26E-1.4 – Notification and Public Outreach, a sign has been posted at the Site and will be maintained so that it is legible at all times until the State issues a No Further Action and Covenant Not to Sue letter. A picture of the sign is included in Appendix C. Site information required under 7:26E-1.4 has been submitted to the State, including an electronic and hardcopy photograph of the sign showing its location and content.

As stated above, due to the local widespread presence of arsenic in the soil and groundwater, arsenic is believed to be at least partially a characteristic of historic fill material. Arsenic concentrations in historic fill at proximate sites have measured up to 2,440 mg/kg.

4 Remedial Action Workplan

The proposed remedial actions were selected based on the previous investigations discussed above, previous remedial actions at the Williams Site, and discussions taken place between Port Authority and the NJDEP.

The objectives of the remedial action are:

- protection of human health and receptors by eliminating exposure pathways to arsenic that will remain in-place at the Site at concentrations in excess of the most stringent SRS and GWQS by utilizing engineering and institutional controls, and site security;
- protection of groundwater quality by attempting to eliminate known sources of groundwater contamination, and
- protection of surface water quality by preventing contact of storm water run-off with contaminated soils utilizing engineering controls.

4.1 Soil Source Removal

It is proposed to excavate the arsenic-impacted soil in the three areas as outlined on Figure 7 for disposal offsite. The plan is to mitigate the impacts of the soil to groundwater pathway in the potential source areas through the removal of the source and limited dewatering activities. For the purposes of this RIR/RAWP, it is estimated that the source material will be removed to a depth of 3 feet below the ground surface in the area of PA-MW-2, to a depth of 5 feet below ground surface in the area of PA-MW-17, and to a depth of 8 feet below ground surface in the area of WP-MW-12, as practical using standard construction techniques.

As previously discussed the Bayonne Bridge Redevelopment project will result in the relocation of the existing support piers currently located at the Site. There are currently four new piers proposed within the Site boundaries. The installation of the proposed piers will require additional remedial excavation and dewatering to complete their installation. Source removal excavations are proposed in conjunction with the pier construction/excavating for the Bayonne Bridge.

For the purposes of this RIR/RAWP, it is assumed that the excavations will be sheeted. Excavation activities will commence following as needed dewatering, and the materials excavated will be stockpiled onsite on plastic, with appurtenant containment to control

pore water drainage. The materials stockpiled will be sampled statistically in accordance with NJDEP Technical Regulations, and disposed of offsite. The excavations will be backfilled as needed to support bridge construction requirements.

4.2 Impermeable Cap

The surficial soils may also represent a potential pathway for direct contact and fugitive dust. Therefore, it is proposed that the upper foot of the Site be capped to eliminate the above pathway. Excavation may or may not be required to place the cap depending on final grade. A cap consisting of imported clean fill and 4 to 8 inches of asphalt will then be placed for the elimination of the direct contact and fugitive dust pathways.

The cap shall be constructed of approximately 6 inches of certified clean fill or crushed stone materials and 4 to 8 inches of asphalt to address the presence of residual contamination at concentrations in excess of the NJDEP SRS that will remain on-site. The cap will serve to prevent inadvertent access to the residual contaminants and eliminate potential exposure pathways.

In addition, a retention basin is proposed for the Site and will act as a cap for this area (Figure 8). The retention basin will be lined with geosynthetic clay liner, and designed to resist groundwater uplift pressures.

The retention basin will also be designed to prevent groundwater infiltration into the subsurface. A quality assurance plan and monitoring plan will be developed to confirm that the liner is installed to specifications and that groundwater is not infiltrating into the subsurface.

4.3 Institutional Controls

4.3.1 Deed Notice

A Deed Notice will be properly prepared and filed to address the presence of contaminants at concentrations in excess of the SRS attributed to the presence of historic fill materials following the source removal and completion of the Bayonne Bridge Redevelopment project. The Deed Notice will serve to restrict future development of the property and to prevent inadvertent disruption of the cap and potential exposure to contaminants that will remain in-place at the Site. A draft Deed Notice is presented in Appendix D.

As part of the establishment of the Deed Notice, the Port Authority proposes the following:

- the Deed Notice will be properly filed and will remain on file with the Office of the Hudson County Recording Officer;
- the Port Authority will ensure that the current land use is consistent with the restrictions established in the Deed Notice;
- the Port Authority will ensure that any changes in land use will not create an unacceptable exposure;
- any changes in current land use subsequent to the establishment of the Deed Notice and the issuance of a "No Further Action/Covenant Not To Sue Letter" from the NJDEP will be reported; and
- submittal of Biennial Certifications (including dates of inspection, name of inspector, results of the inspection, conditions of engineering controls, etc.). The certification submittal will also alert the NJDEP of any disturbance activities in the restricted area including names of the persons causing the disturbance and their affiliation, dates of disturbance, amounts of soil generated due to the disturbance, final disposition of the soils generated and the methods used to control exposure due to the disturbance.

4.3.2 Classification Exception Area (CEA)

Following the removal of the source material and the completion of the groundwater monitoring program, the Port Authority proposes to file a CEA to address the presence of arsenic in the groundwater in excess of the NJDEP GWQS. A draft version of the CEA is provided in Appendix E.

Based on existing NJDEP GeoWeb GIS data, a CEA has previously been established over a portion of the site (Appendix E, Exhibit C-2). This CEA (#1346) has been established by Texaco Refining and Marketing Co. and includes arsenic as a contaminant of concern (Appendix E, Exhibit C-3).

In order to establish the CEA on-site, quarterly groundwater monitoring is proposed for 8 consecutive quarters to assess the success of the natural attenuation of arsenic. Based on the proposed Site activities, it is assumed that all existing Site monitoring wells will be destroyed. The proposed replacement monitoring well locations will be finalized following the completion of the Bayonne Bridge Redevelopment work at the Site and subsequent Site redevelopment. The proposed monitoring well locations will

be submitted to the LSRP for review. The final CEA package will be compiled upon completion of the required groundwater sampling data and will include the following:

- a description of the fate and transport of the arsenic contaminant plume and details regarding the length of time the plume is expected to travel and persist before the contaminant concentrations naturally attenuate (decrease) to or below the applicable remediation standard;
- a proposed expiration date for the CEA
- a map of the proposed CEA area compatible with the NJDEP's Geographic Information System (GIS);
- a determination as to whether the CEA will extend through a groundwater use area; and
- documentation the Port Authority has notified the local Health Department and Clerks of the governing bodies of each municipality in which the CEA is located in accordance with N.J.A.C. 7:26E-1.4.

4.4 Inspection, Maintenance and Monitoring

4.4.1 Inspection and Maintenance

There are limited maintenance and inspections required for the remedial activities selected at the Site. The maintenance and inspection activities will include:

- maintenance of all engineering (i.e., the cap and fence) and institutional controls (i.e., the Deed Notice and the CEA) to ensure that these measures continue to be protective of human health and the environment;
- performing annual inspections of the engineering controls to determine that the controls are operating as designed and intended including their integrity, operability and effectiveness;
- performing annual inspections of the site to determine that the land use does not violate the terms and conditions of the institutional control(s);
- submission of a monitoring report documenting and certifying compliance with the above every two years; and
- inspection and maintenance of the retention basin, as required, to prevent groundwater infiltration.

4.4.2 Groundwater Monitoring

Groundwater monitoring will be conducted to determine the effectiveness of the remedial action. Following the completion of the excavation activities and Site redevelopment, monitoring well replacement locations will be provided for approval by the Licensed Site Remediation Professional (LSRP). The monitoring wells will be sampled quarterly for 2 years and annually thereafter for 8 years (total 10 years). Groundwater samples will be analyzed for total arsenic.

The data collected will be analyzed in order to establish trends. If after 10 years of monitoring, the statistical analysis indicates that arsenic concentrations are decreasing; all monitoring wells will be sealed. Otherwise the need for further monitoring and/or remedial actions will be re-evaluated.

The results will be submitted to the LSRP in letter report format within 60 days of each sampling event.

5 Required Permits

The following permits will be required for the proposed remedial approach:

- Well Abandonment Report

It is assumed that all of the existing Site monitoring wells will be abandoned during the remedial excavation, capping, and Bayonne Bridge Redevelopment construction activities. Well Abandonment Reports shall be submitted to the State by a licensed well driller within 90 days of sealing the wells.

All other required permits, associated with the excavation and dewatering activities, shall be obtained as part of the proposed Bayonne Bridge Redevelopment activities prior to initiating the remedial actions at the Site.

Following LSRP approval of the proposed monitoring well replacement locations, Well Certification Form Bs shall be obtained as new monitoring wells are installed at the Site following construction.

6 Construction of Remediation Structures

The remedial actions described in this RIR/RAWP will not result in the construction of structures (i.e., permanent and/or temporary), remedial units, and/or equipment to complete the proposed remedial actions. The construction activities will be limited to monitoring well installation, excavation, and site restoration activities.

7 Erosion, Dust, and Odor Control

7.1 Soil Erosion and Sediment Control

A Soil Erosion and Sediment Control Plan (SESC Plan), for the performance of the Bayonne Bridge construction activities will be submitted to the Hudson-Essex-Passaic Soil Conservation District for their review, consideration, and concurrence. The proposed remedial activities will be included as part of the contract documents for the Bayonne Bridge development activities and will therefore be included as part of the SESC Plan for the overall construction project.

7.2 Dust Control

During construction activities, airborne dust will be monitored in accordance with the site specific Health and Safety Plan (HASP) requirements to minimize the migration of arsenic particulate dust. Measurements will be utilized in order to determine if additional dust control measures will be required.

7.3 Odor Control

Based on Site conditions, odor is not anticipated to be a problem; however, vapor contaminant concentrations in work areas may be monitored as part of the HASP.

8 Site Restoration

The active remedial actions proposed for the Site, as described in this RIR/RAWP, include the installation of a soil cap and excavation. The cap is being installed to eliminate the direct contact exposure pathway to residual contamination. The six existing piers (Figure 2) currently located at the Site will be replaced with four piers installed on the Site as part of the Bayonne Bridge Redevelopment construction activities. Additionally, a stormwater management basin is proposed for the eastern boundary of the Site. The proposed Site conditions following construction are shown on Figure 8.

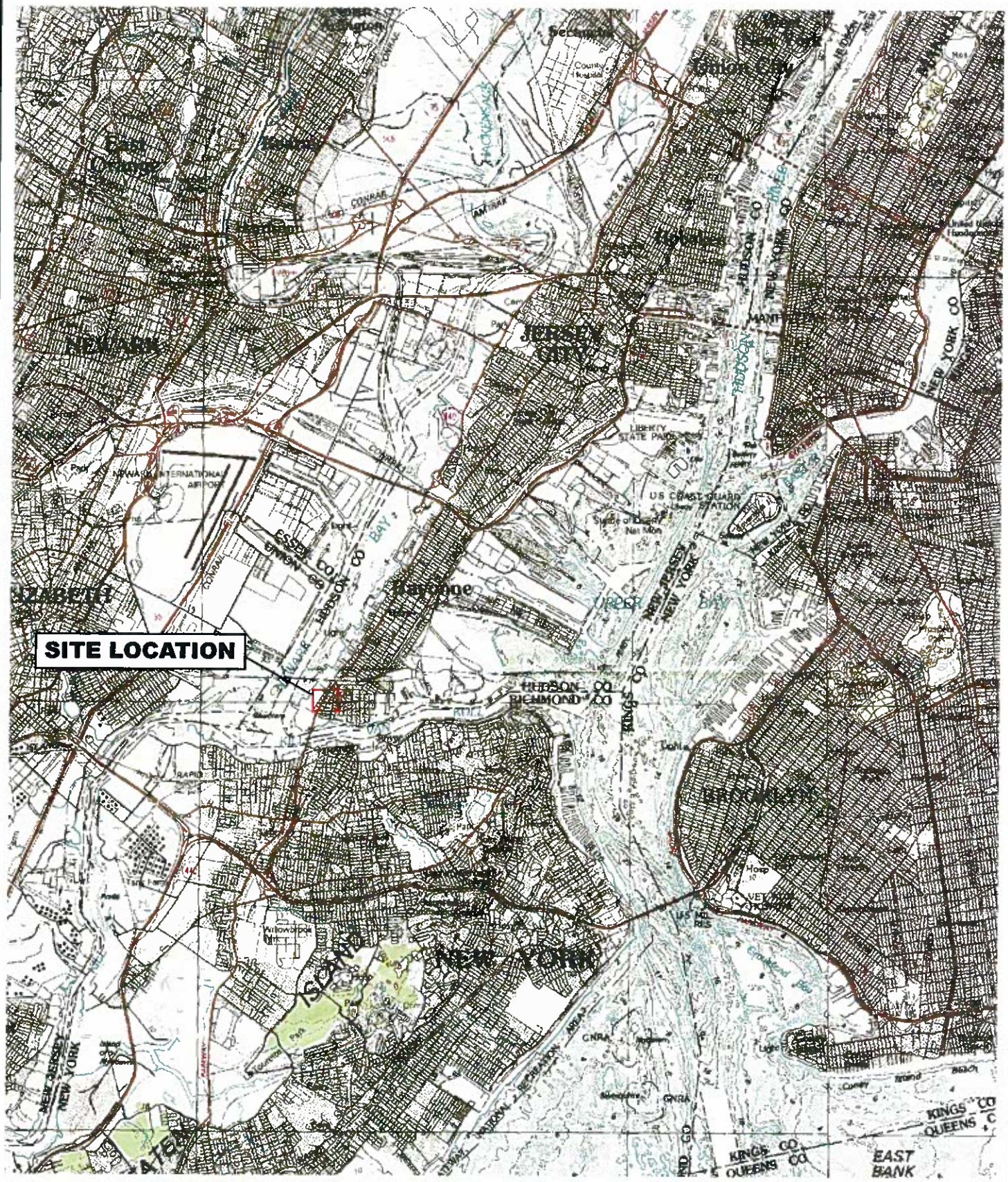
As previously discussed, it is assumed that all of the existing Site monitoring wells will be abandoned during the remedial excavation, capping, and Bayonne Bridge Redevelopment construction activities. Replacement monitoring well locations will be proposed to the LSRP following completion of the Bayonne Bridge Redevelopment activities at the Site.

As part of the Site restoration following construction, fencing around the Site will be inspected and repaired if needed and any debris will be removed and disposed of properly.

9 Remedial Action Schedule

As previously discussed, the remedial actions will be performed concurrent with the Bayonne Bridge Redevelopment construction activities at the Site. The current Bayonne Bridge Redevelopment construction schedule estimates the construction will be performed between 2013 and 2017. The schedule also assumes the proposed Site work will be performed during 2013.

Figures



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	BAYONNE BRIDGE **Bayonne, NJ**	**APRIL 2012**
	SITE LOCATION	**FIGURE 1**

Date\Time : Wed, 03 Oct 2012 – 1:04pm Current Plotstyle : ByColor Layout Tab: FIGURE 2
Path\Name : G:\ENVCAD\Manchester\ACT\04907098\0000\00200\Drawing Files\FIGURES_recover000 UPDATED 4-3-12.dwg

Acad Version : R18.1s (LMS Tech)
User Name : BSSmall

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KEYPLAN

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SEAL

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THE PORT AUTHORITY
OF NY & NJ
BAYONNE BRIDGE
REMEDIAL ACTION WORKPLAN

PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF.	CHECKED BY
Project Manager		J. FREDERICK	G. JEAN-PIERRE
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
SITE MAP			K. IAMICELI
		PROJECT NUMBER	DRAWING NUMBER
		04907098.0000	FIGURE 2
			SHEET OF

LEGEND:

- FENCE LINE
- PROPERTY LINE
- PA-SB-15 – HISTORICAL SOIL BORING LOCATIONS
- PA-MW-16 – HISTORICAL MONITORING WELL LOCATIONS
- PA-SB-15 – JANUARY 2012 SOIL BORING LOCATIONS
- PA-MW-16 – JANUARY 2012 MONITORING WELL LOCATIONS
- PORTION FORMERLY LEASED TO WILLIAMS

Date\Time : Wed, 03 Oct 2012 – 1:05pm Current Plotstyle : ByColor Layout Tab: FIGURE 3
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THE PORT AUTHORITY
OF NY & NJ
BAYONNE BRIDGE
REMEDIAL ACTION WORKPLAN

PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF.	CHECKED BY
Project Manager		J. FREDERICK	G. JEAN-PIERRE
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
MONITORING WELL & SOIL BORING LOCATIONS			K. IAMICELI
		PROJECT NUMBER	DRAWING NUMBER
		04907098.0000	FIGURE 3
			SHEET OF

LEGEND:

- FENCE LINE
- PROPERTY LINE
- PA-PA-SB-15 – HISTORICAL SOIL BORING LOCATIONS
- PA-MW-1 – HISTORICAL MONITORING WELL LOCATIONS
- PA-SB-15 – JANUARY 2012 SOIL BORING LOCATIONS
- PA-MW-16 – JANUARY 2012 MONITORING WELL LOCATIONS
- (7.61) – GROUND WATER ELEVATION
- 9 – JAN 2012 GROUNDWATER CONTOURS (1-FT)
- PORTION FORMERLY LEASED TO WILLIAMS

0 20 40
SCALE IN FEET

Date\Time : Wed, 03 Oct 2012 – 1:09pm Current Plotstyle : ByColor Layout Tab: FIGURE 4
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OF NY & NJ
BAYONNE BRIDGE
REMEDIAL ACTION WORKPLAN

PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF.	CHECKED BY
Project Manager		J. FREDERICK	G. JEAN-PIERRE
SHEET TITLE: GROUNDWATER CONTOUR MAP		TASK/PHASE NUMBER	DRAWN BY: K. IAMICELI
		PROJECT NUMBER: 04907098.0000	DRAWING NUMBER: FIGURE 4
			SHEET OF

Williams' Site Soil Results
August 2008

Depth	WP-MW-12	WP-MW-13	WP-MW-14	WP-MW-15
0.0-2	1600	644	131	240
2.0-4.0	10800	1040	129	366

All results in mg/kg.

Table 2
Bayonne Bridge
Remedial Investigation
Arsenic Results Found in Site Soils

Sample ID	Sampling Depth	Sampling Date	Result (mg/kg)
PA-MW-1	0.0-2.0	12/1/2003	100
PA-MW-1	2.0-4.0	12/1/2003	128
PA-MW-2	0.0-2.0	12/1/2003	176
PA-MW-2	2.0-3.0	12/1/2003	10,400
PA-MW-3	0.0-2.0	12/1/2003	29.8
PA-MW-3	6.0-8.0	12/1/2003	40.7
PA-MW-4	0.0-2.0	12/1/2003	283
PA-MW-4	2.0-4.0	12/1/2003	88.1
PA-MW-5	0.0-2.0	12/1/2003	25.7
PA-MW-5	2.0-4.0	12/1/2003	48.6
PA-MW-6	0.0-2.0	12/1/2003	182
PA-MW-6	2.0-4.0	12/1/2003	80.8
PA-MW-7	0.0-0.5	06/28/04	264
PA-MW-7	1.5-2.0	06/28/04	813
PA-MW-8	0.0-0.5	05/20/04	594
PA-MW-8	0.5-1.0	05/20/04	960
PA-MW-9	0.0-0.5	5/21/2004	360
PA-MW-9	2.0-2.5	5/21/2004	3,490
PA-MW-10	0.0-0.5	05/20/04	404
PA-MW-10	1.5-2.0	05/20/04	2,890
PA-MW-11	0.0-0.5	5/21/2004	216
PA-MW-11	2.0-2.5	5/21/2004	1,560
PA-MW-12	0.0-0.5	11/24/2009	24.5
PA-MW-12	3.0-3.5	11/24/2009	358
PA-MW-13	0.0-0.5	11/24/2009	673
PA-MW-13	3.0-4.0	11/24/2009	195
PA-MW-14	0.0-0.5	11/24/2009	27.8
PA-MW-14	0.5-1.0	11/24/2009	18.3
PA-MW-15	0.0-2.0	11/24/2009	190
PA-SB-15	2.0-4.0	11/24/2009	9,760
PA-SB-15	4.0-6.0	11/24/2009	3,830
PA-SB-15	6.0-8.0	11/24/2009	1,710
PA-SB-15	8.0-10	11/24/2009	441
PA-SB-15	10-12	11/24/2009	41.8
PA-MW-16-01	0.0-0.5	1/9/2012	52.3
PA-MW-16-02	2.0-2.5	1/9/2012	4,380
PA-MW-16-2P (DUP)	2-2.5	1/9/2012	24,100
PA-MW-16-03	4.0-4.5	1/9/2012	1,560
PA-MW-16-04	6.0-8.0	1/9/2012	14.3
PA-MW-16-05	8.0-10	1/9/2012	1.6
PA-MW-17-01	0.0-0.5	1/3/2012	231
PA-MW-17-02	2.0-2.5	1/3/2012	5,220
PA-MW-17-03	4.0-4.5	1/3/2012	2,920
PA-MW-17-04	6.0-6.5	1/3/2012	135
PA-MW-17-05	8.0-8.2	1/3/2012	108
PA-MW-18-01	0.0-0.5	1/5/2012	334
PA-MW-18-02	2.0-2.5	1/5/2012	860
PA-MW-18-03	4.0-4.5	1/5/2012	50.0
PA-MW-18-04	6.0-8.0	1/5/2012	85.7
PA-MW-18-05	8.0-10	1/5/2012	322
PA-SB-19-01	0.0-0.5	1/10/2012	1,500
PA-SB-19-02	2.0-2.5	1/10/2012	346
PA-SB-19-03	4.0-4.5	1/10/2012	648
PA-SB-19-04	7.0-7.5	1/10/2012	1,200
PA-SB-19-05	9.0-9.5	1/10/2012	669
PA-SB-20-01	0.0-0.5	1/10/2012	547
PA-SB-20-02	2.0-2.5	1/10/2012	273
PA-SB-20-03	4.0-4.5	1/10/2012	929
PA-SB-20-3P (DUP)	4-4.5	1/10/2012	1,080
PA-SB-20-04	7.0-7.5	1/10/2012	2,700
PA-SB-20-05	9.0-9.5	1/10/2012	1,090
PA-SB-21-01	0.0-0.5	1/10/2012	29.4
PA-SB-21-02	2.0-2.5	1/10/2012	371
PA-SB-21-03	4.0-4.6	1/10/2012	585
PA-SB-21-04	5.0-5.5	1/10/2012	3,110
PA-SB-21-05	6.0-6.5	1/10/2012	3,204
PA-SB-22-01	0.0-0.5	1/9/2012	184
PA-SB-22-1P (DUP)	0-0.5	1/9/2012	53.6
PA-SB-22-02	2.0-2.5	1/9/2012	36.3
PA-SB-22-03	4.0-4.5	1/9/2012	7.4
PA-SB-22-04	6.0-8.0	1/9/2012	6.8
PA-SB-22-05	8.0-10	1/9/2012	5.7
PA-SB-23-01	0.0-0.5	1/11/2012	286
PA-SB-23-02	2.0-2.5	1/11/2012	45.9
PA-SB-23-03	4.0-4.5	1/11/2012	42.9
PA-SB-23-04	7.0-7.5	1/11/2012	6.0
PA-SB-23-05	9.0-9.5	1/11/2012	2.7
PA-SB-24-01	0.0-0.5	1/11/2012	269
PA-SB-24-02	2.0-2.5	1/11/2012	29.6
PA-SB-24-03	4.0-4.5	1/11/2012	4.7
PA-SB-24-04	7.0-7.5	1/11/2012	5.1
PA-SB-24-05	9.0-9.5	1/11/2012	2.3
PA-SB-25-01	0.0-0.5	1/5/2012	219
PA-SB-25-02	2.0-2.5	1/5/2012	323
PA-SB-25-03	4.0-4.5	1/5/2012	73.1
PA-SB-25-04	6.0-8.0	1/5/2012	116
PA-SB-25-05	8.0-10	1/5/2012	242
PA-SB-26-01	0.0-0.5	1/11/2012	37.4
PA-SB-26-02	2.0-2.5	1/11/2012	143
PA-SB-26-03	4.0-4.5	1/11/2012	5.6
PA-SB-26-04	7.0-7.5	1/11/2012	3.2
PA-SB-26-05	9.0-9.5	1/11/2012	1.8

Notes:
mg/kg - miligram per kilogram
NJDEP RDCSRS, NRDCSRS, and default IGWSRS - 19 mg/kg
Highlighted values indicate exceedance of 2,440 mg/kg

Date\Time : Wed, 03 Oct 2012 – 1:15pm Current Plotstyle : ByColor Layout Tab: FIGURE 5
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THE PORT AUTHORITY
OF NY & NJ
BAYONNE BRIDGE
REMEDIAL ACTION WORKPLAN

PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF.	CHECKED BY
Project Manager		J. FREDERICK	G. JEAN-PIERRE
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
SOIL RESULTS			K. IAMICELI
		PROJECT NUMBER	DRAWING NUMBER
		04907098.0000	FIGURE 5
			SHEET OF

LEGEND:

- FENCE LINE
- PROPERTY LINE
- PA-PA-SB-15 – HISTORICAL SOIL BORING LOCATIONS
- PA-MW-1 – HISTORICAL MONITORING WELL LOCATIONS
- PA-SB-15 – JANUARY 2012 SOIL BORING LOCATIONS
- PA-MW-16 – JANUARY 2012 MONITORING WELL LOCATIONS
- PORTION FORMERLY LEASED TO WILLIAMS

Table 4
Bayonne Bridge
Remedial Investigation
Groundwater Analytical Results

Sample ID	NJDEP PQL	Units	December 2003	July 2004	August 2008	November 2008	Decmeber 2009	January 2012
PA-MW-1	3	ug/L	989	31,300	8,260	351	1,600	615
PA-MW-2	3	ug/L	116,000	91,700	183,000	224,000	144,000	244,000
PA-MW-3	3	ug/L	325	NS	321	163	260	80.1
PA-MW-4	3	ug/L	556	NS	438	192	140	160
PA-MW-5	3	ug/L	1,830	NS	360	331	320	329
PA-MW-6	3	ug/L	2,080	NS	269	328	430	372
PA-MW-7	3	ug/L	NS	2270	11,200	2,420	1,600	2,640
PA-MW-8	3	ug/L	NS	43,700	39,500	126,000	68,500	306,000
PA-MW-9	3	ug/L	NS	54,300	34,600	5,360	2,000	3,630
PA-MW-10	3	ug/L	NS	16,000	19,000	11,200	10,600	12,200
PA-MW-11	3	ug/L	NS	5,810	2,940	557	440	287
PA-MW-12	3	ug/L	NS	NS	NS	NS	280	1,430
PA-MW-13	3	ug/L	NS	NS	NS	NS	1,500	1,150
PA-MW-14	3	ug/L	NS	NS	NS	NS	230	5.2
PA-MW-15	3	ug/L	NS	NS	NS	NS	NS	15,700
PA-MW-16	3	ug/L	NS	NS	NS	NS	NS	9,340
PA-MW-17	3	ug/L	NS	NS	NS	NS	NS	8,910
PA-MW-18	3	ug/L	NS	NS	NS	NS	NS	4,370

Notes:
ug/L - micrograms per liter
NJDEP PQL - New Jersey Department of Environmental Protection Practical Quantitation Level
NS - not sampled

Table 5
Bayonne Bridge
Williams' Site
Groundwater Analytical Results

Sample ID	NJDEP PQL	Units	1992	1995	February 1998	March 1998	December 2003	July 2004	August 2008	November 2008	January 2012
WP-MW-12	3	ug/L	NS	NS	NS	NS	NS	NS	15,800	13,300	23,200
WP-MW-13	3	ug/L	NS	NS	NS	NS	NS	NS	17,300	6,630	6,950
WP-MW-14	3	ug/L	NS	NS	NS	NS	NS	NS	141,000	73,300	19,800
WP-MW-15	3	ug/L	NS	NS	NS	NS	NS	NS	19,200	13,700	15,700
MW-1	3	ug/L	55,800	31,600	15,400	NS	NS	NS	NS	NS	NS
MW-2	3	ug/L	1,360	1,630	2,620	NS	NS	NS	NS	NS	NS
MW-3	3	ug/L	386	898	644	NS	NS	NS	NS	NS	NS
MW-4	3	ug/L	321	403	113	NS	NS	NS	NS	159	15,700
MW-5	3	ug/L	NA	NA	9,370	7,940	NS	NS	NS	NS	NS
MW-6A	3	ug/L	NA	NA	90	NS	NS	NS	NS	NS	NS

Notes:
ug/L - micrograms per liter
NJDEP PQL - New Jersey Department of Environmental Protection Practical Quantitation Level
NS - not sampled
WP-MW-14 same location as previous MW-1
WP-MW-15 same location as previuos MW-5
Vault removed September/October 1998

0 20 40
SCALE IN FEET

Date\Time : Wed, 03 Oct 2012 – 1:16pm Current Plotstyle : ByColor Layout Tab: FIGURE 6
Path\Name : G:\ENVCAD\Manchester\ACT\04907098\0000\0020\Drawing Files\FIGURES_recover000 UPDATED 4-3-12.dwg

Acad Version : R18.1s (LMS Tech)
User Name : BSSmall

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REV.	ISSUED	DATE	DESCRIPTION
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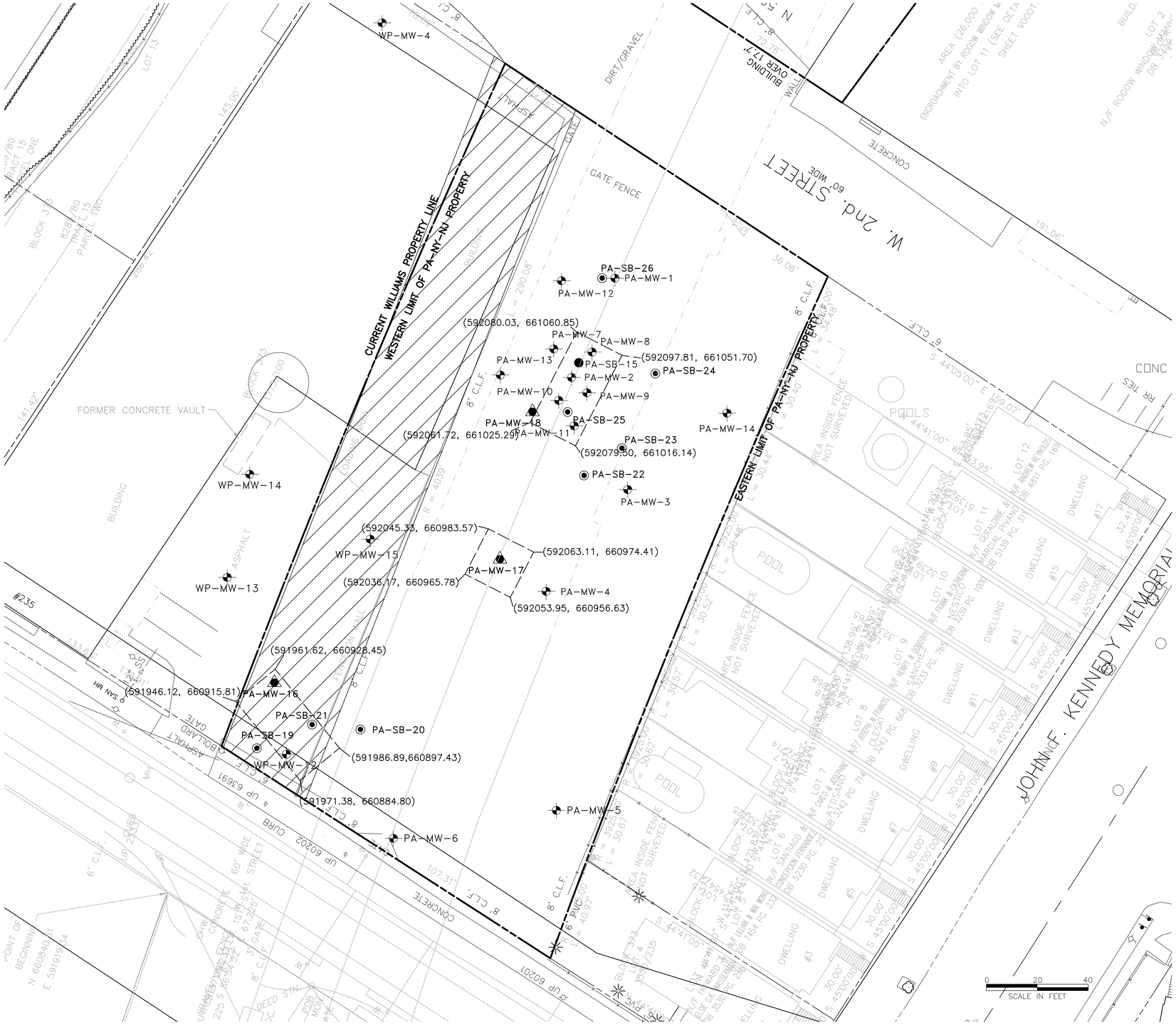
REMEDIAL ACTION WORKPLAN

PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF.	CHECKED BY
Project Manager		J. FREDERICK	G. JEAN-PIERRE
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
GROUNDWATER RESULTS			K. IAMICELI
		PROJECT NUMBER	DRAWING NUMBER
		04907098.0000	FIGURE 6
			SHEET OF



Date\Time : Wed, 03 Oct 2012 – 1:16pm Current Plotstyle : ByColor Layout Tab: FIGURE 7
Path\Name : G:\ENVCAD\Manchester\ACT\04907098\2000\00200\Drawing Files\FIGURES_recover000 UPDATED 4-3-12.dwg

Acad Version : R18.1s (LMS Tech)
User Name : BSSmall

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REV.	ISSUED	DATE	DESCRIPTION
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PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF.	CHECKED BY
Project Manager		J. FREDERICK	G. JEAN-PIERRE
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
PROPOSED REMEDIAL EXCAVATIONS			K. IAMICELI
		PROJECT NUMBER	DRAWING NUMBER
		04907098.0000	FIGURE 7
			SHEET OF

REV.	ISSUED	DATE	DESCRIPTION
–	–	–	–
–	–	–	–

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PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF.	CHECKED BY
Project Manager		J. FREDERICK	G. JEAN-PIERRE
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
PROPOSED SITE RESTORATION			K. IAMICELI
		PROJECT NUMBER	DRAWING NUMBER
		04907098.0000	FIGURE 8
			SHEET OF

Acad Version : R18.1s (LMS Tech)
User Name : BSSmoll
Date\Time : Wed, 03 Oct 2012 – 1:17pm
Path\Name : G:\ENVCAD\Manchester\ACT\04907098\0000\00200\Drawing Files\FIGURES_recovered00 UPDATED 4-3-12.dwg
Current Plotsyle : ByColor
Layout Tab: FIGURE 8
© 2004 ARCADIS TPS, Inc.

NJDEP Constituent Warning Report
File: G:\Project\04907098\RAWP\EDDs\35415\Final EDD\HZRESULT (RSTP)
Date: 04/09/2012 15:40
Warnings#: (1)

Analyte/Desc	Type	CAS
Arsenic	P	7440-38-2

Possible match with SRP Result Type: A

DIRECTORY	DESCRIPT	SRPID	CONSULTANT	PHASE	STATUS	TRANSMIT	SUBMITDATE	PACKNUM
1	BB - Arsenic Site	G000021830	BB- Arsenic Site			RAWP	Packaged	04/09/2012

```
SRPID    SAMPDATE         SAMPNUM SAMPTIME         DUPSAMP MATRIX   FIELDID AOCID
LAT_DEGREE       LAT_MINUTE       LAT_SECOND       LON_DEGREE       LON_MINUTE
LON_SECOND       SP_X     SP_Y    DEPTH_TOP        DEPTH_BOTTOM     GROUNDELEV
WELL_ELEV        SAMPTYPE         DATETOLAB        SAMPMETHOD       SAMPNOTE
SUBMITDATE       QAQC
G000021830       01/03/2012       1        08:55   N        Solid   ASPAMW17SO1
                                                   592068.12        660982.84        1
                         Subsurface Soil 01/05/2012                         04/09/2012

G000021830       01/03/2012       2        09:05   N        Solid   ASPAMW17ESO2
                                                   592068.12        660982.84        2
                         Subsurface Soil 01/05/2012                         04/09/2012

G000021830       01/03/2012       3        09:15   N        Solid   ASPAMW17ESO3
                                                   592068.12        660982.84        3
                         Subsurface Soil 01/05/2012                         04/09/2012

G000021830       01/03/2012       4        09:30   N        Solid   ASPAMW17ESO4
                                                   592068.12        660982.84        4
                         Subsurface Soil 01/05/2012                         04/09/2012

G000021830       01/03/2012       5        09:45   N        Solid   ASPAMW17ESO5
                                                   592068.12        660982.84        5
                         Subsurface Soil 01/05/2012                         04/09/2012
```

```
SRPID   SAMPDATE        SAMPNUM LABID   DANALYZ LABNAME NJLABCERT       RESULTTYPE
ANALTPARAM      CAS     FILTUNFILT      CONC    CONCUNITS       QAQUAL  MDL
QUANTTYPE       QUANTLEVEL      ANLYS_MTHD      QAQC
G000021830      01/03/2012      1       460-35415-1     01/06/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               231     ppm             1.0
PQL     1.1     6010B
G000021830      01/03/2012      2       460-35415-2     01/08/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               5220    ppm             6.8
PQL     7.3     6010B
G000021830      01/03/2012      3       460-35415-3     01/08/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               2920    ppm             3.0
PQL     3.2     6010B
G000021830      01/03/2012      4       460-35415-4     01/06/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               135     ppm             1.6
PQL     1.7     6010B
G000021830      01/03/2012      5       460-35415-5     01/06/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               108     ppm             1.1
PQL     1.2     6010B
```

```
NJDEP HZRESULT Error Report
File:       G:\Project\04907098\RAWP\EDDs\35415\Final EDD\HZRESULT
Date:       04/09/2012 15:40
Errors#:    (0)
```

No HZRESULT errors have been identified!

```
NJDEP HZSAMPLE Error Report
File:       G:\Project\04907098\RAWP\EDDs\35415\Final EDD\HZSAMPLE
Date:       04/09/2012 15:40
Errors#:    (0)
```

No HZSAMPLE errors have been identified!

```
NJDEP HZSAMPLE Error Report
File:       G:\Project\04907098\RAWP\EDDs\35525\FINAL EDD 35525\HZSAMPLE
Date:       04/09/2012 15:53
Errors#:    (0)
```

No HZSAMPLE errors have been identified!

```
SRPID    SAMPDATE          SAMPNUM LABID    DANALYZ LABNAME NJLABCERT        RESULTTYPE
ANALTPARAM       CAS      FILTUNFILT       CONC     CONCUNITS        QAQUAL   MDL
QUANTTYPE        QUANTLEVEL       ANLYS_MTHD       QAQC
G000021830       01/05/2012       6        460-35525-1      01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 334      ppm              1.1
PQL      1.2     6010B
G000021831       01/05/2012       7        460-35525-10     01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 242      ppm              1.2
PQL      1.3     6010B
G000021832       01/05/2012       8        460-35525-2      01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 860      ppm              1.1
PQL      1.2     6010B
G000021833       01/05/2012       9        460-35525-3      01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 50.0     ppm              1.0
PQL      1.1     6010B
G000021834       01/05/2012       10       460-35525-4      01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 85.7     ppm              1.1
PQL      1.1     6010B
G000021835       01/05/2012       11       460-35525-5      01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 322      ppm              1.1
PQL      1.2     6010B
G000021836       01/05/2012       12       460-35525-6      01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 219      ppm              1.0
PQL      1.1     6010B
G000021837       01/05/2012       13       460-35525-7      01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 323      ppm              1.1
PQL      1.2     6010B
G000021838       01/05/2012       14       460-35525-8      01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 73.1     ppm              1.2
PQL      1.2     6010B
G000021839       01/05/2012       15       460-35525-9      01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 116      ppm              1.2
PQL      1.2     6010B
```

```
SRPID    SAMPDATE         SAMPNUM SAMPTIME         DUPSAMP MATRIX   FIELDID AOCID
LAT_DEGREE       LAT_MINUTE       LAT_SECOND       LON_DEGREE       LON_MINUTE
LON_SECOND       SP_X     SP_Y    DEPTH_TOP        DEPTH_BOTTOM     GROUNDELEV
WELL_ELEV        SAMPTYPE         DATETOLAB        SAMPMETHOD       SAMPNOTE
SUBMITDATE       QAQC
G000021830       01/05/2012       6        09:35   N        Solid   ASPAMW18SO1
                                                   592068.12        660982.84        6
                         Subsurface Soil 01/09/2012                          04/09/2012

G000021831       01/05/2012       7        14:30   N        Solid   ASPASB25SO5
                                                   592068.12        660982.84        7
                         Subsurface Soil 01/09/2012                          04/09/2012

G000021832       01/05/2012       8        09:38   N        Solid   ASPAMW18SO2
                                                   592068.12        660982.84        8
                         Subsurface Soil 01/09/2012                          04/09/2012

G000021833       01/05/2012       9        10:35   N        Solid   ASPAMW18SO3
                                                   592068.12        660982.84        9
                         Subsurface Soil 01/09/2012                          04/09/2012

G000021834       01/05/2012       10       10:45   N        Solid   ASPAMW18SO4
                                                   592068.12        660982.84        10
                         Subsurface Soil 01/09/2012                          04/09/2012

G000021835       01/05/2012       11       10:50   N        Solid   ASPAMW18SO5
                                                   592068.12        660982.84        11
                         Subsurface Soil 01/09/2012                          04/09/2012

G000021836       01/05/2012       12       13:55   N        Solid   ASPASB25SO1
                                                   592068.12        660982.84        12
                         Subsurface Soil 01/09/2012                          04/09/2012

G000021837       01/05/2012       13       14:05   N        Solid   ASPASB25SO2
                                                   592068.12        660982.84        13
                         Subsurface Soil 01/09/2012                          04/09/2012

G000021838       01/05/2012       14       14:12   N        Solid   ASPASB25SO3
                                                   592068.12        660982.84        14
                         Subsurface Soil 01/09/2012                          04/09/2012

G000021839       01/05/2012       15       14:15   N        Solid   ASPASB25SO4
                                                   592068.12        660982.84        15
                         Subsurface Soil 01/09/2012                          04/09/2012
```

NJDEP Constituent Warning Report
File: G:\Project\04907098\RAWP\EDDs\35525\FINAL EDD 35525\HZRESULT (RSTP)
Date: 04/09/2012 15:53
Warnings#: (1)

Analyte/Desc	Type	CAS
Arsenic	P	7440-38-2

Possible match with SRP Result Type: A

DIRECTORY	DESCRIPT	SRPID	CONSULTANT	PHASE	STATUS	TRANSMIT	SUBMITDATE	PACKNUM
2	BB - Arsenic Site	G000021830	BB - Arsenic Site					
Packaged							04/09/2012	

```
NJDEP HZRESULT Error Report
File:       G:\Project\04907098\RAWP\EDDs\35525\FINAL EDD 35525\HZRESULT
Date:       04/09/2012 15:53
Errors#:    (0)
```

No HZRESULT errors have been identified!

```
SRPID   SAMPDATE        SAMPNUM LABID   DANALYZ LABNAME NJLABCERT       RESULTTYPE
ANALTPARAM      CAS     FILTUNFILT      CONC    CONCUNITS       QAQUAL  MDL
QUANTTYPE       QUANTLEVEL      ANLYS_MTHD      QAQC
G000021830      01/09/2012      16      460-35549-1     01/11/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               184     ppm             1.0
PQL     1.1     6010B
G000021831      01/09/2012      17      460-35549-2     01/11/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               53.6    ppm             1.0
PQL     1.1     6010B
G000021832      01/09/2012      18      460-35549-3     01/11/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               36.3    ppm             1.0
PQL     1.1     6010B
G000021833      01/09/2012      19      460-35549-4     01/11/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               7.4     ppm             1.0
PQL     1.1     6010B
G000021834      01/09/2012      20      460-35549-5     01/11/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               6.8     ppm             1.4
PQL     1.5     6010B
G000021835      01/09/2012      21      460-35549-6     01/11/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               5.7     ppm             1.2
PQL     1.3     6010B
```

```
SRPID    SAMPDATE         SAMPNUM SAMPTIME         DUPSAMP MATRIX   FIELDID AOCID
LAT_DEGREE       LAT_MINUTE       LAT_SECOND       LON_DEGREE       LON_MINUTE
LON_SECOND       SP_X     SP_Y    DEPTH_TOP        DEPTH_BOTTOM     GROUNDELEV
WELL_ELEV        SAMPTYPE         DATETOLAB        SAMPMETHOD       SAMPNOTE
SUBMITDATE       QAQC
G000021830       01/09/2012       16       10:12   N        Solid   ASPASB22SO1
                                                   592068.12        660982.84        16
                         Subsurface Soil 01/10/2012                         04/09/2012

G000021831       01/09/2012       17       10:12   N        Solid   ASPASB22S1P
                                                   592068.12        660982.84        17
                         Subsurface Soil 01/10/2012                         04/09/2012

G000021832       01/09/2012       18       10:22   N        Solid   ASPASB22SO2
                                                   592068.12        660982.84        18
                         Subsurface Soil 01/10/2012                         04/09/2012

G000021833       01/09/2012       19       10:28   N        Solid   ASPASB22SO3
                                                   592068.12        660982.84        19
                         Subsurface Soil 01/10/2012                         04/09/2012

G000021834       01/09/2012       20       10:54   N        Solid   ASPASB22SO4
                                                   592068.12        660982.84        20
                         Subsurface Soil 01/10/2012                         04/09/2012

G000021835       01/09/2012       21       10:55   N        Solid   ASPASB22SO5
                                                   592068.12        660982.84        21
                         Subsurface Soil 01/10/2012                         04/09/2012
```

NJDEP Constituent Warning Report
File: G:\Project\04907098\RAWP\EDDs\35549\FINAL EDDs 35549\HZRESULT (RSTP)
Date: 04/09/2012 15:57
Warnings#: (1)

Analyte/Desc	Type	CAS
Arsenic	P	7440-38-2

Possible match with SRP Result Type: A

DIRECTORY	DESCRIPT	SRPID	CONSULTANT	PHASE	STATUS	TRANSMIT	SUBMITDATE	PACKNUM
3	BB - Arsenic Site	G000021830	BB - Arsenic Site					
Packaged		04/09/2012						

NJDEP HZRESULT Error Report
File: G:\Project\04907098\RAWP\EDDs\35549\FINAL EDDs 35549\HZRESULT
Date: 04/09/2012 15:57
Errors#: (0)

No HZRESULT errors have been identified!

NJDEP HZSAMPLE Error Report
File: G:\Project\04907098\RAWP\EDDs\35549\FINAL EDDs 35549\HZSAMPLE
Date: 04/09/2012 15:57
Errors#: (0)

No HZSAMPLE errors have been identified!

```
SRPID    SAMPDATE         SAMPNUM LABID    DANALYZ LABNAME NJLABCERT        RESULTTYPE
ANALTPARAM       CAS      FILTUNFILT       CONC     CONCUNITS        QAQUAL  MDL
QUANTTYPE        QUANTLEVEL       ANLYS_MTHD       QAQC
G000021830       01/09/2012       22       460-35620-1      01/13/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                52.3     ppm             0.94
PQL      1.0     6010B
G000021831       01/09/2012       23       460-35620-2      01/13/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                4380     ppm             6.8
PQL      7.2     6010B
G000021832       01/09/2012       24       460-35620-3      01/13/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                24100    ppm             42.8
PQL      45.6    6010B
G000021833       01/09/2012       25       460-35620-4      01/13/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                1560     ppm             1.1
PQL      1.2     6010B
G000021834       01/09/2012       26       460-35620-5      01/13/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                14.3     ppm             1.1
PQL      1.2     6010B
G000021835       01/09/2012       27       460-35620-6      01/13/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                1.6      ppm             1.0
PQL      1.1     6010B
```

```
SRPID    SAMPDATE         SAMPNUM SAMPTIME         DUPSAMP MATRIX   FIELDID AOCID
LAT_DEGREE       LAT_MINUTE       LAT_SECOND       LON_DEGREE       LON_MINUTE
LON_SECOND       SP_X     SP_Y    DEPTH_TOP        DEPTH_BOTTOM     GROUNDELEV
WELL_ELEV        SAMPTYPE         DATETOLAB        SAMPMETHOD       SAMPNOTE
SUBMITDATE       QAQC
G000021830       01/09/2012       22       13:43   N        Solid   ASPAMW16SO1
                                                   592068.12        660982.84        22
                         Subsurface Soil 01/11/2012                         04/09/2012

G000021831       01/09/2012       23       13:44   N        Solid   ASPAMW16SO2
                                                   592068.12        660982.84        23
                         Subsurface Soil 01/11/2012                         04/09/2012

G000021832       01/09/2012       24       13:44   N        Solid   ASPAMW16S2P
                                                   592068.12        660982.84        24
                         Subsurface Soil 01/11/2012                         04/09/2012

G000021833       01/09/2012       25       14:00   N        Solid   ASPAMW16SO3
                                                   592068.12        660982.84        25
                         Subsurface Soil 01/11/2012                         04/09/2012

G000021834       01/09/2012       26       14:15   N        Solid   ASPAMW16SO4
                                                   592068.12        660982.84        26
                         Subsurface Soil 01/11/2012                         04/09/2012

G000021835       01/09/2012       27       14:16   N        Solid   ASPAMW16SO5
                                                   592068.12        660982.84        27
                         Subsurface Soil 01/11/2012                         04/09/2012
```

NJDEP Constituent Warning Report
File: G:\Project\04907098\RAWP\EDDs\35620\FINAL EDDs 35620\HZRESULT (RSTP)
Date: 04/09/2012 16:05
Warnings#: (1)

Analyte/Desc	Type	CAS
Arsenic	P	7440-38-2

Possible match with SRP Result Type: A

DIRECTORY	DESCRIPT	SRPID	CONSULTANT	PHASE	STATUS	TRANSMIT	SUBMITDATE	PACKNUM
4	BB - Arsenic Site	G000021830	BB - Arsenic Site					
Packaged							04/09/2012	

NJDEP HZRESULT Error Report
File: G:\Project\04907098\RAWP\EDDs\35620\FINAL EDDs 35620\HZRESULT
Date: 04/09/2012 16:05
Errors#: (0)

No HZRESULT errors have been identified!

```
NJDEP HZSAMPLE Error Report
File:       G:\Project\04907098\RAWP\EDDs\35620\FINAL EDDs 35620\HZSAMPLE
Date:       04/09/2012 16:05
Errors#:    (0)
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No HZSAMPLE errors have been identified!

NJDEP HZSAMPLE Error Report
File: G:\Project\04907098\RAWP\EDDs\35682\FINAL EDDs 35682\HZSAMPLE
Date: 04/09/2012 16:12
Errors#: (0)

No HZSAMPLE errors have been identified!

```
SRPID    SAMPDATE        SAMPNUM LABID    DANALYZ LABNAME NJLABCERT        RESULTTYPE
ANALTPARAM       CAS     FILTUNFILT       CONC    CONCUNITS        QAQUAL  MDL
QUANTTYPE        QUANTLEVEL       ANLYS_MTHD       QAQC
G000021830       01/10/2012       28       460-35682-1      01/15/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                1500     ppm             0.98
PQL      1.0     6010B
G000021831       01/10/2012       29       460-35682-10     01/16/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                3240     ppm             3.2
PQL      3.4     6010B
G000021832       01/11/2012       30       460-35682-11     01/15/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                547      ppm             1.1
PQL      1.1     6010B
G000021833       01/11/2012       31       460-35682-12     01/15/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                273      ppm             1.2
PQL      1.3     6010B
G000021834       01/11/2012       32       460-35682-13     01/15/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                1080     ppm             1.2
PQL      1.3     6010B
G000021835       01/11/2012       33       460-35682-14     01/16/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                2700     ppm             2.7
PQL      2.9     6010B
G000021836       01/11/2012       34       460-35682-15     01/15/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                1090     ppm             1.0
PQL      1.1     6010B
G000021837       01/11/2012       35       460-35682-16     01/15/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                286      ppm             1.0
PQL      1.1     6010B
G000021838       01/11/2012       36       460-35682-17     01/15/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                45.9     ppm             1.0
PQL      1.1     6010B
G000021839       01/11/2012       37       460-35682-18     01/15/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                42.9     ppm             1.0
PQL      1.1     6010B
G000021840       01/11/2012       38       460-35682-19     01/15/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                6.0      ppm             0.99
PQL      1.1     6010B
G000021841       01/10/2012       39       460-35682-2      01/15/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                346      ppm             1.0
PQL      1.1     6010B
G000021842       01/11/2012       40       460-35682-20     01/15/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                2.7      ppm             1.0
PQL      1.1     6010B
G000021843       01/11/2012       41       460-35682-21     01/15/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                269      ppm             1.1
PQL      1.2     6010B
G000021844       01/11/2012       42       460-35682-22     01/15/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                29.6     ppm             1.0
PQL      1.1     6010B
G000021845       01/11/2012       43       460-35682-23     01/15/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                4.7      ppm             0.94
PQL      1.0     6010B
G000021846       01/11/2012       44       460-35682-24     01/15/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                5.1      ppm             1.0
PQL      1.1     6010B
G000021847       01/11/2012       45       460-35682-25     01/15/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                2.3      ppm             1.0
PQL      1.1     6010B
G000021848       01/11/2012       46       460-35682-26     01/15/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                37.4     ppm             1.2
PQL      1.2     6010B
G000021849       01/11/2012       47       460-35682-27     01/15/2012       TestAmerica
Edison   12028   P       Arsenic 7440-38-2                143      ppm             1.0
PQL      1.1     6010B
```

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G000021850      01/11/2012      48      460-35682-28    01/15/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               5.6     ppm             1.0
PQL     1.1     6010B
G000021851      01/11/2012      49      460-35682-29    01/15/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               3.2     ppm             1.1
PQL     1.1     6010B
G000021852      01/10/2012      50      460-35682-3     01/15/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               648     ppm             1.1
PQL     1.2     6010B
G000021853      01/11/2012      51      460-35682-30    01/15/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               1.8     ppm             1.1
PQL     1.2     6010B
G000021854      01/11/2012      52      460-35682-31    01/18/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               929     ppm             1.2
PQL     1.3     6010B
G000021855      01/10/2012      53      460-35682-4     01/16/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               1200    ppm             2.7
PQL     2.9     6010B
G000021856      01/10/2012      54      460-35682-5     01/15/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               669     ppm             1.1
PQL     1.2     6010B
G000021857      01/10/2012      55      460-35682-6     01/15/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               29.4    ppm             0.95
PQL     1.0     6010B
G000021858      01/10/2012      56      460-35682-7     01/15/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               371     ppm             1.3
PQL     1.3     6010B
G000021859      01/10/2012      57      460-35682-8     01/15/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               585     ppm             1.2
PQL     1.3     6010B
G000021860      01/10/2012      58      460-35682-9     01/16/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               3110    ppm             3.7
PQL     3.9     6010B
```

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SRPID    SAMPDATE         SAMPNUM SAMPTIME         DUPSAMP MATRIX   FIELDID AOCID
LAT_DEGREE       LAT_MINUTE       LAT_SECOND       LON_DEGREE       LON_MINUTE
LON_SECOND       SP_X     SP_Y    DEPTH_TOP        DEPTH_BOTTOM     GROUNDELEV
WELL_ELEV        SAMPTYPE         DATETOLAB        SAMPMETHOD       SAMPNOTE
SUBMITDATE       QAQC
G000021830       01/10/2012       28       10:50   N        Solid   ASPASB19SO1
                                                   592068.12        660982.84        28
                         Subsurface Soil 01/12/2012                          04/09/2012

G000021831       01/10/2012       29       09:58   N        Solid   ASPASB21SO5
                                                   592068.12        660982.84        29
                         Subsurface Soil 01/12/2012                          04/09/2012

G000021832       01/11/2012       30       13:35   N        Solid   ASPASB20SO1
                                                   592068.12        660982.84        30
                         Subsurface Soil 01/12/2012                          04/09/2012

G000021833       01/11/2012       31       13:42   N        Solid   ASPASB20SO2
                                                   592068.12        660982.84        31
                         Subsurface Soil 01/12/2012                          04/09/2012

G000021834       01/11/2012       32       13:58   N        Solid   ASPASB20S3P
                                                   592068.12        660982.84        32
                         Subsurface Soil 01/12/2012                          04/09/2012

G000021835       01/11/2012       33       14:05   N        Solid   ASPASB20SO4
                                                   592068.12        660982.84        33
                         Subsurface Soil 01/12/2012                          04/09/2012

G000021836       01/11/2012       34       14:10   N        Solid   ASPASB20SO5
                                                   592068.12        660982.84        34
                         Subsurface Soil 01/12/2012                          04/09/2012

G000021837       01/11/2012       35       10:20   N        Solid   ASPASB23SO1
                                                   592068.12        660982.84        35
                         Subsurface Soil 01/12/2012                          04/09/2012

G000021838       01/11/2012       36       10:23   N        Solid   ASPASB23SO2
                                                   592068.12        660982.84        36
                         Subsurface Soil 01/12/2012                          04/09/2012

G000021839       01/11/2012       37       10:28   N        Solid   ASPASB23SO3
                                                   592068.12        660982.84        37
                         Subsurface Soil 01/12/2012                          04/09/2012

G000021840       01/11/2012       38       10:40   N        Solid   ASPASB23SO4
                                                   592068.12        660982.84        38
                         Subsurface Soil 01/12/2012                          04/09/2012

G000021841       01/10/2012       39       11:10   N        Solid   ASPASB19SO2
                                                   592068.12        660982.84        39
                         Subsurface Soil 01/12/2012                          04/09/2012

G000021842       01/11/2012       40       10:45   N        Solid   ASPASB23SO5
                                                   592068.12        660982.84        40
                         Subsurface Soil 01/12/2012                          04/09/2012

G000021843       01/11/2012       41       12:45   N        Solid   ASPASB24SO1
                                                   592068.12        660982.84        41
                         Subsurface Soil 01/12/2012                          04/09/2012

G000021844       01/11/2012       42       12:50   N        Solid   ASPASB24SO2
                                                   592068.12        660982.84        42
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                    Subsurface Soil 01/12/2012                          04/09/2012

G000021845    01/11/2012    43    12:56   N       Solid   ASPASB24SO3
                                          592068.12       660982.84       43
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021846    01/11/2012    44    12:44   N       Solid   ASPASB24SO4
                                          592068.12       660982.84       44
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021847    01/11/2012    45    12:48   N       Solid   ASPASB24SO5
                                          592068.12       660982.84       45
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021848    01/11/2012    46    13:50   N       Solid   ASPASB26SO1
                                          592068.12       660982.84       46
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021849    01/11/2012    47    13:55   N       Solid   ASPASB26SO2
                                          592068.12       660982.84       47
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021850    01/11/2012    48    14:00   N       Solid   ASPASB26SO3
                                          592068.12       660982.84       48
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021851    01/11/2012    49    14:12   N       Solid   ASPASB26SO4
                                          592068.12       660982.84       49
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021852    01/10/2012    50    11:15   N       Solid   ASPASB19SO3
                                          592068.12       660982.84       50
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021853    01/11/2012    51    14:15   N       Solid   ASPASB26SO5
                                          592068.12       660982.84       51
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021854    01/11/2012    52    13:58   N       Solid   ASPASB20SO3
                                          592068.12       660982.84       52
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021855    01/10/2012    53    11:28   N       Solid   ASPASB19SO4
                                          592068.12       660982.84       53
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021856    01/10/2012    54    11:35   N       Solid   ASPASB19SO5
                                          592068.12       660982.84       54
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021857    01/10/2012    55    09:23   N       Solid   ASPASB21SO1
                                          592068.12       660982.84       55
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021858    01/10/2012    56    09:30   N       Solid   ASPASB21SO2
                                          592068.12       660982.84       56
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021859    01/10/2012    57    09:48   N       Solid   ASPASB21SO3
                                          592068.12       660982.84       57
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021860    01/10/2012    58    09:55   N       Solid   ASPASB21SO4
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		592068.12	660982.84	58
Subsurface Soil	01/12/2012			04/09/2012

NJDEP Constituent Warning Report
File: G:\Project\04907098\RAWP\EDDs\35682\FINAL EDDs 35682\HZRESULT (RSTP)
Date: 04/09/2012 16:12
Warnings#: (1)

Analyte/Desc	Type	CAS
Arsenic	P	7440-38-2

Possible match with SRP Result Type: A

DIRECTORY	DESCRIPT	SRPID	CONSULTANT	PHASE	STATUS	TRANSMIT	SUBMITDATE	PACKNUM
5	BB - Arsenic Site	G000021830	BB - Arsenic Site					
Packaged							04/09/2012	

NJDEP HZRESULT Error Report
File: G:\Project\04907098\RAWP\EDDs\35682\FINAL EDDs 35682\HZRESULT
Date: 04/09/2012 16:12
Errors#: (0)

No HZRESULT errors have been identified!

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SRPID    SAMPDATE         SAMPNUM LABID    DANALYZ LABNAME NJLABCERT        RESULTTYPE
ANALTPARAM       CAS      FILTUNFILT       CONC     CONCUNITS        QAQUAL  MDL
QUANTTYPE        QUANTLEVEL       ANLYS_MTHD       QAQC
G000021830       01/17/2012       59       460-35951-1      01/26/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        5.2      ppb             1.8
PQL      2.5     200.8
G000021831       01/18/2012       60       460-35951-10     01/31/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        1150     ppb             1.8
PQL      2.5     200.8
G000021832       01/18/2012       61       460-35951-11     01/31/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        372      ppb             1.8
PQL      2.5     200.8
G000021833       01/18/2012       62       460-35951-12     01/31/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        3630     ppb             1.8
PQL      2.5     200.8
G000021834       01/18/2012       63       460-35951-13     01/31/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        244000   ppb             72.8
PQL      100     200.8
G000021835       01/18/2012       64       460-35951-14     01/31/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        243000   ppb             72.8
PQL      100     200.8
G000021836       01/18/2012       65       460-35951-15     01/31/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        1430     ppb             1.8
PQL      2.5     200.8
G000021837       01/18/2012       66       460-35951-16     01/31/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        615      ppb             1.8
PQL      2.5     200.8
G000021838       01/18/2012       67       460-35951-17     01/31/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        ND       ppb     U       1.8
PQL      2.5     200.8
G000021839       01/19/2012       68       460-35951-18     01/31/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        23200    ppb             7.3
PQL      10.0    200.8
G000021840       01/19/2012       69       460-35951-19     01/31/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        23100    ppb             7.3
PQL      10.0    200.8
G000021841       01/17/2012       70       460-35951-2      01/26/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        80.1     ppb             1.8
PQL      2.5     200.8
G000021842       01/19/2012       71       460-35951-20     01/31/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        6950     ppb             1.8
PQL      2.5     200.8
G000021843       01/19/2012       72       460-35951-21     01/31/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        19800    ppb             7.3
PQL      10.0    200.8
G000021844       01/19/2012       73       460-35951-22     01/27/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        47.2     ppb             1.8
PQL      2.5     200.8
G000021845       01/19/2012       74       460-35951-23     01/31/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        15700    ppb             7.3
PQL      10.0    200.8
G000021846       01/19/2012       75       460-35951-24     01/31/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        8910     ppb             3.6
PQL      5.0     200.8
G000021847       01/19/2012       76       460-35951-25     01/27/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        4370     ppb             1.8
PQL      2.5     200.8
G000021848       01/19/2012       77       460-35951-26     01/27/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        ND       ppb     U       1.8
PQL      2.5     200.8
G000021849       01/17/2012       78       460-35951-3      01/26/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2        U        12200    ppb             3.6
PQL      5.0     200.8
```

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G000021850      01/17/2012      79      460-35951-4     01/26/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2       U       329     ppb             1.8
PQL     2.5     200.8
G000021851      01/17/2012      80      460-35951-5     01/26/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2       U       160     ppb             1.8
PQL     2.5     200.8
G000021852      01/17/2012      81      460-35951-6     01/30/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2       U       287     ppb             1.8
PQL     2.5     200.8
G000021853      01/17/2012      82      460-35951-7     01/31/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2       U       ND      ppb     U       1.8
PQL     2.5     200.8
G000021854      01/18/2012      83      460-35951-8     01/31/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2       U       306000  ppb             72.8
PQL     100     200.8
G000021855      01/18/2012      84      460-35951-9     01/31/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2       U       2640    ppb             1.8
PQL     2.5     200.8
```

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SRPID    SAMPDATE         SAMPNUM SAMPTIME         DUPSAMP MATRIX   FIELDID AOCID
LAT_DEGREE       LAT_MINUTE       LAT_SECOND       LON_DEGREE       LON_MINUTE
LON_SECOND       SP_X     SP_Y    DEPTH_TOP        DEPTH_BOTTOM     GROUNDELEV
WELL_ELEV        SAMPTYPE         DATETOLAB        SAMPMETHOD       SAMPNOTE
SUBMITDATE       QAQC
G000021830       01/17/2012       59       10:44   N        Ground Water    ASPAMW14WG1
                                                             592068.12       660982.84
59                                Monitor Well      01/19/2012
04/09/2012
G000021831       01/18/2012       60       11:39   N        Ground Water    ASPAMW13WG1
                                                             592068.12       660982.84
60                                Monitor Well      01/19/2012
04/09/2012
G000021832       01/18/2012       61       12:44   N        Ground Water    ASPAMW06WG1
                                                             592068.12       660982.84
61                                Monitor Well      01/19/2012
04/09/2012
G000021833       01/18/2012       62       09:05   N        Ground Water    ASPAMW09WG1
                                                             592068.12       660982.84
62                                Monitor Well      01/19/2012
04/09/2012
G000021834       01/18/2012       63       09:40   N        Ground Water    ASPAMW02WG1
                                                             592068.12       660982.84
63                                Monitor Well      01/19/2012
04/09/2012
G000021835       01/18/2012       64       09:40   N        Ground Water    ASPAMW02WG1P
                                                             592068.12       660982.84
64                                Monitor Well      01/19/2012
04/09/2012
G000021836       01/18/2012       65       11:10   N        Ground Water    ASPAMW12WG1
                                                             592068.12       660982.84
65                                Monitor Well      01/19/2012
04/09/2012
G000021837       01/18/2012       66       12:20   N        Ground Water    ASPAMW01WG1
                                                             592068.12       660982.84
66                                Monitor Well      01/19/2012
04/09/2012
G000021838       01/18/2012       67       08:55   N        Ground Water    ASPAFB01WQ1
                                                             592068.12       660982.84
67                                Monitor Well      01/19/2012
04/09/2012
G000021839       01/19/2012       68       09:30   N        Ground Water    ASWPMW12WG1
                                                             592068.12       660982.84
68                                Monitor Well      01/19/2012
04/09/2012
G000021840       01/19/2012       69       09:30   N        Ground Water    ASWPMW12WG1P
                                                             592068.12       660982.84
69                                Monitor Well      01/19/2012
04/09/2012
G000021841       01/17/2012       70       11:39   N        Ground Water    ASPAMW03WG1
                                                             592068.12       660982.84
70                                Monitor Well      01/19/2012
04/09/2012
G000021842       01/19/2012       71       10:15   N        Ground Water    ASWPMW13WG1
                                                             592068.12       660982.84
71                                Monitor Well      01/19/2012
04/09/2012
G000021843       01/19/2012       72       11:00   N        Ground Water    ASWPMW14WG1
                                                             592068.12       660982.84
72                                Monitor Well      01/19/2012
04/09/2012
G000021844       01/19/2012       73       09:29   N        Ground Water    ASWPMW04WG1
                                                             592068.12       660982.84
```

```
73                                  Monitor Well    01/19/2012
04/09/2012
G000021845      01/19/2012      74      10:29   N       Ground Water    ASWPMW15WG1
                                                        592068.12       660982.84
74                                  Monitor Well    01/19/2012
04/09/2012
G000021846      01/19/2012      75      12:25   N       Ground Water    ASPAMW17WG1
                                                        592068.12       660982.84
75                                  Monitor Well    01/19/2012
04/09/2012
G000021847      01/19/2012      76      11:44   N       Ground Water    ASPAMW18WG1
                                                        592068.12       660982.84
76                                  Monitor Well    01/19/2012
04/09/2012
G000021848      01/19/2012      77      10:25   N       Ground Water    ASPAFB01WQ1
                                                        592068.12       660982.84
77                                  Monitor Well    01/19/2012
04/09/2012
G000021849      01/17/2012      78      12:39   N       Ground Water    ASPAMW10WG1
                                                        592068.12       660982.84
78                                  Monitor Well    01/19/2012
04/09/2012
G000021850      01/17/2012      79      10:40   N       Ground Water    ASPAMW05WG1
                                                        592068.12       660982.84
79                                  Monitor Well    01/19/2012
04/09/2012
G000021851      01/17/2012      80      11:30   N       Ground Water    ASPAMW04WG1
                                                        592068.12       660982.84
80                                  Monitor Well    01/19/2012
04/09/2012
G000021852      01/17/2012      81      12:45   N       Ground Water    ASPAMW11WG1
                                                        592068.12       660982.84
81                                  Monitor Well    01/19/2012
04/09/2012
G000021853      01/17/2012      82      11:35   N       Ground Water    ASPAFB01WQ1
                                                        592068.12       660982.84
82                                  Monitor Well    01/19/2012
04/09/2012
G000021854      01/18/2012      83      09:04   N       Ground Water    ASPAMW08WG1
                                                        592068.12       660982.84
83                                  Monitor Well    01/19/2012
04/09/2012
G000021855      01/18/2012      84      09:39   N       Ground Water    ASPAMW07WG1
                                                        592068.12       660982.84
84                                  Monitor Well    01/19/2012
04/09/2012
```

NJDEP Constituent Warning Report
File: G:\Project\04907098\RAWP\EDDs\35951\FINAL EDDs 35951\HZRESULT (RSTP)
Date: 04/09/2012 16:21
Warnings#: (1)

Analyte/Desc	Type	CAS
Arsenic	P	7440-38-2

Possible match with SRP Result Type: A

DIRECTORY	DESCRIPT	SRPID	CONSULTANT	PHASE	STATUS	TRANSMIT	SUBMITDATE	PACKNUM
6	BB - Arsenic Site	G000021830	BB - Arsenic Site					
Packaged		04/09/2012						

```
NJDEP HZRESULT Error Report
File:       G:\Project\04907098\RAWP\EDDs\35951\FINAL EDDs 35951\HZRESULT
Date:       04/09/2012 16:21
Errors#:    (0)
```

No HZRESULT errors have been identified!

NJDEP HZSAMPLE Error Report
File: G:\Project\04907098\RAWP\EDDs\35951\FINAL EDDs 35951\HZSAMPLE
Date: 04/09/2012 16:21
Errors#: (0)

No HZSAMPLE errors have been identified!

```
NJDEP HZSAMPLE Error Report
File:       G:\Project\04907098\RAWP\EDDs\36122\Final EDD 36122\HZSAMPLE
Date:       04/09/2012 16:26
Errors#:    (0)
```

No HZSAMPLE errors have been identified!

SRPID SAMPDATE SAMPNUM LABID DANALYZ LABNAME NJLABCERT RESULTTYPE
ANALTPARAM CAS FILTUNFILT CONC CONCUNITS QAQUAL MDL
QUANTTYPE QUANTLEVEL ANLYS_MTHD QAQC
G000021830 01/25/2012 85 460-36122-1 01/27/2012 TestAmerica
Edison 12028 P Arsenic 7440-38-2 U 9340 ppb 3.6
PQL 5.0 200.8
G000021831 01/25/2012 86 460-36122-2 01/27/2012 TestAmerica
Edison 12028 P Arsenic 7440-38-2 U ND ppb U 1.8
PQL 2.5 200.8

```
SRPID    SAMPDATE         SAMPNUM SAMPTIME         DUPSAMP MATRIX   FIELDID AOCID
LAT_DEGREE       LAT_MINUTE       LAT_SECOND       LON_DEGREE       LON_MINUTE
LON_SECOND       SP_X     SP_Y    DEPTH_TOP        DEPTH_BOTTOM     GROUNDELEV
WELL_ELEV        SAMPTYPE         DATETOLAB        SAMPMETHOD       SAMPNOTE
SUBMITDATE       QAQC
G000021830       01/25/2012       85       10:20   N        Ground Water    ASPAMW16WG1
                                                           592068.12       660982.84
85                                Monitor Well     01/25/2012
04/09/2012
G000021831       01/25/2012       86       08:30   N        Ground Water    ASPAFB01WQ1
                                                           592068.12       660982.84
86                                Monitor Well     01/25/2012
04/09/2012
```

NJDEP Constituent Warning Report
File: G:\Project\04907098\RAWP\EDDs\36122\Final EDD 36122\HZRESULT (RSTP)
Date: 04/09/2012 16:26
Warnings#: (1)

Analyte/Desc	Type	CAS
Arsenic	P	7440-38-2

Possible match with SRP Result Type: A

DIRECTORY	DESCRIPT	SRPID	CONSULTANT	PHASE	STATUS	TRANSMIT	SUBMITDATE	PACKNUM
7	BB - Arsenic Site	G000021830	BB - Arsenic Site					
Packaged							04/09/2012	

```
NJDEP HZRESULT Error Report
File:       G:\Project\04907098\RAWP\EDDs\36122\Final EDD 36122\HZRESULT
Date:       04/09/2012 16:26
Errors#:    (0)
```

No HZRESULT errors have been identified!

DIRECTORY	DESCRIPT	SRPID	CONSULTANT	PHASE	STATUS	TRANSMIT	SUBMITDATE	PACKNUM
1	BB - Arsenic Site	G000021830	BB- Arsenic Site			RAWP	Packaged	04/09/2012

```
NJDEP HZRESULT Error Report
File:       G:\Project\04907098\RAWP\EDDs\35415\Final EDD\HZRESULT
Date:       04/09/2012 15:40
Errors#:    (0)
```

No HZRESULT errors have been identified!

```
SRPID    SAMPDATE         SAMPNUM LABID    DANALYZ LABNAME NJLABCERT        RESULTTYPE
ANALTPARAM       CAS      FILTUNFILT       CONC     CONCUNITS        QAQUAL   MDL
QUANTTYPE        QUANTLEVEL       ANLYS_MTHD       QAQC
G000021830       01/03/2012       1        460-35415-1      01/06/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 231      ppm              1.0
PQL      1.1     6010B
G000021830       01/03/2012       2        460-35415-2      01/08/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 5220     ppm              6.8
PQL      7.3     6010B
G000021830       01/03/2012       3        460-35415-3      01/08/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 2920     ppm              3.0
PQL      3.2     6010B
G000021830       01/03/2012       4        460-35415-4      01/06/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 135      ppm              1.6
PQL      1.7     6010B
G000021830       01/03/2012       5        460-35415-5      01/06/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 108      ppm              1.1
PQL      1.2     6010B
```

```
NJDEP HZSAMPLE Error Report
File:       G:\Project\04907098\RAWP\EDDs\35415\Final EDD\HZSAMPLE
Date:       04/09/2012 15:40
Errors#:    (0)

No HZSAMPLE errors have been identified!
```

```
SRPID    SAMPDATE         SAMPNUM SAMPTIME         DUPSAMP MATRIX   FIELDID AOCID
LAT_DEGREE       LAT_MINUTE       LAT_SECOND       LON_DEGREE       LON_MINUTE
LON_SECOND       SP_X     SP_Y    DEPTH_TOP        DEPTH_BOTTOM     GROUNDELEV
WELL_ELEV        SAMPTYPE         DATETOLAB        SAMPMETHOD       SAMPNOTE
SUBMITDATE       QAQC
G000021830       01/03/2012       1        08:55   N        Solid   ASPAMW17SO1
                                                   592068.12        660982.84        1
                         Subsurface Soil 01/05/2012                         04/09/2012

G000021830       01/03/2012       2        09:05   N        Solid   ASPAMW17ESO2
                                                   592068.12        660982.84        2
                         Subsurface Soil 01/05/2012                         04/09/2012

G000021830       01/03/2012       3        09:15   N        Solid   ASPAMW17ESO3
                                                   592068.12        660982.84        3
                         Subsurface Soil 01/05/2012                         04/09/2012

G000021830       01/03/2012       4        09:30   N        Solid   ASPAMW17ESO4
                                                   592068.12        660982.84        4
                         Subsurface Soil 01/05/2012                         04/09/2012

G000021830       01/03/2012       5        09:45   N        Solid   ASPAMW17ESO5
                                                   592068.12        660982.84        5
                         Subsurface Soil 01/05/2012                         04/09/2012
```

NJDEP Constituent Warning Report
File: G:\Project\04907098\RAWP\EDDs\35415\Final EDD\HZRESULT (RSTP)
Date: 04/09/2012 15:40
Warnings#: (1)

Analyte/Desc	Type	CAS
Arsenic	P	7440-38-2

Possible match with SRP Result Type: A

```
NJDEP HZRESULT Error Report
File:       G:\Project\04907098\RAWP\EDDs\35525\FINAL EDD 35525\HZRESULT
Date:       04/09/2012 15:53
Errors#:    (0)
```

No HZRESULT errors have been identified!

DIRECTORY	DESCRIPT	SRPID	CONSULTANT	PHASE	STATUS	TRANSMIT	SUBMITDATE	PACKNUM
2	BB - Arsenic Site	G000021830	BB - Arsenic Site					
Packaged							04/09/2012	

```
SRPID    SAMPDATE         SAMPNUM LABID    DANALYZ LABNAME NJLABCERT        RESULTTYPE
ANALTPARAM       CAS      FILTUNFILT       CONC     CONCUNITS        QAQUAL  MDL
QUANTTYPE        QUANTLEVEL       ANLYS_MTHD       QAQC
G000021830       01/05/2012       6        460-35525-1      01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 334      ppm             1.1
PQL      1.2     6010B
G000021831       01/05/2012       7        460-35525-10     01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 242      ppm             1.2
PQL      1.3     6010B
G000021832       01/05/2012       8        460-35525-2      01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 860      ppm             1.1
PQL      1.2     6010B
G000021833       01/05/2012       9        460-35525-3      01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 50.0     ppm             1.0
PQL      1.1     6010B
G000021834       01/05/2012       10       460-35525-4      01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 85.7     ppm             1.1
PQL      1.1     6010B
G000021835       01/05/2012       11       460-35525-5      01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 322      ppm             1.1
PQL      1.2     6010B
G000021836       01/05/2012       12       460-35525-6      01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 219      ppm             1.0
PQL      1.1     6010B
G000021837       01/05/2012       13       460-35525-7      01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 323      ppm             1.1
PQL      1.2     6010B
G000021838       01/05/2012       14       460-35525-8      01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 73.1     ppm             1.2
PQL      1.2     6010B
G000021839       01/05/2012       15       460-35525-9      01/11/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 116      ppm             1.2
PQL      1.2     6010B
```

```
NJDEP HZSAMPLE Error Report
File:       G:\Project\04907098\RAWP\EDDs\35525\FINAL EDD 35525\HZSAMPLE
Date:       04/09/2012 15:53
Errors#:    (0)
```

No HZSAMPLE errors have been identified!

NJDEP Constituent Warning Report
File: G:\Project\04907098\RAWP\EDDs\35525\FINAL EDD 35525\HZRESULT (RSTP)
Date: 04/09/2012 15:53
Warnings#: (1)

Analyte/Desc	Type	CAS
Arsenic	P	7440-38-2

Possible match with SRP Result Type: A

```
SRPID    SAMPDATE         SAMPNUM SAMPTIME         DUPSAMP MATRIX   FIELDID AOCID
LAT_DEGREE       LAT_MINUTE       LAT_SECOND       LON_DEGREE       LON_MINUTE
LON_SECOND       SP_X     SP_Y    DEPTH_TOP        DEPTH_BOTTOM     GROUNDELEV
WELL_ELEV        SAMPTYPE         DATETOLAB        SAMPMETHOD       SAMPNOTE
SUBMITDATE       QAQC
G000021830       01/05/2012       6        09:35   N        Solid   ASPAMW18SO1
                                                   592068.12        660982.84        6
                         Subsurface Soil 01/09/2012                         04/09/2012

G000021831       01/05/2012       7        14:30   N        Solid   ASPASB25SO5
                                                   592068.12        660982.84        7
                         Subsurface Soil 01/09/2012                         04/09/2012

G000021832       01/05/2012       8        09:38   N        Solid   ASPAMW18SO2
                                                   592068.12        660982.84        8
                         Subsurface Soil 01/09/2012                         04/09/2012

G000021833       01/05/2012       9        10:35   N        Solid   ASPAMW18SO3
                                                   592068.12        660982.84        9
                         Subsurface Soil 01/09/2012                         04/09/2012

G000021834       01/05/2012       10       10:45   N        Solid   ASPAMW18SO4
                                                   592068.12        660982.84        10
                         Subsurface Soil 01/09/2012                         04/09/2012

G000021835       01/05/2012       11       10:50   N        Solid   ASPAMW18SO5
                                                   592068.12        660982.84        11
                         Subsurface Soil 01/09/2012                         04/09/2012

G000021836       01/05/2012       12       13:55   N        Solid   ASPASB25SO1
                                                   592068.12        660982.84        12
                         Subsurface Soil 01/09/2012                         04/09/2012

G000021837       01/05/2012       13       14:05   N        Solid   ASPASB25SO2
                                                   592068.12        660982.84        13
                         Subsurface Soil 01/09/2012                         04/09/2012

G000021838       01/05/2012       14       14:12   N        Solid   ASPASB25SO3
                                                   592068.12        660982.84        14
                         Subsurface Soil 01/09/2012                         04/09/2012

G000021839       01/05/2012       15       14:15   N        Solid   ASPASB25SO4
                                                   592068.12        660982.84        15
                         Subsurface Soil 01/09/2012                         04/09/2012
```

DIRECTORY	DESCRIPT	SRPID	CONSULTANT	PHASE	STATUS	TRANSMIT	SUBMITDATE	PACKNUM
3	BB - Arsenic Site	G000021830	BB - Arsenic Site					
Packaged		04/09/2012						

NJDEP HZRESULT Error Report
File: G:\Project\04907098\RAWP\EDDs\35549\FINAL EDDs 35549\HZRESULT
Date: 04/09/2012 15:57
Errors#: (0)

No HZRESULT errors have been identified!

SRPID SAMPDATE SAMPNUM LABID DANALYZ LABNAME NJLABCERT RESULTTYPE
ANALTPARAM CAS FILTUNFILT CONC CONCUNITS QAQUAL MDL
QUANTTYPE QUANTLEVEL ANLYS_MTHD QAQC
G000021830 01/09/2012 16 460-35549-1 01/11/2012 TestAmerica
Edison 12028 P Arsenic 7440-38-2 184 ppm 1.0
PQL 1.1 6010B
G000021831 01/09/2012 17 460-35549-2 01/11/2012 TestAmerica
Edison 12028 P Arsenic 7440-38-2 53.6 ppm 1.0
PQL 1.1 6010B
G000021832 01/09/2012 18 460-35549-3 01/11/2012 TestAmerica
Edison 12028 P Arsenic 7440-38-2 36.3 ppm 1.0
PQL 1.1 6010B
G000021833 01/09/2012 19 460-35549-4 01/11/2012 TestAmerica
Edison 12028 P Arsenic 7440-38-2 7.4 ppm 1.0
PQL 1.1 6010B
G000021834 01/09/2012 20 460-35549-5 01/11/2012 TestAmerica
Edison 12028 P Arsenic 7440-38-2 6.8 ppm 1.4
PQL 1.5 6010B
G000021835 01/09/2012 21 460-35549-6 01/11/2012 TestAmerica
Edison 12028 P Arsenic 7440-38-2 5.7 ppm 1.2
PQL 1.3 6010B

NJDEP HZSAMPLE Error Report
File: G:\Project\04907098\RAWP\EDDs\35549\FINAL EDDs 35549\HZSAMPLE
Date: 04/09/2012 15:57
Errors#: (0)

No HZSAMPLE errors have been identified!

```
SRPID    SAMPDATE         SAMPNUM SAMPTIME         DUPSAMP MATRIX   FIELDID AOCID
LAT_DEGREE       LAT_MINUTE       LAT_SECOND       LON_DEGREE       LON_MINUTE
LON_SECOND       SP_X     SP_Y    DEPTH_TOP        DEPTH_BOTTOM     GROUNDELEV
WELL_ELEV        SAMPTYPE         DATETOLAB        SAMPMETHOD       SAMPNOTE
SUBMITDATE       QAQC
G000021830       01/09/2012       16       10:12   N        Solid   ASPASB22SO1
                                                   592068.12        660982.84        16
                         Subsurface Soil 01/10/2012                         04/09/2012

G000021831       01/09/2012       17       10:12   N        Solid   ASPASB22S1P
                                                   592068.12        660982.84        17
                         Subsurface Soil 01/10/2012                         04/09/2012

G000021832       01/09/2012       18       10:22   N        Solid   ASPASB22SO2
                                                   592068.12        660982.84        18
                         Subsurface Soil 01/10/2012                         04/09/2012

G000021833       01/09/2012       19       10:28   N        Solid   ASPASB22SO3
                                                   592068.12        660982.84        19
                         Subsurface Soil 01/10/2012                         04/09/2012

G000021834       01/09/2012       20       10:54   N        Solid   ASPASB22SO4
                                                   592068.12        660982.84        20
                         Subsurface Soil 01/10/2012                         04/09/2012

G000021835       01/09/2012       21       10:55   N        Solid   ASPASB22SO5
                                                   592068.12        660982.84        21
                         Subsurface Soil 01/10/2012                         04/09/2012
```

NJDEP Constituent Warning Report
File: G:\Project\04907098\RAWP\EDDs\35549\FINAL EDDs 35549\HZRESULT (RSTP)
Date: 04/09/2012 15:57
Warnings#: (1)

Analyte/Desc	Type	CAS
Arsenic	P	7440-38-2

Possible match with SRP Result Type: A

NJDEP HZRESULT Error Report
File: G:\Project\04907098\RAWP\EDDs\35620\FINAL EDDs 35620\HZRESULT
Date: 04/09/2012 16:05
Errors#: (0)

NO HZRESULT errors have been identified!

DIRECTORY	DESCRIPT	SRPID	CONSULTANT	PHASE	STATUS	TRANSMIT	SUBMITDATE	PACKNUM
4	BB - Arsenic Site	G000021830	BB - Arsenic Site					
Packaged							04/09/2012	

NJDEP HZSAMPLE Error Report
File: G:\Project\04907098\RAWP\EDDs\35620\FINAL EDDs 35620\HZSAMPLE
Date: 04/09/2012 16:05
Errors#: (0)

No HZSAMPLE errors have been identified!

```
SRPID    SAMPDATE          SAMPNUM LABID    DANALYZ LABNAME NJLABCERT        RESULTTYPE
ANALTPARAM       CAS      FILTUNFILT       CONC     CONCUNITS        QAQUAL   MDL
QUANTTYPE        QUANTLEVEL       ANLYS_MTHD       QAQC
G000021830       01/09/2012       22       460-35620-1      01/13/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 52.3     ppm              0.94
PQL      1.0     6010B
G000021831       01/09/2012       23       460-35620-2      01/13/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 4380     ppm              6.8
PQL      7.2     6010B
G000021832       01/09/2012       24       460-35620-3      01/13/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 24100    ppm              42.8
PQL      45.6    6010B
G000021833       01/09/2012       25       460-35620-4      01/13/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 1560     ppm              1.1
PQL      1.2     6010B
G000021834       01/09/2012       26       460-35620-5      01/13/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 14.3     ppm              1.1
PQL      1.2     6010B
G000021835       01/09/2012       27       460-35620-6      01/13/2012       TestAmerica
Edison   12028   P        Arsenic 7440-38-2                 1.6      ppm              1.0
PQL      1.1     6010B
```

```
SRPID    SAMPDATE         SAMPNUM SAMPTIME         DUPSAMP MATRIX   FIELDID AOCID
LAT_DEGREE       LAT_MINUTE       LAT_SECOND       LON_DEGREE       LON_MINUTE
LON_SECOND       SP_X     SP_Y    DEPTH_TOP        DEPTH_BOTTOM     GROUNDELEV
WELL_ELEV        SAMPTYPE         DATETOLAB        SAMPMETHOD       SAMPNOTE
SUBMITDATE       QAQC
G000021830       01/09/2012       22       13:43   N        Solid   ASPAMW16SO1
                                                   592068.12        660982.84        22
                         Subsurface Soil 01/11/2012                         04/09/2012

G000021831       01/09/2012       23       13:44   N        Solid   ASPAMW16SO2
                                                   592068.12        660982.84        23
                         Subsurface Soil 01/11/2012                         04/09/2012

G000021832       01/09/2012       24       13:44   N        Solid   ASPAMW16S2P
                                                   592068.12        660982.84        24
                         Subsurface Soil 01/11/2012                         04/09/2012

G000021833       01/09/2012       25       14:00   N        Solid   ASPAMW16SO3
                                                   592068.12        660982.84        25
                         Subsurface Soil 01/11/2012                         04/09/2012

G000021834       01/09/2012       26       14:15   N        Solid   ASPAMW16SO4
                                                   592068.12        660982.84        26
                         Subsurface Soil 01/11/2012                         04/09/2012

G000021835       01/09/2012       27       14:16   N        Solid   ASPAMW16SO5
                                                   592068.12        660982.84        27
                         Subsurface Soil 01/11/2012                         04/09/2012
```

NJDEP Constituent Warning Report
File: G:\Project\04907098\RAWP\EDDs\35620\FINAL EDDs 35620\HZRESULT (RSTP)
Date: 04/09/2012 16:05
Warnings#: (1)

Analyte/Desc	Type	CAS
Arsenic	P	7440-38-2

Possible match with SRP Result Type: A

DIRECTORY	DESCRIPT	SRPID	CONSULTANT	PHASE	STATUS	TRANSMIT	SUBMITDATE	PACKNUM
5	BB - Arsenic Site	G000021830	BB - Arsenic Site					
Packaged							04/09/2012	

```
NJDEP HZSAMPLE Error Report
File:       G:\Project\04907098\RAWP\EDDs\35682\FINAL EDDs 35682\HZSAMPLE
Date:       04/09/2012 16:12
Errors#:    (0)
```

No HZSAMPLE errors have been identified!

```
SRPID    SAMPDATE         SAMPNUM SAMPTIME         DUPSAMP MATRIX   FIELDID AOCID
LAT_DEGREE       LAT_MINUTE       LAT_SECOND       LON_DEGREE       LON_MINUTE
LON_SECOND       SP_X     SP_Y    DEPTH_TOP        DEPTH_BOTTOM     GROUNDELEV
WELL_ELEV        SAMPTYPE         DATETOLAB        SAMPMETHOD       SAMPNOTE
SUBMITDATE       QAQC
G000021830       01/10/2012       28       10:50   N        Solid   ASPASB19SO1
                                                   592068.12        660982.84        28
                         Subsurface Soil 01/12/2012                         04/09/2012

G000021831       01/10/2012       29       09:58   N        Solid   ASPASB21SO5
                                                   592068.12        660982.84        29
                         Subsurface Soil 01/12/2012                         04/09/2012

G000021832       01/11/2012       30       13:35   N        Solid   ASPASB20SO1
                                                   592068.12        660982.84        30
                         Subsurface Soil 01/12/2012                         04/09/2012

G000021833       01/11/2012       31       13:42   N        Solid   ASPASB20SO2
                                                   592068.12        660982.84        31
                         Subsurface Soil 01/12/2012                         04/09/2012

G000021834       01/11/2012       32       13:58   N        Solid   ASPASB20S3P
                                                   592068.12        660982.84        32
                         Subsurface Soil 01/12/2012                         04/09/2012

G000021835       01/11/2012       33       14:05   N        Solid   ASPASB20SO4
                                                   592068.12        660982.84        33
                         Subsurface Soil 01/12/2012                         04/09/2012

G000021836       01/11/2012       34       14:10   N        Solid   ASPASB20SO5
                                                   592068.12        660982.84        34
                         Subsurface Soil 01/12/2012                         04/09/2012

G000021837       01/11/2012       35       10:20   N        Solid   ASPASB23SO1
                                                   592068.12        660982.84        35
                         Subsurface Soil 01/12/2012                         04/09/2012

G000021838       01/11/2012       36       10:23   N        Solid   ASPASB23SO2
                                                   592068.12        660982.84        36
                         Subsurface Soil 01/12/2012                         04/09/2012

G000021839       01/11/2012       37       10:28   N        Solid   ASPASB23SO3
                                                   592068.12        660982.84        37
                         Subsurface Soil 01/12/2012                         04/09/2012

G000021840       01/11/2012       38       10:40   N        Solid   ASPASB23SO4
                                                   592068.12        660982.84        38
                         Subsurface Soil 01/12/2012                         04/09/2012

G000021841       01/10/2012       39       11:10   N        Solid   ASPASB19SO2
                                                   592068.12        660982.84        39
                         Subsurface Soil 01/12/2012                         04/09/2012

G000021842       01/11/2012       40       10:45   N        Solid   ASPASB23SO5
                                                   592068.12        660982.84        40
                         Subsurface Soil 01/12/2012                         04/09/2012

G000021843       01/11/2012       41       12:45   N        Solid   ASPASB24SO1
                                                   592068.12        660982.84        41
                         Subsurface Soil 01/12/2012                         04/09/2012

G000021844       01/11/2012       42       12:50   N        Solid   ASPASB24SO2
                                                   592068.12        660982.84        42
```

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                    Subsurface Soil 01/12/2012                          04/09/2012

G000021845    01/11/2012    43    12:56   N       Solid   ASPASB24SO3
                                          592068.12       660982.84       43
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021846    01/11/2012    44    12:44   N       Solid   ASPASB24SO4
                                          592068.12       660982.84       44
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021847    01/11/2012    45    12:48   N       Solid   ASPASB24SO5
                                          592068.12       660982.84       45
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021848    01/11/2012    46    13:50   N       Solid   ASPASB26SO1
                                          592068.12       660982.84       46
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021849    01/11/2012    47    13:55   N       Solid   ASPASB26SO2
                                          592068.12       660982.84       47
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021850    01/11/2012    48    14:00   N       Solid   ASPASB26SO3
                                          592068.12       660982.84       48
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021851    01/11/2012    49    14:12   N       Solid   ASPASB26SO4
                                          592068.12       660982.84       49
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021852    01/10/2012    50    11:15   N       Solid   ASPASB19SO3
                                          592068.12       660982.84       50
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021853    01/11/2012    51    14:15   N       Solid   ASPASB26SO5
                                          592068.12       660982.84       51
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021854    01/11/2012    52    13:58   N       Solid   ASPASB20SO3
                                          592068.12       660982.84       52
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021855    01/10/2012    53    11:28   N       Solid   ASPASB19SO4
                                          592068.12       660982.84       53
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021856    01/10/2012    54    11:35   N       Solid   ASPASB19SO5
                                          592068.12       660982.84       54
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021857    01/10/2012    55    09:23   N       Solid   ASPASB21SO1
                                          592068.12       660982.84       55
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021858    01/10/2012    56    09:30   N       Solid   ASPASB21SO2
                                          592068.12       660982.84       56
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021859    01/10/2012    57    09:48   N       Solid   ASPASB21SO3
                                          592068.12       660982.84       57
                    Subsurface Soil 01/12/2012                          04/09/2012

G000021860    01/10/2012    58    09:55   N       Solid   ASPASB21SO4
```

592068.12 660982.84 58
Subsurface Soil 01/12/2012 04/09/2012

SRPID	SAMPDATE	SAMPNUM	LABID	DANALYZ	LABNAME	NJLABCERT	RESULTTYPE	ANALTPARAM	CAS	FILTUNFILT	CONC	CONCUNITS	QAQUAL	MDL	QUANTTYPE	QUANTLEVEL	ANLYS_MTHD	QAQC
G000021830	01/10/2012	28	460-35682-1	01/15/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		1500	ppm		0.98	PQL	1.0	6010B	
G000021831	01/10/2012	29	460-35682-10	01/16/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		3240	ppm		3.2	PQL	3.4	6010B	
G000021832	01/11/2012	30	460-35682-11	01/15/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		547	ppm		1.1	PQL	1.1	6010B	
G000021833	01/11/2012	31	460-35682-12	01/15/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		273	ppm		1.2	PQL	1.3	6010B	
G000021834	01/11/2012	32	460-35682-13	01/15/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		1080	ppm		1.2	PQL	1.3	6010B	
G000021835	01/11/2012	33	460-35682-14	01/16/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		2700	ppm		2.7	PQL	2.9	6010B	
G000021836	01/11/2012	34	460-35682-15	01/15/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		1090	ppm		1.0	PQL	1.1	6010B	
G000021837	01/11/2012	35	460-35682-16	01/15/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		286	ppm		1.0	PQL	1.1	6010B	
G000021838	01/11/2012	36	460-35682-17	01/15/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		45.9	ppm		1.0	PQL	1.1	6010B	
G000021839	01/11/2012	37	460-35682-18	01/15/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		42.9	ppm		1.0	PQL	1.1	6010B	
G000021840	01/11/2012	38	460-35682-19	01/15/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		6.0	ppm		0.99	PQL	1.1	6010B	
G000021841	01/10/2012	39	460-35682-2	01/15/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		346	ppm		1.0	PQL	1.1	6010B	
G000021842	01/11/2012	40	460-35682-20	01/15/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		2.7	ppm		1.0	PQL	1.1	6010B	
G000021843	01/11/2012	41	460-35682-21	01/15/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		269	ppm		1.1	PQL	1.2	6010B	
G000021844	01/11/2012	42	460-35682-22	01/15/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		29.6	ppm		1.0	PQL	1.1	6010B	
G000021845	01/11/2012	43	460-35682-23	01/15/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		4.7	ppm		0.94	PQL	1.0	6010B	
G000021846	01/11/2012	44	460-35682-24	01/15/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		5.1	ppm		1.0	PQL	1.1	6010B	
G000021847	01/11/2012	45	460-35682-25	01/15/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		2.3	ppm		1.0	PQL	1.1	6010B	
G000021848	01/11/2012	46	460-35682-26	01/15/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		37.4	ppm		1.2	PQL	1.2	6010B	
G000021849	01/11/2012	47	460-35682-27	01/15/2012	TestAmerica Edison	12028	P	Arsenic	7440-38-2		143	ppm		1.0	PQL	1.1	6010B	

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G000021850      01/11/2012      48      460-35682-28    01/15/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               5.6     ppm             1.0
PQL     1.1     6010B
G000021851      01/11/2012      49      460-35682-29    01/15/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               3.2     ppm             1.1
PQL     1.1     6010B
G000021852      01/10/2012      50      460-35682-3     01/15/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               648     ppm             1.1
PQL     1.2     6010B
G000021853      01/11/2012      51      460-35682-30    01/15/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               1.8     ppm             1.1
PQL     1.2     6010B
G000021854      01/11/2012      52      460-35682-31    01/18/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               929     ppm             1.2
PQL     1.3     6010B
G000021855      01/10/2012      53      460-35682-4     01/16/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               1200    ppm             2.7
PQL     2.9     6010B
G000021856      01/10/2012      54      460-35682-5     01/15/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               669     ppm             1.1
PQL     1.2     6010B
G000021857      01/10/2012      55      460-35682-6     01/15/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               29.4    ppm             0.95
PQL     1.0     6010B
G000021858      01/10/2012      56      460-35682-7     01/15/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               371     ppm             1.3
PQL     1.3     6010B
G000021859      01/10/2012      57      460-35682-8     01/15/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               585     ppm             1.2
PQL     1.3     6010B
G000021860      01/10/2012      58      460-35682-9     01/16/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2               3110    ppm             3.7
PQL     3.9     6010B
```

NJDEP HZRESULT Error Report
File: G:\Project\04907098\RAWP\EDDs\35951\FINAL EDDs 35951\HZRESULT
Date: 04/09/2012 16:21
Errors#: (0)

No HZRESULT errors have been identified!

NJDEP Constituent Warning Report
File: G:\Project\04907098\RAWP\EDDs\35682\FINAL EDDs 35682\HZRESULT (RSTP)
Date: 04/09/2012 16:12
Warnings#: (1)

Analyte/Desc	Type	CAS
Arsenic	P	7440-38-2

Possible match with SRP Result Type: A

DIRECTORY	DESCRIPT	SRPID	CONSULTANT	PHASE	STATUS	TRANSMIT	SUBMITDATE	PACKNUM
6	BB - Arsenic Site	G000021830	BB - Arsenic Site					
Packaged		04/09/2012						

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6

Data File: 6M00522.D
Analysis Date: 08/05/13 06:35
Method: EPA 8260B

Tune Scan/Time Range: Average of 3.963 to 3.972 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.2	38556	PASS
75	95	30	60	53.7	108100	PASS
95	95	100	100	100.0	201184	PASS
96	95	5	9	5.4	10877	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	83.7	168464	PASS
175	174	5	9	8.2	13770	PASS
176	174	95	101	99.3	167356	PASS
177	176	5	9	6.0	10094	PASS

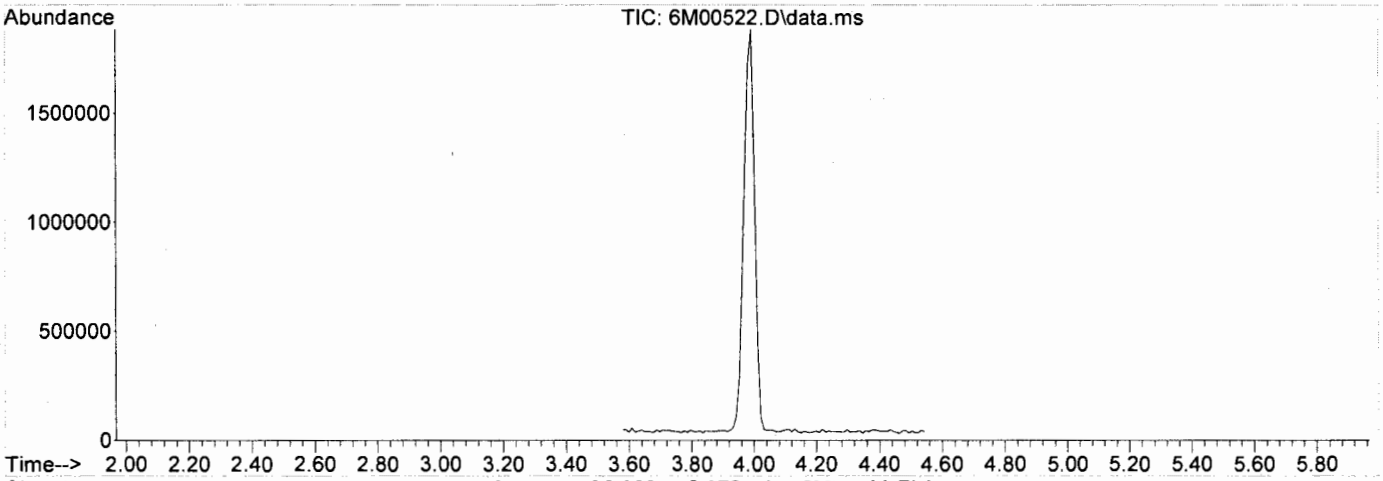
Data File	Sample Number	Analysis Date:
6M00523.D	BLKJUG3	08/05/13 06:45
6M00524.D	BLK	08/05/13 07:02
6M00525.D	50 PPB	08/05/13 07:18
6M00526.D	CAL @ 50 PPB	08/05/13 07:37
6M00527.D	BLK	08/05/13 07:54
6M00528.D	BLK	08/05/13 08:10
6M00529.D	DAILY BLANK	08/05/13 08:26
6M00530.D	MBS27721	08/05/13 08:42
6M00531.D	BLK	08/05/13 08:58
6M00532.D	AC73793-001	08/05/13 09:15
6M00533.D	AC73793-002	08/05/13 09:31
6M00534.D	AC73793-003	08/05/13 09:47
6M00535.D	AC73793-004	08/05/13 10:03
6M00536.D	AC73793-005	08/05/13 10:20
6M00537.D	AC73797-004	08/05/13 10:36
6M00538.D	AC73797-005	08/05/13 10:52
6M00539.D	AC73771-004	08/05/13 11:11
6M00540.D	AC73771-003	08/05/13 11:27
6M00541.D	AC73821-001	08/05/13 11:43
6M00542.D	AC73820-001	08/05/13 11:59
6M00543.D	AC73832-004	08/05/13 12:16
6M00544.D	AC73832-005	08/05/13 12:32
6M00545.D	BLK	08/05/13 12:48
6M00546.D	AC73816-022	08/05/13 13:04
6M00547.D	AC73797-002(MS)	08/05/13 13:20
6M00548.D	AC73797-002(MSD	08/05/13 13:37
6M00549.D	AC73797-002	08/05/13 13:53
6M00550.D	BLK	08/05/13 14:09
6M00551.D	AC73797-001	08/05/13 14:25
6M00552.D	STD	08/05/13 14:42
6M00553.D	AC73797-002	08/05/13 14:58
6M00554.D	AC73797-006	08/05/13 15:14
6M00555.D	AC73797-001	08/05/13 15:30
6M00556.D	MBS27731	08/05/13 15:46
6M00557.D	AC73797-003	08/05/13 16:02
6M00558.D	AC73820-004	08/05/13 16:19
6M00559.D	AC73820-005	08/05/13 16:35
6M00560.D	AC73820-006	08/05/13 16:51
6M00561.D	AC73820-007	08/05/13 17:07
6M00562.D	AC73820-003	08/05/13 17:23
6M00563.D	BLK	08/05/13 17:39
6M00564.D	AC73823-001	08/05/13 17:55
6M00565.D	AC73823-009	08/05/13 18:11
6M00566.D	BLK	08/05/13 18:28
6M00567.D	BLK	08/05/13 18:44
6M00568.D	BLK	08/05/13 19:00
6M00569.D	BLK	08/05/13 19:16

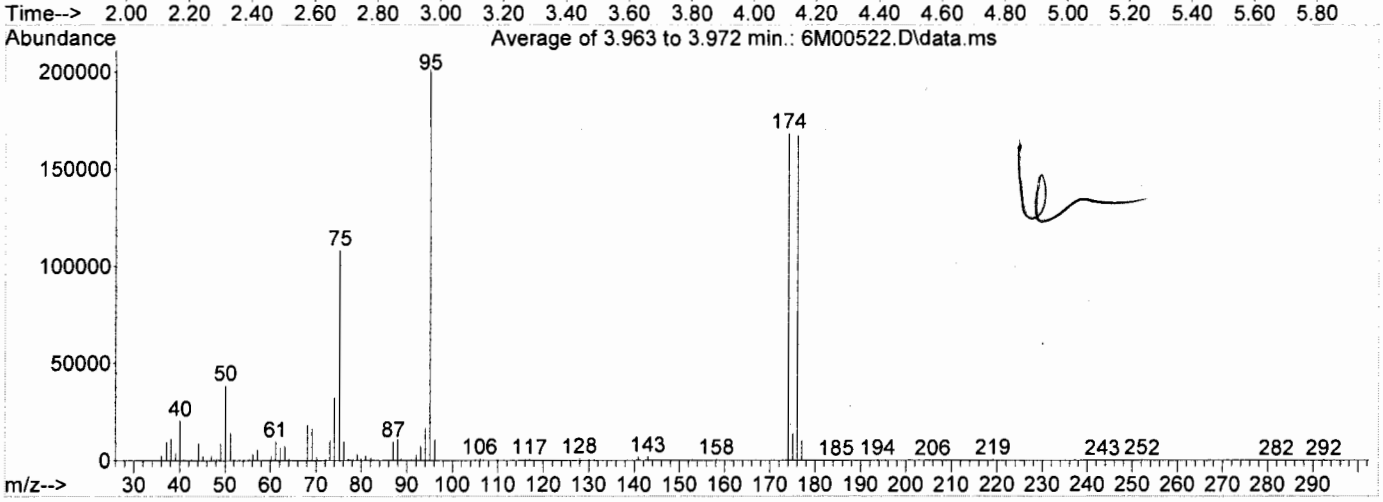
3080110 0055

Data Path : G:\GcMsData\2013\GCMS_6\Data\08-05-13\
Data File : 6M00522.D
Acq On : 5 Aug 2013 6:35
Operator : SG
Sample : BFB TUNE
Misc : S,5G
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2013\GCMS_6\MethodQt\6M_S0718.M
Title : @GCMS_6,ug,624,8260
Last Update : Thu Jul 18 10:53:43 2013





Spectrum Information: Average of 3.963 to 3.972 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.2	38556	PASS
75	95	30	60	53.7	108100	PASS
95	95	100	100	100.0	201184	PASS
96	95	5	9	5.4	10877	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	83.7	168464	PASS
175	174	5	9	8.2	13770	PASS
176	174	95	101	99.3	167356	PASS
177	176	5	9	6.0	10094	PASS

Form 6
Initial Calibration

Method: EPA 8260B

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M99870.	CAL @ 20 PPB	07/18/13 10:36	2	6M99865.	CAL @ 5 PPB	07/18/13 09:14
3	6M99864.	CAL @ 2 PPB	07/18/13 08:58	4	6M99869.	CAL @ 50 PPB	07/18/13 10:19
5	6M99868.	CAL @ 100 PPB	07/18/13 10:03	6	6M99867.	CAL @ 250 PPB	07/18/13 09:47
7	6M99866.	CAL @ 500 PPB	07/18/13 09:31	8	6M99863.	CAL @ 1 PPB	07/18/13 08:42
9	6M99862.	CAL @ 0.5 PPB	07/18/13 08:26				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.4918	0.4764	0.6544	0.5298	0.5899	0.4996	0.5126	-----	-----	0.536	1.31	0.999	0.999	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dichlorodifluoromethan	1	0	Avg	0.5721	0.6141	0.5329	0.5584	0.6525	0.5453	0.5426	-----	-----	0.574	1.31	0.998	0.999	7.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloromethane	1	0	Avg	0.3217	0.2844	0.3062	0.3391	0.3838	0.3358	0.3357	-----	-----	0.330	1.44	0.999	0.999	9.4	**(0.100)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromomethane	1	0	Avg	0.2502	0.3092	0.3528	0.2798	0.3139	0.2795	0.2877	-----	-----	0.296	1.78	0.999	0.999	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Vinyl Chloride	1	0	Avg	0.3047	0.3442	0.3691	0.3307	0.3637	0.3198	0.3218	-----	-----	0.336	1.53	0.999	0.999	7.1	*(30)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloroethane	1	0	LinF	0.1824	0.2391	0.3096	0.2088	0.2273	0.2023	0.2063	-----	-----	0.225	1.86	0.999	0.999	18		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Trichlorofluoromethane	1	0	Avg	0.6400	0.8177	0.8125	0.7069	0.7636	0.6879	0.7106	-----	-----	0.734	2.06	0.999	0.999	9.0		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl ether	1	0	Avg	0.0716	0.0944	0.1168	0.0961	0.1143	0.1051	0.1001	-----	-----	0.0998	2.27	0.998	0.999	15		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Furan	1	0	Avg	0.3220	0.3536	0.4761	0.3337	0.3962	0.3443	0.3589	-----	-----	0.369	2.29	0.999	0.999	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1.1.2-Trichloro-1.2.2-tri	1	0	Avg	0.4789	0.4174	0.5540	0.4692	0.4986	0.4416	0.4382	-----	-----	0.471	2.45	0.999	0.999	9.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methylene Chloride	1	0	LinF	0.2291	0.2819	0.4221	0.2242	0.2514	0.2258	0.2327	-----	-----	0.267	2.79	0.999	0.999	27		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Acrolein	1	0	LinF	0.0079	0.0071	0.0127	0.0086	0.0108	0.0096	0.0097	-----	-----	0.00954	2.35	0.999	0.999	20		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Acrylonitrile	1	0	LinF	0.0132	0.0186	0.0333	0.0207	0.0217	0.0164	0.0161	-----	-----	0.0200	2.98	0.995	0.996	33		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Iodomethane	1	0	Avg	0.4575	0.4866	0.5417	0.4737	0.5307	0.4751	0.4885	-----	-----	0.493	2.56	0.999	0.999	6.3		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Acetone	1	0	LinF	0.0165	0.0234	0.0114	0.0180	0.0176	0.0178	0.0163	-----	-----	0.0173	2.47	0.998	1.00	20		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Carbon Disulfide	1	0	Avg	1.0846	1.0705	1.2932	1.0918	1.1854	1.0898	1.0905	-----	-----	1.13	2.62	1.00	1.00	7.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
t-Butyl Alcohol	1	0	Avg	0.0040	0.0036	0.0040	0.0045	0.0041	0.0043	0.0044	-----	-----	0.00416	2.86	1.00	1.00	7.5		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
n-Hexane	1	0	Avg	0.4419	0.4140	0.3428	0.4564	0.5099	0.4585	0.4516	-----	-----	0.439	3.24	0.999	1.00	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Di-isopropyl-ether	1	0	Avg	0.5765	0.5663	0.6494	0.5758	0.6490	0.5928	0.5988	-----	-----	0.601	3.39	1.00	1.00	5.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1.1-Dichloroethene	1	0	Avg	0.4662	0.5228	0.3685	0.4712	0.5154	0.4635	0.4761	-----	-----	0.469	2.44	0.999	0.999	11	*(30)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl Acetate	1	0	Avg	0.0499	0.0625	0.0457	0.0601	0.0679	0.0660	0.0652	-----	-----	0.0597	2.71	1.00	1.00	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl-t-butyl ether	1	0	Avg	0.3484	0.3914	0.4193	0.3349	0.3967	0.3413	0.3414	0.4669	-----	0.380	3.01	0.999	0.999	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1.1-Dichloroethane	1	0	Avg	0.5473	0.5630	0.5017	0.5296	0.6174	0.5529	0.5626	-----	-----	0.554	3.34	0.999	0.999	6.4	**(0.100)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
trans-1.2-Dichloroether	1	0	Avg	0.3977	0.4336	0.4411	0.3961	0.4412	0.3908	0.4128	-----	-----	0.416	3.01	0.999	0.999	5.3		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl-t-butyl ether	1	0	Avg	0.4364	0.4374	0.5528	0.4893	0.5560	0.4846	0.4887	-----	-----	0.492	3.68	0.999	0.999	9.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
cis-1.2-Dichloroethene	1	0	Avg	0.4369	0.4592	0.6123	0.4893	0.5436	0.4949	0.4912	-----	-----	0.504	3.79	0.999	1.00	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromochloromethane	1	0	LinF	0.1511	0.1728	0.2231	0.1368	0.1607	0.1333	0.1429	-----	-----	0.160	3.96	0.998	0.998	19		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2.2-Dichloropropane	1	0	Avg	0.4900	0.5100	0.5504	0.4974	0.5823	0.5236	0.5221	-----	-----	0.525	3.80	0.999	0.999	6.1		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl acetate	1	0	Avg	0.0740	0.0647	0.0923	0.0717	0.0924	0.0834	0.0786	-----	-----	0.0796	3.84	0.998	0.999	13		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1.4-Dioxane	1	0	Avg	0.0008	0.0007	0.0010	0.0008	0.0009	0.0008	0.0009	-----	-----	.000880	4.91	0.996	0.999	13		1000.	250.0	100.0	2500.	5000.	1250	2500		
1.1-Dichloropropene	1	0	Avg	0.5478	0.5833	0.5440	0.5635	0.6053	0.5450	0.5306	-----	-----	0.560	4.25	0.999	1.00	4.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloroform	1	0	Avg	0.6240	0.6502	0.6180	0.5896	0.6550	0.5885	0.6124	-----	-----	0.620	4.02	0.999	0.999	4.2	*(30)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromofluoromethane	1	0	Avg	0.2741	0.2825	0.2839	0.2599	0.2550	0.2555	0.2422	0.2732	0.2861	0.268	4.11	-1	-1	5.8		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.5188	0.4991	0.6285	0.5670	0.6196	0.5455	0.5356	-----	-----	0.559	4.20	0.999	0.999	8.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1.2-Dichloroethane-d4	1	0	Avg	0.0864	0.0870	0.0906	0.0865	0.0978	0.0899	0.0985	0.0965	0.0826	0.0907	4.33	-1	-1	6.3		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
1.2-Dichloroethane	1	0	Avg	0.2634	0.2727	0.3569	0.2727	0.2945	0.2585	0.2605	0.3156	-----	0.287	4.38	0.999	0.999	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
2-Butanone	1	0	LinF	0.0313	0.0305	0.0160	0.0323	0.0282	0.0274	0.0291	-----	-----	0.0279	3.81	0.999	1.00	20		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1.1.1-Trichloroethane	1	0	Avg	0.6559	0.6633	0.7189	0.6912	0.7781	0.6705	0.6601	-----	-----	0.691	4.15	0.999	0.999	6.4		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Carbon Tetrachloride	1	0	Avg	0.5702	0.5305	0.6544	0.5859	0.6209	0.5668	0.5314	-----	-----	0.580	4.26	0.998	1.00	7.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Vinyl Acetate	1	0	Avg	0.3086	0.2650	0.3994	0.3212	0.3552	0.3147	0.3217	-----	-----	0.327	3.39	0.999	0.999	13		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromodichloromethane	1	0	Avg	0.3665	0.3695	0.3408	0.3605	0.4119	0.3630	0.3661	-----	-----	0.368	4.98	0.999	0.999	5.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		

Flags
a - failed the spcc criteria — ** - ccc compound*
b - failed the ccc criteria — *** - spcc compound*
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.9
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

3080110 0056

Form 6
Initial Calibration

Method: EPA 8260B

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M99870.	CAL @ 20 PPB	07/18/13 10:36	2	6M99865.	CAL @ 5 PPB	07/18/13 09:14
3	6M99864.	CAL @ 2 PPB	07/18/13 08:58	4	6M99869.	CAL @ 50 PPB	07/18/13 10:19
5	6M99868.	CAL @ 100 PPB	07/18/13 10:03	6	6M99867.	CAL @ 250 PPB	07/18/13 09:47
7	6M99866.	CAL @ 500 PPB	07/18/13 09:31	8	6M99863.	CAL @ 1 PPB	07/18/13 08:42
9	6M99862.	CAL @ 0.5 PPB	07/18/13 08:26				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.6611	0.6392	0.7603	0.7275	0.7779	0.6796	0.6393	-----	-----	0.698	4.84	0.998	1.00	8.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromomethane	1	0	Avg	0.1481	0.1618	0.1945	0.1359	0.1609	0.1391	0.1424	-----	-----	0.155	4.91	0.999	0.999	13		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichloropropane	1	0	Avg	0.2661	0.2515	0.2959	0.2650	0.2824	0.2453	0.2406	-----	-----	0.264	4.84	0.999	0.999	7.6	*(30)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Trichloroethene	1	0	Avg	0.4334	0.4699	0.5725	0.4815	0.5140	0.4751	0.4380	-----	-----	0.484	4.73	0.998	1.00	9.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Benzene	1	0	Avg	1.1602	1.2696	1.2456	1.2435	1.3961	1.1764	1.1139	1.4835	-----	1.26	4.38	0.997	0.999	9.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
tert-Amyl methyl ether	1	0	Avg	0.3246	0.3494	0.3825	0.3698	0.4061	0.3567	0.3664	-----	-----	0.365	4.44	0.999	0.999	7.0		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Iso-propylacetate	1	0	Avg	0.1355	0.1239	0.1588	0.1560	0.1636	0.1647	0.1594	-----	-----	0.152	4.39	1.00	1.00	10		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl methacrylate	1	0	Avg	0.5776	0.5634	0.5988	0.5932	0.6523	0.6017	0.5980	-----	-----	0.598	4.84	1.00	1.00	4.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromochloromethane	1	0	Avg	0.3589	0.3461	0.3629	0.3487	0.3893	0.3771	0.3680	-----	-----	0.364	5.79	1.00	1.00	4.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Chloroethylvinylether	1	0	Avg	0.0808	0.0925	0.0833	0.0876	0.0991	0.0992	0.1052	-----	-----	0.0926	5.12	0.999	1.00	9.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
cis-1,3-Dichloropropene	1	0	Avg	0.5301	0.5565	0.5914	0.5472	0.6508	0.6121	0.6234	-----	-----	0.587	5.21	1.00	1.00	7.5		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
trans-1,3-Dichloroprope	1	0	Avg	0.3877	0.3883	0.3269	0.4158	0.4497	0.4544	0.4440	-----	-----	0.410	5.48	1.00	1.00	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl methacrylate	1	0	LinF	0.1672	0.0856	0.1674	0.1663	0.1835	0.1872	0.1959	-----	-----	0.165	5.52	1.00	1.00	22		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,2-Trichloroethane	1	0	Avg	0.2320	0.3024	0.2759	0.2277	0.2724	0.2505	0.2526	-----	-----	0.259	5.58	1.00	1.00	10		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dibromoethane	1	0	Avg	0.2449	0.2539	0.2815	0.2275	0.2496	0.2290	0.2361	-----	-----	0.246	5.86	1.00	1.00	7.5		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3-Dichloropropane	1	0	Avg	0.4015	0.3994	0.4421	0.4023	0.4482	0.4012	0.3866	-----	-----	0.412	5.67	0.999	1.00	5.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
4-Methyl-2-Pentanone	1	0	Avg	0.0845	0.0842	0.1140	0.0896	0.0971	0.0967	0.0945	-----	-----	0.0944	5.28	1.00	1.00	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Hexanone	1	0	LinF	0.0332	0.0350	0.0497	0.0556	0.0570	0.0579	0.0613	-----	-----	0.0500	5.71	0.999	1.00	23		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Tetrachloroethene	1	0	Avg	0.6803	0.7298	0.7617	0.6599	0.7067	0.6654	0.6431	-----	-----	0.692	5.68	0.999	1.00	6.1		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Toluene-d8	1	0	Avg	1.6470	1.5919	1.5373	1.5084	1.5118	1.6267	1.6149	1.4948	1.6563	1.58	5.36	-1	-1	4.0		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Toluene	1	0	Avg	1.2365	1.4108	1.4759	1.1929	1.3152	1.2915	1.2108	1.4860	-----	1.33	5.39	0.999	1.00	8.8	*(30)	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1,1,2-Tetrachloroetha	1	0	Avg	0.4660	0.5394	0.4042	0.4520	0.4713	0.4544	0.4416	-----	-----	0.461	6.14	1.00	1.00	8.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chlorobenzene	1	0	Avg	1.3547	1.4921	1.6879	1.3554	1.4975	1.4168	1.2937	-----	-----	1.44	6.11	0.997	1.00	9.1	**(0.300)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Butyl acrylate	1	0	LinF	0.4888	0.1746	0.2124	0.5579	0.6899	0.6392	0.6792	-----	-----	0.492	6.37	0.999	0.999	44		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Amyl acetate	1	0	LinF	0.3238	0.0869	0.0881	0.3208	0.4510	0.3880	0.4311	-----	-----	0.299	6.49	0.997	0.998	51		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromoform	1	0	Avg	0.3789	0.5369	0.4233	0.3572	0.4602	0.3917	0.4153	-----	-----	0.423	6.54	0.998	0.998	14	**(0.100)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethylbenzene	1	0	Avg	1.3314	1.2738	1.3562	1.5209	1.3693	1.3846	1.4027	1.0706	-----	1.34	6.16	1.00	1.00	9.6	*(30)	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1,2,2-Tetrachloroetha	1	0	LinF	0.3972	0.4334	0.6238	0.4186	0.5003	0.4288	0.4432	-----	-----	0.464	6.75	0.999	0.999	17	**(0.300)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromofluorobenzene	1	0	Avg	0.8299	0.8155	0.9037	0.8214	0.8441	0.8510	0.8939	0.8425	0.8373	0.849	6.70	-1	-1	3.6		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Styrene	1	0	Avg	2.2596	2.3432	2.3502	2.2460	2.7272	2.2164	2.2501	-----	-----	2.34	6.43	0.998	0.998	7.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
m&p-Xylenes	1	0	Avg	1.7155	1.6919	1.8947	1.7831	1.9834	1.6738	1.5970	1.9117	2.4625	1.86	6.22	0.998	0.999	14		40.00	10.00	4.00	100.0	200.0	500.0	1000.	2.00	1.00
o-Xylene	1	0	Avg	1.5357	1.7014	1.6259	1.6041	1.9230	1.5800	1.5717	1.9212	-----	1.68	6.43	0.998	0.998	9.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
trans-1,4-Dichloro-2-bu	1	0	Avg	0.3470	0.4185	0.4600	0.3721	0.4512	0.3854	0.4082	-----	-----	0.406	6.77	0.998	0.999	10		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3-Dichlorobenzene	1	0	Avg	1.8037	1.6781	1.8452	1.8239	2.1887	1.8333	1.7739	-----	-----	1.85	7.30	0.998	0.999	8.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,4-Dichlorobenzene	1	0	Avg	1.8102	1.8334	2.4841	1.7935	2.1647	1.8183	1.8101	-----	-----	1.96	7.35	0.998	0.999	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichlorobenzene	1	0	Avg	1.4799	1.4251	1.8015	1.4979	1.7920	1.4588	1.5291	-----	-----	1.57	7.56	0.998	0.998	10		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Isopropylbenzene	1	0	Avg	4.9204	4.8709	4.4695	4.8916	5.8435	4.9613	4.1097	5.7902	-----	4.98	6.61	0.987	0.999	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Cyclohexanone	1	0	LinF	0.0106	0.0216	0.0139	0.0105	0.0126	0.0116	0.0120	-----	-----	0.0133	6.68	0.999	0.999	29		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Camphene	1	0	Avg	2.4618	2.1703	2.6007	2.5007	2.9908	2.5303	2.3466	-----	-----	2.51	6.77	0.996	0.999	10		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,3-Trichloropropane	1	0	Avg	0.4999	0.5596	0.6540	0.4896	0.5695	0.5002	0.4934	-----	-----	0.538	6.79	0.999	0.999	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Chlorotoluene	1	0	Avg	3.1931	3.1308	3.2192	3.5653	3.5952	3.2190	2.7294	-----	-----	3.24	6.89	0.991	1.00	9.0		20.00	5.00	2.00	50.00	100.0	250.0	500.0		

Flags

a - failed the spcc criteria — ** - ccc compound*

b - failed the ccc criteria — *** - spcc compound*

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.9

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form 6
Initial Calibration

Method: EPA 8260B

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M99870.	CAL @ 20 PPB	07/18/13 10:36	2	6M99865.	CAL @ 5 PPB	07/18/13 09:14
3	6M99864.	CAL @ 2 PPB	07/18/13 08:58	4	6M99869.	CAL @ 50 PPB	07/18/13 10:19
5	6M99868.	CAL @ 100 PPB	07/18/13 10:03	6	6M99867.	CAL @ 250 PPB	07/18/13 09:47
7	6M99866.	CAL @ 500 PPB	07/18/13 09:31	8	6M99863.	CAL @ 1 PPB	07/18/13 08:42
9	6M99862.	CAL @ 0.5 PPB	07/18/13 08:26				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	5.1858	4.9170	5.6450	4.9951	5.9743	5.1298	4.0046	-----	-----	5.12	6.89	0.979	0.999	12	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
4-Chlorotoluene	1	0	LinF	2.7522	2.1780	2.1809	2.9097	3.3983	2.8312	2.6701	-----	-----	2.70	6.95	0.997	0.999	16	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Propylbenzene	1	0	Avg	5.4452	5.2241	6.3027	5.9823	6.8250	5.3574	4.2009	5.7323	-----	5.63	6.83	0.976	0.999	14	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Bromobenzene	1	0	Avg	1.8111	1.6835	2.4127	1.8982	2.1352	1.8086	1.9164	-----	-----	1.95	6.79	0.998	0.999	13	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3,5-Trimethylbenzene	1	0	Avg	3.4856	3.5071	4.1538	3.8533	4.0558	3.3282	3.2900	4.6169	-----	3.79	6.92	0.998	0.999	12	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Butyl methacrylate	1	0	LinF	0.6573	0.4911	0.7116	0.7723	0.8972	0.8103	0.8176	-----	-----	0.737	6.93	0.999	0.999	18	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
t-Butylbenzene	1	0	Avg	3.5340	3.6027	3.5997	3.7641	4.1612	3.7009	3.4914	4.5027	-----	3.79	7.11	0.998	1.00	9.3	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trimethylbenzene	1	0	Avg	3.2271	3.2136	3.9467	3.3354	4.0951	3.4218	3.2390	4.0528	-----	3.57	7.13	0.997	0.999	11	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
sec-Butylbenzene	1	0	Avg	5.1520	4.6662	4.8769	5.4802	5.9718	5.0729	4.1871	6.0597	-----	5.18	7.23	0.987	1.00	12	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
4-Isopropyltoluene	1	0	Avg	3.7817	3.5571	4.1690	4.0671	4.6318	3.7495	3.4669	4.5679	-----	4.00	7.29	0.995	0.999	11	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
n-Butylbenzene	1	0	Avg	4.3844	3.8082	4.1332	4.7453	5.2697	4.4577	4.1120	4.7996	-----	4.46	7.52	0.996	0.999	10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
p-Diethylbenzene	1	0	Avg	1.8266	1.7453	2.2034	2.1127	2.3601	2.2244	2.1249	-----	-----	2.09	7.51	0.999	1.00	11	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,4,5-Tetramethylben	1	0	Avg	2.3544	2.1531	2.9129	2.8228	3.1848	2.8104	2.7825	-----	-----	2.72	7.95	0.999	0.999	13	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dibromo-3-Chloropr	1	0	LinF	0.0681	0.0478	0.1247	0.0555	0.0750	0.0602	0.0665	-----	-----	0.0712	7.98	0.996	0.997	35	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Camphor	1	0	LinF	0.0184	0.0120	0.0186	0.0189	0.0210	0.0185	0.0163	-----	-----	0.0177	8.41	0.994	1.00	16	200.0	50.00	20.00	500.0	1000.	2500.	5000.		
Hexachlorobutadiene	1	0	Avg	0.8223	0.6934	1.0633	0.8561	0.9637	0.8377	0.8247	-----	-----	0.866	8.56	0.999	0.999	14	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,4-Trichlorobenzene	1	0	Avg	0.7432	0.7595	0.7880	0.8361	0.9992	0.8028	0.8264	-----	-----	0.822	8.47	0.998	0.998	10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,3-Trichlorobenzene	1	0	Avg	0.6428	0.5010	0.6780	0.6206	0.7516	0.6151	0.5658	-----	-----	0.625	8.76	0.995	0.999	13	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Naphthalene	1	0	Avg	0.9386	0.7286	0.8519	0.9439	1.1198	0.9121	0.7644	0.8369	-----	0.887	8.62	0.987	0.999	14	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	

Flags

a - failed the spcc criteria — ** - ccc compound*

b - failed the ccc criteria — *** - spcc compound*

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.9

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

3080110 0058

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M00231.D **Instrument:** GCMS 6

Cont Calibration Date/Time 7/26/2013 9:16:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.53	30.00	30				0.000	0.00	
Chlorodifluoromethane	1	0		1.32	52.44				0.536			
Dichlorodifluoromethane	1	0		1.32	40.78	50			0.574	0.468	18.44	
Chloromethane	1	0	CP	1.44	60.09	50	0.1		0.330	0.396	20.18	
Bromomethane	1	0		1.78	52.65	50			0.296	0.312	5.30	
Vinyl Chloride	1	0	CC	1.53	58.58	50	20		0.336	0.394	17.16	
Chloroethane	1	0		1.86	64.62	50			0.225	0.266	29.24	
Trichlorofluoromethane	1	0		2.06	42.39	50			0.734	0.622	15.22	
Ethyl ether	1	0		2.26	52.63	50			0.100	0.105	5.26	
Furan	1	0		2.29	59.26	50			0.369	0.438	18.53	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.44	38.02	50			0.471	0.358	23.95	
Methylene Chloride	1	0		2.79	64.24	50			0.267	0.298	28.48	
Acrolein	1	0		2.35	336.28	250			0.010	0.013	34.51	
Acrylonitrile	1	0		2.96	59.22	50			0.020	0.019	18.45	
Iodomethane	1	0		2.56	51.09	50			0.493	0.504	2.17	
Acetone	1	0		2.46	326.23	250			0.017	0.022	30.49	
Carbon Disulfide	1	0		2.62	52.36	50			1.129	1.183	4.72	
t-Butyl Alcohol	1	0		2.85	300.72	250			0.004	0.005	20.29	
n-Hexane	1	0		3.24	47.05	50			0.439	0.413	5.90	
Di-isopropyl-ether	1	0		3.39	53.35	50			0.601	0.642	6.70	
1,1-Dichloroethene	1	0	CC	2.44	54.87	50	20		0.469	0.515	9.73	
Methyl Acetate	1	0		2.71	77.32	50			0.060	0.092	54.65	
Methyl-t-butyl ether	1	0		3.01	45.33	50			0.380	0.345	9.35	
1,1-Dichloroethane	1	0	CP	3.34	53.84	50	0.1		0.554	0.596	7.67	
trans-1,2-Dichloroethene	1	0		3.01	46.79	50			0.416	0.390	6.42	
Ethyl-t-butyl ether	1	0		3.68	48.90				0.492			
cis-1,2-Dichloroethene	1	0		3.79	54.88	50			0.504	0.553	9.77	
Bromochloromethane	1	0		3.96	57.36	50			0.160	0.162	14.72	
2,2-Dichloropropane	1	0		3.80	43.35	50			0.525	0.455	13.30	
Ethyl acetate	1	0		3.84	64.83				0.080			
1,4-Dioxane	1	0		4.90	2913.46	2500			0.001	0.001	16.54	
1,1-Dichloropropene	1	0		4.25	46.07	50			0.560	0.516	7.86	
Chloroform	1	0	CC	4.01	44.22	50	20		0.620	0.548	11.55	
Dibromofluoromethane	1	0	S	4.11	24.99	75			0.268	0.223	16.71	
Cyclohexane	1	0		4.20	46.41	50			0.559	0.519	7.19	
1,2-Dichloroethane-d4	1	0	S	4.33	27.01	75			0.091	0.082	9.97	
1,2-Dichloroethane	1	0		4.37	45.45	50			0.287	0.261	9.10	
2-Butanone	1	0		3.79	64.51	50			0.028	0.037	29.01	
1,1,1-Trichloroethane	1	0		4.15	41.81	50			0.691	0.578	16.38	
Carbon Tetrachloride	1	0		4.26	38.84	50			0.580	0.451	22.33	
Vinyl Acetate	1	0		3.39	53.83	50			0.327	0.352	7.66	
Bromodichloromethane	1	0		4.97	48.48	50			0.368	0.357	3.04	
Methylcyclohexane	1	0		4.84	40.83	50			0.698	0.570	18.33	
Dibromomethane	1	0		4.90	39.45	50			0.155	0.122	21.11	
1,2-Dichloropropane	1	0	CC	4.84	54.07	50	20		0.264	0.285	8.14	
Trichloroethene	1	0		4.73	38.82	50			0.484	0.375	22.35	
Benzene	1	0		4.37	47.81	50			1.261	1.206	4.38	
tert-Amyl methyl ether	1	0		4.43	46.89	50			0.365	0.342	6.22	
Chlorobenzene-d5	1	0	I	6.10	30.00	30				0.000	0.00	
Iso-propylacetate	1	0		4.39	67.59				0.152			
Methyl methacrylate	1	0		4.84	54.42				0.598			
Dibromochloromethane	1	0		5.79	45.75	50			0.364	0.333	8.50	
2-Chloroethylvinylether	1	0		5.12	65.71	50			0.093	0.122	31.43	
cis-1,3-Dichloropropene	1	0		5.21	57.35	50			0.587	0.674	14.71	
trans-1,3-Dichloropropene	1	0		5.48	55.41	50			0.410	0.454	10.82	
Ethyl methacrylate	1	0		5.52	50.19				0.165			

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M00231.D **Instrument:** GCMS 6

Cont Calibration Date/Time 7/26/2013 9:16:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
1,1,2-Trichloroethane	1	0		5.58	50.72	50			0.259	0.263	1.44	
1,2-Dibromoethane	1	0		5.86	45.45	50			0.246	0.224	9.10	
1,3-Dichloropropane	1	0		5.66	56.71	50			0.412	0.467	13.43	
4-Methyl-2-Pentanone	1	0		5.27	59.98	50			0.094	0.113	19.96	
2-Hexanone	1	0		5.70	45.70	50			0.050	0.055	8.59	
Tetrachloroethene	1	0		5.68	41.33	50			0.692	0.572	17.33	
Toluene-d8	1	0	S	5.35	33.00	75			1.577	1.734	10.00	
Toluene	1	0	CC	5.39	48.47	50	20		1.327	1.287	3.06	
1,1,1,2-Tetrachloroethane	1	0		6.14	42.91	50			0.461	0.396	14.17	
Chlorobenzene	1	0	CP	6.11	42.99	50	0.3		1.443	1.240	14.02	
1,4-Dichlorobenzene-d4	1	0	I	7.33	30.00	30				0.000	0.00	
n-Butyl acrylate	1	0		6.37	49.95				0.492			
n-Amyl acetate	1	0		6.48	52.74				0.299			
Bromoform	1	0	CP	6.53	41.78	50	0.1		0.423	0.354	16.43	
Ethylbenzene	1	0	CC	6.16	49.77	50	20		1.339	1.333	0.46	
1,1,2,2-Tetrachloroethane	1	0	CP	6.75	60.85	50	0.3		0.464	0.538	21.70	
Bromofluorobenzene	1	0	S	6.70	28.99	75			0.849	0.820	3.37	
Styrene	1	0		6.43	45.97	50			2.342	2.153	8.07	
m&p-Xylenes	1	0		6.22	90.89	100			1.857	1.688	9.11	
o-Xylene	1	0		6.43	47.18	50			1.683	1.588	5.64	
trans-1,4-Dichloro-2-butene	1	0		6.78	51.28	50			0.406	0.417	2.57	
1,3-Dichlorobenzene	1	0		7.30	42.37	50			1.850	1.567	15.27	
1,4-Dichlorobenzene	1	0		7.35	41.26	50			1.959	1.617	17.48	
1,2-Dichlorobenzene	1	0		7.56	37.42	50			1.569	1.174	25.16	
Isopropylbenzene	1	0		6.61	48.03	50			4.982	4.786	3.93	
Cyclohexanone	1	0		6.67	262.91				0.013			
Camphene	1	0		6.78	45.45	50			2.515	2.286	9.10	
1,2,3-Trichloropropane	1	0		6.79	52.97	50			0.538	0.570	5.94	
2-Chlorotoluene	1	0		6.89	49.08	50			3.236	3.176	1.84	
p-Ethyltoluene	1	0		6.89	45.88				5.122			
4-Chlorotoluene	1	0		6.94	48.95	50			2.703	2.668	2.11	
n-Propylbenzene	1	0		6.83	50.25	50			5.634	5.662	0.50	
Bromobenzene	1	0		6.79	46.77	50			1.952	1.826	6.45	
1,3,5-Trimethylbenzene	1	0		6.92	46.42	50			3.786	3.515	7.16	
Butyl methacrylate	1	0		6.93	49.23				0.737			
t-Butylbenzene	1	0		7.10	41.04	50			3.795	3.115	17.92	
1,2,4-Trimethylbenzene	1	0		7.12	41.98	50			3.566	2.995	16.03	
sec-Butylbenzene	1	0		7.22	44.70	50			5.183	4.634	10.60	
4-Isopropyltoluene	1	0		7.29	40.14	50			3.999	3.210	19.73	
n-Butylbenzene	1	0		7.52	47.93	50			4.464	4.279	4.14	
p-Diethylbenzene	1	0		7.50	43.30				2.085			
1,2,4,5-Tetramethylbenzene	1	0		7.95	26.84				2.717			
1,2-Dibromo-3-Chloropropane	1	0		7.98	50.63	50			0.071	0.066	1.25	
Camphor	1	0		8.41	399.75	500			0.018	0.014	20.05	
Hexachlorobutadiene	1	0		8.56	34.97	50			0.866	0.606	30.05	
1,2,4-Trichlorobenzene	1	0		8.47	35.97	50			0.822	0.591	28.06	
1,2,3-Trichlorobenzene	1	0		8.76	36.01	50			0.625	0.450	27.98	
Naphthalene	1	0		8.62	35.53	50			0.887	0.630	28.95	
Freon 113	1	100		0.00	0.00	50				0.000	100.00	
1,2-Dioxane	1	100		0.00	0.00	5000				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M00330.D **Instrument:** GCMS 6

Cont Calibration Date/Time 7/30/2013 6:45:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.52	30.00	30				0.000	0.00	
Chlorodifluoromethane	1	0		1.31	65.24				0.536			
Dichlorodifluoromethane	1	0		1.31	40.92	50			0.574	0.470	18.15	
Chloromethane	1	0	CP	1.44	57.59	50	0.1		0.330	0.380	15.18	
Bromomethane	1	0		1.78	35.80	50			0.296	0.212	28.41	
Vinyl Chloride	1	0	CC	1.52	50.11	50	20		0.336	0.337	0.22	
Chloroethane	1	0		1.85	56.39	50			0.225	0.233	12.78	
Trichlorofluoromethane	1	0		2.05	37.08	50			0.734	0.545	25.84	
Ethyl ether	1	0		2.26	53.90	50			0.100	0.108	7.79	
Furan	1	0		2.29	50.69	50			0.369	0.374	1.38	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.44	48.83	50			0.471	0.460	2.33	
Methylene Chloride	1	0		2.78	56.80	50			0.267	0.263	13.61	
Acrolein	1	0		2.34	242.42	250			0.010	0.009	3.03	
Acrylonitrile	1	0		2.97	40.28	50			0.020	0.013	19.45	
Iodomethane	1	0		2.54	49.77	50			0.493	0.491	0.46	
Acetone	1	0		2.45	293.46	250			0.017	0.020	17.39	
Carbon Disulfide	1	0		2.61	50.17	50			1.129	1.133	0.35	
t-Butyl Alcohol	1	0		2.85	205.62	250			0.004	0.003	17.75	
n-Hexane	1	0		3.23	49.53	50			0.439	0.435	0.94	
Di-isopropyl-ether	1	0		3.39	46.89	50			0.601	0.564	6.21	
1,1-Dichloroethene	1	0	CC	2.44	51.86	50	20		0.469	0.487	3.72	
Methyl Acetate	1	0		2.71	66.65	50			0.060	0.080	33.30	
Methyl-t-butyl ether	1	0		3.00	40.98	50			0.380	0.311	18.05	
1,1-Dichloroethane	1	0	CP	3.33	53.29	50	0.1		0.554	0.590	6.58	
trans-1,2-Dichloroethene	1	0		3.01	48.54	50			0.416	0.404	2.92	
Ethyl-t-butyl ether	1	0		3.67	44.81				0.492			
cis-1,2-Dichloroethene	1	0		3.79	50.17	50			0.504	0.506	0.33	
Bromochloromethane	1	0		3.96	56.87	50			0.160	0.161	13.75	
2,2-Dichloropropane	1	0		3.79	46.24	50			0.525	0.486	7.52	
Ethyl acetate	1	0		3.83	42.17				0.080			
1,4-Dioxane	1	0		4.90	2885.02	2500			0.001	0.001	15.40	
1,1-Dichloropropene	1	0		4.25	44.42	50			0.560	0.497	11.16	
Chloroform	1	0	CC	4.01	47.12	50	20		0.620	0.584	5.77	
Dibromofluoromethane	1	0	S	4.11	30.61	75			0.268	0.274	2.04	
Cyclohexane	1	0		4.19	60.28	50			0.559	0.674	20.55	
1,2-Dichloroethane-d4	1	0	S	4.32	30.52	75			0.091	0.092	1.75	
1,2-Dichloroethane	1	0		4.37	48.15	50			0.287	0.276	3.69	
2-Butanone	1	0		3.79	72.04	50			0.028	0.041	44.08	
1,1,1-Trichloroethane	1	0		4.14	47.22	50			0.691	0.653	5.57	
Carbon Tetrachloride	1	0		4.26	47.54	50			0.580	0.552	4.92	
Vinyl Acetate	1	0		3.39	46.43	50			0.327	0.303	7.14	
Bromodichloromethane	1	0		4.97	55.30	50			0.368	0.407	10.59	
Methylcyclohexane	1	0		4.84	47.04	50			0.698	0.657	5.92	
Dibromomethane	1	0		4.90	44.24	50			0.155	0.137	11.51	
1,2-Dichloropropane	1	0	CC	4.83	51.98	50	20		0.264	0.274	3.96	
Trichloroethene	1	0		4.72	40.35	50			0.484	0.390	19.30	
Benzene	1	0		4.37	46.51	50			1.261	1.173	6.98	
tert-Amyl methyl ether	1	0		4.43	40.12	50			0.365	0.293	19.76	
Chlorobenzene-d5	1	0	I	6.09	30.00	30				0.000	0.00	
Iso-propylacetate	1	0		4.39	39.29				0.152			
Methyl methacrylate	1	0		4.83	45.21				0.598			
Dibromochloromethane	1	0		5.78	42.00	50			0.364	0.306	16.00	
2-Chloroethylvinylether	1	0		5.12	40.95	50			0.093	0.076	18.11	
cis-1,3-Dichloropropene	1	0		5.20	45.96	50			0.587	0.540	8.07	
trans-1,3-Dichloropropene	1	0		5.48	46.55	50			0.410	0.381	6.90	
Ethyl methacrylate	1	0		5.51	36.85				0.165			

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M00330.D **Instrument:** GCMS 6

Cont Calibration Date/Time 7/30/2013 6:45:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
1,1,2-Trichloroethane	1	0		5.57	43.69	50			0.259	0.226	12.62	
1,2-Dibromoethane	1	0		5.86	45.11	50			0.246	0.222	9.77	
1,3-Dichloropropane	1	0		5.66	46.76	50			0.412	0.385	6.48	
4-Methyl-2-Pentanone	1	0		5.27	40.64	50			0.094	0.077	18.72	
2-Hexanone	1	0		5.70	43.30	50			0.050	0.052	13.39	
Tetrachloroethene	1	0		5.67	39.23	50			0.692	0.543	21.54	
Toluene-d8	1	0	S	5.35	28.38	75			1.577	1.492	5.40	
Toluene	1	0	CC	5.38	40.01	50	20		1.327	1.062	19.99	
1,1,1,2-Tetrachloroethane	1	0		6.14	42.00	50			0.461	0.388	16.00	
Chlorobenzene	1	0	CP	6.10	42.32	50	0.3		1.443	1.221	15.36	
1,4-Dichlorobenzene-d4	1	0	I	7.32	30.00	30				0.000	0.00	
n-Butyl acrylate	1	0		6.36	40.67				0.492			
n-Amyl acetate	1	0		6.48	40.73				0.299			
Bromoform	1	0	CP	6.53	44.29	50	0.1		0.423	0.375	11.43	
Ethylbenzene	1	0	CC	6.16	45.52	50	20		1.339	1.219	8.95	
1,1,2,2-Tetrachloroethane	1	0	CP	6.75	53.81	50	0.3		0.464	0.476	7.62	
Bromofluorobenzene	1	0	S	6.70	30.94	75			0.849	0.875	3.13	
Styrene	1	0		6.42	46.26	50			2.342	2.167	7.49	
m&p-Xylenes	1	0		6.21	89.15	100			1.857	1.656	10.85	
o-Xylene	1	0		6.42	47.61	50			1.683	1.603	4.77	
trans-1,4-Dichloro-2-butene	1	0		6.77	46.50	50			0.406	0.378	7.00	
1,3-Dichlorobenzene	1	0		7.29	49.33	50			1.850	1.825	1.34	
1,4-Dichlorobenzene	1	0		7.34	46.51	50			1.959	1.823	6.97	
1,2-Dichlorobenzene	1	0		7.55	43.89	50			1.569	1.378	12.22	
Isopropylbenzene	1	0		6.61	50.02	50			4.982	4.984	0.04	
Cyclohexanone	1	0		6.67	255.44				0.013			
Camphene	1	0		6.77	45.11	50			2.515	2.268	9.79	
1,2,3-Trichloropropane	1	0		6.78	52.03	50			0.538	0.560	4.06	
2-Chlorotoluene	1	0		6.88	54.89	50			3.236	3.553	9.79	
p-Ethyltoluene	1	0		6.88	45.23				5.122			
4-Chlorotoluene	1	0		6.94	47.74	50			2.703	2.602	4.52	
n-Propylbenzene	1	0		6.82	52.69	50			5.634	5.937	5.39	
Bromobenzene	1	0		6.79	47.25	50			1.952	1.845	5.50	
1,3,5-Trimethylbenzene	1	0		6.91	45.87	50			3.786	3.474	8.26	
Butyl methacrylate	1	0		6.93	47.58				0.737			
t-Butylbenzene	1	0		7.10	45.76	50			3.795	3.473	8.49	
1,2,4-Trimethylbenzene	1	0		7.12	42.51	50			3.566	3.032	14.98	
sec-Butylbenzene	1	0		7.21	50.07	50			5.183	5.190	0.13	
4-Isopropyltoluene	1	0		7.29	44.68	50			3.999	3.574	10.64	
n-Butylbenzene	1	0		7.52	49.14	50			4.464	4.387	1.72	
p-Diethylbenzene	1	0		7.50	43.96				2.085			
1,2,4,5-Tetramethylbenzene	1	0		7.94	30.62				2.717			
1,2-Dibromo-3-Chloropropane	1	0		7.98	49.98	50			0.071	0.065	0.05	
Camphor	1	0		8.41	243.35	500			0.018	0.008	51.33	
Hexachlorobutadiene	1	0		8.56	40.92	50			0.866	0.709	18.17	
1,2,4-Trichlorobenzene	1	0		8.47	43.19	50			0.822	0.710	13.62	
1,2,3-Trichlorobenzene	1	0		8.75	38.40	50			0.625	0.480	23.20	
Naphthalene	1	0		8.61	32.71	50			0.887	0.580	34.57	
Freon 113	1	100		0.00	0.00	50				0.000	100.00	
1,2-Dioxane	1	100		0.00	0.00	5000				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M00526.D **Instrument:** GCMS 6

Cont Calibration Date/Time 8/5/2013 7:37:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.52	30.00	30				0.000	0.00	
Chlorodifluoromethane	1	0		1.32	38.64				0.536			
Dichlorodifluoromethane	1	0		1.32	29.52	50			0.574	0.339	40.96	
Chloromethane	1	0	CP	1.44	53.40	50	0.1		0.330	0.352	6.79	
Bromomethane	1	0		1.78	37.99	50			0.296	0.225	24.02	
Vinyl Chloride	1	0	CC	1.53	48.77	50	20		0.336	0.328	2.47	
Chloroethane	1	0		1.85	56.60	50			0.225	0.233	13.21	
Trichlorofluoromethane	1	0		2.05	36.76	50			0.734	0.540	26.47	
Ethyl ether	1	0		2.26	49.94	50			0.100	0.100	0.13	
Furan	1	0		2.29	53.55	50			0.369	0.396	7.10	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.44	43.97	50			0.471	0.414	12.06	
Methylene Chloride	1	0		2.79	54.42	50			0.267	0.252	8.84	
Acrolein	1	0		2.35	252.32	250			0.010	0.010	0.93	
Acrylonitrile	1	0		2.98	52.58	50			0.020	0.017	5.16	
Iodomethane	1	0		2.55	41.38	50			0.493	0.408	17.25	
Acetone	1	0		2.46	370.67	250			0.017	0.025	48.27	
Carbon Disulfide	1	0		2.62	51.68	50			1.129	1.167	3.35	
t-Butyl Alcohol	1	0		2.85	261.23	250			0.004	0.004	4.49	
n-Hexane	1	0		3.23	46.53	50			0.439	0.409	6.94	
Di-isopropyl-ether	1	0		3.39	45.96	50			0.601	0.553	8.08	
1,1-Dichloroethene	1	0	CC	2.44	49.73	50	20		0.469	0.467	0.54	
Methyl Acetate	1	0		2.71	69.97	50			0.060	0.083	39.95	
Methyl-t-butyl ether	1	0		3.01	41.33	50			0.380	0.314	17.34	
1,1-Dichloroethane	1	0	CP	3.34	51.29	50	0.1		0.554	0.568	2.58	
trans-1,2-Dichloroethene	1	0		3.01	47.27	50			0.416	0.393	5.46	
Ethyl-t-butyl ether	1	0		3.68	42.97				0.492			
cis-1,2-Dichloroethene	1	0		3.79	52.67	50			0.504	0.531	5.34	
Bromochloromethane	1	0		3.96	59.41	50			0.160	0.168	18.82	
2,2-Dichloropropane	1	0		3.80	44.37	50			0.525	0.466	11.25	
Ethyl acetate	1	0		3.84	47.44				0.080			
1,4-Dioxane	1	0		4.90	2936.49	2500			0.001	0.001	17.46	
1,1-Dichloropropene	1	0		4.25	45.30	50			0.560	0.507	9.40	
Chloroform	1	0	CC	4.01	46.85	50	20		0.620	0.581	6.30	
Dibromofluoromethane	1	0	S	4.11	30.17	75			0.268	0.270	0.58	
Cyclohexane	1	0		4.20	56.59	50			0.559	0.633	13.17	
1,2-Dichloroethane-d4	1	0	S	4.33	30.07	75			0.091	0.091	0.22	
1,2-Dichloroethane	1	0		4.37	45.65	50			0.287	0.262	8.70	
2-Butanone	1	0		3.80	72.60	50			0.028	0.042	45.20	
1,1,1-Trichloroethane	1	0		4.15	44.24	50			0.691	0.612	11.52	
Carbon Tetrachloride	1	0		4.26	44.01	50			0.580	0.511	11.98	
Vinyl Acetate	1	0		3.39	45.30	50			0.327	0.296	9.40	
Bromodichloromethane	1	0		4.97	53.90	50			0.368	0.397	7.79	
Methylcyclohexane	1	0		4.84	46.86	50			0.698	0.654	6.28	
Dibromomethane	1	0		4.90	41.88	50			0.155	0.130	16.24	
1,2-Dichloropropane	1	0	CC	4.84	52.17	50	20		0.264	0.275	4.33	
Trichloroethene	1	0		4.73	39.04	50			0.484	0.377	21.93	
Benzene	1	0		4.37	44.98	50			1.261	1.135	10.04	
tert-Amyl methyl ether	1	0		4.43	38.09	50			0.365	0.278	23.82	
Chlorobenzene-d5	1	0	I	6.10	30.00	30				0.000	0.00	
Iso-propylacetate	1	0		4.39	45.33				0.152			
Methyl methacrylate	1	0		4.84	51.61				0.598			
Dibromochloromethane	1	0		5.79	42.67	50			0.364	0.311	14.67	
2-Chloroethylvinylether	1	0		5.12	49.24	50			0.093	0.091	1.52	
cis-1,3-Dichloropropene	1	0		5.21	47.03	50			0.587	0.553	5.94	
trans-1,3-Dichloropropene	1	0		5.48	45.57	50			0.410	0.373	8.86	
Ethyl methacrylate	1	0		5.52	44.11				0.165			

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M00526.D **Instrument:** GCMS 6

Cont Calibration Date/Time 8/5/2013 7:37:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
1,1,2-Trichloroethane	1	0		5.57	44.68	50			0.259	0.232	10.64	
1,2-Dibromoethane	1	0		5.86	41.95	50			0.246	0.206	16.10	
1,3-Dichloropropane	1	0		5.66	50.86	50			0.412	0.419	1.72	
4-Methyl-2-Pentanone	1	0		5.27	43.64	50			0.094	0.082	12.72	
2-Hexanone	1	0		5.69	40.76	50			0.050	0.049	18.48	
Tetrachloroethene	1	0		5.67	37.84	50			0.692	0.524	24.32	
Toluene-d8	1	0	S	5.35	29.82	75			1.577	1.567	0.61	
Toluene	1	0	CC	5.39	40.50	50	20		1.327	1.075	19.00	
1,1,1,2-Tetrachloroethane	1	0		6.14	42.10	50			0.461	0.388	15.80	
Chlorobenzene	1	0	CP	6.11	42.82	50	0.3		1.443	1.235	14.36	
1,4-Dichlorobenzene-d4	1	0	I	7.33	30.00	30				0.000	0.00	
n-Butyl acrylate	1	0		6.37	45.01				0.492			
n-Amyl acetate	1	0		6.48	42.68				0.299			
Bromoform	1	0	CP	6.53	37.21	50	0.1		0.423	0.315	25.57	
Ethylbenzene	1	0	CC	6.16	51.62	50	20		1.339	1.382	3.25	
1,1,2,2-Tetrachloroethane	1	0	CP	6.74	53.90	50	0.3		0.464	0.476	7.79	
Bromofluorobenzene	1	0	S	6.70	28.75	75			0.849	0.814	4.15	
Styrene	1	0		6.43	41.94	50			2.342	1.964	16.12	
m&p-Xylenes	1	0		6.22	87.53	100			1.857	1.626	12.47	
o-Xylene	1	0		6.43	43.75	50			1.683	1.472	12.51	
trans-1,4-Dichloro-2-butene	1	0		6.77	47.72	50			0.406	0.388	4.56	
1,3-Dichlorobenzene	1	0		7.30	42.60	50			1.850	1.576	14.80	
1,4-Dichlorobenzene	1	0		7.34	38.19	50			1.959	1.497	23.62	
1,2-Dichlorobenzene	1	0		7.56	37.13	50			1.569	1.165	25.73	
Isopropylbenzene	1	0		6.61	40.90	50			4.982	4.076	18.19	
Cyclohexanone	1	0		6.67	337.75				0.013			
Camphene	1	0		6.77	43.29	50			2.515	2.177	13.41	
1,2,3-Trichloropropane	1	0		6.78	48.67	50			0.538	0.524	2.67	
2-Chlorotoluene	1	0		6.89	48.09	50			3.236	3.112	3.83	
p-Ethyltoluene	1	0		6.89	44.93				5.122			
4-Chlorotoluene	1	0		6.94	48.50	50			2.703	2.644	2.99	
n-Propylbenzene	1	0		6.83	48.90	50			5.634	5.510	2.20	
Bromobenzene	1	0		6.79	43.22	50			1.952	1.688	13.56	
1,3,5-Trimethylbenzene	1	0		6.91	43.22	50			3.786	3.273	13.56	
Butyl methacrylate	1	0		6.93	48.52				0.737			
t-Butylbenzene	1	0		7.10	40.79	50			3.795	3.096	18.42	
1,2,4-Trimethylbenzene	1	0		7.12	41.13	50			3.566	2.934	17.74	
sec-Butylbenzene	1	0		7.22	46.26	50			5.183	4.796	7.48	
4-Isopropyltoluene	1	0		7.29	42.98	50			3.999	3.437	14.04	
n-Butylbenzene	1	0		7.52	48.95	50			4.464	4.370	2.09	
p-Diethylbenzene	1	0		7.50	42.02				2.085			
1,2,4,5-Tetramethylbenzene	1	0		7.95	29.24				2.717			
1,2-Dibromo-3-Chloropropane	1	0		7.98	44.23	50			0.071	0.058	11.54	
Camphor	1	0		8.40	329.33	500			0.018	0.011	34.13	
Hexachlorobutadiene	1	0		8.56	37.28	50			0.866	0.646	25.44	
1,2,4-Trichlorobenzene	1	0		8.47	40.95	50			0.822	0.673	18.10	
1,2,3-Trichlorobenzene	1	0		8.76	36.32	50			0.625	0.454	27.35	
Naphthalene	1	0		8.61	39.16	50			0.887	0.695	21.68	
Freon 113	1	100		0.00	0.00	50				0.000	100.00	
1,2-Dioxane	1	100		0.00	0.00	5000				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M99870.D Method: EPA 8260B

Analysis Date/Time: 07/18/13 10:36

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	337561	4.53	215002	6.10	115016	7.33						
Eval File Area Limit:	168780-675122		107501-430004		57508-230032							
Eval File Rt Limit:	4.03-5.03		5.6-6.6		6.83-7.83							

Data File	Sample												
6M99861.D	BLK	305213	4.52	199837	6.10	103488	7.33						
6M99862.D	CAL @ 0.5 PF	305626	4.52	196789	6.10	102211	7.33						
6M99863.D	CAL @ 1 PPB	305178	4.53	203819	6.10	101152	7.33						
6M99864.D	CAL @ 2 PPB	299319	4.52	200875	6.10	95835	7.33						
6M99865.D	CAL @ 5 PPB	322434	4.53	199560	6.10	111120	7.33						
6M99866.D	CAL @ 500 P	374673	4.52	241874	6.10	117897	7.33						
6M99867.D	CAL @ 250 P	377576	4.53	237508	6.10	124227	7.33						
6M99868.D	CAL @ 100 P	349065	4.52	236178	6.09	113893	7.33						
6M99869.D	CAL @ 50 PP	360646	4.53	237046	6.10	121818	7.33						
6M99870.D	CAL @ 20 PP	337561	4.53	215002	6.10	115016	7.33						
6M99873.D	ICV	327971	4.53	197385	6.10	105514	7.33						

I1 =	Fluorobenzene	I4 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =	624/8260 Internal Standard concentration = 30ug/L
I3 =	1.4-Dichlorobenzene-d4	I6 =	524 Internal Standard concentration =5ug/L

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M00231.D Method: EPA 8260B

Analysis Date/Time: 07/26/13 09:16

Lab File ID: CAL @ 50 PPB

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	332938	4.53	186757	6.10	88411	7.33						
Eval File Area Limit:	166469-665876		93378-373514		44206-176822							
Eval File Rt Limit:	4.03-5.03		5.6-6.6		6.83-7.83							

Data File	Sample											
6M00229.D	BLK	327116	4.53	189112	6.10	80202	7.33					
6M00230.D	50 PPB	312418	4.52	182310	6.10	88033	7.33					
6M00232.D	BLK	309168	4.53	183664	6.11	79028	7.34					
6M00233.D	BLK	314923	4.53	165266	6.10	74269	7.34					
6M00234.D	DAILY BLANK	305635	4.53	170572	6.10	74608	7.34					
6M00235.D	MBS27634	311437	4.53	182154	6.10	83837	7.33					
6M00236.D	BLK	290361	4.53	168178	6.10	72148	7.33					
6M00237.D	AC73583-005	296011	4.53	167606	6.10	69947	7.33					
6M00238.D	AC73583-007	145249 A	4.53	72287 A	6.11	31039 A	7.34					
6M00239.D	AC73583-009	317451	4.53	173719	6.10	73971	7.33					
6M00240.D	AC73583-011	315725	4.53	164689	6.10	72569	7.34					
6M00241.D	AC73583-015	322579	4.53	185852	6.10	76454	7.34					
6M00242.D	AC73607-002	293793	4.53	166807	6.10	73994	7.34					
6M00243.D	AC73607-003	311831	4.53	168891	6.10	79337	7.33					
6M00244.D	STDTEST	316424	4.53	182835	6.10	83033	7.33					
6M00245.D	AC73571-006	324851	4.53	173548	6.10	79436	7.33					
6M00246.D	STD	304682	4.53	174329	6.10	82433	7.33					
6M00247.D	AC73571-006	326893	4.53	185363	6.10	76962	7.33					
6M00248.D	BLK	279926	4.53	167085	6.10	66201	7.34					
6M00249.D	AC73581-001	309204	4.53	169368	6.10	78646	7.34					
6M00250.D	AC73599-003	319642	4.53	169930	6.10	77625	7.33					
6M00251.D	STD	330108	4.53	187774	6.10	93654	7.33					
6M00252.D	STD	331877	4.53	192192	6.10	85969	7.34					
6M00253.D	AC73611-003	321384	4.53	179911	6.10	64959	7.33					
6M00254.D	STD	527110	4.53	317857	6.10	141174	7.33					
6M00255.D	MBS27639	333054	4.53	195870	6.10	89619	7.33					
6M00256.D	MBS27640	340909	4.53	197690	6.10	84005	7.34					
6M00257.D	AC73611-004	308844	4.53	167061	6.10	67903	7.34					
6M00258.D	AC73611-005	322017	4.53	170038	6.10	78807	7.33					
6M00259.D	AC73611-006	315668	4.53	172642	6.10	74005	7.33					
6M00260.D	AC73611-007	327657	4.53	181059	6.10	79191	7.33					
6M00261.D	AC73611-008	333729	4.53	182839	6.10	75730	7.34					
6M00262.D	AC73611-009	318824	4.53	165080	6.10	73425	7.33					
6M00263.D	AC73611-010	302854	4.53	154687	6.10	82982	7.33					
6M00264.D	AC73548-005	336093	4.53	179016	6.10	79042	7.33					
6M00265.D	AC73548-006	340144	4.53	181278	6.10	72730	7.34					
6M00266.D	AC73611-020	334860	4.53	167390	6.10	69123	7.33					
6M00267.D	BLK	314048	4.53	185828	6.10	78778	7.33					
6M00268.D	BLK	321285	4.53	183922	6.10	78201	7.33					
6M00269.D	BLK	320787	4.53	167684	6.10	79906	7.33					

I1 =	Fluorobenzene	I4 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =	624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =	524 Internal Standard concentration =5ug/L

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M00330.D Method: EPA 8260B

Analysis Date/Time: 07/30/13 06:45

Lab File ID: CAL @ 50 PPB

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	298050	4.52	217611	6.09	106134	7.32						
Eval File Area Limit:	149025-596100		108806-435222		53067-212268							
Eval File Rt Limit:	4.02-5.02		5.59-6.59		6.82-7.82							

Data File	Sample												
6M00332.D	BLK	369182	4.52	234226	6.09	105151	7.33						
6M00333.D	DAILY BLANK	376940	4.52	226825	6.09	103086	7.33						
6M00334.D	MBS27658	401396	4.52	223607	6.09	109155	7.32						
6M00335.D	AC73651-002	386622	4.52	213350	6.09	81666	7.33						
6M00336.D	BLK	380894	4.52	203135	6.10	96625	7.33						
6M00337.D	AC73651-003	391858	4.53	221386	6.10	78345	7.33						
6M00338.D	BLK	365670	4.52	216032	6.09	94382	7.33						
6M00339.D	AC73611-009	401052	4.52	224201	6.09	109321	7.33						
6M00340.D	AC73611-009	386174	4.52	245174	6.09	112341	7.33						
6M00341.D	BLK	328220	4.52	218386	6.10	103463	7.33						
6M00342.D	AC73634-001	329170	4.52	201787	6.09	89001	7.33						
6M00343.D	AC73634-002	364586	4.53	216489	6.10	89663	7.34						
6M00344.D	AC73631-001	370922	4.52	233896	6.09	98499	7.33						
6M00345.D	AC73631-002	321972	4.52	161564	6.10	70513	7.34						
6M00346.D	BLK	356264	4.53	220008	6.10	91777	7.33						
6M00347.D	AC73670-001	377527	4.53	199067	6.10	93884	7.34						
6M00348.D	AC73632-001	374596	4.52	210877	6.10	105548	7.33						
6M00349.D	BLK	340042	4.52	219686	6.09	88861	7.33						
6M00350.D	AC73679-003	334950	4.52	203317	6.09	93307	7.33						
6M00351.D	AC73679-004	349204	4.52	200428	6.10	88621	7.33						
6M00352.D	AC73679-005	396145	4.52	227135	6.09	101596	7.33						
6M00353.D	BLK	358812	4.52	219761	6.09	103432	7.33						
6M00354.D	MBS27665	395893	4.52	230216	6.10	108613	7.33						
6M00355.D	AC73611-010	373361	4.52	228793	6.09	102692	7.32						
6M00356.D	AC73611-010	388579	4.52	207100	6.09	107703	7.33						
6M00357.D	BLK	352859	4.52	210838	6.10	90271	7.33						

I1 =	Fluorobenzene	I4 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =	624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =	524 Internal Standard concentration =5ug/L

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M00526.D Method: EPA 8260B

Analysis Date/Time: 08/05/13 07:37

Lab File ID: CAL @ 50 PPB

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	295522	4.52	201130	6.10	106823	7.33						
Eval File Area Limit:	147761-591044		100565-402260		53412-213646							
Eval File Rt Limit:	4.02-5.02		5.6-6.6		6.83-7.83							

Data File	Sample												
6M00523.D	BLKJUG3	340739	4.52	169097	6.10	96381	7.33						
6M00524.D	BLK	410839	4.53	165609	6.10	91831	7.34						
6M00525.D	50 PPB	271629	4.52	187115	6.10	106893	7.33						
6M00527.D	BLK	295148	4.52	200973	6.10	100255	7.33						
6M00528.D	BLK	323901	4.53	203420	6.10	101950	7.34						
6M00529.D	DAILY BLANK	339016	4.52	213465	6.10	86903	7.33						
6M00530.D	MBS27721	340228	4.53	226747	6.10	101945	7.33						
6M00531.D	BLK	343837	4.54	221402	6.11	98425	7.35						
6M00532.D	AC73793-001	347471	4.52	193560	6.10	87019	7.33						
6M00533.D	AC73793-002	320175	4.53	203124	6.10	91537	7.33						
6M00534.D	AC73793-003	305140	4.53	185248	6.10	88021	7.34						
6M00535.D	AC73793-004	301909	4.53	192906	6.10	88632	7.33						
6M00536.D	AC73793-005	336767	4.52	205704	6.10	94029	7.34						
6M00537.D	AC73797-004	341122	4.53	203047	6.10	89258	7.33						
6M00538.D	AC73797-005	327425	4.53	195838	6.10	84638	7.33						
6M00539.D	AC73771-004	284129	4.52	159446	6.10	69814	7.33						
6M00540.D	AC73771-003	306070	4.53	185031	6.10	73360	7.33						
6M00541.D	AC73821-001	305366	4.52	192082	6.09	77541	7.34						
6M00542.D	AC73820-001	306357	4.53	199603	6.10	86445	7.33						
6M00543.D	AC73832-004	362741	4.53	210932	6.10	78718	7.33						
6M00544.D	AC73832-005	316697	4.52	188764	6.10	96139	7.33						
6M00545.D	BLK	308910	4.53	190994	6.10	91532	7.33						
6M00546.D	AC73816-022	302132	4.54	183174	6.11	85693	7.35						
6M00547.D	AC73797-002(	374246	4.53	168370	6.10	52711 A	7.34						
6M00548.D	AC73797-002(	366602	4.53	151959	6.10	40636 A	7.33						
6M00549.D	AC73797-002	309779	4.53	162976	6.10	40604 A	7.34						
6M00550.D	BLK	282642	4.53	192837	6.10	88767	7.34						
6M00551.D	AC73797-001	308852	4.53	174976	6.10	52463 A	7.33						
6M00552.D	STD	409726	4.53	222887	6.10	107612	7.33						
6M00553.D	AC73797-002	314105	4.53	156929	6.10	52414 A	7.33						
6M00554.D	AC73797-006	255145	4.53	103720	6.10	16438 A	7.33						
6M00555.D	AC73797-001	305340	4.53	164075	6.10	44836 A	7.33						
6M00556.D	MBS27731	371272	4.53	209669	6.10	108631	7.33						
6M00557.D	AC73797-003	326141	4.53	175775	6.10	55274	7.34						
6M00558.D	AC73820-004	312359	4.53	187222	6.10	86082	7.33						
6M00559.D	AC73820-005	324456	4.53	189145	6.10	83366	7.33						
6M00560.D	AC73820-006	327219	4.53	201593	6.10	90335	7.34						
6M00561.D	AC73820-007	315030	4.53	191991	6.10	82317	7.33						
6M00562.D	AC73820-003	289781	4.53	199815	6.10	82740	7.33						
6M00563.D	BLK	324371	4.53	183573	6.10	83801	7.33						
6M00564.D	AC73823-001	0 A	0.00 R	162 A	6.08	290 A	7.44						
6M00565.D	AC73823-009	335085	4.53	228925	6.10	129251	7.33						
6M00566.D	BLK	310680	4.53	194347	6.10	96015	7.33						
6M00567.D	BLK	334159	4.53	179160	6.10	103225	7.33						
6M00568.D	BLK	296588	4.52	189230	6.10	86071	7.33						
6M00569.D	BLK	333116	4.52	204788	6.10	88474	7.33						

I1 =	Fluorobenzene	I4 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =	624/8260 Internal Standard concentration = 30ug/L
I3 =	1.4-Dichlorobenzene-d4	I6 =	524 Internal Standard concentration =5ug/L

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

Semi-Volatile Data

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AC73771-001
Client Id: BB-COMP-1-0801113
Data File: 9M51843.D
Analysis Date: 08/02/13 18:49
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270C
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 91

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.037	U	**205-99-2**	**Benzo[b]fluoranthene**	**0.037**	**0.081**
95-94-3	1,2,4,5-Tetrachlorobenzene	0.037	U	**191-24-2**	**Benzo[g,h,i]perylene**	**0.0092**	**0.053**
122-66-7	1,2-Diphenylhydrazine	0.037	U	207-08-9	Benzo[k]fluoranthene	0.037	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.037	U	100-51-6	Benzyl alcohol	0.037	U
95-95-4	2,4,5-Trichlorophenol	0.037	U	111-91-1	bis(2-Chloroethoxy)methan	0.037	U
88-06-2	2,4,6-Trichlorophenol	0.037	U	111-44-4	bis(2-Chloroethyl)ether	0.0092	U
120-83-2	2,4-Dichlorophenol	0.0092	U	108-60-1	bis(2-chloroisopropyl)ether	0.037	U
105-67-9	2,4-Dimethylphenol	0.0092	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.037	U
51-28-5	2,4-Dinitrophenol	0.18	U	85-68-7	Butylbenzylphthalate	0.037	U
121-14-2	2,4-Dinitrotoluene	0.037	U	105-60-2	Caprolactam	0.037	U
606-20-2	2,6-Dinitrotoluene	0.037	U	86-74-8	Carbazole	0.037	U
91-58-7	2-Chloronaphthalene	0.037	U	**218-01-9**	**Chrysene**	**0.037**	**0.071**
95-57-8	2-Chlorophenol	0.037	U	53-70-3	Dibenzo[a,h]anthracene	0.037	U
91-57-6	2-Methylnaphthalene	0.037	U	132-64-9	Dibenzofuran	0.0092	U
95-48-7	2-Methylphenol	0.0092	U	84-66-2	Diethylphthalate	0.037	U
88-74-4	2-Nitroaniline	0.037	U	131-11-3	Dimethylphthalate	0.037	U
88-75-5	2-Nitrophenol	0.037	U	84-74-2	Di-n-butylphthalate	0.018	U
106-44-5	3&4-Methylphenol	0.0092	U	117-84-0	Di-n-octylphthalate	0.037	U
91-94-1	3,3'-Dichlorobenzidine	0.037	U	**206-44-0**	**Fluoranthene**	**0.037**	**0.088**
99-09-2	3-Nitroaniline	0.037	U	86-73-7	Fluorene	0.037	U
534-52-1	4,6-Dinitro-2-methylphenol	0.037	U	118-74-1	Hexachlorobenzene	0.037	U
101-55-3	4-Bromophenyl-phenylether	0.037	U	87-68-3	Hexachlorobutadiene	0.037	U
59-50-7	4-Chloro-3-methylphenol	0.037	U	77-47-4	Hexachlorocyclopentadiene	0.037	U
106-47-8	4-Chloroaniline	0.017	U	67-72-1	Hexachloroethane	0.037	U
7005-72-3	4-Chlorophenyl-phenylether	0.037	U	**193-39-5**	**Indeno[1,2,3-cd]pyrene**	**0.037**	**0.045**
100-01-6	4-Nitroaniline	0.037	U	78-59-1	Isophorone	0.037	U
100-02-7	4-Nitrophenol	0.037	U	91-20-3	Naphthalene	0.0092	U
83-32-9	Acenaphthene	0.037	U	98-95-3	Nitrobenzene	0.037	U
208-96-8	Acenaphthylene	0.037	U	62-75-9	N-Nitrosodimethylamine	0.037	U
98-86-2	Acetophenone	0.037	U	621-64-7	N-Nitroso-di-n-propylamine	0.0092	U
120-12-7	Anthracene	0.037	U	86-30-6	n-Nitrosodiphenylamine	0.037	U
1912-24-9	Atrazine	0.037	U	87-86-5	Pentachlorophenol	0.062	U
100-52-7	Benzaldehyde	0.037	U	**85-01-8**	**Phenanthrene**	**0.037**	**0.052**
92-87-5	Benzidine	0.037	U	108-95-2	Phenol	0.037	U
56-55-3	**Benzo[a]anthracene**	**0.037**	**0.058**	**129-00-0**	**Pyrene**	**0.037**	**0.11**
50-32-8	**Benzo[a]pyrene**	**0.037**	**0.057**				

Worksheet #: 272527

Total Target Concentration 0.62

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AC73771-001
Client Id: BB-COMP-1-0801113
Data File: 9M51843.D
Analysis Date: 08/02/13 18:49
Date Rec/Extracted: 08/01/13-08/02/13

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 91
Method: EPA 8270C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	4.15	1.3 JB
2	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.48	43 JAB
3		unknown	5.12	0.21 JB
4	57-10-3	Hexadecanoic acid	10.45	0.087 J
5		unknown	12.62	0.086 J
6	19047-85-9	Phosphonic acid, dioctadecyl ester	12.80	0.24 JB
7	84530-84-7	3,5,7-Trimethoxy-2,8-dimethyldibenzoph	13.33	0.13 J
8	40710-42-7	1-Hentetracontanol	13.58	0.12 J
9	301-02-0	9-Octadecenamide, (Z)-	13.91	0.081 J
10	55401-55-3	Docosane, 11-decyl-	14.31	0.19 J
11		unknown	14.33	0.22 J
12	593-45-3	Octadecane	15.13	0.18 J
13	52078-56-5	11-Tricosene	15.17	0.13 J
14		unknown	15.90	0.10 J
15		unknown	16.02	0.11 J
16	38485-29-9	Stigmasta-5,23-dien-3.beta.-ol	16.17	0.18 J
17	74685-29-3	9-Eicosene, (E)-	16.23	0.11 J
18	83-47-6	Stigmast-5-en-3-ol, (3.beta.,24S)-	16.55	0.52 J

Worksheet #: 272527 ***Total Tentatively Identified Concentration*** 47

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

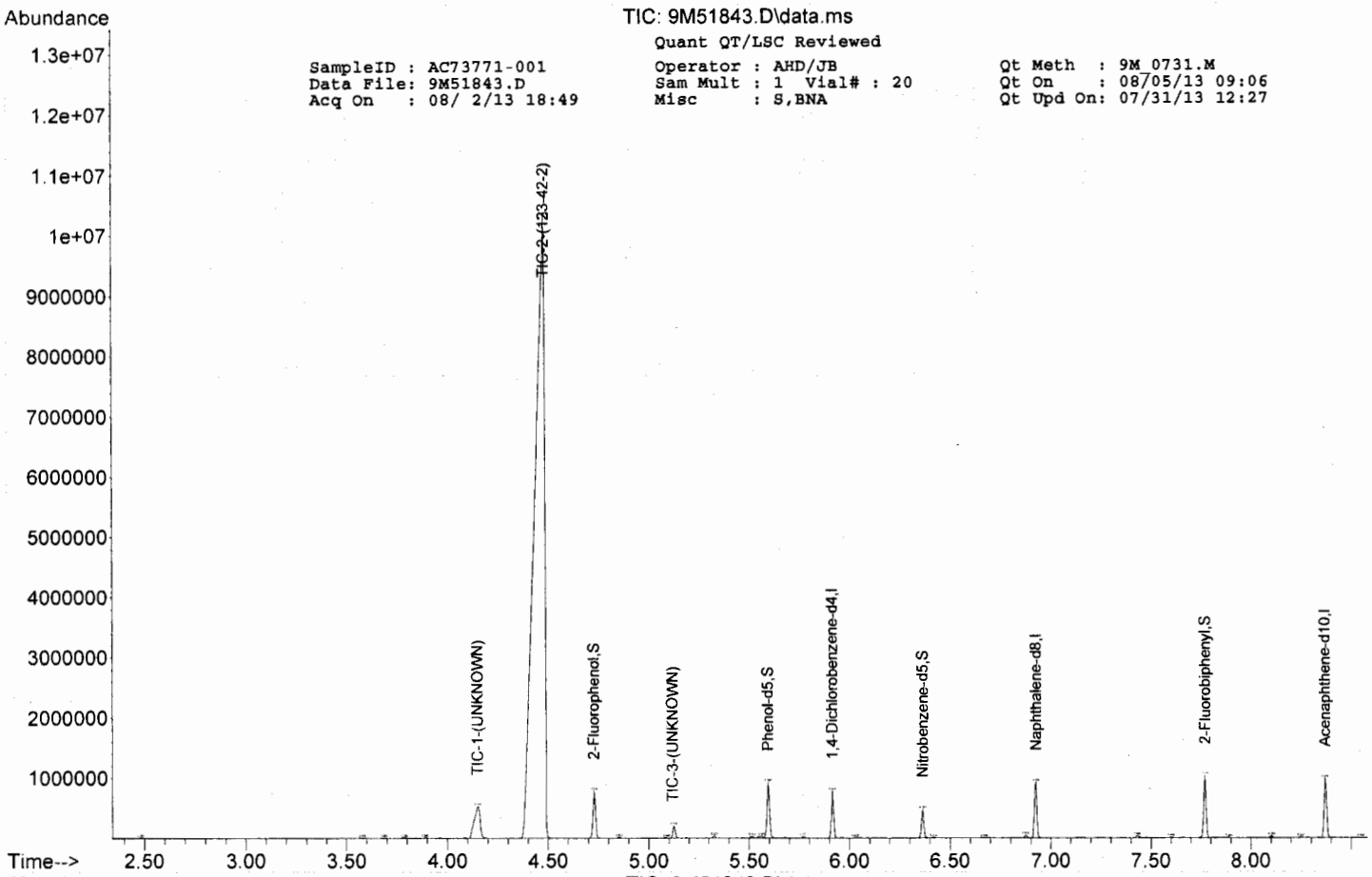
3080110 0072

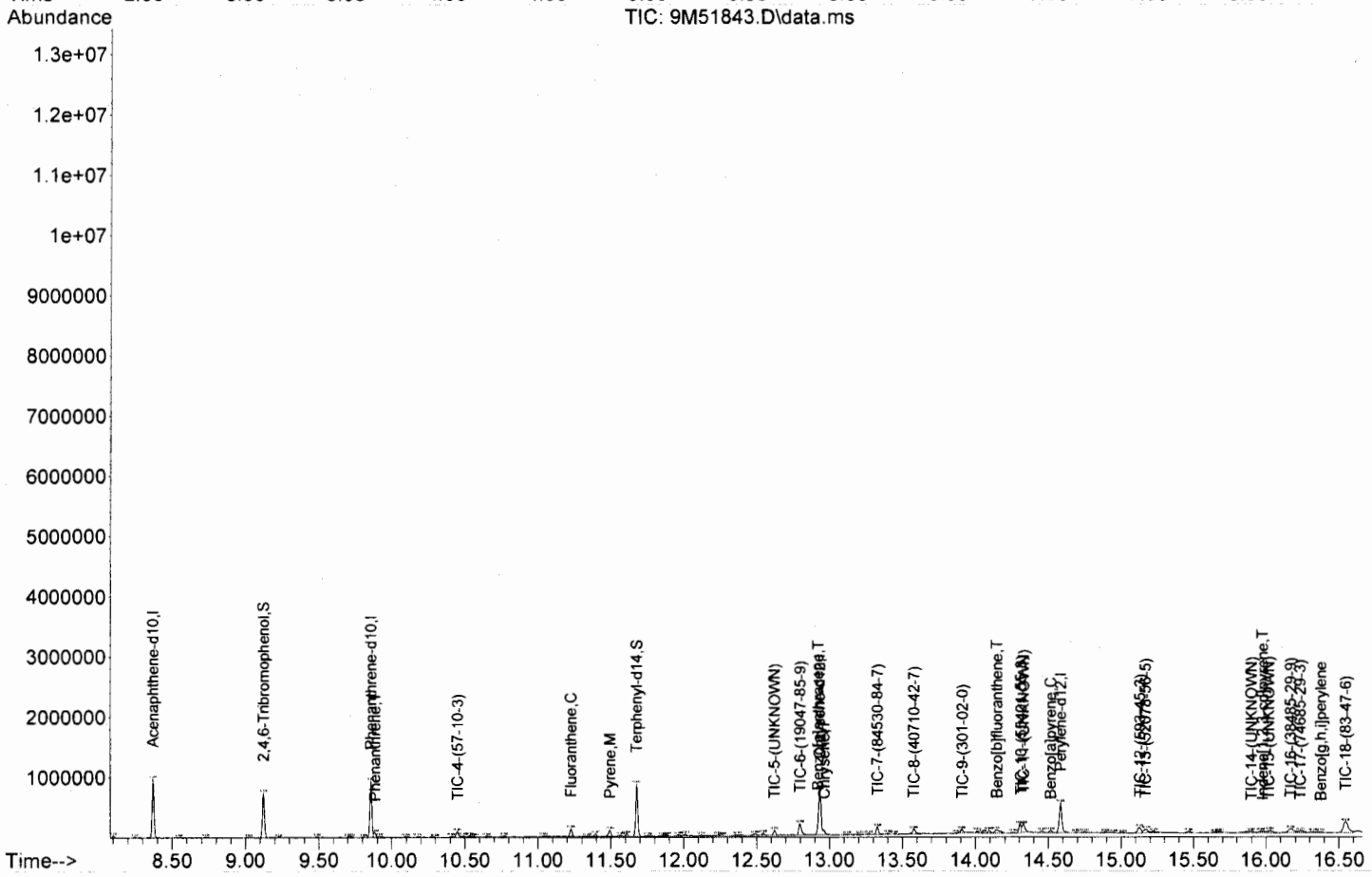
SampleID : AC73771-001 Operator : AHD/JB Qt Meth : 9M_0731.M
Data File: 9M51843.D Sam Mult : 1 Vial# : 20 Qt On : 08/05/13 09:06
Acq On : 08/ 2/13 18:49 Misc : S,BNA Qt Upd On: 07/31/13 12:27

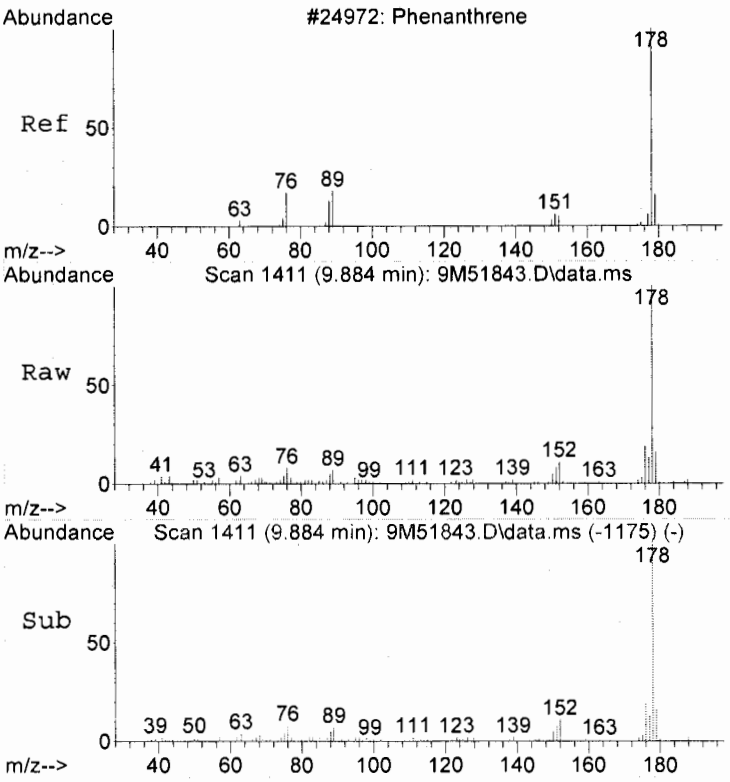
Data Path : G:\GcMsData\2013\GCMS_9\Data\08-02-13\
Qt Path : G:\GCMSDATA\2013\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dichlorobenzene-d4	5.915	152	100428	40.00	ng	0.00
29) Naphthalene-d8	6.926	136	370834	40.00	ng	0.00
47) Acenaphthene-d10	8.370	164	212048	40.00	ng	-0.01
74) Phenanthrene-d10	9.857	188	358538	40.00	ng	0.00
88) Chrysene-d12	12.932	240	311006	40.00	ng	0.00
100) Perylene-d12	14.585	264	244721	40.00	ng	0.02
System Monitoring Compounds						
10) 2-Fluorophenol	4.728	112	186810	61.55	ng	0.01
Spiked Amount 100.000			Recovery = 61.55%			
15) Phenol-d5	5.594	99	259213	64.41	ng	0.00
Spiked Amount 100.000			Recovery = 64.41%			
30) Nitrobenzene-d5	6.364	128	56817	36.74	ng	0.00
Spiked Amount 50.000			Recovery = 73.48%			
52) 2-Fluorobiphenyl	7.771	172	284439	38.95	ng	0.00
Spiked Amount 50.000			Recovery = 77.90%			
77) 2,4,6-Tribromophenol	9.124	330	84004	81.79	ng	0.00
Spiked Amount 100.000			Recovery = 81.79%			
91) Terphenyl-d14	11.675	244	271058	45.40	ng	0.00
Spiked Amount 50.000			Recovery = 90.80%			
Target Compounds						Qvalue
83) Phenanthrene	9.884	178	27127	2.8360	ng	99
87) Fluoranthene	11.226	202	54929	4.7992	ng	80
89) Pyrene	11.494	202	50717	6.0888	ng	79
97) Benzo[a]anthracene	12.922	228	25154	3.1782	ng	89
98) Chrysene	12.965	228	27802	3.8910	ng	96
102) Benzo[b]fluoranthene	14.147	252	32287m	4.4439	ng	
104) Benzo[a]pyrene	14.516	252	21175	3.1057	ng	83
105) Indeno[1,2,3-cd]pyrene	15.976	276	17404	2.4337	ng	74
107) Benzo[g,h,i]perylene	16.377	276	16657	2.8745	ng	69
Library Search Internal Standards TIC Results						
1) 1,4-Dichlorobenzene-d4	5.915		605324	40.00	ng	--
2) Naphthalene-d8	6.926		793912	40.00	ng	--
3) Acenaphthene-d10	8.370		905161	40.00	ng	--
4) Phenanthrene-d10	9.857		961398	40.00	ng	--
5) Chrysene-d12	12.932		843922m	40.00	ng	--
6) Perylene-d12	14.585		659491	40.00	ng	--
Library Search Compounds						
1) UNKNOWN	4.150		1076754	71.15	ng	--
2) 123-42-2	4.480		35445319	2342.24	ng	56
3) UNKNOWN	5.120		176792	11.68	ng	--
4) 57-10-3	10.450		114092	4.75	ng	96
5) UNKNOWN	12.620		99572	4.72	ng	--
6) 19047-85-9	12.800		275569	13.06	ng	93
7) 84530-84-7	13.330		149679	7.09	ng	68
8) 40710-42-7	13.580		134047	6.35	ng	83
9) 301-02-0	13.910		73267	4.44	ng	64
10) 55401-55-3	14.310		169333	10.27	ng	91
11) UNKNOWN	14.330		194325	11.79	ng	--
12) 593-45-3	15.130		160709	9.75	ng	95
13) 52078-56-5	15.170		114191	6.93	ng	91
14) UNKNOWN	15.900		93750	5.69	ng	--
15) UNKNOWN	16.020		99131	6.01	ng	--
16) 38485-29-9	16.170		164692	9.99	ng	91
17) 74685-29-3	16.230		94702	5.74	ng	64
18) 83-47-6	16.550		464691	28.18	ng	90

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


TIC: 9M51843.D\data.ms
Quant QT/LSC Reviewed
SampleID : AC73771-001
Data File: 9M51843.D
Acq On : 08/ 2/13 18:49
Operator : AHD/JB
Sam Mult : 1 Vial# : 20
Misc : S,BNA
Qt Meth : 9M_0731.M
Qt On : 08/05/13 09:06
Qt Upd On: 07/31/13 12:27
Abundance
TIC-1-(UNKNOWN)
TIC-2-(123-42-2)
2-Fluorophenol,S
TIC-3-(UNKNOWN)
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Time-->

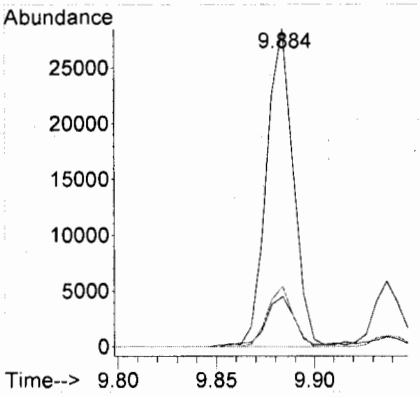

TIC: 9M51843.D\data.ms
Abundance
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Phenanthrene-d10,I
TIC-4-(57-10-3)
Fluoranthene,C
Pyrene,M
Terphenyl-d14,S
TIC-5-(UNKNOWN)
TIC-6-(19047-85-9)
TIC-7-(84530-84-7)
TIC-8-(40710-42-7)
TIC-9-(301-02-0)
Benzo[b]fluoranthene,T
Perylene-d12,I
TIC-14-(UNKNOWN)
Benzo[g,h,i]perylene
TIC-18-(83-47-6)
Time-->

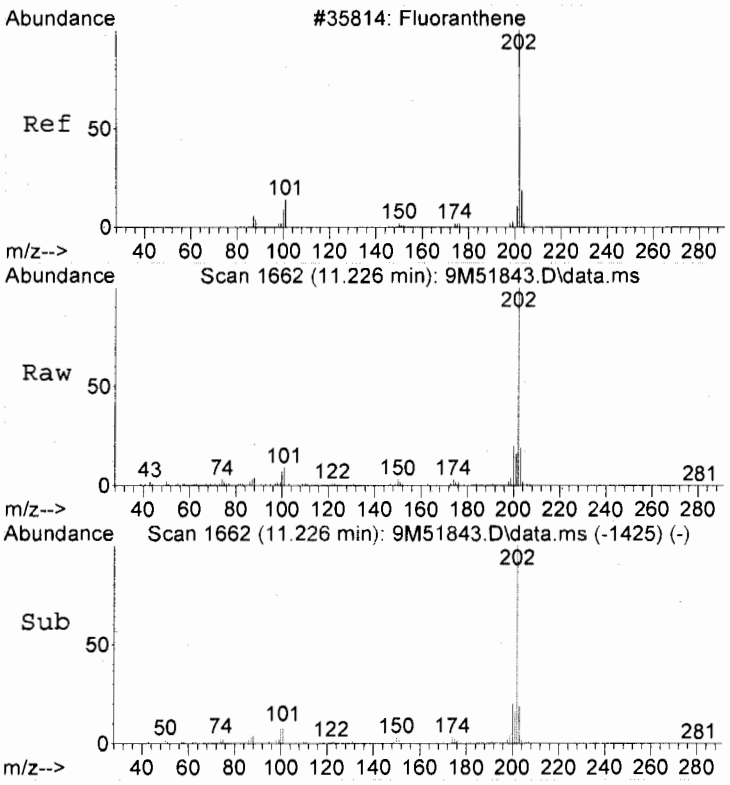


#83
Phenanthrene
Concen: 2.84 ng
RT: 9.884 min Scan# 1411
Delta R.T. -0.000 min
Lab File: 9M51843.D
Acq: 2 Aug 2013 18:49

Tgt Ion:178 Resp: 27127

Ion	Ratio	Lower	Upper
178	100		
179	15.7	0.0	55.5
176	18.9	0.0	59.3

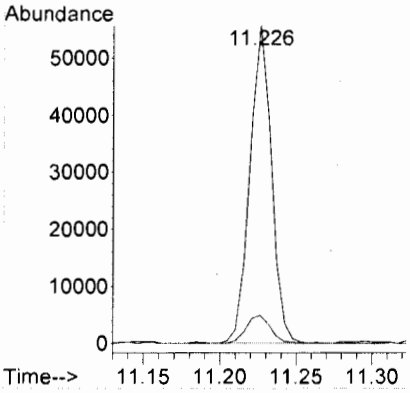


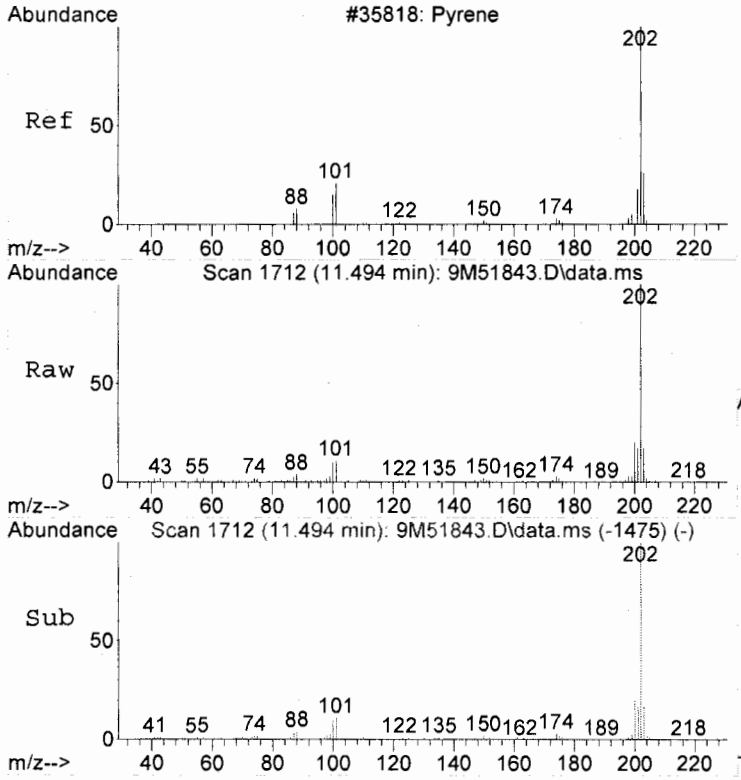


#87
Fluoranthene
Concen: 4.80 ng
RT: 11.226 min Scan# 1662
Delta R.T. -0.000 min
Lab File: 9M51843.D
Acq: 2 Aug 2013 18:49

Tgt Ion:202 Resp: 54929

Ion	Ratio	Lower	Upper
202	100		
101	8.8	0.0	57.6

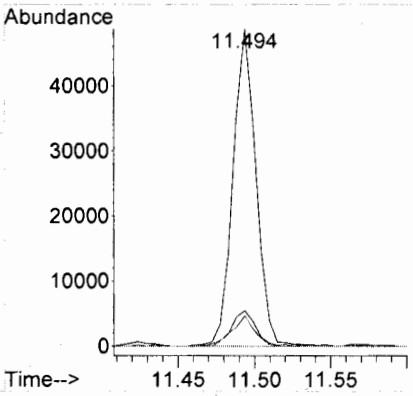


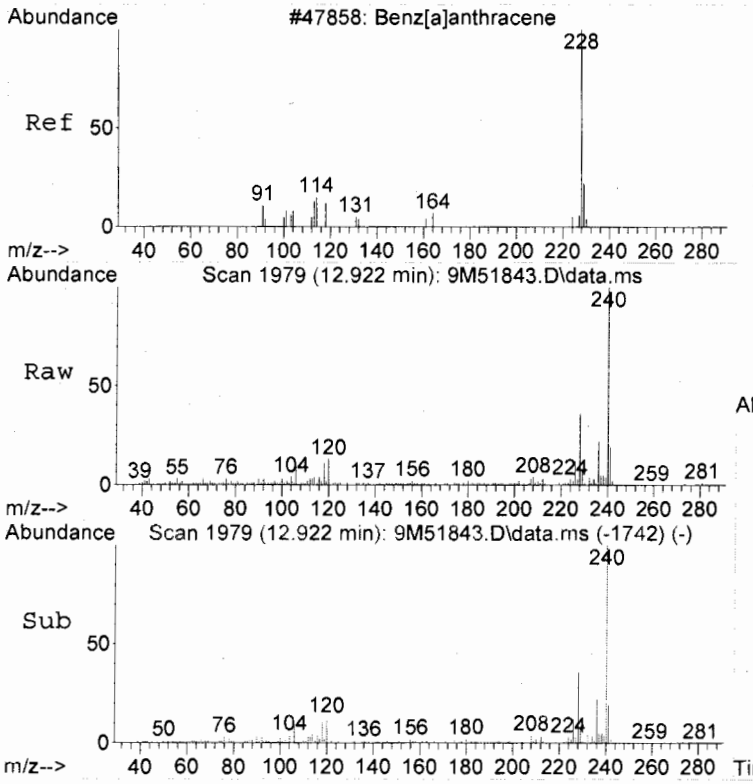


#89
Pyrene
Concen: 6.09 ng
RT: 11.494 min Scan# 1712
Delta R.T. 0.005 min
Lab File: 9M51843.D
Acq: 2 Aug 2013 18:49

Tgt Ion:202 Resp: 50717

Ion	Ratio	Lower	Upper
202	100		
101	11.2	0.0	62.2
100	9.6	0.0	57.8

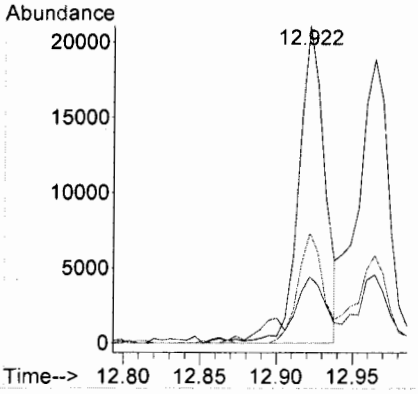


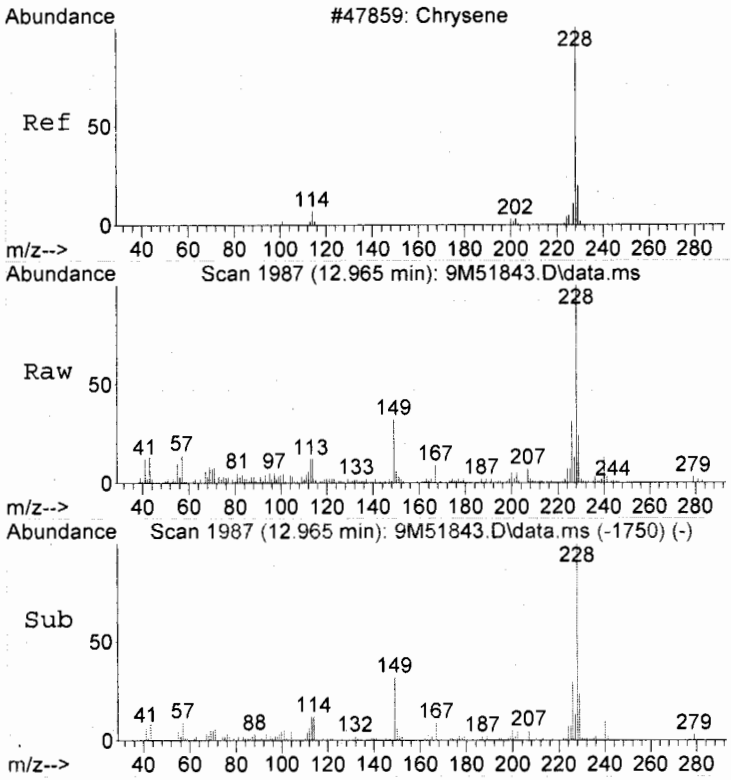


#97
Benzo[a]anthracene
Concen: 3.18 ng
RT: 12.922 min Scan# 1979
Delta R.T. 0.005 min
Lab File: 9M51843.D
Acq: 2 Aug 2013 18:49

Tgt Ion:228 Resp: 25154

Ion	Ratio	Lower	Upper
228	100		
229	20.2	0.0	59.5
226	34.8	0.0	66.0

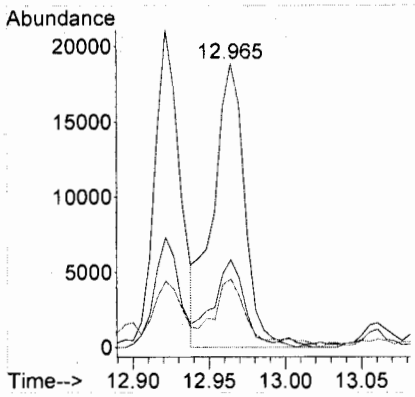


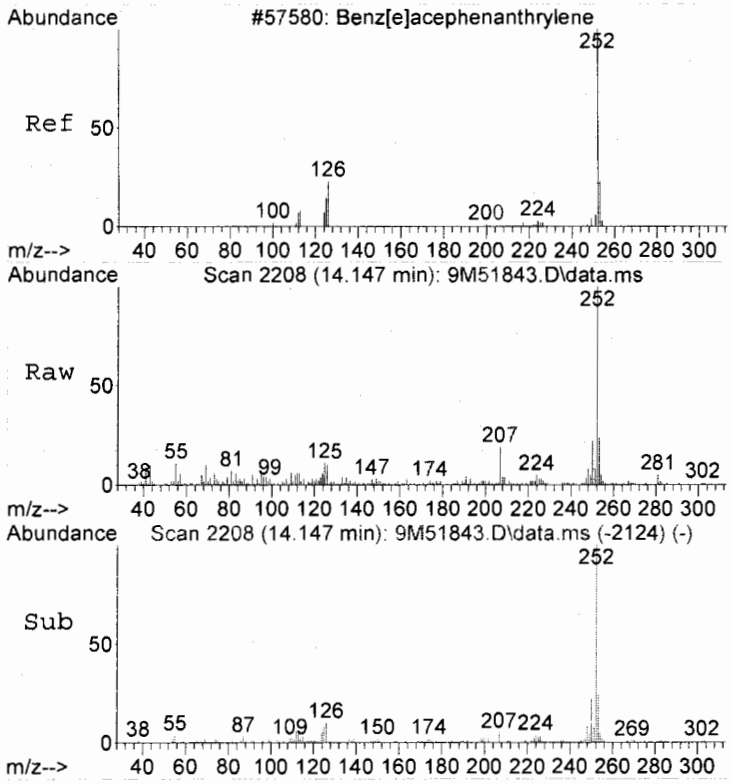


#98
Chrysene
Concen: 3.89 ng
RT: 12.965 min Scan# 1987
Delta R.T. 0.005 min
Lab File: 9M51843.D
Acq: 2 Aug 2013 18:49

Tgt Ion:228 Resp: 27802

Ion	Ratio	Lower	Upper
228	100		
226	31.3	9.5	49.5
229	22.7	0.0	60.2

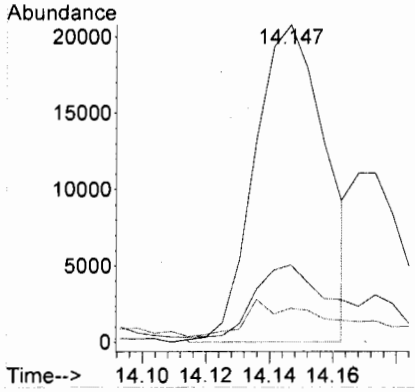


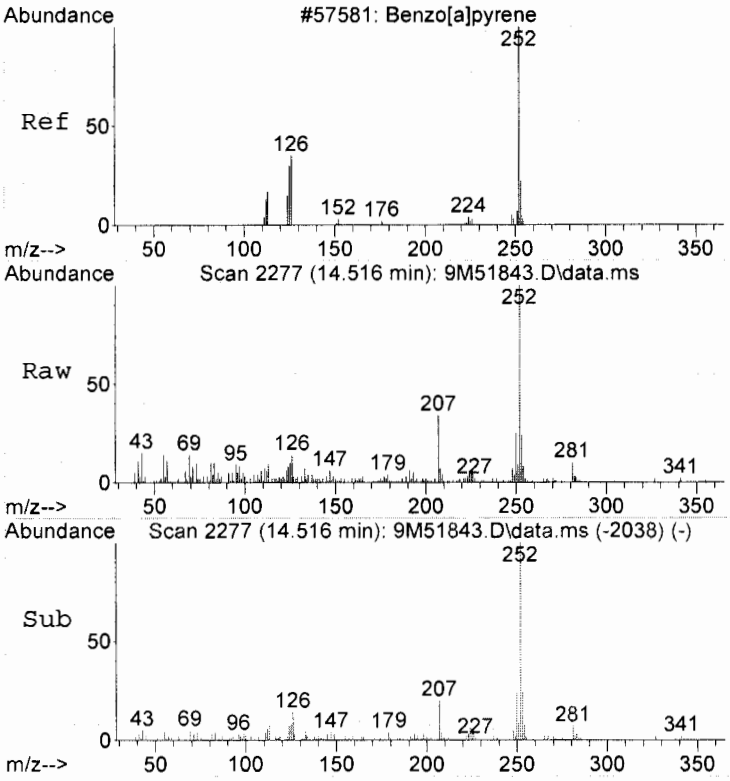


#102
Benzo[b]fluoranthene
Concen: 4.44 ng m
RT: 14.147 min Scan# 2208
Delta R.T. 0.016 min
Lab File: 9M51843.D
Acq: 2 Aug 2013 18:49

Tgt Ion:252 Resp: 32287

Ion	Ratio	Lower	Upper
252	100		
253	24.4	0.0	62.3
125	10.7	0.0	58.4

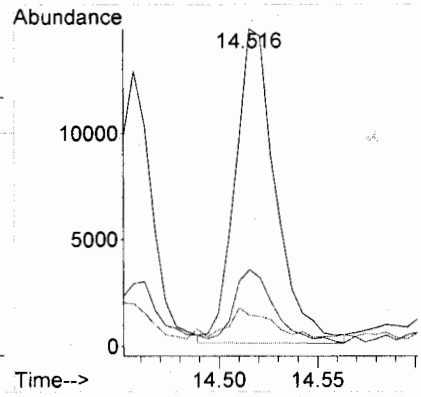


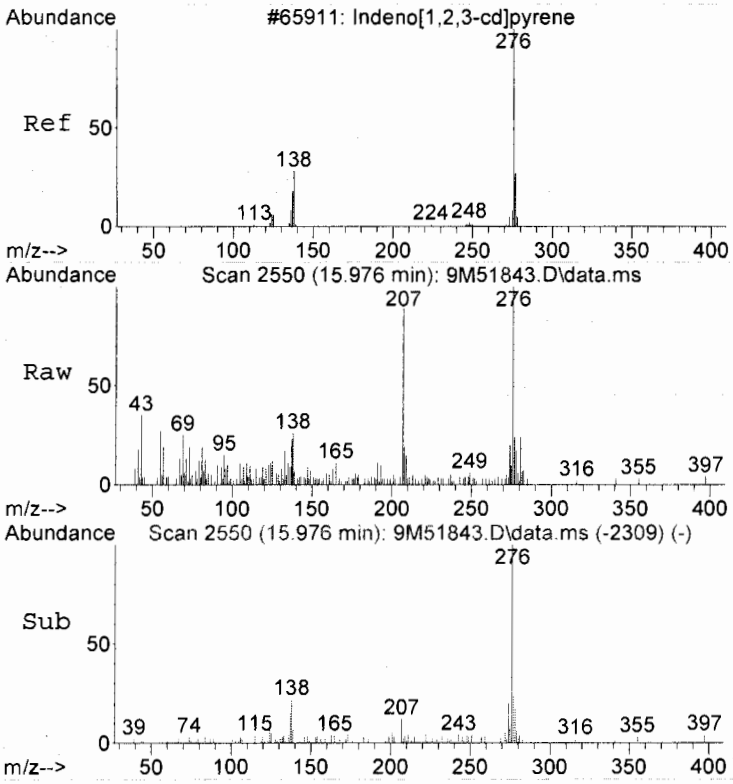


#104
Benzo[a]pyrene
Concen: 3.11 ng
RT: 14.516 min Scan# 2277
Delta R.T. 0.011 min
Lab File: 9M51843.D
Acq: 2 Aug 2013 18:49

Tgt Ion:252 Resp: 21175

Ion	Ratio	Lower	Upper
252	100		
253	23.9	0.0	62.4
125	6.2	0.0	60.9

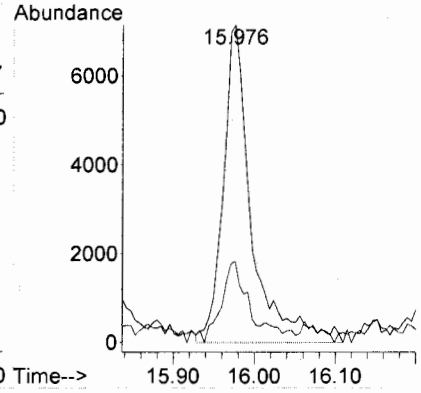


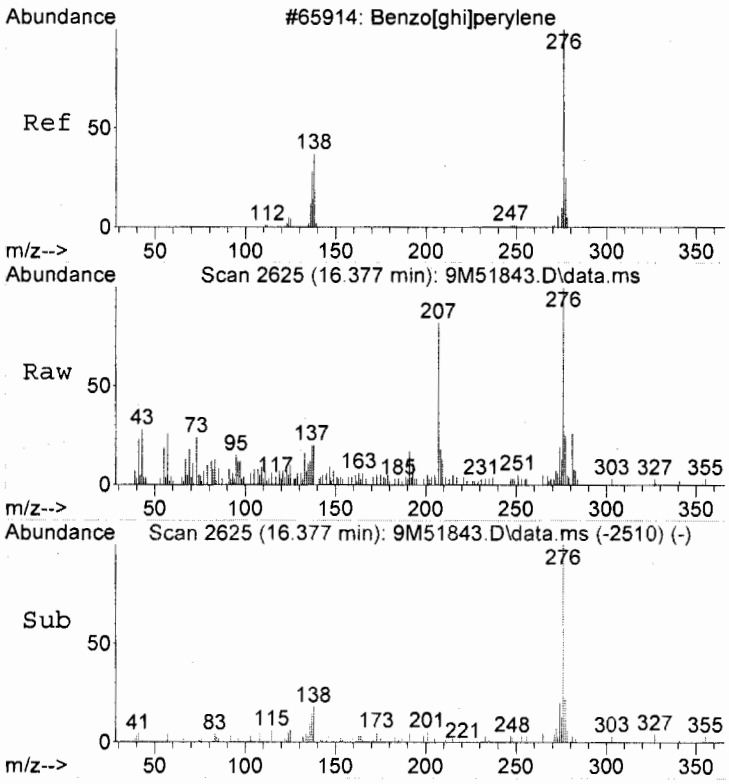


#105
Indeno[1,2,3-cd]pyrene
Concen: 2.43 ng
RT: 15.976 min Scan# 2550
Delta R.T. 0.027 min
Lab File: 9M51843.D
Acq: 2 Aug 2013 18:49

Tgt Ion:276 Resp: 17404

Ion	Ratio	Lower	Upper
276	100		
138	23.3	0.0	78.9

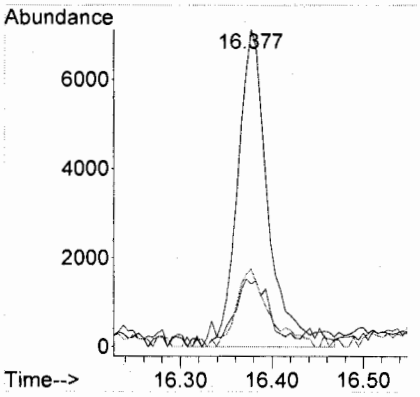




#107
Benzo[g,h,i]perylene
Concen: 2.87 ng
RT: 16.377 min Scan# 2625
Delta R.T. 0.075 min
Lab File: 9M51843.D
Acq: 2 Aug 2013 18:49

Tgt Ion:276 Resp: 16657

Ion	Ratio	Lower	Upper
276	100		
138	19.3	0.0	100.0
277	26.0	0.0	60.0



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AC73771-002
Client Id: BB-COMP-2-0801113
Data File: 9M51844.D
Analysis Date: 08/02/13 19:12
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270C
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 89

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.037	U	**205-99-2**	**Benzo[b]fluoranthene**	**0.037**	**0.19**
95-94-3	1,2,4,5-Tetrachlorobenzene	0.037	U	**191-24-2**	**Benzo[g,h,i]perylene**	**0.0094**	**0.093**
122-66-7	1,2-Diphenylhydrazine	0.037	U	**207-08-9**	**Benzo[k]fluoranthene**	**0.037**	**0.058**
58-90-2	2,3,4,6-Tetrachlorophenol	0.037	U	100-51-6	Benzyl alcohol	0.037	U
95-95-4	2,4,5-Trichlorophenol	0.037	U	111-91-1	bis(2-Chloroethoxy)methan	0.037	U
88-06-2	2,4,6-Trichlorophenol	0.037	U	111-44-4	bis(2-Chloroethyl)ether	0.0094	U
120-83-2	2,4-Dichlorophenol	0.0094	U	108-60-1	bis(2-chloroisopropyl)ether	0.037	U
105-67-9	2,4-Dimethylphenol	0.0094	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.037	U
51-28-5	2,4-Dinitrophenol	0.19	U	85-68-7	Butylbenzylphthalate	0.037	U
121-14-2	2,4-Dinitrotoluene	0.037	U	105-60-2	Caprolactam	0.037	U
606-20-2	2,6-Dinitrotoluene	0.037	U	**86-74-8**	**Carbazole**	**0.037**	**0.040**
91-58-7	2-Chloronaphthalene	0.037	U	**218-01-9**	**Chrysene**	**0.037**	**0.15**
95-57-8	2-Chlorophenol	0.037	U	53-70-3	Dibenzo[a,h]anthracene	0.037	U
91-57-6	2-Methylnaphthalene	0.037	U	**132-64-9**	**Dibenzofuran**	**0.0094**	**0.026**
95-48-7	2-Methylphenol	0.0094	U	84-66-2	Diethylphthalate	0.037	U
88-74-4	2-Nitroaniline	0.037	U	**131-11-3**	**Dimethylphthalate**	**0.037**	**0.038 B**
88-75-5	2-Nitrophenol	0.037	U	84-74-2	Di-n-butylphthalate	0.019	U
106-44-5	3&4-Methylphenol	0.0094	U	117-84-0	Di-n-octylphthalate	0.037	U
91-94-1	3,3'-Dichlorobenzidine	0.037	U	**206-44-0**	**Fluoranthene**	**0.037**	**0.30**
99-09-2	3-Nitroaniline	0.037	U	86-73-7	Fluorene	0.037	U
534-52-1	4,6-Dinitro-2-methylphenol	0.037	U	118-74-1	Hexachlorobenzene	0.037	U
101-55-3	4-Bromophenyl-phenylether	0.037	U	87-68-3	Hexachlorobutadiene	0.037	U
59-50-7	4-Chloro-3-methylphenol	0.037	U	77-47-4	Hexachlorocyclopentadiene	0.037	U
106-47-8	4-Chloroaniline	0.018	U	67-72-1	Hexachloroethane	0.037	U
7005-72-3	4-Chlorophenyl-phenylether	0.037	U	**193-39-5**	**Indeno[1,2,3-cd]pyrene**	**0.037**	**0.091**
100-01-6	4-Nitroaniline	0.037	U	78-59-1	Isophorone	0.037	U
100-02-7	4-Nitrophenol	0.037	U	**91-20-3**	**Naphthalene**	**0.0094**	**0.019**
83-32-9	Acenaphthene	0.037	U	98-95-3	Nitrobenzene	0.037	U
208-96-8	Acenaphthylene	0.037	U	62-75-9	N-Nitrosodimethylamine	0.037	U
98-86-2	Acetophenone	0.037	U	621-64-7	N-Nitroso-di-n-propylamine	0.0094	U
120-12-7	**Anthracene**	**0.037**	**0.040**	86-30-6	n-Nitrosodiphenylamine	0.037	U
1912-24-9	Atrazine	0.037	U	87-86-5	Pentachlorophenol	0.063	U
100-52-7	Benzaldehyde	0.037	U	**85-01-8**	**Phenanthrene**	**0.037**	**0.30**
92-87-5	Benzidine	0.037	U	108-95-2	Phenol	0.037	U
56-55-3	**Benzo[a]anthracene**	**0.037**	**0.14**	**129-00-0**	**Pyrene**	**0.037**	**0.32**
50-32-8	**Benzo[a]pyrene**	**0.037**	**0.12**				

Worksheet #: 272527 ***Total Target Concentration*** 1.9 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AC73771-002
Client Id: BB-COMP-2-0801113
Data File: 9M51844.D
Analysis Date: 08/02/13 19:12
Date Rec/Extracted: 08/01/13-08/02/13

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 89
Method: EPA 8270C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	4.16	1.4 JB
2	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.49	47 JAB
3		unknown	5.13	0.24 JB
4	57-10-3	Hexadecanoic acid	10.45	0.20 J
5		unknown	11.96	0.10 J
6	74685-30-6	5-Eicosene, (E)-	12.80	0.38 J
7	84530-84-7	3,5,7-Trimethoxy-2,8-dimethyldibenzoph	13.33	0.29 J
8	112-88-9	1-Octadecene	13.58	0.21 J
9	35216-11-6	7-Tetradecyne	13.70	0.39 J
10		unknown	13.91	0.24 J
11	56554-87-1	16-Octadecenal	14.09	0.26 J
12	297-03-0	Cyclotetracosane	14.33	0.78 J
13	198-55-0	Perylene	14.46	0.12 J
14	77899-10-6	(Z)14-TRICOSENYL FORMATE	14.90	0.15 J
15	629-94-7	Heneicosane	15.13	0.18 J
16	62376-17-4	Cyclohexane, 1,2-dimethyl-3-pentyl-4-pr	15.17	0.24 J
17		unknown	15.88	0.17 J
18	4651-51-8	Ergost-5-en-3-ol, (3.beta.)-	16.03	0.13 J
19		unknown	16.17	0.23 J
20	74685-33-9	3-Eicosene, (E)-	16.24	0.18 J

Worksheet #: 272527 ***Total Tentatively Identified Concentration*** 53

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

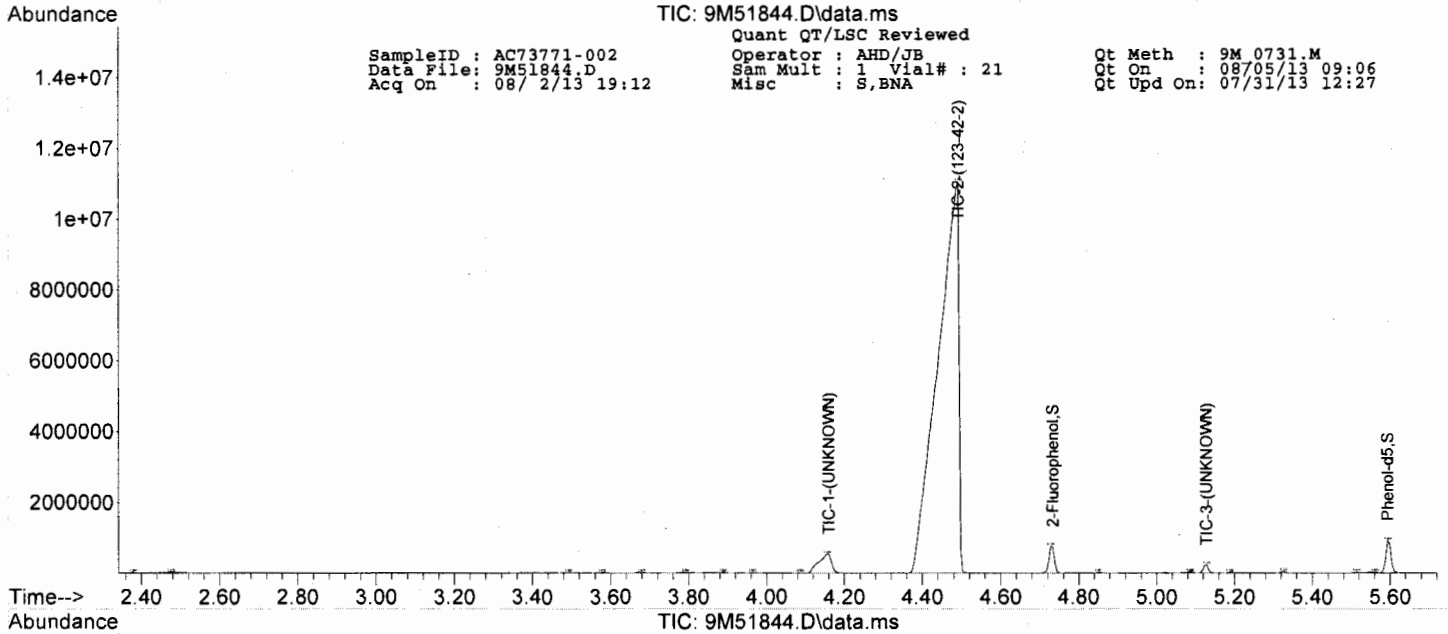
3080110 0081

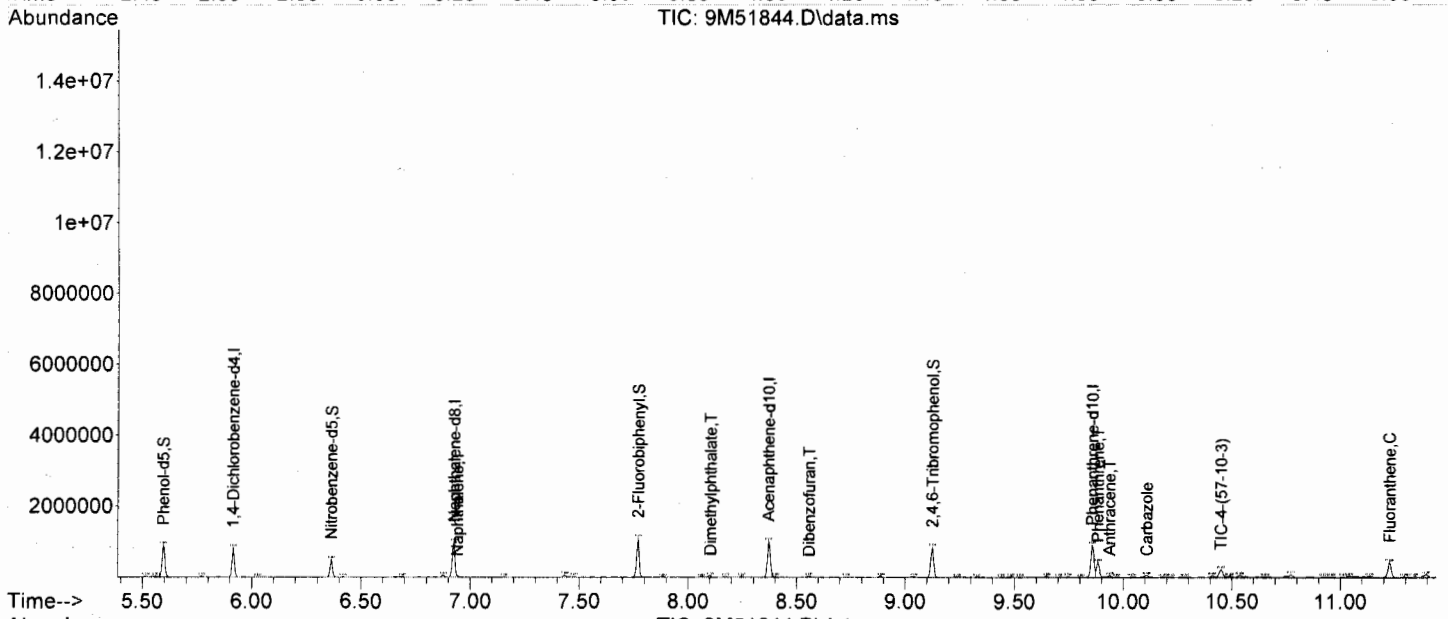
SampleID : AC73771-002 Operator : AHD/JB Qt Meth : 9M_0731.M
Data File: 9M51844.D Sam Mult : 1 Vial# : 21 Qt On : 08/05/13 09:06
Acq On : 08/ 2/13 19:12 Misc : S,BNA Qt Upd On: 07/31/13 12:27

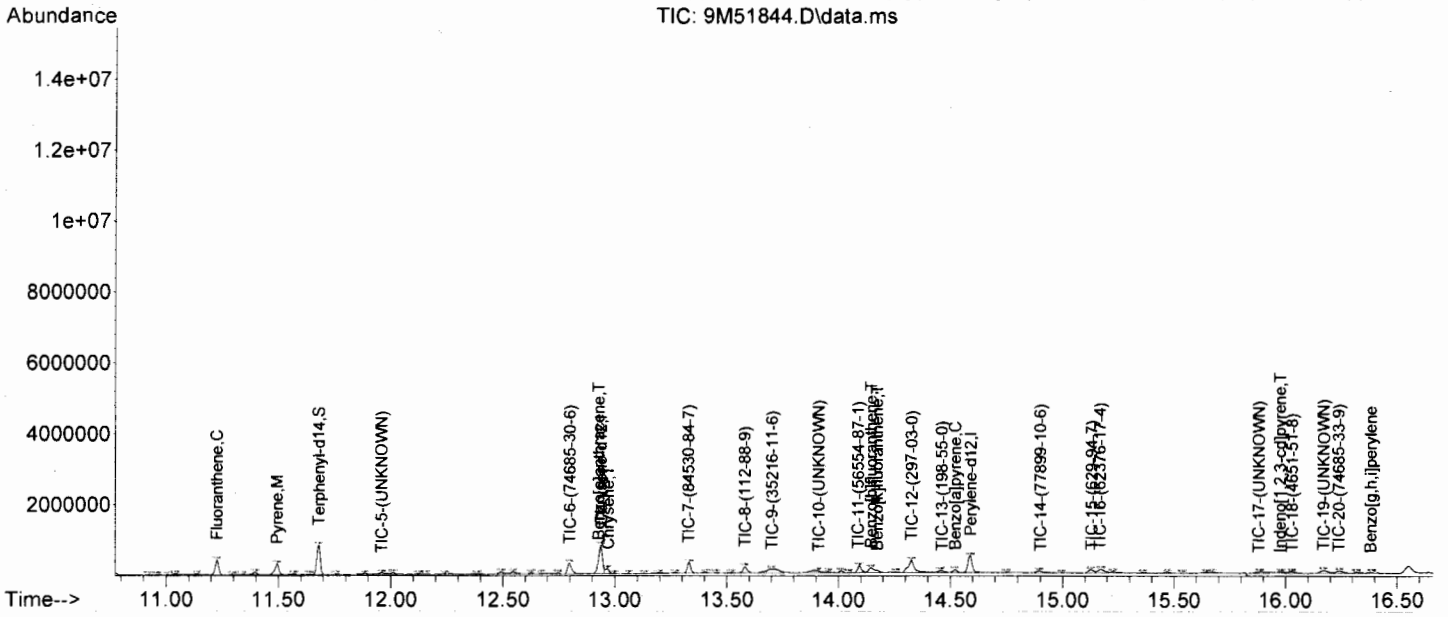
Data Path : G:\GcMsData\2013\GCMS_9\Data\08-02-13\
Qt Path : G:\GCMSDATA\2013\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

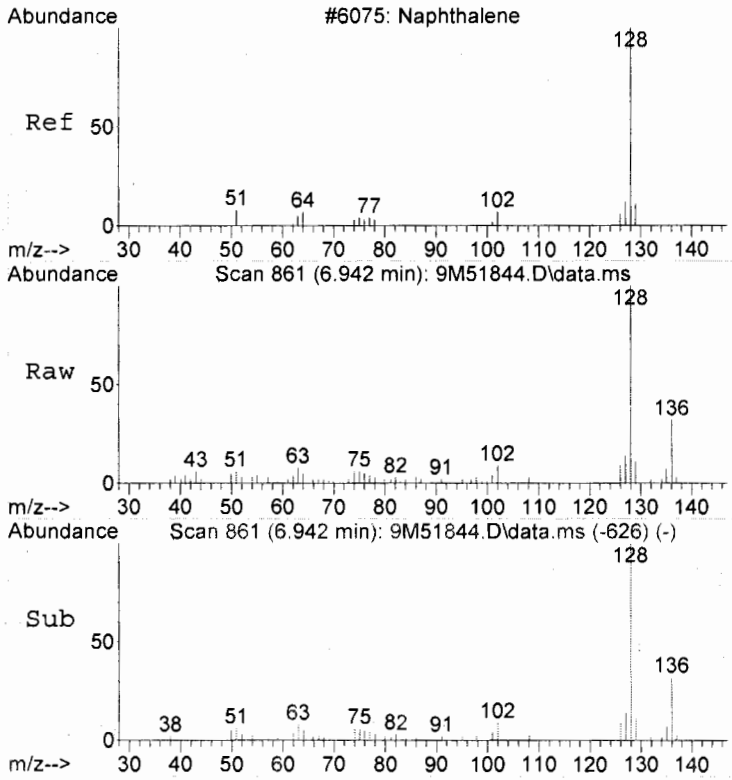
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dichlorobenzene-d4	5.915	152	105406	40.00	ng	0.00
29) Naphthalene-d8	6.926	136	388729	40.00	ng	0.00
47) Acenaphthene-d10	8.370	164	222216	40.00	ng	-0.01
74) Phenanthrene-d10	9.857	188	366878	40.00	ng	0.00
88) Chrysene-d12	12.938	240	312835	40.00	ng	0.01
100) Perylene-d12	14.590	264	249822	40.00	ng	0.03
System Monitoring Compounds						
10) 2-Fluorophenol	4.733	112	193925	60.88	ng	0.02
Spiked Amount 100.000			Recovery = 60.88%			
15) Phenol-d5	5.594	99	272454	64.51	ng	0.00
Spiked Amount 100.000			Recovery = 64.51%			
30) Nitrobenzene-d5	6.364	128	60288	37.19	ng	0.00
Spiked Amount 50.000			Recovery = 74.38%			
52) 2-Fluorobiphenyl	7.771	172	302794	39.57	ng	0.00
Spiked Amount 50.000			Recovery = 79.14%			
77) 2,4,6-Tribromophenol	9.124	330	90665	86.27	ng	0.00
Spiked Amount 100.000			Recovery = 86.27%			
91) Terphenyl-d14	11.681	244	283539	47.22	ng	0.01
Spiked Amount 50.000			Recovery = 94.44%			
Target Compounds						Qvalue
39) Naphthalene	6.942	128	10447	1.0050	ng	97
60) Dimethylphthalate	8.103	163	15573	2.0402	ng	98
65) Dibenzofuran	8.557	168	13206	1.3950	ng	85
83) Phenanthrene	9.884	178	158593	16.2032	ng	99
84) Anthracene	9.937	178	20748	2.1324	ng	96
85) Carbazole	10.108	167	19847	2.1378	ng	96
87) Fluoranthene	11.226	202	187310	15.9934	ng	80
89) Pyrene	11.494	202	142381	16.9934	ng	77
97) Benzo[a]anthracene	12.927	228	59764	7.5069	ng	98
98) Chrysene	12.970	228	59205	8.2376	ng	99
102) Benzo[b]fluoranthene	14.147	252	73417m	9.8985	ng	
103) Benzo[k]fluoranthene	14.173	252	23345m	3.0780	ng	
104) Benzo[a]pyrene	14.521	252	44653	6.4154	ng	86
105) Indeno[1,2,3-cd]pyrene	15.976	276	35329	4.8393	ng	84
107) Benzo[g,h,i]perylene	16.382	276	29457	4.9796	ng	70
Library Search Internal Standards TIC Results						
1) 1,4-Dichlorobenzene-d4	5.915		636053	40.00	ng	--
2) Naphthalene-d8	6.926		853334	40.00	ng	--
3) Acenaphthene-d10	8.370		961315	40.00	ng	--
4) Phenanthrene-d10	9.857		949598	40.00	ng	--
5) Chrysene-d12	12.938		863216m	40.00	ng	--
6) Perylene-d12	14.590		693187	40.00	ng	--
Library Search Compounds						
1) UNKNOWN	4.160		1219205	76.67	ng	--
2) 123-42-2	4.490		40038494	2517.93	ng	74
3) UNKNOWN	5.130		201518	12.67	ng	--
4) 57-10-3	10.450		255080	10.74	ng	98
5) UNKNOWN	11.960		120819	5.60	ng	--
6) 74685-30-6	12.800		432633	20.05	ng	91
7) 84530-84-7	13.330		335158	15.53	ng	58
8) 112-88-9	13.580		236479	10.96	ng	83
9) 35216-11-6	13.700		449651	20.84	ng	78
10) UNKNOWN	13.910		220679	12.73	ng	--
11) 56554-87-1	14.090		237019	13.68	ng	91
12) 297-03-0	14.330		722774	41.71	ng	95
13) 198-55-0	14.460		110690	6.39	ng	91
14) 77899-10-6	14.900		136590	7.88	ng	52
15) 629-94-7	15.130		166424	9.60	ng	93
16) 62376-17-4	15.170		224114	12.93	ng	72
17) UNKNOWN	15.880		160442	9.26	ng	--
18) 4651-51-8	16.030		122879	7.09	ng	53
19) UNKNOWN	16.170		209426	12.08	ng	--
20) 74685-33-9	16.240		165501	9.55	ng	93

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


Abundance
TIC: 9M51844.D\data.ms
Quant QT/LSC Reviewed
SampleID : AC73771-002
Data File: 9M51844.D
Acq On : 08/ 2/13 19:12
Operator : AHD/JB
Sam Mult : 1 Vial# : 21
Misc : S,BNA
Qt Meth : 9M_0731.M
Qt On : 08/05/13 09:06
Qt Upd On: 07/31/13 12:27
TIC-1-(UNKNOWN)
TIC-2-(123-42-2)
2-Fluorophenol,S
TIC-3-(UNKNOWN)
Phenol-d5,S
Time-->


Abundance
TIC: 9M51844.D\data.ms
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
2-Fluorobiphenyl,S
Dimethylphthalate,T
Acenaphthene-d10,I
Dibenzofuran,T
2,4,6-Tribromophenol,S
Anthracene,T
Carbazole
TIC-4-(57-10-3)
Fluoranthene,C
Time-->

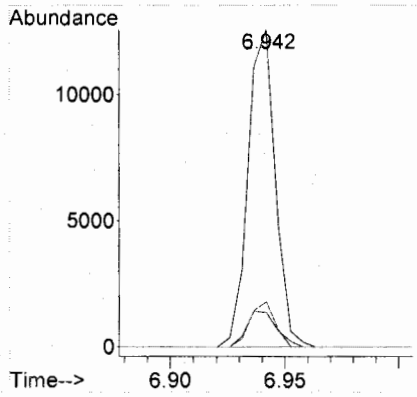

Abundance
TIC: 9M51844.D\data.ms
Fluoranthene,C
Pyrene,M
Terphenyl-d14,S
TIC-5-(UNKNOWN)
TIC-6-(74685-30-6)
TIC-7-(84530-84-7)
TIC-8-(112-88-9)
TIC-9-(35216-11-6)
TIC-10-(UNKNOWN)
TIC-12-(297-03-0)
TIC-13-(198-55-0)
Benzo[a]pyrene,C
Perylene-d12,I
TIC-14-(77899-10-6)
TIC-17-(UNKNOWN)
TIC-19-(UNKNOWN)
TIC-20-(74685-33-9)
Benzo[g,h,i]perylene
Time-->

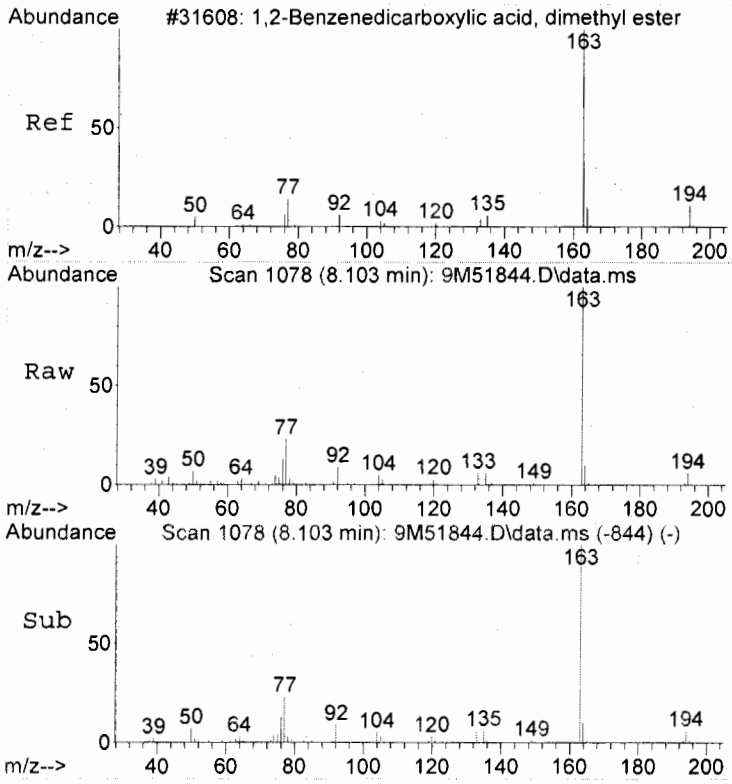


#39
Naphthalene
Concen: 1.00 ng
RT: 6.942 min Scan# 861
Delta R.T. -0.006 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:128 Resp: 10447

Ion	Ratio	Lower	Upper
128	100		
129	10.8	0.0	50.9
127	14.2	0.0	52.4

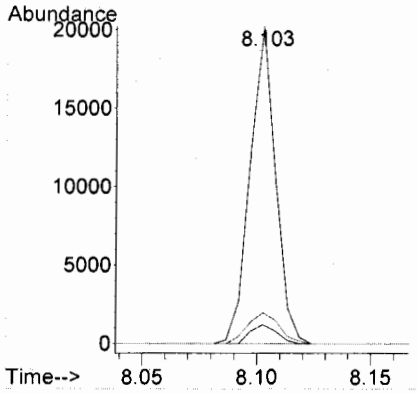


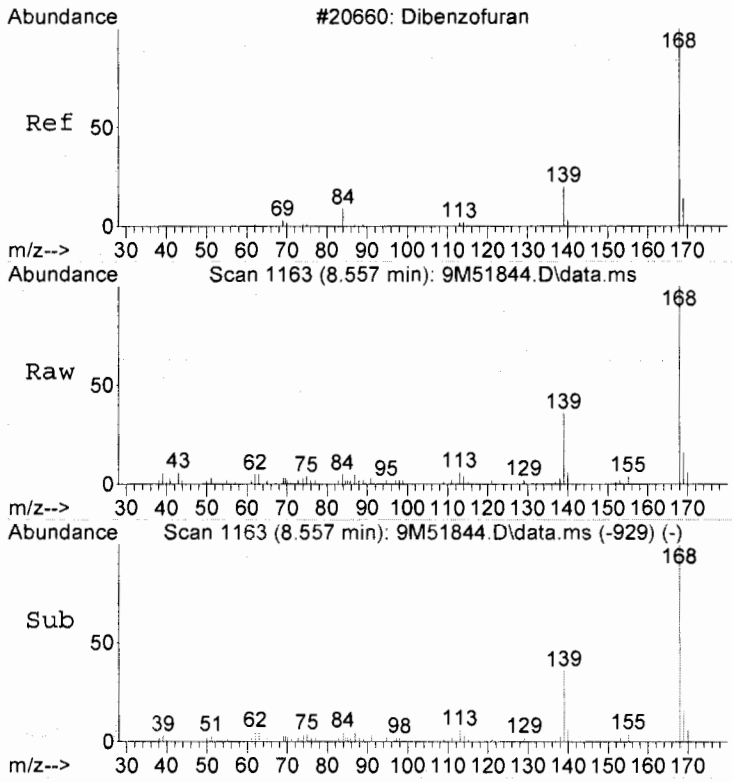


#60
Dimethylphthalate
Concen: 2.04 ng
RT: 8.103 min Scan# 1078
Delta R.T. -0.011 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:163 Resp: 15573

Ion	Ratio	Lower	Upper
163	100		
194	6.0	0.0	44.1
164	9.7	0.0	50.0

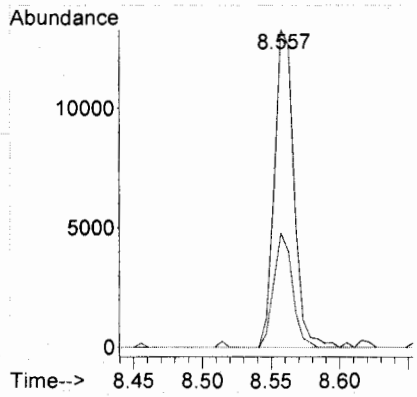


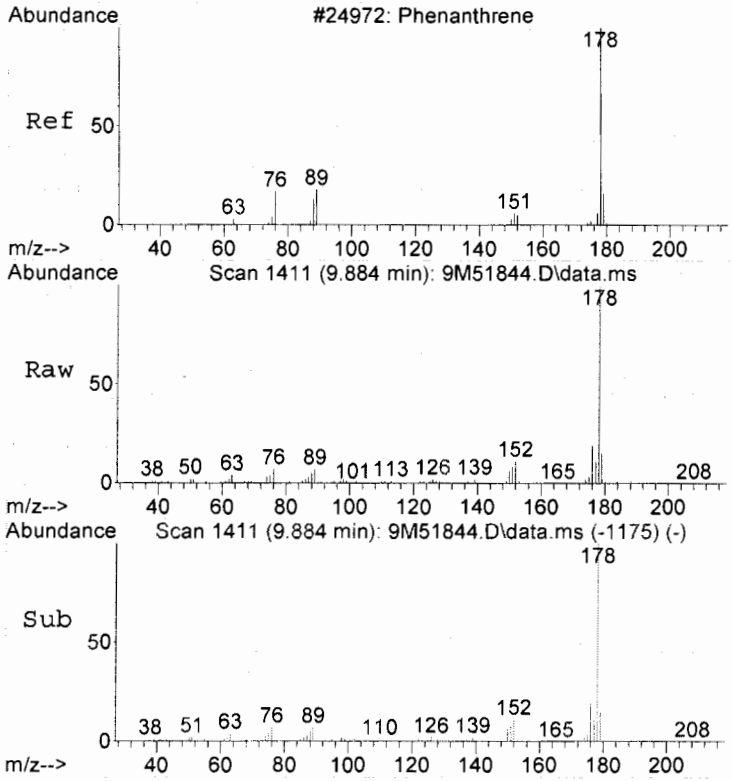


#65
Dibenzofuran
Concen: 1.40 ng
RT: 8.557 min Scan# 1163
Delta R.T. -0.011 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:168 Resp: 13206

Ion	Ratio	Lower	Upper
168	100		
139	36.0	0.0	246.0

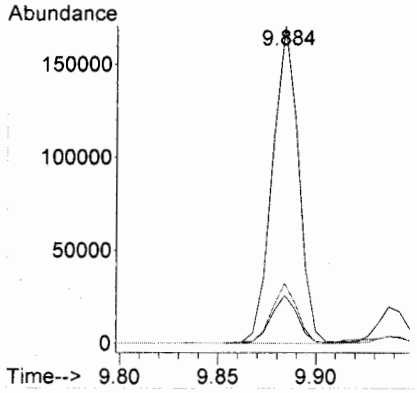


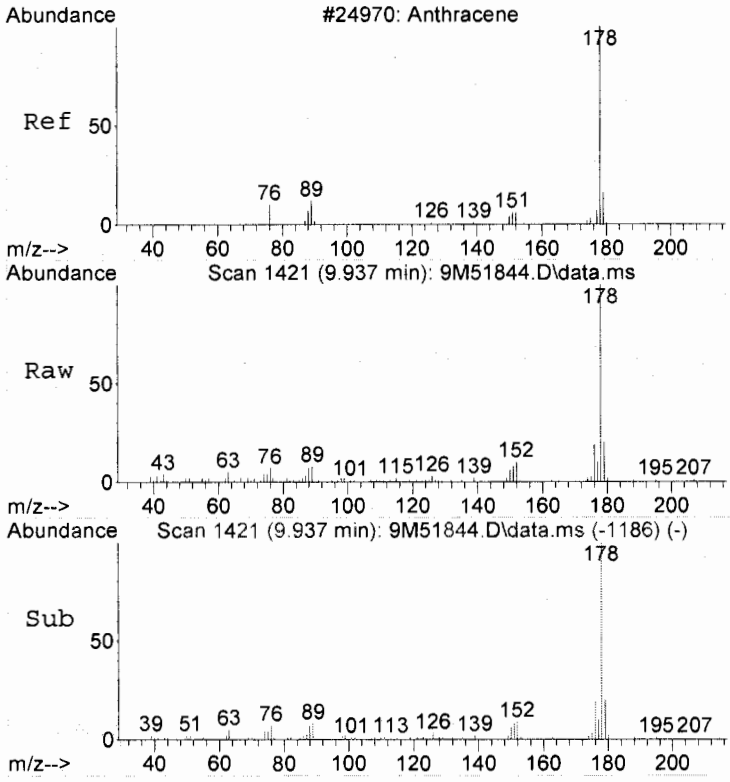


#83
Phenanthrene
Concen: 16.20 ng
RT: 9.884 min Scan# 1411
Delta R.T. -0.000 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:178 Resp: 158593

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	55.5
176	18.8	0.0	59.3

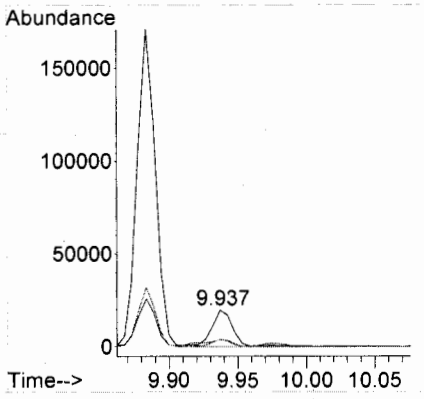


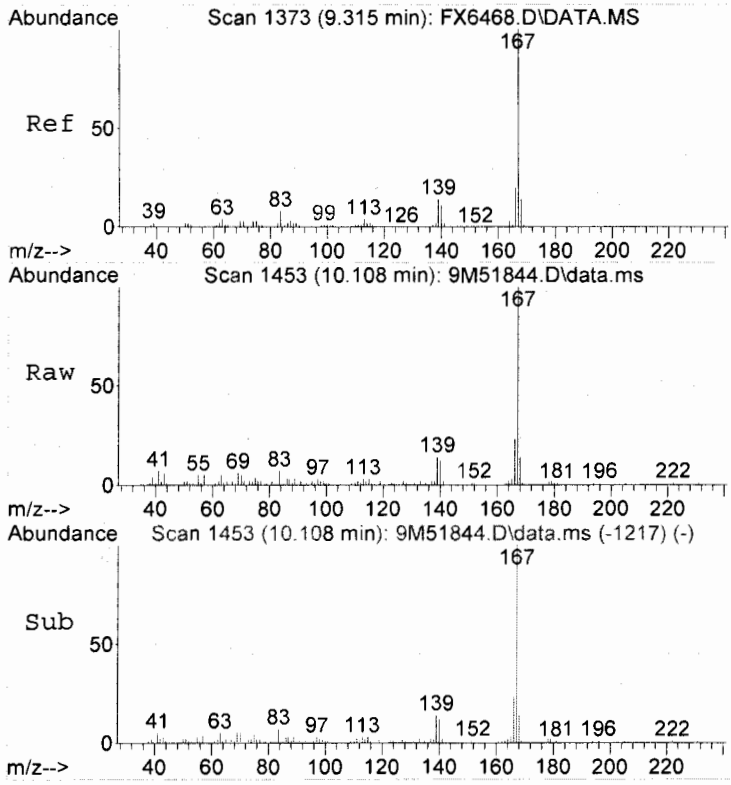


#84
Anthracene
Concen: 2.13 ng
RT: 9.937 min Scan# 1421
Delta R.T. -0.006 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:178 Resp: 20748

Ion	Ratio	Lower	Upper
178	100		
179	17.1	0.0	55.2
176	19.4	0.0	58.1

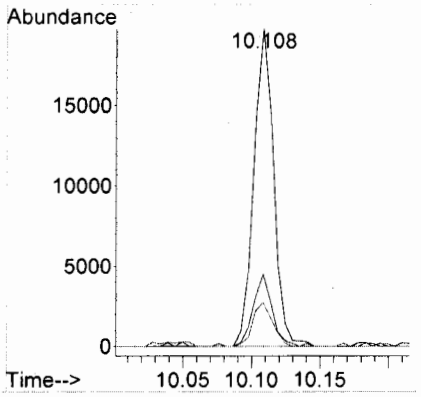


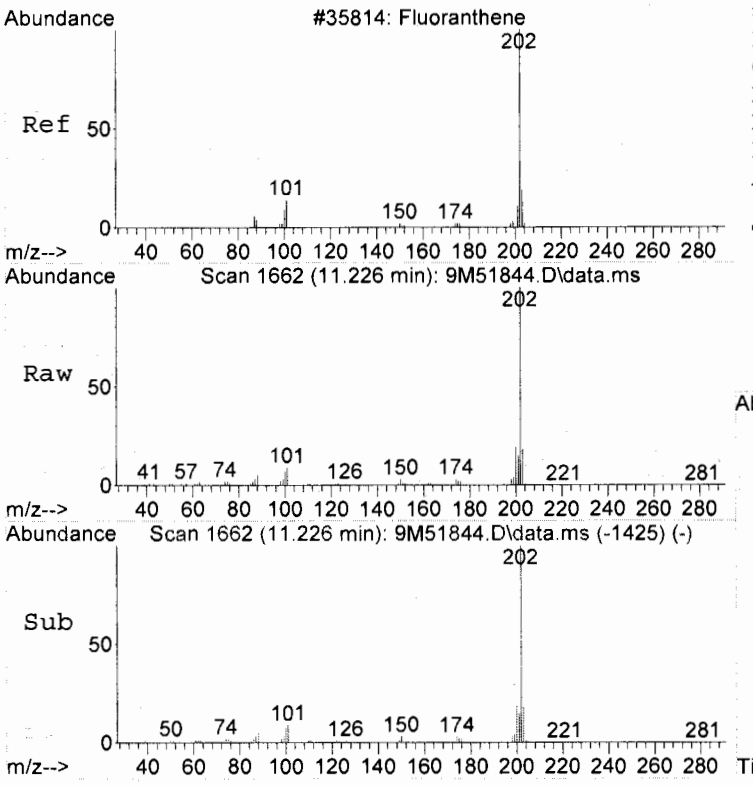


#85
Carbazole
Concen: 2.14 ng
RT: 10.108 min Scan# 1453
Delta R.T. -0.000 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:167 Resp: 19847

Ion	Ratio	Lower	Upper
167	100		
166	22.7	0.2	40.2
139	13.7	0.0	35.0

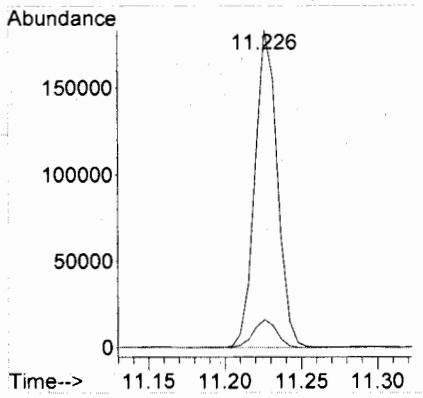


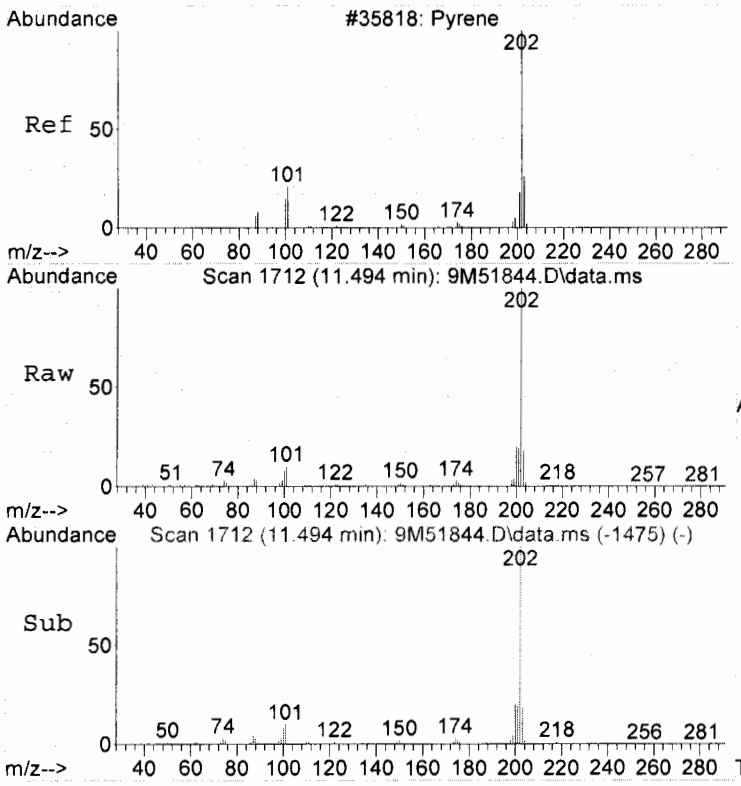


#87
Fluoranthene
Concen: 15.99 ng
RT: 11.226 min Scan# 1662
Delta R.T. -0.000 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:202 Resp: 187310

Ion	Ratio	Lower	Upper
202	100		
101	8.8	0.0	57.6

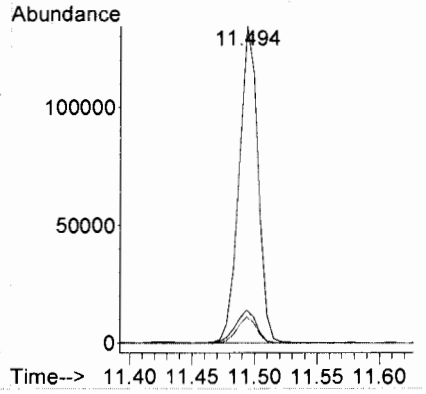


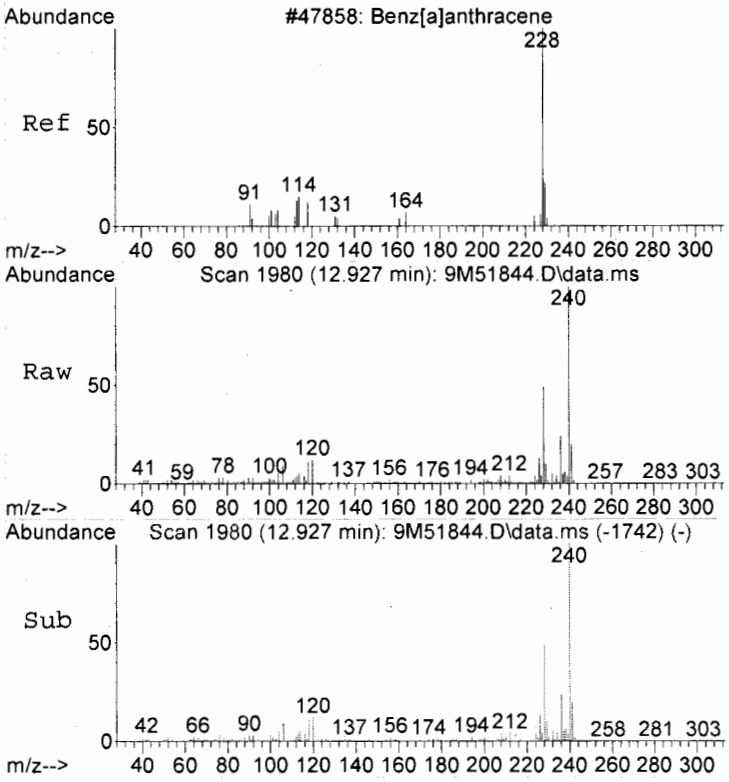


#89
Pyrene
Concen: 16.99 ng
RT: 11.494 min Scan# 1712
Delta R.T. 0.005 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:202 Resp: 142381

Ion	Ratio	Lower	Upper
202	100		
101	10.5	0.0	62.2
100	8.4	0.0	57.8

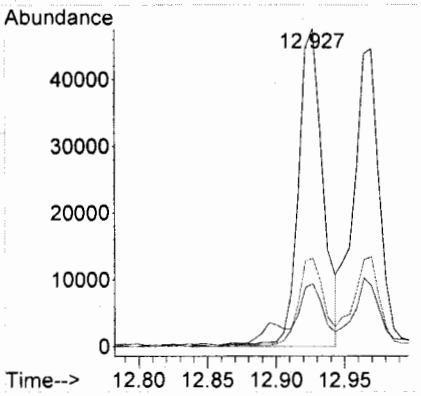


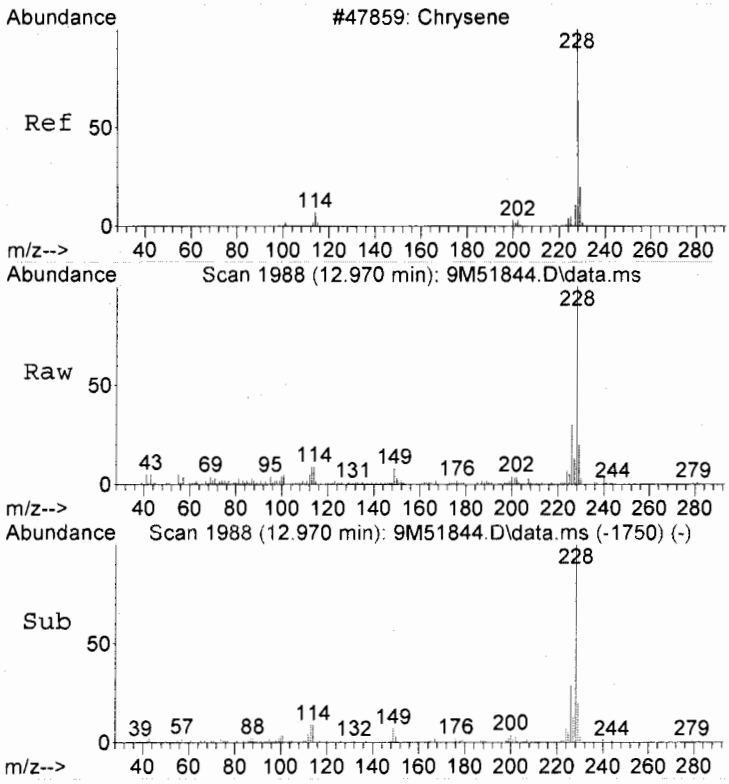


#97
Benzo[a]anthracene
Concen: 7.51 ng
RT: 12.927 min Scan# 1980
Delta R.T. 0.010 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:228 Resp: 59764

Ion	Ratio	Lower	Upper
228	100		
229	19.1	0.0	59.5
226	27.7	0.0	66.0

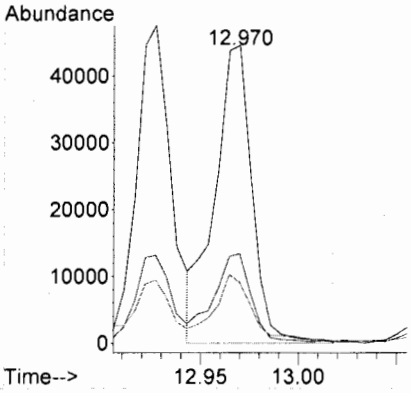


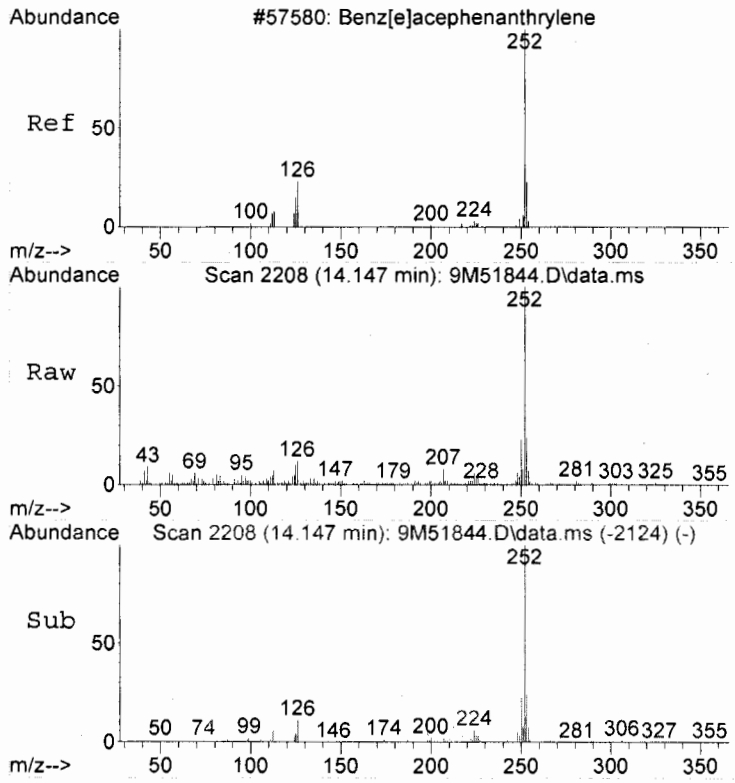


#98
Chrysene
Concen: 8.24 ng
RT: 12.970 min Scan# 1988
Delta R.T. 0.010 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:228 Resp: 59205

Ion	Ratio	Lower	Upper
228	100		
226	29.8	9.5	49.5
229	19.8	0.0	60.2

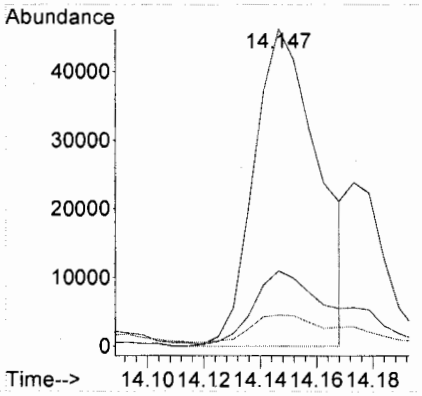


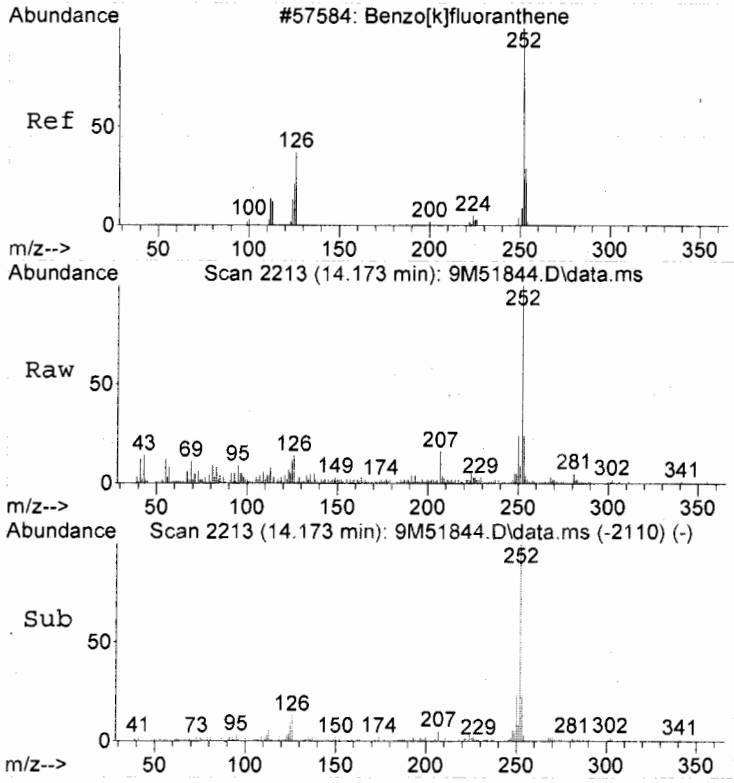


#102
Benzo[b]fluoranthene
Concen: 9.90 ng m
RT: 14.147 min Scan# 2208
Delta R.T. 0.016 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:252 Resp: 73417

Ion	Ratio	Lower	Upper
252	100		
253	23.8	0.0	62.3
125	9.8	0.0	58.4

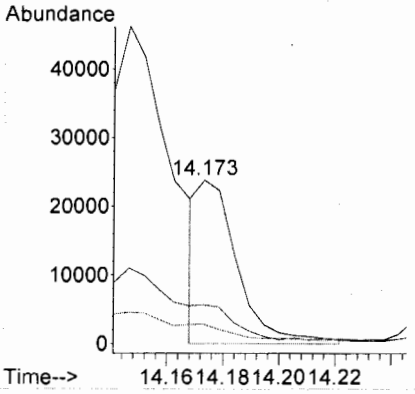


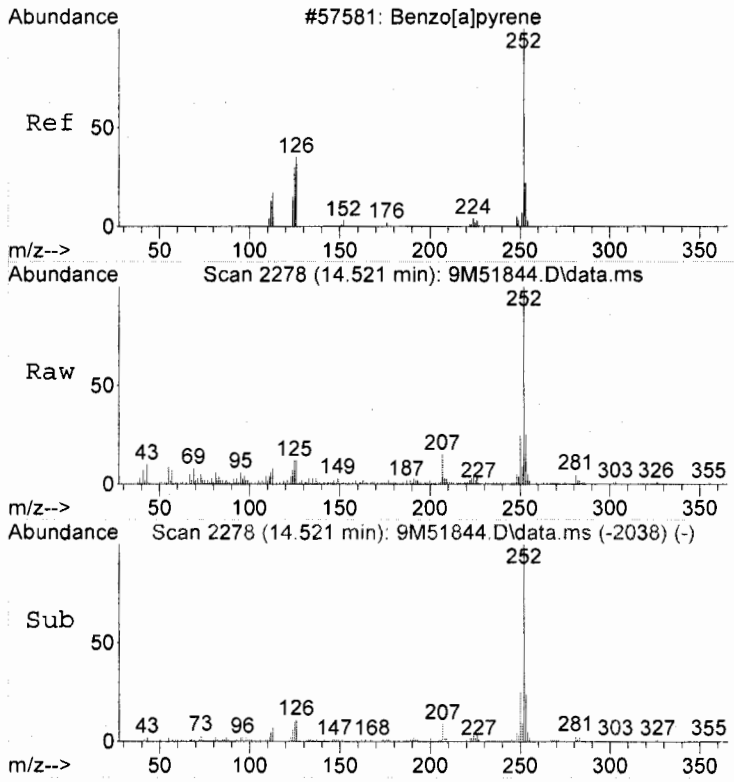


#103
Benzo[k]fluoranthene
Concen: 3.08 ng m
RT: 14.173 min Scan# 2213
Delta R.T. 0.010 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:252 Resp: 23345

Ion	Ratio	Lower	Upper
252	100		
253	23.6	0.0	52.2
125	11.8	0.0	48.9

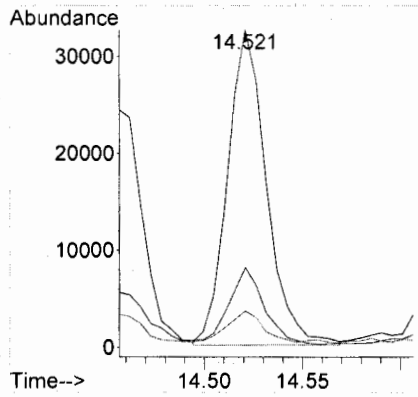


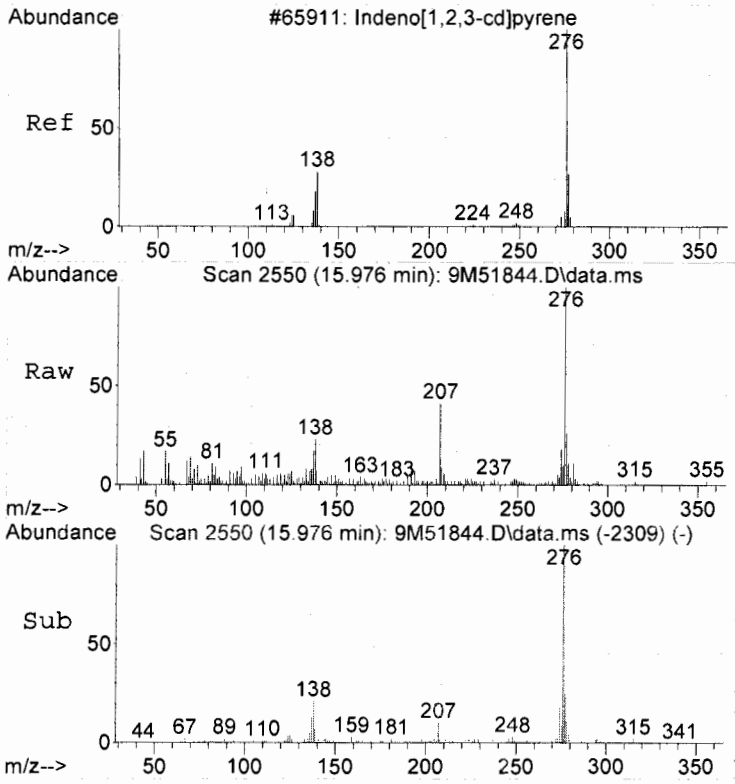


#104
Benzo[a]pyrene
Concen: 6.42 ng
RT: 14.521 min Scan# 2278
Delta R.T. 0.016 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:252 Resp: 44653

Ion	Ratio	Lower	Upper
252	100		
253	24.4	0.0	62.4
125	9.9	0.0	60.9

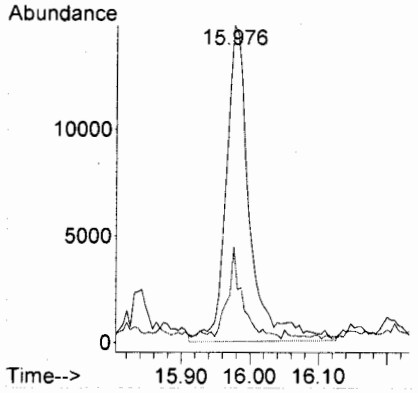


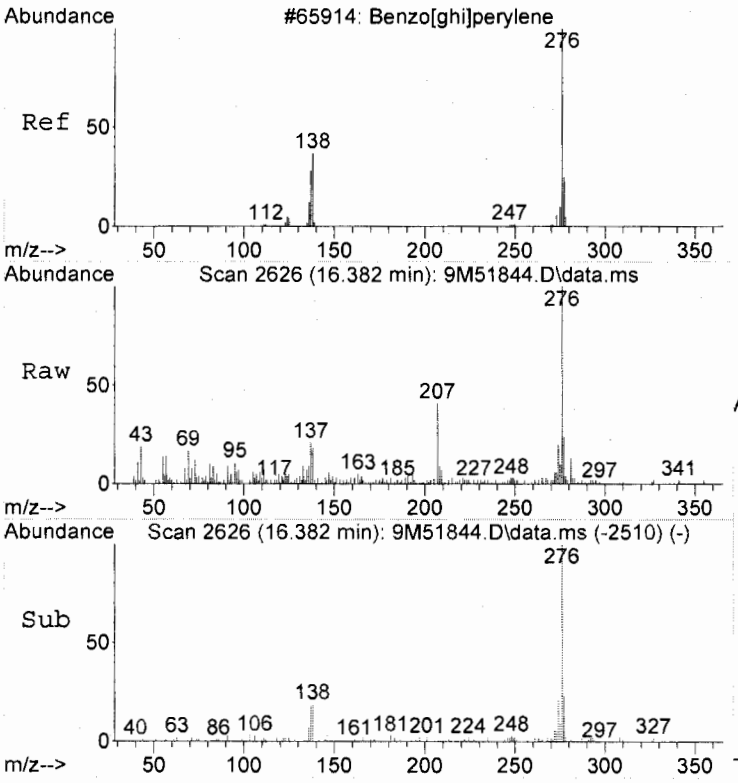


#105
Indeno[1,2,3-cd]pyrene
Concen: 4.84 ng
RT: 15.976 min Scan# 2550
Delta R.T. 0.026 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:276 Resp: 35329

Ion	Ratio	Lower	Upper
276	100		
138	29.3	0.0	78.9

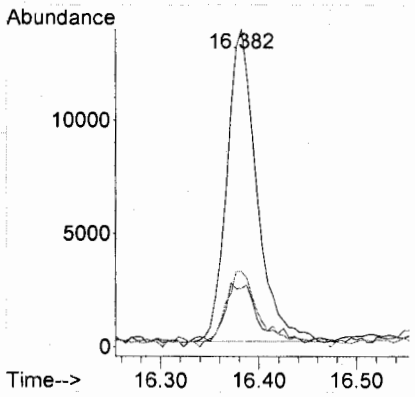




#107
Benzo[g,h,i]perylene
Concen: 4.98 ng
RT: 16.382 min Scan# 2626
Delta R.T. 0.080 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:276 Resp: 29457

Ion	Ratio	Lower	Upper
276	100		
138	18.2	0.0	100.0
277	28.1	0.0	60.0



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: SMB25788
Client Id:
Data File: 9M51850.D
Analysis Date: 08/05/13 10:18
Date Rec/Extracted: NA-08/02/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270C
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.033	U	205-99-2	Benzo[b]fluoranthene	0.033	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.033	U	191-24-2	Benzo[g,h,i]perylene	0.0083	U
122-66-7	1,2-Diphenylhydrazine	0.033	U	207-08-9	Benzo[k]fluoranthene	0.033	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.033	U	100-51-6	Benzyl alcohol	0.033	U
95-95-4	2,4,5-Trichlorophenol	0.033	U	111-91-1	bis(2-Chloroethoxy)methan	0.033	U
88-06-2	2,4,6-Trichlorophenol	0.033	U	111-44-4	bis(2-Chloroethyl)ether	0.0083	U
120-83-2	2,4-Dichlorophenol	0.0083	U	108-60-1	bis(2-chloroisopropyl)ether	0.033	U
105-67-9	2,4-Dimethylphenol	0.0083	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.033	U
51-28-5	2,4-Dinitrophenol	0.17	U	85-68-7	Butylbenzylphthalate	0.033	U
121-14-2	2,4-Dinitrotoluene	0.033	U	105-60-2	Caprolactam	0.033	U
606-20-2	2,6-Dinitrotoluene	0.033	U	86-74-8	Carbazole	0.033	U
91-58-7	2-Chloronaphthalene	0.033	U	218-01-9	Chrysene	0.033	U
95-57-8	2-Chlorophenol	0.033	U	53-70-3	Dibenzo[a,h]anthracene	0.033	U
91-57-6	2-Methylnaphthalene	0.033	U	132-64-9	Dibenzofuran	0.0083	U
95-48-7	2-Methylphenol	0.0083	U	84-66-2	Diethylphthalate	0.033	U
88-74-4	2-Nitroaniline	0.033	U	**131-11-3**	**Dimethylphthalate**	**0.033**	**0.040**
88-75-5	2-Nitrophenol	0.033	U	84-74-2	Di-n-butylphthalate	0.017	U
106-44-5	3&4-Methylphenol	0.0083	U	117-84-0	Di-n-octylphthalate	0.033	U
91-94-1	3,3'-Dichlorobenzidine	0.033	U	206-44-0	Fluoranthene	0.033	U
99-09-2	3-Nitroaniline	0.033	U	86-73-7	Fluorene	0.033	U
534-52-1	4,6-Dinitro-2-methylphenol	0.033	U	118-74-1	Hexachlorobenzene	0.033	U
101-55-3	4-Bromophenyl-phenylether	0.033	U	87-68-3	Hexachlorobutadiene	0.033	U
59-50-7	4-Chloro-3-methylphenol	0.033	U	77-47-4	Hexachlorocyclopentadiene	0.033	U
106-47-8	4-Chloroaniline	0.016	U	67-72-1	Hexachloroethane	0.033	U
7005-72-3	4-Chlorophenyl-phenylether	0.033	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.033	U
100-01-6	4-Nitroaniline	0.033	U	78-59-1	Isophorone	0.033	U
100-02-7	4-Nitrophenol	0.033	U	91-20-3	Naphthalene	0.0083	U
83-32-9	Acenaphthene	0.033	U	98-95-3	Nitrobenzene	0.033	U
208-96-8	Acenaphthylene	0.033	U	62-75-9	N-Nitrosodimethylamine	0.033	U
98-86-2	Acetophenone	0.033	U	621-64-7	N-Nitroso-di-n-propylamine	0.0083	U
120-12-7	Anthracene	0.033	U	86-30-6	n-Nitrosodiphenylamine	0.033	U
1912-24-9	Atrazine	0.033	U	87-86-5	Pentachlorophenol	0.056	U
100-52-7	Benzaldehyde	0.033	U	85-01-8	Phenanthrene	0.033	U
92-87-5	Benzidine	0.033	U	108-95-2	Phenol	0.033	U
56-55-3	Benzo[a]anthracene	0.033	U	129-00-0	Pyrene	0.033	U
50-32-8	Benzo[a]pyrene	0.033	U				

Worksheet #: 272527 ***Total Target Concentration*** 0.04 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: SMB25788
Client Id:
Data File: 9M51850.D
Analysis Date: 08/05/13 10:18
Date Rec/Extracted: NA-08/02/13

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 100
Method: EPA 8270C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	4.16	1.5 J
2	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.49	47 JA
3		unknown	5.12	0.25 J
4	19047-85-9	Phosphonic acid, dioctadecyl ester	12.77	0.084 J

Worksheet #: 272527 ***Total Tentatively Identified Concentration*** 49

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

3080110 0093

SampleID : SMB25788 Operator : AHD/JB Qt Meth : 9M_0731.M
Data File: 9M51850.D Sam Mult : 1 Vial# : 3 Qt On : 08/05/13 10:40
Acq On : 08/ 5/13 10:18 Misc : S,BNA Qt Upd On: 07/31/13 12:27

Data Path : G:\GcMsData\2013\GCMS_9\Data\08-05-13\
Qt Path : G:\GCMSDATA\2013\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dichlorobenzene-d4	5.915	152	101289	40.00	ng	0.00
29) Naphthalene-d8	6.921	136	392490	40.00	ng	-0.01
47) Acenaphthene-d10	8.365	164	234411	40.00	ng	-0.02
74) Phenanthrene-d10	9.846	188	434532	40.00	ng	-0.01
88) Chrysene-d12	12.916	240	486333	40.00	ng	-0.01
100) Perylene-d12	14.553	264	379918	40.00	ng	-0.01
System Monitoring Compounds						
10) 2-Fluorophenol	4.728	112	168980	55.20	ng	0.01
Spiked Amount 100.000			Recovery = 55.20%			
15) Phenol-d5	5.594	99	235331	57.98	ng	0.00
Spiked Amount 100.000			Recovery = 57.98%			
30) Nitrobenzene-d5	6.364	128	51950	31.74	ng	0.00
Spiked Amount 50.000			Recovery = 63.48%			
52) 2-Fluorobiphenyl	7.766	172	258065	31.97	ng	-0.01
Spiked Amount 50.000			Recovery = 63.94%			
77) 2,4,6-Tribromophenol	9.119	330	87696	70.45	ng	-0.01
Spiked Amount 100.000			Recovery = 70.45%			
91) Terphenyl-d14	11.660	244	346923	37.16	ng	-0.01
Spiked Amount 50.000			Recovery = 74.32%			
Target Compounds						Qvalue
60) Dimethylphthalate	8.097	163	19083	2.3700	ng	96
Library Search Internal Standards TIC Results						
1) 1,4-Dichlorobenzene-d4	5.915		602274	40.00	ng	--
2) Naphthalene-d8	6.921		823080	40.00	ng	--
3) Acenaphthene-d10	8.365		978422	40.00	ng	--
4) Phenanthrene-d10	9.846		1056920	40.00	ng	--
5) Chrysene-d12	12.916		1250820	40.00	ng	--
6) Perylene-d12	14.553		993126	40.00	ng	--
Library Search Compounds						
1) UNKNOWN	4.160		1366129	90.73	ng	--
2) 123-42-2	4.490		42553375	2826.18	ng	64
3) UNKNOWN	5.120		225681	14.99	ng	--
4) 19047-85-9	12.770		157626	5.04	ng	93

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

Ve

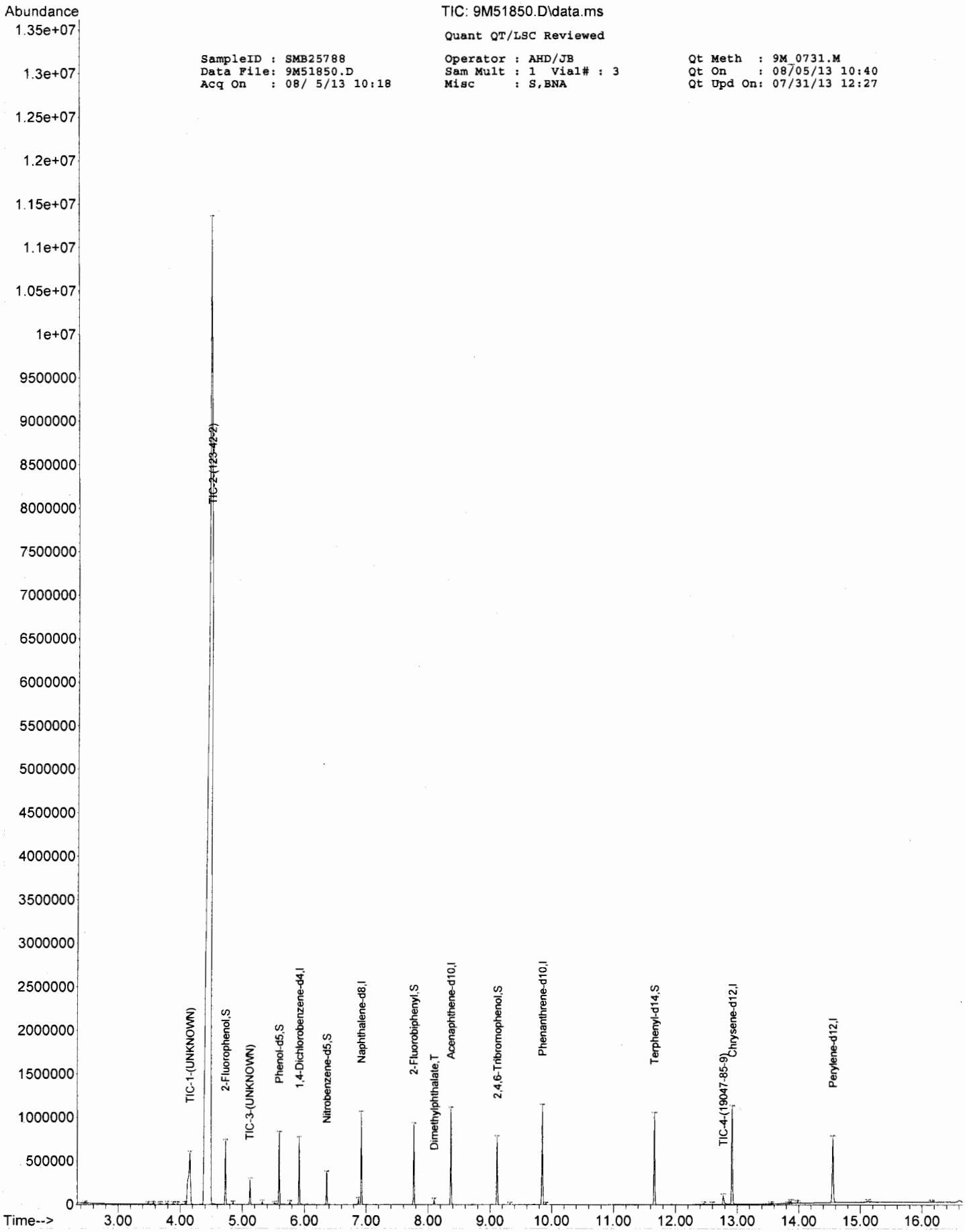
TIC: 9M51850.D\data.ms

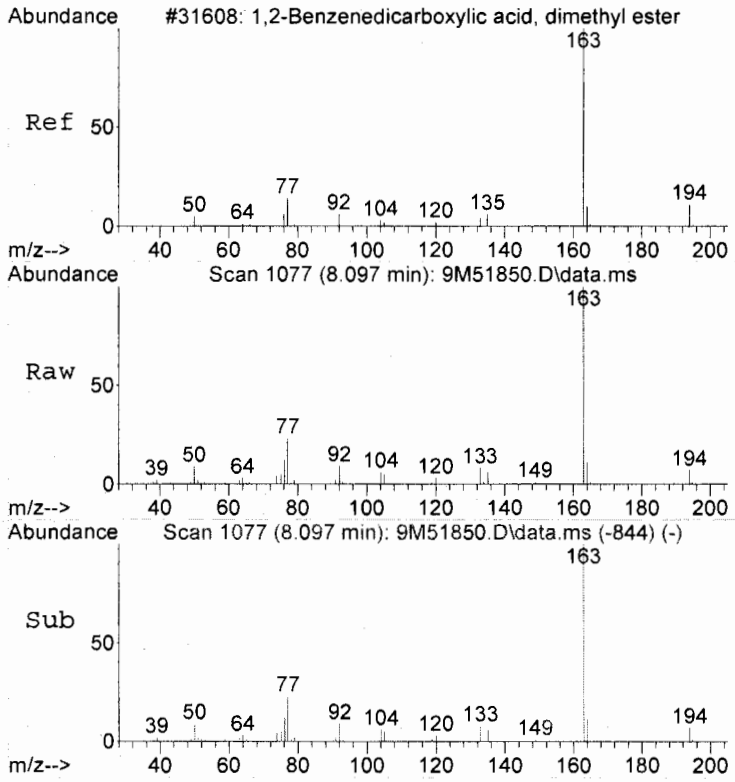
Quant QT/LSC Reviewed

SampleID : SMB25788
Data File: 9M51850.D
Acq On : 08/ 5/13 10:18

Operator : AHD/JB
Sam Mult : 1 Vial# : 3
Misc : S,BNA

Qt Meth : 9M_0731.M
Qt On : 08/05/13 10:40
Qt Upd On: 07/31/13 12:27

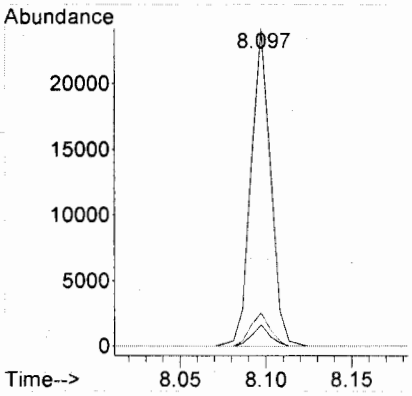




#60
Dimethylphthalate
Concen: 2.37 ng
RT: 8.097 min Scan# 1077
Delta R.T. -0.016 min
Lab File: 9M51850.D
Acq: 5 Aug 2013 10:18

Tgt Ion:163 Resp: 19083

Ion	Ratio	Lower	Upper
163	100		
194	7.4	0.0	44.1
164	10.6	0.0	50.0



FORM2

Surrogate Recovery

Method: EPA 8270C

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column1 S5 Recov	Column1 S6 Recov
9M51850.D	SMB25788	Soil	08/05/13 10:18	1		55	58	63	64	70	74
9M51843.D	AC73771-001	Soil	08/02/13 18:49	1		62	64	73	78	82	91
9M51844.D	AC73771-002	Soil	08/02/13 19:12	1		61	65	74	79	86	94
9M51830.D	SMB25788(M	Soil	08/02/13 12:44	1		74	77	88	86	95	107
9M51832.D	AC73758-002	Soil	08/02/13 14:20	1		58	60	69	71	76	88
9M51834.D	AC73758-002(	Soil	08/02/13 15:23	1		60	62	72	69	77	84
9M51835.D	AC73758-002(	Soil	08/02/13 15:46	1		63	64	75	75	82	92

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8270C

Soil Limits

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	43-128
S2=Phenol-d5	100	49-129
S3=Nitrobenzene-d5	50	52-129
S4=2-Fluorobiphenyl	50	58-125
S5=2,4,6-Tribromophenol	100	54-145
S6=Terphenyl-d14	50	58-148

Form3
Recovery Data
QC Batch: SMB25788

	Data File	Sample ID:	Analysis Date
Spike or Dup:	9M51830.D	SMB25788(MS)	8/2/2013 12:44:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8270 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Phenol	1	81.0873	0	100	81	20	130
2-Chlorophenol	1	90.2945	0	100	90	50	130
1,4-Dichlorobenzene	1	41.1173	0	50	82	50	130
2-Methylphenol	1	93.4596	0	100	93	50	130
N-Nitroso-di-n-propylamine	1	45.715	0	50	91	20	130
2,4-Dimethylphenol	1	99.3784	0	100	99	50	130
1,2,4-Trichlorobenzene	1	45.3054	0	50	91	50	130
Naphthalene	1	43.9923	0	50	88	50	130
4-Chloro-3-methylphenol	1	94.9795	0	100	95	50	130
Acenaphthene	1	44.3565	0	50	89	50	130
2,4-Dinitrotoluene	1	43.5982	0	50	87	50	130
4-Nitrophenol	1	82.4904	0	100	82	20	130
Fluorene	1	43.953	0	50	88	50	130
Pentachlorophenol	1	82.5727	0	100	83	40	130
Pyrene	1	58.8372	0	50	118	50	130
Butylbenzylphthalate	1	58.4565	0	50	117	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB25788

	Data File	Sample ID:	Analysis Date
Spike or Dup:	9M51834.D	AC73758-002(MS)	8/2/2013 3:23:00 PM
Non Spike(If applicable):	9M51832.D	AC73758-002	8/2/2013 2:20:00 PM
Inst Blank(If applicable):			

Method: 8270 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Phenol	1	74.7143	0	100	75	20	130
2-Chlorophenol	1	81.8499	0	100	82	50	130
1,4-Dichlorobenzene	1	37.8672	0	50	76	50	130
2-Methylphenol	1	84.1959	0	100	84	50	130
N-Nitroso-di-n-propylamine	1	41.3936	0	50	83	20	130
2,4-Dimethylphenol	1	90.6225	0	100	91	50	130
1,2,4-Trichlorobenzene	1	41.7327	0	50	83	50	130
Naphthalene	1	40.2375	0	50	80	50	130
4-Chloro-3-methylphenol	1	86.3685	0	100	86	50	130
Acenaphthene	1	40.9418	0	50	82	50	130
2,4-Dinitrotoluene	1	38.3398	0	50	77	50	130
4-Nitrophenol	1	76.473	0	100	76	20	130
Fluorene	1	40.936	0	50	82	50	130
Pentachlorophenol	1	78.5166	0	100	79	40	130
Pyrene	1	50.5457	0	50	101	50	130
Butylbenzylphthalate	1	50.8009	0	50	102	50	130

	Data File	Sample ID:	Analysis Date
Spike or Dup:	9M51835.D	AC73758-002(MSD)	8/2/2013 3:46:00 PM
Non Spike(If applicable):	9M51832.D	AC73758-002	8/2/2013 2:20:00 PM
Inst Blank(If applicable):			

Method: 8270 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Phenol	1	75.7073	0	100	76	20	130
2-Chlorophenol	1	84.5706	0	100	85	50	130
1,4-Dichlorobenzene	1	37.6406	0	50	75	50	130
2-Methylphenol	1	86.3335	0	100	86	50	130
N-Nitroso-di-n-propylamine	1	42.5227	0	50	85	20	130
2,4-Dimethylphenol	1	93.1104	0	100	93	50	130
1,2,4-Trichlorobenzene	1	42.5132	0	50	85	50	130
Naphthalene	1	41.5731	0	50	83	50	130
4-Chloro-3-methylphenol	1	87.972	0	100	88	50	130
Acenaphthene	1	42.7783	0	50	86	50	130
2,4-Dinitrotoluene	1	41.4874	0	50	83	50	130
4-Nitrophenol	1	80.1396	0	100	80	20	130
Fluorene	1	42.3269	0	50	85	50	130
Pentachlorophenol	1	82.0271	0	100	82	40	130
Pyrene	1	53.824	0	50	108	50	130
Butylbenzylphthalate	1	54.4928	0	50	109	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA

QC Batch: SMB25788

	Data File	Sample ID:	Analysis Date
Spike or Dup:	9M51835.D	AC73758-002(MSD)	8/2/2013 3:46:00 PM
Duplicate(If applicable):	9M51834.D	AC73758-002(MS)	8/2/2013 3:23:00 PM
Inst Blank(If applicable):			

Method: 8270 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Phenol	1	75.7073	74.7143	1.3	40
2-Chlorophenol	1	84.5706	81.8499	3.3	40
1,4-Dichlorobenzene	1	37.6406	37.8672	0.6	40
2-Methylphenol	1	86.3335	84.1959	2.5	40
N-Nitroso-di-n-propylamine	1	42.5227	41.3936	2.7	40
2,4-Dimethylphenol	1	93.1104	90.6225	2.7	40
1,2,4-Trichlorobenzene	1	42.5132	41.7327	1.9	40
Naphthalene	1	41.5731	40.2375	3.3	40
4-Chloro-3-methylphenol	1	87.972	86.3685	1.8	40
Acenaphthene	1	42.7783	40.9418	4.4	40
2,4-Dinitrotoluene	1	41.4874	38.3398	7.9	40
4-Nitrophenol	1	80.1396	76.473	4.7	40
Fluorene	1	42.3269	40.936	3.3	40
Pentachlorophenol	1	82.0271	78.5166	4.4	40
Pyrene	1	53.824	50.5457	6.3	40
Butylbenzylphthalate	1	54.4928	50.8009	7	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: SMB25788
Blank Data File: 9M51850.D
Matrix: Soil

Blank Analysis Date: 08/05/13 10:18
Blank Extraction Date: 08/02/13
(If Applicable)
Method: EPA 8270C

Sample Number	Data File	Analysis Date
AC73771-001	9M51843.D	08/02/13 18:49
AC73771-002	9M51844.D	08/02/13 19:12
AC73758-002(MSD	9M51835.D	08/02/13 15:46
AC73758-002(MS)	9M51834.D	08/02/13 15:23
AC73758-002	9M51832.D	08/02/13 14:20
SMB25788(MS)	9M51830.D	08/02/13 12:44

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 9

Data File: 9M51760.D
Analysis Date: 07/31/13 08:32
Method: EPA 8270C

Tune Scan/Time Range: Scan 1457

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	38.0	40696	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	51.7	55352	PASS
70	69	0.00	2	0.6	328	PASS
127	198	40	60	54.5	58376	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	107056	PASS
199	198	5	9	6.7	7199	PASS
275	198	10	30	27.8	29776	PASS
365	198	1	100	3.4	3610	PASS
441	443	0.01	100	78.3	10102	PASS
442	198	40	100	59.3	63520	PASS
443	442	17	23	20.3	12905	PASS

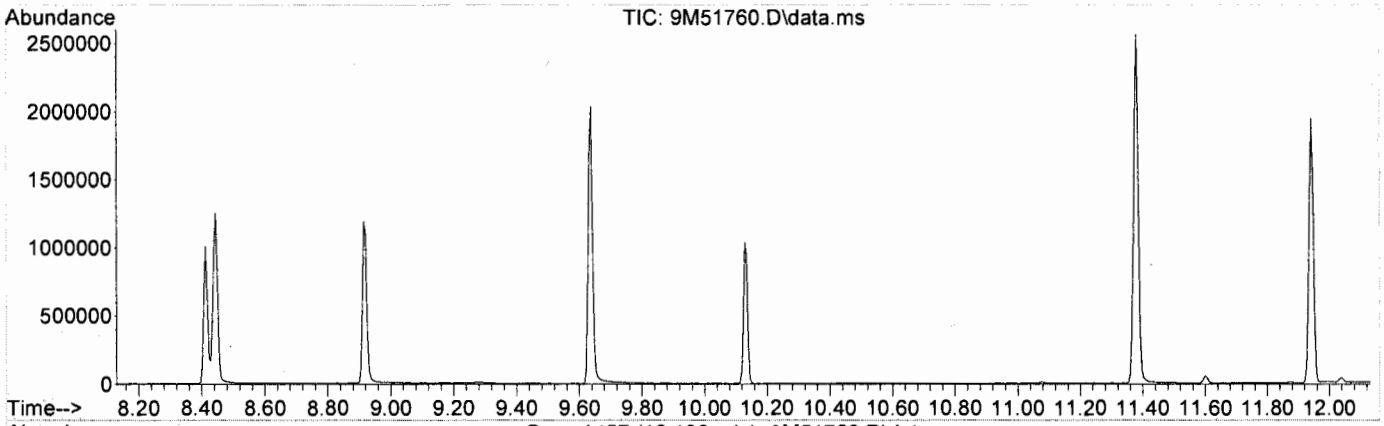
Data File	Sample Number	Analysis Date:
9M51761.D	CAL BNA@50PPM	07/31/13 08:59
9M51762.D	CAL BNA@196PP	07/31/13 09:24
9M51763.D	CAL BNA@160PP	07/31/13 09:46
9M51764.D	CAL BNA@120PP	07/31/13 10:09
9M51765.D	CAL BNA@80PPM	07/31/13 10:32
9M51766.D	CAL BNA@20PPM	07/31/13 10:55
9M51767.D	CAL BNA@10PPM	07/31/13 11:17
9M51768.D	CAL BNA@2PPM	07/31/13 11:40
9M51769.D	CAL BNA@.5PPM	07/31/13 12:03
9M51770.D	CAL BNA@50PPM	07/31/13 12:26
9M51771.D	ICV BNA@50PPM	07/31/13 12:48

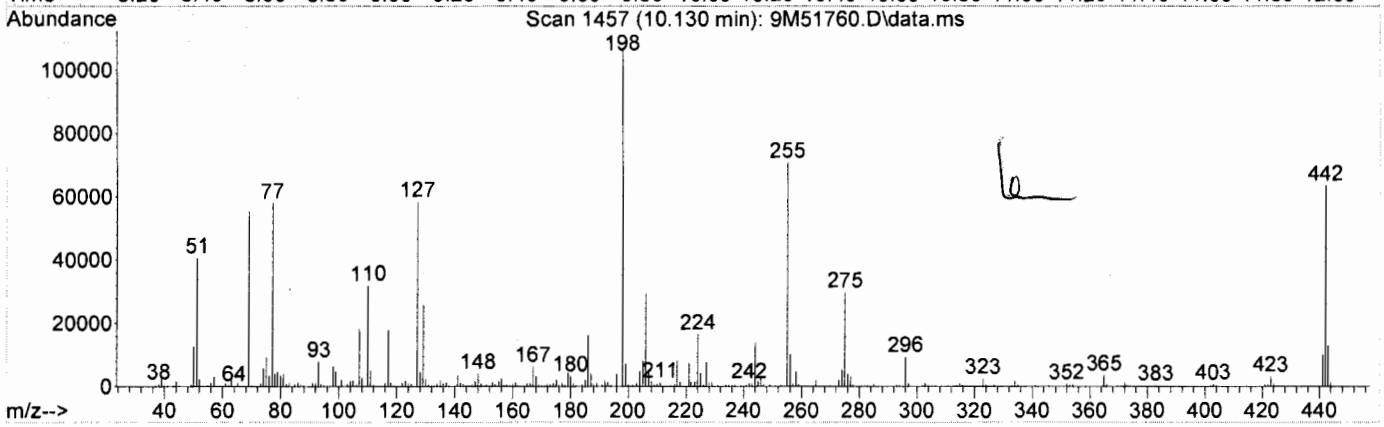
3080110 0102

Data Path : G:\GcMsData\2013\GCMS_9\Data\07-31-13\
Data File : 9M51760.D
Acq On : 31 Jul 2013 8:32
Operator : AHD/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2013\GCMS_9\METHODQT\9M_0725.M
Title : @GCMS_9,mg,625,8270
Last Update : Thu Jul 25 13:14:23 2013





Spectrum Information: Scan 1457

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.0	40696	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	51.7	55352	PASS
70	69	0.00	2	0.6	328	PASS
127	198	40	60	54.5	58376	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	107056	PASS
199	198	5	9	6.7	7199	PASS
275	198	10	30	27.8	29776	PASS
365	198	1	100	3.4	3610	PASS
441	443	0.01	100	78.3	10102	PASS
442	198	40	100	59.3	63520	PASS
443	442	17	23	20.3	12905	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 9

Data File: 9M51823.D
Analysis Date: 08/02/13 09:05
Method: EPA 8270C

Tune Scan/Time Range: Scan 1457

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	44.1	34472	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	58.5	45696	PASS
70	69	0.00	2	0.8	381	PASS
127	198	40	60	58.9	46040	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	78144	PASS
199	198	5	9	6.5	5107	PASS
275	198	10	30	27.7	21648	PASS
365	198	1	100	3.3	2604	PASS
441	443	0.01	100	75.2	6530	PASS
442	198	40	100	55.4	43312	PASS
443	442	17	23	20.1	8689	PASS

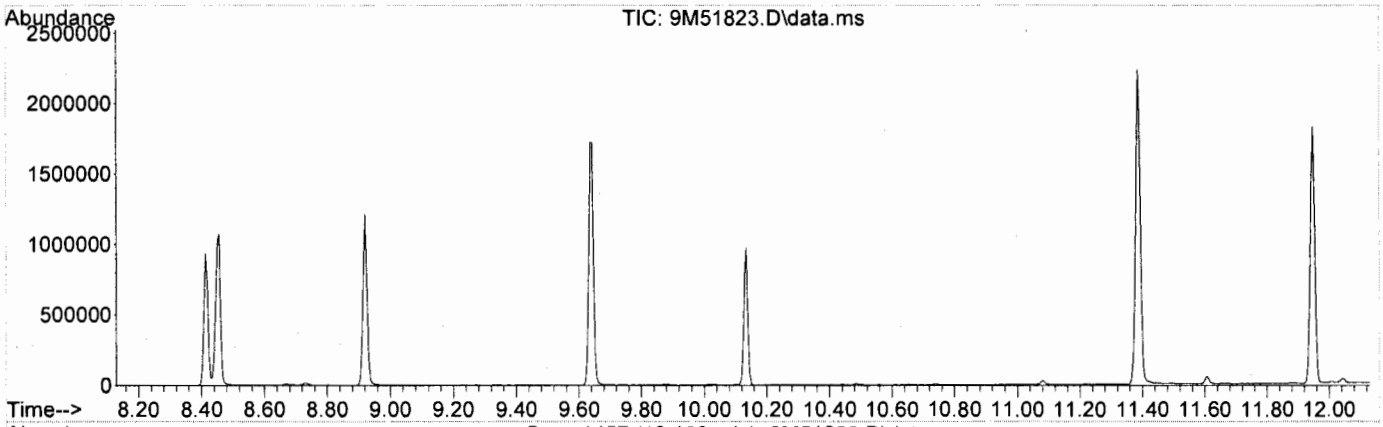
Data File	Sample Number	Analysis Date:
9M51824.D	CAL BNA@50PPM	08/02/13 09:33
9M51825.D	AC73706-022	08/02/13 09:56
9M51826.D	AC73706-025	08/02/13 10:19
9M51827.D	AC73722-005	08/02/13 10:41
9M51828.D	AC73722-004	08/02/13 11:04
9M51829.D	AC73722-001	08/02/13 11:27
9M51830.D	SMB25788(MS)	08/02/13 12:44
9M51831.D	SMB25788	08/02/13 13:07
9M51832.D	AC73758-002	08/02/13 14:20
9M51833.D	SMB25788	08/02/13 15:00
9M51834.D	AC73758-002(MS)	08/02/13 15:23
9M51835.D	AC73758-002(MSD	08/02/13 15:46
9M51836.D	AC73758-001	08/02/13 16:09
9M51837.D	AC73758-003	08/02/13 16:32
9M51838.D	AC73758-004	08/02/13 16:55
9M51839.D	AC73758-005	08/02/13 17:18
9M51840.D	AC73626-008	08/02/13 17:41
9M51841.D	AC73626-016	08/02/13 18:04
9M51842.D	AC73626-017	08/02/13 18:26
9M51843.D	AC73771-001	08/02/13 18:49
9M51844.D	AC73771-002	08/02/13 19:12
9M51845.D	AC73615-010	08/02/13 19:35
9M51846.D	AC73742-001	08/02/13 19:58
9M51847.D	AC73615-020(10X)	08/02/13 20:21

3080110 0104

Data Path : G:\GcMsData\2013\GCMS_9\Data\08-02-13\
Data File : 9M51823.D
Acq On : 2 Aug 2013 9:05
Operator : AHD/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2013\GCMS_9\METHODQT\9M_0731.M
Title : @GCMS_9,mg,625,8270
Last Update : Wed Jul 31 12:22:50 2013



Spectrum Information: Scan 1457

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.1	34472	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	58.5	45696	PASS
70	69	0.00	2	0.8	381	PASS
127	198	40	60	58.9	46040	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	78144	PASS
199	198	5	9	6.5	5107	PASS
275	198	10	30	27.7	21648	PASS
365	198	1	100	3.3	2604	PASS
441	443	0.01	100	75.2	6530	PASS
442	198	40	100	55.4	43312	PASS
443	442	17	23	20.1	8689	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 9M51848.D
Instrument: GCMS 9 **Analysis Date:** 08/05/13 09:20
Method: EPA 8270C

Tune Scan/Time Range: Average of 10.108 to 10.119 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	39.2	23711	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	52.9	31989	PASS
70	69	0.00	2	0.6	180	PASS
127	198	40	60	53.8	32528	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	60487	PASS
199	198	5	9	6.9	4190	PASS
275	198	10	30	28.7	17341	PASS
365	198	1	100	3.2	1939	PASS
441	443	0.01	100	78.2	5991	PASS
442	198	40	100	63.2	38227	PASS
443	442	17	23	20.0	7664	PASS

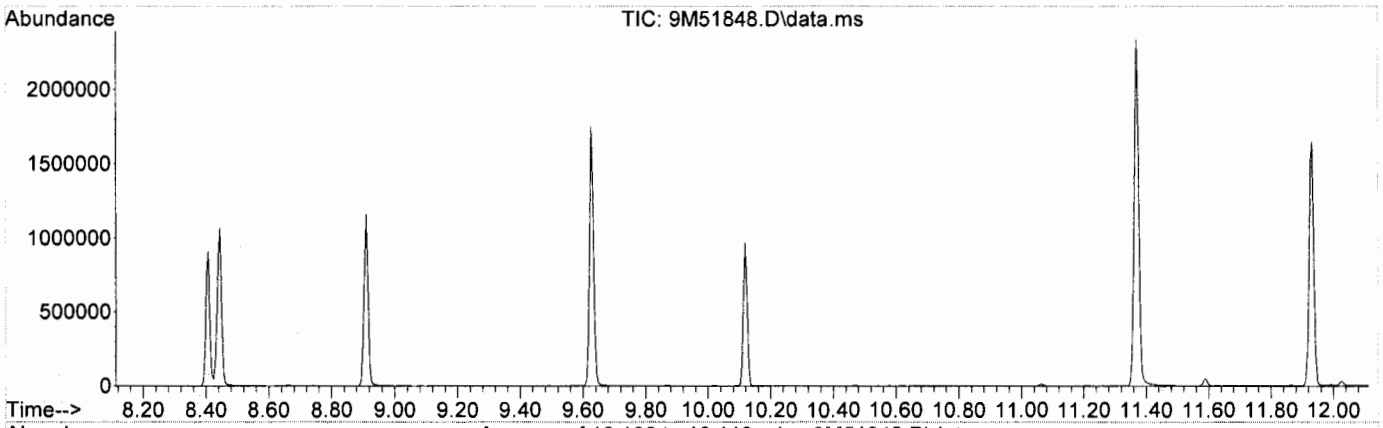
Data File	Sample Number	Analysis Date:
9M51849.D	CAL BNA@50PPM	08/05/13 09:48
9M51850.D	SMB25788	08/05/13 10:18
9M51851.D	WMB25804	08/05/13 15:30
9M51852.D	SMB25796	08/05/13 15:52
9M51853.D	SMB25796(MS)	08/05/13 16:15
9M51854.D	AC73729-001	08/05/13 16:38
9M51855.D	AC73729-001(MS)	08/05/13 17:00
9M51856.D	AC73729-001(MSD	08/05/13 17:23
9M51857.D	AC73729-004	08/05/13 17:46
9M51858.D	AC73729-046	08/05/13 18:09
9M51859.D	AC73729-037	08/05/13 18:31
9M51860.D	AC73729-040	08/05/13 18:54
9M51861.D	AC73729-010	08/05/13 19:16
9M51862.D	AC73729-013	08/05/13 19:39
9M51863.D	AC73615-020(3X)	08/05/13 20:02
9M51864.D	AC73729-022(3X)	08/05/13 20:24
9M51865.D	AC73729-049(3X)	08/05/13 20:47
9M51866.D	AC73729-052(3X)	08/05/13 21:09

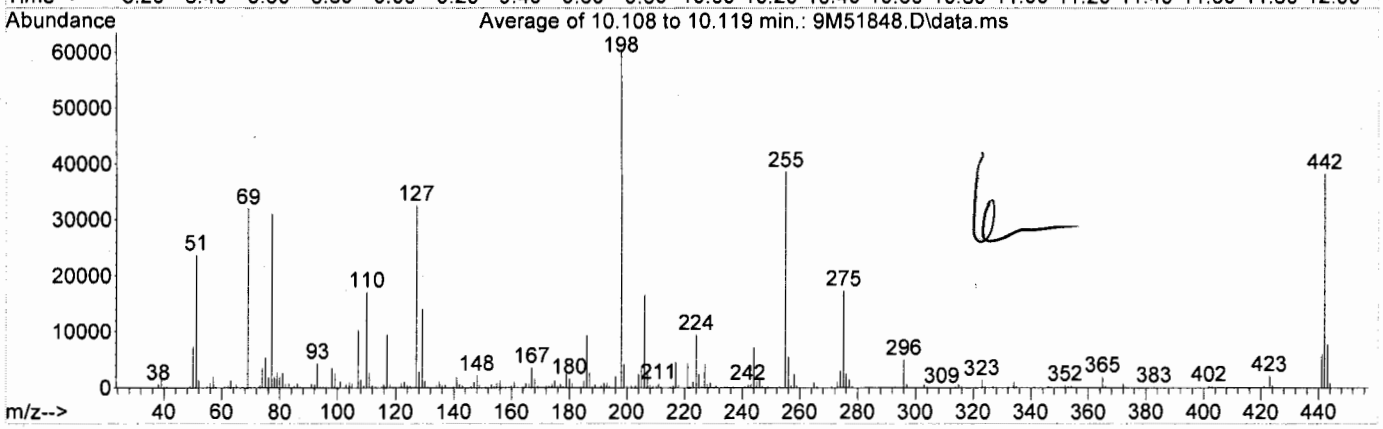
3080110 0106

Data Path : G:\GcMsData\2013\GCMS_9\Data\08-05-13\
Data File : 9M51848.D
Acq On : 5 Aug 2013 9:20
Operator : AHD/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2013\GCMS_9\METHODQT\9M_0731.M
Title : @GCMS_9,mg,625,8270
Last Update : Wed Jul 31 12:22:50 2013





Spectrum Information: Average of 10.108 to 10.119 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	39.2	23711	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	52.9	31989	PASS
70	69	0.00	2	0.6	180	PASS
127	198	40	60	53.8	32528	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	60487	PASS
199	198	5	9	6.9	4190	PASS
275	198	10	30	28.7	17341	PASS
365	198	1	100	3.2	1939	PASS
441	443	0.01	100	78.2	5991	PASS
442	198	40	100	63.2	38227	PASS
443	442	17	23	20.0	7664	PASS

Form 6
Initial Calibration

Method: EPA 8270C

Instrument: GCMS_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9M51761.	CAL BNA@50PPM	07/31/13 08:59	2	9M51768.	CAL BNA@2PPM	07/31/13 11:40
3	9M51767.	CAL BNA@10PPM	07/31/13 11:17	4	9M51766.	CAL BNA@20PPM	07/31/13 10:55
5	9M51765.	CAL BNA@80PPM	07/31/13 10:32	6	9M51764.	CAL BNA@120PPM	07/31/13 10:09
7	9M51763.	CAL BNA@160PPM	07/31/13 09:46	8	9M51762.	CAL BNA@196PPM	07/31/13 09:24
9	9M51769.	CAL BNA@.5PPM	07/31/13 12:03				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Pyridine	1	0	Avg	1.1921	0.9678	1.0933	1.1261	1.1951	1.2226	1.2275	1.2527	-----	1.16	3.20	1.00	1.00	8.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitrosodimethylamin	1	0	Avg	0.7234	0.5891	0.6566	0.6236	0.7246	0.7408	0.7438	0.7758	-----	0.697	3.14	0.999	1.00	9.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorophenol	1	0	Avg	1.2201	1.0598	1.0631	1.0950	1.2570	1.2960	1.3053	1.3738	-----	1.21	4.72	0.998	1.00	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzaldehyde	1	0	Qua	0.5511	0.8116	0.8411	0.8290	0.4336	0.2289	-----	-----	-----	0.616	5.55	0.794	0.994	41		50.00	2.00	10.00	20.00	80.00	120.0			
Aniline	1	0	Avg	1.7415	1.4906	1.7953	1.7366	1.7147	1.6774	1.5966	1.6909	1.3206	1.64	5.64	0.999	0.999	9.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.4651	0.4429	0.4450	0.4401	0.4696	0.4697	0.4705	0.4797	-----	0.460	5.69	1.00	1.00	3.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethyl)ether	1	0	Avg	1.1184	1.1416	1.1380	1.0976	1.1408	1.1319	1.1035	1.1448	1.0201	1.12	5.70	0.999	1.00	3.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	1.5921	1.4181	1.4842	1.4980	1.6449	1.6994	1.6802	1.8053	-----	1.60	5.59	0.997	0.999	8.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenol	1	0	Avg	1.6326	1.5867	1.4883	1.4689	1.6949	1.7306	1.6995	1.8084	-----	1.64	5.60	0.998	0.999	7.2	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Chlorophenol	1	0	Avg	1.4091	1.3012	1.3530	1.3504	1.4275	1.4371	1.4079	1.4921	-----	1.40	5.74	0.999	0.999	4.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Decane	1	0	Avg	0.9944	0.9961	1.0154	0.9601	1.0279	1.0402	1.0224	1.0526	-----	1.01	5.78	1.00	1.00	2.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,3-Dichlorobenzene	1	0	Avg	1.5295	1.5130	1.5109	1.4570	1.5309	1.5180	1.5368	1.5989	-----	1.52	5.87	0.999	1.00	2.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dichlorobenzene	1	0	Avg	1.5221	1.6524	1.5354	1.4544	1.4978	1.5386	1.5262	1.5968	-----	1.54	5.94	0.999	1.00	3.9	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Dichlorobenzene	1	0	Avg	1.4353	1.4923	1.4350	1.3746	1.4164	1.4334	1.4094	1.4756	-----	1.43	6.06	0.999	0.999	2.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzyl alcohol	1	0	Avg	0.8250	0.7055	0.8048	0.7958	0.8510	0.8579	0.8481	0.9103	-----	0.825	6.03	0.998	0.999	7.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-chloroisopropyl)et	1	0	Avg	0.9978	1.1211	1.0361	1.0134	1.0308	1.0090	0.9843	1.0285	-----	1.03	6.15	0.999	0.999	4.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylphenol	1	0	Avg	1.1111	1.0623	1.0973	1.0872	1.1502	1.1613	1.1528	1.2326	1.0219	1.12	6.11	0.998	0.999	5.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	1.7672	1.7925	1.7925	1.7471	1.8572	1.8570	1.8523	2.0180	-----	1.84	6.25	0.998	0.999	4.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachloroethane	1	0	Avg	0.5599	0.6013	0.5600	0.5446	0.5845	0.5848	0.5835	0.6074	-----	0.578	6.33	0.999	1.00	3.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitroso-di-n-propylan	1	0	Avg	0.9293	0.8146	0.9215	0.9123	0.9726	0.9734	0.9527	1.0269	0.8378	0.927	6.25	0.999	0.999	7.2	**(0.050)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3&4-Methylphenol	1	0	Avg	1.2326	1.1863	1.1875	1.1933	1.3056	1.3549	1.3684	1.5110	1.1196	1.27	6.24	0.994	0.999	9.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Avg	0.1709	0.1448	0.1565	0.1637	0.1724	0.1735	0.1744	0.1779	-----	0.167	6.37	1.00	1.00	6.7		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0	Avg	0.3583	0.3318	0.3592	0.3534	0.3592	0.3585	0.3586	0.3659	-----	0.356	6.39	1.00	1.00	2.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Isophorone	1	0	Avg	0.6129	0.5531	0.5882	0.5932	0.6288	0.6325	0.6394	0.6551	-----	0.613	6.57	1.00	1.00	5.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitrophenol	1	0	Avg	0.2130	0.1593	0.1832	0.1904	0.2116	0.2110	0.2132	0.2203	-----	0.200	6.63	0.999	1.00	10	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dimethylphenol	1	0	Avg	0.3632	0.3485	0.3483	0.3568	0.3654	0.3642	0.3657	0.3784	0.3453	0.360	6.65	1.00	1.00	3.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.2711	-----	0.1316	0.2047	0.3206	0.3288	0.3394	0.3515	-----	0.278	6.73	0.998	0.999	29		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethoxy)met	1	0	Avg	0.3529	0.3533	0.3565	0.3495	0.3645	0.3644	0.3671	0.3796	-----	0.361	6.73	0.999	1.00	2.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dichlorophenol	1	0	Avg	0.3173	0.2766	0.3016	0.3009	0.3182	0.3195	0.3221	0.3379	0.2777	0.308	6.81	0.999	1.00	6.7	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzene	1	0	Avg	0.3650	0.3490	0.3580	0.3477	0.3604	0.3603	0.3688	0.3783	-----	0.361	6.88	0.999	1.00	2.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Naphthalene	1	0	Avg	1.0430	1.1198	1.0778	1.0175	1.0399	1.0537	1.0583	1.1054	1.1110	1.07	6.95	0.999	1.00	3.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Qua	0.4080	0.3224	0.5574	0.4185	0.3886	0.3513	0.3355	0.3235	0.3152	0.380	6.98	0.994	0.999	20		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.2204	0.1949	0.2153	0.2098	0.2195	0.2202	0.2247	0.2337	-----	0.217	7.03	0.999	1.00	5.3	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Caprolactam	1	0	Qua	0.1118	0.0781	0.1031	0.1037	0.1149	0.1249	0.1294	0.1309	-----	0.112	7.26	0.997	1.00	16		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chloro-3-methylphen	1	0	Avg	0.3274	0.2781	0.2951	0.3078	0.3286	0.3261	0.3304	0.3507	-----	0.318	7.34	0.998	0.999	7.2	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylnaphthalene	1	0	Avg	0.7844	0.7649	0.7586	0.7449	0.7914	0.7911	0.8144	0.8415	-----	0.786	7.49	0.999	1.00	4.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Methylnaphthalenes (T	1	0	Avg	0.7844	0.7649	0.7593	0.7449	0.7916	0.7908	0.8164	0.8427	-----	0.787	7.49	0.999	1.00	4.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,1'-Biphenyl	1	0	Avg	1.0083	0.9910	0.9755	0.9759	1.0100	1.0172	1.0441	1.1034	-----	1.02	7.87	0.998	1.00	4.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2,4,5-Tetrachloroben	1	0	Avg	0.6387	0.6640	0.5971	0.5921	0.6159	0.6069	0.6185	0.6275	-----	0.620	7.62	1.00	1.00	3.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorocyclopentac	1	0	Qua	0.4152	0.2917	0.3308	0.3584	0.4120	0.4135	0.4186	0.4373	-----	0.385	7.61	0.999	0.999	13	**(0.050)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Avg	0.4344	0.3943	0.4080	0.4314	0.4830	0.4326	0.4552	0.4505	-----	0.436	7.71	0.998	0.998	6.3	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the spcc criteria — ** - ccc compound*
b - failed the ccc criteria — *** - spcc compound*
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.18
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

8080110 0107

Form 6
Initial Calibration

Method: EPA 8270C

Instrument: GCMS_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9M51761.	CAL BNA@50PPM	07/31/13 08:59	2	9M51768.	CAL BNA@2PPM	07/31/13 11:40
3	9M51767.	CAL BNA@10PPM	07/31/13 11:17	4	9M51766.	CAL BNA@20PPM	07/31/13 10:55
5	9M51765.	CAL BNA@80PPM	07/31/13 10:32	6	9M51764.	CAL BNA@120PPM	07/31/13 10:09
7	9M51763.	CAL BNA@160PPM	07/31/13 09:46	8	9M51762.	CAL BNA@196PPM	07/31/13 09:24
9	9M51769.	CAL BNA@.5PPM	07/31/13 12:03				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
2.4.5-Trichlorophenol	1	0	Avg	0.3856	0.3388	0.4100	0.4132	0.4283	0.3895	0.4298	0.4339	-----	0.404	7.74	0.997	0.998	7.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.3876	1.4196	1.4176	1.3422	1.3784	1.3293	1.3440	1.4009	-----	1.38	7.78	0.999	1.00	2.6		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Qua	1.1891	1.7021	1.6815	1.6476	1.1449	1.1158	1.1713	1.1670	-----	1.35	7.89	0.998	0.998	20		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1.4-Dimethylnaphthalei	1	0	Avg	0.9455	0.9843	0.9301	0.9073	0.9578	0.9546	0.9955	1.0498	-----	0.966	8.17	0.998	1.00	4.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.9455	0.9843	0.9301	0.9073	0.9578	0.9546	0.9955	1.0498	-----	0.966	8.17	0.998	1.00	4.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.8015	0.8361	0.7889	0.7869	0.7947	0.7792	0.7917	0.8188	-----	0.800	7.95	0.999	1.00	2.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.4188	0.3502	0.4160	0.4035	0.4161	0.3919	0.4038	0.4071	-----	0.401	7.97	0.999	0.999	5.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4628	0.4332	0.4385	0.4407	0.4585	0.4555	0.4756	0.4978	-----	0.458	8.16	0.998	1.00	4.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.8344	1.8234	1.7692	1.7280	1.8040	1.7659	1.8092	1.8384	-----	1.80	8.26	1.00	1.00	2.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.3891	1.3621	1.3700	1.3389	1.3690	1.3528	1.3870	1.4227	-----	1.37	8.11	0.999	1.00	1.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2.6-Dinitrotoluene	1	0	Avg	0.3221	0.2560	0.3075	0.2978	0.3328	0.3287	0.3449	0.3583	-----	0.319	8.17	0.998	1.00	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.2218	1.2220	1.1576	1.1331	1.2139	1.2025	1.2476	1.2740	-----	1.21	8.41	0.999	1.00	3.8	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Avg	0.3306	0.2667	0.3129	0.3273	0.3269	0.3062	0.3000	0.3066	-----	0.310	8.33	0.999	0.999	6.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2.4-Dinitrophenol	1	0	Qua	0.2149	-----	0.1118	0.1482	0.2233	0.2220	0.2417	0.2441	-----	0.201	8.42	0.998	0.999	25	**(0.050)	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Avg	1.7243	1.7689	1.6477	1.6309	1.6902	1.6393	1.6832	1.7210	1.8301	1.70	8.57	0.999	1.00	3.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2.4-Dinitrotoluene	1	0	Avg	0.4377	0.3092	0.3811	0.3856	0.4358	0.4312	0.4465	0.4536	-----	0.410	8.54	0.999	1.00	12		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Avg	0.2637	0.1841	0.2357	0.2458	0.2655	0.2608	0.2691	0.2714	-----	0.250	8.45	1.00	1.00	12	**(0.050)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2.3.4.6-Tetrachlorophe	1	0	Avg	0.4071	0.3440	0.3654	0.3718	0.3967	0.3965	0.4103	0.4195	-----	0.389	8.67	0.999	1.00	6.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.4846	1.4006	1.3846	1.3635	1.4408	1.4145	1.4530	1.4880	-----	1.43	8.89	0.999	1.00	3.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.7811	0.7165	0.6970	0.7018	0.7760	0.7706	0.8009	0.8398	-----	0.761	8.88	0.998	1.00	6.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.4212	1.2782	1.3208	1.3043	1.4041	1.3741	1.4156	1.4554	-----	1.37	8.76	0.999	1.00	4.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Avg	0.3413	0.2523	0.2977	0.3039	0.3326	0.3164	0.3278	0.3253	-----	0.312	8.90	0.999	0.999	9.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.3821	0.2960	0.3316	0.3585	0.3639	0.3588	0.3680	0.3849	-----	0.356	9.53	0.998	0.999	8.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4.6-Dinitro-2-methylphe	1	0	Qua	0.1420	0.0427	0.1012	0.1144	0.1420	0.1432	0.1495	0.1541	-----	0.124	8.92	0.998	0.999	30		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamine	1	0	Avg	0.6331	0.6109	0.6368	0.6167	0.6380	0.6403	0.6480	0.6711	-----	0.637	8.99	0.999	1.00	2.9	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2.4.6-Tribromophenol	1	0	Avg	0.1165	0.0874	0.1057	0.1115	0.1200	0.1227	0.1237	0.1287	-----	0.115	9.13	0.999	1.00	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1.2-Diphenylhydrazine	1	0	Avg	0.6606	0.6429	0.6713	0.6628	0.6712	0.6687	0.6645	0.6730	-----	0.664	9.04	1.00	1.00	1.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.2428	0.2313	0.2275	0.2281	0.2464	0.2528	0.2533	0.2663	-----	0.244	9.38	0.999	1.00	5.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.2647	0.2680	0.2582	0.2584	0.2638	0.2647	0.2642	0.2736	-----	0.264	9.44	1.00	1.00	1.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.3466	0.2695	0.3312	0.3370	0.3519	0.3596	0.3571	0.3714	-----	0.341	9.71	0.999	1.00	9.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Qua	0.1882	0.0911	0.1426	0.1652	0.1954	0.1986	0.2067	0.2122	-----	0.175	9.64	0.998	1.00	23	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0571	1.1111	1.0594	1.0074	1.0606	1.0578	1.0771	1.1062	-----	1.07	9.88	0.999	1.00	3.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.0833	0.9932	1.0393	1.0277	1.0623	1.0608	1.0944	1.1253	-----	1.06	9.94	0.999	1.00	3.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	1.0300	0.9736	0.9733	0.9652	1.0134	1.0171	1.0515	1.0731	-----	1.01	10.11	0.999	1.00	3.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Qua	1.2913	0.9197	1.1013	1.1516	1.2914	1.3072	1.3408	1.3733	0.8115	1.18	10.49	0.999	1.00	17		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0	Avg	1.3352	1.1318	1.1835	1.2063	1.3190	1.3209	1.3641	1.3540	-----	1.28	11.23	1.00	1.00	7.0	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	1.1246	0.9417	1.0559	1.0427	1.0779	1.1030	1.0770	1.1474	-----	1.07	11.49	0.998	0.999	5.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzidine	1	0	Qua	0.3969	0.2153	0.3988	0.4338	0.3442	0.3055	0.2905	0.3013	-----	0.336	11.38	0.984	0.995	21		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Terphenyl-d14	1	0	Avg	0.8010	0.6930	0.7484	0.7507	0.7639	0.7781	0.7716	0.8355	-----	0.768	11.67	0.998	0.999	5.4		25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	
4.4'-DDE	1	0	Avg	0.2626	0.2083	0.2377	0.2355	0.2499	0.2610	0.2586	0.2817	-----	0.249	11.61	0.996	0.998	8.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4.4'-DDD	1	0	LinF	0.4250	0.2795	0.3587	0.3777	0.4238	0.4377	0.4354	0.4677	-----	0.401	12.00	0.998	0.999	15		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the spcc criteria — ** - ccc compound*
b - failed the ccc criteria — *** - spcc compound*
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.18
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form 6
Initial Calibration

Method: EPA 8270C

Instrument: GCMS_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9M51761.	CAL BNA@50PPM	07/31/13 08:59	2	9M51768.	CAL BNA@2PPM	07/31/13 11:40
3	9M51767.	CAL BNA@10PPM	07/31/13 11:17	4	9M51766.	CAL BNA@20PPM	07/31/13 10:55
5	9M51765.	CAL BNA@80PPM	07/31/13 10:32	6	9M51764.	CAL BNA@120PPM	07/31/13 10:09
7	9M51763.	CAL BNA@160PPM	07/31/13 09:46	8	9M51762.	CAL BNA@196PPM	07/31/13 09:24
9	9M51769.	CAL BNA@.5PPM	07/31/13 12:03				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Butylbenzylphthalate	1	0	Qua	0.4684	0.2694	0.3724	0.4034	0.4603	0.4835	0.4833	0.5130	-----	0.432	12.26	0.998	0.999	19		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	LinF	0.3892	0.2362	0.3234	0.3371	0.3794	0.3954	0.3909	0.4278	-----	0.360	12.37	0.996	0.998	17		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Qua	0.3611	0.2209	0.3180	0.3455	0.3479	0.3542	0.3494	0.3446	-----	0.330	12.88	1.00	1.00	14		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]anthracene	1	0	Avg	1.0643	0.9776	0.9874	0.9827	1.0133	1.0321	1.0270	1.0589	-----	1.02	12.92	0.999	1.00	3.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	0.9480	0.9314	0.8927	0.8791	0.8896	0.9321	0.9331	0.9454	-----	0.919	12.96	1.00	1.00	3.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Qua	0.6295	0.3593	0.4974	0.5343	0.6121	0.6510	0.6489	0.6987	-----	0.579	12.95	0.997	0.999	19		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Qua	1.2259	0.5544	0.7982	0.9593	1.2360	1.3268	1.3915	1.5181	-----	1.13	13.70	0.993	0.999	29	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[b]fluoranthene	1	0	Avg	1.2423	0.9489	1.1040	1.0765	1.2176	1.2956	1.2612	1.3540	-----	1.19	14.13	0.998	0.999	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[k]fluoranthene	1	0	Avg	1.2478	1.2378	1.1611	1.1941	1.1572	1.1839	1.2568	1.2759	-----	1.21	14.16	0.998	0.999	3.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]pyrene	1	0	Avg	1.1842	0.8860	1.0315	1.0421	1.1289	1.1815	1.2028	1.2581	-----	1.11	14.51	0.998	1.00	11	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyrene	1	0	Avg	1.2239	0.9071	1.0370	1.0734	1.1874	1.2721	1.2926	1.3575	-----	1.17	15.95	0.997	1.00	13		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzo[a,h]anthracene	1	0	Avg	0.9997	0.7697	0.8423	0.8777	0.9684	1.0313	1.0398	1.1019	-----	0.954	15.97	0.997	1.00	12		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[g,h,i]perylene	1	0	Avg	-----	0.8663	0.9057	0.9030	0.9714	1.0464	1.0401	1.0811	0.7629	0.947	16.30	0.999	1.00	11			2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50

Flags

a - failed the spcc criteria — ** - ccc compound*

b - failed the ccc criteria — *** - spcc compound*

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.18

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M51824.D **Instrument:** GCMS 9

Cont Calibration Date/Time 8/2/2013 9:33:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
1,4-Dichlorobenzene-d4	1	0	I	5.92	40.00	40				0.000	0.00	
Pyridine	1	0		3.20	48.14	50			1.160	1.117	3.72	
N-Nitrosodimethylamine	1	0		3.14	47.20	50			0.697	0.658	5.60	
2-Fluorophenol	1	0	S	4.72	49.29	50			1.209	1.192	1.43	
Benzaldehyde	1	0		5.55	53.82	50			0.616	0.620	7.64	
Aniline	1	0		5.64	52.77	50			1.641	1.731	5.53	
Pentachloroethane	1	0		5.68	49.72	50			0.460	0.458	0.56	
bis(2-Chloroethyl)ether	1	0		5.70	48.66	50			1.115	1.085	2.67	
Phenol-d5	1	0	S	5.59	48.19	50			1.603	1.545	3.62	
Phenol	1	0	CC	5.61	49.92	50	20		1.639	1.636	0.16	
2-Chlorophenol	1	0		5.74	49.60	50			1.397	1.386	0.79	
N-Decane	1	0		5.78	47.98	50			1.014	0.973	4.03	
1,3-Dichlorobenzene	1	0		5.87	48.78	50			1.524	1.487	2.44	
1,4-Dichlorobenzene	1	0	CC	5.93	47.89	50	20		1.541	1.476	4.22	
1,2-Dichlorobenzene	1	0		6.05	48.35	50			1.434	1.387	3.30	
Benzyl alcohol	1	0		6.03	49.47	50			0.825	0.816	1.05	
bis(2-chloroisopropyl)ether	1	0		6.14	46.59	50			1.028	0.958	6.82	
2-Methylphenol	1	0		6.12	49.52	50			1.120	1.109	0.96	
Acetophenone	1	0		6.25	47.83	50			1.836	1.756	4.35	
Hexachloroethane	1	0		6.33	47.16	50			0.578	0.545	5.68	
N-Nitroso-di-n-propylamine	1	0	CP	6.24	50.15	50	0.05		0.927	0.930	0.30	
3&4-Methylphenol	1	0		6.24	48.89	50			1.273	1.245	2.21	
Naphthalene-d8	1	0	I	6.93	40.00	40				0.000	0.00	
Nitrobenzene-d5	1	0	S	6.37	26.51	25			0.167	0.177	6.03	
Nitrobenzene	1	0		6.39	49.32	50			0.356	0.351	1.36	
Isophorone	1	0		6.57	50.20	50			0.613	0.615	0.40	
2-Nitrophenol	1	0	CC	6.63	51.75	50	20		0.200	0.207	3.50	
2,4-Dimethylphenol	1	0		6.65	49.30	50			0.360	0.355	1.40	
Benzoic Acid	1	0		6.73	45.25	50			0.278	0.244	9.51	
bis(2-Chloroethoxy)methane	1	0		6.73	49.37	50			0.361	0.357	1.25	
2,4-Dichlorophenol	1	0	CC	6.81	50.39	50	20		0.308	0.310	0.78	
1,2,4-Trichlorobenzene	1	0		6.88	48.87	50			0.361	0.353	2.27	
Naphthalene	1	0		6.94	47.27	50			1.070	1.011	5.47	
4-Chloroaniline	1	0		6.98	52.77	50			0.380	0.417	5.55	
Hexachlorobutadiene	1	0	CC	7.03	49.14	50	20		0.217	0.214	1.72	
Caprolactam	1	0		7.26	51.19	50			0.112	0.115	2.38	
4-Chloro-3-methylphenol	1	0	CC	7.34	49.68	50	20		0.318	0.316	0.65	
2-Methylnaphthalene	1	0		7.48	48.83	50			0.786	0.768	2.33	
Methylnaphthalenes	1	0		7.48	48.81	50	20			0.768	2.39	
1,1'-Biphenyl	1	0		7.86	48.39	50			1.016	0.983	3.22	
Acenaphthene-d10	1	0	I	8.38	40.00	40				0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.62	48.03	50			0.620	0.596	3.93	
Hexachlorocyclopentadiene	1	0	CP	7.61	47.52	50	0.05		0.385	0.373	4.95	
2,4,6-Trichlorophenol	1	0	CC	7.70	49.20	50	20		0.436	0.429	1.59	
2,4,5-Trichlorophenol	1	0		7.74	52.16	50			0.404	0.421	4.33	
2-Fluorobiphenyl	1	0	S	7.77	24.68	25			1.378	1.360	1.29	
2-Chloronaphthalene	1	0		7.89	48.00	50			1.352	1.116	3.99	
1,4-Dimethylnaphthalene	1	0		8.17	47.38	50			0.966	0.915	5.23	
Dimethylnaphthalenes	1	0		8.17	47.38	50	20			0.915	5.23	
Diphenyl Ether	1	0		7.95	48.51	50			0.800	0.776	2.98	
2-Nitroaniline	1	0		7.96	49.29	50			0.401	0.395	1.42	
Coumarin	1	0		8.16	48.21				0.458			
Acenaphthylene	1	0		8.25	49.06	50			1.797	1.763	1.88	
Dimethylphthalate	1	0		8.11	49.23	50			1.374	1.353	1.55	
2,6-Dinitrotoluene	1	0		8.17	50.34	50			0.319	0.321	0.68	
Acenaphthene	1	0	CC	8.41	47.75	50	20		1.209	1.155	4.50	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M51824.D **Instrument:** GCMS 9

Cont Calibration Date/Time 8/2/2013 9:33:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
3-Nitroaniline	1	0		8.33	54.88	50			0.310	0.340	9.75	
2,4-Dinitrophenol	1	0	CP	8.42	53.20	50	0.05		0.201	0.212	6.41	
Dibenzofuran	1	0		8.56	48.63	50			1.704	1.657	2.74	
2,4-Dinitrotoluene	1	0		8.54	51.75	50			0.410	0.424	3.50	
4-Nitrophenol	1	0	CP	8.45	50.93	50	0.05		0.250	0.254	1.86	
2,3,4,6-Tetrachlorophenol	1	0		8.67	49.23	50			0.389	0.383	1.54	
Fluorene	1	0		8.89	48.75	50			1.429	1.393	2.50	
4-Chlorophenyl-phenylether	1	0		8.88	48.72	50			0.761	0.741	2.56	
Diethylphthalate	1	0		8.76	49.36	50			1.372	1.354	1.28	
4-Nitroaniline	1	0		8.90	53.15	50			0.312	0.332	6.29	
Atrazine	1	0		9.53	53.33	50			0.356	0.379	6.67	
Phenanthrene-d10	1	0	I	9.86	40.00	40				0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.93	52.89	50			0.124	0.140	5.77	
n-Nitrosodiphenylamine	1	0	CC	9.00	48.36	50	20		0.637	0.616	3.27	
2,4,6-Tribromophenol	1	0	S	9.13	52.16	50			0.115	0.120	4.33	
1,2-Diphenylhydrazine	1	0		9.04	47.65	50			0.664	0.633	4.69	
4-Bromophenyl-phenylether	1	0		9.38	48.71	50			0.244	0.237	2.57	
Hexachlorobenzene	1	0		9.44	49.10	50			0.265	0.260	1.81	
N-Octadecane	1	0		9.71	48.69	50			0.341	0.332	2.62	
Pentachlorophenol	1	0	CC	9.64	50.44	50	20		0.175	0.184	0.87	
Phenanthrene	1	0		9.89	47.55	50			1.067	1.015	4.89	
Anthracene	1	0		9.94	49.56	50			1.061	1.051	0.89	
Carbazole	1	0		10.11	49.08	50			1.012	0.994	1.85	
Di-n-butylphthalate	1	0		10.49	49.83	50			1.176	1.255	0.34	
Fluoranthene	1	0	CC	11.23	50.00	50	20		1.277	1.277	0.01	
Chrysene-d12	1	0	I	12.94	40.00	40				0.000	0.00	
Pyrene	1	0		11.50	50.70	50			1.071	1.086	1.41	
Benzidine	1	0		11.39	65.92	50			0.336	0.472	31.84	
Terphenyl-d14	1	0	S	11.68	25.29	25			0.768	0.777	1.15	
4,4'-DDE	1	0		11.61	51.24				0.249			
4,4'-DDD	1	0		12.01	47.71				0.401			
Butylbenzylphthalate	1	0		12.27	51.88	50			0.432	0.466	3.76	
4,4'-DDT	1	0		12.37	43.21				0.360			
3,3'-Dichlorobenzidine	1	0		12.89	54.96	50			0.330	0.384	9.93	
Benzo[a]anthracene	1	0		12.93	50.09	50			1.018	1.020	0.18	
Chrysene	1	0		12.97	48.99	50			0.919	0.900	2.02	
bis(2-Ethylhexyl)phthalate	1	0		12.96	51.73	50			0.579	0.617	3.46	
Perylene-d12	1	0	I	14.58	40.00	40				0.000	0.00	
Di-n-octylphthalate	1	0	CC	13.71	55.48	50	20		1.126	1.294	10.96	
Benzo[b]fluoranthene	1	0		14.14	48.44	50			1.188	1.150	3.12	
Benzo[k]fluoranthene	1	0		14.17	47.49	50			1.214	1.153	5.02	
Benzo[a]pyrene	1	0	CC	14.52	48.94	50	20		1.114	1.091	2.11	
Indeno[1,2,3-cd]pyrene	1	0		15.97	51.60	50			1.169	1.206	3.21	
Dibenzo[a,h]anthracene	1	0		16.00	52.89	50			0.954	1.009	5.77	
Benzo[g,h,i]perylene	1	0		16.37	53.14	50			0.947	1.007	6.27	
4-Methylphenol	1	100		0.00	0.00	50				0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50			0.966	0.000	100.00	
Endrin	1	100		0.00	0.00	50				0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10				0.000	100.00	
Heptachlor	1	100		0.00	0.00	10				0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10				0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10				0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50			0.787	0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50				0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50				0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M51824.D **Instrument:** GCMS 9

Cont Calibration Date/Time 8/2/2013 9:33:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M51849.D **Instrument:** GCMS 9

Cont Calibration Date/Time 8/5/2013 9:48:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
1,4-Dichlorobenzene-d4	1	0	I	5.91	40.00	40				0.000	0.00	
Pyridine	1	0		3.20	49.77	50			1.160	1.154	0.45	
N-Nitrosodimethylamine	1	0		3.13	49.80	50			0.697	0.694	0.39	
2-Fluorophenol	1	0	S	4.72	50.34	50			1.209	1.217	0.68	
Benzaldehyde	1	0		5.54	55.51	50			0.616	0.630	11.02	
Aniline	1	0		5.63	54.02	50			1.641	1.773	8.05	
Pentachloroethane	1	0		5.67	50.29	50			0.460	0.463	0.58	
bis(2-Chloroethyl)ether	1	0		5.69	50.39	50			1.115	1.124	0.78	
Phenol-d5	1	0	S	5.59	49.74	50			1.603	1.594	0.53	
Phenol	1	0	CC	5.60	50.91	50	20		1.639	1.669	1.83	
2-Chlorophenol	1	0		5.73	49.83	50			1.397	1.393	0.34	
N-Decane	1	0		5.77	48.76	50			1.014	0.988	2.49	
1,3-Dichlorobenzene	1	0		5.86	49.39	50			1.524	1.506	1.22	
1,4-Dichlorobenzene	1	0	CC	5.93	48.01	50	20		1.541	1.479	3.97	
1,2-Dichlorobenzene	1	0		6.05	49.58	50			1.434	1.422	0.83	
Benzyl alcohol	1	0		6.02	49.54	50			0.825	0.817	0.92	
bis(2-chloroisopropyl)ether	1	0		6.13	46.71	50			1.028	0.960	6.58	
2-Methylphenol	1	0		6.11	49.88	50			1.120	1.117	0.23	
Acetophenone	1	0		6.24	48.62	50			1.836	1.785	2.76	
Hexachloroethane	1	0		6.33	47.36	50			0.578	0.548	5.27	
N-Nitroso-di-n-propylamine	1	0	CP	6.24	50.35	50	0.05		0.927	0.933	0.71	
3&4-Methylphenol	1	0		6.24	49.80	50			1.273	1.268	0.40	
Naphthalene-d8	1	0	I	6.92	40.00	40				0.000	0.00	
Nitrobenzene-d5	1	0	S	6.36	26.25	25			0.167	0.175	4.99	
Nitrobenzene	1	0		6.38	48.59	50			0.356	0.346	2.82	
Isophorone	1	0		6.56	49.40	50			0.613	0.606	1.20	
2-Nitrophenol	1	0	CC	6.63	50.59	50	20		0.200	0.203	1.18	
2,4-Dimethylphenol	1	0		6.65	49.53	50			0.360	0.356	0.94	
Benzoic Acid	1	0		6.72	36.38	50			0.278	0.192	27.24	
bis(2-Chloroethoxy)methane	1	0		6.72	48.84	50			0.361	0.353	2.31	
2,4-Dichlorophenol	1	0	CC	6.81	51.29	50	20		0.308	0.316	2.57	
1,2,4-Trichlorobenzene	1	0		6.87	49.73	50			0.361	0.359	0.54	
Naphthalene	1	0		6.94	47.56	50			1.070	1.017	4.88	
4-Chloroaniline	1	0		6.97	53.01	50			0.380	0.419	6.03	
Hexachlorobutadiene	1	0	CC	7.02	48.43	50	20		0.217	0.211	3.14	
Caprolactam	1	0		7.25	51.17	50			0.112	0.114	2.34	
4-Chloro-3-methylphenol	1	0	CC	7.34	50.61	50	20		0.318	0.322	1.22	
2-Methylnaphthalene	1	0		7.48	48.61	50			0.786	0.765	2.77	
Methylnaphthalenes	1	0		7.48	48.58	50	20			0.765	2.83	
1,1'-Biphenyl	1	0		7.86	48.41	50			1.016	0.983	3.18	
Acenaphthene-d10	1	0	I	8.37	40.00	40				0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.61	47.76	50			0.620	0.592	4.47	
Hexachlorocyclopentadiene	1	0	CP	7.60	45.51	50	0.05		0.385	0.357	8.99	
2,4,6-Trichlorophenol	1	0	CC	7.70	48.36	50	20		0.436	0.422	3.29	
2,4,5-Trichlorophenol	1	0		7.73	52.62	50			0.404	0.425	5.25	
2-Fluorobiphenyl	1	0	S	7.77	23.93	25			1.378	1.318	4.29	
2-Chloronaphthalene	1	0		7.88	49.57	50			1.352	1.152	0.87	
1,4-Dimethylnaphthalene	1	0		8.17	46.46	50			0.966	0.897	7.08	
Dimethylnaphthalenes	1	0		8.17	46.46	50	20			0.897	7.08	
Diphenyl Ether	1	0		7.94	44.94	50			0.800	0.719	10.12	
2-Nitroaniline	1	0		7.96	48.10	50			0.401	0.386	3.80	
Coumarin	1	0		8.15	48.02				0.458			
Acenaphthylene	1	0		8.25	48.12	50			1.797	1.729	3.76	
Dimethylphthalate	1	0		8.10	48.51	50			1.374	1.333	2.97	
2,6-Dinitrotoluene	1	0		8.16	49.31	50			0.319	0.314	1.39	
Acenaphthene	1	0	CC	8.40	47.84	50	20		1.209	1.157	4.32	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M51849.D **Instrument:** GCMS 9

Cont Calibration Date/Time 8/5/2013 9:48:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
3-Nitroaniline	1	0		8.32	53.48	50			0.310	0.331	6.95	
2,4-Dinitrophenol	1	0	CP	8.41	53.70	50	0.05		0.201	0.214	7.40	
Dibenzofuran	1	0		8.56	48.03	50			1.704	1.637	3.94	
2,4-Dinitrotoluene	1	0		8.53	52.05	50			0.410	0.427	4.11	
4-Nitrophenol	1	0	CP	8.44	50.36	50	0.05		0.250	0.251	0.72	
2,3,4,6-Tetrachlorophenol	1	0		8.66	49.43	50			0.389	0.385	1.14	
Fluorene	1	0		8.88	48.30	50			1.429	1.380	3.40	
4-Chlorophenyl-phenylether	1	0		8.87	48.26	50			0.761	0.734	3.47	
Diethylphthalate	1	0		8.74	49.07	50			1.372	1.346	1.87	
4-Nitroaniline	1	0		8.89	51.45	50			0.312	0.321	2.90	
Atrazine	1	0		9.52	53.12	50			0.356	0.378	6.23	
Phenanthrene-d10	1	0	I	9.85	40.00	40				0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.92	52.32	50			0.124	0.139	4.65	
n-Nitrosodiphenylamine	1	0	CC	8.99	47.85	50	20		0.637	0.610	4.30	
2,4,6-Tribromophenol	1	0	S	9.12	51.82	50			0.115	0.119	3.64	
1,2-Diphenylhydrazine	1	0		9.03	45.77	50			0.664	0.608	8.46	
4-Bromophenyl-phenylether	1	0		9.36	48.65	50			0.244	0.237	2.69	
Hexachlorobenzene	1	0		9.43	48.79	50			0.265	0.258	2.42	
N-Octadecane	1	0		9.69	47.08	50			0.341	0.321	5.85	
Pentachlorophenol	1	0	CC	9.63	48.28	50	20		0.175	0.175	3.44	
Phenanthrene	1	0		9.87	47.93	50			1.067	1.023	4.13	
Anthracene	1	0		9.93	49.03	50			1.061	1.040	1.94	
Carbazole	1	0		10.10	48.68	50			1.012	0.985	2.64	
Di-n-butylphthalate	1	0		10.47	49.75	50			1.176	1.253	0.50	
Fluoranthene	1	0	CC	11.22	51.26	50	20		1.277	1.309	2.51	
Chrysene-d12	1	0	I	12.92	40.00	40				0.000	0.00	
Pyrene	1	0		11.48	48.34	50			1.071	1.036	3.32	
Benzidine	1	0		11.37	63.57	50			0.336	0.457	27.14	
Terphenyl-d14	1	0	S	11.66	24.44	25			0.768	0.751	2.24	
4,4'-DDE	1	0		11.59	47.89				0.249			
4,4'-DDD	1	0		11.99	45.89				0.401			
Butylbenzylphthalate	1	0		12.25	49.47	50			0.432	0.444	1.07	
4,4'-DDT	1	0		12.35	42.82				0.360			
3,3'-Dichlorobenzidine	1	0		12.87	55.96	50			0.330	0.391	11.93	
Benzo[a]anthracene	1	0		12.91	49.75	50			1.018	1.013	0.51	
Chrysene	1	0		12.95	48.24	50			0.919	0.887	3.52	
bis(2-Ethylhexyl)phthalate	1	0		12.94	49.45	50			0.579	0.588	1.09	
Perylene-d12	1	0	I	14.56	40.00	40				0.000	0.00	
Di-n-octylphthalate	1	0	CC	13.69	53.17	50	20		1.126	1.234	6.33	
Benzo[b]fluoranthene	1	0		14.12	48.72	50			1.188	1.157	2.57	
Benzo[k]fluoranthene	1	0		14.15	48.82	50			1.214	1.186	2.36	
Benzo[a]pyrene	1	0	CC	14.49	49.78	50	20		1.114	1.109	0.45	
Indeno[1,2,3-cd]pyrene	1	0		15.94	51.03	50			1.169	1.193	2.05	
Dibenzo[a,h]anthracene	1	0		15.96	51.51	50			0.954	0.983	3.02	
Benzo[g,h,i]perylene	1	0		16.33	52.34	50			0.947	0.992	4.69	
4-Methylphenol	1	100		0.00	0.00	50				0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50			0.966	0.000	100.00	
Endrin	1	100		0.00	0.00	50				0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10				0.000	100.00	
Heptachlor	1	100		0.00	0.00	10				0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10				0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10				0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50			0.787	0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50				0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50				0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M51849.D **Instrument:** GCMS 9

Cont Calibration Date/Time 8/5/2013 9:48:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

FORM8

Internal Standard Areas

Evaluation Std Data File: 9M51761.D Method: EPA 8270C

Analysis Date/Time: 07/31/13 08:59

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	85470	5.92	318657	6.93	190593	8.38	374669	9.86	434903	12.93	341498	14.56
Eval File Area Limit:	42735-170940		159328-637314		95296-381186		187334-749338		217452-869806		170749-682996	
Eval File Rt Limit:	5.42-6.42		6.43-7.43		7.88-8.88		9.36-10.36		12.43-13.43		14.06-15.06	

Data File	Sample												
9M51761.D	CAL BNA@50	85470	5.92	318657	6.93	190593	8.38	374669	9.86	434903	12.93	341498	14.56
9M51762.D	CAL BNA@19	70541	5.92	273615	6.93	171957	8.38	333093	9.86	376488	12.93	278487	14.57
9M51763.D	CAL BNA@16	74151	5.92	277120	6.93	168447	8.38	325922	9.86	394252	12.93	306340	14.57
9M51764.D	CAL BNA@12	78142	5.92	297927	6.93	180421	8.38	341428	9.86	393004	12.93	310785	14.56
9M51765.D	CAL BNA@80	84933	5.92	322808	6.93	192184	8.38	371353	9.86	442762	12.93	351777	14.57
9M51766.D	CAL BNA@20	91368	5.92	342213	6.93	205356	8.38	384191	9.86	451383	12.92	354785	14.56
9M51767.D	CAL BNA@10	86463	5.92	330727	6.93	198794	8.38	372839	9.86	436367	12.92	339394	14.56
9M51768.D	CAL BNA@2F	81952	5.92	314995	6.93	187991	8.38	362866	9.86	436223	12.92	345274	14.56
9M51769.D	CAL BNA@.5	85168	5.92	329856	6.93	196621	8.38	375291	9.86	453954	12.92	355892	14.56
9M51771.D	ICV BNA@50	90676	5.92	338864	6.93	200506	8.38	380075	9.86	478956	12.92	377067	14.56

I1 =	1,4-Dichlorobenzene-d4	I4 =	Phenanthrene-d10	**625/8270 Internal Standard concentration = 40 mg/L (in final extract)**
I2 =	Naphthalene-d8	I5 =	Chrysene-d12	**624/8260 Internal Standard concentration = 30ug/L**
I3 =	Acenaphthene-d10	I6 =	Perylene-d12	**524 Internal Standard concentration =5ug/L**

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 9M51824.D Method: EPA 8270C

Analysis Date/Time: 08/02/13 09:33

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	91020	5.92	340360	6.93	204956	8.38	398400	9.86	457215	12.94	356771	14.58
Eval File Area Limit:	45510-182040		170180-680720		102478-409912		199200-796800		228608-914430		178386-713542	
Eval File Rt Limit:	5.42-6.42		6.43-7.43		7.88-8.88		9.36-10.36		12.44-13.44		14.08-15.08	

Data File	Sample												
9M51825.D	AC73706-022	107116	5.92	405937	6.93	234998	8.37	406900	9.86	367797	12.93	269530	14.57
9M51826.D	AC73706-025	119219	5.92	448264	6.93	256235	8.37	439494	9.86	399168	12.93	309256	14.57
9M51827.D	AC73722-005	101630	5.92	380244	6.93	220258	8.37	368916	9.86	336823	12.93	260093	14.57
9M51828.D	AC73722-004	101681	5.91	374793	6.93	210597	8.37	356333	9.86	306282	12.93	241342	14.58
9M51829.D	AC73722-001	103099	5.92	382497	6.93	210723	8.38	341063	9.86	307796	12.93	262054	14.59
9M51830.D	SMB25788(M	120372	5.92	434319	6.94	261398	8.40	435868	9.88	347213	12.94	266472	14.59
9M51831.D	SMB25788	0 A	0.00 R	0 A	0.00 R	0 A	0.00 R	0 A	0.00 R	0 A	0.00 R	0 A	0.00 R
9M51832.D	AC73758-002	117393	5.92	436989	6.94	254598	8.39	442452	9.87	383213	12.94	285275	14.60
9M51833.D	SMB25788	107531	5.92	394427	6.93	229334	8.38	401300	9.86	375775	12.93	279842	14.58
9M51834.D	AC73758-002(	108973	5.91	391563	6.93	240034	8.37	409079	9.86	382261	12.93	291074	14.57
9M51835.D	AC73758-002(	100279	5.91	360177	6.93	215398	8.37	361740	9.86	332865	12.93	252930	14.57
9M51836.D	AC73758-001	113232	5.92	419081	6.93	240301	8.37	408134	9.86	348612	12.93	262438	14.58
9M51837.D	AC73758-003	102893	5.92	381485	6.93	221518	8.37	380358	9.86	353798	12.93	269974	14.58
9M51838.D	AC73758-004	109311	5.92	404742	6.92	237510	8.37	412339	9.86	379804	12.93	289593	14.58
9M51839.D	AC73758-005	119937	5.92	443881	6.93	259146	8.37	443117	9.86	402403	12.93	310125	14.58
9M51840.D	AC73626-008	99726	5.92	371850	6.93	220701	8.37	383168	9.86	352385	12.93	275756	14.58
9M51841.D	AC73626-016	108726	5.91	397172	6.92	228734	8.37	397745	9.86	357708	12.93	278494	14.59
9M51842.D	AC73626-017	95704	5.92	358133	6.92	204718	8.37	347402	9.86	296392	12.93	231544	14.59
9M51843.D	AC73771-001	100428	5.92	370834	6.93	212048	8.37	358538	9.86	311006	12.93	244721	14.59
9M51844.D	AC73771-002	105406	5.91	388729	6.93	222216	8.37	366878	9.86	312835	12.94	249822	14.59
9M51845.D	AC73615-010	94346	5.91	324780	6.93	240815	8.39	376635	9.88	334713	12.94	292156	14.59
9M51846.D	AC73742-001	97623	5.92	367153	6.93	212738	8.37	368604	9.86	329731	12.94	264422	14.59
9M51847.D	AC73615-020(	105295	5.92	392461	6.93	232207	8.37	404454	9.86	388433	12.94	295765	14.59

I1 =	1,4-Dichlorobenzene-d4	I4 =	Phenanthrene-d10	**625/8270 Internal Standard concentration = 40 mg/L (in final extract)**
I2 =	Naphthalene-d8	I5 =	Chrysene-d12	**624/8260 Internal Standard concentration = 30ug/L**
I3 =	Acenaphthene-d10	I6 =	Perylene-d12	**524 Internal Standard concentration =5ug/L**

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 9M51849.D Method: EPA 8270C

Analysis Date/Time: 08/05/13 09:48

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	80832	5.91	307197	6.92	187581	8.37	365134	9.85	447779	12.92	370879	14.56
Eval File Area Limit:	40416-161664		153598-614394		93790-375162		182567-730268		223890-895558		185440-741758	
Eval File Rt Limit:	5.41-6.41		6.42-7.42		7.87-8.87		9.35-10.35		12.42-13.42		14.06-15.06	

Data File	Sample												
9M51850.D	SMB25788	101289	5.92	392490	6.92	234411	8.36	434532	9.85	486333	12.92	379918	14.55
9M51851.D	WMB25804	96129	5.92	367754	6.93	225539	8.37	423633	9.85	515948	12.92	413705	14.56
9M51852.D	SMB25796	90485	5.91	348437	6.92	206151	8.36	393086	9.85	452483	12.91	351747	14.55
9M51853.D	SMB25796(M	90599	5.92	332611	6.92	208397	8.36	376420	9.85	432400	12.91	343284	14.55
9M51854.D	AC73729-001	107386	5.92	412848	6.92	246289	8.36	450223	9.85	454954	12.91	335917	14.55
9M51855.D	AC73729-001(	106792	5.92	395965	6.92	247178	8.36	432950	9.85	452038	12.91	346877	14.55
9M51856.D	AC73729-001(	107445	5.92	399385	6.92	247541	8.36	438694	9.85	445637	12.91	328975	14.55
9M51857.D	AC73729-004	105699	5.92	386369	6.92	215755	8.36	337635	9.85	338561	12.92	286893	14.56
9M51858.D	AC73729-046	95342	5.91	356185	6.92	204114	8.36	342721	9.85	310050	12.92	264454	14.56
9M51859.D	AC73729-037	111564	5.91	419616	6.92	245283	8.36	420902	9.85	368803	12.92	286663	14.56
9M51860.D	AC73729-040	103609	5.92	382435	6.92	190334	8.36	330054	9.85	317257	12.92	255184	14.56
9M51861.D	AC73729-010	97831	5.92	354876	6.92	188298	8.36	314714	9.85	375820	12.93	377967	14.59
9M51862.D	AC73729-013	108934	5.92	396380	6.92	209098	8.37	334439	9.85	366447	12.92	335632	14.57
9M51863.D	AC73615-020(	99868	5.91	380684	6.92	223706	8.37	375584	9.85	356755	12.92	310269	14.56
9M51864.D	AC73729-022(	94147	5.92	356200	6.92	210420	8.37	351955	9.85	357165	12.92	287144	14.56
9M51865.D	AC73729-049(	100696	5.92	374610	6.92	217809	8.37	365559	9.85	348973	12.92	295698	14.56
9M51866.D	AC73729-052(	98023	5.91	372745	6.92	218281	8.37	366296	9.85	353686	12.92	295854	14.56

I1 =	1,4-Dichlorobenzene-d4	I4 =	Phenanthrene-d10	**625/8270 Internal Standard concentration = 40 mg/L (in final extract)**
I2 =	Naphthalene-d8	I5 =	Chrysene-d12	**624/8260 Internal Standard concentration = 30ug/L**
I3 =	Acenaphthene-d10	I6 =	Perylene-d12	**524 Internal Standard concentration =5ug/L**

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

PCB Data

Form1

ORGANICS PCB REPORT

Sample Number: AC73771-001
Client Id: BB-COMP-1-0801113
Data File: 3G77923.D
Analysis Date: 08/02/13 13:11
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 91

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.027	U	11097-69-1	Aroclor-1254	0.027	U
11104-28-2	Aroclor-1221	0.027	U	11096-82-5	Aroclor-1260	0.027	U
11141-16-5	Aroclor-1232	0.027	U	37324-23-5	Aroclor-1262	0.027	U
53469-21-9	Aroclor-1242	0.027	U	11100-14-4	Aroclor-1268	0.027	U
12672-29-6	Aroclor-1248	0.027	U	1336-36-3	Aroclor (Total)	0.027	U

Worksheet #: 272488

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3080110 0121

Data Path : G:\Gcdata\2013\GC_3\Data\08-02-13\
Data File : 3G77923.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 2 Aug 2013 13:11
Operator : MS
Sample : AC73771-001
Misc : S,PCB
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 02 13:31:18 2013
Quant Method : G:\GCDATA\2013\GC_3\METHODQT\3G_C0715.M
Quant Title : @GC_3,ug,608,8082
QLast Update : Mon Jul 15 16:15:58 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	4.010	3.975	2445064	2997786	132.835	105.454
45)DCB-Surrogate	10.068	10.720	2188840	3285648	123.643	106.800

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

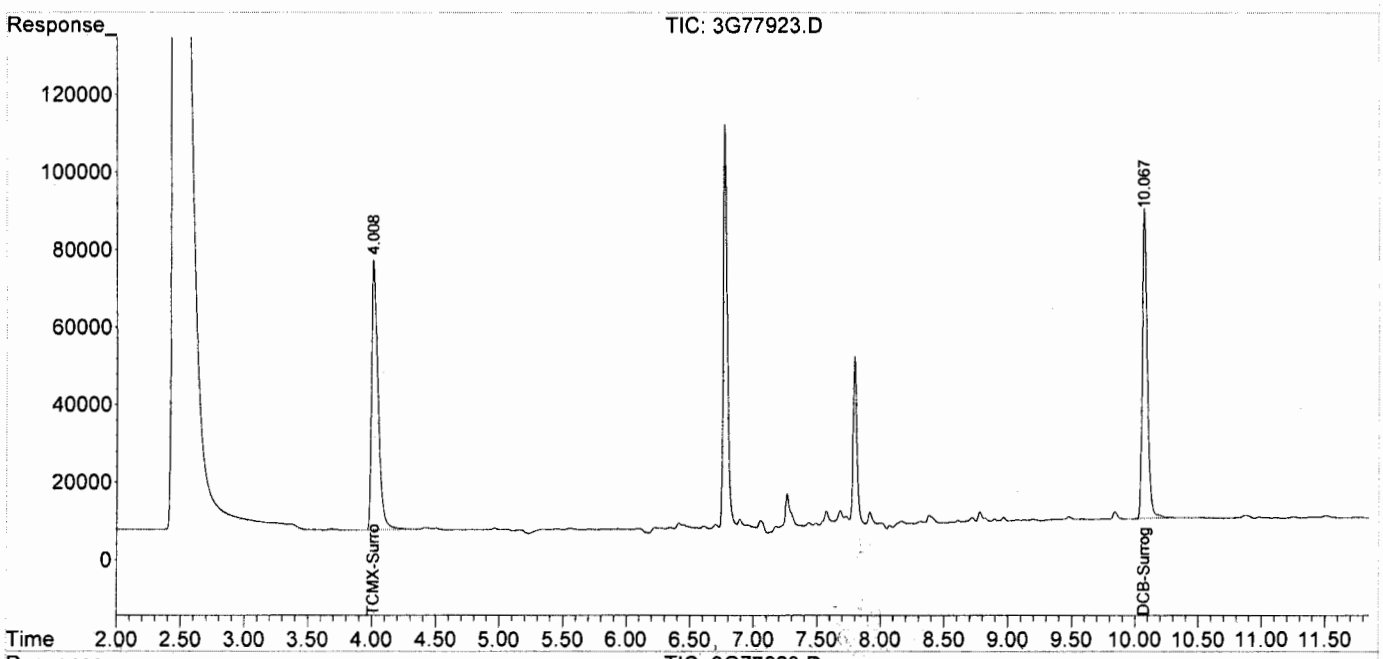
Quantitation Report (QT Reviewed)

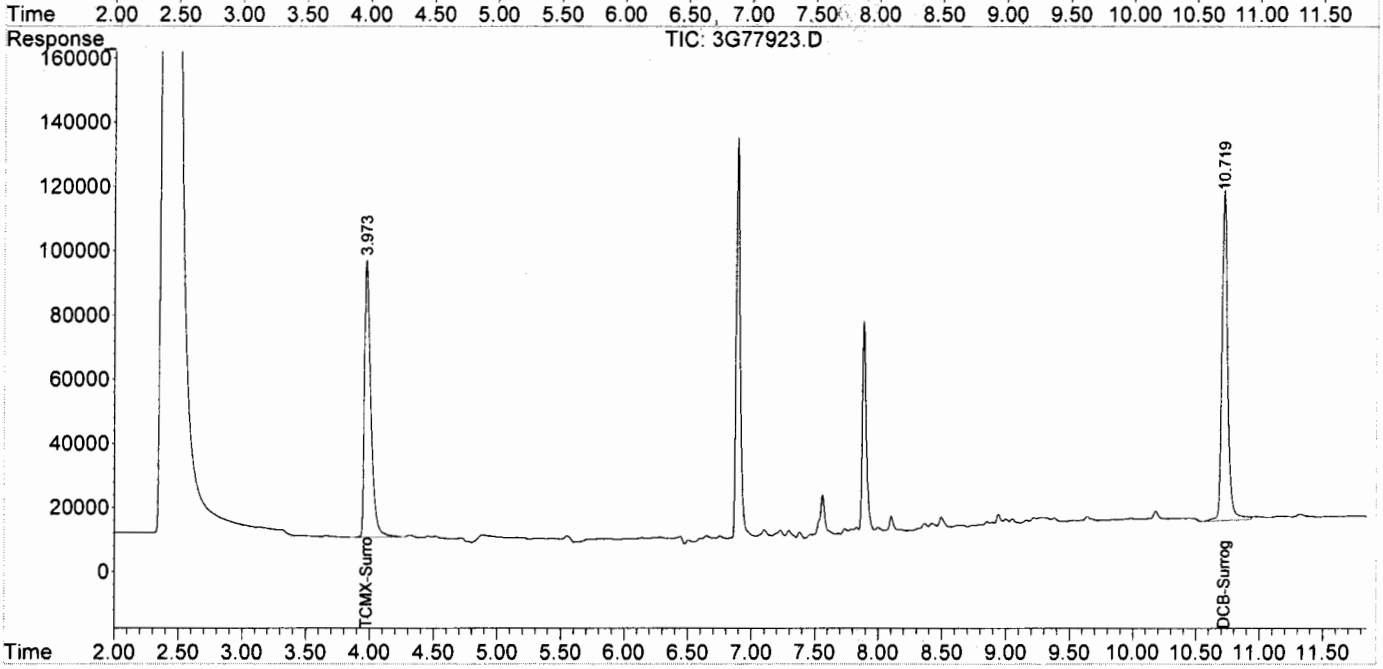
3080110 0122

Data Path : G:\Gcdata\2013\GC_3\Data\08-02-13\
Data File : 3G77923.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 2 Aug 2013 13:11
Operator : MS
Sample : AC73771-001
Misc : S,PCB
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 02 13:31:18 2013
Quant Method : G:\GCDATA\2013\GC_3\METHODQT\3G_C0715.M
Quant Title : @GC_3,ug,608,8082
QLast Update : Mon Jul 15 16:15:58 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Form1

ORGANICS PCB REPORT

Sample Number: AC73771-002
Client Id: BB-COMP-2-0801113
Data File: 3G77924.D
Analysis Date: 08/02/13 13:26
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 89

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.028	U	11097-69-1	Aroclor-1254	0.028	U
11104-28-2	Aroclor-1221	0.028	U	11096-82-5	Aroclor-1260	0.028	U
11141-16-5	Aroclor-1232	0.028	U	37324-23-5	Aroclor-1262	0.028	U
53469-21-9	Aroclor-1242	0.028	U	11100-14-4	Aroclor-1268	0.028	U
12672-29-6	Aroclor-1248	0.028	U	1336-36-3	Aroclor (Total)	0.028	U

Worksheet #: 272488

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3080110 0124

Data Path : G:\Gcdata\2013\GC_3\Data\08-02-13\
Data File : 3G77924.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 2 Aug 2013 13:26
Operator : MS
Sample : AC73771-002
Misc : S,PCB
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 02 14:23:31 2013
Quant Method : G:\GCDATA\2013\GC_3\METHODQT\3G_C0715.M
Quant Title : @GC_3,ug,608,8082
QLast Update : Mon Jul 15 16:15:58 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	4.010	3.974	2175367	2667491	118.183	93.835
45)DCB-Surrogate	10.070	10.718	2042828	2884040	115.395	93.746m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

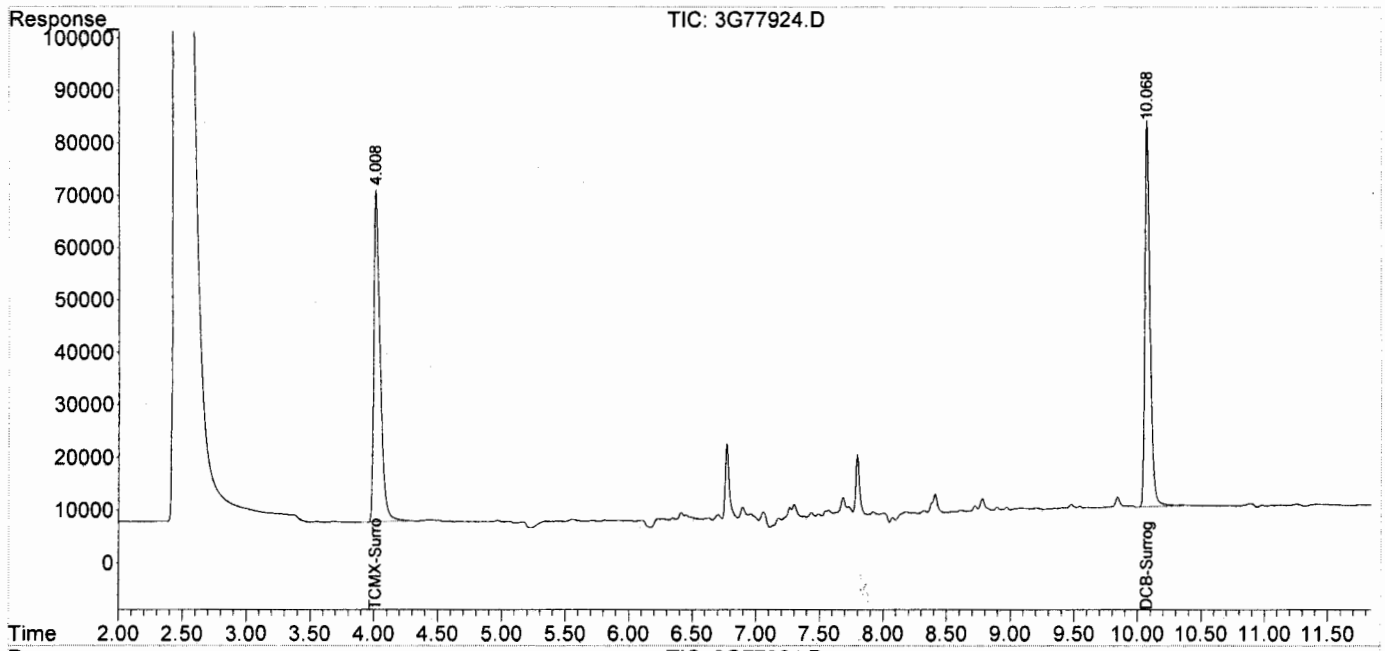
Quantitation Report (QT Reviewed)

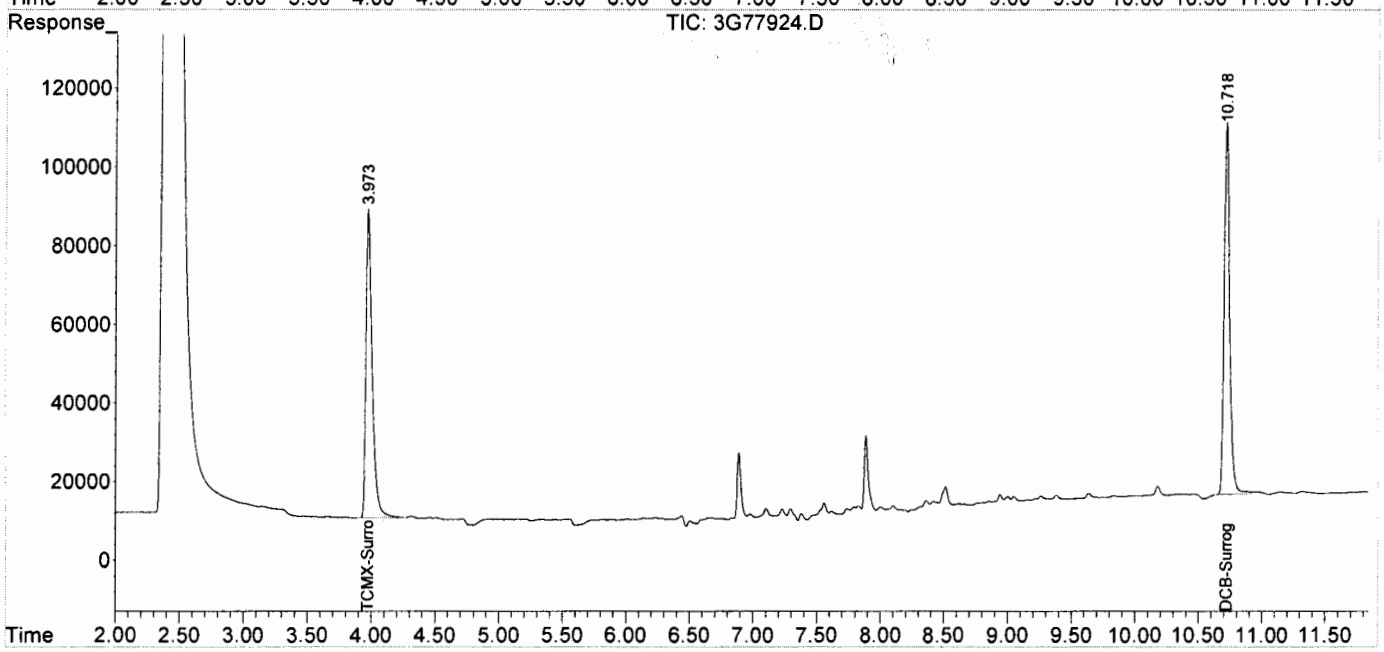
3080110 0125

Data Path : G:\Gcdata\2013\GC_3\Data\08-02-13\
Data File : 3G77924.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 2 Aug 2013 13:26
Operator : MS
Sample : AC73771-002
Misc : S,PCB
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 02 14:23:31 2013
Quant Method : G:\GCDATA\2013\GC_3\METHODQT\3G_C0715.M
Quant Title : @GC_3,ug,608,8082
QLast Update : Mon Jul 15 16:15:58 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Form1

ORGANICS PCB REPORT

Sample Number: SMB25779
Client Id:
Data File: 2G83010.D
Analysis Date: 08/02/13 11:56
Date Rec/Extracted: NA-08/02/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.025	U	11097-69-1	Aroclor-1254	0.025	U
11104-28-2	Aroclor-1221	0.025	U	11096-82-5	Aroclor-1260	0.025	U
11141-16-5	Aroclor-1232	0.025	U	37324-23-5	Aroclor-1262	0.025	U
53469-21-9	Aroclor-1242	0.025	U	11100-14-4	Aroclor-1268	0.025	U
12672-29-6	Aroclor-1248	0.025	U				

Worksheet #: 272488 ***Total Target Concentration*** 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3080110 0127

Data Path : G:\Gcdata\2013\GC_2\Data\08-02-13\
Data File : 2G83010.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 2 Aug 2013 11:56
Operator : MS
Sample : SMB25779
Misc : S,PCB
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 02 12:09:05 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_C07016.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Tue Jul 16 16:02:46 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	3.917	3.993	397906	372263	77.055	77.626
45)DCB-Surrogate	10.238	11.056	237200	210792	50.664m	50.217

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

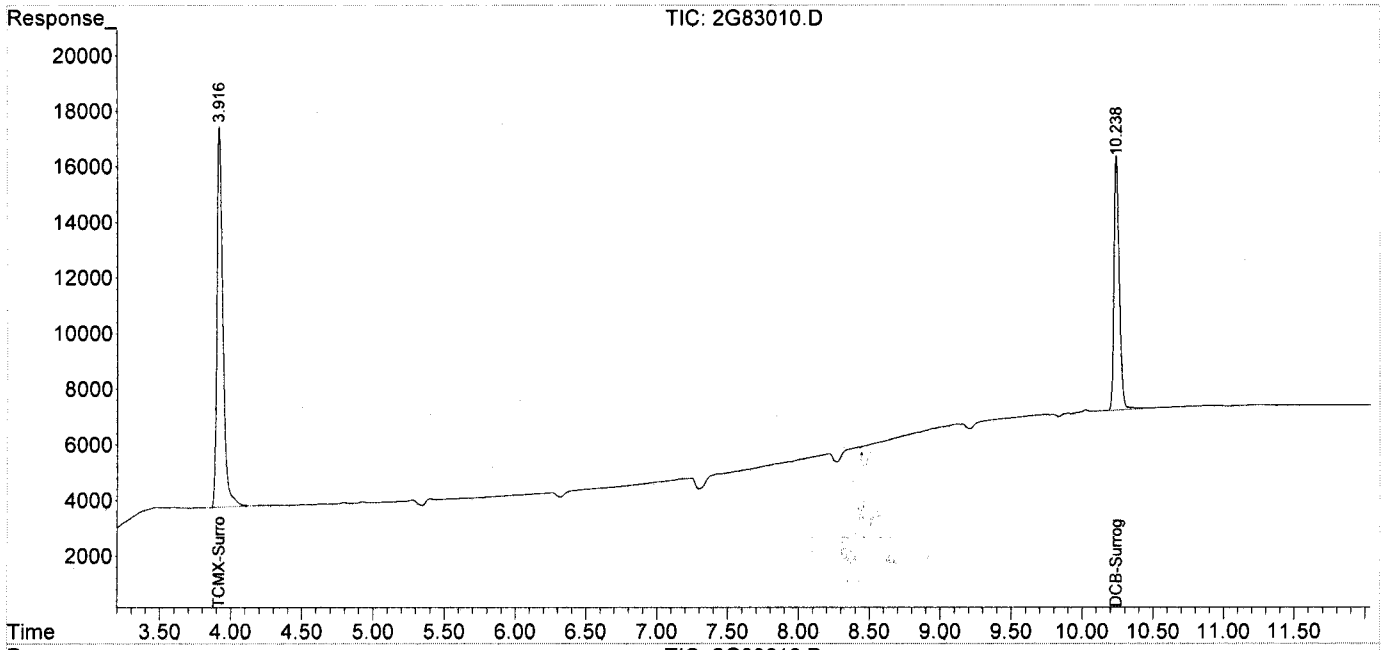
Quantitation Report (QT Reviewed)

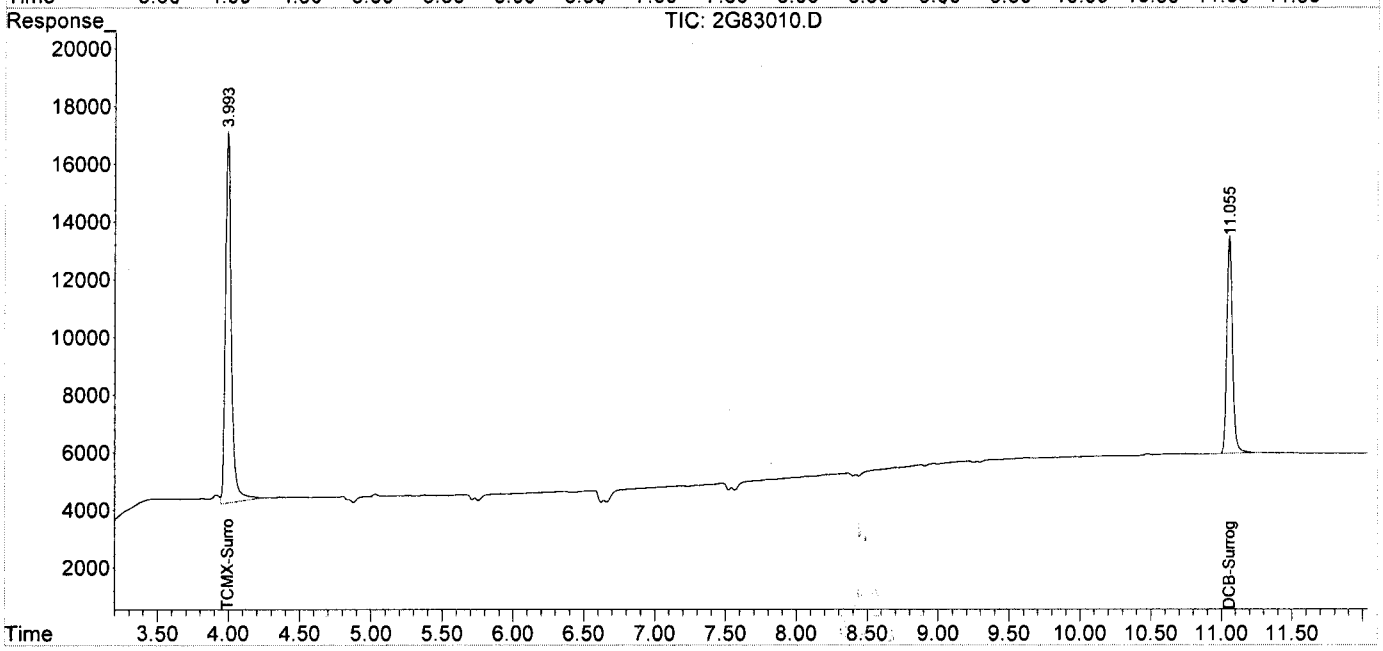
3080110 0128

Data Path : G:\Gcdata\2013\GC_2\Data\08-02-13\
Data File : 2G83010.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 2 Aug 2013 11:56
Operator : MS
Sample : SMB25779
Misc : S,PCB
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 02 12:09:05 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_C07016.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Tue Jul 16 16:02:46 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





FORM2

Surrogate Recovery

Method: EPA 8082

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column2 S2 Recov	Column1 S3 Recov	Column2 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
2G83010.D	SMB25779	Soil	08/02/13 11:56	1		77	78	51	50		
3G77923.D	AC73771-001	Soil	08/02/13 13:11	1		133	105	124	107		
3G77924.D	AC73771-002	Soil	08/02/13 13:26	1		118	94	115	94		
2G83011.D	SMB25779(M	Soil	08/02/13 12:11	1		83	81	58	59		
2G83037.D	AC73723-001(	Soil	08/02/13 19:30	1		88	84	92	88		
2G83038.D	AC73723-001(	Soil	08/02/13 19:46	1		78	72	83	82		
2G83039.D	AC73723-001	Soil	08/02/13 20:01	1		83	79	89	85		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8082

Soil Limits

Compound	Spike Amt	Limits
S1=TCMX-Surrogate	100	37-141
S2=TCMX-Surrogate	100	37-141
S3=DCB-Surrogate	100	34-146
S4=DCB-Surrogate	100	34-146

Form3
Recovery Data
QC Batch: SMB25779

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G83011.D	SMB25779(MS)	8/2/2013 12:11:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	790.5	0	1000	79	30	163
Aroclor-1260 -Total	1	793.556	0	1000	79	25	166

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB25779

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G83037.D	AC73723-001(MS)	8/2/2013 7:30:00 PM
Non Spike(If applicable):	2G83039.D	AC73723-001	8/2/2013 8:01:00 PM
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	833.814	0	1000	83	30	163
Aroclor-1260 -Total	1	829.612	0	1000	83	25	166

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G83038.D	AC73723-001(MSD)	8/2/2013 7:46:00 PM
Non Spike(If applicable):	2G83039.D	AC73723-001	8/2/2013 8:01:00 PM
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	750.678	0	1000	75	30	163
Aroclor-1260 -Total	1	746.348	0	1000	75	25	166

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA

QC Batch: SMB25779

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G83038.D	AC73723-001(MSD)	8/2/2013 7:46:00 PM
Duplicate(If applicable):	2G83037.D	AC73723-001(MS)	8/2/2013 7:30:00 PM
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Aroclor-1016 -Total	1	750.678	833.814	10	40
Aroclor-1260 -Total	1	746.348	829.612	11	37

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: SMB25779
Blank Data File: 2G83010.D
Matrix: Soil

Blank Analysis Date: 08/02/13 11:56
Blank Extraction Date: 08/02/13
(If Applicable)
Method: EPA 8082

Sample Number	Data File	Analysis Date
AC73771-001	3G77923.D	08/02/13 13:11
AC73771-002	3G77924.D	08/02/13 13:26
AC73723-001	2G83039.D	08/02/13 20:01
AC73723-001(MSD	2G83038.D	08/02/13 19:46
AC73723-001(MS)	2G83037.D	08/02/13 19:30
SMB25779(MS)	2G83011.D	08/02/13 12:11

Form 5

Method: EPA 8082

Instrument: GC_3

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
3G77333.D	50	07/15/13 10:22	Aqueous					
3G77334.D	BLK	07/15/13 11:32	Aqueous					
3G77335.D	BLK	07/15/13 11:47	Aqueous					
3G77336.D	BLK	07/15/13 12:02	Aqueous					
3G77337.D	BLK	07/15/13 12:17	Aqueous					
3G77338.D	BLK	07/15/13 12:32	Aqueous					
3G77339.D	BLK	07/15/13 12:47	Aqueous					
3G77340.D	BLK	07/15/13 13:03	Aqueous					
3G77341.D	CAL 1660@50PPB	07/15/13 13:23	Aqueous	3G77341.	10.0901	0	10.7221	0
3G77342.D	CAL 1660@200PPB	07/15/13 13:38	Aqueous	3G77341.	10.0856	0.0446	10.7199	0.0205
3G77343.D	CAL 1660@500PPB	07/15/13 13:54	Aqueous	3G77341.	10.0836	0.0644	10.7195	0.0243
3G77344.D	CAL 1660@1000PPB	07/15/13 14:09	Aqueous	3G77341.	10.0838	0.0625	10.7205	0.0149
3G77345.D	CAL 1660@2000PPB	07/15/13 14:24	Aqueous	3G77341.	10.0829	0.0714	10.7192	0.0271
3G77346.D	CAL 1660@4000PPB	07/15/13 14:40	Aqueous	3G77341.	10.0824	0.0763	10.7180	0.0382
3G77347.D	CAL 3268@500PPB	07/15/13 14:55	Aqueous	3G77341.	10.0825	0.0753	10.7188	0.0308
3G77348.D	CAL 1242@500PPB	07/15/13 15:10	Aqueous	3G77341.	10.0846	0.0545	10.7201	0.0187
3G77349.D	CAL 1248@500PPB	07/15/13 15:26	Aqueous	3G77341.	10.0846	0.0545	10.7206	0.014
3G77350.D	CAL 2154@500PPB	07/15/13 15:41	Aqueous	3G77341.	10.0835	0.0654	10.7197	0.0224
3G77351.D	CAL 1262@500PPB	07/15/13 15:57	Aqueous	3G77341.	10.0825	0.0753	10.7184	0.0345
3G77352.D	ICV	07/15/13 16:12	Aqueous	3G77341.	10.0822	0.0783	10.7199	0.0205
3G77353.D	PEST WS	07/15/13 16:27	Aqueous	3G77341.	0.0000	200 *	0.0000	200 *
3G77354.D	AC73377-001	07/15/13 19:22	Aqueous	3G77341.	10.0901	0	10.7222	0.0009
3G77355.D	AC73377-002	07/15/13 19:38	Aqueous	3G77341.	10.0832	0.0684	10.7185	0.0336
3G77356.D	AC73377-003	07/15/13 19:53	Aqueous	3G77341.	10.0812	0.0883	10.7186	0.0326
3G77357.D	AC73377-004	07/15/13 20:08	Aqueous	3G77341.	10.0827	0.0734	10.7187	0.0317
3G77358.D	AC73377-005	07/15/13 20:24	Aqueous	3G77341.	10.0813	0.0873	10.7196	0.0233
3G77359.D	AC73416-002	07/15/13 20:39	Aqueous	3G77341.	10.0820	0.0803	10.7181	0.0373
3G77360.D	AC73433-002	07/15/13 20:54	Aqueous	3G77341.	10.0829	0.0714	10.7187	0.0317
3G77361.D	CAL 1660@1000PPB	07/15/13 21:10	Aqueous	3G77341.	10.0818	0.0823	10.7191	0.028
3G77362.D	2000PPB	07/15/13 21:25	Aqueous	3G77361.	10.0814	0.004	10.7198	0.0065

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8082

Instrument: GC_2

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
2G82586.D	1000	07/16/13 09:06	Soil					
2G82587.D	1000	07/16/13 09:21	Soil					
2G82588.D	1000	07/16/13 09:36	Soil					
2G82589.D	1000	07/16/13 09:51	Soil					
2G82590.D	1000	07/16/13 10:06	Soil					
2G82591.D	1000	07/16/13 10:22	Soil					
2G82592.D	PEST WS	07/16/13 11:37	Soil					
2G82593.D	CAL 1660@50PPB	07/16/13 11:52	Soil	2G82593.	10.2438	0	11.0490	0
2G82594.D	CAL 1660@200PPB	07/16/13 12:08	Soil	2G82593.	10.2413	0.0244	11.0473	0.0154
2G82595.D	CAL 1660@500PPB	07/16/13 12:23	Soil	2G82593.	10.2418	0.0195	11.0485	0.0045
2G82596.D	CAL 1660@1000PPB	07/16/13 12:38	Soil	2G82593.	10.2400	0.0371	11.0483	0.0063
2G82597.D	CAL 1660@2000PPB	07/16/13 12:53	Soil	2G82593.	10.2391	0.0459	11.0474	0.0145
2G82598.D	CAL 1660@4000PPB	07/16/13 13:08	Soil	2G82593.	10.2381	0.0557	11.0458	0.029
2G82599.D	CAL 3268@500PPB	07/16/13 13:24	Soil	2G82593.	10.2392	0.0449	11.0476	0.0127
2G82600.D	CAL 1242@500PPB	07/16/13 13:39	Soil	2G82593.	10.2410	0.0273	11.0464	0.0235
2G82601.D	CAL 1248@500PPB	07/16/13 13:54	Soil	2G82593.	10.2399	0.0381	11.0469	0.019
2G82602.D	CAL 2154@500PPB	07/16/13 14:09	Soil	2G82593.	10.2407	0.0303	11.0476	0.0127
2G82603.D	CAL 1262@500PPB	07/16/13 14:24	Soil	2G82593.	10.2407	0.0303	11.0471	0.0172
2G82604.D	ICV	07/16/13 14:39	Soil	2G82593.	10.2402	0.0352	11.0480	0.009

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8082

Instrument: GC_2

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
2G82995.D	CAL 1660@200PPB	08/02/13 07:35	Soil	2G82995.	10.2434	0	11.0559	0
2G82996.D	AC73759-047	08/02/13 07:55	Aqueous	2G82995.	10.2433	0.001	11.0555	0.0036
2G82997.D	AC73759-048	08/02/13 08:10	Aqueous	2G82995.	10.2385	0.0478	11.0537	0.0199
2G82998.D	AC73759-049	08/02/13 08:29	Aqueous	2G82995.	10.2399	0.0342	11.0542	0.0154
2G82999.D	AC73652-044	08/02/13 08:44	Soil	2G82995.	10.2379	0.0537	11.0539	0.0181
2G83000.D	AC73652-049	08/02/13 08:59	Soil	2G82995.	10.2364	0.0684	11.0538	0.019
2G83001.D	AC73652-062	08/02/13 09:14	Soil	2G82995.	10.2369	0.0635	11.0539	0.0181
2G83002.D	AC73652-064	08/02/13 09:30	Soil	2G82995.	10.2379	0.0537	11.0540	0.0172
2G83003.D	AC73652-066	08/02/13 09:45	Soil	2G82995.	10.2392	0.041	11.0557	0.0018
2G83004.D	AC73652-068	08/02/13 10:00	Soil	2G82995.	10.2371	0.0615	11.0546	0.0118
2G83005.D	AC73652-070	08/02/13 10:15	Soil	2G82995.	10.2366	0.0664	11.0536	0.0208
2G83006.D	AC73652-072	08/02/13 10:30	Soil	2G82995.	10.2378	0.0547	11.0548	0.0099
2G83007.D	AC73652-074	08/02/13 10:45	Soil	2G82995.	10.2358	0.0742	11.0539	0.0181
2G83008.D	CAL 1660@200PPB	08/02/13 11:24	Soil	2G82995.	10.2444	0.0098	11.0559	0
2G83009.D	WMB25770(MS)	08/02/13 11:40	Aqueous	2G83008.	10.2408	0.0351	11.0561	0.0018
2G83010.D	SMB25779	08/02/13 11:56	Soil	2G83008.	10.2380	0.0625	11.0562	0.0027
2G83011.D	SMB25779(MS)	08/02/13 12:11	Soil	2G83008.	10.2380	0.0625	11.0546	0.0118
2G83012.D	AC73787-010(10X)	08/02/13 12:26	Soil	2G83008.	10.2392	0.0508	11.0558	0.0009
2G83013.D	AC73787-011(10X)	08/02/13 12:41	Soil	2G83008.	10.2385	0.0576	11.0566	0.0063
2G83014.D	73787-012(10X)	08/02/13 12:56	Soil	2G83008.	10.2379	0.0635	11.0546	0.0118
2G83015.D	AC73787-013(10X)	08/02/13 13:11	Soil	2G83008.	10.2381	0.0615	11.0553	0.0054
2G83016.D	AC73787-014(10X)	08/02/13 13:27	Soil	2G83008.	10.2377	0.0654	11.0543	0.0145
2G83017.D	AC73787-015(10X)	08/02/13 13:42	Soil	2G83008.	10.2384	0.0586	11.0540	0.0172
2G83018.D	AC73787-016(10X)	08/02/13 13:57	Soil	2G83008.	10.2387	0.0557	11.0549	0.009
2G83019.D	AC73787-017(10X)	08/02/13 14:12	Soil	2G83008.	10.2377	0.0654	11.0550	0.0081
2G83020.D	AC73656-001	08/02/13 14:27	Soil	2G83008.	10.2348	0.0938	11.0516	0.0389
2G83021.D	AC73787-012	08/02/13 14:42	Soil	2G83008.	10.2358	0.084	11.0529	0.0271
2G83022.D	CAL 1660@500PPB	08/02/13 14:58	Soil	2G83008.	10.2387	0.0557	11.0548	0.0099
2G83023.D	WMB25783(MS)	08/02/13 15:58	Aqueous	2G83022.	10.2256	0.128	11.0444	0.0941
2G83024.D	AC73731-001	08/02/13 16:13	Aqueous	2G83022.	10.2272	0.1124	11.0470	0.0706
2G83025.D	AC73731-002	08/02/13 16:28	Aqueous	2G83022.	10.2273	0.1114	11.0453	0.086
2G83026.D	AC73731-004	08/02/13 16:43	Aqueous	2G83022.	10.2278	0.1065	11.0476	0.0652
2G83027.D	AC73731-005	08/02/13 16:59	Aqueous	2G83022.	10.2274	0.1104	11.0472	0.0688
2G83028.D	AC73731-007	08/02/13 17:14	Aqueous	2G83022.	10.2280	0.1046	11.0456	0.0833
2G83029.D	AC73731-008	08/02/13 17:29	Aqueous	2G83022.	10.2280	0.1046	11.0476	0.0652
2G83030.D	AC73731-009	08/02/13 17:44	Aqueous	2G83022.	10.2276	0.1085	11.0471	0.0697
2G83031.D	AC73731-010	08/02/13 17:59	Aqueous	2G83022.	10.2281	0.1036	11.0475	0.0661
2G83032.D	AC73731-011	08/02/13 18:15	Aqueous	2G83022.	10.2278	0.1065	11.0463	0.0769
2G83033.D	CAL 1660@200PPB	08/02/13 18:30	Aqueous	2G83022.	10.2308	0.0772	11.0488	0.0543
2G83034.D	500PPB	08/02/13 18:45	Aqueous	2G83033.	10.2300	0.0078	11.0481	0.0063
2G83035.D	AC73668-008(R)	08/02/13 19:00	Aqueous	2G83033.	10.2280	0.0274	11.0465	0.0208
2G83036.D	AC73668-005(R)	08/02/13 19:15	Aqueous	2G83033.	10.2299	0.0088	11.0481	0.0063
2G83037.D	AC73723-001(MS)	08/02/13 19:30	Soil	2G83033.	10.2295	0.0127	11.0491	0.0027
2G83038.D	AC73723-001(MSD)	08/02/13 19:46	Soil	2G83033.	10.2319	0.0108	11.0512	0.0217
2G83039.D	AC73723-001	08/02/13 20:01	Soil	2G83033.	10.2331	0.0225	11.0512	0.0217
2G83040.D	AC73758-005	08/02/13 20:16	Soil	2G83033.	10.2305	0.0029	11.0488	0
2G83041.D	AC73652-044(MS)	08/02/13 20:31	Soil	2G83033.	10.2327	0.0186	11.0506	0.0163
2G83042.D	AC73652-044(MSD)	08/02/13 20:46	Soil	2G83033.	10.2322	0.0137	11.0501	0.0118
2G83043.D	BLK	08/02/13 21:02	Soil	2G83033.	10.2338	0.0293	11.0515	0.0244
2G83044.D	BLK	08/02/13 21:17	Soil	2G83033.	10.2343	0.0342	11.0522	0.0308
2G83045.D	BLK	08/02/13 21:32	Soil	2G83033.	10.2342	0.0332	11.0519	0.028
2G83046.D	200PPB	08/02/13 21:47	Soil	2G83033.	10.2343	0.0342	11.0521	0.0299
2G83047.D	CAL 1660@500PPB	08/02/13 22:02	Soil	2G83033.	10.2349	0.0401	11.0527	0.0353

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8082

Instrument: GC_3

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
3G77902.D	CAL 1660@1000PPB	08/02/13 07:37	Soil	3G77902.	10.0733	0	10.7213	0
3G77903.D	AC73759-013(10X)	08/02/13 07:54	Soil	3G77902.	10.0704	0.0288	10.7189	0.0224
3G77904.D	CAL 1660@2000PPB	08/02/13 08:10	Soil	3G77902.	10.0673	0.0596	10.7189	0.0224
3G77905.D	AC73787-001	08/02/13 08:37	Aqueous	3G77904.	10.0735	0.0616	10.7212	0.0215
3G77906.D	AC73787-018	08/02/13 08:52	Aqueous	3G77904.	10.0669	0.004	10.7175	0.0131
3G77907.D	AC73787-019	08/02/13 09:07	Aqueous	3G77904.	10.0662	0.0109	10.7179	0.0093
3G77908.D	AC73652-054	08/02/13 09:23	Soil	3G77904.	10.0664	0.0089	10.7175	0.0131
3G77909.D	AC73652-059	08/02/13 09:38	Soil	3G77904.	10.0670	0.003	10.7189	0
3G77910.D	AC73656-001	08/02/13 09:53	Soil	3G77904.	10.0655	0.0179	10.7171	0.0168
3G77911.D	AC73767-001	08/02/13 10:08	OIL/OTHER	3G77904.	10.0665	0.0079	10.7182	0.0065
3G77912.D	AC73787-002(10X)	08/02/13 10:23	Soil	3G77904.	10.0666	0.007	10.7181	0.0075
3G77913.D	AC73787-003(10X)	08/02/13 10:38	Soil	3G77904.	10.0672	0.001	10.7171	0.0168
3G77914.D	AC73787-004(10X)	08/02/13 10:53	Soil	3G77904.	10.0672	0.001	10.7169	0.0187
3G77915.D	AC73787-005(10X)	08/02/13 11:08	Soil	3G77904.	10.0674	0.001	10.7167	0.0205
3G77916.D	AC73787-006(10X)	08/02/13 11:23	Soil	3G77904.	10.0660	0.0129	10.7166	0.0215
3G77917.D	AC73787-007(10X)	08/02/13 11:37	Soil	3G77904.	10.0669	0.004	10.7169	0.0187
3G77918.D	73787-008(10X)	08/02/13 11:52	Soil	3G77904.	10.0661	0.0119	10.7170	0.0177
3G77919.D	AC73787-009(10X)	08/02/13 12:07	Soil	3G77904.	10.0668	0.005	10.7169	0.0187
3G77920.D	AC73787-008(50X)	08/02/13 12:22	Soil	3G77904.	0.0000	200 *	0.0000	200 *
3G77921.D	CAL 1660@2000PPB	08/02/13 12:37	Soil	3G77904.	10.0650	0.0229	10.7172	0.0159
3G77922.D	AC73615-026	08/02/13 12:56	Soil	3G77921.	10.0719	0.0685	10.7217	0.042
3G77923.D	AC73771-001	08/02/13 13:11	Soil	3G77921.	10.0677	0.0268	10.7202	0.028
3G77924.D	AC73771-002	08/02/13 13:26	Soil	3G77921.	10.0699	0.0487	10.7180	0.0075
3G77925.D	AC73742-001	08/02/13 13:41	Soil	3G77921.	10.0670	0.0199	10.7184	0.0112
3G77926.D	AC73748-001	08/02/13 13:56	Soil	3G77921.	10.0666	0.0159	10.7189	0.0159
3G77927.D	AC73749-001	08/02/13 14:11	Soil	3G77921.	10.0682	0.0318	10.7187	0.014
3G77928.D	AC73758-001	08/02/13 14:26	Soil	3G77921.	10.0689	0.0387	10.7203	0.0289
3G77929.D	WMB25783	08/02/13 14:41	Aqueous	3G77921.	10.0668	0.0179	10.7193	0.0196
3G77930.D	AC73758-002	08/02/13 14:55	Soil	3G77921.	10.0687	0.0368	10.7193	0.0196
3G77931.D	AC73758-003	08/02/13 15:10	Soil	3G77921.	10.0672	0.0219	10.7196	0.0224
3G77932.D	AC73758-004	08/02/13 15:26	Soil	3G77921.	10.0677	0.0268	10.7188	0.0149
3G77933.D	SMB25777	08/02/13 15:41	Soil	3G77921.	10.0676	0.0258	10.7195	0.0215
3G77934.D	OMB25776(MS)	08/02/13 15:56	OIL/OTHER	3G77921.	10.0685	0.0348	10.7198	0.0243
3G77935.D	OMB25776	08/02/13 16:12	OIL/OTHER	3G77921.	10.0680	0.0298	10.7188	0.0149
3G77936.D	CAL 1660@2000PPB	08/02/13 16:27	Soil	3G77921.	10.0674	0.0238	10.7196	0.0224
3G77937.D	SMB25784	08/02/13 16:42	Soil	3G77936.	10.0671	0.003	10.7194	0.0019
3G77938.D	SMB25784(MS)	08/02/13 16:58	Soil	3G77936.	10.0669	0.005	10.7193	0.0028
3G77939.D	SMB25777(MS)	08/02/13 17:13	Soil	3G77936.	10.0668	0.006	10.7177	0.0177
3G77940.D	AC73789-008(MS)	08/02/13 17:28	Soil	3G77936.	10.0676	0.002	10.7195	0.0009
3G77941.D	AC73789-008(MSD)	08/02/13 17:44	Soil	3G77936.	10.0671	0.003	10.7190	0.0056
3G77942.D	AC73789-001	08/02/13 17:59	Soil	3G77936.	10.0692	0.0179	10.7201	0.0047
3G77943.D	AC73789-002	08/02/13 18:14	Soil	3G77936.	10.0689	0.0149	10.7211	0.014
3G77944.D	AC73789-003	08/02/13 18:30	Soil	3G77936.	10.0692	0.0179	10.7206	0.0093
3G77945.D	AC73789-004	08/02/13 18:45	Soil	3G77936.	10.0677	0.003	10.7205	0.0084
3G77946.D	AC73789-005	08/02/13 19:00	Soil	3G77936.	10.0682	0.0079	10.7192	0.0037
3G77947.D	AC73789-006	08/02/13 19:16	Soil	3G77936.	10.0692	0.0179	10.7196	0
3G77948.D	AC73789-007	08/02/13 19:31	Soil	3G77936.	10.0684	0.0099	10.7198	0.0019
3G77949.D	AC73789-008	08/02/13 19:46	Soil	3G77936.	10.0684	0.0099	10.7202	0.0056
3G77950.D	AC73789-009	08/02/13 20:02	Soil	3G77936.	10.0674	0	10.7207	0.0103
3G77951.D	AC73789-010	08/02/13 20:17	Soil	3G77936.	10.0678	0.004	10.7203	0.0065
3G77952.D	1000PPB	08/02/13 20:32	Soil	3G77936.	10.0680	0.006	10.7201	0.0047
3G77953.D	CAL 1660@2000PPB	08/02/13 20:47	Soil	3G77936.	10.0684	0.0099	10.7192	0.0037

Drift Compound: DCB-Surrogate

Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph)

* - Values outside of limits for this column/run

3080110 0138

Form 6
Initial Calibration

Method: EPA 8082

Instrument: GC_3

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	3G77341.	CAL 1660@50PPB	07/15/13 13:23	2	3G77342.	CAL 1660@200PPB	07/15/13 13:38
3	3G77343.	CAL 1660@500PPB	07/15/13 13:54	4	3G77344.	CAL 1660@1000PPB	07/15/13 14:09
5	3G77345.	CAL 1660@2000PPB	07/15/13 14:24	6	3G77346.	CAL 1660@4000PPB	07/15/13 14:40
7	3G77347.	CAL 3268@500PPB	07/15/13 14:55	8	3G77348.	CAL 1242@500PPB	07/15/13 15:10
9	3G77349.	CAL 1248@500PPB	07/15/13 15:26	10	3G77350.	CAL 2154@500PPB	07/15/13 15:41
11	3G77351.	CAL 1262@500PPB	07/15/13 15:57				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Avg	1.8427	1.8034	1.8246	1.8622	1.8882	1.8229	----	----	1.84	4.02	1.00	1.00	1.7	5.00	20.00	50.00	100.0	200.0	400.0		
Aroclor-1016	1	1	Qua	0.0544	0.0486	0.0461	0.0436	0.0414	0.0381	----	----	0.0454	4.46	0.998	1.00	13	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	2	Qua	0.1058	0.0902	0.0827	0.0782	0.0730	0.0661	----	----	0.0827	4.80	0.997	1.00	17	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	3	Qua	0.2154	0.1873	0.1701	0.1647	0.1543	0.1422	----	----	0.172	5.25	0.998	1.00	15	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	4	Qua	0.0832	0.0788	0.0715	0.0703	0.0670	0.0628	----	----	0.0723	5.38	0.999	1.00	10	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	5	Avg	0.0586	0.0564	0.0525	0.0524	0.0508	0.0475	----	----	0.0531	5.48	0.999	1.00	7.4	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	1	Qua	0.1251	0.1140	0.1015	0.0979	0.0911	0.0844	----	----	0.102	7.06	0.998	1.00	15	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	2	Qua	0.1460	0.1312	0.1164	0.1132	0.1062	0.0988	----	----	0.119	7.31	0.998	1.00	15	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	3	Avg	0.0559	0.0533	0.0500	0.0511	0.0508	0.0489	----	----	0.0517	7.79	1.00	1.00	4.9	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	4	Qua	0.1013	0.0868	0.0791	0.0788	0.0750	0.0713	----	----	0.0821	8.08	0.999	1.00	13	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	5	Avg	0.1356	0.1324	0.1241	0.1289	0.1262	0.1248	----	----	0.129	8.79	1.00	1.00	3.6	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1221	1	1	Avg	----	----	----	----	----	----	----	----	0.0231	4.26	-1	-1	Lvl=10	500.0							
Aroclor-1221	1	2	Avg	----	----	----	----	----	----	----	----	0.0137	4.39	-1	-1	Lvl=10	500.0							
Aroclor-1221	1	3	Avg	----	----	----	----	----	----	----	----	0.0634	4.45	-1	-1	Lvl=10	500.0							
Aroclor-1232	1	1	Avg	----	----	----	----	----	----	----	----	0.0450	4.46	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	2	Avg	----	----	----	----	----	----	----	----	0.0382	4.80	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	3	Avg	----	----	----	----	----	----	----	----	0.0787	5.26	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	4	Avg	----	----	----	----	----	----	----	----	0.0325	5.38	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	5	Avg	----	----	----	----	----	----	----	----	0.0360	5.82	-1	-1	Lvl=7	500.0							
Aroclor-1242	1	1	Avg	----	----	----	----	----	----	----	----	0.0386	4.46	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	2	Avg	----	----	----	----	----	----	----	----	0.0672	4.80	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	3	Avg	----	----	----	----	----	----	----	----	0.141	5.25	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	4	Avg	----	----	----	----	----	----	----	----	0.0939	5.59	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	5	Avg	----	----	----	----	----	----	----	----	0.0605	5.82	-1	-1	Lvl=8	500.0							
Aroclor-1248	1	1	Avg	----	----	----	----	----	----	----	----	0.0352	4.80	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	2	Avg	----	----	----	----	----	----	----	----	0.0861	5.25	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	3	Avg	----	----	----	----	----	----	----	----	0.146	5.58	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	4	Avg	----	----	----	----	----	----	----	----	0.0838	5.93	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	5	Avg	----	----	----	----	----	----	----	----	0.0973	6.50	-1	-1	Lvl=9	500.0							
Aroclor-1254	1	1	Avg	----	----	----	----	----	----	----	----	0.0411	6.70	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	2	Avg	----	----	----	----	----	----	----	----	0.129	6.90	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	3	Avg	----	----	----	----	----	----	----	----	0.0758	7.07	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	4	Avg	----	----	----	----	----	----	----	----	0.113	7.18	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	5	Avg	----	----	----	----	----	----	----	----	0.0566	7.56	-1	-1	Lvl=10	500.0							
Aroclor-1262	1	1	Avg	----	----	----	----	----	----	----	----	0.135	7.74	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	2	Avg	----	----	----	----	----	----	----	----	0.0781	8.73	-1	-1	Lvl=11	500.0							

Avg Rsd Col 1: 10.3 Avg Rsd Col 2: 13.7

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3080110 0139

Form 6
Initial Calibration

Method: EPA 8082

Instrument: GC_3

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	3G77341.	CAL 1660@50PPB	07/15/13 13:23	2	3G77342.	CAL 1660@200PPB	07/15/13 13:38
3	3G77343.	CAL 1660@500PPB	07/15/13 13:54	4	3G77344.	CAL 1660@1000PPB	07/15/13 14:09
5	3G77345.	CAL 1660@2000PPB	07/15/13 14:24	6	3G77346.	CAL 1660@4000PPB	07/15/13 14:40
7	3G77347.	CAL 3268@500PPB	07/15/13 14:55	8	3G77348.	CAL 1242@500PPB	07/15/13 15:10
9	3G77349.	CAL 1248@500PPB	07/15/13 15:26	10	3G77350.	CAL 2154@500PPB	07/15/13 15:41
11	3G77351.	CAL 1262@500PPB	07/15/13 15:57				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aroclor-1262	1	3	Avg	----	----	----	----	----	----	----	----	0.174	8.79	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	4	Avg	----	----	----	----	----	----	----	----	0.0843	9.49	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	5	Avg	----	----	----	----	----	----	----	----	0.0266	9.85	-1	-1	Lvl=11	500.0							
Aroclor-1268	1	1	Avg	----	----	----	----	----	----	----	----	0.0355	8.09	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	2	Avg	----	----	----	----	----	----	----	----	0.0314	8.39	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	3	Avg	----	----	----	----	----	----	----	----	0.198	8.98	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	4	Avg	----	----	----	----	----	----	----	----	0.0628	9.08	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	5	Avg	----	----	----	----	----	----	----	----	0.550	9.85	-1	-1	Lvl=7	500.0							
DCB-Surrogate	1	0	Avg	2.0251	1.8929	1.7235	1.7342	1.6589	1.5869	----	----	1.77	10.08	0.999	1.00	9.1	5.00	20.00	50.00	100.0	200.0	400.0		
TCMX-Surrogate	2	0	Avg	3.0418	2.7834	2.7670	2.8151	2.8567	2.7922	----	----	2.84	3.97	1.00	1.00	3.6	5.00	20.00	50.00	100.0	200.0	400.0		
Aroclor-1016	2	1	Qua	0.0904	0.0741	0.0673	0.0642	0.0608	0.0557	----	----	0.0688	4.55	0.998	1.00	18	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	2	Qua	0.1685	0.1543	0.1330	0.1245	0.1146	0.1039	----	----	0.133	4.95	0.997	1.00	18	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	3	Qua	0.3503	0.2984	0.2631	0.2519	0.2375	0.2255	----	----	0.271	5.33	0.999	1.00	17	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	4	Qua	0.1532	0.1235	0.1071	0.1020	0.0955	0.0882	----	----	0.112	5.65	0.998	1.00	21	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	5	Qua	0.0941	0.0857	0.0753	0.0728	0.0680	0.0627	----	----	0.0765	6.01	0.998	1.00	15	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	1	Qua	0.2290	0.1923	0.1636	0.1546	0.1433	0.1345	----	----	0.170	7.29	0.999	1.00	21	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	2	Qua	0.2438	0.2088	0.1817	0.1752	0.1630	0.1536	----	----	0.188	7.38	0.999	1.00	18	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	3	Qua	0.1879	0.1727	0.1560	0.1533	0.1462	0.1436	----	----	0.160	8.36	1.00	1.00	11	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	4	Avg	0.1766	0.1572	0.1448	0.1492	0.1474	0.1504	----	----	0.154	9.05	1.00	1.00	7.6	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	5	Avg	0.1202	0.1089	0.1016	0.1060	0.1050	0.1062	----	----	0.108	9.64	1.00	1.00	5.9	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1221	2	1	Avg	----	----	----	----	----	----	----	----	0.0372	4.34	-1	-1	Lvl=10	500.0							
Aroclor-1221	2	2	Avg	----	----	----	----	----	----	----	----	0.0206	4.49	-1	-1	Lvl=10	500.0							
Aroclor-1221	2	3	Avg	----	----	----	----	----	----	----	----	0.0794	4.55	-1	-1	Lvl=10	500.0							
Aroclor-1232	2	1	Avg	----	----	----	----	----	----	----	----	0.0655	4.55	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	2	Avg	----	----	----	----	----	----	----	----	0.0634	4.96	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	3	Avg	----	----	----	----	----	----	----	----	0.118	5.33	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	4	Avg	----	----	----	----	----	----	----	----	0.0400	6.01	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	5	Avg	----	----	----	----	----	----	----	----	0.0375	6.15	-1	-1	Lvl=7	500.0							
Aroclor-1242	2	1	Avg	----	----	----	----	----	----	----	----	0.0560	4.55	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	2	Avg	----	----	----	----	----	----	----	----	0.103	4.95	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	3	Avg	----	----	----	----	----	----	----	----	0.211	5.33	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	4	Avg	----	----	----	----	----	----	----	----	0.0867	5.65	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	5	Avg	----	----	----	----	----	----	----	----	0.0682	6.01	-1	-1	Lvl=8	500.0							
Aroclor-1248	2	1	Avg	----	----	----	----	----	----	----	----	0.0540	4.95	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	2	Avg	----	----	----	----	----	----	----	----	0.136	5.33	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	3	Avg	----	----	----	----	----	----	----	----	0.0982	5.64	-1	-1	Lvl=9	500.0							

Avg Rsd Col 1: 10.3 Avg Rsd Col 2: 13.7

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3080110 0140

Form 6
Initial Calibration

Method: EPA 8082

Instrument: GC_3

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	3G77341.	CAL 1660@50PPB	07/15/13 13:23	2	3G77342.	CAL 1660@200PPB	07/15/13 13:38
3	3G77343.	CAL 1660@500PPB	07/15/13 13:54	4	3G77344.	CAL 1660@1000PPB	07/15/13 14:09
5	3G77345.	CAL 1660@2000PPB	07/15/13 14:24	6	3G77346.	CAL 1660@4000PPB	07/15/13 14:40
7	3G77347.	CAL 3268@500PPB	07/15/13 14:55	8	3G77348.	CAL 1242@500PPB	07/15/13 15:10
9	3G77349.	CAL 1248@500PPB	07/15/13 15:26	10	3G77350.	CAL 2154@500PPB	07/15/13 15:41
11	3G77351.	CAL 1262@500PPB	07/15/13 15:57				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aroclor-1248	2	4	Avg	----	----	----	----	----	----	----	----	0.100	6.15	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	5	Avg	----	----	----	----	----	----	----	----	0.125	6.29	-1	-1	Lvl=9	500.0							
Aroclor-1254	2	1	Avg	----	----	----	----	----	----	----	----	0.161	6.50	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	2	Avg	----	----	----	----	----	----	----	----	0.0520	6.83	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	3	Avg	----	----	----	----	----	----	----	----	0.134	7.23	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	4	Avg	----	----	----	----	----	----	----	----	0.0690	7.74	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	5	Avg	----	----	----	----	----	----	----	----	0.0695	8.42	-1	-1	Lvl=10	500.0							
Aroclor-1262	2	1	Avg	----	----	----	----	----	----	----	----	0.169	7.79	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	2	Avg	----	----	----	----	----	----	----	----	0.133	8.94	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	3	Avg	----	----	----	----	----	----	----	----	0.165	9.05	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	4	Avg	----	----	----	----	----	----	----	----	0.198	9.64	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	5	Avg	----	----	----	----	----	----	----	----	0.0459	10.18	-1	-1	Lvl=11	500.0							
Aroclor-1268	2	1	Avg	----	----	----	----	----	----	----	----	0.0356	8.45	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	2	Avg	----	----	----	----	----	----	----	----	0.0647	8.49	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	3	Avg	----	----	----	----	----	----	----	----	0.351	9.38	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	4	Avg	----	----	----	----	----	----	----	----	0.103	9.54	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	5	Avg	----	----	----	----	----	----	----	----	0.979	10.18	-1	-1	Lvl=7	500.0							
DCB-Surrogate	2	0	Avg	3.5426	3.2252	2.9455	2.9891	2.8984	2.8576	----	----	3.08	10.72	1.00	1.00	8.5	5.00	20.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 10.3 Avg Rsd Col 2: 13.7

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3080110 0141

Form 6
Initial Calibration

Method: EPA 8082

Instrument: GC_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2G82593.	CAL 1660@50PPB	07/16/13 11:52	2	2G82594.	CAL 1660@200PPB	07/16/13 12:08
3	2G82595.	CAL 1660@500PPB	07/16/13 12:23	4	2G82596.	CAL 1660@1000PPB	07/16/13 12:38
5	2G82597.	CAL 1660@2000PPB	07/16/13 12:53	6	2G82598.	CAL 1660@4000PPB	07/16/13 13:08
7	2G82599.	CAL 3268@500PPB	07/16/13 13:24	8	2G82600.	CAL 1242@500PPB	07/16/13 13:39
9	2G82601.	CAL 1248@500PPB	07/16/13 13:54	10	2G82602.	CAL 2154@500PPB	07/16/13 14:09
11	2G82603.	CAL 1262@500PPB	07/16/13 14:24				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Avg	0.5182	0.5155	0.4924	0.5202	0.5324	0.5193	----	----	0.516	3.91	1.00	1.00	2.5	5.00	20.00	50.00	100.0	200.0	400.0		
Aroclor-1016	1	1	Qua	0.0164	0.0157	0.0138	0.0132	0.0123	0.0112	----	----	0.0138	4.43	0.997	1.00	14	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	2	Qua	0.0326	0.0300	0.0256	0.0243	0.0224	0.0199	----	----	0.0258	4.80	0.996	1.00	18	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	3	Qua	0.0642	0.0567	0.0485	0.0470	0.0440	0.0404	----	----	0.0502	5.27	0.998	1.00	17	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	4	Avg	0.0182	0.0176	0.0155	0.0156	0.0151	0.0141	----	----	0.0161	5.52	0.999	1.00	9.7	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	5	Qua	0.0441	0.0410	0.0351	0.0342	0.0319	0.0291	----	----	0.0360	5.63	0.997	1.00	16	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	1	Qua	0.0381	0.0347	0.0300	0.0285	0.0266	0.0241	----	----	0.0304	7.15	0.997	1.00	17	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	2	Qua	0.0433	0.0397	0.0341	0.0326	0.0305	0.0279	----	----	0.0347	7.41	0.998	1.00	17	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	3	Avg	0.0195	0.0199	0.0178	0.0181	0.0180	0.0173	----	----	0.0185	7.61	1.00	1.00	5.6	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	4	Avg	0.0262	0.0257	0.0228	0.0230	0.0223	0.0211	----	----	0.0236	8.20	0.999	1.00	8.6	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	5	Avg	0.0381	0.0382	0.0369	0.0370	0.0360	0.0342	----	----	0.0368	8.92	0.999	1.00	4.1	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1221	1	1	Avg	----	----	----	----	----	----	----	----	0.00707	4.22	-1	-1	Lvl=10	500.0							
Aroclor-1221	1	2	Avg	----	----	----	----	----	----	----	----	0.00417	4.37	-1	-1	Lvl=10	500.0							
Aroclor-1221	1	3	Avg	----	----	----	----	----	----	----	----	0.0193	4.43	-1	-1	Lvl=10	500.0							
Aroclor-1232	1	1	Avg	----	----	----	----	----	----	----	----	0.0145	4.43	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	2	Avg	----	----	----	----	----	----	----	----	0.0128	4.80	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	3	Avg	----	----	----	----	----	----	----	----	0.0231	5.27	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	4	Avg	----	----	----	----	----	----	----	----	0.0112	5.41	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	5	Avg	----	----	----	----	----	----	----	----	0.0114	5.88	-1	-1	Lvl=7	500.0							
Aroclor-1242	1	1	Avg	----	----	----	----	----	----	----	----	0.0118	4.43	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	2	Avg	----	----	----	----	----	----	----	----	0.0205	4.80	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	3	Avg	----	----	----	----	----	----	----	----	0.0394	5.27	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	4	Avg	----	----	----	----	----	----	----	----	0.0278	5.63	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	5	Avg	----	----	----	----	----	----	----	----	0.0180	5.88	-1	-1	Lvl=8	500.0							
Aroclor-1248	1	1	Avg	----	----	----	----	----	----	----	----	0.0104	4.80	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	2	Avg	----	----	----	----	----	----	----	----	0.0253	5.27	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	3	Avg	----	----	----	----	----	----	----	----	0.0429	5.61	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	4	Avg	----	----	----	----	----	----	----	----	0.0229	5.98	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	5	Avg	----	----	----	----	----	----	----	----	0.0266	6.58	-1	-1	Lvl=9	500.0							
Aroclor-1254	1	1	Avg	----	----	----	----	----	----	----	----	0.0119	6.78	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	2	Avg	----	----	----	----	----	----	----	----	0.0366	6.99	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	3	Avg	----	----	----	----	----	----	----	----	0.0217	7.16	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	4	Avg	----	----	----	----	----	----	----	----	0.0318	7.27	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	5	Avg	----	----	----	----	----	----	----	----	0.0148	7.66	-1	-1	Lvl=10	500.0							
Aroclor-1262	1	1	Avg	----	----	----	----	----	----	----	----	0.0445	7.84	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	2	Avg	----	----	----	----	----	----	----	----	0.0225	8.85	-1	-1	Lvl=11	500.0							

Avg Rsd Col 1: 11.9 Avg Rsd Col 2: 14.5

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3080110 0142

Form 6
Initial Calibration

Method: EPA 8082

Instrument: GC_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2G82593.	CAL 1660@50PPB	07/16/13 11:52
3	2G82595.	CAL 1660@500PPB	07/16/13 12:23
5	2G82597.	CAL 1660@2000PPB	07/16/13 12:53
7	2G82599.	CAL 3268@500PPB	07/16/13 13:24
9	2G82601.	CAL 1248@500PPB	07/16/13 13:54
11	2G82603.	CAL 1262@500PPB	07/16/13 14:24

Level #:	Data File:	Cal Identifier:	Analysis Date/Time
2	2G82594.	CAL 1660@200PPB	07/16/13 12:08
4	2G82596.	CAL 1660@1000PPB	07/16/13 12:38
6	2G82598.	CAL 1660@4000PPB	07/16/13 13:08
8	2G82600.	CAL 1242@500PPB	07/16/13 13:39
10	2G82602.	CAL 2154@500PPB	07/16/13 14:09

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aroclor-1262	1	3	Avg	----	----	----	----	----	----	----	----	0.0491	8.91	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	4	Avg	----	----	----	----	----	----	----	----	0.0242	9.66	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	5	Avg	----	----	----	----	----	----	----	----	0.00711	10.02	-1	-1	Lvl=11	500.0							
Aroclor-1268	1	1	Avg	----	----	----	----	----	----	----	----	0.0103	8.19	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	2	Avg	----	----	----	----	----	----	----	----	0.00875	8.51	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	3	Avg	----	----	----	----	----	----	----	----	0.0547	9.09	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	4	Avg	----	----	----	----	----	----	----	----	0.0182	9.19	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	5	Avg	----	----	----	----	----	----	----	----	0.144	10.02	-1	-1	Lvl=7	500.0							
DCB-Surrogate	1	0	Qua	0.5568	0.5353	0.4670	0.4631	0.4405	0.4093	----	----	0.479	10.24	0.998	1.00	12	5.00	20.00	50.00	100.0	200.0	400.0		
TCMX-Surrogate	2	0	Avg	0.5035	0.4769	0.4512	0.4805	0.4859	0.4791	----	----	0.480	3.98	1.00	1.00	3.5	5.00	20.00	50.00	100.0	200.0	400.0		
Aroclor-1016	2	1	Qua	0.0172	0.0144	0.0125	0.0127	0.0120	0.0107	----	----	0.0133	4.60	0.996	1.00	17	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	2	Qua	0.0321	0.0284	0.0239	0.0235	0.0218	0.0190	----	----	0.0248	5.03	0.994	1.00	19	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	3	Qua	0.0626	0.0548	0.0467	0.0450	0.0426	0.0387	----	----	0.0484	5.42	0.997	1.00	18	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	4	Qua	0.0286	0.0246	0.0210	0.0200	0.0186	0.0174	----	----	0.0218	5.75	0.999	1.00	19	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	5	Qua	0.0185	0.0171	0.0148	0.0144	0.0136	0.0128	----	----	0.0152	6.13	0.999	1.00	14	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	1	Qua	0.0387	0.0338	0.0283	0.0268	0.0247	0.0227	----	----	0.0292	7.45	0.998	1.00	21	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	2	Qua	0.0396	0.0352	0.0295	0.0282	0.0264	0.0243	----	----	0.0306	7.53	0.998	1.00	19	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	3	Qua	0.0163	0.0150	0.0131	0.0133	0.0128	0.0122	----	----	0.0138	8.17	0.999	1.00	11	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	4	Avg	0.0308	0.0290	0.0260	0.0251	0.0250	0.0241	----	----	0.0267	8.54	1.00	1.00	9.8	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	5	Qua	0.0271	0.0246	0.0210	0.0217	0.0216	0.0208	----	----	0.0228	9.26	1.00	1.00	11	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1221	2	1	Avg	----	----	----	----	----	----	----	----	0.00675	4.38	-1	-1	Lvl=10	500.0							
Aroclor-1221	2	2	Avg	----	----	----	----	----	----	----	----	0.00445	4.53	-1	-1	Lvl=10	500.0							
Aroclor-1221	2	3	Avg	----	----	----	----	----	----	----	----	0.0146	4.60	-1	-1	Lvl=10	500.0							
Aroclor-1232	2	1	Avg	----	----	----	----	----	----	----	----	0.0132	4.60	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	2	Avg	----	----	----	----	----	----	----	----	0.0124	5.03	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	3	Avg	----	----	----	----	----	----	----	----	0.0223	5.42	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	4	Avg	----	----	----	----	----	----	----	----	0.0106	5.75	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	5	Avg	----	----	----	----	----	----	----	----	0.00643	6.27	-1	-1	Lvl=7	500.0							
Aroclor-1242	2	1	Avg	----	----	----	----	----	----	----	----	0.0110	4.60	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	2	Avg	----	----	----	----	----	----	----	----	0.0194	5.03	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	3	Avg	----	----	----	----	----	----	----	----	0.0376	5.42	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	4	Avg	----	----	----	----	----	----	----	----	0.0167	5.75	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	5	Avg	----	----	----	----	----	----	----	----	0.0137	6.13	-1	-1	Lvl=8	500.0							
Aroclor-1248	2	1	Avg	----	----	----	----	----	----	----	----	0.00957	5.03	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	2	Avg	----	----	----	----	----	----	----	----	0.0245	5.41	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	3	Avg	----	----	----	----	----	----	----	----	0.0192	5.75	-1	-1	Lvl=9	500.0							

Avg Rsd Col 1: 11.9 Avg Rsd Col 2: 14.5

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc.)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 ; Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3080110 0143

Form 6
Initial Calibration

Method: EPA 8082

Instrument: GC_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2G82593.	CAL 1660@50PPB	07/16/13 11:52	2	2G82594.	CAL 1660@200PPB	07/16/13 12:08
3	2G82595.	CAL 1660@500PPB	07/16/13 12:23	4	2G82596.	CAL 1660@1000PPB	07/16/13 12:38
5	2G82597.	CAL 1660@2000PPB	07/16/13 12:53	6	2G82598.	CAL 1660@4000PPB	07/16/13 13:08
7	2G82599.	CAL 3268@500PPB	07/16/13 13:24	8	2G82600.	CAL 1242@500PPB	07/16/13 13:39
9	2G82601.	CAL 1248@500PPB	07/16/13 13:54	10	2G82602.	CAL 2154@500PPB	07/16/13 14:09
11	2G82603.	CAL 1262@500PPB	07/16/13 14:24				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aroclor-1248	2	4	Avg	----	----	----	----	----	----	----	----	0.0169	6.27	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	5	Avg	----	----	----	----	----	----	----	----	0.0215	6.41	-1	-1	Lvl=9	500.0							
Aroclor-1254	2	1	Avg	----	----	----	----	----	----	----	----	0.0284	6.63	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	2	Avg	----	----	----	----	----	----	----	----	0.00954	6.98	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	3	Avg	----	----	----	----	----	----	----	----	0.0241	7.38	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	4	Avg	----	----	----	----	----	----	----	----	0.0118	7.90	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	5	Avg	----	----	----	----	----	----	----	----	0.0108	8.60	-1	-1	Lvl=10	500.0							
Aroclor-1262	2	1	Avg	----	----	----	----	----	----	----	----	0.0489	8.09	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	2	Avg	----	----	----	----	----	----	----	----	0.0211	9.14	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	3	Avg	----	----	----	----	----	----	----	----	0.0267	9.26	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	4	Avg	----	----	----	----	----	----	----	----	0.0275	9.88	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	5	Avg	----	----	----	----	----	----	----	----	0.00638	10.46	-1	-1	Lvl=11	500.0							
Aroclor-1268	2	1	Avg	----	----	----	----	----	----	----	----	0.00600	8.64	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	2	Avg	----	----	----	----	----	----	----	----	0.00998	8.68	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	3	Avg	----	----	----	----	----	----	----	----	0.0469	9.61	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	4	Avg	----	----	----	----	----	----	----	----	0.0146	9.78	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	5	Avg	----	----	----	----	----	----	----	----	0.131	10.46	-1	-1	Lvl=7	500.0							
DCB-Surrogate	2	0	Qua	0.5149	0.4749	0.4151	0.4157	0.4025	0.3821	----	----	0.434	11.05	0.999	1.00	12	5.00	20.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 11.9 Avg Rsd Col 2: 14.5

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc.)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Form7
Continuing Calibration

Method: EPA 8082

Data File:				2G83008.D			2G83022.D			2G83033.D			2G83047.D			3G77921.D		
Method:				8082			8082			8082			8082			8082		
Calibration Name:				CAL 1660@200PP			CAL 1660@500PP			CAL 1660@200PP			CAL 1660@500PP			CAL 1660@2000PP		
Calibration Date/Time				08/02/13 11:24			08/02/13 14:58			08/02/13 18:30			08/02/13 22:02			08/02/13 12:37		
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff
TCMX-Surrogate	15	1	0	19.24	20	3.8	49.09	50	1.8	19.95	20	0.2	49.26	50	1.5	222.4	200	11.2
Aroclor-1016	15	1	1	222.7	200	11.3	535.3	500	7.1	219.6	200	9.8	526.1	500	5.2	2195	2000	9.8
Aroclor-1016	15	1	2	227.7	200	13.8	532.1	500	6.4	232.5	200	16.2*	528.7	500	5.7	2151	2000	7.6
Aroclor-1016	15	1	3	227.3	200	13.6	537.1	500	7.4	236.4	200	18.2*	529.0	500	5.8	2133	2000	6.6
Aroclor-1016	15	1	4	207.5	200	3.7	509.4	500	1.9	216.1	200	8.0	505.3	500	1.1	2188	2000	9.4
Aroclor-1016	15	1	5	220.7	200	10.3	528.6	500	5.7	209.0	200	4.5	522.1	500	4.4	2049	2000	2.4
Aroclor-1260	15	1	1	217.6	200	8.8	524.9	500	5.0	227.4	200	13.7	515.2	500	3.0	2100	2000	5.0
Aroclor-1260	15	1	2	219.0	200	9.5	529.9	500	6.0	228.8	200	14.4	516.5	500	3.3	2093	2000	4.6
Aroclor-1260	15	1	3	192.1	200	4.0	484.6	500	3.1	204.1	200	2.0	483.5	500	3.3	2129	2000	6.5
Aroclor-1260	15	1	4	194.1	200	2.9	478.4	500	4.3	205.9	200	2.9	499.8	500	0.0	2049	2000	2.4
Aroclor-1260	15	1	5	183.9	200	8.0	471.4	500	5.7	200.2	200	0.1	455.5	500	8.9	1987	2000	0.7
DCB-Surrogate	15	1	0	12.22	20	38.9*	30.4	50	39.2*	21.29	20	6.5	49.77	50	0.5	181.7	200	9.2
Average Difference	15	1	0			10.7			7.8			8.0			3.6			6.3
TCMX-Surrogate	15	2	0	19.54	20	2.3	48.28	50	3.4	19.02	20	4.9	46.6	50	6.8	176.1	200	12.0
Aroclor-1016	15	2	1	214.5	200	7.3	546.6	500	9.3	205.7	200	2.8	473.2	500	5.4	1737	2000	13.1
Aroclor-1016	15	2	2	225.9	200	12.9	512.6	500	2.5	224.4	200	12.2	509.1	500	1.8	1713	2000	14.4
Aroclor-1016	15	2	3	229.5	200	14.7	532.2	500	6.4	224.9	200	12.5	506.3	500	1.3	1744	2000	12.8
Aroclor-1016	15	2	4	234.3	200	17.1*	528	500	5.6	222.9	200	11.4	507.1	500	1.4	1697	2000	15.2
Aroclor-1016	15	2	5	226.3	200	13.2	519.8	500	4.0	219.6	200	9.8	506.3	500	1.3	1712	2000	14.4
Aroclor-1260	15	2	1	226.6	200	13.3	525.9	500	5.2	226.1	200	13.1	501.5	500	0.3	1701	2000	14.9
Aroclor-1260	15	2	2	229.8	200	14.9	526.5	500	5.3	223.8	200	11.9	499.8	500	0.0	1766	2000	11.7
Aroclor-1260	15	2	3	203.3	200	1.7	479.6	500	4.1	213.1	200	6.6	447.0	500	10.6	1828	2000	8.6
Aroclor-1260	15	2	4	177.4	200	11.3	448.3	500	10.3	196.9	200	1.6	442	500	11.6	1921	2000	3.9
Aroclor-1260	15	2	5	174.4	200	12.8	451.3	500	9.7	195.4	200	2.3	459.3	500	8.1	1763	2000	11.9
DCB-Surrogate	15	2	0	12.87	20	35.7*	32.1	50	35.8*	21.22	20	6.1	45.41	50	9.2	154.8	200	22.6*
Average Difference	15	2	0			13.1			8.5			7.9			4.8			13.0

Flags/Notes: **** - Values outside of limits for this column/run***

Form7
Continuing Calibration

Method: EPA 8082

Data File:				3G77936.D															
Method:				8082															
Calibration Name:				CAL 1660@2000PP															
Calibration Date/Time				08/02/13 16:27															
					Conc			Conc			Conc			Conc			Conc		
Compound	Limit	Col	Mr	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff
TCMX-Surrogate	15	1	0	232.6	200	16.3*												
Aroclor-1016	15	1	1	2314	2000	15.7*												
Aroclor-1016	15	1	2	2268	2000	13.4												
Aroclor-1016	15	1	3	2260	2000	13.0												
Aroclor-1016	15	1	4	2269	2000	13.4												
Aroclor-1016	15	1	5	2163	2000	8.1												
Aroclor-1260	15	1	1	2213	2000	10.6												
Aroclor-1260	15	1	2	2193	2000	9.6												
Aroclor-1260	15	1	3	2250	2000	12.5												
Aroclor-1260	15	1	4	2146	2000	7.3												
Aroclor-1260	15	1	5	2068	2000	3.4												
DCB-Surrogate	15	1	0	181.6	200	9.2												
Average Difference	15	1	0			11.1												
TCMX-Surrogate	15	2	0	181.1	200	9.5												
Aroclor-1016	15	2	1	1798	2000	10.1												
Aroclor-1016	15	2	2	1776	2000	11.2												
Aroclor-1016	15	2	3	1811	2000	9.5												
Aroclor-1016	15	2	4	1760	2000	12.0												
Aroclor-1016	15	2	5	1780	2000	11.0												
Aroclor-1260	15	2	1	1727	2000	13.7												
Aroclor-1260	15	2	2	1833	2000	8.3												
Aroclor-1260	15	2	3	1869	2000	6.6												
Aroclor-1260	15	2	4	1962	2000	1.9												
Aroclor-1260	15	2	5	1748	2000	12.6												
DCB-Surrogate	15	2	0	144.8	200	27.6*												
Average Difference	15	2	0			11.2												

Flags/Notes: **** - Values outside of limits for this column/run***

Form7

RtWindow Summary

Method: EPA 8082

3080110 0146

Data File:			2G82593.D		3G77341.D		2G83008.D		2G83033.D		3G77921.D	
Calibration Name:			CAL 1660@50PPB		CAL 1660@50PPB		CAL 1660@200PPB		CAL 1660@200PPB		CAL 1660@2000PPB	
Calibration Date/Time			7/16/2013 11:52:00 AM		7/15/2013 1:23:00 PM		8/2/2013 11:24:00 AM		8/2/2013 6:30:00 PM		8/2/2013 12:37:00 PM	
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
TCMX-Surrogate	1	0	3.91	(3.85 - 3.97)	4.02	(3.96 - 4.08)	3.92	(3.86 - 3.98)	3.91	(3.85 - 3.97)	4.01	(3.95 - 4.07)
Aroclor-1016	1	1	4.43	(4.39 - 4.47)	4.45	(4.41 - 4.49)	4.44	(4.40 - 4.48)	4.43	(4.39 - 4.47)	4.44	(4.40 - 4.48)
Aroclor-1016	1	2	4.80	(4.76 - 4.84)	4.80	(4.76 - 4.84)	4.81	(4.77 - 4.85)	4.79	(4.75 - 4.83)	4.78	(4.74 - 4.82)
Aroclor-1016	1	3	5.27	(5.23 - 5.31)	5.25	(5.21 - 5.29)	5.27	(5.23 - 5.31)	5.26	(5.22 - 5.30)	5.24	(5.20 - 5.28)
Aroclor-1016	1	4	5.52	(5.48 - 5.56)	5.38	(5.34 - 5.42)	5.52	(5.48 - 5.56)	5.51	(5.47 - 5.55)	5.36	(5.32 - 5.40)
Aroclor-1016	1	5	5.63	(5.59 - 5.67)	5.48	(5.44 - 5.52)	5.63	(5.59 - 5.67)	5.62	(5.58 - 5.66)	5.47	(5.43 - 5.51)
Aroclor-1260	1	1	7.15	(7.11 - 7.19)	7.06	(7.02 - 7.10)	7.16	(7.12 - 7.20)	7.15	(7.11 - 7.19)	7.05	(7.01 - 7.09)
Aroclor-1260	1	2	7.40	(7.36 - 7.44)	7.31	(7.27 - 7.35)	7.41	(7.37 - 7.45)	7.40	(7.36 - 7.44)	7.29	(7.25 - 7.33)
Aroclor-1260	1	3	7.61	(7.57 - 7.65)	7.79	(7.75 - 7.83)	7.61	(7.57 - 7.65)	7.60	(7.56 - 7.64)	7.78	(7.74 - 7.82)
Aroclor-1260	1	4	8.20	(8.16 - 8.24)	8.08	(8.04 - 8.12)	8.20	(8.16 - 8.24)	8.19	(8.15 - 8.23)	8.06	(8.02 - 8.10)
Aroclor-1260	1	5	8.92	(8.88 - 8.96)	8.79	(8.75 - 8.83)	8.92	(8.88 - 8.96)	8.91	(8.87 - 8.95)	8.78	(8.73 - 8.81)
Aroclor-1221	1	1	4.22	(4.18 - 4.26)	4.26	(4.22 - 4.30)					4.26	(4.22 - 4.30)
Aroclor-1221	1	2	4.37	(4.33 - 4.41)	4.39	(4.35 - 4.43)					4.38	(4.34 - 4.42)
Aroclor-1221	1	3	4.43	(4.39 - 4.47)	4.45	(4.41 - 4.49)					4.44	(4.40 - 4.48)
Aroclor-1232	1	1	4.43	(4.39 - 4.47)	4.46	(4.42 - 4.50)					4.44	(4.40 - 4.48)
Aroclor-1232	1	2	4.80	(4.76 - 4.84)	4.80	(4.76 - 4.84)					4.78	(4.74 - 4.82)
Aroclor-1232	1	3	5.27	(5.23 - 5.31)	5.26	(5.22 - 5.30)					5.24	(5.20 - 5.28)
Aroclor-1232	1	4	5.41	(5.37 - 5.45)	5.38	(5.34 - 5.42)					5.36	(5.32 - 5.40)
Aroclor-1232	1	5	5.88	(5.84 - 5.92)	5.82	(5.78 - 5.86)					5.80	(5.76 - 5.84)
Aroclor-1242	1	1	4.43	(4.39 - 4.47)	4.46	(4.42 - 4.50)					4.44	(4.40 - 4.48)
Aroclor-1242	1	2	4.80	(4.76 - 4.84)	4.80	(4.76 - 4.84)					4.78	(4.74 - 4.82)
Aroclor-1242	1	3	5.27	(5.23 - 5.31)	5.25	(5.21 - 5.29)					5.24	(5.20 - 5.28)
Aroclor-1242	1	4	5.63	(5.59 - 5.67)	5.59	(5.55 - 5.63)					5.58	(5.54 - 5.62)
Aroclor-1242	1	5	5.88	(5.84 - 5.92)	5.82	(5.78 - 5.86)					5.80	(5.76 - 5.84)
Aroclor-1248	1	1	4.80	(4.76 - 4.84)	4.80	(4.76 - 4.84)					4.78	(4.74 - 4.82)
Aroclor-1248	1	2	5.27	(5.23 - 5.31)	5.25	(5.21 - 5.29)					5.24	(5.20 - 5.28)
Aroclor-1248	1	3	5.61	(5.57 - 5.65)	5.58	(5.54 - 5.62)					5.58	(5.54 - 5.62)
Aroclor-1248	1	4	5.98	(5.94 - 6.02)	5.93	(5.89 - 5.97)					5.91	(5.87 - 5.95)
Aroclor-1248	1	5	6.58	(6.54 - 6.62)	6.50	(6.46 - 6.54)					6.49	(6.45 - 6.53)
Aroclor-1254	1	1	6.78	(6.74 - 6.82)	6.70	(6.66 - 6.74)					6.69	(6.65 - 6.73)
Aroclor-1254	1	2	6.99	(6.95 - 7.03)	6.90	(6.86 - 6.94)					6.89	(6.85 - 6.93)
Aroclor-1254	1	3	7.16	(7.12 - 7.20)	7.07	(7.03 - 7.11)					7.05	(7.01 - 7.09)
Aroclor-1254	1	4	7.27	(7.23 - 7.31)	7.18	(7.14 - 7.22)					7.22	(7.18 - 7.26)
Aroclor-1254	1	5	7.66	(7.62 - 7.70)	7.56	(7.52 - 7.60)					7.49	(7.45 - 7.53)
Aroclor-1262	1	1	7.84	(7.80 - 7.88)	7.74	(7.70 - 7.78)					7.72	(7.68 - 7.76)
Aroclor-1262	1	2	8.85	(8.81 - 8.89)	8.73	(8.69 - 8.77)					8.72	(8.68 - 8.76)
Aroclor-1262	1	3	8.91	(8.87 - 8.95)	8.79	(8.75 - 8.83)					8.78	(8.73 - 8.81)
Aroclor-1262	1	4	9.66	(9.62 - 9.70)	9.49	(9.45 - 9.53)					9.47	(9.43 - 9.51)
Aroclor-1262	1	5	10.02	(9.98 - 10.06)	9.85	(9.81 - 9.89)					9.84	(9.80 - 9.88)
Aroclor-1268	1	1	8.19	(8.15 - 8.23)	8.09	(8.05 - 8.13)					8.12	(8.08 - 8.16)
Aroclor-1268	1	2	8.51	(8.47 - 8.55)	8.39	(8.35 - 8.43)						
Aroclor-1268	1	3	9.09	(9.05 - 9.13)	8.98	(8.94 - 9.02)					9.07	(9.03 - 9.11)
Aroclor-1268	1	4	9.19	(9.15 - 9.23)	9.08	(9.04 - 9.12)					9.14	(9.10 - 9.18)
Aroclor-1268	1	5	10.02	(9.98 - 10.06)	9.85	(9.81 - 9.89)						
DCB-Surrogate	1	0	10.24	(10.18 - 10.30)	10.08	(10.02 - 10.14)	10.24	(10.18 - 10.30)	10.23	(10.17 - 10.29)	10.07	(10.00 - 10.12)
TCMX-Surrogate	2	0	3.98	(3.92 - 4.04)	3.97	(3.91 - 4.03)	3.99	(3.93 - 4.05)	3.98	(3.92 - 4.04)	3.97	(3.91 - 4.03)
Aroclor-1016	2	1	4.60	(4.56 - 4.64)	4.55	(4.51 - 4.59)	4.60	(4.56 - 4.64)	4.60	(4.56 - 4.64)	4.55	(4.51 - 4.59)
Aroclor-1016	2	2	5.03	(4.99 - 5.07)	4.95	(4.91 - 4.99)	5.03	(4.99 - 5.07)	5.03	(4.99 - 5.07)	4.95	(4.91 - 4.99)
Aroclor-1016	2	3	5.42	(5.38 - 5.46)	5.33	(5.29 - 5.37)	5.42	(5.38 - 5.46)	5.42	(5.38 - 5.46)	5.33	(5.29 - 5.37)
Aroclor-1016	2	4	5.75	(5.71 - 5.79)	5.65	(5.61 - 5.69)	5.76	(5.72 - 5.80)	5.75	(5.71 - 5.79)	5.64	(5.60 - 5.68)
Aroclor-1016	2	5	6.13	(6.09 - 6.17)	6.01	(5.97 - 6.05)	6.13	(6.09 - 6.17)	6.13	(6.09 - 6.17)	6.01	(5.97 - 6.05)
Aroclor-1260	2	1	7.45	(7.41 - 7.49)	7.29	(7.25 - 7.33)	7.46	(7.42 - 7.50)	7.45	(7.41 - 7.49)	7.29	(7.25 - 7.33)
Aroclor-1260	2	2	7.53	(7.49 - 7.57)	7.38	(7.34 - 7.42)	7.55	(7.51 - 7.59)	7.54	(7.50 - 7.58)	7.37	(7.33 - 7.41)
Aroclor-1260	2	3	8.17	(8.13 - 8.21)	8.36	(8.32 - 8.40)	8.18	(8.14 - 8.22)	8.18	(8.14 - 8.22)	8.36	(8.32 - 8.40)
Aroclor-1260	2	4	8.54	(8.50 - 8.58)	9.05	(9.01 - 9.09)	8.55	(8.51 - 8.59)	8.54	(8.50 - 8.58)	9.05	(9.01 - 9.09)
Aroclor-1260	2	5	9.26	(9.22 - 9.30)	9.64	(9.60 - 9.68)	9.26	(9.22 - 9.30)	9.26	(9.22 - 9.30)	9.64	(9.60 - 9.68)
Aroclor-1221	2	1	4.38	(4.34 - 4.42)	4.34	(4.30 - 4.38)					4.34	(4.30 - 4.38)
Aroclor-1221	2	2	4.53	(4.49 - 4.57)	4.49	(4.45 - 4.53)					4.49	(4.45 - 4.53)
Aroclor-1221	2	3	4.60	(4.56 - 4.64)	4.55	(4.51 - 4.59)					4.55	(4.51 - 4.59)
Aroclor-1232	2	1	4.60	(4.56 - 4.64)	4.55	(4.51 - 4.59)					4.55	(4.51 - 4.59)
Aroclor-1232	2	2	5.03	(4.99 - 5.07)	4.96	(4.92 - 5.00)					4.95	(4.91 - 4.99)
Aroclor-1232	2	3	5.42	(5.38 - 5.46)	5.33	(5.29 - 5.37)					5.33	(5.29 - 5.37)
Aroclor-1232	2	4	5.75	(5.71 - 5.79)	6.01	(5.97 - 6.05)					6.01	(5.97 - 6.05)
Aroclor-1232	2	5	6.27	(6.23 - 6.31)	6.15	(6.11 - 6.19)					6.15	(6.11 - 6.19)
Aroclor-1242	2	1	4.60	(4.56 - 4.64)	4.55	(4.51 - 4.59)					4.55	(4.51 - 4.59)
Aroclor-1242	2	2	5.03	(4.99 - 5.07)	4.95	(4.91 - 4.99)					4.95	(4.91 - 4.99)
Aroclor-1242	2	3	5.41	(5.37 - 5.45)	5.33	(5.29 - 5.37)					5.33	(5.29 - 5.37)
Aroclor-1242	2	4	5.75	(5.71 - 5.79)	5.65	(5.61 - 5.69)					5.64	(5.60 - 5.68)
Aroclor-1242	2	5	6.13	(6.09 - 6.17)	6.01	(5.97 - 6.05)					6.01	(5.97 - 6.05)
Aroclor-1248	2	1	5.03	(4.99 - 5.07)	4.95	(4.91 - 4.99)					4.95	(4.91 - 4.99)
Aroclor-1248	2	2	5.41	(5.37 - 5.45)	5.33	(5.29 - 5.37)					5.33	(5.29 - 5.37)
Aroclor-1248	2	3	5.75	(5.71 - 5.79)	5.64	(5.60 - 5.68)					5.64	(5.60 - 5.68)
Aroclor-1248	2	4	6.27	(6.23 - 6.31)	6.15	(6.11 - 6.19)					6.15	(6.11 - 6.19)
Aroclor-1248	2	5	6.41	(6.37 - 6.45)	6.29	(6.25 - 6.33)					6.29	(6.25 - 6.33)
Aroclor-1254	2	1	6.63	(6.59 - 6.67)	6.50	(6.46 - 6.54)					6.50	(6.46 - 6.54)
Aroclor-1254	2	2	6.98	(6.94 - 7.02)	6.83	(6.79 - 6.87)					6.83	(6.79 - 6.87)
Aroclor-1254	2	3	7.38	(7.34 - 7.42)	7.23	(7.19 - 7.27)					7.22	(7.18 - 7.26)
Aroclor-1254	2	4	7.90	(7.86 - 7.94)	7.74	(7.70 - 7.78)					7.79	(7.75 - 7.83)
Aroclor-1254	2	5	8.60	(8.56 - 8.64)	8.42	(8.38 - 8.46)					8.36	(8.32 - 8.40)
Aroclor-1262	2	1	8.09	(8.05 - 8.13)	7.79	(7.75 - 7.83)					7.79	(7.75 - 7.83)
Aroclor-1262	2	2	9.14	(9.10 - 9.18)	8.94	(8.90 - 8.98)					8.94	(8.90 - 8.98)
Aroclor-1262	2	3	9.26	(9.22 - 9.30)	9.05	(9.01 - 9.09)					9.05	(9.01 - 9.09)
Aroclor-1262	2	4	9.88	(9.84 - 9.92)	9.64	(9.60 - 9.68)					9.64	(9.60 - 9.68)
Aroclor-1262	2	5	10.46	(10.42 - 10.50)	10.18	(10.14 - 10.22)					10.18	(10.14 - 10.22)
Aroclor-1268	2	1	8.64	(8.60 - 8.68)	8.45	(8.41 - 8.49)					8.49	(8.45 - 8.53)
Aroclor-1268	2	2	8.68	(8.64 - 8.72)	8.49	(8.45 - 8.53)					8.49	(8.45 - 8.53)
Aroclor-1268	2	3	9.61	(9.57 - 9.65)	9.38	(9.34 - 9.42)					9.38	(9.34 - 9.42)
Aroclor-1268	2	4	9.78	(9.74 - 9.82)	9.54	(9.50 - 9.58)					9.54	(9.50 - 9.58)
Aroclor-1268	2	5	10.46	(10.42 - 10.50)	10.18	(10.14 - 10.22)					10.18	(10.14 - 10.22)
DCB-Surrogate	2	0	11.05	(10.99 - 11.11)	10.72	(10.66 - 10.78)	11.06	(11.00 - 11.12)	11.05	(10.99 - 11.11)	10.72	(10.66 - 10.78)

Pesticide Data

Form1

ORGANICS PESTICIDE REPORT

Sample Number: AC73771-001
Client Id: BB-COMP-1-0801113
Data File: 6G42655.D
Analysis Date: 08/05/13 11:29
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 91

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0055	U	53494-70-5	Endrin Ketone	0.0055	U
309-00-2	Aldrin	0.0055	U	58-89-9	gamma-BHC	0.0011	U
319-84-6	alpha-BHC	0.0011	U	76-44-8	Heptachlor	0.0055	U
319-85-7	beta-BHC	0.0011	U	1024-57-3	Heptachlor Epoxide	0.0055	U
319-86-8	delta-BHC	0.0055	U	72-43-5	Methoxychlor	0.0055	U
60-57-1	Dieldrin	0.0011	U	**72-54-8**	**p,p'-DDD**	**0.0027**	**0.0034**
959-98-8	Endosulfan I	0.0055	U	**72-55-9**	**(^)p,p'-DDE**	**0.0027**	**0.059**
33213-65-9	Endosulfan II	0.0055	U	**50-29-3**	**(^)p,p'-DDT**	**0.0027**	**0.037**
1031-07-8	Endosulfan Sulfate	0.0055	U	8001-35-2	Toxaphene	0.027	U
72-20-8	Endrin	0.0055	U	5103-74-2	y-chlordane	0.0055	U
7421-93-4	Endrin Aldehyde	0.0055	U				

Worksheet #: 272498

Total Target Concentration 0.0034

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3080110 0149

Data Path : G:\Gcdata\2013\GC_6\Data\08-05-13\
Data File : 6G42655.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 5 Aug 2013 11:29
Operator : MS
Sample : AC73771-001
Misc : S,PEST
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 06 12:42:23 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0705.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Jul 05 13:03:33 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	5.093	5.047	1392588	1790248	118.314	113.666
12)p,p'-DDE	8.869	8.824	1192278	1633008	105.904	108.073m
15)p,p'-DDD	9.828	9.510	54496	71782	6.198m	6.065m
17)p,p'-DDT	10.039	9.901	462161	801255	53.302	67.340m#
22)DCB-Surrogate	12.425	12.886	1054622	1744078	108.904	118.329

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

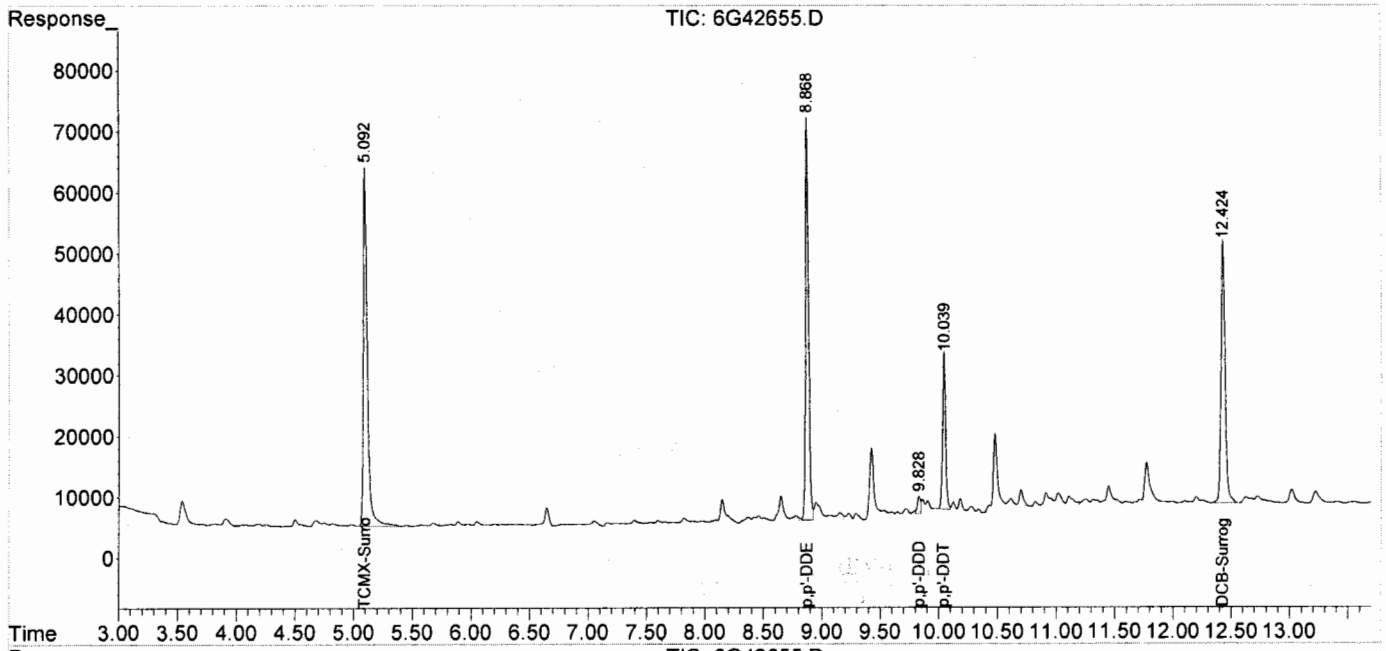
Quantitation Report (QT Reviewed)

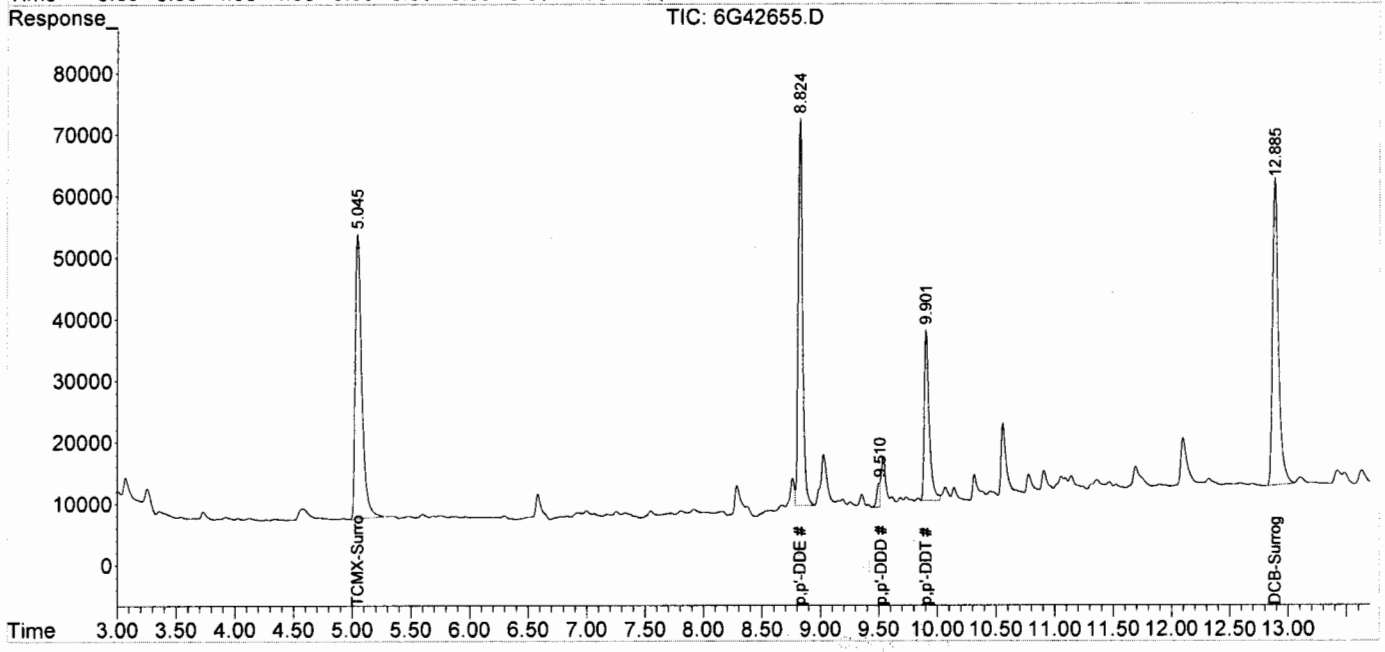
3080110 0150

Data Path : G:\Gcdata\2013\GC_6\Data\08-05-13\
Data File : 6G42655.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 5 Aug 2013 11:29
Operator : MS
Sample : AC73771-001
Misc : S,PEST
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 06 12:42:23 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0705.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Jul 05 13:03:33 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PESTICIDE REPORT

Sample Number: AC73771-002
Client Id: BB-COMP-2-0801113
Data File: 6G42656.D
Analysis Date: 08/05/13 11:47
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 89

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0056	U	53494-70-5	Endrin Ketone	0.0056	U
309-00-2	Aldrin	0.0056	U	58-89-9	gamma-BHC	0.0011	U
319-84-6	alpha-BHC	0.0011	U	76-44-8	Heptachlor	0.0056	U
319-85-7	beta-BHC	0.0011	U	1024-57-3	Heptachlor Epoxide	0.0056	U
319-86-8	delta-BHC	0.0056	U	72-43-5	Methoxychlor	0.0056	U
60-57-1	Dieldrin	0.0011	U	72-54-8	p,p'-DDD	0.0028	U
959-98-8	Endosulfan I	0.0056	U	**72-55-9**	**p,p'-DDE**	**0.0028**	**0.0090**
33213-65-9	Endosulfan II	0.0056	U	**50-29-3**	**(^)p,p'-DDT**	**0.0028**	**0.012**
1031-07-8	Endosulfan Sulfate	0.0056	U	8001-35-2	Toxaphene	0.028	U
72-20-8	Endrin	0.0056	U	5103-74-2	y-chlordane	0.0056	U
7421-93-4	Endrin Aldehyde	0.0056	U				

Worksheet #: 272498

Total Target Concentration 0.009

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3080110 0152

Data Path : G:\Gcdata\2013\GC_6\Data\08-05-13\
Data File : 6G42656.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 5 Aug 2013 11:47
Operator : MS
Sample : AC73771-002
Misc : S,PEST
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 06 12:42:46 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0705.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Jul 05 13:03:33 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	5.093	5.047	1277524	1703505	108.010	108.159
12)p,p'-DDE	8.870	8.823	180272	172897	16.013m	11.442m#
17)p,p'-DDT	10.040	9.903	133309	264067	15.375m	22.193m#
22)DCB-Surrogate	12.425	12.887	1032956	1693244	106.525	114.735

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

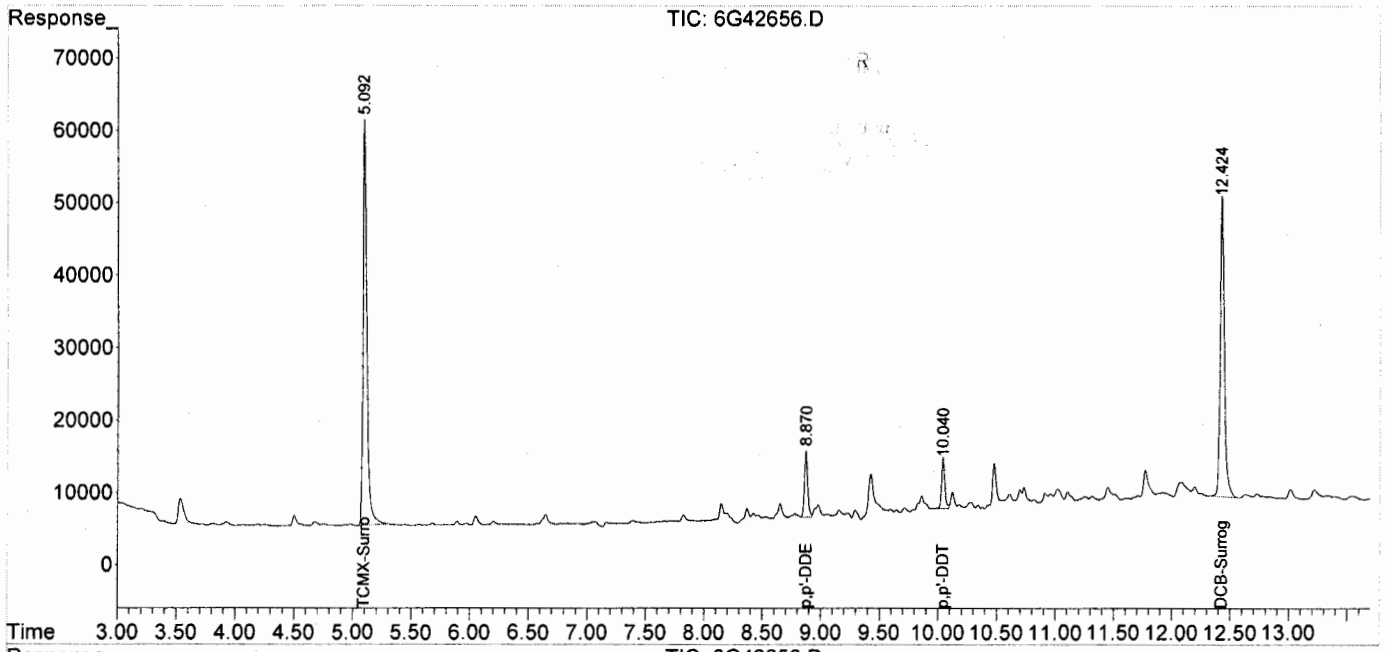
Quantitation Report (QT Reviewed)

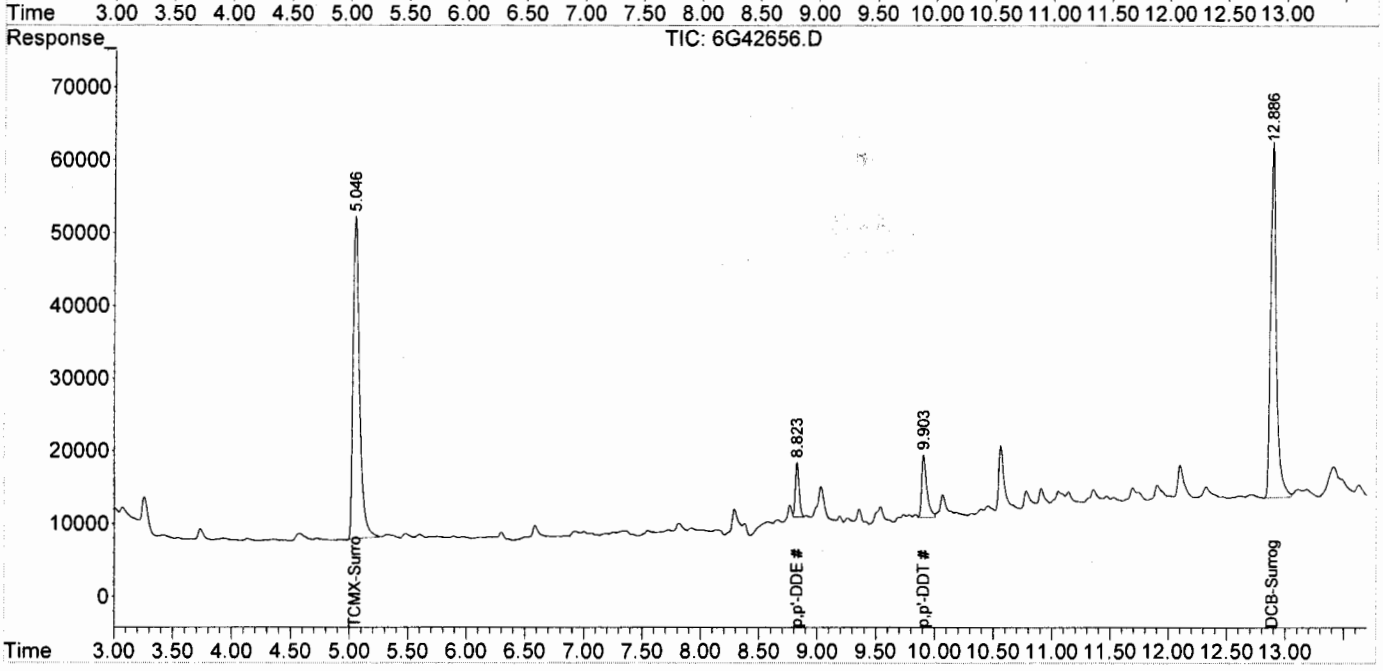
3080110 0153

Data Path : G:\Gcdata\2013\GC_6\Data\08-05-13\
Data File : 6G42656.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 5 Aug 2013 11:47
Operator : MS
Sample : AC73771-002
Misc : S,PEST
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 06 12:42:46 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0705.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Jul 05 13:03:33 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PESTICIDE REPORT

Sample Number: SMB25778
Client Id:
Data File: 5G47145.D
Analysis Date: 08/02/13 20:38
Date Rec/Extracted: NA-08/02/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0050	U	53494-70-5	Endrin Ketone	0.0050	U
309-00-2	Aldrin	0.0050	U	58-89-9	gamma-BHC	0.0010	U
319-84-6	alpha-BHC	0.0010	U	76-44-8	Heptachlor	0.0050	U
319-85-7	beta-BHC	0.0010	U	1024-57-3	Heptachlor Epoxide	0.0050	U
319-86-8	delta-BHC	0.0050	U	72-43-5	Methoxychlor	0.0050	U
60-57-1	Dieldrin	0.0010	U	72-54-8	p,p'-DDD	0.0025	U
959-98-8	Endosulfan I	0.0050	U	72-55-9	p,p'-DDE	0.0025	U
33213-65-9	Endosulfan II	0.0050	U	50-29-3	p,p'-DDT	0.0025	U
1031-07-8	Endosulfan Sulfate	0.0050	U	8001-35-2	Toxaphene	0.025	U
72-20-8	Endrin	0.0050	U	5103-74-2	y-chlordane	0.0050	U
7421-93-4	Endrin Aldehyde	0.0050	U				

Worksheet #: 272498

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3080110 0155

Data Path : G:\Gcdata\2013\GC_5\Data\08-02-13\
Data File : 5G47145.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02-Aug-13, 20:38:04
Operator : MS/BS
Sample : SMB25778
Misc : S,PEST
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 05 12:39:30 2013
Quant Method : G:\GCDATA\2013\GC_5\METHODQT\5G_PEST0711.M
Quant Title : @GC_5,ug,608,8081
QLast Update : Fri Jul 12 09:57:58 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	6.265	6.198	172.5E6	121.0E6	80.788	84.206
22)DCB-Surrogate	13.290	13.672	151.2E6	93775540	100.355	95.092

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

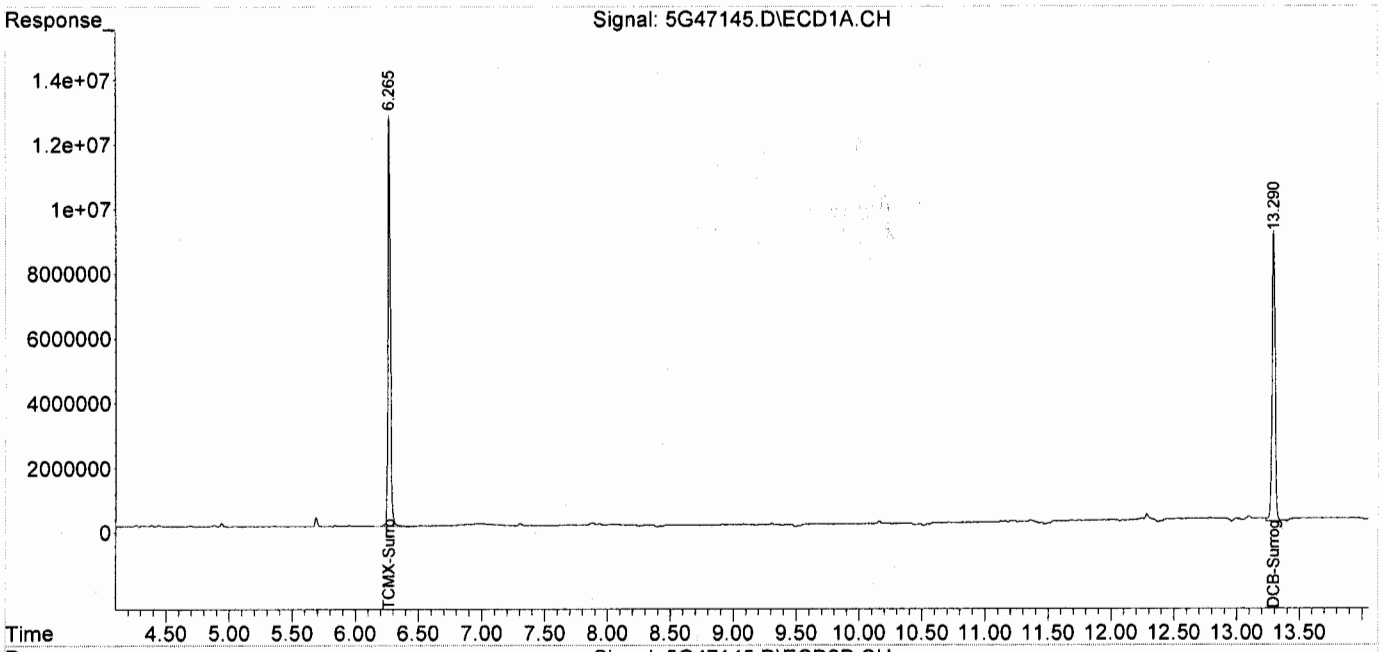
Quantitation Report (QT Reviewed)

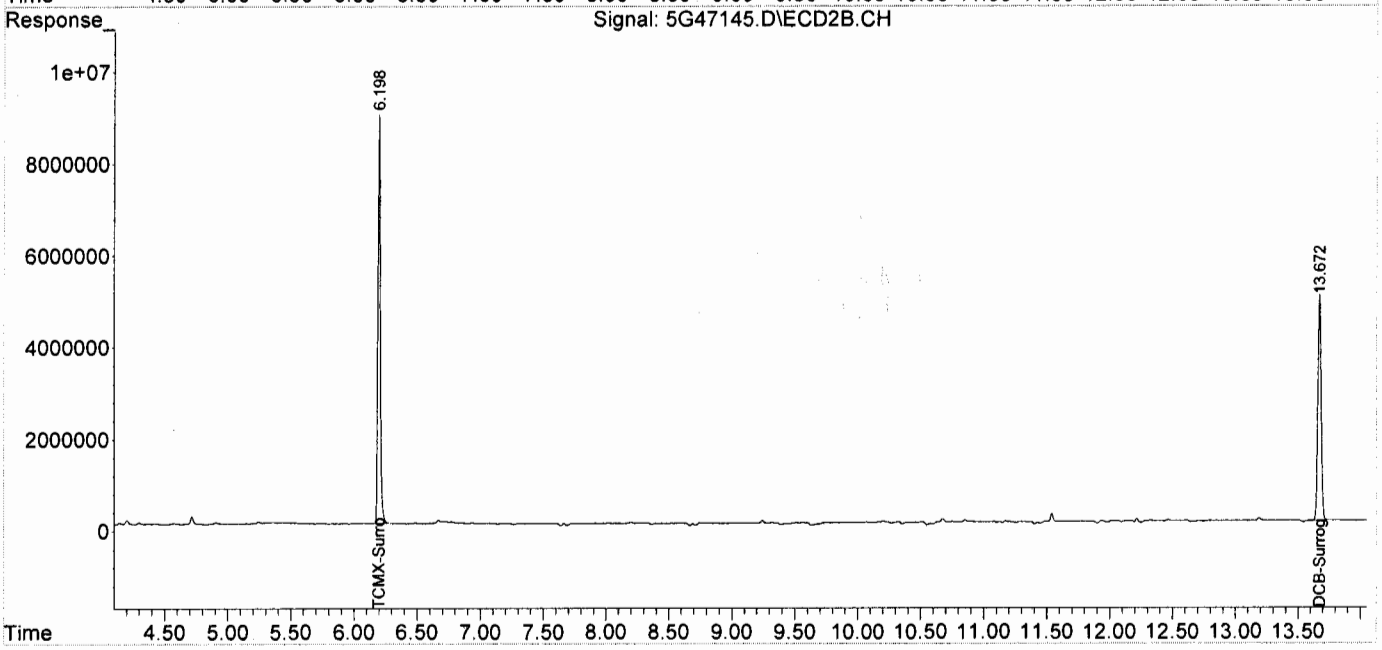
3080110 0156

Data Path : G:\Gcdata\2013\GC_5\Data\08-02-13\
Data File : 5G47145.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02-Aug-13, 20:38:04
Operator : MS/BS
Sample : SMB25778
Misc : S,PEST
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 05 12:39:30 2013
Quant Method : G:\GCDATA\2013\GC_5\METHODQT\5G_PEST0711.M
Quant Title : @GC_5,ug,608,8081
QLast Update : Fri Jul 12 09:57:58 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32





FORM2

Surrogate Recovery

Method: EPA 8081A

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column2 S2 Recov	Column1 S3 Recov	Column2 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
5G47145.D	SMB25778	Soil	08/02/13 20:38	1		81	84	100	95		
6G42655.D	AC73771-001	Soil	08/05/13 11:29	1		118	114	109	118		
6G42656.D	AC73771-002	Soil	08/05/13 11:47	1		108	108	107	115		
6G42659.D	AC73723-001(	Soil	08/05/13 12:40	1		116	123	59	83		
6G42660.D	AC73723-001(	Soil	08/05/13 12:57	1		100	107	41	60		
6G42661.D	AC73723-001	Soil	08/05/13 13:15	1		106	111	31 *	47		
6G42667.D	SMB25778(M	Soil	08/05/13 15:45	1		110	122	104	116		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8081A

Soil Limits

Compound	Spike Amt	Limits
S1=TCMX-Surrogate	100	37-141
S2=TCMX-Surrogate	100	37-141
S3=DCB-Surrogate	100	33-146
S4=DCB-Surrogate	100	33-146

Form3
Recovery Data
QC Batch: SMB25778

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G42667.D	SMB25778(MS)	8/5/2013 3:45:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	2	92.4	0	100	92	60	130
gamma-BHC	2	99.46	0	100	99	60	130
beta-BHC	2	116.79	0	100	117	60	130
Heptachlor	2	114.56	0	100	115	60	130
delta-BHC	2	83.65	0	100	84	60	130
Aldrin	2	112.36	0	100	112	70	130
Heptachlor Epoxide	2	106.04	0	100	106	70	130
Endosulfan I	2	108.38	0	100	108	70	130
p,p'-DDE	2	99.38	0	100	99	70	130
Dieldrin	2	110.31	0	100	110	70	130
Endrin	2	130.07	0	100	130	70	130
p,p'-DDD	2	108.41	0	100	108	70	130
Endosulfan II	2	109.54	0	100	110	70	130
p,p'-DDT	2	98.65	0	100	99	70	130
Endrin Aldehyde	2	52.84	0	100	53	10	130
Endosulfan Sulfate	2	96.43	0	100	96	70	130
Methoxychlor	2	99.43	0	100	99	60	130
Endrin Ketone	2	85.37	0	100	85	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB25778

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G42659.D	AC73723-001(MS)	8/5/2013 12:40:00 PM
Non Spike(If applicable):	6G42661.D	AC73723-001	8/5/2013 1:15:00 PM
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	2	95.64	0	100	96	60	130
gamma-BHC	2	106.19	0	100	106	60	130
beta-BHC	2	211.44	0	100	211 *	60	130
Heptachlor	2	128.26	0	100	128	60	130
delta-BHC	2	93.88	0	100	94	60	130
Aldrin	2	121.17	0	100	121	70	130
Heptachlor Epoxide	2	120.93	0	100	121	70	130
Endosulfan I	2	119.56	0	100	120	70	130
p,p'-DDE	2	145.87	0	100	146 *	70	130
Dieldrin	2	265.34	0	100	265 *	70	130
Endrin	2	162.92	0	100	163 *	70	130
p,p'-DDD	2	166.05	0	100	166 *	70	130
Endosulfan II	2	152.78	0	100	153 *	70	130
p,p'-DDT	2	136.77	0	100	137 *	70	130
Endrin Aldehyde	2	98.06	0	100	98	10	130
Endosulfan Sulfate	2	107.26	0	100	107	70	130
Methoxychlor	2	149.93	0	100	150 *	60	130
Endrin Ketone	2	136.86	0	100	137 *	70	130

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G42660.D	AC73723-001(MSD)	8/5/2013 12:57:00 PM
Non Spike(If applicable):	6G42661.D	AC73723-001	8/5/2013 1:15:00 PM
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	2	77.42	0	100	77	60	130
gamma-BHC	2	88.32	0	100	88	60	130
beta-BHC	2	158.09	0	100	158 *	60	130
Heptachlor	2	107.69	0	100	108	60	130
delta-BHC	2	76.56	0	100	77	60	130
Aldrin	2	105.93	0	100	106	70	130
Heptachlor Epoxide	2	99.71	0	100	100	70	130
Endosulfan I	2	133.06	0	100	133 *	70	130
p,p'-DDE	2	116.91	0	100	117	70	130
Dieldrin	2	129.49	0	100	129	70	130
Endrin	2	132.16	0	100	132 *	70	130
p,p'-DDD	2	127.39	0	100	127	70	130
Endosulfan II	2	120.75	0	100	121	70	130
p,p'-DDT	2	100.76	0	100	101	70	130
Endrin Aldehyde	2	79.39	0	100	79	10	130
Endosulfan Sulfate	2	83.73	0	100	84	70	130
Methoxychlor	2	107.18	0	100	107	60	130
Endrin Ketone	2	96.25	0	100	96	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA

QC Batch: SMB25778

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G42660.D	AC73723-001(MSD)	8/5/2013 12:57:00 PM
Duplicate(If applicable):	6G42659.D	AC73723-001(MS)	8/5/2013 12:40:00 PM
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
alpha-BHC	2	77.42	95.64	21	40
gamma-BHC	2	88.32	106.19	18	40
beta-BHC	2	158.09	211.44	29	40
Heptachlor	2	107.69	128.26	17	40
delta-BHC	2	76.56	93.88	20	40
Aldrin	2	105.93	121.17	13	40
Heptachlor Epoxide	2	99.71	120.93	19	40
Endosulfan I	2	133.06	119.56	11	40
p,p'-DDE	2	116.91	145.87	22	40
Dieldrin	2	129.49	265.34	69 *	40
Endrin	2	132.16	162.92	21	40
p,p'-DDD	2	127.39	166.05	26	40
Endosulfan II	2	120.75	152.78	23	40
p,p'-DDT	2	100.76	136.77	30	40
Endrin Aldehyde	2	79.39	98.06	21	40
Endosulfan Sulfate	2	83.73	107.26	25	40
Methoxychlor	2	107.18	149.93	33	40
Endrin Ketone	2	96.25	136.86	35	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: SMB25778
Blank Data File: 5G47145.D
Matrix: Soil

Blank Analysis Date: 08/02/13 20:38
Blank Extraction Date: 08/02/13
(If Applicable)
Method: EPA 8081A

Sample Number	Data File	Analysis Date
AC73771-001	6G42655.D	08/05/13 11:29
AC73771-002	6G42656.D	08/05/13 11:47
SMB25778(MS)	6G42667.D	08/05/13 15:45
AC73723-001	6G42661.D	08/05/13 13:15
AC73723-001(MSD	6G42660.D	08/05/13 12:57
AC73723-001(MS)	6G42659.D	08/05/13 12:40

Form 5

Method: EPA 8081A

Instrument: GC_6

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G42094.D	BLK	07/05/13 08:18	Soil					
6G42095.D	BLK	07/05/13 08:35	Soil					
6G42096.D	CAL EVAL	07/05/13 08:53	Soil					
6G42097.D	200PPB	07/05/13 09:13	Soil					
6G42098.D	CAL PEST@200PPB	07/05/13 09:31	Soil	6G42102.	12.4273	0.0346	12.8867	0.0116
6G42099.D	CAL PEST@100PPB	07/05/13 09:48	Soil	6G42102.	12.4290	0.0209	12.8879	0.0023
6G42100.D	CAL PEST@50PPB	07/05/13 10:06	Soil	6G42102.	12.4290	0.0209	12.8878	0.0031
6G42101.D	CAL PEST@10PPB	07/05/13 10:24	Soil	6G42102.	12.4300	0.0129	12.8870	0.0093
6G42102.D	CAL PEST@2PPB	07/05/13 10:41	Soil	6G42102.	12.4316	0	12.8882	0
6G42103.D	CAL PEST@400PPB	07/05/13 11:00	Soil	6G42102.	12.4303	0.0105	12.8897	0.0116
6G42104.D	CAL CHLOR@100PPB	07/05/13 11:17	Soil	6G42102.	12.4284	0.0257	12.8870	0.0093
6G42105.D	CAL TOX@500PPB	07/05/13 11:35	Soil	6G42102.	12.4297	0.0153	12.8886	0.0031
6G42106.D	ICV	07/05/13 11:52	Soil	6G42102.	12.4272	0.0354	12.8869	0.0101
6G42107.D	SMB25523(MS)	07/05/13 12:11	Soil	6G42102.	12.4280	0.029	12.8872	0.0078
6G42108.D	AC73220-015(MS)	07/05/13 12:28	Soil	6G42102.	12.4272	0.0354	12.8881	0.0008
6G42109.D	AC73220-015(MSD)	07/05/13 12:46	Soil	6G42102.	12.4271	0.0362	12.8874	0.0062
6G42110.D	AC73166-041(5X)	07/05/13 13:03	Soil	6G42102.	12.4284	0.0257	12.8861	0.0163
6G42111.D	AC73180-015	07/05/13 13:21	Soil	6G42102.	12.4278	0.0306	12.8868	0.0109
6G42112.D	AC73149-001	07/05/13 13:38	Soil	6G42102.	12.4287	0.0233	12.8897	0.0116
6G42113.D	CAL PEST@200PPB	07/05/13 14:13	Soil	6G42102.	12.4280	0.029	12.8882	0
6G42114.D	CAL EVAL	07/05/13 14:34	Soil					
6G42115.D	SMB25523	07/05/13 14:52	Soil	6G42113.	12.4299	0.0153	12.8891	0.007
6G42116.D	OMB25539	07/05/13 15:10	OIL/OTHER	6G42113.	12.4303	0.0185	12.8902	0.0155
6G42117.D	MBS	07/05/13 15:27	OIL/OTHER	6G42113.	12.4291	0.0088	12.8892	0.0078
6G42118.D	73281-001(MS)	07/05/13 15:45	OIL/OTHER	6G42113.	12.4292	0.0097	12.8883	0.0008
6G42119.D	73281-001(MSD)	07/05/13 16:02	OIL/OTHER	6G42113.	12.4286	0.0048	12.8876	0.0047
6G42120.D	EF-SPLP-V-168108(7/2)	07/05/13 16:20	Aqueous	6G42113.	12.4288	0.0064	12.8882	0
6G42121.D	EF1-V-167902(7/2)	07/05/13 16:37	Aqueous	6G42113.	12.4295	0.0121	12.8896	0.0109
6G42122.D	SMB25536	07/05/13 16:55	Soil	6G42113.	12.4278	0.0016	12.8864	0.014
6G42123.D	MBS-1	07/05/13 17:12	Soil	6G42113.	12.4279	0.0008	12.8880	0.0016
6G42124.D	MBS-2	07/05/13 17:30	Soil	6G42113.	12.4278	0.0016	12.8878	0.0031
6G42125.D	MBS-3	07/05/13 17:47	Soil	6G42113.	12.4279	0.0008	12.8878	0.0031
6G42126.D	MBS-4	07/05/13 18:05	Soil	6G42113.	12.4266	0.0113	12.8856	0.0202
6G42127.D	SMB25532	07/05/13 18:22	Soil	6G42113.	12.4271	0.0072	12.8858	0.0186
6G42128.D	MBS	07/05/13 18:40	Soil	6G42113.	12.4266	0.0113	12.8858	0.0186
6G42129.D	CAL PEST@100PPB	07/05/13 18:57	Soil	6G42113.	12.4304	0.0193	12.8903	0.0163
6G42130.D	200PPB	07/05/13 19:15	Soil	6G42129.	12.4290	0.0113	12.8891	0.0093
6G42131.D	BLK	07/06/13 11:01	Soil	6G42129.	12.4420	0.0933	12.8918	0.0116
6G42132.D	BLK	07/07/13 11:01	Soil	6G42129.	12.4419	0.0925	12.8913	0.0078
6G42133.D	BLK	07/08/13 05:01	Soil	6G42129.	12.4440	0.1094	12.8921	0.014
6G42134.D	BLK	07/08/13 05:18	Soil	6G42129.	12.4335	0.0249	12.8887	0.0124
6G42135.D	BLK	07/08/13 05:36	Soil	6G42129.	12.4324	0.0161	12.8904	0.0008
6G42136.D	BLK	07/08/13 05:53	Soil	6G42129.	12.4315	0.0089	12.8897	0.0047
6G42137.D	BLK	07/08/13 06:11	Soil	6G42129.	12.4319	0.0121	12.8889	0.0109
6G42138.D	BLK	07/08/13 06:28	Soil	6G42129.	12.4314	0.008	12.8901	0.0016
6G42139.D	BLK	07/08/13 06:46	Soil	6G42129.	12.4309	0.004	12.8886	0.0132
6G42140.D	BLK	07/08/13 07:03	Soil	6G42129.	12.4320	0.0129	12.8905	0.0016
6G42141.D	BLK	07/08/13 07:21	Soil	6G42129.	0.0000	200 *	0.0000	200 *
6G42142.D	BLK	07/08/13 07:37	Soil	6G42129.	12.4315	0.0089	12.8897	0.0047

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081A

Instrument: GC_5

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
5G46830.D	BLK	07/11/13 13:45	Soil					
5G46831.D	BLK	07/11/13 14:03	Soil					
5G46832.D	BLK	07/11/13 14:21	Soil					
5G46833.D	BLK	07/11/13 14:38	Soil					
5G46834.D	CAL EVAL	07/11/13 14:57	Soil					
5G46835.D	CAL PEST@2PPB	07/11/13 15:15	Soil	5G46835.	13.2978	0	13.6785	0
5G46836.D	CAL PEST@10PPB	07/11/13 15:33	Soil	5G46835.	13.2979	0.0008	13.6807	0.0161
5G46837.D	CAL PEST@50PPB	07/11/13 15:51	Soil	5G46835.	13.2970	0.006	13.6799	0.0102
5G46838.D	CAL PEST@100PPB	07/11/13 16:09	Soil	5G46835.	13.2965	0.0098	13.6789	0.0029
5G46839.D	CAL PEST@200PPB	07/11/13 16:26	Soil	5G46835.	13.2957	0.0158	13.6786	0.0007
5G46840.D	CAL PEST@400PPB	07/11/13 16:50	Soil	5G46835.	13.2978	0	13.6771	0.0102
5G46841.D	CAL CHLOR@100PPB	07/11/13 17:08	Soil	5G46835.	13.2970	0.006	13.6796	0.008
5G46842.D	CAL TOX@500PPB	07/11/13 17:26	Soil	5G46835.	13.2982	0.003	13.6806	0.0154
5G46843.D	ICV	07/11/13 17:44	Soil	5G46835.	13.2940	0.0286	13.6755	0.0219
5G46844.D	CAL EVAL	07/11/13 18:01	Soil					
5G46845.D	MBS-1	07/11/13 18:19	Aqueous	5G46835.	13.2936	0.0316	13.6749	0.0263
5G46846.D	MBS-1	07/11/13 18:37	Aqueous	5G46835.	13.2938	0.0301	13.6781	0.0029
5G46847.D	MBS-1	07/11/13 18:55	Aqueous	5G46835.	13.2924	0.0406	13.6751	0.0249
5G46848.D	MBS-1	07/11/13 19:13	Aqueous	5G46835.	13.2938	0.0301	13.6763	0.0161
5G46849.D	CAL PEST@100PPB	07/11/13 19:31	Soil	5G46835.	13.2967	0.0083	13.6791	0.0044
5G46850.D	200PPB	07/11/13 19:48	Soil	5G46849.	13.2958	0.0068	13.6784	0.0051
5G46851.D	WMB25579(MS)	07/11/13 20:06	Aqueous	5G46849.	13.2965	0.0015	13.6788	0.0022
5G46852.D	WMB25579	07/11/13 20:24	Aqueous	5G46849.	13.2960	0.0053	13.6792	0.0007
5G46853.D	AC73359-003(MS)	07/11/13 20:42	Aqueous	5G46849.	13.2933	0.0256	13.6756	0.0256
5G46854.D	AC73359-003(MSD)	07/11/13 20:59	Aqueous	5G46849.	13.2936	0.0233	13.6777	0.0102
5G46855.D	AC73359-003	07/11/13 21:17	Aqueous	5G46849.	13.2934	0.0248	13.6765	0.019
5G46856.D	AC73365-001	07/11/13 21:35	Aqueous	5G46849.	13.2918	0.0369	13.6760	0.0227
5G46857.D	AC73365-002	07/11/13 21:53	Aqueous	5G46849.	13.2935	0.0241	13.6767	0.0175
5G46858.D	AC73365-003	07/11/13 22:11	Aqueous	5G46849.	13.2923	0.0331	13.6739	0.038
5G46859.D	AC73365-004	07/11/13 22:28	Aqueous	5G46849.	13.2932	0.0263	13.6767	0.0175
5G46860.D	AC73365-005	07/11/13 22:46	Aqueous	5G46849.	13.2927	0.0301	13.6748	0.0314
5G46861.D	AC73365-006	07/11/13 23:04	Aqueous	5G46849.	13.2914	0.0399	13.6725	0.0483
5G46862.D	AC73365-007	07/11/13 23:22	Aqueous	5G46849.	13.2958	0.0068	13.6774	0.0124
5G46863.D	AC73365-009	07/11/13 23:39	Aqueous	5G46849.	13.2919	0.0361	13.6752	0.0285
5G46864.D	CAL PEST@100PPB	07/11/13 23:57	Aqueous	5G46849.	13.2959	0.006	13.6782	0.0066
5G46865.D	200PPB	07/12/13 00:15	Aqueous	5G46864.	13.2961	0.0015	13.6786	0.0029

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081A

Instrument: GC_5 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
5G47112.D	CAL EVAL	08/02/13 08:42	Soil					
5G47113.D	CAL PEST@100PPB	08/02/13 09:06	Soil	5G47113.	13.2955	0	13.6741	0
5G47114.D	WMB25769	08/02/13 09:26	Aqueous	5G47113.	13.2940	0.0113	13.6739	0.0015
5G47115.D	WMB25769(MS)	08/02/13 09:44	Aqueous	5G47113.	13.2913	0.0316	13.6725	0.0117
5G47116.D	AC73655-003(100X)	08/02/13 10:02	Soil	5G47113.	0.0000	200*	0.0000	200*
5G47117.D	AC73655-006(100X)	08/02/13 10:20	Soil	5G47113.	0.0000	200*	0.0000	200*
5G47118.D	AC73655-008(10X)	08/02/13 10:37	Soil	5G47113.	13.2903	0.0391	13.6725	0.0117
5G47119.D	AC73655-010(10X)	08/02/13 10:55	Soil	5G47113.	13.2893	0.0466	13.6716	0.0183
5G47120.D	AC73655-015(1000X)	08/02/13 11:13	Soil	5G47113.	0.0000	200*	0.0000	200*
5G47121.D	AC73709-004(50X)	08/02/13 11:31	Soil	5G47113.	13.2889	0.0496	13.6721	0.0146
5G47122.D	AC73655-013(1000X)	08/02/13 11:48	Soil	5G47113.	13.2921	0.0256	13.6763	0.0161
5G47123.D	AC73655-019(1000X)	08/02/13 12:06	Soil	5G47113.	13.2898	0.0429	13.6744	0.0022
5G47124.D	AC73655-026(1000X)	08/02/13 12:24	Soil	5G47113.	13.2935	0.015	13.6746	0.0037
5G47125.D	AC73655-011(1000X)	08/02/13 12:42	Soil	5G47113.	13.2912	0.0323	13.6734	0.0051
5G47126.D	AC73655-009(1000X)	08/02/13 13:00	Soil	5G47113.	13.2898	0.0429	13.6748	0.0051
5G47127.D	AC73655-002(100X)	08/02/13 13:34	Soil	5G47113.	13.2941	0.0105	13.6714	0.0197
5G47128.D	AC73655-007(100X)	08/02/13 13:51	Soil	5G47113.	0.0000	200*	0.0000	200*
5G47129.D	AC73758-001	08/02/13 14:09	Soil	5G47113.	13.2907	0.0361	13.6727	0.0102
5G47130.D	AC73758-002	08/02/13 14:27	Soil	5G47113.	13.2913	0.0316	13.6745	0.0029
5G47131.D	AC73758-003	08/02/13 14:45	Soil	5G47113.	13.2904	0.0384	13.6729	0.0088
5G47132.D	CAL PEST@100PPB	08/02/13 15:16	Soil	5G47113.	13.2904	0.0384	13.6744	0.0022
5G47133.D	CAL EVAL	08/02/13 17:04	Soil					
5G47134.D	WMB25782	08/02/13 17:22	Aqueous	5G47132.	13.2938	0.0256	13.6733	0.008
5G47135.D	WMB25782(MS)	08/02/13 17:40	Aqueous	5G47132.	13.2915	0.0083	13.6730	0.0102
5G47136.D	AC73751-001(T)	08/02/13 17:57	Aqueous	5G47132.	13.2916	0.009	13.6728	0.0117
5G47137.D	AC73697-001(T)	08/02/13 18:15	Aqueous	5G47132.	13.2921	0.0128	13.6744	0
5G47138.D	EF1-V-170078(8/1)	08/02/13 18:33	Aqueous	5G47132.	13.2934	0.0226	13.6752	0.0059
5G47139.D	AC73668-008(R)	08/02/13 18:51	Aqueous	5G47132.	13.2923	0.0143	13.6738	0.0044
5G47140.D	AC73596-001(T)	08/02/13 19:09	Aqueous	5G47132.	13.2913	0.0068	13.6735	0.0066
5G47141.D	AC73596-002(T)	08/02/13 19:26	Aqueous	5G47132.	13.2925	0.0158	13.6736	0.0059
5G47142.D	AC73596-003(T)	08/02/13 19:44	Aqueous	5G47132.	13.2917	0.0098	13.6737	0.0051
5G47143.D	AC73596-004(T)	08/02/13 20:02	Aqueous	5G47132.	13.2910	0.0045	13.6733	0.008
5G47144.D	EF1-V-169300((7/25)	08/02/13 20:20	Aqueous	5G47132.	13.2930	0.0196	13.6748	0.0029
5G47145.D	SMB25778	08/02/13 20:38	Soil	5G47132.	13.2904	0	13.6723	0.0154
5G47146.D	BLK	08/02/13 20:55	Soil	5G47132.	13.2913	0.0068	13.6735	0.0066
5G47147.D	BLK	08/02/13 21:13	Soil	5G47132.	13.2905	0.0008	13.6717	0.0198
5G47148.D	CAL PEST@100PPB	08/02/13 21:31	Soil	5G47132.	13.2919	0.0113	13.6734	0.0073
5G47149.D	200PPB	08/02/13 21:49	Soil	5G47148.	13.2911	0.006	13.6729	0.0037
5G47150.D	73751-002	08/02/13 22:07	Aqueous	5G47148.	13.2898	0.0158	13.6721	0.0095
5G47151.D	73668-005	08/02/13 22:24	Aqueous	5G47148.	13.2901	0.0135	13.6722	0.0088
5G47152.D	73752-001	08/02/13 22:42	Aqueous	5G47148.	13.2967	0.0361	13.6799	0.0475

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081A

Instrument: GC_6

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G42647.D	CAL EVAL	08/05/13 08:37	Soil					
6G42648.D	CAL PEST@200PPB	08/05/13 09:02	Soil	6G42648.	12.4253	0	12.8804	0
6G42649.D	AC73751-002(T)	08/05/13 09:30	Aqueous	6G42648.	12.4250	0.0024	12.8780	0.0186
6G42650.D	AC73668-005(R)	08/05/13 09:48	Aqueous	6G42648.	12.4174	0.0636	12.8740	0.0497
6G42651.D	AC73752-001(T)	08/05/13 10:05	Aqueous	6G42648.	12.4291	0.0306	12.8859	0.0427
6G42652.D	MBS	08/05/13 10:23	Soil	6G42648.	12.4264	0.0089	12.8869	0.0505
6G42653.D	AC73758-004	08/05/13 10:54	Soil	6G42648.	12.4366	0.0909	12.8932	0.0993
6G42654.D	AC73758-005	08/05/13 11:12	Soil	6G42648.	12.4264	0.0089	12.8886	0.0636
6G42655.D	AC73771-001	08/05/13 11:29	Soil	6G42648.	12.4247	0.0048	12.8863	0.0458
6G42656.D	AC73771-002	08/05/13 11:47	Soil	6G42648.	12.4249	0.0032	12.8874	0.0543
6G42657.D	AC73748-001	08/05/13 12:05	Soil	6G42648.	12.4244	0.0072	12.8860	0.0435
6G42658.D	AC73749-001	08/05/13 12:22	Soil	6G42648.	12.4244	0.0072	12.8857	0.0411
6G42659.D	AC73723-001(MS)	08/05/13 12:40	Soil	6G42648.	12.4260	0.0056	12.8870	0.0512
6G42660.D	AC73723-001(MSD)	08/05/13 12:57	Soil	6G42648.	12.4271	0.0145	12.8892	0.0683
6G42661.D	AC73723-001	08/05/13 13:15	Soil	6G42648.	12.4266	0.0105	12.8895	0.0706
6G42662.D	CAL PEST@200PPB	08/05/13 13:52	Soil	6G42648.	12.4246	0.0056	12.8886	0.0636
6G42663.D	AC73655-011	08/05/13 14:10	Soil	6G42662.	12.4237	0.0072	12.8859	0.021
6G42665.D	AC73655-011(10X)	08/05/13 14:45	Soil	6G42662.	12.4254	0.0064	12.8860	0.0202
6G42666.D	100PPB	08/05/13 15:02	Soil	6G42662.	12.4265	0.0153	12.8904	0.014
6G42667.D	SMB25778(MS)	08/05/13 15:45	Soil	6G42662.	12.4379	0.107	12.8949	0.0489
6G42668.D	CAL PEST@100PPB	08/05/13 16:09	Soil	6G42662.	12.4365	0.0957	12.8947	0.0473

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

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Form 6
Initial Calibration

Method: EPA 8081A

Instrument: GC_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6G42102.	CAL PEST@2PPB	07/05/13 10:41	2	6G42101.	CAL PEST@10PPB	07/05/13 10:24
3	6G42100.	CAL PEST@50PPB	07/05/13 10:06	4	6G42099.	CAL PEST@100PPB	07/05/13 09:48
5	6G42098.	CAL PEST@200PPB	07/05/13 09:31	6	6G42103.	CAL PEST@400PPB	07/05/13 11:00
7	6G42104.	CAL CHLOR@100PP	07/05/13 11:17	8	6G42105.	CAL TOX@500PPB	07/05/13 11:35

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Qua	1.6581	1.4421	1.2641	1.2093	1.1167	1.0211	----	----	1.29	5.09	0.997	1.00	18	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	1	0	Avg	1.4550	1.3469	1.4645	1.5062	1.4776	1.4026	----	----	1.44	6.28	0.999	1.00	4.0	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	1	0	Avg	1.4686	1.3659	1.4113	1.4162	1.3620	1.2834	----	----	1.38	6.81	0.999	1.00	4.6	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	1	0	Qua	1.1313	0.9050	0.7701	0.7322	0.6764	0.6148	----	----	0.805	7.71	0.997	1.00	23	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	1	0	Qua	1.8487	1.4741	1.2860	1.2405	1.1665	1.0784	----	----	1.35	7.10	0.998	1.00	21	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	1	0	Qua	1.6553	1.3589	1.3169	1.3419	1.3004	1.2326	----	----	1.37	8.05	0.999	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Aldrin	1	0	Avg	1.4795	1.2592	1.2336	1.2303	1.1809	1.1078	----	----	1.25	7.47	0.999	1.00	10	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	1	0	Qua	1.5152	1.2893	1.1787	1.1399	1.0661	0.9801	----	----	1.19	8.31	0.997	1.00	16	2.00	10.00	50.00	100.0	200.0	400.0		
γ-chlordane	1	0	Qua	1.7212	1.4552	1.2984	1.2841	1.2287	1.1476	----	----	1.36	8.71	0.998	1.00	15	2.00	10.00	50.00	100.0	200.0	400.0		
a-chlordane	1	0	Qua	1.8133	1.4248	1.2314	1.1921	1.1216	1.0456	----	----	1.30	8.78	0.998	1.00	21	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	1	0	Qua	1.3546	1.1613	0.9979	0.9526	0.8864	0.8107	----	----	1.03	8.68	0.997	1.00	19	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	1	0	Avg	1.3016	1.1354	1.1098	1.1128	1.0734	1.0216	----	----	1.13	8.87	0.999	1.00	8.4	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	1	0	Avg	1.2611	1.1251	1.0883	1.0848	1.0361	0.9689	----	----	1.09	9.13	0.998	1.00	9.0	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	1	0	Qua	1.0745	0.9149	0.8805	0.8895	0.8557	0.7842	----	----	0.900	9.39	0.998	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	1	0	Qua	1.1216	0.9075	0.8464	0.8685	0.8430	0.8057	----	----	0.899	9.83	0.999	1.00	13	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	1	0	Qua	1.5313	1.1899	1.0491	1.0158	0.9568	0.8853	----	----	1.10	9.96	0.998	1.00	21	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	1	0	Avg	1.0235	0.8799	0.8424	0.8415	0.8195	0.7954	----	----	0.867	10.04	1.00	1.00	9.4	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	1	0	Qua	1.2270	0.8699	0.7625	0.7919	0.7633	0.7166	----	----	0.855	10.45	0.999	1.00	22	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	1	0	Qua	1.5036	1.0991	0.9829	0.9821	0.9295	0.8723	----	----	1.06	10.83	0.999	1.00	22	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	1	0	Qua	0.7163	0.5597	0.5138	0.4943	0.4620	0.4276	----	----	0.529	10.74	0.998	1.00	19	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	1	0	Qua	1.5926	1.2205	1.0895	1.0755	1.0118	0.9444	----	----	1.16	11.36	0.998	1.00	20	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	1	0	Qua	1.7160	1.3938	1.0922	1.0027	0.8962	0.8138	----	----	1.15	12.43	0.996	1.00	30	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane	1	1	Avg	----	----	----	----	----	----	----	----	0.0856	7.10	-1	-1	Lvl=7	100.0							
Chlordane	1	2	Avg	----	----	----	----	----	----	----	----	0.161	8.72	-1	-1	Lvl=7	100.0							
Chlordane	1	3	Avg	----	----	----	----	----	----	----	----	0.234	8.78	-1	-1	Lvl=7	100.0							
Toxaphene	1	1	Avg	----	----	----	----	----	----	----	----	0.0147	9.38	-1	-1	Lvl=8	500.0							
Toxaphene	1	2	Avg	----	----	----	----	----	----	----	----	0.0126	9.64	-1	-1	Lvl=8	500.0							
Toxaphene	1	3	Avg	----	----	----	----	----	----	----	----	0.0332	10.32	-1	-1	Lvl=8	500.0							
Toxaphene	1	4	Avg	----	----	----	----	----	----	----	----	0.0318	10.69	-1	-1	Lvl=8	500.0							
Toxaphene	1	5	Avg	----	----	----	----	----	----	----	----	0.0237	11.09	-1	-1	Lvl=8	500.0							
TCMX-Surrogate	2	0	Avg	1.7040	1.5866	1.5892	1.5620	1.5375	1.4704	----	----	1.58	5.02	0.999	1.00	4.9	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	2	0	Qua	1.5313	1.5130	1.8065	2.0012	2.0803	2.0691	----	----	1.83	5.95	1.00	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	2	0	Avg	1.6331	1.5110	1.7163	1.8446	1.8721	1.8182	----	----	1.73	6.48	1.00	1.00	8.1	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	2	0	Avg	1.2735	1.1585	1.0314	1.0467	1.0402	1.0163	----	----	1.09	6.56	1.00	1.00	9.3	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	2	0	Qua	2.4055	1.7833	1.6320	1.6670	1.6628	1.6155	----	----	1.79	6.93	1.00	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	2	0	Avg	1.7315	1.4679	1.6374	1.8204	1.8801	1.8544	----	----	1.73	7.06	1.00	1.00	9.1	2.00	10.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 15.8 Avg Rsd Col 2: 9.65

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

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Form 6
Initial Calibration

Method: EPA 8081A

Instrument: GC_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6G42102.	CAL PEST@2PPB	07/05/13 10:41	2	6G42101.	CAL PEST@10PPB	07/05/13 10:24
3	6G42100.	CAL PEST@50PPB	07/05/13 10:06	4	6G42099.	CAL PEST@100PPB	07/05/13 09:48
5	6G42098.	CAL PEST@200PPB	07/05/13 09:31	6	6G42103.	CAL PEST@400PPB	07/05/13 11:00
7	6G42104.	CAL CHLOR@100PP	07/05/13 11:17	8	6G42105.	CAL TOX@500PPB	07/05/13 11:35

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aldrin	2	0	Avg	1.6168	1.4523	1.5554	1.6692	1.7129	1.6884	----	----	1.62	7.38	1.00	1.00	6.1	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	2	0	Avg	1.7873	1.5293	1.4997	1.5446	1.5344	1.4782	----	----	1.56	8.10	1.00	1.00	7.2	2.00	10.00	50.00	100.0	200.0	400.0		
v-chlordane	2	0	Avg	1.8842	1.6171	1.6123	1.6775	1.6922	1.6605	----	----	1.69	8.31	1.00	1.00	5.9	2.00	10.00	50.00	100.0	200.0	400.0		
a-chlordane	2	0	Avg	1.7861	1.5390	1.4767	1.5115	1.4728	1.3946	----	----	1.53	8.51	0.999	1.00	8.8	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	2	0	Avg	1.7502	1.5071	1.5300	1.6330	1.6741	1.6390	----	----	1.62	8.57	1.00	1.00	5.6	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	2	0	Avg	1.7244	1.3289	1.3856	1.5090	1.5630	1.5549	----	----	1.51	8.80	1.00	1.00	9.3	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	2	0	Avg	1.6613	1.3538	1.3781	1.4817	1.5140	1.4857	----	----	1.48	8.96	1.00	1.00	7.4	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	2	0	Avg	1.1691	1.0275	1.0406	1.1153	1.1460	1.0943	----	----	1.10	9.43	0.999	1.00	5.1	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	2	0	Avg	1.2442	1.0907	1.0869	1.1879	1.2440	1.2473	----	----	1.18	9.51	1.00	1.00	6.5	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	2	0	Avg	1.6816	1.4370	1.3769	1.4193	1.4178	1.3762	----	----	1.45	9.65	1.00	1.00	7.9	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	2	0	Avg	1.1612	1.0772	1.1496	1.2191	1.2641	1.2677	----	----	1.19	9.89	1.00	1.00	6.2	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	2	0	Qua	1.9191	1.2901	1.0926	1.1515	1.1373	1.1005	----	----	1.28	10.05	1.00	1.00	25	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	2	0	Avg	1.5079	1.2151	1.1815	1.2204	1.2301	1.2124	----	----	1.26	10.20	1.00	1.00	9.7	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	2	0	Avg	0.8676	0.7732	0.7315	0.7285	0.7128	0.6824	----	----	0.749	10.95	0.999	1.00	8.7	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	2	0	Qua	1.8666	1.4942	1.4397	1.4874	1.4742	1.4376	----	----	1.53	11.20	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	2	0	Qua	2.1943	1.8055	1.5612	1.5015	1.4176	1.3293	----	----	1.63	12.89	0.999	1.00	19	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane	2	1	Avg	----	----	----	----	----	----	----	----	0.118	6.93	-1	-1	Lvl=7	100.0							
Chlordane	2	2	Avg	----	----	----	----	----	----	----	----	0.348	8.31	-1	-1	Lvl=7	100.0							
Chlordane	2	3	Avg	----	----	----	----	----	----	----	----	0.193	8.51	-1	-1	Lvl=7	100.0							
Toxaphene	2	1	Avg	----	----	----	----	----	----	----	----	0.0230	9.12	-1	-1	Lvl=8	500.0							
Toxaphene	2	2	Avg	----	----	----	----	----	----	----	----	0.0105	9.42	-1	-1	Lvl=8	500.0							
Toxaphene	2	3	Avg	----	----	----	----	----	----	----	----	0.0271	10.21	-1	-1	Lvl=8	500.0							
Toxaphene	2	4	Avg	----	----	----	----	----	----	----	----	0.0246	10.46	-1	-1	Lvl=8	500.0							
Toxaphene	2	5	Avg	----	----	----	----	----	----	----	----	0.0738	10.78	-1	-1	Lvl=8	500.0							

Avg Rsd Col 1: 15.8 Avg Rsd Col 2: 9.65

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 ; Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3080110 0168

Form 6
Initial Calibration

Method: EPA 8081A

Instrument: GC_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5G46835.	CAL PEST@2PPB	07/11/13 15:15	2	5G46836.	CAL PEST@10PPB	07/11/13 15:33
3	5G46837.	CAL PEST@50PPB	07/11/13 15:51	4	5G46838.	CAL PEST@100PPB	07/11/13 16:09
5	5G46839.	CAL PEST@200PPB	07/11/13 16:26	6	5G46840.	CAL PEST@400PPB	07/11/13 16:50
7	5G46841.	CAL CHLOR@100PP	07/11/13 17:08	8	5G46842.	CAL TOX@500PPB	07/11/13 17:26

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Avg	239.14	230.91	205.67	207.50	202.86	195.34	---	---	214	6.27	1.00	1.00	8.1	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	1	0	Avg	284.46	289.38	280.85	294.53	298.44	302.73	---	---	292	7.54	1.00	1.00	2.9	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	1	0	Avg	274.73	273.94	254.31	261.93	265.45	261.87	---	---	265	8.06	1.00	1.00	3.0	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	1	0	Avg	112.94	111.16	102.26	105.90	105.41	102.15	---	---	107	8.96	1.00	1.00	4.2	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	1	0	Avg	239.58	227.97	214.94	214.97	209.70	201.00	---	---	218	8.35	0.999	1.00	6.3	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	1	0	Avg	189.49	254.62	228.80	240.48	243.00	235.07	---	---	232	9.28	1.00	1.00	9.7	2.00	10.00	50.00	100.0	200.0	400.0		
Aldrin	1	0	Avg	241.97	242.14	231.83	235.97	232.56	222.74	---	---	235	8.71	0.999	1.00	3.1	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	1	0	Qua	111.61	209.91	199.94	203.85	200.41	190.67	---	---	186	9.52	0.999	1.00	20	2.00	10.00	50.00	100.0	200.0	400.0		
γ-chlordane	1	0	Qua	108.32	162.57	200.82	208.73	209.20	204.44	---	---	182	9.90	1.00	1.00	22	2.00	10.00	50.00	100.0	200.0	400.0		
α-chlordane	1	0	Qua	136.03	140.52	194.34	200.79	200.67	195.46	---	---	178	9.97	1.00	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	1	0	Qua	96.907	150.73	175.00	181.49	179.47	173.28	---	---	159	9.86	1.00	1.00	20	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	1	0	Qua	127.89	127.45	195.83	203.00	201.72	197.05	---	---	175	10.06	1.00	1.00	21	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	1	0	Avg	194.53	198.11	192.38	199.83	197.50	193.42	---	---	196	10.29	1.00	1.00	1.5	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	1	0	Avg	146.74	148.80	146.84	153.07	151.74	146.16	---	---	149	10.53	1.00	1.00	1.9	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	1	0	Avg	149.27	151.75	137.91	150.36	153.13	152.61	---	---	149	10.97	1.00	1.00	3.8	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	1	0	Avg	165.68	170.08	160.16	168.23	168.36	165.36	---	---	166	11.07	1.00	1.00	2.1	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	1	0	Qua	106.36	118.09	129.41	136.86	141.36	143.93	---	---	129	11.16	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	1	0	Avg	128.10	118.65	108.14	122.42	123.33	121.70	---	---	120	11.54	1.00	1.00	5.6	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	1	0	Avg	146.37	149.01	140.19	152.30	151.99	149.41	---	---	148	11.89	1.00	1.00	3.0	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	1	0	Avg	69.060	60.691	58.303	61.832	63.565	63.818	---	---	62.9	11.82	1.00	1.00	5.8	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	1	0	Avg	158.30	146.44	143.97	160.56	161.93	162.99	---	---	156	12.38	1.00	1.00	5.3	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	1	0	Avg	173.67	155.80	137.17	145.34	146.09	145.83	---	---	151	13.30	1.00	1.00	8.5	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane	1	1	Avg	---	---	---	---	---	---	---	---	10.5	8.15	-1	-1	Lvl=7	100.0							
Chlordane	1	2	Avg	---	---	---	---	---	---	---	---	25.6	9.90	-1	-1	Lvl=7	100.0							
Chlordane	1	3	Avg	---	---	---	---	---	---	---	---	36.4	9.97	-1	-1	Lvl=7	100.0							
Toxaphene	1	1	Avg	---	---	---	---	---	---	---	---	1.07	10.32	-1	-1	Lvl=8	500.0							
Toxaphene	1	2	Avg	---	---	---	---	---	---	---	---	2.04	10.53	-1	-1	Lvl=8	500.0							
Toxaphene	1	3	Avg	---	---	---	---	---	---	---	---	2.16	11.11	-1	-1	Lvl=8	500.0							
Toxaphene	1	4	Avg	---	---	---	---	---	---	---	---	5.12	11.42	-1	-1	Lvl=8	500.0							
Toxaphene	1	5	Avg	---	---	---	---	---	---	---	---	3.89	12.13	-1	-1	Lvl=8	500.0							
TCMX-Surrogate	2	0	Qua	191.28	158.02	139.08	143.32	138.58	128.57	---	---	150	6.20	0.998	1.00	15	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	2	0	Avg	208.37	205.93	199.97	206.67	206.68	197.90	---	---	204	7.21	0.999	1.00	2.1	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	2	0	Avg	182.69	177.50	169.69	175.99	175.37	167.19	---	---	175	7.75	0.999	1.00	3.2	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	2	0	Avg	84.700	83.505	71.898	77.596	76.623	71.421	---	---	77.6	7.84	0.998	1.00	7.2	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	2	0	Qua	219.77	160.22	137.29	138.93	134.56	125.76	---	---	153	8.18	0.999	1.00	23	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	2	0	Avg	181.17	170.16	155.72	171.84	171.10	164.42	---	---	169	8.32	0.999	1.00	5.0	2.00	10.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 8.50 Avg Rsd Col 2: 6.80

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt.calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3080110 0169

Form 6
Initial Calibration

Method: EPA 8081A

Instrument: GC_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5G46835.	CAL PEST@2PPB	07/11/13 15:15	2	5G46836.	CAL PEST@10PPB	07/11/13 15:33
3	5G46837.	CAL PEST@50PPB	07/11/13 15:51	4	5G46838.	CAL PEST@100PPB	07/11/13 16:09
5	5G46839.	CAL PEST@200PPB	07/11/13 16:26	6	5G46840.	CAL PEST@400PPB	07/11/13 16:50
7	5G46841.	CAL CHLOR@100PP	07/11/13 17:08	8	5G46842.	CAL TOX@500PPB	07/11/13 17:26

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aldrin	2	0	Avg	166.64	162.78	152.09	159.17	154.50	144.38	----	----	157	8.62	0.999	1.00	5.1	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	2	0	Avg	162.45	142.98	131.29	135.45	132.49	123.93	----	----	138	9.32	0.999	1.00	9.7	2.00	10.00	50.00	100.0	200.0	400.0		
γ-chlordane	2	0	Avg	144.73	139.12	128.03	137.84	137.25	130.71	----	----	136	9.52	0.999	1.00	4.4	2.00	10.00	50.00	100.0	200.0	400.0		
a-chlordane	2	0	Avg	136.81	131.81	122.59	130.01	129.60	124.76	----	----	129	9.72	1.00	1.00	3.9	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	2	0	Avg	138.95	134.30	120.64	125.11	121.59	113.89	----	----	126	9.76	0.999	1.00	7.4	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	2	0	Avg	126.87	127.11	120.67	129.33	129.40	124.99	----	----	126	10.00	1.00	1.00	2.6	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	2	0	Avg	136.59	134.14	126.54	133.92	130.21	125.49	----	----	131	10.13	0.999	1.00	3.4	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	2	0	Avg	103.25	100.09	93.769	99.814	98.651	94.469	----	----	98.3	10.58	0.999	1.00	3.7	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	2	0	Avg	102.08	99.020	89.873	100.62	101.53	100.72	----	----	99.0	10.67	1.00	1.00	4.6	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	2	0	Avg	117.04	116.61	107.55	115.47	116.61	110.13	----	----	114	10.79	0.999	1.00	3.5	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	2	0	Avg	101.14	86.659	84.345	94.544	95.642	96.038	----	----	93.1	11.03	1.00	1.00	6.8	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	2	0	Qua	114.80	91.421	76.326	90.323	89.458	87.324	----	----	91.6	11.17	0.999	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	2	0	Avg	117.54	105.18	98.006	107.96	107.15	103.78	----	----	107	11.31	1.00	1.00	6.0	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	2	0	Avg	51.360	45.951	39.897	43.695	43.845	44.037	----	----	44.8	12.02	1.00	1.00	8.4	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	2	0	Avg	124.98	118.63	106.75	117.36	117.16	116.55	----	----	117	12.24	1.00	1.00	5.0	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	2	0	Avg	108.38	102.00	91.176	97.232	97.430	95.471	----	----	98.6	13.68	1.00	1.00	6.0	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane	2	1	Avg	----	----	----	----	----	----	----	----	7.39	7.97	-1	-1	Lvl=7	100.0							
Chlordane	2	2	Avg	----	----	----	----	----	----	----	----	17.9	9.52	-1	-1	Lvl=7	100.0							
Chlordane	2	3	Avg	----	----	----	----	----	----	----	----	15.5	9.72	-1	-1	Lvl=7	100.0							
Toxaphene	2	1	Avg	----	----	----	----	----	----	----	----	1.76	10.29	-1	-1	Lvl=8	500.0							
Toxaphene	2	2	Avg	----	----	----	----	----	----	----	----	2.81	10.83	-1	-1	Lvl=8	500.0							
Toxaphene	2	3	Avg	----	----	----	----	----	----	----	----	2.52	11.32	-1	-1	Lvl=8	500.0							
Toxaphene	2	4	Avg	----	----	----	----	----	----	----	----	5.37	11.85	-1	-1	Lvl=8	500.0							
Toxaphene	2	5	Avg	----	----	----	----	----	----	----	----	2.47	12.21	-1	-1	Lvl=8	500.0							

Avg Rsd Col 1: 8.50 Avg Rsd Col 2: 6.80

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Form7
Continuing Calibration

Method: EPA 8081A

3080110 0170

				5G47132.D			5G47148.D			6G42648.D			6G42662.D			6G42668.D		
Data File:				5G47132.D			5G47148.D			6G42648.D			6G42662.D			6G42668.D		
Method:				8081			8081			8081			8081			8081		
Calibration Name:				CAL PEST@100PP			CAL PEST@100PP			CAL PEST@200PP			CAL PEST@200PP			CAL PEST@100PP		
Calibration Date/Time				08/02/13 15:16			08/02/13 21:31			08/05/13 09:02			08/05/13 13:52			08/05/13 16:09		
Compound	Limit	Col	Mr	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff
TCMX-Surrogate	15	1	0	99.99	100	0.0	97.98	100	2.0	208.7	200	4.3	220.6	200	10.3	117.6	100	17.6*
alpha-BHC	15	1	0	104.5	100	4.5	104.3	100	4.3	213.3	200	6.7	189.8	200	5.1	104.2	100	4.2
gamma-BHC	15	1	0	102.2	100	2.2	102.8	100	2.8	207	200	3.5	195.6	200	2.2	110	100	10.0
beta-BHC	15	1	0	102.4	100	2.4	103.7	100	3.7	203.4	200	1.7	193.9	200	3.1	109.5	100	9.5
Heptachlor	15	1	0	107.2	100	7.2	106.9	100	6.9	212.7	200	6.3	219.5	200	9.8	117.7	100	17.7*
delta-BHC	15	1	0	107.5	100	7.5	106.8	100	6.8	200.6	200	0.3	171.7	200	14.2	93.83	100	6.2
Aldrin	15	1	0	102.6	100	2.6	103.3	100	3.3	197.4	200	1.3	196.9	200	1.6	109.6	100	9.6
Heptachlor Epoxide	15	1	0	101.6	100	1.6	102.9	100	2.9	206	200	3.0	205.2	200	2.6	111.7	100	11.7
y-chlordane	15	1	0	98.42	100	1.6	103.1	100	3.1	206.3	200	3.1	199.5	200	0.2	109.6	100	9.6
a-chlordane	15	1	0	99.69	100	0.3	102.9	100	2.9	202.3	200	1.1	193.0	200	3.5	106.7	100	6.7
Endosulfan I	15	1	0	102.3	100	2.3	103.7	100	3.7	204.9	200	2.4	199.2	200	0.4	107.6	100	7.6
p,p'-DDE	15	1	0	101.1	100	1.1	102.8	100	2.8	194.9	200	2.6	191.4	200	4.3	103.9	100	3.9
Dieldrin	15	1	0	100.8	100	0.8	106.3	100	6.3	196.1	200	1.9	191.7	200	4.1	106.2	100	6.2
Endrin	15	1	0	109.1	100	9.1	109.8	100	9.8	212.1	200	6.0	210.4	200	5.2	110.4	100	10.4
p,p'-DDD	15	1	0	106.5	100	6.5	106.4	100	6.4	203.5	200	1.8	198.1	200	0.9	101.9	100	1.9
Endosulfan II	15	1	0	101.7	100	1.7	106.4	100	6.4	206.7	200	3.3	200.4	200	0.2	107	100	7.0
p,p'-DDT	15	1	0	104.7	100	4.7	110.3	100	10.3	190.2	200	4.9	171.9	200	14.0	86.75	100	13.3
Endrin Aldehyde	15	1	0	92.26	100	7.7	106.4	100	6.4	217.9	200	8.9	182.9	200	8.6	96.12	100	3.9
Endosulfan Sulfate	15	1	0	99.39	100	0.6	104.8	100	4.8	197.1	200	1.5	186.3	200	6.8	95.75	100	4.3
Methoxychlor	15	1	0	110.5	100	10.5	104.4	100	4.4	199.2	200	0.4	173.5	200	13.3	88.34	100	11.7
Endrin Ketone	15	1	0	102.1	100	2.1	106.7	100	6.7	198.6	200	0.7	136.2	200	31.9*	70.9	100	29.1*
DCB-Surrogate	15	1	0	97.68	100	2.3	101.9	100	1.9	185.6	200	7.2	172.2	200	13.9	95.77	100	4.2
Average Difference	15	1	0			3.6			4.9			3.3			7.1			9.4
TCMX-Surrogate	15	2	0	102.3	100	2.3	100.2	100	0.2	201.1	200	0.5	242.4	200	21.2*	131.2	100	31.2*
alpha-BHC	15	2	0	103.8	100	3.8	104.0	100	4.0	211	200	5.5	220.9	200	10.5	110.5	100	10.5
gamma-BHC	15	2	0	103.3	100	3.3	103.8	100	3.8	222.3	200	11.2	228	200	14.0	116.6	100	16.6*
beta-BHC	15	2	0	99.63	100	0.4	99.45	100	0.6	195.4	200	2.3	243.5	200	21.7*	132.1	100	32.1*
Heptachlor	15	2	0	109.3	100	9.3	109.3	100	9.3	209.8	200	4.9	256.9	200	28.5*	133.7	100	33.6*
delta-BHC	15	2	0	104.0	100	4.0	101.6	100	1.6	216	200	8.0	206.7	200	3.3	102.1	100	2.1
Aldrin	15	2	0	102.3	100	2.3	103	100	3.0	217.4	200	8.7	244.7	200	22.3*	129.1	100	29.1*
Heptachlor Epoxide	15	2	0	99.9	100	0.1	101.8	100	1.8	199.6	200	0.2	223.3	200	11.7	121.0	100	21.0*
y-chlordane	15	2	0	99.39	100	0.6	103.5	100	3.5	200.6	200	0.3	212.9	200	6.4	115.4	100	15.4
a-chlordane	15	2	0	102.1	100	2.1	104.2	100	4.2	194.4	200	2.8	200.4	200	0.2	110.6	100	10.6
Endosulfan I	15	2	0	99.9	100	0.1	101.4	100	1.4	210.6	200	5.3	234.1	200	17.0*	123.9	100	23.9*
p,p'-DDE	15	2	0	104.0	100	4.0	104.5	100	4.5	207.0	200	3.5	214.6	200	7.3	107.9	100	7.9
Dieldrin	15	2	0	103.9	100	3.9	104.8	100	4.8	209.8	200	4.9	239.8	200	19.9*	120.5	100	20.5*
Endrin	15	2	0	107.5	100	7.5	105.0	100	5.0	223.1	200	11.5	238.5	200	19.3*	123.1	100	23.1*
p,p'-DDD	15	2	0	106.2	100	6.2	105.2	100	5.2	209	200	4.5	198.8	200	0.6	101.9	100	1.9
Endosulfan II	15	2	0	102.5	100	2.5	104.9	100	4.9	203.1	200	1.5	211.3	200	5.6	114.7	100	14.7
p,p'-DDT	15	2	0	109.8	100	9.8	108.7	100	8.7	218.3	200	9.1	202.7	200	1.4	98.38	100	1.6
Endrin Aldehyde	15	2	0	108.2	100	8.2	103.6	100	3.6	215.2	200	7.6	183.6	200	8.2	94.47	100	5.5
Endosulfan Sulfate	15	2	0	101.6	100	1.6	102.6	100	2.6	205.3	200	2.6	211.6	200	5.8	109.1	100	9.1
Methoxychlor	15	2	0	104.8	100	4.8	104.8	100	4.8	196.6	200	1.7	212.2	200	6.1	106.6	100	6.6
Endrin Ketone	15	2	0	100.6	100	0.6	103.1	100	3.1	211.1	200	5.5	194.9	200	2.6	97.29	100	2.7
DCB-Surrogate	15	2	0	98.75	100	1.3	101.8	100	1.8	185.5	200	7.2	203.8	200	1.9	101.8	100	1.8
Average Difference	15	2	0			3.6			3.7			5.0			10.7			14.6

Flags/Notes: **** - Values outside of limits for this column/run***

Form7
RtWindow Summary

Method: EPA 8081A

3080110 0171

Data File:			5G46835.D		6G42102.D		5G47132.D		6G42648.D		6G42662.D	
Calibration Name:			CAL PEST@2PPB		CAL PEST@2PPB		CAL PEST@100PPB		CAL PEST@200PPB		CAL PEST@200PPB	
Calibration Date/Time			7/11/2013 3:15:40 PM		7/5/2013 10:41:00 AM		8/2/2013 3:16:02 PM		8/5/2013 9:02:00 AM		8/5/2013 1:52:00 PM	
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
TCMX-Surrogate	1	0	6.27	(6.21 - 6.33)	5.09	(5.03 - 5.15)	6.27	(6.20 - 6.32)	5.09	(5.03 - 5.15)	5.09	(5.03 - 5.15)
alpha-BHC	1	0	7.54	(7.50 - 7.58)	6.28	(6.24 - 6.32)	7.54	(7.50 - 7.58)	6.28	(6.24 - 6.32)	6.28	(6.24 - 6.32)
gamma-BHC	1	0	8.07	(8.03 - 8.11)	6.81	(6.77 - 6.85)	8.06	(8.02 - 8.10)	6.80	(6.76 - 6.84)	6.80	(6.76 - 6.84)
beta-BHC	1	0	8.96	(8.88 - 9.04)	7.71	(7.63 - 7.79)	8.95	(8.87 - 9.03)	7.70	(7.62 - 7.78)	7.70	(7.62 - 7.78)
Heptachlor	1	0	8.35	(8.31 - 8.39)	7.10	(7.06 - 7.14)	8.34	(8.30 - 8.38)	7.10	(7.06 - 7.14)	7.10	(7.06 - 7.14)
delta-BHC	1	0	9.28	(9.20 - 9.36)	8.05	(7.97 - 8.13)	9.28	(9.20 - 9.36)	8.04	(7.96 - 8.12)	8.04	(7.96 - 8.12)
Aldrin	1	0	8.71	(8.63 - 8.79)	7.47	(7.39 - 7.55)	8.70	(8.62 - 8.78)	7.47	(7.39 - 7.55)	7.47	(7.39 - 7.55)
Heptachlor Epoxide	1	0	9.52	(9.48 - 9.56)	8.31	(8.27 - 8.35)	9.52	(9.48 - 9.56)	8.31	(8.27 - 8.35)	8.31	(8.27 - 8.35)
v-chlordane	1	0	9.90	(9.86 - 9.94)	8.71	(8.67 - 8.75)	9.90	(9.86 - 9.94)	8.71	(8.67 - 8.75)	8.71	(8.67 - 8.75)
a-chlordane	1	0	9.97	(9.93 - 10.01)	8.78	(8.74 - 8.82)	9.97	(9.93 - 10.01)	8.78	(8.74 - 8.82)	8.78	(8.74 - 8.82)
Endosulfan I	1	0	9.86	(9.82 - 9.90)	8.68	(8.64 - 8.72)	9.86	(9.82 - 9.90)	8.67	(8.63 - 8.71)	8.67	(8.63 - 8.71)
p,p'-DDE	1	0	10.06	(9.98 - 10.14)	8.87	(8.79 - 8.95)	10.05	(9.97 - 10.13)	8.86	(8.78 - 8.94)	8.87	(8.79 - 8.95)
Dieldrin	1	0	10.29	(10.21 - 10.37)	9.13	(9.05 - 9.21)	10.28	(10.20 - 10.36)	9.12	(9.04 - 9.20)	9.12	(9.04 - 9.20)
Endrin	1	0	10.53	(10.49 - 10.57)	9.39	(9.35 - 9.43)	10.53	(10.49 - 10.57)	9.38	(9.34 - 9.42)	9.38	(9.34 - 9.42)
p,p'-DDD	1	0	10.97	(10.89 - 11.05)	9.83	(9.75 - 9.91)	10.96	(10.88 - 11.04)	9.82	(9.74 - 9.90)	9.83	(9.75 - 9.91)
Endosulfan II	1	0	11.08	(11.00 - 11.16)	9.96	(9.88 - 10.04)	11.07	(10.99 - 11.15)	9.95	(9.87 - 10.03)	9.95	(9.87 - 10.03)
p,p'-DDT	1	0	11.16	(11.08 - 11.24)	10.04	(9.96 - 10.12)	11.15	(11.07 - 11.23)	10.04	(9.96 - 10.12)	10.04	(9.96 - 10.12)
Endrin Aldehyde	1	0	11.54	(11.46 - 11.62)	10.46	(10.38 - 10.54)	11.54	(11.46 - 11.62)	10.45	(10.37 - 10.53)	10.45	(10.37 - 10.53)
Endosulfan Sulfate	1	0	11.89	(11.85 - 11.93)	10.83	(10.79 - 10.87)	11.89	(11.85 - 11.93)	10.81	(10.77 - 10.85)	10.81	(10.77 - 10.85)
Methoxychlor	1	0	11.82	(11.78 - 11.86)	10.74	(10.70 - 10.78)	11.81	(11.77 - 11.85)	10.73	(10.69 - 10.77)	10.73	(10.69 - 10.77)
Endrin Ketone	1	0	12.38	(12.30 - 12.46)	11.36	(11.28 - 11.44)	12.37	(12.29 - 12.45)	11.35	(11.27 - 11.43)	11.35	(11.27 - 11.43)
DCB-Surrogate	1	0	13.30	(13.24 - 13.36)	12.43	(12.37 - 12.49)	13.29	(13.23 - 13.35)	12.43	(12.37 - 12.49)	12.42	(12.36 - 12.48)
Chlordane	1	1	8.15	(8.11 - 8.19)	7.10	(7.06 - 7.14)						
Chlordane	1	2	9.90	(9.86 - 9.94)	8.72	(8.68 - 8.76)						
Chlordane	1	3	9.97	(9.93 - 10.01)	8.78	(8.74 - 8.82)						
Toxaphene	1	1	10.32	(10.28 - 10.36)	9.38	(9.34 - 9.42)						
Toxaphene	1	2	10.53	(10.49 - 10.57)	9.64	(9.60 - 9.68)						
Toxaphene	1	3	11.11	(11.07 - 11.15)	10.32	(10.28 - 10.36)						
Toxaphene	1	4	11.42	(11.38 - 11.46)	10.69	(10.65 - 10.73)						
Toxaphene	1	5	12.13	(12.09 - 12.17)	11.09	(11.05 - 11.13)						
TCMX-Surrogate	2	0	6.20	(6.14 - 6.26)	5.02	(4.96 - 5.08)	6.20	(6.14 - 6.26)	5.01	(4.95 - 5.07)	5.05	(4.99 - 5.11)
alpha-BHC	2	0	7.21	(7.17 - 7.25)	5.95	(5.91 - 5.99)	7.21	(7.17 - 7.25)	5.94	(5.90 - 5.98)	5.96	(5.92 - 6.00)
gamma-BHC	2	0	7.75	(7.71 - 7.79)	6.48	(6.44 - 6.52)	7.75	(7.71 - 7.79)	6.48	(6.44 - 6.52)	6.49	(6.45 - 6.53)
beta-BHC	2	0	7.84	(7.76 - 7.92)	6.56	(6.48 - 6.64)	7.84	(7.76 - 7.92)	6.55	(6.47 - 6.63)	6.59	(6.51 - 6.67)
Heptachlor	2	0	8.18	(8.14 - 8.22)	6.93	(6.89 - 6.97)	8.18	(8.14 - 8.22)	6.92	(6.88 - 6.96)	6.93	(6.89 - 6.97)
delta-BHC	2	0	8.32	(8.24 - 8.40)	7.06	(6.98 - 7.14)	8.32	(8.24 - 8.40)	7.05	(6.97 - 7.13)	7.09	(7.01 - 7.17)
Aldrin	2	0	8.62	(8.54 - 8.70)	7.38	(7.30 - 7.46)	8.62	(8.54 - 8.70)	7.37	(7.29 - 7.45)	7.38	(7.30 - 7.46)
Heptachlor Epoxide	2	0	9.32	(9.28 - 9.36)	8.10	(8.06 - 8.14)	9.32	(9.28 - 9.36)	8.10	(8.06 - 8.14)	8.10	(8.06 - 8.14)
v-chlordane	2	0	9.52	(9.48 - 9.56)	8.31	(8.27 - 8.35)	9.52	(9.48 - 9.56)	8.31	(8.27 - 8.35)	8.31	(8.27 - 8.35)
a-chlordane	2	0	9.72	(9.68 - 9.76)	8.51	(8.47 - 8.55)	9.71	(9.67 - 9.75)	8.51	(8.47 - 8.55)	8.51	(8.47 - 8.55)
Endosulfan I	2	0	9.76	(9.72 - 9.80)	8.57	(8.53 - 8.61)	9.76	(9.72 - 9.80)	8.56	(8.52 - 8.60)	8.57	(8.53 - 8.61)
p,p'-DDE	2	0	10.00	(9.92 - 10.08)	8.80	(8.72 - 8.88)	10.00	(9.92 - 10.08)	8.80	(8.72 - 8.88)	8.83	(8.75 - 8.91)
Dieldrin	2	0	10.13	(10.05 - 10.21)	8.96	(8.88 - 9.04)	10.13	(10.05 - 10.21)	8.95	(8.87 - 9.03)	8.96	(8.88 - 9.04)
Endrin	2	0	10.58	(10.54 - 10.62)	9.43	(9.39 - 9.47)	10.58	(10.54 - 10.62)	9.43	(9.39 - 9.47)	9.43	(9.39 - 9.47)
p,p'-DDD	2	0	10.67	(10.59 - 10.75)	9.51	(9.43 - 9.59)	10.66	(10.58 - 10.74)	9.50	(9.42 - 9.58)	9.53	(9.45 - 9.61)
Endosulfan II	2	0	10.79	(10.71 - 10.87)	9.65	(9.57 - 9.73)	10.79	(10.71 - 10.87)	9.64	(9.56 - 9.72)	9.65	(9.57 - 9.73)
p,p'-DDT	2	0	11.03	(10.95 - 11.11)	9.89	(9.81 - 9.97)	11.02	(10.94 - 11.10)	9.89	(9.81 - 9.97)	9.90	(9.82 - 9.98)
Endrin Aldehyde	2	0	11.17	(11.09 - 11.25)	10.05	(9.97 - 10.13)	11.17	(11.09 - 11.25)	10.05	(9.97 - 10.13)	10.06	(9.98 - 10.14)
Endosulfan Sulfate	2	0	11.31	(11.27 - 11.35)	10.20	(10.16 - 10.24)	11.31	(11.27 - 11.35)	10.20	(10.16 - 10.24)	10.21	(10.17 - 10.25)
Methoxychlor	2	0	12.02	(11.98 - 12.06)	10.95	(10.91 - 10.99)	12.02	(11.98 - 12.06)	10.94	(10.90 - 10.98)	10.96	(10.92 - 11.00)
Endrin Ketone	2	0	12.24	(12.16 - 12.32)	11.20	(11.12 - 11.28)	12.23	(12.15 - 12.31)	11.20	(11.11 - 11.27)	11.20	(11.12 - 11.28)
DCB-Surrogate	2	0	13.68	(13.62 - 13.74)	12.89	(12.83 - 12.95)	13.67	(13.61 - 13.73)	12.88	(12.82 - 12.94)	12.89	(12.83 - 12.95)
Chlordane	2	1	7.97	(7.93 - 8.01)	6.93	(6.89 - 6.97)						
Chlordane	2	2	9.52	(9.48 - 9.56)	8.31	(8.27 - 8.35)						
Chlordane	2	3	9.72	(9.68 - 9.76)	8.51	(8.47 - 8.55)						
Toxaphene	2	1	10.29	(10.25 - 10.33)	9.12	(9.08 - 9.16)						
Toxaphene	2	2	10.83	(10.79 - 10.87)	9.42	(9.38 - 9.46)						
Toxaphene	2	3	11.32	(11.28 - 11.36)	10.21	(10.17 - 10.25)						
Toxaphene	2	4	11.85	(11.81 - 11.89)	10.46	(10.42 - 10.50)						
Toxaphene	2	5	12.21	(12.17 - 12.25)	10.78	(10.74 - 10.82)						

EPH Category 1 Data

EPH Category 1 Data
Sample Data

Form1

ORGANICS REPORT

Sample Number: AC73771-001
Client Id: BB-COMP-1-0801113
Data File: 8G42168.D
Analysis Date: 08/03/13 21:47
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: NJEPHRev3A
Matrix: Soil
Initial Vol: 10g
Final Vol: 1ml
Dilution: 1
Solids: 91

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
ephc28c40	>C28-C40	66	U	c9toc28	C9-C28	66	U
ephcat1tot	C9-C40 Cat1 Total EPH	66	U				

Worksheet #: 272465 ***Total Target Concentration*** 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3080110 0175

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42168.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 21:47:46
Operator : KD/RAK/MS
Sample : AC73771-001
Misc : S.TPH
ALS Vial : 37 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:00:04 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.410	296538	87.981		
22)S	1-Chlorooctadecane	13.693	227822	88.781		
	Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		d
5)	2-Methylnaphthalene	0.000	0	N.D.		d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	12.410f	1278319	474.675		m
24)B	>C28-C40(Total)	18.801f	1518958	628.024		m
25)t	C9-C40(TOTAL)	12.410f	2796524	1074.937		m

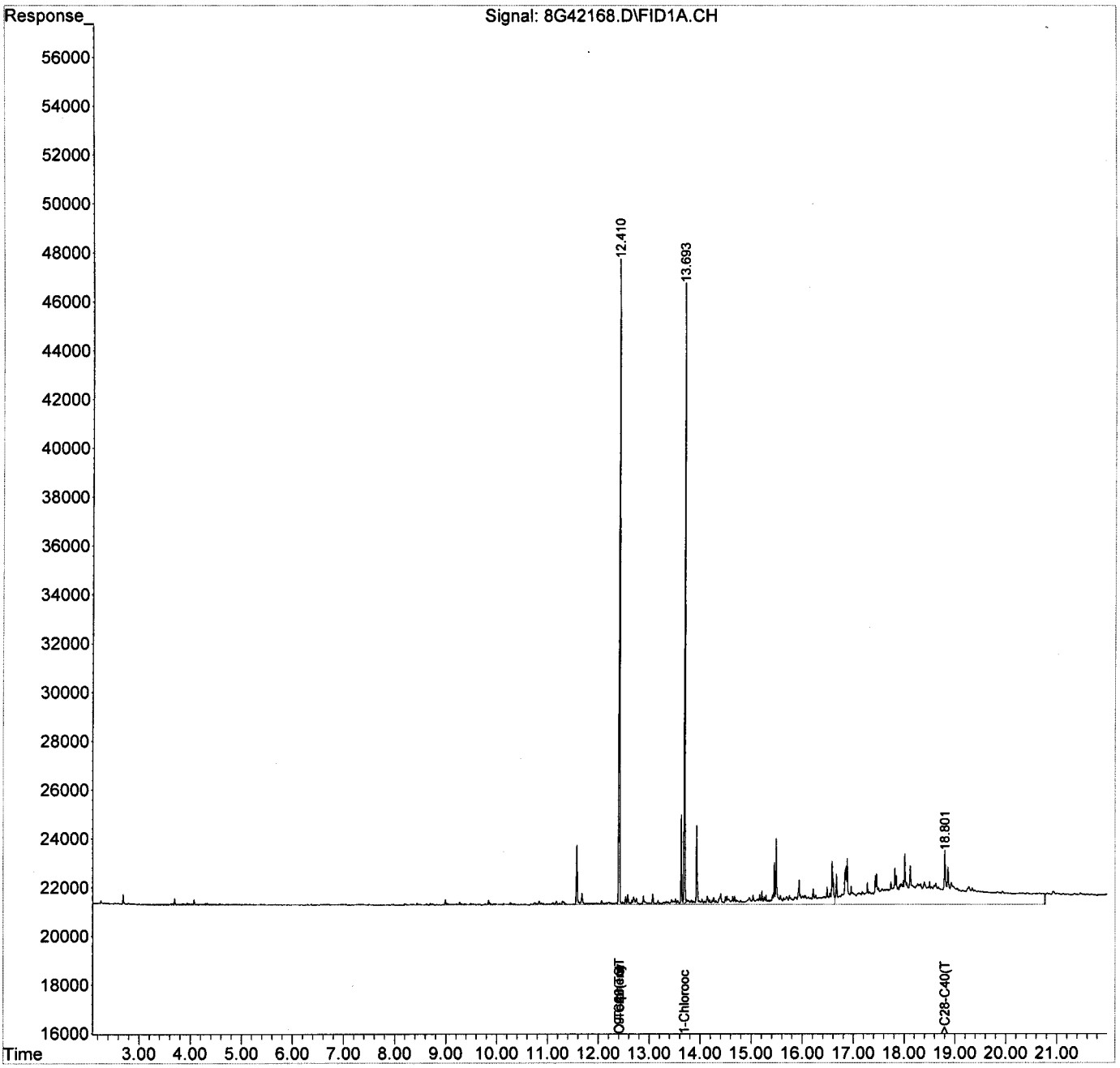
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42168.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 21:47:46
Operator : KD/RAK/MS
Sample : AC73771-001
Misc : S.TPH
ALS Vial : 37 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:00:04 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Form1

ORGANICS REPORT

Sample Number: AC73771-002
Client Id: BB-COMP-2-0801113
Data File: 8G42169.D
Analysis Date: 08/03/13 22:17
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: NJEPHRev3A
Matrix: Soil
Initial Vol: 10g
Final Vol: 1ml
Dilution: 1
Solids: 89

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
ephc28c40	>C28-C40	67	U	c9toc28	C9-C28	67	U
ephcat1tot	C9-C40 Cat1 Total EPH	67	U				

Worksheet #: 272465

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3080110 0178

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42169.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 22:17:43
Operator : KD/RAK/MS
Sample : AC73771-002
Misc : S.TPH
ALS Vial : 38 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:02:10 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units
System Monitoring Compounds					
21)S	O-Terphenyl	12.410	289030	85.753	
22)S	1-Chlorooctadecane	13.693	219034	85.357	
Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.	
2)AT	n-Decane (C10)	0.000	0	N.D.	d
3)	Naphthalene	0.000	0	N.D.	d
4)AT	n-Dodecane (C12)	0.000	0	N.D.	d
5)	2-Methylnaphthalene	0.000	0	N.D.	d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.	d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.	d
8)AT	n-Octadecane (C18)	0.000	0	N.D.	d
9)AT	n-Eicosane (C20)	0.000	0	N.D.	d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.	d
11)AT	n-Docosane (C22)	0.000	0	N.D.	d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.	d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.	d
14)AT	n-Octacosane (C28)	0.000	0	N.D.	d
15)BT	n-Triacontane (C30)	0.000	0	N.D.	d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.	d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.	d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.	d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.	d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.	d
23)A	C9-C28(Total)	12.410f	1003473	372.617	m
24)B	>C28-C40(Total)	16.854	1419064	586.722	m
25)t	C9-C40(TOTAL)	12.410f	2421858	930.921	m

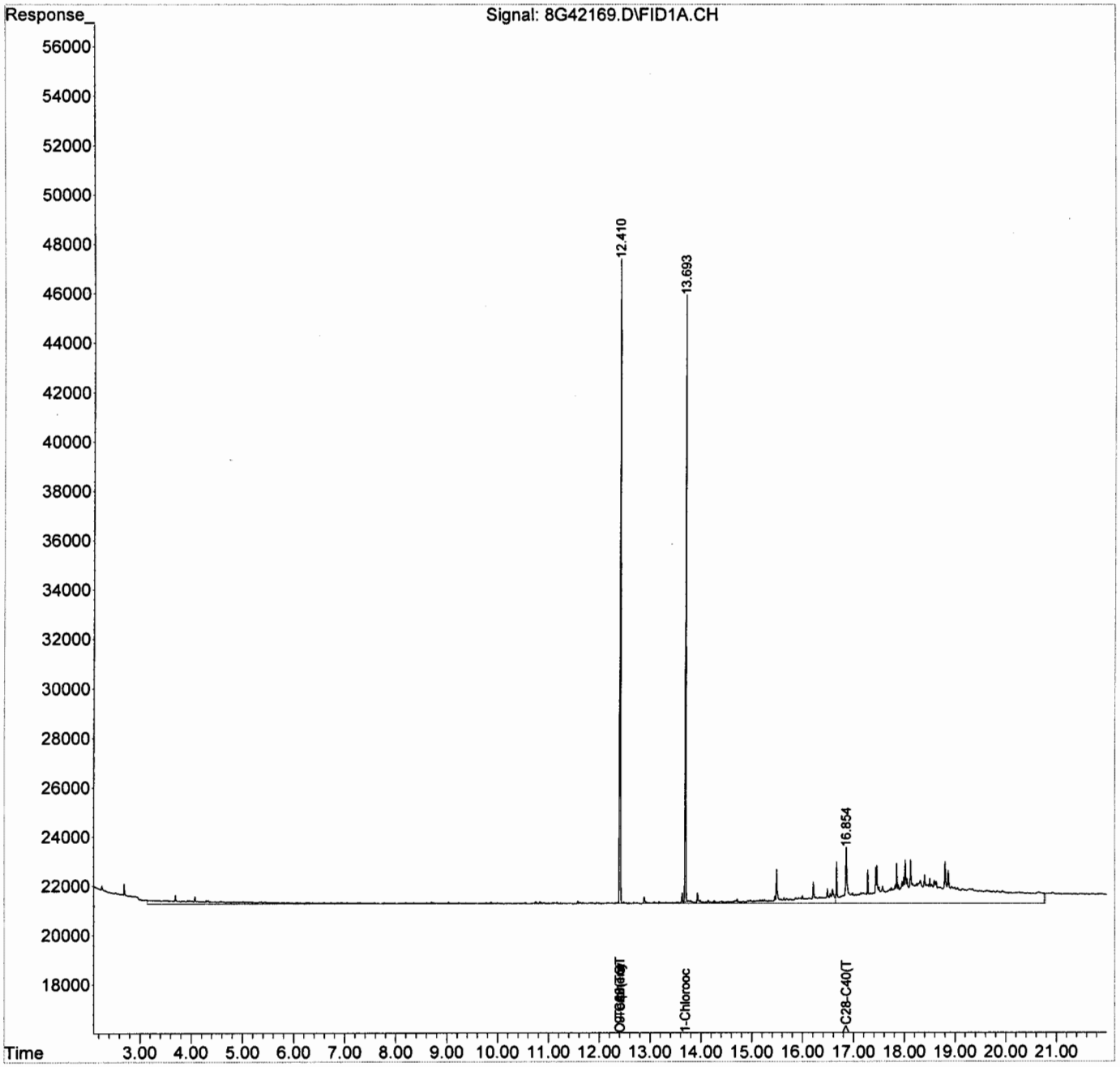
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42169.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 22:17:43
Operator : KD/RAK/MS
Sample : AC73771-002
Misc : S.TPH
ALS Vial : 38 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:02:10 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



EPH Category 1 Data
QC Summary

FORM2

Surrogate Recovery

Method: NJEPHRev3A

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column0 S3 Recov	Column0 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
8G42131.D	SMB25787	Soil	08/02/13 16:46	1		85	87				
8G42168.D	AC73771-001	Soil	08/03/13 21:47	1		88	89				
8G42169.D	AC73771-002	Soil	08/03/13 22:17	1		86	85				
8G42132.D	SMB25787(M	Soil	08/02/13 17:17	1		100	103				
8G42133.D	SMB25787(M	Soil	08/02/13 17:47	1		107	109				
8G42134.D	SMB25787(DI	Soil	08/02/13 18:18	1		95	95				
8G42135.D	SMB25787(DI	Soil	08/02/13 18:48	1		115	115				
8G42197.D	AC73723-001(	Soil	08/04/13 13:49	10		105	104				
8G42198.D	AC73723-001(	Soil	08/04/13 14:19	10		81	75				
8G42199.D	AC73723-001(	Soil	08/04/13 14:50	10		89	93				

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: NJEPHRev3A

Soil Limits

Compound	Spike Amt	Limits
S1=O-Terphenyl	100	40-140
S2=1-Chlorooctadecane	100	40-140

Form3
Recovery Data
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42132.D	SMB25787(MS)	8/2/2013 5:17:22 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	65.98	0	100	66	25	140
n-Decane (C10)	1	88.55	0	100	89	40	140
n-Dodecane (C12)	1	108.25	0	100	108	40	140
n-Tetradecane (C14)	1	111.02	0	100	111	40	140
n-Hexadecane (C16)	1	110.08	0	100	110	40	140
n-Octadecane (C18)	1	104.86	0	100	105	40	140
n-Eicosane (C20)	1	103.68	0	100	104	40	140
n-Heneicosane (C21)	1	102.65	0	100	103	40	140
n-Docosane (C22)	1	101.33	0	100	101	40	140
n-Tetracosane (C24)	1	99.72	0	100	100	40	140
n-Hexacosane (C26)	1	101.24	0	100	101	40	140
n-Octacosane (C28)	1	100.01	0	100	100	40	140
n-Triacontane (C30)	1	100.35	0	100	100	40	140
n-Dotriacontane(C32)	1	101.17	0	100	101	40	140
n-Tetratriacontane (C34)	1	102.99	0	100	103	40	140
n-Hexatriacontane (C36)	1	104.33	0	100	104	40	140
n-Octatriacontane (C38)	1	104.66	0	100	105	40	140
n-Tetracontane (C40)	1	106.1	0	100	106	40	140

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42133.D	SMB25787(MSD)	8/2/2013 5:47:46 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	78.21	0	100	78	25	140
n-Decane (C10)	1	98.51	0	100	99	40	140
n-Dodecane (C12)	1	117.76	0	100	118	40	140
n-Tetradecane (C14)	1	122.66	0	100	123	40	140
n-Hexadecane (C16)	1	124.16	0	100	124	40	140
n-Octadecane (C18)	1	118.69	0	100	119	40	140
n-Eicosane (C20)	1	115.04	0	100	115	40	140
n-Heneicosane (C21)	1	111.89	0	100	112	40	140
n-Docosane (C22)	1	109.56	0	100	110	40	140
n-Tetracosane (C24)	1	103.69	0	100	104	40	140
n-Hexacosane (C26)	1	102.23	0	100	102	40	140
n-Octacosane (C28)	1	98.82	0	100	99	40	140
n-Triacontane (C30)	1	98.74	0	100	99	40	140
n-Dotriacontane(C32)	1	100.02	0	100	100	40	140
n-Tetratriacontane (C34)	1	102.66	0	100	103	40	140
n-Hexatriacontane (C36)	1	104.08	0	100	104	40	140
n-Octatriacontane (C38)	1	105.44	0	100	105	40	140
n-Tetracontane (C40)	1	107.49	0	100	107	40	140

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42134.D	SMB25787(DIESEL)(MS)	8/2/2013 6:18:13 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
C9-C28	1	3081.19	0	3000	103	40	140

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42135.D	SMB25787(DIESEL)(MSD)	8/2/2013 6:48:43 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
C9-C28	1	3639.08	0	3000	121	40	140

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42133.D	SMB25787(MSD)	8/2/2013 5:47:46 PM
Duplicate(If applicable):	8G42132.D	SMB25787(MS)	8/2/2013 5:17:22 PM
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Nonane (C9)	1	78.21	65.98	17	25
n-Decane (C10)	1	98.51	88.55	11	25
n-Dodecane (C12)	1	117.76	108.25	8.4	25
n-Tetradecane (C14)	1	122.66	111.02	10	25
n-Hexadecane (C16)	1	124.16	110.08	12	25
n-Octadecane (C18)	1	118.69	104.86	12	25
n-Eicosane (C20)	1	115.04	103.68	10	25
n-Heneicosane (C21)	1	111.89	102.65	8.6	25
n-Docosane (C22)	1	109.56	101.33	7.8	25
n-Tetracosane (C24)	1	103.69	99.72	3.9	25
n-Hexacosane (C26)	1	102.23	101.24	0.97	25
n-Octacosane (C28)	1	98.82	100.01	1.2	25
n-Triacontane (C30)	1	98.74	100.35	1.6	25
n-Dotriacontane(C32)	1	100.02	101.17	1.1	25
n-Tetratriacontane (C34)	1	102.66	102.99	0.32	25
n-Hexatriacontane (C36)	1	104.08	104.33	0.24	25
n-Octatriacontane (C38)	1	105.44	104.66	0.74	25
n-Tetracontane (C40)	1	107.49	106.1	1.3	25

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42135.D	SMB25787(DIESEL)(MSD)	8/2/2013 6:48:43 PM
Duplicate(If applicable):	8G42134.D	SMB25787(DIESEL)(MS)	8/2/2013 6:18:13 PM
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
C9-C28	1	3639.08	3081.19	17	25

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Form3
Recovery Data
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42197.D	AC73723-001(10X)(MS)	8/4/2013 1:49:50 PM
Non Spike(If applicable):	8G42199.D	AC73723-001(10X)	8/4/2013 2:50:19 PM
Inst Blank(If applicable):	8G42190.D	INST BLK(MECL2)	8/4/2013 10:18:27 AM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	0	0	100	0*	25	140
n-Decane (C10)	1	0	0	100	0*	40	140
n-Dodecane (C12)	1	103	0	100	103	40	140
n-Tetradecane (C14)	1	110.7	0	100	111	40	140
n-Hexadecane (C16)	1	119.8	0	100	120	40	140
n-Octadecane (C18)	1	115.3	0	100	115	40	140
n-Eicosane (C20)	1	110.5	0	100	110	40	140
n-Heneicosane (C21)	1	112	0	100	112	40	140
n-Docosane (C22)	1	110.9	0	100	111	40	140
n-Tetracosane (C24)	1	0	0	100	0*	40	140
n-Hexacosane (C26)	1	100	0	100	100	40	140
n-Octacosane (C28)	1	0	0	100	0*	40	140
n-Triacontane (C30)	1	0	0	100	0*	40	140
n-Dotriacontane(C32)	1	0	0	100	0*	40	140
n-Tetratriacontane (C34)	1	100.6	0	100	101	40	140
n-Hexatriacontane (C36)	1	112.4	0	100	112	40	140
n-Octatriacontane (C38)	1	102.8	0	100	103	40	140
n-Tetracontane (C40)	1	110.4	0	100	110	40	140

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42198.D	AC73723-001(10X)(DUP)	8/4/2013 2:19:57 PM
Duplicate(If applicable):	8G42199.D	AC73723-001(10X)	8/4/2013 2:50:19 PM
Inst Blank(If applicable):	8G42190.D	INST BLK(MECL2)	8/4/2013 10:18:27 AM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: DUP

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
C9-C28	1	0	0	NA	50
>C28-C40	1	7217.9	10146.4	34	50
C9-C40	1	8580.7	13141.5	42	50

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: SMB25787
Blank Data File: 8G42131.D
Matrix: Soil

Blank Analysis Date: 08/02/13 16:46
Blank Extraction Date: 08/02/13
(If Applicable)
Method: NJEPHRev3A

Sample Number	Data File	Analysis Date
AC73771-001	8G42168.D	08/03/13 21:47
AC73771-002	8G42169.D	08/03/13 22:17
AC73723-001(10X)	8G42199.D	08/04/13 14:50
AC73723-001(10X)	8G42198.D	08/04/13 14:19
AC73723-001(10X)	8G42197.D	08/04/13 13:49
SMB25787(DIESE	8G42135.D	08/02/13 18:48
SMB25787(DIESE	8G42134.D	08/02/13 18:18
SMB25787(MSD)	8G42133.D	08/02/13 17:47
SMB25787(MS)	8G42132.D	08/02/13 17:17

Form 5

Method: NJEPHRev3A

Instrument: GC_8 Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8G41617.D	INST BLK(MECL2)	07/15/13 08:12	Soil					
8G41618.D	CALDTH AL@100PPM	07/15/13 09:13	Soil	8G41618.	12.4312	0		
8G41619.D	CALDTH AL@500PPM	07/15/13 09:45	Soil	8G41618.	12.4501	0.1519		
8G41620.D	CALDTH AL@300PPM	07/15/13 10:15	Soil	8G41618.	12.4405	0.0748		
8G41621.D	CALDTH AL@200PPM	07/15/13 10:45	Soil	8G41618.	12.4358	0.037		
8G41622.D	CALDTH AL@100PPM	07/15/13 11:16	Soil	8G41618.	12.4302	0.008		
8G41623.D	CALDTH AL@50PPM	07/15/13 11:46	Soil	8G41618.	12.4278	0.0274		
8G41624.D	CALDTH AL@10PPM	07/15/13 12:17	Soil	8G41618.	12.4250	0.0499		
8G41625.D	@100PPM	07/15/13 12:48	Soil	8G41618.	12.4309	0.0024		
8G41626.D	@100PPM	07/15/13 13:19	Soil	8G41618.	12.4313	0.0008		
8G41627.D	ICV DTH AL@100PPM	07/15/13 13:57	Soil	8G41618.	12.4322	0.008		
8G41628.D	INST BLK(MECL2)	07/15/13 14:28	Soil	8G41618.	0.0000	200*		
8G41629.D	AC73363-005	07/15/13 14:59	Soil	8G41618.	12.4290	0.0177		
8G41630.D	AC73363-004(5X)	07/15/13 15:30	Soil	8G41618.	12.4266	0.037		
8G41631.D	AC73406-002	07/15/13 16:01	Soil	8G41618.	12.4300	0.0097		
8G41632.D	AC73382-001	07/15/13 16:32	Soil	8G41618.	12.4302	0.008		
8G41633.D	AC73382-002	07/15/13 17:03	Soil	8G41618.	12.4304	0.0064		
8G41634.D	AC73382-003	07/15/13 17:34	Soil	8G41618.	12.4302	0.008		
8G41635.D	AC73383-001	07/15/13 18:05	Soil	8G41618.	12.4303	0.0072		
8G41636.D	AC73406-003	07/15/13 18:36	Soil	8G41618.	12.4318	0.0048		
8G41637.D	AC73406-005	07/15/13 19:06	Soil	8G41618.	12.4305	0.0056		
8G41638.D	AC73406-004	07/15/13 19:37	Soil	8G41618.	12.4315	0.0024		
8G41639.D	AC73348-005	07/15/13 20:08	Soil	8G41618.	12.4319	0.0056		
8G41640.D	TEST	07/15/13 20:39	Soil	8G41618.	0.0000	200*		
8G41641.D	CALDTH AL@100PPM	07/15/13 21:10	Soil	8G41618.	12.4322	0.008		
8G41642.D	100PPM	07/15/13 22:11	Soil	8G41641.	12.4326	0.0032		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: NJEPHRev3A

Instrument: GC_8 Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8G42127.D	INST BLK(MECL2)	08/02/13 14:45	Soil					
8G42128.D	100PPM	08/02/13 15:15	Soil					
8G42129.D	CALDTH AL@100PPM	08/02/13 15:45	Soil	8G42129.	12.4141	0		
8G42130.D	INST BLK(MECL2)	08/02/13 16:16	Soil	8G42129.	0.0000	200 *		
8G42131.D	SMB25787	08/02/13 16:46	Soil	8G42129.	12.4127	0.0113		
8G42132.D	SMB25787(MS)	08/02/13 17:17	Soil	8G42129.	12.4133	0.0064		
8G42133.D	SMB25787(MSD)	08/02/13 17:47	Soil	8G42129.	12.4138	0.0024		
8G42134.D	SMB25787(DIESEL)(MS	08/02/13 18:18	Soil	8G42129.	12.4140	0.0008		
8G42135.D	SMB25787(DIESEL)(MS	08/02/13 18:48	Soil	8G42129.	12.4150	0.0073		
8G42136.D	SMB25742(DIESEL)(MS	08/02/13 19:19	Soil	8G42129.	12.4146	0.004		
8G42137.D	SMB25742(DIESEL)(MS	08/02/13 19:49	Soil	8G42129.	12.4160	0.0153		
8G42138.D	SMB25772(MS)	08/02/13 20:19	Soil	8G42129.	12.4136	0.004		
8G42139.D	SMB25772(MSD)	08/02/13 20:50	Soil	8G42129.	12.4136	0.004		
8G42140.D	AC73713-001(MS)	08/02/13 21:20	Soil	8G42129.	12.4110	0.025		
8G42141.D	AC73713-001(DUP)	08/02/13 21:50	Soil	8G42129.	12.4120	0.0169		
8G42142.D	AC73713-001	08/02/13 22:20	Soil	8G42129.	12.4127	0.0113		
8G42143.D	AC73713-002	08/02/13 22:51	Soil	8G42129.	12.4137	0.0032		
8G42144.D	AC73716-008	08/02/13 23:21	Soil	8G42129.	12.4115	0.0209		
8G42145.D	AC73706-007	08/02/13 23:51	Soil	8G42129.	12.4115	0.0209		
8G42146.D	AC73706-013	08/03/13 00:21	Soil	8G42129.	12.4110	0.025		
8G42147.D	AC73706-001	08/03/13 00:51	Soil	8G42129.	12.4114	0.0218		
8G42148.D	TEST	08/03/13 01:21	Soil	8G42129.	0.0000	200 *		
8G42149.D	100PPM	08/03/13 11:43	Soil	8G42129.	12.4156	0.0121		
8G42150.D	CALDTH AL@100PPM	08/03/13 12:15	Soil	8G42129.	12.4134	0.0056		
8G42151.D	INST BLK(MECL2)	08/03/13 13:15	Soil	8G42150.	0.0000	200 *		
8G42152.D	SMB25786	08/03/13 13:45	Soil	8G42150.	12.4119	0.0121		
8G42153.D	SMB25786(DIESEL)(MS	08/03/13 14:15	Soil	8G42150.	12.4121	0.0105		
8G42154.D	AC73713-006	08/03/13 14:45	Soil	8G42150.	12.4097	0.0298		
8G42155.D	AC73713-007	08/03/13 15:16	Soil	8G42150.	12.4107	0.0218		
8G42156.D	AC73713-009	08/03/13 15:46	Soil	8G42150.	12.4106	0.0226		
8G42157.D	AC73672-002(R)	08/03/13 16:16	Soil	8G42150.	12.4105	0.0234		
8G42158.D	AC73706-010	08/03/13 16:46	Soil	8G42150.	12.4110	0.0193		
8G42159.D	AC73706-019	08/03/13 17:16	Soil	8G42150.	12.4104	0.0242		
8G42160.D	AC73706-025	08/03/13 17:47	Soil	8G42150.	12.4110	0.0193		
8G42161.D	AC73713-008	08/03/13 18:17	Soil	8G42150.	12.4121	0.0105		
8G42162.D	73732-001	08/03/13 18:47	Soil	8G42150.	12.4221	0.0701		
8G42163.D	AC73732-005	08/03/13 19:17	Soil	8G42150.	12.4688	0.4453		
8G42164.D	AC73669-007	08/03/13 19:47	Soil	8G42150.	12.4111	0.0185		
8G42165.D	AC73706-028	08/03/13 20:17	Soil	8G42150.	12.4106	0.0226		
8G42166.D	AC73706-022	08/03/13 20:47	Soil	8G42150.	12.4105	0.0234		
8G42167.D	AC73706-031	08/03/13 21:17	Soil	8G42150.	12.4103	0.025		
8G42168.D	AC73771-001	08/03/13 21:47	Soil	8G42150.	12.4103	0.025		
8G42169.D	AC73771-002	08/03/13 22:17	Soil	8G42150.	12.4100	0.0274		
8G42170.D	TEST	08/03/13 22:47	Soil	8G42150.	0.0000	200 *		
8G42171.D	CALDTH AL@100PPM	08/03/13 23:17	Soil	8G42150.	12.4119	0.0121		
8G42172.D	100PPM	08/04/13 00:17	Soil	8G42171.	12.4127	0.0064		
8G42173.D	INST BLK(MECL2)	08/04/13 01:17	Soil	8G42171.	0.0000	200 *		
8G42174.D	AC73706-016	08/04/13 01:47	Soil	8G42171.	12.4104	0.0121		
8G42175.D	AC73706-004	08/04/13 02:17	Soil	8G42171.	12.4103	0.0129		
8G42176.D	AC73713-004	08/04/13 02:47	Soil	8G42171.	12.4199	0.0644		
8G42177.D	AC73713-012	08/04/13 03:17	Soil	8G42171.	12.4423	0.2446		
8G42178.D	AC73708-001	08/04/13 03:47	Soil	8G42171.	12.4113	0.0048		
8G42179.D	AC73708-004	08/04/13 04:17	Soil	8G42171.	12.4098	0.0169		
8G42180.D	AC73672-001(5X)	08/04/13 04:47	Soil	8G42171.	12.4073	0.0371		
8G42181.D	AC73685-015(5X)	08/04/13 05:17	Soil	8G42171.	12.4074	0.0363		
8G42182.D	AC73685-017(10X)	08/04/13 05:47	Soil	8G42171.	12.4066	0.0427		
8G42183.D	AC73723-001(20X)(MS)	08/04/13 06:17	Soil	8G42171.	12.4069	0.0403		
8G42184.D	AC73723-001(20X)(DUP	08/04/13 06:47	Soil	8G42171.	12.4063	0.0451		
8G42185.D	AC73723-001(20X)	08/04/13 07:17	Soil	8G42171.	12.4065	0.0435		
8G42186.D	TEST	08/04/13 07:47	Soil	8G42171.	0.0000	200 *		
8G42187.D	CALDTH AL@100PPM	08/04/13 08:17	Soil	8G42171.	12.4114	0.004		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: NJEPHRev3A

Instrument: GC_8 Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8G42188.D	INST BLK(MECL2)	08/04/13 08:48	Soil					
8G42189.D	CALDTH AL@100PPM	08/04/13 09:48	Soil	8G42189.	12.4103	0		
8G42190.D	INST BLK(MECL2)	08/04/13 10:18	Soil	8G42189.	0.0000	200 *		
8G42191.D	SMB25791	08/04/13 10:48	Soil	8G42189.	12.4096	0.0056		
8G42192.D	MBS25791	08/04/13 11:18	Soil	8G42189.	12.4094	0.0073		
8G42193.D	SMB25791(MSD)	08/04/13 11:49	Soil	8G42189.	12.4117	0.0113		
8G42194.D	AC73729-001(MS)	08/04/13 12:19	Soil	8G42189.	12.4114	0.0089		
8G42195.D	AC73729-001DUP)	08/04/13 12:49	Soil	8G42189.	12.4098	0.004		
8G42196.D	AC73729-001	08/04/13 13:19	Soil	8G42189.	12.4104	0.0008		
8G42197.D	AC73723-001(10X)(MS)	08/04/13 13:49	Soil	8G42189.	12.4062	0.033		
8G42198.D	AC73723-001(10X)(DUP	08/04/13 14:19	Soil	8G42189.	12.4058	0.0363		
8G42199.D	AC73723-001(10X)	08/04/13 14:50	Soil	8G42189.	12.4059	0.0355		
8G42200.D	AC73760-001(10X)	08/04/13 15:20	Soil	8G42189.	12.4056	0.0379		
8G42201.D	AC73760-002(10X)	08/04/13 15:50	Soil	8G42189.	12.4052	0.0411		
8G42202.D	AC73713-008(10X)	08/04/13 16:20	Soil	8G42189.	12.4060	0.0347		
8G42203.D	AC73713-012(10X)	08/04/13 16:50	Soil	8G42189.	12.4058	0.0363		
8G42204.D	AC73760-003(10X)	08/04/13 17:20	Soil	8G42189.	12.4050	0.0427		
8G42205.D	AC73708-002	08/04/13 17:50	Soil	8G42189.	12.4100	0.0024		
8G42206.D	AC73708-003	08/04/13 18:20	Soil	8G42189.	12.4097	0.0048		
8G42207.D	AC73672-001(5X)	08/04/13 18:50	Soil	8G42189.	12.4061	0.0338		
8G42208.D	AC73729-022	08/04/13 19:20	Soil	8G42189.	12.4084	0.0153		
8G42209.D	AC73729-010	08/04/13 19:50	Soil	8G42189.	12.4094	0.0073		
8G42210.D	AC73729-013	08/04/13 20:20	Soil	8G42189.	12.4094	0.0073		
8G42211.D	CALDTH AL@100PPM	08/05/13 08:00	Soil	8G42189.	12.4154	0.0411		
8G42212.D	INST BLK(MECL2)	08/05/13 08:37	Soil	8G42211.	0.0000	200 *		
8G42213.D	AC73729-007	08/05/13 09:16	Soil	8G42211.	12.4103	0.0411		
8G42214.D	TEST	08/05/13 09:46	Soil	8G42211.	12.4098	0.0451		
8G42215.D	AC73729-031	08/05/13 10:19	Soil	8G42211.	12.4073	0.0653		
8G42216.D	AC73729-028	08/05/13 10:49	Soil	8G42211.	12.4065	0.0717		
8G42217.D	AC73729-019	08/05/13 11:19	Soil	8G42211.	12.4053	0.0814		
8G42218.D	AC73729-016	08/05/13 11:49	Soil	8G42211.	12.4060	0.0757		
8G42219.D	AC73729-055	08/05/13 12:20	Soil	8G42211.	12.4059	0.0765		
8G42220.D	AC73729-058	08/05/13 12:50	Soil	8G42211.	12.4057	0.0782		
8G42221.D	AC73729-034	08/05/13 13:20	Soil	8G42211.	12.4069	0.0685		
8G42222.D	AC73732-005(100X)	08/05/13 13:50	Soil	8G42211.	12.3906	0.1999		
8G42223.D	AC73760-002(20X)	08/05/13 14:20	Soil	8G42211.	0.0000	200 *		
8G42224.D	CALDTH AL@100PPM	08/05/13 14:50	Soil	8G42211.	12.4092	0.0499		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form8

EPH Surrogate Initial Calibration Areas And Area Recovery Limits

Inital Calibration File: 8G41618.D
Analysis Date: 7/15/2013 9:13:00 AM
Analytical Method: NJEPHRev3A

Surrogate	Area Found	Area Limit
1-Chlorooctadecane	253233	126616-506466
O-Terphenyl	326899	163450-653798

Continuing Calibration Data

Data File	TxtSamNum:	Analysis Date	Surrogate: 1-Chlorooctadecane	Surrogate O-Terphenyl
8G42129.D	CALDTH AL@100PPM	8/2/13 15:45	248125	329095
8G42150.D	CALDTH AL@100PPM	8/3/13 12:15	252623	344150
8G42171.D	CALDTH AL@100PPM	8/3/13 23:17	288876	385978
8G42189.D	CALDTH AL@100PPM	8/4/13 09:48	244228	325646
8G42211.D	CALDTH AL@100PPM	8/5/13 08:00	277370	371720

* - Indicates Area Failed Criteria

EPH Category 1 Data
Standards Data

3080110 0193

Form 6
Initial Calibration

Method: NJEPHRev3A

Instrument: GC_8

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	8G41618.	CALDTH AL@100PP	07/15/13 09:13	2	8G41624.	CALDTH AL@10PPM	07/15/13 12:17
3	8G41623.	CALDTH AL@50PPM	07/15/13 11:46	4	8G41621.	CALDTH AL@200PP	07/15/13 10:45
5	8G41620.	CALDTH AL@300PP	07/15/13 10:15	6	8G41619.	CALDTH AL@500PP	07/15/13 09:45

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
n-Nonane (C9)	1	0	Avg	0.2470	0.2406	0.2576	0.2523	0.2732	0.3087	----	----	0.263	3.29	0.992	1.00	9.4	100.0	10.00	50.00	200.0	300.0	500.0		
n-Decane (C10)	1	0	Avg	0.2537	0.2490	0.2664	0.2586	0.2760	0.3102	----	----	0.269	4.35	0.993	1.00	8.3	100.0	10.00	50.00	200.0	300.0	500.0		
Naphthalene	1	0	Avg	0.2932	0.2928	0.3129	0.3030	0.3139	0.3513	----	----	0.311	6.32	0.994	1.00	7.0	100.0	10.00	50.00	200.0	300.0	500.0		
n-Dodecane (C12)	1	0	Avg	0.2566	0.2581	0.2739	0.2655	0.2748	0.3073	----	----	0.273	6.39	0.995	1.00	6.8	100.0	10.00	50.00	200.0	300.0	500.0		
2-Methylnaphthalene	1	0	Avg	0.2896	0.2836	0.3085	0.3009	0.3070	0.3422	----	----	0.305	7.37	0.995	1.00	6.7	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetradecane (C14)	1	0	Avg	0.2611	0.2597	0.2748	0.2694	0.2712	0.3026	----	----	0.273	8.22	0.995	1.00	5.7	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexadecane (C16)	1	0	Avg	0.2610	0.2622	0.2768	0.2732	0.2690	0.2955	----	----	0.273	9.89	0.997	1.00	4.6	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octadecane (C18)	1	0	Avg	0.2622	0.2680	0.2788	0.2744	0.2649	0.2846	----	----	0.272	11.65	0.998	0.999	3.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Eicosane (C20)	1	0	Avg	0.2642	0.2735	0.2801	0.2774	0.2635	0.2745	----	----	0.272	13.19	0.999	0.999	2.5	100.0	10.00	50.00	200.0	300.0	500.0		
n-Heneicosane (C21)	1	0	Avg	0.2668	0.2758	0.2833	0.2805	0.2647	0.2706	----	----	0.274	13.77	0.999	0.999	2.7	100.0	10.00	50.00	200.0	300.0	500.0		
n-Docosane (C22)	1	0	Avg	0.2657	0.2765	0.2813	0.2796	0.2627	0.2629	----	----	0.271	14.28	0.999	0.999	3.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetracosane (C24)	1	0	Avg	0.2671	0.2723	0.2828	0.2805	0.2612	0.2504	----	----	0.269	15.14	0.998	0.999	4.5	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexacosane (C26)	1	0	Avg	0.2639	0.2700	0.2784	0.2760	0.2557	0.2347	----	----	0.263	15.89	0.994	1.00	6.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octacosane (C28)	1	0	Avg	0.2629	0.2653	0.2761	0.2716	0.2521	0.2233	----	----	0.259	16.55	0.990	1.00	7.4	100.0	10.00	50.00	200.0	300.0	500.0		
n-Triacontane (C30)	1	0	Avg	0.2647	0.2633	0.2768	0.2700	0.2523	0.2189	----	----	0.258	17.16	0.988	1.00	8.0	100.0	10.00	50.00	200.0	300.0	500.0		
n-Dotriacontane(C32)	1	0	Avg	0.2600	0.2577	0.2702	0.2627	0.2471	0.2163	----	----	0.252	17.74	0.989	1.00	7.6	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetratriacontane (C34)	1	0	Avg	0.2505	0.2468	0.2569	0.2517	0.2388	0.2159	----	----	0.243	18.30	0.994	1.00	6.1	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexatriacontane (C36)	1	0	Avg	0.2445	0.2387	0.2505	0.2492	0.2381	0.2221	----	----	0.241	18.91	0.997	1.00	4.3	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octatriacontane (C38)	1	0	Avg	0.2330	0.2306	0.2389	0.2401	0.2313	0.2197	----	----	0.232	19.68	0.998	1.00	3.1	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetracontane (C40)	1	0	Avg	0.2242	0.2232	0.2286	0.2318	0.2249	0.2155	----	----	0.225	20.69	0.999	1.00	2.5	100.0	10.00	50.00	200.0	300.0	500.0		
O-Terphenyl	1	0	Avg	0.3269	0.3329	0.3415	0.3385	0.3257	0.3566	----	----	0.337	12.43	0.997	0.999	3.4	100.0	10.00	50.00	200.0	300.0	500.0		
1-Chlorooctadecane	1	0	Avg	0.2532	0.2554	0.2631	0.2610	0.2470	0.2597	----	----	0.257	13.71	0.999	0.999	2.3	100.0	10.00	50.00	200.0	300.0	500.0		
C9-C28(Total)	1	0	Avg	0.2610	0.2642	0.2759	0.2716	0.2658	0.2771	----	----	0.269	3.29	0.999	1.00	2.4	1200.	120.0	600.0	2400.	3600.	6000.		
>C28-C40(Total)	1	0	Avg	0.2461	0.2434	0.2537	0.2509	0.2387	0.2181	----	----	0.242	16.65	0.995	1.00	5.3	600.0	60.00	300.0	1200.	1800.	3000.		
C9-C40(TOTAL)	1	0	Avg	0.2561	0.2573	0.2685	0.2647	0.2567	0.2574	----	----	0.260	3.29	1.00	1.00	2.0	1800.	180.0	900.0	3600.	5400.	9000.		

Avg Rsd Col 1: 5.25 Avg Rsd Col 2: -1

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Quantitation Report (QT Reviewed)

3080110 0194

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41618.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 09:13:00
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:18:06 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

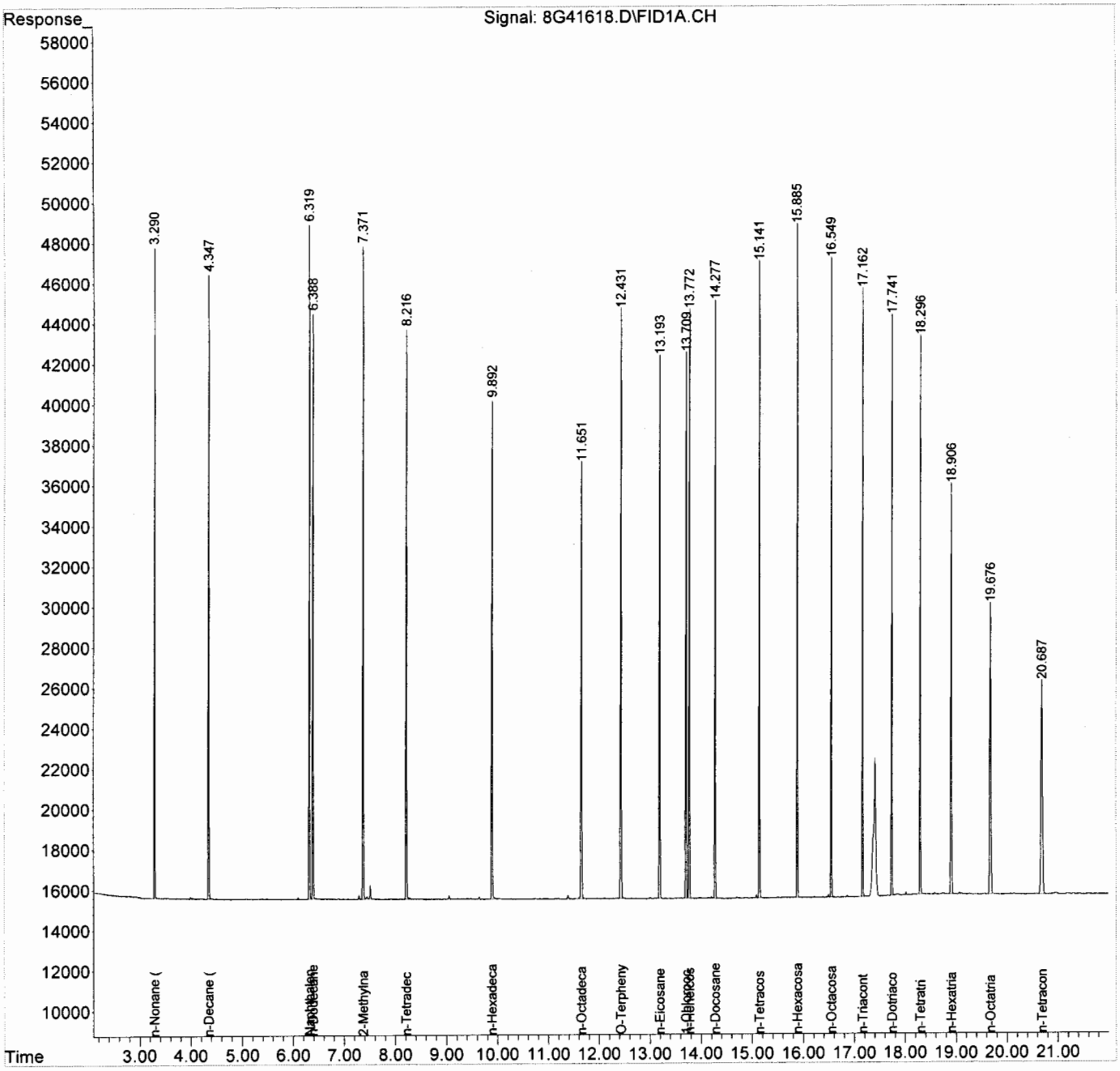
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.431	326899	110.578		
22)S	1-Chlorooctadecane	13.709	253233	110.947		
	Target Compounds					
1)AT	n-Nonane (C9)	3.290	247094	110.367		
2)AT	n-Decane (C10)	4.348	253774	111.243		
3)	Naphthalene	6.319	293239	110.334		
4)AT	n-Dodecane (C12)	6.388	256646	110.669		
5)	2-Methylnaphthalene	7.371	289639	110.289		
6)AT	n-Tetradecane (C14)	8.216	261184	110.715		
7)AT	n-Hexadecane (C16)	9.892	261026	109.717		
8)AT	n-Octadecane (C18)	11.652	262261	109.669		
9)AT	n-Eicosane (C20)	13.193	264260	109.102		
10)AT	n-Heneicosane (C21)	13.773	266837	108.901		
11)AT	n-Docosane (C22)	14.277	265738	108.586		
12)AT	n-Tetracosane (C24)	15.142	267126	108.579		
13)AT	n-Hexacosane (C26)	15.885	263966	108.506		
14)AT	n-Octacosane (C28)	16.549	262899	108.971		
15)BT	n-Triacontane (C30)	17.162	264697	109.248		
16)BT	n-Dotriacontane(C32)	17.741	260075	109.217		
17)BT	n-Tetratriacontane (C34	18.296	250513	109.537		
18)BT	n-Hexatriacontane (C36)	18.906	244549	108.222		
19)BT	n-Octatriacontane (C38)	19.677	233027	107.284		
20)BT	n-Tetracontane (C40)	20.687	224217	107.477		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41618.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 09:13:00
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:18:06 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0196

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41624.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 12:17:34
Operator : KD/RAK/MS
Sample : CALDTH AL@10PPM
Misc : S.TPH
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 13:01:59 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.425	33293	11.262		
22)S	1-Chlorooctadecane	13.705	25543	11.191		
Target Compounds						
1)AT	n-Nonane (C9)	3.289	24061	10.747		
2)AT	n-Decane (C10)	4.346	24907	10.918		
3)	Naphthalene	6.316	29280	11.017		
4)AT	n-Dodecane (C12)	6.386	25811	11.130		
5)	2-Methylnaphthalene	7.367	28365	10.801		
6)AT	n-Tetradecane (C14)	8.213	25974	11.010		
7)AT	n-Hexadecane (C16)	9.889	26223	11.022		
8)AT	n-Octadecane (C18)	11.646	26805	11.209		
9)AT	n-Eicosane (C20)	13.190	27355	11.294		
10)AT	n-Heneicosane (C21)	13.769	27583	11.257		
11)AT	n-Docosane (C22)	14.274	27659	11.302		
12)AT	n-Tetracosane (C24)	15.139	27234	11.070		
13)AT	n-Hexacosane (C26)	15.882	27002	11.099		
14)AT	n-Octacosane (C28)	16.554	26533	10.998		
15)BT	n-Triacontane (C30)	17.189	26333	10.868		
16)BT	n-Dotriacontane(C32)	17.806	25777	10.825		
17)BT	n-Tetratriacontane (C34	18.412	24683	10.792		
18)BT	n-Hexatriacontane (C36)	19.039	23878	10.567		
19)BT	n-Octatriacontane (C38)	19.819	23064	10.618		
20)BT	n-Tetracontane (C40)	20.835	22326	10.702		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

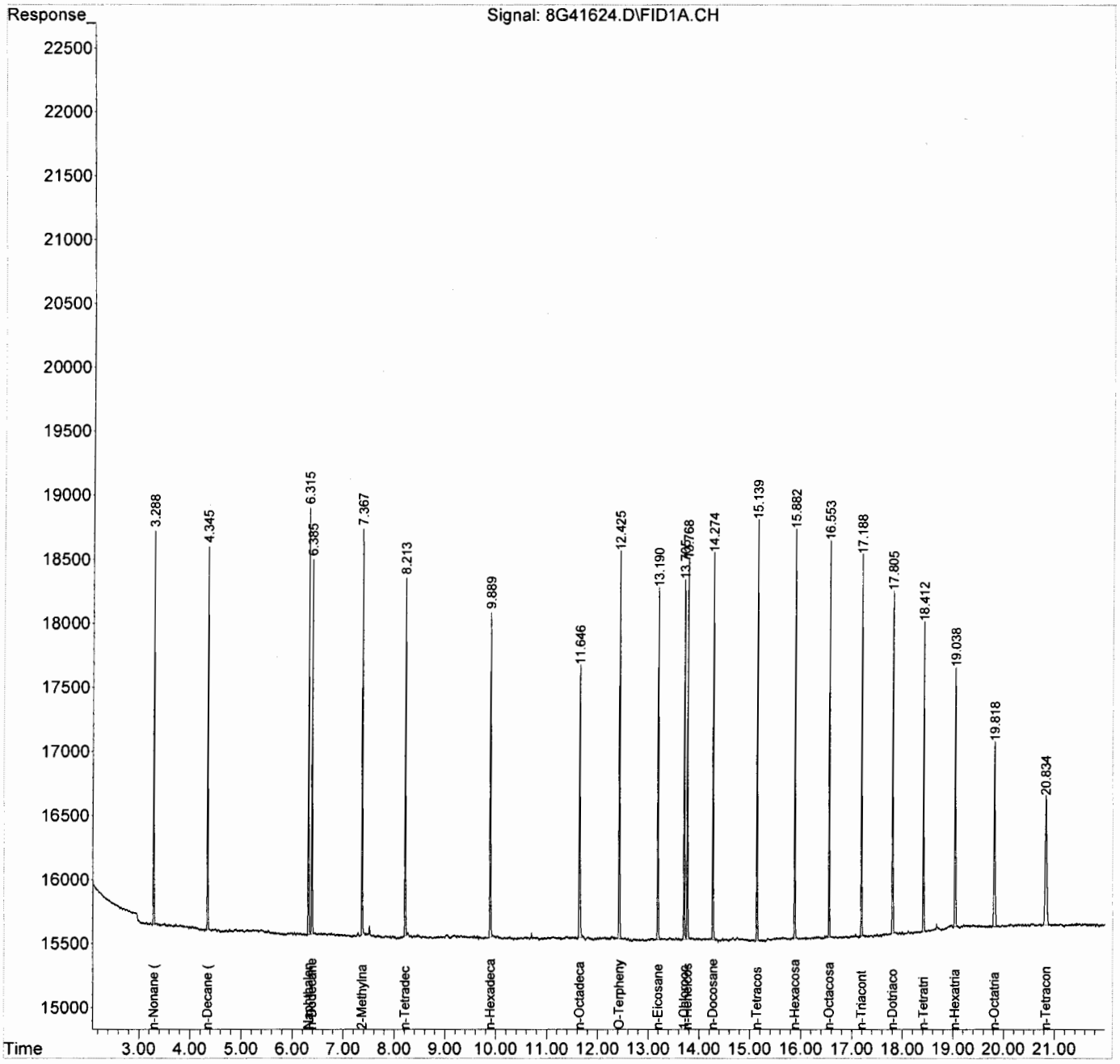
Quantitation Report (QT Reviewed)

3080110 0197

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41624.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 12:17:34
Operator : KD/RAK/MS
Sample : CALDTH AL@10PPM
Misc : S.TPH
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 13:01:59 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0198

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41623.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 11:46:55
Operator : KD/RAK/MS
Sample : CALDTH AL@50PPM
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 12:31:25 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.428	170765	57.763		
22)S	1-Chlorooctadecane	13.707	131587	57.652		
	Target Compounds					
1)AT	n-Nonane (C9)	3.290	128837	57.547		
2)AT	n-Decane (C10)	4.347	133244	58.408		
3)	Naphthalene	6.317	156480	58.877		
4)AT	n-Dodecane (C12)	6.387	136964	59.061		
5)	2-Methylnaphthalene	7.369	154297	58.753		
6)AT	n-Tetradecane (C14)	8.214	137398	58.243		
7)AT	n-Hexadecane (C16)	9.890	138411	58.178		
8)AT	n-Octadecane (C18)	11.648	139428	58.305		
9)AT	n-Eicosane (C20)	13.191	140077	57.832		
10)AT	n-Heneicosane (C21)	13.770	141664	57.816		
11)AT	n-Docosane (C22)	14.275	140655	57.475		
12)AT	n-Tetracosane (C24)	15.139	141407	57.478		
13)AT	n-Hexacosane (C26)	15.882	139242	57.237		
14)AT	n-Octacosane (C28)	16.550	138086	57.236		
15)BT	n-Triacontane (C30)	17.174	138438	57.137		
16)BT	n-Dotriacontane(C32)	17.773	135145	56.753		
17)BT	n-Tetratriacontane (C34	18.355	128453	56.166		
18)BT	n-Hexatriacontane (C36)	18.971	125284	55.443		
19)BT	n-Octatriacontane (C38)	19.747	119462	54.999		
20)BT	n-Tetracontane (C40)	20.761	114306	54.792		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

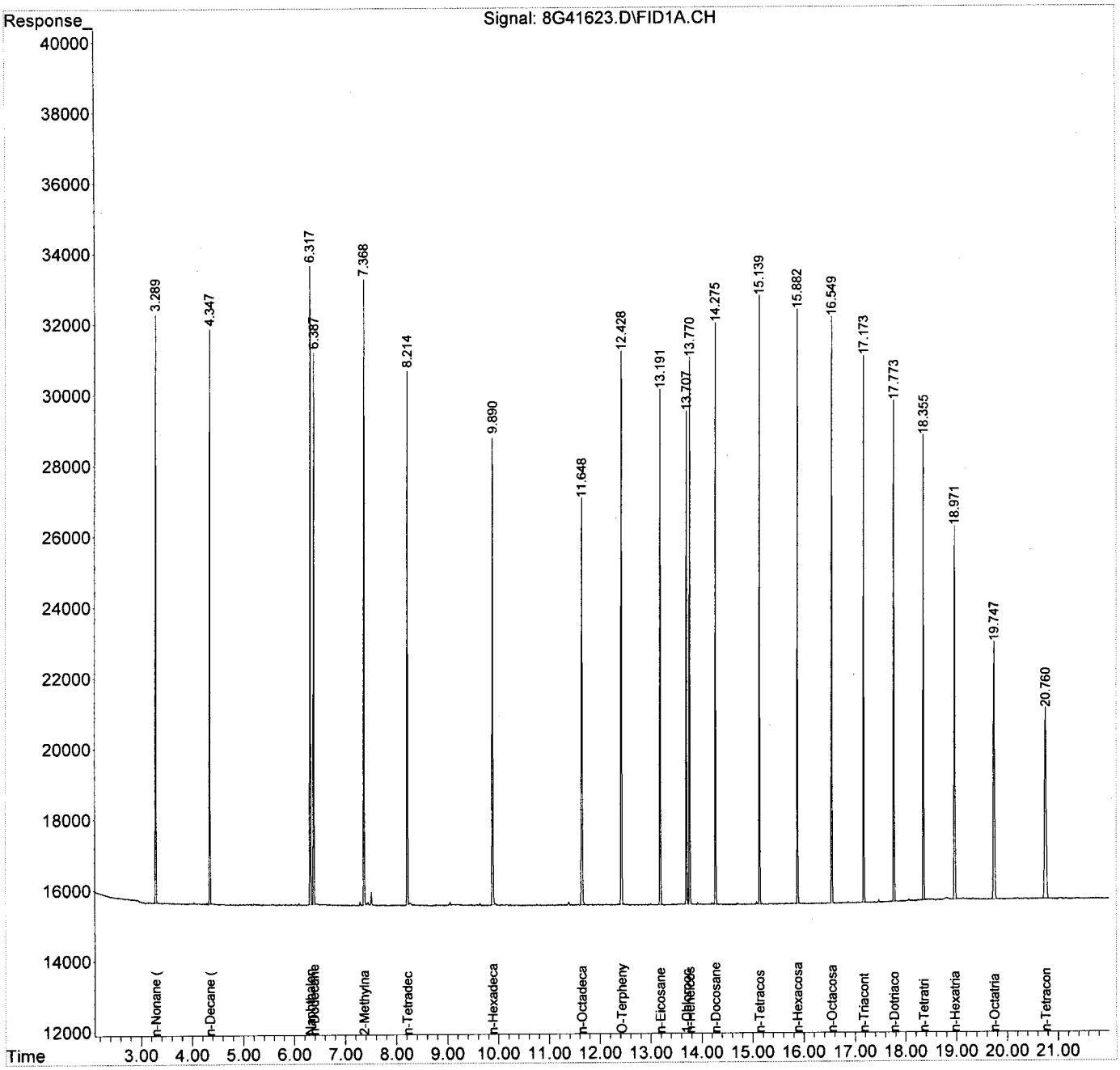
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41623.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 11:46:55
Operator : KD/RAK/MS
Sample : CALDTH AL@50PPM
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 12:31:25 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0200

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41621.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 10:45:52
Operator : KD/RAK/MS
Sample : CALDTH AL@200PPM
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 11:36:32 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

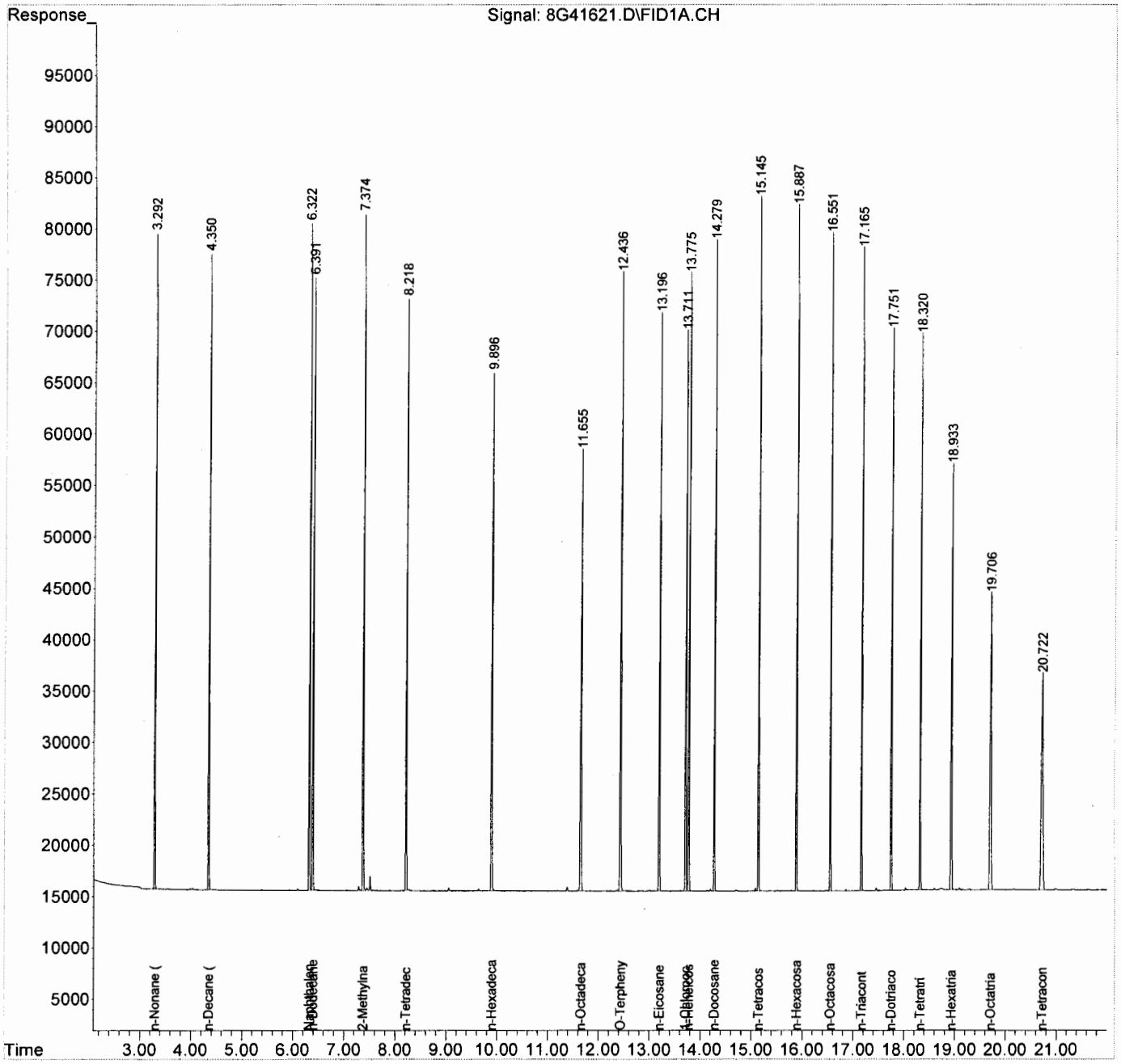
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.436	677022	229.011		
22)S	1-Chlorooctadecane	13.712	522162	228.771		
	Target Compounds					
1)AT	n-Nonane (C9)	3.293	504775	225.463		
2)AT	n-Decane (C10)	4.351	517199	226.716		
3)	Naphthalene	6.322	606087	228.045		
4)AT	n-Dodecane (C12)	6.391	531177	229.051		
5)	2-Methylnaphthalene	7.374	601987	229.225		
6)AT	n-Tetradecane (C14)	8.219	538961	228.465		
7)AT	n-Hexadecane (C16)	9.896	546475	229.700		
8)AT	n-Octadecane (C18)	11.656	548947	229.553		
9)AT	n-Eicosane (C20)	13.196	554812	229.058		
10)AT	n-Heneicosane (C21)	13.775	561131	229.008		
11)AT	n-Docosane (C22)	14.279	559234	228.515		
12)AT	n-Tetracosane (C24)	15.145	561061	228.054		
13)AT	n-Hexacosane (C26)	15.887	552096	226.944		
14)AT	n-Octacosane (C28)	16.551	543297	225.196		
15)BT	n-Triacontane (C30)	17.165	540131	222.927		
16)BT	n-Dotriacontane(C32)	17.751	525452	220.660		
17)BT	n-Tetratriacontane (C34	18.320	503549	220.177		
18)BT	n-Hexatriacontane (C36)	18.934	498587	220.643		
19)BT	n-Octatriacontane (C38)	19.706	480264	221.109		
20)BT	n-Tetracontane (C40)	20.722	463656	222.252		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41621.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 10:45:52
Operator : KD/RAK/MS
Sample : CALDTH AL@200PPM
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 11:36:32 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0202

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41620.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 10:15:28
Operator : KD/RAK/MS
Sample : CALDTH AL@300PPM
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:38:57 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.440	977336	330.596		
22)S	1-Chlorooctadecane	13.714	741044	324.669		
Target Compounds						
1)AT	n-Nonane (C9)	3.296	819746	366.149		
2)AT	n-Decane (C10)	4.354	828043	362.976		
3)	Naphthalene	6.326	941704	354.323		
4)AT	n-Dodecane (C12)	6.394	824461	355.519		
5)	2-Methylnaphthalene	7.378	921071	350.726		
6)AT	n-Tetradecane (C14)	8.222	813731	344.939		
7)AT	n-Hexadecane (C16)	9.899	807092	339.245		
8)AT	n-Octadecane (C18)	11.659	794795	332.359		
9)AT	n-Eicosane (C20)	13.199	790726	326.457		
10)AT	n-Heneicosane (C21)	13.778	794326	324.179		
11)AT	n-Docosane (C22)	14.283	788134	322.048		
12)AT	n-Tetracosane (C24)	15.146	783702	318.551		
13)AT	n-Hexacosane (C26)	15.889	767328	315.417		
14)AT	n-Octacosane (C28)	16.554	756559	313.593		
15)BT	n-Triacontane (C30)	17.170	756954	312.415		
16)BT	n-Dotriacontane(C32)	17.757	741445	311.365		
17)BT	n-Tetratriacontane (C34	18.327	716416	313.253		
18)BT	n-Hexatriacontane (C36)	18.943	714339	316.121		
19)BT	n-Octatriacontane (C38)	19.717	694104	319.559		
20)BT	n-Tetracontane (C40)	20.733	674763	323.445		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

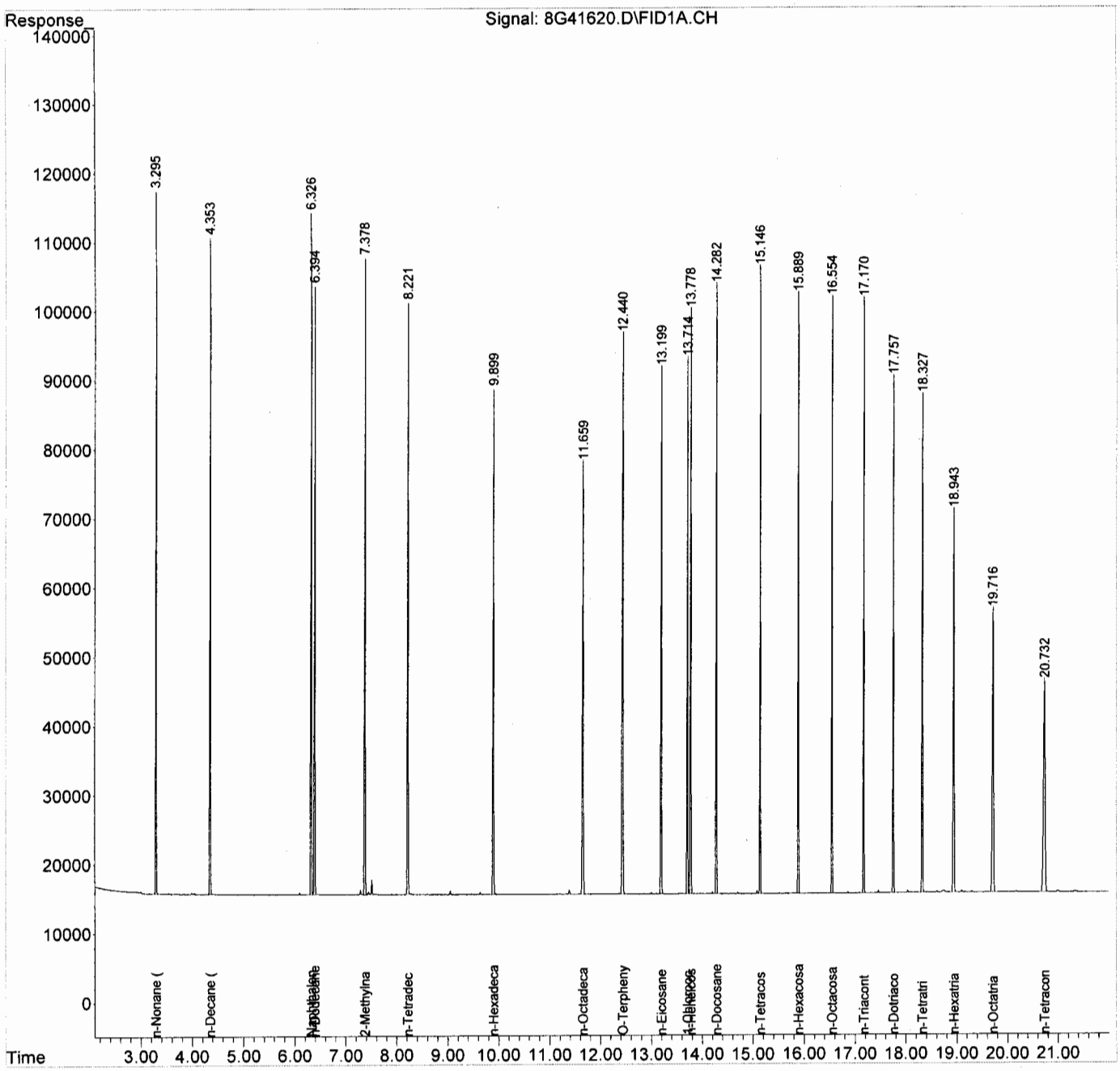
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41620.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 10:15:28
Operator : KD/RAK/MS
Sample : CALDTH AL@300PPM
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:38:57 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0204

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41619.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 09:45:05
Operator : KD/RAK/MS
Sample : CALDTH AL@500PPM
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:18:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.450	1783225	603.197		
22)S	1-Chlorooctadecane	13.720	1298611	568.952		
Target Compounds						
1)AT	n-Nonane (C9)	3.302	1543495	689.419		
2)AT	n-Decane (C10)	4.360	1551256	679.999		
3)	Naphthalene	6.333	1756479	660.888		
4)AT	n-Dodecane (C12)	6.401	1536749	662.667		
5)	2-Methylnaphthalene	7.386	1711111	651.558		
6)AT	n-Tetradecane (C14)	8.228	1513025	641.368		
7)AT	n-Hexadecane (C16)	9.908	1477636	621.096		
8)AT	n-Octadecane (C18)	11.668	1423159	595.122		
9)AT	n-Eicosane (C20)	13.206	1372655	566.710		
10)AT	n-Heneicosane (C21)	13.784	1353391	552.344		
11)AT	n-Docosane (C22)	14.287	1314593	537.170		
12)AT	n-Tetracosane (C24)	15.151	1252240	508.997		
13)AT	n-Hexacosane (C26)	15.894	1173555	482.400		
14)AT	n-Octacosane (C28)	16.558	1116637	462.844		
15)BT	n-Triacontane (C30)	17.172	1094946	451.914		
16)BT	n-Dotriacontane(C32)	17.758	1081825	454.305		
17)BT	n-Tetratriacontane (C34	18.325	1079688	472.093		
18)BT	n-Hexatriacontane (C36)	18.941	1110579	491.472		
19)BT	n-Octatriacontane (C38)	19.719	1098924	505.935		
20)BT	n-Tetracontane (C40)	20.737	1077652	516.569		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

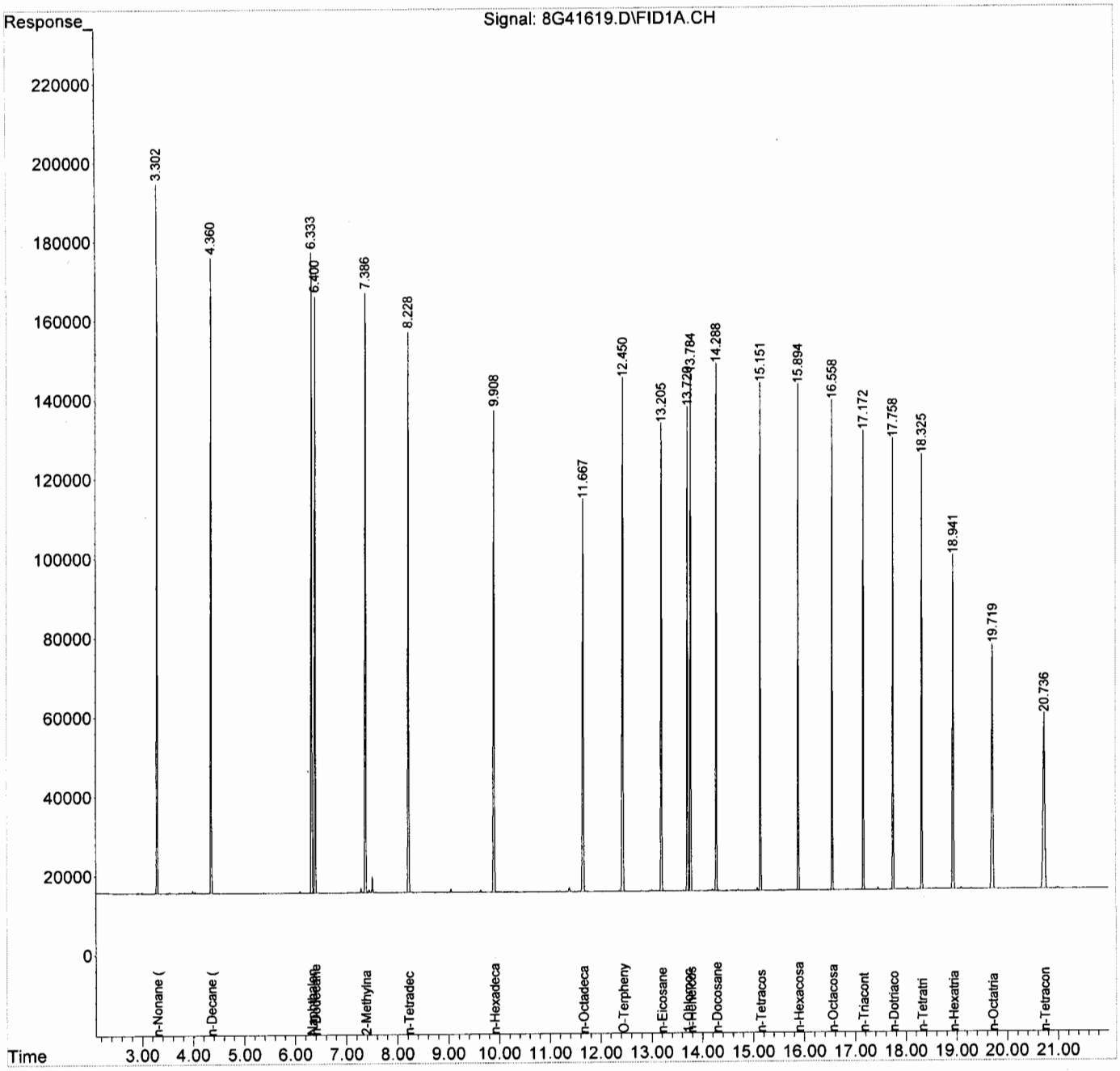
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41619.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 09:45:05
Operator : KD/RAK/MS
Sample : CALDTH AL@500PPM
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:18:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Form7
Continuing Calibration

Method: NJEPHRev3A

Data File:				8G42129.D			8G42150.D			8G42171.D			8G42189.D			8G42211.D		
Method:				8015-EPHCA			8015-EPHCA			8015-EPHCA			8015-EPHCA			8015-EPHCA		
Calibration Name:				CALDTH AL@100			CALDTH AL@100			CALDTH AL@100			CALDTH AL@100			CALDTH AL@100		
Calibration Date/Time				08/02/13 15:45			08/03/13 12:15			08/03/13 23:17			08/04/13 09:48			08/05/13 08:00		
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff
n-Nonane (C9)	30	1	0	109.8	100	9.8	108.2	100	8.2	126.4	100	26.4	108	100	8.0	118.3	100	18.3
n-Decane (C10)	30	1	0	110.4	100	10.4	107.9	100	7.9	126.7	100	26.7	108.4	100	8.4	121.4	100	21.4
Naphthalene	30	1	0	108.3	100	8.3	108.9	100	8.9	126.1	100	26.1	107.0	100	7.0	123.2	100	23.2
n-Dodecane (C12)	30	1	0	112	100	12.0	109.8	100	9.8	128.0	100	28.0	109	100	9.0	126.2	100	26.2
2-Methylnaphthalene	30	1	0	109.9	100	9.9	111.3	100	11.3	128.7	100	28.7	108.8	100	8.8	126.1	100	26.1
n-Tetradecane (C14)	30	1	0	110.6	100	10.6	107.9	100	7.9	126.3	100	26.3	106.5	100	6.5	127	100	27.0
n-Hexadecane (C16)	30	1	0	108.4	100	8.4	106	100	6.0	123.9	100	23.9	104.3	100	4.3	126.6	100	26.6
n-Octadecane (C18)	30	1	0	107	100	7.0	104.4	100	4.4	121.1	100	21.1	103.0	100	3.0	123.6	100	23.6
n-Eicosane (C20)	30	1	0	103.3	100	3.3	103.3	100	3.3	118.7	100	18.7	100.4	100	0.4	118.3	100	18.3
n-Heneicosane (C21)	30	1	0	101.7	100	1.7	102.5	100	2.5	117.7	100	17.7	99.71	100	0.3	115.4	100	15.4
n-Docosane (C22)	30	1	0	100.3	100	0.3	101.2	100	1.2	116.6	100	16.6	98.95	100	1.1	112.6	100	12.6
n-Tetracosane (C24)	30	1	0	98.57	100	1.4	100.3	100	0.3	116.3	100	16.3	98.65	100	1.3	107.2	100	7.2
n-Hexacosane (C26)	30	1	0	96.37	100	3.6	98.36	100	1.6	114.6	100	14.6	97.78	100	2.2	102.2	100	2.2
n-Octacosane (C28)	30	1	0	96.48	100	3.5	97.14	100	2.9	114.2	100	14.2	98.46	100	1.5	99.68	100	0.3
n-Triacontane (C30)	30	1	0	97.92	100	2.1	97.43	100	2.6	114.6	100	14.6	99.31	100	0.7	99.65	100	0.3
n-Dotriacontane(C32)	30	1	0	100.2	100	0.2	97.78	100	2.2	115.3	100	15.3	101.1	100	1.1	101.9	100	1.9
n-Tetratriacontane (C	30	1	0	105	100	5.0	101.2	100	1.2	118.7	100	18.7	105	100	4.9	106.3	100	6.3
n-Hexatriacontane (C	30	1	0	104.4	100	4.4	99.86	100	0.1	118.9	100	18.9	104.5	100	4.5	106.5	100	6.5
n-Octatriacontane (C3	30	1	0	105.7	100	5.7	102	100	2.0	119.4	100	19.4	107.3	100	7.3	110.0	100	10.0
n-Tetracontane (C40)	30	1	0	105.7	100	5.7	103.7	100	3.7	122.5	100	22.5	110.2	100	10.2	115.2	100	15.2
O-Terphenyl	30	1	0	97.64	100	2.4	102.1	100	2.1	114.5	100	14.5	96.62	100	3.4	110.3	100	10.3
1-Chlorooctadecane	30	1	0	96.69	100	3.3	98.45	100	1.6	112.6	100	12.6	95.17	100	4.8	108.1	100	8.1
C9-C28	25	1	0	1255	1200	4.6	1247	1200	3.9	1451	1200	20.9	1233	1200	2.8	1398	1200	16.5
>C28-C40	25	1	0	618.9	600	3.2	601.9	600	0.3	709.3	600	18.2	627.3	600	4.5	639.5	600	6.6
C9-C40	25	1	0	1874	1800	4.1	1849	1800	2.7	2160	1800	20.0	1860	1800	3.4	2038	1800	13.2

Flags/Notes: **** - Values outside of limits for this column/run***

Form7

RtWindow Summary

Method: NJEPHRev3A

Data File:			8G41618.D		8G42129.D		8G42150.D		8G42189.D			
Calibration Name:			CALDTH AL@100PPM		CALDTH AL@100PPM		CALDTH AL@100PPM		CALDTH AL@100PPM			
Calibration Date/Time			7/15/2013 9:13:00 AM		8/2/2013 3:45:54 PM		8/3/2013 12:15:06 PM		8/4/2013 9:48:20 AM			
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
n-Nonane (C9)	1	0	3.29	(3.24 - 3.34)	3.28	(3.23 - 3.33)	3.28	(3.23 - 3.33)	3.28	(3.23 - 3.33)		
n-Decane (C10)	1	0	4.35	(4.30 - 4.40)	4.33	(4.28 - 4.38)	4.33	(4.28 - 4.38)	4.33	(4.28 - 4.38)		
Naphthalene	1	0	6.32	(6.27 - 6.37)	6.30	(6.25 - 6.35)	6.30	(6.25 - 6.35)	6.30	(6.25 - 6.35)		
n-Dodecane (C12)	1	0	6.39	(6.34 - 6.44)	6.37	(6.32 - 6.42)	6.37	(6.32 - 6.42)	6.37	(6.32 - 6.42)		
2-Methylnaphthalene	1	0	7.37	(7.32 - 7.42)	7.36	(7.31 - 7.41)	7.36	(7.31 - 7.41)	7.35	(7.30 - 7.40)		
n-Tetradecane (C14)	1	0	8.22	(8.17 - 8.27)	8.20	(8.15 - 8.25)	8.20	(8.15 - 8.25)	8.20	(8.15 - 8.25)		
n-Hexadecane (C16)	1	0	9.90	(9.85 - 9.95)	9.88	(9.83 - 9.93)	9.88	(9.83 - 9.93)	9.87	(9.82 - 9.92)		
n-Octadecane (C18)	1	0	11.65	(11.60 - 11.70)	11.63	(11.58 - 11.68)	11.63	(11.58 - 11.68)	11.63	(11.58 - 11.68)		
n-Eicosane (C20)	1	0	13.20	(13.15 - 13.25)	13.18	(13.13 - 13.23)	13.18	(13.13 - 13.23)	13.18	(13.13 - 13.23)		
n-Heneicosane (C21)	1	0	13.77	(13.72 - 13.82)	13.76	(13.71 - 13.81)	13.76	(13.71 - 13.81)	13.76	(13.71 - 13.81)		
n-Docosane (C22)	1	0	14.28	(14.23 - 14.33)	14.27	(14.22 - 14.32)	14.26	(14.21 - 14.31)	14.26	(14.21 - 14.31)		
n-Tetracosane (C24)	1	0	15.14	(15.09 - 15.19)	15.13	(15.08 - 15.18)	15.13	(15.08 - 15.18)	15.13	(15.08 - 15.18)		
n-Hexacosane (C26)	1	0	15.89	(15.84 - 15.94)	15.87	(15.82 - 15.92)	15.87	(15.82 - 15.92)	15.87	(15.82 - 15.92)		
n-Octacosane (C28)	1	0	16.55	(16.50 - 16.60)	16.54	(16.49 - 16.59)	16.54	(16.49 - 16.59)	16.54	(16.49 - 16.59)		
n-Triacontane (C30)	1	0	17.17	(17.12 - 17.22)	17.16	(17.11 - 17.21)	17.15	(17.10 - 17.20)	17.15	(17.10 - 17.20)		
n-Dotriacontane(C32)	1	0	17.76	(17.71 - 17.81)	17.76	(17.71 - 17.81)	17.72	(17.67 - 17.77)	17.71	(17.66 - 17.76)		
n-Tetratriacontane (C	1	0	18.34	(18.29 - 18.39)	18.35	(18.30 - 18.40)	18.25	(18.20 - 18.30)	18.25	(18.20 - 18.30)		
n-Hexatriacontane (C	1	0	18.96	(18.91 - 19.01)	18.97	(18.92 - 19.02)	18.86	(18.81 - 18.91)	18.85	(18.80 - 18.90)		
n-Octatriacontane (C	1	0	19.73	(19.68 - 19.78)	19.74	(19.69 - 19.79)	19.62	(19.57 - 19.67)	19.62	(19.57 - 19.67)		
n-Tetracontane (C40)	1	0	20.75	(20.70 - 20.80)	20.75	(20.70 - 20.80)	20.62	(20.57 - 20.67)	20.62	(20.57 - 20.67)		
O-Terphenyl	1	0	12.44	(12.40 - 12.48)	12.41	(12.37 - 12.45)	12.41	(12.37 - 12.45)	12.41	(12.37 - 12.45)		
1-Chlorooctadecane	1	0	13.71	(13.67 - 13.75)	13.70	(13.66 - 13.74)	13.69	(13.65 - 13.73)	13.69	(13.65 - 13.73)		
C9-C28	1	0										
>C28-C40	1	0										
C9-C40	1	0										

Quantitation Report (QT Reviewed)

3080110 0208

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42129.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 15:45:54
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 02 16:09:08 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.414	329095	97.640		
22)S	1-Chlorooctadecane	13.696	248125	96.693		
Target Compounds						
1)AT	n-Nonane (C9)	3.278	288997	109.766		
2)AT	n-Decane (C10)	4.334	296981	110.388		
3)	Naphthalene	6.305	337131	108.330		
4)AT	n-Dodecane (C12)	6.373	305472	112.001		
5)	2-Methylnaphthalene	7.357	335565	109.894		
6)AT	n-Tetradecane (C14)	8.201	301994	110.550		
7)AT	n-Hexadecane (C16)	9.876	295881	108.390		
8)AT	n-Octadecane (C18)	11.632	291245	106.997		
9)AT	n-Eicosane (C20)	13.179	281210	103.293		
10)AT	n-Heneicosane (C21)	13.760	278275	101.683		
11)AT	n-Docosane (C22)	14.265	272300	100.302		
12)AT	n-Tetracosane (C24)	15.132	265244	98.574		
13)AT	n-Hexacosane (C26)	15.875	253606	96.367		
14)AT	n-Octacosane (C28)	16.540	249497	96.482		
15)BT	n-Triacontane (C30)	17.161	252357	97.922		
16)BT	n-Dotriacontane(C32)	17.764	252875	100.190		
17)BT	n-Tetratriacontane (C34	18.349	255566	104.972		
18)BT	n-Hexatriacontane (C36)	18.966	251203	104.420		
19)BT	n-Octatriacontane (C38)	19.739	245606	105.722		
20)BT	n-Tetracontane (C40)	20.750	237507	105.686		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

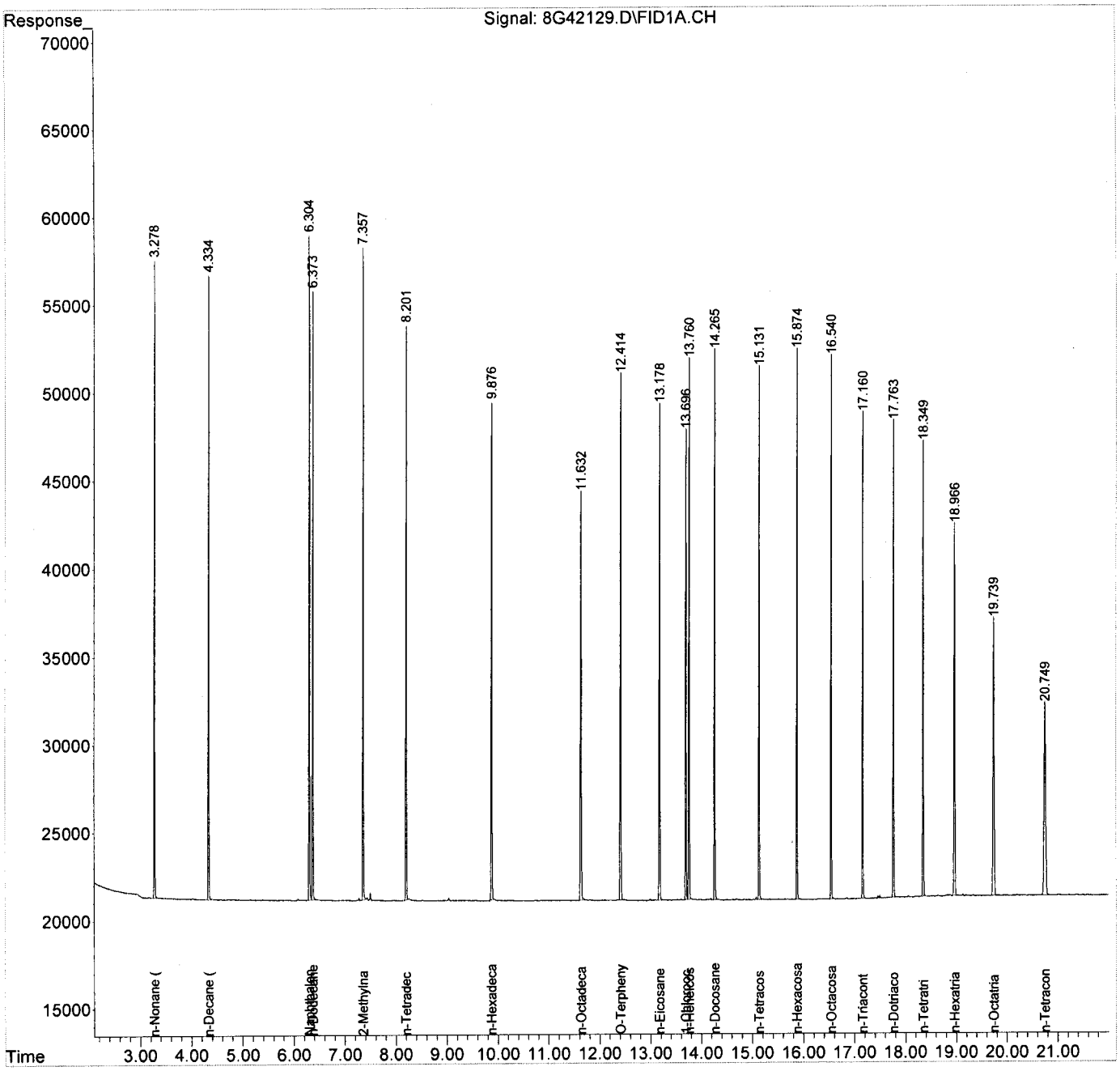
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42129.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 15:45:54
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 02 16:09:08 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0210

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42150.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 12:15:06
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 08:12:13 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.413	344150	102.107		
22)S	1-Chlorooctadecane	13.695	252623	98.446		
Target Compounds						
1)AT	n-Nonane (C9)	3.277	284770	108.160		
2)AT	n-Decane (C10)	4.333	290305	107.907		
3)	Naphthalene	6.304	339006	108.933		
4)AT	n-Dodecane (C12)	6.373	299470	109.800		
5)	2-Methylnaphthalene	7.356	339979	111.339		
6)AT	n-Tetradecane (C14)	8.200	294819	107.924		
7)AT	n-Hexadecane (C16)	9.875	289294	105.977		
8)AT	n-Octadecane (C18)	11.632	284085	104.366		
9)AT	n-Eicosane (C20)	13.178	281294	103.323		
10)AT	n-Heneicosane (C21)	13.758	280447	102.477		
11)AT	n-Docosane (C22)	14.264	274613	101.154		
12)AT	n-Tetracosane (C24)	15.131	269935	100.317		
13)AT	n-Hexacosane (C26)	15.875	258849	98.359		
14)AT	n-Octacosane (C28)	16.539	251210	97.145		
15)BT	n-Triacontane (C30)	17.149	251100	97.434		
16)BT	n-Dotriacontane(C32)	17.715	246798	97.782		
17)BT	n-Tetratriacontane (C34	18.251	246313	101.172		
18)BT	n-Hexatriacontane (C36)	18.857	240229	99.858		
19)BT	n-Octatriacontane (C38)	19.621	236900	101.975		
20)BT	n-Tetracontane (C40)	20.624	232990	103.676		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

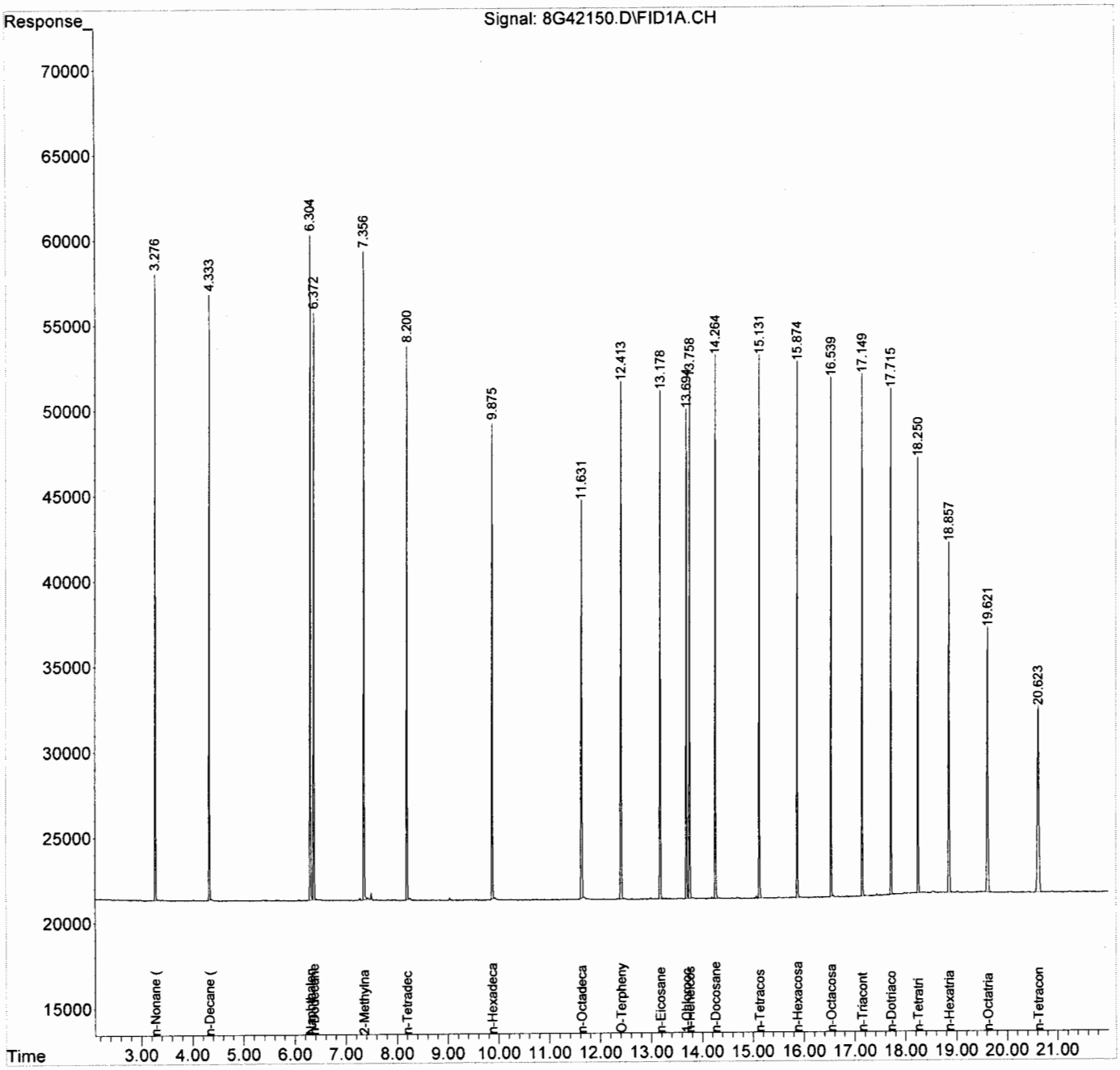
Quantitation Report (QT Reviewed)

3080110 0211

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42150.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 12:15:06
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 08:12:13 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0212

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42171.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 23:17:33
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 39 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 13:22:58 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.412	385978	114.517		
22)S	1-Chlorooctadecane	13.694	288876	112.574		
Target Compounds						
1)AT	n-Nonane (C9)	3.276	332877	126.432		
2)AT	n-Decane (C10)	4.332	340906	126.715		
3)	Naphthalene	6.303	392532	126.132		
4)AT	n-Dodecane (C12)	6.372	349174	128.024		
5)	2-Methylnaphthalene	7.356	392970	128.693		
6)AT	n-Tetradecane (C14)	8.199	345087	126.325		
7)AT	n-Hexadecane (C16)	9.874	338180	123.885		
8)AT	n-Octadecane (C18)	11.630	329536	121.063		
9)AT	n-Eicosane (C20)	13.177	323225	118.725		
10)AT	n-Heneicosane (C21)	13.757	322020	117.668		
11)AT	n-Docosane (C22)	14.263	316563	116.606		
12)AT	n-Tetracosane (C24)	15.130	312897	116.283		
13)AT	n-Hexacosane (C26)	15.873	301639	114.619		
14)AT	n-Octacosane (C28)	16.538	295278	114.186		
15)BT	n-Triacontane (C30)	17.147	295271	114.574		
16)BT	n-Dotriacontane(C32)	17.714	291099	115.334		
17)BT	n-Tetratriacontane (C34	18.249	288871	118.652		
18)BT	n-Hexatriacontane (C36)	18.854	285938	118.858		
19)BT	n-Octatriacontane (C38)	19.617	277356	119.389		
20)BT	n-Tetracontane (C40)	20.622	275233	122.474		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

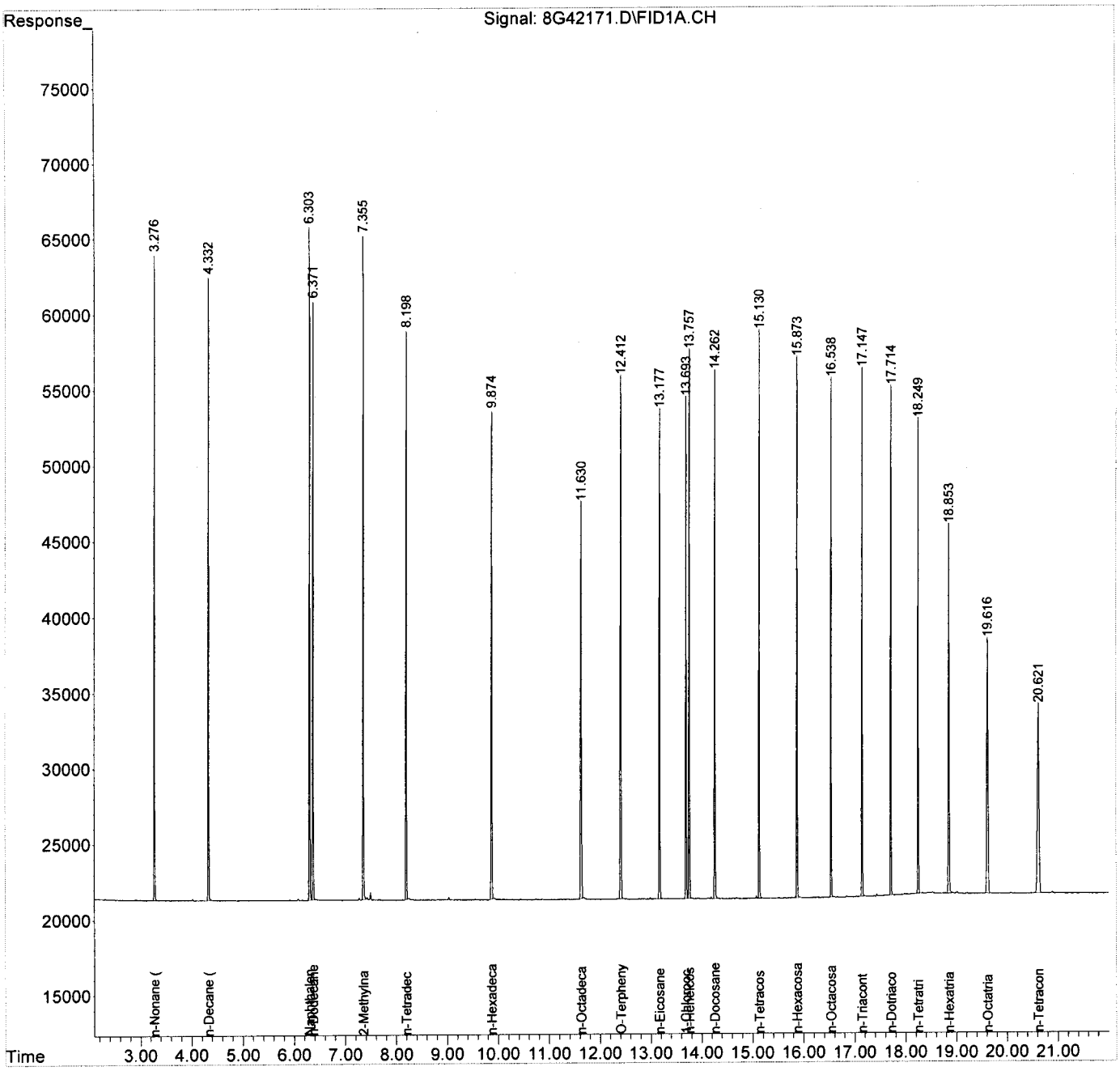
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42171.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 23:17:33
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 39 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 13:22:58 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0214

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42189.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 09:48:20
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:22:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.410	325646	96.617		
22)S	1-Chlorooctadecane	13.694	244228	95.175		
Target Compounds						
1)AT	n-Nonane (C9)	3.275	284237	107.958		
2)AT	n-Decane (C10)	4.331	291522	108.359		
3)	Naphthalene	6.302	333088	107.031		
4)AT	n-Dodecane (C12)	6.371	297232	108.980		
5)	2-Methylnaphthalene	7.354	332188	108.788		
6)AT	n-Tetradecane (C14)	8.198	290984	106.520		
7)AT	n-Hexadecane (C16)	9.873	284670	104.283		
8)AT	n-Octadecane (C18)	11.629	280443	103.028		
9)AT	n-Eicosane (C20)	13.176	273373	100.414		
10)AT	n-Heneicosane (C21)	13.756	272878	99.711		
11)AT	n-Docosane (C22)	14.263	268643	98.955		
12)AT	n-Tetracosane (C24)	15.129	265459	98.653		
13)AT	n-Hexacosane (C26)	15.872	257323	97.780		
14)AT	n-Octacosane (C28)	16.537	254606	98.458		
15)BT	n-Triacontane (C30)	17.146	255936	99.311		
16)BT	n-Dotriacontane(C32)	17.714	255063	101.057		
17)BT	n-Tetratriacontane (C34	18.248	255518	104.953		
18)BT	n-Hexatriacontane (C36)	18.854	251325	104.471		
19)BT	n-Octatriacontane (C38)	19.618	249262	107.296		
20)BT	n-Tetracontane (C40)	20.620	247658	110.203		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

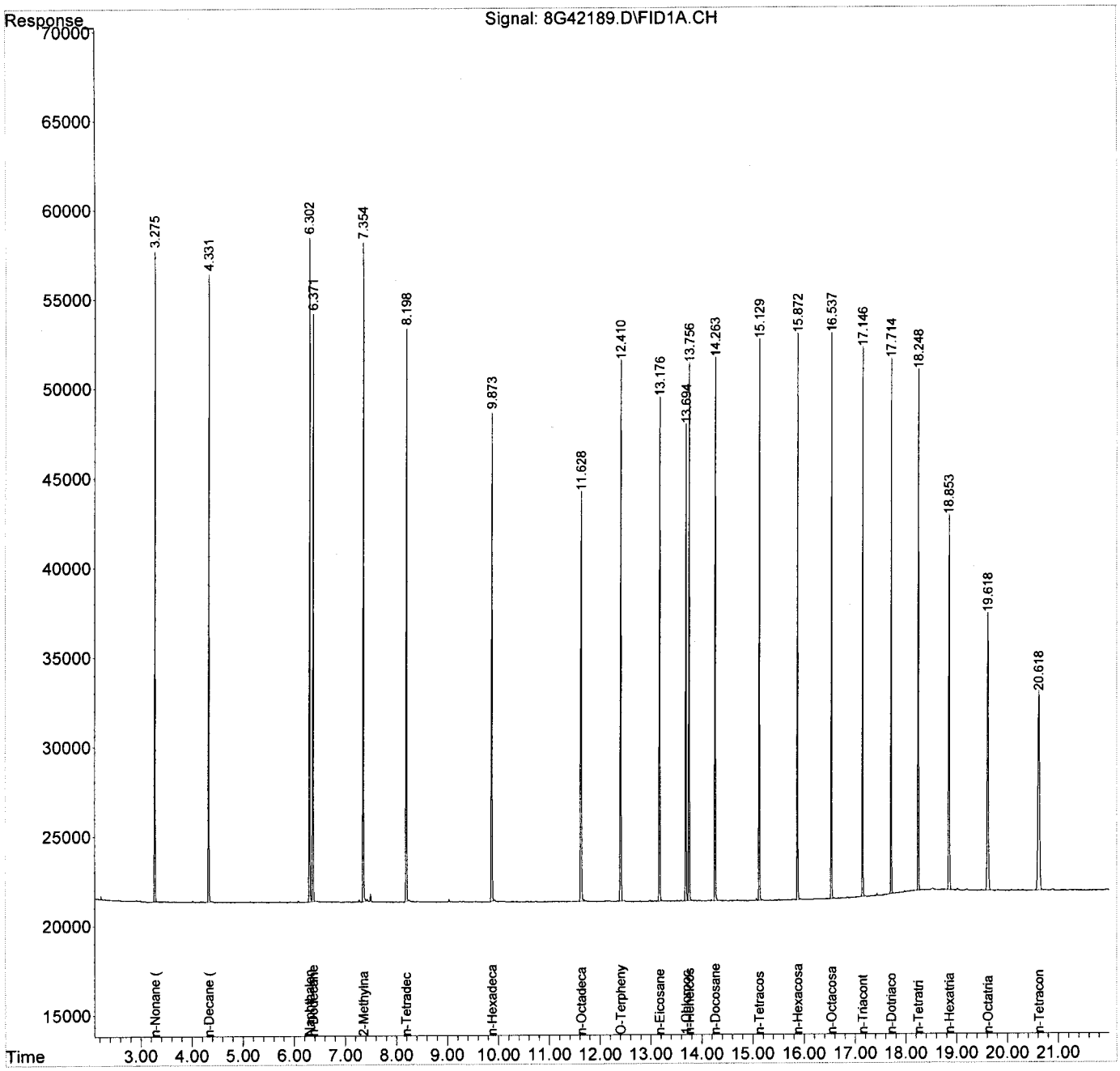
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42189.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 09:48:20
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:22:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0216

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42211.D
Signal(s) : FID1A.CH
Acq On : 05-Aug-13, 08:00:06
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 08:31:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.415	371720	110.286		
22)S	1-Chlorooctadecane	13.697	277370	108.090		
Target Compounds						
1)AT	n-Nonane (C9)	3.275	311508	118.316		
2)AT	n-Decane (C10)	4.332	326667	121.423		
3)	Naphthalene	6.305	383468	123.220		
4)AT	n-Dodecane (C12)	6.373	344156	126.184		
5)	2-Methylnaphthalene	7.357	385141	126.129		
6)AT	n-Tetradecane (C14)	8.200	346864	126.975		
7)AT	n-Hexadecane (C16)	9.877	345501	126.567		
8)AT	n-Octadecane (C18)	11.634	336556	123.643		
9)AT	n-Eicosane (C20)	13.180	321996	118.274		
10)AT	n-Heneicosane (C21)	13.760	315671	115.348		
11)AT	n-Docosane (C22)	14.265	305604	112.570		
12)AT	n-Tetracosane (C24)	15.131	288435	107.192		
13)AT	n-Hexacosane (C26)	15.874	269025	102.226		
14)AT	n-Octacosane (C28)	16.539	257763	99.678		
15)BT	n-Triacontane (C30)	17.149	256800	99.646		
16)BT	n-Dotriacontane(C32)	17.721	257203	101.905		
17)BT	n-Tetratriacontane (C34	18.269	258771	106.289		
18)BT	n-Hexatriacontane (C36)	18.876	256150	106.476		
19)BT	n-Octatriacontane (C38)	19.642	255579	110.015		
20)BT	n-Tetracontane (C40)	20.648	258840	115.179		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

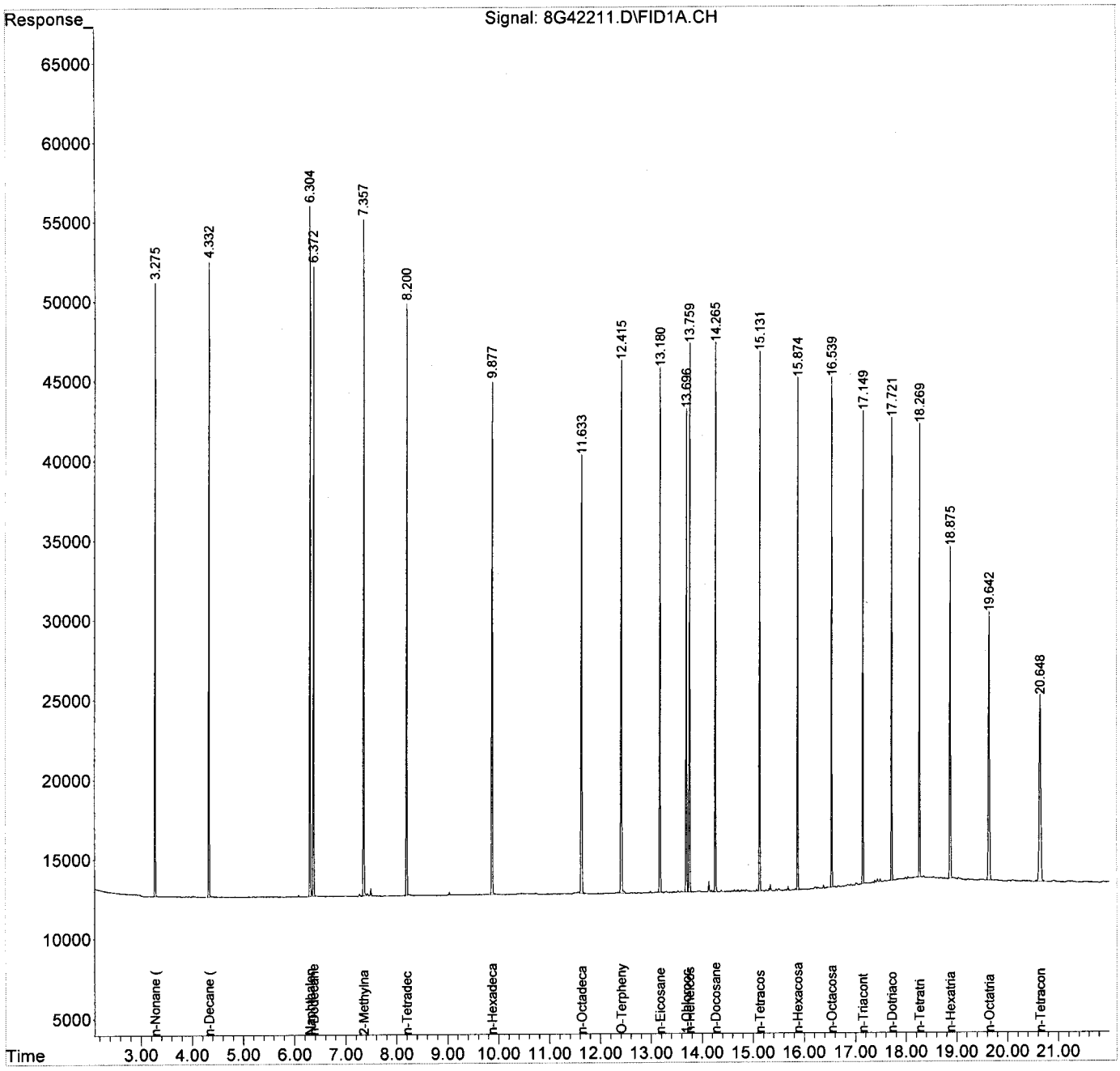
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42211.D
Signal(s) : FID1A.CH
Acq On : 05-Aug-13, 08:00:06
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 08:31:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



EPH Category 1 Data
Raw QC Data

Form1

ORGANICS REPORT

Sample Number: SMB25787
Client Id:
Data File: 8G42131.D
Analysis Date: 08/02/13 16:46
Date Rec/Extracted: NA-08/02/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: NJEPHRev3A
Matrix: Soil
Initial Vol: 10g
Final Vol: 1ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
ephc28c40	>C28-C40	60	U	c9toc28	C9-C28	60	U

Worksheet #: 272465

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42131.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 16:46:53
Operator : KD/RAK/MS
Sample : SMB25787
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:07:07 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.413	285806	84.796		
22)S	1-Chlorooctadecane	13.695	222594	86.744		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		
9)AT	n-Eicosane (C20)	0.000	0	N.D.		
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	12.412f	760181	282.276		m
24)B	>C28-C40(Total)	18.038f	373377	154.375		m
25)t	C9-C40(TOTAL)	12.412f	1132217	435.205		m

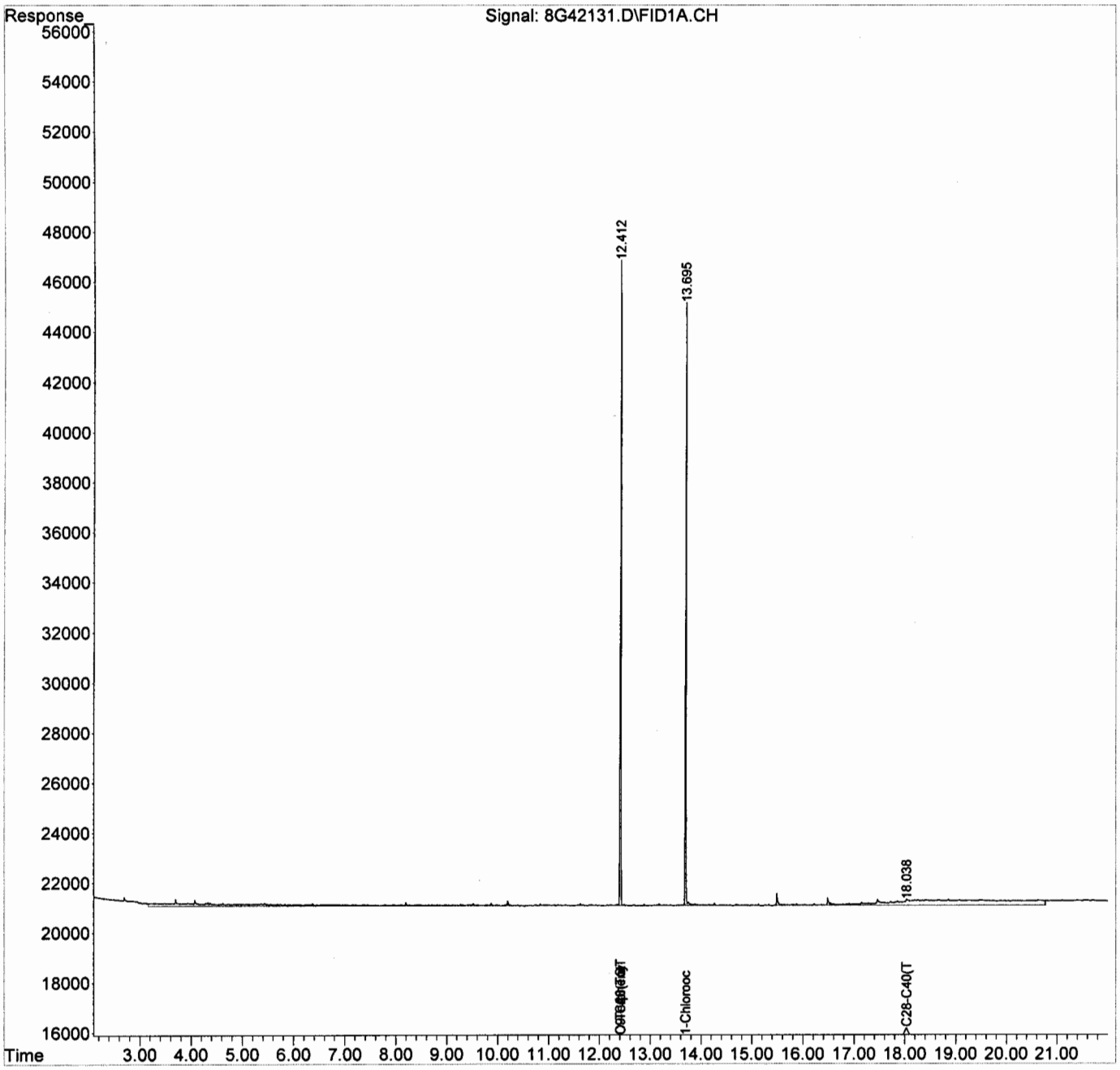
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42131.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 16:46:53
Operator : KD/RAK/MS
Sample : SMB25787
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:07:07 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42130.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 16:16:18
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 08:58:23 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	0.000	0	N.D.		
22)S	1-Chlorooctadecane	0.000	0	N.D.		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		
9)AT	n-Eicosane (C20)	0.000	0	N.D.		
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		
11)AT	n-Docosane (C22)	0.000	0	N.D.		
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		
14)AT	n-Octacosane (C28)	0.000	0	N.D.		
15)BT	n-Triacontane (C30)	0.000	0	N.D.		
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	3.187	251750	93.482		m
24)B	>C28-C40(Total)	18.725f	445002	183.989		m
25)t	C9-C40(TOTAL)	18.725f	694627	267.003		m

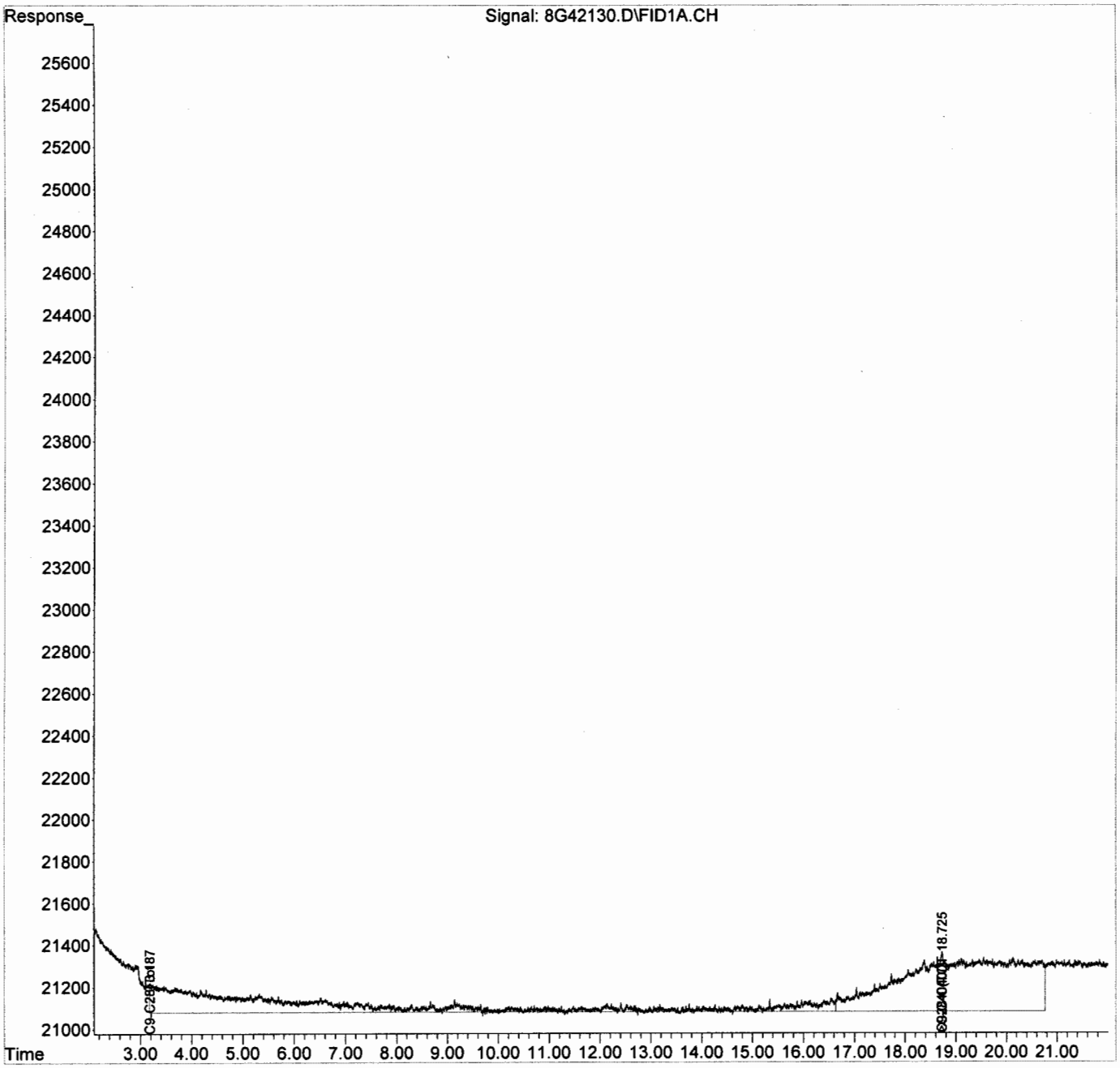
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42130.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 16:16:18
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 08:58:23 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42151.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 13:15:26
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:14:16 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	0.000	0	N.D.		
22)S	1-Chlorooctadecane	0.000	0	N.D.		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		
9)AT	n-Eicosane (C20)	0.000	0	N.D.		
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		
11)AT	n-Docosane (C22)	0.000	0	N.D.		
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		
14)AT	n-Octacosane (C28)	0.000	0	N.D.		
15)BT	n-Triacontane (C30)	0.000	0	N.D.		
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	3.198	228448	84.829		m
24)B	>C28-C40(Total)	18.536f	455341	188.264		m
25)t	C9-C40(TOTAL)	18.536f	683622	262.773		m

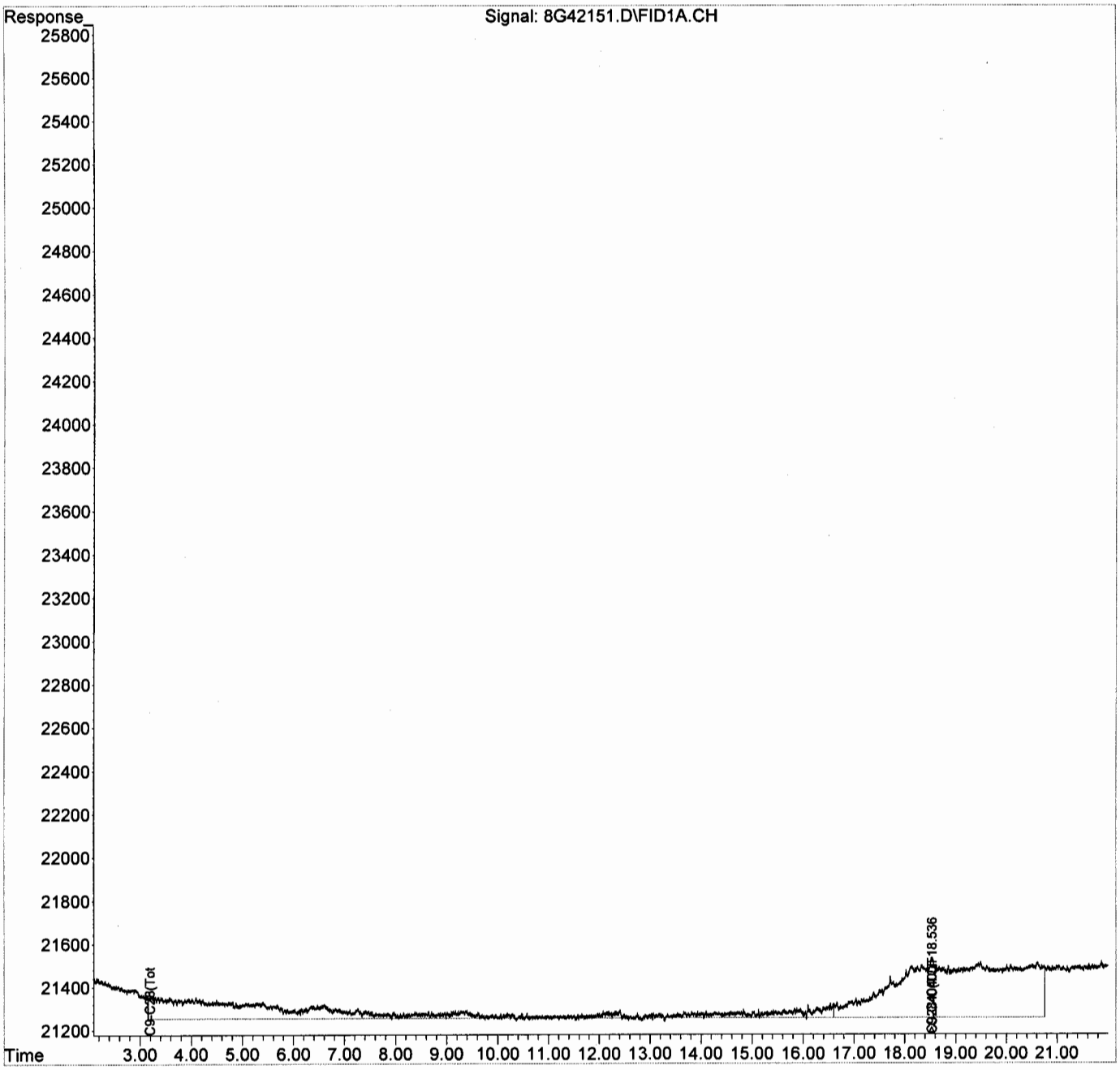
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42151.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 13:15:26
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:14:16 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0226

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42190.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 10:18:27
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:23:54 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units
System Monitoring Compounds					
21)S	O-Terphenyl	0.000	0	N.D.	
22)S	1-Chlorooctadecane	0.000	0	N.D.	
Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.	
2)AT	n-Decane (C10)	0.000	0	N.D.	
3)	Naphthalene	0.000	0	N.D.	
4)AT	n-Dodecane (C12)	0.000	0	N.D.	
5)	2-Methylnaphthalene	0.000	0	N.D.	
6)AT	n-Tetradecane (C14)	0.000	0	N.D.	
7)AT	n-Hexadecane (C16)	0.000	0	N.D.	
8)AT	n-Octadecane (C18)	0.000	0	N.D.	
9)AT	n-Eicosane (C20)	0.000	0	N.D.	
10)AT	n-Heneicosane (C21)	0.000	0	N.D.	
11)AT	n-Docosane (C22)	0.000	0	N.D.	
12)AT	n-Tetracosane (C24)	0.000	0	N.D.	
13)AT	n-Hexacosane (C26)	0.000	0	N.D.	
14)AT	n-Octacosane (C28)	0.000	0	N.D.	
15)BT	n-Triacontane (C30)	0.000	0	N.D.	
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.	
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.	
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.	
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.	
20)BT	n-Tetracontane (C40)	0.000	0	N.D.	
23)A	C9-C28(Total)	16.265f	259169	96.236	m
24)B	>C28-C40(Total)	17.356	1072017	443.233	m
25)t	C9-C40(TOTAL)	17.356f	1324167	508.987	m

(f)=RT Delta > 1/2 Window (m)=manual int.

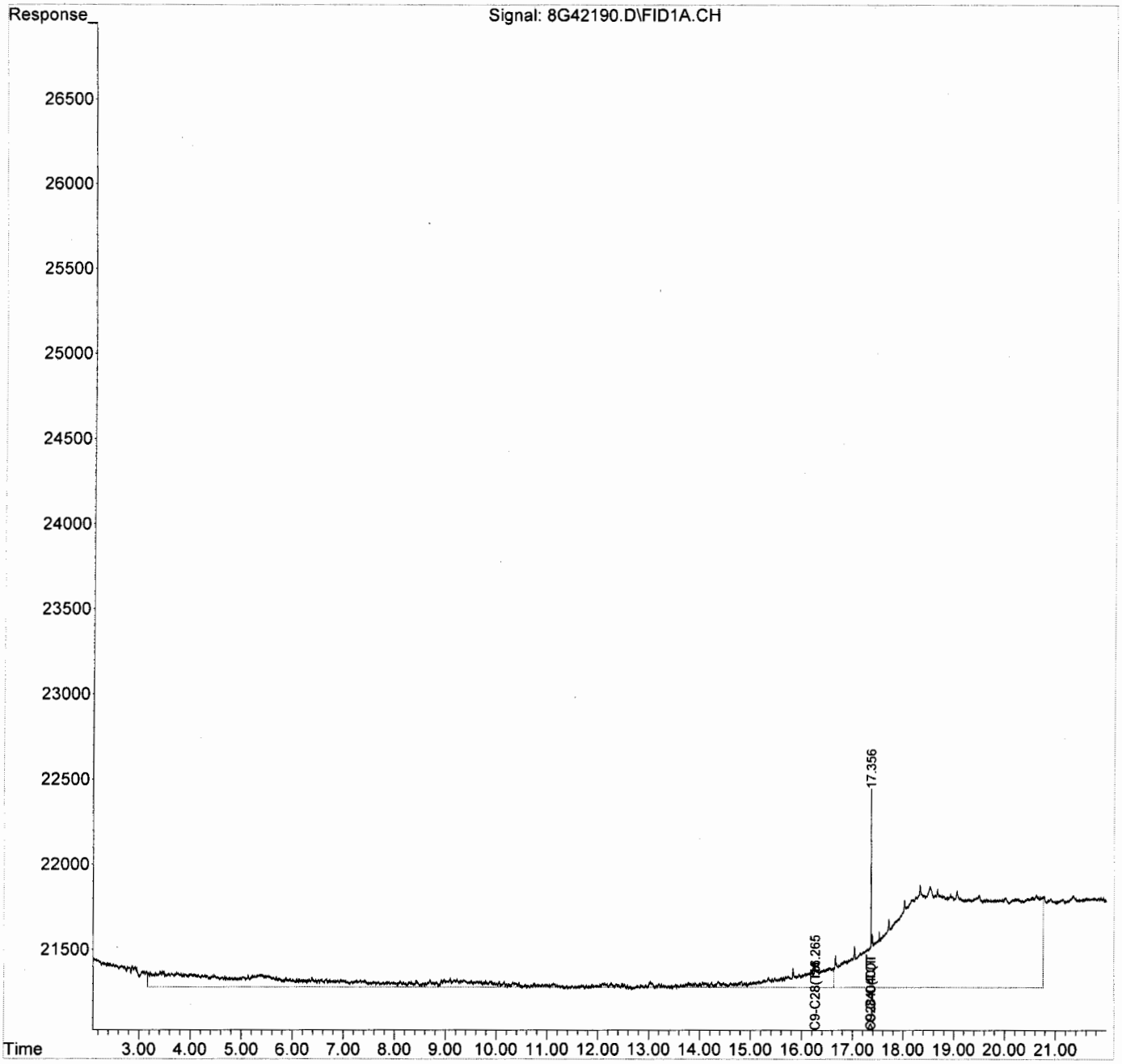
Quantitation Report (QT Reviewed)

3080110 0227

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42190.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 10:18:27
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:23:54 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0228

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42132.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 17:17:22
Operator : KD/RAK/MS
Sample : SMB25787(MS)
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:02:14 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.413	337660	100.181		
22)S	1-Chlorooctadecane	13.696	263536	102.699		
Target Compounds						
1)AT	n-Nonane (C9)	3.277	173707	65.977		
2)AT	n-Decane (C10)	4.334	238219	88.547		
3)	Naphthalene	6.305	332405	106.812		
4)AT	n-Dodecane (C12)	6.374	295255	108.255		
5)	2-Methylnaphthalene	7.357	326547	106.941		
6)AT	n-Tetradecane (C14)	8.202	303282	111.021		
7)AT	n-Hexadecane (C16)	9.876	300508	110.085		
8)AT	n-Octadecane (C18)	11.631	285417	104.856		
9)AT	n-Eicosane (C20)	13.179	282276	103.684		
10)AT	n-Heneicosane (C21)	13.759	280909	102.646		
11)AT	n-Docosane (C22)	14.265	275090	101.330		
12)AT	n-Tetracosane (C24)	15.131	268327	99.719		
13)AT	n-Hexacosane (C26)	15.876	266427	101.239		
14)AT	n-Octacosane (C28)	16.540	258632	100.015		
15)BT	n-Triacontane (C30)	17.150	258627	100.355		
16)BT	n-Dotriacontane(C32)	17.720	255353	101.172		
17)BT	n-Tetratriacontane (C34	18.264	250734	102.988		
18)BT	n-Hexatriacontane (C36)	18.870	250978	104.326		
19)BT	n-Octatriacontane (C38)	19.635	243135	104.658		
20)BT	n-Tetracontane (C40)	20.639	238443	106.103		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

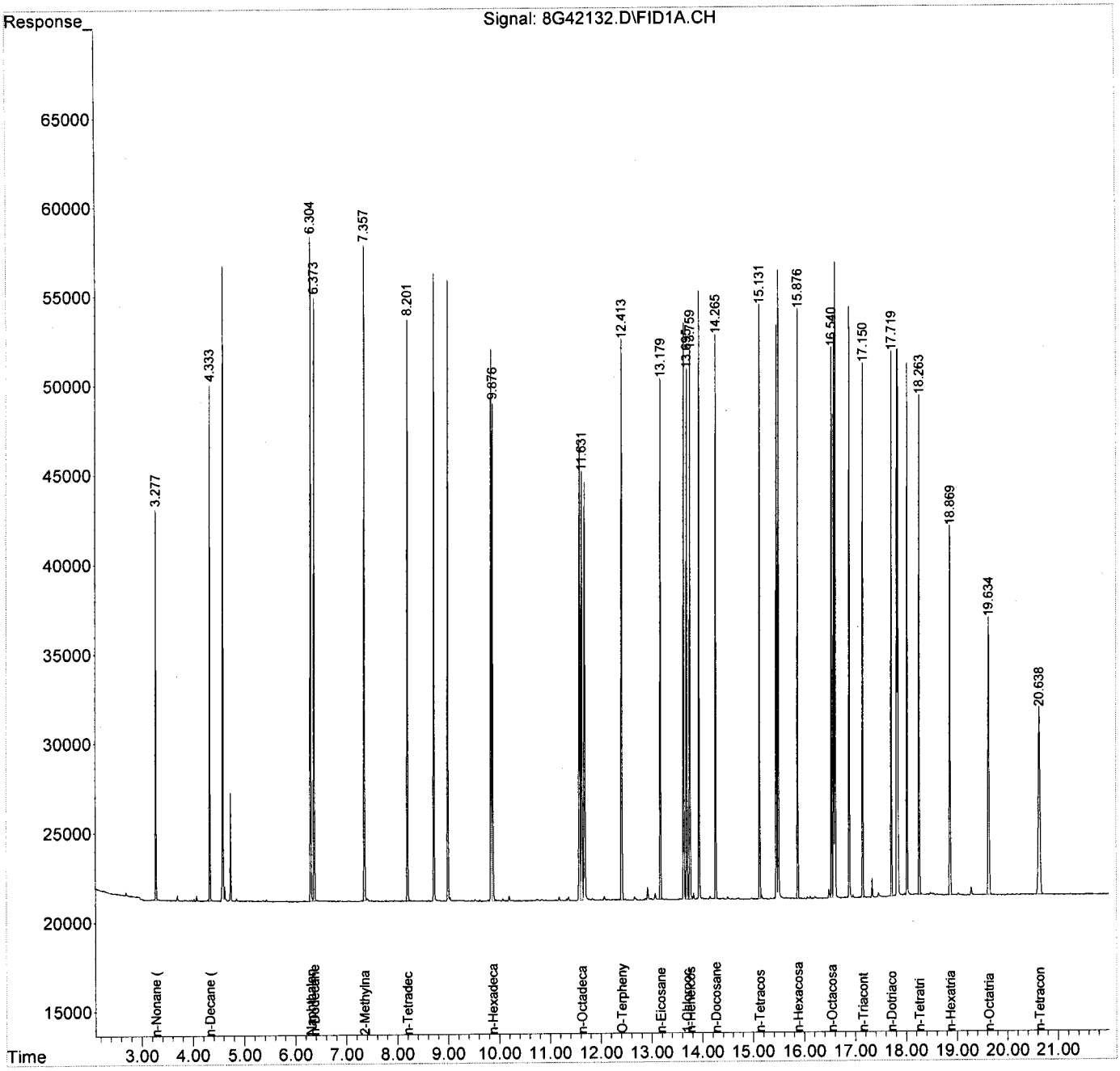
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42132.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 17:17:22
Operator : KD/RAK/MS
Sample : SMB25787(MS)
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:02:14 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0230

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42133.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 17:47:46
Operator : KD/RAK/MS
Sample : SMB25787(MSD)
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:02:38 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.414	360761	107.035		
22)S	1-Chlorooctadecane	13.696	279831	109.049		
Target Compounds						
1)AT	n-Nonane (C9)	3.277	205910	78.208		
2)AT	n-Decane (C10)	4.334	265018	98.507		
3)	Naphthalene	6.305	367509	118.092		
4)AT	n-Dodecane (C12)	6.373	321176	117.759		
5)	2-Methylnaphthalene	7.357	363301	118.977		
6)AT	n-Tetradecane (C14)	8.202	335078	122.661		
7)AT	n-Hexadecane (C16)	9.876	338943	124.164		
8)AT	n-Octadecane (C18)	11.633	323070	118.688		
9)AT	n-Eicosane (C20)	13.179	313196	115.041		
10)AT	n-Heneicosane (C21)	13.759	306204	111.889		
11)AT	n-Docosane (C22)	14.265	297425	109.557		
12)AT	n-Tetracosane (C24)	15.132	279002	103.687		
13)AT	n-Hexacosane (C26)	15.876	269035	102.230		
14)AT	n-Octacosane (C28)	16.540	255533	98.816		
15)BT	n-Triacontane (C30)	17.149	254459	98.738		
16)BT	n-Dotriacontane(C32)	17.722	252437	100.016		
17)BT	n-Tetratriacontane (C34	18.269	249933	102.659		
18)BT	n-Hexatriacontane (C36)	18.877	250380	104.077		
19)BT	n-Octatriacontane (C38)	19.644	244939	105.435		
20)BT	n-Tetracontane (C40)	20.647	241560	107.490		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

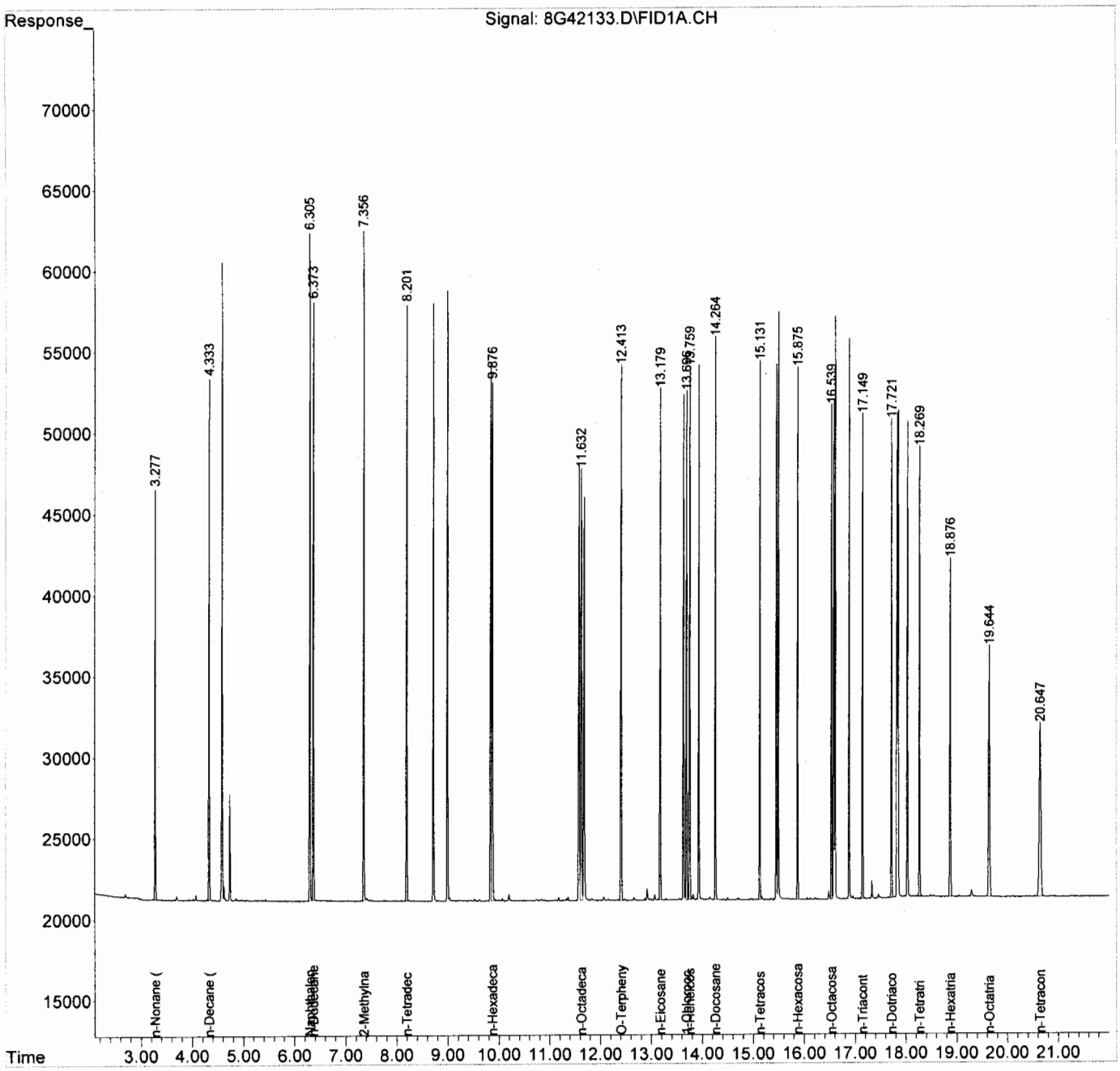
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42133.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 17:47:46
Operator : KD/RAK/MS
Sample : SMB25787(MSD)
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:02:38 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0232

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42134.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 18:18:13
Operator : KD/RAK/MS
Sample : SMB25787(DIESEL)(MS)
Misc : S.TPH
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:04:26 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.414	318968	94.635		
22)S	1-Chlorooctadecane	13.695	243443	94.869		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		d
2)AT	n-Decane (C10)	0.000	0	N.D.		d
3)	Naphthalene	0.000	0	N.D.		d
4)AT	n-Dodecane (C12)	0.000	0	N.D.		d
5)	2-Methylnaphthalene	0.000	0	N.D.		d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	12.414f	9059873	3364.179		m
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

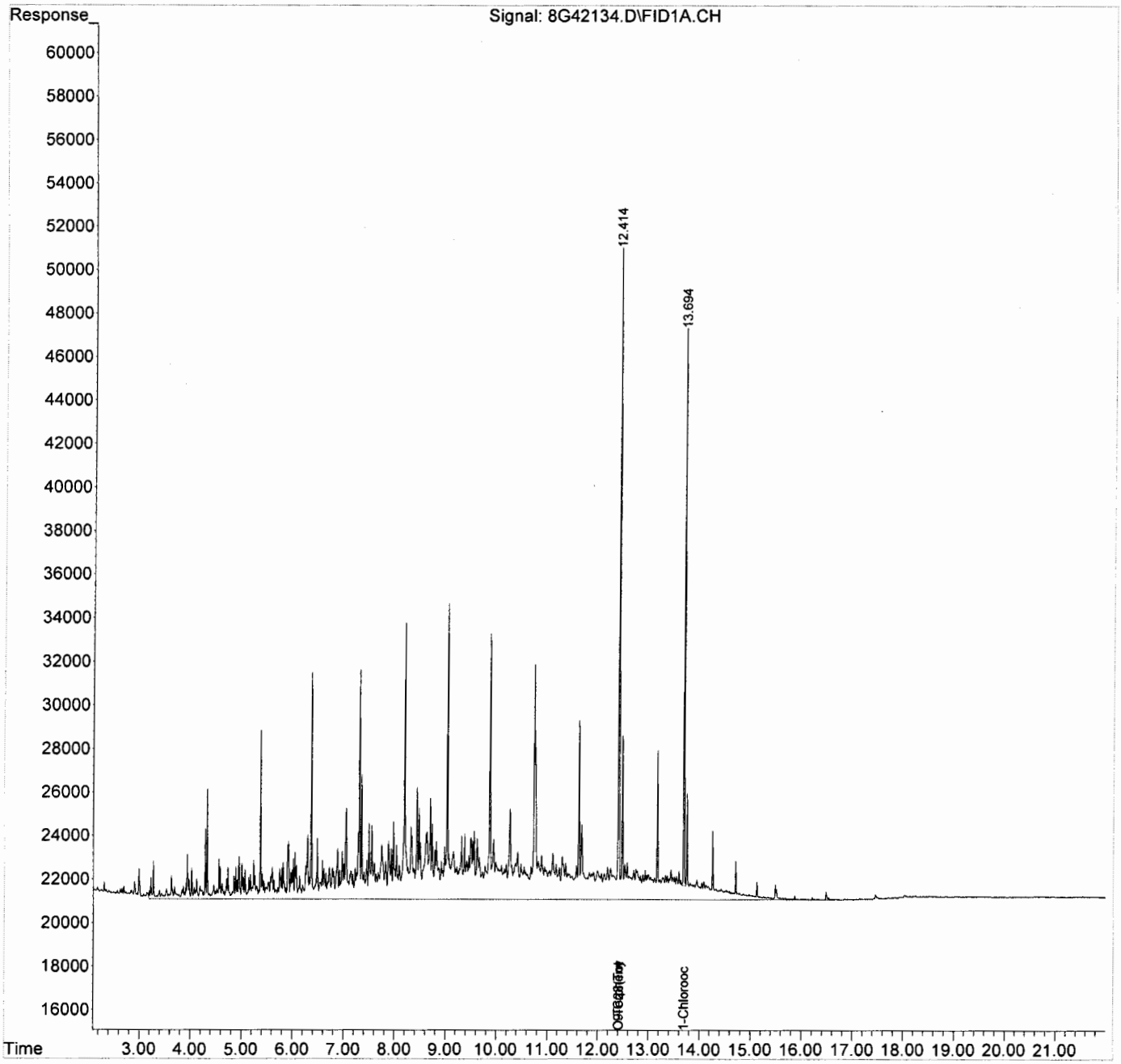
Quantitation Report (QT Reviewed)

3080110 0233

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42134.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 18:18:13
Operator : KD/RAK/MS
Sample : SMB25787(DIESEL)(MS)
Misc : S.TPH
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:04:26 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0234

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42135.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 18:48:43
Operator : KD/RAK/MS
Sample : SMB25787(DIESEL)(MSD)
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:04:06 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units
System Monitoring Compounds					
21)S	O-Terphenyl	12.415	388013	115.120	
22)S	1-Chlorooctadecane	13.696	295431	115.129	
Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.	d
2)AT	n-Decane (C10)	0.000	0	N.D.	d
3)	Naphthalene	0.000	0	N.D.	d
4)AT	n-Dodecane (C12)	0.000	0	N.D.	d
5)	2-Methylnaphthalene	0.000	0	N.D.	d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.	d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.	d
8)AT	n-Octadecane (C18)	0.000	0	N.D.	d
9)AT	n-Eicosane (C20)	0.000	0	N.D.	d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.	d
11)AT	n-Docosane (C22)	0.000	0	N.D.	d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.	d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.	d
14)AT	n-Octacosane (C28)	0.000	0	N.D.	d
15)BT	n-Triacontane (C30)	0.000	0	N.D.	d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.	d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.	d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.	d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.	d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.	
23)A	C9-C28(Total)	12.415f	10672013	3962.810	m
24)B	>C28-C40(Total)	0.000	0	N.D.	d
25)t	C9-C40(TOTAL)	0.000	0	N.D.	d

(f)=RT Delta > 1/2 Window (m)=manual int.

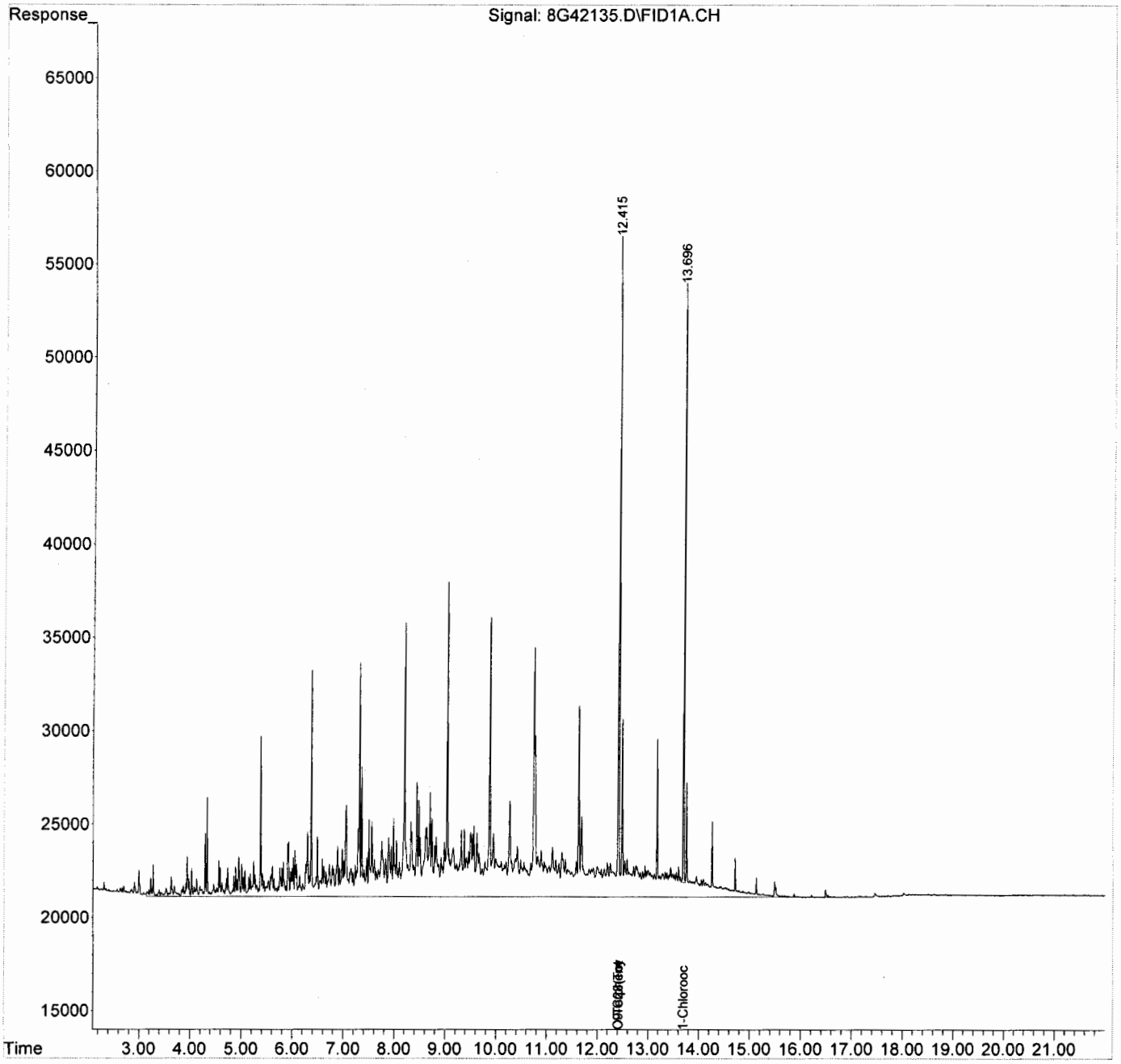
Quantitation Report (QT Reviewed)

3080110 0235

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42135.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 18:48:43
Operator : KD/RAK/MS
Sample : SMB25787(DIESEL)(MSD)
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:04:06 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0236

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42197.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 13:49:50
Operator : KD/RAK/MS
Sample : AC73723-001(10X)(MS)
Misc : S.TPH:10
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:21:56 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.406	35395	10.501		
22)S	1-Chlorooctadecane	13.691	26718	10.412		
	Target Compounds					
1)AT	n-Nonane (C9)	3.273	17824	6.770		
2)AT	n-Decane (C10)	4.329	22417	8.333		
3)	Naphthalene	6.299	33049	10.620		
4)AT	n-Dodecane (C12)	6.368	28088	10.298		
5)	2-Methylnaphthalene	7.351	31667	10.371		
6)AT	n-Tetradecane (C14)	8.195	30254	11.075		
7)AT	n-Hexadecane (C16)	9.869	32714	11.984		
8)AT	n-Octadecane (C18)	11.624	31397	11.534		
9)AT	n-Eicosane (C20)	13.173	30072	11.046		
10)AT	n-Heneicosane (C21)	13.754	30647	11.199		
11)AT	n-Docosane (C22)	14.260	30099	11.087		
12)AT	n-Tetracosane (C24)	15.127	26387	9.806		
13)AT	n-Hexacosane (C26)	15.871	26317	10.000		
14)AT	n-Octacosane (C28)	16.535	24399	9.435		
15)BT	n-Triacontane (C30)	17.144	22186	8.609		
16)BT	n-Dotriacontane(C32)	17.711	22061	8.741		m
17)BT	n-Tetratriacontane (C34	18.246	24480	10.055		
18)BT	n-Hexatriacontane (C36)	18.851	27048	11.243		m
19)BT	n-Octatriacontane (C38)	19.614	23879	10.279		
20)BT	n-Tetracontane (C40)	20.614	24813	11.041		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

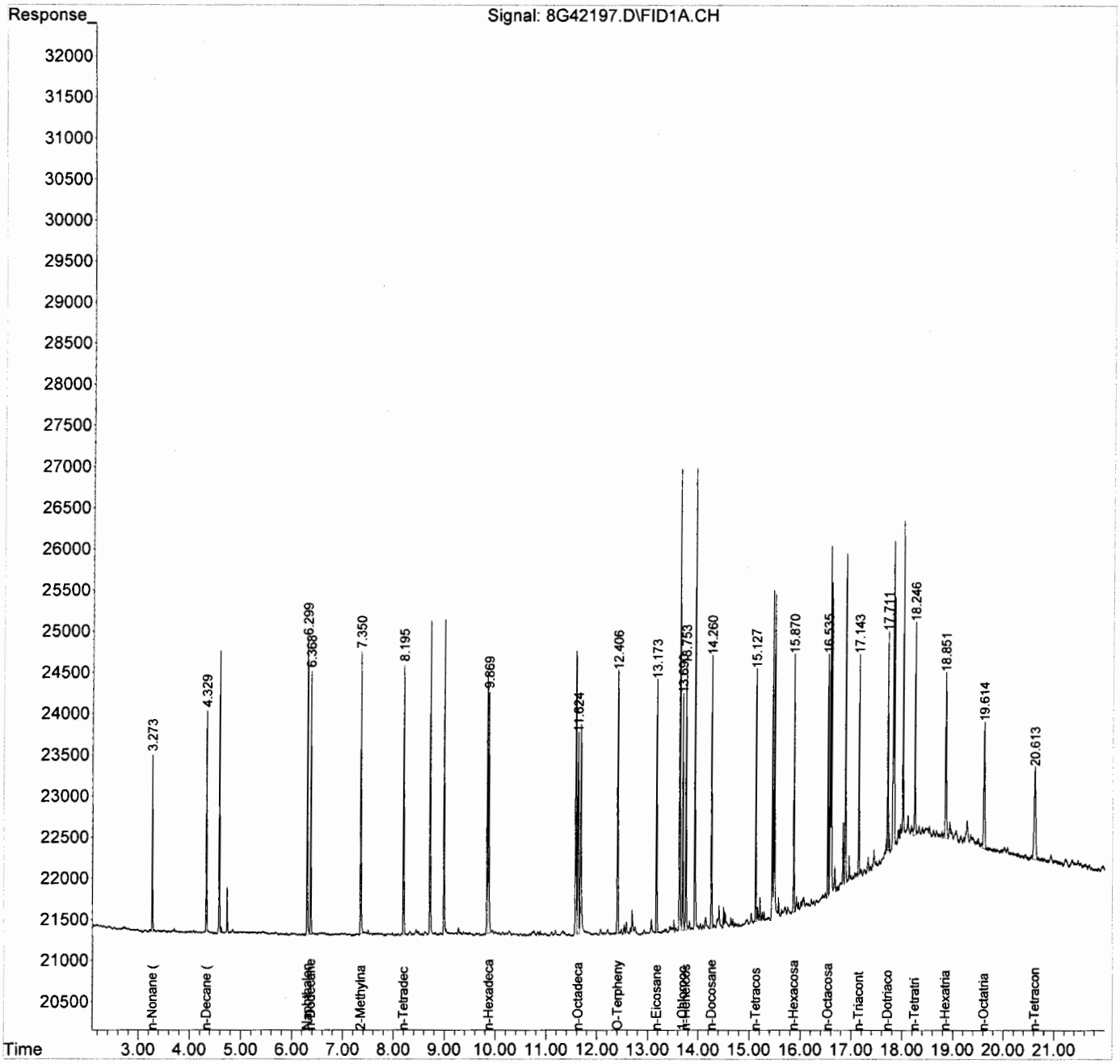
Quantitation Report (QT Reviewed)

3080110 0237

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42197.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 13:49:50
Operator : KD/RAK/MS
Sample : AC73723-001(10X)(MS)
Misc : S.TPH:10
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:21:56 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0238

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42198.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 14:19:57
Operator : KD/RAK/MS
Sample : AC73723-001(10X)(DUP)
Misc : S.TPH:10
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:23:44 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.406	27234	8.080		
22)S	1-Chlorooctadecane	13.691	19194	7.480		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		d
2)AT	n-Decane (C10)	0.000	0	N.D.		d
3)	Naphthalene	0.000	0	N.D.		d
4)AT	n-Dodecane (C12)	0.000	0	N.D.		d
5)	2-Methylnaphthalene	0.000	0	N.D.		d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	13.629f	780816	289.938		m
24)B	>C28-C40(Total)	18.010f	2817744	1165.016		m
25)t	C9-C40(TOTAL)	13.629f	3596973	1382.615		m

(f)=RT Delta > 1/2 Window (m)=manual int.

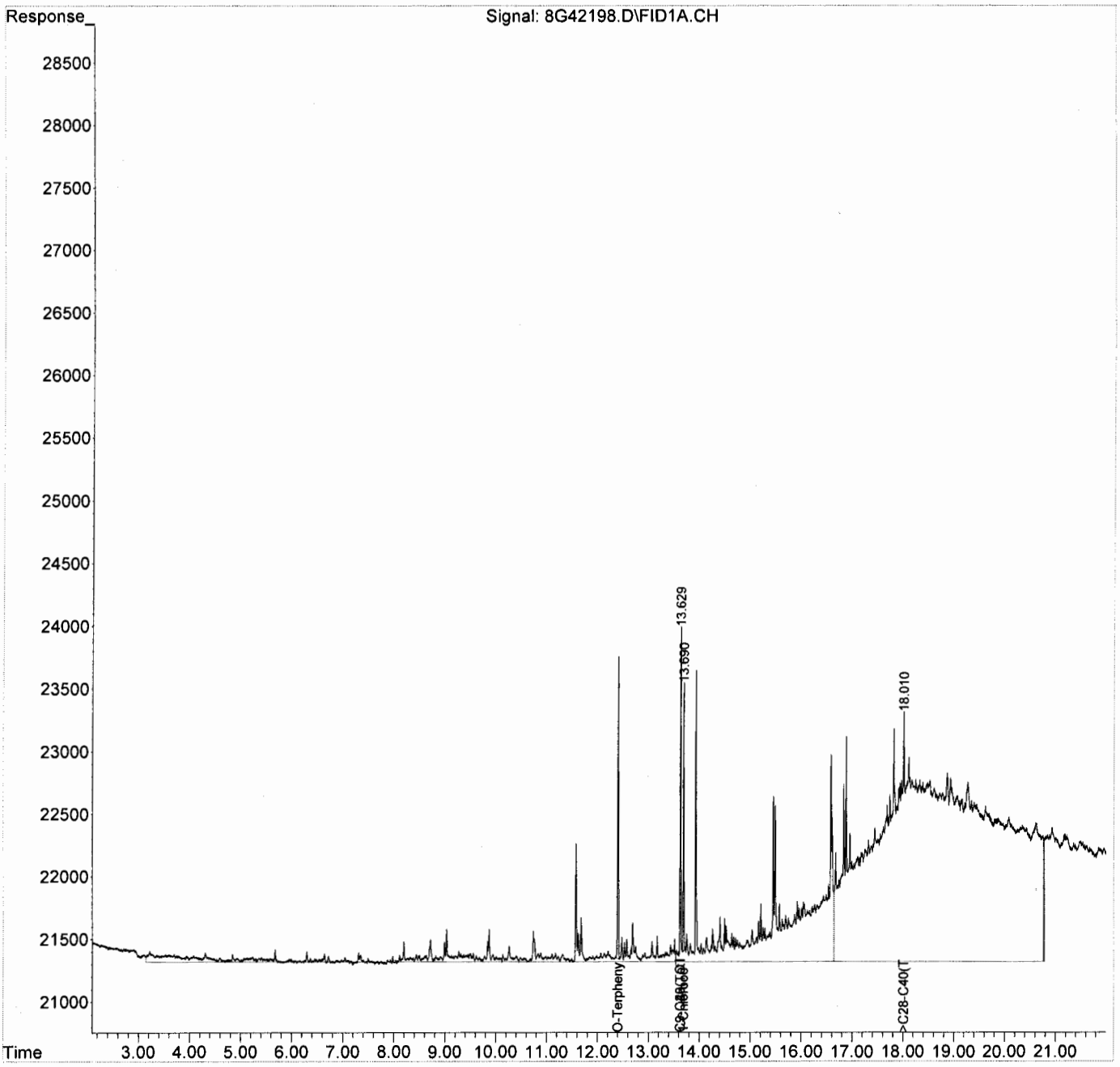
Quantitation Report (QT Reviewed)

3080110 0239

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42198.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 14:19:57
Operator : KD/RAK/MS
Sample : AC73723-001(10X)(DUP)
Misc : S.TPH:10
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:23:44 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0240

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42199.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 14:50:19
Operator : KD/RAK/MS
Sample : AC73723-001(10X)
Misc : S.TPH:10
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:30:13 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units
System Monitoring Compounds					
21)S	O-Terphenyl	12.406	29924	8.878	
22)S	1-Chlorooctadecane	13.690	23812	9.279	
Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.	d
2)AT	n-Decane (C10)	0.000	0	N.D.	d
3)	Naphthalene	0.000	0	N.D.	d
4)AT	n-Dodecane (C12)	0.000	0	N.D.	d
5)	2-Methylnaphthalene	0.000	0	N.D.	d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.	d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.	d
8)AT	n-Octadecane (C18)	0.000	0	N.D.	d
9)AT	n-Eicosane (C20)	0.000	0	N.D.	d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.	d
11)AT	n-Docosane (C22)	0.000	0	N.D.	d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.	d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.	d
14)AT	n-Octacosane (C28)	0.000	0	N.D.	d
15)BT	n-Triacontane (C30)	0.000	0	N.D.	d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.	d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.	d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.	d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.	d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.	d
23)A	C9-C28(Total)	13.629f	1263031	468.998	m
24)B	>C28-C40(Total)	16.878	3526060	1457.874	m
25)t	C9-C40(TOTAL)	13.629f	4790271	1841.299	m

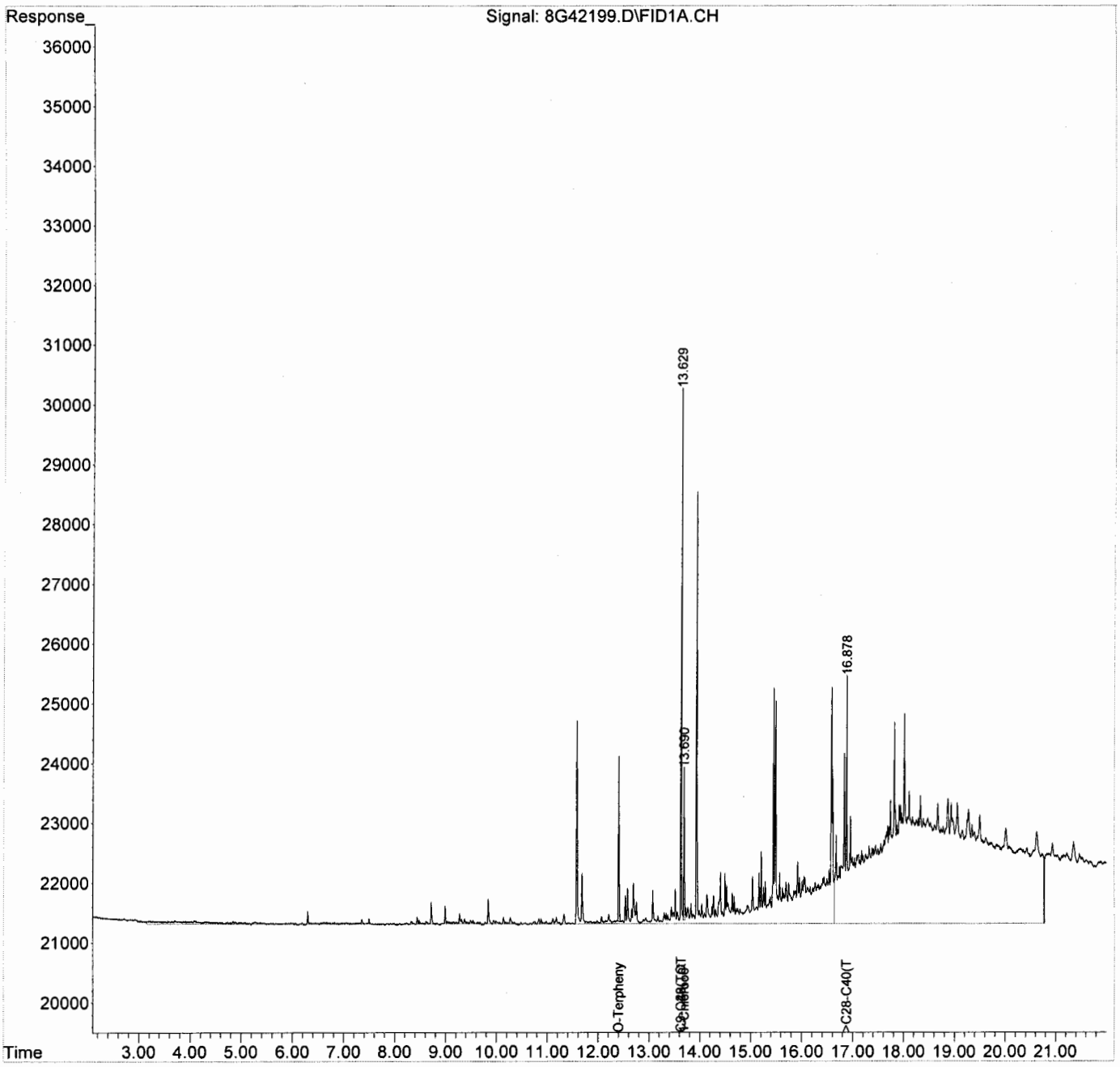
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42199.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 14:50:19
Operator : KD/RAK/MS
Sample : AC73723-001(10X)
Misc : S.TPH:10
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:30:13 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



EPH Category 2 Data

EPH Category 2 Data
Sample Data

Form1

ORGANICS REPORT

Sample Number: AC73771-001
Client Id: BB-COMP-1-0801113
Data File: 8G42168.D
Analysis Date: 08/03/13 21:47
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: NJEPHRev3B
Matrix: Soil
Initial Vol: 10g
Final Vol: 1ml
Dilution: 1
Solids: 91

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
ephc9c40	**C9-C40**	**66**	**70**				

Worksheet #: 272475 ***Total Target Concentration*** 70 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42168.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 21:47:46
Operator : KD/RAK/MS
Sample : AC73771-001
Misc : S.TPH
ALS Vial : 37 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:00:04 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.410	296538	87.981		
22)S	1-Chlorooctadecane	13.693	227822	88.781		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		d
5)	2-Methylnaphthalene	0.000	0	N.D.		d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	12.410f	1278319	474.675		m
24)B	>C28-C40(Total)	18.801f	1518958	628.024		m
25)t	C9-C40(TOTAL)	12.410f	2796524	1074.937		m

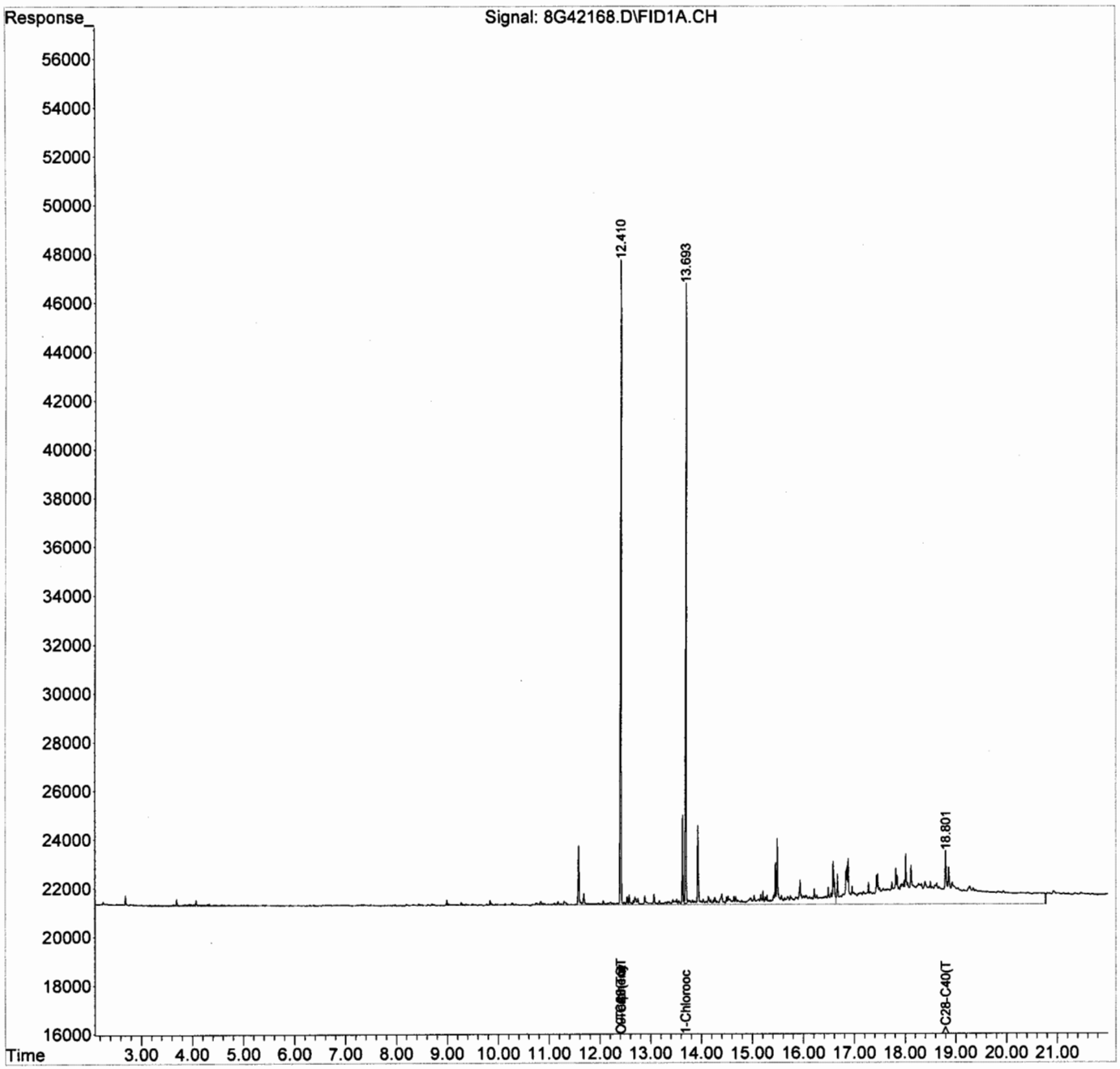
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42168.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 21:47:46
Operator : KD/RAK/MS
Sample : AC73771-001
Misc : S.TPH
ALS Vial : 37 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:00:04 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Form1

ORGANICS REPORT

Sample Number: AC73771-002
Client Id: BB-COMP-2-0801113
Data File: 8G42169.D
Analysis Date: 08/03/13 22:17
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: NJEPHRev3B
Matrix: Soil
Initial Vol: 10g
Final Vol: 1ml
Dilution: 1
Solids: 89

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
ephc9c40	C9-C40	67	U				

Worksheet #: 272475

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42169.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 22:17:43
Operator : KD/RAK/MS
Sample : AC73771-002
Misc : S.TPH
ALS Vial : 38 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:02:10 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units
System Monitoring Compounds					
21)S	O-Terphenyl	12.410	289030	85.753	
22)S	1-Chlorooctadecane	13.693	219034	85.357	
Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.	
2)AT	n-Decane (C10)	0.000	0	N.D.	d
3)	Naphthalene	0.000	0	N.D.	d
4)AT	n-Dodecane (C12)	0.000	0	N.D.	d
5)	2-Methylnaphthalene	0.000	0	N.D.	d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.	d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.	d
8)AT	n-Octadecane (C18)	0.000	0	N.D.	d
9)AT	n-Eicosane (C20)	0.000	0	N.D.	d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.	d
11)AT	n-Docosane (C22)	0.000	0	N.D.	d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.	d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.	d
14)AT	n-Octacosane (C28)	0.000	0	N.D.	d
15)BT	n-Triacontane (C30)	0.000	0	N.D.	d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.	d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.	d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.	d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.	d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.	d
23)A	C9-C28(Total)	12.410f	1003473	372.617	m
24)B	>C28-C40(Total)	16.854	1419064	586.722	m
25)t	C9-C40(TOTAL)	12.410f	2421858	930.921	m

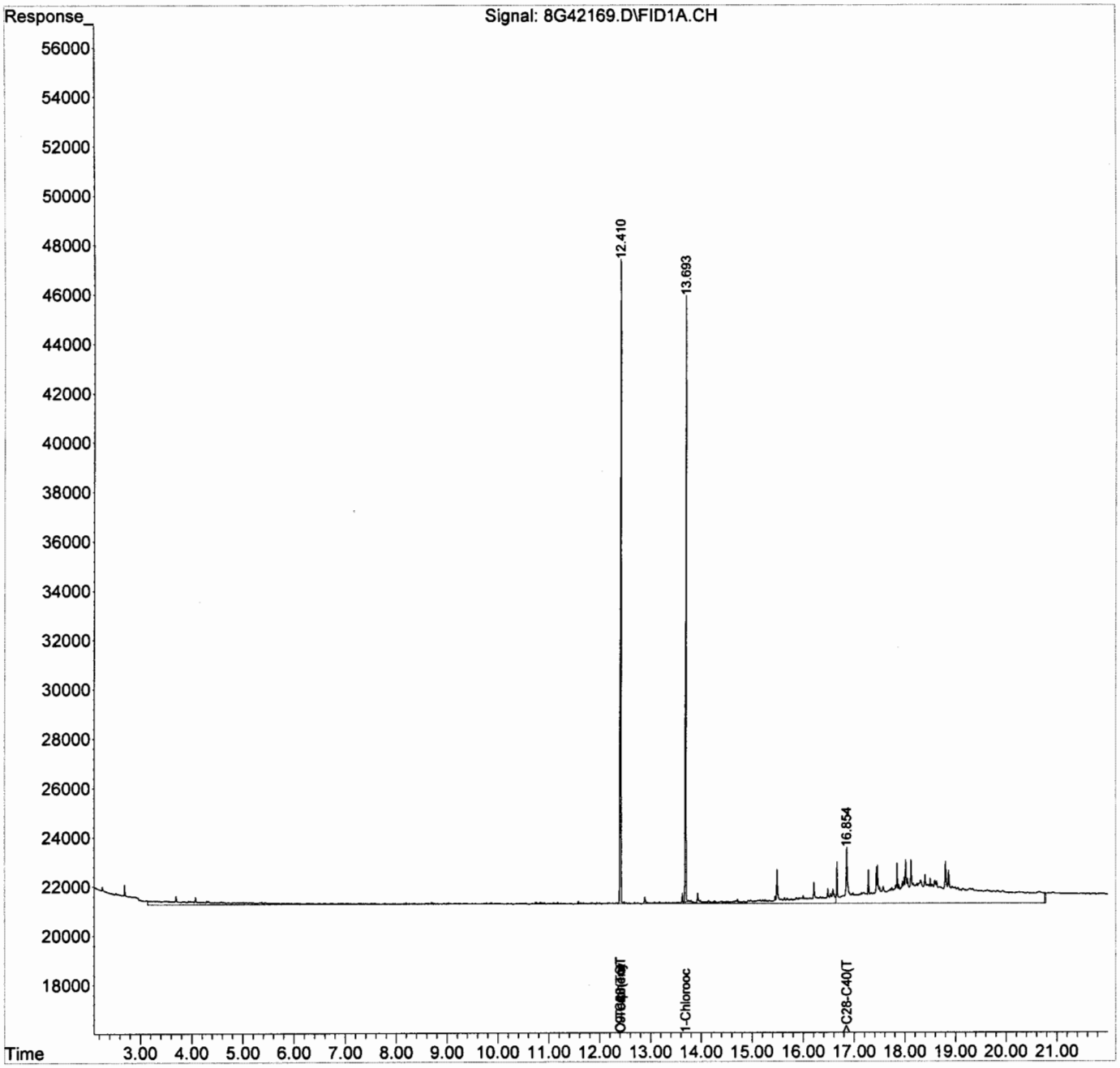
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42169.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 22:17:43
Operator : KD/RAK/MS
Sample : AC73771-002
Misc : S.TPH
ALS Vial : 38 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:02:10 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



EPH Category 2 Data
QC Summary

FORM2

Surrogate Recovery

Method: NJEPHRev3B

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column0 S3 Recov	Column0 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
8G42131.D	SMB25787	Soil	08/02/13 16:46	1		85	87				
8G42168.D	AC73771-001	Soil	08/03/13 21:47	1		88	89				
8G42169.D	AC73771-002	Soil	08/03/13 22:17	1		86	85				
8G42132.D	SMB25787(M	Soil	08/02/13 17:17	1		100	103				
8G42133.D	SMB25787(M	Soil	08/02/13 17:47	1		107	109				
8G42134.D	SMB25787(DI	Soil	08/02/13 18:18	1		95	95				
8G42135.D	SMB25787(DI	Soil	08/02/13 18:48	1		115	115				
8G42197.D	AC73723-001(	Soil	08/04/13 13:49	10		105	104				
8G42198.D	AC73723-001(	Soil	08/04/13 14:19	10		81	75				
8G42199.D	AC73723-001(	Soil	08/04/13 14:50	10		89	93				

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: NJEPHRev3B

Soil Limits

Compound	Spike Amt	Limits
S1=O-Terphenyl	100	40-140
S2=1-Chlorooctadecane	100	40-140

Form3
Recovery Data
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42132.D	SMB25787(MS)	8/2/2013 5:17:22 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	65.98	0	100	66	25	140
n-Decane (C10)	1	88.55	0	100	89	40	140
n-Dodecane (C12)	1	108.25	0	100	108	40	140
n-Tetradecane (C14)	1	111.02	0	100	111	40	140
n-Hexadecane (C16)	1	110.08	0	100	110	40	140
n-Octadecane (C18)	1	104.86	0	100	105	40	140
n-Eicosane (C20)	1	103.68	0	100	104	40	140
n-Heneicosane (C21)	1	102.65	0	100	103	40	140
n-Docosane (C22)	1	101.33	0	100	101	40	140
n-Tetracosane (C24)	1	99.72	0	100	100	40	140
n-Hexacosane (C26)	1	101.24	0	100	101	40	140
n-Octacosane (C28)	1	100.01	0	100	100	40	140
n-Triacontane (C30)	1	100.35	0	100	100	40	140
n-Dotriacontane(C32)	1	101.17	0	100	101	40	140
n-Tetratriacontane (C34)	1	102.99	0	100	103	40	140
n-Hexatriacontane (C36)	1	104.33	0	100	104	40	140
n-Octatriacontane (C38)	1	104.66	0	100	105	40	140
n-Tetracontane (C40)	1	106.1	0	100	106	40	140

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42133.D	SMB25787(MSD)	8/2/2013 5:47:46 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	78.21	0	100	78	25	140
n-Decane (C10)	1	98.51	0	100	99	40	140
n-Dodecane (C12)	1	117.76	0	100	118	40	140
n-Tetradecane (C14)	1	122.66	0	100	123	40	140
n-Hexadecane (C16)	1	124.16	0	100	124	40	140
n-Octadecane (C18)	1	118.69	0	100	119	40	140
n-Eicosane (C20)	1	115.04	0	100	115	40	140
n-Heneicosane (C21)	1	111.89	0	100	112	40	140
n-Docosane (C22)	1	109.56	0	100	110	40	140
n-Tetracosane (C24)	1	103.69	0	100	104	40	140
n-Hexacosane (C26)	1	102.23	0	100	102	40	140
n-Octacosane (C28)	1	98.82	0	100	99	40	140
n-Triacontane (C30)	1	98.74	0	100	99	40	140
n-Dotriacontane(C32)	1	100.02	0	100	100	40	140
n-Tetratriacontane (C34)	1	102.66	0	100	103	40	140
n-Hexatriacontane (C36)	1	104.08	0	100	104	40	140
n-Octatriacontane (C38)	1	105.44	0	100	105	40	140
n-Tetracontane (C40)	1	107.49	0	100	107	40	140

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42134.D	SMB25787(DIESEL)(MS)	8/2/2013 6:18:13 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
C9-C28	1	3081.19	0	3000	103	40	140

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42135.D	SMB25787(DIESEL)(MSD)	8/2/2013 6:48:43 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
C9-C28	1	3639.08	0	3000	121	40	140

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42133.D	SMB25787(MSD)	8/2/2013 5:47:46 PM
Duplicate(If applicable):	8G42132.D	SMB25787(MS)	8/2/2013 5:17:22 PM
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Nonane (C9)	1	78.21	65.98	17	25
n-Decane (C10)	1	98.51	88.55	11	25
n-Dodecane (C12)	1	117.76	108.25	8.4	25
n-Tetradecane (C14)	1	122.66	111.02	10	25
n-Hexadecane (C16)	1	124.16	110.08	12	25
n-Octadecane (C18)	1	118.69	104.86	12	25
n-Eicosane (C20)	1	115.04	103.68	10	25
n-Heneicosane (C21)	1	111.89	102.65	8.6	25
n-Docosane (C22)	1	109.56	101.33	7.8	25
n-Tetracosane (C24)	1	103.69	99.72	3.9	25
n-Hexacosane (C26)	1	102.23	101.24	0.97	25
n-Octacosane (C28)	1	98.82	100.01	1.2	25
n-Triacontane (C30)	1	98.74	100.35	1.6	25
n-Dotriacontane(C32)	1	100.02	101.17	1.1	25
n-Tetratriacontane (C34)	1	102.66	102.99	0.32	25
n-Hexatriacontane (C36)	1	104.08	104.33	0.24	25
n-Octatriacontane (C38)	1	105.44	104.66	0.74	25
n-Tetracontane (C40)	1	107.49	106.1	1.3	25

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42135.D	SMB25787(DIESEL)(MSD)	8/2/2013 6:48:43 PM
Duplicate(If applicable):	8G42134.D	SMB25787(DIESEL)(MS)	8/2/2013 6:18:13 PM
Inst Blank(If applicable):	8G42130.D	INST BLK(MECL2)	8/2/2013 4:16:18 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
C9-C28	1	3639.08	3081.19	17	25

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Form3
Recovery Data
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42197.D	AC73723-001(10X)(MS)	8/4/2013 1:49:50 PM
Non Spike(If applicable):	8G42199.D	AC73723-001(10X)	8/4/2013 2:50:19 PM
Inst Blank(If applicable):	8G42190.D	INST BLK(MECL2)	8/4/2013 10:18:27 AM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	0	0	100	0*	25	140
n-Decane (C10)	1	0	0	100	0*	40	140
n-Dodecane (C12)	1	103	0	100	103	40	140
n-Tetradecane (C14)	1	110.7	0	100	111	40	140
n-Hexadecane (C16)	1	119.8	0	100	120	40	140
n-Octadecane (C18)	1	115.3	0	100	115	40	140
n-Eicosane (C20)	1	110.5	0	100	110	40	140
n-Heneicosane (C21)	1	112	0	100	112	40	140
n-Docosane (C22)	1	110.9	0	100	111	40	140
n-Tetracosane (C24)	1	0	0	100	0*	40	140
n-Hexacosane (C26)	1	100	0	100	100	40	140
n-Octacosane (C28)	1	0	0	100	0*	40	140
n-Triacontane (C30)	1	0	0	100	0*	40	140
n-Dotriacontane(C32)	1	0	0	100	0*	40	140
n-Tetratriacontane (C34)	1	100.6	0	100	101	40	140
n-Hexatriacontane (C36)	1	112.4	0	100	112	40	140
n-Octatriacontane (C38)	1	102.8	0	100	103	40	140
n-Tetracontane (C40)	1	110.4	0	100	110	40	140

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA
QC Batch: SMB25787

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42198.D	AC73723-001(10X)(DUP)	8/4/2013 2:19:57 PM
Duplicate(If applicable):	8G42199.D	AC73723-001(10X)	8/4/2013 2:50:19 PM
Inst Blank(If applicable):	8G42190.D	INST BLK(MECL2)	8/4/2013 10:18:27 AM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: DUP

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
C9-C28	1	0	0	NA	50
>C28-C40	1	7217.9	10146.4	34	50
C9-C40	1	8580.7	13141.5	42	50

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: SMB25787
Blank Data File: 8G42131.D
Matrix: Soil

Blank Analysis Date: 08/02/13 16:46
Blank Extraction Date: 08/02/13
(If Applicable)
Method: NJEPHRev3B

Sample Number	Data File	Analysis Date
AC73771-001	8G42168.D	08/03/13 21:47
AC73771-002	8G42169.D	08/03/13 22:17
AC73723-001(10X)	8G42199.D	08/04/13 14:50
AC73723-001(10X)	8G42198.D	08/04/13 14:19
AC73723-001(10X)	8G42197.D	08/04/13 13:49
SMB25787(DIESE	8G42135.D	08/02/13 18:48
SMB25787(DIESE	8G42134.D	08/02/13 18:18
SMB25787(MSD)	8G42133.D	08/02/13 17:47
SMB25787(MS)	8G42132.D	08/02/13 17:17

Form 5

Method: NJEPHRev3B

Instrument: GC_8 Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8G41617.D	INST BLK(MECL2)	07/15/13 08:12	Soil					
8G41618.D	CALDTH AL@100PPM	07/15/13 09:13	Soil	8G41618.	12.4312	0		
8G41619.D	CALDTH AL@500PPM	07/15/13 09:45	Soil	8G41618.	12.4501	0.1519		
8G41620.D	CALDTH AL@300PPM	07/15/13 10:15	Soil	8G41618.	12.4405	0.0748		
8G41621.D	CALDTH AL@200PPM	07/15/13 10:45	Soil	8G41618.	12.4358	0.037		
8G41622.D	CALDTH AL@100PPM	07/15/13 11:16	Soil	8G41618.	12.4302	0.008		
8G41623.D	CALDTH AL@50PPM	07/15/13 11:46	Soil	8G41618.	12.4278	0.0274		
8G41624.D	CALDTH AL@10PPM	07/15/13 12:17	Soil	8G41618.	12.4250	0.0499		
8G41625.D	@100PPM	07/15/13 12:48	Soil	8G41618.	12.4309	0.0024		
8G41626.D	@100PPM	07/15/13 13:19	Soil	8G41618.	12.4313	0.0008		
8G41627.D	ICV DTH AL@100PPM	07/15/13 13:57	Soil	8G41618.	12.4322	0.008		
8G41628.D	INST BLK(MECL2)	07/15/13 14:28	Soil	8G41618.	0.0000	200 *		
8G41629.D	AC73363-005	07/15/13 14:59	Soil	8G41618.	12.4290	0.0177		
8G41630.D	AC73363-004(5X)	07/15/13 15:30	Soil	8G41618.	12.4266	0.037		
8G41631.D	AC73406-002	07/15/13 16:01	Soil	8G41618.	12.4300	0.0097		
8G41632.D	AC73382-001	07/15/13 16:32	Soil	8G41618.	12.4302	0.008		
8G41633.D	AC73382-002	07/15/13 17:03	Soil	8G41618.	12.4304	0.0064		
8G41634.D	AC73382-003	07/15/13 17:34	Soil	8G41618.	12.4302	0.008		
8G41635.D	AC73383-001	07/15/13 18:05	Soil	8G41618.	12.4303	0.0072		
8G41636.D	AC73406-003	07/15/13 18:36	Soil	8G41618.	12.4318	0.0048		
8G41637.D	AC73406-005	07/15/13 19:06	Soil	8G41618.	12.4305	0.0056		
8G41638.D	AC73406-004	07/15/13 19:37	Soil	8G41618.	12.4315	0.0024		
8G41639.D	AC73348-005	07/15/13 20:08	Soil	8G41618.	12.4319	0.0056		
8G41640.D	TEST	07/15/13 20:39	Soil	8G41618.	0.0000	200 *		
8G41641.D	CALDTH AL@100PPM	07/15/13 21:10	Soil	8G41618.	12.4322	0.008		
8G41642.D	100PPM	07/15/13 22:11	Soil	8G41641.	12.4326	0.0032		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: NJEPHRev3B

Instrument: GC_8 Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8G42127.D	INST BLK(MECL2)	08/02/13 14:45	Soil					
8G42128.D	100PPM	08/02/13 15:15	Soil					
8G42129.D	CALDTH AL@100PPM	08/02/13 15:45	Soil	8G42129.	12.4141	0		
8G42130.D	INST BLK(MECL2)	08/02/13 16:16	Soil	8G42129.	0.0000	200 *		
8G42131.D	SMB25787	08/02/13 16:46	Soil	8G42129.	12.4127	0.0113		
8G42132.D	SMB25787(MS)	08/02/13 17:17	Soil	8G42129.	12.4133	0.0064		
8G42133.D	SMB25787(MSD)	08/02/13 17:47	Soil	8G42129.	12.4138	0.0024		
8G42134.D	SMB25787(DIESEL)(MS	08/02/13 18:18	Soil	8G42129.	12.4140	0.0008		
8G42135.D	SMB25787(DIESEL)(MS	08/02/13 18:48	Soil	8G42129.	12.4150	0.0073		
8G42136.D	SMB25742(DIESEL)(MS	08/02/13 19:19	Soil	8G42129.	12.4146	0.004		
8G42137.D	SMB25742(DIESEL)(MS	08/02/13 19:49	Soil	8G42129.	12.4160	0.0153		
8G42138.D	SMB25772(MS)	08/02/13 20:19	Soil	8G42129.	12.4136	0.004		
8G42139.D	SMB25772(MSD)	08/02/13 20:50	Soil	8G42129.	12.4136	0.004		
8G42140.D	AC73713-001(MS)	08/02/13 21:20	Soil	8G42129.	12.4110	0.025		
8G42141.D	AC73713-001(DUP)	08/02/13 21:50	Soil	8G42129.	12.4120	0.0169		
8G42142.D	AC73713-001	08/02/13 22:20	Soil	8G42129.	12.4127	0.0113		
8G42143.D	AC73713-002	08/02/13 22:51	Soil	8G42129.	12.4137	0.0032		
8G42144.D	AC73716-008	08/02/13 23:21	Soil	8G42129.	12.4115	0.0209		
8G42145.D	AC73706-007	08/02/13 23:51	Soil	8G42129.	12.4115	0.0209		
8G42146.D	AC73706-013	08/03/13 00:21	Soil	8G42129.	12.4110	0.025		
8G42147.D	AC73706-001	08/03/13 00:51	Soil	8G42129.	12.4114	0.0218		
8G42148.D	TEST	08/03/13 01:21	Soil	8G42129.	0.0000	200 *		
8G42149.D	100PPM	08/03/13 11:43	Soil	8G42129.	12.4156	0.0121		
8G42150.D	CALDTH AL@100PPM	08/03/13 12:15	Soil	8G42129.	12.4134	0.0056		
8G42151.D	INST BLK(MECL2)	08/03/13 13:15	Soil	8G42150.	0.0000	200 *		
8G42152.D	SMB25786	08/03/13 13:45	Soil	8G42150.	12.4119	0.0121		
8G42153.D	SMB25786(DIESEL)(MS	08/03/13 14:15	Soil	8G42150.	12.4121	0.0105		
8G42154.D	AC73713-006	08/03/13 14:45	Soil	8G42150.	12.4097	0.0298		
8G42155.D	AC73713-007	08/03/13 15:16	Soil	8G42150.	12.4107	0.0218		
8G42156.D	AC73713-009	08/03/13 15:46	Soil	8G42150.	12.4106	0.0226		
8G42157.D	AC73672-002(R)	08/03/13 16:16	Soil	8G42150.	12.4105	0.0234		
8G42158.D	AC73706-010	08/03/13 16:46	Soil	8G42150.	12.4110	0.0193		
8G42159.D	AC73706-019	08/03/13 17:16	Soil	8G42150.	12.4104	0.0242		
8G42160.D	AC73706-025	08/03/13 17:47	Soil	8G42150.	12.4110	0.0193		
8G42161.D	AC73713-008	08/03/13 18:17	Soil	8G42150.	12.4121	0.0105		
8G42162.D	73732-001	08/03/13 18:47	Soil	8G42150.	12.4221	0.0701		
8G42163.D	AC73732-005	08/03/13 19:17	Soil	8G42150.	12.4688	0.4453		
8G42164.D	AC73669-007	08/03/13 19:47	Soil	8G42150.	12.4111	0.0185		
8G42165.D	AC73706-028	08/03/13 20:17	Soil	8G42150.	12.4106	0.0226		
8G42166.D	AC73706-022	08/03/13 20:47	Soil	8G42150.	12.4105	0.0234		
8G42167.D	AC73706-031	08/03/13 21:17	Soil	8G42150.	12.4103	0.025		
8G42168.D	AC73771-001	08/03/13 21:47	Soil	8G42150.	12.4103	0.025		
8G42169.D	AC73771-002	08/03/13 22:17	Soil	8G42150.	12.4100	0.0274		
8G42170.D	TEST	08/03/13 22:47	Soil	8G42150.	0.0000	200 *		
8G42171.D	CALDTH AL@100PPM	08/03/13 23:17	Soil	8G42150.	12.4119	0.0121		
8G42172.D	100PPM	08/04/13 00:17	Soil	8G42171.	12.4127	0.0064		
8G42173.D	INST BLK(MECL2)	08/04/13 01:17	Soil	8G42171.	0.0000	200 *		
8G42174.D	AC73706-016	08/04/13 01:47	Soil	8G42171.	12.4104	0.0121		
8G42175.D	AC73706-004	08/04/13 02:17	Soil	8G42171.	12.4103	0.0129		
8G42176.D	AC73713-004	08/04/13 02:47	Soil	8G42171.	12.4199	0.0644		
8G42177.D	AC73713-012	08/04/13 03:17	Soil	8G42171.	12.4423	0.2446		
8G42178.D	AC73708-001	08/04/13 03:47	Soil	8G42171.	12.4113	0.0048		
8G42179.D	AC73708-004	08/04/13 04:17	Soil	8G42171.	12.4098	0.0169		
8G42180.D	AC73672-001(5X)	08/04/13 04:47	Soil	8G42171.	12.4073	0.0371		
8G42181.D	AC73685-015(5X)	08/04/13 05:17	Soil	8G42171.	12.4074	0.0363		
8G42182.D	AC73685-017(10X)	08/04/13 05:47	Soil	8G42171.	12.4066	0.0427		
8G42183.D	AC73723-001(20X)(MS)	08/04/13 06:17	Soil	8G42171.	12.4069	0.0403		
8G42184.D	AC73723-001(20X)(DUP	08/04/13 06:47	Soil	8G42171.	12.4063	0.0451		
8G42185.D	AC73723-001(20X)	08/04/13 07:17	Soil	8G42171.	12.4065	0.0435		
8G42186.D	TEST	08/04/13 07:47	Soil	8G42171.	0.0000	200 *		
8G42187.D	CALDTH AL@100PPM	08/04/13 08:17	Soil	8G42171.	12.4114	0.004		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: NJEPHRev3B

Instrument: GC_8 Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8G42188.D	INST BLK(MECL2)	08/04/13 08:48	Soil					
8G42189.D	CALDTH AL@100PPM	08/04/13 09:48	Soil	8G42189.	12.4103	0		
8G42190.D	INST BLK(MECL2)	08/04/13 10:18	Soil	8G42189.	0.0000	200*		
8G42191.D	SMB25791	08/04/13 10:48	Soil	8G42189.	12.4096	0.0056		
8G42192.D	MBS25791	08/04/13 11:18	Soil	8G42189.	12.4094	0.0073		
8G42193.D	SMB25791(MSD)	08/04/13 11:49	Soil	8G42189.	12.4117	0.0113		
8G42194.D	AC73729-001(MS)	08/04/13 12:19	Soil	8G42189.	12.4114	0.0089		
8G42195.D	AC73729-001DUP)	08/04/13 12:49	Soil	8G42189.	12.4098	0.004		
8G42196.D	AC73729-001	08/04/13 13:19	Soil	8G42189.	12.4104	0.0008		
8G42197.D	AC73723-001(10X)(MS)	08/04/13 13:49	Soil	8G42189.	12.4062	0.033		
8G42198.D	AC73723-001(10X)(DUP	08/04/13 14:19	Soil	8G42189.	12.4058	0.0363		
8G42199.D	AC73723-001(10X)	08/04/13 14:50	Soil	8G42189.	12.4059	0.0355		
8G42200.D	AC73760-001(10X)	08/04/13 15:20	Soil	8G42189.	12.4056	0.0379		
8G42201.D	AC73760-002(10X)	08/04/13 15:50	Soil	8G42189.	12.4052	0.0411		
8G42202.D	AC73713-008(10X)	08/04/13 16:20	Soil	8G42189.	12.4060	0.0347		
8G42203.D	AC73713-012(10X)	08/04/13 16:50	Soil	8G42189.	12.4058	0.0363		
8G42204.D	AC73760-003(10X)	08/04/13 17:20	Soil	8G42189.	12.4050	0.0427		
8G42205.D	AC73708-002	08/04/13 17:50	Soil	8G42189.	12.4100	0.0024		
8G42206.D	AC73708-003	08/04/13 18:20	Soil	8G42189.	12.4097	0.0048		
8G42207.D	AC73672-001(5X)	08/04/13 18:50	Soil	8G42189.	12.4061	0.0338		
8G42208.D	AC73729-022	08/04/13 19:20	Soil	8G42189.	12.4084	0.0153		
8G42209.D	AC73729-010	08/04/13 19:50	Soil	8G42189.	12.4094	0.0073		
8G42210.D	AC73729-013	08/04/13 20:20	Soil	8G42189.	12.4094	0.0073		
8G42211.D	CALDTH AL@100PPM	08/05/13 08:00	Soil	8G42189.	12.4154	0.0411		
8G42212.D	INST BLK(MECL2)	08/05/13 08:37	Soil	8G42211.	0.0000	200*		
8G42213.D	AC73729-007	08/05/13 09:16	Soil	8G42211.	12.4103	0.0411		
8G42214.D	TEST	08/05/13 09:46	Soil	8G42211.	12.4098	0.0451		
8G42215.D	AC73729-031	08/05/13 10:19	Soil	8G42211.	12.4073	0.0653		
8G42216.D	AC73729-028	08/05/13 10:49	Soil	8G42211.	12.4065	0.0717		
8G42217.D	AC73729-019	08/05/13 11:19	Soil	8G42211.	12.4053	0.0814		
8G42218.D	AC73729-016	08/05/13 11:49	Soil	8G42211.	12.4060	0.0757		
8G42219.D	AC73729-055	08/05/13 12:20	Soil	8G42211.	12.4059	0.0765		
8G42220.D	AC73729-058	08/05/13 12:50	Soil	8G42211.	12.4057	0.0782		
8G42221.D	AC73729-034	08/05/13 13:20	Soil	8G42211.	12.4069	0.0685		
8G42222.D	AC73732-005(100X)	08/05/13 13:50	Soil	8G42211.	12.3906	0.1999		
8G42223.D	AC73760-002(20X)	08/05/13 14:20	Soil	8G42211.	0.0000	200*		
8G42224.D	CALDTH AL@100PPM	08/05/13 14:50	Soil	8G42211.	12.4092	0.0499		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form8

EPH Surrogate Initial Calibration Areas And Area Recovery Limits

Inital Calibration File: 8G41618.D
Analysis Date: 7/15/2013 9:13:00 AM
Analytical Method: NJEPHRev3B

Surrogate	Area Found	Area Limit
1-Chlorooctadecane	253233	126616-506466
O-Terphenyl	326899	163450-653798

Continuing Calibration Data

Data File	TxtSamNum:	Analysis Date	Surrogate: 1-Chlorooctadecane	Surrogate O-Terphenyl
8G42129.D	CALDTH AL@100PPM	8/2/13 15:45	248125	329095
8G42150.D	CALDTH AL@100PPM	8/3/13 12:15	252623	344150
8G42171.D	CALDTH AL@100PPM	8/3/13 23:17	288876	385978
8G42189.D	CALDTH AL@100PPM	8/4/13 09:48	244228	325646
8G42211.D	CALDTH AL@100PPM	8/5/13 08:00	277370	371720

* - Indicates Area Failed Criteria

EPH Category 2 Data
Standards Data

3080110 0263

Form 6
Initial Calibration

Method: NJEPHRev3B

Instrument: GC_8

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	8G41618.	CALDTH AL@100PP	07/15/13 09:13	2	8G41624.	CALDTH AL@10PPM	07/15/13 12:17
3	8G41623.	CALDTH AL@50PPM	07/15/13 11:46	4	8G41621.	CALDTH AL@200PP	07/15/13 10:45
5	8G41620.	CALDTH AL@300PP	07/15/13 10:15	6	8G41619.	CALDTH AL@500PP	07/15/13 09:45

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
n-Nonane (C9)	1	0	Avg	0.2470	0.2406	0.2576	0.2523	0.2732	0.3087	----	----	0.263	3.29	0.992	1.00	9.4	100.0	10.00	50.00	200.0	300.0	500.0		
n-Decane (C10)	1	0	Avg	0.2537	0.2490	0.2664	0.2586	0.2760	0.3102	----	----	0.269	4.35	0.993	1.00	8.3	100.0	10.00	50.00	200.0	300.0	500.0		
Naphthalene	1	0	Avg	0.2932	0.2928	0.3129	0.3030	0.3139	0.3513	----	----	0.311	6.32	0.994	1.00	7.0	100.0	10.00	50.00	200.0	300.0	500.0		
n-Dodecane (C12)	1	0	Avg	0.2566	0.2581	0.2739	0.2655	0.2748	0.3073	----	----	0.273	6.39	0.995	1.00	6.8	100.0	10.00	50.00	200.0	300.0	500.0		
2-Methylnaphthalene	1	0	Avg	0.2896	0.2836	0.3085	0.3009	0.3070	0.3422	----	----	0.305	7.37	0.995	1.00	6.7	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetradecane (C14)	1	0	Avg	0.2611	0.2597	0.2748	0.2694	0.2712	0.3026	----	----	0.273	8.22	0.995	1.00	5.7	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexadecane (C16)	1	0	Avg	0.2610	0.2622	0.2768	0.2732	0.2690	0.2955	----	----	0.273	9.89	0.997	1.00	4.6	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octadecane (C18)	1	0	Avg	0.2622	0.2680	0.2788	0.2744	0.2649	0.2846	----	----	0.272	11.65	0.998	0.999	3.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Eicosane (C20)	1	0	Avg	0.2642	0.2735	0.2801	0.2774	0.2635	0.2745	----	----	0.272	13.19	0.999	0.999	2.5	100.0	10.00	50.00	200.0	300.0	500.0		
n-Heneicosane (C21)	1	0	Avg	0.2668	0.2758	0.2833	0.2805	0.2647	0.2706	----	----	0.274	13.77	0.999	0.999	2.7	100.0	10.00	50.00	200.0	300.0	500.0		
n-Docosane (C22)	1	0	Avg	0.2657	0.2765	0.2813	0.2796	0.2627	0.2629	----	----	0.271	14.28	0.999	0.999	3.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetracosane (C24)	1	0	Avg	0.2671	0.2723	0.2828	0.2805	0.2612	0.2504	----	----	0.269	15.14	0.998	0.999	4.5	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexacosane (C26)	1	0	Avg	0.2639	0.2700	0.2784	0.2760	0.2557	0.2347	----	----	0.263	15.89	0.994	1.00	6.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octacosane (C28)	1	0	Avg	0.2629	0.2653	0.2761	0.2716	0.2521	0.2233	----	----	0.259	16.55	0.990	1.00	7.4	100.0	10.00	50.00	200.0	300.0	500.0		
n-Triacontane (C30)	1	0	Avg	0.2647	0.2633	0.2768	0.2700	0.2523	0.2189	----	----	0.258	17.16	0.988	1.00	8.0	100.0	10.00	50.00	200.0	300.0	500.0		
n-Dotriacontane(C32)	1	0	Avg	0.2600	0.2577	0.2702	0.2627	0.2471	0.2163	----	----	0.252	17.74	0.989	1.00	7.6	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetratriacontane (C34)	1	0	Avg	0.2505	0.2468	0.2569	0.2517	0.2388	0.2159	----	----	0.243	18.30	0.994	1.00	6.1	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexatriacontane (C36)	1	0	Avg	0.2445	0.2387	0.2505	0.2492	0.2381	0.2221	----	----	0.241	18.91	0.997	1.00	4.3	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octatriacontane (C38)	1	0	Avg	0.2330	0.2306	0.2389	0.2401	0.2313	0.2197	----	----	0.232	19.68	0.998	1.00	3.1	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetracontane (C40)	1	0	Avg	0.2242	0.2232	0.2286	0.2318	0.2249	0.2155	----	----	0.225	20.69	0.999	1.00	2.5	100.0	10.00	50.00	200.0	300.0	500.0		
O-Terphenyl	1	0	Avg	0.3269	0.3329	0.3415	0.3385	0.3257	0.3566	----	----	0.337	12.43	0.997	0.999	3.4	100.0	10.00	50.00	200.0	300.0	500.0		
1-Chlorooctadecane	1	0	Avg	0.2532	0.2554	0.2631	0.2610	0.2470	0.2597	----	----	0.257	13.71	0.999	0.999	2.3	100.0	10.00	50.00	200.0	300.0	500.0		
C9-C28(Total)	1	0	Avg	0.2610	0.2642	0.2759	0.2716	0.2658	0.2771	----	----	0.269	3.29	0.999	1.00	2.4	1200.	120.0	600.0	2400.	3600.	6000.		
>C28-C40(Total)	1	0	Avg	0.2461	0.2434	0.2537	0.2509	0.2387	0.2181	----	----	0.242	16.65	0.995	1.00	5.3	600.0	60.00	300.0	1200.	1800.	3000.		
C9-C40(TOTAL)	1	0	Avg	0.2561	0.2573	0.2685	0.2647	0.2567	0.2574	----	----	0.260	3.29	1.00	1.00	2.0	1800.	180.0	900.0	3600.	5400.	9000.		

Avg Rsd Col 1: 5.25 Avg Rsd Col 2: -1

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Quantitation Report (QT Reviewed)

3080110 0264

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41618.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 09:13:00
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:18:06 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.431	326899	110.578		
22)S	1-Chlorooctadecane	13.709	253233	110.947		
Target Compounds						
1)AT	n-Nonane (C9)	3.290	247094	110.367		
2)AT	n-Decane (C10)	4.348	253774	111.243		
3)	Naphthalene	6.319	293239	110.334		
4)AT	n-Dodecane (C12)	6.388	256646	110.669		
5)	2-Methylnaphthalene	7.371	289639	110.289		
6)AT	n-Tetradecane (C14)	8.216	261184	110.715		
7)AT	n-Hexadecane (C16)	9.892	261026	109.717		
8)AT	n-Octadecane (C18)	11.652	262261	109.669		
9)AT	n-Eicosane (C20)	13.193	264260	109.102		
10)AT	n-Heneicosane (C21)	13.773	266837	108.901		
11)AT	n-Docosane (C22)	14.277	265738	108.586		
12)AT	n-Tetracosane (C24)	15.142	267126	108.579		
13)AT	n-Hexacosane (C26)	15.885	263966	108.506		
14)AT	n-Octacosane (C28)	16.549	262899	108.971		
15)BT	n-Triacontane (C30)	17.162	264697	109.248		
16)BT	n-Dotriacontane(C32)	17.741	260075	109.217		
17)BT	n-Tetratriacontane (C34	18.296	250513	109.537		
18)BT	n-Hexatriacontane (C36)	18.906	244549	108.222		
19)BT	n-Octatriacontane (C38)	19.677	233027	107.284		
20)BT	n-Tetracontane (C40)	20.687	224217	107.477		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

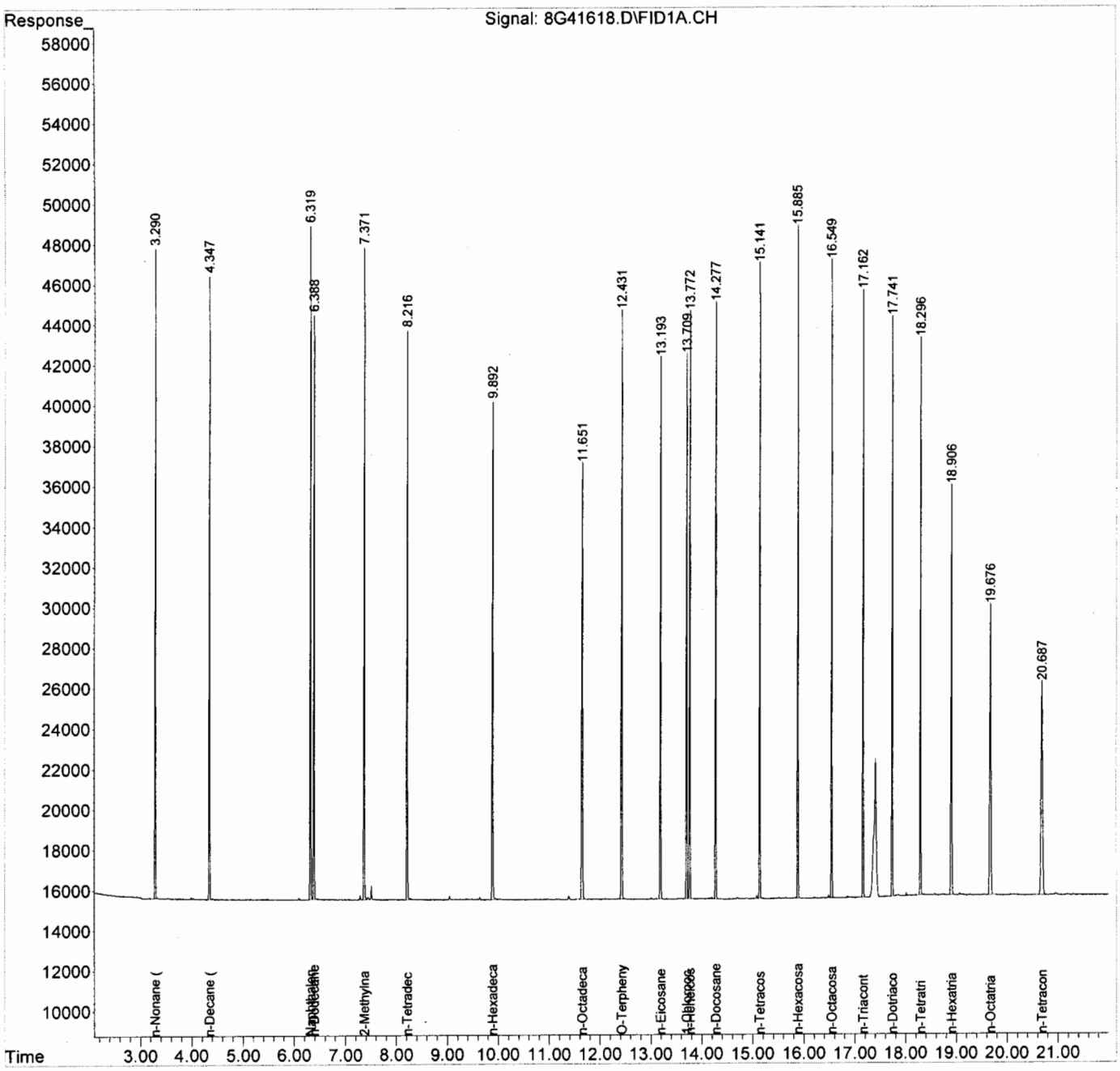
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41618.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 09:13:00
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:18:06 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0266

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41624.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 12:17:34
Operator : KD/RAK/MS
Sample : CALDTH AL@10PPM
Misc : S.TPH
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 13:01:59 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.425	33293	11.262		
22)S	1-Chlorooctadecane	13.705	25543	11.191		
Target Compounds						
1)AT	n-Nonane (C9)	3.289	24061	10.747		
2)AT	n-Decane (C10)	4.346	24907	10.918		
3)	Naphthalene	6.316	29280	11.017		
4)AT	n-Dodecane (C12)	6.386	25811	11.130		
5)	2-Methylnaphthalene	7.367	28365	10.801		
6)AT	n-Tetradecane (C14)	8.213	25974	11.010		
7)AT	n-Hexadecane (C16)	9.889	26223	11.022		
8)AT	n-Octadecane (C18)	11.646	26805	11.209		
9)AT	n-Eicosane (C20)	13.190	27355	11.294		
10)AT	n-Heneicosane (C21)	13.769	27583	11.257		
11)AT	n-Docosane (C22)	14.274	27659	11.302		
12)AT	n-Tetracosane (C24)	15.139	27234	11.070		
13)AT	n-Hexacosane (C26)	15.882	27002	11.099		
14)AT	n-Octacosane (C28)	16.554	26533	10.998		
15)BT	n-Triacontane (C30)	17.189	26333	10.868		
16)BT	n-Dotriacontane(C32)	17.806	25777	10.825		
17)BT	n-Tetratriacontane (C34	18.412	24683	10.792		
18)BT	n-Hexatriacontane (C36)	19.039	23878	10.567		
19)BT	n-Octatriacontane (C38)	19.819	23064	10.618		
20)BT	n-Tetracontane (C40)	20.835	22326	10.702		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

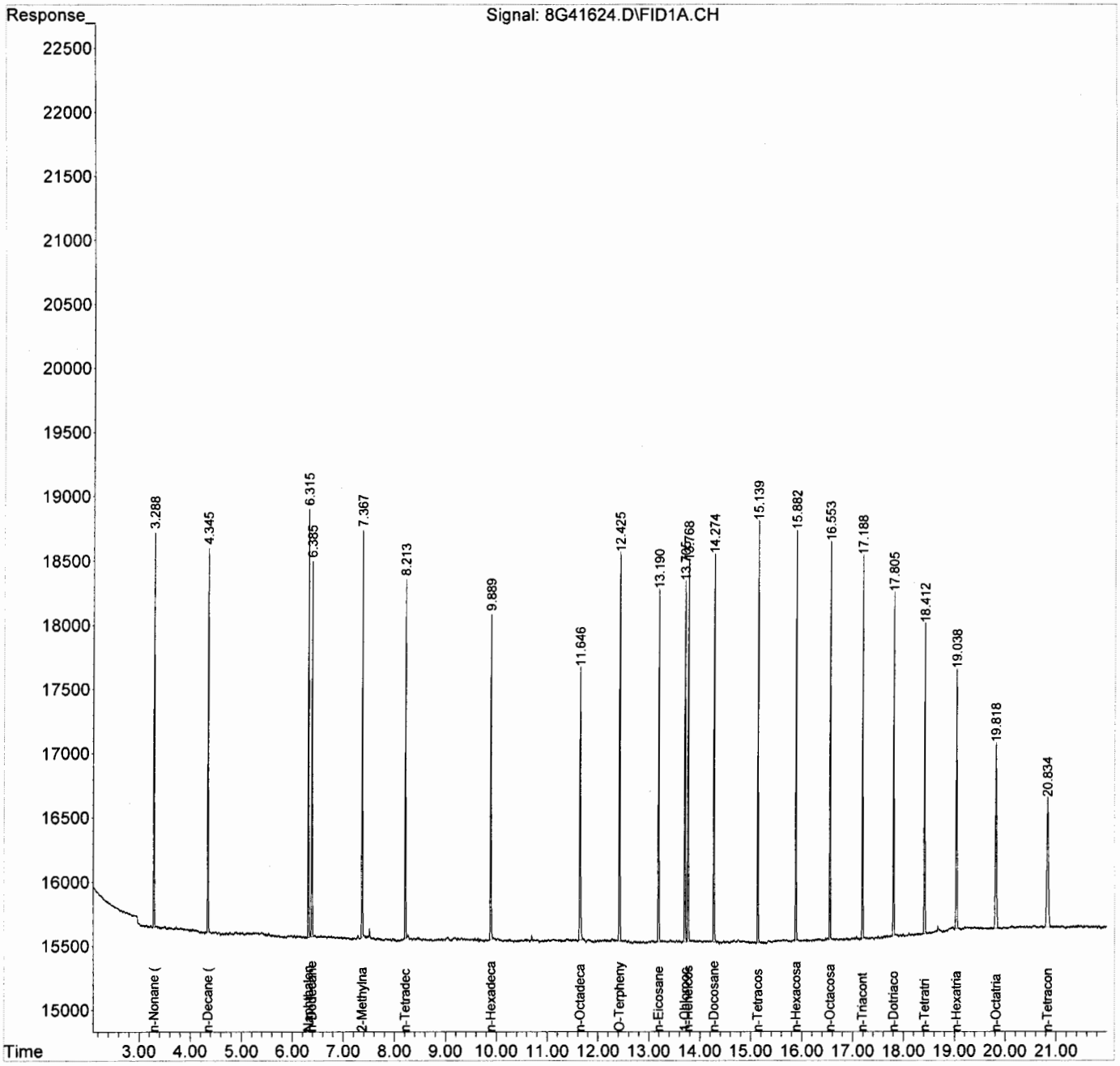
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41624.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 12:17:34
Operator : KD/RAK/MS
Sample : CALDTH AL@10PPM
Misc : S.TPH
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 13:01:59 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0268

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41623.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 11:46:55
Operator : KD/RAK/MS
Sample : CALDTH AL@50PPM
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 12:31:25 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.428	170765	57.763		
22)S	1-Chlorooctadecane	13.707	131587	57.652		
Target Compounds						
1)AT	n-Nonane (C9)	3.290	128837	57.547		
2)AT	n-Decane (C10)	4.347	133244	58.408		
3)	Naphthalene	6.317	156480	58.877		
4)AT	n-Dodecane (C12)	6.387	136964	59.061		
5)	2-Methylnaphthalene	7.369	154297	58.753		
6)AT	n-Tetradecane (C14)	8.214	137398	58.243		
7)AT	n-Hexadecane (C16)	9.890	138411	58.178		
8)AT	n-Octadecane (C18)	11.648	139428	58.305		
9)AT	n-Eicosane (C20)	13.191	140077	57.832		
10)AT	n-Heneicosane (C21)	13.770	141664	57.816		
11)AT	n-Docosane (C22)	14.275	140655	57.475		
12)AT	n-Tetracosane (C24)	15.139	141407	57.478		
13)AT	n-Hexacosane (C26)	15.882	139242	57.237		
14)AT	n-Octacosane (C28)	16.550	138086	57.236		
15)BT	n-Triacontane (C30)	17.174	138438	57.137		
16)BT	n-Dotriacontane(C32)	17.773	135145	56.753		
17)BT	n-Tetratriacontane (C34	18.355	128453	56.166		
18)BT	n-Hexatriacontane (C36)	18.971	125284	55.443		
19)BT	n-Octatriacontane (C38)	19.747	119462	54.999		
20)BT	n-Tetracontane (C40)	20.761	114306	54.792		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

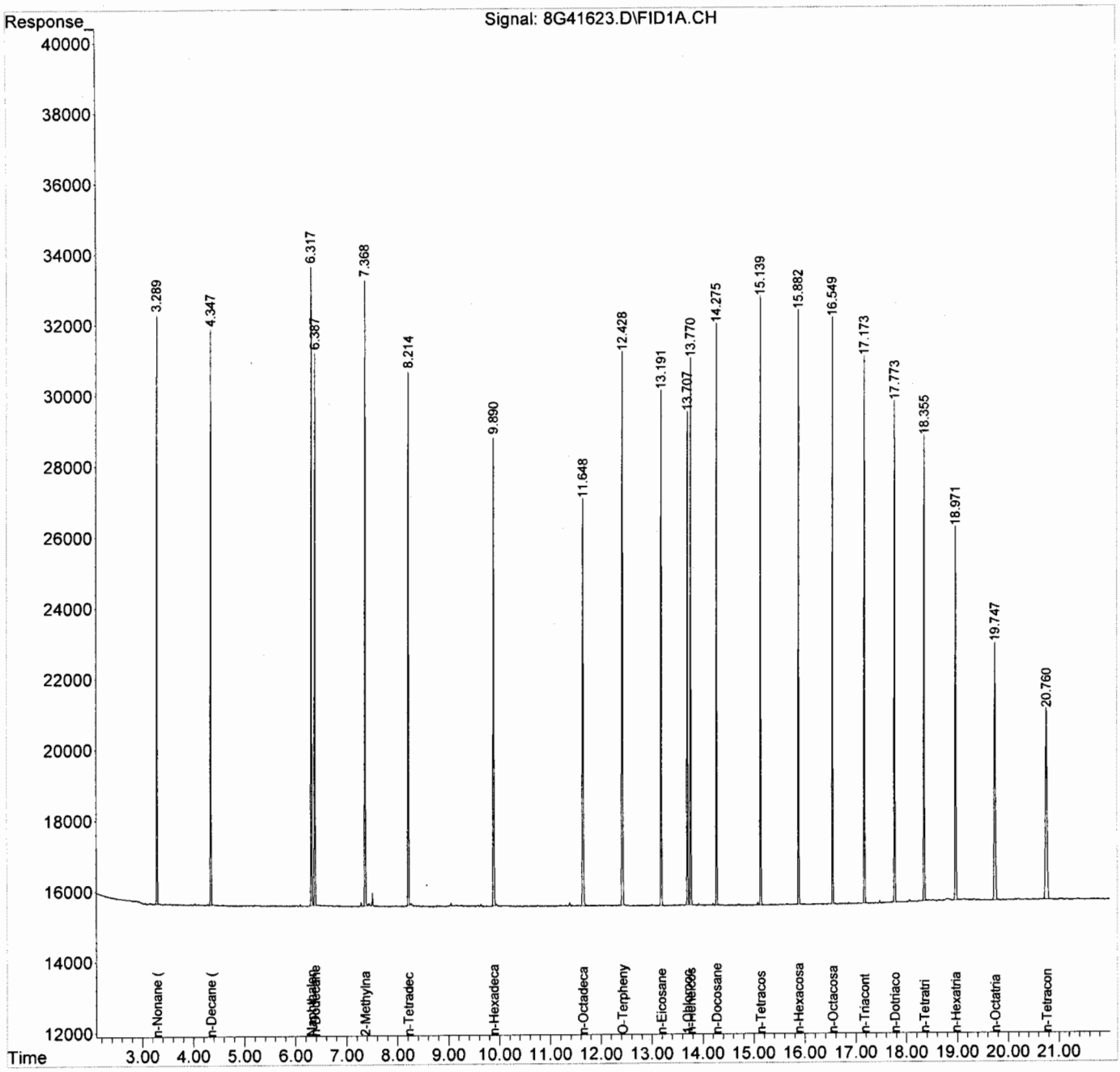
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41623.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 11:46:55
Operator : KD/RAK/MS
Sample : CALDTH AL@50PPM
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 12:31:25 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0270

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41621.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 10:45:52
Operator : KD/RAK/MS
Sample : CALDTH AL@200PPM
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 11:36:32 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.436	677022	229.011		
22)S	1-Chlorooctadecane	13.712	522162	228.771		
Target Compounds						
1)AT	n-Nonane (C9)	3.293	504775	225.463		
2)AT	n-Decane (C10)	4.351	517199	226.716		
3)	Naphthalene	6.322	606087	228.045		
4)AT	n-Dodecane (C12)	6.391	531177	229.051		
5)	2-Methylnaphthalene	7.374	601987	229.225		
6)AT	n-Tetradecane (C14)	8.219	538961	228.465		
7)AT	n-Hexadecane (C16)	9.896	546475	229.700		
8)AT	n-Octadecane (C18)	11.656	548947	229.553		
9)AT	n-Eicosane (C20)	13.196	554812	229.058		
10)AT	n-Heneicosane (C21)	13.775	561131	229.008		
11)AT	n-Docosane (C22)	14.279	559234	228.515		
12)AT	n-Tetracosane (C24)	15.145	561061	228.054		
13)AT	n-Hexacosane (C26)	15.887	552096	226.944		
14)AT	n-Octacosane (C28)	16.551	543297	225.196		
15)BT	n-Triacontane (C30)	17.165	540131	222.927		
16)BT	n-Dotriacontane(C32)	17.751	525452	220.660		
17)BT	n-Tetratriacontane (C34	18.320	503549	220.177		
18)BT	n-Hexatriacontane (C36)	18.934	498587	220.643		
19)BT	n-Octatriacontane (C38)	19.706	480264	221.109		
20)BT	n-Tetracontane (C40)	20.722	463656	222.252		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

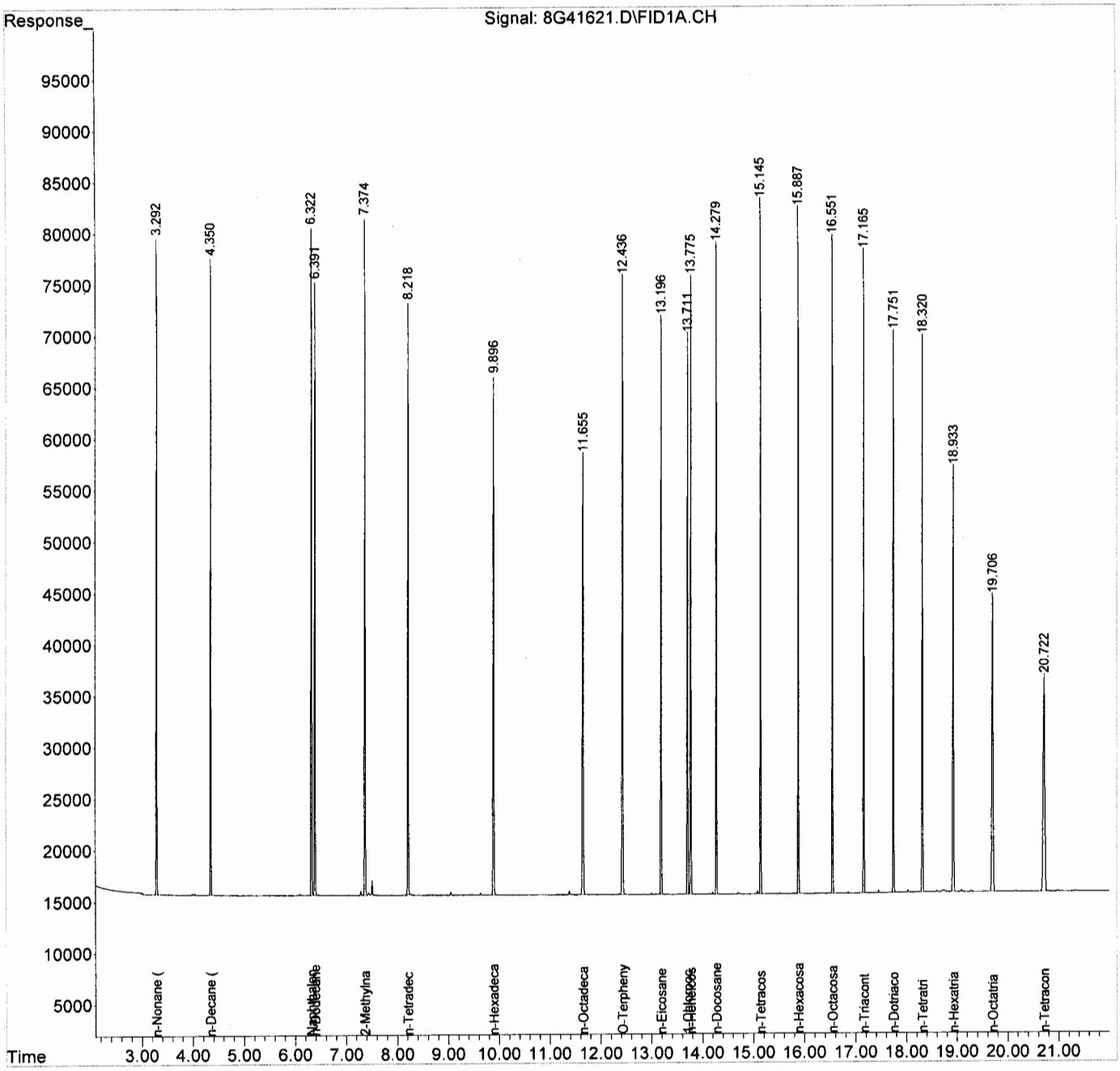
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41621.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 10:45:52
Operator : KD/RAK/MS
Sample : CALDTH AL@200PPM
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 11:36:32 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0272

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41620.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 10:15:28
Operator : KD/RAK/MS
Sample : CALDTH AL@300PPM
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:38:57 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.440	977336	330.596		
22)S	1-Chlorooctadecane	13.714	741044	324.669		
	Target Compounds					
1)AT	n-Nonane (C9)	3.296	819746	366.149		
2)AT	n-Decane (C10)	4.354	828043	362.976		
3)	Naphthalene	6.326	941704	354.323		
4)AT	n-Dodecane (C12)	6.394	824461	355.519		
5)	2-Methylnaphthalene	7.378	921071	350.726		
6)AT	n-Tetradecane (C14)	8.222	813731	344.939		
7)AT	n-Hexadecane (C16)	9.899	807092	339.245		
8)AT	n-Octadecane (C18)	11.659	794795	332.359		
9)AT	n-Eicosane (C20)	13.199	790726	326.457		
10)AT	n-Heneicosane (C21)	13.778	794326	324.179		
11)AT	n-Docosane (C22)	14.283	788134	322.048		
12)AT	n-Tetracosane (C24)	15.146	783702	318.551		
13)AT	n-Hexacosane (C26)	15.889	767328	315.417		
14)AT	n-Octacosane (C28)	16.554	756559	313.593		
15)BT	n-Triacontane (C30)	17.170	756954	312.415		
16)BT	n-Dotriacontane(C32)	17.757	741445	311.365		
17)BT	n-Tetratriacontane (C34	18.327	716416	313.253		
18)BT	n-Hexatriacontane (C36)	18.943	714339	316.121		
19)BT	n-Octatriacontane (C38)	19.717	694104	319.559		
20)BT	n-Tetracontane (C40)	20.733	674763	323.445		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

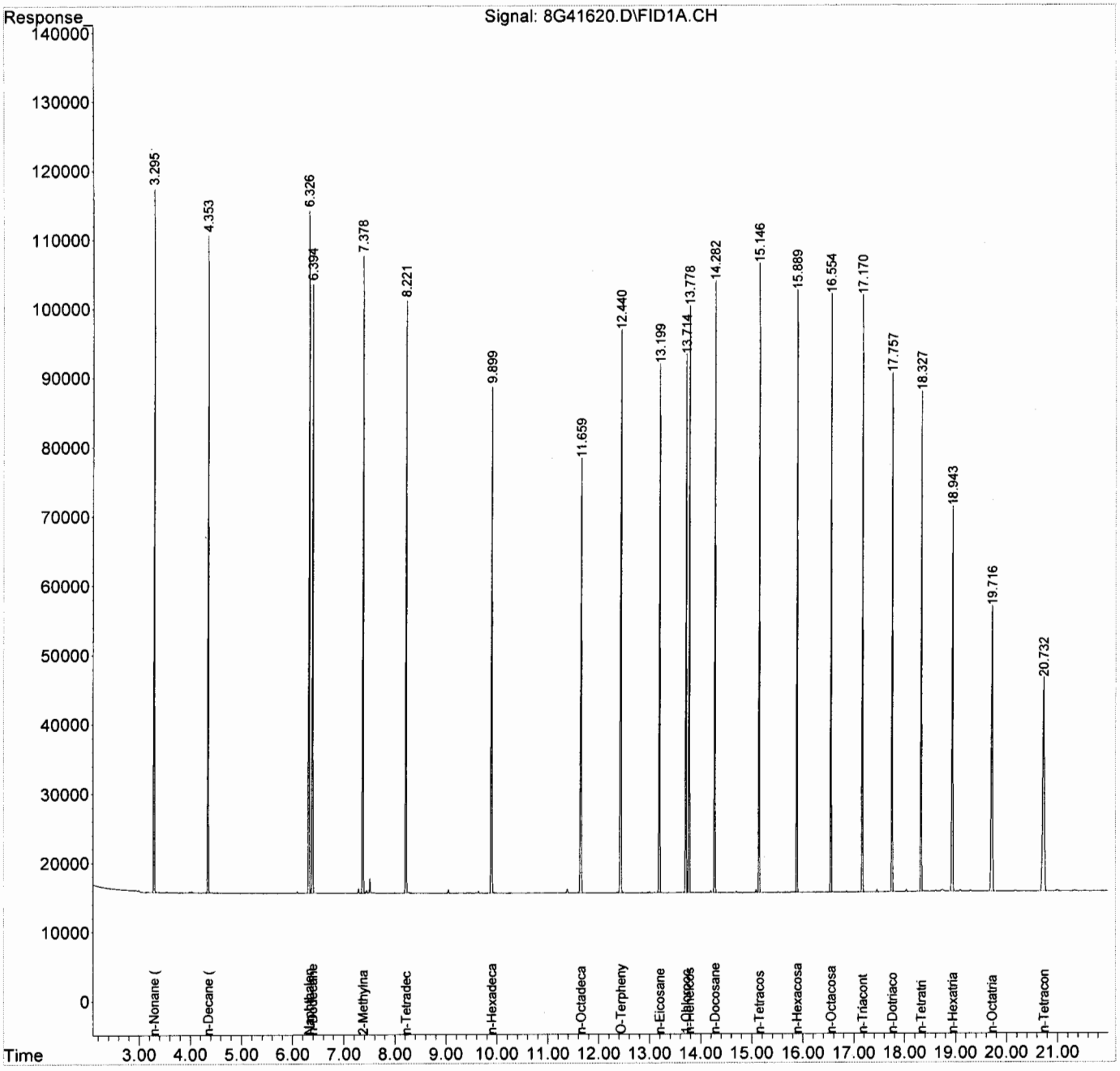
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41620.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 10:15:28
Operator : KD/RAK/MS
Sample : CALDTH AL@300PPM
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:38:57 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0274

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41619.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 09:45:05
Operator : KD/RAK/MS
Sample : CALDTH AL@500PPM
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:18:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.450	1783225	603.197		
22)S	1-Chlorooctadecane	13.720	1298611	568.952		
Target Compounds						
1)AT	n-Nonane (C9)	3.302	1543495	689.419		
2)AT	n-Decane (C10)	4.360	1551256	679.999		
3)	Naphthalene	6.333	1756479	660.888		
4)AT	n-Dodecane (C12)	6.401	1536749	662.667		
5)	2-Methylnaphthalene	7.386	1711111	651.558		
6)AT	n-Tetradecane (C14)	8.228	1513025	641.368		
7)AT	n-Hexadecane (C16)	9.908	1477636	621.096		
8)AT	n-Octadecane (C18)	11.668	1423159	595.122		
9)AT	n-Eicosane (C20)	13.206	1372655	566.710		
10)AT	n-Heneicosane (C21)	13.784	1353391	552.344		
11)AT	n-Docosane (C22)	14.287	1314593	537.170		
12)AT	n-Tetracosane (C24)	15.151	1252240	508.997		
13)AT	n-Hexacosane (C26)	15.894	1173555	482.400		
14)AT	n-Octacosane (C28)	16.558	1116637	462.844		
15)BT	n-Triacontane (C30)	17.172	1094946	451.914		
16)BT	n-Dotriacontane(C32)	17.758	1081825	454.305		
17)BT	n-Tetratriacontane (C34	18.325	1079688	472.093		
18)BT	n-Hexatriacontane (C36)	18.941	1110579	491.472		
19)BT	n-Octatriacontane (C38)	19.719	1098924	505.935		
20)BT	n-Tetracontane (C40)	20.737	1077652	516.569		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

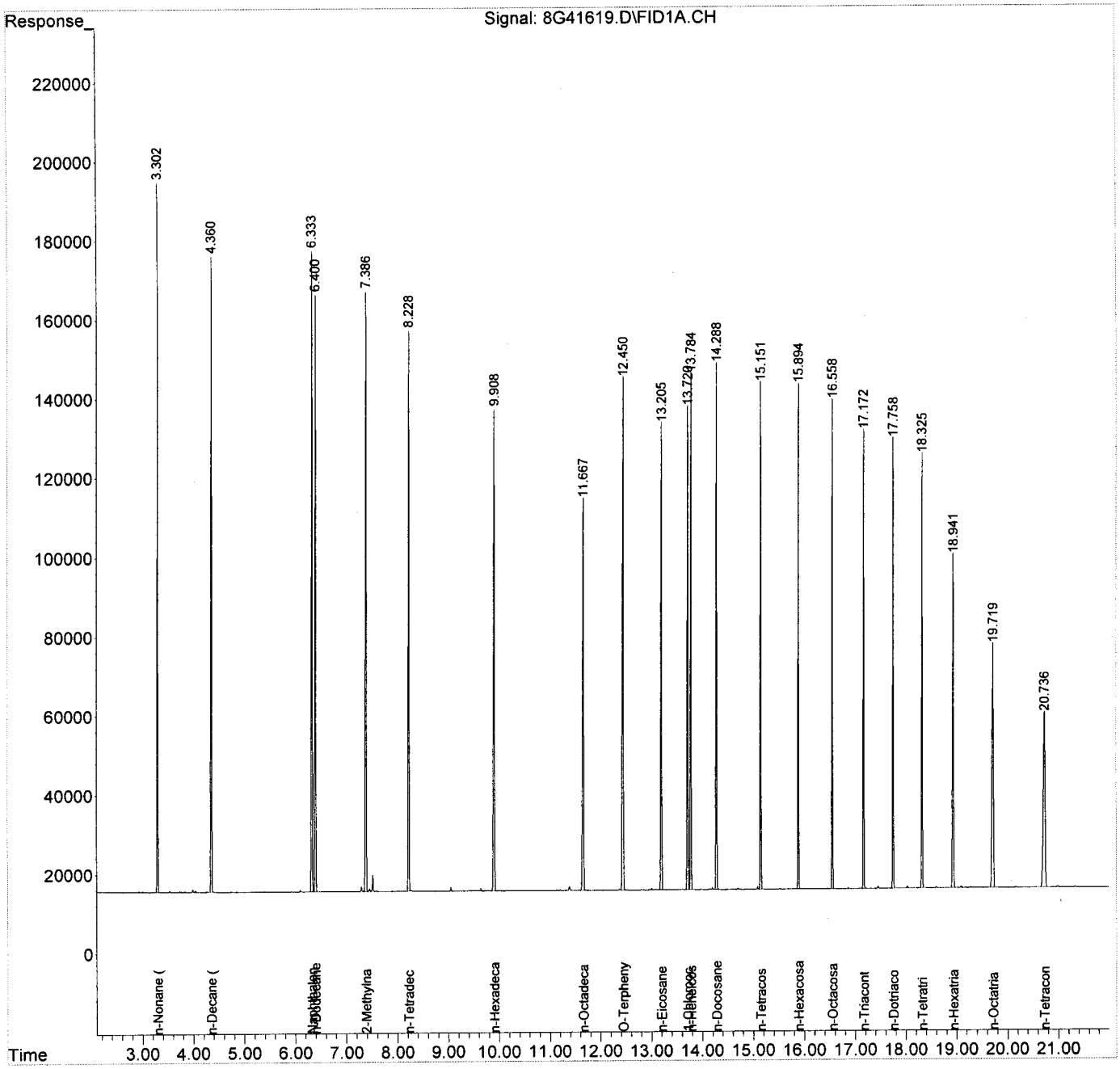
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\07-15-13\
Data File : 8G41619.D
Signal(s) : FID1A.CH
Acq On : 15-Jul-13, 09:45:05
Operator : KD/RAK/MS
Sample : CALDTH AL@500PPM
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 15 10:18:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Wed Jul 10 07:55:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Form7
Continuing Calibration

Method: NJEPHRev3B

Data File:				8G42129.D			8G42150.D			8G42171.D			8G42189.D			8G42211.D		
Method:				8015-EPHCA			8015-EPHCA			8015-EPHCA			8015-EPHCA			8015-EPHCA		
Calibration Name:				CALDTH AL@100			CALDTH AL@100			CALDTH AL@100			CALDTH AL@100			CALDTH AL@100		
Calibration Date/Time				08/02/13 15:45			08/03/13 12:15			08/03/13 23:17			08/04/13 09:48			08/05/13 08:00		
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff
n-Nonane (C9)	30	1	0	109.8	100	9.8	108.2	100	8.2	126.4	100	26.4	108	100	8.0	118.3	100	18.3
n-Decane (C10)	30	1	0	110.4	100	10.4	107.9	100	7.9	126.7	100	26.7	108.4	100	8.4	121.4	100	21.4
Naphthalene	30	1	0	108.3	100	8.3	108.9	100	8.9	126.1	100	26.1	107.0	100	7.0	123.2	100	23.2
n-Dodecane (C12)	30	1	0	112	100	12.0	109.8	100	9.8	128.0	100	28.0	109	100	9.0	126.2	100	26.2
2-Methylnaphthalene	30	1	0	109.9	100	9.9	111.3	100	11.3	128.7	100	28.7	108.8	100	8.8	126.1	100	26.1
n-Tetradecane (C14)	30	1	0	110.6	100	10.6	107.9	100	7.9	126.3	100	26.3	106.5	100	6.5	127	100	27.0
n-Hexadecane (C16)	30	1	0	108.4	100	8.4	106	100	6.0	123.9	100	23.9	104.3	100	4.3	126.6	100	26.6
n-Octadecane (C18)	30	1	0	107	100	7.0	104.4	100	4.4	121.1	100	21.1	103.0	100	3.0	123.6	100	23.6
n-Eicosane (C20)	30	1	0	103.3	100	3.3	103.3	100	3.3	118.7	100	18.7	100.4	100	0.4	118.3	100	18.3
n-Heneicosane (C21)	30	1	0	101.7	100	1.7	102.5	100	2.5	117.7	100	17.7	99.71	100	0.3	115.4	100	15.4
n-Docosane (C22)	30	1	0	100.3	100	0.3	101.2	100	1.2	116.6	100	16.6	98.95	100	1.1	112.6	100	12.6
n-Tetracosane (C24)	30	1	0	98.57	100	1.4	100.3	100	0.3	116.3	100	16.3	98.65	100	1.3	107.2	100	7.2
n-Hexacosane (C26)	30	1	0	96.37	100	3.6	98.36	100	1.6	114.6	100	14.6	97.78	100	2.2	102.2	100	2.2
n-Octacosane (C28)	30	1	0	96.48	100	3.5	97.14	100	2.9	114.2	100	14.2	98.46	100	1.5	99.68	100	0.3
n-Triacontane (C30)	30	1	0	97.92	100	2.1	97.43	100	2.6	114.6	100	14.6	99.31	100	0.7	99.65	100	0.3
n-Dotriacontane(C32)	30	1	0	100.2	100	0.2	97.78	100	2.2	115.3	100	15.3	101.1	100	1.1	101.9	100	1.9
n-Tetratriacontane (C	30	1	0	105	100	5.0	101.2	100	1.2	118.7	100	18.7	105	100	4.9	106.3	100	6.3
n-Hexatriacontane (C	30	1	0	104.4	100	4.4	99.86	100	0.1	118.9	100	18.9	104.5	100	4.5	106.5	100	6.5
n-Octatriacontane (C3	30	1	0	105.7	100	5.7	102	100	2.0	119.4	100	19.4	107.3	100	7.3	110.0	100	10.0
n-Tetracontane (C40)	30	1	0	105.7	100	5.7	103.7	100	3.7	122.5	100	22.5	110.2	100	10.2	115.2	100	15.2
O-Terphenyl	30	1	0	97.64	100	2.4	102.1	100	2.1	114.5	100	14.5	96.62	100	3.4	110.3	100	10.3
1-Chlorooctadecane	30	1	0	96.69	100	3.3	98.45	100	1.6	112.6	100	12.6	95.17	100	4.8	108.1	100	8.1
C9-C28	25	1	0	1255	1200	4.6	1247	1200	3.9	1451	1200	20.9	1233	1200	2.8	1398	1200	16.5
>C28-C40	25	1	0	618.9	600	3.2	601.9	600	0.3	709.3	600	18.2	627.3	600	4.5	639.5	600	6.6
C9-C40	25	1	0	1874	1800	4.1	1849	1800	2.7	2160	1800	20.0	1860	1800	3.4	2038	1800	13.2

Flags/Notes: **** - Values outside of limits for this column/run***

Form7

RtWindow Summary

Method: NJEPHRev3B

			8G41618.D		8G42129.D		8G42150.D		8G42189.D			
Data File:			8G41618.D		8G42129.D		8G42150.D		8G42189.D			
Calibration Name:			CALDTH AL@100PPM		CALDTH AL@100PPM		CALDTH AL@100PPM		CALDTH AL@100PPM			
Calibration Date/Time			7/15/2013 9:13:00 AM		8/2/2013 3:45:54 PM		8/3/2013 12:15:06 PM		8/4/2013 9:48:20 AM			
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
n-Nonane (C9)	1	0	3.29	(3.24 - 3.34)	3.28	(3.23 - 3.33)	3.28	(3.23 - 3.33)	3.28	(3.23 - 3.33)		
n-Decane (C10)	1	0	4.35	(4.30 - 4.40)	4.33	(4.28 - 4.38)	4.33	(4.28 - 4.38)	4.33	(4.28 - 4.38)		
Naphthalene	1	0	6.32	(6.27 - 6.37)	6.30	(6.25 - 6.35)	6.30	(6.25 - 6.35)	6.30	(6.25 - 6.35)		
n-Dodecane (C12)	1	0	6.39	(6.34 - 6.44)	6.37	(6.32 - 6.42)	6.37	(6.32 - 6.42)	6.37	(6.32 - 6.42)		
2-Methylnaphthalene	1	0	7.37	(7.32 - 7.42)	7.36	(7.31 - 7.41)	7.36	(7.31 - 7.41)	7.35	(7.30 - 7.40)		
n-Tetradecane (C14)	1	0	8.22	(8.17 - 8.27)	8.20	(8.15 - 8.25)	8.20	(8.15 - 8.25)	8.20	(8.15 - 8.25)		
n-Hexadecane (C16)	1	0	9.90	(9.85 - 9.95)	9.88	(9.83 - 9.93)	9.88	(9.83 - 9.93)	9.87	(9.82 - 9.92)		
n-Octadecane (C18)	1	0	11.65	(11.60 - 11.70)	11.63	(11.58 - 11.68)	11.63	(11.58 - 11.68)	11.63	(11.58 - 11.68)		
n-Eicosane (C20)	1	0	13.20	(13.15 - 13.25)	13.18	(13.13 - 13.23)	13.18	(13.13 - 13.23)	13.18	(13.13 - 13.23)		
n-Heneicosane (C21)	1	0	13.77	(13.72 - 13.82)	13.76	(13.71 - 13.81)	13.76	(13.71 - 13.81)	13.76	(13.71 - 13.81)		
n-Docosane (C22)	1	0	14.28	(14.23 - 14.33)	14.27	(14.22 - 14.32)	14.26	(14.21 - 14.31)	14.26	(14.21 - 14.31)		
n-Tetracosane (C24)	1	0	15.14	(15.09 - 15.19)	15.13	(15.08 - 15.18)	15.13	(15.08 - 15.18)	15.13	(15.08 - 15.18)		
n-Hexacosane (C26)	1	0	15.89	(15.84 - 15.94)	15.87	(15.82 - 15.92)	15.87	(15.82 - 15.92)	15.87	(15.82 - 15.92)		
n-Octacosane (C28)	1	0	16.55	(16.50 - 16.60)	16.54	(16.49 - 16.59)	16.54	(16.49 - 16.59)	16.54	(16.49 - 16.59)		
n-Triacontane (C30)	1	0	17.17	(17.12 - 17.22)	17.16	(17.11 - 17.21)	17.15	(17.10 - 17.20)	17.15	(17.10 - 17.20)		
n-Dotriacontane(C32)	1	0	17.76	(17.71 - 17.81)	17.76	(17.71 - 17.81)	17.72	(17.67 - 17.77)	17.71	(17.66 - 17.76)		
n-Tetratriacontane (C	1	0	18.34	(18.29 - 18.39)	18.35	(18.30 - 18.40)	18.25	(18.20 - 18.30)	18.25	(18.20 - 18.30)		
n-Hexatriacontane (C	1	0	18.96	(18.91 - 19.01)	18.97	(18.92 - 19.02)	18.86	(18.81 - 18.91)	18.85	(18.80 - 18.90)		
n-Octatriacontane (C	1	0	19.73	(19.68 - 19.78)	19.74	(19.69 - 19.79)	19.62	(19.57 - 19.67)	19.62	(19.57 - 19.67)		
n-Tetracontane (C40)	1	0	20.75	(20.70 - 20.80)	20.75	(20.70 - 20.80)	20.62	(20.57 - 20.67)	20.62	(20.57 - 20.67)		
O-Terphenyl	1	0	12.44	(12.40 - 12.48)	12.41	(12.37 - 12.45)	12.41	(12.37 - 12.45)	12.41	(12.37 - 12.45)		
1-Chlorooctadecane	1	0	13.71	(13.67 - 13.75)	13.70	(13.66 - 13.74)	13.69	(13.65 - 13.73)	13.69	(13.65 - 13.73)		
C9-C28	1	0										
>C28-C40	1	0										
C9-C40	1	0										

Quantitation Report (QT Reviewed)

3080110 0278

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42129.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 15:45:54
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 02 16:09:08 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.414	329095	97.640		
22)S	1-Chlorooctadecane	13.696	248125	96.693		
Target Compounds						
1)AT	n-Nonane (C9)	3.278	288997	109.766		
2)AT	n-Decane (C10)	4.334	296981	110.388		
3)	Naphthalene	6.305	337131	108.330		
4)AT	n-Dodecane (C12)	6.373	305472	112.001		
5)	2-Methylnaphthalene	7.357	335565	109.894		
6)AT	n-Tetradecane (C14)	8.201	301994	110.550		
7)AT	n-Hexadecane (C16)	9.876	295881	108.390		
8)AT	n-Octadecane (C18)	11.632	291245	106.997		
9)AT	n-Eicosane (C20)	13.179	281210	103.293		
10)AT	n-Heneicosane (C21)	13.760	278275	101.683		
11)AT	n-Docosane (C22)	14.265	272300	100.302		
12)AT	n-Tetracosane (C24)	15.132	265244	98.574		
13)AT	n-Hexacosane (C26)	15.875	253606	96.367		
14)AT	n-Octacosane (C28)	16.540	249497	96.482		
15)BT	n-Triacontane (C30)	17.161	252357	97.922		
16)BT	n-Dotriacontane(C32)	17.764	252875	100.190		
17)BT	n-Tetratriacontane (C34	18.349	255566	104.972		
18)BT	n-Hexatriacontane (C36)	18.966	251203	104.420		
19)BT	n-Octatriacontane (C38)	19.739	245606	105.722		
20)BT	n-Tetracontane (C40)	20.750	237507	105.686		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

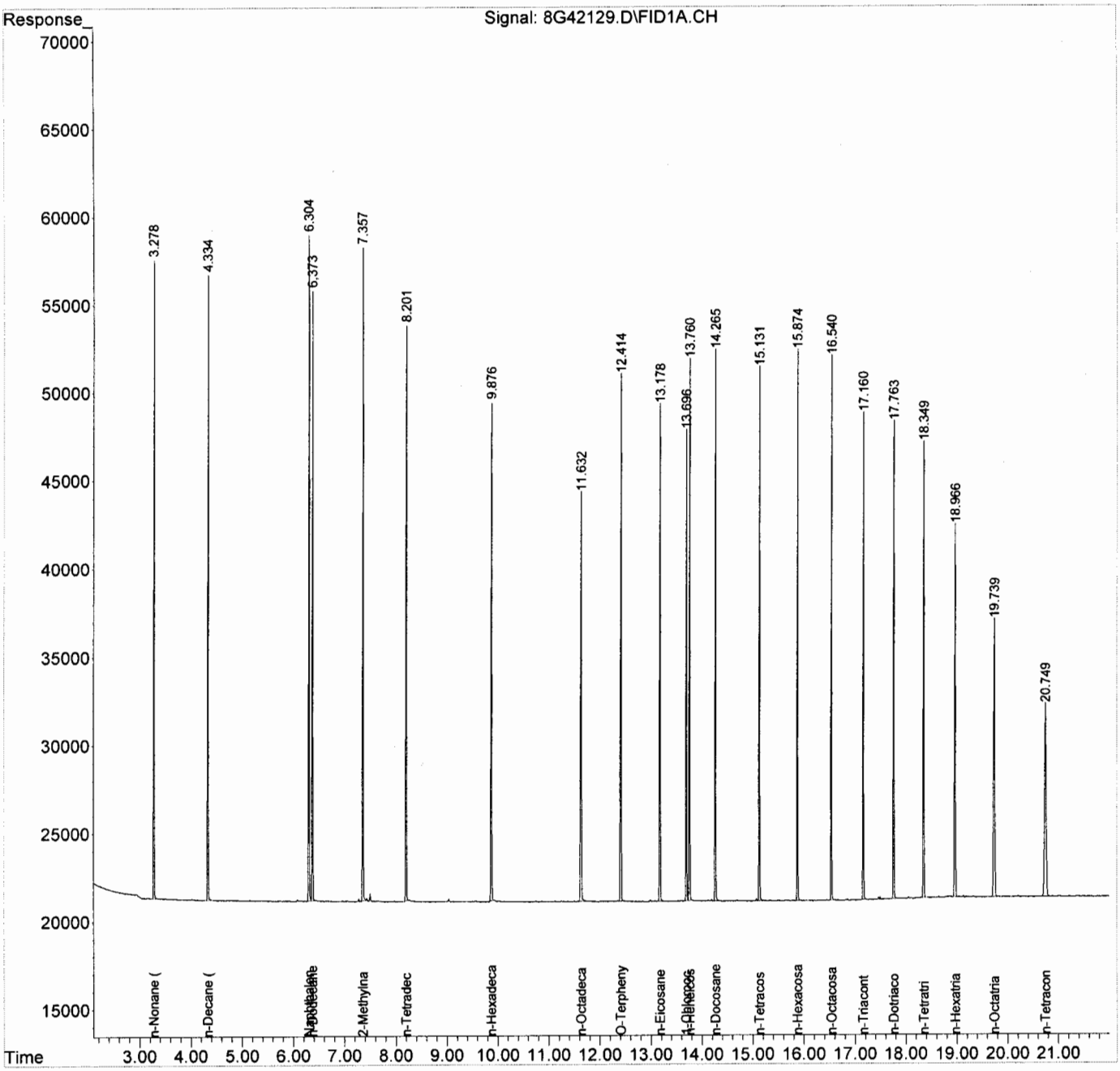
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42129.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 15:45:54
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 02 16:09:08 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0280

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42150.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 12:15:06
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 08:12:13 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.413	344150	102.107		
22)S	1-Chlorooctadecane	13.695	252623	98.446		
Target Compounds						
1)AT	n-Nonane (C9)	3.277	284770	108.160		
2)AT	n-Decane (C10)	4.333	290305	107.907		
3)	Naphthalene	6.304	339006	108.933		
4)AT	n-Dodecane (C12)	6.373	299470	109.800		
5)	2-Methylnaphthalene	7.356	339979	111.339		
6)AT	n-Tetradecane (C14)	8.200	294819	107.924		
7)AT	n-Hexadecane (C16)	9.875	289294	105.977		
8)AT	n-Octadecane (C18)	11.632	284085	104.366		
9)AT	n-Eicosane (C20)	13.178	281294	103.323		
10)AT	n-Heneicosane (C21)	13.758	280447	102.477		
11)AT	n-Docosane (C22)	14.264	274613	101.154		
12)AT	n-Tetracosane (C24)	15.131	269935	100.317		
13)AT	n-Hexacosane (C26)	15.875	258849	98.359		
14)AT	n-Octacosane (C28)	16.539	251210	97.145		
15)BT	n-Triacontane (C30)	17.149	251100	97.434		
16)BT	n-Dotriacontane(C32)	17.715	246798	97.782		
17)BT	n-Tetratriacontane (C34	18.251	246313	101.172		
18)BT	n-Hexatriacontane (C36)	18.857	240229	99.858		
19)BT	n-Octatriacontane (C38)	19.621	236900	101.975		
20)BT	n-Tetracontane (C40)	20.624	232990	103.676		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

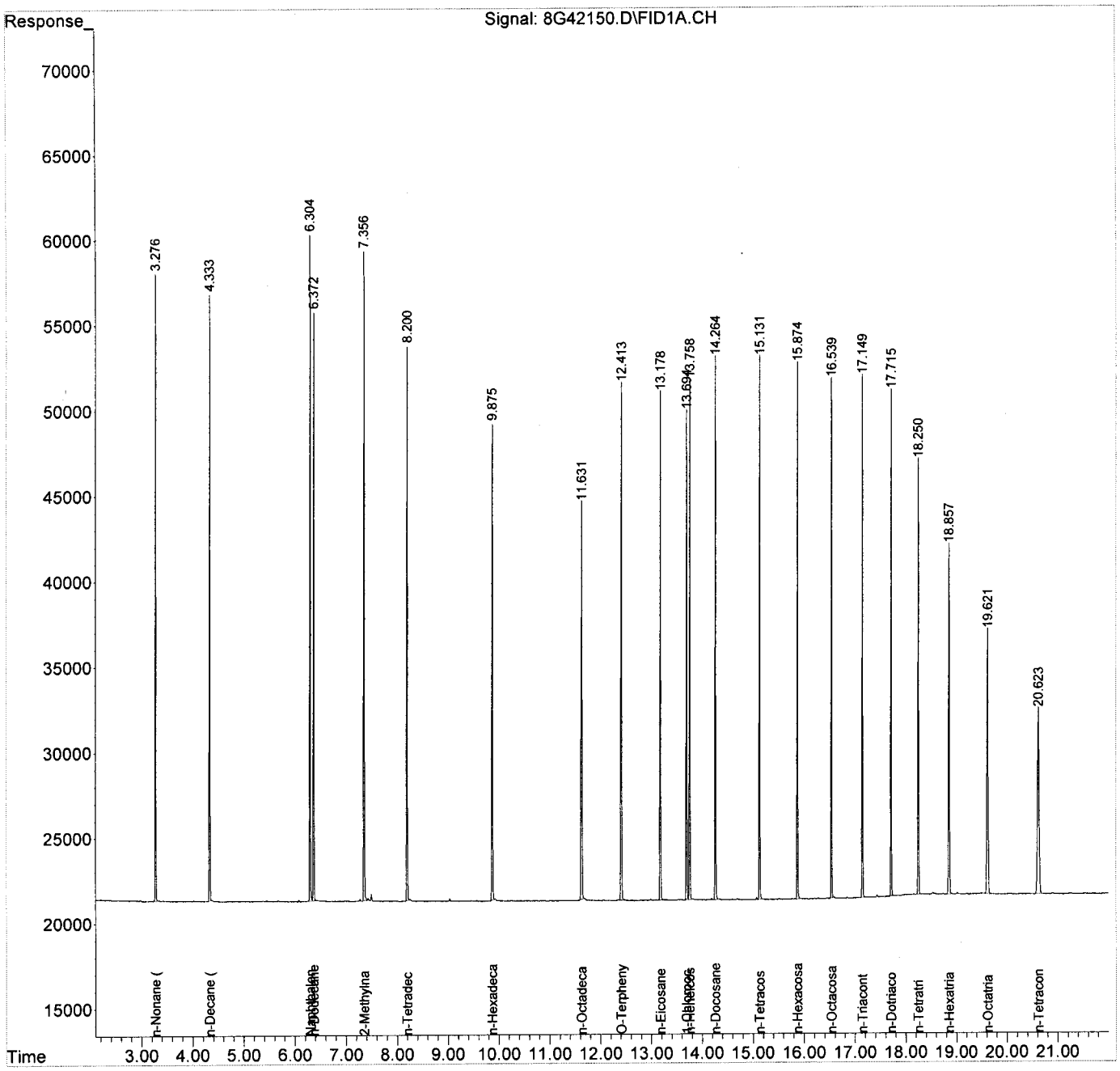
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42150.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 12:15:06
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 08:12:13 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0282

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42171.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 23:17:33
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 39 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 13:22:58 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.412	385978	114.517		
22)S	1-Chlorooctadecane	13.694	288876	112.574		
Target Compounds						
1)AT	n-Nonane (C9)	3.276	332877	126.432		
2)AT	n-Decane (C10)	4.332	340906	126.715		
3)	Naphthalene	6.303	392532	126.132		
4)AT	n-Dodecane (C12)	6.372	349174	128.024		
5)	2-Methylnaphthalene	7.356	392970	128.693		
6)AT	n-Tetradecane (C14)	8.199	345087	126.325		
7)AT	n-Hexadecane (C16)	9.874	338180	123.885		
8)AT	n-Octadecane (C18)	11.630	329536	121.063		
9)AT	n-Eicosane (C20)	13.177	323225	118.725		
10)AT	n-Heneicosane (C21)	13.757	322020	117.668		
11)AT	n-Docosane (C22)	14.263	316563	116.606		
12)AT	n-Tetracosane (C24)	15.130	312897	116.283		
13)AT	n-Hexacosane (C26)	15.873	301639	114.619		
14)AT	n-Octacosane (C28)	16.538	295278	114.186		
15)BT	n-Triacontane (C30)	17.147	295271	114.574		
16)BT	n-Dotriacontane(C32)	17.714	291099	115.334		
17)BT	n-Tetratriacontane (C34	18.249	288871	118.652		
18)BT	n-Hexatriacontane (C36)	18.854	285938	118.858		
19)BT	n-Octatriacontane (C38)	19.617	277356	119.389		
20)BT	n-Tetracontane (C40)	20.622	275233	122.474		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

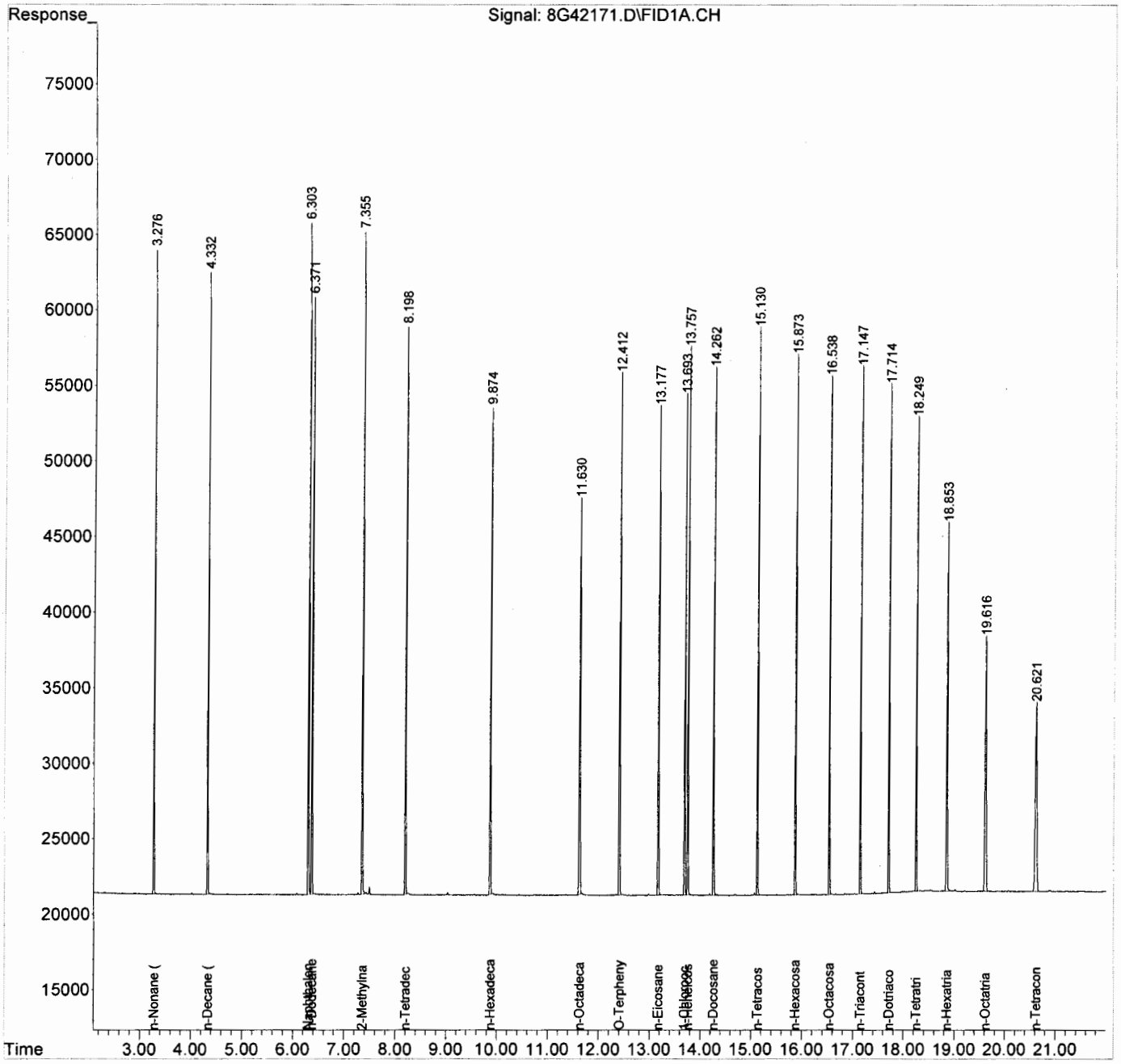
Quantitation Report (QT Reviewed)

3080110 0283

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42171.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 23:17:33
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 39 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 13:22:58 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0284

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42189.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 09:48:20
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:22:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.410	325646	96.617		
22)S	1-Chlorooctadecane	13.694	244228	95.175		
Target Compounds						
1)AT	n-Nonane (C9)	3.275	284237	107.958		
2)AT	n-Decane (C10)	4.331	291522	108.359		
3)	Naphthalene	6.302	333088	107.031		
4)AT	n-Dodecane (C12)	6.371	297232	108.980		
5)	2-Methylnaphthalene	7.354	332188	108.788		
6)AT	n-Tetradecane (C14)	8.198	290984	106.520		
7)AT	n-Hexadecane (C16)	9.873	284670	104.283		
8)AT	n-Octadecane (C18)	11.629	280443	103.028		
9)AT	n-Eicosane (C20)	13.176	273373	100.414		
10)AT	n-Heneicosane (C21)	13.756	272878	99.711		
11)AT	n-Docosane (C22)	14.263	268643	98.955		
12)AT	n-Tetracosane (C24)	15.129	265459	98.653		
13)AT	n-Hexacosane (C26)	15.872	257323	97.780		
14)AT	n-Octacosane (C28)	16.537	254606	98.458		
15)BT	n-Triacontane (C30)	17.146	255936	99.311		
16)BT	n-Dotriacontane(C32)	17.714	255063	101.057		
17)BT	n-Tetratriacontane (C34	18.248	255518	104.953		
18)BT	n-Hexatriacontane (C36)	18.854	251325	104.471		
19)BT	n-Octatriacontane (C38)	19.618	249262	107.296		
20)BT	n-Tetracontane (C40)	20.620	247658	110.203		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

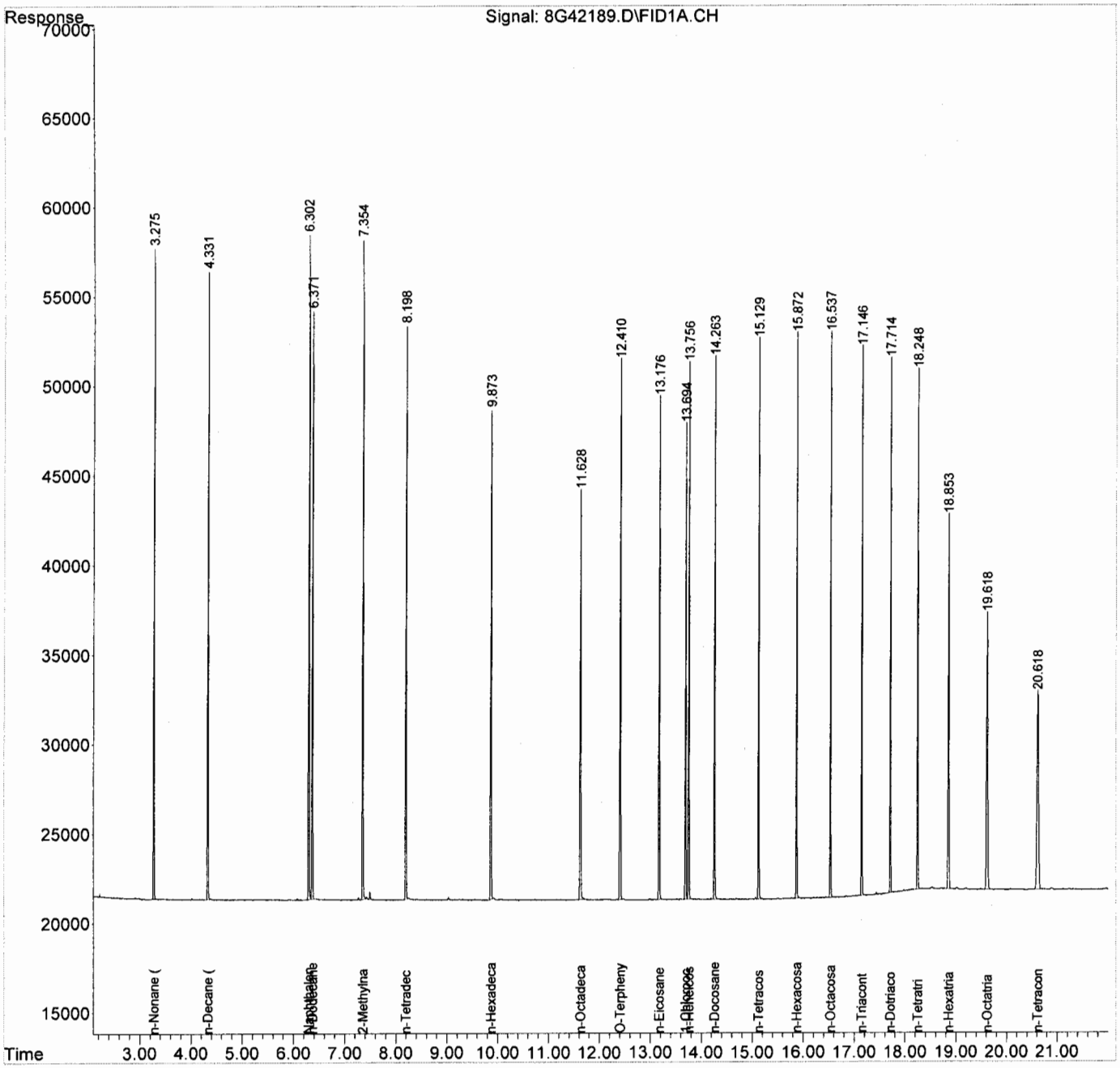
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42189.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 09:48:20
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:22:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0286

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42211.D
Signal(s) : FID1A.CH
Acq On : 05-Aug-13, 08:00:06
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 08:31:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.415	371720	110.286		
22)S	1-Chlorooctadecane	13.697	277370	108.090		
Target Compounds						
1)AT	n-Nonane (C9)	3.275	311508	118.316		
2)AT	n-Decane (C10)	4.332	326667	121.423		
3)	Naphthalene	6.305	383468	123.220		
4)AT	n-Dodecane (C12)	6.373	344156	126.184		
5)	2-Methylnaphthalene	7.357	385141	126.129		
6)AT	n-Tetradecane (C14)	8.200	346864	126.975		
7)AT	n-Hexadecane (C16)	9.877	345501	126.567		
8)AT	n-Octadecane (C18)	11.634	336556	123.643		
9)AT	n-Eicosane (C20)	13.180	321996	118.274		
10)AT	n-Heneicosane (C21)	13.760	315671	115.348		
11)AT	n-Docosane (C22)	14.265	305604	112.570		
12)AT	n-Tetracosane (C24)	15.131	288435	107.192		
13)AT	n-Hexacosane (C26)	15.874	269025	102.226		
14)AT	n-Octacosane (C28)	16.539	257763	99.678		
15)BT	n-Triacontane (C30)	17.149	256800	99.646		
16)BT	n-Dotriacontane(C32)	17.721	257203	101.905		
17)BT	n-Tetratriacontane (C34	18.269	258771	106.289		
18)BT	n-Hexatriacontane (C36)	18.876	256150	106.476		
19)BT	n-Octatriacontane (C38)	19.642	255579	110.015		
20)BT	n-Tetracontane (C40)	20.648	258840	115.179		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

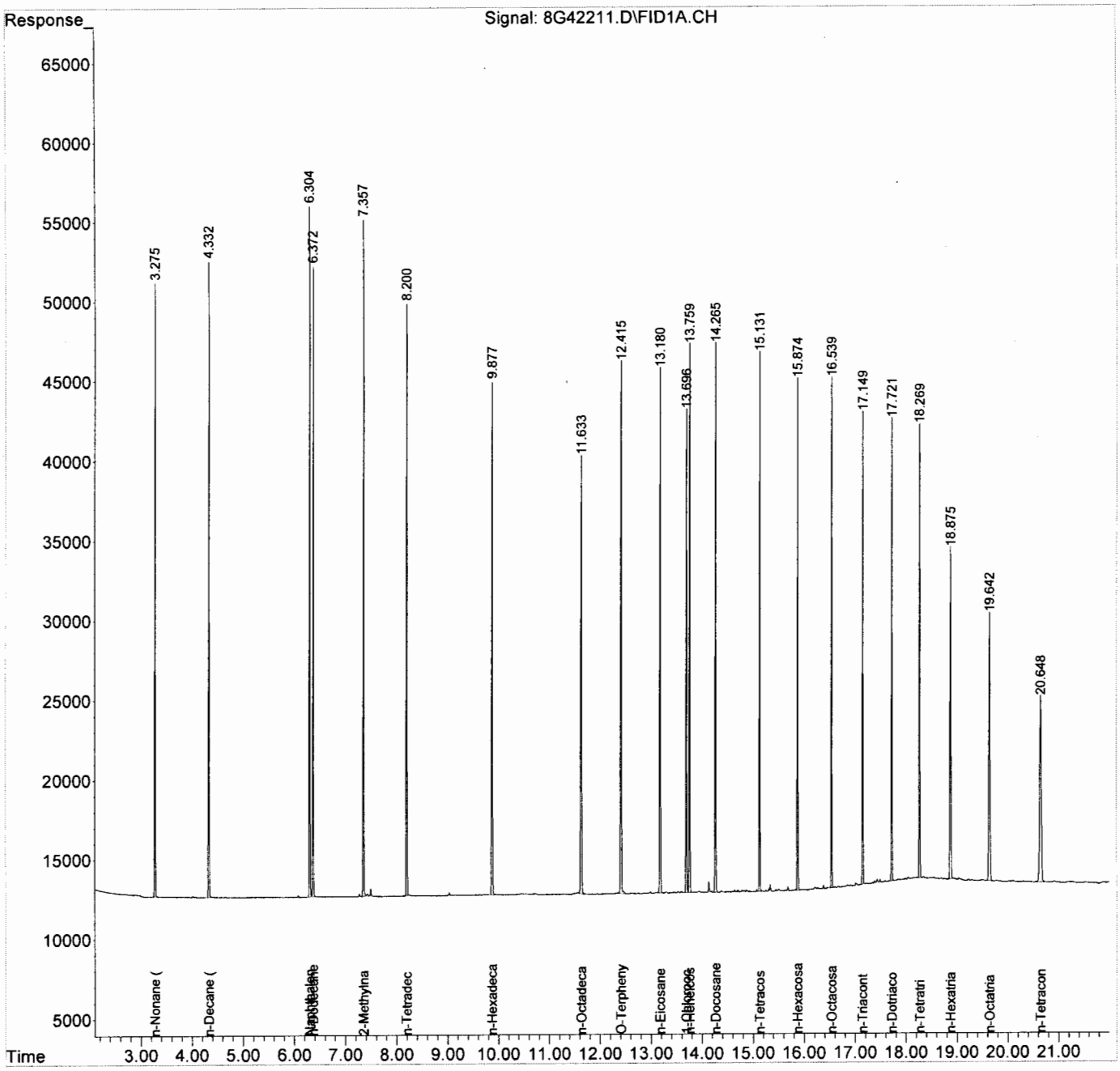
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42211.D
Signal(s) : FID1A.CH
Acq On : 05-Aug-13, 08:00:06
Operator : KD/RAK/MS
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 08:31:35 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



EPH Category 2 Data
Raw QC Data

Form1

ORGANICS REPORT

Sample Number: SMB25787
Client Id:
Data File: 8G42131.D
Analysis Date: 08/02/13 16:46
Date Rec/Extracted: NA-08/02/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: NJEPHRev3B
Matrix: Soil
Initial Vol: 10g
Final Vol: 1ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
ephc9c40	C9-C40	60	U				

Worksheet #: 272475 ***Total Target Concentration*** 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42131.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 16:46:53
Operator : KD/RAK/MS
Sample : SMB25787
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:07:07 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

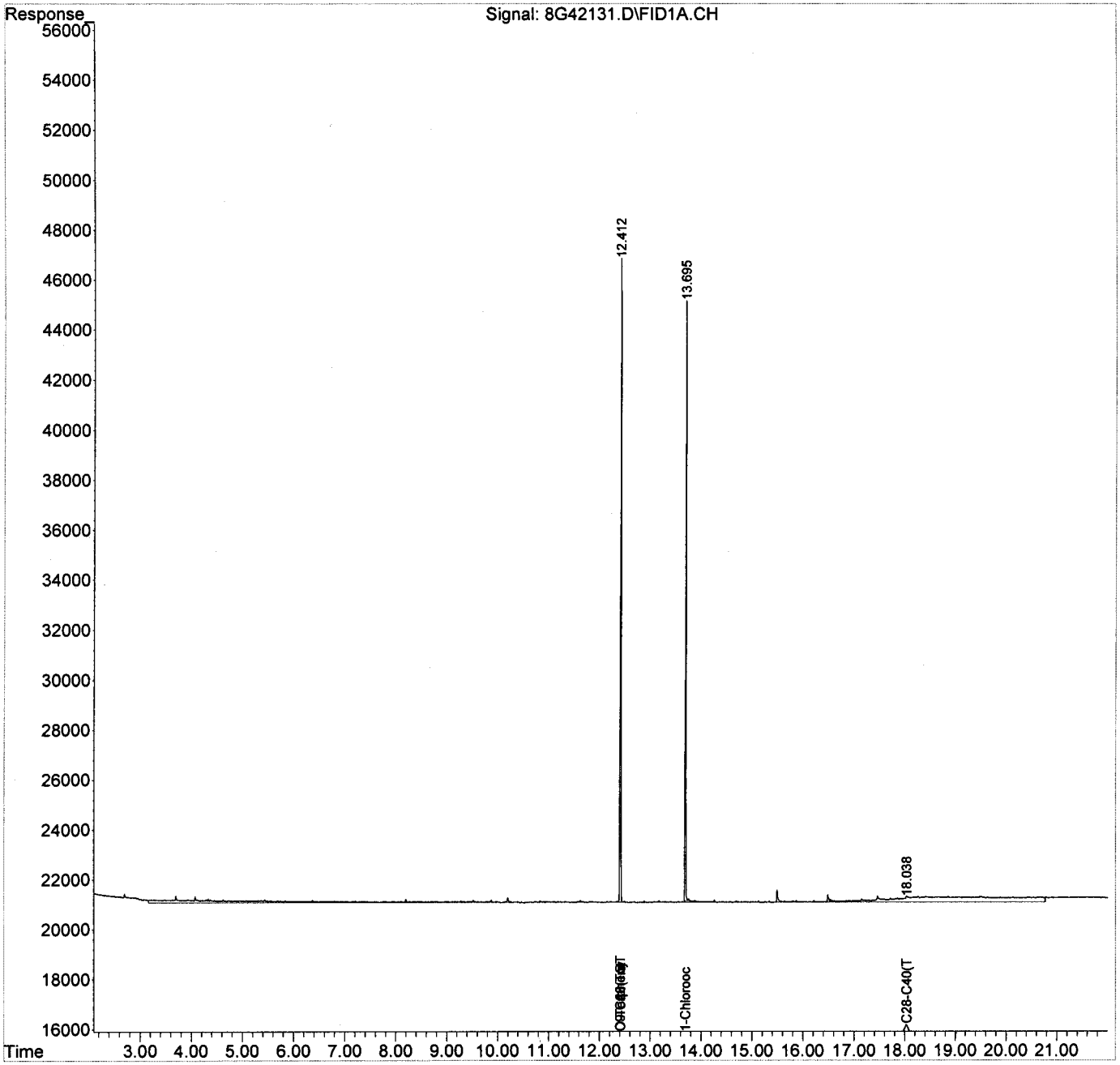
	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.413	285806	84.796		
22)S	1-Chlorooctadecane	13.695	222594	86.744		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		
9)AT	n-Eicosane (C20)	0.000	0	N.D.		
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	12.412f	760181	282.276		m
24)B	>C28-C40(Total)	18.038f	373377	154.375		m
25)t	C9-C40(TOTAL)	12.412f	1132217	435.205		m

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42131.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 16:46:53
Operator : KD/RAK/MS
Sample : SMB25787
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:07:07 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42130.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 16:16:18
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 08:58:23 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

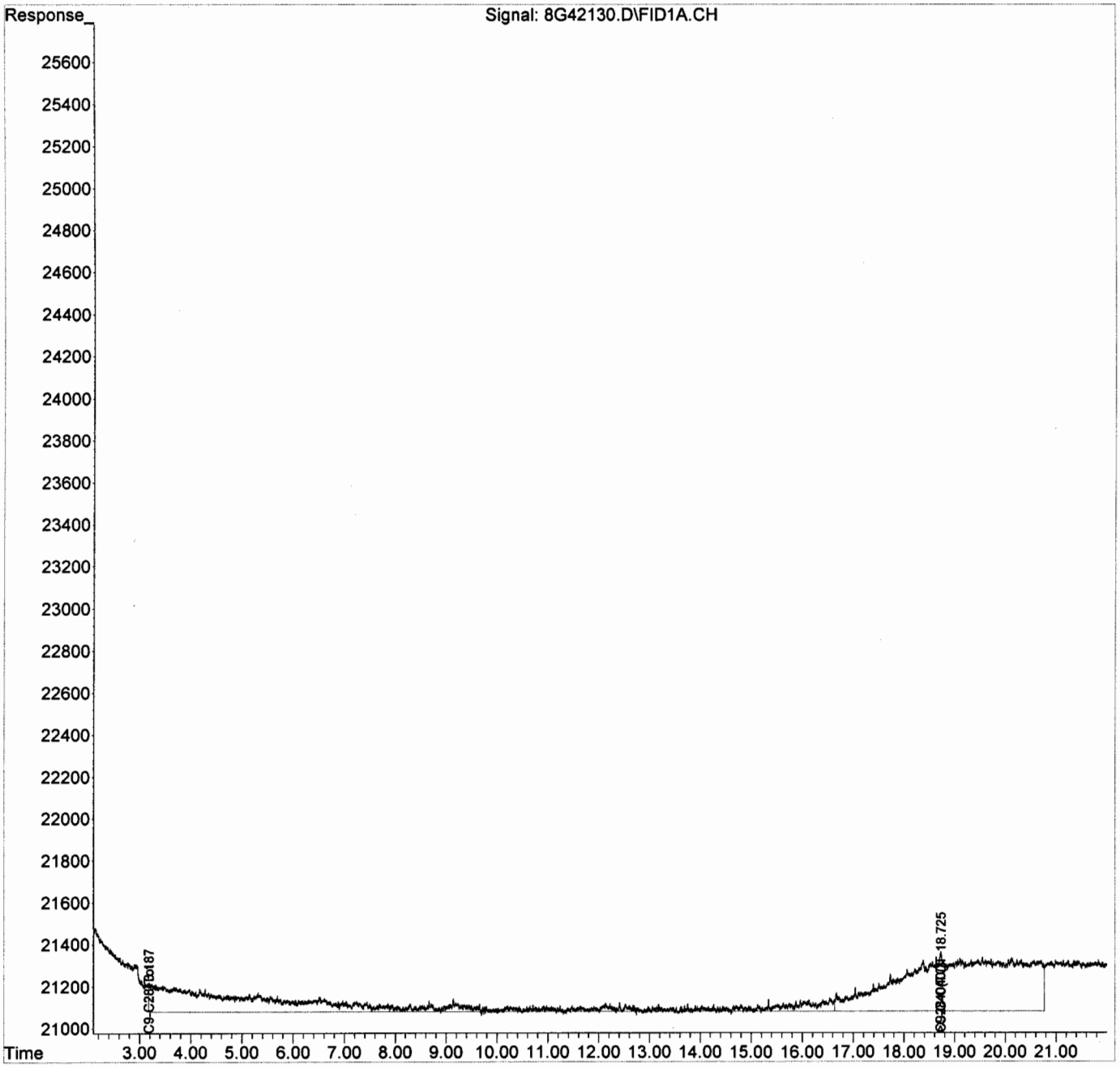
	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	0.000	0	N.D.		
22)S	1-Chlorooctadecane	0.000	0	N.D.		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		
9)AT	n-Eicosane (C20)	0.000	0	N.D.		
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		
11)AT	n-Docosane (C22)	0.000	0	N.D.		
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		
14)AT	n-Octacosane (C28)	0.000	0	N.D.		
15)BT	n-Triacontane (C30)	0.000	0	N.D.		
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	3.187	251750	93.482		m
24)B	>C28-C40(Total)	18.725f	445002	183.989		m
25)t	C9-C40(TOTAL)	18.725f	694627	267.003		m

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42130.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 16:16:18
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 08:58:23 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42151.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 13:15:26
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:14:16 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	0.000	0	N.D.		
22)S	1-Chlorooctadecane	0.000	0	N.D.		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		
9)AT	n-Eicosane (C20)	0.000	0	N.D.		
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		
11)AT	n-Docosane (C22)	0.000	0	N.D.		
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		
14)AT	n-Octacosane (C28)	0.000	0	N.D.		
15)BT	n-Triacontane (C30)	0.000	0	N.D.		
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	3.198	228448	84.829		m
24)B	>C28-C40(Total)	18.536f	455341	188.264		m
25)t	C9-C40(TOTAL)	18.536f	683622	262.773		m

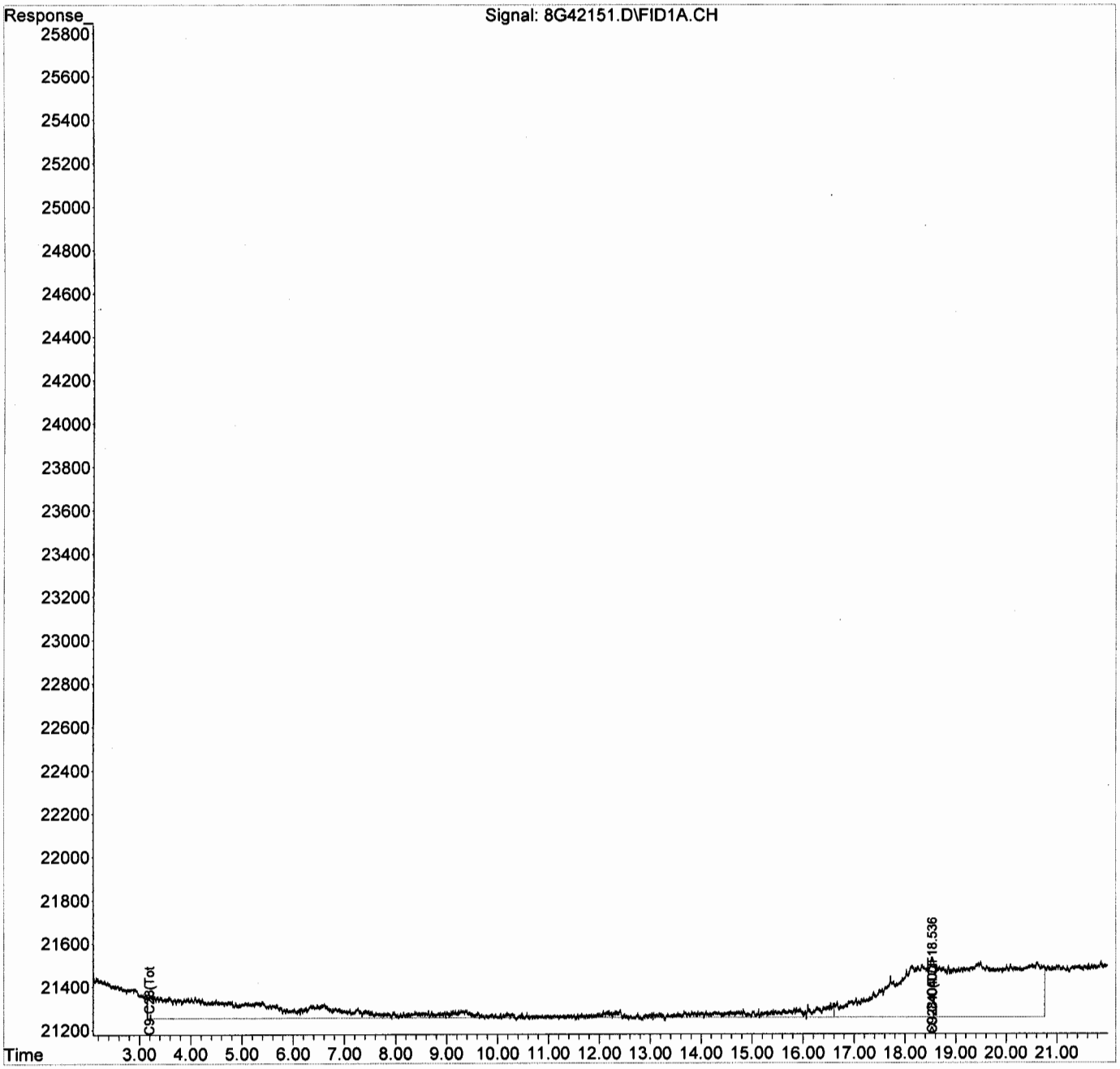
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42151.D
Signal(s) : FID1A.CH
Acq On : 03-Aug-13, 13:15:26
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:14:16 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0296

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42190.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 10:18:27
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:23:54 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

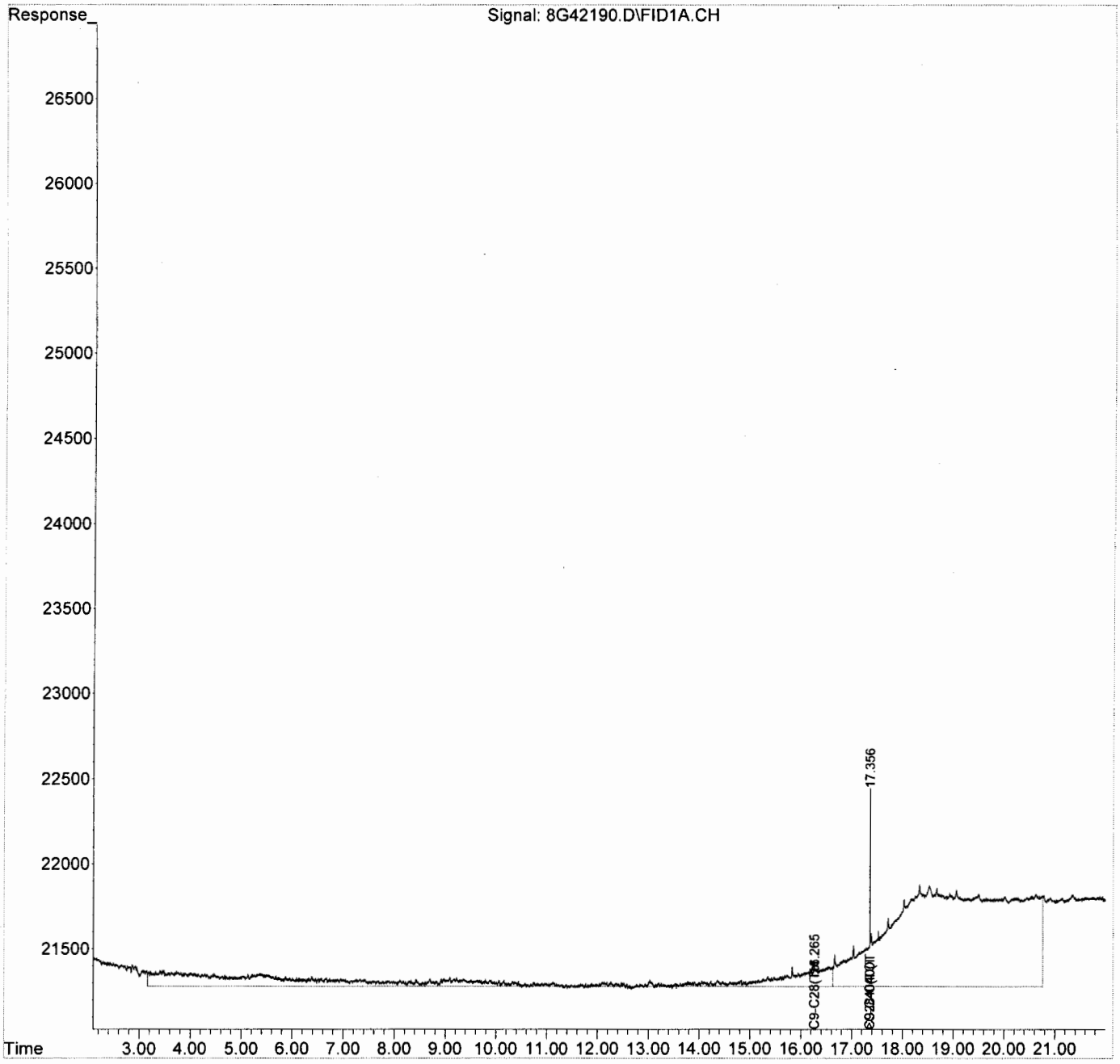
	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	0.000	0	N.D.		
22)S	1-Chlorooctadecane	0.000	0	N.D.		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		
9)AT	n-Eicosane (C20)	0.000	0	N.D.		
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		
11)AT	n-Docosane (C22)	0.000	0	N.D.		
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		
14)AT	n-Octacosane (C28)	0.000	0	N.D.		
15)BT	n-Triacontane (C30)	0.000	0	N.D.		
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	16.265f	259169	96.236		m
24)B	>C28-C40(Total)	17.356	1072017	443.233		m
25)t	C9-C40(TOTAL)	17.356f	1324167	508.987		m

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42190.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 10:18:27
Operator : KD/RAK/MS
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 12:23:54 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0298

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42132.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 17:17:22
Operator : KD/RAK/MS
Sample : SMB25787(MS)
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:02:14 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.413	337660	100.181		
22)S	1-Chlorooctadecane	13.696	263536	102.699		
Target Compounds						
1)AT	n-Nonane (C9)	3.277	173707	65.977		
2)AT	n-Decane (C10)	4.334	238219	88.547		
3)	Naphthalene	6.305	332405	106.812		
4)AT	n-Dodecane (C12)	6.374	295255	108.255		
5)	2-Methylnaphthalene	7.357	326547	106.941		
6)AT	n-Tetradecane (C14)	8.202	303282	111.021		
7)AT	n-Hexadecane (C16)	9.876	300508	110.085		
8)AT	n-Octadecane (C18)	11.631	285417	104.856		
9)AT	n-Eicosane (C20)	13.179	282276	103.684		
10)AT	n-Heneicosane (C21)	13.759	280909	102.646		
11)AT	n-Docosane (C22)	14.265	275090	101.330		
12)AT	n-Tetracosane (C24)	15.131	268327	99.719		
13)AT	n-Hexacosane (C26)	15.876	266427	101.239		
14)AT	n-Octacosane (C28)	16.540	258632	100.015		
15)BT	n-Triacontane (C30)	17.150	258627	100.355		
16)BT	n-Dotriacontane(C32)	17.720	255353	101.172		
17)BT	n-Tetratriacontane (C34	18.264	250734	102.988		
18)BT	n-Hexatriacontane (C36)	18.870	250978	104.326		
19)BT	n-Octatriacontane (C38)	19.635	243135	104.658		
20)BT	n-Tetracontane (C40)	20.639	238443	106.103		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

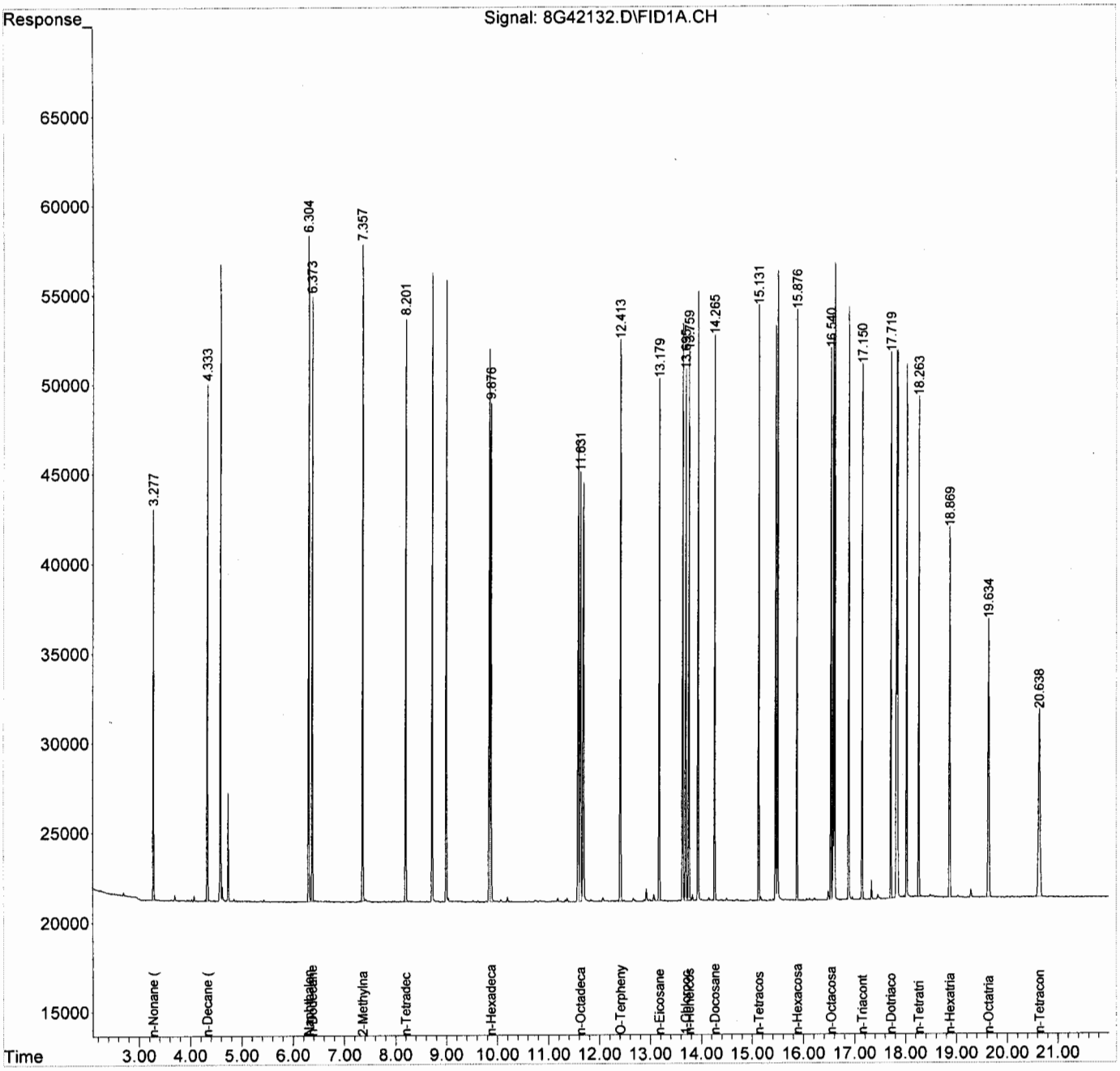
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42132.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 17:17:22
Operator : KD/RAK/MS
Sample : SMB25787(MS)
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:02:14 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0300

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42133.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 17:47:46
Operator : KD/RAK/MS
Sample : SMB25787(MSD)
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:02:38 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.414	360761	107.035		
22)S	1-Chlorooctadecane	13.696	279831	109.049		
Target Compounds						
1)AT	n-Nonane (C9)	3.277	205910	78.208		
2)AT	n-Decane (C10)	4.334	265018	98.507		
3)	Naphthalene	6.305	367509	118.092		
4)AT	n-Dodecane (C12)	6.373	321176	117.759		
5)	2-Methylnaphthalene	7.357	363301	118.977		
6)AT	n-Tetradecane (C14)	8.202	335078	122.661		
7)AT	n-Hexadecane (C16)	9.876	338943	124.164		
8)AT	n-Octadecane (C18)	11.633	323070	118.688		
9)AT	n-Eicosane (C20)	13.179	313196	115.041		
10)AT	n-Heneicosane (C21)	13.759	306204	111.889		
11)AT	n-Docosane (C22)	14.265	297425	109.557		
12)AT	n-Tetracosane (C24)	15.132	279002	103.687		
13)AT	n-Hexacosane (C26)	15.876	269035	102.230		
14)AT	n-Octacosane (C28)	16.540	255533	98.816		
15)BT	n-Triacontane (C30)	17.149	254459	98.738		
16)BT	n-Dotriacontane(C32)	17.722	252437	100.016		
17)BT	n-Tetratriacontane (C34	18.269	249933	102.659		
18)BT	n-Hexatriacontane (C36)	18.877	250380	104.077		
19)BT	n-Octatriacontane (C38)	19.644	244939	105.435		
20)BT	n-Tetracontane (C40)	20.647	241560	107.490		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

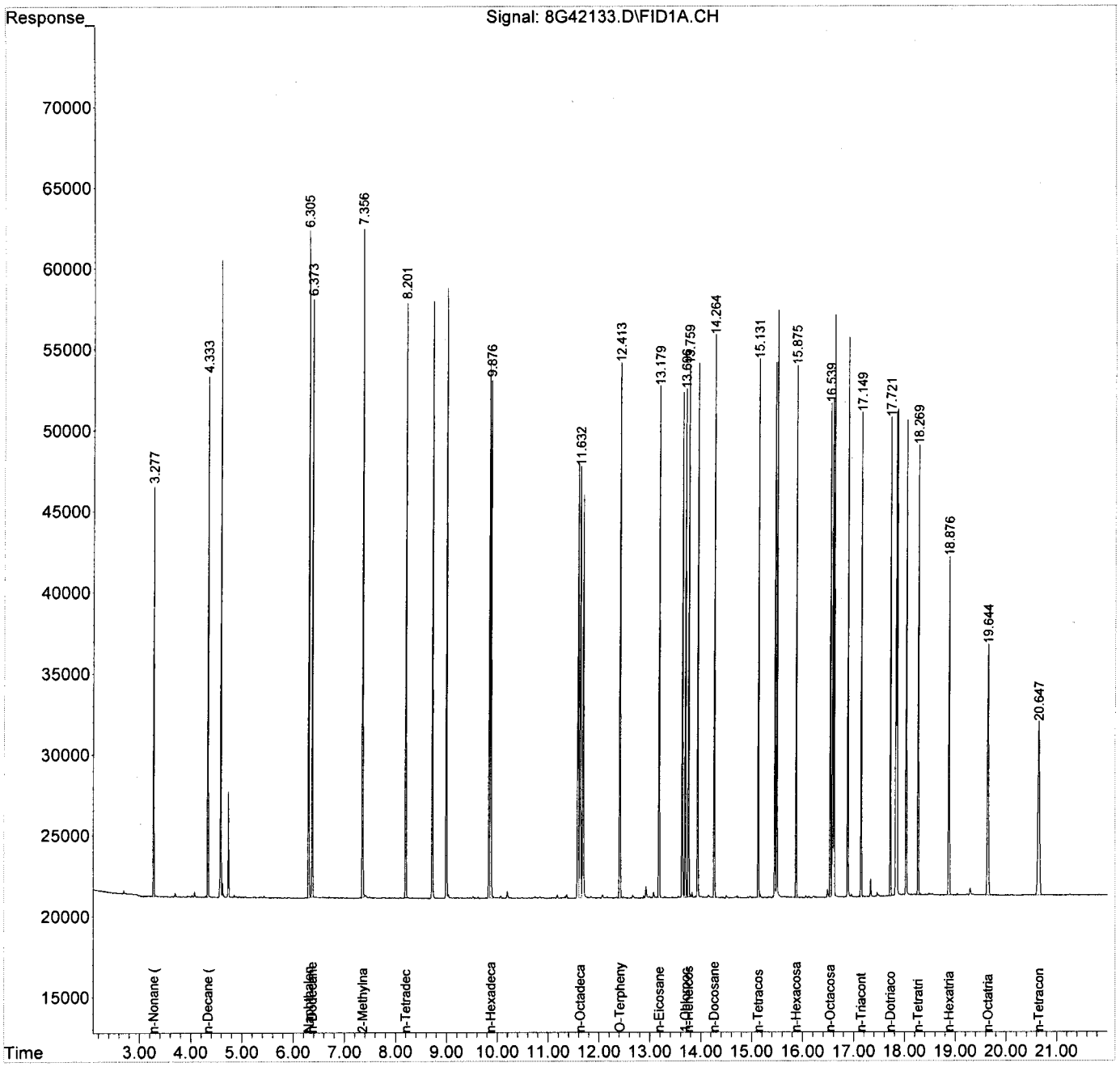
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42133.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 17:47:46
Operator : KD/RAK/MS
Sample : SMB25787(MSD)
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:02:38 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0302

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42134.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 18:18:13
Operator : KD/RAK/MS
Sample : SMB25787(DIESEL)(MS)
Misc : S.TPH
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:04:26 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.414	318968	94.635		
22)S	1-Chlorooctadecane	13.695	243443	94.869		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		d
2)AT	n-Decane (C10)	0.000	0	N.D.		d
3)	Naphthalene	0.000	0	N.D.		d
4)AT	n-Dodecane (C12)	0.000	0	N.D.		d
5)	2-Methylnaphthalene	0.000	0	N.D.		d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	12.414f	9059873	3364.179		m
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

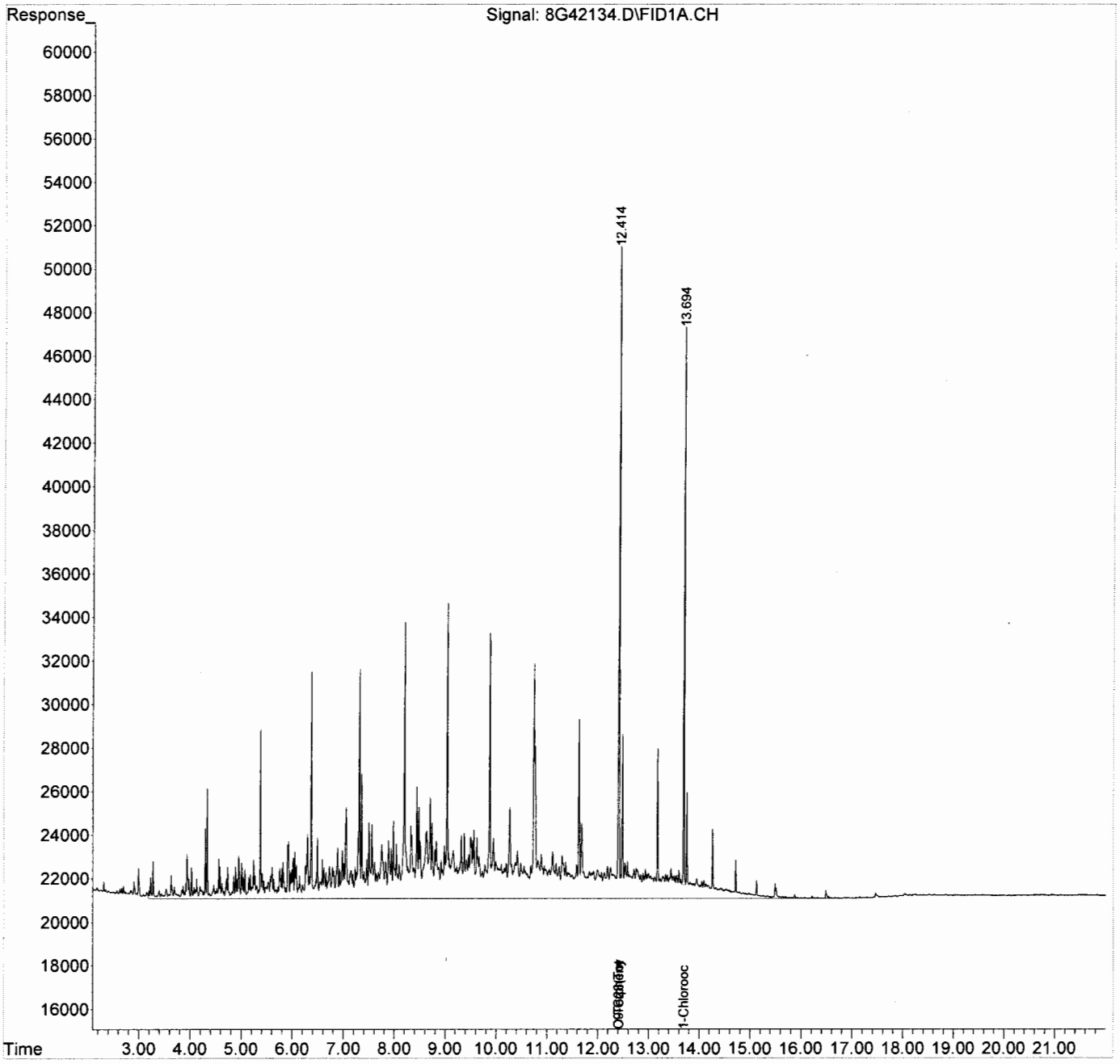
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42134.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 18:18:13
Operator : KD/RAK/MS
Sample : SMB25787(DIESEL)(MS)
Misc : S.TPH
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:04:26 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0304

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42135.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 18:48:43
Operator : KD/RAK/MS
Sample : SMB25787(DIESEL)(MSD)
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:04:06 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

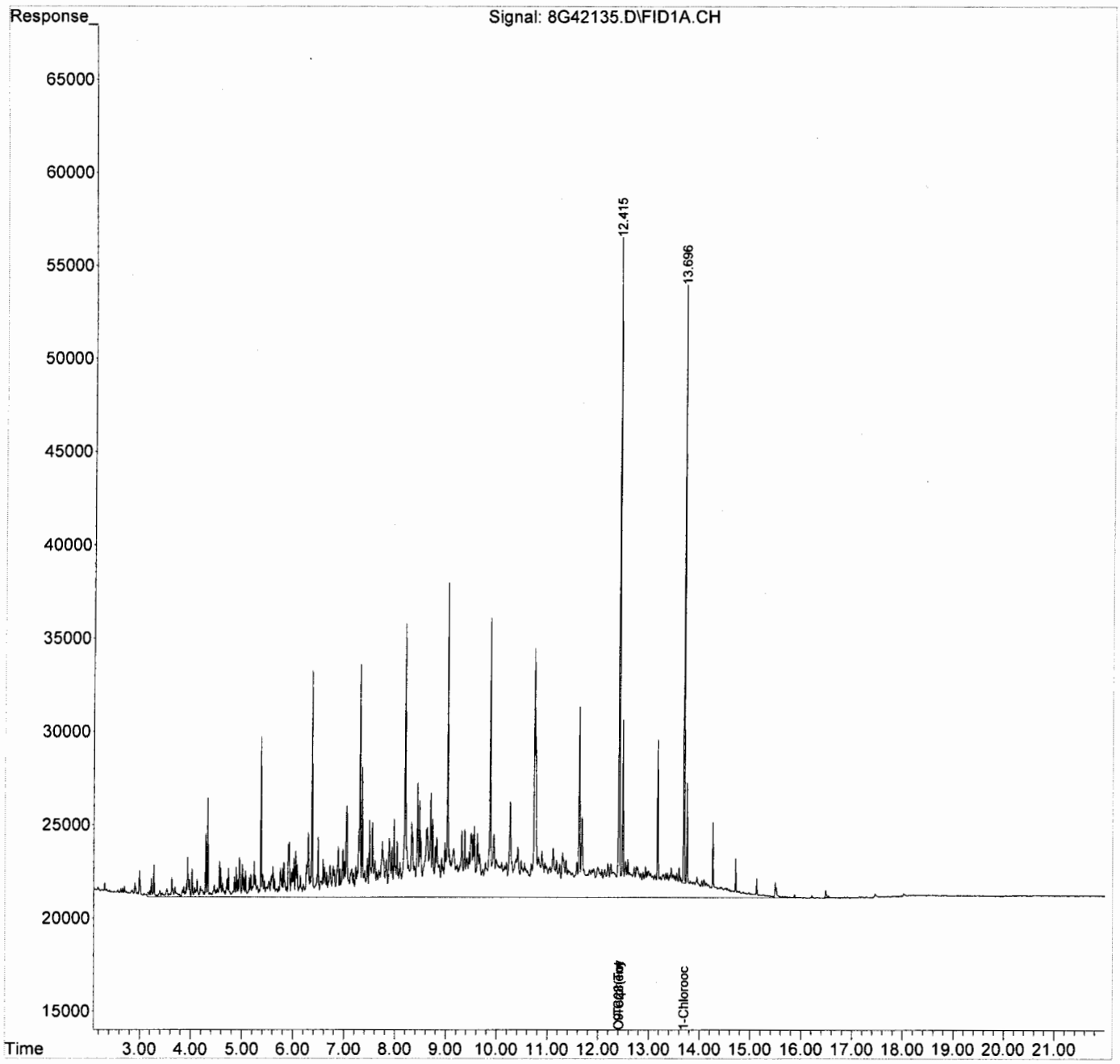
	Compound	R.T.	Response	Conc	Units
System Monitoring Compounds					
21)S	O-Terphenyl	12.415	388013	115.120	
22)S	1-Chlorooctadecane	13.696	295431	115.129	
Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.	d
2)AT	n-Decane (C10)	0.000	0	N.D.	d
3)	Naphthalene	0.000	0	N.D.	d
4)AT	n-Dodecane (C12)	0.000	0	N.D.	d
5)	2-Methylnaphthalene	0.000	0	N.D.	d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.	d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.	d
8)AT	n-Octadecane (C18)	0.000	0	N.D.	d
9)AT	n-Eicosane (C20)	0.000	0	N.D.	d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.	d
11)AT	n-Docosane (C22)	0.000	0	N.D.	d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.	d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.	d
14)AT	n-Octacosane (C28)	0.000	0	N.D.	d
15)BT	n-Triacontane (C30)	0.000	0	N.D.	d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.	d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.	d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.	d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.	d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.	
23)A	C9-C28(Total)	12.415f	10672013	3962.810	m
24)B	>C28-C40(Total)	0.000	0	N.D.	d
25)t	C9-C40(TOTAL)	0.000	0	N.D.	d

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_8\Data\08-02-13\
Data File : 8G42135.D
Signal(s) : FID1A.CH
Acq On : 02-Aug-13, 18:48:43
Operator : KD/RAK/MS
Sample : SMB25787(DIESEL)(MSD)
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 04 11:04:06 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0306

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42197.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 13:49:50
Operator : KD/RAK/MS
Sample : AC73723-001(10X)(MS)
Misc : S.TPH:10
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:21:56 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

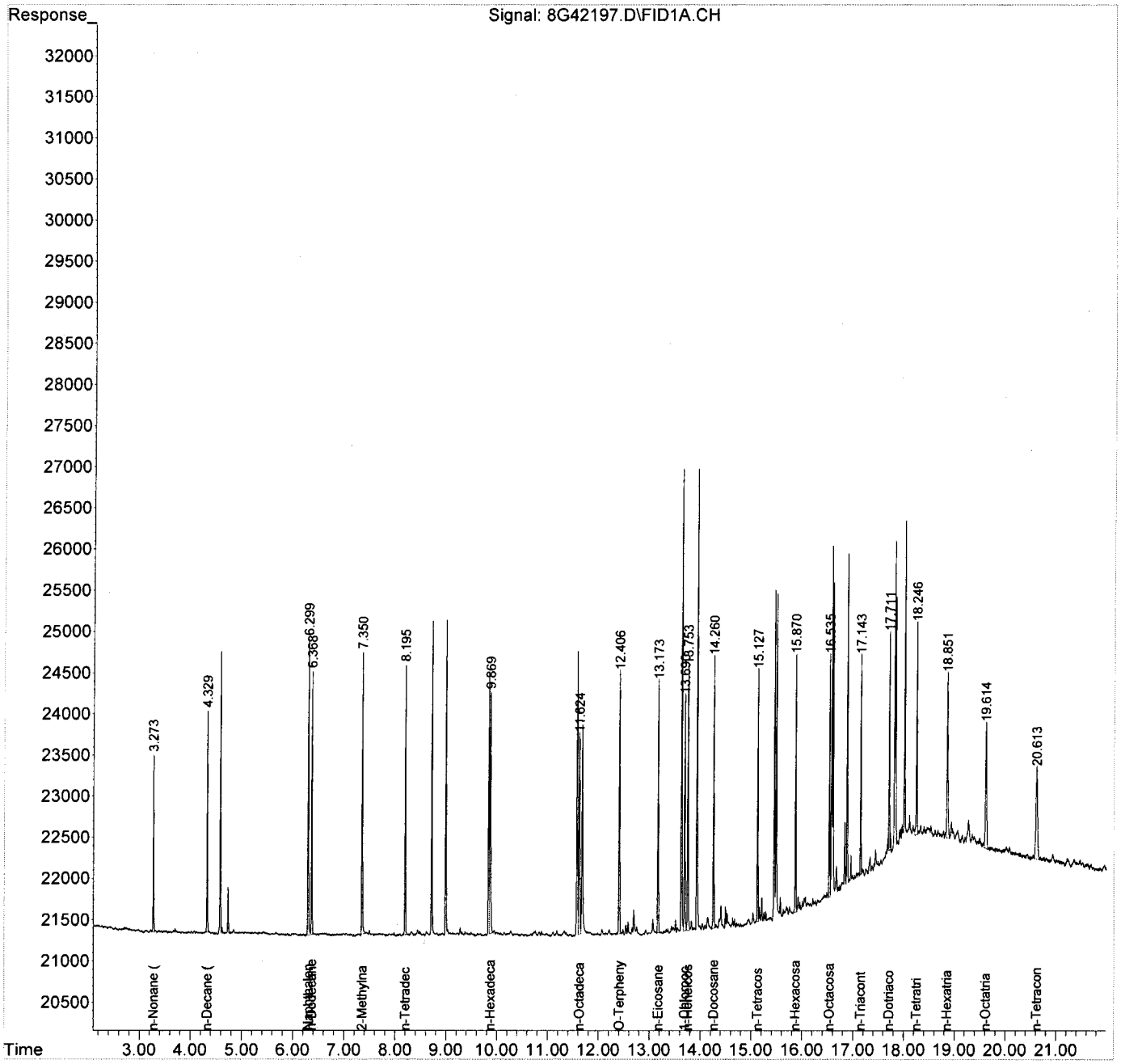
	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.406	35395	10.501		
22)S	1-Chlorooctadecane	13.691	26718	10.412		
Target Compounds						
1)AT	n-Nonane (C9)	3.273	17824	6.770		
2)AT	n-Decane (C10)	4.329	22417	8.333		
3)	Naphthalene	6.299	33049	10.620		
4)AT	n-Dodecane (C12)	6.368	28088	10.298		
5)	2-Methylnaphthalene	7.351	31667	10.371		
6)AT	n-Tetradecane (C14)	8.195	30254	11.075		
7)AT	n-Hexadecane (C16)	9.869	32714	11.984		
8)AT	n-Octadecane (C18)	11.624	31397	11.534		
9)AT	n-Eicosane (C20)	13.173	30072	11.046		
10)AT	n-Heneicosane (C21)	13.754	30647	11.199		
11)AT	n-Docosane (C22)	14.260	30099	11.087		
12)AT	n-Tetracosane (C24)	15.127	26387	9.806		
13)AT	n-Hexacosane (C26)	15.871	26317	10.000		
14)AT	n-Octacosane (C28)	16.535	24399	9.435		
15)BT	n-Triacontane (C30)	17.144	22186	8.609		
16)BT	n-Dotriacontane(C32)	17.711	22061	8.741		m
17)BT	n-Tetratriacontane (C34	18.246	24480	10.055		
18)BT	n-Hexatriacontane (C36)	18.851	27048	11.243		m
19)BT	n-Octatriacontane (C38)	19.614	23879	10.279		
20)BT	n-Tetracontane (C40)	20.614	24813	11.041		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42197.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 13:49:50
Operator : KD/RAK/MS
Sample : AC73723-001(10X)(MS)
Misc : S.TPH:10
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:21:56 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0308

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42198.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 14:19:57
Operator : KD/RAK/MS
Sample : AC73723-001(10X)(DUP)
Misc : S.TPH:10
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:23:44 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.406	27234	8.080		
22)S	1-Chlorooctadecane	13.691	19194	7.480		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		d
2)AT	n-Decane (C10)	0.000	0	N.D.		d
3)	Naphthalene	0.000	0	N.D.		d
4)AT	n-Dodecane (C12)	0.000	0	N.D.		d
5)	2-Methylnaphthalene	0.000	0	N.D.		d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	13.629f	780816	289.938		m
24)B	>C28-C40(Total)	18.010f	2817744	1165.016		m
25)t	C9-C40(TOTAL)	13.629f	3596973	1382.615		m

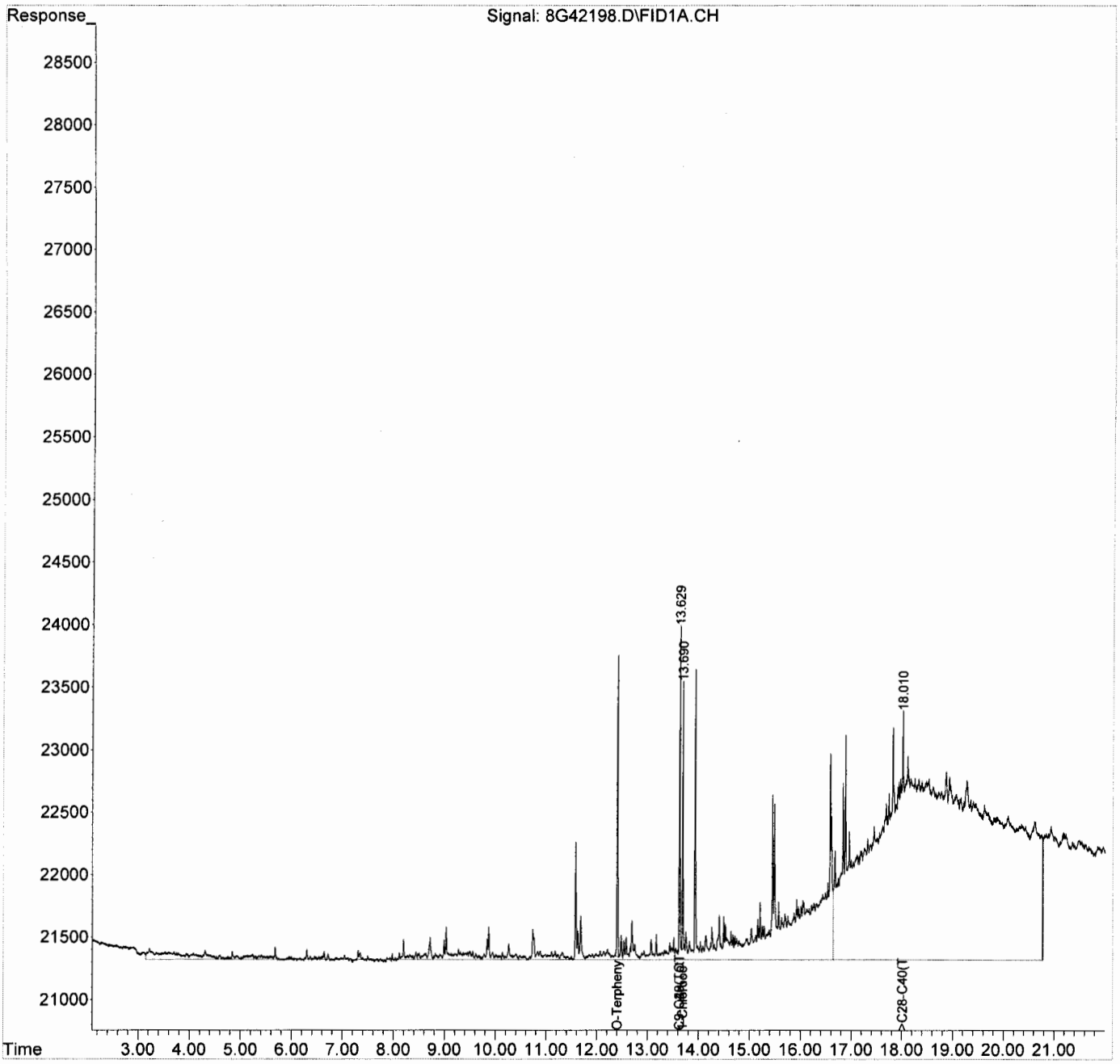
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42198.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 14:19:57
Operator : KD/RAK/MS
Sample : AC73723-001(10X)(DUP)
Misc : S.TPH:10
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:23:44 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3080110 0310

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42199.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 14:50:19
Operator : KD/RAK/MS
Sample : AC73723-001(10X)
Misc : S.TPH:10
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:30:13 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.406	29924	8.878		
22)S	1-Chlorooctadecane	13.690	23812	9.279		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		d
2)AT	n-Decane (C10)	0.000	0	N.D.		d
3)	Naphthalene	0.000	0	N.D.		d
4)AT	n-Dodecane (C12)	0.000	0	N.D.		d
5)	2-Methylnaphthalene	0.000	0	N.D.		d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		d
23)A	C9-C28(Total)	13.629f	1263031	468.998		m
24)B	>C28-C40(Total)	16.878	3526060	1457.874		m
25)t	C9-C40(TOTAL)	13.629f	4790271	1841.299		m

(f)=RT Delta > 1/2 Window (m)=manual int.

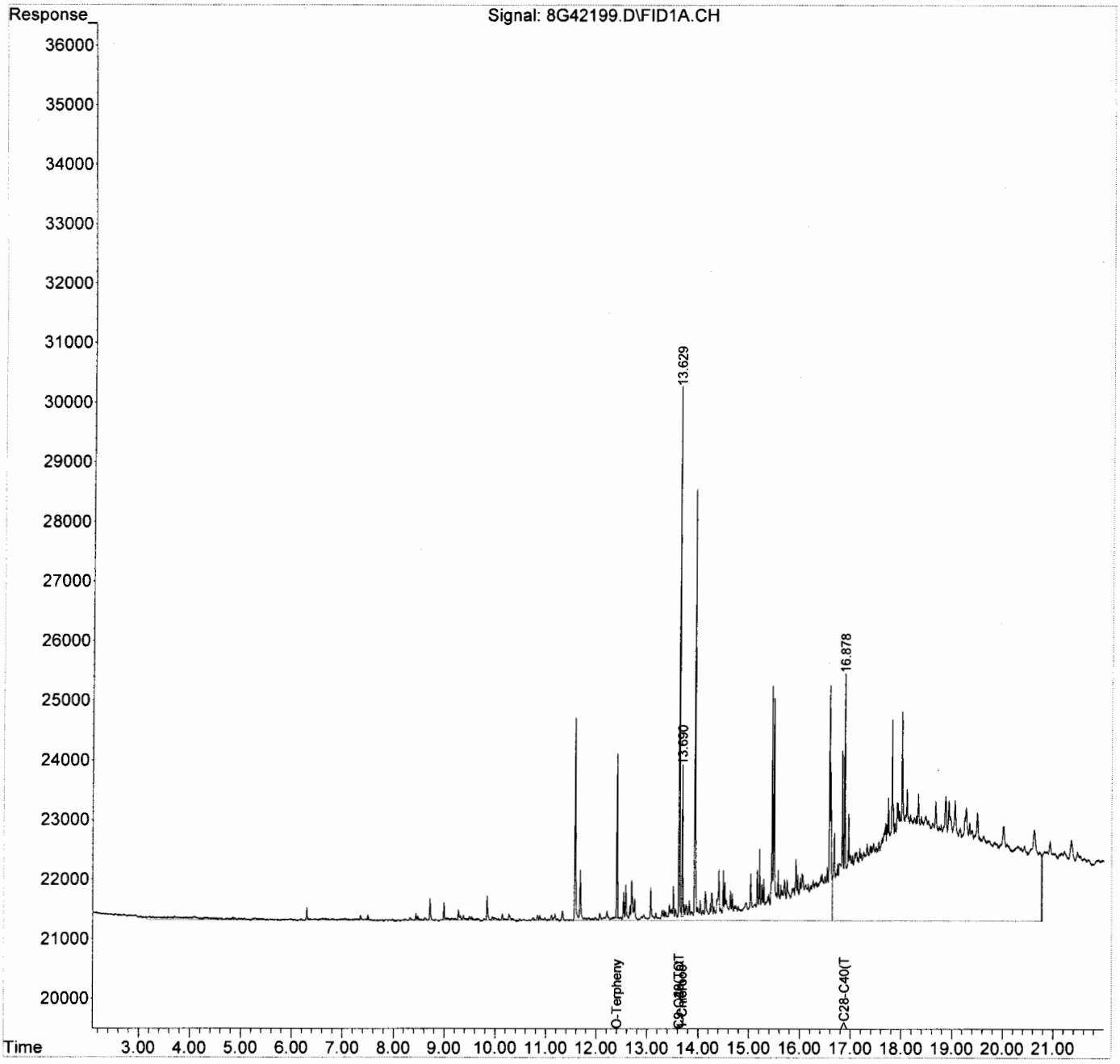
Quantitation Report (QT Reviewed)

3080110 0311

Data Path : G:\Gcdata\2013\GC_8\Data\08-04-13\
Data File : 8G42199.D
Signal(s) : FID1A.CH
Acq On : 04-Aug-13, 14:50:19
Operator : KD/RAK/MS
Sample : AC73723-001(10X)
Misc : S.TPH:10
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 05 15:30:13 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0715M.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Metal Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC73771-001	% Solid:	91	Lab Name:	Veritech	Nras No:	
Client Id:	BB-COMP-1-0801113	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/1/2013	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	220	8900	1	0.5	50	08/06/13	26592	S15344D3	21	P	PEICPRAD3A
7440-36-0	Antimony	2.2	ND	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-38-2	Arsenic	2.2	8.1	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-39-3	Barium	11	74	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-41-7	Beryllium	0.66	0.80	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-43-9	Cadmium	0.66	ND	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-70-2	Calcium	1100	2600	1	0.5	50	08/06/13	26592	S15344D3	21	P	PEICPRAD3A
7440-47-3	Chromium	5.5	21	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-48-4	Cobalt	2.7	9.4	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-50-8	Copper	5.5	38	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7439-89-6	Iron	220	17000	1	0.5	50	08/06/13	26592	S15344D3	21	P	PEICPRAD3A
7439-92-1	Lead	5.5	80	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7439-95-4	Magnesium	550	4300	1	0.5	50	08/06/13	26592	S15344D3	21	P	PEICPRAD3A
7439-96-5	Manganese	11	450	1	0.5	50	08/06/13	26592	S15344D3	21	P	PEICPRAD3A
7439-97-6	Mercury	0.092	ND	1	0.15	25	08/06/13	26592	H15344Sb	20	CV	HGCV1A
7440-02-0	Nickel	5.5	34	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-09-7	Potassium	550	1100	1	0.5	50	08/06/13	26592	S15344D3	21	P	PEICPRAD3A
7782-49-2	Selenium	2.0	ND	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-22-4	Silver	1.6	ND	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-23-5	Sodium	270	ND	1	0.5	50	08/06/13	26592	S15344D3	21	P	PEICPRAD3A
7440-28-0	Thallium	1.3	ND	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-62-2	Vanadium	11	35	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A
7440-66-6	Zinc	11	88	1	0.5	50	08/02/13	26592	S15344A3	22	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC73771-002	% Solid:	89	Lab Name:	Veritech	Nras No:	
Client Id:	BB-COMP-2-0801113	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/1/2013	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	220	9500	1	0.5	50	08/06/13	26592	S15344D3	13	P	PEICPRAD3A
7440-36-0	Antimony	2.2	ND	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-38-2	Arsenic	2.2	8.3	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-39-3	Barium	11	78	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-41-7	Beryllium	0.67	0.85	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-43-9	Cadmium	0.67	ND	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-70-2	Calcium	1100	2100	1	0.5	50	08/06/13	26592	S15344D3	13	P	PEICPRAD3A
7440-47-3	Chromium	5.6	18	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-48-4	Cobalt	2.8	8.1	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-50-8	Copper	5.6	36	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7439-89-6	Iron	220	17000	1	0.5	50	08/06/13	26592	S15344D3	13	P	PEICPRAD3A
7439-92-1	Lead	5.6	69	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7439-95-4	Magnesium	560	4300	1	0.5	50	08/06/13	26592	S15344D3	13	P	PEICPRAD3A
7439-96-5	Manganese	11	430	1	0.5	50	08/06/13	26592	S15344D3	13	P	PEICPRAD3A
7439-97-6	Mercury	0.094	ND	1	0.15	25	08/06/13	26592	H15344Sb	16	CV	HGCV1A
7440-02-0	Nickel	5.6	16	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-09-7	Potassium	560	1200	1	0.5	50	08/06/13	26592	S15344D3	13	P	PEICPRAD3A
7782-49-2	Selenium	2.0	ND	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-22-4	Silver	1.7	ND	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-23-5	Sodium	280	ND	1	0.5	50	08/06/13	26592	S15344D3	13	P	PEICPRAD3A
7440-28-0	Thallium	1.3	ND	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-62-2	Vanadium	11	37	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A
7440-66-6	Zinc	11	76	1	0.5	50	08/02/13	26592	S15344A3	14	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 26592 (100) % Solid: 0 Lab Name: Veritech
Client Id: MB 26592 (100) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	0.5	50	08/06/13	26592	S15344D3	10	P	PEICPRAD3A
7440-36-0	Antimony	2.0	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-38-2	Arsenic	2.0	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-39-3	Barium	10	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-41-7	Beryllium	0.60	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-43-9	Cadmium	0.60	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-70-2	Calcium	1000	ND	1	0.5	50	08/06/13	26592	S15344D3	10	P	PEICPRAD3A
7440-47-3	Chromium	5.0	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-48-4	Cobalt	2.5	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-50-8	Copper	5.0	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7439-89-6	Iron	200	ND	1	0.5	50	08/06/13	26592	S15344D3	10	P	PEICPRAD3A
7439-92-1	Lead	5.0	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7439-95-4	Magnesium	500	ND	1	0.5	50	08/06/13	26592	S15344D3	10	P	PEICPRAD3A
7439-96-5	Manganese	10	ND	1	0.5	50	08/06/13	26592	S15344D3	10	P	PEICPRAD3A
7439-98-7	Molybdenum	2.5	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-02-0	Nickel	5.0	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-09-7	Potassium	500	ND	1	0.5	50	08/06/13	26592	S15344D3	10	P	PEICPRAD3A
7782-49-2	Selenium	1.8	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-22-4	Silver	1.5	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-23-5	Sodium	250	ND	1	0.5	50	08/06/13	26592	S15344D3	10	P	PEICPRAD3A
7440-28-0	Thallium	1.2	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-31-5	Tin	5.7	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-32-6	Titanium	35	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-62-2	Vanadium	10	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A
7440-66-6	Zinc	10	ND	1	0.5	50	08/02/13	26592	S15344A3	11	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 26592 (167) % Solid: 0 Lab Name: Veritech
Client Id: MB 26592 (167) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7439-97-6	Mercury	0.083	ND	1	0.15	25	08/06/13	26592	H15344Sb	11	CV	HGCV1A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/02/13
Data File: S15344A3
Prep Batch: 26592
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV (2) V-168169-7	Rec	CCV V-168988-19	Rec	CCV V-168988-30	Rec	CCV V-168988-41	Rec	CCV V-168988-50	Rec		Rec		Rec		Rec
Antimony	1/.5	1.00829	101	0.49969	100	0.50163	100	0.49429	99	0.48541	97						
Arsenic	1/.5	1.01179	101	0.49564	99	0.49122	98	0.49663	99	0.48342	97						
Barium	1/.5	1.01605	102	0.51177	102	0.51462	103	0.51200	102	0.51227	102						
Beryllium	1/.5	1.00589	101	0.50577	101	0.50184	100	0.50438	101	0.50072	100						
Cadmium	1/.5	1.01027	101	0.50518	101	0.50856	102	0.50440	101	0.50829	102						
Chromium	1/.5	1.00753	101	0.50780	102	0.51463	103	0.51009	102	0.51158	102						
Cobalt	1/.5	1.01181	101	0.51385	103	0.51723	103	0.51625	103	0.51515	103						
Copper	1/.5	1.00088	100	0.50232	100	0.50863	102	0.50562	101	0.51261	103						
Lead	1/.5	1.00270	100	0.51161	102	0.51034	102	0.50945	102	0.50125	100						
Molybdenum	1/.5	1.01274	101	0.51201	102	0.51123	102	0.50748	101	0.50079	100						
Nickel	1/.5	0.99387	99	0.50521	101	0.51175	102	0.50984	102	0.50935	102						
Selenium	1/.5	1.01500	102	0.50515	101	0.50562	101	0.51065	102	0.49717	99						
Silver	0.2/0.1	0.20189	101	0.10097	101	0.10246	102	0.10137	101	0.10310	103						
Thallium	1/.5	1.02829	103	0.54658	109	0.53893	108	0.54206	108	0.54388	109						
Vanadium	1/.5	0.99703	100	0.50489	101	0.50962	102	0.50677	101	0.50693	101						
Zinc	1/.5	1.00743	101	0.50415	101	0.50803	102	0.50484	101	0.50588	101						

Notes:
a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits:
ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-11

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/06/13
Data File: S15344D3
Prep Batch: 26592
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICPRAD3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV (2) V-168169-6	Rec	CCV V-168988-18	Rec	CCV V-168988-26	Rec	CCV V-168988-33	Rec	CCV V-168988-40	Rec		Rec		Rec		Rec
Aluminum	10/5	9.73766	97	4.98308	100	5.13391	103	5.06707	101	5.07926	102						
Calcium	100/50	94.70030	95	49.92660	100	49.81070	100	49.97700	100	50.20360	100						
Iron	10/5	9.46969	95	5.00807	100	5.03235	101	5.25931	105	5.03060	101						
Magnesium	100/50	94.66540	95	49.65730	99	49.82520	100	49.91100	100	50.21500	100						
Manganese	1/.5	0.94347	94	0.49413	99	0.49219	98	0.49955	100	0.49485	99						
Potassium	100/50	94.70340	95	49.53350	99	48.95710	98	49.14840	98	48.83710	98						
Sodium	100/50	94.96500	95	49.56040	99	48.94010	98	49.17440	98	49.17920	98						

Notes: a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits: ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-11

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/06/13
Data File: H15344Sb
Prep Batch: 26592
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

		ICV (2)-9		CCV-21		CCV-33		CCV-38									
Analyte	ICV/CCV Amt		Rec		Rec		Rec		Rec		Rec		Rec		Rec		Rec
Mercury	20/10	20.73395	104	10.41688	104	10.20092	102	10.10901	101								

Notes:
a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits:
ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-11

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/02/13
Data File: S15344A3
Prep Batch: 26592
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-166272-8	CCB V-166272-20	CCB V-166272-31	CCB V-166272-42	CCB V-166272-51	MB 26592 (100)-11		
Antimony	.02 U	.02 U	.02 U	.02 U	.02 U	2 U		
Arsenic	.02 U	.02 U	.02 U	.02 U	.02 U	2 U		
Barium	.1 U	.1 U	.1 U	.1 U	.1 U	10 U		
Beryllium	.006 U	.006 U	.006 U	.006 U	.006 U	.6 U		
Cadmium	.006 U	.006 U	.006 U	.006 U	.006 U	.6 U		
Chromium	.05 U	.05 U	.05 U	.05 U	.05 U	5 U		
Cobalt	.025 U	.025 U	.025 U	.025 U	.025 U	2.5 U		
Copper	.05 U	.05 U	.05 U	.05 U	.05 U	5 U		
Lead	.05 U	.05 U	.05 U	.05 U	.05 U	5 U		
Molybdenum	.025 U	.025 U	.025 U	.025 U	.025 U	2.5 U		
Nickel	.05 U	.05 U	.05 U	.05 U	.05 U	5 U		
Selenium	.018 U	.018 U	.018 U	.018 U	.018 U	1.8 U		
Silver	.015 U	.015 U	.015 U	.015 U	.015 U	1.5 U		
Thallium	.012 U	.012 U	.012 U	.012 U	.012 U	1.2 U		
Vanadium	.1 U	.1 U	.1 U	.1 U	.1 U	10 U		
Zinc	.1 U	.1 U	.1 U	.1 U	.1 U	10 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/06/13
Data File: S15344D3
Prep Batch: 26592
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICPRAD3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-166272-7	CCB V-166272-19	CCB V-166272-27	CCB V-166272-34	CCB V-166272-41	MB 26592 (100)-10		
Aluminum	2 U	2 U	2 U	2 U	2 U	200 U		
Calcium	10 U	10 U	10 U	10 U	10 U	1000 U		
Iron	2 U	2 U	2 U	2 U	2 U	200 U		
Magnesium	5 U	5 U	5 U	5 U	5 U	500 U		
Manganese	.1 U	.1 U	.1 U	.1 U	.1 U	10 U		
Potassium	5 U	5 U	5 U	5 U	5 U	500 U		
Sodium	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	250 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/06/13
Data File: H15344Sb
Prep Batch: 26592
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-39	MB 26592 (167)-11			
Mercury	.5 U	.5 U	.5 U	.5 U	83 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 08/02/13
Data File: S15344A3
Prep Batch: 26592
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-169160-9	Rec	ICSAB V-169161-10	Rec	ICSA V-169160-28	Rec	ICSAB V-169161-29	Rec	ICSA V-169160-39	Rec	ICSAB V-169161-40	Rec	ICSA V-169160-48	Rec	ICSAB V-169161-49	Rec
Aluminum	500	508.254	102	506.56700	101	511.425	102	502.34300	100	500.877	100	501.29500	100	504.194	101	508.41800	102
Antimony	1	U		1.07215	107	U		1.05949	106	U		1.05080	105	U		1.04549	105
Arsenic	1	U		1.04387	104	U		1.03133	103	U		1.01898	102	U		1.01299	101
Barium	.5	U		0.53811	108	U		0.53363	107	U		0.52947	106	U		0.52913	106
Beryllium	.5	U		0.52019	104	U		0.51435	103	U		0.51136	102	U		0.51496	103
Cadmium	1	U		1.05959	106	U		1.04747	105	U		1.04449	104	U		1.05057	105
Calcium	500	473.451	95	467.70800	94	477.657	96	461.98200	92	467.105	93	460.87000	92	473.797	95	464.04500	93
Chromium	.5	U		0.50326	101	U		0.49831	100	U		0.49687	99	U		0.49995	100
Cobalt	.5	U		0.49478	99	U		0.48912	98	U		0.48659	97	U		0.48686	97
Copper	.5	U		0.53770	108	U		0.53164	106	U		0.53063	106	U		0.53935	108
Iron	200	187.303	94	187.37800	94	189.629	95	182.13900	91	185.908	93	180.94600	90	186.405	93	180.96700	90
Lead	1	U		0.97127	97	U		0.95618	96	U		0.95333	95	U		0.94572	95
Magnesium	500	513.074	103	517.39700	103	517.795	104	503.37100	101	504.883	101	495.41400	99	500.228	100	488.14600	98
Nickel	1	U		0.94372	94	U		0.93298	93	U		0.92805	93	U		0.93522	94
Selenium	1	U		1.03690	104	U		1.02533	103	U		1.02423	102	U		1.02570	103
Silver	1	U		1.11322	111	U		1.10709	111	U		1.10499	110	U		1.12164	112
Thallium	1	U		0.98186	98	U		0.98506	99	U		0.98349	98	U		1.01434	101
Vanadium	.5	U		0.49913	100	U		0.49386	99	U		0.48871	98	U		0.49198	98
Zinc	1	U		0.96276	96	U		0.95197	95	U		0.94692	95	U		0.94548	95

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 08/06/13
Data File: S15344D3
Prep Batch: 26592
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICPRAD3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-169160-8	Rec	ICSAB V-169161-9	Rec	ICSA V-169160-24	Rec	ICSAB V-169161-25	Rec	ICSA V-169160-38	Rec	ICSAB V-169161-39	Rec		Rec		Rec
Aluminum	500	470.63	94	466.87400	93	474.741	95	467.90900	94	469.725	94	468.51900	94				
Calcium	500	459.771	92	456.35800	91	465.104	93	458.24700	92	460.167	92	459.10200	92				
Iron	200	177.548	89	176.58800	88	179.736	90	177.35200	89	178.153	89	178.00700	89				
Magnesium	500	464.056	93	461.62600	92	470.522	94	464.33400	93	466.318	93	465.77900	93				
Manganese	.5	U		0.47341	95	U		0.47397	95	U		0.48059	96				

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

FORM5/FORM7
SPIKE RECOVERY DATA
PREP BATCH: 26592

Instrument Type: ICP/HG
Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 26592

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	26592	1	S15344D3	12	63.2310	90.6	70		46	153
Antimony	26592	1	S15344A3	13	0.7331	1.06	69		1.9	219
Arsenic	26592	1	S15344A3	13	1.6904	1.82	93		83	118
Barium	26592	1	S15344A3	13	1.3825	1.43	97		83	117
Beryllium	26592	1	S15344A3	13	0.9195	0.983	94		84	116
Cadmium	26592	1	S15344A3	13	0.5879	0.604	97		83	117
Calcium	26592	1	S15344D3	12	56.0479	60.4	93		83	117
Chromium	26592	1	S15344A3	13	1.1870	1.25	95		82	118
Cobalt	26592	1	S15344A3	13	1.6377	1.63	100		85	115
Copper	26592	1	S15344A3	13	0.7922	0.801	99		84	116
Iron	26592	1	S15344D3	12	106.1720	129	82		51	150
Lead	26592	1	S15344A3	13	1.3082	1.36	96		84	117
Magnesium	26592	1	S15344D3	12	23.3231	26.4	88		75	124
Manganese	26592	1	S15344D3	12	2.6033	2.79	93		83	118
Mercury	26592	5	H15344Sb	15	11.8875	55.5	107		72	129
Nickel	26592	1	S15344A3	13	1.2714	1.28	99		84	116
Potassium	26592	1	S15344D3	12	23.7439	28.2	84		73	127
Selenium	26592	1	S15344A3	13	0.7958	0.859	93		80	120
Silver	26592	1	S15344A3	13	0.5952	0.613	97		66	134
Sodium	26592	1	S15344D3	12	3.9335	4.39	90		74	126
Thallium	26592	1	S15344A3	13	1.4289	1.44	99		81	119
Vanadium	26592	1	S15344A3	13	0.9211	1.04	89		75	124
Zinc	26592	1	S15344A3	13	1.9302	2.04	95		82	118

TxtQcType: LCS Matrix: SOIL SampleID: LCS 26592

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	26592	1	S15344D3	11	59.7671	90.6	66		46	153
Antimony	26592	1	S15344A3	12	0.7316	1.06	69		1.9	219
Arsenic	26592	1	S15344A3	12	1.6693	1.82	92		83	118
Barium	26592	1	S15344A3	12	1.3286	1.43	93		83	117
Beryllium	26592	1	S15344A3	12	0.9116	0.983	93		84	116
Cadmium	26592	1	S15344A3	12	0.5739	0.604	95		83	117
Calcium	26592	1	S15344D3	11	53.3266	60.4	88		83	117
Chromium	26592	1	S15344A3	12	1.1602	1.25	93		82	118
Cobalt	26592	1	S15344A3	12	1.6108	1.63	99		85	115
Copper	26592	1	S15344A3	12	0.7702	0.801	96		84	116
Iron	26592	1	S15344D3	11	100.7800	129	78		51	150
Lead	26592	1	S15344A3	12	1.2535	1.36	92		84	117
Magnesium	26592	1	S15344D3	11	21.9062	26.4	83		75	124
Manganese	26592	1	S15344D3	11	2.4380	2.79	87		83	118
Mercury	26592	5	H15344Sb	14	11.0173	55.5	99		72	129
Nickel	26592	1	S15344A3	12	1.2428	1.28	97		84	116
Potassium	26592	1	S15344D3	11	22.3560	28.2	79		73	127
Selenium	26592	1	S15344A3	12	0.7856	0.859	91		80	120
Silver	26592	1	S15344A3	12	0.5797	0.613	95		66	134
Sodium	26592	1	S15344D3	11	3.7922	4.39	86		74	126
Thallium	26592	1	S15344A3	12	1.4058	1.44	98		81	119
Vanadium	26592	1	S15344A3	12	0.9042	1.04	87		75	124
Zinc	26592	1	S15344A3	12	1.8900	2.04	93		82	118

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 26592

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MSD Matrix: SOIL SampleID: AC73771-002

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	26592	1	S15344D3	16	S15344D3	13	99.9327	84.7397	5.0	304	b	75	125
Antimony	26592	1	S15344A3	17	S15344A3	14	0.2886	0.02U	0.5	58	a	75	125
Arsenic	26592	1	S15344A3	17	S15344A3	14	0.5371	0.0742	0.5	93		75	125
Barium	26592	1	S15344A3	17	S15344A3	14	1.0865	0.6942	0.5	78		75	125
Beryllium	26592	1	S15344A3	17	S15344A3	14	0.4804	0.0076	0.5	95		75	125
Cadmium	26592	1	S15344A3	17	S15344A3	14	0.4857	0.006U	0.5	97		75	125
Calcium	26592	1	S15344D3	16	S15344D3	13	63.0252	18.7361	50	89		75	125
Chromium	26592	1	S15344A3	17	S15344A3	14	0.6405	0.1619	0.5	96		75	125
Cobalt	26592	1	S15344A3	17	S15344A3	14	0.5723	0.0719	0.5	100		75	125
Copper	26592	1	S15344A3	17	S15344A3	14	0.7940	0.3231	0.5	94		75	125
Iron	26592	1	S15344D3	16	S15344D3	13	154.9240	149.6880	5.0	105		75	125
Lead	26592	1	S15344A3	17	S15344A3	14	1.0734	0.6156	0.5	92		75	125
Magnesium	26592	1	S15344D3	16	S15344D3	13	83.0300	38.3688	50	89		75	125
Manganese	26592	1	S15344D3	16	S15344D3	13	4.2557	3.8218	0.5	87		75	125
Mercury	26592	1	H15344Sb	19	H15344Sb	16	10.8829	.5U	10	109		75	125
Nickel	26592	1	S15344A3	17	S15344A3	14	0.6244	0.1394	0.5	97		75	125
Potassium	26592	1	S15344D3	16	S15344D3	13	57.4114	10.7367	50	93		75	125
Selenium	26592	1	S15344A3	17	S15344A3	14	0.4532	0.018U	0.5	91		75	125
Silver	26592	1	S15344A3	17	S15344A3	14	0.0938	0.015U	0.10	94		75	125
Sodium	26592	1	S15344D3	16	S15344D3	13	47.2879	2.5U	50	95		75	125
Thallium	26592	1	S15344A3	17	S15344A3	14	0.4877	0.012U	0.5	98		75	125
Vanadium	26592	1	S15344A3	17	S15344A3	14	0.7941	0.3306	0.5	93		75	125
Zinc	26592	1	S15344A3	17	S15344A3	14	1.1453	0.6802	0.5	93		75	125

TxtQcType: MS Matrix: SOIL SampleID: AC73771-002

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	26592	1	S15344D3	15	S15344D3	13	104.5730	84.7397	5.0	397	b	75	125
Antimony	26592	1	S15344A3	16	S15344A3	14	0.2646	0.02U	0.5	53	a	75	125
Arsenic	26592	1	S15344A3	16	S15344A3	14	0.5285	0.0742	0.5	91		75	125
Barium	26592	1	S15344A3	16	S15344A3	14	1.1571	0.6942	0.5	93		75	125
Beryllium	26592	1	S15344A3	16	S15344A3	14	0.4640	0.0076	0.5	91		75	125
Cadmium	26592	1	S15344A3	16	S15344A3	14	0.4703	0.006U	0.5	94		75	125
Calcium	26592	1	S15344D3	15	S15344D3	13	69.0046	18.7361	50	101		75	125
Chromium	26592	1	S15344A3	16	S15344A3	14	0.6394	0.1619	0.5	96		75	125
Cobalt	26592	1	S15344A3	16	S15344A3	14	0.5610	0.0719	0.5	98		75	125
Copper	26592	1	S15344A3	16	S15344A3	14	0.8788	0.3231	0.5	111		75	125
Iron	26592	1	S15344D3	15	S15344D3	13	172.7020	149.6880	5.0	460	b	75	125
Lead	26592	1	S15344A3	16	S15344A3	14	1.2741	0.6156	0.5	132	a	75	125
Magnesium	26592	1	S15344D3	15	S15344D3	13	82.4397	38.3688	50	88		75	125
Manganese	26592	1	S15344D3	15	S15344D3	13	5.7731	3.8218	0.5	390	b	75	125
Mercury	26592	1	H15344Sb	18	H15344Sb	16	10.6726	.5U	10	107		75	125
Nickel	26592	1	S15344A3	16	S15344A3	14	0.6175	0.1394	0.5	96		75	125
Potassium	26592	1	S15344D3	15	S15344D3	13	57.1548	10.7367	50	93		75	125
Selenium	26592	1	S15344A3	16	S15344A3	14	0.4256	0.018U	0.5	85		75	125
Silver	26592	1	S15344A3	16	S15344A3	14	0.0896	0.015U	0.10	90		75	125
Sodium	26592	1	S15344D3	15	S15344D3	13	45.6802	2.5U	50	91		75	125
Thallium	26592	1	S15344A3	16	S15344A3	14	0.4697	0.012U	0.5	94		75	125
Vanadium	26592	1	S15344A3	16	S15344A3	14	0.7837	0.3306	0.5	91		75	125
Zinc	26592	1	S15344A3	16	S15344A3	14	1.2854	0.6802	0.5	121		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 26592

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 26592

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	26592	S15344D3	12	S15344D3	11	63.2310	59.7671	5.6		20
Antimony	26592	S15344A3	13	S15344A3	12	0.7331	0.7316	.21		20
Arsenic	26592	S15344A3	13	S15344A3	12	1.6904	1.6693	1.3		20
Barium	26592	S15344A3	13	S15344A3	12	1.3825	1.3286	4		20
Beryllium	26592	S15344A3	13	S15344A3	12	0.9195	0.9116	.86		20
Cadmium	26592	S15344A3	13	S15344A3	12	0.5879	0.5739	2.4		20
Calcium	26592	S15344D3	12	S15344D3	11	56.0479	53.3266	5		20
Chromium	26592	S15344A3	13	S15344A3	12	1.1870	1.1602	2.3		20
Cobalt	26592	S15344A3	13	S15344A3	12	1.6377	1.6108	1.7		20
Copper	26592	S15344A3	13	S15344A3	12	0.7922	0.7702	2.8		20
Iron	26592	S15344D3	12	S15344D3	11	106.1720	100.7800	5.2		20
Lead	26592	S15344A3	13	S15344A3	12	1.3082	1.2535	4.3		20
Magnesium	26592	S15344D3	12	S15344D3	11	23.3231	21.9062	6.3		20
Manganese	26592	S15344D3	12	S15344D3	11	2.6033	2.4380	6.6		20
Mercury	26592	H15344Sb	15	H15344Sb	14	11.8875	11.0173	7.6		20
Nickel	26592	S15344A3	13	S15344A3	12	1.2714	1.2428	2.3		20
Potassium	26592	S15344D3	12	S15344D3	11	23.7439	22.3560	6		20
Selenium	26592	S15344A3	13	S15344A3	12	0.7958	0.7856	1.3		20
Silver	26592	S15344A3	13	S15344A3	12	0.5952	0.5797	2.6		20
Sodium	26592	S15344D3	12	S15344D3	11	3.9335	3.7922	3.7		20
Thallium	26592	S15344A3	13	S15344A3	12	1.4289	1.4058	1.6		20
Vanadium	26592	S15344A3	13	S15344A3	12	0.9211	0.9042	1.9		20
Zinc	26592	S15344A3	13	S15344A3	12	1.9302	1.8900	2.1		20

TxtQcType: MR Matrix: SOIL SampleID: AC73771-002

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	26592	S15344D3	14	S15344D3	13	80.0387	84.7397	5.7		20
Antimony	26592	S15344A3	15	S15344A3	14	0.02U	0.02U	---		20
Arsenic	26592	S15344A3	15	S15344A3	14	0.0734	0.0742	1		20
Barium	26592	S15344A3	15	S15344A3	14	0.6910	0.6942	0.46		20
Beryllium	26592	S15344A3	15	S15344A3	14	0.0068	0.0076	10		20
Cadmium	26592	S15344A3	15	S15344A3	14	0.006U	0.006U	---		20
Calcium	26592	S15344D3	14	S15344D3	13	15.0517	18.7361	22	b	20
Chromium	26592	S15344A3	15	S15344A3	14	0.1601	0.1619	1.2		20
Cobalt	26592	S15344A3	15	S15344A3	14	0.0640	0.0719	12		20
Copper	26592	S15344A3	15	S15344A3	14	0.3554	0.3231	9.5		20
Iron	26592	S15344D3	14	S15344D3	13	135.5560	149.6880	9.9		20
Lead	26592	S15344A3	15	S15344A3	14	0.7075	0.6156	14		20
Magnesium	26592	S15344D3	14	S15344D3	13	34.2992	38.3688	11		20
Manganese	26592	S15344D3	14	S15344D3	13	2.9603	3.8218	25	a	20
Mercury	26592	H15344Sb	17	H15344Sb	16	.5U	.5U	---		20
Nickel	26592	S15344A3	15	S15344A3	14	0.1329	0.1394	4.8		20
Potassium	26592	S15344D3	14	S15344D3	13	9.2961	10.7367	14		20
Selenium	26592	S15344A3	15	S15344A3	14	0.018U	0.018U	---		20
Silver	26592	S15344A3	15	S15344A3	14	0.015U	0.015U	---		20
Sodium	26592	S15344D3	14	S15344D3	13	2.5U	2.5U	---		20
Thallium	26592	S15344A3	15	S15344A3	14	0.012U	0.012U	---		20
Vanadium	26592	S15344A3	15	S15344A3	14	0.3419	0.3306	3.4		20
Zinc	26592	S15344A3	15	S15344A3	14	0.7739	0.6802	13		20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 26592

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MSD Matrix: SOIL SampleID: AC73771-002

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	26592	S15344D3	16	S15344D3	15	99.9327	104.5730	4.5		20
Antimony	26592	S15344A3	17	S15344A3	16	0.2886	0.2646	8.7		20
Arsenic	26592	S15344A3	17	S15344A3	16	0.5371	0.5285	1.6		20
Barium	26592	S15344A3	17	S15344A3	16	1.0865	1.1571	6.3		20
Beryllium	26592	S15344A3	17	S15344A3	16	0.4804	0.4640	3.5		20
Cadmium	26592	S15344A3	17	S15344A3	16	0.4857	0.4703	3.2		20
Calcium	26592	S15344D3	16	S15344D3	15	63.0252	69.0046	9.1		20
Chromium	26592	S15344A3	17	S15344A3	16	0.6405	0.6394	.16		20
Cobalt	26592	S15344A3	17	S15344A3	16	0.5723	0.5610	2		20
Copper	26592	S15344A3	17	S15344A3	16	0.7940	0.8788	10		20
Iron	26592	S15344D3	16	S15344D3	15	154.9240	172.7020	11		20
Lead	26592	S15344A3	17	S15344A3	16	1.0734	1.2741	17		20
Magnesium	26592	S15344D3	16	S15344D3	15	83.0300	82.4397	.71		20
Manganese	26592	S15344D3	16	S15344D3	15	4.2557	5.7731	30	a	20
Mercury	26592	H15344Sb	19	H15344Sb	18	10.8829	10.6726	2		20
Nickel	26592	S15344A3	17	S15344A3	16	0.6244	0.6175	1.1		20
Potassium	26592	S15344D3	16	S15344D3	15	57.4114	57.1548	.45		20
Selenium	26592	S15344A3	17	S15344A3	16	0.4532	0.4256	6.3		20
Silver	26592	S15344A3	17	S15344A3	16	0.0938	0.0896	4.6		20
Sodium	26592	S15344D3	16	S15344D3	15	47.2879	45.6802	3.5		20
Thallium	26592	S15344A3	17	S15344A3	16	0.4877	0.4697	3.8		20
Vanadium	26592	S15344A3	17	S15344A3	16	0.7941	0.7837	1.3		20
Zinc	26592	S15344A3	17	S15344A3	16	1.1453	1.2854	12		20

TxtQcType: SD Matrix: SOIL SampleID: AC73771-002

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Aluminum	26592	S15344D3	20	S15344D3	13	5	17.1734	84.7397	1.3		10
Antimony	26592	S15344A3	21	S15344A3	14	5	0.0009	0.0153	---		10
Arsenic	26592	S15344A3	21	S15344A3	14	5	0.0150	0.0742	0.95		10
Barium	26592	S15344A3	21	S15344A3	14	5	0.1433	0.6942	3.2		10
Beryllium	26592	S15344A3	21	S15344A3	14	5	0.0022	0.0076	46	a	10
Cadmium	26592	S15344A3	21	S15344A3	14	5	0.0018	0.0046	96	c	10
Calcium	26592	S15344D3	20	S15344D3	13	5	3.9368	18.7361	5.1		10
Chromium	26592	S15344A3	21	S15344A3	14	5	0.0338	0.1619	4.4		10
Cobalt	26592	S15344A3	21	S15344A3	14	5	0.0156	0.0719	8.3		10
Copper	26592	S15344A3	21	S15344A3	14	5	0.0669	0.3231	3.5		10
Iron	26592	S15344D3	20	S15344D3	13	5	30.9744	149.6880	3.5		10
Lead	26592	S15344A3	21	S15344A3	14	5	0.1305	0.6156	6		10
Magnesium	26592	S15344D3	20	S15344D3	13	5	7.9346	38.3688	3.4		10
Manganese	26592	S15344D3	20	S15344D3	13	5	0.7907	3.8218	3.4		10
Nickel	26592	S15344A3	21	S15344A3	14	5	0.0279	0.1394	0.099		10
Potassium	26592	S15344D3	20	S15344D3	13	5	2.3274	10.7367	8.4		10
Selenium	26592	S15344A3	21	S15344A3	14	5	-0.0028	-0.0122	---		10
Silver	26592	S15344A3	21	S15344A3	14	5	-0.0002	-0.0036	---		10
Sodium	26592	S15344D3	20	S15344D3	13	5	0.1955	0.9030	8.2		10
Thallium	26592	S15344A3	21	S15344A3	14	5	-0.0034	-0.0058	---		10
Vanadium	26592	S15344A3	21	S15344A3	14	5	0.0681	0.3306	3		10
Zinc	26592	S15344A3	21	S15344A3	14	5	0.1386	0.6802	1.9		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Hampton-Clarke/Veritech

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B (6020) 200.7/200.8 OTHER_____

Batch No.: 15344 Analyst: tm

QC Number: 26592 Prep Date: 8/2/13

Matrix: soil Reviewed By: [illegible]

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				--	
LCS	0.59					--	
LCSD						--	
1. ~~LC~~ 73771-002							
MR 73771-002							
MS 73771-002							
MSD 73771-002							
2. 73771-001							
3. 73763-004							
4. 73763-005							
5. 73763-006							
6. 73741-001							
7. 73741-002							
8. 73741-003							
9. 73741-004							
10. 73740-001							
11. 73740-002							
12. 73744-001							
13. 73744-002							
14. 73746-001							
15. 73746-002							
16. 73776-001							
17. 73624-004							
18. 73624-005							
19. 73624-006							
20.							

Hot Plate Temperature: 90.0 C (90-95° C)

	Volume mL	Lot #
LCS, LCSD	0.59	V- 7835
LLLCS, LLLCSD		V-
MS, MSD	0.5ml	V- 7685, 7686
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO_3	2.5ml	V- 7839
HCl	5ml	V- 7841
H_2O_2	1.5ml	V- 7423

Acid	Vol mL	Lot#
1:1 HNO_3	5ml	V- 168708
1:1 HCl		V-

Relinquished By tm Date 8/2/13

Received By [illegible] Date 08/06/2013

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HG SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 245.1 7470A (7471A) **OTHER**_____

Batch No.:* 15344

QC Number: 26592

Matrix: SOIL

Analyst: OA.

Prep Date: 08/06/2013

Review By: AB

LAB ID#	MERCURY		COMMENTS
	INITIAL	FINAL	
Method blank	25ml	25ml	
LCS	0.15g		
LCSD			
1 AC73771-002			
MR AC73771-002			
MS AC73771-002			
MSD AC73771-002			
2 AC73771-001			
3 AC73763-004			
4 AC73763-005			
5 AC73763-006			
6 AC73741-001			
7 AC73741-002			
8 AC73741-003			
9 AC73741-004			
10 AC73740-001			
11 AC73740-002			
12 AC73744-001			
13 AC73744-002			
14 AC73746-001			
15 AC73746-002			
16			
17			
18			
19			
20			

Lot Numbers	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 168354	HNO_3		V-
$K_2S_2O_8$: V-	HCl		V-
NH_2OH: V- 166613	H_2SO_4		V-
	Aqua Regia	1.25ml	V- 170391

**Block Temp.:	93.6 °C
Time In Block:	15:40
Time Out of Block:	16:10
** Required range = 90-95°	

Spike Volume & Lot #

☐ LCS V- 7835 (0.15g / 0.25 ml)

☐ MS V- 170355 0.250 ml

☐ Standards/Control Batch B- 16068.

Relinquished By: OA.

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S15344A3.txt

Analysis Date: 08/02/13

Instrument: PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calib Blank 1 V-166272	1	CAL	18:16	1							V-166272(ICB/CCB)
Calib 1 V-167308	1	CAL	18:20	2							V-167308(ICS1 Lowest std)
Calib 2 V-168853	1	CAL	18:23	3							V-168853(ICS2- Low Std)
Calib 3 V-168467	1	CAL	18:27	4							V-168467(ICS3 - Middle Std)
Calib 4 V-168987	1	CAL	18:30	5							V-168987(ICS4 - High std)
ICS3 V-168467	1	ICS	18:35	6							V-168467(ICS3 - Middle Std)
ICV (2) V-168169	1	ICV	18:38	7							V-168169(ICV)
ICB V-166272	1	ICB	18:43	8							V-166272(ICB/CCB)
ICSA V-169160	1	ICSA	18:46	9							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	18:51	10							V-169161(ICSAB)
MB 26592 (100)	1	MB	18:55	11	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
LCS 26592	1	LCS	18:59	12	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
LCS MR 26592	1	LCS	19:03	13	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	SMP	19:07	14	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	MR	19:11	15	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	MS	19:14	16	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	MSD	19:19	17	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	PS	19:22	18	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
CCV V-168988	1	CCV	19:26	19							V-168988(CCV)
CCB V-166272	1	CCB	19:29	20							V-166272(ICB/CCB)
AC73771-002	5	SD	19:33	21	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-001	1	SMP	19:36	22	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73763-004	1	SMP	19:40	23	MET-RCRA-S	SOIL	SOIL	SW846	26592		()
AC73763-005	1	SMP	19:43	24	MET-RCRA-S	SOIL	SOIL	SW846	26592		()
AC73763-006	1	SMP	19:48	25	MET-RCRA-S	SOIL	SOIL	SW846	26592		()
AC73741-001	1	SMP	19:52	26	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73741-002	1	SMP	19:56	27	METALS-TAL-S	SOIL	SOIL	SW846	26592	Sb NOT reported - high RSD	()
ICSA V-169160	1	ICSA	20:01	28							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	20:05	29							V-169161(ICSAB)
CCV V-168988	1	CCV	20:10	30							V-168988(CCV)
CCB V-166272	1	CCB	20:13	31							V-166272(ICB/CCB)
AC73741-003	1	SMP	20:17	32	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73741-004	1	SMP	20:21	33	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73740-001	1	SMP	20:26	34	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73740-002	1	SMP	20:30	35	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73744-001	1	SMP	20:34	36	METALS-TAL-S	SOIL	SOIL	SW846	26592	Sb NOT reported - high RSD	()
AC73744-002	1	SMP	20:38	37	METALS-TAL-S	SOIL	SOIL	SW846	26592	Sb NOT reported - high RSD	()
AC73746-001	1	SMP	20:43	38	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
ICSA V-169160	1	ICSA	20:47	39							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	20:51	40							V-169161(ICSAB)
CCV V-168988	1	CCV	20:56	41							V-168988(CCV)
CCB V-166272	1	CCB	20:59	42							V-166272(ICB/CCB)
AC73746-002	1	SMP	21:03	43	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73624-004	1	SMP	21:07	44	MET-1-SOIL	SOIL	SOIL	SW846	26592		()
AC73624-005	1	SMP	21:12	45	MET-1-SOIL	SOIL	SOIL	SW846	26592		()
AC73624-006	1	SMP	21:16	46	MET-1-SOIL	SOIL	SOIL	SW846	26592		()
AC73776-001	1	NA	21:21	47	METALS-TAL-S	SOIL	SOIL	SW846	26592	cancelled	()
ICSA V-169160	1	ICSA	21:25	48							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	21:29	49							V-169161(ICSAB)
CCV V-168988	1	CCV	21:34	50							V-168988(CCV)
CCB V-166272	1	CCB	21:37	51							V-166272(ICB/CCB)

Comments/Reviewedby:

OLUFEMI
192.168.1.85 8/6/2013 11:14:56 AM

RUN IS OK
All elements reported except Mn and the earth elements

8/7/13

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD3A\S15344D3.txt

Analysis Date: 08/06/13

Instrument: PEICPRAD3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calib Blk 1 V-166272	1	CAL	14:33	1							V-166272(ICB/CCB)
Calib 1 V-168853	1	CAL	14:37	2							V-168853(ICS2- Low Std)
Calib 2 V-168467	1	CAL	14:41	3							V-168467(ICS3 - Middle Std)
Calib 3 V-168987	1	CAL	14:44	4							V-168987(ICS4 - High std)
ICS3 V-168467	1	ICS	14:47	5							V-168467(ICS3 - Middle Std)
ICV (2) V-168169	1	ICV	14:50	6							V-168169(ICV)
ICB V-166272	1	ICB	14:53	7							V-166272(ICB/CCB)
ICSA V-169160	1	ICSA	14:56	8							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	15:00	9							V-169161(ICSAB)
MB 26592 (100)	1	MB	15:04	10	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
LCS 26592	1	LCS	15:08	11	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
LCS MR 26592	1	LCS	15:11	12	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	SMP	15:14	13	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	MR	15:16	14	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	MS	15:19	15	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	MSD	15:22	16	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-002	1	PS	15:24	17	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
CCV V-168988	1	CCV	15:27	18							V-168988(CCV)
CCB V-166272	1	CCB	15:30	19							V-166272(ICB/CCB)
AC73771-002	5	SD	15:34	20	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73771-001	1	SMP	15:37	21	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73741-001	1	SMP	15:40	22	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73741-002	1	SMP	15:43	23	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
ICSA V-169160	1	ICSA	15:47	24							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	15:51	25							V-169161(ICSAB)
CCV V-168988	1	CCV	15:55	26							V-168988(CCV)
CCB V-166272	1	CCB	15:58	27							V-166272(ICB/CCB)
AC73741-003	1	SMP	16:02	28	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73741-004	1	SMP	16:05	29	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73740-001	1	SMP	16:09	30	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73740-002	1	SMP	16:12	31	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73744-001	1	SMP	16:15	32	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
CCV V-168988	1	CCV	16:18	33							V-168988(CCV)
CCB V-166272	1	CCB	16:21	34							V-166272(ICB/CCB)
AC73744-002	1	SMP	16:25	35	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73746-001	1	SMP	16:28	36	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
AC73746-002	1	SMP	16:33	37	METALS-TAL-S	SOIL	SOIL	SW846	26592		()
ICSA V-169160	1	ICSA	16:36	38							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	16:40	39							V-169161(ICSAB)
CCV V-168988	1	CCV	16:44	40							V-168988(CCV)
CCB V-166272	1	CCB	16:47	41							V-166272(ICB/CCB)

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

OLUFEMI
192.168.1.85 8/6/2013 5:17:55 PM

RUN IS OK
Mn and the earth elements reported

8/7/13

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV1A\H15344Sb.txt

Analysis Date: 08/06/13

Instrument: HGCV1A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	16:28	1							0
.2 PPB	1	CAL	16:29	2							0
.5 PPB	1	CAL	16:31	3							0
1 PPB	1	CAL	16:32	4							0
2 PPB	1	CAL	16:34	5							0
5 PPB	1	CAL	16:35	6							0
10 PPB	1	CAL	16:37	7							0
25 PPB	1	CAL	16:38	8							0
ICV (2)	1	ICV	16:40	9							0
ICB	1	ICB	16:42	10							0
MB 26592 (167)	1	MB	16:43	11	HG-SOIL	SOIL	SOIL	SW846	26592		0
LCS 26592	1	NA	16:45	12	HG-SOIL	SOIL	SOIL	SW846	26592	higher than linear range	0
LCS MR 26592	1	NA	16:47	13	HG-SOIL	SOIL	SOIL	SW846	26592	higher than linear range	0
LCS 5D	5	LCS	16:49	14	HG-SOIL	SOIL	SOIL	SW846	26592		0
LCS MR 5D	5	LCS	16:50	15	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73771-002	1	SMP	16:52	16	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73771-002	1	MR	16:53	17	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73771-002	1	MS	16:55	18	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73771-002	1	MSD	16:56	19	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73771-001	1	SMP	16:58	20	HG-SOIL	SOIL	SOIL	SW846	26592		0
CCV	1	CCV	16:59	21							0
CCB	1	CCB	17:01	22							0
AC73763-004	1	SMP	17:02	23	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73763-005	1	SMP	17:04	24	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73763-006	1	SMP	17:05	25	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73741-001	1	SMP	17:07	26	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73741-002	1	SMP	17:09	27	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73741-003	1	SMP	17:10	28	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73741-004	1	SMP	17:12	29	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73740-001	1	SMP	17:13	30	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73740-002	1	SMP	17:15	31	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73744-001	1	SMP	17:16	32	HG-SOIL	SOIL	SOIL	SW846	26592		0
CCV	1	CCV	17:18	33							0
CCB	1	CCB	17:19	34							0
AC73744-002	1	SMP	17:21	35	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73746-001	1	SMP	17:22	36	HG-SOIL	SOIL	SOIL	SW846	26592		0
AC73746-002	1	SMP	17:24	37	HG-SOIL	SOIL	SOIL	SW846	26592		0
CCV	1	CCV	17:25	38							0
CCB	1	CCB	17:27	39							0

Comments/Reviewedby:

olufemi
192.168.1.89 8/6/2013 5:36:47 PM

RUN IS OK

Standard/Batch/SnCl2 Lot #:

V-170312

TCLP Metal Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC73771-001	% Solid:	0	Lab Name:	Veritech	Nras No:	
Client Id:	BB-COMP-1-0801113	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/1/2013	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.20	ND	1	50	50	08/05/13	26591	T15343A2	14	P	PEICP2A
7440-39-3	Barium	0.25	0.56	1	50	50	08/05/13	26591	T15343A2	14	P	PEICP2A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/05/13	26591	T15343A2	14	P	PEICP2A
7440-47-3	Chromium	0.20	ND	1	50	50	08/05/13	26591	T15343A2	14	P	PEICP2A
7439-92-1	Lead	0.15	ND	1	50	50	08/05/13	26591	T15343A2	14	P	PEICP2A
7439-97-6	Mercury	0.00070	ND	1	25	25	08/06/13	26591	H15343T	14	CV	HGCV1A
7782-49-2	Selenium	0.20	ND	1	50	50	08/05/13	26591	T15343A2	14	P	PEICP2A
7440-22-4	Silver	0.050	ND	1	50	50	08/05/13	26591	T15343A2	14	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC73771-002	% Solid:	0	Lab Name:	Veritech	Nras No:	
Client Id:	BB-COMP-2-0801113	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/1/2013	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.20	ND	1	50	50	08/05/13	26591	T15343A2	25	P	PEICP2A
7440-39-3	Barium	0.25	0.57	1	50	50	08/05/13	26591	T15343A2	25	P	PEICP2A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/05/13	26591	T15343A2	25	P	PEICP2A
7440-47-3	Chromium	0.20	ND	1	50	50	08/05/13	26591	T15343A2	25	P	PEICP2A
7439-92-1	Lead	0.15	ND	1	50	50	08/05/13	26591	T15343A2	25	P	PEICP2A
7439-97-6	Mercury	0.00070	ND	1	25	25	08/06/13	26591	H15343T	23	CV	HGCV1A
7782-49-2	Selenium	0.20	ND	1	50	50	08/05/13	26591	T15343A2	25	P	PEICP2A
7440-22-4	Silver	0.050	ND	1	50	50	08/05/13	26591	T15343A2	25	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 26591 (1) % Solid: 0 Lab Name: Veritech
Client Id: MB 26591 (1) Units: MG/L Lab Code:
Matrix: TCLP
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	1.0	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-36-0	Antimony	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-38-2	Arsenic	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-39-3	Barium	0.25	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-41-7	Beryllium	0.050	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-70-2	Calcium	5.0	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-47-3	Chromium	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-48-4	Cobalt	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-50-8	Copper	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7439-89-6	Iron	1.0	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7439-92-1	Lead	0.15	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7439-95-4	Magnesium	5.0	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7439-96-5	Manganese	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7439-97-6	Mercury	0.00070	ND	1	25	25	08/06/13	26591	H15343T	11	CV	HGCV1A
7439-98-7	Molybdenum	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-02-0	Nickel	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7782-49-2	Selenium	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-22-4	Silver	0.050	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-28-0	Thallium	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-31-5	Tin	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-32-6	Titanium	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-62-2	Vanadium	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A
7440-66-6	Zinc	0.20	ND	1	50	50	08/05/13	26591	T15343A2	11	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/05/13
Data File: T15343A2
Prep Batch: 26591
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V-165044 (2)-7	Rec	CCV V-165587-19	Rec	CCV V-165587-29	Rec		Rec		Rec		Rec		Rec		Rec
Arsenic	1/.5	1.00689	101	0.49161	98	0.49387	99										
Barium	1/.5	1.02116	102	0.50100	100	0.50847	102										
Cadmium	1/.5	1.01677	102	0.49277	99	0.50263	101										
Chromium	1/.5	1.00856	101	0.49507	99	0.50291	101										
Copper	1/.5	1.00878	101	0.49460	99	0.49932	100										
Lead	1/.5	1.00456	100	0.50081	100	0.50629	101										
Nickel	1/.5	1.00096	100	0.49369	99	0.50276	101										
Selenium	1/.5	1.01612	102	0.49469	99	0.50860	102										
Silver	0.2/0.1	0.19986	100	0.09745	97	0.09851	99										
Zinc	1/.5	0.99644	100	0.49289	99	0.50201	100										

Notes:
a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits:
ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-11

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/06/13
Data File: H15343T
Prep Batch: 26591
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

		ICV (2)-9		CCV-21		CCV-25											
Analyte	ICV/CCV Amt		Rec		Rec		Rec		Rec		Rec		Rec		Rec		Rec
Mercury	20/10	19.13774	96	10.03593	100	10.00777	100										

Notes:
a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits:
ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-11

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/05/13
Data File: T15343A2
Prep Batch: 26591
Reporting Limits Used: TCLP,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-166272-8	CCB-20	CCB-30	MB 26591 (1)-11	EF-V-170078-26			
Arsenic	.2 U	.2 U	.2 U	.2 U	.2 U			
Barium	.25 U	.25 U	.25 U	.25 U	.25 U			
Cadmium	.05 U	.05 U	.05 U	.05 U	.05 U			
Chromium	.2 U	.2 U	.2 U	.2 U	.2 U			
Copper	.2 U	.2 U	.2 U	.2 U	.2 U			
Lead	.15 U	.15 U	.15 U	.15 U	.15 U			
Nickel	.2 U	.2 U	.2 U	.2 U	.2 U			
Selenium	.2 U	.2 U	.2 U	.2 U	.2 U			
Silver	.05 U	.05 U	.05 U	.05 U	.05 U			
Zinc	.2 U	.2 U	.2 U	.2 U	.2 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/06/13
Data File: H15343T
Prep Batch: 26591
Reporting Limits Used: TCLP,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-26	MB 26591 (1)-11	EF-V-170078-24			
Mercury	.7 U	.7 U	.7 U	.7 U	.7 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 08/05/13
Data File: T15343A2
Prep Batch: 26591
Reporting Limits Used: TCLP,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3080110

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-165588-9	Rec	ICSAB V-165589-10	Rec	ICSA V-165588-27	Rec	ICSAB V-165589-28	Rec	Rec	Rec	Rec	Rec
Aluminum	500	494.076	99	494.92800	99	500.065	100	489.71400	98				
Arsenic	1	U		1.05313	105	U		1.04564	105				
Barium	.5	U		0.51911	104	U		0.51536	103				
Cadmium	1	U		1.05778	106	U		1.04968	105				
Calcium	500	474.308	95	475.83000	95	481.111	96	470.20400	94				
Chromium	.5	U		0.50667	101	U		0.50281	101				
Copper	.5	U		0.53633	107	U		0.53202	106				
Iron	200	193.791	97	189.64800	95	192.583	96	188.18900	94				
Lead	1	U		0.98040	98	U		0.97755	98				
Magnesium	500	503.919	101	505.70500	101	511.966	102	505.85300	101				
Nickel	1	U		0.96979	97	U		0.96622	97				
Selenium	1	U		1.04755	105	U		1.03898	104				
Silver	1	U		1.07881	108	U		1.06959	107				
Zinc	1	U		0.96921	97	U		0.96426	96				

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 26591

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: TCLP SampleID: LCSW MR 26591

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	26591	1	T15343A2	13	0.4952	0.500	99		80	120
Barium	26591	1	T15343A2	13	0.5073	.5	101		80	120
Cadmium	26591	1	T15343A2	13	0.4998	0.500	100		80	120
Chromium	26591	1	T15343A2	13	0.5017	0.500	100		80	120
Lead	26591	1	T15343A2	13	0.5052	.5	101		80	120
Mercury	26591	1	H15343T	13	10.1260	10	101		80	120
Selenium	26591	1	T15343A2	13	0.4960	0.500	99		80	120
Silver	26591	1	T15343A2	13	0.0957	0.100	96		80	120

TxtQcType: LCS Matrix: TCLP SampleID: LCSW 26591

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	26591	1	T15343A2	12	0.5012	0.500	100		80	120
Barium	26591	1	T15343A2	12	0.5137	.5	103		80	120
Cadmium	26591	1	T15343A2	12	0.5061	0.500	101		80	120
Chromium	26591	1	T15343A2	12	0.5093	0.500	102		80	120
Lead	26591	1	T15343A2	12	0.5150	.5	103		80	120
Mercury	26591	1	H15343T	12	10.3449	10	103		80	120
Selenium	26591	1	T15343A2	12	0.5147	0.500	103		80	120
Silver	26591	1	T15343A2	12	0.0975	0.100	98		80	120

TxtQcType: MS Matrix: TCLP SampleID: AC73771-001

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	26591	1	T15343A2	16	T15343A2	14	0.5350	.2U	0.5	107		50	
Barium	26591	1	T15343A2	16	T15343A2	14	5.6245	0.5594	5	101		50	
Cadmium	26591	1	T15343A2	16	T15343A2	14	0.5258	.05U	0.5	105		50	
Chromium	26591	1	T15343A2	16	T15343A2	14	0.5028	.2U	0.5	101		50	
Lead	26591	1	T15343A2	16	T15343A2	14	5.0907	.15U	5	102		50	
Mercury	26591	1	H15343T	16	H15343T	14	10.2843	.70U	10	103		50	
Selenium	26591	1	T15343A2	16	T15343A2	14	0.5528	.2U	0.5	111		50	
Silver	26591	1	T15343A2	16	T15343A2	14	0.1018	0.05U	0.10	102		50	

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 26591

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: TCLP SampleID: LCSW MR 26591

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	26591	T15343A2	13	T15343A2	12	0.4952	0.5012	1.2	20
Barium	26591	T15343A2	13	T15343A2	12	0.5073	0.5137	1.2	20
Cadmium	26591	T15343A2	13	T15343A2	12	0.4998	0.5061	1.3	20
Chromium	26591	T15343A2	13	T15343A2	12	0.5017	0.5093	1.5	20
Lead	26591	T15343A2	13	T15343A2	12	0.5052	0.5150	1.9	20
Mercury	26591	H15343T	13	H15343T	12	10.1260	10.3449	2.1	20
Selenium	26591	T15343A2	13	T15343A2	12	0.4960	0.5147	3.7	20
Silver	26591	T15343A2	13	T15343A2	12	0.0957	0.0975	1.9	20

TxtQcType: MR Matrix: TCLP SampleID: AC73771-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	26591	T15343A2	15	T15343A2	14	.2U	.2U	---	20
Barium	26591	T15343A2	15	T15343A2	14	0.5737	0.5594	2.5	20
Cadmium	26591	T15343A2	15	T15343A2	14	.05U	.05U	---	20
Chromium	26591	T15343A2	15	T15343A2	14	.2U	.2U	---	20
Lead	26591	T15343A2	15	T15343A2	14	.15U	.15U	---	20
Mercury	26591	H15343T	15	H15343T	14	.70U	.70U	---	20
Selenium	26591	T15343A2	15	T15343A2	14	.2U	.2U	---	20
Silver	26591	T15343A2	15	T15343A2	14	0.05U	0.05U	---	20

TxtQcType: SD Matrix: TCLP SampleID: AC73771-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Arsenic	26591	T15343A2	18	T15343A2	14	5	-0.0003	0.0016	---	10
Barium	26591	T15343A2	18	T15343A2	14	5	0.1096	0.5594	2	10
Cadmium	26591	T15343A2	18	T15343A2	14	5	0.0001	0.0022	---	10
Chromium	26591	T15343A2	18	T15343A2	14	5	-0.0018	0.0008	---	10
Lead	26591	T15343A2	18	T15343A2	14	5	0.0054	0.0259	4.9	10
Selenium	26591	T15343A2	18	T15343A2	14	5	0.0006	-0.0079	---	10
Silver	26591	T15343A2	18	T15343A2	14	5	0.0002	0.0017	---	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP2A\T15343A2.txt

Analysis Date: 08/05/13

Instrument: PEICP2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calib Blk 1 V-166272	1	CAL	17:03	1							V-166272(ICB/CCB)
Calib 1 V-167307	1	CAL	17:06	2							V-167307(ICS1 Lowest std)
Calib 2 V-165042	1	CAL	17:10	3							V-165042(ICS2- Low Std)
Calib 3 V-166088	1	CAL	17:14	4							V-166088(ICS3 - Middle Std)
Calib 4 V-166089	1	CAL	17:17	5							V-166089(ICS4 - High std)
ICS3 V-166088	1	ICS	17:23	6							V-166088(ICS3 - Middle Std)
ICV V-165044 (2)	1	ICV	17:26	7							V-165044(ICV)
ICB V-166272	1	ICB	17:32	8							V-166272(ICB/CCB)
ICSA V-165588	1	ICSA	17:35	9							V-165588(ICSA)
ICSAB V-165589	1	ICSAB	17:41	10							V-165589(ICSAB)
MB 26591 (1)	1	MB	17:46	11		TCLP	TCLP	SW846	26591		0
LCSW 26591	1	LCS	17:50	12		TCLP	TCLP	SW846	26591		0
LCSW MR 26591	1	LCS	17:54	13		TCLP	TCLP	SW846	26591		0
AC73771-001	1	SMP	17:58	14	METALS-TCLP	TCLP	TCLP	SW846	26591		0
AC73771-001	1	MR	18:02	15	METALS-TCLP	TCLP	TCLP	SW846	26591		0
AC73771-001	1	MS	18:05	16	METALS-TCLP	TCLP	TCLP	SW846	26591		0
AC73771-001	1	PS	18:09	17	METALS-TCLP	TCLP	TCLP	SW846	26591		0
AC73771-001	5	SD	18:13	18	METALS-TCLP	TCLP	TCLP	SW846	26591		0
CCV V-165587	1	CCV	18:17	19							V-165587(CCV)
CCB	1	CCB	18:21	20							0
AC73742-001	1	SMP	18:25	21	METALS-TCLP	TCLP	TCLP	SW846	26591		0
AC73763-004	1	SMP	18:28	22	METALS-TCLP	TCLP	TCLP	SW846	26591		0
AC73763-005	1	SMP	18:32	23	METALS-TCLP	TCLP	TCLP	SW846	26591		0
AC73763-006	1	SMP	18:36	24	METALS-TCLP	TCLP	TCLP	SW846	26591		0
AC73771-002	1	SMP	18:40	25	METALS-TCLP	TCLP	TCLP	SW846	26591		0
EF-V-170078	1	EF	18:44	26		TCLP	TCLP	SW846	26591		V-170078(EF-1)
ICSA V-165588	1	ICSA	18:47	27							V-165588(ICSA)
ICSAB V-165589	1	ICSAB	18:53	28							V-165589(ICSAB)
CCV V-165587	1	CCV	18:58	29							V-165587(CCV)
CCB	1	CCB	19:02	30							0

Comments/Reviewedby:

sean
192.168.1.78 8/6/2013 10:03:13 AM

OK

8/6/13

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV1A\H15343T.txt

Analysis Date: 08/06/13

Instrument: HGCV1A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	12:53	1							0
.2 PPB	1	CAL	12:54	2							0
.5 PPB	1	CAL	12:55	3							0
1 PPB	1	CAL	12:57	4							0
2 PPB	1	CAL	12:58	5							0
5 PPB	1	CAL	12:59	6							0
10 PPB	1	CAL	13:01	7							0
25 PPB	1	CAL	13:02	8							0
ICV (2)	1	ICV	13:03	9							0
ICB	1	ICB	13:05	10							0
MB 26591 (1)	1	MB	13:06	11	HG-TCLP	TCLP	TCLP	SW846	26591		0
LCSW 26591	1	LCS	13:08	12	HG-TCLP	TCLP	TCLP	SW846	26591		0
LCSW MR 26591	1	LCS	13:09	13	HG-TCLP	TCLP	TCLP	SW846	26591		0
AC73771-001	1	SMP	13:10	14	HG-TCLP	TCLP	TCLP	SW846	26591		0
AC73771-001	1	MR	13:12	15	HG-TCLP	TCLP	TCLP	SW846	26591		0
AC73771-001	1	MS	13:13	16	HG-TCLP	TCLP	TCLP	SW846	26591		0
AC73742-001	1	SMP	13:14	17	HG-TCLP	TCLP	TCLP	SW846	26591		0
AC73763-004	1	SMP	13:16	18	HG-TCLP	TCLP	TCLP	SW846	26591		0
AC73763-005	1	SMP	13:17	19	HG-TCLP	TCLP	TCLP	SW846	26591		0
AC73763-006	1	SMP	13:19	20	HG-TCLP	TCLP	TCLP	SW846	26591		0
CCV	1	CCV	13:20	21							0
CCB	1	CCB	13:21	22							0
AC73771-002	1	SMP	13:23	23	HG-TCLP	TCLP	TCLP	SW846	26591		0
EF-V-170078	1	EF	13:24	24	HG-TCLP	TCLP	TCLP	SW846	26591		V-170078(EF-1)
CCV	1	CCV	13:25	25							0
CCB	1	CCB	13:27	26							0

Comments/Reviewedby:

olufemi
192.168.1.89 8/6/2013 2:09:31 PM

RUN IS OK

e 8/6/13

Standard/Batch/SnCl2 Lot #:

V-170312

HG SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 245.1 (7470A) 7471A **OTHER**_____

Batch No.:* 15343 Analyst: JY

QC Number: 26591 Prep Date: 8/5/13

Matrix: TCLP Review By: QA

LAB ID#	MERCURY		COMMENTS
	INITIAL	FINAL	
Method blank	25ul	25u	
LCS			
LCSD			
1 AC 73771-001			
MR 73771-001			
MS 73771-001			
~~MSD 73771-001~~			
2 73742-001	25ul	25ul	
3 73763-004			
4 73763-005			
5 73763-006			
6 73771-002			
7 V-170078			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

Lot Numbers	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 168354	HNO_3	0.625	V- 7838
$K_2S_2O_8$: V- 166616	HCl		V-
NH_2OH: V- 166613	H_2SO_4	1.25ul	V- 7331
	Aqua Regia		V-

**Block Temp. :	93.3° C
Time In Block:	13:15
Time Out of Block:	15:15
** Required range = 90-95° C	

Spike Volume & Lot #

☐ LCS V- 170264 0.156 / 0.25 ml

☐ MS V- 170264 0.250 ml

☐ Standards/Control Batch B- 16058

Relinquished By: JY

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

Hampton-Clarke/Veritech

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: (3010A) 3005A 3050B (6020) 200.7/200.8 OTHER_____

Batch No.: 15349 Analyst: BY

QC Number: 26591 Prep Date: 8/5/13.

Matrix: TCLP Reviewed By: SB

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				–	
LCS	↓	↓				–	
LCSD						–	
1. AC 73771-001					170078	73771-001	
MR 73771-001					↓	↓	
MS 73771-001	↓	↓			↓	↓	
MSD							
2. 73742-001	50ml	50ml			170078	73771-001	
3. 73763-004	↓	↓			↓	↓	
4. 73763-005							
5. 73763-006							
6. 73771-002						↓	
7. V-170078	↓	↓			↓		
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 93.1° C (90-95° C)

	Volume mL	Lot #
LCS, LCSD	0.5ml	V-7685, 7686
LLLCS, LLLCSD		V-
MS, ~~MSD~~	0.5; 0.225	V-7685, 7686; 7636
LLMS, LLMSD		V- 7650

Acid	Vol mL	Lot#
HNO_3	3	V-7839
HCl		V-
H_2O_2		V-

Acid	Vol mL	Lot#
1:1 HNO_3		V-
1:1 HCl	5	V-166179

Relinquished By BY Date 8/5/13.

Received By [illegible] Date 8/5/13

T:\QC\FORMS\LOGBOOK FORMS\METALS\ICP sample prep log 2012.DOC

Wet Chemistry Data

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AC73771-001
Matrix Soil
Client SampleID: BB-COMP-1-0801113

Project Number: 3080110
Received Date: 8/1/2013
Collect Date: 8/1/2013

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide (Reactive)	CN-REACTIVE	1	ND	mg/Kg	0.50	08/01/13	08/05/13
Cyanide	CN-S-9012	1	ND	mg/Kg	0.26	08/05/13	08/05/13
Eh	CR6-EH	**1**	**290**	**mv**		08/02/13	08/02/13
pH	CR6-PH	**1**	**7.3**	**pH**		08/02/13	08/02/13
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.1	08/06/13	08/06/13
Ignitability	IGNIT-MOD	**1**	**>141**	**Deg. F**			08/01/13
Sulfide (Reactive)	S-REACTIVE	1	ND	mg/kg	100	08/01/13	08/02/13
Total Organic Carbon	TOC-KAHN	**1**	**16000**	**mg/kg**	**1300**	08/14/13	08/14/13

Lab#: AC73771-002
Matrix Soil
Client SampleID: BB-COMP-2-0801113

Project Number: 3080110
Received Date: 8/1/2013
Collect Date: 8/1/2013

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide (Reactive)	CN-REACTIVE	1	ND	mg/Kg	0.50	08/01/13	08/05/13
Cyanide	CN-S-9012	1	ND	mg/Kg	0.27	08/05/13	08/05/13
Eh	CR6-EH	**1**	**290**	**mv**		08/02/13	08/02/13
pH	CR6-PH	**1**	**6.8**	**pH**		08/02/13	08/02/13
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.1	08/06/13	08/06/13
Ignitability	IGNIT-MOD	**1**	**>141**	**Deg. F**			08/01/13
Sulfide (Reactive)	S-REACTIVE	1	ND	mg/kg	100	08/01/13	08/02/13
Total Organic Carbon	TOC-KAHN	**1**	**13000**	**mg/kg**	**1400**	08/14/13	08/14/13

VERITECH Wet Chem Form1 Analysis Summary
% Solids

TestGroupName: % Solids SM2540G **Project #: 3080110**

TestGroup: %SOLIDS

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AC73771-001	BB-COMP-1-0801	Soil	**1**	**91**	**Percent**			08/02/13	08/01/13	08/01/13
AC73771-002	BB-COMP-2-0801	Soil	**1**	**89**	**Percent**			08/02/13	08/01/13	08/01/13
AC73771-003	BB-GRAB-5-0801	Soil/Encore	**1**	**90**	**Percent**			08/02/13	08/01/13	08/01/13
AC73771-004	BB-GRAB-10-080	Soil/Encore	**1**	**85**	**Percent**			08/02/13	08/01/13	08/01/13

% Solids Report

Analysis Type: SOLIDS-SS
BatchID: SOLIDS-SS-2123

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AC73763-016	87	86.58205	Percent	1.10	12.13	10.65	08/02/13	melissa	0.18	5
Sample	AC73763-016	86	86.42534	Percent	1.10	12.15	10.64	08/02/13	melissa		
Sample	AC73763-017	83	83.36079	Percent	1.10	13.24	11.20	08/02/13	melissa		
Sample	AC73763-018	86	86.45656	Percent	1.11	12.85	11.25	08/02/13	melissa		
Sample	AC73763-019	87	87.17703	Percent	1.11	11.56	10.21	08/02/13	melissa		
Sample	AC73763-020	87	86.69767	Percent	1.10	11.85	10.40	08/02/13	melissa		
Sample	AC73763-021	86	85.54572	Percent	1.10	11.27	9.79	08/02/13	melissa		
Sample	AC73763-022	85	85.07878	Percent	1.11	11.90	10.28	08/02/13	melissa		
Sample	AC73771-001	91	90.67642	Percent	1.10	12.04	11.01	08/02/13	melissa		
Sample	AC73771-002	89	89.36550	Percent	1.10	12.29	11.10	08/02/13	melissa		
Sample	AC73771-003	90	89.98127	Percent	1.11	11.79	10.72	08/02/13	melissa		
Sample	AC73771-004	85	85.12774	Percent	1.10	12.06	10.43	08/02/13	melissa		
Sample	AC73774-001	93	92.92413	Percent	1.09	12.82	12.00	08/02/13	melissa		
Sample	AC73774-002	96	96.07306	Percent	1.11	12.06	11.63	08/02/13	melissa		
Sample	AC73774-003	94	93.60236	Percent	1.10	11.26	10.62	08/02/13	melissa		
Sample	AC73774-004	94	94.24084	Percent	1.10	12.56	11.91	08/02/13	melissa		
Sample	AC73774-005	95	94.88491	Percent	1.09	12.82	12.24	08/02/13	melissa		
Sample	AC73776-001	96	95.99346	Percent	1.09	13.32	12.82	08/02/13	melissa		
Sample	AC73783-001	95	94.62891	Percent	1.09	11.33	10.77	08/02/13	melissa		
Sample	AC73783-002	98	97.53788	Percent	1.09	11.65	11.39	08/02/13	melissa		
Sample	AC73783-003	99	98.71912	Percent	1.12	12.05	11.90	08/02/13	melissa		

* - Indicates Failed Rpd Criteria

Calibration Summary:

3080110 0353

Instrument: DA1
Analysis Meth: SW846 7.3.3

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide (Reactive)	20130805100	9	ICV	98	0.4	90-110
Cyanide (Reactive)	20130805100	21	CCV	97	0.4	90-110
Cyanide (Reactive)	20130805100	30	CCV	102	0.4	90-110

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 8/1/13

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130805100	8/5/13 10:25	MBS-579	11	Cyanide (	ND	0.50

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130805100	8/5/13 10:23	CCB	10	Cyanide (	ND	0.02

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130805100	8/5/13 10:49	CCB	22	Cyanide (	ND	0.02
20130805100	8/5/13 11:05	CCB	31	Cyanide (	ND	0.02

LCS Recoveries

BatchRunID/RunID:===>			201308051005-12								
QcBatchID:===>			LCSS-579								
Date/Time:===>			08/05/13 10:28								
Analytical Method:===>			SW846 7.3.3								
Matrix:===>			Soil		Soil		Soil		Soil		Soil
Analyte	SW846 7.3. **Amt**	**Limits Amt**	**Limits**	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags
Cyanide (Rea	0.4	75-125		110									

MS/MSD/DUP Recovery

3080110 0356

Prep Batch: S-579 Sample ID: AC73748-001
Method: SW846 7.3.3 Matrix: Soil

Qc Type: MS		Limits			MS	Sample			MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov		Dil	Conc	Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide (Reactive)	0.4	75-125		1	0.4204	0	105		20130805100	13	08/05/13 10:30	20130805100	15	08/05/13 10:34

Qc Type: MSD		Limits			MSD	Sample				MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Rpd	Dil	Conc	Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide (Reactive)	0.4	75-125	20	1	0.4466	0	112	6		20130805100	14	08/05/13 10:32	20130805100	15	08/05/13 10:34

Calibration Summary:

Instrument: DA1
Analysis Meth: EPA 9012B

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20130805134	9	ICV	107	0.4	90-110
Cyanide	20130805134	21	CCV	105	0.4	90-110
Cyanide	20130805134	33	CCV	108	0.4	90-110
Cyanide	20130805134	40	CCV	109	0.4	90-110

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 8/5/13

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130805134	8/5/13 14:08	MBS-1212	11	Cyanide	ND	0.24

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130805134	8/5/13 14:31	CCB	22	Cyanide	ND	0.02
20130805134	8/5/13 14:56	CCB	34	Cyanide	ND	0.02
20130805134	8/5/13 15:08	CCB	41	Cyanide	ND	0.02

LCS Recoveries

BatchRunID/RunID:===>			201308051347-13									
QcBatchID:===>			LCSS-1212DUP									
Date/Time:===>			08/05/13 14:12									
Analytical Method:===>			EPA 9012B									
Matrix:===>			Soil		Soil		Soil		Soil		Soil	
Analyte	EPA 9012B **Amt**	**Limits**	**Amt**	**Limits**	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags
Cyanide	0.4	90-110			103							

MS/MSD/DUP Recovery

3080110 0360

Prep Batch: S-1212 Sample ID: AC73771-001
Method: EPA 9012B Matrix: Soil

Qc Type: DUP	Limits			DUP	Sample			MS/MSD/DUP			Non Spike		
Analyte		Rpd	Dil	Conc	Conc	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide		20	1	0	0	NA		20130805134	15	08/05/13 14:16	20130805134	14	08/05/13 14:14

Qc Type: MS		Limits		MS	Sample			MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Dil	Conc	Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125	1	0.3405	0	85		20130805134	16	08/05/13 14:18	20130805134	14	08/05/13 14:14

Qc Type: MSD		Limits			MSD	Sample			MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Rpd	Dil	Conc	Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125	20	1	0.3642	0	91	6.7		20130805134	17	08/05/13 14:20	20130805134	14	08/05/13 14:14

Analysis Type: IGNIT-MOD

Batch Number: IGNIT-MOD-175

Units: Deg. F

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-08/01/13	81	90-110	NA	~~81.94~~ 82.3	~~101~~ 102	NA	
DUP	AC73771-001	0	NA	20	#Error	NA	NA	Nc

PM 8/2/13

PM 8/2/13

Calibration Curve Information

Analytical Method(s)

EPA 1010

Sam #	Type	MB	Result	RL	Per Sol	Full Result	Obs FP	Press	p-Xylene Std	Prep Date	Prep By	Anal Date	Anal By
CAL-01-08/01/13	CAL-01		82		100	~~81.94~~ 82.3	82.12	757	82.3			08/01/13	sdl
AC73771-001	DUP		>141		100	0	>141	757	82.96			08/01/13	sdl
AC73690-001	Sample		>141		100	0	>141	757	82.3			08/01/13	sdl
AC73690-002	Sample		>141		100	0	>141	757	82.96			08/01/13	sdl
AC73751-001	Sample		>141		100	0	>141	757	82.3			08/01/13	sdl
AC73751-002	Sample		>141		100	0	>141	757	82.96			08/01/13	sdl
AC73752-001	Sample		>141		100	0	>141	757	82.3			08/01/13	sdl
AC73748-001	Sample		>141		100	0	>141	757	82.96			08/01/13	sdl
AC73749-001	Sample		>141		100	0	>141	757	82.3			08/01/13	sdl
AC73771-001	Sample		>141		100	0	>141	757	82.96			08/01/13	sdl
AC73771-002	Sample		>141		100	0	>141	757	82.3			08/01/13	sdl

SDL
8/2/13

PM
8/2/13

Flag Codes: Ra - Recovery failed specified criteria (PVS/LCS/MS/MSD/ICV/CAL)
Na - Not Applicable
Rp - RPD failed specified criteria.
Nc - Not Checked ..either one or both values =ND

Analysis Type: RS

Batch Number: RS-579

Units: mg/kg

Calibration Curve Information

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-08/02/13	16	90-110	NA	17.23225	108	NA	
LCS	LCS	400	75-125	NA	410.76875	103	NA	
MS	AC73748-001	400	75-125	NA	430.80625	108	NA	
MSD	AC73748-001	400	75-125	20	420.7875	105	2.4	

Analytical Method(s)

SW846 7.3.4

Sam #	Type	MB	Result	RL	Per Sol	Full Result	Titr Vol	Iod Vol	DF	Sam Wt (g)	Scrb Vol (ml)	Prep Date	Prep By	Anal Date	Anal By
CAL-01-08/02/13	CAL-01		17		100	17.232	5.7	10	1	250	250			08/02/13	BCT
MB-1-08/01/13	MB	MB-1-08/01/13	ND	100	100	0	10.0	10	1	10	250	08/01/13	HS	08/02/13	BCT
LCS	LCS	MB-1-08/01/13	410	100	100	410.77	5.9	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73748-001	MS	MB-1-08/01/13	430	100	94	430.81	5.7	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73748-001	MSD	MB-1-08/01/13	420	100	94	420.79	5.8	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73748-001	Sample	MB-1-08/01/13	ND	100	94	20.038	9.8	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73749-001	Sample	MB-1-08/01/13	ND	100	93	30.056	9.7	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73751-001	Sample	MB-1-08/01/13	ND	100	93	0	10.0	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73751-002	Sample	MB-1-08/01/13	ND	100	98	20.038	9.8	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73752-001	Sample	MB-1-08/01/13	ND	100	95	10.019	9.9	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73758-001	Sample	MB-1-08/01/13	ND	100	93	30.056	9.7	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73758-002	Sample	MB-1-08/01/13	ND	100	93	40.075	9.6	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73758-003	Sample	MB-1-08/01/13	ND	100	88	10.019	9.9	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73758-004	Sample	MB-1-08/01/13	ND	100	94	0	10.0	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73758-005	Sample	MB-1-08/01/13	ND	100	92	20.038	9.8	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73771-001	Sample	MB-1-08/01/13	ND	100	91	20.038	9.8	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73771-002	Sample	MB-1-08/01/13	ND	100	89	10.019	9.9	10	1	10	250	08/01/13	HS	08/02/13	BCT
AC73742-001	Sample	MB-1-08/01/13	ND	200	67	60.112	9.7	10	1	5.0	250	08/01/13	HS	08/02/13	BCT

HS 8/6/13

8/6/13

Flag Codes: Ra - Recovery failed specified criteria (PVS/LCS/MS/MSD/ICV/CAL)
Na - Not Applicable
Rp - RPD failed specified criteria.
Nc - Not Checked ..either one or both values =ND

	Analysis	Batch#	Date	Analyst					
	TOC-KHAN	108	8/14/2013	AF					
	ICV		PPM	Solid Factor	Dilution Factor	TOC (ppm)	True Value (ppm)	%Rec	QC Limits (%)
8/14/2013	(V-7524)		22072	1	1	22072	23500	94	90-110
					Q.C. Data				
		Theoretical Value PPM	Result PPM	% Rec (%)	QC Limits (%)	RPD	Flags		
	LCS	23500	22066	94	75-125				
	MS	25824	35790	75	75-125				
	MSD	25824	40251	92	75-125				
					20	12			
	Sample		16447						
	Sample Dup		14777						
					20	11			
	Sample#	PPM	Solid Factor	Dilution Factor	Sample Wt.	TOC (ppm)	RL (ppm)		QC Limits (%)
MB	MB	-127	1	1	1	-127	1200		
LCS	LCS(v-7524)	22066	1	1	0.2515	22066	1200	94	75-125
MS	AC73771-001MS	32569	0.91	1	0.2542	35790	1320		
MSD	AC73771-001MSD	36628	0.91	1	0.2523	40251	1320		
DUP	AC73771-001 DUP	13447	0.91	1	0.2512	14777	1320		
1	AC73771-001	14967	0.91	1	0.2529	16447	1320		
2	AC73771-002	11325	0.89	1	0.2521	12725	1350		
3	AC73571-001	12696	0.9	1	0.255	14107	1330		
4	AC73571-002	17179	0.82	1	0.251	20950	1460		
5	AC73571-003	11777	0.87	1	0.2521	13537	1380		
CCV	CCV-1(V-7524)	22446	1	1	0.2517	22446	1200	96	90-110
CCB	CCB-1	-125	1	1	1	-125	1200		
6	AC73841-030	13981	0.47	1	0.2512	29747	2550		
CCV	CCV-2(V-7524)	21901	1	1	0.2515	21901	1200	93	90-110
CCB	CCB-2	-127	1	1	1	-127	1200		

8/15/13

BB 8/15/13

3080110 0363

Hex-Cr Soil SW-846 3060A / 7196A

r6 soil curve		Date	8/6/2013			Batch #	163			TestGroupID	CR6-SOIL	
										TestID:	CR-HEX	
TD ppm			ABS									
0			0.0005		Intercept	Constant	-0.004992075					
0.025			0.0173									
0.25			0.1514		Slope	X Coefficients	0.696653734					
0.5			0.3495									
1			0.6929									

STD mg/L			ABS		PPM	DIFF						
0			0.0005		0.007883508	-0.007883508						
0.025			0.0173		0.031998788	-0.006998788						
0.25			0.1514		0.2244904	0.0255096						
0.5			0.3495		0.508849746	-0.008849746						
1			0.6929		1.001777557	-0.001777557						

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.999383185
R Square	0.99876675
Adjusted R Square	0.998355666
Standard Error	0.01168047
Observations	5

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.331477948	0.331477948	2429.59585	1.83877E-05
Residual	3	0.0004093	0.000136433		
Total	4	0.331887248			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	-0.004992075	0.007242992	-0.689228382	0.540203151	-0.028042529	0.018058378	-0.028042529	0.018058378
X Variable 1	0.696653734	0.014133507	49.29093071	1.83877E-05	0.651674563	0.741632904	0.651674563	0.741632904

BJ
8/6/13

#163

BA
8/7/13

30801100364

Hex-Cr Soil SW-846 3060A / 7196A

	Hex-Cr Soil		Q.C. DATA										
atch#	163		QC Sample	AC73763-005 NS.Sample									
ate	8/6/2013			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD	
nalyst	BCT/JW			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL	
repBy	BCT		LCS	20.00	19.71	19.71	99%	75-125%	NA	NA	PASS		
			MS(Sol)	20.00	20.54	20.54	103%	75-125%	NA	NA	PASS		
			MS(Insol)	850.21	463.27	463.27	54%	75-125%	NA	20%		PASS	
			Sample	NA	ND	NA	NA	NA	NA	NA			
			Sample Dup	NA	ND	NA	NA	NA	NA	20%		PASS	
			PVS	20.00	23.67	23.67	118%	75-125%	NA	NA	PASS		
Lead Chromate Added :	0.0115	g											
Upper Calibration Abbsorbance:	0.6929												

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ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3117	0.0000	0.3117	0.454590346	1	1	1	1	0.455	0.500	91	8/6/13 13:53	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	0.0011	0.0000	0.0011	0.008744768	1	1	1	1	0.009	0.025		8/6/13 13:53	
MB.Sample	0.0019	0.0000	0.0019	0.009893115	1	2.5	1	100	0.396	1.000		8/6/13 13:54	
LCS.Sample	0.3383	0.0000	0.3383	0.492772878	1	2.5	1	100	19.711	1.000		8/6/13 13:54	
AC73763-005 NS.Sample	0.0066	0.0024	0.0042	0.013194611	0.87	2.5	1	100	0.607	1.149		8/6/13 13:56	
AC73763-005 D.Sample	0.0017	0.0024	-0.0007	0.006160988	0.87	2.5	1	100	0.283	1.149		8/6/13 13:56	
AC73763-005 MS.Sample	0.3086	0.0024	0.3062	0.446695494	0.87	2.5	1	100	20.538	1.149		8/6/13 13:57	
AC73763-005 50X MSD.Sample	0.1378	0.0024	0.1354	0.201523457	0.87	2.5	50	100	463.272	57.471		8/6/13 13:57	
AC73763-005 PVS.Sample	0.3561	0.0024	0.3537	0.514878556	0.87	2.5	1	100	23.673	1.149		8/6/13 13:58	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3117		0.3117	0.454590346	1	1	1	1	0.455	0.025	91	8/6/13 13:53	PASS
ICB.Sample	0.0011		0.0011	0.008744768	1	1	1	1	0.009	0.025		8/6/13 13:53	
MB.Sample	0.0019		0.0019	0.009893115	1	2.5	1	100	0.396	1.000		8/6/13 13:54	
LCS.Sample	0.3383		0.3383	0.492772878	1	2.5	1	100	19.711	1.000		8/6/13 13:54	
AC73763-005 NS.Sample	0.0066	0.0024	0.0042	0.013194611	0.87	2.5	1	100	0.607	1.149		8/6/13 13:56	
AC73763-005 D.Sample	0.0017	0.0024	-0.0007	0.006160988	0.87	2.5	1	100	0.283	1.149		8/6/13 13:56	
AC73763-005 MS.Sample	0.3086	0.0024	0.3062	0.446695494	0.87	2.5	1	100	20.538	1.149		8/6/13 13:57	
AC73763-005 XXX.Sample	3.9290	0.0024	3.9266	5.643538227	0.87	2.5	1	100	259.473	1.149		8/6/13 13:57	
AC73763-005 50X MSD.Sample	0.1378	0.0024	0.1354	0.201523457	0.87	2.5	50	100	463.272	57.471		8/6/13 13:57	
AC73763-005 PVS.Sample	0.3561	0.0024	0.3537	0.514878556	0.87	2.5	1	100	23.673	1.149		8/6/13 13:58	
CCV.Control	0.3683		0.3683	0.53583588	1	1	1	1	0.536	0.025		8/6/13 13:59	
CCB.Sample	0.0008		0.0008	0.008314138	1	1	1	1	0.008	0.025		8/6/13 14:00	
AC73763-004.Sample	0.0053	0.0013	0.0040	0.012907525	0.87	2.5	1	100	0.593	1.149		8/6/13 14:00	
AC73763-006.Sample	0.0216	0.0217	-0.0001	0.007022248	0.79	2.5	1	100	0.356	1.266		8/6/13 14:01	
AC73771-001.Sample	0.0140	0.0068	0.0072	0.017500912	0.91	2.5	1	100	0.769	1.099		8/6/13 14:01	
AC73771-002.Sample	0.0310	0.0255	0.0055	0.015060675	0.89	2.5	1	100	0.677	1.124		8/6/13 14:02	
AC73804-001.Sample	0.0785	0.0707	0.0078	0.018362179	0.91	2.5	1	100	0.807	1.099		8/6/13 14:02	
AC73804-002.Sample	0.0532	0.0578	-0.0046	0.000562799	0.91	2.5	1	100	0.025	1.099		8/6/13 14:04	
CCV-2.Control	0.3663		0.3663	0.532965007	1	1	1	1	0.533	0.025	107	8/6/13 14:04	PASS
CCB-2.Sample	0.0003		0.0003	0.007596422	1	1	1	1	0.008	0.025		8/6/13 14:05	
AC73763-005 T.Sample	0.0024		0.0024	0.010610832	0.87	2.5	1	100	0.488	1.149		8/6/13 14:06	
AC73763-004 T.Sample	0.0013		0.0013	0.009031855	0.87	2.5	1	100	0.415	1.149		8/6/13 14:06	
AC73763-006 T.Sample	0.0217		0.0217	0.038314696	0.79	2.5	1	100	1.940	1.266		8/6/13 14:07	
AC73771-001 T.Sample	0.0068		0.0068	0.016926738	0.91	2.5	1	100	0.744	1.099		8/6/13 14:08	
AC73771-002 T.Sample	0.0255		0.0255	0.043769341	0.89	2.5	1	100	1.967	1.124		8/6/13 14:09	
AC73804-002 T.Sample	0.0578		0.0578	0.090133837	0.91	2.5	1	100	3.962	1.099		8/6/13 14:11	
AC73804-001 T.Sample.Cycle1	0.0707		0.0707	0.108650925	0.91	2.5	1	100	4.776	1.099		8/6/13 14:14	
CCV-3.Sample.Cycle1	0.3633		0.3633	0.52865872	1	1	1	1	0.529	0.025	106	8/6/13 14:14	PASS
CCB-3.Sample.Cycle1	0.0004		0.0004	0.007739965	1	1	1	1	0.008	0.025		8/6/13 14:15	

BT 8/6/13 #163

BT 8/7/13

Hex-Cr Soil SW-846 3060A / 7196A

	Hex-Cr Soil		Q.C. DATA										
Batch#	163 A		QC Sample	AC73763-005 NS.Sample									
Date	8/6/2013			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD	
Analyst	BCT/JW			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL	
PrepBy	BCT		LCS	20.00	19.52	19.52	98%	75-125%	NA	NA	PASS		
			MS(Sol)	20.00	21.73	21.73	109%	75-125%	NA	NA	PASS		
			MS(Insol)	850.21	562.93	562.93	66%	75-125%	NA	20%		PASS	
			Sample	NA	ND	NA	NA	NA	NA	NA			
			Sample Dup	NA	ND	NA	NA	NA	NA	20%		PASS	
			PVS	20.00	22.95	22.95	115%	75-125%	NA	NA	PASS		
Lead Chromate Added :	0.0115	g											
Upper Calibration Abbsorbance:	0.6929												

****

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3113	0.0000	0.3113	0.454016206	1	1	1	1	0.454	0.500	91	8/6/13 14:19	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	0.0001	0.0000	0.0001	0.007309335	1	1	1	1	0.007	0.025		8/6/13 14:19	
MB.Sample	0.0008	0.0000	0.0008	0.008314138	1	2.5	1	100	0.333	1.000		8/6/13 14:20	
LCS.Sample	0.3349	0.0000	0.3349	0.487892407	1	2.5	1	100	19.516	1.000		8/6/13 14:21	
AC73763-005 NS.Sample	0.0000	0.0010	-0.0010	0.005730358	0.87	2.5	1	100	0.263	1.149		8/6/13 14:21	
AC73763-005 D.Sample	0.0005	0.0010	-0.0005	0.006448075	0.87	2.5	1	100	0.296	1.149		8/6/13 14:22	
AC73763-005 MS.Sample	0.3252	0.0010	0.3242	0.47253327	0.87	2.5	1	100	21.726	1.149		8/6/13 14:22	
AC73763-005 50X MSD.Sample	0.1666	0.0010	0.1656	0.244873559	0.87	2.5	50	100	562.928	57.471		8/6/13 14:23	
AC73763-005 PVS.Sample	0.3438	0.0010	0.3428	0.499232354	0.87	2.5	1	100	22.953	1.149		8/6/13 14:23	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3113		0.3113	0.454016206	1	1	1	1	0.454	0.025	91	8/6/13 14:19	PASS
ICB.Sample	0.0001		0.0001	0.007309335	1	1	1	1	0.007	0.025		8/6/13 14:19	
MB.Sample	0.0008		0.0008	0.008314138	1	2.5	1	100	0.333	1.000		8/6/13 14:20	
LCS.Sample	0.3349		0.3349	0.487892407	1	2.5	1	100	19.516	1.000		8/6/13 14:21	
AC73763-005 NS.Sample	0.0000	0.0010	-0.0010	0.005730358	0.87	2.5	1	100	0.263	1.149		8/6/13 14:21	
AC73763-005 D.Sample	0.0005	0.0010	-0.0005	0.006448075	0.87	2.5	1	100	0.296	1.149		8/6/13 14:22	
AC73763-005 MS.Sample	0.3252	0.0010	0.3242	0.47253327	0.87	2.5	1	100	21.726	1.149		8/6/13 14:22	
AC73763-005 XXX.Sample	3.8239	0.0010	3.8229	5.494683909	0.87	2.5	1	100	252.629	1.149		8/6/13 14:23	
AC73763-005 50X MSD.Sample	0.1666	0.0010	0.1656	0.244873559	0.87	2.5	50	100	562.928	57.471		8/6/13 14:23	
AC73763-005 PVS.Sample	0.3438	0.0010	0.3428	0.499232354	0.87	2.5	1	100	22.953	1.149		8/6/13 14:23	
CCV.Control	0.3614		0.3614	0.525931415	1	1	1	1	0.526	0.025		8/6/13 14:24	
CCB.Sample	0.0010		0.0010	0.008601225	1	1	1	1	0.009	0.025		8/6/13 14:24	
AC73763-004.Sample	0.0069	0.0062	0.0007	0.008170594	0.87	2.5	1	100	0.376	1.149		8/6/13 14:25	
AC73763-006.Sample	0.0364	0.0314	0.0050	0.014342962	0.79	2.5	1	100	0.726	1.266		8/6/13 14:25	
AC73771-001.Sample	0.0131	0.0066	0.0065	0.016496108	0.91	2.5	1	100	0.725	1.099		8/6/13 14:26	
AC73771-002.Sample	0.0199	0.0101	0.0098	0.021233038	0.89	2.5	1	100	0.954	1.124		8/6/13 14:26	
AC73804-001.Sample	0.0458	0.0397	0.0061	0.015921933	0.91	2.5	1	100	0.700	1.099		8/6/13 14:27	
AC73804-002.Sample	0.0728	0.0664	0.0064	0.016352571	0.91	2.5	1	100	0.719	1.099		8/6/13 14:27	
CCV-2.Control	0.3604		0.3604	0.524495957	1	1	1	1	0.524	0.025	105	8/6/13 14:27	PASS
CCB-2.Sample	0.0008		0.0008	0.008314138	1	1	1	1	0.008	0.025		8/6/13 14:27	
AC73763-005 T.Sample	0.0010		0.0010	0.008601225	0.87	2.5	1	100	0.395	1.149		8/6/13 14:28	
AC73763-004 T.Sample	0.0062		0.0062	0.016065479	0.87	2.5	1	100	0.739	1.149		8/6/13 14:30	
AC73763-006 T.Sample	0.0314		0.0314	0.052238397	0.79	2.5	1	100	2.645	1.266		8/6/13 14:30	
AC73771-001 T.Sample	0.0066		0.0066	0.016639652	0.91	2.5	1	100	0.731	1.099		8/6/13 14:31	
AC73771-002 T.Sample	0.0101		0.0101	0.021663668	0.89	2.5	1	100	0.974	1.124		8/6/13 14:31	
AC73804-002 T.Sample	0.0664		0.0664	0.102478564	0.91	2.5	1	100	4.505	1.099		8/6/13 14:32	
AC73804-001 T.Sample	0.0397		0.0397	0.064152497	0.91	2.5	1	100	2.820	1.099		8/6/13 14:33	
CCV-3.Control	0.3588		0.3588	0.522199268	1	1	1	1	0.522	0.025	104	8/6/13 14:33	PASS
CCB-3.Sample	0.0011		0.0011	0.008744768	1	1	1	1	0.009	0.025		8/6/13 14:33	

BT
8/6/13
#163A

BT
8/7/13

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)

Method 3060A

Batch: 163 Analyst Beery Date 8/6/13
Digestion Start: 10:10 Finish: 11:10 Hot Plate Temp 1: 91°C Hot Plate Temp 2: 92°C

Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 From	0.0 ml	7.84	100	1.93	
Cal Curve 0.025 100	0.025	7.80		1.86	V. 170304
Cal Curve 0.25 ppm	0.25	7.69		1.79	V. 170305
Cal Curve 0.5	0.5	7.56		1.84	V. 170306
Cal Curve 1.0	1.0	7.44		2.11	V. 170307
MB	2.5gm	7.12		2.13	
LCS		7.31		2.10	V. 170310
QC Sample AC73763.005					
PDS		7.27		1.95	ICV V. 170308
DUP		7.20		1.97	CCV V. 170309
(Sol) MS		7.41		1.90	
(Insol) MSD		7.69		2.13	
1. AC73763.004		7.64		2.12	
2. 005		7.53		1.96	
3. 006		7.90		1.95	
4. AC73771.001		7.18		1.84	
5. 002		7.54		1.79	
6. AC73804.001		7.57		1.86	
7. 002					
8.					
9.					
10.					
11.					
12.					
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18.					
19.					
20.					

Reagent	Lot #:		$MgCl_2$	# 7734
Digestion Solution - pH must be > 11.5. If not, discard	V- 167959	pH 13.34	Lead Chromate (PbCr)	# 6413
Phosphate Buffer	V- 164939		Weight of PbCr (10-20mg)	0.01159 mg
			PVS 100ppm Volume 0.5ml 1g ml	10% H_2SO_4 V: 167421
			Sample chosen for PVS should be spiked at 40 mg/kg. If sample is > 40 mg/kg, use 2X	5 M HNO_3 V: 168219
			Spike Volume 1ml & Lot # V- 167177	Col Rea. V: 169497

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)
Method 3060A

Batch: 163 A Analyst Beeva Date 8/6/13
Digestion Start: 10:10 Finish: 11:10 Hot Plate Temp 1: 91°C Hot Plate Temp 2: 92°C

Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 from	0.0 ml	7.84	100	1.93	
Cal Curve 0.025 100	0.025	7.80		1.86	V: 170304
Cal Curve 0.25 ppm	0.25	7.69		1.79	V. 170305
Cal Curve 0.5	0.5	7.56		1.84	V. 170306
Cal Curve 1.0	1.0	7.44		2.11	V. 170307
MB	2.5gm	7.43		1.97	
LCS		7.54		2.13	V. 170311
QC Sample AC73763.005					
PDS		7.70		2.14	ICV V.170308
DUP		7.63		2.10	CCV.V.170309
(Sol) MS		7.84		1.90	
(Insol) MSD		7.90		2.14	
1. AC73768.004		7.13		2.11	
2. 005		7.19		2.16	
3. 006		7.24		1.87	
4. AC73771.001		7.59		1.88	
5. 002		7.64		1.93	
6. AC73804.001		7.73		1.90	
7. 002		7.87		1.84	
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					

Reagent	Lot #:		$MgCl_2$	# 7734
Digestion Solution - pH must be > 11.5. If not, discard	V- 167959	pH 13.34	Lead Chromate (PbCr)	# 6413
Phosphate Buffer	V- 164939		Weight of PbCr (10-20mg)	0.01159 mg
			PVS 100 ppm Volume 0.5 ml 1 g	10% H_2SO_4 V: 167421
			Sample chosen for PVS should be spiked at 40 mg/kg. If sample is > 40 mg/kg, use 2X	5 M HNO_3 V: 168219
			Spike Volume 1ml & Lot # V- 167177	Col Rea. V: 169497

Hex-Cr Soil SW-846 3060A / 7196A

Cr6 soil curve		Date	8/6/2013			Batch #	163 A			TestGroupID	CR6-SOIL	
										TestID:	CR-HEX	
STD ppm			ABS									
0			0.0005		Intercept	Constant	-0.004992075					
0.025			0.0173									
0.25			0.1514		Slope	X Coefficients	0.696653734					
0.5			0.3495									
1			0.6929									
**********												
STD mg/L			ABS		PPM	DIFF						
0			0.0005		0.007883508	-0.007883508						
0.025			0.0173		0.031998788	-0.006998788						
0.25			0.1514		0.2244904	0.0255096						
0.5			0.3495		0.508849746	-0.008849746						
1			0.6929		1.001777557	-0.001777557						
**********												
SUMMARY OUTPUT												
Regression Statistics												
Multiple R	0.999383185											
R Square	0.99876675											
Adjusted R Square	0.998355666											
Standard Error	0.01168047											
Observations	5											
ANOVA												
	df	*SS*	*MS*	*F*	*Significance F*							
Regression	1	0.331477948	0.331477948	2429.59585	1.83877E-05							
Residual	3	0.0004093	0.000136433									
Total	4	0.331887248										
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*				
Intercept	-0.004992075	0.007242992	-0.689228382	0.540203151	-0.028042529	0.018058378	-0.028042529	0.018058378				
X Variable 1	0.696653734	0.014133507	49.29093071	1.83877E-05	0.651674563	0.741632904	0.651674563	0.741632904				

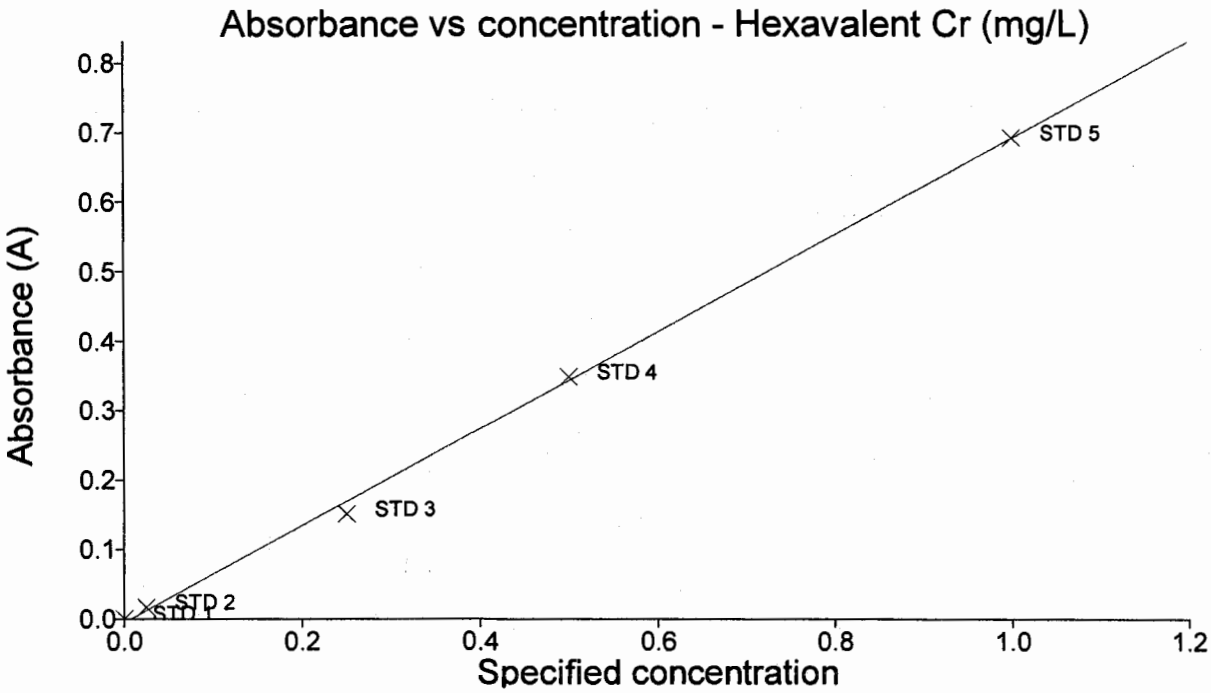
BM
8/6/13
#163A

BM
8/7/13

3080110 0368

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9994

Calibrated on: 08/06/13 17:44

User name: wet chem

Method name: Hexavalent Cr

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample.Cycle1	0.0000	0.0079	-0.0079	0.0005
STD 2.Sample.Cycle1	0.0250	0.0320	-0.0070	0.0173
STD 3.Sample.Cycle1	0.2500	0.2245	0.0255	0.1514
STD 4.Sample.Cycle1	0.5000	0.5088	-0.0088	0.3495
STD 5.Sample.Cycle1	1.0000	1.0018	-0.0018	0.6929

AB 8/7/13

AB 8/8/13

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		08/06/13 13:53:18	0.5000	0.0454	0.3117	0.4546
ICB.Sample		08/06/13 13:53:33			0.0011	0.0087
MB.Sample		08/06/13 13:54:34			0.0019	0.0098
LCS.Sample		08/06/13 13:54:48			0.3383	0.4927
AC73763-005 NS.Sample		08/06/13 13:56:10			0.0066	0.0166
AC73763-005 D.Sample		08/06/13 13:56:38			0.0017	0.0096
AC73763-005 MS.Sample		08/06/13 13:57:02			0.3086	0.4502
AC73763-005 XXX.Sample		08/06/13 13:57:33			3.9290	5.6474 : Exceeded calibration limits.
AC73763-005 50X MSD.Sample	50	08/06/13 13:57:48			0.1378	0.2049
AC73763-005 PVS.Sample		08/06/13 13:58:58			0.3561	0.5183
CCV.Control		08/06/13 13:59:33	0.5000	-0.0358	0.3683	0.5358
CCB.Sample		08/06/13 14:00:30			0.0008	0.0083
AC73763-004.Sample		08/06/13 14:00:51			0.0053	0.0148
AC73763-006.Sample		08/06/13 14:01:17			0.0216	0.0381
AC73771-001.Sample		08/06/13 14:01:45			0.0140	0.0272
AC73771-002.Sample		08/06/13 14:02:10			0.0310	0.0516
AC73804-001.Sample		08/06/13 14:02:34			0.0785	0.1198
AC73804-002.Sample		08/06/13 14:04:11			0.0532	0.0835
CCV-2.Control		08/06/13 14:04:47	0.5000	-0.0329	0.3663	0.5329
CCB-2.Sample		08/06/13 14:05:02			0.0003	0.0075
AC73763-005 T.Sample		08/06/13 14:06:06			0.0024	0.0106
AC73763-004 T.Sample		08/06/13 14:06:34			0.0013	0.0090
AC73763-006 T.Sample		08/06/13 14:07:50			0.0217	0.0383
AC73771-001 T.Sample		08/06/13 14:08:25			0.0068	0.0169
AC73771-002 T.Sample		08/06/13 14:09:33			0.0255	0.0437
AC73804-002 T.Sample		08/06/13 14:11:17			0.0578	0.0901

Report Generated On:08/06/2013 14:16

8/7/13 8/6/13 #163

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AC73804-001 T.Sample.Cycle1		08/06/13 14:14:43			0.0707	0.1086
CCV-3.Sample.Cycle1		08/06/13 14:14:55			0.3633	0.5287
CCB-3.Sample.Cycle1		08/06/13 14:15:05			0.0004	0.0077

JM 8/6/13

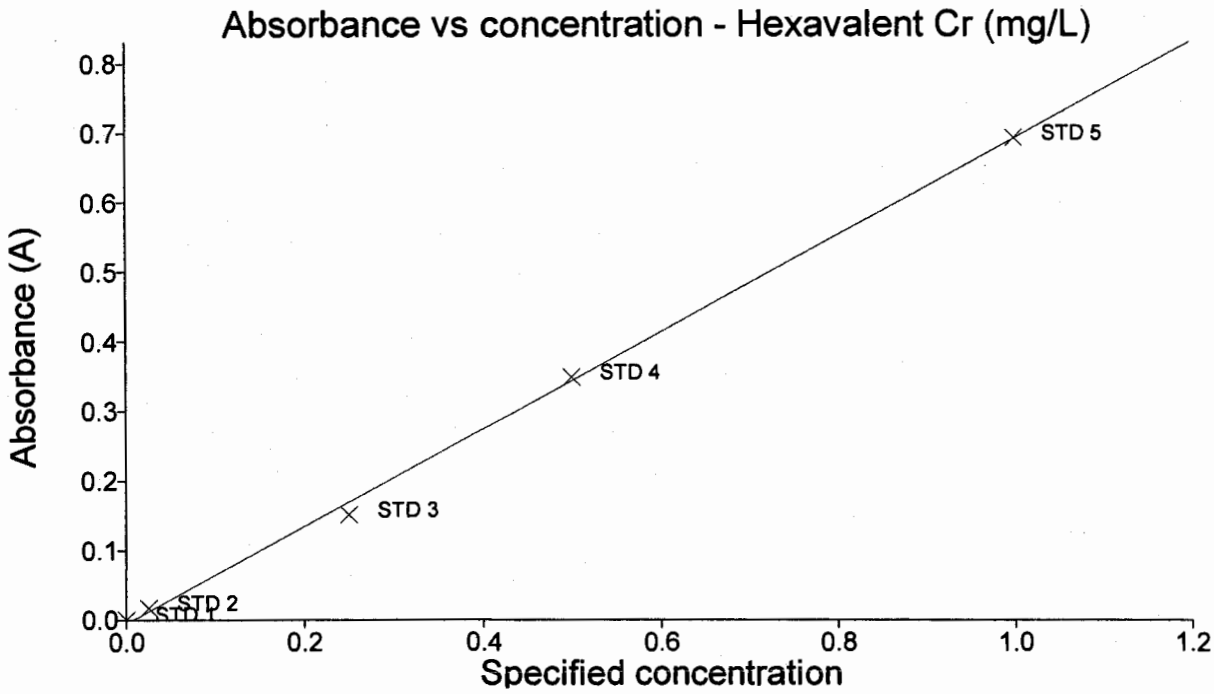
AA 8/7/13

Report Generated On:08/06/2013 14:16

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

- Calibration Graph



Correlation Coefficient: 0.9994

Calibrated on: 08/06/13 17:44

User name: wet chem

Method name: Hexavalent Cr

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample	0.0000	0.0079	-0.0079	0.0005
STD 2.Sample	0.0250	0.0320	-0.0070	0.0173
STD 3.Sample	0.2500	0.2245	0.0255	0.1514
STD 4.Sample	0.5000	0.5088	-0.0088	0.3495
STD 5.Sample	1.0000	1.0018	-0.0018	0.6929

BB 8/7/13 PM 8/6/13

Report Generated On:08/06/2013 14:34

163A

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		08/06/13 14:19:38	0.5000	0.0460	0.3113	0.4540
ICB.Sample		08/06/13 14:19:55			0.0001	0.0072
MB.Sample		08/06/13 14:20:37			0.0008	0.0083
LCS.Sample		08/06/13 14:21:02			0.3349	0.4878
AC73763-005 NS.Sample		08/06/13 14:21:30			0.0000	0.0072
AC73763-005 D.Sample		08/06/13 14:22:17			0.0005	0.0079
AC73763-005 MS.Sample		08/06/13 14:22:40			0.3252	0.4739
AC73763-005 XXX.Sample		08/06/13 14:23:07			3.8239	5.4965 : Exceeded calibration limits.
AC73763-005 50X MSD.Sample	50	08/06/13 14:23:27			0.1666	0.2462
AC73763-005 PVS.Sample		08/06/13 14:23:54			0.3438	0.5006
CCV.Control		08/06/13 14:24:10	0.5000	-0.0260	0.3614	0.5260
CCB.Sample		08/06/13 14:24:24			0.0010	0.0085
AC73763-004.Sample		08/06/13 14:25:17			0.0069	0.0170
AC73763-006.Sample		08/06/13 14:25:41			0.0364	0.0593
AC73771-001.Sample		08/06/13 14:26:11			0.0131	0.0259
AC73771-002.Sample		08/06/13 14:26:34			0.0199	0.0356
AC73804-001.Sample		08/06/13 14:27:09			0.0458	0.0728
AC73804-002.Sample		08/06/13 14:27:30			0.0728	0.1116
CCV-2.Control		08/06/13 14:27:42	0.5000	-0.0245	0.3604	0.5245
CCB-2.Sample		08/06/13 14:27:55			0.0008	0.0083
AC73763-005 T.Sample		08/06/13 14:28:43			0.0010	0.0085
AC73763-004 T.Sample		08/06/13 14:30:08			0.0062	0.0160
AC73763-006 T.Sample		08/06/13 14:30:46			0.0314	0.0521
AC73771-001 T.Sample		08/06/13 14:31:20			0.0066	0.0166
AC73771-002 T.Sample		08/06/13 14:31:51			0.0101	0.0217
AC73804-002 T.Sample		08/06/13 14:32:46			0.0664	0.1025

Report Generated On:08/06/2013 14:34

BA 8/7/13

BA 8/6/13 1634

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AC73804-001 T.Sample		08/06/13 14:33:17			0.0397	0.0641
CCV-3.Control		08/06/13 14:33:33	0.5000	-0.0222	0.3588	0.5222
CCB-3.Sample		08/06/13 14:33:46			0.0011	0.0088

AB
8/7/13

Report Generated On:08/06/2013 14:34

BD
8/6/13
163A

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-164939

Prepared By: Lewis, Simon D.
Description: Phosphate Buffer
Prep Date: 5/9/2013
Expiration Date: 11/8/2013
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml
ApprovedBy: aurora
ApproveDate: 05/21/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7487	POTASSIUM PHOSPHATE MONOBASIC	68.04 g	NEAT neat	
6514	Potassium Phosphate Dibasic Anhydrous	87.09 g	neat neat	
	DI WATER (FILL TO VOLUME)			

Veritech Lot Number: V-167177

Prepared By: Wonge, Janee
Description: 100 ppm cr6 std
Prep Date: 6/17/2013
Expiration Date: 12/16/2013
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: aurora
ApproveDate: 06/19/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7906	Chromium 1000 ppm Standard	10 ml	1000 mg/l	100 mg/l
	DI WATER FILL TO THE VOLUME			

Veritech Lot Number: V-167178

Prepared By: Wonge, Janee
Description: 100 ppm CR6 FOR CCV
Prep Date: 6/17/2013
Expiration Date: 12/16/2013
Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml
ApprovedBy: aurora
ApproveDate: 06/19/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
6758	Hexavalent Chromium	10 ml	1000 mg/l	100 mg/l
	DI WATER FILL TO THE VOLUME			

Veritech Lot Number: V-167421

Prepared By: Saghari, Hossain
Description: 10 % H2SO4
Prep Date: 6/19/2013
Expiration Date: 12/18/2013
Department: WetChem
BatchNumber:
Concentration: 10 %
Final Volume: 2000 ml
ApprovedBy: aurora
ApproveDate: 06/21/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7577	Sulfuric Acid	200 ml	neat neat	
	DI WATER FILL TO THE VOLUME			

Veritech Lot Number: V-167959

Prepared By: Lewis, Simon D.
Description: Cr6 digestion solution
Prep Date: 6/27/2013
Expiration Date: 12/26/2013
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 3000 ml
ApprovedBy: aurora
ApproveDate: 07/25/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7864	Sodium Carbonate Anhydrous	90 g	neat neat	
7490	Sodium Hydroxide	60 g	neat neat	
	DI WATER FILL TO THE VOLUME			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-168219

Prepared By: Trivedi, Beena
Description: 5 M HNO3
Prep Date: 7/3/2013
Expiration Date: 1/2/2014
Department: WetChem
BatchNumber:
Concentration: 5 m
Final Volume: 2000 ml
ApprovedBy: aurora
ApproveDate: 07/03/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7592	Nitric Acid	640 ml	neat neat	
	DI WATER FILL TO THE VOLUME			

Veritech Lot Number: V-169497

Prepared By: Trivedi, Beena
Description: Cr6 Color Reagent
Prep Date: 7/24/2013
Expiration Date: 8/31/2013
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 200 ml
ApprovedBy: aurora
ApproveDate: 07/25/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7705	1,5-Diphenylcarbezide	1 g	NEAT neat	
7517	Acetone	200 ml	neat neat	

Veritech Lot Number: V-170304

Prepared By: Trivedi, Beena
Description: 0.025 ppm
Prep Date: 8/6/2013
Expiration Date: 8/6/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.025 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

8/7/13

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	.025 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-167959	Cr6 digestion solution	50	Reagent reag	

Veritech Lot Number: V-170305

Prepared By: Trivedi, Beena
Description: 0.25 ppm
Prep Date: 8/6/2013
Expiration Date: 8/6/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.25 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	.25 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-167959	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-170306

Prepared By: Trivedi, Beena
Description: 0.5 ppm
Prep Date: 8/6/2013
Expiration Date: 8/6/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	.5 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-167959	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Internally Prepared Standard Log

BB 8/7/13

Veritech Lot Number: V-170307

Prepared By: Trivedi, Beena
Description: 1.0 ppm
Prep Date: 8/6/2013
Expiration Date: 8/6/2013
Department: Wet Lab
BatchNumber:
Concentration: 1.0 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	1 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-167959	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-170308

Prepared By: Trivedi, Beena
Description: ICV
Prep Date: 8/6/2013
Expiration Date: 8/6/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167178	100 ppm CR6 FOR CCV	.5 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-167959	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-170309

Prepared By: Trivedi, Beena
Description: CCV
Prep Date: 8/6/2013
Expiration Date: 8/6/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167178	100 ppm CR6 FOR CCV	.5 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-167959	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-170310

Prepared By: Trivedi, Beena
Description: LCS
Prep Date: 8/6/2013
Expiration Date: 8/6/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	.5 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-167959	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-170311

Prepared By: Trivedi, Beena
Description: LCS-2
Prep Date: 8/6/2013
Expiration Date: 8/6/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	.5 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-167959	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 6514

Description
Potassium Phosphate Dibasic Anhydrous

ApprovedBy: jean
ApproveDate: 08/17/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	m-8391	112839	12/02/11	12/01/15	Soules, John	1	500g	neat	neat

Veritech Control/Receipt Number: 6758

Description
Hexavalent Chromium

ApprovedBy: melissa
ApproveDate: 02/17/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
HACH	14664-42	A1320	02/17/12	11/01/16	Dalmeida, Melissa	2	100m	1000	mg/L

Veritech Control/Receipt Number: 7487

Description
POTASSIUM PHOSPHATE MONOBASIC

ApprovedBy: jean
ApproveDate: 11/27/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	P 285-500	124970	11/26/12	11/25/20	Trivedi, Beena	1	500 G	NEAT	NEAT

Veritech Control/Receipt Number: 7490

Description
Sodium Hydroxide

ApprovedBy: richq
ApproveDate: 11/27/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EMD	SX0590-7	B0729269 152	11/21/12	11/20/16	Quimby, Richard	4	12KG	neat	neat

Veritech Control/Receipt Number: 7517

Description
Acetone

ApprovedBy: jean
ApproveDate: 12/14/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T Baker	9254-03	022620	12/12/12	10/11/15	Batts, Alvin	32	4L	neat	neat

Veritech Control/Receipt Number: 7577

Description
Sulfuric Acid

ApprovedBy: jean
ApproveDate: 01/10/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	A510-P212	3112052	01/10/13	11/19/15	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 7592

Description
Nitric Acid

ApprovedBy: shiamala
ApproveDate: 02/13/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	25627	01/18/13	11/07/17	Lopez, Jose	8	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number:7705

Description
1,5-Diphenylcarbezide

ApprovedBy: melissa
ApproveDate: 02/19/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	D85-25	120894	02/19/13	02/18/18	Trivedi, Beena	1	25G	NEAT	NEAT

Veritech Control/Receipt Number:7864

Description
Sodium Carbonate Anhydrous

ApprovedBy: melissa
ApproveDate: 04/24/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LabChem	LC22965-1	C046-24	04/24/13	04/23/15	Dalmeida, Melissa	11	500g	neat	neat

Veritech Control/Receipt Number:7906

Description
Chromium 1000 ppm Standard

ApprovedBy: melissa
ApproveDate: 06/13/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	SC192-100	125581	05/22/13	09/30/14	Dalmeida, Melissa	1	100 m	1000	mg/L

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 6413

Description
Lead Chromate

ApprovedBy: melissa
ApproveDate: 01/23/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Pfaltz & Bauer inc	L01745	A056-5	10/27/11	10/26/14	Soules, John	1	500g	neat	neat

Veritech Control/Receipt Number: 7734

Description
Magnesium Chloride, Anhydrous

ApprovedBy: melissa
ApproveDate: 02/25/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
AMRESCO	J364-500G	1932C182	02/25/13	02/24/18	Dalmeida, Melissa	2	500g	Neat	Neat

3080110 0381

Hampton-Clarke/Veritech

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 209

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Meter #: 16004

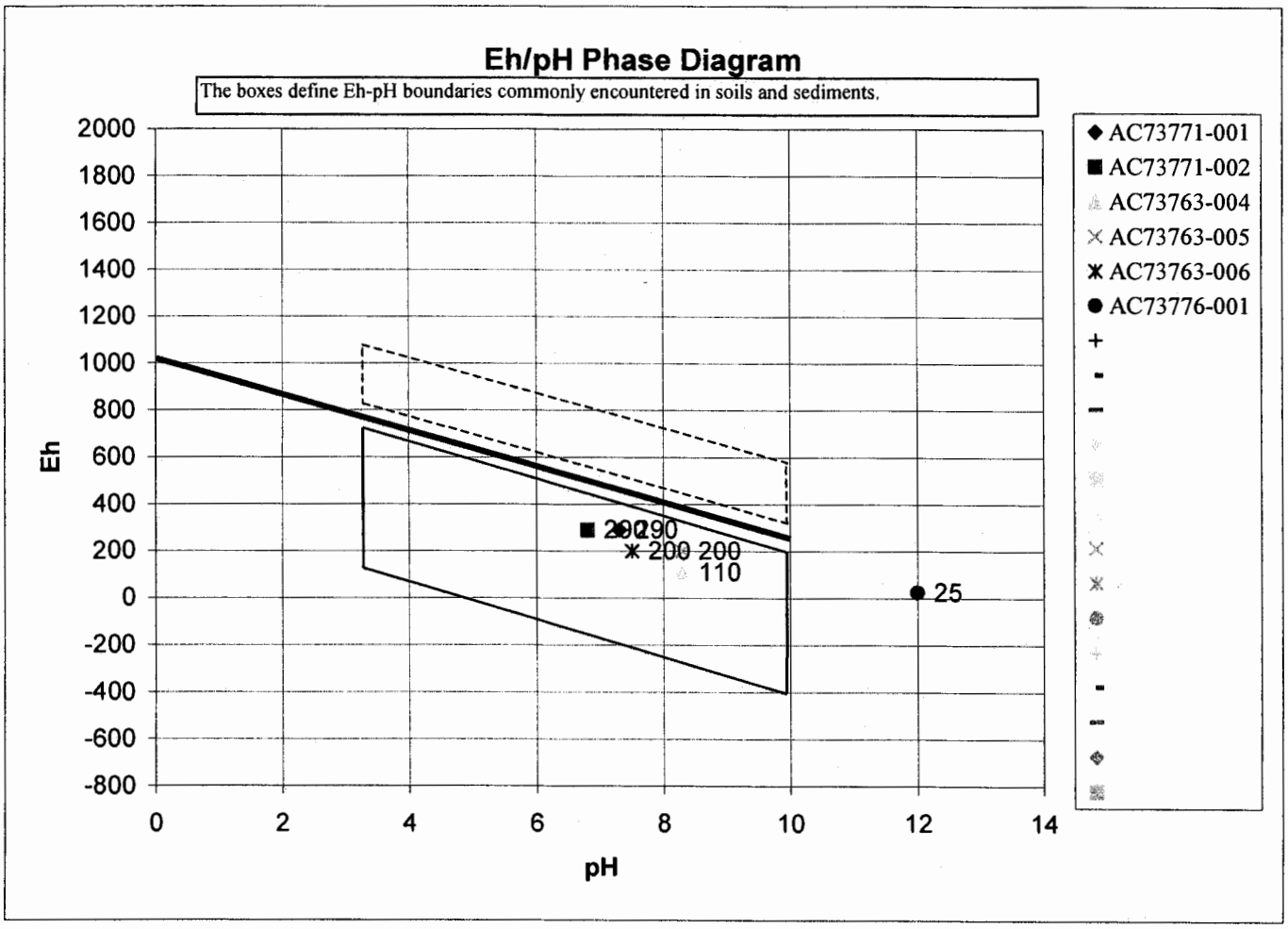
Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	223.3	20.6	223.3	20.6	LCS: 4.44	—	—	08/02/13 10:35	SY
DUP AC73771-001	316.7	23.4	316.8	23.4	DUP: 7.01	25	25		
1. AC73771-001	291.2	23.0	291.4	23.0	7.28				
2. AC73771-002	291.4	23.1	291.2	23.1	6.77				
3. AC73763-004	105.5	23.8	104.8	23.8	8.30				
4. AC73763-005	197.5	23.7	193.5	23.7	8.29				
5. AC73763-006	194.6	23.5	194.8	23.5	7.53				
6. AC73776-001	24.7	24.5	24.8	24.5	12.38				
7.									
8.									
9.									
10.									
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									

* Reading 1 and Reading 2 must agree within ± 10 mV

Reviewed by: _____

Date Reviewed: _____

Solution	Manufacturer's Lot #
ZoBell's Solution	7792
4 M KCl Filling Solution	5456
LCS	V- 169601



Sample	Eh	pH
AC73771-001	290	7.3
AC73771-002	290	6.8
AC73763-004	110	8.3
AC73763-005	200	8.3
AC73763-006	200	7.5
AC73776-001	25	12

Reducing

Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units must be added for the combination platinum electrode used.

8-08/04/13

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-169601

Prepared By: Trivedi, Beena	Department: WetChem	ApprovedBy: aurora
Description: KHP LCS	BatchNumber:	ApproveDate: 07/26/13
Prep Date: 7/24/2013	Concentration: 300 ppm	Checked: Yes
Expiration Date: 1/24/2014	Final Volume: 2000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
5981	POTASSIUM HYDROGEN PHTHALATE DI WATER FILL TO THE VOLUME	600 mg	NEAT	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 5981

Description
POTASSIUM HYDROGEN PHTHALATE

ApprovedBy: jean
ApproveDate: 05/24/11
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	P243-500	101727	05/24/11	05/31/21	Revolus, Jean	1	500g	NEAT	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 5456

Description
Redox reference probe solution

ApprovedBy: brent
ApproveDate: 06/15/11
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
fisher	SP135-500	105440	11/19/10	11/18/13	Miller,Gael E.	1	500ml	4	M

Veritech Control/Receipt Number: 7792

Description
ZoBell's Solution

ApprovedBy: melissa
ApproveDate: 03/25/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Ricca	9880-32	2302653	03/25/13	11/30/13	Dalmeida, Melissa	1	1L	Neat	Neat

Hampton-Clarke/Veritech

pH CALIBRATION RECORD

pH Meter: Orion 3 Star

Serial # B16004

Date	Calibration				Checks				Buffer Lot #s		
	Initials	Calibrate		Read	Initials	Read	Initials	Read	pH 4.0	pH 10.0	pH 7.0
	Time	Buffer 1	Buffer 2	pH 7.0 Buffer	Time	pH 7.0 Buffer	Time	pH 7.0 Buffer			
07/22/13	SJ 7:30	4.00	10.00	7.06	SJ 14:15	7.07			7601	7691	7922
07/23/13	SJ 7:00	4.00	10.00	7.05	HS 10:20	7.05			7601	7691	7922
07/24/13	SJ 7:50	4.00	10.00	7.05	BY 10:20	7.05			7601	7691	7922
07/25/13	SJ 7:40	4.00	10.00	7.05	SDC 11:20	7.06	MM 14:00	7.02	7601	7691	7922
07/26/13	SJ 7:55	4.00	10.00	7.05	BY 11:30	7.06	SDC 14:35	7.06	7601	7691	7922
07/29/13	SJ 7:40	4.00	10.00	7.05	SDC 10:30	7.06			7601	7691	7922
7/30/13	SJ 7:40	4.00	10.00	7.05	BY 10:40	7.05			7601	7691	7922
07/31/13	SJ 7:50	4.00	10.00	7.02	SDC 10:00	7.03			7601	8004	7922
08/01/13	SJ 7:45	4.00	10.00	7.01	BY 12:30	7.02	BY 15:30	7.02	7601	8004	7922
08/02/13	SJ 7:45	4.00	10.00	7.02	SJ 10:35	7.02			7601	8004	7922

Calibrate using pH 4.0 and pH 10.0/Read and record pH 7.0 (the pH 7.0 must agree within ± 0.1 pH units)
When using the pH meter more for analysis and more than 3 hours has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.

Miscellaneous Data

30801110 0388

Hampton-Clarke/Veritech

LEACHATE PREPARATION LOG
(TCLP, SPLP)

Start Date: 8/1/13

Finish Date: 8/2/13

**TCLP Ext. Fluid #1 pH: 4.88 (criteria: 4.93 ± 0.5)
**TCLP Ext. Fluid #2 pH: (criteria: 2.88 ± 0.05)
**SPLP Ext. Fluid #3 pH: 4.20 (criteria: 4.20 ± 0.5)

Sample #	pH (units)	pH in HCL (units)	Final pH (units)	Ext. Fluid (number)	Wt./Vol of Sample (g or mL)	Start Time	Finish Time	Analyst (s)	Ext. Type*	Comments
AC 73742-001	7.56	1.80	5.91	EF1170078	100g/2L	20:00	1:45	E.R.	T	Metals Only.
AC 73763-004	8.09	1.76	4.96		150g/3L					Metals and Organics.
AC 73763-005	10.18	1.82	4.87							
AC 73763-006	8.26	1.74	5.02							
AC 73771-001	8.63	1.74	5.03		100g/2L					Metals Only.
AC 73771-002	7.93	1.65	5.01							
AC 73329-001	—	—	9.21	SPLP109862					P	
AC 73329-002			9.28							
AC 73329-005			9.47							
AC 73745-001			9.84							
AC 73745-002			9.90							
AC 73745-003			97.1							
AC 73747-001			9.83							
AC 73747-002			9.68							
AC 73747-003			9.29							
AC 73655-001			7.12							Organics Only.
SPLP109862	4.20		9.62		3L					Metals and Organics
EF1170078	4.88		4.89	EF170078					T	

* Ext. Type: TCLP = T (Method 1311) LAMP=L (Methods 1311 / ANSI/NEMA C78.LL 1256-2003)
SPLP = P (Method 1312) MEP=M (Method 1320)
ZHE = Z (Method 1311/1312)

** The pH of the extraction fluid must be checked prior to use and must be within limits specified above

0065

HC·V
HamptonClarke·Veritech

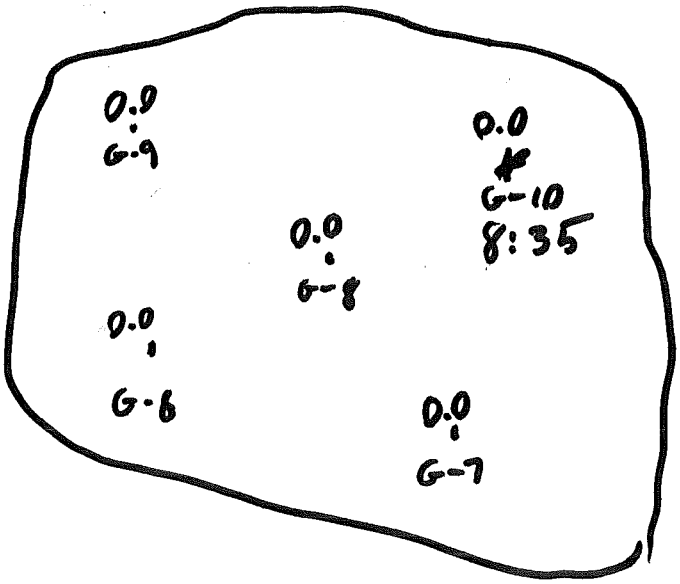
Last Page of Report

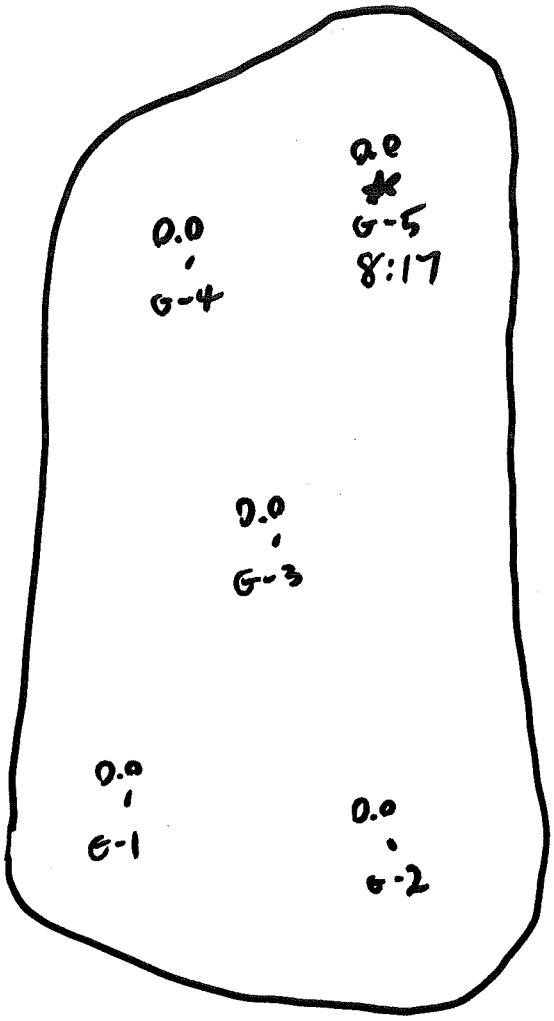
N

BB - NY - Soil Piles

8/1/13

Matt McArdle





HC·V
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175 ROUTE 46 WEST, UNIT D · FAIRFIELD, NJ 07004
2 MADISON ROAD, FAIRFIELD, NJ 07004
800-426-9992 · 973-244-9770
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Project: BayonneBridge-NY

Client PO: B06-264.054

Report To: PORT AUTHORITY OF NY & NJ
MATERIALS ENGINEERING DIV.
241 ERIE ST.
ROOM 234
JERSEY CITY, NJ 07310-1397

Attn: D.Bailey/A.Zafirelis

Received Date: 8/1/2013

Report Date: 8/8/2013

Deliverables: NYDOH-R

Lab ID: AC73771

Lab Project No: 3080110

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Veritech to all parties shall not exceed Veritech's total fee for analytical services rendered.

Robin Cousineau - Quality Assurance Director OR **Stanley Gilewicz - Laboratory Director**

NJ (07071) NY (ELAP11408) CT (PH-0671)
PA (68-00463) KY (90124)

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Method Blank Form 1 with Quantitation Reports/Chromatograms

Instrument Blank Quantitation Reports/Chromatograms

MBS/MBSD Quantitation Reports/Chromatograms

Matrix Spike Quantitation Reports/Chromatograms

Sample DUP Quantitation Reports/Chromatograms

EPH Category 2 Data **242**

EPH Category 2 Sample Data **243**

Form 1 Sample Results with Quantitation Reports/Chromatograms

EPH Category 2 Sample QC Summary **250**

Form 2 Surrogate Recovery

Form 3 MBS/MBSD/MS Recovery / MBS/MBSD and Sample/DUP RPD Data

Form 4 - Blank Summary

Form 5 - Retention Time Drift Summary

Form 8 - Surrogate Area Summary

EPH Category 2 Standards Data **262**

Form 6 Initial Calibration & RT Summary with Quantitation Reports/Chromatograms

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EPH Category 2 Raw QC Data **288**

Method Blank Form 1 with Quantitation Reports/Chromatograms

Instrument Blank Quantitation Reports/Chromatograms

MBS/MBSD Quantitation Reports/Chromatograms

Matrix Spike Quantitation Reports/Chromatograms

Sample DUP Quantitation Reports/Chromatograms

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Form 1 Sample Results

Metals Form 2 Calibration Summary

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Sample Summary

Client: PORT AUTHORITY OF NY & NJ

Project: BayonneBridge-NY

HCV Project #: 3080110

Lab#	SampleID	Matrix	Collection Date	Receipt Date
AC73771-001	BB-COMP-1-0801113	Soil	8/1/2013	8/1/2013
AC73771-002	BB-COMP-2-0801113	Soil	8/1/2013	8/1/2013
AC73771-003	BB-GRAB-5-0801113	Soil/Encore	8/1/2013	8/1/2013
AC73771-004	BB-GRAB-10-0801113	Soil/Encore	8/1/2013	8/1/2013

HCV Case Narrative

Client: Port Authority of NY & NJ
Project: Bayonne Bridge-NY

HCV Project: 3080110

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Volatile Organic Analysis:

Data conforms to method requirements.

Base Neutral/Acid Extractable Analysis:

Dimethylphthalate was recovered in Method Blank 25788 and in sample AC73771-002 due to laboratory contamination. Samples are flagged with "B" qualifier.

PCB Analysis:

Data conforms to method requirements.

Pesticide Analysis:

The Matrix Spike, Matrix Spike Duplicate and/or MS/MSD RPD for batch 25778 had recoveries outside QC limits. However, since the associated Method Blank and Laboratory Control Sample were within control, no corrective action was necessary.

Extractable Petroleum Hydrocarbon Analysis:

The Matrix Spike for batch 25787 had recoveries outside QC limits. However, since the associated Laboratory Control Samples (MBS/MBSD) were within control, no corrective action was necessary.

Metals Analysis:

The Matrix Spike and/or Matrix Spike Duplicate for batch 26592 had recoveries outside QC limits. However, since the associated Method Blank and Laboratory Control Sample were within control, no corrective action was necessary.
The MS/MSD RPD and RPD between the QC sample and the Method Replicate had recoveries outside QC limits also. The RPD criteria were met between the LCS/LCS Method Replicate. In addition, the serial dilution is outside QC limits suggesting matrix interference.

Wet Chemistry Analysis:

The insoluble spike for batch 163-Hex-Cr recovered outside QC limits. The batch was re-analyzed confirming low recovery of insoluble spike. The initial analysis is reported.

Samples AC73771-001 and 002 were analyzed for Reactivity using SW-846 7.3. SW-846 7.3 is not a NELAP accredited parameter.

Robin Cousineau Quality Assurance Director	Or	Stanley Gilewicz Laboratory Director	8/8/2013 Date

HCV Executive Summary

Client: PORT AUTHORITY OF NY & NJ

HCV Project #: 3080110

Project: BayonneBridge-NY

Lab#: AC73771-001 **Sample ID: BB-COMP-1-0801113**

Analyte	Units	RL	Result	Analytical Method
pH	ph		7.3	9040C/9045D
Ignitability	deg. f		>141	EPA 1010
Aluminum	mg/kg	220	8900	EPA 6010B
Arsenic	mg/kg	2.2	8.1	EPA 6010B
Barium	mg/l	0.25	0.56	EPA 6010B
Barium	mg/kg	11	74	EPA 6010B
Beryllium	mg/kg	0.66	0.80	EPA 6010B
Calcium	mg/kg	1100	2600	EPA 6010B
Chromium	mg/kg	5.5	21	EPA 6010B
Cobalt	mg/kg	2.7	9.4	EPA 6010B
Copper	mg/kg	5.5	38	EPA 6010B
Iron	mg/kg	220	17000	EPA 6010B
Lead	mg/kg	5.5	80	EPA 6010B
Magnesium	mg/kg	550	4300	EPA 6010B
Manganese	mg/kg	11	450	EPA 6010B
Nickel	mg/kg	5.5	34	EPA 6010B
Potassium	mg/kg	550	1100	EPA 6010B
Vanadium	mg/kg	11	35	EPA 6010B
Zinc	mg/kg	11	88	EPA 6010B
p,p'-DDD	mg/kg	0.0027	0.0034	EPA 8081A
p,p'-DDE	mg/kg	0.0027	0.059	EPA 8081A
p,p'-DDT	mg/kg	0.0027	0.037	EPA 8081A
Benzo[a]anthracene	mg/kg	0.037	0.058	EPA 8270C
Benzo[a]pyrene	mg/kg	0.037	0.057	EPA 8270C
Benzo[b]fluoranthene	mg/kg	0.037	0.081	EPA 8270C
Benzo[g,h,i]perylene	mg/kg	0.0092	0.053	EPA 8270C
Chrysene	mg/kg	0.037	0.071	EPA 8270C
Fluoranthene	mg/kg	0.037	0.088	EPA 8270C
Indeno[1,2,3-cd]pyrene	mg/kg	0.037	0.045	EPA 8270C
Phenanthrene	mg/kg	0.037	0.052	EPA 8270C
Pyrene	mg/kg	0.037	0.11	EPA 8270C
TotalSemiVolatileTic	mg/kg	NA	47J	EPA 8270C
C9-C40	mg/kg	66	70	NJEPHRev3B
Eh	mv		290	SM 2580

NOTE: Soil Results are reported to Dry Weigh

HCV Executive Summary

Client: PORT AUTHORITY OF NY & NJ **HCV Project #:** 3080110

Project: BayonneBridge-NY

Lab#: AC73771-002 **Sample ID: BB-COMP-2-0801113**

Analyte	Units	RL	Result	Analytical Method
pH	ph		6.8	9040C/9045D
Ignitability	deg. f		>141	EPA 1010
Aluminum	mg/kg	220	9500	EPA 6010B
Arsenic	mg/kg	2.2	8.3	EPA 6010B
Barium	mg/l	0.25	0.57	EPA 6010B
Barium	mg/kg	11	78	EPA 6010B
Beryllium	mg/kg	0.67	0.85	EPA 6010B
Calcium	mg/kg	1100	2100	EPA 6010B
Chromium	mg/kg	5.6	18	EPA 6010B
Cobalt	mg/kg	2.8	8.1	EPA 6010B
Copper	mg/kg	5.6	36	EPA 6010B
Iron	mg/kg	220	17000	EPA 6010B
Lead	mg/kg	5.6	69	EPA 6010B
Magnesium	mg/kg	560	4300	EPA 6010B
Manganese	mg/kg	11	430	EPA 6010B
Nickel	mg/kg	5.6	16	EPA 6010B
Potassium	mg/kg	560	1200	EPA 6010B
Vanadium	mg/kg	11	37	EPA 6010B
Zinc	mg/kg	11	76	EPA 6010B
p,p'-DDE	mg/kg	0.0028	0.0090	EPA 8081A
p,p'-DDT	mg/kg	0.0028	0.012	EPA 8081A
Anthracene	mg/kg	0.037	0.040	EPA 8270C
Benzo[a]anthracene	mg/kg	0.037	0.14	EPA 8270C
Benzo[a]pyrene	mg/kg	0.037	0.12	EPA 8270C
Benzo[b]fluoranthene	mg/kg	0.037	0.19	EPA 8270C
Benzo[g,h,i]perylene	mg/kg	0.0094	0.093	EPA 8270C
Benzo[k]fluoranthene	mg/kg	0.037	0.058	EPA 8270C
Carbazole	mg/kg	0.037	0.040	EPA 8270C
Chrysene	mg/kg	0.037	0.15	EPA 8270C
Dibenzofuran	mg/kg	0.0094	0.026	EPA 8270C
Dimethylphthalate	mg/kg	0.037	0.038B	EPA 8270C
Fluoranthene	mg/kg	0.037	0.30	EPA 8270C
Indeno[1,2,3-cd]pyrene	mg/kg	0.037	0.091	EPA 8270C
Naphthalene	mg/kg	0.0094	0.019	EPA 8270C
Phenanthrene	mg/kg	0.037	0.30	EPA 8270C
Pyrene	mg/kg	0.037	0.32	EPA 8270C
TotalSemiVolatileTic	mg/kg	NA	53J	EPA 8270C
Eh	mv		290	SM 2580

Lab#: AC73771-004 **Sample ID: BB-GRAB-10-0801113**

Analyte	Units	RL	Result	Analytical Method
TotalVolatileTic	mg/kg	NA	0.0061J	EPA 8260B

HCV Report Of Analysis

Client: PORT AUTHORITY OF NY & NJ
Project: BayonneBridge-NY

HCV Project #: 3080110

Sample ID: BB-COMP-1-0801113
Lab#: AC73771-001
Matrix: Soil

Collection Date: 8/1/2013
Receipt Date: 8/1/2013

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		91

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.1	ND

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.26	ND

Eh

Analyte	DF	Units	RL	Result
Eh	1	mv		290

Ignitability (1010 modified)

Analyte	DF	Units	RL	Result
Ignitability	1	deg. f		>141

Mercury (Soil/Waste) 7471A

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.092	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00070	ND

NJ EPH Category 1

Analyte	DF	Units	RL	Result
>C28-C40	1	mg/kg	66	ND
C9-C28	1	mg/kg	66	ND
C9-C40 Cat1 Total EPH	1	mg/kg	66	ND

NJ EPH Category 2

Analyte	DF	Units	RL	Result
C9-C40	1	mg/kg	66	70

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0055	ND
Aldrin	1	mg/kg	0.0055	ND
Alpha-BHC	1	mg/kg	0.0011	ND
beta-BHC	1	mg/kg	0.0011	ND
delta-BHC	1	mg/kg	0.0055	ND
Dieldrin	1	mg/kg	0.0011	ND
Endosulfan I	1	mg/kg	0.0055	ND
Endosulfan II	1	mg/kg	0.0055	ND
Endosulfan Sulfate	1	mg/kg	0.0055	ND
Endrin	1	mg/kg	0.0055	ND
Endrin Aldehyde	1	mg/kg	0.0055	ND
Endrin Ketone	1	mg/kg	0.0055	ND

Sample ID: BB-COMP-1-0801113
Lab#: AC73771-001
Matrix: Soil

Collection Date: 8/1/2013
Receipt Date: 8/1/2013

gamma-BHC	1	mg/kg	0.0011	ND
Heptachlor	1	mg/kg	0.0055	ND
Heptachlor Epoxide	1	mg/kg	0.0055	ND
Methoxychlor	1	mg/kg	0.0055	ND
p,p'-DDD	**1**	**mg/kg**	**0.0027**	**0.0034**
p,p'-DDE	**1**	**mg/kg**	**0.0027**	**0.059**
p,p'-DDT	**1**	**mg/kg**	**0.0027**	**0.037**
Toxaphene	1	mg/kg	0.027	ND
y-Chlordane	1	mg/kg	0.0055	ND

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.027	ND
Aroclor-1016	1	mg/kg	0.027	ND
Aroclor-1221	1	mg/kg	0.027	ND
Aroclor-1232	1	mg/kg	0.027	ND
Aroclor-1242	1	mg/kg	0.027	ND
Aroclor-1248	1	mg/kg	0.027	ND
Aroclor-1254	1	mg/kg	0.027	ND
Aroclor-1260	1	mg/kg	0.027	ND
Aroclor-1262	1	mg/kg	0.027	ND
Aroclor-1268	1	mg/kg	0.027	ND

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	**1**	**ph**		**7.3**

Reactive Cyanide

Analyte	DF	Units	RL	Result
Cyanide (Reactive)	1	mg/kg	0.50	ND

Reactive Sulfide

Analyte	DF	Units	RL	Result
Sulfide (Reactive)	1	mg/kg	100	ND

Semivolatile Organics + 25 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.037	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.037	ND
1,2-Diphenylhydrazine	1	mg/kg	0.037	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.037	ND
2,4,5-Trichlorophenol	1	mg/kg	0.037	ND
2,4,6-Trichlorophenol	1	mg/kg	0.037	ND
2,4-Dichlorophenol	1	mg/kg	0.0092	ND
2,4-Dimethylphenol	1	mg/kg	0.0092	ND
2,4-Dinitrophenol	1	mg/kg	0.18	ND
2,4-Dinitrotoluene	1	mg/kg	0.037	ND
2,6-Dinitrotoluene	1	mg/kg	0.037	ND
2-Chloronaphthalene	1	mg/kg	0.037	ND
2-Chlorophenol	1	mg/kg	0.037	ND
2-Methylnaphthalene	1	mg/kg	0.037	ND
2-Methylphenol	1	mg/kg	0.0092	ND
2-Nitroaniline	1	mg/kg	0.037	ND
2-Nitrophenol	1	mg/kg	0.037	ND
3&4-Methylphenol	1	mg/kg	0.0092	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.037	ND
3-Nitroaniline	1	mg/kg	0.037	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.037	ND

Sample ID: BB-COMP-1-0801113 **Collection Date: 8/1/2013**
Lab#: AC73771-001 **Receipt Date: 8/1/2013**
Matrix: Soil

4-Bromophenyl-phenylether	1	mg/kg	0.037	ND
4-Chloro-3-methylphenol	1	mg/kg	0.037	ND
4-Chloroaniline	1	mg/kg	0.017	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.037	ND
4-Nitroaniline	1	mg/kg	0.037	ND
4-Nitrophenol	1	mg/kg	0.037	ND
Acenaphthene	1	mg/kg	0.037	ND
Acenaphthylene	1	mg/kg	0.037	ND
Acetophenone	1	mg/kg	0.037	ND
Anthracene	1	mg/kg	0.037	ND
Atrazine	1	mg/kg	0.037	ND
Benzaldehyde	1	mg/kg	0.037	ND
Benzidine	1	mg/kg	0.037	ND
Benzo[a]anthracene	**1**	**mg/kg**	**0.037**	**0.058**
Benzo[a]pyrene	**1**	**mg/kg**	**0.037**	**0.057**
Benzo[b]fluoranthene	**1**	**mg/kg**	**0.037**	**0.081**
Benzo[g,h,i]perylene	**1**	**mg/kg**	**0.0092**	**0.053**
Benzo[k]fluoranthene	1	mg/kg	0.037	ND
Benzyl alcohol	1	mg/kg	0.037	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.037	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0092	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.037	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.037	ND
Butylbenzylphthalate	1	mg/kg	0.037	ND
Caprolactam	1	mg/kg	0.037	ND
Carbazole	1	mg/kg	0.037	ND
Chrysene	**1**	**mg/kg**	**0.037**	**0.071**
Dibenzo[a,h]anthracene	1	mg/kg	0.037	ND
Dibenzofuran	1	mg/kg	0.0092	ND
Diethylphthalate	1	mg/kg	0.037	ND
Dimethylphthalate	1	mg/kg	0.037	ND
Di-n-butylphthalate	1	mg/kg	0.018	ND
Di-n-octylphthalate	1	mg/kg	0.037	ND
Fluoranthene	**1**	**mg/kg**	**0.037**	**0.088**
Fluorene	1	mg/kg	0.037	ND
Hexachlorobenzene	1	mg/kg	0.037	ND
Hexachlorobutadiene	1	mg/kg	0.037	ND
Hexachlorocyclopentadiene	1	mg/kg	0.037	ND
Hexachloroethane	1	mg/kg	0.037	ND
Indeno[1,2,3-cd]pyrene	**1**	**mg/kg**	**0.037**	**0.045**
Isophorone	1	mg/kg	0.037	ND
Naphthalene	1	mg/kg	0.0092	ND
Nitrobenzene	1	mg/kg	0.037	ND
N-Nitrosodimethylamine	1	mg/kg	0.037	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.0092	ND
N-Nitrosodiphenylamine	1	mg/kg	0.037	ND
Pentachlorophenol	1	mg/kg	0.062	ND
Phenanthrene	**1**	**mg/kg**	**0.037**	**0.052**
Phenol	1	mg/kg	0.037	ND
Pyrene	**1**	**mg/kg**	**0.037**	**0.11**

Semivolatile Organics + 25 (8270) Library Searches

Analyte	DF	Units	RT	Result
Hexadecanoic acid	**1**	**mg/kg**	**10.45**	**0.087J**
unknown	**1**	**mg/kg**	**12.62**	**0.086J**
Phosphonic acid, dioctadecyl ester	**1**	**mg/kg**	**12.8**	**0.24JB**
3,5,7-Trimethoxy-2,8-dimethyldibenzopho	**1**	**mg/kg**	**13.33**	**0.13J**

Sample ID: BB-COMP-1-0801113 **Collection Date: 8/1/2013**
Lab#: AC73771-001 **Receipt Date: 8/1/2013**
Matrix: Soil

1-Hentetracontanol	1	mg/kg	13.58	0.12J
9-Octadecenamide, (Z)-	1	mg/kg	13.91	0.081J
Docosane, 11-decyl-	1	mg/kg	14.31	0.19J
unknown	1	mg/kg	14.33	0.22J
Octadecane	1	mg/kg	15.13	0.18J
11-Tricosene	1	mg/kg	15.17	0.13J
unknown	1	mg/kg	15.9	0.10J
unknown	1	mg/kg	16.02	0.11J
Stigmasta-5,23-dien-3.beta.-ol	1	mg/kg	16.17	0.18J
9-Eicosene, (E)-	1	mg/kg	16.23	0.11J
Stigmast-5-en-3-ol, (3.beta.,24S)-	1	mg/kg	16.55	0.52J
unknown	1	mg/kg	4.15	1.3JB
2-Pentanone, 4-hydroxy-4-methyl-	1	mg/kg	4.48	43JAB
unknown	1	mg/kg	5.12	0.21JB
TotalSemiVolatileTic	1	mg/kg	NA	47J

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	220	8900
Antimony	1	mg/kg	2.2	ND
Arsenic	1	mg/kg	2.2	8.1
Barium	1	mg/kg	11	74
Beryllium	1	mg/kg	0.66	0.80
Cadmium	1	mg/kg	0.66	ND
Calcium	1	mg/kg	1100	2600
Chromium	1	mg/kg	5.5	21
Cobalt	1	mg/kg	2.7	9.4
Copper	1	mg/kg	5.5	38
Iron	1	mg/kg	220	17000
Lead	1	mg/kg	5.5	80
Magnesium	1	mg/kg	550	4300
Manganese	1	mg/kg	11	450
Nickel	1	mg/kg	5.5	34
Potassium	1	mg/kg	550	1100
Selenium	1	mg/kg	2.0	ND
Silver	1	mg/kg	1.6	ND
Sodium	1	mg/kg	270	ND
Thallium	1	mg/kg	1.3	ND
Vanadium	1	mg/kg	11	35
Zinc	1	mg/kg	11	88

TCLP Metals 6010

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.20	ND
Barium	1	mg/l	0.25	0.56
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.20	ND
Lead	1	mg/l	0.15	ND
Selenium	1	mg/l	0.20	ND
Silver	1	mg/l	0.050	ND

Sample ID: BB-COMP-2-0801113
Lab#: AC73771-002
Matrix: Soil

Collection Date: 8/1/2013
Receipt Date: 8/1/2013

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**89**

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.1	ND

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.27	ND

Eh

Analyte	DF	Units	RL	Result
Eh	**1**	**mv**		**290**

Ignitability (1010 modified)

Analyte	DF	Units	RL	Result
Ignitability	**1**	**deg. f**		**>141**

Mercury (Soil/Waste) 7471A

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.094	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00070	ND

NJ EPH Category 1

Analyte	DF	Units	RL	Result
>C28-C40	1	mg/kg	67	ND
C9-C28	1	mg/kg	67	ND
C9-C40 Cat1 Total EPH	1	mg/kg	67	ND

NJ EPH Category 2

Analyte	DF	Units	RL	Result
C9-C40	1	mg/kg	67	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0056	ND
Aldrin	1	mg/kg	0.0056	ND
Alpha-BHC	1	mg/kg	0.0011	ND
beta-BHC	1	mg/kg	0.0011	ND
delta-BHC	1	mg/kg	0.0056	ND
Dieldrin	1	mg/kg	0.0011	ND
Endosulfan I	1	mg/kg	0.0056	ND
Endosulfan II	1	mg/kg	0.0056	ND
Endosulfan Sulfate	1	mg/kg	0.0056	ND
Endrin	1	mg/kg	0.0056	ND
Endrin Aldehyde	1	mg/kg	0.0056	ND
Endrin Ketone	1	mg/kg	0.0056	ND
gamma-BHC	1	mg/kg	0.0011	ND
Heptachlor	1	mg/kg	0.0056	ND
Heptachlor Epoxide	1	mg/kg	0.0056	ND
Methoxychlor	1	mg/kg	0.0056	ND
p,p'-DDD	1	mg/kg	0.0028	ND
p,p'-DDE	**1**	**mg/kg**	**0.0028**	**0.0090**

Sample ID: BB-COMP-2-0801113 **Collection Date: 8/1/2013**
Lab#: AC73771-002 **Receipt Date: 8/1/2013**
Matrix: Soil

p,p'-DDT	**1**	**mg/kg**	**0.0028**	**0.012**
Toxaphene	1	mg/kg	0.028	ND
y-Chlordane	1	mg/kg	0.0056	ND

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.028	ND
Aroclor-1016	1	mg/kg	0.028	ND
Aroclor-1221	1	mg/kg	0.028	ND
Aroclor-1232	1	mg/kg	0.028	ND
Aroclor-1242	1	mg/kg	0.028	ND
Aroclor-1248	1	mg/kg	0.028	ND
Aroclor-1254	1	mg/kg	0.028	ND
Aroclor-1260	1	mg/kg	0.028	ND
Aroclor-1262	1	mg/kg	0.028	ND
Aroclor-1268	1	mg/kg	0.028	ND

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	**1**	**ph**		**6.8**

Reactive Cyanide

Analyte	DF	Units	RL	Result
Cyanide (Reactive)	1	mg/kg	0.50	ND

Reactive Sulfide

Analyte	DF	Units	RL	Result
Sulfide (Reactive)	1	mg/kg	100	ND

Semivolatile Organics + 25 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.037	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.037	ND
1,2-Diphenylhydrazine	1	mg/kg	0.037	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.037	ND
2,4,5-Trichlorophenol	1	mg/kg	0.037	ND
2,4,6-Trichlorophenol	1	mg/kg	0.037	ND
2,4-Dichlorophenol	1	mg/kg	0.0094	ND
2,4-Dimethylphenol	1	mg/kg	0.0094	ND
2,4-Dinitrophenol	1	mg/kg	0.19	ND
2,4-Dinitrotoluene	1	mg/kg	0.037	ND
2,6-Dinitrotoluene	1	mg/kg	0.037	ND
2-Chloronaphthalene	1	mg/kg	0.037	ND
2-Chlorophenol	1	mg/kg	0.037	ND
2-Methylnaphthalene	1	mg/kg	0.037	ND
2-Methylphenol	1	mg/kg	0.0094	ND
2-Nitroaniline	1	mg/kg	0.037	ND
2-Nitrophenol	1	mg/kg	0.037	ND
3&4-Methylphenol	1	mg/kg	0.0094	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.037	ND
3-Nitroaniline	1	mg/kg	0.037	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.037	ND
4-Bromophenyl-phenylether	1	mg/kg	0.037	ND
4-Chloro-3-methylphenol	1	mg/kg	0.037	ND
4-Chloroaniline	1	mg/kg	0.018	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.037	ND
4-Nitroaniline	1	mg/kg	0.037	ND
4-Nitrophenol	1	mg/kg	0.037	ND

Sample ID: BB-COMP-2-0801113 **Collection Date: 8/1/2013**
Lab#: AC73771-002 **Receipt Date: 8/1/2013**
Matrix: Soil

Acenaphthene	1	mg/kg	0.037	ND
Acenaphthylene	1	mg/kg	0.037	ND
Acetophenone	1	mg/kg	0.037	ND
Anthracene	**1**	**mg/kg**	**0.037**	**0.040**
Atrazine	1	mg/kg	0.037	ND
Benzaldehyde	1	mg/kg	0.037	ND
Benzidine	1	mg/kg	0.037	ND
Benzo[a]anthracene	**1**	**mg/kg**	**0.037**	**0.14**
Benzo[a]pyrene	**1**	**mg/kg**	**0.037**	**0.12**
Benzo[b]fluoranthene	**1**	**mg/kg**	**0.037**	**0.19**
Benzo[g,h,i]perylene	**1**	**mg/kg**	**0.0094**	**0.093**
Benzo[k]fluoranthene	**1**	**mg/kg**	**0.037**	**0.058**
Benzyl alcohol	1	mg/kg	0.037	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.037	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0094	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.037	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.037	ND
Butylbenzylphthalate	1	mg/kg	0.037	ND
Caprolactam	1	mg/kg	0.037	ND
Carbazole	**1**	**mg/kg**	**0.037**	**0.040**
Chrysene	**1**	**mg/kg**	**0.037**	**0.15**
Dibenzo[a,h]anthracene	1	mg/kg	0.037	ND
Dibenzofuran	**1**	**mg/kg**	**0.0094**	**0.026**
Diethylphthalate	1	mg/kg	0.037	ND
Dimethylphthalate	**1**	**mg/kg**	**0.037**	**0.038B**
Di-n-butylphthalate	1	mg/kg	0.019	ND
Di-n-octylphthalate	1	mg/kg	0.037	ND
Fluoranthene	**1**	**mg/kg**	**0.037**	**0.30**
Fluorene	1	mg/kg	0.037	ND
Hexachlorobenzene	1	mg/kg	0.037	ND
Hexachlorobutadiene	1	mg/kg	0.037	ND
Hexachlorocyclopentadiene	1	mg/kg	0.037	ND
Hexachloroethane	1	mg/kg	0.037	ND
Indeno[1,2,3-cd]pyrene	**1**	**mg/kg**	**0.037**	**0.091**
Isophorone	1	mg/kg	0.037	ND
Naphthalene	**1**	**mg/kg**	**0.0094**	**0.019**
Nitrobenzene	1	mg/kg	0.037	ND
N-Nitrosodimethylamine	1	mg/kg	0.037	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.0094	ND
N-Nitrosodiphenylamine	1	mg/kg	0.037	ND
Pentachlorophenol	1	mg/kg	0.063	ND
Phenanthrene	**1**	**mg/kg**	**0.037**	**0.30**
Phenol	1	mg/kg	0.037	ND
Pyrene	**1**	**mg/kg**	**0.037**	**0.32**

Semivolatile Organics + 25 (8270) Library Searches

Analyte	DF	Units	RT	Result
Hexadecanoic acid	**1**	**mg/kg**	**10.45**	**0.20J**
unknown	**1**	**mg/kg**	**11.96**	**0.10J**
5-Eicosene, (E)-	**1**	**mg/kg**	**12.8**	**0.38J**
3,5,7-Trimethoxy-2,8-dimethyldibenzopho	**1**	**mg/kg**	**13.33**	**0.29J**
1-Octadecene	**1**	**mg/kg**	**13.58**	**0.21J**
7-Tetradecyne	**1**	**mg/kg**	**13.7**	**0.39J**
unknown	**1**	**mg/kg**	**13.91**	**0.24J**
16-Octadecenal	**1**	**mg/kg**	**14.09**	**0.26J**
Cyclotetracosane	**1**	**mg/kg**	**14.33**	**0.78J**
Perylene	**1**	**mg/kg**	**14.46**	**0.12J**

Sample ID: BB-COMP-2-0801113 **Collection Date: 8/1/2013**
Lab#: AC73771-002 **Receipt Date: 8/1/2013**
Matrix: Soil

(Z)14-TRICOSENYL FORMATE	1	mg/kg	14.9	0.15J
Heneicosane	1	mg/kg	15.13	0.18J
Cyclohexane, 1,2-dimethyl-3-pentyl-4-pr	1	mg/kg	15.17	0.24J
unknown	1	mg/kg	15.88	0.17J
Ergost-5-en-3-ol, (3.beta.)-	1	mg/kg	16.03	0.13J
unknown	1	mg/kg	16.17	0.23J
3-Eicosene, (E)-	1	mg/kg	16.24	0.18J
unknown	1	mg/kg	4.16	1.4JB
2-Pentanone, 4-hydroxy-4-methyl-	1	mg/kg	4.49	47JAB
unknown	1	mg/kg	5.13	0.24JB
TotalSemiVolatileTic	1	mg/kg	NA	53J

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	220	9500
Antimony	1	mg/kg	2.2	ND
Arsenic	1	mg/kg	2.2	8.3
Barium	1	mg/kg	11	78
Beryllium	1	mg/kg	0.67	0.85
Cadmium	1	mg/kg	0.67	ND
Calcium	1	mg/kg	1100	2100
Chromium	1	mg/kg	5.6	18
Cobalt	1	mg/kg	2.8	8.1
Copper	1	mg/kg	5.6	36
Iron	1	mg/kg	220	17000
Lead	1	mg/kg	5.6	69
Magnesium	1	mg/kg	560	4300
Manganese	1	mg/kg	11	430
Nickel	1	mg/kg	5.6	16
Potassium	1	mg/kg	560	1200
Selenium	1	mg/kg	2.0	ND
Silver	1	mg/kg	1.7	ND
Sodium	1	mg/kg	280	ND
Thallium	1	mg/kg	1.3	ND
Vanadium	1	mg/kg	11	37
Zinc	1	mg/kg	11	76

TCLP Metals 6010

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.20	ND
Barium	1	mg/l	0.25	0.57
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.20	ND
Lead	1	mg/l	0.15	ND
Selenium	1	mg/l	0.20	ND
Silver	1	mg/l	0.050	ND

Sample ID: BB-GRAB-5-0801113
Lab#: AC73771-003
Matrix: Soil/Encore

Collection Date: 8/1/2013
Receipt Date: 8/1/2013

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		90

Volatile Organics + 10 (8260)

Analyte	DF	Units	RL	Result
1,1,1,2-Tetrachloroethane	1.13	mg/kg	0.0025	ND
1,1,1-Trichloroethane	1.13	mg/kg	0.0025	ND
1,1,2,2-Tetrachloroethane	1.13	mg/kg	0.0025	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.13	mg/kg	0.0025	ND
1,1,2-Trichloroethane	1.13	mg/kg	0.0025	ND
1,1-Dichloroethane	1.13	mg/kg	0.0025	ND
1,1-Dichloroethene	1.13	mg/kg	0.0025	ND
1,2,3-Trichlorobenzene	1.13	mg/kg	0.0025	ND
1,2,4-Trichlorobenzene	1.13	mg/kg	0.0025	ND
1,2-Dibromo-3-chloropropane	1.13	mg/kg	0.0025	ND
1,2-Dibromoethane	1.13	mg/kg	0.0025	ND
1,2-Dichlorobenzene	1.13	mg/kg	0.0025	ND
1,2-Dichloroethane	1.13	mg/kg	0.0013	ND
1,2-Dichloropropane	1.13	mg/kg	0.0025	ND
1,3-Dichlorobenzene	1.13	mg/kg	0.0025	ND
1,4-Dichlorobenzene	1.13	mg/kg	0.0025	ND
1,4-Dioxane	1.13	mg/kg	0.13	ND
2-Butanone	1.13	mg/kg	0.0025	ND
2-Hexanone	1.13	mg/kg	0.0025	ND
4-Methyl-2-pentanone	1.13	mg/kg	0.0025	ND
Acetone	1.13	mg/kg	0.013	ND
Acrolein	1.13	mg/kg	0.013	ND
Acrylonitrile	1.13	mg/kg	0.0063	ND
Benzene	1.13	mg/kg	0.0013	ND
Bromochloromethane	1.13	mg/kg	0.0025	ND
Bromodichloromethane	1.13	mg/kg	0.0025	ND
Bromoform	1.13	mg/kg	0.0025	ND
Bromomethane	1.13	mg/kg	0.0025	ND
Carbon disulfide	1.13	mg/kg	0.0025	ND
Carbon tetrachloride	1.13	mg/kg	0.0025	ND
Chlorobenzene	1.13	mg/kg	0.0025	ND
Chloroethane	1.13	mg/kg	0.0025	ND
Chloroform	1.13	mg/kg	0.0025	ND
Chloromethane	1.13	mg/kg	0.0025	ND
cis-1,2-Dichloroethene	1.13	mg/kg	0.0025	ND
cis-1,3-Dichloropropene	1.13	mg/kg	0.0025	ND
Cyclohexane	1.13	mg/kg	0.0025	ND
Dibromochloromethane	1.13	mg/kg	0.0025	ND
Dichlorodifluoromethane	1.13	mg/kg	0.0025	ND
Ethylbenzene	1.13	mg/kg	0.0013	ND
Isopropylbenzene	1.13	mg/kg	0.0013	ND
m&p-Xylenes	1.13	mg/kg	0.0013	ND
Methyl Acetate	1.13	mg/kg	0.0025	ND
Methylcyclohexane	1.13	mg/kg	0.0025	ND
Methylene chloride	1.13	mg/kg	0.0025	ND
Methyl-t-butyl ether	1.13	mg/kg	0.0013	ND
o-Xylene	1.13	mg/kg	0.0013	ND
Styrene	1.13	mg/kg	0.0025	ND
t-Butyl Alcohol	1.13	mg/kg	0.013	ND
Tetrachloroethene	1.13	mg/kg	0.0025	ND

Sample ID: BB-GRAB-5-0801113
Lab#: AC73771-003
Matrix: Soil/Encore

Collection Date: 8/1/2013
Receipt Date: 8/1/2013

Toluene	1.13	mg/kg	0.0013	ND
trans-1,2-Dichloroethene	1.13	mg/kg	0.0025	ND
trans-1,3-Dichloropropene	1.13	mg/kg	0.0025	ND
Trichloroethene	1.13	mg/kg	0.0025	ND
Trichlorofluoromethane	1.13	mg/kg	0.0025	ND
Vinyl chloride	1.13	mg/kg	0.0025	ND
Xylenes (Total)	1.13	mg/kg	0.0013	ND

Volatile Organics + 10 (8260) Library Searches

Analyte	DF	Units	RT	Result
No Unknown Compounds Detected	1.13	mg/kg	NA	ND
TotalVolatileTic	1.13	mg/kg	NA	ND

Sample ID: BB-GRAB-10-0801113
Lab#: AC73771-004
Matrix: Soil/Encore

Collection Date: 8/1/2013
Receipt Date: 8/1/2013

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		85

Volatile Organics + 10 (8260)

Analyte	DF	Units	RL	Result
1,1,1,2-Tetrachloroethane	1.16	mg/kg	0.0027	ND
1,1,1-Trichloroethane	1.16	mg/kg	0.0027	ND
1,1,2,2-Tetrachloroethane	1.16	mg/kg	0.0027	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.16	mg/kg	0.0027	ND
1,1,2-Trichloroethane	1.16	mg/kg	0.0027	ND
1,1-Dichloroethane	1.16	mg/kg	0.0027	ND
1,1-Dichloroethene	1.16	mg/kg	0.0027	ND
1,2,3-Trichlorobenzene	1.16	mg/kg	0.0027	ND
1,2,4-Trichlorobenzene	1.16	mg/kg	0.0027	ND
1,2-Dibromo-3-chloropropane	1.16	mg/kg	0.0027	ND
1,2-Dibromoethane	1.16	mg/kg	0.0027	ND
1,2-Dichlorobenzene	1.16	mg/kg	0.0027	ND
1,2-Dichloroethane	1.16	mg/kg	0.0014	ND
1,2-Dichloropropane	1.16	mg/kg	0.0027	ND
1,3-Dichlorobenzene	1.16	mg/kg	0.0027	ND
1,4-Dichlorobenzene	1.16	mg/kg	0.0027	ND
1,4-Dioxane	1.16	mg/kg	0.14	ND
2-Butanone	1.16	mg/kg	0.0027	ND
2-Hexanone	1.16	mg/kg	0.0027	ND
4-Methyl-2-pentanone	1.16	mg/kg	0.0027	ND
Acetone	1.16	mg/kg	0.014	ND
Acrolein	1.16	mg/kg	0.014	ND
Acrylonitrile	1.16	mg/kg	0.0068	ND
Benzene	1.16	mg/kg	0.0014	ND
Bromochloromethane	1.16	mg/kg	0.0027	ND
Bromodichloromethane	1.16	mg/kg	0.0027	ND
Bromoform	1.16	mg/kg	0.0027	ND
Bromomethane	1.16	mg/kg	0.0027	ND
Carbon disulfide	1.16	mg/kg	0.0027	ND
Carbon tetrachloride	1.16	mg/kg	0.0027	ND
Chlorobenzene	1.16	mg/kg	0.0027	ND
Chloroethane	1.16	mg/kg	0.0027	ND
Chloroform	1.16	mg/kg	0.0027	ND
Chloromethane	1.16	mg/kg	0.0027	ND
cis-1,2-Dichloroethene	1.16	mg/kg	0.0027	ND
cis-1,3-Dichloropropene	1.16	mg/kg	0.0027	ND
Cyclohexane	1.16	mg/kg	0.0027	ND
Dibromochloromethane	1.16	mg/kg	0.0027	ND
Dichlorodifluoromethane	1.16	mg/kg	0.0027	ND
Ethylbenzene	1.16	mg/kg	0.0014	ND
Isopropylbenzene	1.16	mg/kg	0.0014	ND
m&p-Xylenes	1.16	mg/kg	0.0014	ND
Methyl Acetate	1.16	mg/kg	0.0027	ND
Methylcyclohexane	1.16	mg/kg	0.0027	ND
Methylene chloride	1.16	mg/kg	0.0027	ND
Methyl-t-butyl ether	1.16	mg/kg	0.0014	ND
o-Xylene	1.16	mg/kg	0.0014	ND
Styrene	1.16	mg/kg	0.0027	ND
t-Butyl Alcohol	1.16	mg/kg	0.014	ND
Tetrachloroethene	1.16	mg/kg	0.0027	ND

Sample ID: BB-GRAB-10-0801113
Lab#: AC73771-004
Matrix: Soil/Encore

Collection Date: 8/1/2013
Receipt Date: 8/1/2013

Toluene	1.16	mg/kg	0.0014	ND
trans-1,2-Dichloroethene	1.16	mg/kg	0.0027	ND
trans-1,3-Dichloropropene	1.16	mg/kg	0.0027	ND
Trichloroethene	1.16	mg/kg	0.0027	ND
Trichlorofluoromethane	1.16	mg/kg	0.0027	ND
Vinyl chloride	1.16	mg/kg	0.0027	ND
Xylenes (Total)	1.16	mg/kg	0.0014	ND

Volatile Organics + 10 (8260) Library Searches

Analyte	DF	Units	RT	Result
unknown	**1.16**	**mg/kg**	**2.83**	**0.0061J**
TotalVolatileTic	**1.16**	**mg/kg**	**NA**	**0.0061J**

HCV Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

MDL = Method Detection Limit

RL* = Reporting Limit

ND = Not Detected

RT = Retention Time

NA = Not Applicable

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

B- Indicates analyte was present in the Method Blank and sample.

d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.

E- Indicates the concentration exceeded the upper calibration range of the instrument.

J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

Laboratory Chronicle

Client: PORT AUTHORITY OF NY & NJ

HCV Project #: 3080110

Project: BayonneBridge-NY

Lab#: AC73771-001 **Sample ID: BB-COMP-1-0801113**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	8/2/13 00:00	melissa
Cr (Hexavalent) 7196A	EPA 3060A	08/06/13	BCT	EPA 7196A	8/6/13 14:01	BCT/JW
Cyanide (Soil/Waste) 9012B	EPA 9012B	08/05/13	Melissa	EPA 9012B	8/5/13 14:14	af
Eh		08/02/13	sn	SM 2580	8/2/13 00:00	sn
Ignitability (1010 modified)				EPA 1010	8/1/13 00:00	sdl
Mercury (Soil/Waste) 7471A	EPA 7471A	08/06/13	Olufemi	EPA 7471A	8/6/13 16:58	OA
Mercury (TCLP) 7470A	EPA 7470A	08/05/13	Julijana	EPA 7470A	8/6/13 13:10	OA
NJ EPH Category 1	EPA3510/3545	08/02/13	dyr/jessica	NJEPHRev3A	8/3/13 21:47	KD/RAK/MS
NJ EPH Category 2	EPA3510/3545	08/02/13	dyr/jessica	NJEPHRev3B	8/3/13 21:47	KD/RAK/MS
Organochlorine Pesticides 8081	3510C/3550B	08/02/13	lmilteer	EPA 8081A	8/5/13 11:29	MS
PCB 8082	3510C/3550B	08/02/13	lmilteer	EPA 8082	8/2/13 13:11	MS
pH 9040C/9045D		08/02/13	sn	9040C/9045D	8/2/13 10:35	sn
Reactive Cyanide	SW846 7.3.3	08/01/13	hossain	SW846 7.3.3	8/5/13 11:00	af
Reactive Sulfide	SW846 7.3.4	08/01/13	HS	SW846 7.3.4	8/2/13 00:00	BCT
Semivolatile Organics + 25 (8270)	3510C/3550B	08/02/13	hj	EPA 8270C	8/2/13 18:49	AHD/JB
TAL Metals 6010	3005&10/3050	08/02/13	aadewusi	EPA 6010B	8/2/13 19:36	OA
TAL Metals 6010	3005&10/3050	08/02/13	aadewusi	EPA 6010B	8/6/13 15:37	OA
TCLP Metals 6010	3005&10/3050	08/05/13	Julijana	EPA 6010B	8/5/13 17:58	SRB
TCLP Metals Extraction 1311	EPA 1311	08/01/13	Ramos		8/2/13 00:00	Ramos

Lab#: AC73771-002 **Sample ID: BB-COMP-2-0801113**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	8/2/13 00:00	melissa
Cr (Hexavalent) 7196A	EPA 3060A	08/06/13	BCT	EPA 7196A	8/6/13 14:02	BCT/JW
Cyanide (Soil/Waste) 9012B	EPA 9012B	08/05/13	Melissa	EPA 9012B	8/5/13 14:22	af
Eh		08/02/13	sn	SM 2580	8/2/13 00:00	sn
Ignitability (1010 modified)				EPA 1010	8/1/13 00:00	sdl
Mercury (Soil/Waste) 7471A	EPA 7471A	08/06/13	Olufemi	EPA 7471A	8/6/13 16:52	OA
Mercury (TCLP) 7470A	EPA 7470A	08/05/13	Julijana	EPA 7470A	8/6/13 13:23	OA
NJ EPH Category 1	EPA3510/3545	08/02/13	dyr/jessica	NJEPHRev3A	8/3/13 22:17	KD/RAK/MS
NJ EPH Category 2	EPA3510/3545	08/02/13	dyr/jessica	NJEPHRev3B	8/3/13 22:17	KD/RAK/MS
Organochlorine Pesticides 8081	3510C/3550B	08/02/13	lmilteer	EPA 8081A	8/5/13 11:47	MS
PCB 8082	3510C/3550B	08/02/13	lmilteer	EPA 8082	8/2/13 13:26	MS
pH 9040C/9045D		08/02/13	sn	9040C/9045D	8/2/13 10:35	sn
Reactive Cyanide	SW846 7.3.3	08/01/13	hossain	SW846 7.3.3	8/5/13 11:02	af
Reactive Sulfide	SW846 7.3.4	08/01/13	HS	SW846 7.3.4	8/2/13 00:00	BCT
Semivolatile Organics + 25 (8270)	3510C/3550B	08/02/13	hj	EPA 8270C	8/2/13 19:12	AHD/JB
TAL Metals 6010	3005&10/3050	08/02/13	aadewusi	EPA 6010B	8/2/13 19:07	OA
TAL Metals 6010	3005&10/3050	08/02/13	aadewusi	EPA 6010B	8/6/13 15:14	OA
TCLP Metals 6010	3005&10/3050	08/05/13	Julijana	EPA 6010B	8/5/13 18:40	SRB
TCLP Metals Extraction 1311	EPA 1311	08/01/13	Ramos		8/2/13 00:00	Ramos

Laboratory Chronicle

Client: PORT AUTHORITY OF NY & NJ

HCV Project #: 3080110

Project: BayonneBridge-NY

Lab#: AC73771-003 **Sample ID: BB-GRAB-5-0801113**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	8/2/13 00:00	melissa
Volatile Organics + 10 (8260)	EPA5030/5035			EPA 8260B	8/5/13 11:27	SG

Lab#: AC73771-004 **Sample ID: BB-GRAB-10-0801113**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	8/2/13 00:00	melissa
Volatile Organics + 10 (8260)	EPA5030/5035			EPA 8260B	8/5/13 11:11	SG

Chain of Custody

3080110 0021

HE PORT AUTHORITY OF NY & NJ

Materials Engineering Division - 241 Erie Street, Room 234

Jersey City, NJ 07310

Chain-of-Custody

PAGE _1_ OF _1_ PA PROJECT SDG NO__

3080110

Contact Name	Dorian Bailey / Angelos Zafirelis
Contact Phone No.	201-216-2963 / 201-216-2960
Contact Fax No.	201-216-2158
Contact Email	dbailey@PANYNJ.gov / azafirel@PANYNJ.gov
Destination Laboratory:	HC-V
Lab Case/SDG:	

Facility	Bayonne Bridge - NY
Project Info.	2 Additional Soil Piles at BB - NY Side
Charge Code #	B06-264.054

EQUIS Sys_Sample_Code	Contract Lab Sample ID	Date of Collection	Time of Collection	Geotech Cross ID	# of Containers	Preservative Code (MeOH No.)	Grab or Composite	Cat#1 HZ EPH TCL Bnas+20 (X)	Ignitability, Corrosivity, Reactivity	TCL - VO + 10 (X)	Total Cyanide	TAL Metals & Hexavalent Chromium and Mercury	TCLP Metals (8), PCBs, Pesticides (X)	Equis / PDF
	AC73771													
BB-COMP-1-080113	Lab composites Grabs 1-5	8/1/2013	0:00	001	5		COMP	X	X		X	X	X	X
BB-COMP-2-080113	Lab composites Grabs 6-10	8/1/2013	0:00	002	5		COMP	X	X		X	X	X	X
BB-GRAB-5-080113	EnCore	8/1/2013	8:17	003	1		GRAB			X				
BB-GRAB-10-080113	EnCore	8/1/2013	8:35	004	1		GRAB			X				

Sampled By: MM
Sampling Method: Spoon

Preservatives:
1. Ice 2. HCl 3. HNO3
4. NaOH 5. MeOH 6. H2SO4

TAT: 72 Hour
(*) TCL+30 + NYDEP SCC List + SRS List

Deliverables: Data Summary

Relinquished By: [signature] Date: 8/1/13 Received By: [signature] Date: 8/1/13 13:32

Relinquished By: John Burwell Date: 8/1/13 14:24 Received By: [signature] Date: 8/1/13 1424

3.0°

CONDITION UPON RECEIPT

Batch Number AC73771

Entered By: Frantz
Date Entered 8/1/2013 2:31:00 PM

1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	Yes	Are the COC seals intact?
4	Yes	Please specify the Temperature inside the container (in degC) 3.0
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	Yes	Do the contents match the COC? If no, specify
10	Yes	Is there enough sample sent for the analyses listed on the COC? If no, specify:
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify
14	NA	Corrective actions (Specify item number and corrective action taken).

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AC73771-001	08/01/13 14:24	FRAN	0	M	Received
AC73771-001	08/01/13 14:31	FRAN	0	M	Login
AC73771-001	08/01/13 15:21	SDL	1	A	mixing/ignit mod
AC73771-001	08/01/13 17:57	R12	1	A	NONE
AC73771-001	08/01/13 18:34	RAMO	1	A	r12
AC73771-001	08/01/13 18:34	RAMO	1	A	tclp
AC73771-001	08/02/13 04:42	LMILT	1	A	p/p
AC73771-001	08/02/13 04:42	R12	1	A	NONE
AC73771-001	08/02/13 07:12	HJ	1	A	bn
AC73771-001	08/02/13 07:13	R12	1	A	NONE
AC73771-001	08/02/13 08:35	DYR/J	1	A	eph
AC73771-001	08/02/13 09:07	SN	1	A	Eh/pH
AC73771-001	08/02/13 10:41	AM	1	A	r12
AC73771-001	08/02/13 10:41	AM	1	A	tdsi/hg
AC73771-001	08/05/13 07:37	DYR/J	1	A	eph
AC73771-001	08/05/13 09:16	MD	1	A	CN S 9012
AC73771-001	08/05/13 11:24	R12	1	A	NONE
AC73771-001	08/05/13 15:21	R12	1	A	NONE
AC73771-001	08/06/13 09:04	BCT	1	A	cr6 s
AC73771-001	08/06/13 15:38	OA	1	A	tdshg
AC73771-001	08/06/13 15:41	R12	1	A	NONE
AC73771-002	08/01/13 14:24	FRAN	0	M	Received
AC73771-002	08/01/13 14:31	FRAN	0	M	Login
AC73771-002	08/01/13 15:21	SDL	1	A	mixing/ignit mod
AC73771-002	08/01/13 17:57	R12	1	A	NONE
AC73771-002	08/01/13 18:34	RAMO	1	A	r12
AC73771-002	08/01/13 18:34	RAMO	1	A	tclp
AC73771-002	08/02/13 04:42	R12	1	A	NONE
AC73771-002	08/02/13 04:42	LMILT	1	A	p/p
AC73771-002	08/02/13 07:12	HJ	1	A	bn
AC73771-002	08/02/13 07:13	R12	1	A	NONE
AC73771-002	08/02/13 08:35	DYR/J	1	A	eph
AC73771-002	08/02/13 09:07	SN	1	A	Eh/pH
AC73771-002	08/02/13 10:41	AM	1	A	tdsi/hg
AC73771-002	08/02/13 10:41	AM	1	A	r12
AC73771-002	08/05/13 07:37	DYR/J	1	A	eph
AC73771-002	08/05/13 09:16	MD	1	A	CN S 9012
AC73771-002	08/05/13 11:24	R12	1	A	NONE
AC73771-002	08/05/13 15:21	R12	1	A	NONE
AC73771-002	08/06/13 09:04	BCT	1	A	cr6 s
AC73771-002	08/06/13 15:38	OA	1	A	tdshg
AC73771-002	08/06/13 15:41	R12	1	A	NONE
AC73771-003	08/01/13 14:24	FRAN	0	M	Received
AC73771-003	08/01/13 14:31	FRAN	0	M	Login
AC73771-003	08/01/13 22:16	PA	2	A	mixing
AC73771-003	08/01/13 22:17	R12	2	A	NONE
AC73771-003	08/02/13 07:58	HS	2	A	% SOLIDS
AC73771-003	08/02/13 11:58	R12	2	A	NONE
AC73771-003	08/02/13 15:50	R31	3	A	NONE
AC73771-003	08/05/13 10:41	A BM	3	A	voa
AC73771-003	08/05/13 10:42	R31	3	A	NONE
AC73771-003	08/02/13 15:51	F19	4	A	none
AC73771-003	08/02/13 15:51	F19	5	A	none
AC73771-003	08/05/13 10:58	WP	5	A	VOA
AC73771-003	08/02/13 15:51	F19	6	A	none
AC73771-003	08/02/13 15:51	F19	7	A	none
AC73771-004	08/01/13 14:24	FRAN	0	M	Received
AC73771-004	08/01/13 14:31	FRAN	0	M	Login
AC73771-004	08/01/13 22:16	PA	2	A	mixing
AC73771-004	08/01/13 22:17	R12	2	A	NONE
AC73771-004	08/02/13 07:58	HS	2	A	% SOLIDS
AC73771-004	08/02/13 11:58	R12	2	A	NONE
AC73771-004	08/02/13 15:50	R31	3	A	NONE
AC73771-004	08/05/13 10:41	A BM	3	A	voa
AC73771-004	08/05/13 10:42	R31	3	A	NONE
AC73771-004	08/02/13 15:51	F19	4	A	none
AC73771-004	08/02/13 15:51	F19	5	A	none
AC73771-004	08/05/13 10:58	WP	5	A	VOA
AC73771-004	08/02/13 15:51	F19	6	A	none
AC73771-004	08/02/13 15:51	F19	7	A	none

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Volatile Data

Form1

ORGANICS VOLATILE REPORT

Sample Number: AC73771-003
Client Id: BB-GRAB-5-0801113
Data File: 6M00540.D
Analysis Date: 08/05/13 11:27
Date Rec/Extracted: 08/01/13-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260B
Matrix: Soil
Initial Vol: 4.44g
Final Vol: NA
Dilution: 1.13
Solids: 90

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
630-20-6	1,1,1,2-Tetrachloroethane	0.0025	U	75-15-0	Carbon Disulfide	0.0025	U
71-55-6	1,1,1-Trichloroethane	0.0025	U	56-23-5	Carbon Tetrachloride	0.0025	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0025	U	108-90-7	Chlorobenzene	0.0025	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0025	U	75-00-3	Chloroethane	0.0025	U
79-00-5	1,1,2-Trichloroethane	0.0025	U	67-66-3	Chloroform	0.0025	U
75-34-3	1,1-Dichloroethane	0.0025	U	74-87-3	Chloromethane	0.0025	U
75-35-4	1,1-Dichloroethene	0.0025	U	156-59-2	cis-1,2-Dichloroethene	0.0025	U
87-61-6	1,2,3-Trichlorobenzene	0.0025	U	10061-01-5	cis-1,3-Dichloropropene	0.0025	U
120-82-1	1,2,4-Trichlorobenzene	0.0025	U	110-82-7	Cyclohexane	0.0025	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0025	U	124-48-1	Dibromochloromethane	0.0025	U
106-93-4	1,2-Dibromoethane	0.0025	U	75-71-8	Dichlorodifluoromethane	0.0025	U
95-50-1	1,2-Dichlorobenzene	0.0025	U	100-41-4	Ethylbenzene	0.0013	U
107-06-2	1,2-Dichloroethane	0.0013	U	98-82-8	Isopropylbenzene	0.0013	U
78-87-5	1,2-Dichloropropane	0.0025	U	136777612	m&p-Xylenes	0.0013	U
541-73-1	1,3-Dichlorobenzene	0.0025	U	79-20-9	Methyl Acetate	0.0025	U
106-46-7	1,4-Dichlorobenzene	0.0025	U	108-87-2	Methylcyclohexane	0.0025	U
123-91-1	1,4-Dioxane	0.13	U	75-09-2	Methylene Chloride	0.0025	U
78-93-3	2-Butanone	0.0025	U	1634-04-4	Methyl-t-butyl ether	0.0013	U
591-78-6	2-Hexanone	0.0025	U	95-47-6	o-Xylene	0.0013	U
108-10-1	4-Methyl-2-Pentanone	0.0025	U	100-42-5	Styrene	0.0025	U
67-64-1	Acetone	0.013	U	75-65-0	t-Butyl Alcohol	0.013	U
107-02-8	Acrolein	0.013	U	127-18-4	Tetrachloroethene	0.0025	U
107-13-1	Acrylonitrile	0.0063	U	108-88-3	Toluene	0.0013	U
71-43-2	Benzene	0.0013	U	156-60-5	trans-1,2-Dichloroethene	0.0025	U
74-97-5	Bromochloromethane	0.0025	U	10061-02-6	trans-1,3-Dichloropropene	0.0025	U
75-27-4	Bromodichloromethane	0.0025	U	79-01-6	Trichloroethene	0.0025	U
75-25-2	Bromoform	0.0025	U	75-69-4	Trichlorofluoromethane	0.0025	U
74-83-9	Bromomethane	0.0025	U	75-01-4	Vinyl Chloride	0.0025	U
1330-20-7	Xylenes (Total)	0.0013	U				

Worksheet #: 272480

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number:	AC73771-003	Matrix:	Soil
Client Id:	BB-GRAB-5-0801113	Initial Vol:	4.44g
Data File:	6M00540.D	Final Vol:	NA
Analysis Date:	08/05/13 11:27	Dilution:	1.13
Date Rec/Extracted:	08/01/13-NA	Solids:	90
		Method:	EPA 8260B

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		No Unknown Compounds Detected	0.00	0 J

Worksheet #: 272480

Total Tentatively Identified Concentration 0

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

3080110 0027

SampleID : AC73771-003 Operator : SG Qt Meth : 6M_S0718.M
Data File: 6M00540.D Sam Mult : 1 Vial# : 20 Qt On : 08/05/13 11:53
Acq On : 08/ 5/13 11:27 Misc : S,5G!5 Qt Upd On: 07/18/13 12:17

Data Path : G:\GcMsData\2013\GCMS_6\Data\08-05-13\
Qt Path : G:\GcMsData\2013\GCMS_6\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.527	96	306070	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.096	117	185031	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.334	152	73360	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.118	111	82833	30.29	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.97%	
39) 1,2-Dichloroethane-d4	4.328	67	28661	30.98	ug/l	0.00
Spiked Amount 30.000			Recovery	=	103.27%	
66) Toluene-d8	5.356	98	288567	29.68	ug/l	0.00
Spiked Amount 30.000			Recovery	=	98.93%	
76) Bromofluorobenzene	6.703	174	73467	35.39	ug/l	0.00
Spiked Amount 30.000			Recovery	=	117.97%	
Target Compounds						Qvalue
Library Search Internal Standards TIC Results						
1) Fluorobenzene	4.527		631964	30.00	ug/l	--
2) Chlorobenzene-d5	6.096		632690	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	7.334		439213	30.00	ug/l	--
Library Search Compounds						

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

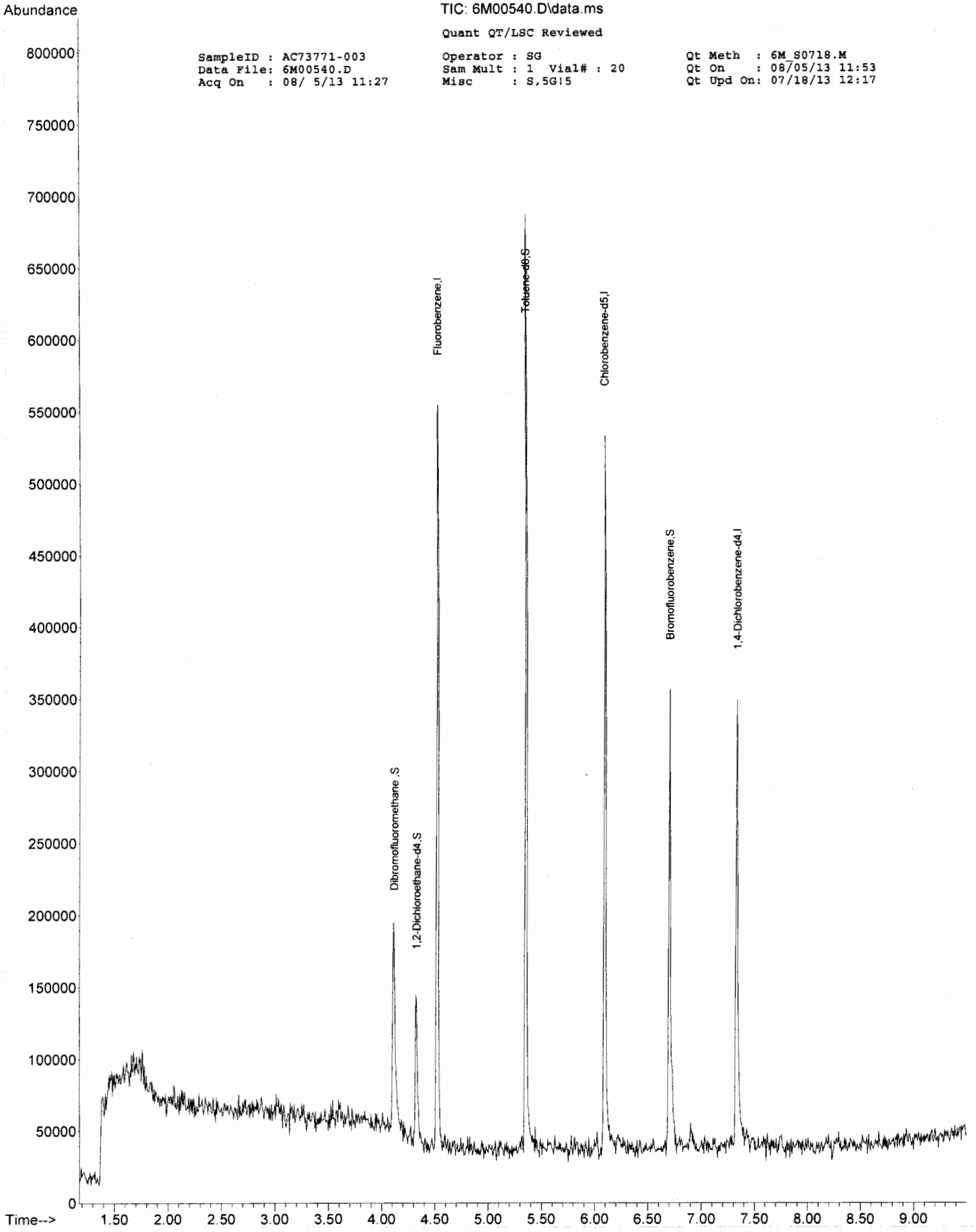
TIC: 6M00540.D\data.ms

Quant QT/LSC Reviewed

SampleID : AC73771-003
Data File: 6M00540.D
Acq On : 08/ 5/13 11:27

Operator : SG
Sam Mult : 1 Vial# : 20
Misc : S,5G!5

Qt Meth : 6M_S0718.M
Qt On : 08/05/13 11:53
Qt Upd On: 07/18/13 12:17



Form1

ORGANICS VOLATILE REPORT

Sample Number: AC73771-004
Client Id: BB-GRAB-10-0801113
Data File: 6M00539.D
Analysis Date: 08/05/13 11:11
Date Rec/Extracted: 08/01/13-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260B
Matrix: Soil
Initial Vol: 4.31g
Final Vol: NA
Dilution: 1.16
Solids: 85

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
630-20-6	1,1,1,2-Tetrachloroethane	0.0027	U	75-15-0	Carbon Disulfide	0.0027	U
71-55-6	1,1,1-Trichloroethane	0.0027	U	56-23-5	Carbon Tetrachloride	0.0027	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0027	U	108-90-7	Chlorobenzene	0.0027	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0027	U	75-00-3	Chloroethane	0.0027	U
79-00-5	1,1,2-Trichloroethane	0.0027	U	67-66-3	Chloroform	0.0027	U
75-34-3	1,1-Dichloroethane	0.0027	U	74-87-3	Chloromethane	0.0027	U
75-35-4	1,1-Dichloroethene	0.0027	U	156-59-2	cis-1,2-Dichloroethene	0.0027	U
87-61-6	1,2,3-Trichlorobenzene	0.0027	U	10061-01-5	cis-1,3-Dichloropropene	0.0027	U
120-82-1	1,2,4-Trichlorobenzene	0.0027	U	110-82-7	Cyclohexane	0.0027	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0027	U	124-48-1	Dibromochloromethane	0.0027	U
106-93-4	1,2-Dibromoethane	0.0027	U	75-71-8	Dichlorodifluoromethane	0.0027	U
95-50-1	1,2-Dichlorobenzene	0.0027	U	100-41-4	Ethylbenzene	0.0014	U
107-06-2	1,2-Dichloroethane	0.0014	U	98-82-8	Isopropylbenzene	0.0014	U
78-87-5	1,2-Dichloropropane	0.0027	U	136777612	m&p-Xylenes	0.0014	U
541-73-1	1,3-Dichlorobenzene	0.0027	U	79-20-9	Methyl Acetate	0.0027	U
106-46-7	1,4-Dichlorobenzene	0.0027	U	108-87-2	Methylcyclohexane	0.0027	U
123-91-1	1,4-Dioxane	0.14	U	75-09-2	Methylene Chloride	0.0027	U
78-93-3	2-Butanone	0.0027	U	1634-04-4	Methyl-t-butyl ether	0.0014	U
591-78-6	2-Hexanone	0.0027	U	95-47-6	o-Xylene	0.0014	U
108-10-1	4-Methyl-2-Pentanone	0.0027	U	100-42-5	Styrene	0.0027	U
67-64-1	Acetone	0.014	U	75-65-0	t-Butyl Alcohol	0.014	U
107-02-8	Acrolein	0.014	U	127-18-4	Tetrachloroethene	0.0027	U
107-13-1	Acrylonitrile	0.0068	U	108-88-3	Toluene	0.0014	U
71-43-2	Benzene	0.0014	U	156-60-5	trans-1,2-Dichloroethene	0.0027	U
74-97-5	Bromochloromethane	0.0027	U	10061-02-6	trans-1,3-Dichloropropene	0.0027	U
75-27-4	Bromodichloromethane	0.0027	U	79-01-6	Trichloroethene	0.0027	U
75-25-2	Bromoform	0.0027	U	75-69-4	Trichlorofluoromethane	0.0027	U
74-83-9	Bromomethane	0.0027	U	75-01-4	Vinyl Chloride	0.0027	U
1330-20-7	Xylenes (Total)	0.0014	U				

Worksheet #: 272480

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number:	AC73771-004	Matrix:	Soil
Client Id:	BB-GRAB-10-0801113	Initial Vol:	4.31g
Data File:	6M00539.D	Final Vol:	NA
Analysis Date:	08/05/13 11:11	Dilution:	1.16
Date Rec/Extracted:	08/01/13-NA	Solids:	85
		Method:	EPA 8260B

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	2.83	0.0061 J

Worksheet #: 272480

Total Tentatively Identified Concentration 0.0061

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

3080110 0031

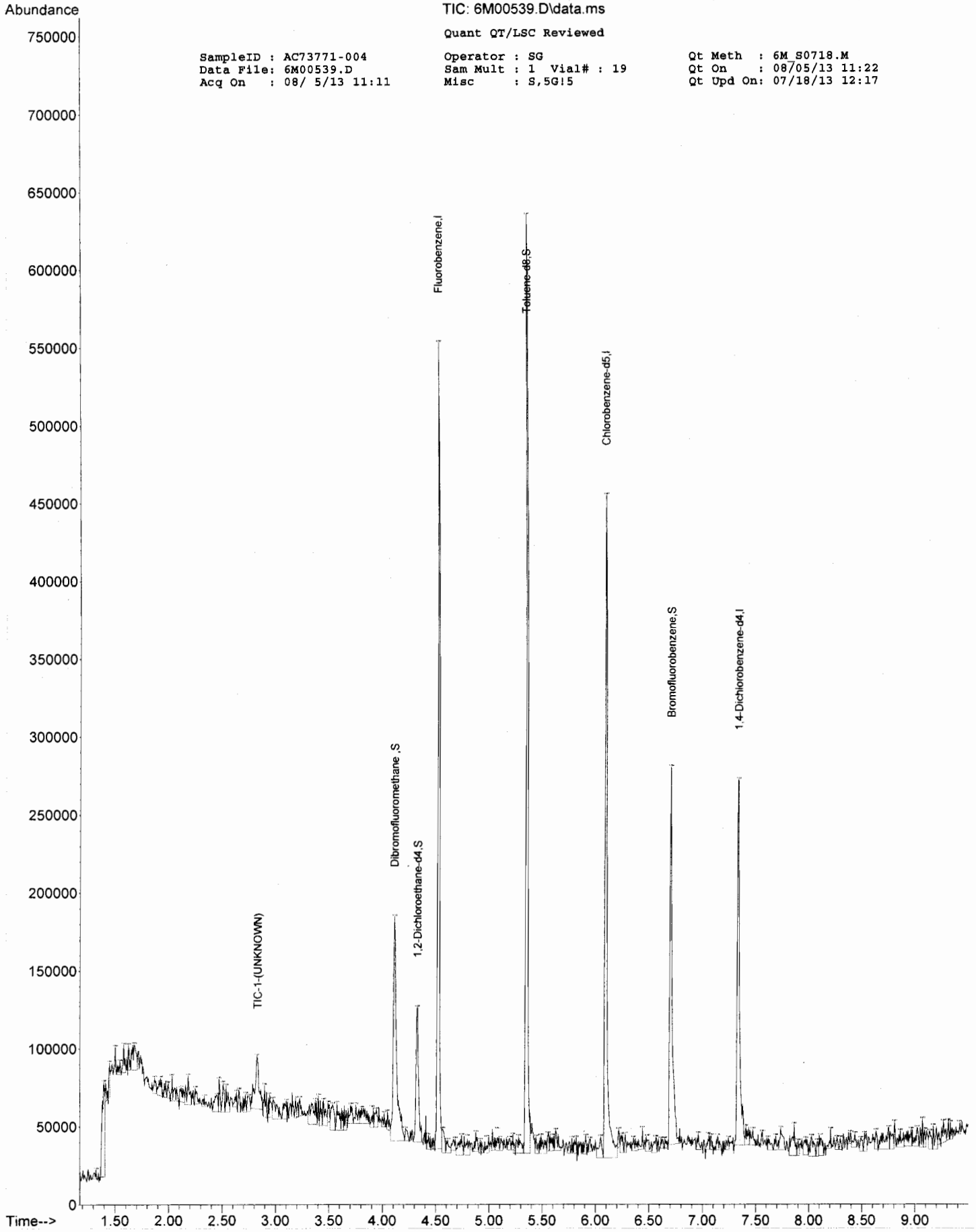
SampleID : AC73771-004 Operator : SG Qt Meth : 6M_S0718.M
Data File: 6M00539.D Sam Mult : 1 Vial# : 19 Qt On : 08/05/13 11:22
Acq On : 08/ 5/13 11:11 Misc : S,5G!5 Qt Upd On: 07/18/13 12:17

Data Path : G:\GcMsData\2013\GCMS_6\Data\08-05-13\
Qt Path : G:\GcMsData\2013\GCMS_6\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.522	96	284129	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.097	117	159446	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.335	152	69814	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.113	111	71387	28.12	ug/l	0.00
Spiked Amount 30.000			Recovery = 93.73%			
39) 1,2-Dichloroethane-d4	4.329	67	24321	28.32	ug/l	0.00
Spiked Amount 30.000			Recovery = 94.40%			
66) Toluene-d8	5.351	98	272404	32.51	ug/l	0.00
Spiked Amount 30.000			Recovery = 108.37%			
76) Bromofluorobenzene	6.704	174	63112	31.95	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.50%			
Target Compounds						Qvalue
Library Search Internal Standards TIC Results						
1) Fluorobenzene	4.522		632262	30.00	ug/l	--
2) Chlorobenzene-d5	6.097		586705	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	7.335		419501	30.00	ug/l	--
Library Search Compounds						
1) UNKNOWN	2.830		94954	4.51	ug/l	--

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

Vu


Abundance
TIC: 6M00539.D\data.ms
Quant QT/LSC Reviewed
SampleID : AC73771-004
Data File: 6M00539.D
Acq On : 08/ 5/13 11:11
Operator : SG
Sam Mult : 1 Vial# : 19
Misc : S,5G!5
Qt Meth : 6M_S0718.M
Qt On : 08/05/13 11:22
Qt Upd On: 07/18/13 12:17
750000
700000
650000
600000
550000
500000
450000
400000
350000
300000
250000
200000
150000
100000
50000
0
TIC-1-(UNKNOWN)
Dibromofluoromethane ,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->
1.50
2.00
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
8.00
8.50
9.00

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 6M00529.D
Analysis Date: 08/05/13 08:26
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260B
Matrix: Soil
Initial Vol: 5g
Final Vol: NA
Dilution: 1.00
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
630-20-6	1,1,1,2-Tetrachloroethane	0.0020	U	75-15-0	Carbon Disulfide	0.0020	U
71-55-6	1,1,1-Trichloroethane	0.0020	U	56-23-5	Carbon Tetrachloride	0.0020	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0020	U	108-90-7	Chlorobenzene	0.0020	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0020	U	75-00-3	Chloroethane	0.0020	U
79-00-5	1,1,2-Trichloroethane	0.0020	U	67-66-3	Chloroform	0.0020	U
75-34-3	1,1-Dichloroethane	0.0020	U	74-87-3	Chloromethane	0.0020	U
75-35-4	1,1-Dichloroethene	0.0020	U	156-59-2	cis-1,2-Dichloroethene	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	0.0020	U	10061-01-5	cis-1,3-Dichloropropene	0.0020	U
120-82-1	1,2,4-Trichlorobenzene	0.0020	U	110-82-7	Cyclohexane	0.0020	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0020	U	124-48-1	Dibromochloromethane	0.0020	U
106-93-4	1,2-Dibromoethane	0.0020	U	75-71-8	Dichlorodifluoromethane	0.0020	U
95-50-1	1,2-Dichlorobenzene	0.0020	U	100-41-4	Ethylbenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.0010	U	98-82-8	Isopropylbenzene	0.0010	U
78-87-5	1,2-Dichloropropane	0.0020	U	136777612	m&p-Xylenes	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.0020	U	79-20-9	Methyl Acetate	0.0020	U
106-46-7	1,4-Dichlorobenzene	0.0020	U	108-87-2	Methylcyclohexane	0.0020	U
123-91-1	1,4-Dioxane	0.10	U	75-09-2	Methylene Chloride	0.0020	U
78-93-3	2-Butanone	0.0020	U	1634-04-4	Methyl-t-butyl ether	0.0010	U
591-78-6	2-Hexanone	0.0020	U	95-47-6	o-Xylene	0.0010	U
108-10-1	4-Methyl-2-Pentanone	0.0020	U	100-42-5	Styrene	0.0020	U
67-64-1	Acetone	0.010	U	75-65-0	t-Butyl Alcohol	0.010	U
107-02-8	Acrolein	0.010	U	127-18-4	Tetrachloroethene	0.0020	U
107-13-1	Acrylonitrile	0.0050	U	108-88-3	Toluene	0.0010	U
71-43-2	Benzene	0.0010	U	156-60-5	trans-1,2-Dichloroethene	0.0020	U
74-97-5	Bromochloromethane	0.0020	U	10061-02-6	trans-1,3-Dichloropropene	0.0020	U
75-27-4	Bromodichloromethane	0.0020	U	79-01-6	Trichloroethene	0.0020	U
75-25-2	Bromoform	0.0020	U	75-69-4	Trichlorofluoromethane	0.0020	U
74-83-9	Bromomethane	0.0020	U	75-01-4	Vinyl Chloride	0.0020	U

Worksheet #: 272480 ***Total Target Concentration*** 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number:	DAILY BLANK	Matrix:	Soil
Client Id:		Initial Vol:	5g
Data File:	6M00529.D	Final Vol:	NA
Analysis Date:	08/05/13 08:26	Dilution:	1.00
Date Rec/Extracted:		Solids:	100
		Method:	EPA 8260B

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		No Unknown Compounds Detected	0.00	0 J

Worksheet #: 272480

Total Tentatively Identified Concentration 0

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

3080110 0035

SampleID : DAILY BLANK
Data File: 6M00529.D
Acq On : 08/ 5/13 08:26

Operator : SG
Sam Mult : 1 Vial# : 9
Misc : S,5G

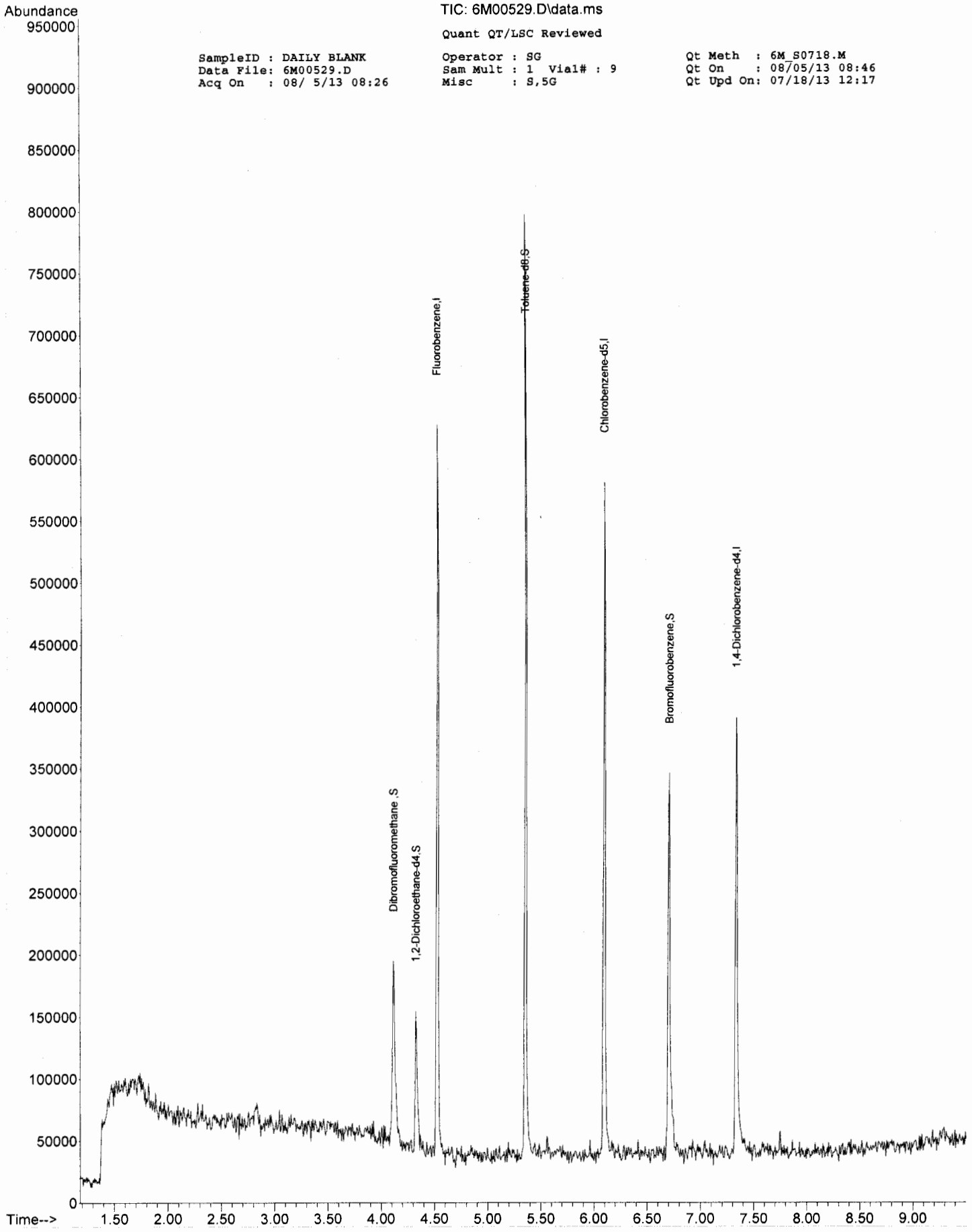
Qt Meth : 6M_S0718.M
Qt On : 08/05/13 08:46
Qt Upd On: 07/18/13 12:17

Data Path : G:\GcMsData\2013\GCMS_6\Data\08-05-13\
Qt Path : G:\GcMsData\2013\GCMS_6\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.522	96	339016	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.097	117	213465	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.329	152	86903	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.113	111	83228	27.47	ug/l	0.00
Spiked Amount 30.000			Recovery = 91.57%			
39) 1,2-Dichloroethane-d4	4.324	67	31514	30.75	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.50%			
66) Toluene-d8	5.358	98	331456	29.55	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.50%			
76) Bromofluorobenzene	6.704	174	72661	29.55	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.50%			
Target Compounds						Qvalue
Library Search Internal Standards TIC Results						
1) Fluorobenzene	4.522		739030	30.00	ug/l	--
2) Chlorobenzene-d5	6.097		642861	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	7.329		543323	30.00	ug/l	--
Library Search Compounds						

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

Dr


Abundance
TIC: 6M00529.D\data.ms
Quant QT/LSC Reviewed
SampleID : DAILY BLANK
Data File: 6M00529.D
Acq On : 08/ 5/13 08:26
Operator : SG
Sam Mult : 1 Vial# : 9
Misc : S,5G
Qt Meth : 6M_S0718.M
Qt On : 08/05/13 08:46
Qt Upd On: 07/18/13 12:17
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

FORM2

Surrogate Recovery

Method: EPA 8260B

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
6M00234.D	DAILY BLANK	Soil	07/26/13 10:06	1		88	81	104	97		
6M00333.D	DAILY BLANK	Soil	07/30/13 07:33	1		86	87	102	103		
6M00529.D	DAILY BLANK	Soil	08/05/13 08:26	1		92	103	98	99		
6M00540.D	AC73771-003	Soil	08/05/13 11:27	1		101	103	99	118		
6M00539.D	AC73771-004	Soil	08/05/13 11:11	1		94	94	108	106		
6M00255.D	MBS27639	Soil	07/26/13 17:27	1		78	96	103	101		
6M00256.D	MBS27640	Soil	07/26/13 17:43	1		83	87	99	98		
6M00263.D	AC73611-010	Soil	07/26/13 19:36	1		93	99	120	96		
6M00354.D	MBS27665	Soil	07/30/13 13:15	1		86	91	101	106		
6M00355.D	AC73611-010(	Soil	07/30/13 13:31	1		85	81	99	103		
6M00356.D	AC73611-010(	Soil	07/30/13 13:48	1		86	85	118	102		
6M00530.D	MBS27721	Soil	08/05/13 08:42	1		87	99	98	104		
6M00556.D	MBS27731	Soil	08/05/13 15:46	1		93	108	115	103		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8260B

Soil Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	63-140
S2=1,2-Dichloroethane-d4	30	63-143
S3=Toluene-d8	30	68-122
S4=Bromofluorobenzene	30	64-129

Form3
Recovery Data
QC Batch: MBS27639

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M00255.D	MBS27639	7/26/2013 5:27:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	53.5352	0	50	107	20	130
1,1-Dichloroethene	1	46.0599	0	50	92	50	130
1,1-Dichloroethane	1	39.6183	0	50	79	50	130
Chloroform	1	35.2319	0	50	70	50	130
1,2-Dichloroethane	1	36.9176	0	50	74	50	130
2-Butanone	1	62.002	0	50	124	20	130
Carbon Tetrachloride	1	29.3464	0	50	59	50	130
Trichloroethene	1	28.513	0	50	57	50	130
Benzene	1	36.0981	0	50	72	50	130
Tetrachloroethene	1	27.1943	0	50	54	50	130
Toluene	1	35.53	0	50	71	50	130
Chlorobenzene	1	31.8548	0	50	64	50	130
1,4-Dichlorobenzene	1	29.4765	0	50	59	50	130
1,2-Dichlorobenzene	1	31.5099	0	50	63	50	130
n-Propylbenzene	1	37.8136	0	50	76	50	130
sec-Butylbenzene	1	35.2538	0	50	71	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS27640

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M00256.D	MBS27640	7/26/2013 5:43:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	57.1972	0	50	114	20	130
1,1-Dichloroethene	1	49.6053	0	50	99	50	130
1,1-Dichloroethane	1	50.4259	0	50	101	50	130
Chloroform	1	41.3737	0	50	83	50	130
1,2-Dichloroethane	1	42.379	0	50	85	50	130
2-Butanone	1	55.8483	0	50	112	20	130
Carbon Tetrachloride	1	33.6304	0	50	67	50	130
Trichloroethene	1	33.294	0	50	67	50	130
Benzene	1	47.3414	0	50	95	50	130
Tetrachloroethene	1	32.7635	0	50	66	50	130
Toluene	1	45.0699	0	50	90	50	130
Chlorobenzene	1	36.7581	0	50	74	50	130
1,4-Dichlorobenzene	1	36.2027	0	50	72	50	130
1,2-Dichlorobenzene	1	38.3953	0	50	77	50	130
n-Propylbenzene	1	46.6131	0	50	93	50	130
sec-Butylbenzene	1	42.3933	0	50	85	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS27665

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M00354.D	MBS27665	7/30/2013 1:15:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	47.6338	0	50	95	20	130
1,1-Dichloroethene	1	44.3754	0	50	89	50	130
1,1-Dichloroethane	1	36.1263	0	50	72	50	130
Chloroform	1	33.0924	0	50	66	50	130
1,2-Dichloroethane	1	33.3042	0	50	67	50	130
2-Butanone	1	36.0379	0	50	72	20	130
Carbon Tetrachloride	1	30.4861	0	50	61	50	130
Trichloroethene	1	28.9799	0	50	58	50	130
Benzene	1	35.4363	0	50	71	50	130
Tetrachloroethene	1	30.2114	0	50	60	50	130
Toluene	1	35.7806	0	50	72	50	130
Chlorobenzene	1	35.8244	0	50	72	50	130
1,4-Dichlorobenzene	1	32.7927	0	50	66	50	130
1,2-Dichlorobenzene	1	34.769	0	50	70	50	130
n-Propylbenzene	1	40.2035	0	50	80	50	130
sec-Butylbenzene	1	37.7569	0	50	76	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS27721

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M00530.D	MBS27721	8/5/2013 8:42:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	53.3793	0	50	107	20	130
1,1-Dichloroethene	1	50.2622	0	50	101	50	130
1,1-Dichloroethane	1	45.8644	0	50	92	50	130
Chloroform	1	37.2996	0	50	75	50	130
1,2-Dichloroethane	1	40.0468	0	50	80	50	130
2-Butanone	1	64.143	0	50	128	20	130
Carbon Tetrachloride	1	34.0608	0	50	68	50	130
Trichloroethene	1	31.6757	0	50	63	50	130
Benzene	1	39.1761	0	50	78	50	130
Tetrachloroethene	1	28.0292	0	50	56	50	130
Toluene	1	33.3384	0	50	67	50	130
Chlorobenzene	1	30.8202	0	50	62	50	130
1,4-Dichlorobenzene	1	32.9362	0	50	66	50	130
1,2-Dichlorobenzene	1	32.9965	0	50	66	50	130
n-Propylbenzene	1	38.6592	0	50	77	50	130
sec-Butylbenzene	1	35.1429	0	50	70	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS27731

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M00556.D	MBS27731	8/5/2013 3:46:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	44.6116	0	50	89	20	130
1,1-Dichloroethene	1	46.2576	0	50	93	50	130
1,1-Dichloroethane	1	40.4231	0	50	81	50	130
Chloroform	1	34.2951	0	50	69	50	130
1,2-Dichloroethane	1	36.0384	0	50	72	50	130
2-Butanone	1	52.9115	0	50	106	20	130
Carbon Tetrachloride	1	29.8935	0	50	60	50	130
Trichloroethene	1	30.0665	0	50	60	50	130
Benzene	1	39.2626	0	50	79	50	130
Tetrachloroethene	1	32.4672	0	50	65	50	130
Toluene	1	38.4293	0	50	77	50	130
Chlorobenzene	1	35.5999	0	50	71	50	130
1,4-Dichlorobenzene	1	31.3121	0	50	63	50	130
1,2-Dichlorobenzene	1	32.8621	0	50	66	50	130
n-Propylbenzene	1	41.2709	0	50	83	50	130
sec-Butylbenzene	1	39.7693	0	50	80	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS27665

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M00355.D	AC73611-010(MS)	7/30/2013 1:31:00 PM
Non Spike(If applicable):	6M00263.D	AC73611-010	7/26/2013 7:36:00 PM
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	51.3174	0	50	103	20	130
1,1-Dichloroethene	1	45.1006	0	50	90	50	130
1,1-Dichloroethane	1	38.974	0	50	78	50	130
Chloroform	1	35.5226	0	50	71	50	130
1,2-Dichloroethane	1	35.1965	0	50	70	50	130
2-Butanone	1	43.5876	0	50	87	20	130
Carbon Tetrachloride	1	30.711	0	50	61	50	130
Trichloroethene	1	30.5023	0	50	61	50	130
Benzene	1	38.8447	0	50	78	50	130
Tetrachloroethene	1	32.9964	0	50	66	50	130
Toluene	1	36.3039	0	50	73	50	130
Chlorobenzene	1	34.7032	0	50	69	50	130
1,4-Dichlorobenzene	1	35.1445	0	50	70	50	130
1,2-Dichlorobenzene	1	36.0007	0	50	72	50	130
n-Propylbenzene	1	40.8617	0	50	82	50	130
sec-Butylbenzene	1	40.2939	0	50	81	50	130

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M00356.D	AC73611-010(MSD)	7/30/2013 1:48:00 PM
Non Spike(If applicable):	6M00263.D	AC73611-010	7/26/2013 7:36:00 PM
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	57.8628	0	50	116	20	130
1,1-Dichloroethene	1	48.8065	0	50	98	50	130
1,1-Dichloroethane	1	38.9272	0	50	78	50	130
Chloroform	1	36.5457	0	50	73	50	130
1,2-Dichloroethane	1	35.4578	0	50	71	50	130
2-Butanone	1	52.8635	0	50	106	20	130
Carbon Tetrachloride	1	32.4634	0	50	65	50	130
Trichloroethene	1	32.1071	0	50	64	50	130
Benzene	1	39.126	0	50	78	50	130
Tetrachloroethene	1	34.8737	0	50	70	50	130
Toluene	1	42.5246	0	50	85	50	130
Chlorobenzene	1	39.4665	0	50	79	50	130
1,4-Dichlorobenzene	1	30.1969	0	50	60	50	130
1,2-Dichlorobenzene	1	33.3893	0	50	67	50	130
n-Propylbenzene	1	39.8843	0	50	80	50	130
sec-Butylbenzene	1	37.5544	0	50	75	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA

QC Batch: MBS27665

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M00356.D	AC73611-010(MSD)	7/30/2013 1:48:00 PM
Duplicate(If applicable):	6M00355.D	AC73611-010(MS)	7/30/2013 1:31:00 PM
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Vinyl Chloride	1	57.8628	51.3174	12	40
1,1-Dichloroethene	1	48.8065	45.1006	7.9	40
1,1-Dichloroethane	1	38.9272	38.974	0.12	40
Chloroform	1	36.5457	35.5226	2.8	40
1,2-Dichloroethane	1	35.4578	35.1965	0.74	40
2-Butanone	1	52.8635	43.5876	19	40
Carbon Tetrachloride	1	32.4634	30.711	5.5	40
Trichloroethene	1	32.1071	30.5023	5.1	40
Benzene	1	39.126	38.8447	0.72	40
Tetrachloroethene	1	34.8737	32.9964	5.5	40
Toluene	1	42.5246	36.3039	16	40
Chlorobenzene	1	39.4665	34.7032	13	40
1,4-Dichlorobenzene	1	30.1969	35.1445	15	40
1,2-Dichlorobenzene	1	33.3893	36.0007	7.5	40
n-Propylbenzene	1	39.8843	40.8617	2.4	40
sec-Butylbenzene	1	37.5544	40.2939	7	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 6M00234.D
Matrix: Soil

Blank Analysis Date: 07/26/13 10:06
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260B

Sample Number	Data File	Analysis Date
MBS27640	6M00256.D	07/26/13 17:43
MBS27639	6M00255.D	07/26/13 17:27
AC73611-010	6M00263.D	07/26/13 19:36

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 6M00333.D
Matrix: Soil

Blank Analysis Date: 07/30/13 07:33
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260B

Sample Number	Data File	Analysis Date
AC73611-010(MSD	6M00356.D	07/30/13 13:48
AC73611-010(MS)	6M00355.D	07/30/13 13:31
MBS27665	6M00354.D	07/30/13 13:15

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 6M00529.D
Matrix: Soil

Blank Analysis Date: 08/05/13 08:26
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260B

Sample Number	Data File	Analysis Date
AC73771-003	6M00540.D	08/05/13 11:27
AC73771-004	6M00539.D	08/05/13 11:11
MBS27731	6M00556.D	08/05/13 15:46
MBS27721	6M00530.D	08/05/13 08:42

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6

Data File: 6M99860.D
Analysis Date: 07/18/13 07:59
Method: EPA 8260B

Tune Scan/Time Range: Average of 3.972 to 3.982 min

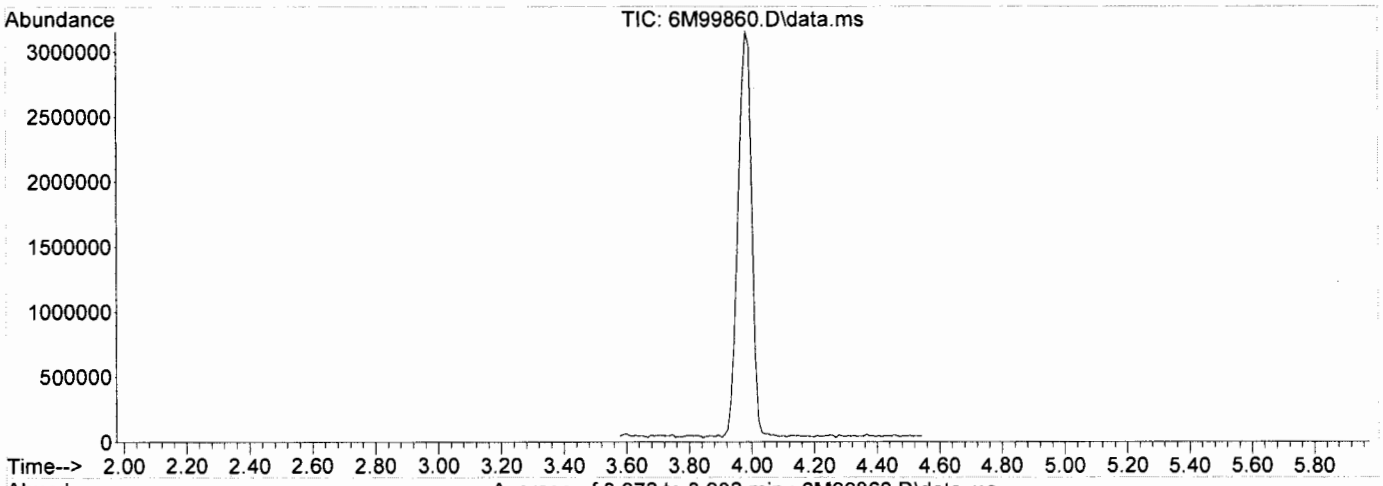
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	17.8	104920	PASS
75	95	30	60	46.5	274752	PASS
95	95	100	100	100.0	590688	PASS
96	95	5	9	6.8	40212	PASS
173	174	0.00	2	1.0	5487	PASS
174	95	50	100	91.9	543104	PASS
175	174	5	9	7.9	42924	PASS
176	174	95	101	99.7	541600	PASS
177	176	5	9	6.6	35852	PASS

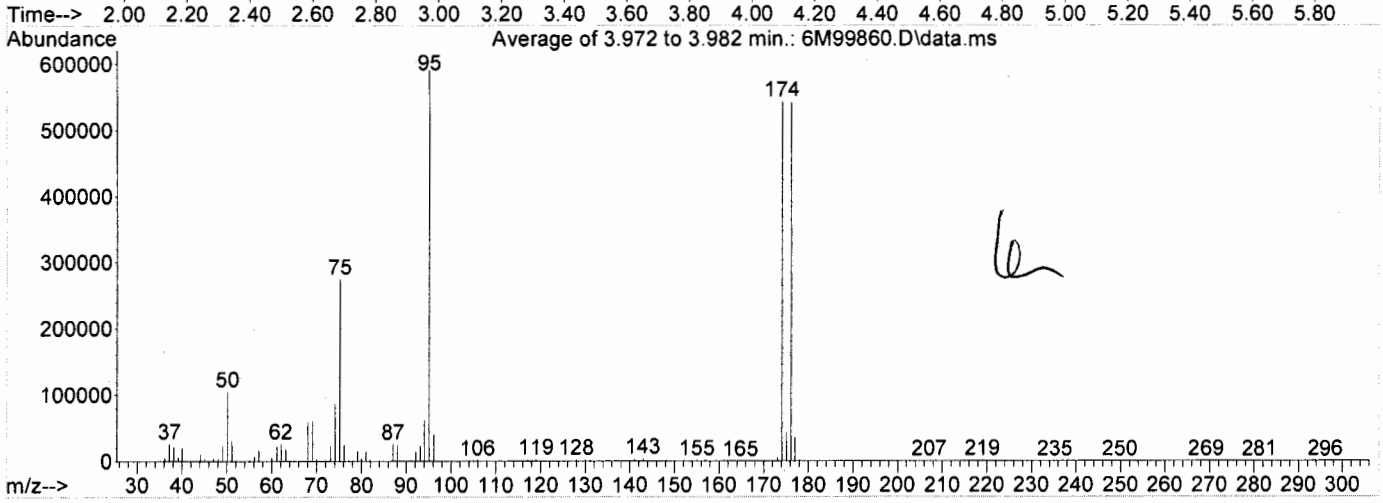
Data File	Sample Number	Analysis Date:
6M99861.D	BLK	07/18/13 08:09
6M99862.D	CAL @ 0.5 PPB	07/18/13 08:26
6M99863.D	CAL @ 1 PPB	07/18/13 08:42
6M99864.D	CAL @ 2 PPB	07/18/13 08:58
6M99865.D	CAL @ 5 PPB	07/18/13 09:14
6M99866.D	CAL @ 500 PPB	07/18/13 09:31
6M99867.D	CAL @ 250 PPB	07/18/13 09:47
6M99868.D	CAL @ 100 PPB	07/18/13 10:03
6M99869.D	CAL @ 50 PPB	07/18/13 10:19
6M99870.D	CAL @ 20 PPB	07/18/13 10:36
6M99873.D	ICV	07/18/13 11:25

Data Path : G:\GcMsData\2013\GCMS_6\Data\07-18-13\
Data File : 6M99860.D
Acq On : 18 Jul 2013 7:59
Operator : SG
Sample : BFB TUNE
Misc : S,5g
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2013\GCMS_6\MethodQt\6M_S0711.M
Title : @GCMS_6,ug,624,8260
Last Update : Fri Jul 12 08:21:44 2013





Spectrum Information: Average of 3.972 to 3.982 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	104920	PASS
75	95	30	60	46.5	274752	PASS
95	95	100	100	100.0	590688	PASS
96	95	5	9	6.8	40212	PASS
173	174	0.00	2	1.0	5487	PASS
174	95	50	100	91.9	543104	PASS
175	174	5	9	7.9	42924	PASS
176	174	95	101	99.7	541600	PASS
177	176	5	9	6.6	35852	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6

Data File: 6M00228.D
Analysis Date: 07/26/13 08:26
Method: EPA 8260B

Tune Scan/Time Range: Average of 3.954 to 4.042 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.6	4994	PASS
75	95	30	60	47.1	12022	PASS
95	95	100	100	100.0	25535	PASS
96	95	5	9	7.0	1790	PASS
173	174	0.00	2	0.5	130	PASS
174	95	50	100	97.0	24774	PASS
175	174	5	9	6.5	1602	PASS
176	174	95	101	99.7	24691	PASS
177	176	5	9	6.0	1490	PASS

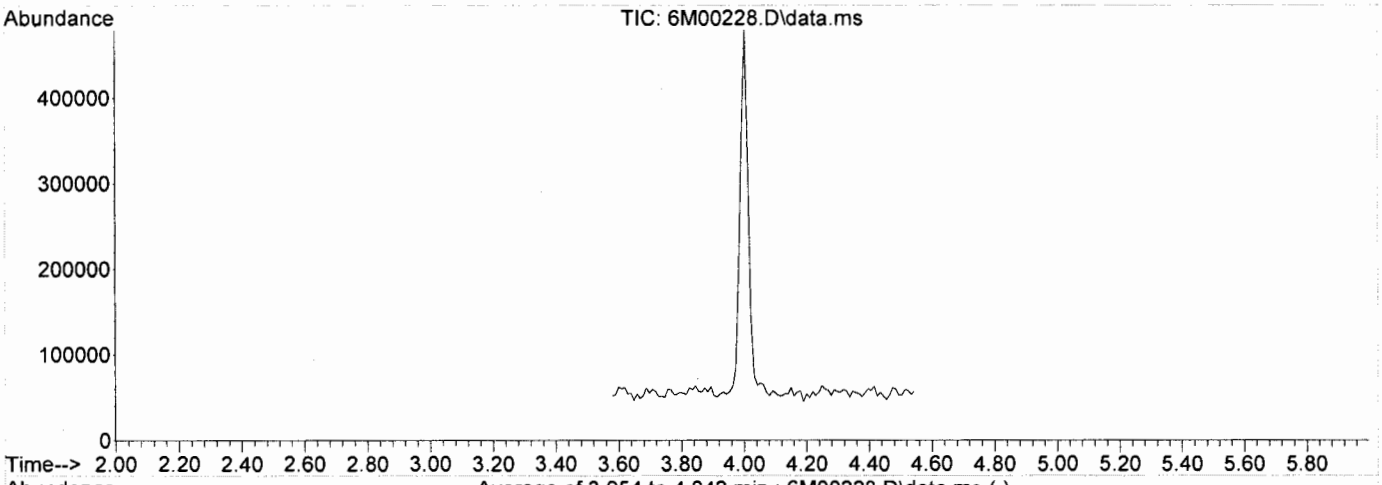
Data File	Sample Number	Analysis Date:
6M00229.D	BLK	07/26/13 08:38
6M00230.D	50 PPB	07/26/13 08:55
6M00231.D	CAL @ 50 PPB	07/26/13 09:16
6M00232.D	BLK	07/26/13 09:33
6M00233.D	BLK	07/26/13 09:49
6M00234.D	DAILY BLANK	07/26/13 10:06
6M00235.D	MBS27634	07/26/13 10:22
6M00236.D	BLK	07/26/13 10:38
6M00237.D	AC73583-005	07/26/13 10:54
6M00238.D	AC73583-007	07/26/13 11:10
6M00239.D	AC73583-009	07/26/13 11:27
6M00240.D	AC73583-011	07/26/13 11:43
6M00241.D	AC73583-015	07/26/13 11:59
6M00242.D	AC73607-002	07/26/13 12:16
6M00243.D	AC73607-003	07/26/13 12:32
6M00244.D	STDTEST	07/26/13 12:48
6M00245.D	AC73571-006(MS)	07/26/13 13:04
6M00246.D	STD	07/26/13 13:20
6M00247.D	AC73571-006(MSD	07/26/13 13:37
6M00248.D	BLK	07/26/13 13:53
6M00249.D	AC73581-001	07/26/13 14:09
6M00250.D	AC73599-003	07/26/13 14:26
6M00251.D	STD	07/26/13 15:01
6M00252.D	STD	07/26/13 15:17
6M00253.D	AC73611-003	07/26/13 16:48
6M00254.D	STD	07/26/13 17:04
6M00255.D	MBS27639	07/26/13 17:27
6M00256.D	MBS27640	07/26/13 17:43
6M00257.D	AC73611-004	07/26/13 17:59
6M00258.D	AC73611-005	07/26/13 18:15
6M00259.D	AC73611-006(MS:	07/26/13 18:31
6M00260.D	AC73611-007(MSD	07/26/13 18:47
6M00261.D	AC73611-008	07/26/13 19:04
6M00262.D	AC73611-009	07/26/13 19:20
6M00263.D	AC73611-010	07/26/13 19:36
6M00264.D	AC73548-005	07/26/13 19:52
6M00265.D	AC73548-006	07/26/13 20:08
6M00266.D	AC73611-020	07/26/13 20:24
6M00267.D	BLK	07/26/13 20:40
6M00268.D	BLK	07/26/13 20:57
6M00269.D	BLK	07/26/13 21:13

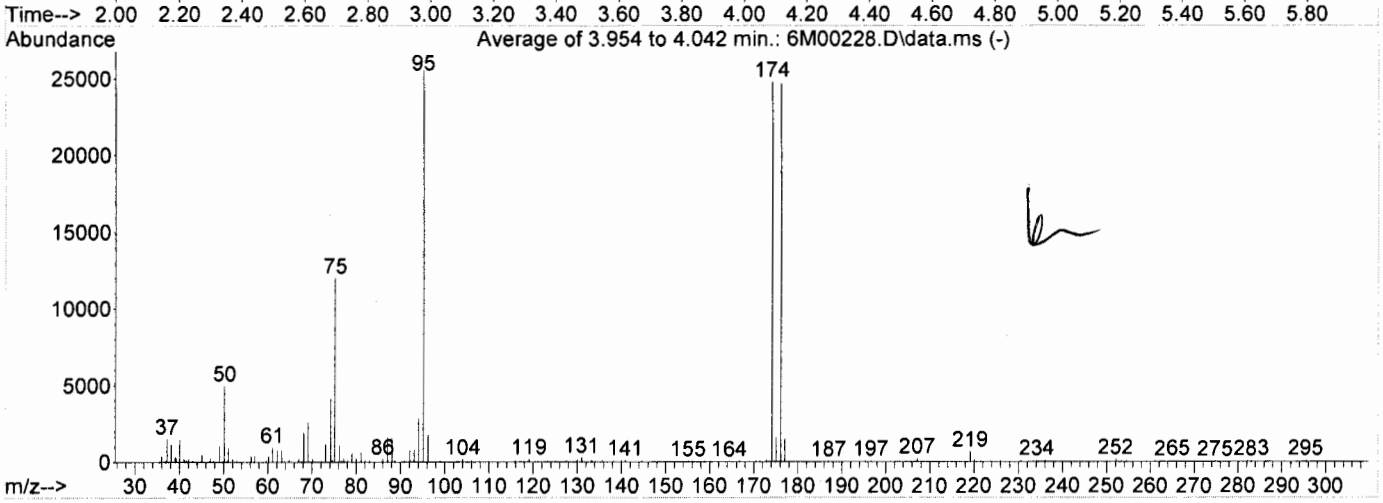
3080110 0051

Data Path : G:\GcMsData\2013\GCMS_6\Data\07-26-13\
Data File : 6M00228.D
Acq On : 26 Jul 2013 8:26
Operator : WP
Sample : BFB TUNE
Misc : S,5g
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2013\GCMS_6\MethodQt\6M_GA0708.M
Title : @GCMS_6,ug,8015
Last Update : Tue Jul 09 08:00:03 2013





Spectrum Information: Average of 3.954 to 4.042 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.6	4994	PASS
75	95	30	60	47.1	12022	PASS
95	95	100	100	100.0	25535	PASS
96	95	5	9	7.0	1790	PASS
173	174	0.00	2	0.5	130	PASS
174	95	50	100	97.0	24774	PASS
175	174	5	9	6.5	1602	PASS
176	174	95	101	99.7	24691	PASS
177	176	5	9	6.0	1490	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6

Data File: 6M00327.D
Analysis Date: 07/30/13 06:02
Method: EPA 8260B

Tune Scan/Time Range: Average of 3.968 to 3.968 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	16.5	49088	PASS
75	95	30	60	49.5	146816	PASS
95	95	100	100	100.0	296704	PASS
96	95	5	9	5.8	17080	PASS
173	174	0.00	2	0.9	2362	PASS
174	95	50	100	91.1	270400	PASS
175	174	5	9	6.3	17008	PASS
176	174	95	101	99.3	268608	PASS
177	176	5	9	7.3	19488	PASS

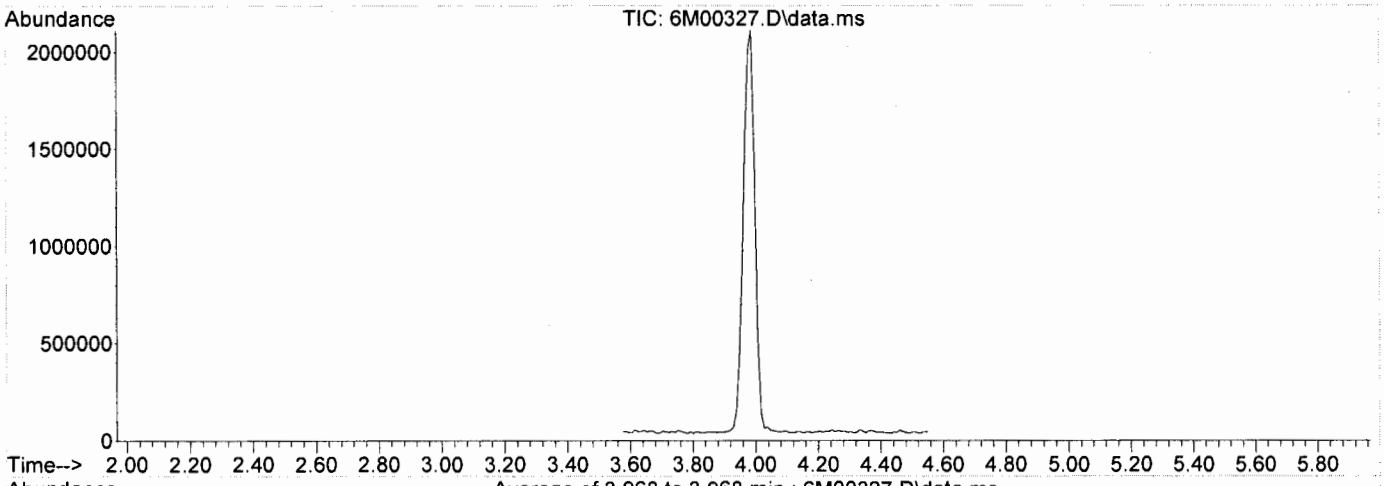
Data File	Sample Number	Analysis Date:
6M00330.D	CAL @ 50 PPB	07/30/13 06:45
6M00332.D	BLK	07/30/13 07:17
6M00333.D	DAILY BLANK	07/30/13 07:33
6M00334.D	MBS27658	07/30/13 07:50
6M00335.D	AC73651-002	07/30/13 08:07
6M00336.D	BLK	07/30/13 08:23
6M00337.D	AC73651-003	07/30/13 08:39
6M00338.D	BLK	07/30/13 08:55
6M00339.D	AC73611-009(MS)	07/30/13 09:12
6M00340.D	AC73611-009(MSD	07/30/13 09:28
6M00341.D	BLK	07/30/13 09:44
6M00342.D	AC73634-001	07/30/13 10:00
6M00343.D	AC73634-002	07/30/13 10:17
6M00344.D	AC73631-001	07/30/13 10:33
6M00345.D	AC73631-002	07/30/13 10:49
6M00346.D	BLK	07/30/13 11:05
6M00347.D	AC73670-001	07/30/13 11:22
6M00348.D	AC73632-001	07/30/13 11:38
6M00349.D	BLK	07/30/13 11:54
6M00350.D	AC73679-003	07/30/13 12:10
6M00351.D	AC73679-004	07/30/13 12:26
6M00352.D	AC73679-005	07/30/13 12:43
6M00353.D	BLK	07/30/13 12:59
6M00354.D	MBS27665	07/30/13 13:15
6M00355.D	AC73611-010(MS)	07/30/13 13:31
6M00356.D	AC73611-010(MSD	07/30/13 13:48
6M00357.D	BLK	07/30/13 14:04

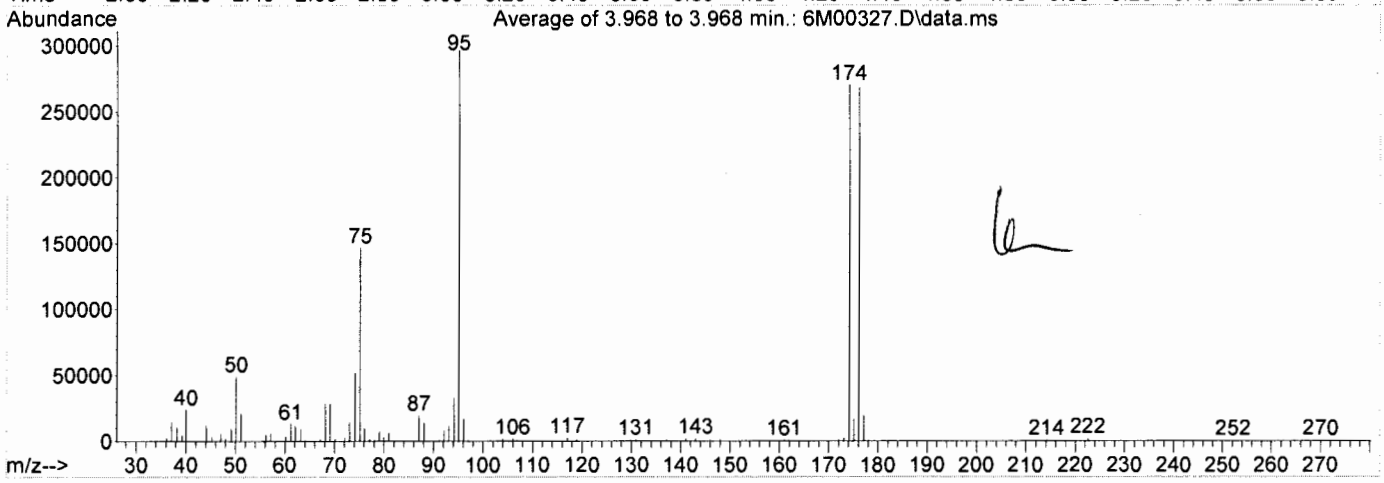
3080110 0053

Data Path : G:\GcMsData\2013\GCMS_6\Data\07-30-13\
Data File : 6M00327.D
Acq On : 30 Jul 2013 6:02
Operator : SG
Sample : BFB TUNE
Misc : S,5g
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2013\GCMS_6\MethodQt\6M_S0718.M
Title : @GCMS_6,ug,624,8260
Last Update : Thu Jul 18 10:53:43 2013





Spectrum Information: Average of 3.968 to 3.968 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.5	49088	PASS
75	95	30	60	49.5	146816	PASS
95	95	100	100	100.0	296704	PASS
96	95	5	9	5.8	17080	PASS
173	174	0.00	2	0.9	2362	PASS
174	95	50	100	91.1	270400	PASS
175	174	5	9	6.3	17008	PASS
176	174	95	101	99.3	268608	PASS
177	176	5	9	7.3	19488	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6

Data File: 6M00522.D
Analysis Date: 08/05/13 06:35
Method: EPA 8260B

Tune Scan/Time Range: Average of 3.963 to 3.972 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.2	38556	PASS
75	95	30	60	53.7	108100	PASS
95	95	100	100	100.0	201184	PASS
96	95	5	9	5.4	10877	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	83.7	168464	PASS
175	174	5	9	8.2	13770	PASS
176	174	95	101	99.3	167356	PASS
177	176	5	9	6.0	10094	PASS

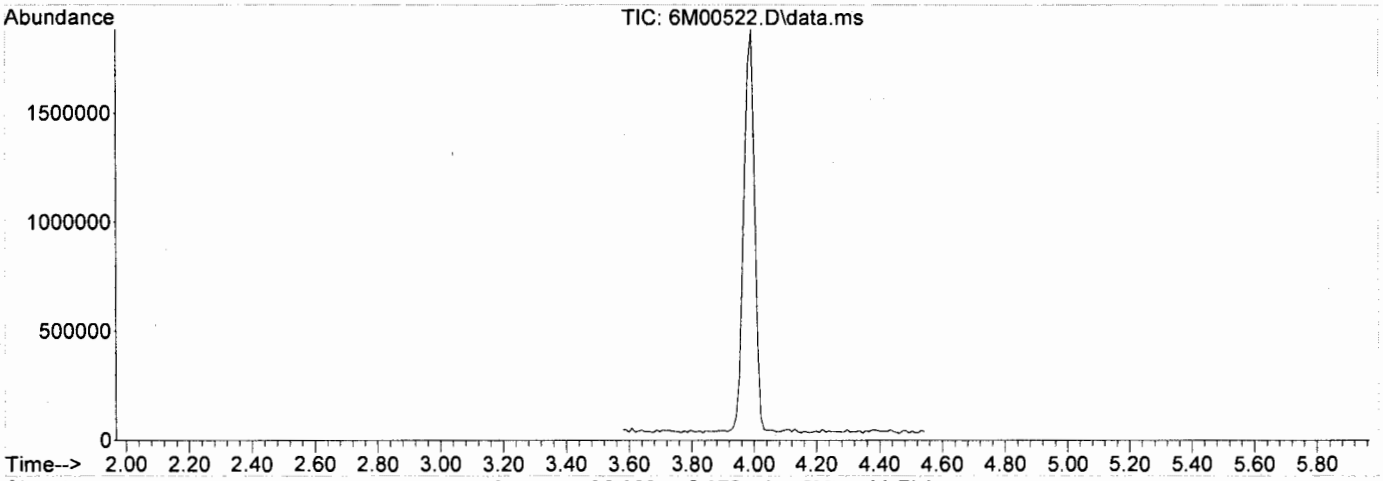
Data File	Sample Number	Analysis Date:
6M00523.D	BLKJUG3	08/05/13 06:45
6M00524.D	BLK	08/05/13 07:02
6M00525.D	50 PPB	08/05/13 07:18
6M00526.D	CAL @ 50 PPB	08/05/13 07:37
6M00527.D	BLK	08/05/13 07:54
6M00528.D	BLK	08/05/13 08:10
6M00529.D	DAILY BLANK	08/05/13 08:26
6M00530.D	MBS27721	08/05/13 08:42
6M00531.D	BLK	08/05/13 08:58
6M00532.D	AC73793-001	08/05/13 09:15
6M00533.D	AC73793-002	08/05/13 09:31
6M00534.D	AC73793-003	08/05/13 09:47
6M00535.D	AC73793-004	08/05/13 10:03
6M00536.D	AC73793-005	08/05/13 10:20
6M00537.D	AC73797-004	08/05/13 10:36
6M00538.D	AC73797-005	08/05/13 10:52
6M00539.D	AC73771-004	08/05/13 11:11
6M00540.D	AC73771-003	08/05/13 11:27
6M00541.D	AC73821-001	08/05/13 11:43
6M00542.D	AC73820-001	08/05/13 11:59
6M00543.D	AC73832-004	08/05/13 12:16
6M00544.D	AC73832-005	08/05/13 12:32
6M00545.D	BLK	08/05/13 12:48
6M00546.D	AC73816-022	08/05/13 13:04
6M00547.D	AC73797-002(MS)	08/05/13 13:20
6M00548.D	AC73797-002(MSD	08/05/13 13:37
6M00549.D	AC73797-002	08/05/13 13:53
6M00550.D	BLK	08/05/13 14:09
6M00551.D	AC73797-001	08/05/13 14:25
6M00552.D	STD	08/05/13 14:42
6M00553.D	AC73797-002	08/05/13 14:58
6M00554.D	AC73797-006	08/05/13 15:14
6M00555.D	AC73797-001	08/05/13 15:30
6M00556.D	MBS27731	08/05/13 15:46
6M00557.D	AC73797-003	08/05/13 16:02
6M00558.D	AC73820-004	08/05/13 16:19
6M00559.D	AC73820-005	08/05/13 16:35
6M00560.D	AC73820-006	08/05/13 16:51
6M00561.D	AC73820-007	08/05/13 17:07
6M00562.D	AC73820-003	08/05/13 17:23
6M00563.D	BLK	08/05/13 17:39
6M00564.D	AC73823-001	08/05/13 17:55
6M00565.D	AC73823-009	08/05/13 18:11
6M00566.D	BLK	08/05/13 18:28
6M00567.D	BLK	08/05/13 18:44
6M00568.D	BLK	08/05/13 19:00
6M00569.D	BLK	08/05/13 19:16

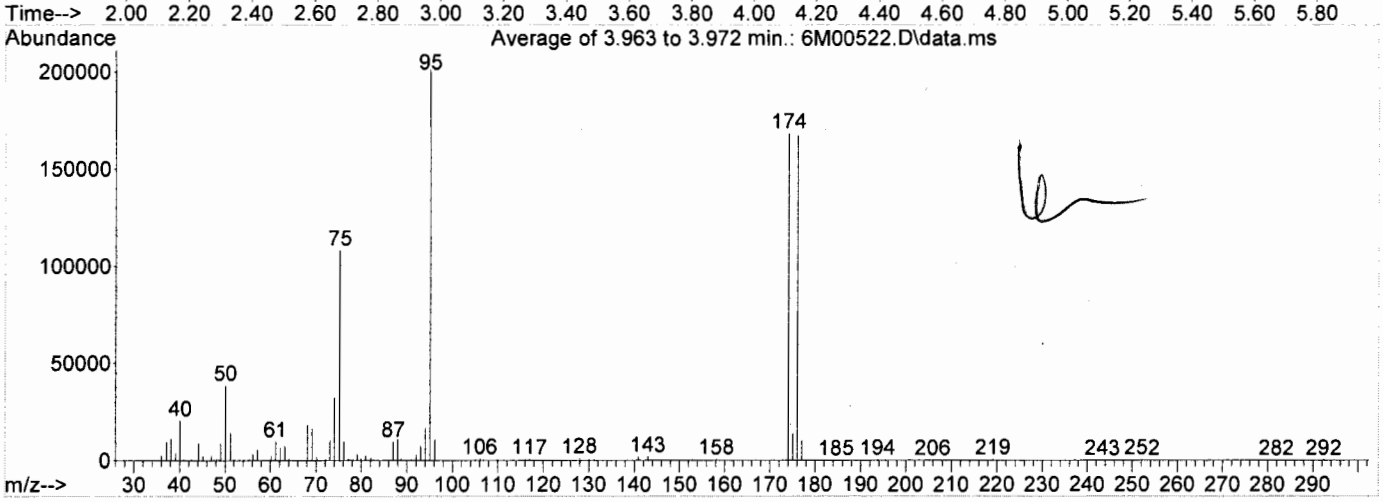
3080110 0055

Data Path : G:\GcMsData\2013\GCMS_6\Data\08-05-13\
Data File : 6M00522.D
Acq On : 5 Aug 2013 6:35
Operator : SG
Sample : BFB TUNE
Misc : S,5G
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2013\GCMS_6\MethodQt\6M_S0718.M
Title : @GCMS_6,ug,624,8260
Last Update : Thu Jul 18 10:53:43 2013





Spectrum Information: Average of 3.963 to 3.972 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.2	38556	PASS
75	95	30	60	53.7	108100	PASS
95	95	100	100	100.0	201184	PASS
96	95	5	9	5.4	10877	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	83.7	168464	PASS
175	174	5	9	8.2	13770	PASS
176	174	95	101	99.3	167356	PASS
177	176	5	9	6.0	10094	PASS

Form 6
Initial Calibration

Method: EPA 8260B

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M99870.	CAL @ 20 PPB	07/18/13 10:36	2	6M99865.	CAL @ 5 PPB	07/18/13 09:14
3	6M99864.	CAL @ 2 PPB	07/18/13 08:58	4	6M99869.	CAL @ 50 PPB	07/18/13 10:19
5	6M99868.	CAL @ 100 PPB	07/18/13 10:03	6	6M99867.	CAL @ 250 PPB	07/18/13 09:47
7	6M99866.	CAL @ 500 PPB	07/18/13 09:31	8	6M99863.	CAL @ 1 PPB	07/18/13 08:42
9	6M99862.	CAL @ 0.5 PPB	07/18/13 08:26				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.4918	0.4764	0.6544	0.5298	0.5899	0.4996	0.5126	-----	-----	0.536	1.31	0.999	0.999	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dichlorodifluoromethan	1	0	Avg	0.5721	0.6141	0.5329	0.5584	0.6525	0.5453	0.5426	-----	-----	0.574	1.31	0.998	0.999	7.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloromethane	1	0	Avg	0.3217	0.2844	0.3062	0.3391	0.3838	0.3358	0.3357	-----	-----	0.330	1.44	0.999	0.999	9.4	**(0.100)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromomethane	1	0	Avg	0.2502	0.3092	0.3528	0.2798	0.3139	0.2795	0.2877	-----	-----	0.296	1.78	0.999	0.999	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Vinyl Chloride	1	0	Avg	0.3047	0.3442	0.3691	0.3307	0.3637	0.3198	0.3218	-----	-----	0.336	1.53	0.999	0.999	7.1	*(30)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloroethane	1	0	LinF	0.1824	0.2391	0.3096	0.2088	0.2273	0.2023	0.2063	-----	-----	0.225	1.86	0.999	0.999	18		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Trichlorofluoromethane	1	0	Avg	0.6400	0.8177	0.8125	0.7069	0.7636	0.6879	0.7106	-----	-----	0.734	2.06	0.999	0.999	9.0		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl ether	1	0	Avg	0.0716	0.0944	0.1168	0.0961	0.1143	0.1051	0.1001	-----	-----	0.0998	2.27	0.998	0.999	15		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Furan	1	0	Avg	0.3220	0.3536	0.4761	0.3337	0.3962	0.3443	0.3589	-----	-----	0.369	2.29	0.999	0.999	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1.1.2-Trichloro-1.2.2-tri	1	0	Avg	0.4789	0.4174	0.5540	0.4692	0.4986	0.4416	0.4382	-----	-----	0.471	2.45	0.999	0.999	9.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methylene Chloride	1	0	LinF	0.2291	0.2819	0.4221	0.2242	0.2514	0.2258	0.2327	-----	-----	0.267	2.79	0.999	0.999	27		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Acrolein	1	0	LinF	0.0079	0.0071	0.0127	0.0086	0.0108	0.0096	0.0097	-----	-----	0.00954	2.35	0.999	0.999	20		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Acrylonitrile	1	0	LinF	0.0132	0.0186	0.0333	0.0207	0.0217	0.0164	0.0161	-----	-----	0.0200	2.98	0.995	0.996	33		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Iodomethane	1	0	Avg	0.4575	0.4866	0.5417	0.4737	0.5307	0.4751	0.4885	-----	-----	0.493	2.56	0.999	0.999	6.3		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Acetone	1	0	LinF	0.0165	0.0234	0.0114	0.0180	0.0176	0.0178	0.0163	-----	-----	0.0173	2.47	0.998	1.00	20		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Carbon Disulfide	1	0	Avg	1.0846	1.0705	1.2932	1.0918	1.1854	1.0898	1.0905	-----	-----	1.13	2.62	1.00	1.00	7.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
t-Butyl Alcohol	1	0	Avg	0.0040	0.0036	0.0040	0.0045	0.0041	0.0043	0.0044	-----	-----	0.00416	2.86	1.00	1.00	7.5		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
n-Hexane	1	0	Avg	0.4419	0.4140	0.3428	0.4564	0.5099	0.4585	0.4516	-----	-----	0.439	3.24	0.999	1.00	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Di-isopropyl-ether	1	0	Avg	0.5765	0.5663	0.6494	0.5758	0.6490	0.5928	0.5988	-----	-----	0.601	3.39	1.00	1.00	5.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1.1-Dichloroethene	1	0	Avg	0.4662	0.5228	0.3685	0.4712	0.5154	0.4635	0.4761	-----	-----	0.469	2.44	0.999	0.999	11	*(30)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl Acetate	1	0	Avg	0.0499	0.0625	0.0457	0.0601	0.0679	0.0660	0.0652	-----	-----	0.0597	2.71	1.00	1.00	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl-t-butyl ether	1	0	Avg	0.3484	0.3914	0.4193	0.3349	0.3967	0.3413	0.3414	0.4669	-----	0.380	3.01	0.999	0.999	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1.1-Dichloroethane	1	0	Avg	0.5473	0.5630	0.5017	0.5296	0.6174	0.5529	0.5626	-----	-----	0.554	3.34	0.999	0.999	6.4	**(0.100)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
trans-1.2-Dichloroether	1	0	Avg	0.3977	0.4336	0.4411	0.3961	0.4412	0.3908	0.4128	-----	-----	0.416	3.01	0.999	0.999	5.3		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl-t-butyl ether	1	0	Avg	0.4364	0.4374	0.5528	0.4893	0.5560	0.4846	0.4887	-----	-----	0.492	3.68	0.999	0.999	9.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
cis-1.2-Dichloroethene	1	0	Avg	0.4369	0.4592	0.6123	0.4893	0.5436	0.4949	0.4912	-----	-----	0.504	3.79	0.999	1.00	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromochloromethane	1	0	LinF	0.1511	0.1728	0.2231	0.1368	0.1607	0.1333	0.1429	-----	-----	0.160	3.96	0.998	0.998	19		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2.2-Dichloropropane	1	0	Avg	0.4900	0.5100	0.5504	0.4974	0.5823	0.5236	0.5221	-----	-----	0.525	3.80	0.999	0.999	6.1		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl acetate	1	0	Avg	0.0740	0.0647	0.0923	0.0717	0.0924	0.0834	0.0786	-----	-----	0.0796	3.84	0.998	0.999	13		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1.4-Dioxane	1	0	Avg	0.0008	0.0007	0.0010	0.0008	0.0009	0.0008	0.0009	-----	-----	.000880	4.91	0.996	0.999	13		1000.	250.0	100.0	2500.	5000.	1250	2500		
1.1-Dichloropropene	1	0	Avg	0.5478	0.5833	0.5440	0.5635	0.6053	0.5450	0.5306	-----	-----	0.560	4.25	0.999	1.00	4.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloroform	1	0	Avg	0.6240	0.6502	0.6180	0.5896	0.6550	0.5885	0.6124	-----	-----	0.620	4.02	0.999	0.999	4.2	*(30)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromofluoromethane	1	0	Avg	0.2741	0.2825	0.2839	0.2599	0.2550	0.2555	0.2422	0.2732	0.2861	0.268	4.11	-1	-1	5.8		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.5188	0.4991	0.6285	0.5670	0.6196	0.5455	0.5356	-----	-----	0.559	4.20	0.999	0.999	8.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1.2-Dichloroethane-d4	1	0	Avg	0.0864	0.0870	0.0906	0.0865	0.0978	0.0899	0.0985	0.0965	0.0826	0.0907	4.33	-1	-1	6.3		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
1.2-Dichloroethane	1	0	Avg	0.2634	0.2727	0.3569	0.2727	0.2945	0.2585	0.2605	0.3156	-----	0.287	4.38	0.999	0.999	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
2-Butanone	1	0	LinF	0.0313	0.0305	0.0160	0.0323	0.0282	0.0274	0.0291	-----	-----	0.0279	3.81	0.999	1.00	20		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1.1.1-Trichloroethane	1	0	Avg	0.6559	0.6633	0.7189	0.6912	0.7781	0.6705	0.6601	-----	-----	0.691	4.15	0.999	0.999	6.4		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Carbon Tetrachloride	1	0	Avg	0.5702	0.5305	0.6544	0.5859	0.6209	0.5668	0.5314	-----	-----	0.580	4.26	0.998	1.00	7.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Vinyl Acetate	1	0	Avg	0.3086	0.2650	0.3994	0.3212	0.3552	0.3147	0.3217	-----	-----	0.327	3.39	0.999	0.999	13		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromodichloromethane	1	0	Avg	0.3665	0.3695	0.3408	0.3605	0.4119	0.3630	0.3661	-----	-----	0.368	4.98	0.999	0.999	5.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		

Flags
a - failed the spcc criteria — ** - ccc compound*
b - failed the ccc criteria — *** - spcc compound*
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.9
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

3080110 0056

Form 6
Initial Calibration

Method: EPA 8260B

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M99870.	CAL @ 20 PPB	07/18/13 10:36	2	6M99865.	CAL @ 5 PPB	07/18/13 09:14
3	6M99864.	CAL @ 2 PPB	07/18/13 08:58	4	6M99869.	CAL @ 50 PPB	07/18/13 10:19
5	6M99868.	CAL @ 100 PPB	07/18/13 10:03	6	6M99867.	CAL @ 250 PPB	07/18/13 09:47
7	6M99866.	CAL @ 500 PPB	07/18/13 09:31	8	6M99863.	CAL @ 1 PPB	07/18/13 08:42
9	6M99862.	CAL @ 0.5 PPB	07/18/13 08:26				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.6611	0.6392	0.7603	0.7275	0.7779	0.6796	0.6393	-----	-----	0.698	4.84	0.998	1.00	8.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromomethane	1	0	Avg	0.1481	0.1618	0.1945	0.1359	0.1609	0.1391	0.1424	-----	-----	0.155	4.91	0.999	0.999	13		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichloropropane	1	0	Avg	0.2661	0.2515	0.2959	0.2650	0.2824	0.2453	0.2406	-----	-----	0.264	4.84	0.999	0.999	7.6	*(30)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Trichloroethene	1	0	Avg	0.4334	0.4699	0.5725	0.4815	0.5140	0.4751	0.4380	-----	-----	0.484	4.73	0.998	1.00	9.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Benzene	1	0	Avg	1.1602	1.2696	1.2456	1.2435	1.3961	1.1764	1.1139	1.4835	-----	1.26	4.38	0.997	0.999	9.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
tert-Amyl methyl ether	1	0	Avg	0.3246	0.3494	0.3825	0.3698	0.4061	0.3567	0.3664	-----	-----	0.365	4.44	0.999	0.999	7.0		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Iso-propylacetate	1	0	Avg	0.1355	0.1239	0.1588	0.1560	0.1636	0.1647	0.1594	-----	-----	0.152	4.39	1.00	1.00	10		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl methacrylate	1	0	Avg	0.5776	0.5634	0.5988	0.5932	0.6523	0.6017	0.5980	-----	-----	0.598	4.84	1.00	1.00	4.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromochloromethane	1	0	Avg	0.3589	0.3461	0.3629	0.3487	0.3893	0.3771	0.3680	-----	-----	0.364	5.79	1.00	1.00	4.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Chloroethylvinylether	1	0	Avg	0.0808	0.0925	0.0833	0.0876	0.0991	0.0992	0.1052	-----	-----	0.0926	5.12	0.999	1.00	9.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
cis-1,3-Dichloropropene	1	0	Avg	0.5301	0.5565	0.5914	0.5472	0.6508	0.6121	0.6234	-----	-----	0.587	5.21	1.00	1.00	7.5		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
trans-1,3-Dichloroprope	1	0	Avg	0.3877	0.3883	0.3269	0.4158	0.4497	0.4544	0.4440	-----	-----	0.410	5.48	1.00	1.00	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl methacrylate	1	0	LinF	0.1672	0.0856	0.1674	0.1663	0.1835	0.1872	0.1959	-----	-----	0.165	5.52	1.00	1.00	22		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,2-Trichloroethane	1	0	Avg	0.2320	0.3024	0.2759	0.2277	0.2724	0.2505	0.2526	-----	-----	0.259	5.58	1.00	1.00	10		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dibromoethane	1	0	Avg	0.2449	0.2539	0.2815	0.2275	0.2496	0.2290	0.2361	-----	-----	0.246	5.86	1.00	1.00	7.5		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3-Dichloropropane	1	0	Avg	0.4015	0.3994	0.4421	0.4023	0.4482	0.4012	0.3866	-----	-----	0.412	5.67	0.999	1.00	5.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
4-Methyl-2-Pentanone	1	0	Avg	0.0845	0.0842	0.1140	0.0896	0.0971	0.0967	0.0945	-----	-----	0.0944	5.28	1.00	1.00	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Hexanone	1	0	LinF	0.0332	0.0350	0.0497	0.0556	0.0570	0.0579	0.0613	-----	-----	0.0500	5.71	0.999	1.00	23		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Tetrachloroethene	1	0	Avg	0.6803	0.7298	0.7617	0.6599	0.7067	0.6654	0.6431	-----	-----	0.692	5.68	0.999	1.00	6.1		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Toluene-d8	1	0	Avg	1.6470	1.5919	1.5373	1.5084	1.5118	1.6267	1.6149	1.4948	1.6563	1.58	5.36	-1	-1	4.0		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Toluene	1	0	Avg	1.2365	1.4108	1.4759	1.1929	1.3152	1.2915	1.2108	1.4860	-----	1.33	5.39	0.999	1.00	8.8	*(30)	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1,1,2-Tetrachloroetha	1	0	Avg	0.4660	0.5394	0.4042	0.4520	0.4713	0.4544	0.4416	-----	-----	0.461	6.14	1.00	1.00	8.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chlorobenzene	1	0	Avg	1.3547	1.4921	1.6879	1.3554	1.4975	1.4168	1.2937	-----	-----	1.44	6.11	0.997	1.00	9.1	**(0.300)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Butyl acrylate	1	0	LinF	0.4888	0.1746	0.2124	0.5579	0.6899	0.6392	0.6792	-----	-----	0.492	6.37	0.999	0.999	44		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Amyl acetate	1	0	LinF	0.3238	0.0869	0.0881	0.3208	0.4510	0.3880	0.4311	-----	-----	0.299	6.49	0.997	0.998	51		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromoform	1	0	Avg	0.3789	0.5369	0.4233	0.3572	0.4602	0.3917	0.4153	-----	-----	0.423	6.54	0.998	0.998	14	**(0.100)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethylbenzene	1	0	Avg	1.3314	1.2738	1.3562	1.5209	1.3693	1.3846	1.4027	1.0706	-----	1.34	6.16	1.00	1.00	9.6	*(30)	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1,2,2-Tetrachloroetha	1	0	LinF	0.3972	0.4334	0.6238	0.4186	0.5003	0.4288	0.4432	-----	-----	0.464	6.75	0.999	0.999	17	**(0.300)	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromofluorobenzene	1	0	Avg	0.8299	0.8155	0.9037	0.8214	0.8441	0.8510	0.8939	0.8425	0.8373	0.849	6.70	-1	-1	3.6		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Styrene	1	0	Avg	2.2596	2.3432	2.3502	2.2460	2.7272	2.2164	2.2501	-----	-----	2.34	6.43	0.998	0.998	7.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
m&p-Xylenes	1	0	Avg	1.7155	1.6919	1.8947	1.7831	1.9834	1.6738	1.5970	1.9117	2.4625	1.86	6.22	0.998	0.999	14		40.00	10.00	4.00	100.0	200.0	500.0	1000.	2.00	1.00
o-Xylene	1	0	Avg	1.5357	1.7014	1.6259	1.6041	1.9230	1.5800	1.5717	1.9212	-----	1.68	6.43	0.998	0.998	9.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
trans-1,4-Dichloro-2-bu	1	0	Avg	0.3470	0.4185	0.4600	0.3721	0.4512	0.3854	0.4082	-----	-----	0.406	6.77	0.998	0.999	10		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3-Dichlorobenzene	1	0	Avg	1.8037	1.6781	1.8452	1.8239	2.1887	1.8333	1.7739	-----	-----	1.85	7.30	0.998	0.999	8.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,4-Dichlorobenzene	1	0	Avg	1.8102	1.8334	2.4841	1.7935	2.1647	1.8183	1.8101	-----	-----	1.96	7.35	0.998	0.999	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichlorobenzene	1	0	Avg	1.4799	1.4251	1.8015	1.4979	1.7920	1.4588	1.5291	-----	-----	1.57	7.56	0.998	0.998	10		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Isopropylbenzene	1	0	Avg	4.9204	4.8709	4.4695	4.8916	5.8435	4.9613	4.1097	5.7902	-----	4.98	6.61	0.987	0.999	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Cyclohexanone	1	0	LinF	0.0106	0.0216	0.0139	0.0105	0.0126	0.0116	0.0120	-----	-----	0.0133	6.68	0.999	0.999	29		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Camphene	1	0	Avg	2.4618	2.1703	2.6007	2.5007	2.9908	2.5303	2.3466	-----	-----	2.51	6.77	0.996	0.999	10		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,3-Trichloropropane	1	0	Avg	0.4999	0.5596	0.6540	0.4896	0.5695	0.5002	0.4934	-----	-----	0.538	6.79	0.999	0.999	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Chlorotoluene	1	0	Avg	3.1931	3.1308	3.2192	3.5653	3.5952	3.2190	2.7294	-----	-----	3.24	6.89	0.991	1.00	9.0		20.00	5.00	2.00	50.00	100.0	250.0	500.0		

Flags

a - failed the spcc criteria — ** - ccc compound*

b - failed the ccc criteria — *** - spcc compound*

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.9

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form 6
Initial Calibration

Method: EPA 8260B

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M99870.	CAL @ 20 PPB	07/18/13 10:36	2	6M99865.	CAL @ 5 PPB	07/18/13 09:14
3	6M99864.	CAL @ 2 PPB	07/18/13 08:58	4	6M99869.	CAL @ 50 PPB	07/18/13 10:19
5	6M99868.	CAL @ 100 PPB	07/18/13 10:03	6	6M99867.	CAL @ 250 PPB	07/18/13 09:47
7	6M99866.	CAL @ 500 PPB	07/18/13 09:31	8	6M99863.	CAL @ 1 PPB	07/18/13 08:42
9	6M99862.	CAL @ 0.5 PPB	07/18/13 08:26				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	5.1858	4.9170	5.6450	4.9951	5.9743	5.1298	4.0046	-----	-----	5.12	6.89	0.979	0.999	12	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
4-Chlorotoluene	1	0	LinF	2.7522	2.1780	2.1809	2.9097	3.3983	2.8312	2.6701	-----	-----	2.70	6.95	0.997	0.999	16	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Propylbenzene	1	0	Avg	5.4452	5.2241	6.3027	5.9823	6.8250	5.3574	4.2009	5.7323	-----	5.63	6.83	0.976	0.999	14	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Bromobenzene	1	0	Avg	1.8111	1.6835	2.4127	1.8982	2.1352	1.8086	1.9164	-----	-----	1.95	6.79	0.998	0.999	13	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3,5-Trimethylbenzene	1	0	Avg	3.4856	3.5071	4.1538	3.8533	4.0558	3.3282	3.2900	4.6169	-----	3.79	6.92	0.998	0.999	12	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Butyl methacrylate	1	0	LinF	0.6573	0.4911	0.7116	0.7723	0.8972	0.8103	0.8176	-----	-----	0.737	6.93	0.999	0.999	18	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
t-Butylbenzene	1	0	Avg	3.5340	3.6027	3.5997	3.7641	4.1612	3.7009	3.4914	4.5027	-----	3.79	7.11	0.998	1.00	9.3	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trimethylbenzene	1	0	Avg	3.2271	3.2136	3.9467	3.3354	4.0951	3.4218	3.2390	4.0528	-----	3.57	7.13	0.997	0.999	11	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
sec-Butylbenzene	1	0	Avg	5.1520	4.6662	4.8769	5.4802	5.9718	5.0729	4.1871	6.0597	-----	5.18	7.23	0.987	1.00	12	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
4-Isopropyltoluene	1	0	Avg	3.7817	3.5571	4.1690	4.0671	4.6318	3.7495	3.4669	4.5679	-----	4.00	7.29	0.995	0.999	11	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
n-Butylbenzene	1	0	Avg	4.3844	3.8082	4.1332	4.7453	5.2697	4.4577	4.1120	4.7996	-----	4.46	7.52	0.996	0.999	10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
p-Diethylbenzene	1	0	Avg	1.8266	1.7453	2.2034	2.1127	2.3601	2.2244	2.1249	-----	-----	2.09	7.51	0.999	1.00	11	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,4,5-Tetramethylben	1	0	Avg	2.3544	2.1531	2.9129	2.8228	3.1848	2.8104	2.7825	-----	-----	2.72	7.95	0.999	0.999	13	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dibromo-3-Chloropr	1	0	LinF	0.0681	0.0478	0.1247	0.0555	0.0750	0.0602	0.0665	-----	-----	0.0712	7.98	0.996	0.997	35	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Camphor	1	0	LinF	0.0184	0.0120	0.0186	0.0189	0.0210	0.0185	0.0163	-----	-----	0.0177	8.41	0.994	1.00	16	200.0	50.00	20.00	500.0	1000.	2500.	5000.		
Hexachlorobutadiene	1	0	Avg	0.8223	0.6934	1.0633	0.8561	0.9637	0.8377	0.8247	-----	-----	0.866	8.56	0.999	0.999	14	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,4-Trichlorobenzene	1	0	Avg	0.7432	0.7595	0.7880	0.8361	0.9992	0.8028	0.8264	-----	-----	0.822	8.47	0.998	0.998	10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,3-Trichlorobenzene	1	0	Avg	0.6428	0.5010	0.6780	0.6206	0.7516	0.6151	0.5658	-----	-----	0.625	8.76	0.995	0.999	13	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Naphthalene	1	0	Avg	0.9386	0.7286	0.8519	0.9439	1.1198	0.9121	0.7644	0.8369	-----	0.887	8.62	0.987	0.999	14	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	

Flags

a - failed the spcc criteria — ** - ccc compound*

b - failed the ccc criteria — *** - spcc compound*

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.9

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

3080110 0058

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M00231.D **Instrument:** GCMS 6

Cont Calibration Date/Time 7/26/2013 9:16:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.53	30.00	30				0.000	0.00	
Chlorodifluoromethane	1	0		1.32	52.44				0.536			
Dichlorodifluoromethane	1	0		1.32	40.78	50			0.574	0.468	18.44	
Chloromethane	1	0	CP	1.44	60.09	50	0.1		0.330	0.396	20.18	
Bromomethane	1	0		1.78	52.65	50			0.296	0.312	5.30	
Vinyl Chloride	1	0	CC	1.53	58.58	50	20		0.336	0.394	17.16	
Chloroethane	1	0		1.86	64.62	50			0.225	0.266	29.24	
Trichlorofluoromethane	1	0		2.06	42.39	50			0.734	0.622	15.22	
Ethyl ether	1	0		2.26	52.63	50			0.100	0.105	5.26	
Furan	1	0		2.29	59.26	50			0.369	0.438	18.53	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.44	38.02	50			0.471	0.358	23.95	
Methylene Chloride	1	0		2.79	64.24	50			0.267	0.298	28.48	
Acrolein	1	0		2.35	336.28	250			0.010	0.013	34.51	
Acrylonitrile	1	0		2.96	59.22	50			0.020	0.019	18.45	
Iodomethane	1	0		2.56	51.09	50			0.493	0.504	2.17	
Acetone	1	0		2.46	326.23	250			0.017	0.022	30.49	
Carbon Disulfide	1	0		2.62	52.36	50			1.129	1.183	4.72	
t-Butyl Alcohol	1	0		2.85	300.72	250			0.004	0.005	20.29	
n-Hexane	1	0		3.24	47.05	50			0.439	0.413	5.90	
Di-isopropyl-ether	1	0		3.39	53.35	50			0.601	0.642	6.70	
1,1-Dichloroethene	1	0	CC	2.44	54.87	50	20		0.469	0.515	9.73	
Methyl Acetate	1	0		2.71	77.32	50			0.060	0.092	54.65	
Methyl-t-butyl ether	1	0		3.01	45.33	50			0.380	0.345	9.35	
1,1-Dichloroethane	1	0	CP	3.34	53.84	50	0.1		0.554	0.596	7.67	
trans-1,2-Dichloroethene	1	0		3.01	46.79	50			0.416	0.390	6.42	
Ethyl-t-butyl ether	1	0		3.68	48.90				0.492			
cis-1,2-Dichloroethene	1	0		3.79	54.88	50			0.504	0.553	9.77	
Bromochloromethane	1	0		3.96	57.36	50			0.160	0.162	14.72	
2,2-Dichloropropane	1	0		3.80	43.35	50			0.525	0.455	13.30	
Ethyl acetate	1	0		3.84	64.83				0.080			
1,4-Dioxane	1	0		4.90	2913.46	2500			0.001	0.001	16.54	
1,1-Dichloropropene	1	0		4.25	46.07	50			0.560	0.516	7.86	
Chloroform	1	0	CC	4.01	44.22	50	20		0.620	0.548	11.55	
Dibromofluoromethane	1	0	S	4.11	24.99	75			0.268	0.223	16.71	
Cyclohexane	1	0		4.20	46.41	50			0.559	0.519	7.19	
1,2-Dichloroethane-d4	1	0	S	4.33	27.01	75			0.091	0.082	9.97	
1,2-Dichloroethane	1	0		4.37	45.45	50			0.287	0.261	9.10	
2-Butanone	1	0		3.79	64.51	50			0.028	0.037	29.01	
1,1,1-Trichloroethane	1	0		4.15	41.81	50			0.691	0.578	16.38	
Carbon Tetrachloride	1	0		4.26	38.84	50			0.580	0.451	22.33	
Vinyl Acetate	1	0		3.39	53.83	50			0.327	0.352	7.66	
Bromodichloromethane	1	0		4.97	48.48	50			0.368	0.357	3.04	
Methylcyclohexane	1	0		4.84	40.83	50			0.698	0.570	18.33	
Dibromomethane	1	0		4.90	39.45	50			0.155	0.122	21.11	
1,2-Dichloropropane	1	0	CC	4.84	54.07	50	20		0.264	0.285	8.14	
Trichloroethene	1	0		4.73	38.82	50			0.484	0.375	22.35	
Benzene	1	0		4.37	47.81	50			1.261	1.206	4.38	
tert-Amyl methyl ether	1	0		4.43	46.89	50			0.365	0.342	6.22	
Chlorobenzene-d5	1	0	I	6.10	30.00	30				0.000	0.00	
Iso-propylacetate	1	0		4.39	67.59				0.152			
Methyl methacrylate	1	0		4.84	54.42				0.598			
Dibromochloromethane	1	0		5.79	45.75	50			0.364	0.333	8.50	
2-Chloroethylvinylether	1	0		5.12	65.71	50			0.093	0.122	31.43	
cis-1,3-Dichloropropene	1	0		5.21	57.35	50			0.587	0.674	14.71	
trans-1,3-Dichloropropene	1	0		5.48	55.41	50			0.410	0.454	10.82	
Ethyl methacrylate	1	0		5.52	50.19				0.165			

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M00231.D **Instrument:** GCMS 6

Cont Calibration Date/Time 7/26/2013 9:16:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
1,1,2-Trichloroethane	1	0		5.58	50.72	50			0.259	0.263	1.44	
1,2-Dibromoethane	1	0		5.86	45.45	50			0.246	0.224	9.10	
1,3-Dichloropropane	1	0		5.66	56.71	50			0.412	0.467	13.43	
4-Methyl-2-Pentanone	1	0		5.27	59.98	50			0.094	0.113	19.96	
2-Hexanone	1	0		5.70	45.70	50			0.050	0.055	8.59	
Tetrachloroethene	1	0		5.68	41.33	50			0.692	0.572	17.33	
Toluene-d8	1	0	S	5.35	33.00	75			1.577	1.734	10.00	
Toluene	1	0	CC	5.39	48.47	50	20		1.327	1.287	3.06	
1,1,1,2-Tetrachloroethane	1	0		6.14	42.91	50			0.461	0.396	14.17	
Chlorobenzene	1	0	CP	6.11	42.99	50	0.3		1.443	1.240	14.02	
1,4-Dichlorobenzene-d4	1	0	I	7.33	30.00	30				0.000	0.00	
n-Butyl acrylate	1	0		6.37	49.95				0.492			
n-Amyl acetate	1	0		6.48	52.74				0.299			
Bromoform	1	0	CP	6.53	41.78	50	0.1		0.423	0.354	16.43	
Ethylbenzene	1	0	CC	6.16	49.77	50	20		1.339	1.333	0.46	
1,1,2,2-Tetrachloroethane	1	0	CP	6.75	60.85	50	0.3		0.464	0.538	21.70	
Bromofluorobenzene	1	0	S	6.70	28.99	75			0.849	0.820	3.37	
Styrene	1	0		6.43	45.97	50			2.342	2.153	8.07	
m&p-Xylenes	1	0		6.22	90.89	100			1.857	1.688	9.11	
o-Xylene	1	0		6.43	47.18	50			1.683	1.588	5.64	
trans-1,4-Dichloro-2-butene	1	0		6.78	51.28	50			0.406	0.417	2.57	
1,3-Dichlorobenzene	1	0		7.30	42.37	50			1.850	1.567	15.27	
1,4-Dichlorobenzene	1	0		7.35	41.26	50			1.959	1.617	17.48	
1,2-Dichlorobenzene	1	0		7.56	37.42	50			1.569	1.174	25.16	
Isopropylbenzene	1	0		6.61	48.03	50			4.982	4.786	3.93	
Cyclohexanone	1	0		6.67	262.91				0.013			
Camphene	1	0		6.78	45.45	50			2.515	2.286	9.10	
1,2,3-Trichloropropane	1	0		6.79	52.97	50			0.538	0.570	5.94	
2-Chlorotoluene	1	0		6.89	49.08	50			3.236	3.176	1.84	
p-Ethyltoluene	1	0		6.89	45.88				5.122			
4-Chlorotoluene	1	0		6.94	48.95	50			2.703	2.668	2.11	
n-Propylbenzene	1	0		6.83	50.25	50			5.634	5.662	0.50	
Bromobenzene	1	0		6.79	46.77	50			1.952	1.826	6.45	
1,3,5-Trimethylbenzene	1	0		6.92	46.42	50			3.786	3.515	7.16	
Butyl methacrylate	1	0		6.93	49.23				0.737			
t-Butylbenzene	1	0		7.10	41.04	50			3.795	3.115	17.92	
1,2,4-Trimethylbenzene	1	0		7.12	41.98	50			3.566	2.995	16.03	
sec-Butylbenzene	1	0		7.22	44.70	50			5.183	4.634	10.60	
4-Isopropyltoluene	1	0		7.29	40.14	50			3.999	3.210	19.73	
n-Butylbenzene	1	0		7.52	47.93	50			4.464	4.279	4.14	
p-Diethylbenzene	1	0		7.50	43.30				2.085			
1,2,4,5-Tetramethylbenzene	1	0		7.95	26.84				2.717			
1,2-Dibromo-3-Chloropropane	1	0		7.98	50.63	50			0.071	0.066	1.25	
Camphor	1	0		8.41	399.75	500			0.018	0.014	20.05	
Hexachlorobutadiene	1	0		8.56	34.97	50			0.866	0.606	30.05	
1,2,4-Trichlorobenzene	1	0		8.47	35.97	50			0.822	0.591	28.06	
1,2,3-Trichlorobenzene	1	0		8.76	36.01	50			0.625	0.450	27.98	
Naphthalene	1	0		8.62	35.53	50			0.887	0.630	28.95	
Freon 113	1	100		0.00	0.00	50				0.000	100.00	
1,2-Dioxane	1	100		0.00	0.00	5000				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M00330.D **Instrument:** GCMS 6

Cont Calibration Date/Time 7/30/2013 6:45:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.52	30.00	30				0.000	0.00	
Chlorodifluoromethane	1	0		1.31	65.24				0.536			
Dichlorodifluoromethane	1	0		1.31	40.92	50			0.574	0.470	18.15	
Chloromethane	1	0	CP	1.44	57.59	50	0.1		0.330	0.380	15.18	
Bromomethane	1	0		1.78	35.80	50			0.296	0.212	28.41	
Vinyl Chloride	1	0	CC	1.52	50.11	50	20		0.336	0.337	0.22	
Chloroethane	1	0		1.85	56.39	50			0.225	0.233	12.78	
Trichlorofluoromethane	1	0		2.05	37.08	50			0.734	0.545	25.84	
Ethyl ether	1	0		2.26	53.90	50			0.100	0.108	7.79	
Furan	1	0		2.29	50.69	50			0.369	0.374	1.38	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.44	48.83	50			0.471	0.460	2.33	
Methylene Chloride	1	0		2.78	56.80	50			0.267	0.263	13.61	
Acrolein	1	0		2.34	242.42	250			0.010	0.009	3.03	
Acrylonitrile	1	0		2.97	40.28	50			0.020	0.013	19.45	
Iodomethane	1	0		2.54	49.77	50			0.493	0.491	0.46	
Acetone	1	0		2.45	293.46	250			0.017	0.020	17.39	
Carbon Disulfide	1	0		2.61	50.17	50			1.129	1.133	0.35	
t-Butyl Alcohol	1	0		2.85	205.62	250			0.004	0.003	17.75	
n-Hexane	1	0		3.23	49.53	50			0.439	0.435	0.94	
Di-isopropyl-ether	1	0		3.39	46.89	50			0.601	0.564	6.21	
1,1-Dichloroethene	1	0	CC	2.44	51.86	50	20		0.469	0.487	3.72	
Methyl Acetate	1	0		2.71	66.65	50			0.060	0.080	33.30	
Methyl-t-butyl ether	1	0		3.00	40.98	50			0.380	0.311	18.05	
1,1-Dichloroethane	1	0	CP	3.33	53.29	50	0.1		0.554	0.590	6.58	
trans-1,2-Dichloroethene	1	0		3.01	48.54	50			0.416	0.404	2.92	
Ethyl-t-butyl ether	1	0		3.67	44.81				0.492			
cis-1,2-Dichloroethene	1	0		3.79	50.17	50			0.504	0.506	0.33	
Bromochloromethane	1	0		3.96	56.87	50			0.160	0.161	13.75	
2,2-Dichloropropane	1	0		3.79	46.24	50			0.525	0.486	7.52	
Ethyl acetate	1	0		3.83	42.17				0.080			
1,4-Dioxane	1	0		4.90	2885.02	2500			0.001	0.001	15.40	
1,1-Dichloropropene	1	0		4.25	44.42	50			0.560	0.497	11.16	
Chloroform	1	0	CC	4.01	47.12	50	20		0.620	0.584	5.77	
Dibromofluoromethane	1	0	S	4.11	30.61	75			0.268	0.274	2.04	
Cyclohexane	1	0		4.19	60.28	50			0.559	0.674	20.55	
1,2-Dichloroethane-d4	1	0	S	4.32	30.52	75			0.091	0.092	1.75	
1,2-Dichloroethane	1	0		4.37	48.15	50			0.287	0.276	3.69	
2-Butanone	1	0		3.79	72.04	50			0.028	0.041	44.08	
1,1,1-Trichloroethane	1	0		4.14	47.22	50			0.691	0.653	5.57	
Carbon Tetrachloride	1	0		4.26	47.54	50			0.580	0.552	4.92	
Vinyl Acetate	1	0		3.39	46.43	50			0.327	0.303	7.14	
Bromodichloromethane	1	0		4.97	55.30	50			0.368	0.407	10.59	
Methylcyclohexane	1	0		4.84	47.04	50			0.698	0.657	5.92	
Dibromomethane	1	0		4.90	44.24	50			0.155	0.137	11.51	
1,2-Dichloropropane	1	0	CC	4.83	51.98	50	20		0.264	0.274	3.96	
Trichloroethene	1	0		4.72	40.35	50			0.484	0.390	19.30	
Benzene	1	0		4.37	46.51	50			1.261	1.173	6.98	
tert-Amyl methyl ether	1	0		4.43	40.12	50			0.365	0.293	19.76	
Chlorobenzene-d5	1	0	I	6.09	30.00	30				0.000	0.00	
Iso-propylacetate	1	0		4.39	39.29				0.152			
Methyl methacrylate	1	0		4.83	45.21				0.598			
Dibromochloromethane	1	0		5.78	42.00	50			0.364	0.306	16.00	
2-Chloroethylvinylether	1	0		5.12	40.95	50			0.093	0.076	18.11	
cis-1,3-Dichloropropene	1	0		5.20	45.96	50			0.587	0.540	8.07	
trans-1,3-Dichloropropene	1	0		5.48	46.55	50			0.410	0.381	6.90	
Ethyl methacrylate	1	0		5.51	36.85				0.165			

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M00330.D **Instrument:** GCMS 6

Cont Calibration Date/Time 7/30/2013 6:45:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
1,1,2-Trichloroethane	1	0		5.57	43.69	50			0.259	0.226	12.62	
1,2-Dibromoethane	1	0		5.86	45.11	50			0.246	0.222	9.77	
1,3-Dichloropropane	1	0		5.66	46.76	50			0.412	0.385	6.48	
4-Methyl-2-Pentanone	1	0		5.27	40.64	50			0.094	0.077	18.72	
2-Hexanone	1	0		5.70	43.30	50			0.050	0.052	13.39	
Tetrachloroethene	1	0		5.67	39.23	50			0.692	0.543	21.54	
Toluene-d8	1	0	S	5.35	28.38	75			1.577	1.492	5.40	
Toluene	1	0	CC	5.38	40.01	50	20		1.327	1.062	19.99	
1,1,1,2-Tetrachloroethane	1	0		6.14	42.00	50			0.461	0.388	16.00	
Chlorobenzene	1	0	CP	6.10	42.32	50	0.3		1.443	1.221	15.36	
1,4-Dichlorobenzene-d4	1	0	I	7.32	30.00	30				0.000	0.00	
n-Butyl acrylate	1	0		6.36	40.67				0.492			
n-Amyl acetate	1	0		6.48	40.73				0.299			
Bromoform	1	0	CP	6.53	44.29	50	0.1		0.423	0.375	11.43	
Ethylbenzene	1	0	CC	6.16	45.52	50	20		1.339	1.219	8.95	
1,1,2,2-Tetrachloroethane	1	0	CP	6.75	53.81	50	0.3		0.464	0.476	7.62	
Bromofluorobenzene	1	0	S	6.70	30.94	75			0.849	0.875	3.13	
Styrene	1	0		6.42	46.26	50			2.342	2.167	7.49	
m&p-Xylenes	1	0		6.21	89.15	100			1.857	1.656	10.85	
o-Xylene	1	0		6.42	47.61	50			1.683	1.603	4.77	
trans-1,4-Dichloro-2-butene	1	0		6.77	46.50	50			0.406	0.378	7.00	
1,3-Dichlorobenzene	1	0		7.29	49.33	50			1.850	1.825	1.34	
1,4-Dichlorobenzene	1	0		7.34	46.51	50			1.959	1.823	6.97	
1,2-Dichlorobenzene	1	0		7.55	43.89	50			1.569	1.378	12.22	
Isopropylbenzene	1	0		6.61	50.02	50			4.982	4.984	0.04	
Cyclohexanone	1	0		6.67	255.44				0.013			
Camphene	1	0		6.77	45.11	50			2.515	2.268	9.79	
1,2,3-Trichloropropane	1	0		6.78	52.03	50			0.538	0.560	4.06	
2-Chlorotoluene	1	0		6.88	54.89	50			3.236	3.553	9.79	
p-Ethyltoluene	1	0		6.88	45.23				5.122			
4-Chlorotoluene	1	0		6.94	47.74	50			2.703	2.602	4.52	
n-Propylbenzene	1	0		6.82	52.69	50			5.634	5.937	5.39	
Bromobenzene	1	0		6.79	47.25	50			1.952	1.845	5.50	
1,3,5-Trimethylbenzene	1	0		6.91	45.87	50			3.786	3.474	8.26	
Butyl methacrylate	1	0		6.93	47.58				0.737			
t-Butylbenzene	1	0		7.10	45.76	50			3.795	3.473	8.49	
1,2,4-Trimethylbenzene	1	0		7.12	42.51	50			3.566	3.032	14.98	
sec-Butylbenzene	1	0		7.21	50.07	50			5.183	5.190	0.13	
4-Isopropyltoluene	1	0		7.29	44.68	50			3.999	3.574	10.64	
n-Butylbenzene	1	0		7.52	49.14	50			4.464	4.387	1.72	
p-Diethylbenzene	1	0		7.50	43.96				2.085			
1,2,4,5-Tetramethylbenzene	1	0		7.94	30.62				2.717			
1,2-Dibromo-3-Chloropropane	1	0		7.98	49.98	50			0.071	0.065	0.05	
Camphor	1	0		8.41	243.35	500			0.018	0.008	51.33	
Hexachlorobutadiene	1	0		8.56	40.92	50			0.866	0.709	18.17	
1,2,4-Trichlorobenzene	1	0		8.47	43.19	50			0.822	0.710	13.62	
1,2,3-Trichlorobenzene	1	0		8.75	38.40	50			0.625	0.480	23.20	
Naphthalene	1	0		8.61	32.71	50			0.887	0.580	34.57	
Freon 113	1	100		0.00	0.00	50				0.000	100.00	
1,2-Dioxane	1	100		0.00	0.00	5000				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M00526.D **Instrument:** GCMS 6

Cont Calibration Date/Time 8/5/2013 7:37:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.52	30.00	30				0.000	0.00	
Chlorodifluoromethane	1	0		1.32	38.64				0.536			
Dichlorodifluoromethane	1	0		1.32	29.52	50			0.574	0.339	40.96	
Chloromethane	1	0	CP	1.44	53.40	50	0.1		0.330	0.352	6.79	
Bromomethane	1	0		1.78	37.99	50			0.296	0.225	24.02	
Vinyl Chloride	1	0	CC	1.53	48.77	50	20		0.336	0.328	2.47	
Chloroethane	1	0		1.85	56.60	50			0.225	0.233	13.21	
Trichlorofluoromethane	1	0		2.05	36.76	50			0.734	0.540	26.47	
Ethyl ether	1	0		2.26	49.94	50			0.100	0.100	0.13	
Furan	1	0		2.29	53.55	50			0.369	0.396	7.10	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.44	43.97	50			0.471	0.414	12.06	
Methylene Chloride	1	0		2.79	54.42	50			0.267	0.252	8.84	
Acrolein	1	0		2.35	252.32	250			0.010	0.010	0.93	
Acrylonitrile	1	0		2.98	52.58	50			0.020	0.017	5.16	
Iodomethane	1	0		2.55	41.38	50			0.493	0.408	17.25	
Acetone	1	0		2.46	370.67	250			0.017	0.025	48.27	
Carbon Disulfide	1	0		2.62	51.68	50			1.129	1.167	3.35	
t-Butyl Alcohol	1	0		2.85	261.23	250			0.004	0.004	4.49	
n-Hexane	1	0		3.23	46.53	50			0.439	0.409	6.94	
Di-isopropyl-ether	1	0		3.39	45.96	50			0.601	0.553	8.08	
1,1-Dichloroethene	1	0	CC	2.44	49.73	50	20		0.469	0.467	0.54	
Methyl Acetate	1	0		2.71	69.97	50			0.060	0.083	39.95	
Methyl-t-butyl ether	1	0		3.01	41.33	50			0.380	0.314	17.34	
1,1-Dichloroethane	1	0	CP	3.34	51.29	50	0.1		0.554	0.568	2.58	
trans-1,2-Dichloroethene	1	0		3.01	47.27	50			0.416	0.393	5.46	
Ethyl-t-butyl ether	1	0		3.68	42.97				0.492			
cis-1,2-Dichloroethene	1	0		3.79	52.67	50			0.504	0.531	5.34	
Bromochloromethane	1	0		3.96	59.41	50			0.160	0.168	18.82	
2,2-Dichloropropane	1	0		3.80	44.37	50			0.525	0.466	11.25	
Ethyl acetate	1	0		3.84	47.44				0.080			
1,4-Dioxane	1	0		4.90	2936.49	2500			0.001	0.001	17.46	
1,1-Dichloropropene	1	0		4.25	45.30	50			0.560	0.507	9.40	
Chloroform	1	0	CC	4.01	46.85	50	20		0.620	0.581	6.30	
Dibromofluoromethane	1	0	S	4.11	30.17	75			0.268	0.270	0.58	
Cyclohexane	1	0		4.20	56.59	50			0.559	0.633	13.17	
1,2-Dichloroethane-d4	1	0	S	4.33	30.07	75			0.091	0.091	0.22	
1,2-Dichloroethane	1	0		4.37	45.65	50			0.287	0.262	8.70	
2-Butanone	1	0		3.80	72.60	50			0.028	0.042	45.20	
1,1,1-Trichloroethane	1	0		4.15	44.24	50			0.691	0.612	11.52	
Carbon Tetrachloride	1	0		4.26	44.01	50			0.580	0.511	11.98	
Vinyl Acetate	1	0		3.39	45.30	50			0.327	0.296	9.40	
Bromodichloromethane	1	0		4.97	53.90	50			0.368	0.397	7.79	
Methylcyclohexane	1	0		4.84	46.86	50			0.698	0.654	6.28	
Dibromomethane	1	0		4.90	41.88	50			0.155	0.130	16.24	
1,2-Dichloropropane	1	0	CC	4.84	52.17	50	20		0.264	0.275	4.33	
Trichloroethene	1	0		4.73	39.04	50			0.484	0.377	21.93	
Benzene	1	0		4.37	44.98	50			1.261	1.135	10.04	
tert-Amyl methyl ether	1	0		4.43	38.09	50			0.365	0.278	23.82	
Chlorobenzene-d5	1	0	I	6.10	30.00	30				0.000	0.00	
Iso-propylacetate	1	0		4.39	45.33				0.152			
Methyl methacrylate	1	0		4.84	51.61				0.598			
Dibromochloromethane	1	0		5.79	42.67	50			0.364	0.311	14.67	
2-Chloroethylvinylether	1	0		5.12	49.24	50			0.093	0.091	1.52	
cis-1,3-Dichloropropene	1	0		5.21	47.03	50			0.587	0.553	5.94	
trans-1,3-Dichloropropene	1	0		5.48	45.57	50			0.410	0.373	8.86	
Ethyl methacrylate	1	0		5.52	44.11				0.165			

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M00526.D **Instrument:** GCMS 6

Cont Calibration Date/Time 8/5/2013 7:37:00 A Method: EPA 8260B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
1,1,2-Trichloroethane	1	0		5.57	44.68	50			0.259	0.232	10.64	
1,2-Dibromoethane	1	0		5.86	41.95	50			0.246	0.206	16.10	
1,3-Dichloropropane	1	0		5.66	50.86	50			0.412	0.419	1.72	
4-Methyl-2-Pentanone	1	0		5.27	43.64	50			0.094	0.082	12.72	
2-Hexanone	1	0		5.69	40.76	50			0.050	0.049	18.48	
Tetrachloroethene	1	0		5.67	37.84	50			0.692	0.524	24.32	
Toluene-d8	1	0	S	5.35	29.82	75			1.577	1.567	0.61	
Toluene	1	0	CC	5.39	40.50	50	20		1.327	1.075	19.00	
1,1,1,2-Tetrachloroethane	1	0		6.14	42.10	50			0.461	0.388	15.80	
Chlorobenzene	1	0	CP	6.11	42.82	50	0.3		1.443	1.235	14.36	
1,4-Dichlorobenzene-d4	1	0	I	7.33	30.00	30				0.000	0.00	
n-Butyl acrylate	1	0		6.37	45.01				0.492			
n-Amyl acetate	1	0		6.48	42.68				0.299			
Bromoform	1	0	CP	6.53	37.21	50	0.1		0.423	0.315	25.57	
Ethylbenzene	1	0	CC	6.16	51.62	50	20		1.339	1.382	3.25	
1,1,2,2-Tetrachloroethane	1	0	CP	6.74	53.90	50	0.3		0.464	0.476	7.79	
Bromofluorobenzene	1	0	S	6.70	28.75	75			0.849	0.814	4.15	
Styrene	1	0		6.43	41.94	50			2.342	1.964	16.12	
m&p-Xylenes	1	0		6.22	87.53	100			1.857	1.626	12.47	
o-Xylene	1	0		6.43	43.75	50			1.683	1.472	12.51	
trans-1,4-Dichloro-2-butene	1	0		6.77	47.72	50			0.406	0.388	4.56	
1,3-Dichlorobenzene	1	0		7.30	42.60	50			1.850	1.576	14.80	
1,4-Dichlorobenzene	1	0		7.34	38.19	50			1.959	1.497	23.62	
1,2-Dichlorobenzene	1	0		7.56	37.13	50			1.569	1.165	25.73	
Isopropylbenzene	1	0		6.61	40.90	50			4.982	4.076	18.19	
Cyclohexanone	1	0		6.67	337.75				0.013			
Camphene	1	0		6.77	43.29	50			2.515	2.177	13.41	
1,2,3-Trichloropropane	1	0		6.78	48.67	50			0.538	0.524	2.67	
2-Chlorotoluene	1	0		6.89	48.09	50			3.236	3.112	3.83	
p-Ethyltoluene	1	0		6.89	44.93				5.122			
4-Chlorotoluene	1	0		6.94	48.50	50			2.703	2.644	2.99	
n-Propylbenzene	1	0		6.83	48.90	50			5.634	5.510	2.20	
Bromobenzene	1	0		6.79	43.22	50			1.952	1.688	13.56	
1,3,5-Trimethylbenzene	1	0		6.91	43.22	50			3.786	3.273	13.56	
Butyl methacrylate	1	0		6.93	48.52				0.737			
t-Butylbenzene	1	0		7.10	40.79	50			3.795	3.096	18.42	
1,2,4-Trimethylbenzene	1	0		7.12	41.13	50			3.566	2.934	17.74	
sec-Butylbenzene	1	0		7.22	46.26	50			5.183	4.796	7.48	
4-Isopropyltoluene	1	0		7.29	42.98	50			3.999	3.437	14.04	
n-Butylbenzene	1	0		7.52	48.95	50			4.464	4.370	2.09	
p-Diethylbenzene	1	0		7.50	42.02				2.085			
1,2,4,5-Tetramethylbenzene	1	0		7.95	29.24				2.717			
1,2-Dibromo-3-Chloropropane	1	0		7.98	44.23	50			0.071	0.058	11.54	
Camphor	1	0		8.40	329.33	500			0.018	0.011	34.13	
Hexachlorobutadiene	1	0		8.56	37.28	50			0.866	0.646	25.44	
1,2,4-Trichlorobenzene	1	0		8.47	40.95	50			0.822	0.673	18.10	
1,2,3-Trichlorobenzene	1	0		8.76	36.32	50			0.625	0.454	27.35	
Naphthalene	1	0		8.61	39.16	50			0.887	0.695	21.68	
Freon 113	1	100		0.00	0.00	50				0.000	100.00	
1,2-Dioxane	1	100		0.00	0.00	5000				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M99870.D Method: EPA 8260B

Analysis Date/Time: 07/18/13 10:36

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	337561	4.53	215002	6.10	115016	7.33						
Eval File Area Limit:	168780-675122		107501-430004		57508-230032							
Eval File Rt Limit:	4.03-5.03		5.6-6.6		6.83-7.83							

Data File	Sample												
6M99861.D	BLK	305213	4.52	199837	6.10	103488	7.33						
6M99862.D	CAL @ 0.5 PF	305626	4.52	196789	6.10	102211	7.33						
6M99863.D	CAL @ 1 PPB	305178	4.53	203819	6.10	101152	7.33						
6M99864.D	CAL @ 2 PPB	299319	4.52	200875	6.10	95835	7.33						
6M99865.D	CAL @ 5 PPB	322434	4.53	199560	6.10	111120	7.33						
6M99866.D	CAL @ 500 P	374673	4.52	241874	6.10	117897	7.33						
6M99867.D	CAL @ 250 P	377576	4.53	237508	6.10	124227	7.33						
6M99868.D	CAL @ 100 P	349065	4.52	236178	6.09	113893	7.33						
6M99869.D	CAL @ 50 PP	360646	4.53	237046	6.10	121818	7.33						
6M99870.D	CAL @ 20 PP	337561	4.53	215002	6.10	115016	7.33						
6M99873.D	ICV	327971	4.53	197385	6.10	105514	7.33						

I1 =	Fluorobenzene	I4 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =	624/8260 Internal Standard concentration = 30ug/L
I3 =	1.4-Dichlorobenzene-d4	I6 =	524 Internal Standard concentration =5ug/L

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M00231.D Method: EPA 8260B

Analysis Date/Time: 07/26/13 09:16

Lab File ID: CAL @ 50 PPB

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	332938	4.53	186757	6.10	88411	7.33						
Eval File Area Limit:	166469-665876		93378-373514		44206-176822							
Eval File Rt Limit:	4.03-5.03		5.6-6.6		6.83-7.83							

Data File	Sample											
6M00229.D	BLK	327116	4.53	189112	6.10	80202	7.33					
6M00230.D	50 PPB	312418	4.52	182310	6.10	88033	7.33					
6M00232.D	BLK	309168	4.53	183664	6.11	79028	7.34					
6M00233.D	BLK	314923	4.53	165266	6.10	74269	7.34					
6M00234.D	DAILY BLANK	305635	4.53	170572	6.10	74608	7.34					
6M00235.D	MBS27634	311437	4.53	182154	6.10	83837	7.33					
6M00236.D	BLK	290361	4.53	168178	6.10	72148	7.33					
6M00237.D	AC73583-005	296011	4.53	167606	6.10	69947	7.33					
6M00238.D	AC73583-007	145249 A	4.53	72287 A	6.11	31039 A	7.34					
6M00239.D	AC73583-009	317451	4.53	173719	6.10	73971	7.33					
6M00240.D	AC73583-011	315725	4.53	164689	6.10	72569	7.34					
6M00241.D	AC73583-015	322579	4.53	185852	6.10	76454	7.34					
6M00242.D	AC73607-002	293793	4.53	166807	6.10	73994	7.34					
6M00243.D	AC73607-003	311831	4.53	168891	6.10	79337	7.33					
6M00244.D	STDTEST	316424	4.53	182835	6.10	83033	7.33					
6M00245.D	AC73571-006	324851	4.53	173548	6.10	79436	7.33					
6M00246.D	STD	304682	4.53	174329	6.10	82433	7.33					
6M00247.D	AC73571-006	326893	4.53	185363	6.10	76962	7.33					
6M00248.D	BLK	279926	4.53	167085	6.10	66201	7.34					
6M00249.D	AC73581-001	309204	4.53	169368	6.10	78646	7.34					
6M00250.D	AC73599-003	319642	4.53	169930	6.10	77625	7.33					
6M00251.D	STD	330108	4.53	187774	6.10	93654	7.33					
6M00252.D	STD	331877	4.53	192192	6.10	85969	7.34					
6M00253.D	AC73611-003	321384	4.53	179911	6.10	64959	7.33					
6M00254.D	STD	527110	4.53	317857	6.10	141174	7.33					
6M00255.D	MBS27639	333054	4.53	195870	6.10	89619	7.33					
6M00256.D	MBS27640	340909	4.53	197690	6.10	84005	7.34					
6M00257.D	AC73611-004	308844	4.53	167061	6.10	67903	7.34					
6M00258.D	AC73611-005	322017	4.53	170038	6.10	78807	7.33					
6M00259.D	AC73611-006	315668	4.53	172642	6.10	74005	7.33					
6M00260.D	AC73611-007	327657	4.53	181059	6.10	79191	7.33					
6M00261.D	AC73611-008	333729	4.53	182839	6.10	75730	7.34					
6M00262.D	AC73611-009	318824	4.53	165080	6.10	73425	7.33					
6M00263.D	AC73611-010	302854	4.53	154687	6.10	82982	7.33					
6M00264.D	AC73548-005	336093	4.53	179016	6.10	79042	7.33					
6M00265.D	AC73548-006	340144	4.53	181278	6.10	72730	7.34					
6M00266.D	AC73611-020	334860	4.53	167390	6.10	69123	7.33					
6M00267.D	BLK	314048	4.53	185828	6.10	78778	7.33					
6M00268.D	BLK	321285	4.53	183922	6.10	78201	7.33					
6M00269.D	BLK	320787	4.53	167684	6.10	79906	7.33					

I1 =	Fluorobenzene	I4 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =	624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =	524 Internal Standard concentration =5ug/L

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M00330.D Method: EPA 8260B

Analysis Date/Time: 07/30/13 06:45

Lab File ID: CAL @ 50 PPB

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	298050	4.52	217611	6.09	106134	7.32						
Eval File Area Limit:	149025-596100		108806-435222		53067-212268							
Eval File Rt Limit:	4.02-5.02		5.59-6.59		6.82-7.82							

Data File	Sample												
6M00332.D	BLK	369182	4.52	234226	6.09	105151	7.33						
6M00333.D	DAILY BLANK	376940	4.52	226825	6.09	103086	7.33						
6M00334.D	MBS27658	401396	4.52	223607	6.09	109155	7.32						
6M00335.D	AC73651-002	386622	4.52	213350	6.09	81666	7.33						
6M00336.D	BLK	380894	4.52	203135	6.10	96625	7.33						
6M00337.D	AC73651-003	391858	4.53	221386	6.10	78345	7.33						
6M00338.D	BLK	365670	4.52	216032	6.09	94382	7.33						
6M00339.D	AC73611-009	401052	4.52	224201	6.09	109321	7.33						
6M00340.D	AC73611-009	386174	4.52	245174	6.09	112341	7.33						
6M00341.D	BLK	328220	4.52	218386	6.10	103463	7.33						
6M00342.D	AC73634-001	329170	4.52	201787	6.09	89001	7.33						
6M00343.D	AC73634-002	364586	4.53	216489	6.10	89663	7.34						
6M00344.D	AC73631-001	370922	4.52	233896	6.09	98499	7.33						
6M00345.D	AC73631-002	321972	4.52	161564	6.10	70513	7.34						
6M00346.D	BLK	356264	4.53	220008	6.10	91777	7.33						
6M00347.D	AC73670-001	377527	4.53	199067	6.10	93884	7.34						
6M00348.D	AC73632-001	374596	4.52	210877	6.10	105548	7.33						
6M00349.D	BLK	340042	4.52	219686	6.09	88861	7.33						
6M00350.D	AC73679-003	334950	4.52	203317	6.09	93307	7.33						
6M00351.D	AC73679-004	349204	4.52	200428	6.10	88621	7.33						
6M00352.D	AC73679-005	396145	4.52	227135	6.09	101596	7.33						
6M00353.D	BLK	358812	4.52	219761	6.09	103432	7.33						
6M00354.D	MBS27665	395893	4.52	230216	6.10	108613	7.33						
6M00355.D	AC73611-010	373361	4.52	228793	6.09	102692	7.32						
6M00356.D	AC73611-010	388579	4.52	207100	6.09	107703	7.33						
6M00357.D	BLK	352859	4.52	210838	6.10	90271	7.33						

I1 =	Fluorobenzene	I4 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =	624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =	524 Internal Standard concentration =5ug/L

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M00526.D Method: EPA 8260B

Analysis Date/Time: 08/05/13 07:37

Lab File ID: CAL @ 50 PPB

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	295522	4.52	201130	6.10	106823	7.33						
Eval File Area Limit:	147761-591044		100565-402260		53412-213646							
Eval File Rt Limit:	4.02-5.02		5.6-6.6		6.83-7.83							

Data File	Sample												
6M00523.D	BLKJUG3	340739	4.52	169097	6.10	96381	7.33						
6M00524.D	BLK	410839	4.53	165609	6.10	91831	7.34						
6M00525.D	50 PPB	271629	4.52	187115	6.10	106893	7.33						
6M00527.D	BLK	295148	4.52	200973	6.10	100255	7.33						
6M00528.D	BLK	323901	4.53	203420	6.10	101950	7.34						
6M00529.D	DAILY BLANK	339016	4.52	213465	6.10	86903	7.33						
6M00530.D	MBS27721	340228	4.53	226747	6.10	101945	7.33						
6M00531.D	BLK	343837	4.54	221402	6.11	98425	7.35						
6M00532.D	AC73793-001	347471	4.52	193560	6.10	87019	7.33						
6M00533.D	AC73793-002	320175	4.53	203124	6.10	91537	7.33						
6M00534.D	AC73793-003	305140	4.53	185248	6.10	88021	7.34						
6M00535.D	AC73793-004	301909	4.53	192906	6.10	88632	7.33						
6M00536.D	AC73793-005	336767	4.52	205704	6.10	94029	7.34						
6M00537.D	AC73797-004	341122	4.53	203047	6.10	89258	7.33						
6M00538.D	AC73797-005	327425	4.53	195838	6.10	84638	7.33						
6M00539.D	AC73771-004	284129	4.52	159446	6.10	69814	7.33						
6M00540.D	AC73771-003	306070	4.53	185031	6.10	73360	7.33						
6M00541.D	AC73821-001	305366	4.52	192082	6.09	77541	7.34						
6M00542.D	AC73820-001	306357	4.53	199603	6.10	86445	7.33						
6M00543.D	AC73832-004	362741	4.53	210932	6.10	78718	7.33						
6M00544.D	AC73832-005	316697	4.52	188764	6.10	96139	7.33						
6M00545.D	BLK	308910	4.53	190994	6.10	91532	7.33						
6M00546.D	AC73816-022	302132	4.54	183174	6.11	85693	7.35						
6M00547.D	AC73797-002(	374246	4.53	168370	6.10	52711 A	7.34						
6M00548.D	AC73797-002(	366602	4.53	151959	6.10	40636 A	7.33						
6M00549.D	AC73797-002	309779	4.53	162976	6.10	40604 A	7.34						
6M00550.D	BLK	282642	4.53	192837	6.10	88767	7.34						
6M00551.D	AC73797-001	308852	4.53	174976	6.10	52463 A	7.33						
6M00552.D	STD	409726	4.53	222887	6.10	107612	7.33						
6M00553.D	AC73797-002	314105	4.53	156929	6.10	52414 A	7.33						
6M00554.D	AC73797-006	255145	4.53	103720	6.10	16438 A	7.33						
6M00555.D	AC73797-001	305340	4.53	164075	6.10	44836 A	7.33						
6M00556.D	MBS27731	371272	4.53	209669	6.10	108631	7.33						
6M00557.D	AC73797-003	326141	4.53	175775	6.10	55274	7.34						
6M00558.D	AC73820-004	312359	4.53	187222	6.10	86082	7.33						
6M00559.D	AC73820-005	324456	4.53	189145	6.10	83366	7.33						
6M00560.D	AC73820-006	327219	4.53	201593	6.10	90335	7.34						
6M00561.D	AC73820-007	315030	4.53	191991	6.10	82317	7.33						
6M00562.D	AC73820-003	289781	4.53	199815	6.10	82740	7.33						
6M00563.D	BLK	324371	4.53	183573	6.10	83801	7.33						
6M00564.D	AC73823-001	0 A	0.00 R	162 A	6.08	290 A	7.44						
6M00565.D	AC73823-009	335085	4.53	228925	6.10	129251	7.33						
6M00566.D	BLK	310680	4.53	194347	6.10	96015	7.33						
6M00567.D	BLK	334159	4.53	179160	6.10	103225	7.33						
6M00568.D	BLK	296588	4.52	189230	6.10	86071	7.33						
6M00569.D	BLK	333116	4.52	204788	6.10	88474	7.33						

I1 =	Fluorobenzene	I4 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =	624/8260 Internal Standard concentration = 30ug/L
I3 =	1.4-Dichlorobenzene-d4	I6 =	524 Internal Standard concentration =5ug/L

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

Semi-Volatile Data

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AC73771-001
Client Id: BB-COMP-1-0801113
Data File: 9M51843.D
Analysis Date: 08/02/13 18:49
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270C
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 91

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.037	U	**205-99-2**	**Benzo[b]fluoranthene**	**0.037**	**0.081**
95-94-3	1,2,4,5-Tetrachlorobenzene	0.037	U	**191-24-2**	**Benzo[g,h,i]perylene**	**0.0092**	**0.053**
122-66-7	1,2-Diphenylhydrazine	0.037	U	207-08-9	Benzo[k]fluoranthene	0.037	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.037	U	100-51-6	Benzyl alcohol	0.037	U
95-95-4	2,4,5-Trichlorophenol	0.037	U	111-91-1	bis(2-Chloroethoxy)methan	0.037	U
88-06-2	2,4,6-Trichlorophenol	0.037	U	111-44-4	bis(2-Chloroethyl)ether	0.0092	U
120-83-2	2,4-Dichlorophenol	0.0092	U	108-60-1	bis(2-chloroisopropyl)ether	0.037	U
105-67-9	2,4-Dimethylphenol	0.0092	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.037	U
51-28-5	2,4-Dinitrophenol	0.18	U	85-68-7	Butylbenzylphthalate	0.037	U
121-14-2	2,4-Dinitrotoluene	0.037	U	105-60-2	Caprolactam	0.037	U
606-20-2	2,6-Dinitrotoluene	0.037	U	86-74-8	Carbazole	0.037	U
91-58-7	2-Chloronaphthalene	0.037	U	**218-01-9**	**Chrysene**	**0.037**	**0.071**
95-57-8	2-Chlorophenol	0.037	U	53-70-3	Dibenzo[a,h]anthracene	0.037	U
91-57-6	2-Methylnaphthalene	0.037	U	132-64-9	Dibenzofuran	0.0092	U
95-48-7	2-Methylphenol	0.0092	U	84-66-2	Diethylphthalate	0.037	U
88-74-4	2-Nitroaniline	0.037	U	131-11-3	Dimethylphthalate	0.037	U
88-75-5	2-Nitrophenol	0.037	U	84-74-2	Di-n-butylphthalate	0.018	U
106-44-5	3&4-Methylphenol	0.0092	U	117-84-0	Di-n-octylphthalate	0.037	U
91-94-1	3,3'-Dichlorobenzidine	0.037	U	**206-44-0**	**Fluoranthene**	**0.037**	**0.088**
99-09-2	3-Nitroaniline	0.037	U	86-73-7	Fluorene	0.037	U
534-52-1	4,6-Dinitro-2-methylphenol	0.037	U	118-74-1	Hexachlorobenzene	0.037	U
101-55-3	4-Bromophenyl-phenylether	0.037	U	87-68-3	Hexachlorobutadiene	0.037	U
59-50-7	4-Chloro-3-methylphenol	0.037	U	77-47-4	Hexachlorocyclopentadiene	0.037	U
106-47-8	4-Chloroaniline	0.017	U	67-72-1	Hexachloroethane	0.037	U
7005-72-3	4-Chlorophenyl-phenylether	0.037	U	**193-39-5**	**Indeno[1,2,3-cd]pyrene**	**0.037**	**0.045**
100-01-6	4-Nitroaniline	0.037	U	78-59-1	Isophorone	0.037	U
100-02-7	4-Nitrophenol	0.037	U	91-20-3	Naphthalene	0.0092	U
83-32-9	Acenaphthene	0.037	U	98-95-3	Nitrobenzene	0.037	U
208-96-8	Acenaphthylene	0.037	U	62-75-9	N-Nitrosodimethylamine	0.037	U
98-86-2	Acetophenone	0.037	U	621-64-7	N-Nitroso-di-n-propylamine	0.0092	U
120-12-7	Anthracene	0.037	U	86-30-6	n-Nitrosodiphenylamine	0.037	U
1912-24-9	Atrazine	0.037	U	87-86-5	Pentachlorophenol	0.062	U
100-52-7	Benzaldehyde	0.037	U	**85-01-8**	**Phenanthrene**	**0.037**	**0.052**
92-87-5	Benzidine	0.037	U	108-95-2	Phenol	0.037	U
56-55-3	**Benzo[a]anthracene**	**0.037**	**0.058**	**129-00-0**	**Pyrene**	**0.037**	**0.11**
50-32-8	**Benzo[a]pyrene**	**0.037**	**0.057**				

Worksheet #: 272527

Total Target Concentration 0.62

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AC73771-001
Client Id: BB-COMP-1-0801113
Data File: 9M51843.D
Analysis Date: 08/02/13 18:49
Date Rec/Extracted: 08/01/13-08/02/13

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 91
Method: EPA 8270C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	4.15	1.3 JB
2	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.48	43 JAB
3		unknown	5.12	0.21 JB
4	57-10-3	Hexadecanoic acid	10.45	0.087 J
5		unknown	12.62	0.086 J
6	19047-85-9	Phosphonic acid, dioctadecyl ester	12.80	0.24 JB
7	84530-84-7	3,5,7-Trimethoxy-2,8-dimethyldibenzoph	13.33	0.13 J
8	40710-42-7	1-Hentetracontanol	13.58	0.12 J
9	301-02-0	9-Octadecenamide, (Z)-	13.91	0.081 J
10	55401-55-3	Docosane, 11-decyl-	14.31	0.19 J
11		unknown	14.33	0.22 J
12	593-45-3	Octadecane	15.13	0.18 J
13	52078-56-5	11-Tricosene	15.17	0.13 J
14		unknown	15.90	0.10 J
15		unknown	16.02	0.11 J
16	38485-29-9	Stigmasta-5,23-dien-3.beta.-ol	16.17	0.18 J
17	74685-29-3	9-Eicosene, (E)-	16.23	0.11 J
18	83-47-6	Stigmast-5-en-3-ol, (3.beta.,24S)-	16.55	0.52 J

Worksheet #: 272527 ***Total Tentatively Identified Concentration*** 47

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

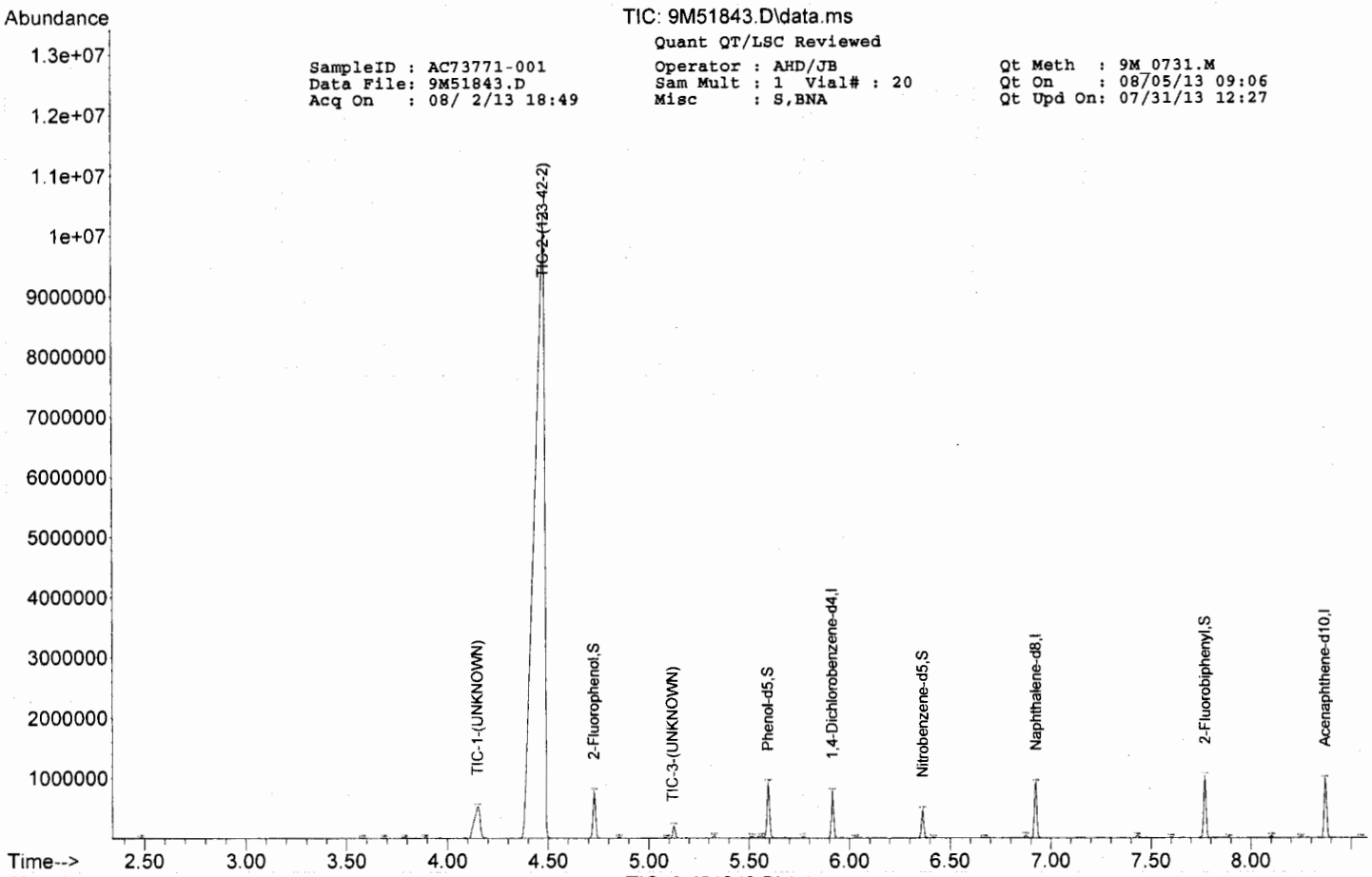
3080110 0072

SampleID : AC73771-001 Operator : AHD/JB Qt Meth : 9M_0731.M
Data File: 9M51843.D Sam Mult : 1 Vial# : 20 Qt On : 08/05/13 09:06
Acq On : 08/ 2/13 18:49 Misc : S,BNA Qt Upd On: 07/31/13 12:27

Data Path : G:\GcMsData\2013\GCMS_9\Data\08-02-13\
Qt Path : G:\GCMSDATA\2013\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dichlorobenzene-d4	5.915	152	100428	40.00	ng	0.00
29) Naphthalene-d8	6.926	136	370834	40.00	ng	0.00
47) Acenaphthene-d10	8.370	164	212048	40.00	ng	-0.01
74) Phenanthrene-d10	9.857	188	358538	40.00	ng	0.00
88) Chrysene-d12	12.932	240	311006	40.00	ng	0.00
100) Perylene-d12	14.585	264	244721	40.00	ng	0.02
System Monitoring Compounds						
10) 2-Fluorophenol	4.728	112	186810	61.55	ng	0.01
Spiked Amount 100.000			Recovery = 61.55%			
15) Phenol-d5	5.594	99	259213	64.41	ng	0.00
Spiked Amount 100.000			Recovery = 64.41%			
30) Nitrobenzene-d5	6.364	128	56817	36.74	ng	0.00
Spiked Amount 50.000			Recovery = 73.48%			
52) 2-Fluorobiphenyl	7.771	172	284439	38.95	ng	0.00
Spiked Amount 50.000			Recovery = 77.90%			
77) 2,4,6-Tribromophenol	9.124	330	84004	81.79	ng	0.00
Spiked Amount 100.000			Recovery = 81.79%			
91) Terphenyl-d14	11.675	244	271058	45.40	ng	0.00
Spiked Amount 50.000			Recovery = 90.80%			
Target Compounds						Qvalue
83) Phenanthrene	9.884	178	27127	2.8360	ng	99
87) Fluoranthene	11.226	202	54929	4.7992	ng	80
89) Pyrene	11.494	202	50717	6.0888	ng	79
97) Benzo[a]anthracene	12.922	228	25154	3.1782	ng	89
98) Chrysene	12.965	228	27802	3.8910	ng	96
102) Benzo[b]fluoranthene	14.147	252	32287m	4.4439	ng	
104) Benzo[a]pyrene	14.516	252	21175	3.1057	ng	83
105) Indeno[1,2,3-cd]pyrene	15.976	276	17404	2.4337	ng	74
107) Benzo[g,h,i]perylene	16.377	276	16657	2.8745	ng	69
Library Search Internal Standards TIC Results						
1) 1,4-Dichlorobenzene-d4	5.915		605324	40.00	ng	--
2) Naphthalene-d8	6.926		793912	40.00	ng	--
3) Acenaphthene-d10	8.370		905161	40.00	ng	--
4) Phenanthrene-d10	9.857		961398	40.00	ng	--
5) Chrysene-d12	12.932		843922m	40.00	ng	--
6) Perylene-d12	14.585		659491	40.00	ng	--
Library Search Compounds						
1) UNKNOWN	4.150		1076754	71.15	ng	--
2) 123-42-2	4.480		35445319	2342.24	ng	56
3) UNKNOWN	5.120		176792	11.68	ng	--
4) 57-10-3	10.450		114092	4.75	ng	96
5) UNKNOWN	12.620		99572	4.72	ng	--
6) 19047-85-9	12.800		275569	13.06	ng	93
7) 84530-84-7	13.330		149679	7.09	ng	68
8) 40710-42-7	13.580		134047	6.35	ng	83
9) 301-02-0	13.910		73267	4.44	ng	64
10) 55401-55-3	14.310		169333	10.27	ng	91
11) UNKNOWN	14.330		194325	11.79	ng	--
12) 593-45-3	15.130		160709	9.75	ng	95
13) 52078-56-5	15.170		114191	6.93	ng	91
14) UNKNOWN	15.900		93750	5.69	ng	--
15) UNKNOWN	16.020		99131	6.01	ng	--
16) 38485-29-9	16.170		164692	9.99	ng	91
17) 74685-29-3	16.230		94702	5.74	ng	64
18) 83-47-6	16.550		464691	28.18	ng	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed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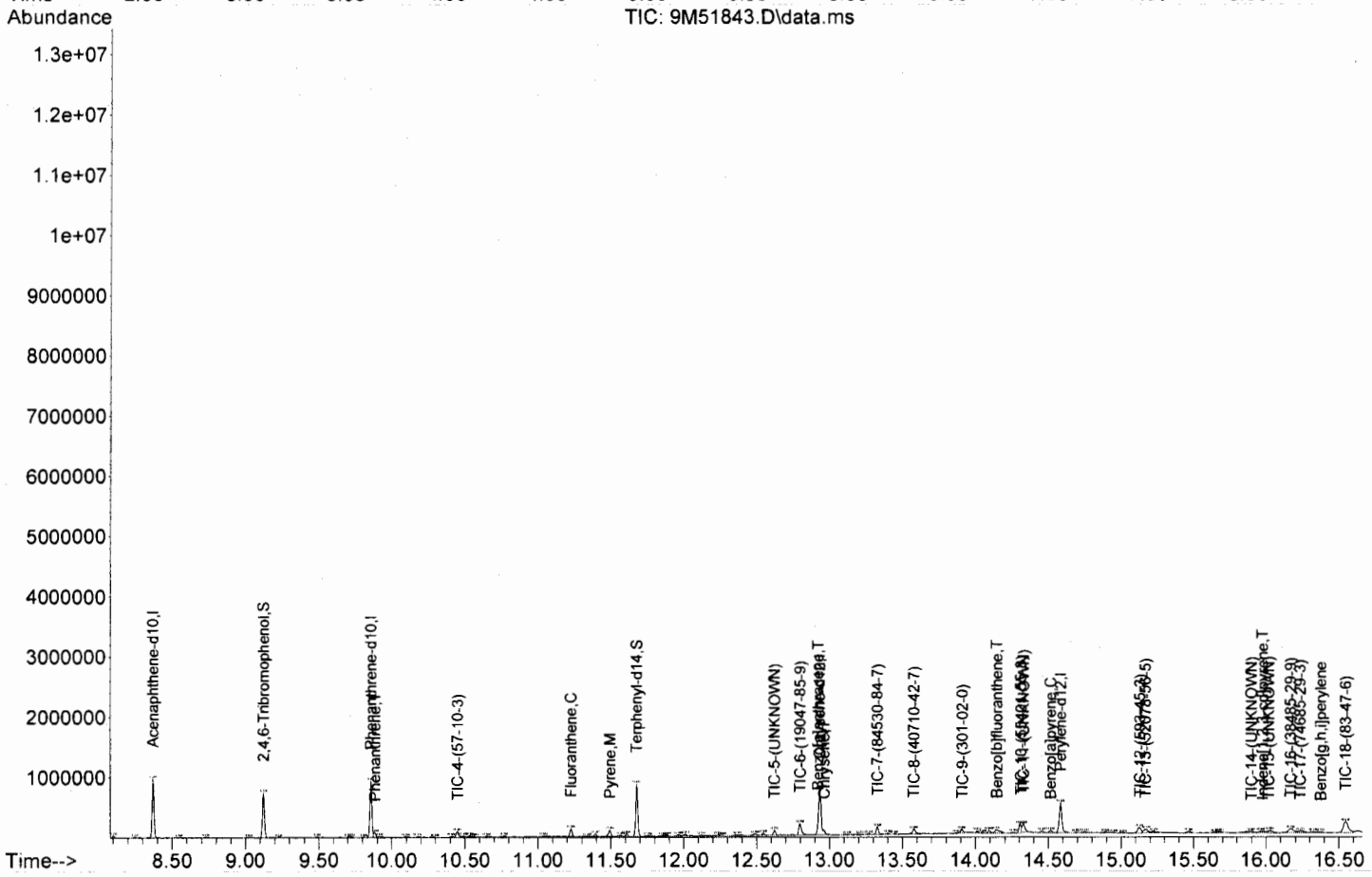
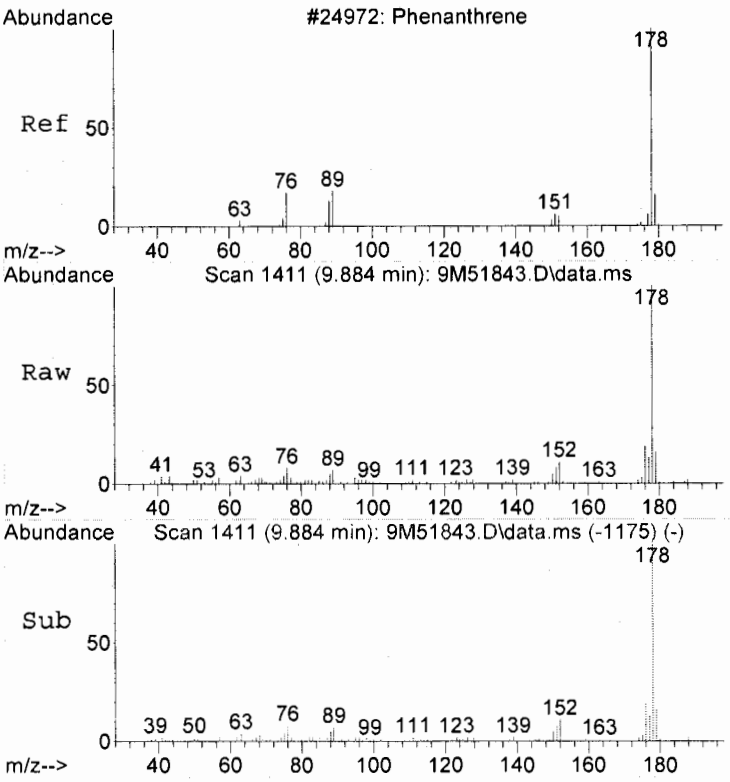
Quant QT/LSC Reviewed
SampleID : AC73771-001
Data File: 9M51843.D
Acq On : 08/ 2/13 18:49
Operator : AHD/JB
Sam Mult : 1 Vial# : 20
Misc : S,BNA
Qt Meth : 9M_0731.M
Qt On : 08/05/13 09:06
Qt Upd On: 07/31/13 12:27
Abundance
TIC-1-(UNKNOWN)
TIC-2-(123-42-2)
2-Fluorophenol,S
TIC-3-(UNKNOWN)
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Time-->

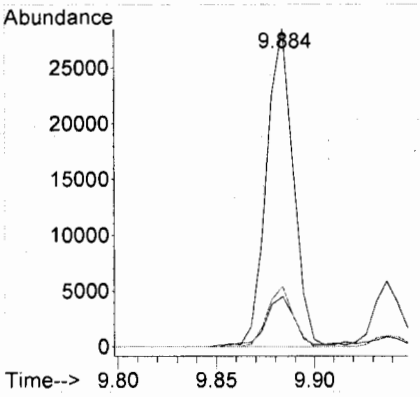

TIC: 9M51843.D\data.ms
Abundance
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Phenanthrene-d10,I
TIC-4-(57-10-3)
Fluoranthene,C
Pyrene,M
Terphenyl-d14,S
TIC-5-(UNKNOWN)
TIC-6-(19047-85-9)
TIC-7-(84530-84-7)
TIC-8-(40710-42-7)
TIC-9-(301-02-0)
Benzo[b]fluoranthene,T
Perylene-d12,I
TIC-14-(UNKNOWN)
Benzo[g,h,i]perylene
TIC-18-(83-47-6)
Time-->

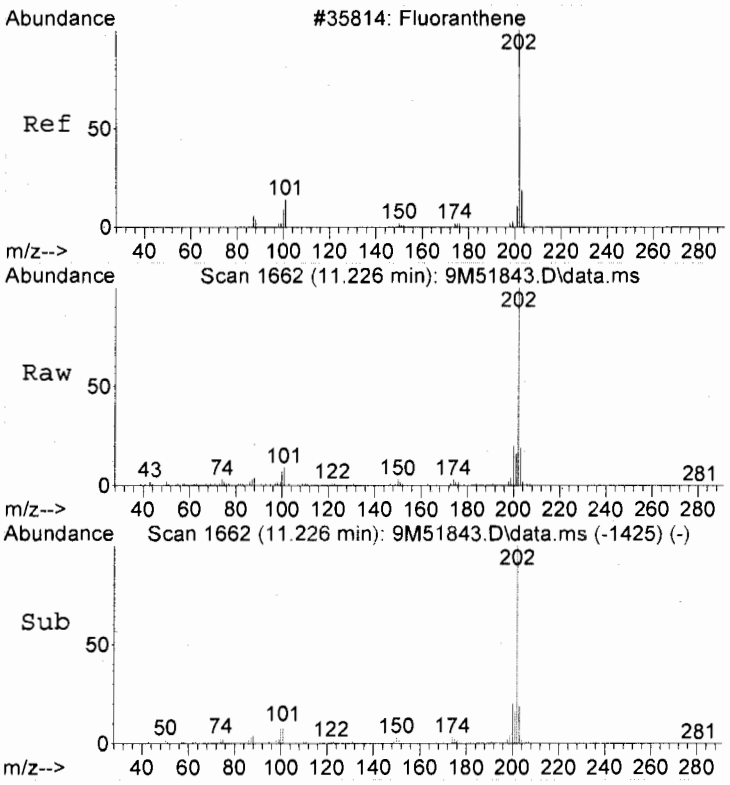


#83
Phenanthrene
Concen: 2.84 ng
RT: 9.884 min Scan# 1411
Delta R.T. -0.000 min
Lab File: 9M51843.D
Acq: 2 Aug 2013 18:49

Tgt Ion:178 Resp: 27127

Ion	Ratio	Lower	Upper
178	100		
179	15.7	0.0	55.5
176	18.9	0.0	59.3

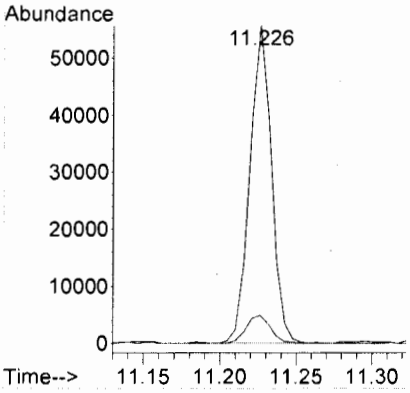


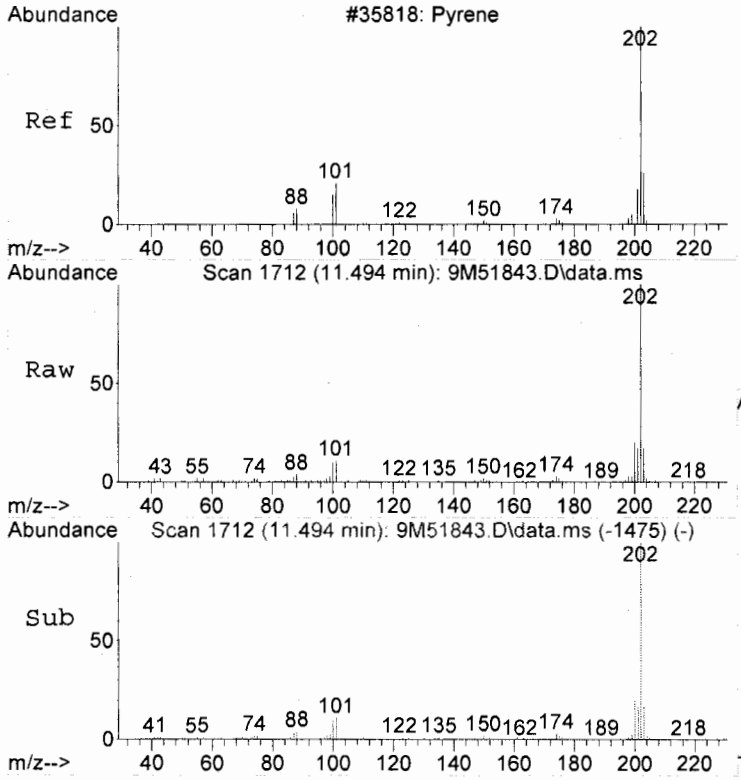


#87
Fluoranthene
Concen: 4.80 ng
RT: 11.226 min Scan# 1662
Delta R.T. -0.000 min
Lab File: 9M51843.D
Acq: 2 Aug 2013 18:49

Tgt Ion:202 Resp: 54929

Ion	Ratio	Lower	Upper
202	100		
101	8.8	0.0	57.6

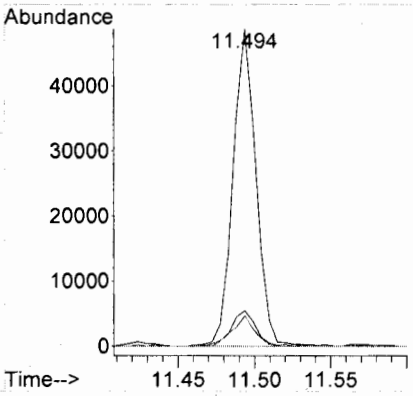


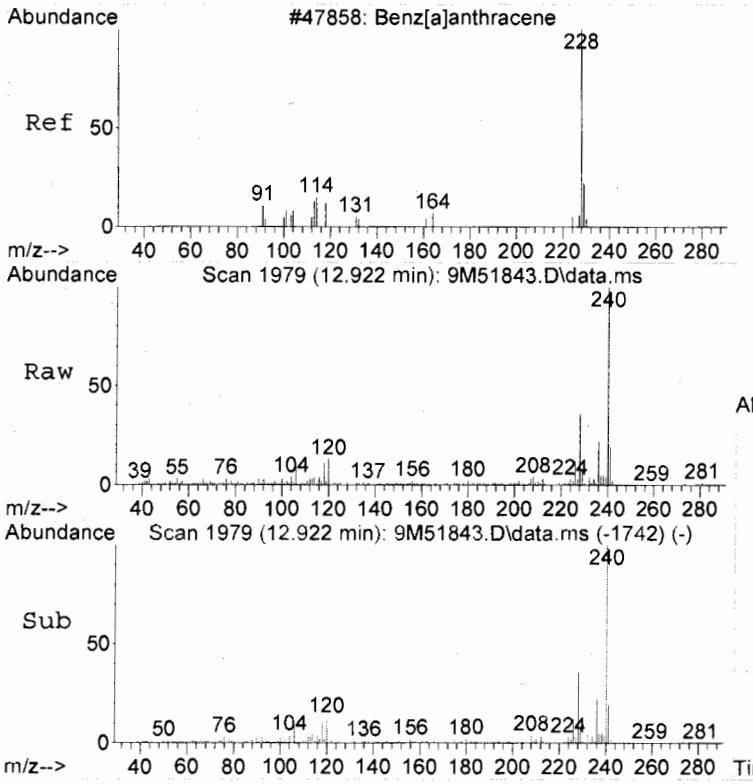


#89
Pyrene
Concen: 6.09 ng
RT: 11.494 min Scan# 1712
Delta R.T. 0.005 min
Lab File: 9M51843.D
Acq: 2 Aug 2013 18:49

Tgt Ion:202 Resp: 50717

Ion	Ratio	Lower	Upper
202	100		
101	11.2	0.0	62.2
100	9.6	0.0	57.8

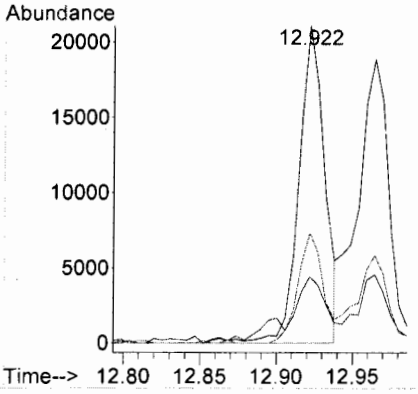


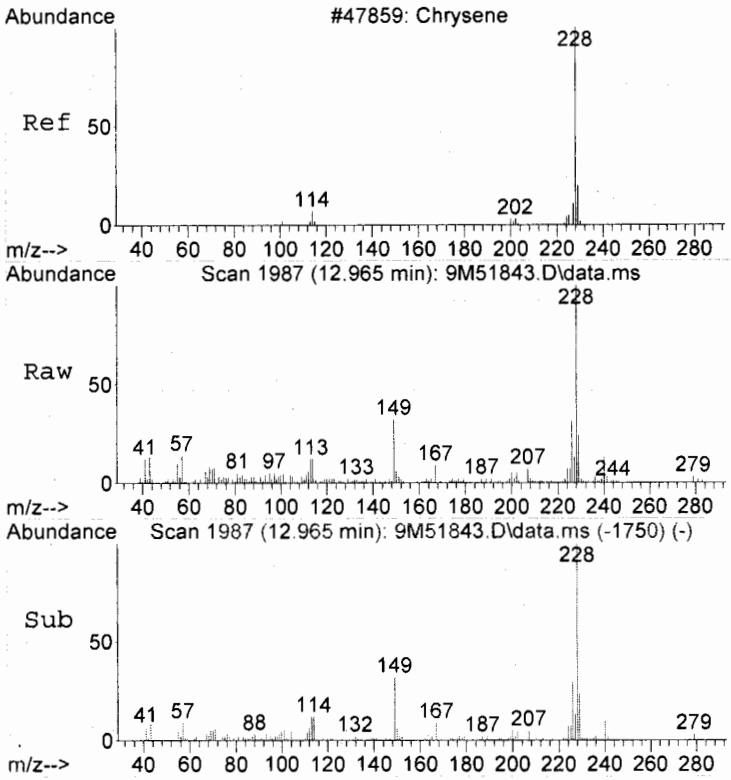


#97
Benzo[a]anthracene
Concen: 3.18 ng
RT: 12.922 min Scan# 1979
Delta R.T. 0.005 min
Lab File: 9M51843.D
Acq: 2 Aug 2013 18:49

Tgt Ion:228 Resp: 25154

Ion	Ratio	Lower	Upper
228	100		
229	20.2	0.0	59.5
226	34.8	0.0	66.0

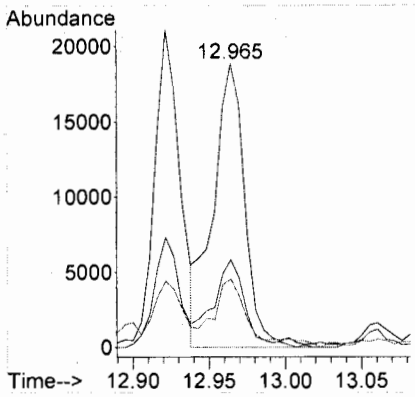


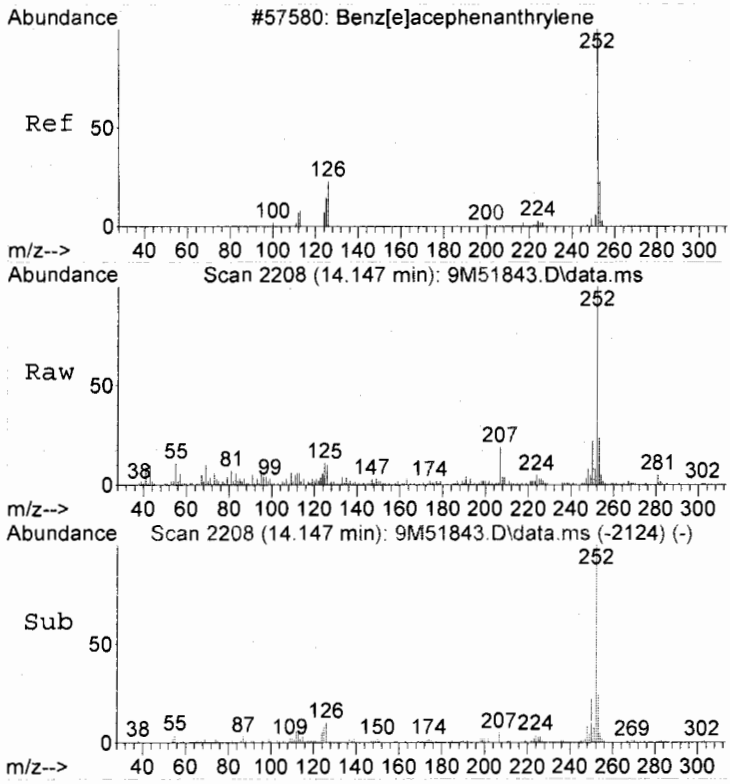


#98
Chrysene
Concen: 3.89 ng
RT: 12.965 min Scan# 1987
Delta R.T. 0.005 min
Lab File: 9M51843.D
Acq: 2 Aug 2013 18:49

Tgt Ion:228 Resp: 27802

Ion	Ratio	Lower	Upper
228	100		
226	31.3	9.5	49.5
229	22.7	0.0	60.2

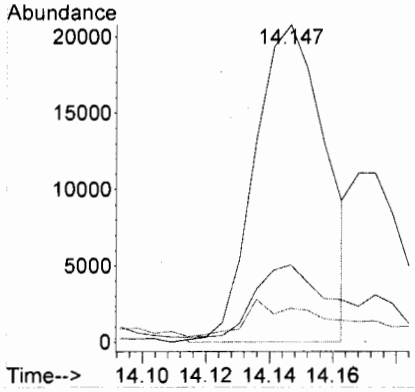


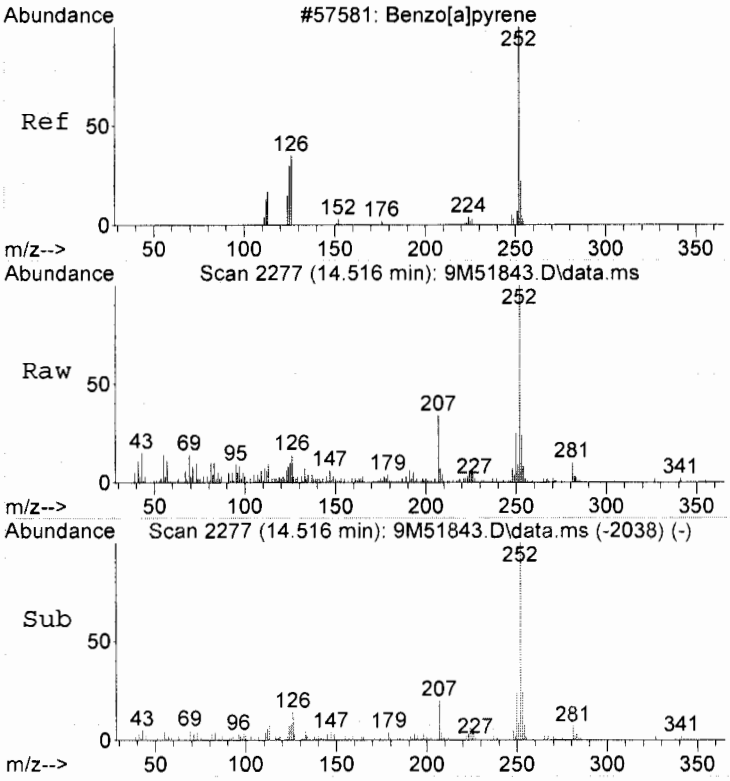


#102
Benzo[b]fluoranthene
Concen: 4.44 ng m
RT: 14.147 min Scan# 2208
Delta R.T. 0.016 min
Lab File: 9M51843.D
Acq: 2 Aug 2013 18:49

Tgt Ion:252 Resp: 32287

Ion	Ratio	Lower	Upper
252	100		
253	24.4	0.0	62.3
125	10.7	0.0	58.4

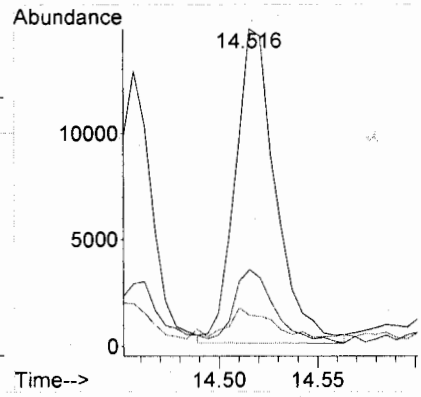


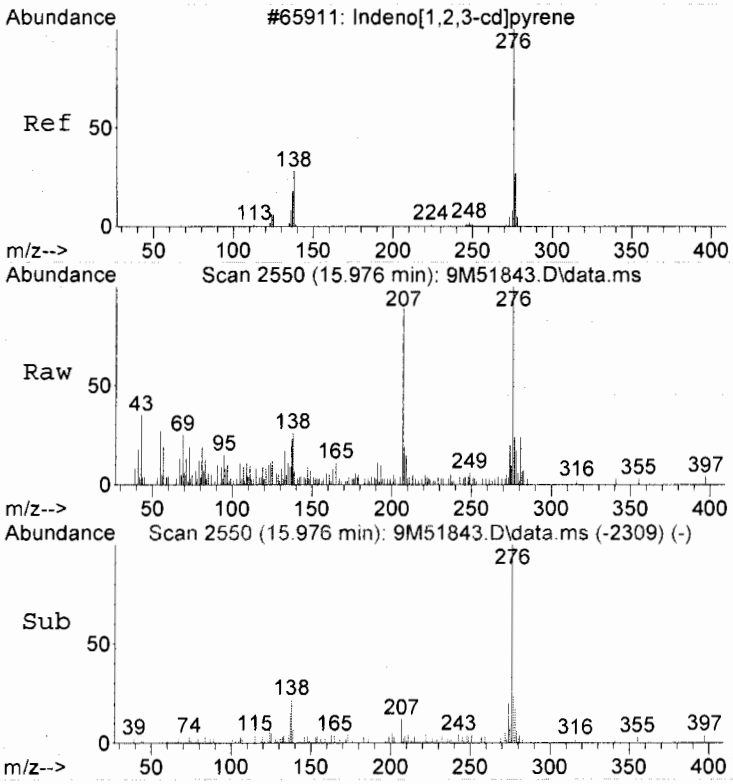


#104
Benzo[a]pyrene
Concen: 3.11 ng
RT: 14.516 min Scan# 2277
Delta R.T. 0.011 min
Lab File: 9M51843.D
Acq: 2 Aug 2013 18:49

Tgt Ion:252 Resp: 21175

Ion	Ratio	Lower	Upper
252	100		
253	23.9	0.0	62.4
125	6.2	0.0	60.9

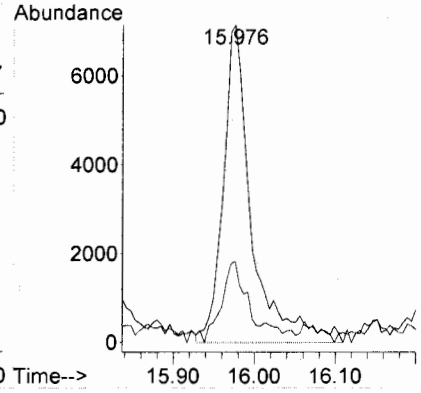


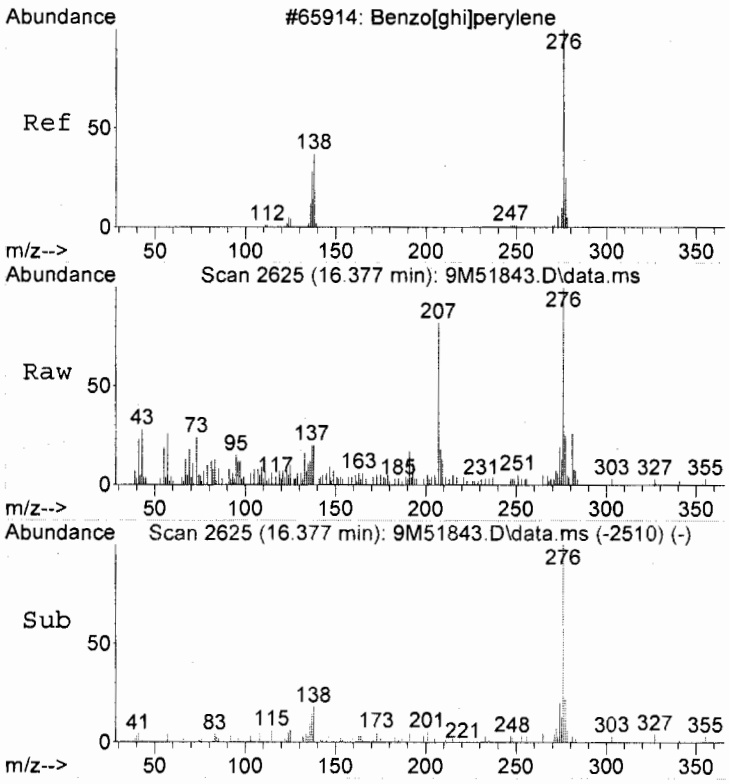


#105
Indeno[1,2,3-cd]pyrene
Concen: 2.43 ng
RT: 15.976 min Scan# 2550
Delta R.T. 0.027 min
Lab File: 9M51843.D
Acq: 2 Aug 2013 18:49

Tgt Ion:276 Resp: 17404

Ion	Ratio	Lower	Upper
276	100		
138	23.3	0.0	78.9

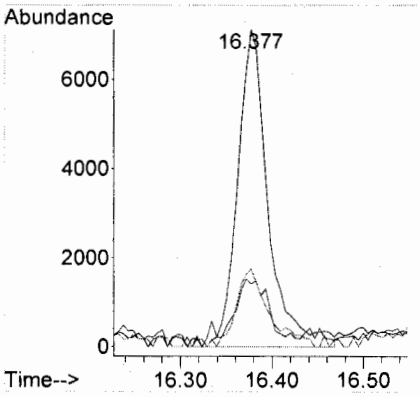




#107
Benzo[g,h,i]perylene
Concen: 2.87 ng
RT: 16.377 min Scan# 2625
Delta R.T. 0.075 min
Lab File: 9M51843.D
Acq: 2 Aug 2013 18:49

Tgt Ion:276 Resp: 16657

Ion	Ratio	Lower	Upper
276	100		
138	19.3	0.0	100.0
277	26.0	0.0	60.0



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AC73771-002
Client Id: BB-COMP-2-0801113
Data File: 9M51844.D
Analysis Date: 08/02/13 19:12
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270C
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 89

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.037	U	**205-99-2**	**Benzo[b]fluoranthene**	**0.037**	**0.19**
95-94-3	1,2,4,5-Tetrachlorobenzene	0.037	U	**191-24-2**	**Benzo[g,h,i]perylene**	**0.0094**	**0.093**
122-66-7	1,2-Diphenylhydrazine	0.037	U	**207-08-9**	**Benzo[k]fluoranthene**	**0.037**	**0.058**
58-90-2	2,3,4,6-Tetrachlorophenol	0.037	U	100-51-6	Benzyl alcohol	0.037	U
95-95-4	2,4,5-Trichlorophenol	0.037	U	111-91-1	bis(2-Chloroethoxy)methan	0.037	U
88-06-2	2,4,6-Trichlorophenol	0.037	U	111-44-4	bis(2-Chloroethyl)ether	0.0094	U
120-83-2	2,4-Dichlorophenol	0.0094	U	108-60-1	bis(2-chloroisopropyl)ether	0.037	U
105-67-9	2,4-Dimethylphenol	0.0094	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.037	U
51-28-5	2,4-Dinitrophenol	0.19	U	85-68-7	Butylbenzylphthalate	0.037	U
121-14-2	2,4-Dinitrotoluene	0.037	U	105-60-2	Caprolactam	0.037	U
606-20-2	2,6-Dinitrotoluene	0.037	U	**86-74-8**	**Carbazole**	**0.037**	**0.040**
91-58-7	2-Chloronaphthalene	0.037	U	**218-01-9**	**Chrysene**	**0.037**	**0.15**
95-57-8	2-Chlorophenol	0.037	U	53-70-3	Dibenzo[a,h]anthracene	0.037	U
91-57-6	2-Methylnaphthalene	0.037	U	**132-64-9**	**Dibenzofuran**	**0.0094**	**0.026**
95-48-7	2-Methylphenol	0.0094	U	84-66-2	Diethylphthalate	0.037	U
88-74-4	2-Nitroaniline	0.037	U	**131-11-3**	**Dimethylphthalate**	**0.037**	**0.038 B**
88-75-5	2-Nitrophenol	0.037	U	84-74-2	Di-n-butylphthalate	0.019	U
106-44-5	3&4-Methylphenol	0.0094	U	117-84-0	Di-n-octylphthalate	0.037	U
91-94-1	3,3'-Dichlorobenzidine	0.037	U	**206-44-0**	**Fluoranthene**	**0.037**	**0.30**
99-09-2	3-Nitroaniline	0.037	U	86-73-7	Fluorene	0.037	U
534-52-1	4,6-Dinitro-2-methylphenol	0.037	U	118-74-1	Hexachlorobenzene	0.037	U
101-55-3	4-Bromophenyl-phenylether	0.037	U	87-68-3	Hexachlorobutadiene	0.037	U
59-50-7	4-Chloro-3-methylphenol	0.037	U	77-47-4	Hexachlorocyclopentadiene	0.037	U
106-47-8	4-Chloroaniline	0.018	U	67-72-1	Hexachloroethane	0.037	U
7005-72-3	4-Chlorophenyl-phenylether	0.037	U	**193-39-5**	**Indeno[1,2,3-cd]pyrene**	**0.037**	**0.091**
100-01-6	4-Nitroaniline	0.037	U	78-59-1	Isophorone	0.037	U
100-02-7	4-Nitrophenol	0.037	U	**91-20-3**	**Naphthalene**	**0.0094**	**0.019**
83-32-9	Acenaphthene	0.037	U	98-95-3	Nitrobenzene	0.037	U
208-96-8	Acenaphthylene	0.037	U	62-75-9	N-Nitrosodimethylamine	0.037	U
98-86-2	Acetophenone	0.037	U	621-64-7	N-Nitroso-di-n-propylamine	0.0094	U
120-12-7	**Anthracene**	**0.037**	**0.040**	86-30-6	n-Nitrosodiphenylamine	0.037	U
1912-24-9	Atrazine	0.037	U	87-86-5	Pentachlorophenol	0.063	U
100-52-7	Benzaldehyde	0.037	U	**85-01-8**	**Phenanthrene**	**0.037**	**0.30**
92-87-5	Benzidine	0.037	U	108-95-2	Phenol	0.037	U
56-55-3	**Benzo[a]anthracene**	**0.037**	**0.14**	**129-00-0**	**Pyrene**	**0.037**	**0.32**
50-32-8	**Benzo[a]pyrene**	**0.037**	**0.12**				

Worksheet #: 272527 ***Total Target Concentration*** 1.9 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AC73771-002
Client Id: BB-COMP-2-0801113
Data File: 9M51844.D
Analysis Date: 08/02/13 19:12
Date Rec/Extracted: 08/01/13-08/02/13

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 89
Method: EPA 8270C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	4.16	1.4 JB
2	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.49	47 JAB
3		unknown	5.13	0.24 JB
4	57-10-3	Hexadecanoic acid	10.45	0.20 J
5		unknown	11.96	0.10 J
6	74685-30-6	5-Eicosene, (E)-	12.80	0.38 J
7	84530-84-7	3,5,7-Trimethoxy-2,8-dimethyldibenzoph	13.33	0.29 J
8	112-88-9	1-Octadecene	13.58	0.21 J
9	35216-11-6	7-Tetradecyne	13.70	0.39 J
10		unknown	13.91	0.24 J
11	56554-87-1	16-Octadecenal	14.09	0.26 J
12	297-03-0	Cyclotetracosane	14.33	0.78 J
13	198-55-0	Perylene	14.46	0.12 J
14	77899-10-6	(Z)14-TRICOSENYL FORMATE	14.90	0.15 J
15	629-94-7	Heneicosane	15.13	0.18 J
16	62376-17-4	Cyclohexane, 1,2-dimethyl-3-pentyl-4-pr	15.17	0.24 J
17		unknown	15.88	0.17 J
18	4651-51-8	Ergost-5-en-3-ol, (3.beta.)-	16.03	0.13 J
19		unknown	16.17	0.23 J
20	74685-33-9	3-Eicosene, (E)-	16.24	0.18 J

Worksheet #: 272527 ***Total Tentatively Identified Concentration*** 53

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

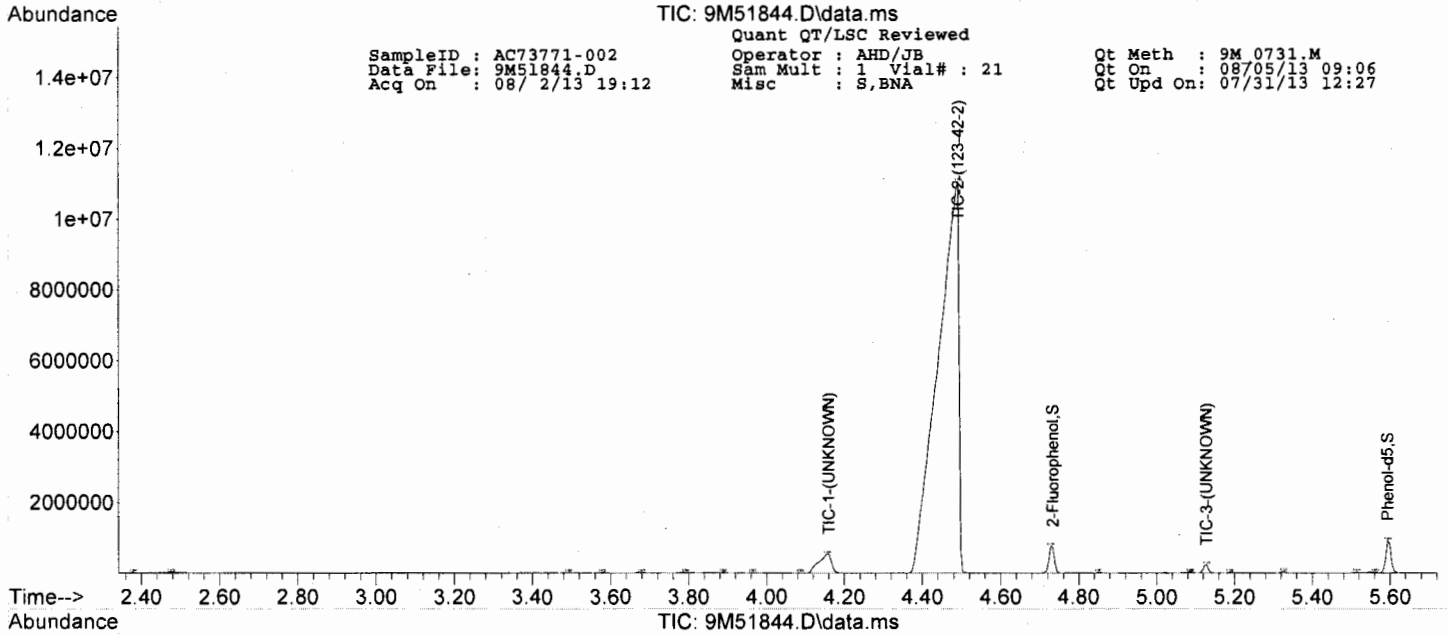
3080110 0081

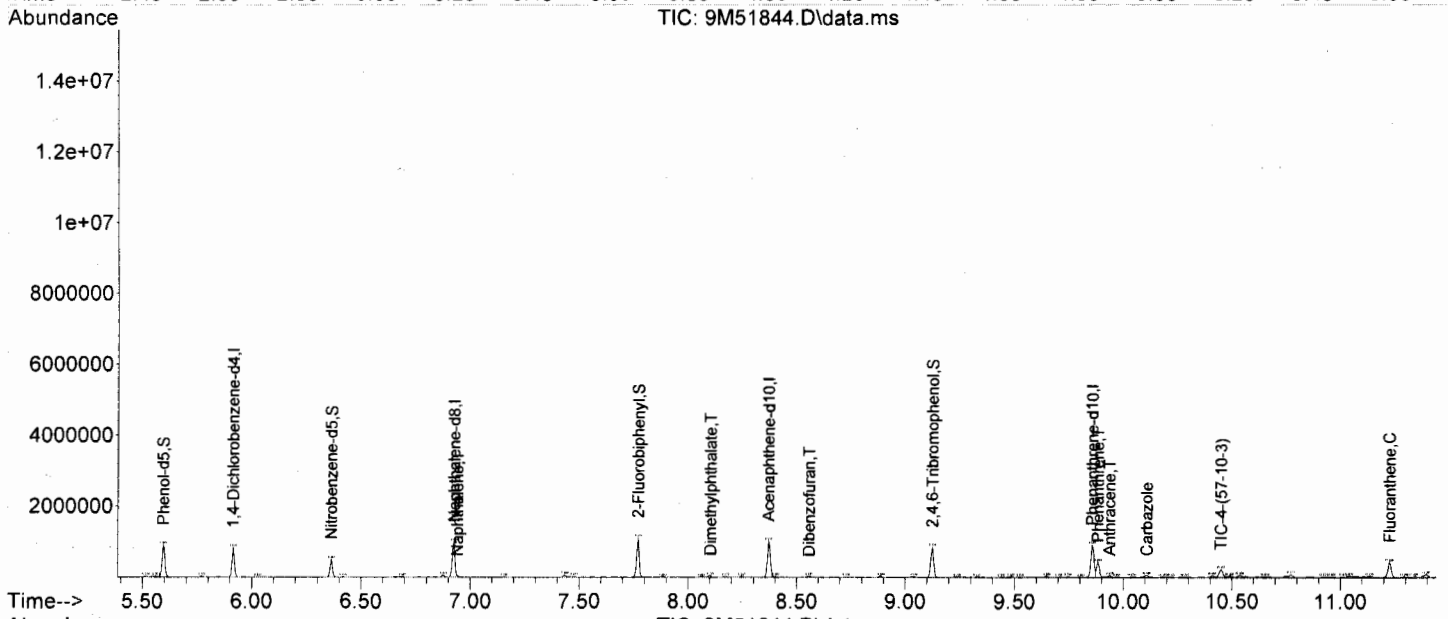
SampleID : AC73771-002 Operator : AHD/JB Qt Meth : 9M_0731.M
Data File: 9M51844.D Sam Mult : 1 Vial# : 21 Qt On : 08/05/13 09:06
Acq On : 08/ 2/13 19:12 Misc : S,BNA Qt Upd On: 07/31/13 12:27

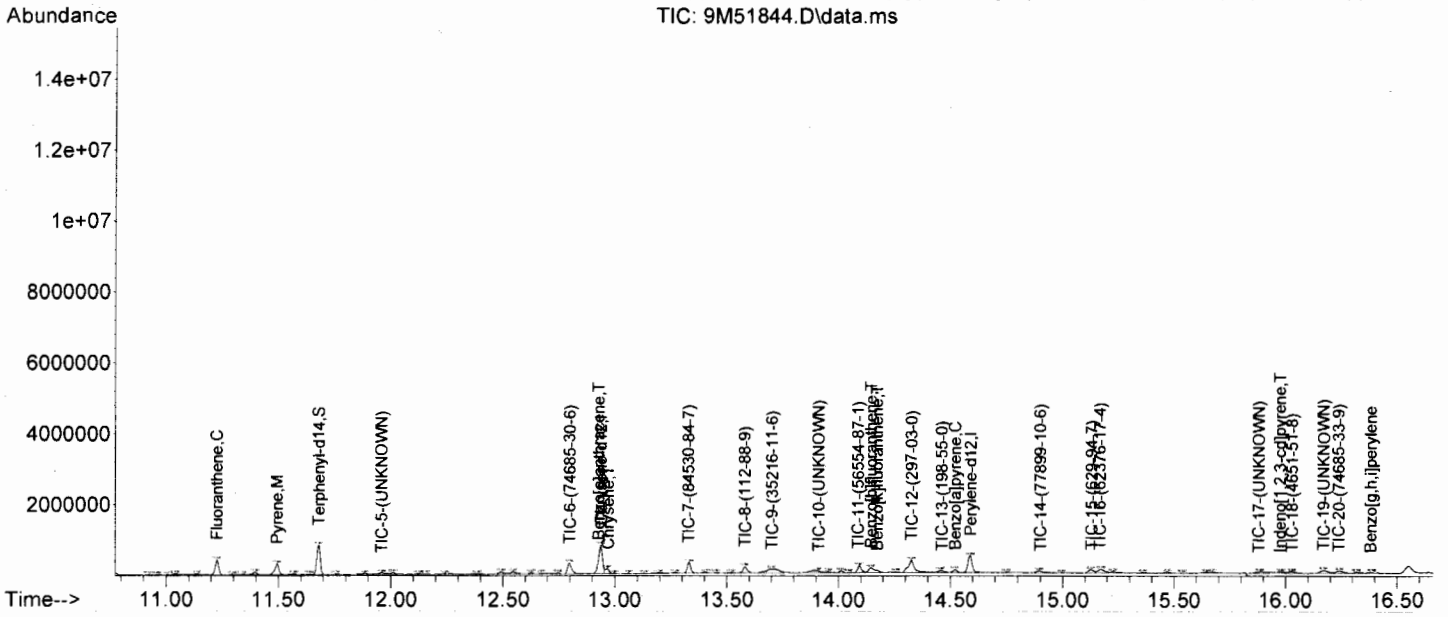
Data Path : G:\GcMsData\2013\GCMS_9\Data\08-02-13\
Qt Path : G:\GCMSDATA\2013\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

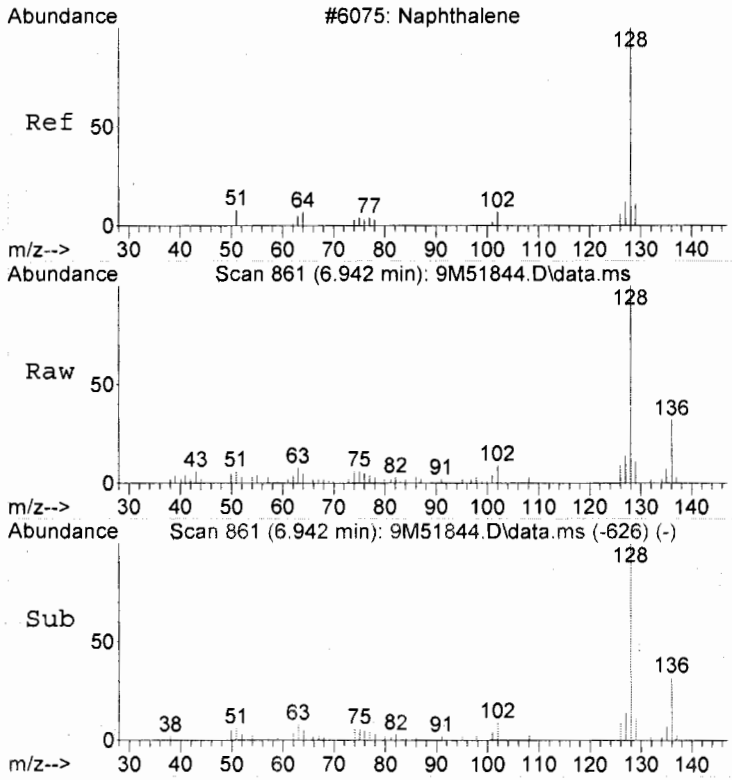
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dichlorobenzene-d4	5.915	152	105406	40.00	ng	0.00
29) Naphthalene-d8	6.926	136	388729	40.00	ng	0.00
47) Acenaphthene-d10	8.370	164	222216	40.00	ng	-0.01
74) Phenanthrene-d10	9.857	188	366878	40.00	ng	0.00
88) Chrysene-d12	12.938	240	312835	40.00	ng	0.01
100) Perylene-d12	14.590	264	249822	40.00	ng	0.03
System Monitoring Compounds						
10) 2-Fluorophenol	4.733	112	193925	60.88	ng	0.02
Spiked Amount 100.000			Recovery = 60.88%			
15) Phenol-d5	5.594	99	272454	64.51	ng	0.00
Spiked Amount 100.000			Recovery = 64.51%			
30) Nitrobenzene-d5	6.364	128	60288	37.19	ng	0.00
Spiked Amount 50.000			Recovery = 74.38%			
52) 2-Fluorobiphenyl	7.771	172	302794	39.57	ng	0.00
Spiked Amount 50.000			Recovery = 79.14%			
77) 2,4,6-Tribromophenol	9.124	330	90665	86.27	ng	0.00
Spiked Amount 100.000			Recovery = 86.27%			
91) Terphenyl-d14	11.681	244	283539	47.22	ng	0.01
Spiked Amount 50.000			Recovery = 94.44%			
Target Compounds						Qvalue
39) Naphthalene	6.942	128	10447	1.0050	ng	97
60) Dimethylphthalate	8.103	163	15573	2.0402	ng	98
65) Dibenzofuran	8.557	168	13206	1.3950	ng	85
83) Phenanthrene	9.884	178	158593	16.2032	ng	99
84) Anthracene	9.937	178	20748	2.1324	ng	96
85) Carbazole	10.108	167	19847	2.1378	ng	96
87) Fluoranthene	11.226	202	187310	15.9934	ng	80
89) Pyrene	11.494	202	142381	16.9934	ng	77
97) Benzo[a]anthracene	12.927	228	59764	7.5069	ng	98
98) Chrysene	12.970	228	59205	8.2376	ng	99
102) Benzo[b]fluoranthene	14.147	252	73417m	9.8985	ng	
103) Benzo[k]fluoranthene	14.173	252	23345m	3.0780	ng	
104) Benzo[a]pyrene	14.521	252	44653	6.4154	ng	86
105) Indeno[1,2,3-cd]pyrene	15.976	276	35329	4.8393	ng	84
107) Benzo[g,h,i]perylene	16.382	276	29457	4.9796	ng	70
Library Search Internal Standards TIC Results						
1) 1,4-Dichlorobenzene-d4	5.915		636053	40.00	ng	--
2) Naphthalene-d8	6.926		853334	40.00	ng	--
3) Acenaphthene-d10	8.370		961315	40.00	ng	--
4) Phenanthrene-d10	9.857		949598	40.00	ng	--
5) Chrysene-d12	12.938		863216m	40.00	ng	--
6) Perylene-d12	14.590		693187	40.00	ng	--
Library Search Compounds						
1) UNKNOWN	4.160		1219205	76.67	ng	--
2) 123-42-2	4.490		40038494	2517.93	ng	74
3) UNKNOWN	5.130		201518	12.67	ng	--
4) 57-10-3	10.450		255080	10.74	ng	98
5) UNKNOWN	11.960		120819	5.60	ng	--
6) 74685-30-6	12.800		432633	20.05	ng	91
7) 84530-84-7	13.330		335158	15.53	ng	58
8) 112-88-9	13.580		236479	10.96	ng	83
9) 35216-11-6	13.700		449651	20.84	ng	78
10) UNKNOWN	13.910		220679	12.73	ng	--
11) 56554-87-1	14.090		237019	13.68	ng	91
12) 297-03-0	14.330		722774	41.71	ng	95
13) 198-55-0	14.460		110690	6.39	ng	91
14) 77899-10-6	14.900		136590	7.88	ng	52
15) 629-94-7	15.130		166424	9.60	ng	93
16) 62376-17-4	15.170		224114	12.93	ng	72
17) UNKNOWN	15.880		160442	9.26	ng	--
18) 4651-51-8	16.030		122879	7.09	ng	53
19) UNKNOWN	16.170		209426	12.08	ng	--
20) 74685-33-9	16.240		165501	9.55	ng	93

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


Abundance
TIC: 9M51844.D\data.ms
Quant QT/LSC Reviewed
SampleID : AC73771-002
Data File: 9M51844.D
Acq On : 08/ 2/13 19:12
Operator : AHD/JB
Sam Mult : 1 Vial# : 21
Misc : S,BNA
Qt Meth : 9M_0731.M
Qt On : 08/05/13 09:06
Qt Upd On: 07/31/13 12:27
TIC-1-(UNKNOWN)
TIC-2-(123-42-2)
2-Fluorophenol,S
TIC-3-(UNKNOWN)
Phenol-d5,S
Time-->


Abundance
TIC: 9M51844.D\data.ms
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
2-Fluorobiphenyl,S
Dimethylphthalate,T
Acenaphthene-d10,I
Dibenzofuran,T
2,4,6-Tribromophenol,S
Anthracene,T
Carbazole
TIC-4-(57-10-3)
Fluoranthene,C
Time-->

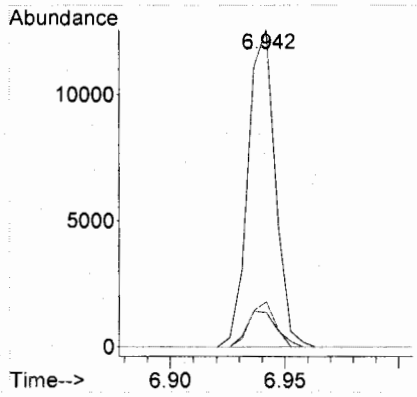

Abundance
TIC: 9M51844.D\data.ms
Fluoranthene,C
Pyrene,M
Terphenyl-d14,S
TIC-5-(UNKNOWN)
TIC-6-(74685-30-6)
TIC-7-(84530-84-7)
TIC-8-(112-88-9)
TIC-9-(35216-11-6)
TIC-10-(UNKNOWN)
TIC-12-(297-03-0)
TIC-13-(198-55-0)
Benzo[a]pyrene,C
Perylene-d12,I
TIC-14-(77899-10-6)
TIC-17-(UNKNOWN)
TIC-19-(UNKNOWN)
TIC-20-(74685-33-9)
Benzo[g,h,i]perylene
Time-->

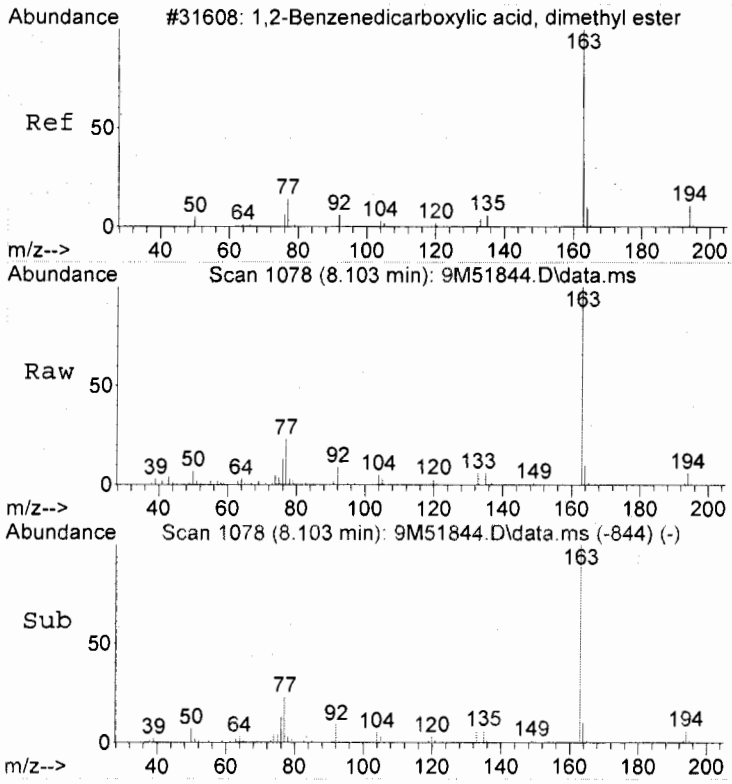


#39
Naphthalene
Concen: 1.00 ng
RT: 6.942 min Scan# 861
Delta R.T. -0.006 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:128 Resp: 10447

Ion	Ratio	Lower	Upper
128	100		
129	10.8	0.0	50.9
127	14.2	0.0	52.4

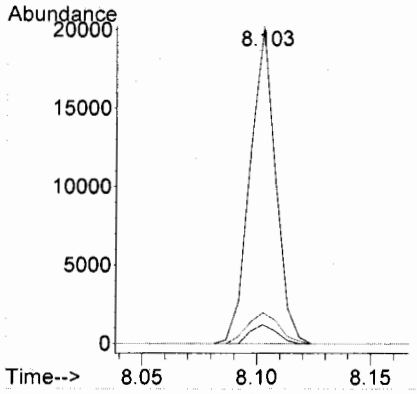


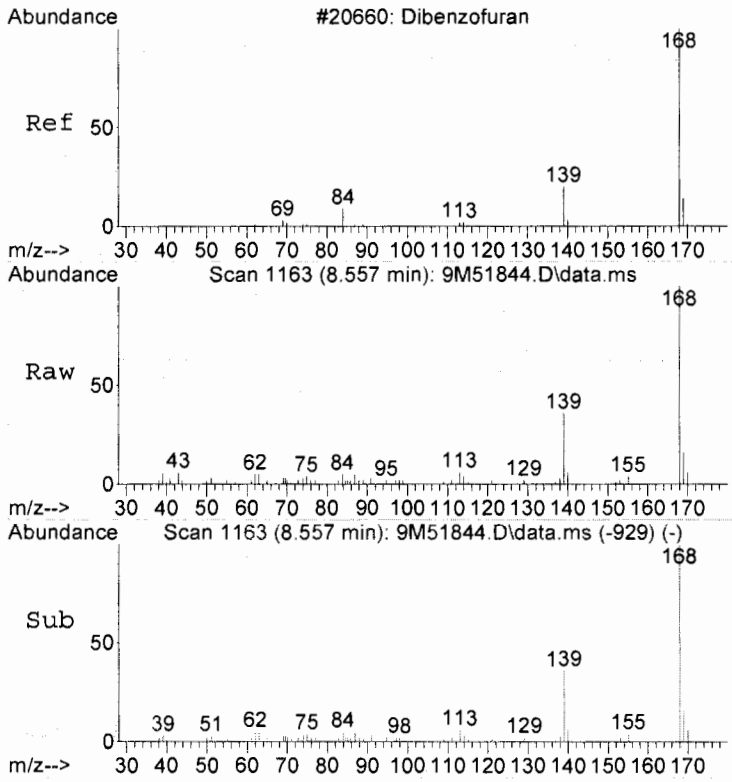


#60
Dimethylphthalate
Concen: 2.04 ng
RT: 8.103 min Scan# 1078
Delta R.T. -0.011 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:163 Resp: 15573

Ion	Ratio	Lower	Upper
163	100		
194	6.0	0.0	44.1
164	9.7	0.0	50.0

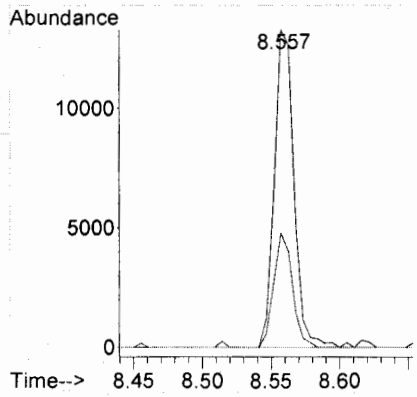


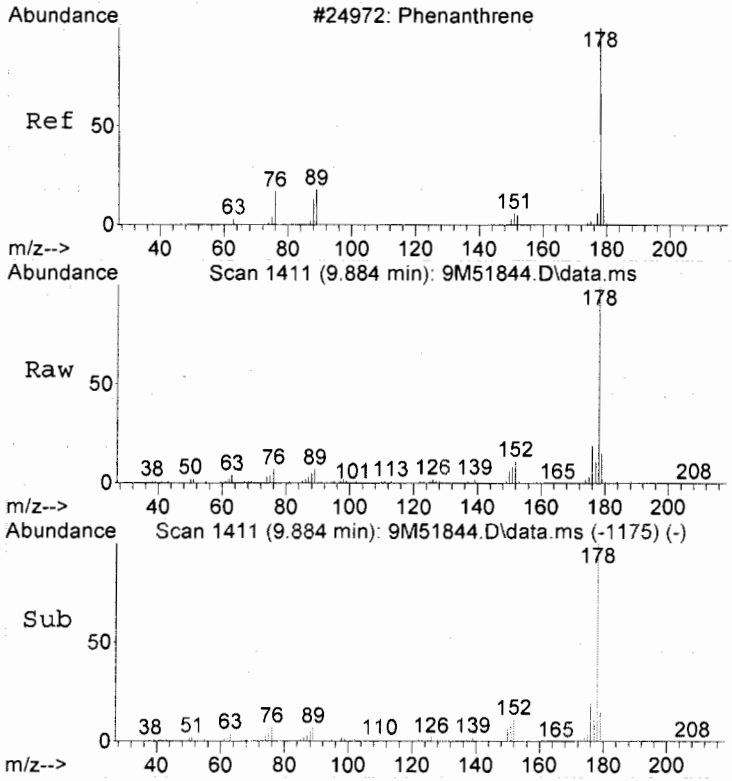


#65
Dibenzofuran
Concen: 1.40 ng
RT: 8.557 min Scan# 1163
Delta R.T. -0.011 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:168 Resp: 13206

Ion	Ratio	Lower	Upper
168	100		
139	36.0	0.0	246.0

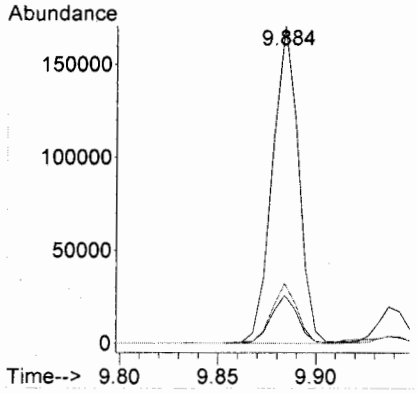


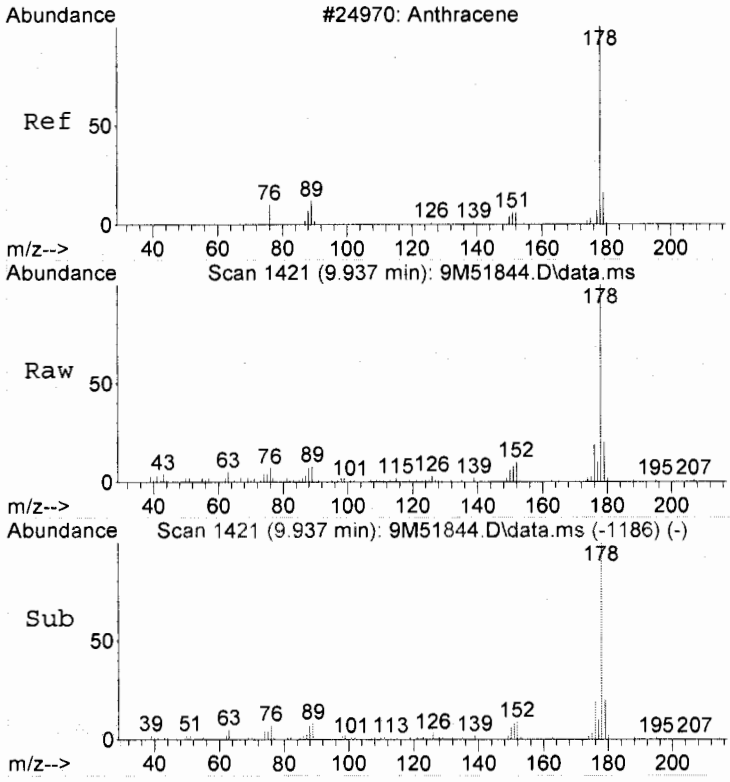


#83
Phenanthrene
Concen: 16.20 ng
RT: 9.884 min Scan# 1411
Delta R.T. -0.000 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:178 Resp: 158593

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	55.5
176	18.8	0.0	59.3

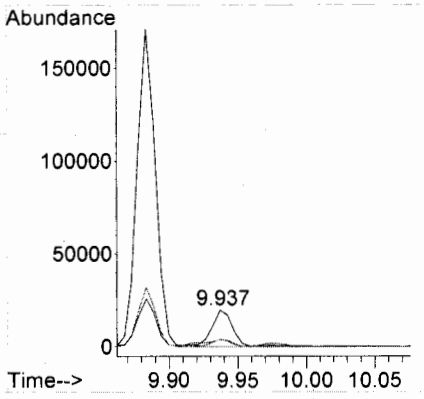


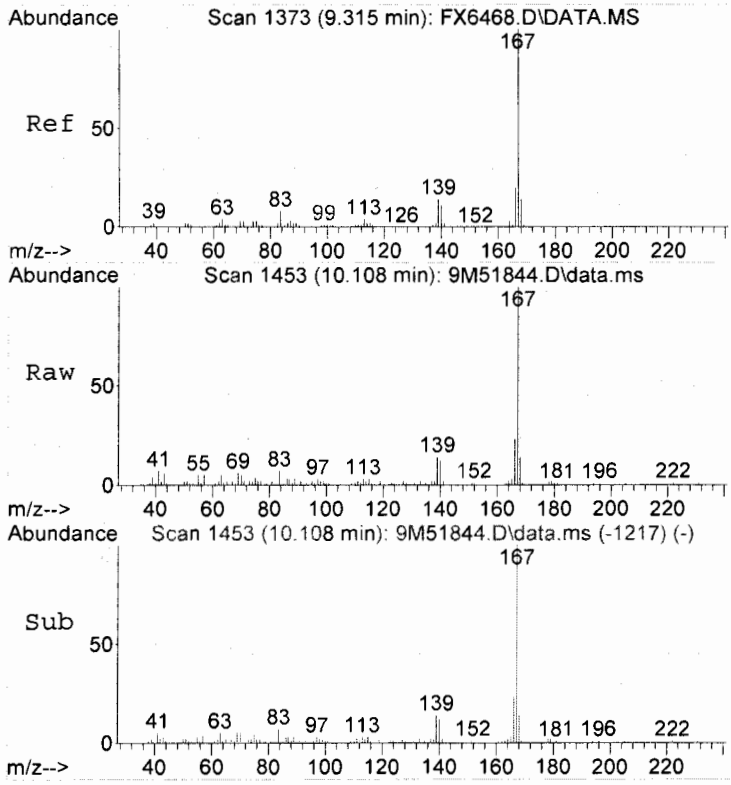


#84
Anthracene
Concen: 2.13 ng
RT: 9.937 min Scan# 1421
Delta R.T. -0.006 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:178 Resp: 20748

Ion	Ratio	Lower	Upper
178	100		
179	17.1	0.0	55.2
176	19.4	0.0	58.1

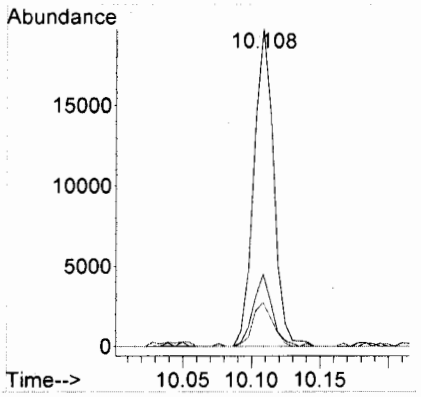


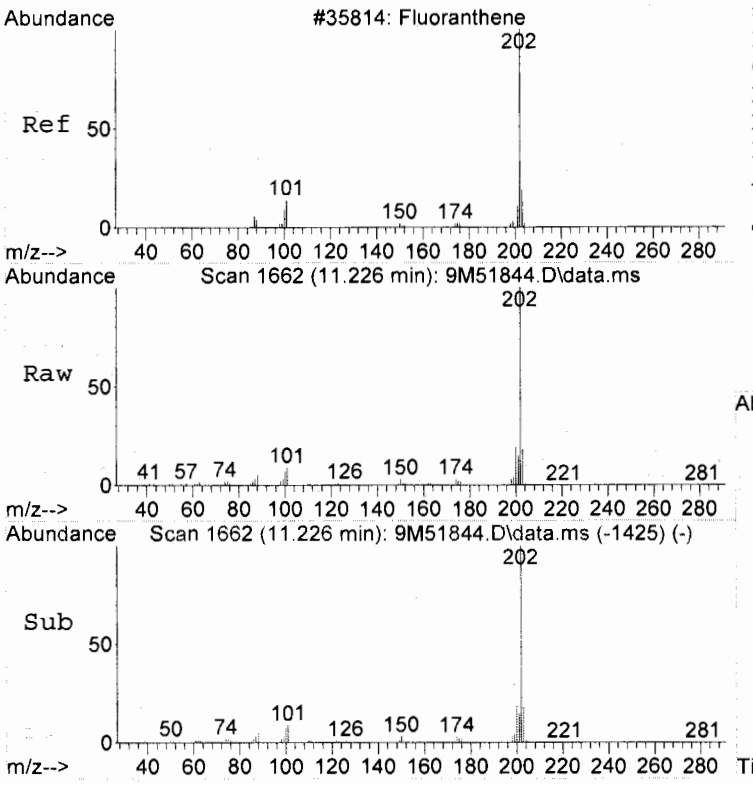


#85
Carbazole
Concen: 2.14 ng
RT: 10.108 min Scan# 1453
Delta R.T. -0.000 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:167 Resp: 19847

Ion	Ratio	Lower	Upper
167	100		
166	22.7	0.2	40.2
139	13.7	0.0	35.0

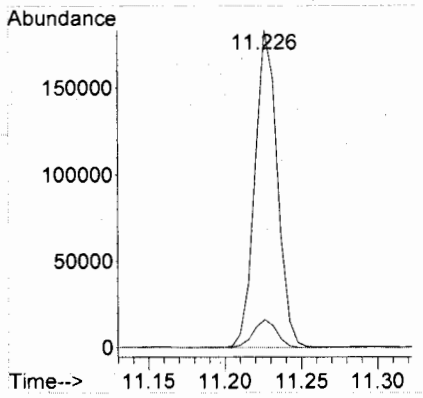


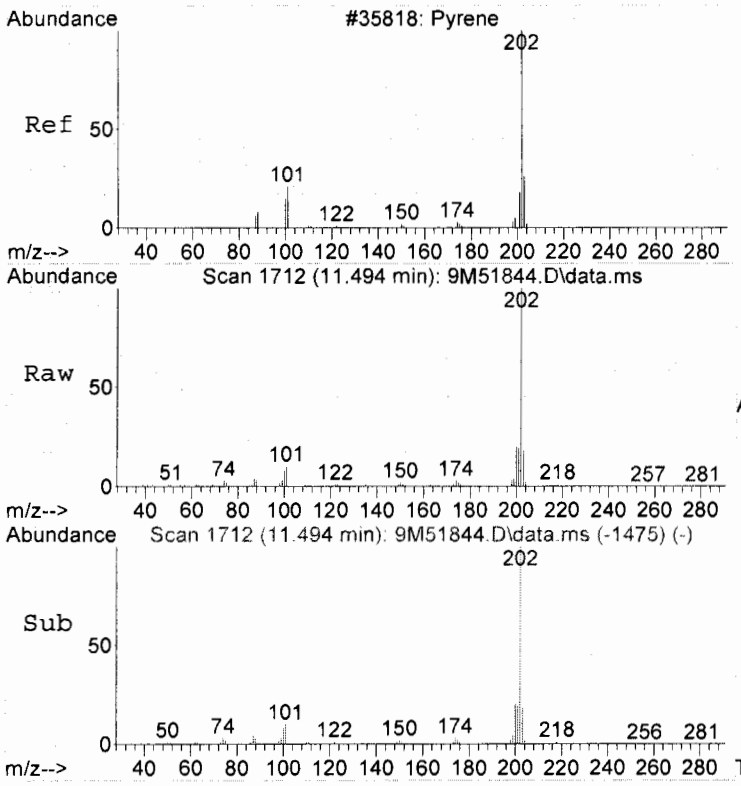


#87
Fluoranthene
Concen: 15.99 ng
RT: 11.226 min Scan# 1662
Delta R.T. -0.000 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:202 Resp: 187310

Ion	Ratio	Lower	Upper
202	100		
101	8.8	0.0	57.6

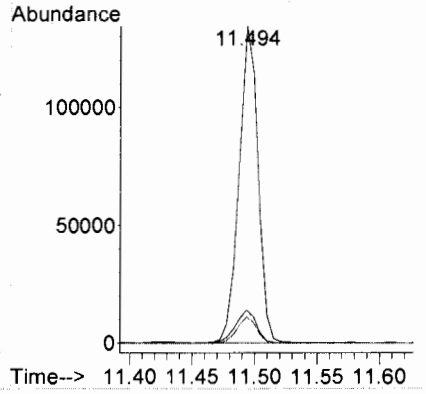


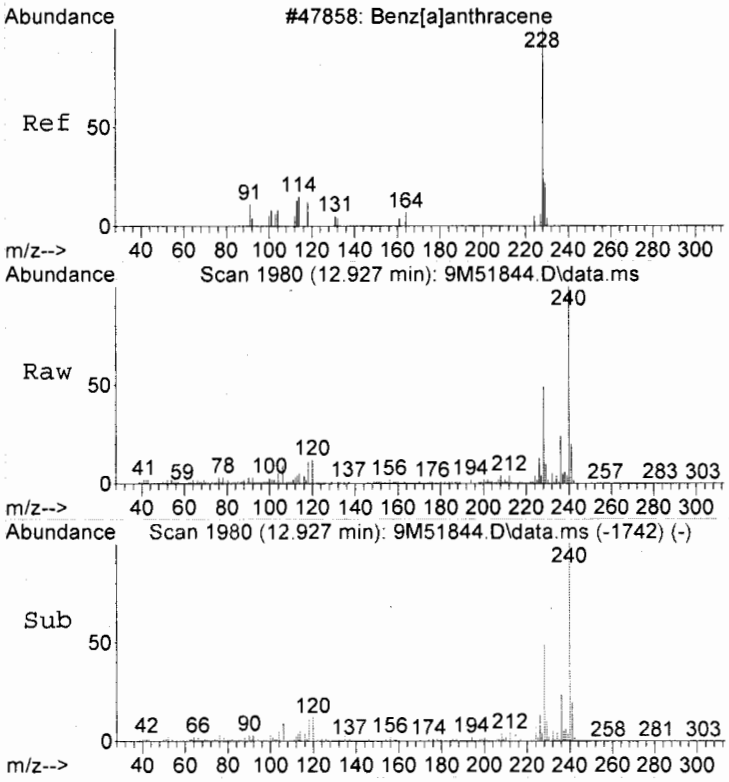


#89
Pyrene
Concen: 16.99 ng
RT: 11.494 min Scan# 1712
Delta R.T. 0.005 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:202 Resp: 142381

Ion	Ratio	Lower	Upper
202	100		
101	10.5	0.0	62.2
100	8.4	0.0	57.8

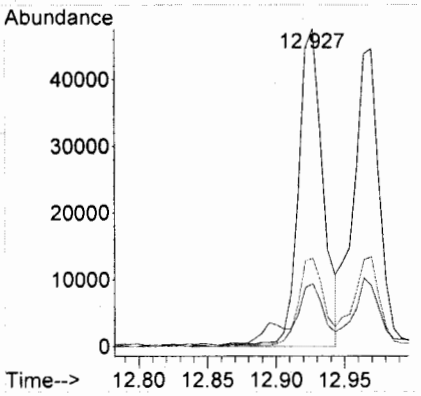


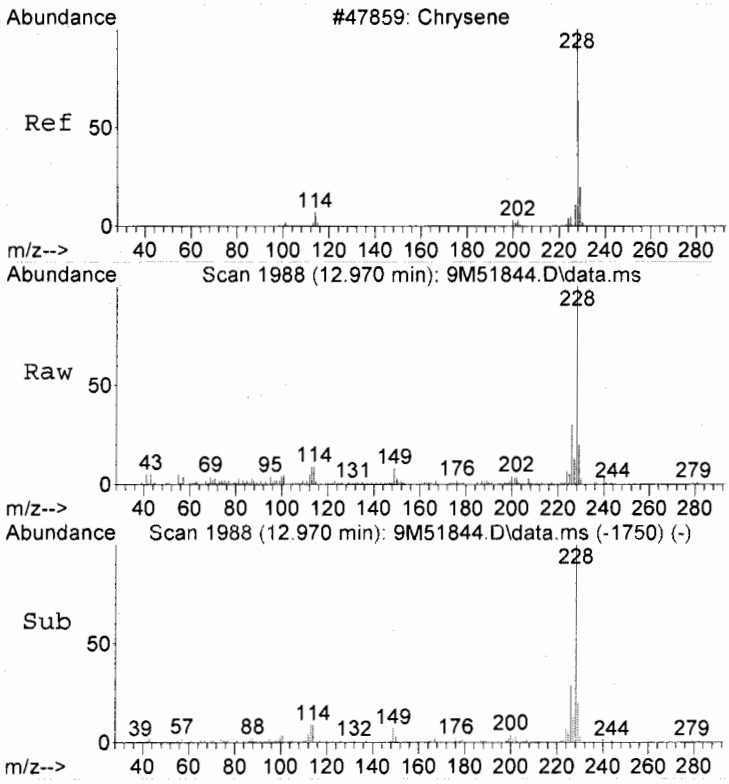


#97
Benzo[a]anthracene
Concen: 7.51 ng
RT: 12.927 min Scan# 1980
Delta R.T. 0.010 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:228 Resp: 59764

Ion	Ratio	Lower	Upper
228	100		
229	19.1	0.0	59.5
226	27.7	0.0	66.0

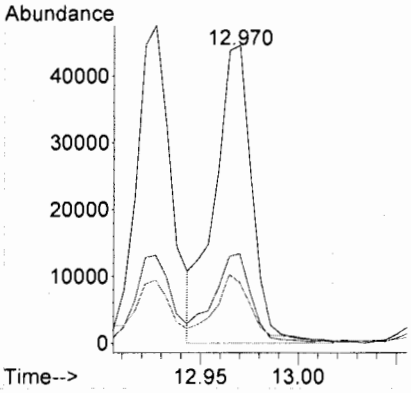


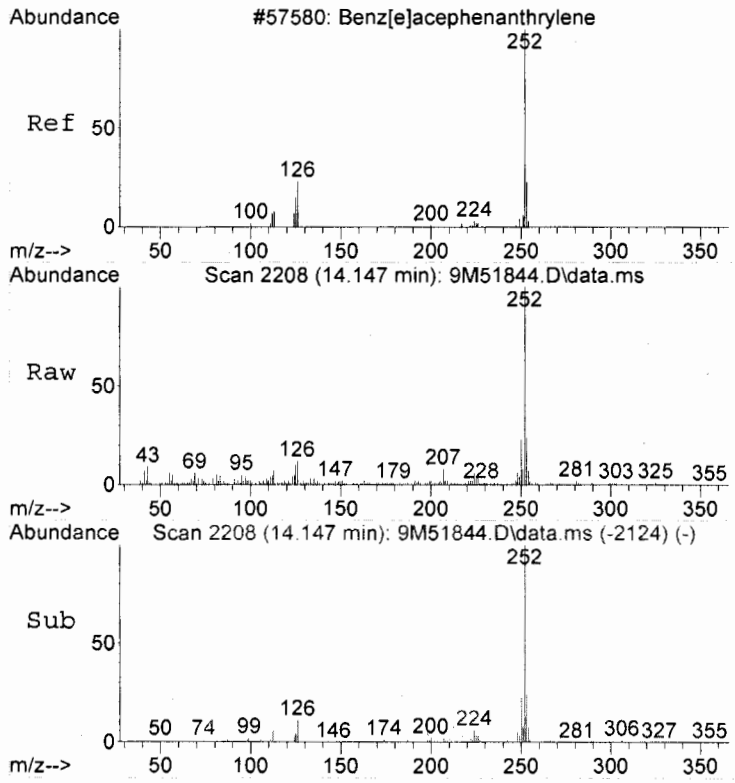


#98
Chrysene
Concen: 8.24 ng
RT: 12.970 min Scan# 1988
Delta R.T. 0.010 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:228 Resp: 59205

Ion	Ratio	Lower	Upper
228	100		
226	29.8	9.5	49.5
229	19.8	0.0	60.2

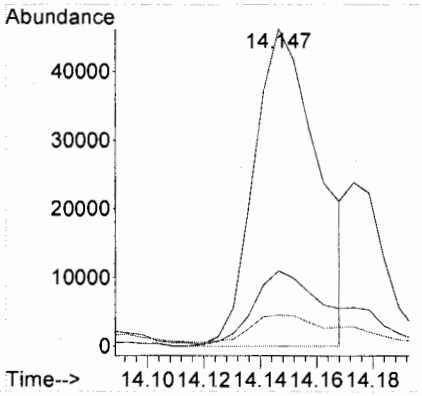


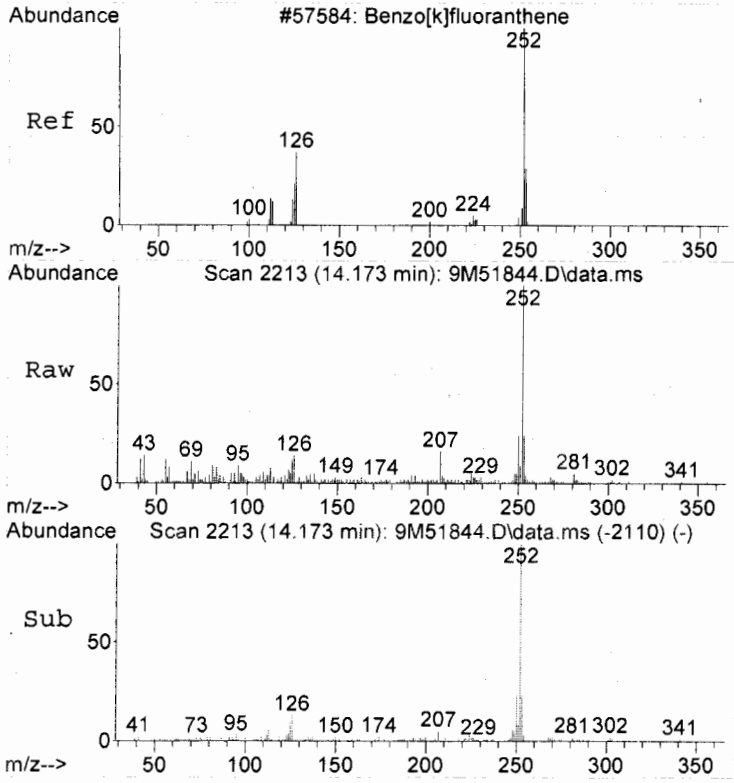


#102
Benzo[b]fluoranthene
Concen: 9.90 ng m
RT: 14.147 min Scan# 2208
Delta R.T. 0.016 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:252 Resp: 73417

Ion	Ratio	Lower	Upper
252	100		
253	23.8	0.0	62.3
125	9.8	0.0	58.4

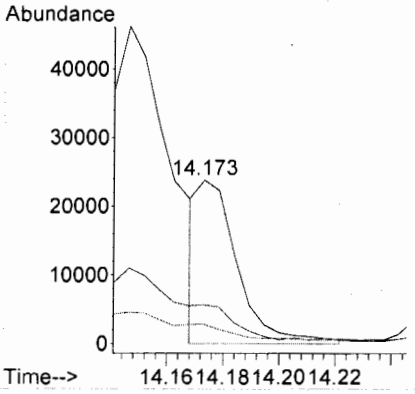


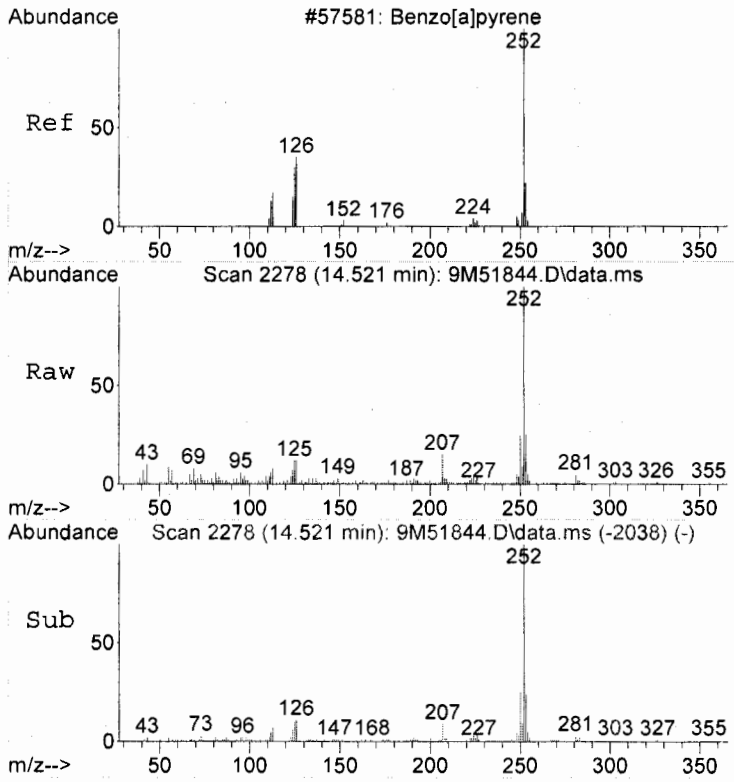


#103
Benzo[k]fluoranthene
Concen: 3.08 ng m
RT: 14.173 min Scan# 2213
Delta R.T. 0.010 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:252 Resp: 23345

Ion	Ratio	Lower	Upper
252	100		
253	23.6	0.0	52.2
125	11.8	0.0	48.9

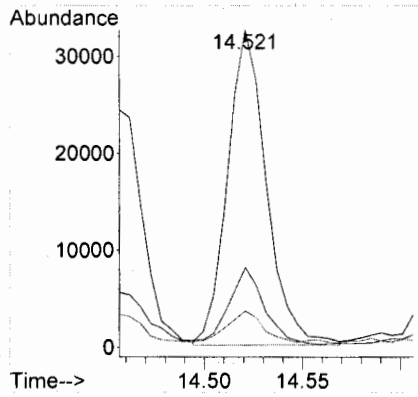


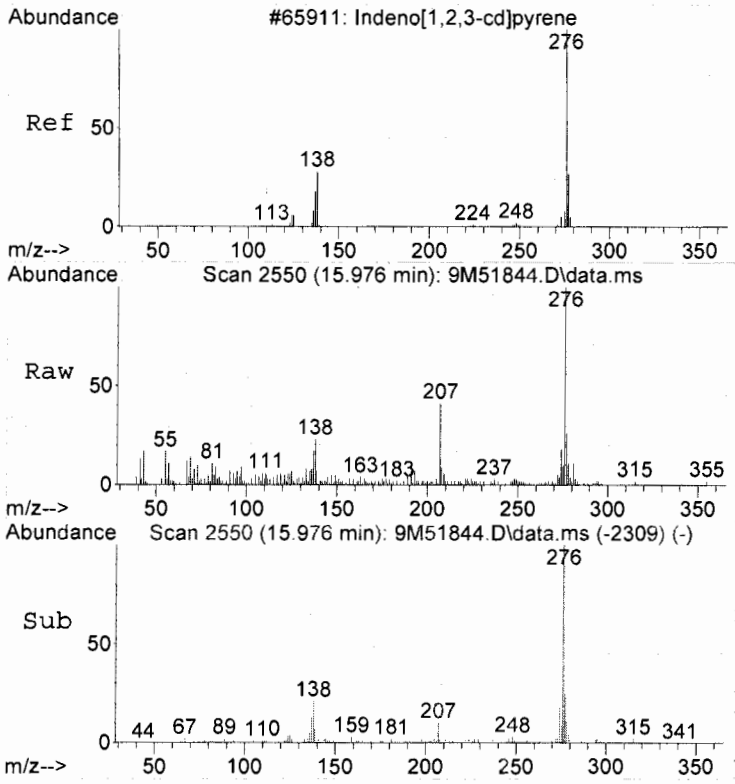


#104
Benzo[a]pyrene
Concen: 6.42 ng
RT: 14.521 min Scan# 2278
Delta R.T. 0.016 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:252 Resp: 44653

Ion	Ratio	Lower	Upper
252	100		
253	24.4	0.0	62.4
125	9.9	0.0	60.9

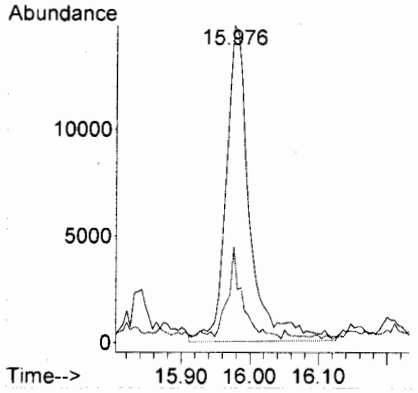


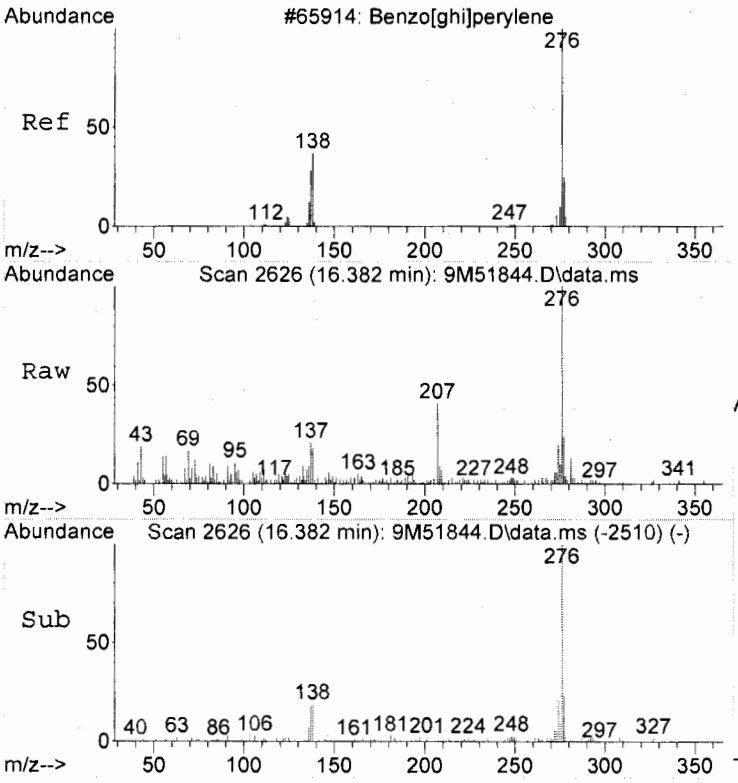


#105
Indeno[1,2,3-cd]pyrene
Concen: 4.84 ng
RT: 15.976 min Scan# 2550
Delta R.T. 0.026 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:276 Resp: 35329

Ion	Ratio	Lower	Upper
276	100		
138	29.3	0.0	78.9

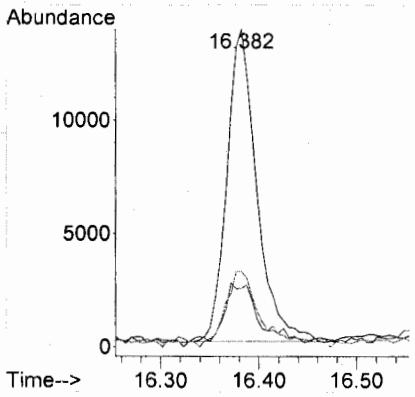




#107
Benzo[g,h,i]perylene
Concen: 4.98 ng
RT: 16.382 min Scan# 2626
Delta R.T. 0.080 min
Lab File: 9M51844.D
Acq: 2 Aug 2013 19:12

Tgt Ion:276 Resp: 29457

Ion	Ratio	Lower	Upper
276	100		
138	18.2	0.0	100.0
277	28.1	0.0	60.0



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: SMB25788
Client Id:
Data File: 9M51850.D
Analysis Date: 08/05/13 10:18
Date Rec/Extracted: NA-08/02/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270C
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.033	U	205-99-2	Benzo[b]fluoranthene	0.033	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.033	U	191-24-2	Benzo[g,h,i]perylene	0.0083	U
122-66-7	1,2-Diphenylhydrazine	0.033	U	207-08-9	Benzo[k]fluoranthene	0.033	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.033	U	100-51-6	Benzyl alcohol	0.033	U
95-95-4	2,4,5-Trichlorophenol	0.033	U	111-91-1	bis(2-Chloroethoxy)methan	0.033	U
88-06-2	2,4,6-Trichlorophenol	0.033	U	111-44-4	bis(2-Chloroethyl)ether	0.0083	U
120-83-2	2,4-Dichlorophenol	0.0083	U	108-60-1	bis(2-chloroisopropyl)ether	0.033	U
105-67-9	2,4-Dimethylphenol	0.0083	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.033	U
51-28-5	2,4-Dinitrophenol	0.17	U	85-68-7	Butylbenzylphthalate	0.033	U
121-14-2	2,4-Dinitrotoluene	0.033	U	105-60-2	Caprolactam	0.033	U
606-20-2	2,6-Dinitrotoluene	0.033	U	86-74-8	Carbazole	0.033	U
91-58-7	2-Chloronaphthalene	0.033	U	218-01-9	Chrysene	0.033	U
95-57-8	2-Chlorophenol	0.033	U	53-70-3	Dibenzo[a,h]anthracene	0.033	U
91-57-6	2-Methylnaphthalene	0.033	U	132-64-9	Dibenzofuran	0.0083	U
95-48-7	2-Methylphenol	0.0083	U	84-66-2	Diethylphthalate	0.033	U
88-74-4	2-Nitroaniline	0.033	U	**131-11-3**	**Dimethylphthalate**	**0.033**	**0.040**
88-75-5	2-Nitrophenol	0.033	U	84-74-2	Di-n-butylphthalate	0.017	U
106-44-5	3&4-Methylphenol	0.0083	U	117-84-0	Di-n-octylphthalate	0.033	U
91-94-1	3,3'-Dichlorobenzidine	0.033	U	206-44-0	Fluoranthene	0.033	U
99-09-2	3-Nitroaniline	0.033	U	86-73-7	Fluorene	0.033	U
534-52-1	4,6-Dinitro-2-methylphenol	0.033	U	118-74-1	Hexachlorobenzene	0.033	U
101-55-3	4-Bromophenyl-phenylether	0.033	U	87-68-3	Hexachlorobutadiene	0.033	U
59-50-7	4-Chloro-3-methylphenol	0.033	U	77-47-4	Hexachlorocyclopentadiene	0.033	U
106-47-8	4-Chloroaniline	0.016	U	67-72-1	Hexachloroethane	0.033	U
7005-72-3	4-Chlorophenyl-phenylether	0.033	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.033	U
100-01-6	4-Nitroaniline	0.033	U	78-59-1	Isophorone	0.033	U
100-02-7	4-Nitrophenol	0.033	U	91-20-3	Naphthalene	0.0083	U
83-32-9	Acenaphthene	0.033	U	98-95-3	Nitrobenzene	0.033	U
208-96-8	Acenaphthylene	0.033	U	62-75-9	N-Nitrosodimethylamine	0.033	U
98-86-2	Acetophenone	0.033	U	621-64-7	N-Nitroso-di-n-propylamine	0.0083	U
120-12-7	Anthracene	0.033	U	86-30-6	n-Nitrosodiphenylamine	0.033	U
1912-24-9	Atrazine	0.033	U	87-86-5	Pentachlorophenol	0.056	U
100-52-7	Benzaldehyde	0.033	U	85-01-8	Phenanthrene	0.033	U
92-87-5	Benzidine	0.033	U	108-95-2	Phenol	0.033	U
56-55-3	Benzo[a]anthracene	0.033	U	129-00-0	Pyrene	0.033	U
50-32-8	Benzo[a]pyrene	0.033	U				

Worksheet #: 272527 ***Total Target Concentration*** 0.04 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: SMB25788
Client Id:
Data File: 9M51850.D
Analysis Date: 08/05/13 10:18
Date Rec/Extracted: NA-08/02/13

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 100
Method: EPA 8270C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	4.16	1.5 J
2	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.49	47 JA
3		unknown	5.12	0.25 J
4	19047-85-9	Phosphonic acid, dioctadecyl ester	12.77	0.084 J

Worksheet #: 272527 ***Total Tentatively Identified Concentration*** 49

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

3080110 0093

SampleID : SMB25788 Operator : AHD/JB Qt Meth : 9M_0731.M
Data File: 9M51850.D Sam Mult : 1 Vial# : 3 Qt On : 08/05/13 10:40
Acq On : 08/ 5/13 10:18 Misc : S,BNA Qt Upd On: 07/31/13 12:27

Data Path : G:\GcMsData\2013\GCMS_9\Data\08-05-13\
Qt Path : G:\GCMSDATA\2013\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dichlorobenzene-d4	5.915	152	101289	40.00	ng	0.00
29) Naphthalene-d8	6.921	136	392490	40.00	ng	-0.01
47) Acenaphthene-d10	8.365	164	234411	40.00	ng	-0.02
74) Phenanthrene-d10	9.846	188	434532	40.00	ng	-0.01
88) Chrysene-d12	12.916	240	486333	40.00	ng	-0.01
100) Perylene-d12	14.553	264	379918	40.00	ng	-0.01
System Monitoring Compounds						
10) 2-Fluorophenol	4.728	112	168980	55.20	ng	0.01
Spiked Amount 100.000			Recovery = 55.20%			
15) Phenol-d5	5.594	99	235331	57.98	ng	0.00
Spiked Amount 100.000			Recovery = 57.98%			
30) Nitrobenzene-d5	6.364	128	51950	31.74	ng	0.00
Spiked Amount 50.000			Recovery = 63.48%			
52) 2-Fluorobiphenyl	7.766	172	258065	31.97	ng	-0.01
Spiked Amount 50.000			Recovery = 63.94%			
77) 2,4,6-Tribromophenol	9.119	330	87696	70.45	ng	-0.01
Spiked Amount 100.000			Recovery = 70.45%			
91) Terphenyl-d14	11.660	244	346923	37.16	ng	-0.01
Spiked Amount 50.000			Recovery = 74.32%			
Target Compounds						Qvalue
60) Dimethylphthalate	8.097	163	19083	2.3700	ng	96
Library Search Internal Standards TIC Results						
1) 1,4-Dichlorobenzene-d4	5.915		602274	40.00	ng	--
2) Naphthalene-d8	6.921		823080	40.00	ng	--
3) Acenaphthene-d10	8.365		978422	40.00	ng	--
4) Phenanthrene-d10	9.846		1056920	40.00	ng	--
5) Chrysene-d12	12.916		1250820	40.00	ng	--
6) Perylene-d12	14.553		993126	40.00	ng	--
Library Search Compounds						
1) UNKNOWN	4.160		1366129	90.73	ng	--
2) 123-42-2	4.490		42553375	2826.18	ng	64
3) UNKNOWN	5.120		225681	14.99	ng	--
4) 19047-85-9	12.770		157626	5.04	ng	93

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

Ve

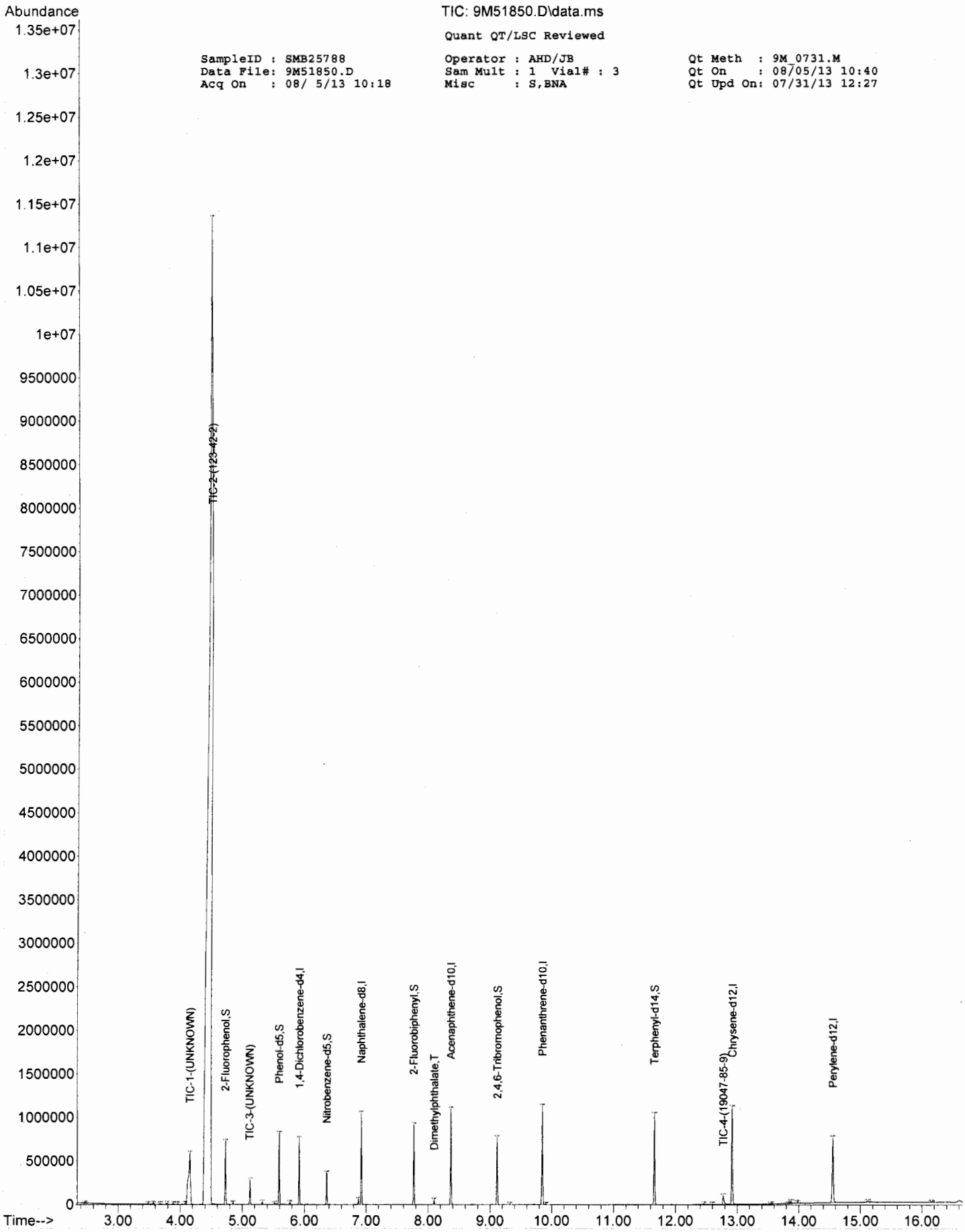
TIC: 9M51850.D\data.ms

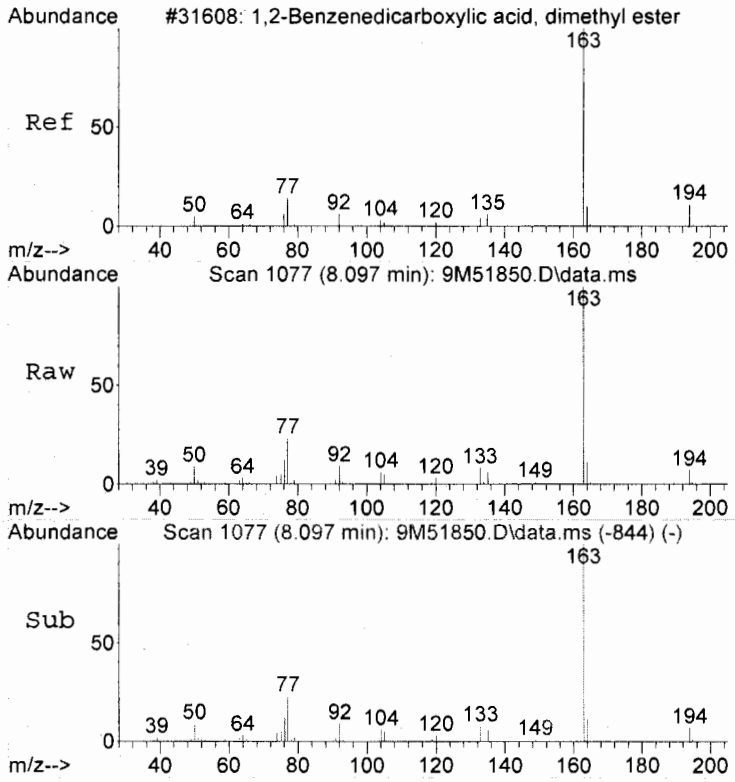
Quant QT/LSC Reviewed

SampleID : SMB25788
Data File: 9M51850.D
Acq On : 08/ 5/13 10:18

Operator : AHD/JB
Sam Mult : 1 Vial# : 3
Misc : S,BNA

Qt Meth : 9M_0731.M
Qt On : 08/05/13 10:40
Qt Upd On: 07/31/13 12:27

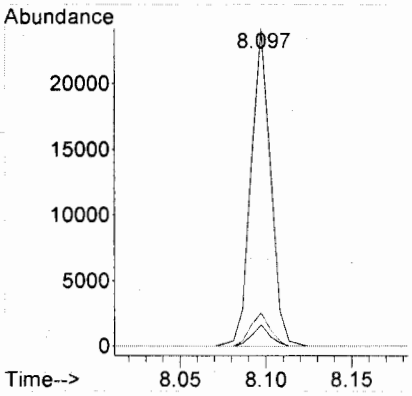




#60
Dimethylphthalate
Concen: 2.37 ng
RT: 8.097 min Scan# 1077
Delta R.T. -0.016 min
Lab File: 9M51850.D
Acq: 5 Aug 2013 10:18

Tgt Ion:163 Resp: 19083

Ion	Ratio	Lower	Upper
163	100		
194	7.4	0.0	44.1
164	10.6	0.0	50.0



FORM2

Surrogate Recovery

Method: EPA 8270C

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column1 S5 Recov	Column1 S6 Recov
9M51850.D	SMB25788	Soil	08/05/13 10:18	1		55	58	63	64	70	74
9M51843.D	AC73771-001	Soil	08/02/13 18:49	1		62	64	73	78	82	91
9M51844.D	AC73771-002	Soil	08/02/13 19:12	1		61	65	74	79	86	94
9M51830.D	SMB25788(M	Soil	08/02/13 12:44	1		74	77	88	86	95	107
9M51832.D	AC73758-002	Soil	08/02/13 14:20	1		58	60	69	71	76	88
9M51834.D	AC73758-002(	Soil	08/02/13 15:23	1		60	62	72	69	77	84
9M51835.D	AC73758-002(	Soil	08/02/13 15:46	1		63	64	75	75	82	92

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8270C

Soil Limits

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	43-128
S2=Phenol-d5	100	49-129
S3=Nitrobenzene-d5	50	52-129
S4=2-Fluorobiphenyl	50	58-125
S5=2,4,6-Tribromophenol	100	54-145
S6=Terphenyl-d14	50	58-148

Form3
Recovery Data
QC Batch: SMB25788

	Data File	Sample ID:	Analysis Date
Spike or Dup:	9M51830.D	SMB25788(MS)	8/2/2013 12:44:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8270 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Phenol	1	81.0873	0	100	81	20	130
2-Chlorophenol	1	90.2945	0	100	90	50	130
1,4-Dichlorobenzene	1	41.1173	0	50	82	50	130
2-Methylphenol	1	93.4596	0	100	93	50	130
N-Nitroso-di-n-propylamine	1	45.715	0	50	91	20	130
2,4-Dimethylphenol	1	99.3784	0	100	99	50	130
1,2,4-Trichlorobenzene	1	45.3054	0	50	91	50	130
Naphthalene	1	43.9923	0	50	88	50	130
4-Chloro-3-methylphenol	1	94.9795	0	100	95	50	130
Acenaphthene	1	44.3565	0	50	89	50	130
2,4-Dinitrotoluene	1	43.5982	0	50	87	50	130
4-Nitrophenol	1	82.4904	0	100	82	20	130
Fluorene	1	43.953	0	50	88	50	130
Pentachlorophenol	1	82.5727	0	100	83	40	130
Pyrene	1	58.8372	0	50	118	50	130
Butylbenzylphthalate	1	58.4565	0	50	117	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB25788

	Data File	Sample ID:	Analysis Date
Spike or Dup:	9M51834.D	AC73758-002(MS)	8/2/2013 3:23:00 PM
Non Spike(If applicable):	9M51832.D	AC73758-002	8/2/2013 2:20:00 PM
Inst Blank(If applicable):			

Method: 8270 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Phenol	1	74.7143	0	100	75	20	130
2-Chlorophenol	1	81.8499	0	100	82	50	130
1,4-Dichlorobenzene	1	37.8672	0	50	76	50	130
2-Methylphenol	1	84.1959	0	100	84	50	130
N-Nitroso-di-n-propylamine	1	41.3936	0	50	83	20	130
2,4-Dimethylphenol	1	90.6225	0	100	91	50	130
1,2,4-Trichlorobenzene	1	41.7327	0	50	83	50	130
Naphthalene	1	40.2375	0	50	80	50	130
4-Chloro-3-methylphenol	1	86.3685	0	100	86	50	130
Acenaphthene	1	40.9418	0	50	82	50	130
2,4-Dinitrotoluene	1	38.3398	0	50	77	50	130
4-Nitrophenol	1	76.473	0	100	76	20	130
Fluorene	1	40.936	0	50	82	50	130
Pentachlorophenol	1	78.5166	0	100	79	40	130
Pyrene	1	50.5457	0	50	101	50	130
Butylbenzylphthalate	1	50.8009	0	50	102	50	130

	Data File	Sample ID:	Analysis Date
Spike or Dup:	9M51835.D	AC73758-002(MSD)	8/2/2013 3:46:00 PM
Non Spike(If applicable):	9M51832.D	AC73758-002	8/2/2013 2:20:00 PM
Inst Blank(If applicable):			

Method: 8270 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Phenol	1	75.7073	0	100	76	20	130
2-Chlorophenol	1	84.5706	0	100	85	50	130
1,4-Dichlorobenzene	1	37.6406	0	50	75	50	130
2-Methylphenol	1	86.3335	0	100	86	50	130
N-Nitroso-di-n-propylamine	1	42.5227	0	50	85	20	130
2,4-Dimethylphenol	1	93.1104	0	100	93	50	130
1,2,4-Trichlorobenzene	1	42.5132	0	50	85	50	130
Naphthalene	1	41.5731	0	50	83	50	130
4-Chloro-3-methylphenol	1	87.972	0	100	88	50	130
Acenaphthene	1	42.7783	0	50	86	50	130
2,4-Dinitrotoluene	1	41.4874	0	50	83	50	130
4-Nitrophenol	1	80.1396	0	100	80	20	130
Fluorene	1	42.3269	0	50	85	50	130
Pentachlorophenol	1	82.0271	0	100	82	40	130
Pyrene	1	53.824	0	50	108	50	130
Butylbenzylphthalate	1	54.4928	0	50	109	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA

QC Batch: SMB25788

	Data File	Sample ID:	Analysis Date
Spike or Dup:	9M51835.D	AC73758-002(MSD)	8/2/2013 3:46:00 PM
Duplicate(If applicable):	9M51834.D	AC73758-002(MS)	8/2/2013 3:23:00 PM
Inst Blank(If applicable):			

Method: 8270 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Phenol	1	75.7073	74.7143	1.3	40
2-Chlorophenol	1	84.5706	81.8499	3.3	40
1,4-Dichlorobenzene	1	37.6406	37.8672	0.6	40
2-Methylphenol	1	86.3335	84.1959	2.5	40
N-Nitroso-di-n-propylamine	1	42.5227	41.3936	2.7	40
2,4-Dimethylphenol	1	93.1104	90.6225	2.7	40
1,2,4-Trichlorobenzene	1	42.5132	41.7327	1.9	40
Naphthalene	1	41.5731	40.2375	3.3	40
4-Chloro-3-methylphenol	1	87.972	86.3685	1.8	40
Acenaphthene	1	42.7783	40.9418	4.4	40
2,4-Dinitrotoluene	1	41.4874	38.3398	7.9	40
4-Nitrophenol	1	80.1396	76.473	4.7	40
Fluorene	1	42.3269	40.936	3.3	40
Pentachlorophenol	1	82.0271	78.5166	4.4	40
Pyrene	1	53.824	50.5457	6.3	40
Butylbenzylphthalate	1	54.4928	50.8009	7	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: SMB25788
Blank Data File: 9M51850.D
Matrix: Soil

Blank Analysis Date: 08/05/13 10:18
Blank Extraction Date: 08/02/13
(If Applicable)
Method: EPA 8270C

Sample Number	Data File	Analysis Date
AC73771-001	9M51843.D	08/02/13 18:49
AC73771-002	9M51844.D	08/02/13 19:12
AC73758-002(MSD	9M51835.D	08/02/13 15:46
AC73758-002(MS)	9M51834.D	08/02/13 15:23
AC73758-002	9M51832.D	08/02/13 14:20
SMB25788(MS)	9M51830.D	08/02/13 12:44

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 9

Data File: 9M51760.D
Analysis Date: 07/31/13 08:32
Method: EPA 8270C

Tune Scan/Time Range: Scan 1457

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	38.0	40696	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	51.7	55352	PASS
70	69	0.00	2	0.6	328	PASS
127	198	40	60	54.5	58376	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	107056	PASS
199	198	5	9	6.7	7199	PASS
275	198	10	30	27.8	29776	PASS
365	198	1	100	3.4	3610	PASS
441	443	0.01	100	78.3	10102	PASS
442	198	40	100	59.3	63520	PASS
443	442	17	23	20.3	12905	PASS

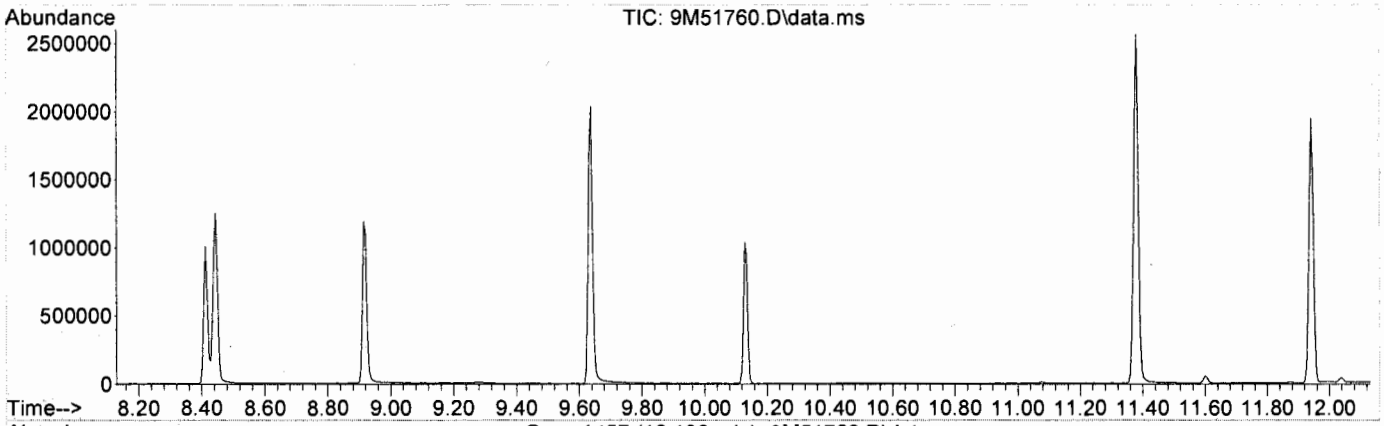
Data File	Sample Number	Analysis Date:
9M51761.D	CAL BNA@50PPM	07/31/13 08:59
9M51762.D	CAL BNA@196PP	07/31/13 09:24
9M51763.D	CAL BNA@160PP	07/31/13 09:46
9M51764.D	CAL BNA@120PP	07/31/13 10:09
9M51765.D	CAL BNA@80PPM	07/31/13 10:32
9M51766.D	CAL BNA@20PPM	07/31/13 10:55
9M51767.D	CAL BNA@10PPM	07/31/13 11:17
9M51768.D	CAL BNA@2PPM	07/31/13 11:40
9M51769.D	CAL BNA@.5PPM	07/31/13 12:03
9M51770.D	CAL BNA@50PPM	07/31/13 12:26
9M51771.D	ICV BNA@50PPM	07/31/13 12:48

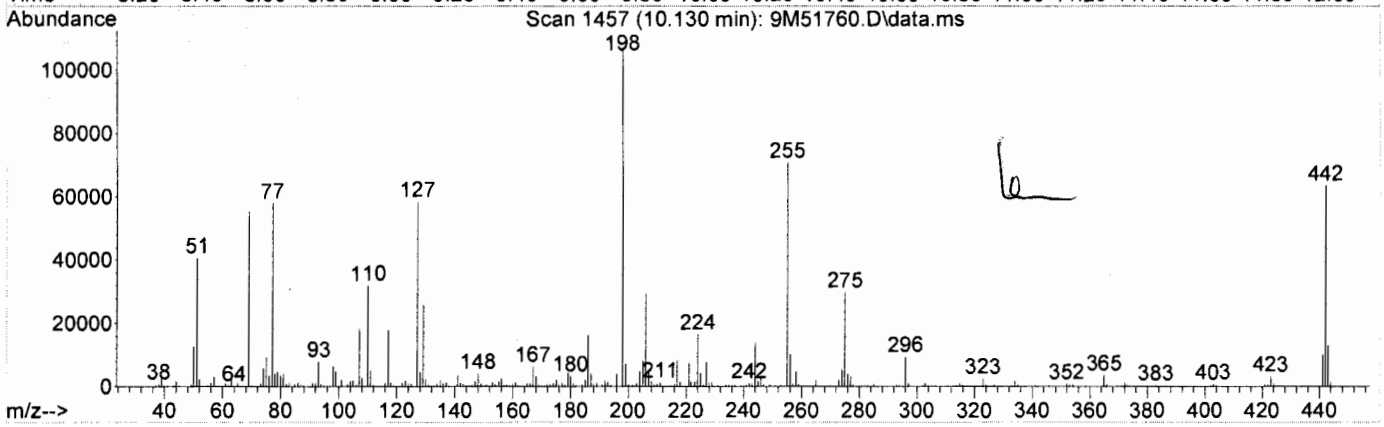
3080110 0102

Data Path : G:\GcMsData\2013\GCMS_9\Data\07-31-13\
Data File : 9M51760.D
Acq On : 31 Jul 2013 8:32
Operator : AHD/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2013\GCMS_9\METHODQT\9M_0725.M
Title : @GCMS_9,mg,625,8270
Last Update : Thu Jul 25 13:14:23 2013





Spectrum Information: Scan 1457

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.0	40696	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	51.7	55352	PASS
70	69	0.00	2	0.6	328	PASS
127	198	40	60	54.5	58376	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	107056	PASS
199	198	5	9	6.7	7199	PASS
275	198	10	30	27.8	29776	PASS
365	198	1	100	3.4	3610	PASS
441	443	0.01	100	78.3	10102	PASS
442	198	40	100	59.3	63520	PASS
443	442	17	23	20.3	12905	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 9

Data File: 9M51823.D
Analysis Date: 08/02/13 09:05
Method: EPA 8270C

Tune Scan/Time Range: Scan 1457

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	44.1	34472	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	58.5	45696	PASS
70	69	0.00	2	0.8	381	PASS
127	198	40	60	58.9	46040	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	78144	PASS
199	198	5	9	6.5	5107	PASS
275	198	10	30	27.7	21648	PASS
365	198	1	100	3.3	2604	PASS
441	443	0.01	100	75.2	6530	PASS
442	198	40	100	55.4	43312	PASS
443	442	17	23	20.1	8689	PASS

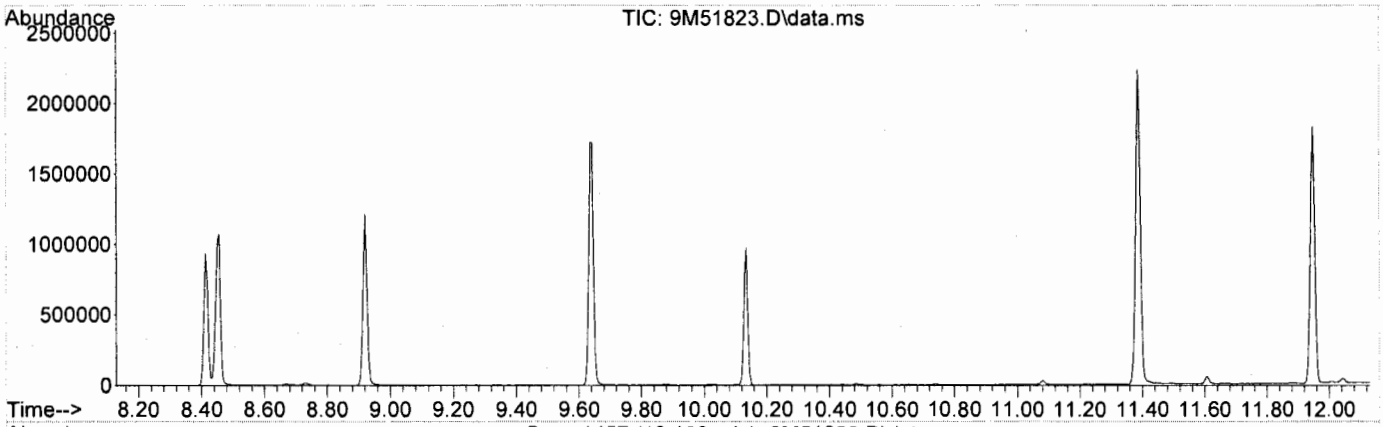
Data File	Sample Number	Analysis Date:
9M51824.D	CAL BNA@50PPM	08/02/13 09:33
9M51825.D	AC73706-022	08/02/13 09:56
9M51826.D	AC73706-025	08/02/13 10:19
9M51827.D	AC73722-005	08/02/13 10:41
9M51828.D	AC73722-004	08/02/13 11:04
9M51829.D	AC73722-001	08/02/13 11:27
9M51830.D	SMB25788(MS)	08/02/13 12:44
9M51831.D	SMB25788	08/02/13 13:07
9M51832.D	AC73758-002	08/02/13 14:20
9M51833.D	SMB25788	08/02/13 15:00
9M51834.D	AC73758-002(MS)	08/02/13 15:23
9M51835.D	AC73758-002(MSD	08/02/13 15:46
9M51836.D	AC73758-001	08/02/13 16:09
9M51837.D	AC73758-003	08/02/13 16:32
9M51838.D	AC73758-004	08/02/13 16:55
9M51839.D	AC73758-005	08/02/13 17:18
9M51840.D	AC73626-008	08/02/13 17:41
9M51841.D	AC73626-016	08/02/13 18:04
9M51842.D	AC73626-017	08/02/13 18:26
9M51843.D	AC73771-001	08/02/13 18:49
9M51844.D	AC73771-002	08/02/13 19:12
9M51845.D	AC73615-010	08/02/13 19:35
9M51846.D	AC73742-001	08/02/13 19:58
9M51847.D	AC73615-020(10X)	08/02/13 20:21

3080110 0104

Data Path : G:\GcMsData\2013\GCMS_9\Data\08-02-13\
Data File : 9M51823.D
Acq On : 2 Aug 2013 9:05
Operator : AHD/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2013\GCMS_9\METHODQT\9M_0731.M
Title : @GCMS_9,mg,625,8270
Last Update : Wed Jul 31 12:22:50 2013



Spectrum Information: Scan 1457

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.1	34472	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	58.5	45696	PASS
70	69	0.00	2	0.8	381	PASS
127	198	40	60	58.9	46040	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	78144	PASS
199	198	5	9	6.5	5107	PASS
275	198	10	30	27.7	21648	PASS
365	198	1	100	3.3	2604	PASS
441	443	0.01	100	75.2	6530	PASS
442	198	40	100	55.4	43312	PASS
443	442	17	23	20.1	8689	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 9M51848.D
Instrument: GCMS 9 **Analysis Date:** 08/05/13 09:20
Method: EPA 8270C

Tune Scan/Time Range: Average of 10.108 to 10.119 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	39.2	23711	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	52.9	31989	PASS
70	69	0.00	2	0.6	180	PASS
127	198	40	60	53.8	32528	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	60487	PASS
199	198	5	9	6.9	4190	PASS
275	198	10	30	28.7	17341	PASS
365	198	1	100	3.2	1939	PASS
441	443	0.01	100	78.2	5991	PASS
442	198	40	100	63.2	38227	PASS
443	442	17	23	20.0	7664	PASS

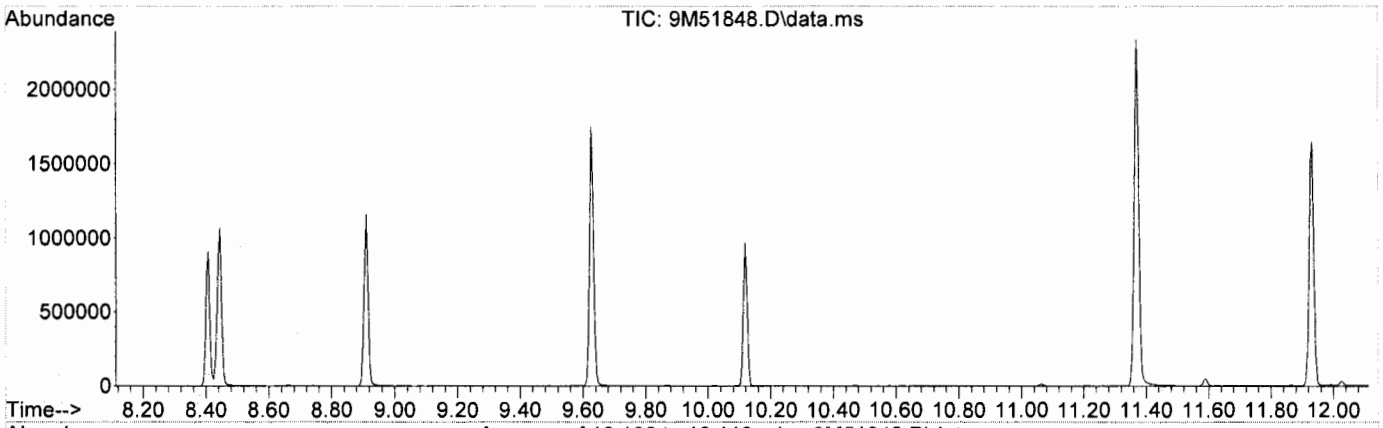
Data File	Sample Number	Analysis Date:
9M51849.D	CAL BNA@50PPM	08/05/13 09:48
9M51850.D	SMB25788	08/05/13 10:18
9M51851.D	WMB25804	08/05/13 15:30
9M51852.D	SMB25796	08/05/13 15:52
9M51853.D	SMB25796(MS)	08/05/13 16:15
9M51854.D	AC73729-001	08/05/13 16:38
9M51855.D	AC73729-001(MS)	08/05/13 17:00
9M51856.D	AC73729-001(MSD	08/05/13 17:23
9M51857.D	AC73729-004	08/05/13 17:46
9M51858.D	AC73729-046	08/05/13 18:09
9M51859.D	AC73729-037	08/05/13 18:31
9M51860.D	AC73729-040	08/05/13 18:54
9M51861.D	AC73729-010	08/05/13 19:16
9M51862.D	AC73729-013	08/05/13 19:39
9M51863.D	AC73615-020(3X)	08/05/13 20:02
9M51864.D	AC73729-022(3X)	08/05/13 20:24
9M51865.D	AC73729-049(3X)	08/05/13 20:47
9M51866.D	AC73729-052(3X)	08/05/13 21:09

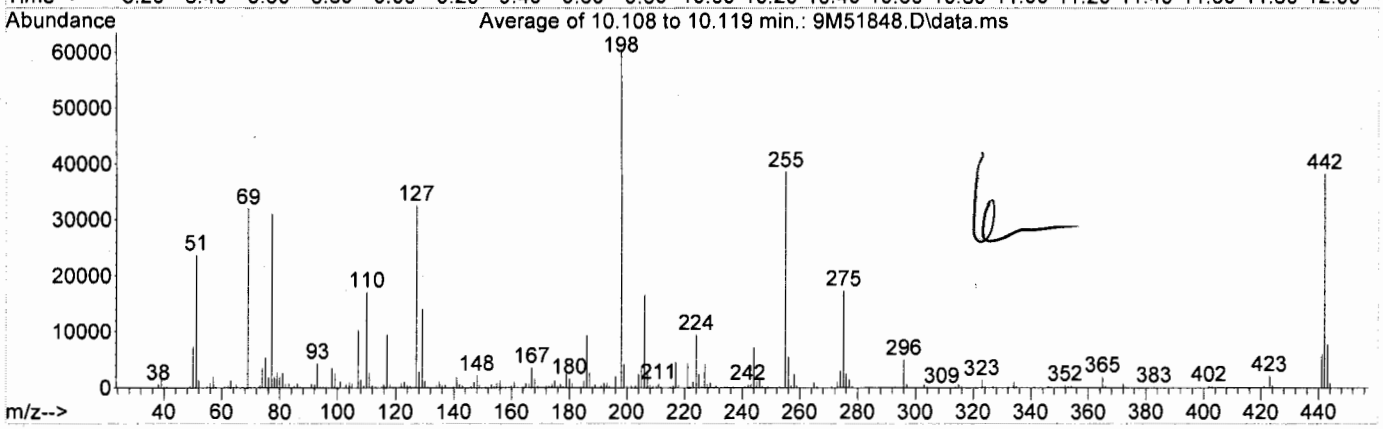
3080110 0106

Data Path : G:\GcMsData\2013\GCMS_9\Data\08-05-13\
Data File : 9M51848.D
Acq On : 5 Aug 2013 9:20
Operator : AHD/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2013\GCMS_9\METHODQT\9M_0731.M
Title : @GCMS_9,mg,625,8270
Last Update : Wed Jul 31 12:22:50 2013





Spectrum Information: Average of 10.108 to 10.119 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	39.2	23711	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	52.9	31989	PASS
70	69	0.00	2	0.6	180	PASS
127	198	40	60	53.8	32528	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	60487	PASS
199	198	5	9	6.9	4190	PASS
275	198	10	30	28.7	17341	PASS
365	198	1	100	3.2	1939	PASS
441	443	0.01	100	78.2	5991	PASS
442	198	40	100	63.2	38227	PASS
443	442	17	23	20.0	7664	PASS

Form 6
Initial Calibration

Method: EPA 8270C

Instrument: GCMS_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9M51761.	CAL BNA@50PPM	07/31/13 08:59	2	9M51768.	CAL BNA@2PPM	07/31/13 11:40
3	9M51767.	CAL BNA@10PPM	07/31/13 11:17	4	9M51766.	CAL BNA@20PPM	07/31/13 10:55
5	9M51765.	CAL BNA@80PPM	07/31/13 10:32	6	9M51764.	CAL BNA@120PPM	07/31/13 10:09
7	9M51763.	CAL BNA@160PPM	07/31/13 09:46	8	9M51762.	CAL BNA@196PPM	07/31/13 09:24
9	9M51769.	CAL BNA@.5PPM	07/31/13 12:03				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Pyridine	1	0	Avg	1.1921	0.9678	1.0933	1.1261	1.1951	1.2226	1.2275	1.2527	-----	1.16	3.20	1.00	1.00	8.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitrosodimethylamin	1	0	Avg	0.7234	0.5891	0.6566	0.6236	0.7246	0.7408	0.7438	0.7758	-----	0.697	3.14	0.999	1.00	9.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorophenol	1	0	Avg	1.2201	1.0598	1.0631	1.0950	1.2570	1.2960	1.3053	1.3738	-----	1.21	4.72	0.998	1.00	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzaldehyde	1	0	Qua	0.5511	0.8116	0.8411	0.8290	0.4336	0.2289	-----	-----	-----	0.616	5.55	0.794	0.994	41		50.00	2.00	10.00	20.00	80.00	120.0			
Aniline	1	0	Avg	1.7415	1.4906	1.7953	1.7366	1.7147	1.6774	1.5966	1.6909	1.3206	1.64	5.64	0.999	0.999	9.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.4651	0.4429	0.4450	0.4401	0.4696	0.4697	0.4705	0.4797	-----	0.460	5.69	1.00	1.00	3.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethyl)ether	1	0	Avg	1.1184	1.1416	1.1380	1.0976	1.1408	1.1319	1.1035	1.1448	1.0201	1.12	5.70	0.999	1.00	3.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	1.5921	1.4181	1.4842	1.4980	1.6449	1.6994	1.6802	1.8053	-----	1.60	5.59	0.997	0.999	8.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenol	1	0	Avg	1.6326	1.5867	1.4883	1.4689	1.6949	1.7306	1.6995	1.8084	-----	1.64	5.60	0.998	0.999	7.2	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Chlorophenol	1	0	Avg	1.4091	1.3012	1.3530	1.3504	1.4275	1.4371	1.4079	1.4921	-----	1.40	5.74	0.999	0.999	4.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Decane	1	0	Avg	0.9944	0.9961	1.0154	0.9601	1.0279	1.0402	1.0224	1.0526	-----	1.01	5.78	1.00	1.00	2.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,3-Dichlorobenzene	1	0	Avg	1.5295	1.5130	1.5109	1.4570	1.5309	1.5180	1.5368	1.5989	-----	1.52	5.87	0.999	1.00	2.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dichlorobenzene	1	0	Avg	1.5221	1.6524	1.5354	1.4544	1.4978	1.5386	1.5262	1.5968	-----	1.54	5.94	0.999	1.00	3.9	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Dichlorobenzene	1	0	Avg	1.4353	1.4923	1.4350	1.3746	1.4164	1.4334	1.4094	1.4756	-----	1.43	6.06	0.999	0.999	2.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzyl alcohol	1	0	Avg	0.8250	0.7055	0.8048	0.7958	0.8510	0.8579	0.8481	0.9103	-----	0.825	6.03	0.998	0.999	7.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-chloroisopropyl)et	1	0	Avg	0.9978	1.1211	1.0361	1.0134	1.0308	1.0090	0.9843	1.0285	-----	1.03	6.15	0.999	0.999	4.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylphenol	1	0	Avg	1.1111	1.0623	1.0973	1.0872	1.1502	1.1613	1.1528	1.2326	1.0219	1.12	6.11	0.998	0.999	5.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	1.7672	1.7925	1.7925	1.7471	1.8572	1.8570	1.8523	2.0180	-----	1.84	6.25	0.998	0.999	4.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachloroethane	1	0	Avg	0.5599	0.6013	0.5600	0.5446	0.5845	0.5848	0.5835	0.6074	-----	0.578	6.33	0.999	1.00	3.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitroso-di-n-propylan	1	0	Avg	0.9293	0.8146	0.9215	0.9123	0.9726	0.9734	0.9527	1.0269	0.8378	0.927	6.25	0.999	0.999	7.2	**(0.050)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3&4-Methylphenol	1	0	Avg	1.2326	1.1863	1.1875	1.1933	1.3056	1.3549	1.3684	1.5110	1.1196	1.27	6.24	0.994	0.999	9.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Avg	0.1709	0.1448	0.1565	0.1637	0.1724	0.1735	0.1744	0.1779	-----	0.167	6.37	1.00	1.00	6.7		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0	Avg	0.3583	0.3318	0.3592	0.3534	0.3592	0.3585	0.3586	0.3659	-----	0.356	6.39	1.00	1.00	2.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Isophorone	1	0	Avg	0.6129	0.5531	0.5882	0.5932	0.6288	0.6325	0.6394	0.6551	-----	0.613	6.57	1.00	1.00	5.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitrophenol	1	0	Avg	0.2130	0.1593	0.1832	0.1904	0.2116	0.2110	0.2132	0.2203	-----	0.200	6.63	0.999	1.00	10	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dimethylphenol	1	0	Avg	0.3632	0.3485	0.3483	0.3568	0.3654	0.3642	0.3657	0.3784	0.3453	0.360	6.65	1.00	1.00	3.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.2711	-----	0.1316	0.2047	0.3206	0.3288	0.3394	0.3515	-----	0.278	6.73	0.998	0.999	29		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethoxy)met	1	0	Avg	0.3529	0.3533	0.3565	0.3495	0.3645	0.3644	0.3671	0.3796	-----	0.361	6.73	0.999	1.00	2.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dichlorophenol	1	0	Avg	0.3173	0.2766	0.3016	0.3009	0.3182	0.3195	0.3221	0.3379	0.2777	0.308	6.81	0.999	1.00	6.7	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzene	1	0	Avg	0.3650	0.3490	0.3580	0.3477	0.3604	0.3603	0.3688	0.3783	-----	0.361	6.88	0.999	1.00	2.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Naphthalene	1	0	Avg	1.0430	1.1198	1.0778	1.0175	1.0399	1.0537	1.0583	1.1054	1.1110	1.07	6.95	0.999	1.00	3.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Qua	0.4080	0.3224	0.5574	0.4185	0.3886	0.3513	0.3355	0.3235	0.3152	0.380	6.98	0.994	0.999	20		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.2204	0.1949	0.2153	0.2098	0.2195	0.2202	0.2247	0.2337	-----	0.217	7.03	0.999	1.00	5.3	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Caprolactam	1	0	Qua	0.1118	0.0781	0.1031	0.1037	0.1149	0.1249	0.1294	0.1309	-----	0.112	7.26	0.997	1.00	16		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chloro-3-methylphen	1	0	Avg	0.3274	0.2781	0.2951	0.3078	0.3286	0.3261	0.3304	0.3507	-----	0.318	7.34	0.998	0.999	7.2	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylnaphthalene	1	0	Avg	0.7844	0.7649	0.7586	0.7449	0.7914	0.7911	0.8144	0.8415	-----	0.786	7.49	0.999	1.00	4.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Methylnaphthalenes (T	1	0	Avg	0.7844	0.7649	0.7593	0.7449	0.7916	0.7908	0.8164	0.8427	-----	0.787	7.49	0.999	1.00	4.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,1'-Biphenyl	1	0	Avg	1.0083	0.9910	0.9755	0.9759	1.0100	1.0172	1.0441	1.1034	-----	1.02	7.87	0.998	1.00	4.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2,4,5-Tetrachloroben	1	0	Avg	0.6387	0.6640	0.5971	0.5921	0.6159	0.6069	0.6185	0.6275	-----	0.620	7.62	1.00	1.00	3.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorocyclopentac	1	0	Qua	0.4152	0.2917	0.3308	0.3584	0.4120	0.4135	0.4186	0.4373	-----	0.385	7.61	0.999	0.999	13	**(0.050)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Avg	0.4344	0.3943	0.4080	0.4314	0.4830	0.4326	0.4552	0.4505	-----	0.436	7.71	0.998	0.998	6.3	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the spcc criteria — ** - ccc compound*
b - failed the ccc criteria — *** - spcc compound*
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.18
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

8080110 0107

Form 6
Initial Calibration

Method: EPA 8270C

Instrument: GCMS_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9M51761.	CAL BNA@50PPM	07/31/13 08:59	2	9M51768.	CAL BNA@2PPM	07/31/13 11:40
3	9M51767.	CAL BNA@10PPM	07/31/13 11:17	4	9M51766.	CAL BNA@20PPM	07/31/13 10:55
5	9M51765.	CAL BNA@80PPM	07/31/13 10:32	6	9M51764.	CAL BNA@120PPM	07/31/13 10:09
7	9M51763.	CAL BNA@160PPM	07/31/13 09:46	8	9M51762.	CAL BNA@196PPM	07/31/13 09:24
9	9M51769.	CAL BNA@.5PPM	07/31/13 12:03				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
2.4.5-Trichlorophenol	1	0	Avg	0.3856	0.3388	0.4100	0.4132	0.4283	0.3895	0.4298	0.4339	-----	0.404	7.74	0.997	0.998	7.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.3876	1.4196	1.4176	1.3422	1.3784	1.3293	1.3440	1.4009	-----	1.38	7.78	0.999	1.00	2.6		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Qua	1.1891	1.7021	1.6815	1.6476	1.1449	1.1158	1.1713	1.1670	-----	1.35	7.89	0.998	0.998	20		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1.4-Dimethylnaphthalei	1	0	Avg	0.9455	0.9843	0.9301	0.9073	0.9578	0.9546	0.9955	1.0498	-----	0.966	8.17	0.998	1.00	4.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.9455	0.9843	0.9301	0.9073	0.9578	0.9546	0.9955	1.0498	-----	0.966	8.17	0.998	1.00	4.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.8015	0.8361	0.7889	0.7869	0.7947	0.7792	0.7917	0.8188	-----	0.800	7.95	0.999	1.00	2.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.4188	0.3502	0.4160	0.4035	0.4161	0.3919	0.4038	0.4071	-----	0.401	7.97	0.999	0.999	5.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4628	0.4332	0.4385	0.4407	0.4585	0.4555	0.4756	0.4978	-----	0.458	8.16	0.998	1.00	4.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.8344	1.8234	1.7692	1.7280	1.8040	1.7659	1.8092	1.8384	-----	1.80	8.26	1.00	1.00	2.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.3891	1.3621	1.3700	1.3389	1.3690	1.3528	1.3870	1.4227	-----	1.37	8.11	0.999	1.00	1.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2.6-Dinitrotoluene	1	0	Avg	0.3221	0.2560	0.3075	0.2978	0.3328	0.3287	0.3449	0.3583	-----	0.319	8.17	0.998	1.00	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.2218	1.2220	1.1576	1.1331	1.2139	1.2025	1.2476	1.2740	-----	1.21	8.41	0.999	1.00	3.8	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Avg	0.3306	0.2667	0.3129	0.3273	0.3269	0.3062	0.3000	0.3066	-----	0.310	8.33	0.999	0.999	6.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2.4-Dinitrophenol	1	0	Qua	0.2149	-----	0.1118	0.1482	0.2233	0.2220	0.2417	0.2441	-----	0.201	8.42	0.998	0.999	25	**(0.050)	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Avg	1.7243	1.7689	1.6477	1.6309	1.6902	1.6393	1.6832	1.7210	1.8301	1.70	8.57	0.999	1.00	3.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2.4-Dinitrotoluene	1	0	Avg	0.4377	0.3092	0.3811	0.3856	0.4358	0.4312	0.4465	0.4536	-----	0.410	8.54	0.999	1.00	12		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Avg	0.2637	0.1841	0.2357	0.2458	0.2655	0.2608	0.2691	0.2714	-----	0.250	8.45	1.00	1.00	12	**(0.050)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2.3.4.6-Tetrachlorophe	1	0	Avg	0.4071	0.3440	0.3654	0.3718	0.3967	0.3965	0.4103	0.4195	-----	0.389	8.67	0.999	1.00	6.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.4846	1.4006	1.3846	1.3635	1.4408	1.4145	1.4530	1.4880	-----	1.43	8.89	0.999	1.00	3.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.7811	0.7165	0.6970	0.7018	0.7760	0.7706	0.8009	0.8398	-----	0.761	8.88	0.998	1.00	6.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.4212	1.2782	1.3208	1.3043	1.4041	1.3741	1.4156	1.4554	-----	1.37	8.76	0.999	1.00	4.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Avg	0.3413	0.2523	0.2977	0.3039	0.3326	0.3164	0.3278	0.3253	-----	0.312	8.90	0.999	0.999	9.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.3821	0.2960	0.3316	0.3585	0.3639	0.3588	0.3680	0.3849	-----	0.356	9.53	0.998	0.999	8.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4.6-Dinitro-2-methylphe	1	0	Qua	0.1420	0.0427	0.1012	0.1144	0.1420	0.1432	0.1495	0.1541	-----	0.124	8.92	0.998	0.999	30		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamine	1	0	Avg	0.6331	0.6109	0.6368	0.6167	0.6380	0.6403	0.6480	0.6711	-----	0.637	8.99	0.999	1.00	2.9	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2.4.6-Tribromophenol	1	0	Avg	0.1165	0.0874	0.1057	0.1115	0.1200	0.1227	0.1237	0.1287	-----	0.115	9.13	0.999	1.00	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1.2-Diphenylhydrazine	1	0	Avg	0.6606	0.6429	0.6713	0.6628	0.6712	0.6687	0.6645	0.6730	-----	0.664	9.04	1.00	1.00	1.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.2428	0.2313	0.2275	0.2281	0.2464	0.2528	0.2533	0.2663	-----	0.244	9.38	0.999	1.00	5.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.2647	0.2680	0.2582	0.2584	0.2638	0.2647	0.2642	0.2736	-----	0.264	9.44	1.00	1.00	1.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.3466	0.2695	0.3312	0.3370	0.3519	0.3596	0.3571	0.3714	-----	0.341	9.71	0.999	1.00	9.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Qua	0.1882	0.0911	0.1426	0.1652	0.1954	0.1986	0.2067	0.2122	-----	0.175	9.64	0.998	1.00	23	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0571	1.1111	1.0594	1.0074	1.0606	1.0578	1.0771	1.1062	-----	1.07	9.88	0.999	1.00	3.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.0833	0.9932	1.0393	1.0277	1.0623	1.0608	1.0944	1.1253	-----	1.06	9.94	0.999	1.00	3.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	1.0300	0.9736	0.9733	0.9652	1.0134	1.0171	1.0515	1.0731	-----	1.01	10.11	0.999	1.00	3.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Qua	1.2913	0.9197	1.1013	1.1516	1.2914	1.3072	1.3408	1.3733	0.8115	1.18	10.49	0.999	1.00	17		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0	Avg	1.3352	1.1318	1.1835	1.2063	1.3190	1.3209	1.3641	1.3540	-----	1.28	11.23	1.00	1.00	7.0	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	1.1246	0.9417	1.0559	1.0427	1.0779	1.1030	1.0770	1.1474	-----	1.07	11.49	0.998	0.999	5.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzidine	1	0	Qua	0.3969	0.2153	0.3988	0.4338	0.3442	0.3055	0.2905	0.3013	-----	0.336	11.38	0.984	0.995	21		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Terphenyl-d14	1	0	Avg	0.8010	0.6930	0.7484	0.7507	0.7639	0.7781	0.7716	0.8355	-----	0.768	11.67	0.998	0.999	5.4		25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	
4.4'-DDE	1	0	Avg	0.2626	0.2083	0.2377	0.2355	0.2499	0.2610	0.2586	0.2817	-----	0.249	11.61	0.996	0.998	8.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4.4'-DDD	1	0	LinF	0.4250	0.2795	0.3587	0.3777	0.4238	0.4377	0.4354	0.4677	-----	0.401	12.00	0.998	0.999	15		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the spcc criteria — ** - ccc compound*
b - failed the ccc criteria — *** - spcc compound*
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.18
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form 6
Initial Calibration

Method: EPA 8270C

Instrument: GCMS_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9M51761.	CAL BNA@50PPM	07/31/13 08:59	2	9M51768.	CAL BNA@2PPM	07/31/13 11:40
3	9M51767.	CAL BNA@10PPM	07/31/13 11:17	4	9M51766.	CAL BNA@20PPM	07/31/13 10:55
5	9M51765.	CAL BNA@80PPM	07/31/13 10:32	6	9M51764.	CAL BNA@120PPM	07/31/13 10:09
7	9M51763.	CAL BNA@160PPM	07/31/13 09:46	8	9M51762.	CAL BNA@196PPM	07/31/13 09:24
9	9M51769.	CAL BNA@.5PPM	07/31/13 12:03				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Butylbenzylphthalate	1	0	Qua	0.4684	0.2694	0.3724	0.4034	0.4603	0.4835	0.4833	0.5130	-----	0.432	12.26	0.998	0.999	19		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	LinF	0.3892	0.2362	0.3234	0.3371	0.3794	0.3954	0.3909	0.4278	-----	0.360	12.37	0.996	0.998	17		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Qua	0.3611	0.2209	0.3180	0.3455	0.3479	0.3542	0.3494	0.3446	-----	0.330	12.88	1.00	1.00	14		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]anthracene	1	0	Avg	1.0643	0.9776	0.9874	0.9827	1.0133	1.0321	1.0270	1.0589	-----	1.02	12.92	0.999	1.00	3.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	0.9480	0.9314	0.8927	0.8791	0.8896	0.9321	0.9331	0.9454	-----	0.919	12.96	1.00	1.00	3.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Qua	0.6295	0.3593	0.4974	0.5343	0.6121	0.6510	0.6489	0.6987	-----	0.579	12.95	0.997	0.999	19		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Qua	1.2259	0.5544	0.7982	0.9593	1.2360	1.3268	1.3915	1.5181	-----	1.13	13.70	0.993	0.999	29	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[b]fluoranthene	1	0	Avg	1.2423	0.9489	1.1040	1.0765	1.2176	1.2956	1.2612	1.3540	-----	1.19	14.13	0.998	0.999	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[k]fluoranthene	1	0	Avg	1.2478	1.2378	1.1611	1.1941	1.1572	1.1839	1.2568	1.2759	-----	1.21	14.16	0.998	0.999	3.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]pyrene	1	0	Avg	1.1842	0.8860	1.0315	1.0421	1.1289	1.1815	1.2028	1.2581	-----	1.11	14.51	0.998	1.00	11	*(30)	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyrene	1	0	Avg	1.2239	0.9071	1.0370	1.0734	1.1874	1.2721	1.2926	1.3575	-----	1.17	15.95	0.997	1.00	13		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzo[a,h]anthracene	1	0	Avg	0.9997	0.7697	0.8423	0.8777	0.9684	1.0313	1.0398	1.1019	-----	0.954	15.97	0.997	1.00	12		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[g,h,i]perylene	1	0	Avg	-----	0.8663	0.9057	0.9030	0.9714	1.0464	1.0401	1.0811	0.7629	0.947	16.30	0.999	1.00	11			2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50

Flags

a - failed the spcc criteria — ** - ccc compound*

b - failed the ccc criteria — *** - spcc compound*

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.18

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

3080110 0109

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M51824.D **Instrument:** GCMS 9

Cont Calibration Date/Time 8/2/2013 9:33:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
1,4-Dichlorobenzene-d4	1	0	I	5.92	40.00	40				0.000	0.00	
Pyridine	1	0		3.20	48.14	50			1.160	1.117	3.72	
N-Nitrosodimethylamine	1	0		3.14	47.20	50			0.697	0.658	5.60	
2-Fluorophenol	1	0	S	4.72	49.29	50			1.209	1.192	1.43	
Benzaldehyde	1	0		5.55	53.82	50			0.616	0.620	7.64	
Aniline	1	0		5.64	52.77	50			1.641	1.731	5.53	
Pentachloroethane	1	0		5.68	49.72	50			0.460	0.458	0.56	
bis(2-Chloroethyl)ether	1	0		5.70	48.66	50			1.115	1.085	2.67	
Phenol-d5	1	0	S	5.59	48.19	50			1.603	1.545	3.62	
Phenol	1	0	CC	5.61	49.92	50	20		1.639	1.636	0.16	
2-Chlorophenol	1	0		5.74	49.60	50			1.397	1.386	0.79	
N-Decane	1	0		5.78	47.98	50			1.014	0.973	4.03	
1,3-Dichlorobenzene	1	0		5.87	48.78	50			1.524	1.487	2.44	
1,4-Dichlorobenzene	1	0	CC	5.93	47.89	50	20		1.541	1.476	4.22	
1,2-Dichlorobenzene	1	0		6.05	48.35	50			1.434	1.387	3.30	
Benzyl alcohol	1	0		6.03	49.47	50			0.825	0.816	1.05	
bis(2-chloroisopropyl)ether	1	0		6.14	46.59	50			1.028	0.958	6.82	
2-Methylphenol	1	0		6.12	49.52	50			1.120	1.109	0.96	
Acetophenone	1	0		6.25	47.83	50			1.836	1.756	4.35	
Hexachloroethane	1	0		6.33	47.16	50			0.578	0.545	5.68	
N-Nitroso-di-n-propylamine	1	0	CP	6.24	50.15	50	0.05		0.927	0.930	0.30	
3&4-Methylphenol	1	0		6.24	48.89	50			1.273	1.245	2.21	
Naphthalene-d8	1	0	I	6.93	40.00	40				0.000	0.00	
Nitrobenzene-d5	1	0	S	6.37	26.51	25			0.167	0.177	6.03	
Nitrobenzene	1	0		6.39	49.32	50			0.356	0.351	1.36	
Isophorone	1	0		6.57	50.20	50			0.613	0.615	0.40	
2-Nitrophenol	1	0	CC	6.63	51.75	50	20		0.200	0.207	3.50	
2,4-Dimethylphenol	1	0		6.65	49.30	50			0.360	0.355	1.40	
Benzoic Acid	1	0		6.73	45.25	50			0.278	0.244	9.51	
bis(2-Chloroethoxy)methane	1	0		6.73	49.37	50			0.361	0.357	1.25	
2,4-Dichlorophenol	1	0	CC	6.81	50.39	50	20		0.308	0.310	0.78	
1,2,4-Trichlorobenzene	1	0		6.88	48.87	50			0.361	0.353	2.27	
Naphthalene	1	0		6.94	47.27	50			1.070	1.011	5.47	
4-Chloroaniline	1	0		6.98	52.77	50			0.380	0.417	5.55	
Hexachlorobutadiene	1	0	CC	7.03	49.14	50	20		0.217	0.214	1.72	
Caprolactam	1	0		7.26	51.19	50			0.112	0.115	2.38	
4-Chloro-3-methylphenol	1	0	CC	7.34	49.68	50	20		0.318	0.316	0.65	
2-Methylnaphthalene	1	0		7.48	48.83	50			0.786	0.768	2.33	
Methylnaphthalenes	1	0		7.48	48.81	50	20			0.768	2.39	
1,1'-Biphenyl	1	0		7.86	48.39	50			1.016	0.983	3.22	
Acenaphthene-d10	1	0	I	8.38	40.00	40				0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.62	48.03	50			0.620	0.596	3.93	
Hexachlorocyclopentadiene	1	0	CP	7.61	47.52	50	0.05		0.385	0.373	4.95	
2,4,6-Trichlorophenol	1	0	CC	7.70	49.20	50	20		0.436	0.429	1.59	
2,4,5-Trichlorophenol	1	0		7.74	52.16	50			0.404	0.421	4.33	
2-Fluorobiphenyl	1	0	S	7.77	24.68	25			1.378	1.360	1.29	
2-Chloronaphthalene	1	0		7.89	48.00	50			1.352	1.116	3.99	
1,4-Dimethylnaphthalene	1	0		8.17	47.38	50			0.966	0.915	5.23	
Dimethylnaphthalenes	1	0		8.17	47.38	50	20			0.915	5.23	
Diphenyl Ether	1	0		7.95	48.51	50			0.800	0.776	2.98	
2-Nitroaniline	1	0		7.96	49.29	50			0.401	0.395	1.42	
Coumarin	1	0		8.16	48.21				0.458			
Acenaphthylene	1	0		8.25	49.06	50			1.797	1.763	1.88	
Dimethylphthalate	1	0		8.11	49.23	50			1.374	1.353	1.55	
2,6-Dinitrotoluene	1	0		8.17	50.34	50			0.319	0.321	0.68	
Acenaphthene	1	0	CC	8.41	47.75	50	20		1.209	1.155	4.50	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M51824.D **Instrument:** GCMS 9

Cont Calibration Date/Time 8/2/2013 9:33:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
3-Nitroaniline	1	0		8.33	54.88	50			0.310	0.340	9.75	
2,4-Dinitrophenol	1	0	CP	8.42	53.20	50	0.05		0.201	0.212	6.41	
Dibenzofuran	1	0		8.56	48.63	50			1.704	1.657	2.74	
2,4-Dinitrotoluene	1	0		8.54	51.75	50			0.410	0.424	3.50	
4-Nitrophenol	1	0	CP	8.45	50.93	50	0.05		0.250	0.254	1.86	
2,3,4,6-Tetrachlorophenol	1	0		8.67	49.23	50			0.389	0.383	1.54	
Fluorene	1	0		8.89	48.75	50			1.429	1.393	2.50	
4-Chlorophenyl-phenylether	1	0		8.88	48.72	50			0.761	0.741	2.56	
Diethylphthalate	1	0		8.76	49.36	50			1.372	1.354	1.28	
4-Nitroaniline	1	0		8.90	53.15	50			0.312	0.332	6.29	
Atrazine	1	0		9.53	53.33	50			0.356	0.379	6.67	
Phenanthrene-d10	1	0	I	9.86	40.00	40				0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.93	52.89	50			0.124	0.140	5.77	
n-Nitrosodiphenylamine	1	0	CC	9.00	48.36	50	20		0.637	0.616	3.27	
2,4,6-Tribromophenol	1	0	S	9.13	52.16	50			0.115	0.120	4.33	
1,2-Diphenylhydrazine	1	0		9.04	47.65	50			0.664	0.633	4.69	
4-Bromophenyl-phenylether	1	0		9.38	48.71	50			0.244	0.237	2.57	
Hexachlorobenzene	1	0		9.44	49.10	50			0.265	0.260	1.81	
N-Octadecane	1	0		9.71	48.69	50			0.341	0.332	2.62	
Pentachlorophenol	1	0	CC	9.64	50.44	50	20		0.175	0.184	0.87	
Phenanthrene	1	0		9.89	47.55	50			1.067	1.015	4.89	
Anthracene	1	0		9.94	49.56	50			1.061	1.051	0.89	
Carbazole	1	0		10.11	49.08	50			1.012	0.994	1.85	
Di-n-butylphthalate	1	0		10.49	49.83	50			1.176	1.255	0.34	
Fluoranthene	1	0	CC	11.23	50.00	50	20		1.277	1.277	0.01	
Chrysene-d12	1	0	I	12.94	40.00	40				0.000	0.00	
Pyrene	1	0		11.50	50.70	50			1.071	1.086	1.41	
Benzidine	1	0		11.39	65.92	50			0.336	0.472	31.84	
Terphenyl-d14	1	0	S	11.68	25.29	25			0.768	0.777	1.15	
4,4'-DDE	1	0		11.61	51.24				0.249			
4,4'-DDD	1	0		12.01	47.71				0.401			
Butylbenzylphthalate	1	0		12.27	51.88	50			0.432	0.466	3.76	
4,4'-DDT	1	0		12.37	43.21				0.360			
3,3'-Dichlorobenzidine	1	0		12.89	54.96	50			0.330	0.384	9.93	
Benzo[a]anthracene	1	0		12.93	50.09	50			1.018	1.020	0.18	
Chrysene	1	0		12.97	48.99	50			0.919	0.900	2.02	
bis(2-Ethylhexyl)phthalate	1	0		12.96	51.73	50			0.579	0.617	3.46	
Perylene-d12	1	0	I	14.58	40.00	40				0.000	0.00	
Di-n-octylphthalate	1	0	CC	13.71	55.48	50	20		1.126	1.294	10.96	
Benzo[b]fluoranthene	1	0		14.14	48.44	50			1.188	1.150	3.12	
Benzo[k]fluoranthene	1	0		14.17	47.49	50			1.214	1.153	5.02	
Benzo[a]pyrene	1	0	CC	14.52	48.94	50	20		1.114	1.091	2.11	
Indeno[1,2,3-cd]pyrene	1	0		15.97	51.60	50			1.169	1.206	3.21	
Dibenzo[a,h]anthracene	1	0		16.00	52.89	50			0.954	1.009	5.77	
Benzo[g,h,i]perylene	1	0		16.37	53.14	50			0.947	1.007	6.27	
4-Methylphenol	1	100		0.00	0.00	50				0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50			0.966	0.000	100.00	
Endrin	1	100		0.00	0.00	50				0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10				0.000	100.00	
Heptachlor	1	100		0.00	0.00	10				0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10				0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10				0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50			0.787	0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50				0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50				0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M51824.D **Instrument:** GCMS 9

Cont Calibration Date/Time 8/2/2013 9:33:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M51849.D **Instrument:** GCMS 9

Cont Calibration Date/Time 8/5/2013 9:48:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
1,4-Dichlorobenzene-d4	1	0	I	5.91	40.00	40				0.000	0.00	
Pyridine	1	0		3.20	49.77	50			1.160	1.154	0.45	
N-Nitrosodimethylamine	1	0		3.13	49.80	50			0.697	0.694	0.39	
2-Fluorophenol	1	0	S	4.72	50.34	50			1.209	1.217	0.68	
Benzaldehyde	1	0		5.54	55.51	50			0.616	0.630	11.02	
Aniline	1	0		5.63	54.02	50			1.641	1.773	8.05	
Pentachloroethane	1	0		5.67	50.29	50			0.460	0.463	0.58	
bis(2-Chloroethyl)ether	1	0		5.69	50.39	50			1.115	1.124	0.78	
Phenol-d5	1	0	S	5.59	49.74	50			1.603	1.594	0.53	
Phenol	1	0	CC	5.60	50.91	50	20		1.639	1.669	1.83	
2-Chlorophenol	1	0		5.73	49.83	50			1.397	1.393	0.34	
N-Decane	1	0		5.77	48.76	50			1.014	0.988	2.49	
1,3-Dichlorobenzene	1	0		5.86	49.39	50			1.524	1.506	1.22	
1,4-Dichlorobenzene	1	0	CC	5.93	48.01	50	20		1.541	1.479	3.97	
1,2-Dichlorobenzene	1	0		6.05	49.58	50			1.434	1.422	0.83	
Benzyl alcohol	1	0		6.02	49.54	50			0.825	0.817	0.92	
bis(2-chloroisopropyl)ether	1	0		6.13	46.71	50			1.028	0.960	6.58	
2-Methylphenol	1	0		6.11	49.88	50			1.120	1.117	0.23	
Acetophenone	1	0		6.24	48.62	50			1.836	1.785	2.76	
Hexachloroethane	1	0		6.33	47.36	50			0.578	0.548	5.27	
N-Nitroso-di-n-propylamine	1	0	CP	6.24	50.35	50	0.05		0.927	0.933	0.71	
3&4-Methylphenol	1	0		6.24	49.80	50			1.273	1.268	0.40	
Naphthalene-d8	1	0	I	6.92	40.00	40				0.000	0.00	
Nitrobenzene-d5	1	0	S	6.36	26.25	25			0.167	0.175	4.99	
Nitrobenzene	1	0		6.38	48.59	50			0.356	0.346	2.82	
Isophorone	1	0		6.56	49.40	50			0.613	0.606	1.20	
2-Nitrophenol	1	0	CC	6.63	50.59	50	20		0.200	0.203	1.18	
2,4-Dimethylphenol	1	0		6.65	49.53	50			0.360	0.356	0.94	
Benzoic Acid	1	0		6.72	36.38	50			0.278	0.192	27.24	
bis(2-Chloroethoxy)methane	1	0		6.72	48.84	50			0.361	0.353	2.31	
2,4-Dichlorophenol	1	0	CC	6.81	51.29	50	20		0.308	0.316	2.57	
1,2,4-Trichlorobenzene	1	0		6.87	49.73	50			0.361	0.359	0.54	
Naphthalene	1	0		6.94	47.56	50			1.070	1.017	4.88	
4-Chloroaniline	1	0		6.97	53.01	50			0.380	0.419	6.03	
Hexachlorobutadiene	1	0	CC	7.02	48.43	50	20		0.217	0.211	3.14	
Caprolactam	1	0		7.25	51.17	50			0.112	0.114	2.34	
4-Chloro-3-methylphenol	1	0	CC	7.34	50.61	50	20		0.318	0.322	1.22	
2-Methylnaphthalene	1	0		7.48	48.61	50			0.786	0.765	2.77	
Methylnaphthalenes	1	0		7.48	48.58	50	20			0.765	2.83	
1,1'-Biphenyl	1	0		7.86	48.41	50			1.016	0.983	3.18	
Acenaphthene-d10	1	0	I	8.37	40.00	40				0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.61	47.76	50			0.620	0.592	4.47	
Hexachlorocyclopentadiene	1	0	CP	7.60	45.51	50	0.05		0.385	0.357	8.99	
2,4,6-Trichlorophenol	1	0	CC	7.70	48.36	50	20		0.436	0.422	3.29	
2,4,5-Trichlorophenol	1	0		7.73	52.62	50			0.404	0.425	5.25	
2-Fluorobiphenyl	1	0	S	7.77	23.93	25			1.378	1.318	4.29	
2-Chloronaphthalene	1	0		7.88	49.57	50			1.352	1.152	0.87	
1,4-Dimethylnaphthalene	1	0		8.17	46.46	50			0.966	0.897	7.08	
Dimethylnaphthalenes	1	0		8.17	46.46	50	20			0.897	7.08	
Diphenyl Ether	1	0		7.94	44.94	50			0.800	0.719	10.12	
2-Nitroaniline	1	0		7.96	48.10	50			0.401	0.386	3.80	
Coumarin	1	0		8.15	48.02				0.458			
Acenaphthylene	1	0		8.25	48.12	50			1.797	1.729	3.76	
Dimethylphthalate	1	0		8.10	48.51	50			1.374	1.333	2.97	
2,6-Dinitrotoluene	1	0		8.16	49.31	50			0.319	0.314	1.39	
Acenaphthene	1	0	CC	8.40	47.84	50	20		1.209	1.157	4.32	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M51849.D **Instrument:** GCMS 9

Cont Calibration Date/Time 8/5/2013 9:48:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
3-Nitroaniline	1	0		8.32	53.48	50			0.310	0.331	6.95	
2,4-Dinitrophenol	1	0	CP	8.41	53.70	50	0.05		0.201	0.214	7.40	
Dibenzofuran	1	0		8.56	48.03	50			1.704	1.637	3.94	
2,4-Dinitrotoluene	1	0		8.53	52.05	50			0.410	0.427	4.11	
4-Nitrophenol	1	0	CP	8.44	50.36	50	0.05		0.250	0.251	0.72	
2,3,4,6-Tetrachlorophenol	1	0		8.66	49.43	50			0.389	0.385	1.14	
Fluorene	1	0		8.88	48.30	50			1.429	1.380	3.40	
4-Chlorophenyl-phenylether	1	0		8.87	48.26	50			0.761	0.734	3.47	
Diethylphthalate	1	0		8.74	49.07	50			1.372	1.346	1.87	
4-Nitroaniline	1	0		8.89	51.45	50			0.312	0.321	2.90	
Atrazine	1	0		9.52	53.12	50			0.356	0.378	6.23	
Phenanthrene-d10	1	0	I	9.85	40.00	40				0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.92	52.32	50			0.124	0.139	4.65	
n-Nitrosodiphenylamine	1	0	CC	8.99	47.85	50	20		0.637	0.610	4.30	
2,4,6-Tribromophenol	1	0	S	9.12	51.82	50			0.115	0.119	3.64	
1,2-Diphenylhydrazine	1	0		9.03	45.77	50			0.664	0.608	8.46	
4-Bromophenyl-phenylether	1	0		9.36	48.65	50			0.244	0.237	2.69	
Hexachlorobenzene	1	0		9.43	48.79	50			0.265	0.258	2.42	
N-Octadecane	1	0		9.69	47.08	50			0.341	0.321	5.85	
Pentachlorophenol	1	0	CC	9.63	48.28	50	20		0.175	0.175	3.44	
Phenanthrene	1	0		9.87	47.93	50			1.067	1.023	4.13	
Anthracene	1	0		9.93	49.03	50			1.061	1.040	1.94	
Carbazole	1	0		10.10	48.68	50			1.012	0.985	2.64	
Di-n-butylphthalate	1	0		10.47	49.75	50			1.176	1.253	0.50	
Fluoranthene	1	0	CC	11.22	51.26	50	20		1.277	1.309	2.51	
Chrysene-d12	1	0	I	12.92	40.00	40				0.000	0.00	
Pyrene	1	0		11.48	48.34	50			1.071	1.036	3.32	
Benzidine	1	0		11.37	63.57	50			0.336	0.457	27.14	
Terphenyl-d14	1	0	S	11.66	24.44	25			0.768	0.751	2.24	
4,4'-DDE	1	0		11.59	47.89				0.249			
4,4'-DDD	1	0		11.99	45.89				0.401			
Butylbenzylphthalate	1	0		12.25	49.47	50			0.432	0.444	1.07	
4,4'-DDT	1	0		12.35	42.82				0.360			
3,3'-Dichlorobenzidine	1	0		12.87	55.96	50			0.330	0.391	11.93	
Benzo[a]anthracene	1	0		12.91	49.75	50			1.018	1.013	0.51	
Chrysene	1	0		12.95	48.24	50			0.919	0.887	3.52	
bis(2-Ethylhexyl)phthalate	1	0		12.94	49.45	50			0.579	0.588	1.09	
Perylene-d12	1	0	I	14.56	40.00	40				0.000	0.00	
Di-n-octylphthalate	1	0	CC	13.69	53.17	50	20		1.126	1.234	6.33	
Benzo[b]fluoranthene	1	0		14.12	48.72	50			1.188	1.157	2.57	
Benzo[k]fluoranthene	1	0		14.15	48.82	50			1.214	1.186	2.36	
Benzo[a]pyrene	1	0	CC	14.49	49.78	50	20		1.114	1.109	0.45	
Indeno[1,2,3-cd]pyrene	1	0		15.94	51.03	50			1.169	1.193	2.05	
Dibenzo[a,h]anthracene	1	0		15.96	51.51	50			0.954	0.983	3.02	
Benzo[g,h,i]perylene	1	0		16.33	52.34	50			0.947	0.992	4.69	
4-Methylphenol	1	100		0.00	0.00	50				0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50			0.966	0.000	100.00	
Endrin	1	100		0.00	0.00	50				0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10				0.000	100.00	
Heptachlor	1	100		0.00	0.00	10				0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10				0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10				0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50			0.787	0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50				0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50				0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M51849.D **Instrument:** GCMS 9

Cont Calibration Date/Time 8/5/2013 9:48:00 A Method: EPA 8270C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	RF	%Diff	Flag
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50				0.000	100.00	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

FORM8

Internal Standard Areas

Evaluation Std Data File: 9M51761.D Method: EPA 8270C

Analysis Date/Time: 07/31/13 08:59

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	85470	5.92	318657	6.93	190593	8.38	374669	9.86	434903	12.93	341498	14.56
Eval File Area Limit:	42735-170940		159328-637314		95296-381186		187334-749338		217452-869806		170749-682996	
Eval File Rt Limit:	5.42-6.42		6.43-7.43		7.88-8.88		9.36-10.36		12.43-13.43		14.06-15.06	

Data File	Sample												
9M51761.D	CAL BNA@50	85470	5.92	318657	6.93	190593	8.38	374669	9.86	434903	12.93	341498	14.56
9M51762.D	CAL BNA@19	70541	5.92	273615	6.93	171957	8.38	333093	9.86	376488	12.93	278487	14.57
9M51763.D	CAL BNA@16	74151	5.92	277120	6.93	168447	8.38	325922	9.86	394252	12.93	306340	14.57
9M51764.D	CAL BNA@12	78142	5.92	297927	6.93	180421	8.38	341428	9.86	393004	12.93	310785	14.56
9M51765.D	CAL BNA@80	84933	5.92	322808	6.93	192184	8.38	371353	9.86	442762	12.93	351777	14.57
9M51766.D	CAL BNA@20	91368	5.92	342213	6.93	205356	8.38	384191	9.86	451383	12.92	354785	14.56
9M51767.D	CAL BNA@10	86463	5.92	330727	6.93	198794	8.38	372839	9.86	436367	12.92	339394	14.56
9M51768.D	CAL BNA@2F	81952	5.92	314995	6.93	187991	8.38	362866	9.86	436223	12.92	345274	14.56
9M51769.D	CAL BNA@.5	85168	5.92	329856	6.93	196621	8.38	375291	9.86	453954	12.92	355892	14.56
9M51771.D	ICV BNA@50	90676	5.92	338864	6.93	200506	8.38	380075	9.86	478956	12.92	377067	14.56

I1 =	1,4-Dichlorobenzene-d4	I4 =	Phenanthrene-d10	**625/8270 Internal Standard concentration = 40 mg/L (in final extract)**
I2 =	Naphthalene-d8	I5 =	Chrysene-d12	**624/8260 Internal Standard concentration = 30ug/L**
I3 =	Acenaphthene-d10	I6 =	Perylene-d12	**524 Internal Standard concentration =5ug/L**

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 9M51824.D Method: EPA 8270C

Analysis Date/Time: 08/02/13 09:33

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	91020	5.92	340360	6.93	204956	8.38	398400	9.86	457215	12.94	356771	14.58
Eval File Area Limit:	45510-182040		170180-680720		102478-409912		199200-796800		228608-914430		178386-713542	
Eval File Rt Limit:	5.42-6.42		6.43-7.43		7.88-8.88		9.36-10.36		12.44-13.44		14.08-15.08	

Data File	Sample												
9M51825.D	AC73706-022	107116	5.92	405937	6.93	234998	8.37	406900	9.86	367797	12.93	269530	14.57
9M51826.D	AC73706-025	119219	5.92	448264	6.93	256235	8.37	439494	9.86	399168	12.93	309256	14.57
9M51827.D	AC73722-005	101630	5.92	380244	6.93	220258	8.37	368916	9.86	336823	12.93	260093	14.57
9M51828.D	AC73722-004	101681	5.91	374793	6.93	210597	8.37	356333	9.86	306282	12.93	241342	14.58
9M51829.D	AC73722-001	103099	5.92	382497	6.93	210723	8.38	341063	9.86	307796	12.93	262054	14.59
9M51830.D	SMB25788(M	120372	5.92	434319	6.94	261398	8.40	435868	9.88	347213	12.94	266472	14.59
9M51831.D	SMB25788	0 A	0.00 R	0 A	0.00 R	0 A	0.00 R	0 A	0.00 R	0 A	0.00 R	0 A	0.00 R
9M51832.D	AC73758-002	117393	5.92	436989	6.94	254598	8.39	442452	9.87	383213	12.94	285275	14.60
9M51833.D	SMB25788	107531	5.92	394427	6.93	229334	8.38	401300	9.86	375775	12.93	279842	14.58
9M51834.D	AC73758-002(	108973	5.91	391563	6.93	240034	8.37	409079	9.86	382261	12.93	291074	14.57
9M51835.D	AC73758-002(	100279	5.91	360177	6.93	215398	8.37	361740	9.86	332865	12.93	252930	14.57
9M51836.D	AC73758-001	113232	5.92	419081	6.93	240301	8.37	408134	9.86	348612	12.93	262438	14.58
9M51837.D	AC73758-003	102893	5.92	381485	6.93	221518	8.37	380358	9.86	353798	12.93	269974	14.58
9M51838.D	AC73758-004	109311	5.92	404742	6.92	237510	8.37	412339	9.86	379804	12.93	289593	14.58
9M51839.D	AC73758-005	119937	5.92	443881	6.93	259146	8.37	443117	9.86	402403	12.93	310125	14.58
9M51840.D	AC73626-008	99726	5.92	371850	6.93	220701	8.37	383168	9.86	352385	12.93	275756	14.58
9M51841.D	AC73626-016	108726	5.91	397172	6.92	228734	8.37	397745	9.86	357708	12.93	278494	14.59
9M51842.D	AC73626-017	95704	5.92	358133	6.92	204718	8.37	347402	9.86	296392	12.93	231544	14.59
9M51843.D	AC73771-001	100428	5.92	370834	6.93	212048	8.37	358538	9.86	311006	12.93	244721	14.59
9M51844.D	AC73771-002	105406	5.91	388729	6.93	222216	8.37	366878	9.86	312835	12.94	249822	14.59
9M51845.D	AC73615-010	94346	5.91	324780	6.93	240815	8.39	376635	9.88	334713	12.94	292156	14.59
9M51846.D	AC73742-001	97623	5.92	367153	6.93	212738	8.37	368604	9.86	329731	12.94	264422	14.59
9M51847.D	AC73615-020(	105295	5.92	392461	6.93	232207	8.37	404454	9.86	388433	12.94	295765	14.59

I1 =	1,4-Dichlorobenzene-d4	I4 =	Phenanthrene-d10	**625/8270 Internal Standard concentration = 40 mg/L (in final extract)**
I2 =	Naphthalene-d8	I5 =	Chrysene-d12	**624/8260 Internal Standard concentration = 30ug/L**
I3 =	Acenaphthene-d10	I6 =	Perylene-d12	**524 Internal Standard concentration =5ug/L**

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 9M51849.D Method: EPA 8270C

Analysis Date/Time: 08/05/13 09:48

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	80832	5.91	307197	6.92	187581	8.37	365134	9.85	447779	12.92	370879	14.56
Eval File Area Limit:	40416-161664		153598-614394		93790-375162		182567-730268		223890-895558		185440-741758	
Eval File Rt Limit:	5.41-6.41		6.42-7.42		7.87-8.87		9.35-10.35		12.42-13.42		14.06-15.06	

Data File	Sample												
9M51850.D	SMB25788	101289	5.92	392490	6.92	234411	8.36	434532	9.85	486333	12.92	379918	14.55
9M51851.D	WMB25804	96129	5.92	367754	6.93	225539	8.37	423633	9.85	515948	12.92	413705	14.56
9M51852.D	SMB25796	90485	5.91	348437	6.92	206151	8.36	393086	9.85	452483	12.91	351747	14.55
9M51853.D	SMB25796(M	90599	5.92	332611	6.92	208397	8.36	376420	9.85	432400	12.91	343284	14.55
9M51854.D	AC73729-001	107386	5.92	412848	6.92	246289	8.36	450223	9.85	454954	12.91	335917	14.55
9M51855.D	AC73729-001(	106792	5.92	395965	6.92	247178	8.36	432950	9.85	452038	12.91	346877	14.55
9M51856.D	AC73729-001(	107445	5.92	399385	6.92	247541	8.36	438694	9.85	445637	12.91	328975	14.55
9M51857.D	AC73729-004	105699	5.92	386369	6.92	215755	8.36	337635	9.85	338561	12.92	286893	14.56
9M51858.D	AC73729-046	95342	5.91	356185	6.92	204114	8.36	342721	9.85	310050	12.92	264454	14.56
9M51859.D	AC73729-037	111564	5.91	419616	6.92	245283	8.36	420902	9.85	368803	12.92	286663	14.56
9M51860.D	AC73729-040	103609	5.92	382435	6.92	190334	8.36	330054	9.85	317257	12.92	255184	14.56
9M51861.D	AC73729-010	97831	5.92	354876	6.92	188298	8.36	314714	9.85	375820	12.93	377967	14.59
9M51862.D	AC73729-013	108934	5.92	396380	6.92	209098	8.37	334439	9.85	366447	12.92	335632	14.57
9M51863.D	AC73615-020(	99868	5.91	380684	6.92	223706	8.37	375584	9.85	356755	12.92	310269	14.56
9M51864.D	AC73729-022(	94147	5.92	356200	6.92	210420	8.37	351955	9.85	357165	12.92	287144	14.56
9M51865.D	AC73729-049(	100696	5.92	374610	6.92	217809	8.37	365559	9.85	348973	12.92	295698	14.56
9M51866.D	AC73729-052(	98023	5.91	372745	6.92	218281	8.37	366296	9.85	353686	12.92	295854	14.56

I1 =	1,4-Dichlorobenzene-d4	I4 =	Phenanthrene-d10	**625/8270 Internal Standard concentration = 40 mg/L (in final extract)**
I2 =	Naphthalene-d8	I5 =	Chrysene-d12	**624/8260 Internal Standard concentration = 30ug/L**
I3 =	Acenaphthene-d10	I6 =	Perylene-d12	**524 Internal Standard concentration =5ug/L**

QC Limits:

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

PCB Data

Form1

ORGANICS PCB REPORT

Sample Number: AC73771-001
Client Id: BB-COMP-1-0801113
Data File: 3G77923.D
Analysis Date: 08/02/13 13:11
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 91

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.027	U	11097-69-1	Aroclor-1254	0.027	U
11104-28-2	Aroclor-1221	0.027	U	11096-82-5	Aroclor-1260	0.027	U
11141-16-5	Aroclor-1232	0.027	U	37324-23-5	Aroclor-1262	0.027	U
53469-21-9	Aroclor-1242	0.027	U	11100-14-4	Aroclor-1268	0.027	U
12672-29-6	Aroclor-1248	0.027	U	1336-36-3	Aroclor (Total)	0.027	U

Worksheet #: 272488

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3080110 0121

Data Path : G:\Gcdata\2013\GC_3\Data\08-02-13\
Data File : 3G77923.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 2 Aug 2013 13:11
Operator : MS
Sample : AC73771-001
Misc : S,PCB
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 02 13:31:18 2013
Quant Method : G:\GCDATA\2013\GC_3\METHODQT\3G_C0715.M
Quant Title : @GC_3,ug,608,8082
QLast Update : Mon Jul 15 16:15:58 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	4.010	3.975	2445064	2997786	132.835	105.454
45)DCB-Surrogate	10.068	10.720	2188840	3285648	123.643	106.800

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

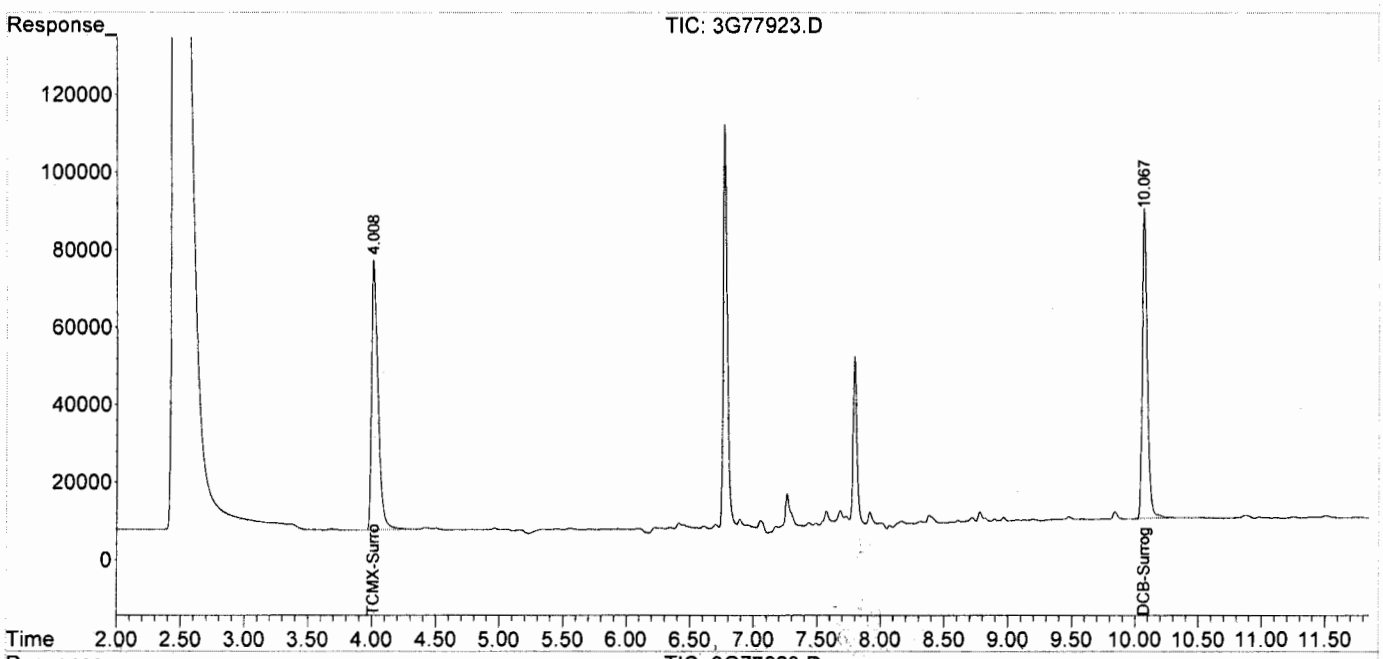
Quantitation Report (QT Reviewed)

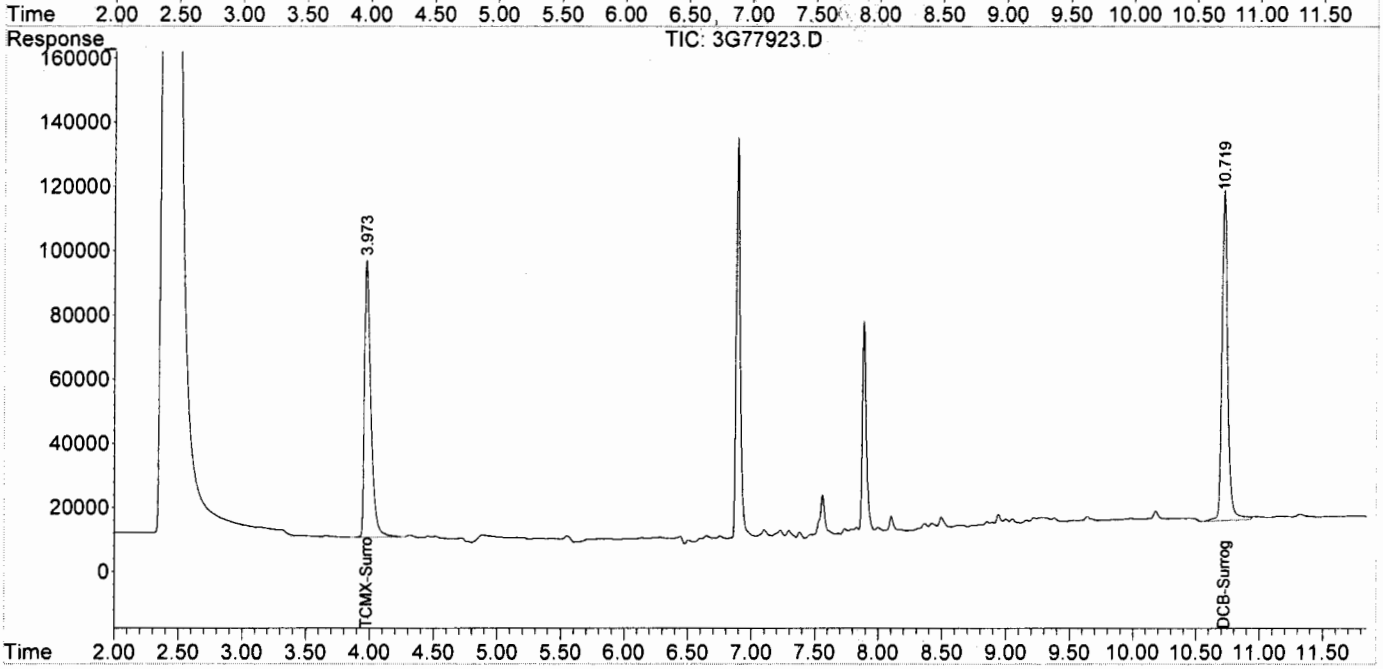
3080110 0122

Data Path : G:\Gcdata\2013\GC_3\Data\08-02-13\
Data File : 3G77923.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 2 Aug 2013 13:11
Operator : MS
Sample : AC73771-001
Misc : S,PCB
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 02 13:31:18 2013
Quant Method : G:\GCDATA\2013\GC_3\METHODQT\3G_C0715.M
Quant Title : @GC_3,ug,608,8082
QLast Update : Mon Jul 15 16:15:58 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Form1

ORGANICS PCB REPORT

Sample Number: AC73771-002
Client Id: BB-COMP-2-0801113
Data File: 3G77924.D
Analysis Date: 08/02/13 13:26
Date Rec/Extracted: 08/01/13-08/02/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 89

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.028	U	11097-69-1	Aroclor-1254	0.028	U
11104-28-2	Aroclor-1221	0.028	U	11096-82-5	Aroclor-1260	0.028	U
11141-16-5	Aroclor-1232	0.028	U	37324-23-5	Aroclor-1262	0.028	U
53469-21-9	Aroclor-1242	0.028	U	11100-14-4	Aroclor-1268	0.028	U
12672-29-6	Aroclor-1248	0.028	U	1336-36-3	Aroclor (Total)	0.028	U

Worksheet #: 272488

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3080110 0124

Data Path : G:\Gcdata\2013\GC_3\Data\08-02-13\
Data File : 3G77924.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 2 Aug 2013 13:26
Operator : MS
Sample : AC73771-002
Misc : S,PCB
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 02 14:23:31 2013
Quant Method : G:\GCDATA\2013\GC_3\METHODQT\3G_C0715.M
Quant Title : @GC_3,ug,608,8082
QLast Update : Mon Jul 15 16:15:58 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	4.010	3.974	2175367	2667491	118.183	93.835
45)DCB-Surrogate	10.070	10.718	2042828	2884040	115.395	93.746m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

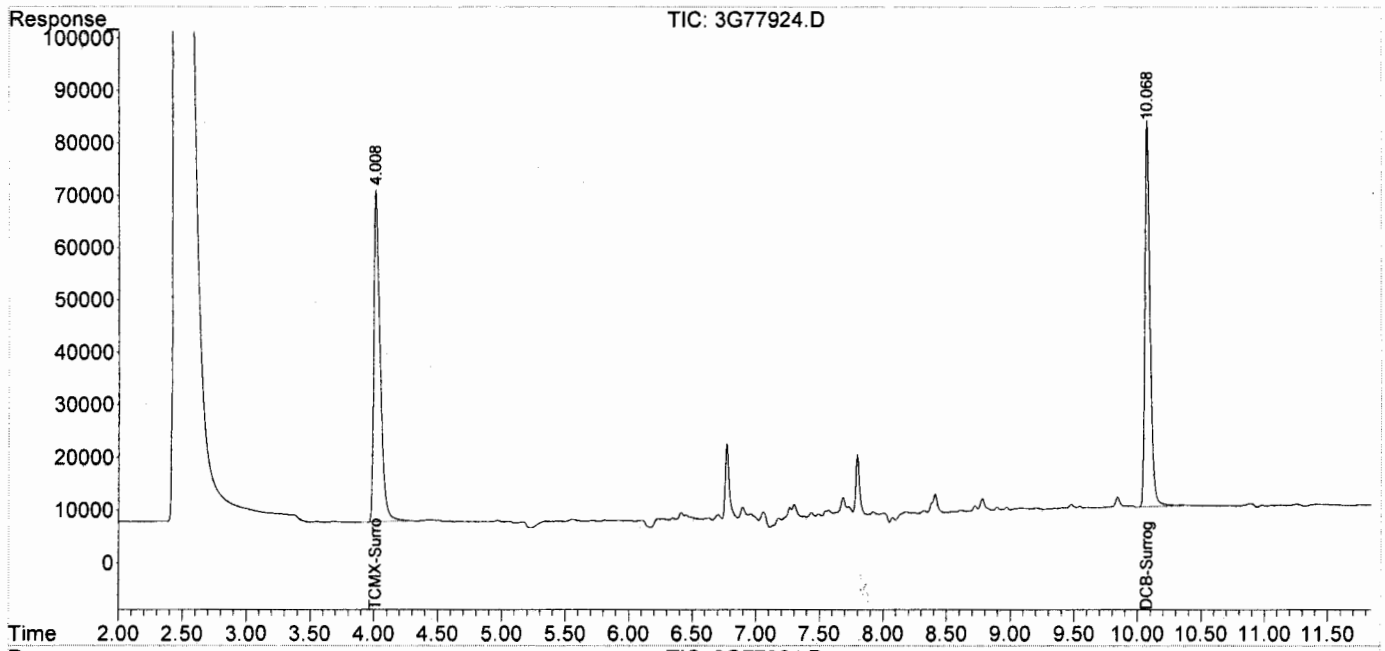
Quantitation Report (QT Reviewed)

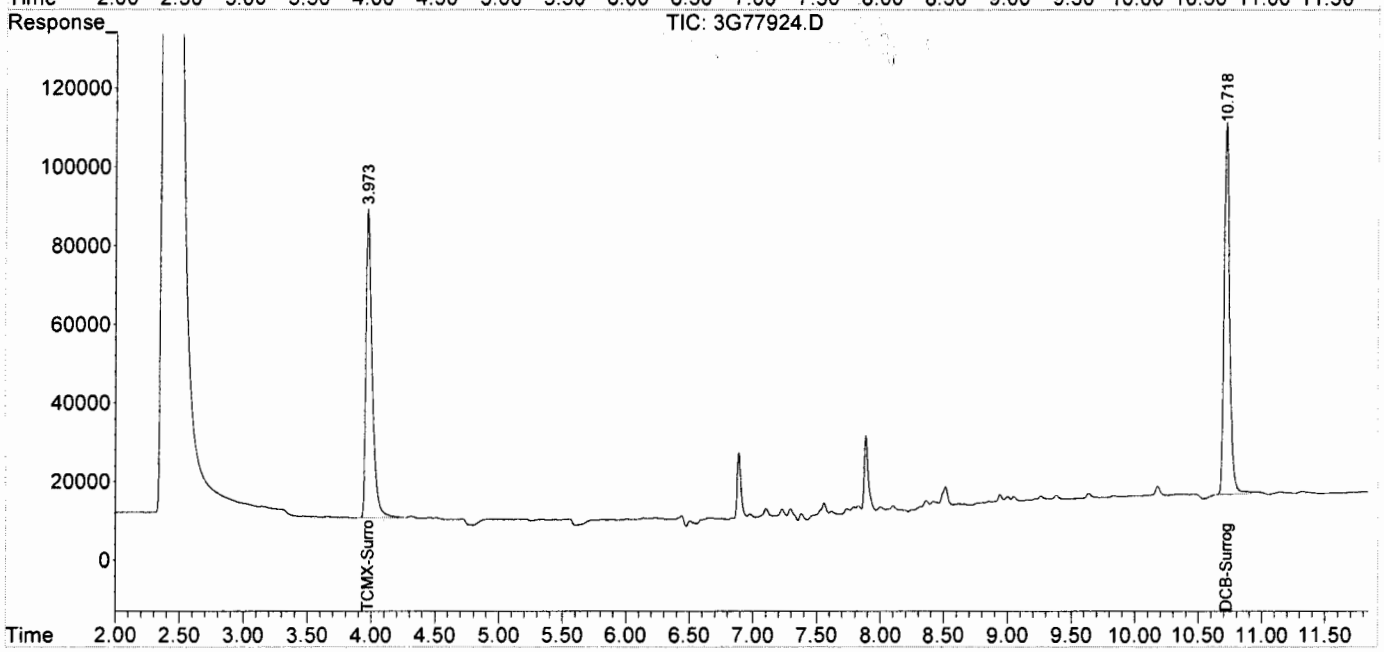
3080110 0125

Data Path : G:\Gcdata\2013\GC_3\Data\08-02-13\
Data File : 3G77924.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 2 Aug 2013 13:26
Operator : MS
Sample : AC73771-002
Misc : S,PCB
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 02 14:23:31 2013
Quant Method : G:\GCDATA\2013\GC_3\METHODQT\3G_C0715.M
Quant Title : @GC_3,ug,608,8082
QLast Update : Mon Jul 15 16:15:58 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Form1

ORGANICS PCB REPORT

Sample Number: SMB25779
Client Id:
Data File: 2G83010.D
Analysis Date: 08/02/13 11:56
Date Rec/Extracted: NA-08/02/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.025	U	11097-69-1	Aroclor-1254	0.025	U
11104-28-2	Aroclor-1221	0.025	U	11096-82-5	Aroclor-1260	0.025	U
11141-16-5	Aroclor-1232	0.025	U	37324-23-5	Aroclor-1262	0.025	U
53469-21-9	Aroclor-1242	0.025	U	11100-14-4	Aroclor-1268	0.025	U
12672-29-6	Aroclor-1248	0.025	U				

Worksheet #: 272488 ***Total Target Concentration*** 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3080110 0127

Data Path : G:\Gcdata\2013\GC_2\Data\08-02-13\
Data File : 2G83010.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 2 Aug 2013 11:56
Operator : MS
Sample : SMB25779
Misc : S,PCB
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 02 12:09:05 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_C07016.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Tue Jul 16 16:02:46 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	3.917	3.993	397906	372263	77.055	77.626
45)DCB-Surrogate	10.238	11.056	237200	210792	50.664m	50.217

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

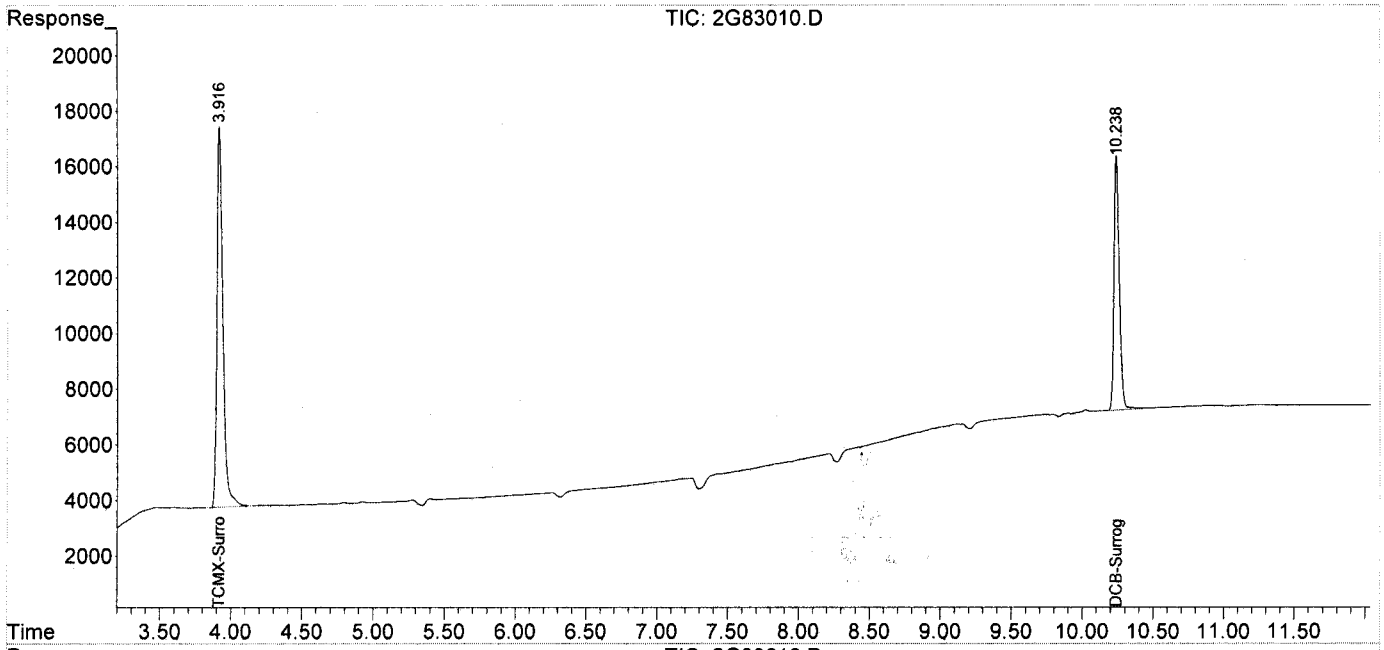
Quantitation Report (QT Reviewed)

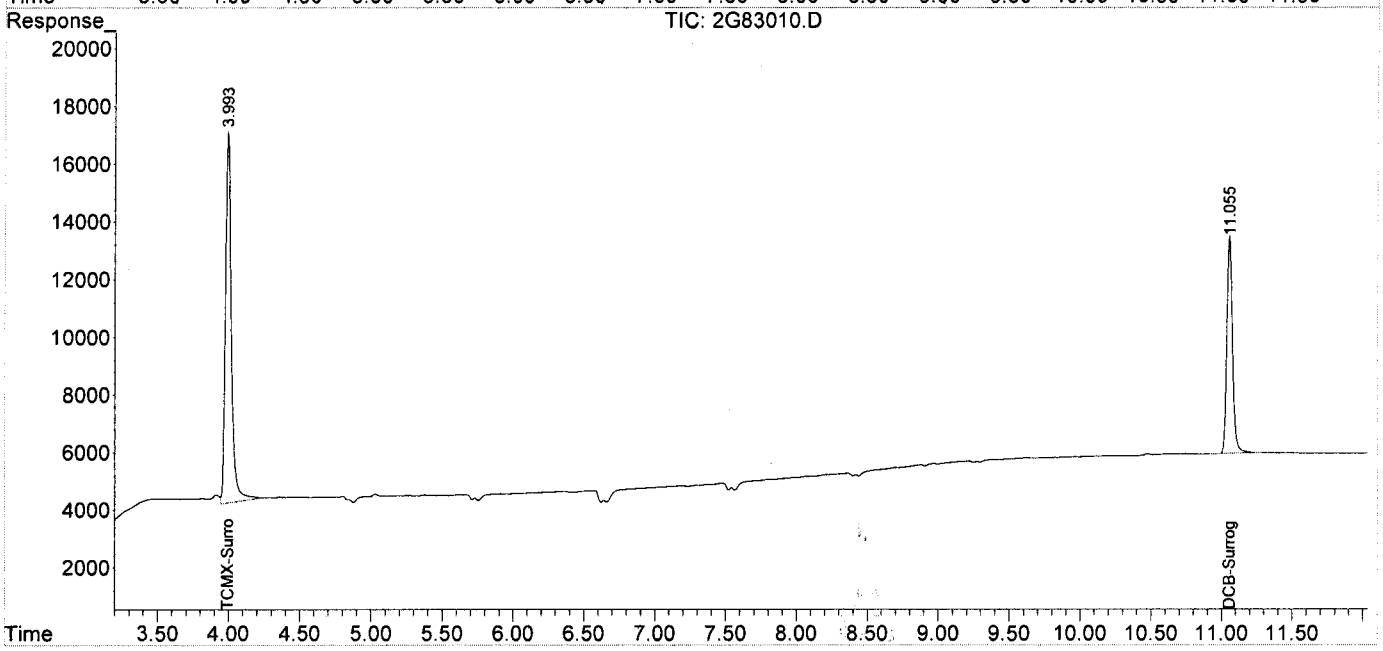
3080110 0128

Data Path : G:\Gcdata\2013\GC_2\Data\08-02-13\
Data File : 2G83010.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 2 Aug 2013 11:56
Operator : MS
Sample : SMB25779
Misc : S,PCB
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 02 12:09:05 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_C07016.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Tue Jul 16 16:02:46 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





FORM2

Surrogate Recovery

Method: EPA 8082

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column2 S2 Recov	Column1 S3 Recov	Column2 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
2G83010.D	SMB25779	Soil	08/02/13 11:56	1		77	78	51	50		
3G77923.D	AC73771-001	Soil	08/02/13 13:11	1		133	105	124	107		
3G77924.D	AC73771-002	Soil	08/02/13 13:26	1		118	94	115	94		
2G83011.D	SMB25779(M	Soil	08/02/13 12:11	1		83	81	58	59		
2G83037.D	AC73723-001(	Soil	08/02/13 19:30	1		88	84	92	88		
2G83038.D	AC73723-001(	Soil	08/02/13 19:46	1		78	72	83	82		
2G83039.D	AC73723-001	Soil	08/02/13 20:01	1		83	79	89	85		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8082

Soil Limits

Compound	Spike Amt	Limits
S1=TCMX-Surrogate	100	37-141
S2=TCMX-Surrogate	100	37-141
S3=DCB-Surrogate	100	34-146
S4=DCB-Surrogate	100	34-146

Form3
Recovery Data
QC Batch: SMB25779

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G83011.D	SMB25779(MS)	8/2/2013 12:11:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	790.5	0	1000	79	30	163
Aroclor-1260 -Total	1	793.556	0	1000	79	25	166

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB25779

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G83037.D	AC73723-001(MS)	8/2/2013 7:30:00 PM
Non Spike(If applicable):	2G83039.D	AC73723-001	8/2/2013 8:01:00 PM
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	833.814	0	1000	83	30	163
Aroclor-1260 -Total	1	829.612	0	1000	83	25	166

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G83038.D	AC73723-001(MSD)	8/2/2013 7:46:00 PM
Non Spike(If applicable):	2G83039.D	AC73723-001	8/2/2013 8:01:00 PM
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	750.678	0	1000	75	30	163
Aroclor-1260 -Total	1	746.348	0	1000	75	25	166

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA

QC Batch: SMB25779

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G83038.D	AC73723-001(MSD)	8/2/2013 7:46:00 PM
Duplicate(If applicable):	2G83037.D	AC73723-001(MS)	8/2/2013 7:30:00 PM
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Aroclor-1016 -Total	1	750.678	833.814	10	40
Aroclor-1260 -Total	1	746.348	829.612	11	37

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: SMB25779
Blank Data File: 2G83010.D
Matrix: Soil

Blank Analysis Date: 08/02/13 11:56
Blank Extraction Date: 08/02/13
(If Applicable)
Method: EPA 8082

Sample Number	Data File	Analysis Date
AC73771-001	3G77923.D	08/02/13 13:11
AC73771-002	3G77924.D	08/02/13 13:26
AC73723-001	2G83039.D	08/02/13 20:01
AC73723-001(MSD	2G83038.D	08/02/13 19:46
AC73723-001(MS)	2G83037.D	08/02/13 19:30
SMB25779(MS)	2G83011.D	08/02/13 12:11

Form1

ORGANICS PCB REPORT

Sample Number: AC74177-002
Client Id: 006 SS-1 Composite
Data File: 5G47585.D
Analysis Date: 08/27/13 16:42
Date Rec/Extracted: 08/23/13-08/26/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.027	U	11097-69-1	Aroclor-1254	0.027	U
11104-28-2	Aroclor-1221	0.027	U	11096-82-5	Aroclor-1260	0.027	U
11141-16-5	Aroclor-1232	0.027	U	37324-23-5	Aroclor-1262	0.027	U
53469-21-9	Aroclor-1242	0.027	U	11100-14-4	Aroclor-1268	0.027	U
12672-29-6	Aroclor-1248	0.027	U	1336-36-3	Aroclor (Total)	0.027	U

Worksheet #: 274865

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0238

Data Path : G:\Gcdata\2013\GC_5\Data\08-27-13\
Data File : 5G47585.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27-Aug-13, 16:42:43
Operator : MS/BS
Sample : AC74177-002
Misc : S,PCB
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 28 10:08:05 2013
Quant Method : G:\GCDATA\2013\GC_5\METHODQT\5G_PCB0813.M
Quant Title : @GC_5,ug,608,8082
QLast Update : Tue Aug 13 13:06:49 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	6.267	6.202	8026.5E6	5768.3E6	107.693	113.857
45)DCB-Surrogate	13.289	13.670	6325.6E6	4288.6E6	124.099	131.467

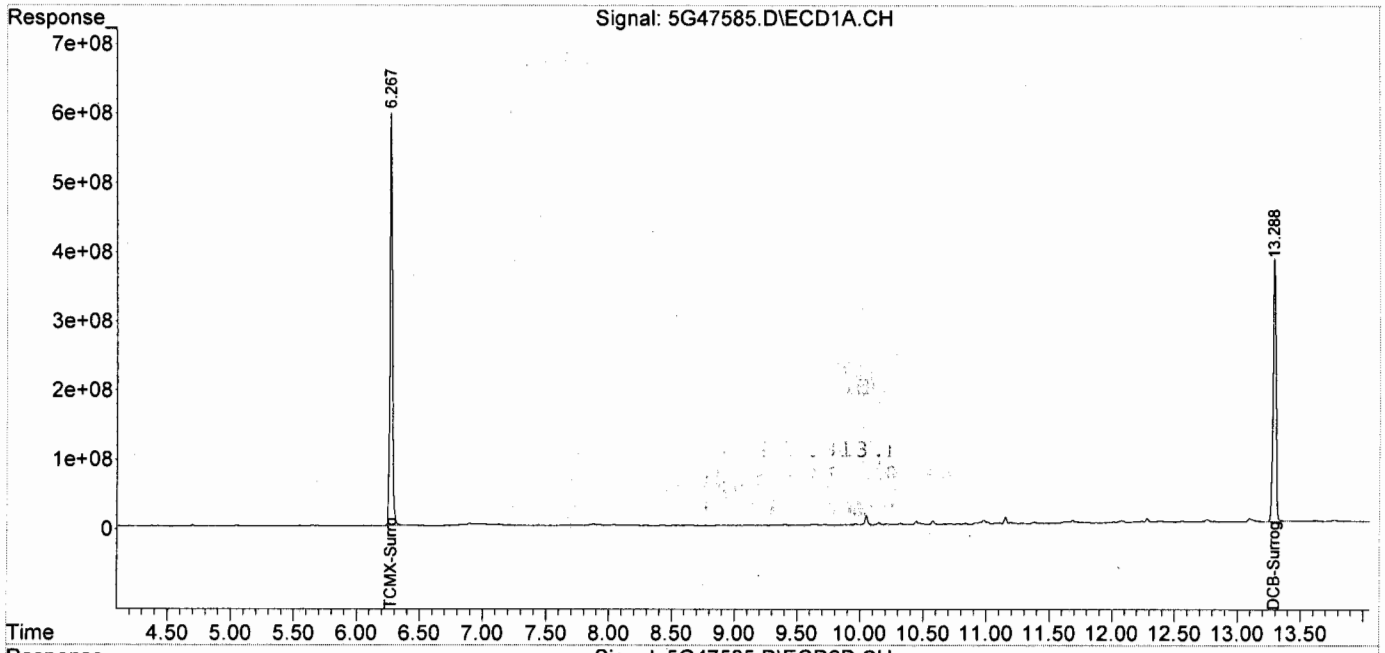
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

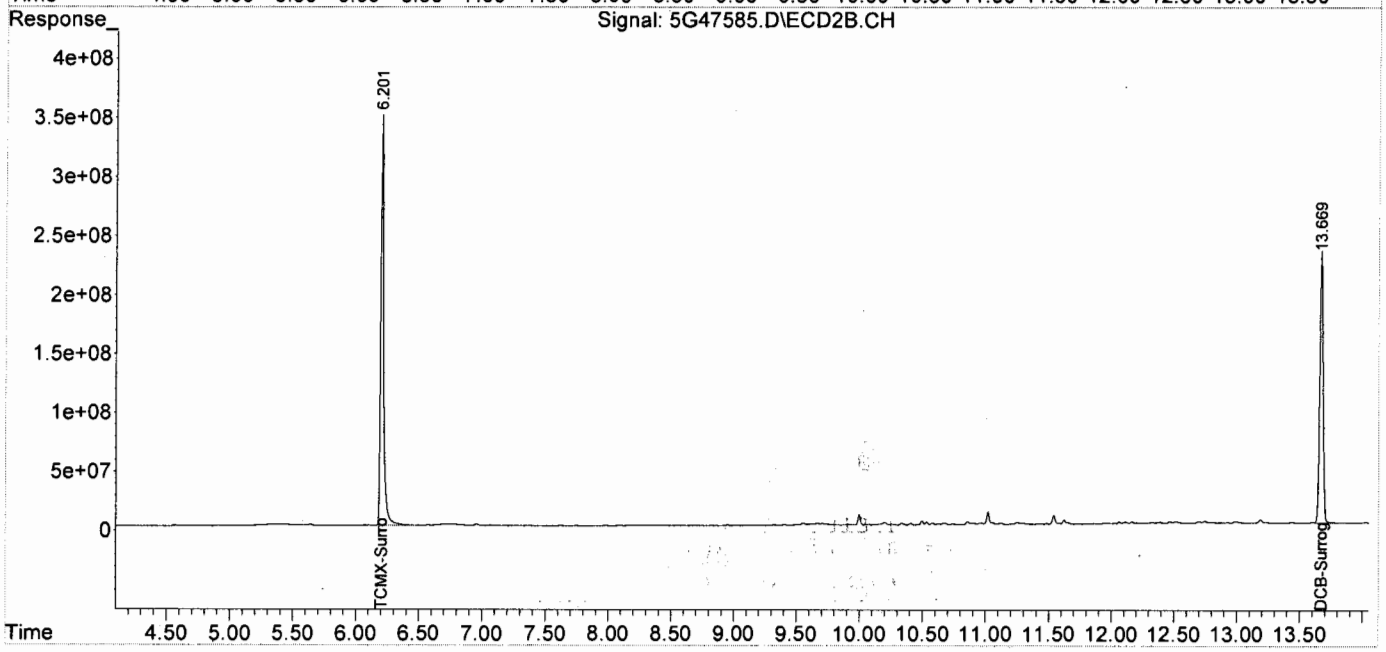
Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_5\Data\08-27-13\
Data File : 5G47585.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27-Aug-13, 16:42:43
Operator : MS/BS
Sample : AC74177-002
Misc : S,PCB
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 28 10:08:05 2013
Quant Method : G:\GCDATA\2013\GC_5\METHODQT\5G_PCB0813.M
Quant Title : @GC_5,ug,608,8082
QLast Update : Tue Aug 13 13:06:49 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Form1

ORGANICS PCB REPORT

Sample Number: AC74177-004
Client Id: 012 SS-2 Composite
Data File: 5G47595.D
Analysis Date: 08/27/13 19:40
Date Rec/Extracted: 08/23/13-08/26/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.027	U	11097-69-1	Aroclor-1254	0.027	U
11104-28-2	Aroclor-1221	0.027	U	11096-82-5	Aroclor-1260	0.027	U
11141-16-5	Aroclor-1232	0.027	U	37324-23-5	Aroclor-1262	0.027	U
53469-21-9	Aroclor-1242	0.027	U	11100-14-4	Aroclor-1268	0.027	U
12672-29-6	Aroclor-1248	0.027	U	1336-36-3	Aroclor (Total)	0.027	U

Worksheet #: 274865

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_5\Data\08-27-13\
Data File : 5G47595.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27-Aug-13, 19:40:56
Operator : MS/BS
Sample : AC74177-004
Misc : S,PCB
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 28 10:18:13 2013
Quant Method : G:\GCDATA\2013\GC_5\METHODQT\5G_PCB0813.M
Quant Title : @GC_5,ug,608,8082
QLast Update : Tue Aug 13 13:06:49 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

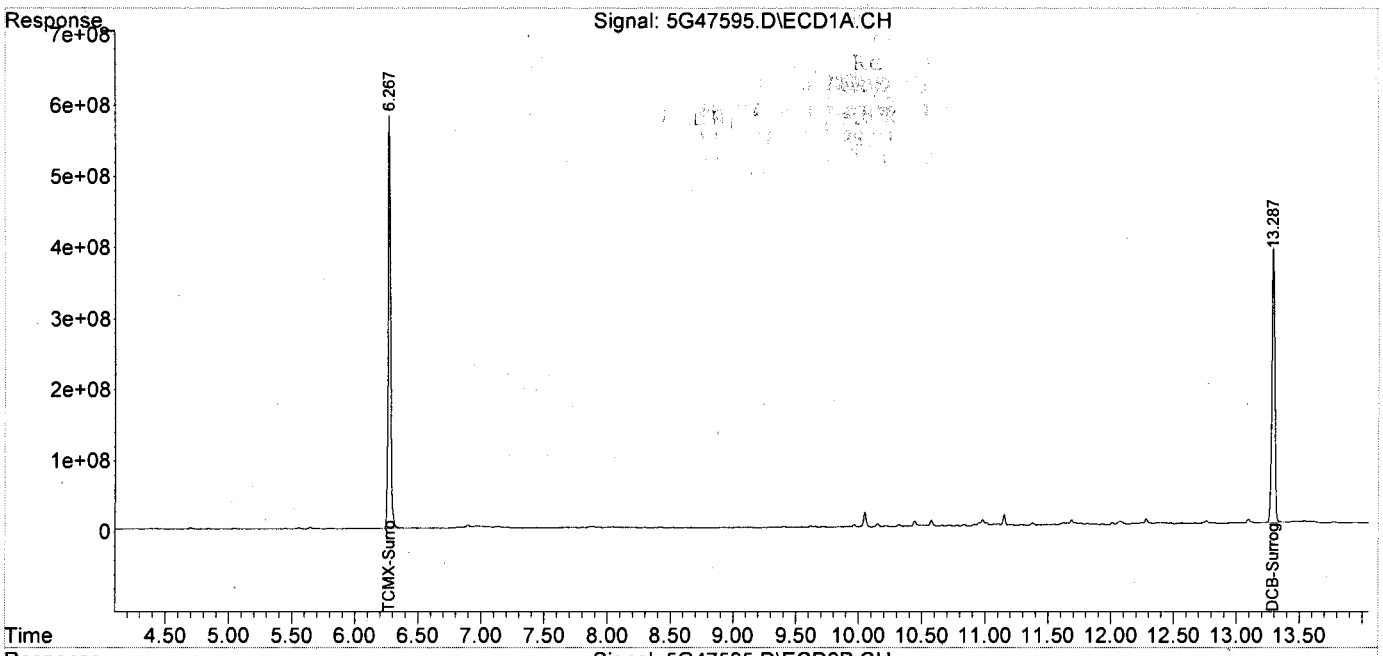
Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	6.267	6.202	7879.8E6	5676.4E6	105.726	112.043
45)DCB-Surrogate	13.287	13.668	6346.5E6	4301.6E6	124.510	131.865

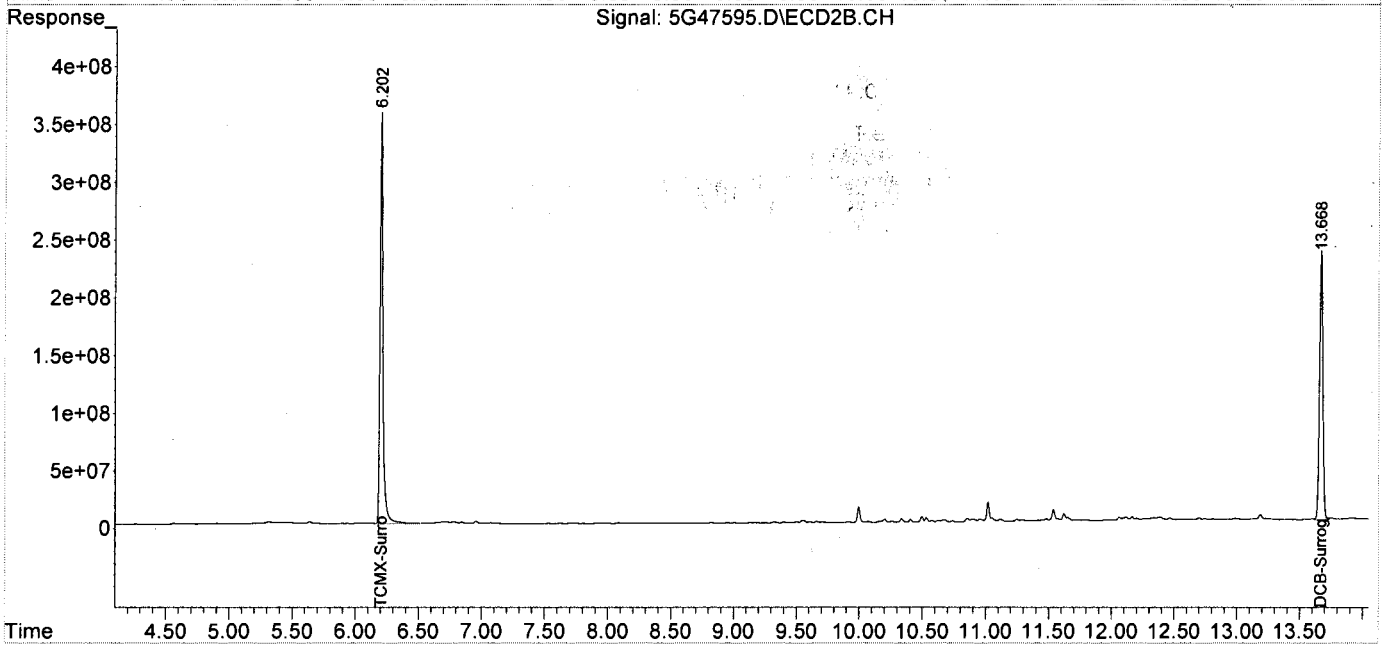
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2013\GC_5\Data\08-27-13\
Data File : 5G47595.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27-Aug-13, 19:40:56
Operator : MS/BS
Sample : AC74177-004
Misc : S,PCB
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 28 10:18:13 2013
Quant Method : G:\GCDATA\2013\GC_5\METHODQT\5G_PCB0813.M
Quant Title : @GC_5,ug,608,8082
QLast Update : Tue Aug 13 13:06:49 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Form1

ORGANICS PCB REPORT

Sample Number: AC74177-006
Client Id: 018 SS-3 Composite
Data File: 5G47596.D
Analysis Date: 08/27/13 19:58
Date Rec/Extracted: 08/23/13-08/26/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 92

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.027	U	11097-69-1	Aroclor-1254	0.027	U
11104-28-2	Aroclor-1221	0.027	U	11096-82-5	Aroclor-1260	0.027	U
11141-16-5	Aroclor-1232	0.027	U	37324-23-5	Aroclor-1262	0.027	U
53469-21-9	Aroclor-1242	0.027	U	11100-14-4	Aroclor-1268	0.027	U
12672-29-6	Aroclor-1248	0.027	U	1336-36-3	Aroclor (Total)	0.027	U

Worksheet #: 274865

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3082313 0244

Data Path : G:\Gcdata\2013\GC_5\Data\08-27-13\
Data File : 5G47596.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27-Aug-13, 19:58:51
Operator : MS/BS
Sample : AC74177-006
Misc : S,PCB
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 28 10:18:55 2013
Quant Method : G:\GCDATA\2013\GC_5\METHODQT\5G_PCB0813.M
Quant Title : @GC_5,ug,608,8082
QLast Update : Tue Aug 13 13:06:49 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	6.268	6.202	6097.3E6	4553.2E6	81.809	89.872
45)DCB-Surrogate	13.288	13.670	4985.4E6	3428.8E6	97.807	105.109

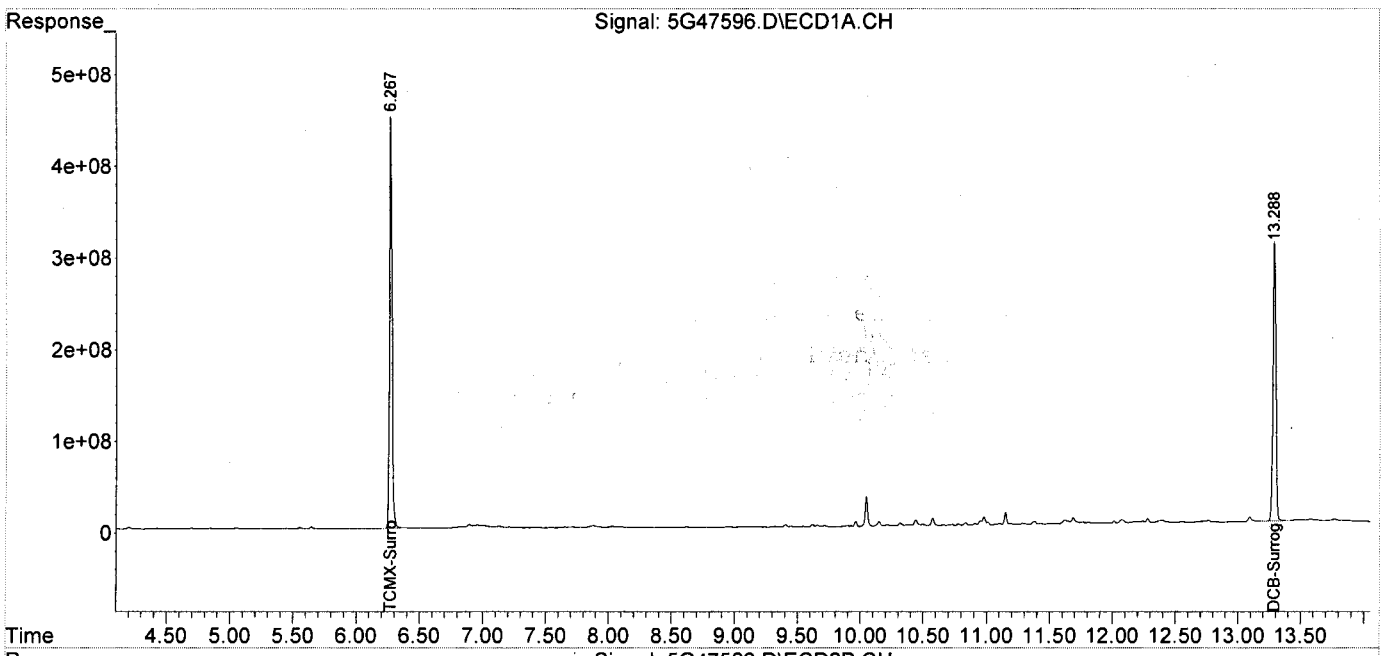
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

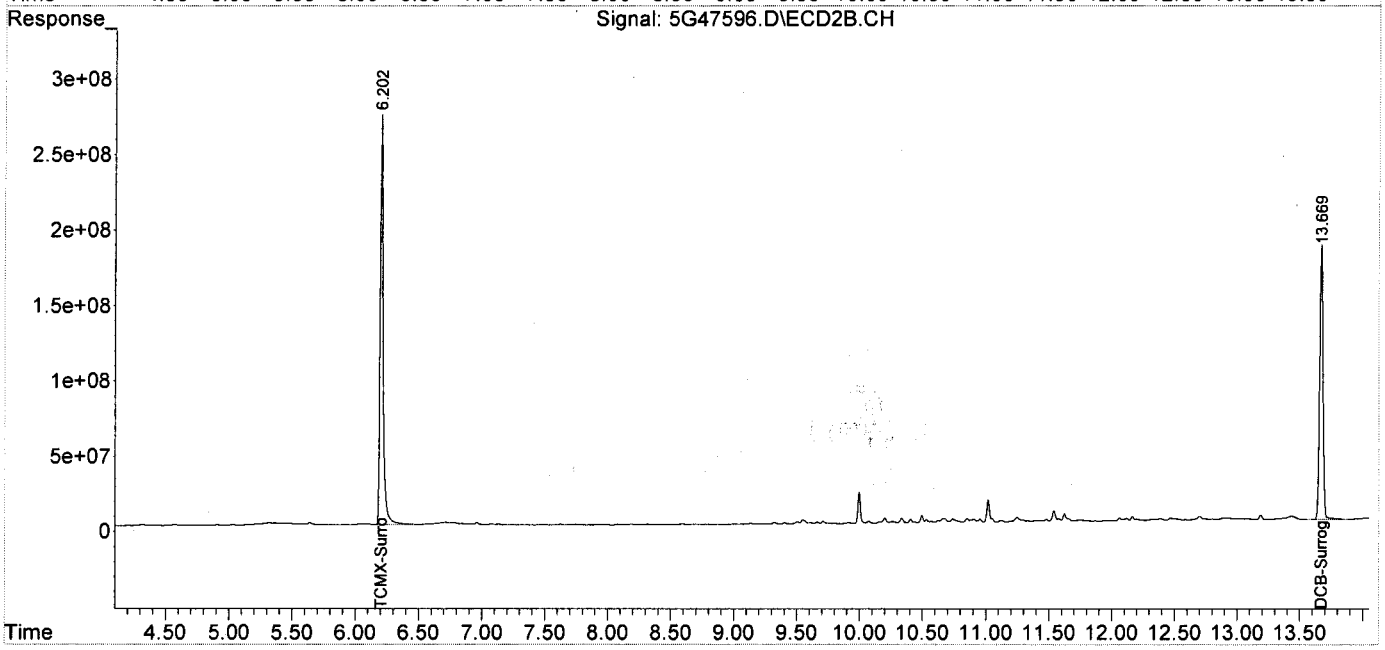
Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_5\Data\08-27-13\
Data File : 5G47596.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27-Aug-13, 19:58:51
Operator : MS/BS
Sample : AC74177-006
Misc : S,PCB
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 28 10:18:55 2013
Quant Method : G:\GCDATA\2013\GC_5\METHODQT\5G_PCB0813.M
Quant Title : @GC_5,ug,608,8082
QLast Update : Tue Aug 13 13:06:49 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Form1

ORGANICS PCB REPORT

Sample Number: SMB25998
Client Id:
Data File: 5G47563.D
Analysis Date: 08/27/13 09:56
Date Rec/Extracted: NA-08/26/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.025	U	11097-69-1	Aroclor-1254	0.025	U
11104-28-2	Aroclor-1221	0.025	U	11096-82-5	Aroclor-1260	0.025	U
11141-16-5	Aroclor-1232	0.025	U	37324-23-5	Aroclor-1262	0.025	U
53469-21-9	Aroclor-1242	0.025	U	11100-14-4	Aroclor-1268	0.025	U
12672-29-6	Aroclor-1248	0.025	U				

Worksheet #: 274865

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3082313 0247

Data Path : G:\Gcdata\2013\GC_5\Data\08-27-13\
Data File : 5G47563.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27-Aug-13, 09:56:32 (#1); 27-Aug-13, 09:56:33 (#2)
Operator : MS/BS
Sample : SMB25998
Misc : S,PCB
ALS Vial : 1 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 27 13:10:04 2013
Quant Method : G:\GCDATA\2013\GC_5\METHODQT\5G_PCB0813.M
Quant Title : @GC_5,ug,608,8082
QLast Update : Tue Aug 13 13:06:49 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	6.269	6.196	6954.8E6	4996.2E6	93.314	98.617
45)DCB-Surrogate	13.297	13.670	5782.7E6	3810.3E6	113.450	116.804

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

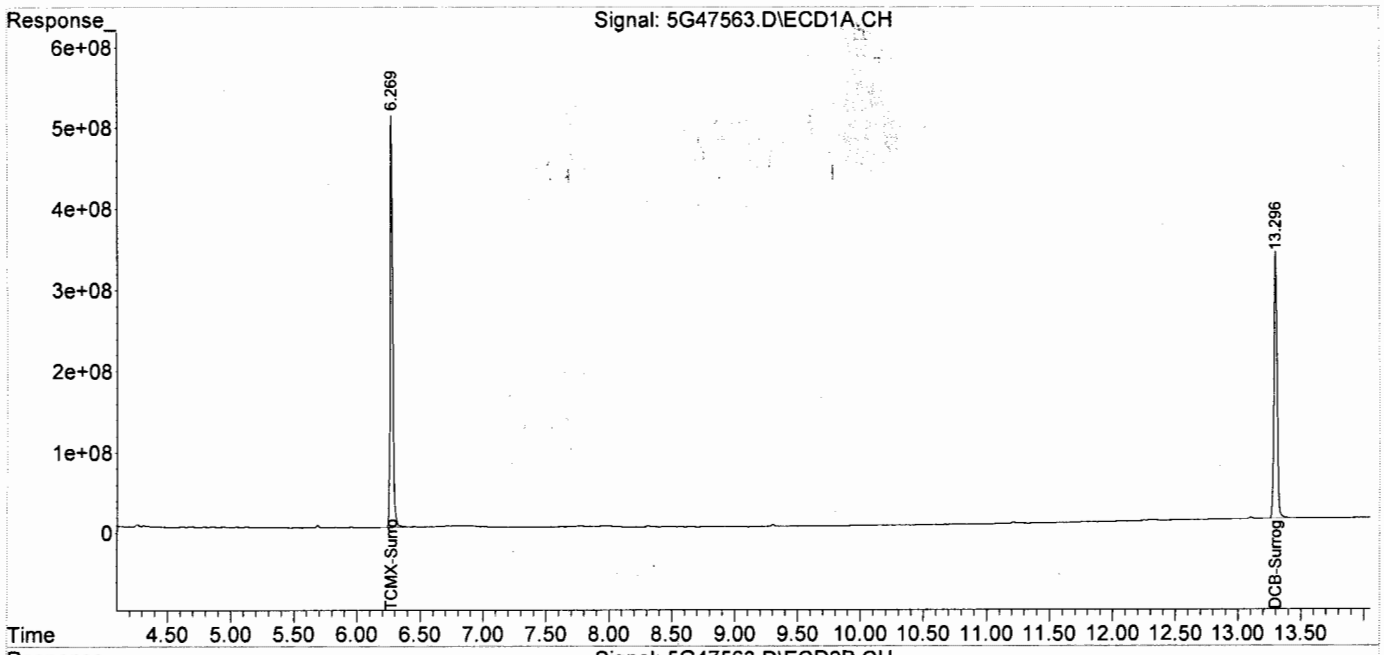
Quantitation Report (QT Reviewed)

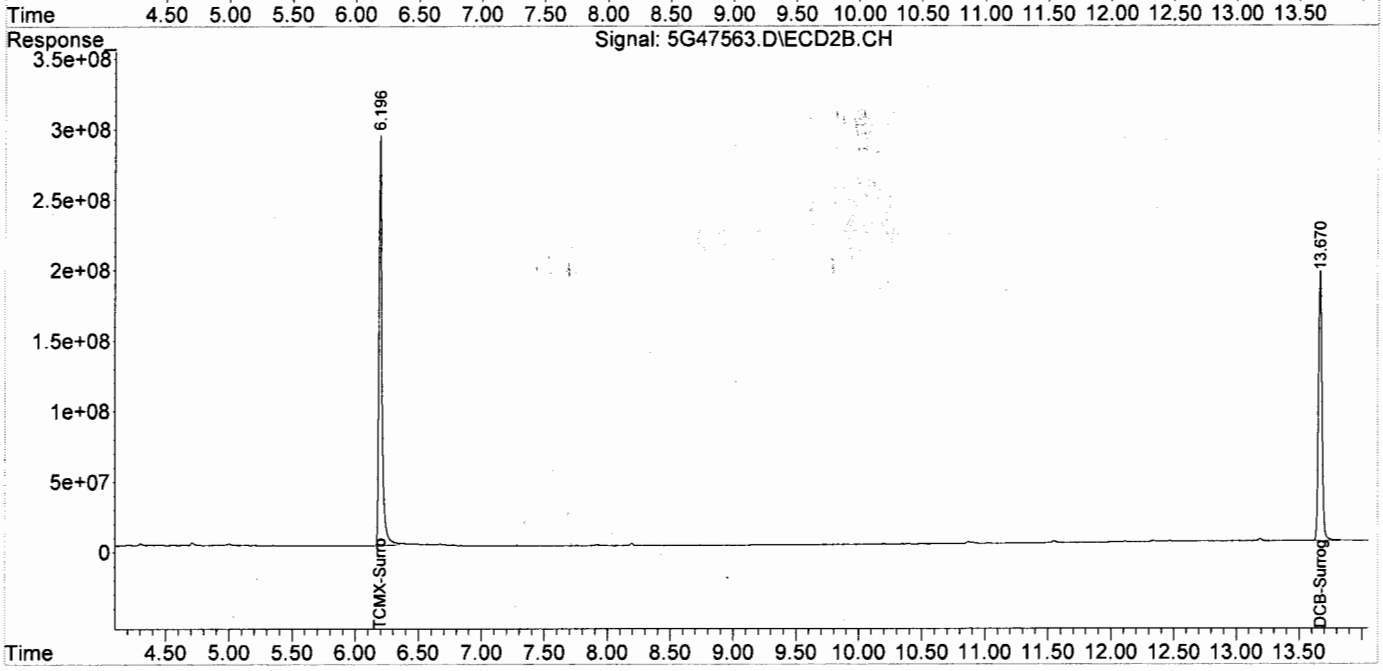
3082313 0248

Data Path : G:\Gcdata\2013\GC_5\Data\08-27-13\
Data File : 5G47563.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27-Aug-13, 09:56:32 (#1); 27-Aug-13, 09:56:33 (#2)
Operator : MS/BS
Sample : SMB25998
Misc : S,PCB
ALS Vial : 1 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Aug 27 13:10:04 2013
Quant Method : G:\GCDATA\2013\GC_5\METHODQT\5G_PCB0813.M
Quant Title : @GC_5,ug,608,8082
QLast Update : Tue Aug 13 13:06:49 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





FORM2

Surrogate Recovery

Method: EPA 8082

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column2 S2 Recov	Column1 S3 Recov	Column2 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
5G47563.D	SMB25998	Soil	08/27/13 09:56	1		93	99	113	117		
5G47585.D	AC74177-002	Soil	08/27/13 16:42	1		108	114	124	131		
5G47595.D	AC74177-004	Soil	08/27/13 19:40	1		106	112	125	132		
5G47596.D	AC74177-006	Soil	08/27/13 19:58	1		82	90	98	105		
5G47564.D	SMB25998(M	Soil	08/27/13 10:14	1		88	92	105	109		
5G47583.D	AC74177-002(	Soil	08/27/13 16:07	1		85	89	99	104		
5G47584.D	AC74177-002(	Soil	08/27/13 16:24	1		82	91	99	105		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8082

Soil Limits

Compound	Spike Amt	Limits
S1=TCMX-Surrogate	100	37-141
S2=TCMX-Surrogate	100	37-141
S3=DCB-Surrogate	100	34-146
S4=DCB-Surrogate	100	34-146

Form3
Recovery Data
QC Batch: SMB25998

	Data File	Sample ID:	Analysis Date
Spike or Dup:	5G47564.D	SMB25998(MS)	8/27/2013 10:14:16 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	925.356	0	1000	93	30	163
Aroclor-1260 -Total	1	1001.484	0	1000	100	25	166

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB25998

	Data File	Sample ID:	Analysis Date
Spike or Dup:	5G47583.D	AC74177-002(MS)	8/27/2013 4:07:03 PM
Non Spike(If applicable):	5G47585.D	AC74177-002	8/27/2013 4:42:43 PM
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	921.952	0	1000	92	30	163
Aroclor-1260 -Total	1	954.496	0	1000	95	25	166

	Data File	Sample ID:	Analysis Date
Spike or Dup:	5G47584.D	AC74177-002(MSD)	8/27/2013 4:24:55 PM
Non Spike(If applicable):	5G47585.D	AC74177-002	8/27/2013 4:42:43 PM
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	908.2	0	1000	91	30	163
Aroclor-1260 -Total	1	920.056	0	1000	92	25	166

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA
QC Batch: SMB25998

	Data File	Sample ID:	Analysis Date
Spike or Dup:	5G47584.D	AC74177-002(MSD)	8/27/2013 4:24:55 PM
Duplicate(If applicable):	5G47583.D	AC74177-002(MS)	8/27/2013 4:07:03 PM
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Aroclor-1016 -Total	1	908.2	921.952	1.5	40
Aroclor-1260 -Total	1	920.056	954.496	3.7	37

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: SMB25998
Blank Data File: 5G47563.D
Matrix: Soil

Blank Analysis Date: 08/27/13 09:56
Blank Extraction Date: 08/26/13
(If Applicable)
Method: EPA 8082

Sample Number	Data File	Analysis Date
AC74177-002	5G47585.D	08/27/13 16:42
AC74177-004	5G47595.D	08/27/13 19:40
AC74177-006	5G47596.D	08/27/13 19:58
AC74177-002(MSD	5G47584.D	08/27/13 16:24
AC74177-002(MS)	5G47583.D	08/27/13 16:07
SMB25998(MS)	5G47564.D	08/27/13 10:14

Form 5

Method: EPA 8082

Instrument: GC_5

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
5G47332.D	2000	08/13/13 08:52	Aqueous					
5G47333.D	CAL 1660@50PPB	08/13/13 09:32	Soil	5G47333.	13.3031	0	13.6777	0
5G47334.D	CAL 1660@200PPB	08/13/13 09:50	Soil	5G47333.	13.2979	0.0391	13.6771	0.0044
5G47335.D	CAL 1660@500PPB	08/13/13 10:08	Soil	5G47333.	13.2970	0.0459	13.6767	0.0073
5G47336.D	CAL 1660@1000PPB	08/13/13 10:25	Soil	5G47333.	13.2954	0.0579	13.6774	0.0022
5G47337.D	CAL 1660@2000PPB	08/13/13 10:43	Soil	5G47333.	13.2937	0.0707	13.6751	0.019
5G47338.D	CAL 1660@4000PPB	08/13/13 11:01	Soil	5G47333.	13.2943	0.0662	13.6757	0.0146
5G47339.D	CAL 3268@500PPB	08/13/13 11:19	Soil	5G47333.	13.2947	0.0632	13.6748	0.0212
5G47340.D	CAL 1242@500PPB	08/13/13 11:37	Soil	5G47333.	13.2943	0.0662	13.6761	0.0117
5G47341.D	CAL 1248@500PPB	08/13/13 11:54	Soil	5G47333.	13.2954	0.0579	13.6768	0.0066
5G47342.D	CAL 2154@500PPB	08/13/13 12:12	Soil	5G47333.	13.2942	0.0669	13.6748	0.0212
5G47343.D	CAL 1262@500PPB	08/13/13 12:30	Soil	5G47333.	13.2935	0.0722	13.6746	0.0227
5G47344.D	ICV	08/13/13 12:48	Soil	5G47333.	13.2942	0.0669	13.6760	0.0124
5G47345.D	AC73948-004(10X)	08/13/13 13:06	Soil	5G47333.	13.2907	0.0933	13.6734	0.0314
5G47346.D	AC73948-005(10X)	08/13/13 13:23	Soil	5G47333.	13.2922	0.082	13.6725	0.038
5G47347.D	AC73948-006(10X)	08/13/13 13:41	Soil	5G47333.	13.2933	0.0737	13.6751	0.019
5G47348.D	AC73948-007(10X)	08/13/13 13:59	Soil	5G47333.	13.2937	0.0707	13.6745	0.0234
5G47349.D	AC73948-008(10X)	08/13/13 14:17	Soil	5G47333.	13.2930	0.0759	13.6747	0.0219
5G47350.D	AC73948-009(10X)	08/13/13 14:35	Soil	5G47333.	13.2927	0.0782	13.6732	0.0329
5G47351.D	AC73948-011(10X)	08/13/13 14:53	Soil	5G47333.	13.2919	0.0842	13.6746	0.0227
5G47352.D	AC73948-012(10X)	08/13/13 15:09	Soil	5G47333.	13.2898	0.1	13.6699	0.057
5G47353.D	AC73948-005(100X)	08/13/13 15:27	Soil	5G47333.	0.0000	200 *	0.0000	200 *
5G47354.D	SMB25877	08/13/13 15:45	Soil	5G47333.	13.2930	0.0759	13.6745	0.0234
5G47355.D	CAL 1660@1000PPB	08/13/13 16:03	Soil	5G47333.	13.2935	0.0722	13.6753	0.0176
5G47356.D	WMB25881(MS)	08/13/13 16:23	Aqueous	5G47355.	13.2959	0.0181	13.6762	0.0066
5G47357.D	SMB25877(MS)	08/13/13 16:41	Soil	5G47355.	13.2933	0.0015	13.6737	0.0117
5G47358.D	AC73948-006(MS)	08/13/13 16:59	Soil	5G47355.	13.2937	0.0015	13.6753	0
5G47359.D	AC73948-006(MSD)	08/13/13 17:16	Soil	5G47355.	13.2930	0.0038	13.6740	0.0095
5G47360.D	AC73921-001	08/13/13 17:34	Soil	5G47355.	13.2926	0.0068	13.6731	0.0161
5G47361.D	AC73908-002	08/13/13 17:52	Soil	5G47355.	13.2915	0.015	13.6730	0.0168
5G47362.D	AC73908-004	08/13/13 18:10	Soil	5G47355.	13.2930	0.0038	13.6750	0.0022
5G47363.D	AC73908-006	08/13/13 18:28	Soil	5G47355.	13.2941	0.0045	13.6757	0.0029
5G47364.D	AC73888-002	08/13/13 18:45	Soil	5G47355.	13.2930	0.0038	13.6748	0.0037
5G47365.D	AC73888-006	08/13/13 19:03	Soil	5G47355.	13.2934	0.0008	13.6753	0
5G47366.D	SMB25879	08/13/13 19:21	Soil	5G47355.	13.2938	0.0023	13.6739	0.0102
5G47367.D	SMB25879(MS)	08/13/13 19:39	Soil	5G47355.	13.2932	0.0023	13.6738	0.011
5G47368.D	AC73947-001(MS)	08/13/13 19:57	Soil	5G47355.	13.2929	0.0045	13.6743	0.0073
5G47369.D	AC73947-001(MSD)	08/13/13 20:14	Soil	5G47355.	13.2936	0.0008	13.6757	0.0029
5G47370.D	AC73947-001	08/13/13 20:32	Soil	5G47355.	13.2931	0.003	13.6751	0.0015
5G47371.D	AC73929-002	08/13/13 20:50	Soil	5G47355.	13.2917	0.0135	13.6734	0.0139
5G47372.D	AC73929-004	08/13/13 21:08	Soil	5G47355.	13.2923	0.009	13.6749	0.0029
5G47373.D	CAL 1660@1000PPB	08/13/13 21:26	Soil	5G47355.	13.2927	0.006	13.6744	0.0066
5G47374.D	2000PPB	08/13/13 21:43	Soil	5G47373.	13.2939	0.009	13.6757	0.0095

Drift Compound: DCB-Surrogate

Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph)

* Values outside of limits for this column/run

Form 5

Method: EPA 8082

Instrument: GC_5

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
5G47562.D	CAL 1660@500PPB	08/27/13 09:23	Aqueous	5G47562.	13.2986	0	13.6699	0
5G47563.D	SMB25998	08/27/13 09:56	Soil	5G47562.	13.2966	0.015	13.6704	0.0037
5G47564.D	SMB25998(MS)	08/27/13 10:14	Soil	5G47562.	13.2916	0.0527	13.6702	0.0022
5G47565.D	SMB25999	08/27/13 10:32	Soil	5G47562.	13.2899	0.0654	13.6697	0.0015
5G47566.D	SMB25999(MS)	08/27/13 10:49	Soil	5G47562.	13.2896	0.0677	13.6698	0.0007
5G47567.D	AC74211-001	08/27/13 11:07	Soil	5G47562.	13.2879	0.0805	13.6693	0.0044
5G47568.D	AC74211-002	08/27/13 11:25	Soil	5G47562.	13.2869	0.088	13.6671	0.0205
5G47569.D	AC74211-003	08/27/13 11:43	Soil	5G47562.	13.2879	0.0805	13.6688	0.008
5G47570.D	AC74211-004	08/27/13 12:01	Soil	5G47562.	13.2874	0.0843	13.6684	0.011
5G47571.D	AC74211-005	08/27/13 12:18	Soil	5G47562.	13.2882	0.0782	13.6687	0.0088
5G47572.D	AC74211-006	08/27/13 12:36	Soil	5G47562.	13.2863	0.0925	13.6679	0.0146
5G47573.D	CAL 1660@500PPB	08/27/13 12:54	Soil	5G47562.	13.2886	0.0752	13.6703	0.0029
5G47574.D	AC74170-004(10X)	08/27/13 13:12	Soil	5G47573.	13.2876	0.0075	13.6692	0.008
5G47575.D	AC74212-013(10X)	08/27/13 13:30	Soil	5G47573.	13.2871	0.0113	13.6678	0.0183
5G47576.D	AC74212-014(10X)	08/27/13 13:47	Soil	5G47573.	13.2874	0.009	13.6684	0.0139
5G47577.D	AC74212-015(10X)	08/27/13 14:05	Soil	5G47573.	13.2880	0.0045	13.6693	0.0073
5G47578.D	SMB26000	08/27/13 14:23	Soil	5G47573.	13.2881	0.0038	13.6680	0.0168
5G47579.D	SMB26000(MS)	08/27/13 14:41	Soil	5G47573.	13.2885	0.0008	13.6697	0.0044
5G47580.D	AC74212-001(10X)(MS)	08/27/13 14:59	Soil	5G47573.	13.2875	0.0083	13.6670	0.0241
5G47581.D	AC74212-001(10X)(MSD	08/27/13 15:16	Soil	5G47573.	13.2882	0.003	13.6687	0.0117
5G47582.D	CAL 1660@500PPB	08/27/13 15:35	Soil	5G47573.	13.2892	0.0045	13.6686	0.0124
5G47583.D	AC74177-002(MS)	08/27/13 16:07	Soil	5G47582.	13.2934	0.0316	13.6693	0.0051
5G47584.D	AC74177-002(MSD)	08/27/13 16:24	Soil	5G47582.	13.2890	0.0015	13.6700	0.0102
5G47585.D	AC74177-002	08/27/13 16:42	Soil	5G47582.	13.2886	0.0045	13.6697	0.008
5G47586.D	AC74101-001	08/27/13 17:00	Soil	5G47582.	13.2882	0.0075	13.6693	0.0051
5G47587.D	AC74101-004	08/27/13 17:18	Soil	5G47582.	13.2870	0.0166	13.6685	0.0007
5G47588.D	AC74101-007	08/27/13 17:36	Soil	5G47582.	13.2881	0.0083	13.6684	0.0015
5G47589.D	AC74101-016	08/27/13 17:54	Soil	5G47582.	13.2883	0.0068	13.6700	0.0102
5G47590.D	AC74101-021	08/27/13 18:11	Soil	5G47582.	13.2872	0.015	13.6686	0
5G47591.D	AC74101-022	08/27/13 18:29	Soil	5G47582.	13.2879	0.0098	13.6696	0.0073
5G47592.D	AC74101-027	08/27/13 18:47	Soil	5G47582.	13.2876	0.012	13.6690	0.0029
5G47593.D	AC74101-034	08/27/13 19:05	Soil	5G47582.	13.2876	0.012	13.6688	0.0015
5G47594.D	AC74101-039	08/27/13 19:23	Soil	5G47582.	13.2876	0.012	13.6684	0.0015
5G47595.D	AC74177-004	08/27/13 19:40	Soil	5G47582.	13.2870	0.0166	13.6683	0.0022
5G47596.D	AC74177-006	08/27/13 19:58	Soil	5G47582.	13.2881	0.0083	13.6698	0.0088
5G47597.D	CAL 1660@500PPB	08/27/13 20:16	Soil	5G47582.	13.2901	0.0068	13.6715	0.0212
5G47598.D	1000PPB	08/27/13 20:34	Soil	5G47597.	13.2882	0.0143	13.6699	0.0117
5G47599.D	AC74101-040	08/27/13 20:52	Soil	5G47597.	13.2892	0.0068	13.6711	0.0029
5G47600.D	AC74101-028	08/27/13 21:10	Soil	5G47597.	13.2871	0.0226	13.6682	0.0241
5G47601.D	AC74101-033	08/27/13 21:27	Soil	5G47597.	13.2490	0.3097	13.7060	0.252
5G47602.D	AC74101-010	08/27/13 21:45	Soil	5G47597.	13.2879	0.0166	13.6680	0.0256
5G47603.D	AC74101-015	08/27/13 22:03	Soil	5G47597.	13.2888	0.0098	13.6696	0.0139
5G47604.D	500PPB	08/27/13 22:21	Soil	5G47597.	13.2876	0.0188	13.6692	0.0168
5G47605.D	CAL 1660@1000PPB	08/27/13 22:39	Soil	5G47597.	13.2880	0.0158	13.6700	0.011

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

3082313 0256

Form 6
Initial Calibration

Method: EPA 8082

Instrument: GC_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5G47333.	CAL 1660@50PPB	08/13/13 09:32	2	5G47334.	CAL 1660@200PPB	08/13/13 09:50
3	5G47335.	CAL 1660@500PPB	08/13/13 10:08	4	5G47336.	CAL 1660@1000PPB	08/13/13 10:25
5	5G47337.	CAL 1660@2000PPB	08/13/13 10:43	6	5G47338.	CAL 1660@4000PPB	08/13/13 11:01
7	5G47339.	CAL 3268@500PPB	08/13/13 11:19	8	5G47340.	CAL 1242@500PPB	08/13/13 11:37
9	5G47341.	CAL 1248@500PPB	08/13/13 11:54	10	5G47342.	CAL 2154@500PPB	08/13/13 12:12
11	5G47343.	CAL 1262@500PPB	08/13/13 12:30				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Avg	7908.7	8045.2	7320.3	7065.4	6833.4	7545.2	----	----	7450	6.27	0.997	1.00	6.3	5.00	20.00	50.00	100.0	200.0	400.0		
Aroclor-1016	1	1	Qua	130.30	123.98	108.85	103.01	96.385	100.35	----	----	110	7.11	0.999	1.00	12	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	2	Qua	284.49	280.09	236.87	226.66	209.88	218.01	----	----	243	7.62	0.999	0.999	13	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	3	Avg	536.57	527.92	483.65	457.09	452.73	485.02	----	----	491	8.22	0.999	1.00	7.1	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	4	Qua	236.44	224.79	192.71	187.79	179.80	189.21	----	----	202	8.38	0.999	1.00	11	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	5	Avg	189.32	181.16	155.50	156.44	151.18	162.25	----	----	166	8.51	0.999	1.00	9.4	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	1	Qua	330.34	286.68	258.61	255.46	244.89	262.41	----	----	273	10.32	0.999	1.00	11	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	2	Avg	382.15	345.60	313.81	332.01	318.62	354.21	----	----	341	10.59	0.997	1.00	7.4	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	3	Qua	206.11	179.97	158.59	155.53	132.28	144.98	----	----	163	11.07	0.997	0.998	16	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	4	Avg	238.18	235.21	220.72	226.48	227.63	254.85	----	----	234	11.38	0.997	1.00	5.2	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	5	Avg	399.14	416.07	370.26	386.76	385.15	443.31	----	----	400	12.10	0.995	1.00	6.5	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1221	1	1	Avg	----	----	----	----	----	----	----	----	80.6	6.81	-1	-1	Lvl=10	500.0							
Aroclor-1221	1	2	Avg	----	----	----	----	----	----	----	----	50.1	7.02	-1	-1	Lvl=10	500.0							
Aroclor-1221	1	3	Avg	----	----	----	----	----	----	----	----	159	7.11	-1	-1	Lvl=10	500.0							
Aroclor-1232	1	1	Avg	----	----	----	----	----	----	----	----	130	7.11	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	2	Avg	----	----	----	----	----	----	----	----	106	7.62	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	3	Avg	----	----	----	----	----	----	----	----	220	8.22	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	4	Avg	----	----	----	----	----	----	----	----	91.9	8.38	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	5	Avg	----	----	----	----	----	----	----	----	75.1	8.51	-1	-1	Lvl=7	500.0							
Aroclor-1242	1	1	Avg	----	----	----	----	----	----	----	----	112	7.11	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	2	Avg	----	----	----	----	----	----	----	----	189	7.62	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	3	Avg	----	----	----	----	----	----	----	----	395	8.22	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	4	Avg	----	----	----	----	----	----	----	----	133	8.51	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	5	Avg	----	----	----	----	----	----	----	----	174	8.94	-1	-1	Lvl=8	500.0							
Aroclor-1248	1	1	Avg	----	----	----	----	----	----	----	----	97.7	7.62	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	2	Avg	----	----	----	----	----	----	----	----	253	8.22	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	3	Avg	----	----	----	----	----	----	----	----	160	8.62	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	4	Avg	----	----	----	----	----	----	----	----	279	8.94	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	5	Avg	----	----	----	----	----	----	----	----	246	9.05	-1	-1	Lvl=9	500.0							
Aroclor-1254	1	1	Avg	----	----	----	----	----	----	----	----	374	10.16	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	2	Avg	----	----	----	----	----	----	----	----	173	10.32	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	3	Avg	----	----	----	----	----	----	----	----	218	10.46	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	4	Avg	----	----	----	----	----	----	----	----	187	10.58	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	5	Avg	----	----	----	----	----	----	----	----	144	10.85	-1	-1	Lvl=10	500.0							
Aroclor-1262	1	1	Avg	----	----	----	----	----	----	----	----	301	10.58	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	2	Avg	----	----	----	----	----	----	----	----	235	12.02	-1	-1	Lvl=11	500.0							

Avg Rsd Col 1: 9.47 Avg Rsd Col 2: 9.50

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3082313 0257

Form 6
Initial Calibration

Method: EPA 8082

Instrument: GC_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5G47333.	CAL 1660@50PPB	08/13/13 09:32	2	5G47334.	CAL 1660@200PPB	08/13/13 09:50
3	5G47335.	CAL 1660@500PPB	08/13/13 10:08	4	5G47336.	CAL 1660@1000PPB	08/13/13 10:25
5	5G47337.	CAL 1660@2000PPB	08/13/13 10:43	6	5G47338.	CAL 1660@4000PPB	08/13/13 11:01
7	5G47339.	CAL 3268@500PPB	08/13/13 11:19	8	5G47340.	CAL 1242@500PPB	08/13/13 11:37
9	5G47341.	CAL 1248@500PPB	08/13/13 11:54	10	5G47342.	CAL 2154@500PPB	08/13/13 12:12
11	5G47343.	CAL 1262@500PPB	08/13/13 12:30				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aroclor-1262	1	3	Avg	----	----	----	----	----	----	----	----	537	12.08	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	4	Avg	----	----	----	----	----	----	----	----	252	12.77	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	5	Avg	----	----	----	----	----	----	----	----	79.8	13.10	-1	-1	Lvl=11	500.0							
Aroclor-1268	1	1	Avg	----	----	----	----	----	----	----	----	73.8	11.36	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	2	Avg	----	----	----	----	----	----	----	----	79.7	11.69	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	3	Avg	----	----	----	----	----	----	----	----	669	12.25	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	4	Avg	----	----	----	----	----	----	----	----	203	12.34	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	5	Avg	----	----	----	----	----	----	----	----	1850	13.10	-1	-1	Lvl=7	500.0							
DCB-Surrogate	1	0	Avg	5480.9	5104.2	4723.4	4891.4	4815.2	5567.7	----	----	5100	13.30	0.995	1.00	7.0	5.00	20.00	50.00	100.0	200.0	400.0		
TCMX-Surrogate	2	0	Avg	5841.0	5319.6	4905.5	4736.9	4610.1	4984.4	----	----	5070	6.21	0.998	1.00	8.9	5.00	20.00	50.00	100.0	200.0	400.0		
Aroclor-1016	2	1	Qua	93.237	84.954	74.513	70.006	65.196	63.621	----	----	75.3	7.16	1.00	1.00	16	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	2	Qua	205.81	189.12	166.13	156.72	146.93	152.38	----	----	170	7.72	0.999	1.00	14	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	3	Qua	320.30	268.64	239.55	225.10	208.11	215.89	----	----	246	8.21	0.999	1.00	17	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	4	Avg	124.68	123.31	114.14	112.06	107.57	95.517	----	----	113	8.42	0.996	1.00	9.5	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	5	Avg	167.53	157.65	144.98	142.26	137.44	147.01	----	----	149	8.60	0.999	1.00	7.4	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	1	Avg	226.51	209.92	187.37	185.69	179.30	196.80	----	----	198	10.41	0.998	1.00	9.0	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	2	Avg	256.47	236.87	208.73	206.60	199.40	217.94	----	----	221	10.51	0.998	1.00	9.8	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	3	Avg	128.21	130.72	117.49	120.51	119.65	134.37	----	----	125	11.49	0.997	1.00	5.5	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	4	Avg	185.23	185.03	168.10	169.38	167.49	187.77	----	----	177	12.18	0.997	1.00	5.5	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	5	Avg	124.50	119.63	109.81	110.72	109.41	123.95	----	----	116	12.71	0.996	1.00	6.2	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1221	2	1	Avg	----	----	----	----	----	----	----	----	48.3	6.86	-1	-1	Lvl=10	500.0							
Aroclor-1221	2	2	Avg	----	----	----	----	----	----	----	----	28.8	7.07	-1	-1	Lvl=10	500.0							
Aroclor-1221	2	3	Avg	----	----	----	----	----	----	----	----	90.0	7.16	-1	-1	Lvl=10	500.0							
Aroclor-1232	2	1	Avg	----	----	----	----	----	----	----	----	68.3	7.16	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	2	Avg	----	----	----	----	----	----	----	----	76.6	7.72	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	3	Avg	----	----	----	----	----	----	----	----	106	8.21	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	4	Avg	----	----	----	----	----	----	----	----	50.1	8.42	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	5	Avg	----	----	----	----	----	----	----	----	66.4	8.60	-1	-1	Lvl=7	500.0							
Aroclor-1242	2	1	Avg	----	----	----	----	----	----	----	----	60.1	7.16	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	2	Avg	----	----	----	----	----	----	----	----	128	7.72	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	3	Avg	----	----	----	----	----	----	----	----	194	8.21	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	4	Avg	----	----	----	----	----	----	----	----	112	8.59	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	5	Avg	----	----	----	----	----	----	----	----	81.7	9.02	-1	-1	Lvl=8	500.0							
Aroclor-1248	2	1	Avg	----	----	----	----	----	----	----	----	63.7	7.72	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	2	Avg	----	----	----	----	----	----	----	----	64.3	8.19	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	3	Avg	----	----	----	----	----	----	----	----	127	8.60	-1	-1	Lvl=9	500.0							

Avg Rsd Col 1: 9.47 Avg Rsd Col 2: 9.50

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3082313 0258

Form 6
Initial Calibration

Method: EPA 8082

Instrument: GC_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5G47333.	CAL 1660@50PPB	08/13/13 09:32	2	5G47334.	CAL 1660@200PPB	08/13/13 09:50
3	5G47335.	CAL 1660@500PPB	08/13/13 10:08	4	5G47336.	CAL 1660@1000PPB	08/13/13 10:25
5	5G47337.	CAL 1660@2000PPB	08/13/13 10:43	6	5G47338.	CAL 1660@4000PPB	08/13/13 11:01
7	5G47339.	CAL 3268@500PPB	08/13/13 11:19	8	5G47340.	CAL 1242@500PPB	08/13/13 11:37
9	5G47341.	CAL 1248@500PPB	08/13/13 11:54	10	5G47342.	CAL 2154@500PPB	08/13/13 12:12
11	5G47343.	CAL 1262@500PPB	08/13/13 12:30				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aroclor-1248	2	4	Avg	----	----	----	----	----	----	----	----	124	9.02	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	5	Avg	----	----	----	----	----	----	----	----	144	9.34	-1	-1	Lvl=9	500.0							
Aroclor-1254	2	1	Avg	----	----	----	----	----	----	----	----	142	9.51	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	2	Avg	----	----	----	----	----	----	----	----	56.0	9.92	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	3	Avg	----	----	----	----	----	----	----	----	127	10.36	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	4	Avg	----	----	----	----	----	----	----	----	73.4	10.87	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	5	Avg	----	----	----	----	----	----	----	----	76.9	11.54	-1	-1	Lvl=10	500.0							
Aroclor-1262	2	1	Avg	----	----	----	----	----	----	----	----	127	10.92	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	2	Avg	----	----	----	----	----	----	----	----	139	12.07	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	3	Avg	----	----	----	----	----	----	----	----	184	12.17	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	4	Avg	----	----	----	----	----	----	----	----	212	12.71	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	5	Avg	----	----	----	----	----	----	----	----	48.4	13.20	-1	-1	Lvl=11	500.0							
Aroclor-1268	2	1	Avg	----	----	----	----	----	----	----	----	38.6	11.58	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	2	Avg	----	----	----	----	----	----	----	----	69.5	11.63	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	3	Avg	----	----	----	----	----	----	----	----	382	12.47	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	4	Avg	----	----	----	----	----	----	----	----	106	12.61	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	5	Avg	----	----	----	----	----	----	----	----	1140	13.19	-1	-1	Lvl=7	500.0							
DCB-Surrogate	2	0	Avg	3437.7	3406.0	3084.6	3115.7	3057.4	3470.8	----	----	3260	13.68	0.996	1.00	6.0	5.00	20.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 9.47 Avg Rsd Col 2: 9.50

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 ; Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Form7
Continuing Calibration

Method: EPA 8082

Data File:				5G47562.D			5G47573.D			5G47582.D			5G47597.D										
Method:				8082			8082			8082			8082										
Calibration Name:				CAL 1660@500PP			CAL 1660@500PP			CAL 1660@500PP			CAL 1660@500PP										
Calibration Date/Time				08/27/13 09:23			08/27/13 12:54			08/27/13 15:35			08/27/13 20:16										
					Conc			Conc			Conc			Conc							Conc		
Compound	Limit	Col	Mr	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff						Conc	Exp	%Diff
TCMX-Surrogate	15	1	0	48.13	50	3.7	45.76	50	8.5	47.78	50	4.4	46.69	50	6.6								
Aroclor-1016	15	1	1	540.7	500	8.1	529.4	500	5.9	585.5	500	17.1*	549.1	500	9.8								
Aroclor-1016	15	1	2	547.5	500	9.5	516.1	500	3.2	548.8	500	9.8	532.7	500	6.5								
Aroclor-1016	15	1	3	505.3	500	1.1	473.6	500	5.3	482.7	500	3.5	458.6	500	8.3								
Aroclor-1016	15	1	4	532.7	500	6.5	517.0	500	3.4	549.9	500	10.0	494.5	500	1.1								
Aroclor-1016	15	1	5	486.1	500	2.8	460.6	500	7.9	496.6	500	0.7	463	500	7.4								
Aroclor-1260	15	1	1	585.3	500	17.1*	530.4	500	6.1	569.1	500	13.8	530.6	500	6.1								
Aroclor-1260	15	1	2	501.0	500	0.2	449.9	500	10.0	493.1	500	1.4	446.4	500	10.7								
Aroclor-1260	15	1	3	532.5	500	6.5	499.8	500	0.0	556.0	500	11.2	533.3	500	6.7								
Aroclor-1260	15	1	4	510	500	2.0	451.9	500	9.6	498.3	500	0.3	452.5	500	9.5								
Aroclor-1260	15	1	5	488.2	500	2.4	446.2	500	10.8	482.4	500	3.5	476.4	500	4.7								
DCB-Surrogate	15	1	0	49.3	50	1.4	47.33	50	5.3	48.83	50	2.3	45.93	50	8.1								
Average Difference	15	1	0			5.1			6.3			6.5			7.1								
TCMX-Surrogate	15	2	0	49.44	50	1.1	49.27	50	1.5	50.51	50	1.0	50.07	50	0.1								
Aroclor-1016	15	2	1	524.3	500	4.9	517.3	500	3.5	534.1	500	6.8	518.4	500	3.7								
Aroclor-1016	15	2	2	569.6	500	13.9	555.5	500	11.1	579.2	500	15.8*	558.1	500	11.6								
Aroclor-1016	15	2	3	539.1	500	7.8	544.8	500	9.0	528.1	500	5.6	544.7	500	8.9								
Aroclor-1016	15	2	4	425.3	500	15.0	418.1	500	16.4*	553.6	500	10.7	416.2	500	16.8*								
Aroclor-1016	15	2	5	511.4	500	2.3	504.5	500	0.9	528.2	500	5.6	507.4	500	1.5								
Aroclor-1260	15	2	1	503.5	500	0.7	498.2	500	0.4	531.0	500	6.2	496	500	0.8								
Aroclor-1260	15	2	2	493	500	1.4	488.4	500	2.3	525.8	500	5.2	501.8	500	0.4								
Aroclor-1260	15	2	3	524.4	500	4.9	503.7	500	0.7	537.9	500	7.6	489.6	500	2.1								
Aroclor-1260	15	2	4	486.9	500	2.6	474.4	500	5.1	510.5	500	2.1	481.0	500	3.8								
Aroclor-1260	15	2	5	492.7	500	1.5	494.6	500	1.1	527.6	500	5.5	559.8	500	12.0								
DCB-Surrogate	15	2	0	48.09	50	3.8	48.36	50	3.3	50.83	50	1.7	47.6	50	4.8								
Average Difference	15	2	0			5.0			4.6			6.2			5.5								

Flags/Notes: **** - Values outside of limits for this column/run***

Form7

RtWindow Summary

Method: EPA 8082

3082313 0260

Data File:			5G47333.D		5G47562.D		5G47582.D					
Calibration Name:			CAL 1660@50PPB		CAL 1660@500PPB		CAL 1660@500PPB					
Calibration Date/Time			8/13/2013 9:32:37 AM		8/27/2013 9:23:15 AM		8/27/2013 3:35:36 PM					
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
TCMX-Surrogate	1	0	6.27	(6.21 - 6.33)	6.27	(6.21 - 6.33)	6.27	(6.21 - 6.33)				
Aroclor-1016	1	1	7.11	(7.07 - 7.15)	7.11	(7.07 - 7.15)	7.11	(7.07 - 7.15)				
Aroclor-1016	1	2	7.62	(7.58 - 7.66)	7.62	(7.58 - 7.66)	7.62	(7.58 - 7.66)				
Aroclor-1016	1	3	8.22	(8.18 - 8.26)	8.22	(8.18 - 8.26)	8.22	(8.18 - 8.26)				
Aroclor-1016	1	4	8.38	(8.34 - 8.42)	8.38	(8.34 - 8.42)	8.38	(8.34 - 8.42)				
Aroclor-1016	1	5	8.51	(8.47 - 8.55)	8.51	(8.47 - 8.55)	8.51	(8.47 - 8.55)				
Aroclor-1260	1	1	10.32	(10.28 - 10.36)	10.32	(10.28 - 10.36)	10.32	(10.28 - 10.36)				
Aroclor-1260	1	2	10.59	(10.55 - 10.63)	10.58	(10.54 - 10.62)	10.58	(10.54 - 10.62)				
Aroclor-1260	1	3	11.07	(11.03 - 11.11)	11.07	(11.03 - 11.11)	11.07	(11.03 - 11.11)				
Aroclor-1260	1	4	11.38	(11.34 - 11.42)	11.38	(11.34 - 11.42)	11.37	(11.33 - 11.41)				
Aroclor-1260	1	5	12.10	(12.06 - 12.14)	12.09	(12.05 - 12.13)	12.09	(12.05 - 12.13)				
Aroclor-1221	1	1	6.81	(6.77 - 6.85)								
Aroclor-1221	1	2	7.02	(6.98 - 7.06)								
Aroclor-1221	1	3	7.11	(7.07 - 7.15)								
Aroclor-1232	1	1	7.11	(7.07 - 7.15)								
Aroclor-1232	1	2	7.62	(7.58 - 7.66)								
Aroclor-1232	1	3	8.22	(8.18 - 8.26)								
Aroclor-1232	1	4	8.38	(8.34 - 8.42)								
Aroclor-1232	1	5	8.51	(8.47 - 8.55)								
Aroclor-1242	1	1	7.11	(7.07 - 7.15)								
Aroclor-1242	1	2	7.62	(7.58 - 7.66)								
Aroclor-1242	1	3	8.22	(8.18 - 8.26)								
Aroclor-1242	1	4	8.51	(8.47 - 8.55)								
Aroclor-1242	1	5	8.94	(8.90 - 8.98)								
Aroclor-1248	1	1	7.62	(7.58 - 7.66)								
Aroclor-1248	1	2	8.22	(8.18 - 8.26)								
Aroclor-1248	1	3	8.62	(8.58 - 8.66)								
Aroclor-1248	1	4	8.94	(8.90 - 8.98)								
Aroclor-1248	1	5	9.05	(9.01 - 9.09)								
Aroclor-1254	1	1	10.16	(10.12 - 10.20)								
Aroclor-1254	1	2	10.32	(10.28 - 10.36)								
Aroclor-1254	1	3	10.46	(10.42 - 10.50)								
Aroclor-1254	1	4	10.58	(10.54 - 10.62)								
Aroclor-1254	1	5	10.85	(10.81 - 10.89)								
Aroclor-1262	1	1	10.58	(10.54 - 10.62)								
Aroclor-1262	1	2	12.02	(11.98 - 12.06)								
Aroclor-1262	1	3	12.08	(12.04 - 12.12)								
Aroclor-1262	1	4	12.77	(12.73 - 12.81)								
Aroclor-1262	1	5	13.10	(13.06 - 13.14)								
Aroclor-1268	1	1	11.36	(11.32 - 11.40)								
Aroclor-1268	1	2	11.69	(11.65 - 11.73)								
Aroclor-1268	1	3	12.25	(12.21 - 12.29)								
Aroclor-1268	1	4	12.34	(12.30 - 12.38)								
Aroclor-1268	1	5	13.10	(13.06 - 13.14)								
DCB-Surrogate	1	0	13.30	(13.24 - 13.36)	13.30	(13.24 - 13.36)	13.29	(13.23 - 13.35)				
TCMX-Surrogate	2	0	6.21	(6.15 - 6.27)	6.19	(6.13 - 6.25)	6.20	(6.14 - 6.26)				
Aroclor-1016	2	1	7.16	(7.12 - 7.20)	7.15	(7.11 - 7.19)	7.15	(7.11 - 7.19)				
Aroclor-1016	2	2	7.72	(7.68 - 7.76)	7.71	(7.67 - 7.75)	7.72	(7.68 - 7.76)				
Aroclor-1016	2	3	8.21	(8.17 - 8.25)	8.20	(8.16 - 8.24)	8.20	(8.16 - 8.24)				
Aroclor-1016	2	4	8.42	(8.38 - 8.46)	8.40	(8.36 - 8.44)	8.41	(8.37 - 8.45)				
Aroclor-1016	2	5	8.59	(8.55 - 8.63)	8.58	(8.54 - 8.62)	8.59	(8.55 - 8.63)				
Aroclor-1260	2	1	10.41	(10.37 - 10.45)	10.40	(10.36 - 10.44)	10.41	(10.37 - 10.45)				
Aroclor-1260	2	2	10.51	(10.47 - 10.55)	10.50	(10.46 - 10.54)	10.50	(10.46 - 10.54)				
Aroclor-1260	2	3	11.49	(11.45 - 11.53)	11.48	(11.44 - 11.52)	11.48	(11.44 - 11.52)				
Aroclor-1260	2	4	12.17	(12.13 - 12.21)	12.17	(12.13 - 12.21)	12.17	(12.13 - 12.21)				
Aroclor-1260	2	5	12.71	(12.67 - 12.75)	12.70	(12.66 - 12.74)	12.71	(12.67 - 12.75)				
Aroclor-1221	2	1	6.86	(6.82 - 6.90)								
Aroclor-1221	2	2	7.07	(7.03 - 7.11)								
Aroclor-1221	2	3	7.16	(7.12 - 7.20)								
Aroclor-1232	2	1	7.16	(7.12 - 7.20)								
Aroclor-1232	2	2	7.72	(7.68 - 7.76)								
Aroclor-1232	2	3	8.21	(8.17 - 8.25)								
Aroclor-1232	2	4	8.42	(8.38 - 8.46)								
Aroclor-1232	2	5	8.60	(8.56 - 8.64)								
Aroclor-1242	2	1	7.16	(7.12 - 7.20)								
Aroclor-1242	2	2	7.72	(7.68 - 7.76)								
Aroclor-1242	2	3	8.21	(8.17 - 8.25)								
Aroclor-1242	2	4	8.60	(8.56 - 8.64)								
Aroclor-1242	2	5	9.02	(8.98 - 9.06)								
Aroclor-1248	2	1	7.72	(7.68 - 7.76)								
Aroclor-1248	2	2	8.19	(8.15 - 8.23)								
Aroclor-1248	2	3	8.60	(8.56 - 8.64)								
Aroclor-1248	2	4	9.02	(8.98 - 9.06)								
Aroclor-1248	2	5	9.34	(9.30 - 9.38)								
Aroclor-1254	2	1	9.51	(9.47 - 9.55)								
Aroclor-1254	2	2	9.92	(9.88 - 9.96)								
Aroclor-1254	2	3	10.36	(10.32 - 10.40)								
Aroclor-1254	2	4	10.87	(10.83 - 10.91)								
Aroclor-1254	2	5	11.54	(11.50 - 11.58)								
Aroclor-1262	2	1	10.92	(10.88 - 10.96)								
Aroclor-1262	2	2	12.07	(12.03 - 12.11)								
Aroclor-1262	2	3	12.17	(12.13 - 12.21)								
Aroclor-1262	2	4	12.71	(12.67 - 12.75)								
Aroclor-1262	2	5	13.20	(13.16 - 13.24)								
Aroclor-1268	2	1	11.58	(11.54 - 11.62)								
Aroclor-1268	2	2	11.63	(11.59 - 11.67)								
Aroclor-1268	2	3	12.47	(12.43 - 12.51)								
Aroclor-1268	2	4	12.61	(12.57 - 12.65)								
Aroclor-1268	2	5	13.19	(13.15 - 13.23)								
DCB-Surrogate	2	0	13.68	(13.62 - 13.74)	13.67	(13.61 - 13.73)	13.67	(13.61 - 13.73)				

Pesticide Data

Form1

ORGANICS PESTICIDE REPORT

Sample Number: AC74177-002
Client Id: 006 SS-1 Composite
Data File: 6G43249.D
Analysis Date: 08/28/13 11:52
Date Rec/Extracted: 08/23/13-08/26/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0054	U	7421-93-4	Endrin Aldehyde	0.0054	U
309-00-2	Aldrin	0.0054	U	53494-70-5	Endrin Ketone	0.0054	U
319-84-6	alpha-BHC	0.0011	U	58-89-9	gamma-BHC	0.0011	U
319-85-7	beta-BHC	0.0011	U	76-44-8	Heptachlor	0.0054	U
57-74-9	Chlordane	0.027	U	1024-57-3	Heptachlor Epoxide	0.0054	U
319-86-8	delta-BHC	0.0054	U	72-43-5	Methoxychlor	0.0054	U
60-57-1	Dieldrin	0.0011	U	72-54-8	p,p'-DDD	0.0027	U
959-98-8	Endosulfan I	0.0054	U	72-55-9	p,p'-DDE	0.0027	U
33213-65-9	Endosulfan II	0.0054	U	50-29-3	p,p'-DDT	0.0027	U
1031-07-8	Endosulfan Sulfate	0.0054	U	8001-35-2	Toxaphene	0.027	U
72-20-8	Endrin	0.0054	U	5103-74-2	y-chlordane	0.0054	U

Worksheet #: 274979

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3082313 0263

Data Path : G:\Gcdata\2013\GC_6\Data\08-28-13\
Data File : 6G43249.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 11:52
Operator : MS
Sample : AC74177-002
Misc : S,PEST
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 28 15:44:26 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0808.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Thu Aug 08 12:29:53 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	5.084	5.015	1073690	1512078	98.352	103.820
22)DCB-Surrogate	12.406	12.859	944491	1544019	112.956	124.060

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

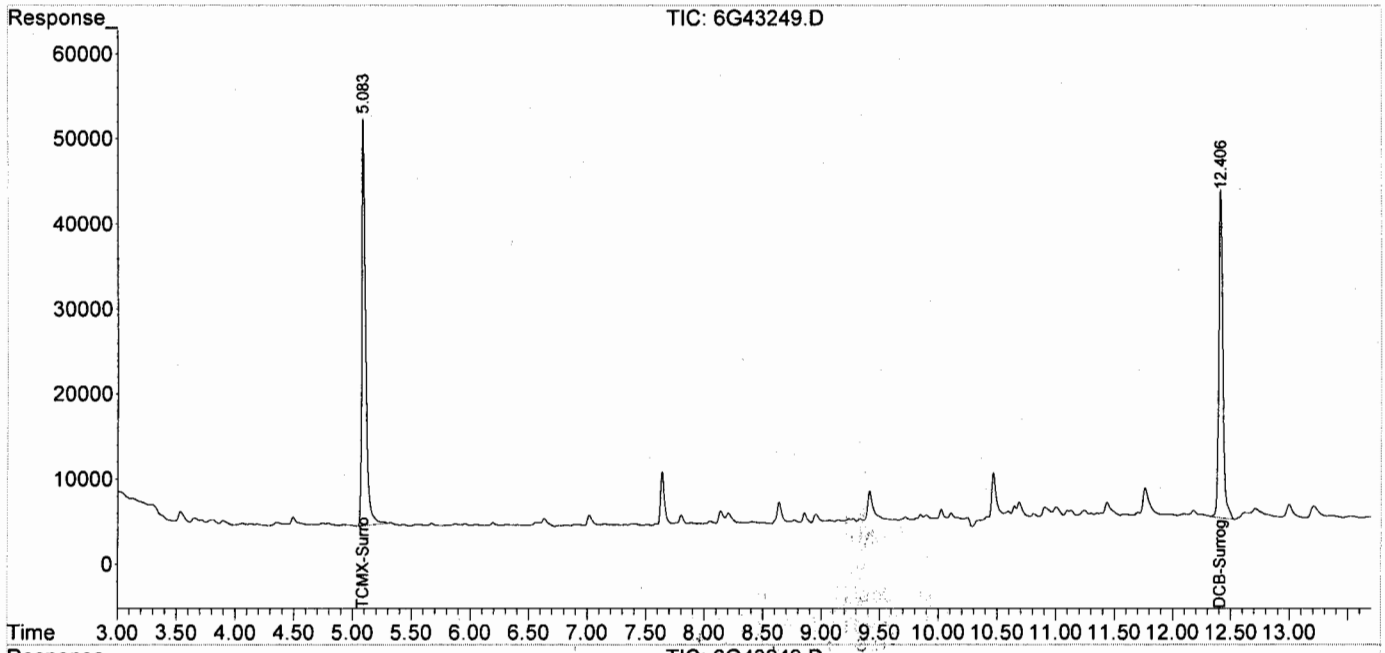
MS

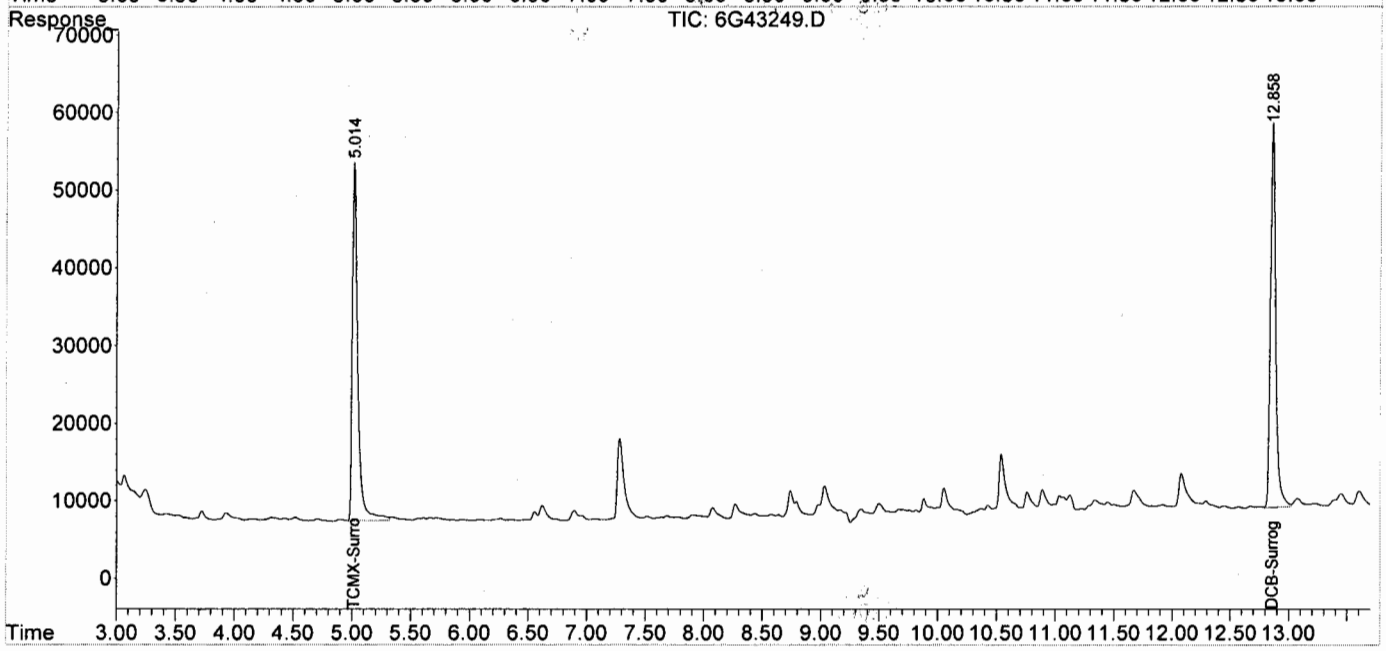
Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_6\Data\08-28-13\
Data File : 6G43249.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 11:52
Operator : MS
Sample : AC74177-002
Misc : S,PEST
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 28 15:44:26 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0808.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Thu Aug 08 12:29:53 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PESTICIDE REPORT

Sample Number: AC74177-004
Client Id: 012 SS-2 Composite
Data File: 6G43250.D
Analysis Date: 08/28/13 12:10
Date Rec/Extracted: 08/23/13-08/26/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0054	U	7421-93-4	Endrin Aldehyde	0.0054	U
309-00-2	Aldrin	0.0054	U	53494-70-5	Endrin Ketone	0.0054	U
319-84-6	alpha-BHC	0.0011	U	58-89-9	gamma-BHC	0.0011	U
319-85-7	beta-BHC	0.0011	U	76-44-8	Heptachlor	0.0054	U
57-74-9	Chlordane	0.027	U	1024-57-3	Heptachlor Epoxide	0.0054	U
319-86-8	delta-BHC	0.0054	U	72-43-5	Methoxychlor	0.0054	U
60-57-1	Dieldrin	0.0011	U	72-54-8	p,p'-DDD	0.0027	U
959-98-8	Endosulfan I	0.0054	U	72-55-9	p,p'-DDE	0.0027	U
33213-65-9	Endosulfan II	0.0054	U	50-29-3	p,p'-DDT	0.0027	U
1031-07-8	Endosulfan Sulfate	0.0054	U	8001-35-2	Toxaphene	0.027	U
72-20-8	Endrin	0.0054	U	5103-74-2	y-chlordane	0.0054	U

Worksheet #: 274979

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_6\Data\08-28-13\
Data File : 6G43250.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 12:10
Operator : MS
Sample : AC74177-004
Misc : S,PEST
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 28 15:46:21 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0808.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Thu Aug 08 12:29:53 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32

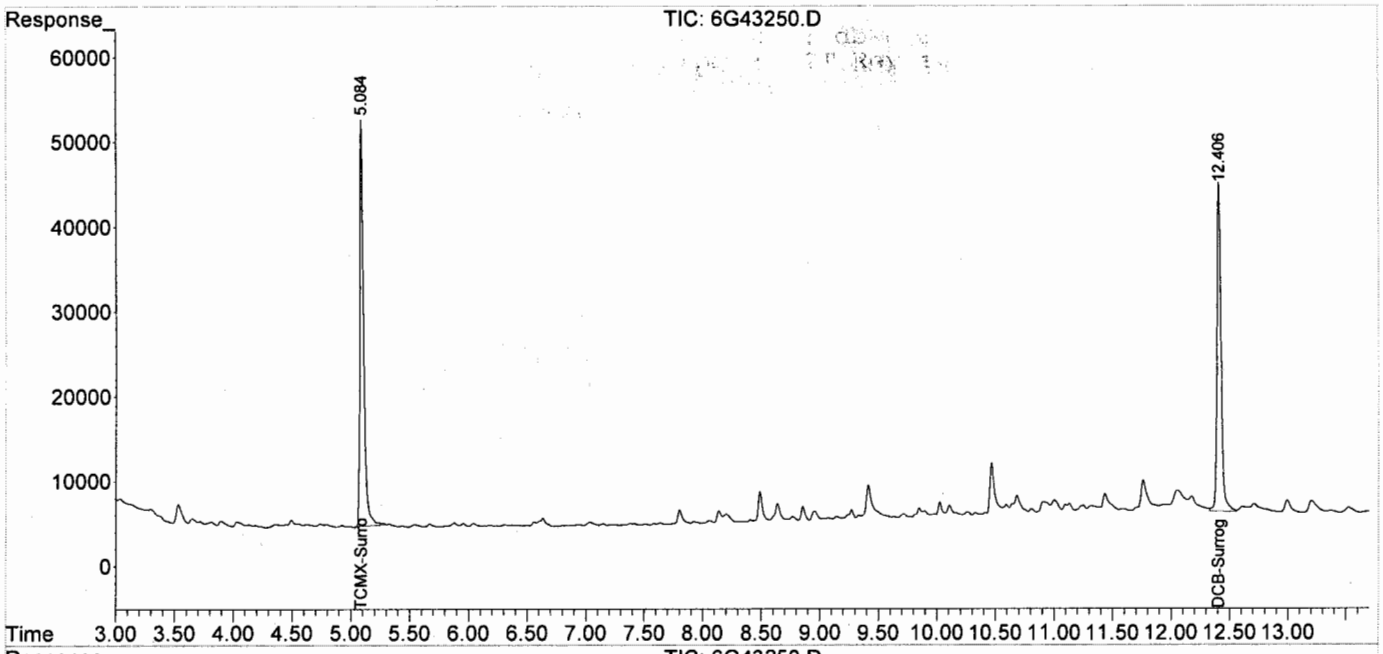
Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	5.085	5.015	1054500	1480507	96.507	101.580
22)DCB-Surrogate	12.407	12.858	946436	1567921	113.208	126.116

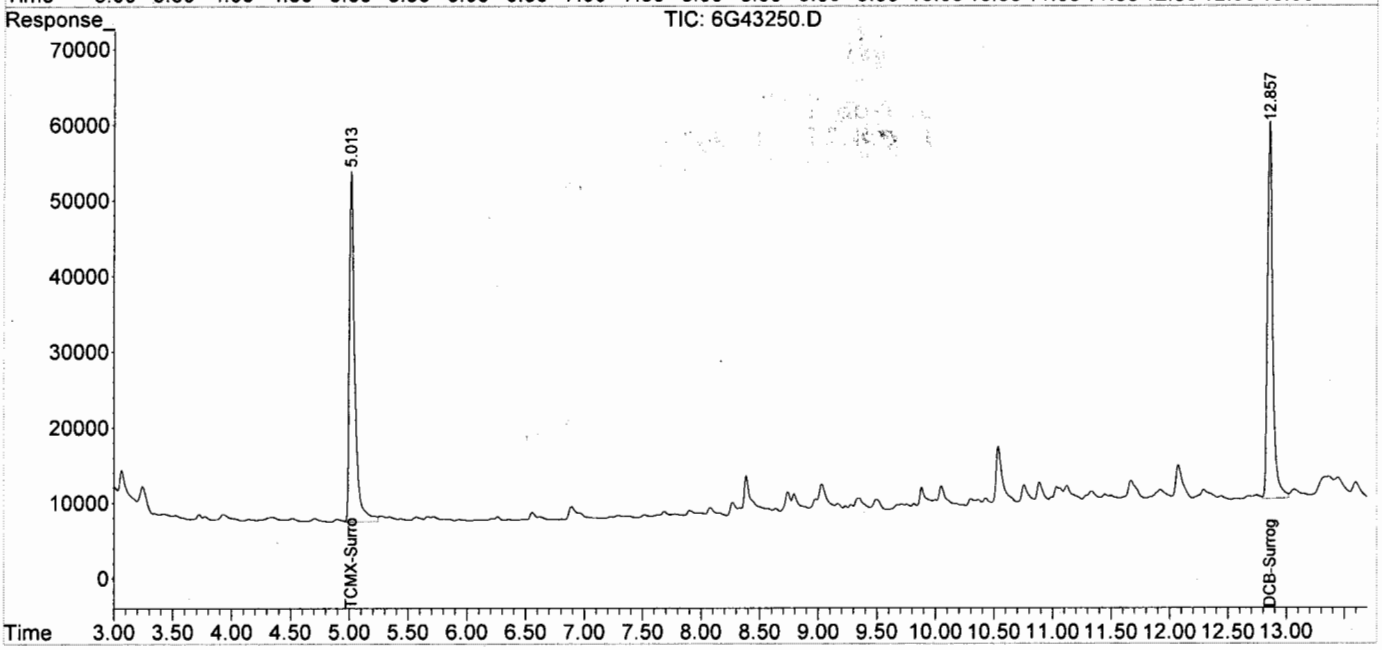
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2013\GC_6\Data\08-28-13\
Data File : 6G43250.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 12:10
Operator : MS
Sample : AC74177-004
Misc : S,PEST
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 28 15:46:21 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0808.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Thu Aug 08 12:29:53 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PESTICIDE REPORT

Sample Number: AC74177-006
Client Id: 018 SS-3 Composite
Data File: 6G43251.D
Analysis Date: 08/28/13 12:27
Date Rec/Extracted: 08/23/13-08/26/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 92

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0054	U	7421-93-4	Endrin Aldehyde	0.0054	U
309-00-2	Aldrin	0.0054	U	53494-70-5	Endrin Ketone	0.0054	U
319-84-6	alpha-BHC	0.0011	U	58-89-9	gamma-BHC	0.0011	U
319-85-7	beta-BHC	0.0011	U	76-44-8	Heptachlor	0.0054	U
57-74-9	Chlordane	0.027	U	1024-57-3	Heptachlor Epoxide	0.0054	U
319-86-8	delta-BHC	0.0054	U	72-43-5	Methoxychlor	0.0054	U
60-57-1	Dieldrin	0.0011	U	72-54-8	p,p'-DDD	0.0027	U
959-98-8	Endosulfan I	0.0054	U	**72-55-9**	**(^)p,p'-DDE**	**0.0027**	**0.0056**
33213-65-9	Endosulfan II	0.0054	U	**50-29-3**	**p,p'-DDT**	**0.0027**	**0.0028 d**
1031-07-8	Endosulfan Sulfate	0.0054	U	8001-35-2	Toxaphene	0.027	U
72-20-8	Endrin	0.0054	U	5103-74-2	y-chlordane	0.0054	U

Worksheet #: 274979

Total Target Concentration 0.0028

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3082313 0269

Data Path : G:\Gcdata\2013\GC_6\Data\08-28-13\
Data File : 6G43251.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 12:27
Operator : MS
Sample : AC74177-006
Misc : S,PEST
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 28 15:47:28 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0808.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Thu Aug 08 12:29:53 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	5.084	5.015	1082768	1451569	99.225	99.530
12)p,p'-DDE	8.854	8.798	67383	126224	7.295m	10.247m#
17)p,p'-DDT	10.023	9.881	32079	75637	5.065m	7.733m#
22)DCB-Surrogate	12.407	12.859	881795	1516930	104.865	121.736

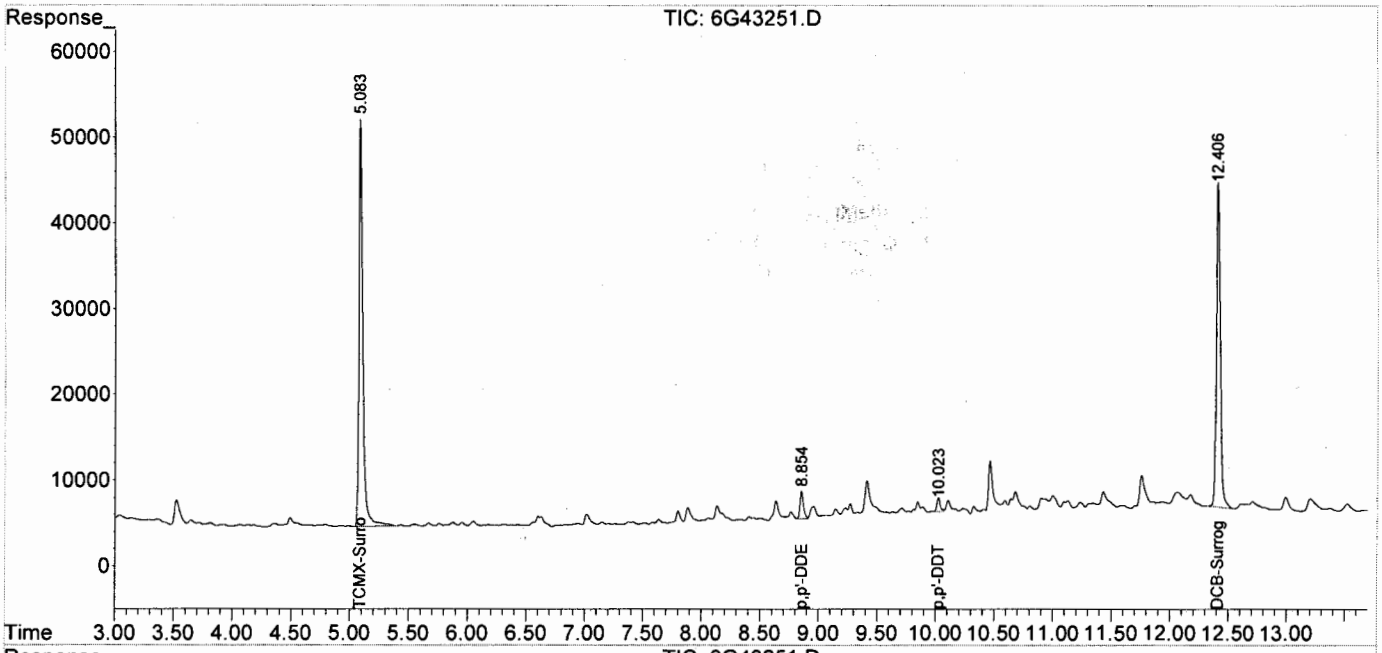
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

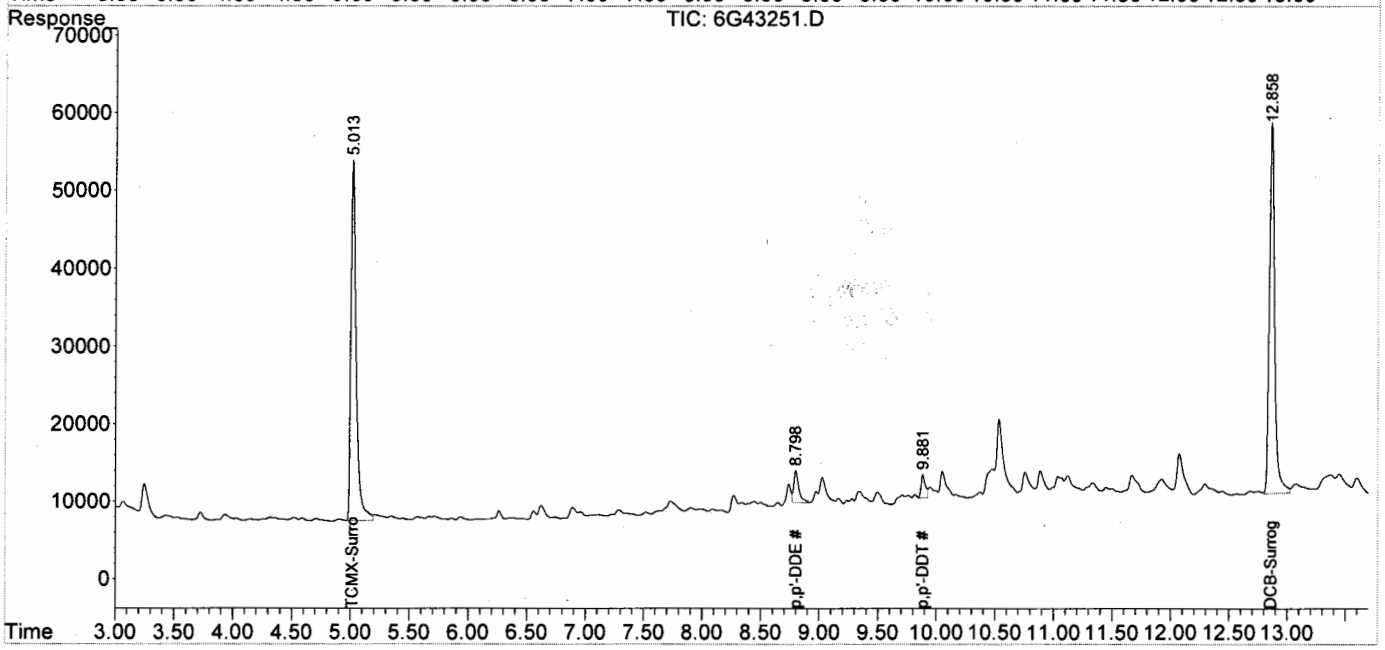
Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_6\Data\08-28-13\
Data File : 6G43251.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 12:27
Operator : MS
Sample : AC74177-006
Misc : S,PEST
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 28 15:47:28 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0808.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Thu Aug 08 12:29:53 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PESTICIDE REPORT

Sample Number: SMB25997
Client Id:
Data File: 6G43236.D
Analysis Date: 08/28/13 07:08
Date Rec/Extracted: NA-08/26/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0050	U	7421-93-4	Endrin Aldehyde	0.0050	U
309-00-2	Aldrin	0.0050	U	53494-70-5	Endrin Ketone	0.0050	U
319-84-6	alpha-BHC	0.0010	U	58-89-9	gamma-BHC	0.0010	U
319-85-7	beta-BHC	0.0010	U	76-44-8	Heptachlor	0.0050	U
57-74-9	Chlordane	0.025	U	1024-57-3	Heptachlor Epoxide	0.0050	U
319-86-8	delta-BHC	0.0050	U	72-43-5	Methoxychlor	0.0050	U
60-57-1	Dieldrin	0.0010	U	72-54-8	p,p'-DDD	0.0025	U
959-98-8	Endosulfan I	0.0050	U	72-55-9	p,p'-DDE	0.0025	U
33213-65-9	Endosulfan II	0.0050	U	50-29-3	p,p'-DDT	0.0025	U
1031-07-8	Endosulfan Sulfate	0.0050	U	8001-35-2	Toxaphene	0.025	U
72-20-8	Endrin	0.0050	U	5103-74-2	y-chlordane	0.0050	U

Worksheet #: 274979

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0272

Data Path : G:\Gcdata\2013\GC_6\Data\08-28-13\
Data File : 6G43236.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 7:08
Operator : MS
Sample : SMB25997
Misc : S,PEST
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 28 13:37:27 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0808.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Thu Aug 08 12:29:53 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32

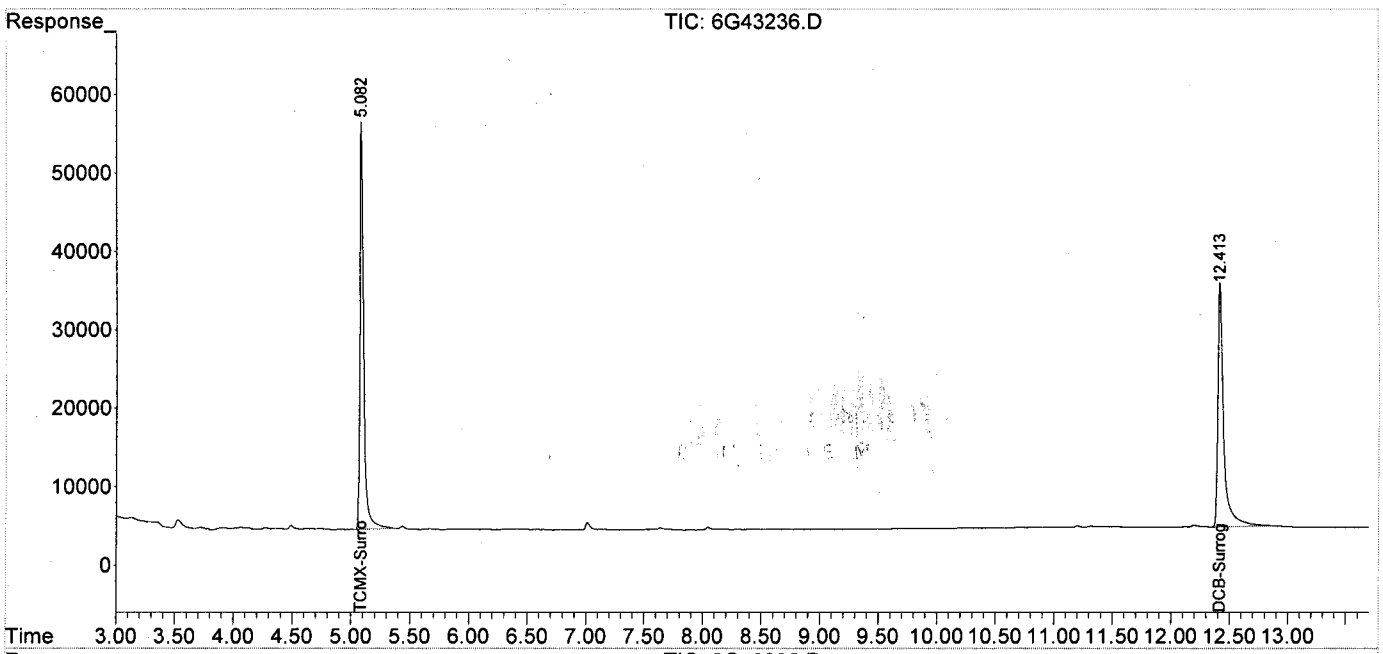
Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	5.083	5.015	1153300	1586852	106.040	109.139
22)DCB-Surrogate	12.414	12.868	1060477	1688440	128.190	136.554

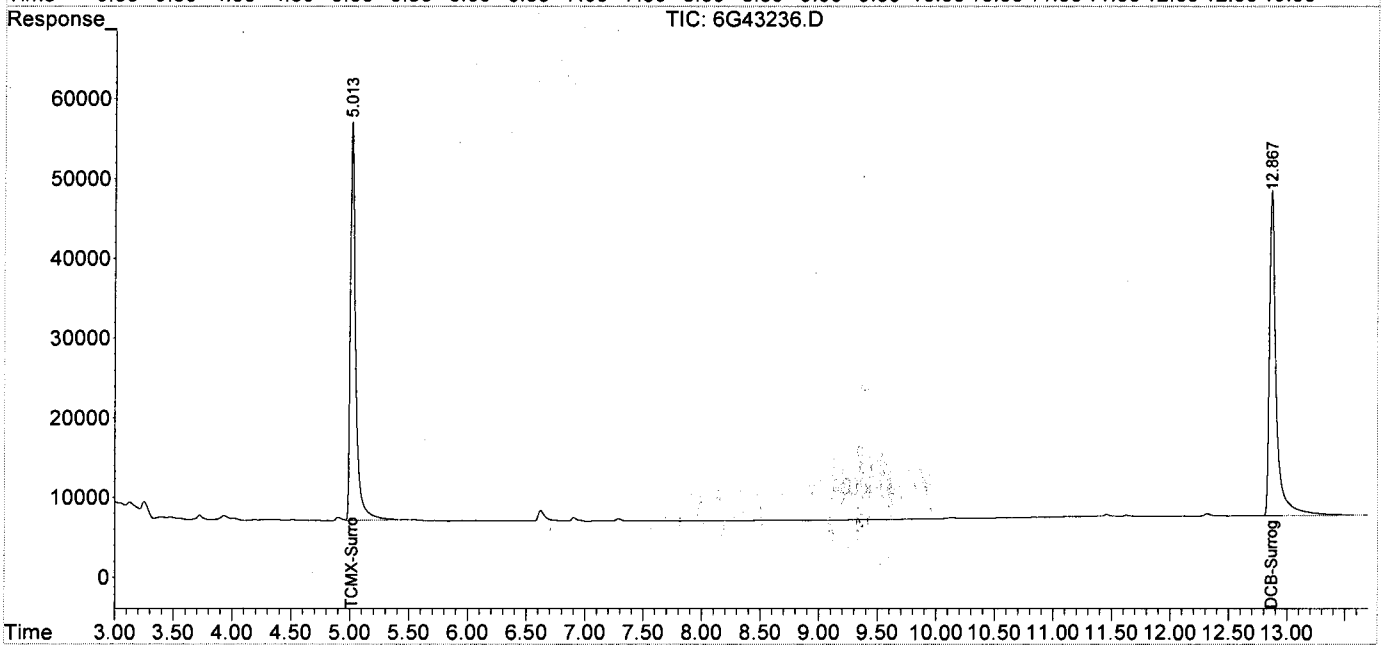
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2013\GC_6\Data\08-28-13\
Data File : 6G43236.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 7:08
Operator : MS
Sample : SMB25997
Misc : S,PEST
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 28 13:37:27 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0808.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Thu Aug 08 12:29:53 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32





FORM2

Surrogate Recovery

Method: EPA 8081A

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column2 S2 Recov	Column1 S3 Recov	Column2 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
6G43176.D	SMB25986	Soil	08/26/13 10:35	1		81	73	99	92		
6G43236.D	SMB25997	Soil	08/28/13 07:08	1		106	109	128	137		
6G43249.D	AC74177-002	Soil	08/28/13 11:52	1		98	104	113	124		
6G43250.D	AC74177-004	Soil	08/28/13 12:10	1		97	102	113	126		
6G43251.D	AC74177-006	Soil	08/28/13 12:27	1		99	100	105	122		
6G43177.D	SMB25986(M	Soil	08/26/13 10:53	1		83	80	102	98		
6G43178.D	AC74086-003(	Soil	08/26/13 11:10	1		90	88	106	108		
6G43179.D	AC74086-003(	Soil	08/26/13 11:28	1		85	83	99	101		
6G43204.D	AC74086-003	Soil	08/27/13 10:31	1		90	87	108	114		
6G43257.D	SMB25997(M	Soil	08/28/13 14:58	1		85	88	99	106		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8081A

Soil Limits

Compound	Spike Amt	Limits
S1=TCMX-Surrogate	100	37-141
S2=TCMX-Surrogate	100	37-141
S3=DCB-Surrogate	100	33-146
S4=DCB-Surrogate	100	33-146

Form3
Recovery Data
QC Batch: SMB25986

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G43177.D	SMB25986(MS)	8/26/2013 10:53:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	2	100.7	0	100	101	60	130
gamma-BHC	2	109.7	0	100	110	60	130
beta-BHC	2	99.87	0	100	100	60	130
Heptachlor	2	94.44	0	100	94	60	130
delta-BHC	2	91.55	0	100	92	60	130
Aldrin	2	102.3	0	100	102	70	130
Heptachlor Epoxide	2	103.93	0	100	104	70	130
Endosulfan I	2	107.09	0	100	107	70	130
p,p'-DDE	2	102.39	0	100	102	70	130
Dieldrin	2	114.91	0	100	115	70	130
Endrin	2	110.92	0	100	111	70	130
p,p'-DDD	2	94.81	0	100	95	70	130
Endosulfan II	2	111.74	0	100	112	70	130
p,p'-DDT	2	101.8	0	100	102	70	130
Endrin Aldehyde	2	71.29	0	100	71	10	130
Endosulfan Sulfate	2	92.58	0	100	93	70	130
Methoxychlor	2	94.63	0	100	95	60	130
Endrin Ketone	2	97.96	0	100	98	70	130

QC

QC

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB25997

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G43257.D	SMB25997(MS)	8/28/2013 2:58:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	2	105.76	0	100	106	60	130
gamma-BHC	2	116.65	0	100	117	60	130
beta-BHC	2	106.37	0	100	106	60	130
Heptachlor	2	100.63	0	100	101	60	130
delta-BHC	2	105.53	0	100	106	60	130
Aldrin	2	101.6	0	100	102	70	130
Heptachlor Epoxide	2	105.56	0	100	106	70	130
Endosulfan I	2	106.64	0	100	107	70	130
p,p'-DDE	2	105.09	0	100	105	70	130
Dieldrin	2	111.26	0	100	111	70	130
Endrin	2	117.71	0	100	118	70	130
p,p'-DDD	2	106.82	0	100	107	70	130
Endosulfan II	2	105.81	0	100	106	70	130
p,p'-DDT	2	113.98	0	100	114	70	130
Endrin Aldehyde	2	62.27	0	100	62	10	130
Endosulfan Sulfate	2	97.28	0	100	97	70	130
Methoxychlor	2	120.73	0	100	121	60	130
Endrin Ketone	2	111.31	0	100	111	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB25986

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G43178.D	AC74086-003(MS)	8/26/2013 11:10:00 AM
Non Spike(If applicable):	6G43204.D	AC74086-003	8/27/2013 10:31:00 AM
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	2	110.32	0	100	110	60	130
gamma-BHC	2	119.98	0	100	120	60	130
beta-BHC	2	111.83	0	100	112	60	130
Heptachlor	2	104.71	0	100	105	60	130
delta-BHC	2	104.62	0	100	105	60	130
Aldrin	2	113.8	0	100	114	70	130
Heptachlor Epoxide	2	114.02	0	100	114	70	130
Endosulfan I	2	118.85	0	100	119	70	130
p,p'-DDE	2	115.01	0	100	115	70	130
Dieldrin	2	125.74	0	100	126	70	130
Endrin	2	126.64	0	100	127	70	130
p,p'-DDD	2	112.19	0	100	112	70	130
Endosulfan II	2	116.39	0	100	116	70	130
p,p'-DDT	2	115.01	0	100	115	70	130
Endrin Aldehyde	2	81.88	0	100	82	10	130
Endosulfan Sulfate	2	101.66	0	100	102	70	130
Methoxychlor	2	109.4	0	100	109	60	130
Endrin Ketone	2	110.36	0	100	110	70	130

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G43179.D	AC74086-003(MSD)	8/26/2013 11:28:00 AM
Non Spike(If applicable):	6G43204.D	AC74086-003	8/27/2013 10:31:00 AM
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	2	103.9	0	100	104	60	130
gamma-BHC	2	113.47	0	100	113	60	130
beta-BHC	2	103.38	0	100	103	60	130
Heptachlor	2	97.73	0	100	98	60	130
delta-BHC	2	101.06	0	100	101	60	130
Aldrin	2	105.45	0	100	105	70	130
Heptachlor Epoxide	2	107.07	0	100	107	70	130
Endosulfan I	2	110.68	0	100	111	70	130
p,p'-DDE	2	105.25	0	100	105	70	130
Dieldrin	2	116.43	0	100	116	70	130
Endrin	2	118.8	0	100	119	70	130
p,p'-DDD	2	104.87	0	100	105	70	130
Endosulfan II	2	109.53	0	100	110	70	130
p,p'-DDT	2	103.6	0	100	104	70	130
Endrin Aldehyde	2	95.14	0	100	95	10	130
Endosulfan Sulfate	2	97.5	0	100	98	70	130
Methoxychlor	2	100.16	0	100	100	60	130
Endrin Ketone	2	105.68	0	100	106	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA

QC Batch: SMB25986

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G43179.D	AC74086-003(MSD)	8/26/2013 11:28:00 AM
Duplicate(If applicable):	6G43178.D	AC74086-003(MS)	8/26/2013 11:10:00 AM
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
alpha-BHC	2	103.9	110.32	6	40
gamma-BHC	2	113.47	119.98	5.6	40
beta-BHC	2	103.38	111.83	7.9	40
Heptachlor	2	97.73	104.71	6.9	40
delta-BHC	2	101.06	104.62	3.5	40
Aldrin	2	105.45	113.8	7.6	40
Heptachlor Epoxide	2	107.07	114.02	6.3	40
Endosulfan I	2	110.68	118.85	7.1	40
p,p'-DDE	2	105.25	115.01	8.9	40
Dieldrin	2	116.43	125.74	7.7	40
Endrin	2	118.8	126.64	6.4	40
p,p'-DDD	2	104.87	112.19	6.7	40
Endosulfan II	2	109.53	116.39	6.1	40
p,p'-DDT	2	103.6	115.01	10	40
Endrin Aldehyde	2	95.14	81.88	15	40
Endosulfan Sulfate	2	97.5	101.66	4.2	40
Methoxychlor	2	100.16	109.4	8.8	40
Endrin Ketone	2	105.68	110.36	4.3	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: SMB25986
Blank Data File: 6G43176.D
Matrix: Soil

Blank Analysis Date: 08/26/13 10:35
Blank Extraction Date: 08/23/13
(If Applicable)
Method: EPA 8081A

Sample Number	Data File	Analysis Date
AC74086-003	6G43204.D	08/27/13 10:31
AC74086-003(MSD	6G43179.D	08/26/13 11:28
AC74086-003(MS)	6G43178.D	08/26/13 11:10
SMB25986(MS)	6G43177.D	08/26/13 10:53

FORM 4
Blank Summary

Blank Number: SMB25997
Blank Data File: 6G43236.D
Matrix: Soil

Blank Analysis Date: 08/28/13 07:08
Blank Extraction Date: 08/26/13
(If Applicable)
Method: EPA 8081A

Sample Number	Data File	Analysis Date
AC74177-002	6G43249.D	08/28/13 11:52
AC74177-004	6G43250.D	08/28/13 12:10
AC74177-006	6G43251.D	08/28/13 12:27
SMB25997(MS)	6G43257.D	08/28/13 14:58

Form 5

Method: EPA 8081A

Instrument: GC_6

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G42771.D	CAL EVAL	08/08/13 08:40	Aqueous					
6G42772.D	CAL PEST@2PPB	08/08/13 08:59	Soil	6G42772.	12.4274	0	12.8842	0
6G42773.D	CAL PEST@10PPB	08/08/13 09:16	Soil	6G42772.	12.4247	0.0217	12.8837	0.0039
6G42774.D	CAL PEST@50PPB	08/08/13 09:34	Soil	6G42772.	12.4246	0.0225	12.8834	0.0062
6G42775.D	CAL PEST@100PPB	08/08/13 09:51	Soil	6G42772.	12.4231	0.0346	12.8833	0.007
6G42776.D	CAL PEST@200PPB	08/08/13 10:09	Soil	6G42772.	12.4206	0.0547	12.8813	0.0225
6G42777.D	CAL PEST@400PPB	08/08/13 10:26	Soil	6G42772.	12.4195	0.0636	12.8793	0.038
6G42778.D	CAL CHLOR@100PPB	08/08/13 10:44	Soil	6G42772.	12.4236	0.0306	12.8837	0.0039
6G42779.D	CAL TOX@500PPB	08/08/13 11:01	Soil	6G42772.	12.4249	0.0201	12.8840	0.0016
6G42780.D	ICV	08/08/13 11:19	Soil	6G42772.	12.4213	0.0491	12.8808	0.0264
6G42781.D	SMB25840	08/08/13 11:40	Soil	6G42772.	12.4252	0.0177	12.8824	0.014
6G42782.D	MBS	08/08/13 11:58	Soil	6G42772.	12.4205	0.0555	12.8802	0.031
6G42783.D	AC73775-001	08/08/13 12:15	Soil	6G42772.	12.4178	0.0773	12.8764	0.0606
6G42784.D	AC73775-002	08/08/13 12:33	Soil	6G42772.	12.4170	0.0837	12.8769	0.0567
6G42785.D	AC73775-003	08/08/13 12:50	Soil	6G42772.	12.4175	0.0797	12.8750	0.0714
6G42786.D	AC73775-004	08/08/13 13:08	Soil	6G42772.	12.4166	0.0869	12.8759	0.0644
6G42787.D	AC73775-005	08/08/13 13:25	Soil	6G42772.	12.4192	0.066	12.8780	0.0481
6G42788.D	AC73899-001	08/08/13 13:43	Soil	6G42772.	12.4181	0.0749	12.8776	0.0512
6G42789.D	CAL PEST@200PPB	08/08/13 14:16	Soil	6G42772.	12.4231	0.0346	12.8815	0.021

Drift Compound: DCB-Surrogate

Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph)

* - Values outside of limits for this column/run

Form 5

Method: EPA 8081A

Instrument: GC_6

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G43172.D	blk	08/26/13 08:47	Soil					
6G43173.D	CAL EVAL	08/26/13 09:04	Soil					
6G43174.D	CAL PEST@100PPB	08/26/13 09:23	Soil	6G43174.	12.4120	0	12.8667	0
6G43175.D	BLK	08/26/13 09:41	Soil	6G43174.	12.4086	0.0274	12.8671	0.0031
6G43176.D	SMB25986	08/26/13 10:35	Soil	6G43174.	12.4229	0.0878	12.8734	0.0521
6G43177.D	SMB25986(MS)	08/26/13 10:53	Soil	6G43174.	12.4123	0.0024	12.8687	0.0155
6G43178.D	AC74086-003(MS)	08/26/13 11:10	Soil	6G43174.	12.4072	0.0387	12.8630	0.0288
6G43179.D	AC74086-003(MSD)	08/26/13 11:28	Soil	6G43174.	12.4066	0.0435	12.8625	0.0326
6G43180.D	AC74051-001(MS)	08/26/13 11:45	Soil	6G43174.	12.4027	0.0749	12.8590	0.0599
6G43181.D	AC74051-001(MSD)	08/26/13 12:03	Soil	6G43174.	12.4033	0.0701	12.8593	0.0575
6G43182.D	CAL PEST@200PPB	08/26/13 13:49	Soil	6G43174.	12.4064	0.0451	12.8632	0.0272

Drift Compound: DCB-Surrogate

Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph)

*- Values outside of limits for this column/run

Form 5

Method: EPA 8081A

Instrument: GC_6

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G43183.D	BLK	08/27/13 01:01	Soil					
6G43184.D	BLK	08/27/13 01:18	Soil					
6G43185.D	CAL EVAL	08/27/13 01:36	Soil					
6G43186.D	100PPB	08/27/13 01:53	Soil					
6G43187.D	200PPB	08/27/13 02:11	Soil					
6G43188.D	AC74086-001	08/27/13 02:28	Soil					
6G43189.D	AC74086-002	08/27/13 02:46	Soil					
6G43190.D	AC74086-003	08/27/13 03:03	Soil					
6G43191.D	AC74086-004	08/27/13 03:21	Soil					
6G43192.D	AC74086-005	08/27/13 03:38	Soil					
6G43193.D	AC74086-006	08/27/13 03:56	Soil					
6G43194.D	AC74144-001	08/27/13 04:13	Soil					
6G43195.D	AC74130-007	08/27/13 04:31	Soil					
6G43196.D	AC74130-008	08/27/13 04:48	Soil					
6G43197.D	AC74051-001	08/27/13 05:06	Soil					
6G43198.D	AC74086-020	08/27/13 05:23	Soil					
6G43199.D	200	08/27/13 09:02	Soil					
6G43200.D	CAL PEST@100PPB	08/27/13 09:20	Soil	6G43200.	12.4119	0	12.8651	0
6G43201.D	CAL EVAL	08/27/13 09:37	Soil					
6G43202.D	AC74086-001	08/27/13 09:56	Soil	6G43200.	12.4071	0.0387	12.8599	0.0404
6G43203.D	AC74086-002	08/27/13 10:14	Soil	6G43200.	12.4063	0.0451	12.8613	0.0295
6G43204.D	AC74086-003	08/27/13 10:31	Soil	6G43200.	12.4066	0.0427	12.8621	0.0233
6G43205.D	AC74086-004	08/27/13 10:49	Soil	6G43200.	12.4071	0.0387	12.8607	0.0342
6G43206.D	AC74086-005	08/27/13 11:06	Soil	6G43200.	12.4046	0.0588	12.8612	0.0303
6G43207.D	AC74086-006	08/27/13 11:24	Soil	6G43200.	12.4088	0.025	12.8630	0.0163
6G43208.D	AC74086-020	08/27/13 11:41	Soil	6G43200.	12.4102	0.0137	12.8672	0.0163
6G43209.D	AC74086-019	08/27/13 11:59	Soil	6G43200.	12.4056	0.0508	12.8623	0.0218
6G43210.D	AC73951-002	08/27/13 12:16	Soil	6G43200.	12.4064	0.0443	12.8628	0.0179
6G43211.D	AC74051-001	08/27/13 12:40	Soil	6G43200.	12.4129	0.0081	12.8648	0.0023
6G43212.D	AC74130-007	08/27/13 12:57	Soil	6G43200.	12.4058	0.0492	12.8607	0.0342
6G43213.D	AC74130-008	08/27/13 13:15	Soil	6G43200.	12.4073	0.0371	12.8621	0.0233
6G43214.D	CAL PEST@200PPB	08/27/13 13:58	Soil	6G43200.	12.4123	0.0032	12.8655	0.0031

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081A

Instrument: GC_6

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G43215.D	BLK	08/28/13 01:01	Soil					
6G43216.D	BLK	08/28/13 01:18	Soil					
6G43217.D	CAL EVAL	08/28/13 01:36	Soil					
6G43218.D	CAL PEST@100PPB	08/28/13 01:53	Soil	6G43218.	12.4133	0	12.8670	0
6G43219.D	200PPB	08/28/13 02:11	Soil	6G43218.	12.4108	0.0201	12.8661	0.007
6G43220.D	MB	08/28/13 02:28	Aqueous	6G43218.	12.4162	0.0234	12.8706	0.028
6G43221.D	MBS	08/28/13 02:46	Aqueous	6G43218.	12.4084	0.0395	12.8624	0.0358
6G43222.D	AC74109-003(MS)	08/28/13 03:03	Aqueous	6G43218.	12.4078	0.0443	12.8629	0.0319
6G43223.D	AC74109-004(MSD)	08/28/13 03:21	Aqueous	6G43218.	12.4064	0.0556	12.8608	0.0482
6G43224.D	AC74109-002	08/28/13 03:38	Aqueous	6G43218.	12.4069	0.0516	12.8623	0.0365
6G43225.D	AC74109-005	08/28/13 03:56	Aqueous	6G43218.	12.4087	0.0371	12.8634	0.028
6G43226.D	AC74109-006	08/28/13 04:13	Aqueous	6G43218.	12.4078	0.0443	12.8625	0.035
6G43227.D	AC74109-007	08/28/13 04:31	Aqueous	6G43218.	12.4070	0.0508	12.8615	0.0428
6G43228.D	AC74109-009	08/28/13 04:48	Aqueous	6G43218.	12.4117	0.0129	12.8678	0.0062
6G43229.D	AC74110-001	08/28/13 05:06	Aqueous	6G43218.	12.4138	0.004	12.8704	0.0264
6G43230.D	AC74110-002	08/28/13 05:23	Aqueous	6G43218.	12.4127	0.0048	12.8680	0.0078
6G43231.D	AC74177-002	08/28/13 05:41	Aqueous	6G43218.	12.4145	0.0097	12.8708	0.0295
6G43232.D	AC74177-004	08/28/13 05:58	Aqueous	6G43218.	12.4162	0.0234	12.8718	0.0373
6G43233.D	AC74177-006	08/28/13 06:16	Aqueous	6G43218.	12.4159	0.0209	12.8710	0.0311
6G43234.D	EF1-V-171314(8/22)	08/28/13 06:33	Aqueous	6G43218.	12.4142	0.0073	12.8694	0.0187
6G43235.D	EF1-V-171314(8/27)	08/28/13 06:50	Aqueous	6G43218.	12.4162	0.0234	12.8719	0.0381
6G43236.D	SMB25997	08/28/13 07:08	Soil	6G43218.	12.4137	0.0032	12.8684	0.0109
6G43237.D	MBS	08/28/13 07:25	Soil	6G43218.	12.4131	0.0016	12.8680	0.0078
6G43238.D	MBS	08/28/13 07:43	Aqueous	6G43218.	12.4071	0.05	12.8617	0.0412
6G43239.D	MB	08/28/13 08:00	Aqueous	6G43218.	12.4059	0.0596	12.8610	0.0466
6G43240.D	100PPB	08/28/13 08:49	Soil	6G43218.	12.4156	0.0185	12.8690	0.0155
6G43241.D	CAL PEST@100PPB	08/28/13 09:27	Soil	6G43218.	12.4349	0.1739	12.8751	0.0629
6G43242.D	CAL EVAL	08/28/13 09:45	Soil					
6G43243.D	WMB26006	08/28/13 10:07	Aqueous	6G43241.	12.4235	0.0917	12.8701	0.0388
6G43244.D	AC74110-001(T)	08/28/13 10:25	Aqueous	6G43241.	12.4153	0.1577	12.8664	0.0676
6G43245.D	AC74110-002(T)	08/28/13 10:42	Aqueous	6G43241.	12.4122	0.1827	12.8637	0.0886
6G43246.D	AC74177-002(T)	08/28/13 11:00	Aqueous	6G43241.	12.4147	0.1626	12.8660	0.0707
6G43247.D	AC74177-004(T)	08/28/13 11:17	Aqueous	6G43241.	12.4161	0.1513	12.8686	0.0505
6G43248.D	AC74177-006(T)	08/28/13 11:35	Aqueous	6G43241.	12.4153	0.1577	12.8662	0.0691
6G43249.D	AC74177-002	08/28/13 11:52	Soil	6G43241.	12.4064	0.2295	12.8591	0.1243
6G43250.D	AC74177-004	08/28/13 12:10	Soil	6G43241.	12.4067	0.227	12.8578	0.1345
6G43251.D	AC74177-006	08/28/13 12:27	Soil	6G43241.	12.4072	0.223	12.8592	0.1236
6G43252.D	AC74144-001	08/28/13 12:45	Soil	6G43241.	12.4126	0.1795	12.8604	0.1142
6G43253.D	AC74048-001	08/28/13 13:03	Soil	6G43241.	12.4086	0.2117	12.8594	0.122
6G43254.D	SMB25997	08/28/13 13:20	Soil	6G43241.	12.4098	0.2021	12.8619	0.1026
6G43255.D	MBS	08/28/13 13:38	Soil	6G43241.	12.4094	0.2053	12.8619	0.1026
6G43256.D	CAL PEST@200PPB	08/28/13 14:24	Soil	6G43241.	12.4113	0.19	12.8612	0.108
6G43257.D	SMB25997(MS)	08/28/13 14:58	Soil	6G43256.	12.4195	0.0661	12.8665	0.0412
6G43258.D	WMB26006(MS)	08/28/13 15:21	Aqueous	6G43256.	12.4152	0.0314	12.8629	0.0132
6G43259.D	AC74109-003(MS:AC74	08/28/13 15:40	Aqueous	6G43256.	12.4091	0.0177	12.8595	0.0132
6G43260.D	AC74109-004(MSD:AC7	08/28/13 15:59	Aqueous	6G43256.	12.4065	0.0387	12.8579	0.0257
6G43261.D	CAL PEST@200PPB	08/28/13 16:16	Aqueous	6G43256.	12.4079	0.0274	12.8611	0.0008

Drift Compound: DCB-Surrogate

Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph)

* Values outside of limits for this column/run

3082313 0285

Form 6
Initial Calibration

Method: EPA 8081A

Instrument: GC_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6G42772.	CAL PEST@2PPB	08/08/13 08:59	2	6G42773.	CAL PEST@10PPB	08/08/13 09:16
3	6G42774.	CAL PEST@50PPB	08/08/13 09:34	4	6G42775.	CAL PEST@100PPB	08/08/13 09:51
5	6G42776.	CAL PEST@200PPB	08/08/13 10:09	6	6G42777.	CAL PEST@400PPB	08/08/13 10:26
7	6G42778.	CAL CHLOR@100PP	08/08/13 10:44	8	6G42779.	CAL TOX@500PPB	08/08/13 11:01

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Qua	1.6264	1.2413	1.1028	1.0845	1.0410	0.9313	----	----	1.17	5.09	0.996	1.00	21	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	1	0	Avg	1.2693	1.0689	1.1445	1.2457	1.2495	1.2151	----	----	1.20	6.28	1.00	1.00	6.4	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	1	0	Avg	1.3854	1.1462	1.1635	1.2046	1.1923	1.0983	----	----	1.20	6.80	0.998	1.00	8.3	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	1	0	Qua	1.0029	0.7494	0.6509	0.6397	0.6086	0.5412	----	----	0.699	7.69	0.996	1.00	23	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	1	0	Qua	1.7117	1.2365	1.0707	1.0664	1.0371	0.9430	----	----	1.18	7.09	0.997	1.00	24	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	1	0	Qua	1.2633	0.9242	0.9599	1.0496	1.0553	0.9804	----	----	1.04	8.04	0.998	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		
Aldrin	1	0	Qua	1.3862	1.0632	1.0460	1.0843	1.0778	0.9942	----	----	1.11	7.47	0.998	1.00	13	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	1	0	Qua	1.4226	1.0304	0.9985	1.0032	0.9680	0.8700	----	----	1.05	8.30	0.996	1.00	18	2.00	10.00	50.00	100.0	200.0	400.0		
γ-chlordane	1	0	Qua	1.5262	1.1738	1.0892	1.1102	1.1010	1.0055	----	----	1.17	8.70	0.998	1.00	16	2.00	10.00	50.00	100.0	200.0	400.0		
α-chlordane	1	0	Qua	1.4579	1.1115	1.0085	1.0119	0.9861	0.8982	----	----	1.08	8.77	0.997	1.00	18	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	1	0	Qua	1.0565	0.8614	0.8132	0.8171	0.7747	0.6956	----	----	0.836	8.67	0.996	1.00	15	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	1	0	Avg	1.0179	0.8492	0.8672	0.9481	0.9596	0.8999	----	----	0.924	8.86	0.999	1.00	6.9	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	1	0	Avg	1.1398	0.9230	0.9033	0.9517	0.9402	0.8639	----	----	0.954	9.12	0.998	1.00	10	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	1	0	Avg	0.9408	0.7514	0.7372	0.7787	0.7772	0.7185	----	----	0.784	9.38	0.998	1.00	10	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	1	0	Avg	0.7827	0.6380	0.6262	0.6777	0.6953	0.6639	----	----	0.681	9.82	0.999	1.00	8.2	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	1	0	Qua	1.1832	0.9700	0.8958	0.9011	0.8732	0.7883	----	----	0.935	9.95	0.997	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	1	0	Avg	0.6586	0.6230	0.6056	0.6476	0.6480	0.6168	----	----	0.633	10.03	0.999	1.00	3.3	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	1	0	Qua	1.0027	0.7195	0.6545	0.7039	0.7125	0.6535	----	----	0.741	10.44	0.998	1.00	18	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	1	0	Qua	2.2229	0.9203	0.8200	0.8453	0.8565	0.7845	----	----	1.07	10.81	0.998	1.00	52	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	1	0	Qua	0.5952	0.3275	0.3060	0.3199	0.3344	0.3072	----	----	0.365	10.74	0.998	0.999	31	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	1	0	Avg	0.8817	0.7654	0.7072	0.7201	0.7472	0.6764	----	----	0.750	11.35	0.997	0.999	9.6	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	1	0	Qua	1.6393	1.0916	0.8562	0.8642	0.7783	0.6692	----	----	0.983	12.42	0.992	1.00	36	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane	1	1	Avg	----	----	----	----	----	----	----	----	0.0762	7.09	-1	-1	Lvl=7	100.0							
Chlordane	1	2	Avg	----	----	----	----	----	----	----	----	0.146	8.71	-1	-1	Lvl=7	100.0							
Chlordane	1	3	Avg	----	----	----	----	----	----	----	----	0.203	8.77	-1	-1	Lvl=7	100.0							
Toxaphene	1	1	Avg	----	----	----	----	----	----	----	----	0.0113	9.37	-1	-1	Lvl=8	500.0							
Toxaphene	1	2	Avg	----	----	----	----	----	----	----	----	0.00948	9.63	-1	-1	Lvl=8	500.0							
Toxaphene	1	3	Avg	----	----	----	----	----	----	----	----	0.0270	10.31	-1	-1	Lvl=8	500.0							
Toxaphene	1	4	Avg	----	----	----	----	----	----	----	----	0.0172	10.68	-1	-1	Lvl=8	500.0							
Toxaphene	1	5	Avg	----	----	----	----	----	----	----	----	0.0137	11.08	-1	-1	Lvl=8	500.0							
TCMX-Surrogate	2	0	Qua	1.8222	1.4619	1.3907	1.4354	1.4304	1.3173	----	----	1.48	5.03	0.998	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	2	0	Qua	1.5252	1.3180	1.4563	1.6584	1.7870	1.7293	----	----	1.58	5.95	0.999	0.999	11	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	2	0	Avg	1.4882	1.2595	1.3586	1.4993	1.5735	1.4912	----	----	1.45	6.48	0.999	0.999	7.9	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	2	0	Qua	1.4089	1.0215	0.9190	0.9813	0.9997	0.9396	----	----	1.05	6.58	0.999	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	2	0	Qua	2.1495	1.5006	1.4334	1.5270	1.5627	1.4684	----	----	1.61	6.92	0.999	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	2	0	Qua	1.7921	1.1697	1.1634	1.3749	1.5156	1.4958	----	----	1.42	7.08	0.999	0.999	17	2.00	10.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 17 Avg Rsd Col 2: 12.5

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3082313 0286

Form 6
Initial Calibration

Method: EPA 8081A

Instrument: GC_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6G42772.	CAL PEST@2PPB	08/08/13 08:59	2	6G42773.	CAL PEST@10PPB	08/08/13 09:16
3	6G42774.	CAL PEST@50PPB	08/08/13 09:34	4	6G42775.	CAL PEST@100PPB	08/08/13 09:51
5	6G42776.	CAL PEST@200PPB	08/08/13 10:09	6	6G42777.	CAL PEST@400PPB	08/08/13 10:26
7	6G42778.	CAL CHLOR@100PP	08/08/13 10:44	8	6G42779.	CAL TOX@500PPB	08/08/13 11:01

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aldrin	2	0	Qua	1.7332	1.2953	1.3485	1.4790	1.5610	1.4911	----	----	1.48	7.37	0.999	0.999	11	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	2	0	Avg	1.6616	1.3609	1.3023	1.3616	1.3787	1.2879	----	----	1.39	8.10	0.999	1.00	9.8	2.00	10.00	50.00	100.0	200.0	400.0		
γ-chlordane	2	0	Avg	1.6567	1.3529	1.3252	1.4114	1.4613	1.3904	----	----	1.43	8.31	0.999	1.00	8.3	2.00	10.00	50.00	100.0	200.0	400.0		
a-chlordane	2	0	Qua	1.5493	1.2415	1.2074	1.2544	1.2419	1.1511	----	----	1.27	8.51	0.998	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	2	0	Avg	1.6263	1.3474	1.3425	1.4533	1.5212	1.4424	----	----	1.46	8.56	0.999	1.00	7.4	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	2	0	Qua	1.2462	1.0043	1.0562	1.1940	1.2999	1.2854	----	----	1.18	8.81	0.999	0.999	10	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	2	0	Avg	1.4155	1.1678	1.2006	1.3284	1.3877	1.3200	----	----	1.30	8.95	0.999	0.999	7.6	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	2	0	Qua	1.0464	0.8635	0.9000	0.9820	1.0445	1.0002	----	----	0.973	9.43	0.999	0.999	7.8	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	2	0	Qua	0.8027	0.6993	0.7705	0.8815	0.9732	0.9748	----	----	0.850	9.52	0.999	0.999	13	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	2	0	Avg	1.4417	1.1794	1.2406	1.3263	1.3580	1.2624	----	----	1.30	9.65	0.998	1.00	7.2	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	2	0	Qua	0.9634	0.7703	0.8411	0.9504	1.0197	1.0011	----	----	0.924	9.89	0.999	0.999	11	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	2	0	Qua	1.4456	0.9733	0.8738	0.9793	0.9888	0.9219	----	----	1.03	10.05	0.998	0.999	20	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	2	0	Avg	1.2787	1.0861	1.0298	1.1494	1.1795	1.1113	----	----	1.14	10.20	0.999	1.00	7.5	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	2	0	Avg	0.6937	0.5948	0.5712	0.5787	0.6091	0.5540	----	----	0.600	10.96	0.998	0.999	8.3	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	2	0	Qua	2.2634	1.1460	1.1486	1.2139	1.2579	1.1724	----	----	1.37	11.20	0.999	0.999	32	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	2	0	Qua	1.8807	1.4664	1.2624	1.2587	1.1983	1.0651	----	----	1.36	12.88	0.996	1.00	21	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane	2	1	Avg	----	----	----	----	----	----	----	----	0.101	6.92	-1	-1	Lvl=7	100.0							
Chlordane	2	2	Avg	----	----	----	----	----	----	----	----	0.292	8.31	-1	-1	Lvl=7	100.0							
Chlordane	2	3	Avg	----	----	----	----	----	----	----	----	0.164	8.51	-1	-1	Lvl=7	100.0							
Toxaphene	2	1	Avg	----	----	----	----	----	----	----	----	0.0202	9.12	-1	-1	Lvl=8	500.0							
Toxaphene	2	2	Avg	----	----	----	----	----	----	----	----	0.00937	9.41	-1	-1	Lvl=8	500.0							
Toxaphene	2	3	Avg	----	----	----	----	----	----	----	----	0.0245	10.21	-1	-1	Lvl=8	500.0							
Toxaphene	2	4	Avg	----	----	----	----	----	----	----	----	0.0145	10.46	-1	-1	Lvl=8	500.0							
Toxaphene	2	5	Avg	----	----	----	----	----	----	----	----	0.0451	10.77	-1	-1	Lvl=8	500.0							

Avg Rsd Col 1: 17 Avg Rsd Col 2: 12.5

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Form7
Continuing Calibration

Method: EPA 8081A

3082313 0287

Data File:				6G43174.D			6G43182.D			6G43200.D			6G43214.D			6G43218.D			
Method:				8081			8081			8081			8081			8081			
Calibration Name:				CAL PEST@100PP			CAL PEST@200PP			CAL PEST@100PP			CAL PEST@200PP			CAL PEST@100PP			
Calibration Date/Time				08/26/13 09:23			08/26/13 13:49			08/27/13 09:20			08/27/13 13:58			08/28/13 01:53			
					Conc			Conc			Conc			Conc			Conc		
Compound	Limit	Col	Mr	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	
TCMX-Surrogate	15	1	0	104.6	100	4.6	207.6	200	3.8	106.9	100	6.9	181.5	200	9.3	96.47	100	3.5	
alpha-BHC	15	1	0	113.5	100	13.5	227.2	200	13.6	117.5	100	17.5*	201.2	200	0.6	106.4	100	6.4	
gamma-BHC	15	1	0	106.9	100	6.8	211.3	200	5.7	111.9	100	11.9	188.8	200	5.6	101.5	100	1.5	
beta-BHC	15	1	0	106.2	100	6.2	207.5	200	3.7	106.1	100	6.1	178.6	200	10.7	97.91	100	2.1	
Heptachlor	15	1	0	89.58	100	10.4	198.4	200	0.8	98.1	100	1.9	180.5	200	9.8	84.66	100	15.3	
delta-BHC	15	1	0	108.6	100	8.6	224	200	12.0	110.9	100	10.9	196.9	200	1.5	99.75	100	0.3	
Aldrin	15	1	0	106.6	100	6.6	211.4	200	5.7	107.8	100	7.8	187.5	200	6.3	98	100	2.0	
Heptachlor Epoxide	15	1	0	105	100	5.0	208.3	200	4.2	108.0	100	8.0	187.1	200	6.4	97.84	100	2.2	
y-chlordane	15	1	0	110.3	100	10.3	216.8	200	8.4	110.6	100	10.6	190.3	200	4.8	99.99	100	0.0	
a-chlordane	15	1	0	110.1	100	10.1	215.6	200	7.8	110.1	100	10.1	188.6	200	5.7	100.7	100	0.7	
Endosulfan I	15	1	0	104.8	100	4.8	210.9	200	5.4	109.1	100	9.1	189.7	200	5.1	98.76	100	1.2	
p,p'-DDE	15	1	0	109.7	100	9.7	218.1	200	9.0	109.7	100	9.7	189.9	200	5.1	97.13	100	2.9	
Dieldrin	15	1	0	107.6	100	7.6	206.3	200	3.2	107.3	100	7.3	183.2	200	8.4	97.99	100	2.0	
Endrin	15	1	0	96.36	100	3.6	200.2	200	0.1	104.2	100	4.2	183.8	200	8.1	92.18	100	7.8	
p,p'-DDD	15	1	0	100.4	100	0.4	213.0	200	6.5	111.4	100	11.4	194.6	200	2.7	94.22	100	5.8	
Endosulfan II	15	1	0	109.2	100	9.2	214.4	200	7.2	110.7	100	10.7	189.7	200	5.1	102.8	100	2.8	
p,p'-DDT	15	1	0	100.2	100	0.2	219.8	200	9.9	98.91	100	1.1	180.6	200	9.7	84.63	100	15.4	
Endrin Aldehyde	15	1	0	102.6	100	2.6	135.7	200	32.2*	101.4	100	1.4	171.9	200	14.0	96.21	100	3.8	
Endosulfan Sulfate	15	1	0	100.5	100	0.5	194	200	3.0	98.87	100	1.1	165.0	200	17.5*	91.86	100	8.1	
Methoxychlor	15	1	0	68.42	100	31.6*	184.5	200	7.8	84.81	100	15.2	163.9	200	18.1*	61.48	100	38.5*	
Endrin Ketone	15	1	0	113.3	100	13.3	228.5	200	14.2	120.8	100	20.8*	207.1	200	3.6	109.8	100	9.8	
DCB-Surrogate	15	1	0	110.8	100	10.8	219.1	200	9.6	109.2	100	9.2	179	200	10.5	98.21	100	1.8	
Average Difference	15	1	0			8.0			7.9			8.8			7.7			6.1	
TCMX-Surrogate	15	2	0	101.5	100	1.5	208.4	200	4.2	104.9	100	4.9	191.4	200	4.3	95.83	100	4.2	
alpha-BHC	15	2	0	97.98	100	2.0	217.7	200	8.8	107.9	100	7.9	202.1	200	1.0	96.56	100	3.4	
gamma-BHC	15	2	0	105.9	100	5.9	232.0	200	16.0*	117	100	17.0*	216.3	200	8.2	104.6	100	4.6	
beta-BHC	15	2	0	95.94	100	4.1	198.4	200	0.8	100.5	100	0.5	183.5	200	8.3	92.14	100	7.9	
Heptachlor	15	2	0	90.48	100	9.5	201.9	200	0.9	99.96	100	0.0	188.2	200	5.9	84.23	100	15.8*	
delta-BHC	15	2	0	92.83	100	7.2	216.2	200	8.1	109	100	9.0	202.7	200	1.4	92.9	100	7.1	
Aldrin	15	2	0	102.3	100	2.3	213.9	200	6.9	109.0	100	9.0	199.5	200	0.3	96.05	100	3.9	
Heptachlor Epoxide	15	2	0	100.4	100	0.4	203.1	200	1.6	106.4	100	6.4	192.6	200	3.7	96.74	100	3.3	
y-chlordane	15	2	0	106	100	6.0	214.2	200	7.1	111.6	100	11.6	200.7	200	0.3	100.6	100	0.6	
a-chlordane	15	2	0	108.2	100	8.2	216.4	200	8.2	112.0	100	12.0	200.4	200	0.2	102.3	100	2.3	
Endosulfan I	15	2	0	103.3	100	3.3	214.5	200	7.3	108.9	100	8.9	199.9	200	0.1	98.62	100	1.4	
p,p'-DDE	15	2	0	97.83	100	2.2	210.0	200	5.0	103.6	100	3.6	192.3	200	3.9	90.22	100	9.8	
Dieldrin	15	2	0	107.8	100	7.8	219	200	9.5	112	100	12.0	203.1	200	1.6	102.8	100	2.8	
Endrin	15	2	0	89.55	100	10.5	202.8	200	1.4	102.0	100	2.0	194.6	200	2.7	89.47	100	10.5	
p,p'-DDD	15	2	0	89.65	100	10.4	202.8	200	1.4	101.7	100	1.7	192.2	200	3.9	84.4	100	15.6*	
Endosulfan II	15	2	0	102.9	100	2.9	208.9	200	4.5	109.7	100	9.7	196.2	200	1.9	102.3	100	2.3	
p,p'-DDT	15	2	0	83.87	100	16.1*	200.4	200	0.2	87.6	100	12.4	176.7	200	11.7	70.97	100	29.0*	
Endrin Aldehyde	15	2	0	105.3	100	5.3	210.7	200	5.3	109.9	100	9.9	197.7	200	1.2	100.0	100	0.0	
Endosulfan Sulfate	15	2	0	91.15	100	8.8	188.4	200	5.8	97.74	100	2.3	181.4	200	9.3	88.15	100	11.9	
Methoxychlor	15	2	0	82.91	100	17.1*	193.7	200	3.2	91.34	100	8.7	173.1	200	13.4	75	100	25.0*	
Endrin Ketone	15	2	0	92.14	100	7.9	212.8	200	6.4	107.5	100	7.5	200.4	200	0.2	93.68	100	6.3	
DCB-Surrogate	15	2	0	107.3	100	7.3	214.8	200	7.4	111.8	100	11.8	193.4	200	3.3	101.9	100	1.8	
Average Difference	15	2	0			6.7			5.5			7.7			3.9			7.7	

Flags/Notes: **** - Values outside of limits for this column/run***

Form7
Continuing Calibration

Method: EPA 8081A

3082313 0288

Data File:				6G43241.D			6G43256.D			6G43261.D									
Method:				8081			8081			8081									
Calibration Name:				CAL PEST@100PP			CAL PEST@200PP			CAL PEST@200PP									
Calibration Date/Time				08/28/13 09:27			08/28/13 14:24			08/28/13 16:16									
				Conc			Conc			Conc			Conc			Conc			
Compound	Limit	Col	Mr	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff
TCMX-Surrogate	15	1	0	95.7	100	4.3	190.5	200	4.7	187.0	200	6.5						
alpha-BHC	15	1	0	105.6	100	5.6	209.4	200	4.7	206.8	200	3.4						
gamma-BHC	15	1	0	102	100	2.0	196.6	200	1.7	194.7	200	2.7						
beta-BHC	15	1	0	99.01	100	1.0	184.1	200	7.9	180.7	200	9.6						
Heptachlor	15	1	0	97.92	100	2.1	196.5	200	1.7	195.8	200	2.1						
delta-BHC	15	1	0	105.2	100	5.2	203.0	200	1.5	197.4	200	1.3						
Aldrin	15	1	0	96.61	100	3.4	192.4	200	3.8	191.0	200	4.5						
Heptachlor Epoxide	15	1	0	96.69	100	3.3	190.4	200	4.8	189.2	200	5.4						
y-chlordane	15	1	0	98.94	100	1.1	195.4	200	2.3	193.7	200	3.2						
a-chlordane	15	1	0	99.46	100	0.5	192.7	200	3.6	192.6	200	3.7						
Endosulfan I	15	1	0	99.16	100	0.8	191.6	200	4.2	189.9	200	5.0						
p,p'-DDE	15	1	0	101.4	100	1.4	195.7	200	2.2	191.7	200	4.2						
Dieldrin	15	1	0	97.32	100	2.7	186	200	7.0	184.8	200	7.6						
Endrin	15	1	0	100.1	100	0.1	188.0	200	6.0	186.3	200	6.9						
p,p'-DDD	15	1	0	103.2	100	3.2	193.9	200	3.1	188.0	200	6.0						
Endosulfan II	15	1	0	97.67	100	2.3	182.9	200	8.6	190.7	200	4.7						
p,p'-DDT	15	1	0	110.2	100	10.2	204.1	200	2.0	214.2	200	7.1						
Endrin Aldehyde	15	1	0	95.2	100	4.8	175	200	12.5	126.4	200	36.8*						
Endosulfan Sulfate	15	1	0	95.99	100	4.0	170.2	200	14.9	174.9	200	12.6						
Methoxychlor	15	1	0	114.4	100	14.4	201.6	200	0.8	187.3	200	6.3						
Endrin Ketone	15	1	0	112.9	100	12.9	207.5	200	3.7	211.9	200	6.0						
DCB-Surrogate	15	1	0	104.9	100	4.9	185.7	200	7.2	187.9	200	6.0						
Average Difference	15	1	0			4.1			5.0			6.9						
TCMX-Surrogate	15	2	0	100.8	100	0.8	207.1	200	3.5	205.7	200	2.9						
alpha-BHC	15	2	0	100.7	100	0.7	219.5	200	9.8	216.0	200	8.0						
gamma-BHC	15	2	0	110.6	100	10.6	234.6	200	17.3*	230	200	15.0						
beta-BHC	15	2	0	97.38	100	2.6	196.2	200	1.9	193.1	200	3.5						
Heptachlor	15	2	0	100.2	100	0.2	209	200	4.5	206.3	200	3.2						
delta-BHC	15	2	0	103.3	100	3.3	213.7	200	6.9	206.4	200	3.2						
Aldrin	15	2	0	98.03	100	2.0	207.6	200	3.8	207.5	200	3.7						
Heptachlor Epoxide	15	2	0	99.87	100	0.1	201.3	200	0.6	199.3	200	0.4						
y-chlordane	15	2	0	102.4	100	2.4	209.3	200	4.7	207	200	3.5						
a-chlordane	15	2	0	104.1	100	4.1	204.4	200	2.2	208.3	200	4.1						
Endosulfan I	15	2	0	101.1	100	1.1	195.8	200	2.1	207.5	200	3.8						
p,p'-DDE	15	2	0	99.96	100	0.0	203.9	200	2.0	202.5	200	1.3						
Dieldrin	15	2	0	103	100	3.0	208.5	200	4.2	211.6	200	5.8						
Endrin	15	2	0	100.5	100	0.5	204.9	200	2.4	204.1	200	2.1						
p,p'-DDD	15	2	0	101.3	100	1.3	203.6	200	1.8	193.4	200	3.3						
Endosulfan II	15	2	0	103.4	100	3.4	198.3	200	0.9	200.5	200	0.3						
p,p'-DDT	15	2	0	111.2	100	11.2	217.8	200	8.9	212.6	200	6.3						
Endrin Aldehyde	15	2	0	110.6	100	10.6	205.2	200	2.6	204.1	200	2.1						
Endosulfan Sulfate	15	2	0	101.5	100	1.5	191.7	200	4.2	188	200	6.0						
Methoxychlor	15	2	0	111.7	100	11.7	203.4	200	1.7	208.5	200	4.3						
Endrin Ketone	15	2	0	104.9	100	4.9	208.6	200	4.3	214.6	200	7.3						
DCB-Surrogate	15	2	0	105.4	100	5.4	205.7	200	2.9	217.5	200	8.7						
Average Difference	15	2	0			3.7			4.2			4.5						

Flags/Notes: **** - Values outside of limits for this column/run***

Form7
RtWindow Summary

Method: EPA 8081A

Data File:			6G42772.D		6G43174.D		6G43200.D		6G43218.D		6G43241.D	
Calibration Name:			CAL PEST@2PPB		CAL PEST@100PPB		CAL PEST@100PPB		CAL PEST@100PPB		CAL PEST@100PPB	
Calibration Date/Time			8/8/2013 8:59:00 AM		8/26/2013 9:23:00 AM		8/27/2013 9:20:00 AM		8/28/2013 1:53:00 AM		8/28/2013 9:27:00 AM	
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
TCMX-Surrogate	1	0	5.09	(5.03 - 5.15)	5.09	(5.03 - 5.15)	5.09	(5.03 - 5.15)	5.08	(5.02 - 5.14)	5.10	(5.04 - 5.16)
alpha-BHC	1	0	6.28	(6.24 - 6.32)	6.27	(6.23 - 6.31)	6.27	(6.23 - 6.31)	6.26	(6.22 - 6.30)	6.29	(6.25 - 6.33)
gamma-BHC	1	0	6.80	(6.76 - 6.84)	6.79	(6.75 - 6.83)	6.79	(6.75 - 6.83)	6.78	(6.74 - 6.82)	6.81	(6.77 - 6.85)
beta-BHC	1	0	7.69	(7.61 - 7.77)	7.68	(7.60 - 7.76)	7.68	(7.60 - 7.76)	7.68	(7.60 - 7.76)	7.70	(7.62 - 7.78)
Heptachlor	1	0	7.09	(7.05 - 7.13)	7.09	(7.05 - 7.13)	7.09	(7.05 - 7.13)	7.08	(7.04 - 7.12)	7.11	(7.07 - 7.15)
delta-BHC	1	0	8.04	(7.96 - 8.12)	8.03	(7.94 - 8.10)	8.02	(7.94 - 8.10)	8.02	(7.94 - 8.10)	8.05	(7.97 - 8.13)
Aldrin	1	0	7.47	(7.39 - 7.55)	7.46	(7.38 - 7.54)	7.46	(7.38 - 7.54)	7.46	(7.38 - 7.54)	7.48	(7.40 - 7.56)
Heptachlor Epoxide	1	0	8.30	(8.26 - 8.34)	8.30	(8.26 - 8.34)	8.30	(8.26 - 8.34)	8.29	(8.25 - 8.33)	8.32	(8.28 - 8.36)
v-chlordane	1	0	8.70	(8.66 - 8.74)	8.69	(8.65 - 8.73)	8.70	(8.65 - 8.73)	8.69	(8.65 - 8.73)	8.72	(8.68 - 8.76)
a-chlordane	1	0	8.77	(8.73 - 8.81)	8.76	(8.72 - 8.80)	8.76	(8.72 - 8.80)	8.76	(8.72 - 8.80)	8.78	(8.74 - 8.82)
Endosulfan I	1	0	8.67	(8.63 - 8.71)	8.66	(8.62 - 8.70)	8.66	(8.62 - 8.70)	8.66	(8.62 - 8.70)	8.68	(8.64 - 8.72)
p,p'-DDE	1	0	8.86	(8.78 - 8.94)	8.85	(8.77 - 8.93)	8.85	(8.77 - 8.93)	8.85	(8.77 - 8.93)	8.87	(8.79 - 8.95)
Dieldrin	1	0	9.12	(9.04 - 9.20)	9.11	(9.03 - 9.19)	9.11	(9.03 - 9.19)	9.10	(9.02 - 9.18)	9.13	(9.05 - 9.21)
Endrin	1	0	9.38	(9.34 - 9.42)	9.37	(9.33 - 9.41)	9.37	(9.33 - 9.41)	9.37	(9.33 - 9.41)	9.39	(9.35 - 9.43)
p,p'-DDD	1	0	9.82	(9.74 - 9.90)	9.81	(9.73 - 9.89)	9.81	(9.73 - 9.89)	9.81	(9.73 - 9.89)	9.83	(9.75 - 9.91)
Endosulfan II	1	0	9.95	(9.87 - 10.03)	9.93	(9.85 - 10.01)	9.94	(9.86 - 10.02)	9.93	(9.85 - 10.01)	9.96	(9.88 - 10.04)
p,p'-DDT	1	0	10.03	(9.95 - 10.11)	10.02	(9.94 - 10.10)	10.02	(9.94 - 10.10)	10.02	(9.94 - 10.10)	10.04	(9.96 - 10.12)
Endrin Aldehyde	1	0	10.44	(10.36 - 10.52)	10.43	(10.35 - 10.51)	10.43	(10.35 - 10.51)	10.43	(10.35 - 10.51)	10.45	(10.37 - 10.53)
Endosulfan Sulfate	1	0	10.81	(10.77 - 10.85)	10.80	(10.76 - 10.84)	10.80	(10.76 - 10.84)	10.80	(10.76 - 10.84)	10.82	(10.78 - 10.86)
Methoxychlor	1	0	10.73	(10.69 - 10.77)	10.73	(10.69 - 10.77)	10.72	(10.68 - 10.76)	10.73	(10.69 - 10.77)	10.74	(10.70 - 10.78)
Endrin Ketone	1	0	11.35	(11.27 - 11.43)	11.33	(11.25 - 11.41)	11.33	(11.25 - 11.41)	11.33	(11.25 - 11.41)	11.35	(11.27 - 11.43)
DCB-Surrogate	1	0	12.42	(12.36 - 12.48)	12.41	(12.35 - 12.47)	12.41	(12.35 - 12.47)	12.41	(12.35 - 12.47)	12.43	(12.37 - 12.49)
Chlordane	1	1	7.09	(7.05 - 7.13)								
Chlordane	1	2	8.71	(8.67 - 8.75)								
Chlordane	1	3	8.77	(8.73 - 8.81)								
Toxaphene	1	1	9.37	(9.33 - 9.41)								
Toxaphene	1	2	9.63	(9.59 - 9.67)								
Toxaphene	1	3	10.31	(10.27 - 10.35)								
Toxaphene	1	4	10.68	(10.64 - 10.72)								
Toxaphene	1	5	11.08	(11.04 - 11.12)								
TCMX-Surrogate	2	0	5.03	(4.97 - 5.09)	5.02	(4.96 - 5.08)	5.01	(4.95 - 5.07)	5.01	(4.95 - 5.07)	5.02	(4.96 - 5.08)
alpha-BHC	2	0	5.95	(5.91 - 5.99)	5.94	(5.90 - 5.98)	5.94	(5.90 - 5.98)	5.94	(5.90 - 5.98)	5.95	(5.91 - 5.99)
gamma-BHC	2	0	6.48	(6.44 - 6.52)	6.47	(6.43 - 6.51)	6.47	(6.43 - 6.51)	6.47	(6.43 - 6.51)	6.48	(6.44 - 6.52)
beta-BHC	2	0	6.58	(6.50 - 6.66)	6.57	(6.49 - 6.65)	6.57	(6.49 - 6.65)	6.57	(6.49 - 6.65)	6.57	(6.49 - 6.65)
Heptachlor	2	0	6.92	(6.88 - 6.96)	6.92	(6.88 - 6.96)	6.92	(6.88 - 6.96)	6.91	(6.87 - 6.95)	6.92	(6.88 - 6.96)
delta-BHC	2	0	7.08	(7.00 - 7.16)	7.06	(6.98 - 7.14)	7.06	(6.98 - 7.14)	7.06	(6.98 - 7.14)	7.07	(6.99 - 7.15)
Aldrin	2	0	7.37	(7.29 - 7.45)	7.37	(7.29 - 7.45)	7.36	(7.28 - 7.44)	7.36	(7.28 - 7.44)	7.37	(7.29 - 7.45)
Heptachlor Epoxide	2	0	8.10	(8.06 - 8.14)	8.09	(8.05 - 8.13)	8.09	(8.05 - 8.13)	8.08	(8.04 - 8.12)	8.10	(8.06 - 8.14)
v-chlordane	2	0	8.30	(8.26 - 8.34)	8.30	(8.26 - 8.34)	8.30	(8.26 - 8.34)	8.30	(8.26 - 8.34)	8.31	(8.27 - 8.35)
a-chlordane	2	0	8.51	(8.47 - 8.55)	8.50	(8.46 - 8.54)	8.50	(8.46 - 8.54)	8.50	(8.46 - 8.54)	8.51	(8.47 - 8.55)
Endosulfan I	2	0	8.56	(8.52 - 8.60)	8.55	(8.51 - 8.59)	8.55	(8.51 - 8.59)	8.55	(8.51 - 8.59)	8.56	(8.52 - 8.60)
p,p'-DDE	2	0	8.81	(8.73 - 8.89)	8.80	(8.72 - 8.88)	8.80	(8.72 - 8.88)	8.80	(8.72 - 8.88)	8.81	(8.73 - 8.89)
Dieldrin	2	0	8.95	(8.87 - 9.03)	8.94	(8.86 - 9.02)	8.94	(8.86 - 9.02)	8.94	(8.86 - 9.02)	8.95	(8.87 - 9.03)
Endrin	2	0	9.43	(9.39 - 9.47)	9.42	(9.38 - 9.46)	9.42	(9.38 - 9.46)	9.42	(9.38 - 9.46)	9.43	(9.39 - 9.47)
p,p'-DDD	2	0	9.52	(9.44 - 9.60)	9.51	(9.43 - 9.59)	9.51	(9.43 - 9.59)	9.51	(9.43 - 9.59)	9.51	(9.43 - 9.59)
Endosulfan II	2	0	9.65	(9.57 - 9.73)	9.64	(9.56 - 9.72)	9.64	(9.56 - 9.72)	9.64	(9.56 - 9.72)	9.65	(9.57 - 9.73)
p,p'-DDT	2	0	9.89	(9.81 - 9.97)	9.88	(9.80 - 9.96)	9.88	(9.80 - 9.96)	9.88	(9.80 - 9.96)	9.89	(9.81 - 9.97)
Endrin Aldehyde	2	0	10.05	(9.97 - 10.13)	10.04	(9.96 - 10.12)	10.04	(9.96 - 10.12)	10.04	(9.96 - 10.12)	10.05	(9.97 - 10.13)
Endosulfan Sulfate	2	0	10.20	(10.16 - 10.24)	10.20	(10.16 - 10.24)	10.19	(10.15 - 10.23)	10.19	(10.15 - 10.23)	10.20	(10.16 - 10.24)
Methoxychlor	2	0	10.95	(10.91 - 10.99)	10.95	(10.91 - 10.99)	10.94	(10.90 - 10.98)	10.95	(10.91 - 10.99)	10.95	(10.91 - 10.99)
Endrin Ketone	2	0	11.20	(11.12 - 11.28)	11.19	(11.11 - 11.27)	11.19	(11.11 - 11.27)	11.19	(11.11 - 11.27)	11.20	(11.12 - 11.28)
DCB-Surrogate	2	0	12.88	(12.82 - 12.94)	12.87	(12.81 - 12.93)	12.87	(12.81 - 12.93)	12.87	(12.81 - 12.93)	12.88	(12.82 - 12.94)
Chlordane	2	1	6.92	(6.88 - 6.96)								
Chlordane	2	2	8.31	(8.27 - 8.35)								
Chlordane	2	3	8.51	(8.47 - 8.55)								
Toxaphene	2	1	9.12	(9.08 - 9.16)								
Toxaphene	2	2	9.41	(9.37 - 9.45)								
Toxaphene	2	3	10.21	(10.17 - 10.25)								
Toxaphene	2	4	10.45	(10.41 - 10.49)								
Toxaphene	2	5	10.77	(10.73 - 10.81)								

Form7

RtWindow Summary

Method: EPA 8081A

3082313 0290

Data File:			6G43256.D											
Calibration Name:			CAL PEST@200PPB											
Calibration Date/Time			8/28/2013 2:24:00 PM											
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
TCMX-Surrogate	1	0	5.09	(5.03 - 5.15)								
alpha-BHC	1	0	6.27	(6.23 - 6.31)								
gamma-BHC	1	0	6.79	(6.75 - 6.83)								
beta-BHC	1	0	7.68	(7.60 - 7.76)								
Heptachlor	1	0	7.09	(7.05 - 7.13)								
delta-BHC	1	0	8.03	(7.95 - 8.11)								
Aldrin	1	0	7.46	(7.38 - 7.54)								
Heptachlor Epoxide	1	0	8.30	(8.26 - 8.34)								
g-chlordane	1	0	8.70	(8.66 - 8.74)								
a-chlordane	1	0	8.77	(8.73 - 8.81)								
Endosulfan I	1	0	8.66	(8.62 - 8.70)								
p,p'-DDE	1	0	8.85	(8.77 - 8.93)								
Dieldrin	1	0	9.11	(9.03 - 9.19)								
Endrin	1	0	9.37	(9.33 - 9.41)								
p,p'-DDD	1	0	9.81	(9.73 - 9.89)								
Endosulfan II	1	0	9.94	(9.86 - 10.02)								
p,p'-DDT	1	0	10.03	(9.95 - 10.11)								
Endrin Aldehyde	1	0	10.43	(10.35 - 10.51)								
Endosulfan Sulfate	1	0	10.80	(10.76 - 10.84)								
Methoxychlor	1	0	10.72	(10.68 - 10.76)								
Endrin Ketone	1	0	11.34	(11.26 - 11.42)								
DCB-Surrogate	1	0	12.41	(12.35 - 12.47)								
Chlordane	1	1										
Chlordane	1	2										
Chlordane	1	3										
Toxaphene	1	1										
Toxaphene	1	2										
Toxaphene	1	3										
Toxaphene	1	4										
Toxaphene	1	5										
TCMX-Surrogate	2	0	5.01	(4.95 - 5.07)								
alpha-BHC	2	0	5.94	(5.90 - 5.98)								
gamma-BHC	2	0	6.47	(6.43 - 6.51)								
beta-BHC	2	0	6.56	(6.48 - 6.64)								
Heptachlor	2	0	6.91	(6.87 - 6.95)								
delta-BHC	2	0	7.06	(6.98 - 7.14)								
Aldrin	2	0	7.36	(7.28 - 7.44)								
Heptachlor Epoxide	2	0	8.09	(8.05 - 8.13)								
g-chlordane	2	0	8.30	(8.26 - 8.34)								
a-chlordane	2	0	8.50	(8.46 - 8.54)								
Endosulfan I	2	0	8.55	(8.51 - 8.59)								
p,p'-DDE	2	0	8.80	(8.72 - 8.88)								
Dieldrin	2	0	8.94	(8.86 - 9.02)								
Endrin	2	0	9.42	(9.38 - 9.46)								
p,p'-DDD	2	0	9.50	(9.42 - 9.58)								
Endosulfan II	2	0	9.64	(9.56 - 9.72)								
p,p'-DDT	2	0	9.88	(9.80 - 9.96)								
Endrin Aldehyde	2	0	10.04	(9.96 - 10.12)								
Endosulfan Sulfate	2	0	10.19	(10.15 - 10.23)								
Methoxychlor	2	0	10.94	(10.90 - 10.98)								
Endrin Ketone	2	0	11.19	(11.11 - 11.27)								
DCB-Surrogate	2	0	12.86	(12.80 - 12.92)								
Chlordane	2	1										
Chlordane	2	2										
Chlordane	2	3										
Toxaphene	2	1										
Toxaphene	2	2										
Toxaphene	2	3										
Toxaphene	2	4										
Toxaphene	2	5										

TCLP Pesticide Data

Form1

ORGANICS PESTICIDE REPORT

Sample Number: AC74177-002(T)
Client Id: 006 SS-1 Composite
Data File: 6G43246.D
Analysis Date: 08/28/13 11:00
Date Rec/Extracted: 08/23/13-08/27/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081A
Matrix: Aqueous
Initial Vol: 100ml
Final Vol: 5ml
Dilution: 1
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
57-74-9	Chlordane	0.0010	U	1024-57-3	Heptachlor Epoxide	0.00010	U
72-20-8	Endrin	0.00010	U	72-43-5	Methoxychlor	0.00010	U
58-89-9	gamma-BHC	0.00010	U	8001-35-2	Toxaphene	0.0025	U
76-44-8	Heptachlor	0.00010	U				

Worksheet #: 274939

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0293

Data Path : G:\Gcdata\2013\GC_6\Data\08-28-13\
Data File : 6G43246.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 11:00
Operator : MS
Sample : AC74177-002(T)
Misc : A,PEST
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 28 13:50:10 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0808.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Thu Aug 08 12:29:53 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32

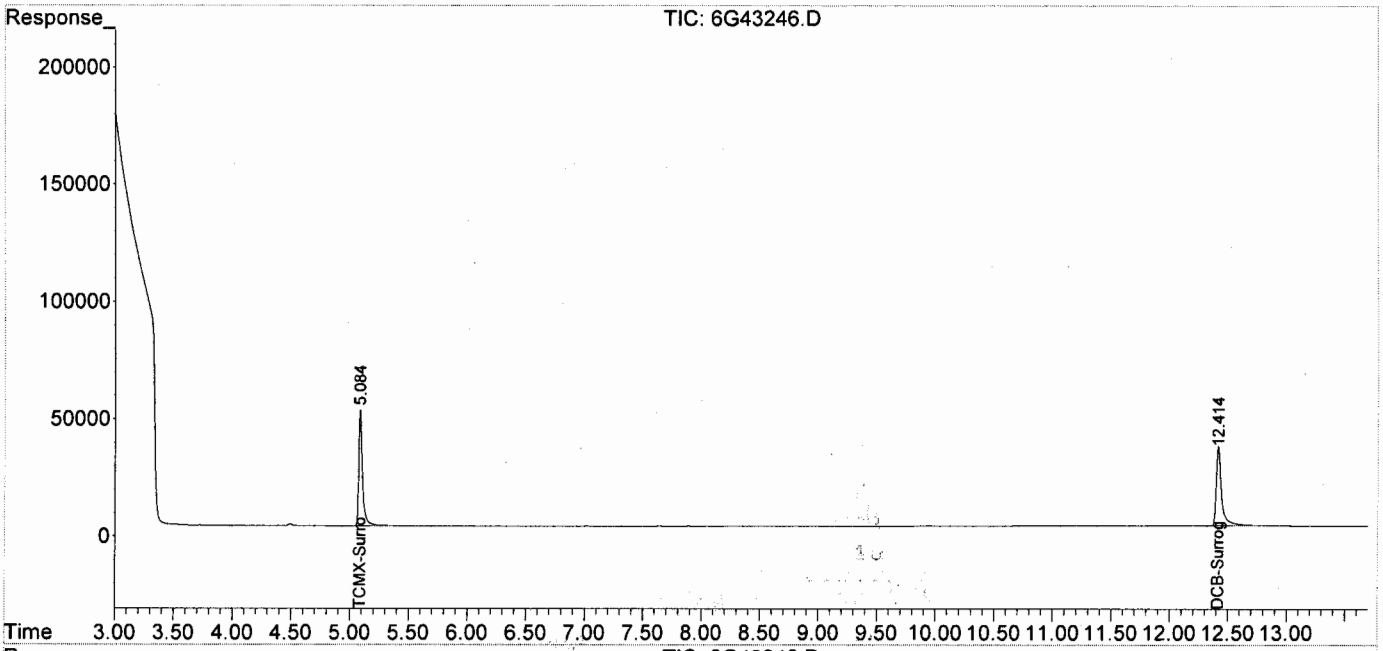
Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	5.085	5.014	1096196	1501773	100.519	103.089
22)DCB-Surrogate	12.415	12.866	1067321	1746740	129.100	141.648

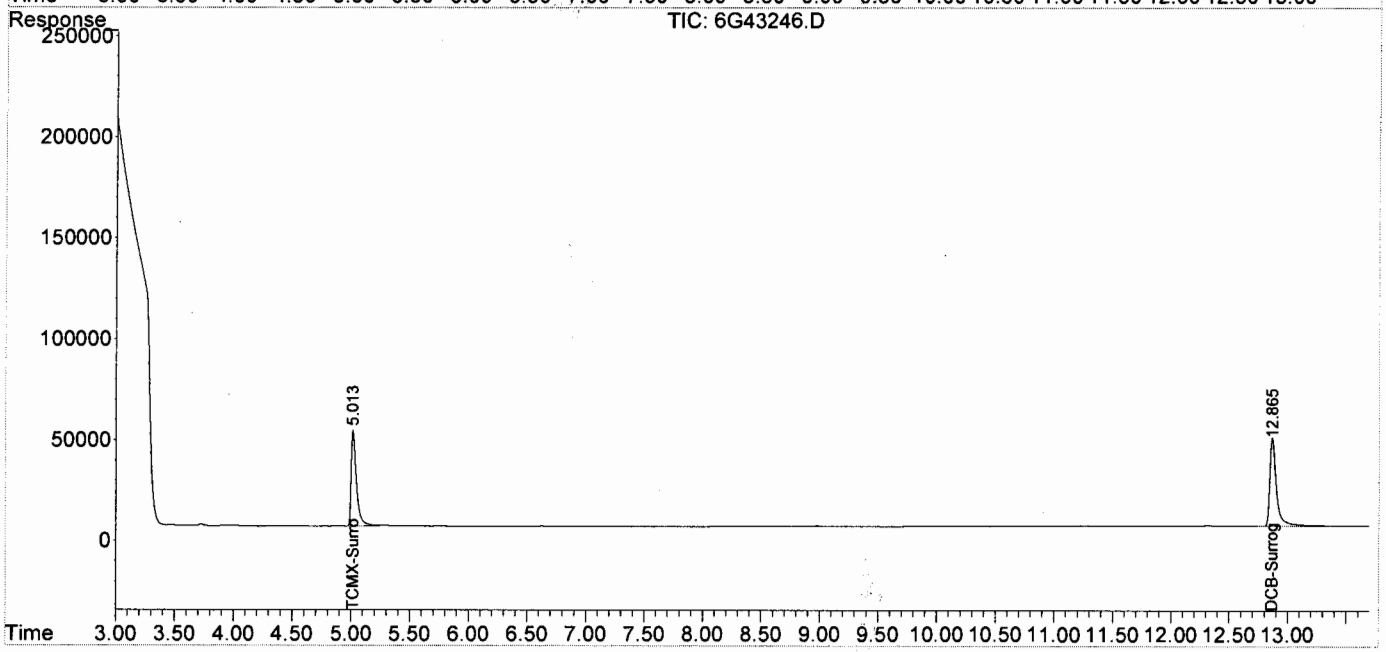
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2013\GC_6\Data\08-28-13\
Data File : 6G43246.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 11:00
Operator : MS
Sample : AC74177-002(T)
Misc : A,PEST
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 28 13:50:10 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0808.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Thu Aug 08 12:29:53 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PESTICIDE REPORT

Sample Number: AC74177-004(T)
Client Id: 012 SS-2 Composite
Data File: 6G43247.D
Analysis Date: 08/28/13 11:17
Date Rec/Extracted: 08/23/13-08/27/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081A
Matrix: Aqueous
Initial Vol: 100ml
Final Vol: 5ml
Dilution: 1
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
57-74-9	Chlordane	0.0010	U	1024-57-3	Heptachlor Epoxide	0.00010	U
72-20-8	Endrin	0.00010	U	72-43-5	Methoxychlor	0.00010	U
58-89-9	gamma-BHC	0.00010	U	8001-35-2	Toxaphene	0.0025	U
76-44-8	Heptachlor	0.00010	U				

Worksheet #: 274939

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0296

Data Path : G:\Gcdata\2013\GC_6\Data\08-28-13\
Data File : 6G43247.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 11:17
Operator : MS
Sample : AC74177-004(T)
Misc : A,PEST
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 28 13:50:34 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0808.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Thu Aug 08 12:29:53 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32

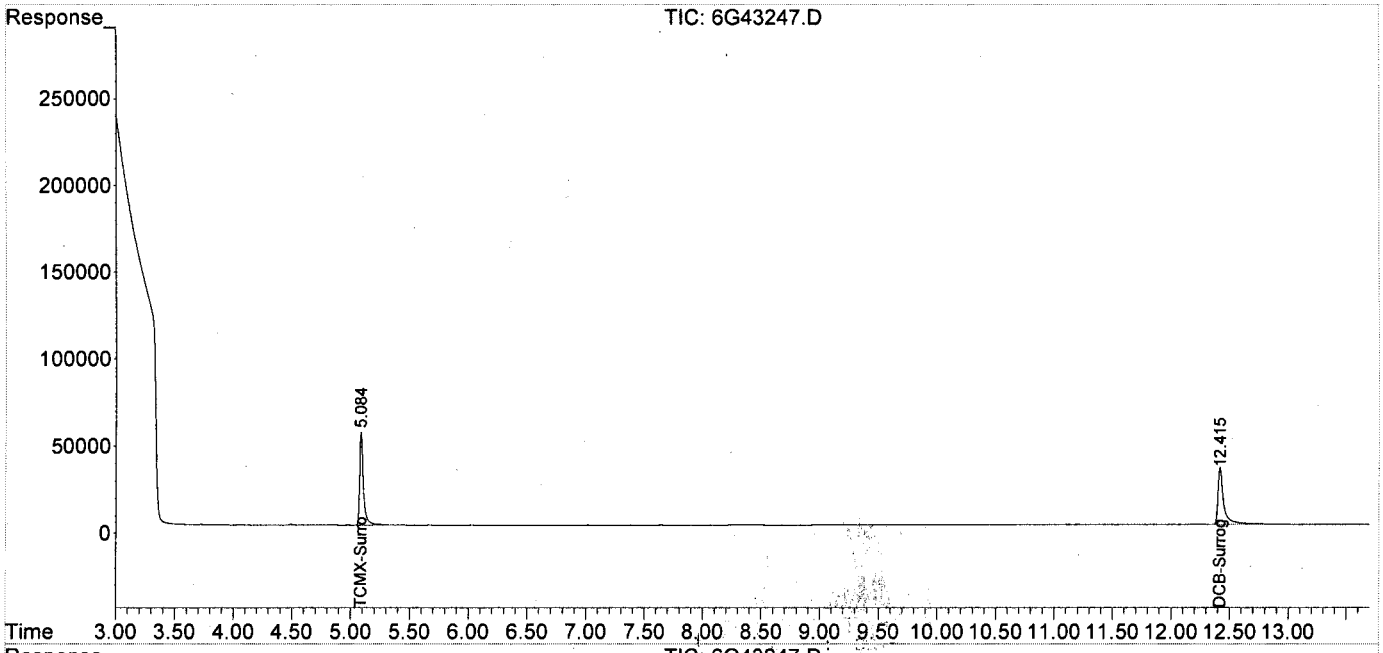
Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	5.085	5.016	1191640	1645348	109.765	113.313
22)DCB-Surrogate	12.416	12.869	1113604	1810158	135.289	147.222

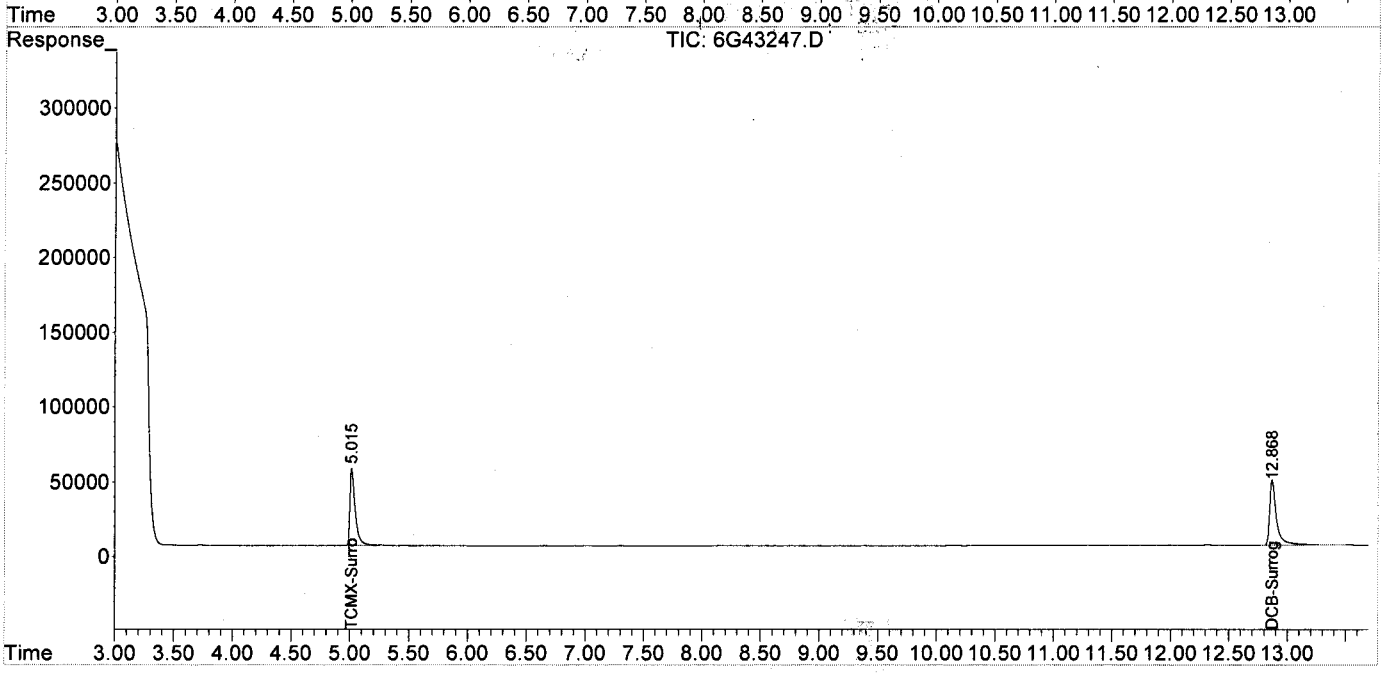
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2013\GC_6\Data\08-28-13\
Data File : 6G43247.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 11:17
Operator : MS
Sample : AC74177-004(T)
Misc : A,PEST
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 28 13:50:34 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0808.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Thu Aug 08 12:29:53 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PESTICIDE REPORT

Sample Number: AC74177-006(T)
Client Id: 018 SS-3 Composite
Data File: 6G43248.D
Analysis Date: 08/28/13 11:35
Date Rec/Extracted: 08/23/13-08/27/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081A
Matrix: Aqueous
Initial Vol: 100ml
Final Vol: 5ml
Dilution: 1
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
57-74-9	Chlordane	0.0010	U	1024-57-3	Heptachlor Epoxide	0.00010	U
72-20-8	Endrin	0.00010	U	72-43-5	Methoxychlor	0.00010	U
58-89-9	gamma-BHC	0.00010	U	8001-35-2	Toxaphene	0.0025	U
76-44-8	Heptachlor	0.00010	U				

Worksheet #: 274939

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_6\Data\08-28-13\
Data File : 6G43248.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 11:35
Operator : MS
Sample : AC74177-006(T)
Misc : A,PEST
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 28 13:51:09 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0808.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Thu Aug 08 12:29:53 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	5.085	5.015	1063093	1488588	97.333	102.153
22)DCB-Surrogate	12.415	12.866	1071225	1745867	129.620	141.571

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

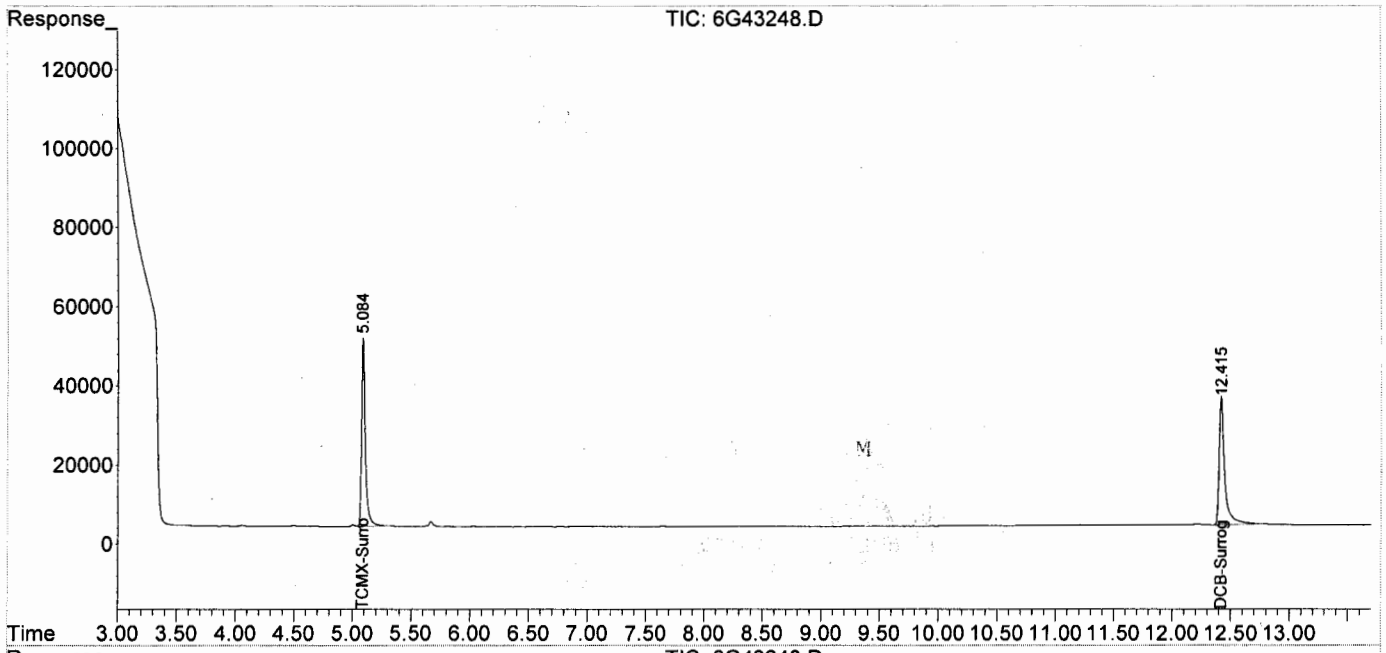
Quantitation Report (QT Reviewed)

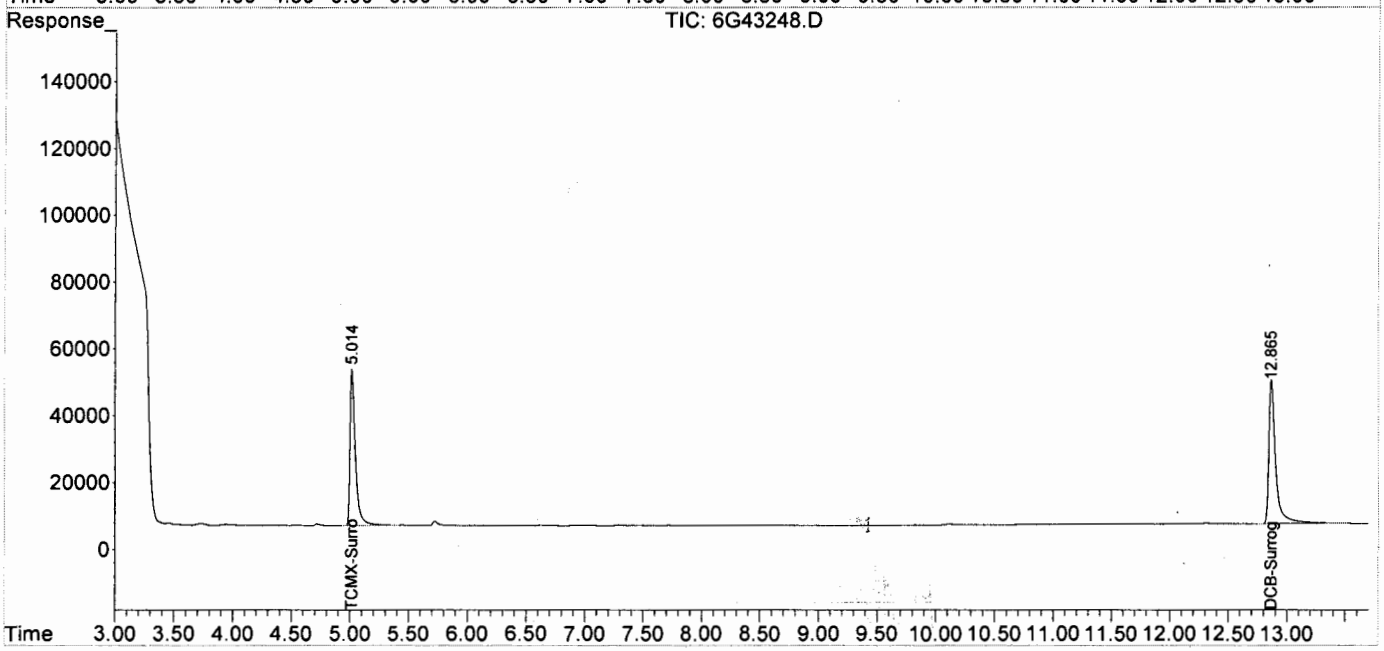
3082313 0300

Data Path : G:\Gcdata\2013\GC_6\Data\08-28-13\
Data File : 6G43248.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 11:35
Operator : MS
Sample : AC74177-006(T)
Misc : A,PEST
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 28 13:51:09 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0808.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Thu Aug 08 12:29:53 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PESTICIDE REPORT

Sample Number: WMB26006
Client Id:
Data File: 6G43243.D
Analysis Date: 08/28/13 10:07
Date Rec/Extracted: NA-08/27/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081A
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 5ml
Dilution: 1
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
57-74-9	Chlordane	0.00010	U	1024-57-3	Heptachlor Epoxide	0.000010	U
72-20-8	Endrin	0.000010	U	72-43-5	Methoxychlor	0.000010	U
58-89-9	gamma-BHC	0.000010	U	8001-35-2	Toxaphene	0.00025	U
76-44-8	Heptachlor	0.000010	U				

Worksheet #: 274939

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0302

Data Path : G:\Gcdata\2013\GC_6\Data\08-28-13\
Data File : 6G43243.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 10:07
Operator : MS
Sample : WMB26006
Misc : A,PEST
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 28 13:40:20 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0808.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Thu Aug 08 12:29:53 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32

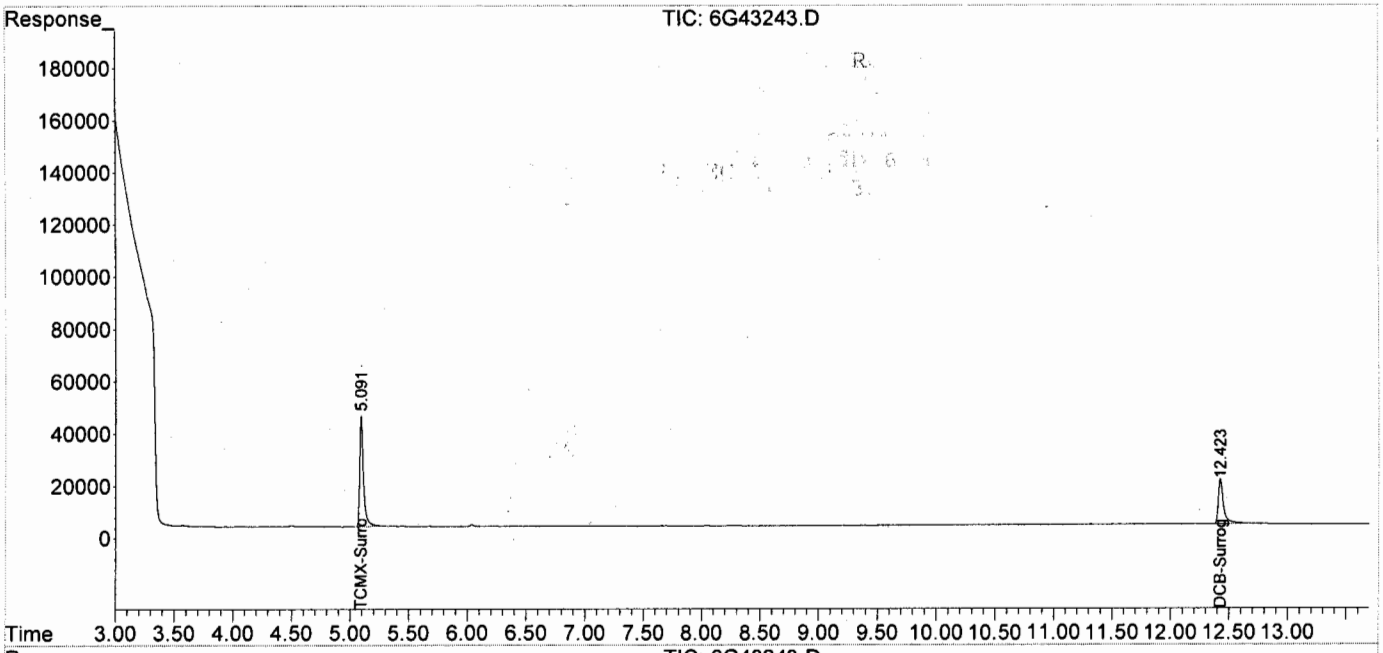
Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	5.092	5.016	957299	1280489	87.218	87.464
22)DCB-Surrogate	12.423	12.870	529906	838476	61.163	65.370

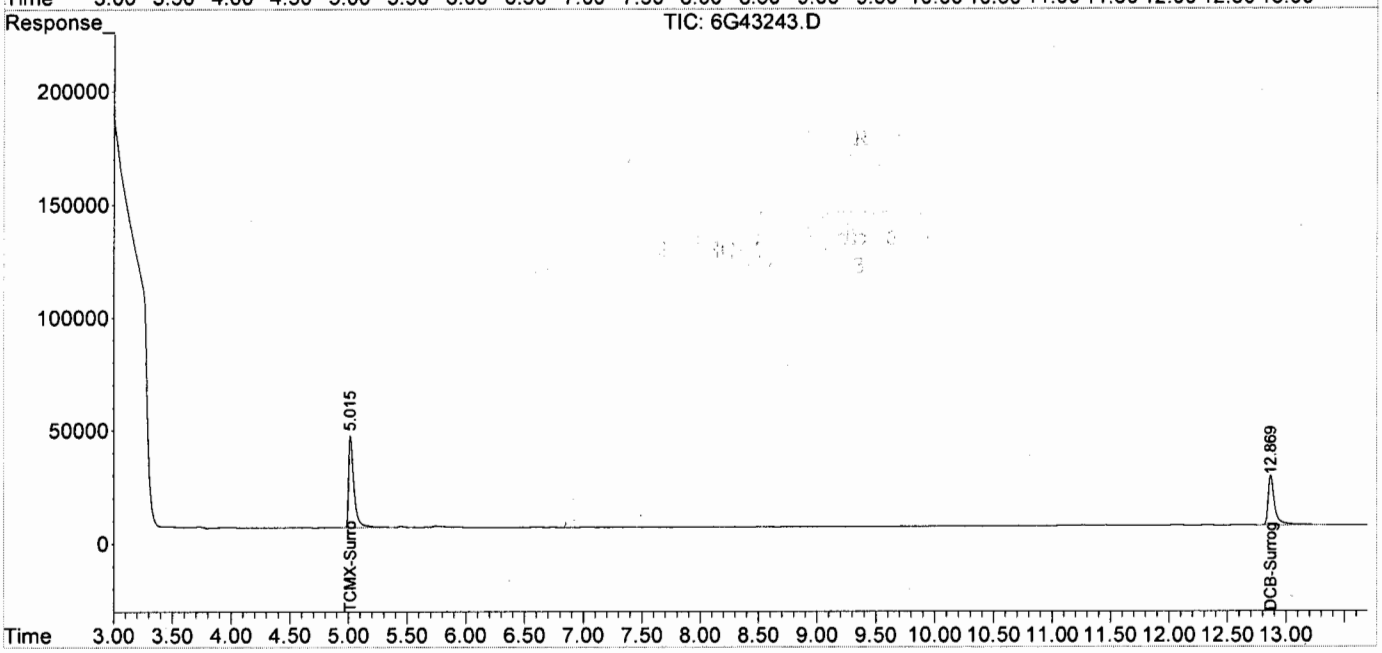
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2013\GC_6\Data\08-28-13\
Data File : 6G43243.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 10:07
Operator : MS
Sample : WMB26006
Misc : A,PEST
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 28 13:40:20 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0808.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Thu Aug 08 12:29:53 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PESTICIDE REPORT

Sample Number: EF1-V-171314(8/27)
Client Id:
Data File: 6G43277.D
Analysis Date: 08/29/13 05:23
Date Rec/Extracted: NA-08/27/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081A
Matrix: Aqueous
Initial Vol: 100ml
Final Vol: 5ml
Dilution: 1
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
57-74-9	Chlordane	0.0010	U	1024-57-3	Heptachlor Epoxide	0.00010	U
72-20-8	Endrin	0.00010	U	72-43-5	Methoxychlor	0.00010	U
58-89-9	gamma-BHC	0.00010	U	8001-35-2	Toxaphene	0.0025	U
76-44-8	Heptachlor	0.00010	U				

Worksheet #: 275099

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0305

Data Path : G:\Gcdata\2013\GC_6\Data\08-29-13\
Data File : 6G43277.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Aug 2013 5:23
Operator : MS
Sample : EF1-V-171314(8/27)
Misc : A,PEST
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 29 12:34:44 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0808.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Thu Aug 08 12:29:53 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	5.081	5.012	1117472	1539933	102.573	105.800
22)DCB-Surrogate	12.410	12.864	1021025	1656740	122.968	133.796

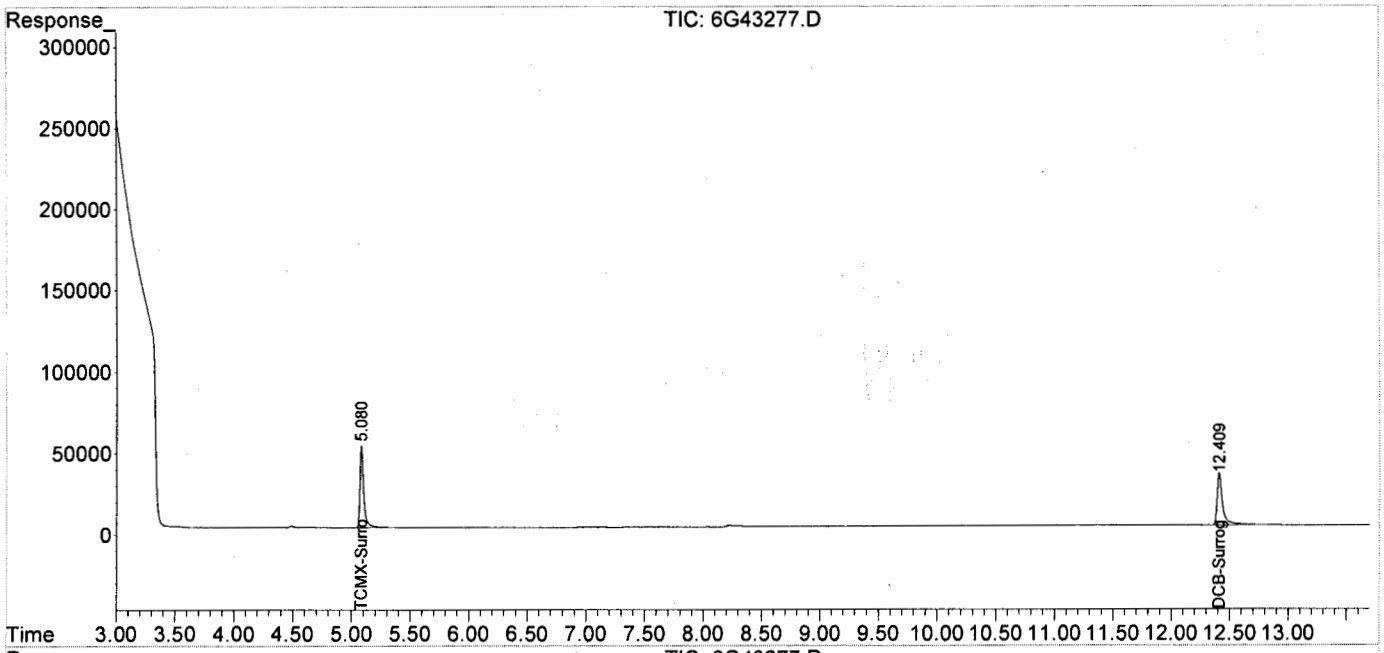
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

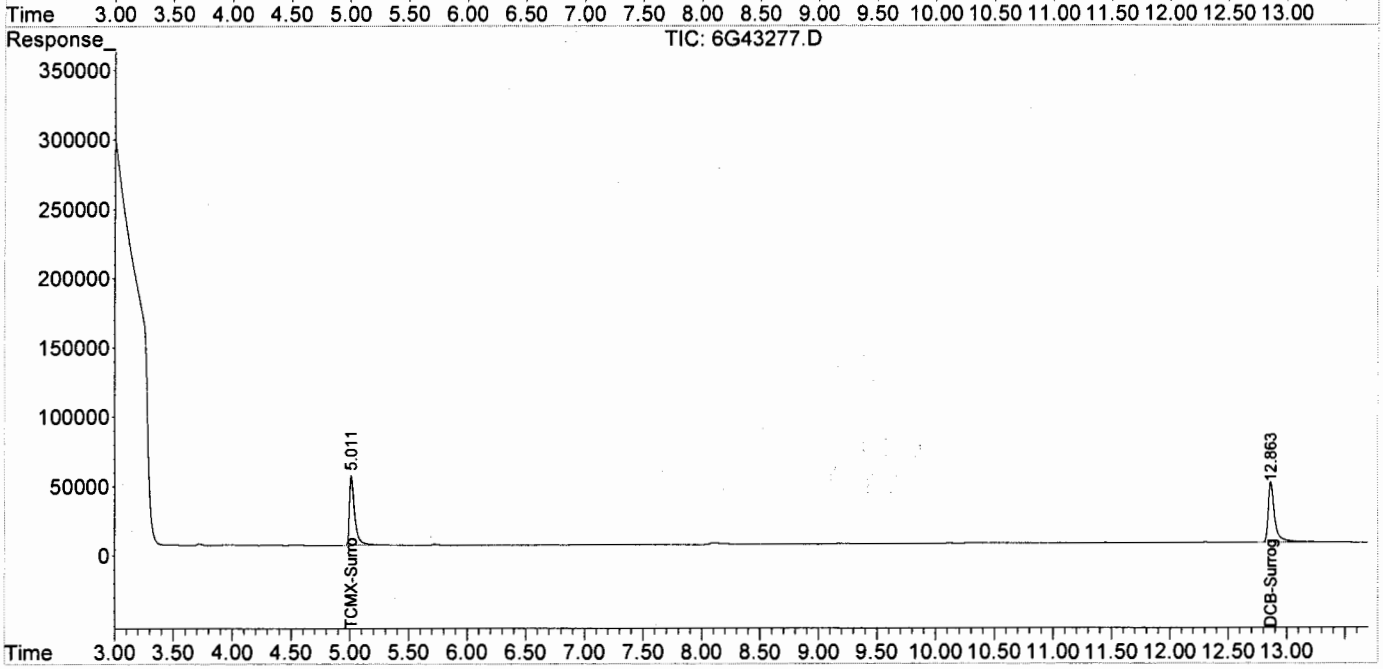
3082313 0306

Data Path : G:\Gcdata\2013\GC_6\Data\08-29-13\
Data File : 6G43277.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 29 Aug 2013 5:23
Operator : MS
Sample : EF1-V-171314(8/27)
Misc : A,PEST
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Aug 29 12:34:44 2013
Quant Method : G:\GCDATA\2013\GC_6\METHODQT\6G_P0808.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Thu Aug 08 12:29:53 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701 Signal #2 Phase: db-608
Signal #1 Info : .32 Signal #2 Info : .32





FORM2

Surrogate Recovery

Method: EPA 8081A

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column2 S2 Recov	Column1 S3 Recov	Column2 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
6G43243.D	WMB26006	Aqueous	08/28/13 10:07	1		87	87	61	65		
6G43277.D	EF1-V-171314	Aqueous	08/29/13 05:23	1		103	106	123	134		
6G43246.D	AC74177-002(	Aqueous	08/28/13 11:00	1		101	103	129	142		
6G43247.D	AC74177-004(	Aqueous	08/28/13 11:17	1		110	113	135	147 *		
6G43248.D	AC74177-006(	Aqueous	08/28/13 11:35	1		97	102	130	142		
6G43258.D	WMB26006(M	Aqueous	08/28/13 15:21	1		77	82	75	81		
6G43259.D	AC74109-003(	Aqueous	08/28/13 15:40	1		112	119	132	153 *		
6G43260.D	AC74109-004(	Aqueous	08/28/13 15:59	1		97	105	107	122		
6G43270.D	AC74109-002(	Aqueous	08/29/13 03:21	1		77	79	115	136		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8081A

Aqueous Limits

Compound	Spike Amt	Limits
S1=TCMX-Surrogate	100	39-132
S2=TCMX-Surrogate	100	39-132
S3=DCB-Surrogate	100	39-142
S4=DCB-Surrogate	100	39-142

Form3
Recovery Data
QC Batch: WMB26006

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G43258.D	WMB26006(MS)	8/28/2013 3:21:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8081 Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	1	100.45	0	100	100	50	130
gamma-BHC	1	97.8	0	100	98	50	130
beta-BHC	1	97.04	0	100	97	50	130
Heptachlor	1	94.24	0	100	94	50	130
delta-BHC	1	97.59	0	100	98	50	130
Aldrin	1	91.77	0	100	92	70	130
Heptachlor Epoxide	1	93.33	0	100	93	70	130
Endosulfan I	1	95.03	0	100	95	70	130
p,p'-DDE	1	96.51	0	100	97	70	130
Dieldrin	1	96.45	0	100	96	70	130
Endrin	1	107.15	0	100	107	70	130
p,p'-DDD	1	101.29	0	100	101	70	130
Endosulfan II	1	94.48	0	100	94	70	130
p,p'-DDT	1	107.8	0	100	108	70	130
Endrin Aldehyde	1	83.54	0	100	84	50	130
Endosulfan Sulfate	1	86.13	0	100	86	70	130
Methoxychlor	1	114.12	0	100	114	50	130
Endrin Ketone	1	106.81	0	100	107	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: WMB26006

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G43259.D	AC74109-003(T)(MS:AC74109-	8/28/2013 3:40:00 PM
Non Spike(If applicable):	6G43270.D	AC74109-002(T)	8/29/2013 3:21:00 AM
Inst Blank(If applicable):			

Method: 8081 Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	1	120.42	0	100	120	50	130
gamma-BHC	1	115.05	0	100	115	50	130
beta-BHC	1	118.8	0	100	119	50	130
Heptachlor	1	112.66	0	100	113	50	130
delta-BHC	1	134.3	0	100	134 *	50	130
Aldrin	1	114.11	0	100	114	70	130
Heptachlor Epoxide	1	128.68	0	100	129	70	130
Endosulfan I	1	137.01	0	100	137 *	70	130
p,p'-DDE	1	139.44	0	100	139 *	70	130
Dieldrin	1	133.35	0	100	133 *	70	130
Endrin	1	194.92	0	100	195 *	70	130
p,p'-DDD	1	144.83	0	100	145 *	70	130
Endosulfan II	1	141.84	0	100	142 *	70	130
p,p'-DDT	1	157.9	0	100	158 *	70	130
Endrin Aldehyde	1	126.47	0	100	126	50	130
Endosulfan Sulfate	1	122.25	0	100	122	70	130
Methoxychlor	1	149.74	0	100	150 *	50	130
Endrin Ketone	1	148.09	0	100	148 *	70	130

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G43260.D	AC74109-004(T)(MSD:AC7410	8/28/2013 3:59:00 PM
Non Spike(If applicable):	6G43270.D	AC74109-002(T)	8/29/2013 3:21:00 AM
Inst Blank(If applicable):			

Method: 8081 Matrix: Aqueous QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	1	112.86	0	100	113	50	130
gamma-BHC	1	107.48	0	100	107	50	130
beta-BHC	1	104.41	0	100	104	50	130
Heptachlor	1	109.64	0	100	110	50	130
delta-BHC	1	126.94	0	100	127	50	130
Aldrin	1	108.89	0	100	109	70	130
Heptachlor Epoxide	1	122.11	0	100	122	70	130
Endosulfan I	1	137.94	0	100	138 *	70	130
p,p'-DDE	1	143.13	0	100	143 *	70	130
Dieldrin	1	120.98	0	100	121	70	130
Endrin	1	308.13	0	100	308 *	70	130
p,p'-DDD	1	133.76	0	100	134 *	70	130
Endosulfan II	1	134.74	0	100	135 *	70	130
p,p'-DDT	1	166.94	0	100	167 *	70	130
Endrin Aldehyde	1	167.08	0	100	167 *	50	130
Endosulfan Sulfate	1	108.34	0	100	108	70	130
Methoxychlor	1	141.37	0	100	141 *	50	130
Endrin Ketone	1	134.74	0	100	135 *	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA

QC Batch: WMB26006

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G43260.D	AC74109-004(T)(MSD:AC7410	8/28/2013 3:59:00 PM
Duplicate(If applicable):	6G43259.D	AC74109-003(T)(MS:AC74109-	8/28/2013 3:40:00 PM
Inst Blank(If applicable):			

Method: 8081 Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
alpha-BHC	1	112.86	120.42	6.5	40
gamma-BHC	1	107.48	115.05	6.8	40
beta-BHC	1	104.41	118.8	13	40
Heptachlor	1	109.64	112.66	2.7	40
delta-BHC	1	126.94	134.3	5.6	40
Aldrin	1	108.89	114.11	4.7	40
Heptachlor Epoxide	1	122.11	128.68	5.2	40
Endosulfan I	1	137.94	137.01	0.68	40
p,p'-DDE	1	143.13	139.44	2.6	40
Dieldrin	1	120.98	133.35	9.7	40
Endrin	1	308.13	194.92	45 *	40
p,p'-DDD	1	133.76	144.83	7.9	40
Endosulfan II	1	134.74	141.84	5.1	40
p,p'-DDT	1	166.94	157.9	5.6	40
Endrin Aldehyde	1	167.08	126.47	28	40
Endosulfan Sulfate	1	108.34	122.25	12	40
Methoxychlor	1	141.37	149.74	5.8	40
Endrin Ketone	1	134.74	148.09	9.4	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: WMB26006
Blank Data File: 6G43243.D
Matrix: Aqueous

Blank Analysis Date: 08/28/13 10:07
Blank Extraction Date: 08/27/13
(If Applicable)
Method: EPA 8081A

Sample Number	Data File	Analysis Date
AC74177-002(T)	6G43246.D	08/28/13 11:00
AC74177-004(T)	6G43247.D	08/28/13 11:17
AC74177-006(T)	6G43248.D	08/28/13 11:35
EF1-V-171314(8/27	6G43277.D	08/29/13 05:23
AC74109-002(T)	6G43270.D	08/29/13 03:21
AC74109-004(T)(M	6G43260.D	08/28/13 15:59
AC74109-003(T)(M	6G43259.D	08/28/13 15:40
WMB26006(MS)	6G43258.D	08/28/13 15:21

Form 5

Method: EPA 8081A

Instrument: GC_6

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G42771.D	CAL EVAL	08/08/13 08:40	Aqueous					
6G42772.D	CAL PEST@2PPB	08/08/13 08:59	Soil	6G42772.	12.4274	0	12.8842	0
6G42773.D	CAL PEST@10PPB	08/08/13 09:16	Soil	6G42772.	12.4247	0.0217	12.8837	0.0039
6G42774.D	CAL PEST@50PPB	08/08/13 09:34	Soil	6G42772.	12.4246	0.0225	12.8834	0.0062
6G42775.D	CAL PEST@100PPB	08/08/13 09:51	Soil	6G42772.	12.4231	0.0346	12.8833	0.007
6G42776.D	CAL PEST@200PPB	08/08/13 10:09	Soil	6G42772.	12.4206	0.0547	12.8813	0.0225
6G42777.D	CAL PEST@400PPB	08/08/13 10:26	Soil	6G42772.	12.4195	0.0636	12.8793	0.038
6G42778.D	CAL CHLOR@100PPB	08/08/13 10:44	Soil	6G42772.	12.4236	0.0306	12.8837	0.0039
6G42779.D	CAL TOX@500PPB	08/08/13 11:01	Soil	6G42772.	12.4249	0.0201	12.8840	0.0016
6G42780.D	ICV	08/08/13 11:19	Soil	6G42772.	12.4213	0.0491	12.8808	0.0264
6G42781.D	SMB25840	08/08/13 11:40	Soil	6G42772.	12.4252	0.0177	12.8824	0.014
6G42782.D	MBS	08/08/13 11:58	Soil	6G42772.	12.4205	0.0555	12.8802	0.031
6G42783.D	AC73775-001	08/08/13 12:15	Soil	6G42772.	12.4178	0.0773	12.8764	0.0606
6G42784.D	AC73775-002	08/08/13 12:33	Soil	6G42772.	12.4170	0.0837	12.8769	0.0567
6G42785.D	AC73775-003	08/08/13 12:50	Soil	6G42772.	12.4175	0.0797	12.8750	0.0714
6G42786.D	AC73775-004	08/08/13 13:08	Soil	6G42772.	12.4166	0.0869	12.8759	0.0644
6G42787.D	AC73775-005	08/08/13 13:25	Soil	6G42772.	12.4192	0.066	12.8780	0.0481
6G42788.D	AC73899-001	08/08/13 13:43	Soil	6G42772.	12.4181	0.0749	12.8776	0.0512
6G42789.D	CAL PEST@200PPB	08/08/13 14:16	Soil	6G42772.	12.4231	0.0346	12.8815	0.021

Drift Compound: DCB-Surrogate

Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph)

* - Values outside of limits for this column/run

Form 5

Method: EPA 8081A

Instrument: GC_6 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G43215.D	BLK	08/28/13 01:01	Soil					
6G43216.D	BLK	08/28/13 01:18	Soil					
6G43217.D	CAL EVAL	08/28/13 01:36	Soil					
6G43218.D	CAL PEST@100PPB	08/28/13 01:53	Soil	6G43218.	12.4133	0	12.8670	0
6G43219.D	200PPB	08/28/13 02:11	Soil	6G43218.	12.4108	0.0201	12.8661	0.007
6G43220.D	MB	08/28/13 02:28	Aqueous	6G43218.	12.4162	0.0234	12.8706	0.028
6G43221.D	MBS	08/28/13 02:46	Aqueous	6G43218.	12.4084	0.0395	12.8624	0.0358
6G43222.D	AC74109-003(MS)	08/28/13 03:03	Aqueous	6G43218.	12.4078	0.0443	12.8629	0.0319
6G43223.D	AC74109-004(MSD)	08/28/13 03:21	Aqueous	6G43218.	12.4064	0.0556	12.8608	0.0482
6G43224.D	AC74109-002	08/28/13 03:38	Aqueous	6G43218.	12.4069	0.0516	12.8623	0.0365
6G43225.D	AC74109-005	08/28/13 03:56	Aqueous	6G43218.	12.4087	0.0371	12.8634	0.028
6G43226.D	AC74109-006	08/28/13 04:13	Aqueous	6G43218.	12.4078	0.0443	12.8625	0.035
6G43227.D	AC74109-007	08/28/13 04:31	Aqueous	6G43218.	12.4070	0.0508	12.8615	0.0428
6G43228.D	AC74109-009	08/28/13 04:48	Aqueous	6G43218.	12.4117	0.0129	12.8678	0.0062
6G43229.D	AC74110-001	08/28/13 05:06	Aqueous	6G43218.	12.4138	0.004	12.8704	0.0264
6G43230.D	AC74110-002	08/28/13 05:23	Aqueous	6G43218.	12.4127	0.0048	12.8680	0.0078
6G43231.D	AC74177-002	08/28/13 05:41	Aqueous	6G43218.	12.4145	0.0097	12.8708	0.0295
6G43232.D	AC74177-004	08/28/13 05:58	Aqueous	6G43218.	12.4162	0.0234	12.8718	0.0373
6G43233.D	AC74177-006	08/28/13 06:16	Aqueous	6G43218.	12.4159	0.0209	12.8710	0.0311
6G43234.D	EF1-V-171314(8/22)	08/28/13 06:33	Aqueous	6G43218.	12.4142	0.0073	12.8694	0.0187
6G43235.D	EF1-V-171314(8/27)	08/28/13 06:50	Aqueous	6G43218.	12.4162	0.0234	12.8719	0.0381
6G43236.D	SMB25997	08/28/13 07:08	Soil	6G43218.	12.4137	0.0032	12.8684	0.0109
6G43237.D	MBS	08/28/13 07:25	Soil	6G43218.	12.4131	0.0016	12.8680	0.0078
6G43238.D	MBS	08/28/13 07:43	Aqueous	6G43218.	12.4071	0.05	12.8617	0.0412
6G43239.D	MB	08/28/13 08:00	Aqueous	6G43218.	12.4059	0.0596	12.8610	0.0466
6G43240.D	100PPB	08/28/13 08:49	Soil	6G43218.	12.4156	0.0185	12.8690	0.0155
6G43241.D	CAL PEST@100PPB	08/28/13 09:27	Soil	6G43218.	12.4349	0.1739	12.8751	0.0629
6G43242.D	CAL EVAL	08/28/13 09:45	Soil					
6G43243.D	WMB26006	08/28/13 10:07	Aqueous	6G43241.	12.4235	0.0917	12.8701	0.0388
6G43244.D	AC74110-001(T)	08/28/13 10:25	Aqueous	6G43241.	12.4153	0.1577	12.8664	0.0676
6G43245.D	AC74110-002(T)	08/28/13 10:42	Aqueous	6G43241.	12.4122	0.1827	12.8637	0.0886
6G43246.D	AC74177-002(T)	08/28/13 11:00	Aqueous	6G43241.	12.4147	0.1626	12.8660	0.0707
6G43247.D	AC74177-004(T)	08/28/13 11:17	Aqueous	6G43241.	12.4161	0.1513	12.8686	0.0505
6G43248.D	AC74177-006(T)	08/28/13 11:35	Aqueous	6G43241.	12.4153	0.1577	12.8662	0.0691
6G43249.D	AC74177-002	08/28/13 11:52	Soil	6G43241.	12.4064	0.2295	12.8591	0.1243
6G43250.D	AC74177-004	08/28/13 12:10	Soil	6G43241.	12.4067	0.227	12.8578	0.1345
6G43251.D	AC74177-006	08/28/13 12:27	Soil	6G43241.	12.4072	0.223	12.8592	0.1236
6G43252.D	AC74144-001	08/28/13 12:45	Soil	6G43241.	12.4126	0.1795	12.8604	0.1142
6G43253.D	AC74048-001	08/28/13 13:03	Soil	6G43241.	12.4086	0.2117	12.8594	0.122
6G43254.D	SMB25997	08/28/13 13:20	Soil	6G43241.	12.4098	0.2021	12.8619	0.1026
6G43255.D	MBS	08/28/13 13:38	Soil	6G43241.	12.4094	0.2053	12.8619	0.1026
6G43256.D	CAL PEST@200PPB	08/28/13 14:24	Soil	6G43241.	12.4113	0.19	12.8612	0.108
6G43257.D	SMB25997(MS)	08/28/13 14:58	Soil	6G43256.	12.4195	0.0661	12.8665	0.0412
6G43258.D	WMB26006(MS)	08/28/13 15:21	Aqueous	6G43256.	12.4152	0.0314	12.8629	0.0132
6G43259.D	AC74109-003(T)(MS:AC	08/28/13 15:40	Aqueous	6G43256.	12.4091	0.0177	12.8595	0.0132
6G43260.D	AC74109-004(T)(MSD:A	08/28/13 15:59	Aqueous	6G43256.	12.4065	0.0387	12.8579	0.0257
6G43261.D	CAL PEST@200PPB	08/28/13 16:16	Aqueous	6G43256.	12.4079	0.0274	12.8611	0.0008

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081A

Instrument: GC_6

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G43262.D	BLK	08/29/13 01:01	Soil					
6G43263.D	BLK	08/29/13 01:19	Soil					
6G43264.D	CAL EVAL	08/29/13 01:36	Soil					
6G43265.D	CAL PEST@100PPB	08/29/13 01:53	Soil	6G43265.	12.4094	0	12.8625	0
6G43266.D	200PPB	08/29/13 02:11	Soil	6G43265.	12.4061	0.0266	12.8598	0.021
6G43267.D	AC74160-001	08/29/13 02:28	Aqueous	6G43265.	12.4014	0.0645	12.8556	0.0537
6G43268.D	WMB25995(MS)	08/29/13 02:46	Aqueous	6G43265.	12.4017	0.0621	12.8539	0.0669
6G43269.D	WMB25995	08/29/13 03:03	Aqueous	6G43265.	12.4019	0.0605	12.8540	0.0661
6G43270.D	AC74109-002(T)	08/29/13 03:21	Aqueous	6G43265.	12.4020	0.0596	12.8547	0.0607
6G43271.D	AC74109-005(T)	08/29/13 03:38	Aqueous	6G43265.	12.4041	0.0427	12.8569	0.0435
6G43272.D	AC74109-006(T)	08/29/13 03:56	Aqueous	6G43265.	12.4039	0.0443	12.8568	0.0443
6G43273.D	AC74109-007(T)	08/29/13 04:13	Aqueous	6G43265.	12.4015	0.0637	12.8542	0.0645
6G43274.D	AC74109-009(T)	08/29/13 04:31	Aqueous	6G43265.	12.4054	0.0322	12.8583	0.0327
6G43275.D	AC74109-001(T)	08/29/13 04:48	Aqueous	6G43265.	12.4019	0.0605	12.8547	0.0607
6G43276.D	EF1-V-171314(8/22)	08/29/13 05:06	Aqueous	6G43265.	12.4077	0.0137	12.8599	0.0202
6G43277.D	EF1-V-171314(8/27)	08/29/13 05:23	Aqueous	6G43265.	12.4095	0.0008	12.8638	0.0101
6G43278.D	AC74085-001(T)	08/29/13 05:41	Aqueous	6G43265.	12.4038	0.0451	12.8562	0.049
6G43279.D	AC74085-002(T)	08/29/13 05:58	Aqueous	6G43265.	12.4021	0.0588	12.8547	0.0607
6G43280.D	AC74085-003(T)	08/29/13 06:16	Aqueous	6G43265.	12.4011	0.0669	12.8541	0.0653
6G43281.D	AC74085-004(T)	08/29/13 06:33	Aqueous	6G43265.	12.4066	0.0226	12.8610	0.0117
6G43282.D	AC74085-008(T)	08/29/13 06:50	Aqueous	6G43265.	12.4030	0.0516	12.8564	0.0474
6G43283.D	EF-1-V-170460(8/21)	08/29/13 07:08	Aqueous	6G43265.	12.4087	0.0056	12.8622	0.0023
6G43284.D	200	08/29/13 08:02	Aqueous	6G43265.	12.4191	0.0781	12.8659	0.0264
6G43285.D	CAL EVAL	08/29/13 08:20	Aqueous					
6G43286.D	CAL PEST@100PPB	08/29/13 11:00	Aqueous	6G43265.	12.4120	0.0209	12.8630	0.0039

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

3082313 0315

Form 6
Initial Calibration

Method: EPA 8081A

Instrument: GC_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6G42772.	CAL PEST@2PPB	08/08/13 08:59	2	6G42773.	CAL PEST@10PPB	08/08/13 09:16
3	6G42774.	CAL PEST@50PPB	08/08/13 09:34	4	6G42775.	CAL PEST@100PPB	08/08/13 09:51
5	6G42776.	CAL PEST@200PPB	08/08/13 10:09	6	6G42777.	CAL PEST@400PPB	08/08/13 10:26
7	6G42778.	CAL CHLOR@100PP	08/08/13 10:44	8	6G42779.	CAL TOX@500PPB	08/08/13 11:01

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Qua	1.6264	1.2413	1.1028	1.0845	1.0410	0.9313	----	----	1.17	5.09	0.996	1.00	21	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	1	0	Avg	1.2693	1.0689	1.1445	1.2457	1.2495	1.2151	----	----	1.20	6.28	1.00	1.00	6.4	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	1	0	Avg	1.3854	1.1462	1.1635	1.2046	1.1923	1.0983	----	----	1.20	6.80	0.998	1.00	8.3	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	1	0	Qua	1.0029	0.7494	0.6509	0.6397	0.6086	0.5412	----	----	0.699	7.69	0.996	1.00	23	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	1	0	Qua	1.7117	1.2365	1.0707	1.0664	1.0371	0.9430	----	----	1.18	7.09	0.997	1.00	24	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	1	0	Qua	1.2633	0.9242	0.9599	1.0496	1.0553	0.9804	----	----	1.04	8.04	0.998	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		
Aldrin	1	0	Qua	1.3862	1.0632	1.0460	1.0843	1.0778	0.9942	----	----	1.11	7.47	0.998	1.00	13	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	1	0	Qua	1.4226	1.0304	0.9985	1.0032	0.9680	0.8700	----	----	1.05	8.30	0.996	1.00	18	2.00	10.00	50.00	100.0	200.0	400.0		
γ-chlordane	1	0	Qua	1.5262	1.1738	1.0892	1.1102	1.1010	1.0055	----	----	1.17	8.70	0.998	1.00	16	2.00	10.00	50.00	100.0	200.0	400.0		
α-chlordane	1	0	Qua	1.4579	1.1115	1.0085	1.0119	0.9861	0.8982	----	----	1.08	8.77	0.997	1.00	18	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	1	0	Qua	1.0565	0.8614	0.8132	0.8171	0.7747	0.6956	----	----	0.836	8.67	0.996	1.00	15	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	1	0	Avg	1.0179	0.8492	0.8672	0.9481	0.9596	0.8999	----	----	0.924	8.86	0.999	1.00	6.9	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	1	0	Avg	1.1398	0.9230	0.9033	0.9517	0.9402	0.8639	----	----	0.954	9.12	0.998	1.00	10	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	1	0	Avg	0.9408	0.7514	0.7372	0.7787	0.7772	0.7185	----	----	0.784	9.38	0.998	1.00	10	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	1	0	Avg	0.7827	0.6380	0.6262	0.6777	0.6953	0.6639	----	----	0.681	9.82	0.999	1.00	8.2	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	1	0	Qua	1.1832	0.9700	0.8958	0.9011	0.8732	0.7883	----	----	0.935	9.95	0.997	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	1	0	Avg	0.6586	0.6230	0.6056	0.6476	0.6480	0.6168	----	----	0.633	10.03	0.999	1.00	3.3	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	1	0	Qua	1.0027	0.7195	0.6545	0.7039	0.7125	0.6535	----	----	0.741	10.44	0.998	1.00	18	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	1	0	Qua	2.2229	0.9203	0.8200	0.8453	0.8565	0.7845	----	----	1.07	10.81	0.998	1.00	52	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	1	0	Qua	0.5952	0.3275	0.3060	0.3199	0.3344	0.3072	----	----	0.365	10.74	0.998	0.999	31	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	1	0	Avg	0.8817	0.7654	0.7072	0.7201	0.7472	0.6764	----	----	0.750	11.35	0.997	0.999	9.6	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	1	0	Qua	1.6393	1.0916	0.8562	0.8642	0.7783	0.6692	----	----	0.983	12.42	0.992	1.00	36	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane	1	1	Avg	----	----	----	----	----	----	----	----	0.0762	7.09	-1	-1	Lvl=7	100.0							
Chlordane	1	2	Avg	----	----	----	----	----	----	----	----	0.146	8.71	-1	-1	Lvl=7	100.0							
Chlordane	1	3	Avg	----	----	----	----	----	----	----	----	0.203	8.77	-1	-1	Lvl=7	100.0							
Toxaphene	1	1	Avg	----	----	----	----	----	----	----	----	0.0113	9.37	-1	-1	Lvl=8	500.0							
Toxaphene	1	2	Avg	----	----	----	----	----	----	----	----	0.00948	9.63	-1	-1	Lvl=8	500.0							
Toxaphene	1	3	Avg	----	----	----	----	----	----	----	----	0.0270	10.31	-1	-1	Lvl=8	500.0							
Toxaphene	1	4	Avg	----	----	----	----	----	----	----	----	0.0172	10.68	-1	-1	Lvl=8	500.0							
Toxaphene	1	5	Avg	----	----	----	----	----	----	----	----	0.0137	11.08	-1	-1	Lvl=8	500.0							
TCMX-Surrogate	2	0	Qua	1.8222	1.4619	1.3907	1.4354	1.4304	1.3173	----	----	1.48	5.03	0.998	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	2	0	Qua	1.5252	1.3180	1.4563	1.6584	1.7870	1.7293	----	----	1.58	5.95	0.999	0.999	11	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	2	0	Avg	1.4882	1.2595	1.3586	1.4993	1.5735	1.4912	----	----	1.45	6.48	0.999	0.999	7.9	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	2	0	Qua	1.4089	1.0215	0.9190	0.9813	0.9997	0.9396	----	----	1.05	6.58	0.999	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	2	0	Qua	2.1495	1.5006	1.4334	1.5270	1.5627	1.4684	----	----	1.61	6.92	0.999	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	2	0	Qua	1.7921	1.1697	1.1634	1.3749	1.5156	1.4958	----	----	1.42	7.08	0.999	0.999	17	2.00	10.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 17 Avg Rsd Col 2: 12.5

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3082313 0316

Form 6
Initial Calibration

Method: EPA 8081A

Instrument: GC_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6G42772.	CAL PEST@2PPB	08/08/13 08:59	2	6G42773.	CAL PEST@10PPB	08/08/13 09:16
3	6G42774.	CAL PEST@50PPB	08/08/13 09:34	4	6G42775.	CAL PEST@100PPB	08/08/13 09:51
5	6G42776.	CAL PEST@200PPB	08/08/13 10:09	6	6G42777.	CAL PEST@400PPB	08/08/13 10:26
7	6G42778.	CAL CHLOR@100PP	08/08/13 10:44	8	6G42779.	CAL TOX@500PPB	08/08/13 11:01

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aldrin	2	0	Qua	1.7332	1.2953	1.3485	1.4790	1.5610	1.4911	----	----	1.48	7.37	0.999	0.999	11	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	2	0	Avg	1.6616	1.3609	1.3023	1.3616	1.3787	1.2879	----	----	1.39	8.10	0.999	1.00	9.8	2.00	10.00	50.00	100.0	200.0	400.0		
γ-chlordane	2	0	Avg	1.6567	1.3529	1.3252	1.4114	1.4613	1.3904	----	----	1.43	8.31	0.999	1.00	8.3	2.00	10.00	50.00	100.0	200.0	400.0		
a-chlordane	2	0	Qua	1.5493	1.2415	1.2074	1.2544	1.2419	1.1511	----	----	1.27	8.51	0.998	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	2	0	Avg	1.6263	1.3474	1.3425	1.4533	1.5212	1.4424	----	----	1.46	8.56	0.999	1.00	7.4	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	2	0	Qua	1.2462	1.0043	1.0562	1.1940	1.2999	1.2854	----	----	1.18	8.81	0.999	0.999	10	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	2	0	Avg	1.4155	1.1678	1.2006	1.3284	1.3877	1.3200	----	----	1.30	8.95	0.999	0.999	7.6	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	2	0	Qua	1.0464	0.8635	0.9000	0.9820	1.0445	1.0002	----	----	0.973	9.43	0.999	0.999	7.8	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	2	0	Qua	0.8027	0.6993	0.7705	0.8815	0.9732	0.9748	----	----	0.850	9.52	0.999	0.999	13	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	2	0	Avg	1.4417	1.1794	1.2406	1.3263	1.3580	1.2624	----	----	1.30	9.65	0.998	1.00	7.2	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	2	0	Qua	0.9634	0.7703	0.8411	0.9504	1.0197	1.0011	----	----	0.924	9.89	0.999	0.999	11	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	2	0	Qua	1.4456	0.9733	0.8738	0.9793	0.9888	0.9219	----	----	1.03	10.05	0.998	0.999	20	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	2	0	Avg	1.2787	1.0861	1.0298	1.1494	1.1795	1.1113	----	----	1.14	10.20	0.999	1.00	7.5	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	2	0	Avg	0.6937	0.5948	0.5712	0.5787	0.6091	0.5540	----	----	0.600	10.96	0.998	0.999	8.3	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	2	0	Qua	2.2634	1.1460	1.1486	1.2139	1.2579	1.1724	----	----	1.37	11.20	0.999	0.999	32	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	2	0	Qua	1.8807	1.4664	1.2624	1.2587	1.1983	1.0651	----	----	1.36	12.88	0.996	1.00	21	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane	2	1	Avg	----	----	----	----	----	----	----	----	0.101	6.92	-1	-1	Lvl=7	100.0							
Chlordane	2	2	Avg	----	----	----	----	----	----	----	----	0.292	8.31	-1	-1	Lvl=7	100.0							
Chlordane	2	3	Avg	----	----	----	----	----	----	----	----	0.164	8.51	-1	-1	Lvl=7	100.0							
Toxaphene	2	1	Avg	----	----	----	----	----	----	----	----	0.0202	9.12	-1	-1	Lvl=8	500.0							
Toxaphene	2	2	Avg	----	----	----	----	----	----	----	----	0.00937	9.41	-1	-1	Lvl=8	500.0							
Toxaphene	2	3	Avg	----	----	----	----	----	----	----	----	0.0245	10.21	-1	-1	Lvl=8	500.0							
Toxaphene	2	4	Avg	----	----	----	----	----	----	----	----	0.0145	10.46	-1	-1	Lvl=8	500.0							
Toxaphene	2	5	Avg	----	----	----	----	----	----	----	----	0.0451	10.77	-1	-1	Lvl=8	500.0							

Avg Rsd Col 1: 17 Avg Rsd Col 2: 12.5

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Form7
Continuing Calibration

Method: EPA 8081A

Data File:				6G43241.D			6G43256.D			6G43261.D			6G43265.D			6G43286.D		
Method:				8081			8081			8081			8081			8081		
Calibration Name:				CAL PEST@100PP			CAL PEST@200PP			CAL PEST@200PP			CAL PEST@100PP			CAL PEST@100PP		
Calibration Date/Time				08/28/13 09:27			08/28/13 14:24			08/28/13 16:16			08/29/13 01:53			08/29/13 11:00		
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff
TCMX-Surrogate	15	1	0	95.7	100	4.3	190.5	200	4.7	187.0	200	6.5	99.03	100	1.0	95.7	100	4.3
alpha-BHC	15	1	0	105.6	100	5.6	209.4	200	4.7	206.8	200	3.4	109.9	100	9.9	105.9	100	5.9
gamma-BHC	15	1	0	102	100	2.0	196.6	200	1.7	194.7	200	2.7	105.5	100	5.5	102.9	100	2.8
beta-BHC	15	1	0	99.01	100	1.0	184.1	200	7.9	180.7	200	9.6	101.1	100	1.1	99.01	100	1.0
Heptachlor	15	1	0	97.92	100	2.1	196.5	200	1.7	195.8	200	2.1	98.18	100	1.8	94.18	100	5.8
delta-BHC	15	1	0	105.2	100	5.2	203.0	200	1.5	197.4	200	1.3	105.3	100	5.3	102.9	100	2.9
Aldrin	15	1	0	96.61	100	3.4	192.4	200	3.8	191.0	200	4.5	99.86	100	0.1	96.29	100	3.7
Heptachlor Epoxide	15	1	0	96.69	100	3.3	190.4	200	4.8	189.2	200	5.4	99.33	100	0.7	95.83	100	4.2
y-chlordane	15	1	0	98.94	100	1.1	195.4	200	2.3	193.7	200	3.2	103.1	100	3.1	99.27	100	0.7
a-chlordane	15	1	0	99.46	100	0.5	192.7	200	3.6	192.6	200	3.7	103.1	100	3.1	99.76	100	0.2
Endosulfan I	15	1	0	99.16	100	0.8	191.6	200	4.2	189.9	200	5.0	99.23	100	0.8	95.96	100	4.0
p,p'-DDE	15	1	0	101.4	100	1.4	195.7	200	2.2	191.7	200	4.2	100.6	100	0.6	98.44	100	1.6
Dieldrin	15	1	0	97.32	100	2.7	186	200	7.0	184.8	200	7.6	99.76	100	0.2	96.48	100	3.5
Endrin	15	1	0	100.1	100	0.1	188.0	200	6.0	186.3	200	6.9	98.49	100	1.5	97.01	100	3.0
p,p'-DDD	15	1	0	103.2	100	3.2	193.9	200	3.1	188.0	200	6.0	94.11	100	5.9	94.55	100	5.4
Endosulfan II	15	1	0	97.67	100	2.3	182.9	200	8.6	190.7	200	4.7	102.3	100	2.3	98.48	100	1.5
p,p'-DDT	15	1	0	110.2	100	10.2	204.1	200	2.0	214.2	200	7.1	109.6	100	9.6	107.4	100	7.4
Endrin Aldehyde	15	1	0	95.2	100	4.8	175	200	12.5	126.4	200	36.8*	99.43	100	0.6	96.28	100	3.7
Endosulfan Sulfate	15	1	0	95.99	100	4.0	170.2	200	14.9	174.9	200	12.6	96.76	100	3.2	93.84	100	6.2
Methoxychlor	15	1	0	114.4	100	14.4	201.6	200	0.8	187.3	200	6.3	85.57	100	14.4	89.17	100	10.8
Endrin Ketone	15	1	0	112.9	100	12.9	207.5	200	3.7	211.9	200	6.0	114.5	100	14.5	108.6	100	8.6
DCB-Surrogate	15	1	0	104.9	100	4.9	185.7	200	7.2	187.9	200	6.0	103.7	100	3.7	100.5	100	0.5
Average Difference	15	1	0			4.1			5.0			6.9			4.0			4.0
TCMX-Surrogate	15	2	0	100.8	100	0.8	207.1	200	3.5	205.7	200	2.9	103.0	100	3.0	103.8	100	3.8
alpha-BHC	15	2	0	100.7	100	0.7	219.5	200	9.8	216.0	200	8.0	106.7	100	6.7	110.2	100	10.2
gamma-BHC	15	2	0	110.6	100	10.6	234.6	200	17.3*	230	200	15.0	116.7	100	16.7*	120.7	100	20.7*
beta-BHC	15	2	0	97.38	100	2.6	196.2	200	1.9	193.1	200	3.5	99.35	100	0.7	102.1	100	2.1
Heptachlor	15	2	0	100.2	100	0.2	209	200	4.5	206.3	200	3.2	102.9	100	2.9	105.4	100	5.4
delta-BHC	15	2	0	103.3	100	3.3	213.7	200	6.9	206.4	200	3.2	104.7	100	4.7	110.5	100	10.5
Aldrin	15	2	0	98.03	100	2.0	207.6	200	3.8	207.5	200	3.7	103.7	100	3.7	106.5	100	6.5
Heptachlor Epoxide	15	2	0	99.87	100	0.1	201.3	200	0.6	199.3	200	0.4	104.6	100	4.6	107	100	7.0
y-chlordane	15	2	0	102.4	100	2.4	209.3	200	4.7	207	200	3.5	107.7	100	7.7	111	100	11.0
a-chlordane	15	2	0	104.1	100	4.1	204.4	200	2.2	208.3	200	4.1	108.4	100	8.4	113.1	100	13.1
Endosulfan I	15	2	0	101.1	100	1.1	195.8	200	2.1	207.5	200	3.8	105.2	100	5.2	107.4	100	7.4
p,p'-DDE	15	2	0	99.96	100	0.0	203.9	200	2.0	202.5	200	1.3	98.42	100	1.6	102.7	100	2.7
Dieldrin	15	2	0	103	100	3.0	208.5	200	4.2	211.6	200	5.8	107.6	100	7.6	110.0	100	10.0
Endrin	15	2	0	100.5	100	0.5	204.9	200	2.4	204.1	200	2.1	102.1	100	2.1	107.8	100	7.8
p,p'-DDD	15	2	0	101.3	100	1.3	203.6	200	1.8	193.4	200	3.3	91.47	100	8.5	98.18	100	1.8
Endosulfan II	15	2	0	103.4	100	3.4	198.3	200	0.9	200.5	200	0.3	106.2	100	6.2	108.1	100	8.1
p,p'-DDT	15	2	0	111.2	100	11.2	217.8	200	8.9	212.6	200	6.3	103.1	100	3.1	109.5	100	9.5
Endrin Aldehyde	15	2	0	110.6	100	10.6	205.2	200	2.6	204.1	200	2.1	106.6	100	6.6	110.5	100	10.5
Endosulfan Sulfate	15	2	0	101.5	100	1.5	191.7	200	4.2	188	200	6.0	94.59	100	5.4	98.33	100	1.7
Methoxychlor	15	2	0	111.7	100	11.7	203.4	200	1.7	208.5	200	4.3	107	100	7.0	112.8	100	12.8
Endrin Ketone	15	2	0	104.9	100	4.9	208.6	200	4.3	214.6	200	7.3	107.7	100	7.7	110.7	100	10.7
DCB-Surrogate	15	2	0	105.4	100	5.4	205.7	200	2.9	217.5	200	8.7	108.9	100	8.9	110.4	100	10.4
Average Difference	15	2	0			3.7			4.2			4.5			5.8			8.3

Flags/Notes: **** - Values outside of limits for this column/run***

Form7

RtWindow Summary

Method: EPA 8081A

Data File:	6G42772.D		6G43241.D		6G43256.D		6G43265.D			
Calibration Name:	CAL PEST@2PPB		CAL PEST@100PPB		CAL PEST@200PPB		CAL PEST@100PPB			
Calibration Date/Time	8/8/2013 8:59:00 AM		8/28/2013 9:27:00 AM		8/28/2013 2:24:00 PM		8/29/2013 1:53:00 AM			
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
TCMX-Surrogate	1	0	5.09	(5.03 - 5.15)	5.10	(5.04 - 5.16)	5.09	(5.03 - 5.15)	5.08	(5.02 - 5.14)		
alpha-BHC	1	0	6.28	(6.24 - 6.32)	6.29	(6.25 - 6.33)	6.27	(6.23 - 6.31)	6.26	(6.22 - 6.30)		
gamma-BHC	1	0	6.80	(6.76 - 6.84)	6.81	(6.77 - 6.85)	6.79	(6.75 - 6.83)	6.78	(6.74 - 6.82)		
beta-BHC	1	0	7.69	(7.61 - 7.77)	7.70	(7.62 - 7.78)	7.68	(7.60 - 7.76)	7.68	(7.60 - 7.76)		
Heptachlor	1	0	7.09	(7.05 - 7.13)	7.11	(7.07 - 7.15)	7.09	(7.05 - 7.13)	7.08	(7.04 - 7.12)		
delta-BHC	1	0	8.04	(7.96 - 8.12)	8.05	(7.97 - 8.13)	8.03	(7.95 - 8.11)	8.02	(7.94 - 8.10)		
Aldrin	1	0	7.47	(7.39 - 7.55)	7.48	(7.40 - 7.56)	7.46	(7.38 - 7.54)	7.46	(7.38 - 7.54)		
Heptachlor Epoxide	1	0	8.30	(8.26 - 8.34)	8.32	(8.28 - 8.36)	8.30	(8.26 - 8.34)	8.29	(8.25 - 8.33)		
v-chlordane	1	0	8.70	(8.66 - 8.74)	8.72	(8.68 - 8.76)	8.70	(8.66 - 8.74)	8.69	(8.65 - 8.73)		
a-chlordane	1	0	8.77	(8.73 - 8.81)	8.78	(8.74 - 8.82)	8.77	(8.73 - 8.81)	8.76	(8.72 - 8.80)		
Endosulfan I	1	0	8.67	(8.63 - 8.71)	8.68	(8.64 - 8.72)	8.66	(8.62 - 8.70)	8.66	(8.62 - 8.70)		
p,p'-DDE	1	0	8.86	(8.78 - 8.94)	8.87	(8.79 - 8.95)	8.85	(8.77 - 8.93)	8.85	(8.77 - 8.93)		
Dieldrin	1	0	9.12	(9.04 - 9.20)	9.13	(9.05 - 9.21)	9.11	(9.03 - 9.19)	9.10	(9.02 - 9.18)		
Endrin	1	0	9.38	(9.34 - 9.42)	9.39	(9.35 - 9.43)	9.37	(9.33 - 9.41)	9.37	(9.33 - 9.41)		
p,p'-DDD	1	0	9.82	(9.74 - 9.90)	9.83	(9.75 - 9.91)	9.81	(9.73 - 9.89)	9.81	(9.73 - 9.89)		
Endosulfan II	1	0	9.95	(9.87 - 10.03)	9.96	(9.88 - 10.04)	9.94	(9.86 - 10.02)	9.93	(9.85 - 10.01)		
p,p'-DDT	1	0	10.03	(9.95 - 10.11)	10.04	(9.96 - 10.12)	10.03	(9.95 - 10.11)	10.02	(9.94 - 10.10)		
Endrin Aldehyde	1	0	10.44	(10.36 - 10.52)	10.45	(10.37 - 10.53)	10.43	(10.35 - 10.51)	10.42	(10.34 - 10.50)		
Endosulfan Sulfate	1	0	10.81	(10.77 - 10.85)	10.82	(10.78 - 10.86)	10.80	(10.76 - 10.84)	10.79	(10.75 - 10.83)		
Methoxychlor	1	0	10.73	(10.69 - 10.77)	10.74	(10.70 - 10.78)	10.72	(10.68 - 10.76)	10.72	(10.68 - 10.76)		
Endrin Ketone	1	0	11.35	(11.27 - 11.43)	11.35	(11.27 - 11.43)	11.34	(11.26 - 11.42)	11.33	(11.25 - 11.41)		
DCB-Surrogate	1	0	12.42	(12.36 - 12.48)	12.43	(12.37 - 12.49)	12.41	(12.35 - 12.47)	12.41	(12.35 - 12.47)		
Chlordane	1	1	7.09	(7.05 - 7.13)								
Chlordane	1	2	8.71	(8.67 - 8.75)								
Chlordane	1	3	8.77	(8.73 - 8.81)								
Toxaphene	1	1	9.37	(9.33 - 9.41)								
Toxaphene	1	2	9.63	(9.59 - 9.67)								
Toxaphene	1	3	10.31	(10.27 - 10.35)								
Toxaphene	1	4	10.68	(10.64 - 10.72)								
Toxaphene	1	5	11.08	(11.04 - 11.12)								
TCMX-Surrogate	2	0	5.03	(4.97 - 5.09)	5.02	(4.96 - 5.08)	5.01	(4.95 - 5.07)	5.01	(4.95 - 5.07)		
alpha-BHC	2	0	5.95	(5.91 - 5.99)	5.95	(5.91 - 5.99)	5.94	(5.90 - 5.98)	5.94	(5.90 - 5.98)		
gamma-BHC	2	0	6.48	(6.44 - 6.52)	6.48	(6.44 - 6.52)	6.47	(6.43 - 6.51)	6.47	(6.43 - 6.51)		
beta-BHC	2	0	6.58	(6.50 - 6.66)	6.57	(6.49 - 6.65)	6.56	(6.48 - 6.64)	6.56	(6.48 - 6.64)		
Heptachlor	2	0	6.92	(6.88 - 6.96)	6.92	(6.88 - 6.96)	6.91	(6.87 - 6.95)	6.91	(6.87 - 6.95)		
delta-BHC	2	0	7.08	(7.00 - 7.16)	7.07	(6.99 - 7.15)	7.06	(6.98 - 7.14)	7.06	(6.98 - 7.14)		
Aldrin	2	0	7.37	(7.29 - 7.45)	7.37	(7.29 - 7.45)	7.36	(7.28 - 7.44)	7.36	(7.28 - 7.44)		
Heptachlor Epoxide	2	0	8.10	(8.06 - 8.14)	8.10	(8.06 - 8.14)	8.09	(8.05 - 8.13)	8.08	(8.04 - 8.12)		
v-chlordane	2	0	8.30	(8.26 - 8.34)	8.31	(8.27 - 8.35)	8.30	(8.26 - 8.34)	8.29	(8.25 - 8.33)		
a-chlordane	2	0	8.51	(8.47 - 8.55)	8.51	(8.47 - 8.55)	8.50	(8.46 - 8.54)	8.50	(8.46 - 8.54)		
Endosulfan I	2	0	8.56	(8.52 - 8.60)	8.56	(8.52 - 8.60)	8.55	(8.51 - 8.59)	8.55	(8.51 - 8.59)		
p,p'-DDE	2	0	8.81	(8.73 - 8.89)	8.81	(8.73 - 8.89)	8.80	(8.72 - 8.88)	8.79	(8.71 - 8.87)		
Dieldrin	2	0	8.95	(8.87 - 9.03)	8.95	(8.87 - 9.03)	8.94	(8.86 - 9.02)	8.94	(8.86 - 9.02)		
Endrin	2	0	9.43	(9.39 - 9.47)	9.43	(9.39 - 9.47)	9.42	(9.38 - 9.46)	9.41	(9.37 - 9.45)		
p,p'-DDD	2	0	9.52	(9.44 - 9.60)	9.51	(9.43 - 9.59)	9.50	(9.42 - 9.58)	9.51	(9.43 - 9.59)		
Endosulfan II	2	0	9.65	(9.57 - 9.73)	9.65	(9.57 - 9.73)	9.64	(9.56 - 9.72)	9.63	(9.55 - 9.71)		
p,p'-DDT	2	0	9.89	(9.81 - 9.97)	9.89	(9.81 - 9.97)	9.88	(9.80 - 9.96)	9.88	(9.80 - 9.96)		
Endrin Aldehyde	2	0	10.05	(9.97 - 10.13)	10.05	(9.97 - 10.13)	10.04	(9.96 - 10.12)	10.04	(9.96 - 10.12)		
Endosulfan Sulfate	2	0	10.20	(10.16 - 10.24)	10.20	(10.16 - 10.24)	10.19	(10.15 - 10.23)	10.19	(10.15 - 10.23)		
Methoxychlor	2	0	10.95	(10.91 - 10.99)	10.95	(10.91 - 10.99)	10.94	(10.90 - 10.98)	10.95	(10.91 - 10.99)		
Endrin Ketone	2	0	11.20	(11.12 - 11.28)	11.20	(11.12 - 11.28)	11.19	(11.11 - 11.27)	11.19	(11.11 - 11.27)		
DCB-Surrogate	2	0	12.88	(12.82 - 12.94)	12.88	(12.82 - 12.94)	12.86	(12.80 - 12.92)	12.86	(12.80 - 12.92)		
Chlordane	2	1	6.92	(6.88 - 6.96)								
Chlordane	2	2	8.31	(8.27 - 8.35)								
Chlordane	2	3	8.51	(8.47 - 8.55)								
Toxaphene	2	1	9.12	(9.08 - 9.16)								
Toxaphene	2	2	9.41	(9.37 - 9.45)								
Toxaphene	2	3	10.21	(10.17 - 10.25)								
Toxaphene	2	4	10.45	(10.41 - 10.49)								
Toxaphene	2	5	10.77	(10.73 - 10.81)								

Herbicide Data

Form1

ORGANICS HERBICIDE REPORT

Sample Number: AC74177-002
Client Id: 006 SS-1 Composite
Data File: 2G83609.D
Analysis Date: 08/28/13 13:07
Date Rec/Extracted: 08/23/13-08/27/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8151A
Matrix: Soil
Initial Vol: 50g
Final Vol: 10ml
Dilution: 1
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
94-75-7	2,4-D	0.011	U	93-72-1	Silvex	0.011	U

Worksheet #: 274944

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3082313 0321

Data Path : G:\Gcdata\2013\GC_2\Data\08-28-13\
Data File : 2G83609.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 13:07
Operator : MS
Sample : AC74177-002
Misc : S,HERB
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 28 15:00:42 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_H0822.M
Quant Title : @GC_2,ug,8151
QLast Update : Thu Aug 22 16:18:19 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
Target Compounds						
2)Dcaa-Surrogate	6.938	6.968	670194	537861	1090.241m	1026.464m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

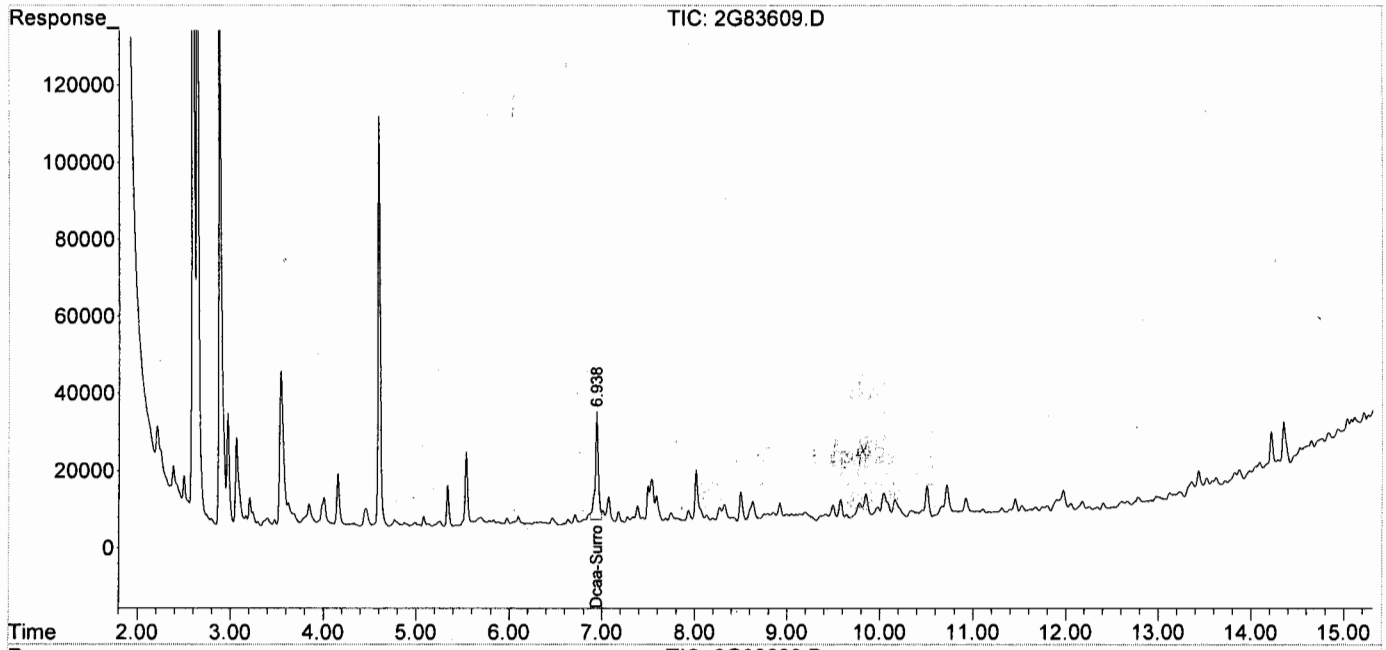
Quantitation Report (QT Reviewed)

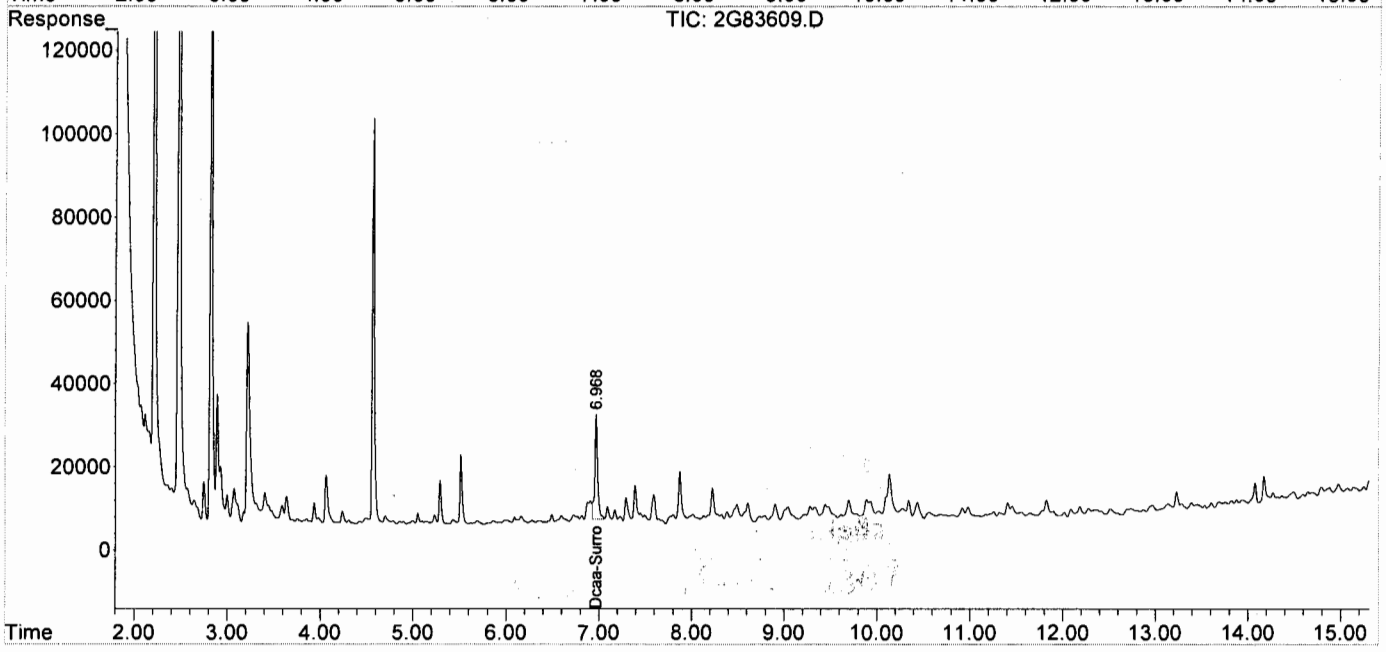
3082313 0322

Data Path : G:\Gcdata\2013\GC_2\Data\08-28-13\
Data File : 2G83609.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 13:07
Operator : MS
Sample : AC74177-002
Misc : S,HERB
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 28 15:00:42 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_H0822.M
Quant Title : @GC_2,ug,8151
QLast Update : Thu Aug 22 16:18:19 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Form1

ORGANICS HERBICIDE REPORT

Sample Number: AC74177-004
Client Id: 012 SS-2 Composite
Data File: 2G83610.D
Analysis Date: 08/28/13 13:27
Date Rec/Extracted: 08/23/13-08/27/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8151A
Matrix: Soil
Initial Vol: 50g
Final Vol: 10ml
Dilution: 1
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
94-75-7	2,4-D	0.011	U	93-72-1	Silvex	0.011	U

Worksheet #: 274944

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3082313 0324

Data Path : G:\Gcdata\2013\GC_2\Data\08-28-13\
Data File : 2G83610.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 13:27
Operator : MS
Sample : AC74177-004
Misc : S,HERB
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 28 15:01:30 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_H0822.M
Quant Title : @GC_2,ug,8151
QLast Update : Thu Aug 22 16:18:19 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

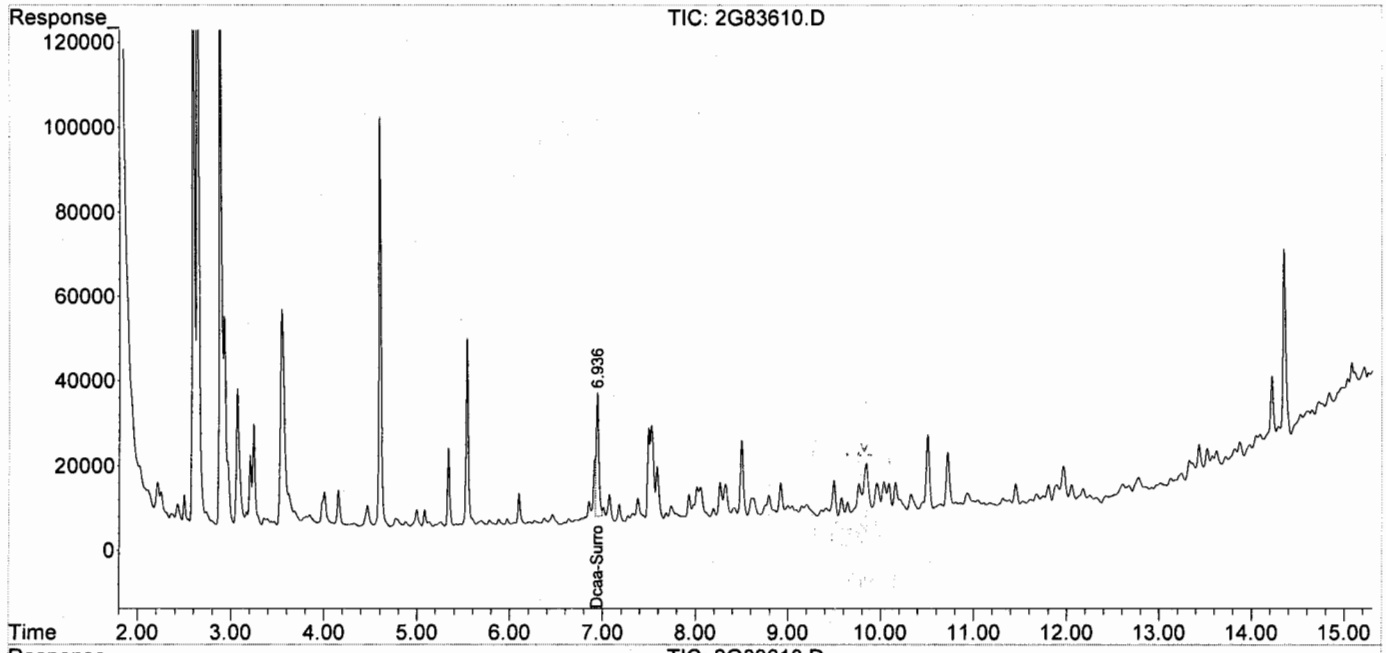
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
Target Compounds						
2)Dcaa-Surrogate	6.936	6.968	582583	524840	947.719m	1001.614m

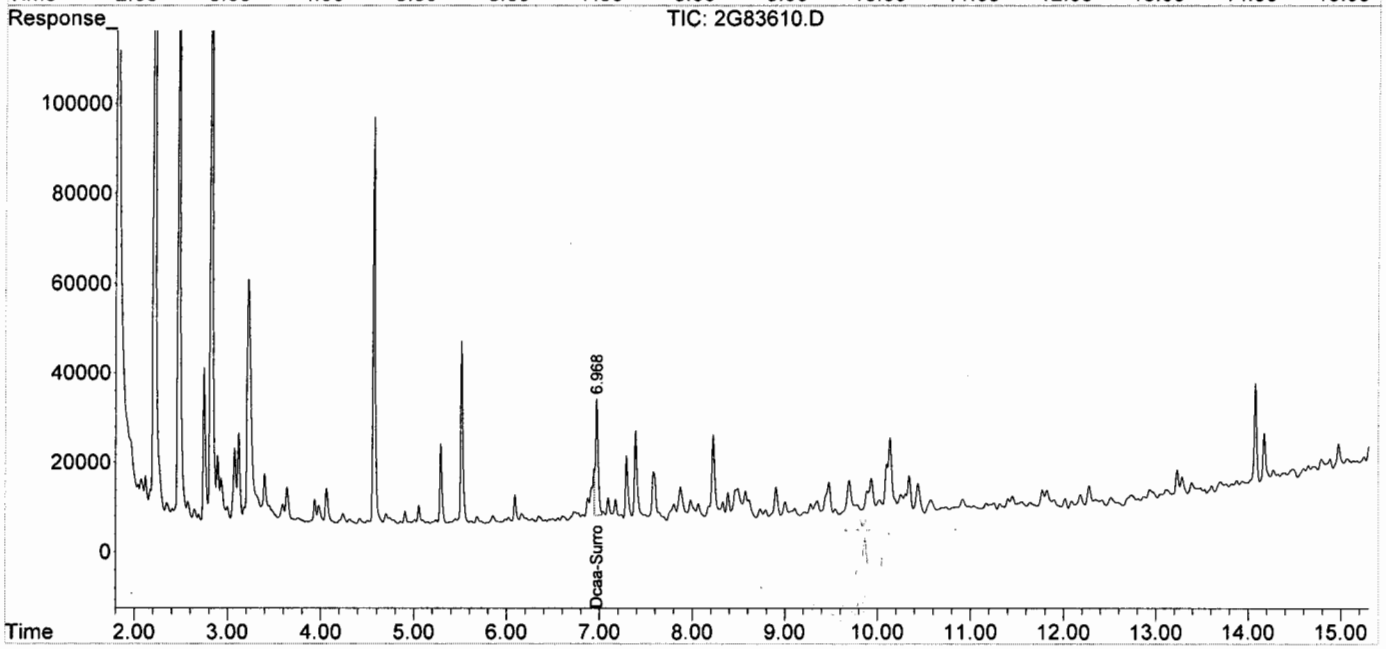
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2013\GC_2\Data\08-28-13\
Data File : 2G83610.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 13:27
Operator : MS
Sample : AC74177-004
Misc : S,HERB
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 28 15:01:30 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_H0822.M
Quant Title : @GC_2,ug,8151
QLast Update : Thu Aug 22 16:18:19 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Form1

ORGANICS HERBICIDE REPORT

Sample Number: AC74177-006
Client Id: 018 SS-3 Composite
Data File: 2G83611.D
Analysis Date: 08/28/13 13:47
Date Rec/Extracted: 08/23/13-08/27/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8151A
Matrix: Soil
Initial Vol: 50g
Final Vol: 10ml
Dilution: 1
Solids: 92

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
94-75-7	2,4-D	0.011	U	93-72-1	Silvex	0.011	U

Worksheet #: 274944

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0327

Data Path : G:\Gcdata\2013\GC_2\Data\08-28-13\
Data File : 2G83611.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 13:47
Operator : MS
Sample : AC74177-006
Misc : S,HERB
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 28 15:02:03 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_H0822.M
Quant Title : @GC_2,ug,8151
QLast Update : Thu Aug 22 16:18:19 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

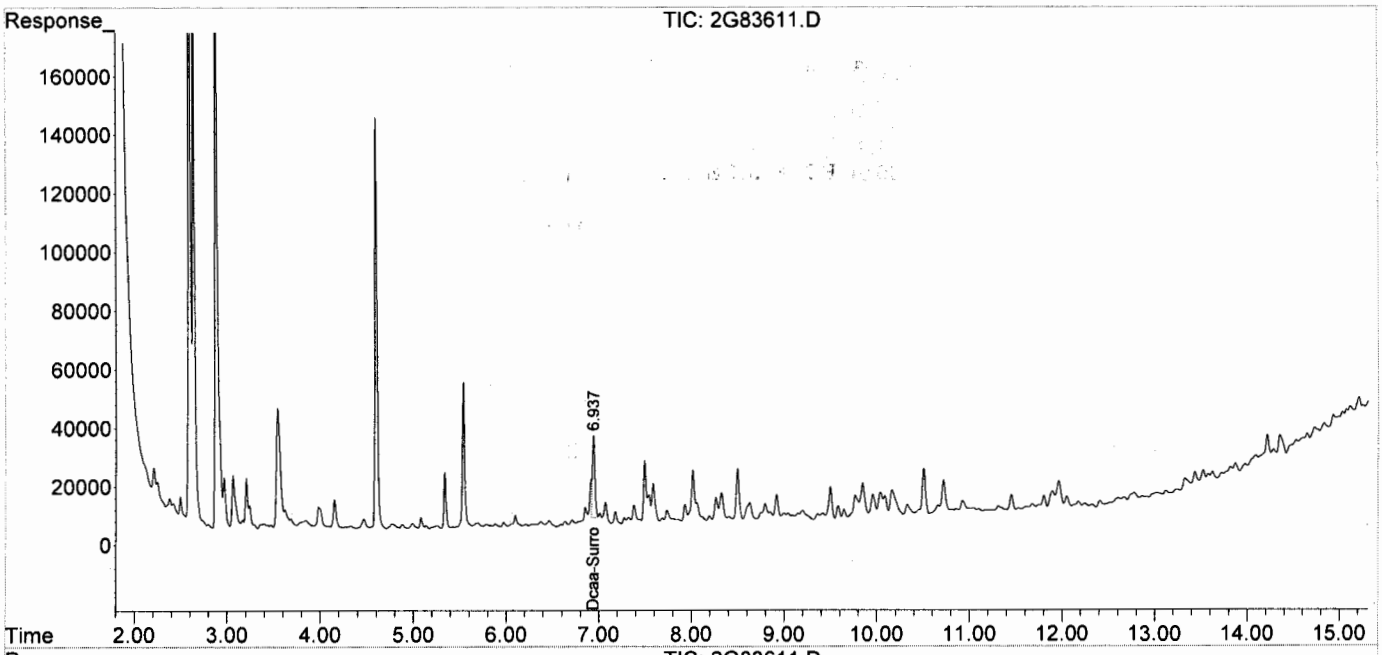
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
Target Compounds						
2)Dcaa-Surrogate	6.937	6.968	538944	540588	876.729m	1031.668m

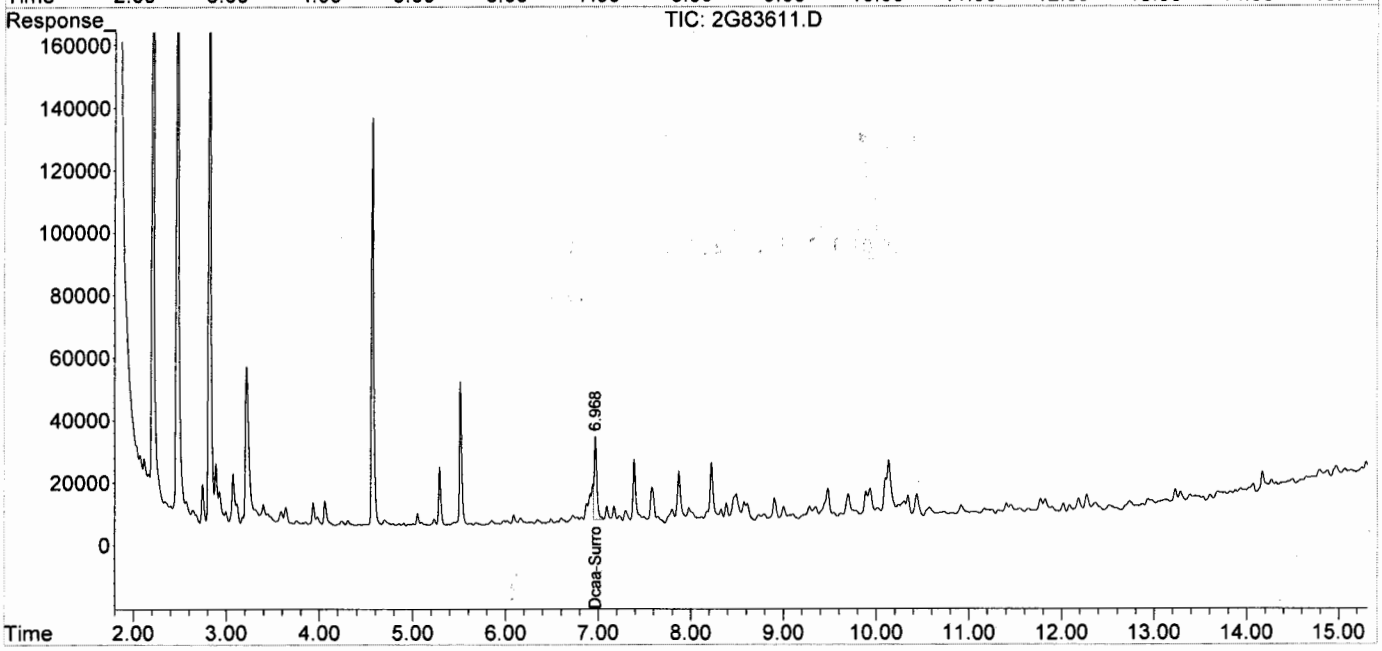
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2013\GC_2\Data\08-28-13\
Data File : 2G83611.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 13:47
Operator : MS
Sample : AC74177-006
Misc : S,HERB
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 28 15:02:03 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_H0822.M
Quant Title : @GC_2,ug,8151
QLast Update : Thu Aug 22 16:18:19 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Form1

ORGANICS HERBICIDE REPORT

Sample Number: SMB26002
Client Id:
Data File: 2G83607.D
Analysis Date: 08/28/13 12:26
Date Rec/Extracted: NA-08/27/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8151A
Matrix: Soil
Initial Vol: 50g
Final Vol: 10ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
94-75-7	2,4-D	0.010	U	93-72-1	Silvex	0.010	U

Worksheet #: 274944

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3082313 0330

Data Path : G:\Gcdata\2013\GC_2\Data\08-28-13\
Data File : 2G83607.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 12:26
Operator : MS
Sample : SMB26002
Misc : S,HERB
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 28 13:19:07 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_H0822.M
Quant Title : @GC_2,ug,8151
QLast Update : Thu Aug 22 16:18:19 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

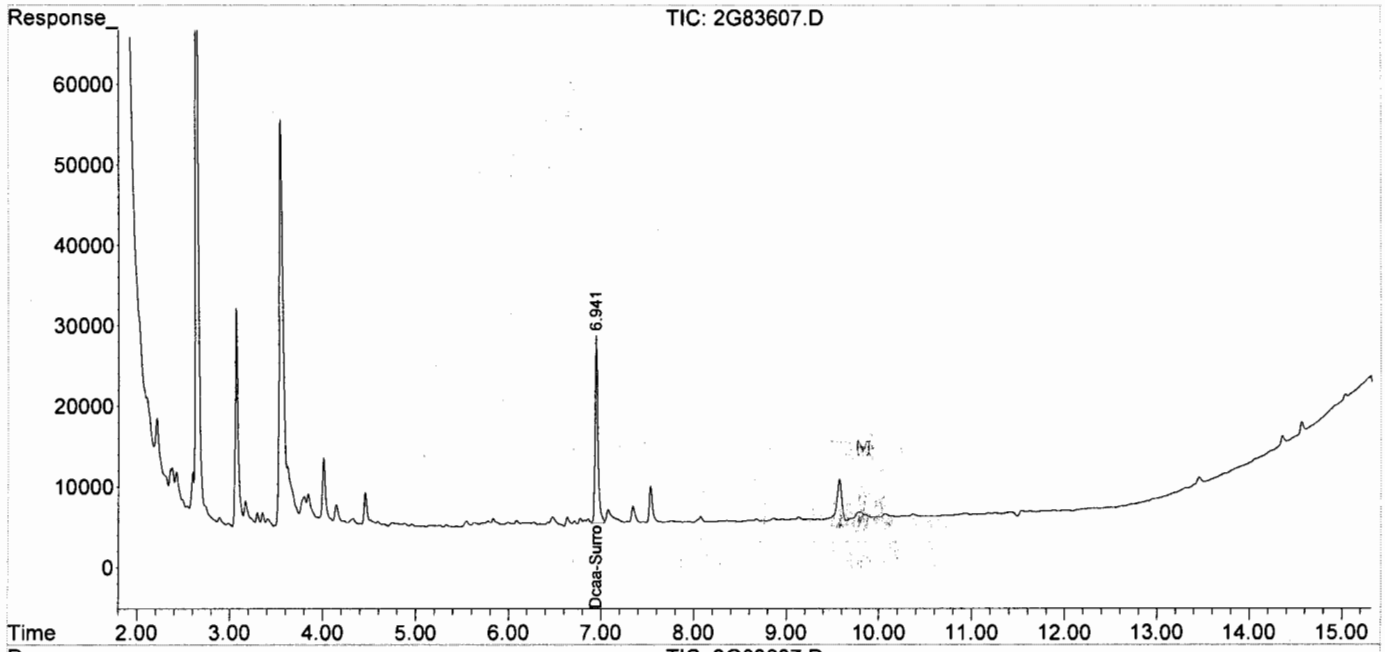
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
Target Compounds						
2)Dcaa-Surrogate	6.941	6.970	491743	501136	799.945m	956.377

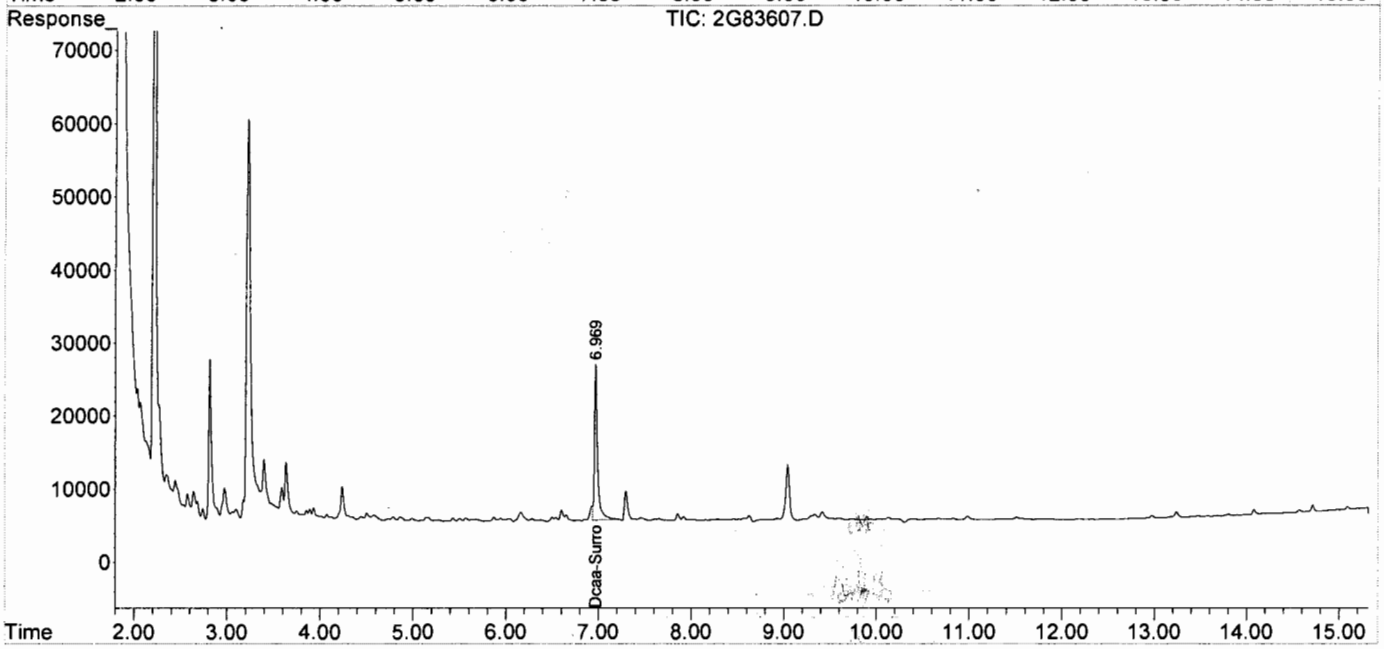
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2013\GC_2\Data\08-28-13\
Data File : 2G83607.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 12:26
Operator : MS
Sample : SMB26002
Misc : S,HERB
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 28 13:19:07 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_H0822.M
Quant Title : @GC_2,ug,8151
QLast Update : Thu Aug 22 16:18:19 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





FORM2

Surrogate Recovery

Method: EPA 8151A

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column2 S2 Recov	Column0 S3 Recov	Column0 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
2G83450.D	SMB25925	Soil	08/19/13 10:36	1		89	101				
2G83607.D	SMB26002	Soil	08/28/13 12:26	1		80	96				
2G83609.D	AC74177-002	Soil	08/28/13 13:07	1		109	103				
2G83610.D	AC74177-004	Soil	08/28/13 13:27	1		95	100				
2G83611.D	AC74177-006	Soil	08/28/13 13:47	1		88	103				
2G83451.D	AC73841-029	Soil	08/19/13 10:56	1		134	110				
2G83472.D	SMB25925(M	Soil	08/19/13 17:54	1		72	96				
2G83473.D	AC73841-029(	Soil	08/19/13 18:15	1		99	120				
2G83474.D	AC73841-029(	Soil	08/19/13 18:35	1		151 *	107				
2G83608.D	SMB26002(M	Soil	08/28/13 12:47	1		82	93				

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8151A

Soil Limits

Compound	Spike Amt	Limits
S1=Dcaa-Surrogate	1000	25-138
S2=Dcaa-Surrogate	1000	25-138

Form3
Recovery Data
QC Batch: SMB25925

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G83472.D	SMB25925(MS)	8/19/2013 5:54:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8151 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Dicamba	2	258.85	0	400	65	25	130
2,4-D	2	209	0	400	52	10	130
Silvex	2	334.8	0	400	84	25	130
2,4,5-T	2	433.13	0	400	108	25	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB26002

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G83608.D	SMB26002(MS)	8/28/2013 12:47:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8151 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Dicamba	2	262.35	0	400	66	25	130
2,4-D	2	246.37	0	400	62	10	130
Silvex	2	286.83	0	400	72	25	130
2,4,5-T	2	281.4	0	400	70	25	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB25925

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G83473.D	AC73841-029(MS)	8/19/2013 6:15:00 PM
Non Spike(If applicable):	2G83451.D	AC73841-029	8/19/2013 10:56:00 AM
Inst Blank(If applicable):			

Method: 8151 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Dicamba	2	271.18	0	400	68	25	130
2,4-D	2	300.53	0	400	75	10	130
Silvex	2	350.71	0	400	88	25	130
2,4,5-T	2	470.87	0	400	118	25	130

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G83474.D	AC73841-029(MSD)	8/19/2013 6:35:00 PM
Non Spike(If applicable):	2G83451.D	AC73841-029	8/19/2013 10:56:00 AM
Inst Blank(If applicable):			

Method: 8151 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Dicamba	2	239.64	0	400	60	25	130
2,4-D	2	304.19	0	400	76	10	130
Silvex	2	354.78	0	400	89	25	130
2,4,5-T	2	494.53	0	400	124	25	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA

QC Batch: SMB25925

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G83474.D	AC73841-029(MSD)	8/19/2013 6:35:00 PM
Duplicate(If applicable):	2G83473.D	AC73841-029(MS)	8/19/2013 6:15:00 PM
Inst Blank(If applicable):			

Method: 8151 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Dicamba	2	239.64	271.18	12	40
2,4-D	2	304.19	300.53	1.2	40
Silvex	2	354.78	350.71	1.2	40
2,4,5-T	2	494.53	470.87	4.9	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: SMB25925
Blank Data File: 2G83450.D
Matrix: Soil

Blank Analysis Date: 08/19/13 10:36
Blank Extraction Date: 08/16/13
(If Applicable)
Method: EPA 8151A

Sample Number	Data File	Analysis Date
AC73841-029(MSD	2G83474.D	08/19/13 18:35
AC73841-029(MS)	2G83473.D	08/19/13 18:15
SMB25925(MS)	2G83472.D	08/19/13 17:54
AC73841-029	2G83451.D	08/19/13 10:56

FORM 4
Blank Summary

Blank Number: SMB26002
Blank Data File: 2G83607.D
Matrix: Soil

Blank Analysis Date: 08/28/13 12:26
Blank Extraction Date: 08/27/13
(If Applicable)
Method: EPA 8151A

Sample Number	Data File	Analysis Date
AC74177-002	2G83609.D	08/28/13 13:07
AC74177-004	2G83610.D	08/28/13 13:27
AC74177-006	2G83611.D	08/28/13 13:47
SMB26002(MS)	2G83608.D	08/28/13 12:47

Form 5

Method: EPA 8151A

Instrument: GC_2 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
2G83110.D	CAL HERB@50PPB	08/06/13 09:38	Soil	2G83110.	6.9607	0	6.9829	0
2G83111.D	CAL HERB@100PPB	08/06/13 11:04	Soil	2G83110.	6.9668	0.0876	6.9854	0.0358
2G83112.D	CAL HERB@200PPB	08/06/13 11:24	Soil	2G83110.	6.9591	0.023	6.9782	0.0673
2G83113.D	CAL HERB@400PPB	08/06/13 11:45	Soil	2G83110.	6.9549	0.0834	6.9758	0.1017
2G83114.D	CAL HERB@500PPB	08/06/13 12:05	Soil	2G83110.	6.9516	0.1308	6.9735	0.1347
2G83115.D	CAL HERB@600PPB	08/06/13 12:25	Soil	2G83110.	6.9516	0.1308	6.9726	0.1476
2G83116.D	ICV	08/06/13 12:45	Soil	2G83110.	6.9642	0.0503	6.9820	0.0129
2G83117.D	WMB25795	08/06/13 13:13	Aqueous	2G83110.	6.9524	0.1193	6.9731	0.1404
2G83118.D	WMB25795(MS)	08/06/13 13:34	Aqueous	2G83110.	6.9515	0.1323	6.9715	0.1634
2G83119.D	WMB25785	08/06/13 13:55	Aqueous	2G83110.	6.9545	0.0891	6.9748	0.1161
2G83120.D	WMB25785(MS)	08/06/13 14:15	Aqueous	2G83110.	6.9500	0.1538	6.9711	0.1691
2G83121.D	AC73697-001(T)	08/06/13 14:56	Aqueous	2G83110.	6.9510	0.1394	6.9721	0.1548
2G83122.D	AC73751-002(T)	08/06/13 15:16	Aqueous	2G83110.	6.9464	0.2056	6.9712	0.1677
2G83123.D	AC73752-001(T)	08/06/13 15:36	Aqueous	2G83110.	6.9491	0.1668	6.9713	0.1663
2G83124.D	AC73751-001(T)	08/06/13 15:56	Aqueous	2G83110.	6.9533	0.1064	6.9749	0.1146
2G83125.D	EF1-V-170078A(8/1)	08/06/13 16:17	Aqueous	2G83110.	6.9531	0.1092	6.9753	0.1089
2G83126.D	AC73833-027	08/06/13 16:37	Aqueous	2G83110.	6.9547	0.0862	6.9750	0.1132
2G83127.D	AC73717-001(T)	08/06/13 16:57	Aqueous	2G83110.	6.9539	0.0977	6.9753	0.1089
2G83128.D	AC73717-007(T)	08/06/13 17:17	Aqueous	2G83110.	6.9565	0.0604	6.9760	0.0989
2G83129.D	AC73717-015(T)	08/06/13 17:38	Aqueous	2G83110.	6.9533	0.1064	6.9756	0.1046
2G83130.D	AC73717-023(T)	08/06/13 17:58	Aqueous	2G83110.	6.9517	0.1294	6.9728	0.1447
2G83131.D	AC73717-033(T)	08/06/13 18:18	Aqueous	2G83110.	6.9554	0.0762	6.9751	0.1118
2G83132.D	EF1-V-170078(8/1)	08/06/13 18:39	Aqueous	2G83110.	6.9567	0.0575	6.9770	0.0845
2G83133.D	200PPB	08/06/13 18:59	Aqueous	2G83110.	6.9608	0.0014	6.9816	0.0186
2G83134.D	CAL HERB@400PPB	08/06/13 19:19	Aqueous	2G83110.	6.9554	0.0762	6.9775	0.0774
2G83135.D	WMB25807	08/06/13 19:39	Aqueous	2G83134.	6.9558	0.0058	6.9760	0.0215
2G83136.D	WMB25807(MS)	08/06/13 20:00	Aqueous	2G83134.	6.9516	0.0546	6.9725	0.0717
2G83137.D	AC73830-001(MS)(T)	08/06/13 20:20	Aqueous	2G83134.	6.9503	0.0733	6.9714	0.0875
2G83138.D	AC73830-001(MSD)(T)	08/06/13 20:40	Aqueous	2G83134.	6.9504	0.0719	6.9718	0.0817
2G83139.D	AC73830-001(T)	08/06/13 21:00	Aqueous	2G83134.	6.9520	0.0489	6.9738	0.053
2G83140.D	AC73830-002(T)	08/06/13 21:20	Aqueous	2G83134.	6.9505	0.0705	6.9724	0.0731
2G83141.D	AC73830-003(T)	08/06/13 21:40	Aqueous	2G83134.	6.9486	0.0978	6.9718	0.0817
2G83142.D	AC73830-004(T)	08/06/13 22:01	Aqueous	2G83134.	6.9467	0.1252	6.9699	0.109
2G83143.D	AC73830-006(T)	08/06/13 22:21	Aqueous	2G83134.	6.9534	0.0288	6.9763	0.0172
2G83144.D	AC73830-008(T)	08/06/13 22:41	Aqueous	2G83134.	6.9468	0.1237	6.9703	0.1032
2G83145.D	AC73830-009(T)	08/06/13 23:01	Aqueous	2G83134.	6.9507	0.0676	6.9783	0.0115
2G83146.D	200PPB	08/06/13 23:22	Aqueous	2G83134.	6.9617	0.0905	6.9822	0.0673
2G83147.D	CAL HERB@400PPB	08/06/13 23:42	Aqueous	2G83134.	6.9564	0.0144	6.9764	0.0158
2G83148.D	OMB25809	08/07/13 00:02	OIL/OTHER	2G83147.	6.9586	0.0316	6.9799	0.0502
2G83149.D	OMB25809(MS)	08/07/13 00:22	OIL/OTHER	2G83147.	6.9506	0.0834	6.9729	0.0502
2G83150.D	AC73830-005	08/07/13 00:43	OIL/OTHER	2G83147.	6.9493	0.1021	6.9718	0.066
2G83151.D	AC73830-010	08/07/13 01:03	OIL/OTHER	2G83147.	6.9520	0.0633	6.9748	0.0229
2G83152.D	AC73830-011	08/07/13 01:23	OIL/OTHER	2G83147.	6.9508	0.0805	6.9729	0.0502
2G83153.D	AC73830-012	08/07/13 01:43	OIL/OTHER	2G83147.	6.9506	0.0834	6.9729	0.0502
2G83154.D	AC73830-013	08/07/13 02:04	OIL/OTHER	2G83147.	6.9503	0.0877	6.9726	0.0545
2G83155.D	AC73830-014	08/07/13 02:24	OIL/OTHER	2G83147.	6.9491	0.105	6.9720	0.0631
2G83156.D	AC73830-007(T)	08/07/13 02:44	Aqueous	2G83147.	6.9468	0.1381	6.9714	0.0717
2G83157.D	SMB25808	08/07/13 03:04	Soil	2G83147.	6.9532	0.046	6.9750	0.0201
2G83158.D	SMB25808(MS)	08/07/13 03:25	Soil	2G83147.	6.9497	0.0964	6.9718	0.066
2G83159.D	AC73635-003	08/07/13 03:45	Soil	2G83147.	6.9464	0.1439	6.9699	0.0932
2G83160.D	EF1-V-170078(8/6)	08/07/13 04:05	Aqueous	2G83147.	6.9562	0.0029	6.9769	0.0072
2G83161.D	200PPB	08/07/13 04:25	Aqueous	2G83147.	6.9606	0.0604	6.9818	0.0774
2G83162.D	CAL HERB@400PPB	08/07/13 04:46	Aqueous	2G83147.	6.9543	0.0302	6.9774	0.0143

Drift Compound: Dcaa-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8151A

Instrument: GC_2

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
2G83448.D	200PPB	08/19/13 09:04	Soil					
2G83449.D	CAL HERB@200PPB	08/19/13 09:49	Soil	2G83449.	6.9556	0	6.9829	0
2G83450.D	SMB25925	08/19/13 10:36	Soil	2G83449.	6.9421	0.1943	6.9702	0.182
2G83451.D	AC73841-029	08/19/13 10:56	Soil	2G83449.	6.9431	0.1799	6.9723	0.1519
2G83452.D	AC73841-028	08/19/13 11:16	Soil	2G83449.	6.9399	0.226	6.9700	0.1849
2G83453.D	AC73841-027	08/19/13 11:37	Soil	2G83449.	6.9389	0.2404	6.9700	0.1849
2G83454.D	AC73841-033	08/19/13 11:50	Soil	2G83449.	6.9112	0.6404	6.9456	0.5356
2G83455.D	AC73904-022	08/19/13 12:10	Soil	2G83449.	6.9392	0.2361	6.9695	0.1921
2G83456.D	AC73904-023	08/19/13 12:30	Soil	2G83449.	6.9419	0.1972	6.9711	0.1691
2G83457.D	AC73904-025	08/19/13 12:51	Soil	2G83449.	6.9467	0.128	6.9590	0.3429
2G83458.D	AC73904-024	08/19/13 13:11	Soil	2G83449.	6.9447	0.1568	6.9713	0.1663
2G83459.D	WMB25923	08/19/13 13:27	Aqueous	2G83449.	6.9700	0.2068	6.9946	0.1674
2G83460.D	AC73939-001(T)	08/19/13 13:48	Aqueous	2G83449.	6.9647	0.1308	6.9903	0.1059
2G83461.D	AC73939-002(T)	08/19/13 14:08	Aqueous	2G83449.	6.9863	0.4404	7.0090	0.3731
2G83462.D	AC73939-003(T)	08/19/13 14:28	Aqueous	2G83449.	6.9778	0.3187	7.0038	0.2989
2G83463.D	AC73939-004(T)	08/19/13 14:48	Aqueous	2G83449.	6.9791	0.3373	7.0054	0.3217
2G83464.D	AC73939-005(T)	08/19/13 15:08	Aqueous	2G83449.	6.9905	0.5005	7.0155	0.4658
2G83465.D	AC73939-006(T)	08/19/13 15:29	Aqueous	2G83449.	6.9905	0.5005	7.0145	0.4515
2G83466.D	AC73939-007(T)	08/19/13 15:49	Aqueous	2G83449.	6.9613	0.0819	6.9890	0.0873
2G83467.D	AC73939-008(T)	08/19/13 16:09	Aqueous	2G83449.	6.9800	0.3502	7.0067	0.3403
2G83468.D	200PPB	08/19/13 16:31	Aqueous	2G83449.	7.0009	0.6492	7.0245	0.594
2G83469.D	400PPB	08/19/13 16:52	Aqueous	2G83449.	0.0000	200*	0.0000	200*
2G83470.D	CAL HERB@400PPB	08/19/13 17:14	Aqueous	2G83449.	6.9865	0.4433	7.0116	0.4102
2G83471.D	WMB25923(MS)	08/19/13 17:34	Aqueous	2G83470.	6.9507	0.5137	6.9779	0.4818
2G83472.D	SMB25925(MS)	08/19/13 17:54	Soil	2G83470.	6.9424	0.6332	6.9724	0.5606
2G83473.D	AC73841-029(MS)	08/19/13 18:15	Soil	2G83470.	6.9410	0.6534	6.9715	0.5736
2G83474.D	AC73841-029(MSD)	08/19/13 18:35	Soil	2G83470.	6.9420	0.639	6.9711	0.5793
2G83475.D	EF-1-V-170818(8/14)	08/19/13 18:55	Aqueous	2G83470.	6.9598	0.3829	6.9866	0.3572
2G83476.D	CAL HERB@400PPB	08/19/13 19:15	Aqueous	2G83470.	6.9926	0.0873	7.0175	0.0841

Drift Compound: Dcaa-Surrogate

Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph)

* Values outside of limits for this column/run

Form 5

Method: EPA 8151A

Instrument: GC_2

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
2G83519.D	CAL HERB@400PPB	08/22/13 11:28	Aqueous	2G83519.	6.9466	0	6.9660	0
2G83520.D	MBS	08/22/13 11:48	Aqueous	2G83519.	6.9483	0.0245	6.9721	0.0875
2G83521.D	CAL HERB@50PPB	08/22/13 12:36	Soil	2G83519.	6.9555	0	6.9706	0.066
2G83522.D	CAL HERB@100PPB	08/22/13 12:56	Soil	2G83521.	6.9487	0.0978	6.9718	0.0172
2G83523.D	CAL HERB@200PPB	08/22/13 13:16	Soil	2G83521.	6.9451	0.1496	6.9704	0.0029
2G83524.D	CAL HERB@400PPB	08/22/13 13:36	Soil	2G83521.	6.9437	0.1698	6.9699	0.01
2G83525.D	CAL HERB@500PPB	08/22/13 13:57	Soil	2G83521.	6.9428	0.1828	6.9692	0.0201
2G83526.D	CAL HERB@600PPB	08/22/13 14:17	Soil	2G83521.	6.9426	0.1856	6.9696	0.0143
2G83527.D	ICV	08/22/13 14:37	Soil	2G83521.	6.9452	0.1482	6.9700	0.0086
2G83528.D	SMB25962	08/22/13 14:57	Soil	2G83521.	6.9444	0.1597	6.9710	0.0057
2G83529.D	SMB25962(MS)	08/22/13 15:17	Soil	2G83521.	6.9435	0.1727	6.9707	0.0014
2G83530.D	AC74118-002	08/22/13 15:38	Soil	2G83521.	6.9451	0.1496	6.9702	0.0057
2G83531.D	CAL HERB@400PPB	08/22/13 15:58	Soil	2G83521.	6.9431	0.1784	6.9697	0.0129
2G83532.D	400PPB	08/22/13 16:18	Soil	2G83531.	6.9427	0.0058	6.9693	0.0057

Drift Compound: Dcaa-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8151A

Instrument: GC_2

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
2G83599.D	200PPB	08/28/13 09:39	Soil					
2G83600.D	CAL HERB@400PPB	08/28/13 10:02	Soil	2G83600.	6.9391	0	6.9695	0
2G83601.D	WMB26003	08/28/13 10:26	Aqueous	2G83600.	6.9409	0.0259	6.9688	0.01
2G83602.D	WMB26003(MS)	08/28/13 10:46	Aqueous	2G83600.	6.9400	0.013	6.9701	0.0086
2G83603.D	AC74177-002(T)	08/28/13 11:06	Aqueous	2G83600.	6.9390	0.0014	6.9700	0.0072
2G83604.D	AC74177-004(T)	08/28/13 11:26	Aqueous	2G83600.	6.9396	0.0072	6.9686	0.0129
2G83605.D	AC74177-006(T)	08/28/13 11:46	Aqueous	2G83600.	6.9398	0.0101	6.9695	0
2G83606.D	EF-1-V-171314(8/27)	08/28/13 12:06	Aqueous	2G83600.	6.9413	0.0317	6.9700	0.0072
2G83607.D	SMB26002	08/28/13 12:26	Soil	2G83600.	6.9410	0.0274	6.9703	0.0115
2G83608.D	SMB26002(MS)	08/28/13 12:47	Soil	2G83600.	6.9409	0.0259	6.9711	0.023
2G83609.D	AC74177-002	08/28/13 13:07	Soil	2G83600.	6.9378	0.0187	6.9682	0.0187
2G83610.D	AC74177-004	08/28/13 13:27	Soil	2G83600.	6.9361	0.0432	6.9676	0.0273
2G83611.D	AC74177-006	08/28/13 13:47	Soil	2G83600.	6.9369	0.0317	6.9678	0.0244
2G83612.D	AC74158-001	08/28/13 14:07	Soil	2G83600.	6.9391	0	6.9694	0.0014
2G83613.D	AC74199-001	08/28/13 14:27	Soil	2G83600.	6.9349	0.0605	6.9673	0.0316
2G83614.D	AC74199-003	08/28/13 14:48	Soil	2G83600.	6.9368	0.0331	6.9672	0.033
2G83615.D	AC74199-005	08/28/13 15:08	Soil	2G83600.	6.9376	0.0216	6.9683	0.0172
2G83616.D	CAL HERB@400PPB	08/28/13 15:26	Soil	2G83600.	6.9395	0.0058	6.9679	0.023

Drift Compound: Dcaa-Surrogate

Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph)

* - Values outside of limits for this column/run

3082313 0343

Form 6
Initial Calibration

Method: EPA 8151A

Instrument: GC_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2G83110.	CAL HERB@50PPB	08/06/13 09:38	2	2G83111.	CAL HERB@100PPB	08/06/13 11:04
3	2G83112.	CAL HERB@200PPB	08/06/13 11:24	4	2G83113.	CAL HERB@400PPB	08/06/13 11:45
5	2G83114.	CAL HERB@500PPB	08/06/13 12:05	6	2G83115.	CAL HERB@600PPB	08/06/13 12:25

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Dalapon	1	0	Avg	0.1204	0.1143	0.1140	0.1014	0.0996	0.1001	----	----	0.108	2.57	0.999	0.999	8.3	50.00	100.0	200.0	400.0	500.0	600.0		
Dcaa-Surrogate	1	0	Avg	0.0750	0.0676	0.0656	0.0554	0.0541	0.0533	----	----	0.0619	6.96	0.997	0.999	14	250.0	500.0	1000.	2000.	2500.	3000.		
Dicamba	1	0	Avg	0.2777	0.2900	0.2879	0.2430	0.2380	0.2353	----	----	0.262	7.11	0.988	0.998	9.9	50.00	100.0	200.0	400.0	500.0	600.0		
Dichloroprop	1	0	Avg	0.0945	0.0889	0.0939	0.0810	0.0815	0.0785	----	----	0.0864	7.85	0.997	0.999	8.1	50.00	100.0	200.0	400.0	500.0	600.0		
2,4-D	1	0	Avg	0.1233	0.1137	0.1115	0.1016	0.1015	0.1009	----	----	0.109	8.26	0.999	1.00	8.3	50.00	100.0	200.0	400.0	500.0	600.0		
Silvex	1	0	Avg	0.3410	0.3641	0.3691	0.3405	0.3414	0.3423	----	----	0.350	8.99	0.999	0.999	3.8	50.00	100.0	200.0	400.0	500.0	600.0		
2,4,5-T	1	0	Avg	0.3407	0.3243	0.3624	0.3513	0.3509	0.3526	----	----	0.347	9.52	1.00	1.00	3.8	50.00	100.0	200.0	400.0	500.0	600.0		
2,4-DB	1	0	Avg	0.0632	0.0616	0.0591	0.0662	0.0655	0.0660	----	----	0.0636	10.09	0.999	0.999	4.5	50.00	100.0	200.0	400.0	500.0	600.0		
Dinoseb	1	0	Avg	0.2781	0.2730	0.2871	0.2597	0.2583	0.2595	----	----	0.269	10.65	0.999	0.999	4.4	50.00	100.0	200.0	400.0	500.0	600.0		
Picloram	1	0	Avg	0.3361	0.3655	0.4010	0.3924	0.4059	0.4238	----	----	0.388	12.08	0.998	0.999	8.1	25.00	50.00	100.0	200.0	250.0	300.0		
Dalapon	2	0	Avg	0.0894	0.0887	0.0989	0.0855	0.0856	0.0865	----	----	0.0891	2.48	0.997	0.997	5.7	50.00	100.0	200.0	400.0	500.0	600.0		
Dcaa-Surrogate	2	0	Avg	0.0562	0.0533	0.0510	0.0422	0.0408	0.0401	----	----	0.0473	6.98	0.996	0.998	15	250.0	500.0	1000.	2000.	2500.	3000.		
Dicamba	2	0	Avg	0.2214	0.2278	0.2260	0.1982	0.1950	0.1929	----	----	0.210	7.19	0.998	0.999	7.8	50.00	100.0	200.0	400.0	500.0	600.0		
Dichloroprop	2	0	Avg	0.0680	0.0675	0.0698	0.0660	0.0649	0.0633	----	----	0.0666	7.73	0.999	1.00	3.5	50.00	100.0	200.0	400.0	500.0	600.0		
2,4-D	2	0	Avg	0.0847	0.0763	0.0803	0.0760	0.0764	0.0743	----	----	0.0780	8.18	0.999	1.00	4.9	50.00	100.0	200.0	400.0	500.0	600.0		
Silvex	2	0	Avg	0.2673	0.2640	0.2851	0.2558	0.2572	0.2576	----	----	0.265	8.83	0.999	0.999	4.2	50.00	100.0	200.0	400.0	500.0	600.0		
2,4,5-T	2	0	Avg	0.2176	0.2018	0.1769	0.1714	0.1774	0.1813	----	----	0.188	9.41	0.998	1.00	9.6	50.00	100.0	200.0	400.0	500.0	600.0		
2,4-DB	2	0	Avg	0.0475	0.0473	0.0537	0.0431	0.0426	0.0425	----	----	0.0462	9.92	0.993	0.995	9.5	50.00	100.0	200.0	400.0	500.0	600.0		
Dinoseb	2	0	Avg	0.2683	0.2928	0.3092	0.2605	0.2544	0.2503	----	----	0.273	9.51	0.995	0.998	8.6	50.00	100.0	200.0	400.0	500.0	600.0		
Picloram	2	0	Avg	0.2524	0.2510	0.3023	0.2788	0.2826	0.2944	----	----	0.277	12.13	0.998	0.998	7.7	25.00	50.00	100.0	200.0	250.0	300.0		

Avg Rsd Col 1: 7.35 Avg Rsd Col 2: 7.63

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3082313 0344

Form 6
Initial Calibration

Method: EPA 8151A

Instrument: GC_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2G83521.	CAL HERB@50PPB	08/22/13 12:36	2	2G83522.	CAL HERB@100PPB	08/22/13 12:56
3	2G83523.	CAL HERB@200PPB	08/22/13 13:16	4	2G83524.	CAL HERB@400PPB	08/22/13 13:36
5	2G83525.	CAL HERB@500PPB	08/22/13 13:57	6	2G83526.	CAL HERB@600PPB	08/22/13 14:17

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Dalapon	1	0	Avg	0.1178	0.1182	0.1222	0.1055	0.1031	0.1029	----	----	0.112	2.60	0.997	0.998	7.8	50.00	100.0	200.0	400.0	500.0	600.0		
Dcaa-Surrogate	1	0	Avg	0.0719	0.0677	0.0680	0.0557	0.0530	0.0522	----	----	0.0615	6.95	0.993	0.997	14	250.0	500.0	1000.	2000.	2500.	3000.		
Dicamba	1	0	Avg	0.2380	0.2467	0.2680	0.2294	0.2205	0.2193	----	----	0.237	7.10	0.990	0.998	7.8	50.00	100.0	200.0	400.0	500.0	600.0		
Dichloroprop	1	0	Avg	0.0887	0.0905	0.0935	0.0767	0.0738	0.0727	----	----	0.0827	7.83	0.993	0.997	11	50.00	100.0	200.0	400.0	500.0	600.0		
2,4-D	1	0	Avg	0.1069	0.1090	0.1123	0.0936	0.0911	0.0913	----	----	0.101	8.22	0.995	0.997	9.6	50.00	100.0	200.0	400.0	500.0	600.0		
Silvex	1	0	Avg	0.3227	0.3433	0.3806	0.3276	0.3212	0.3206	----	----	0.336	8.96	0.996	0.998	7.0	50.00	100.0	200.0	400.0	500.0	600.0		
2,4,5-T	1	0	Avg	0.3353	0.3522	0.3718	0.3278	0.3249	0.3243	----	----	0.339	9.48	0.998	0.999	5.6	50.00	100.0	200.0	400.0	500.0	600.0		
2,4-DB	1	0	Avg	0.0570	0.0593	0.0658	0.0557	0.0554	0.0554	----	----	0.0581	10.04	0.996	0.997	7.0	50.00	100.0	200.0	400.0	500.0	600.0		
Dinoseb	1	0	Avg	0.2907	0.2930	0.3077	0.2537	0.2484	0.2468	----	----	0.273	10.62	0.995	0.997	9.8	50.00	100.0	200.0	400.0	500.0	600.0		
Picloram	1	0	Avg	0.3184	0.3386	0.4394	0.3806	0.3899	0.4004	----	----	0.378	12.04	0.996	0.996	12	25.00	50.00	100.0	200.0	250.0	300.0		
Dalapon	2	0	Avg	0.0882	0.0945	0.1045	0.0957	0.0980	0.0961	----	----	0.0962	2.51	0.999	0.999	5.5	50.00	100.0	200.0	400.0	500.0	600.0		
Dcaa-Surrogate	2	0	Avg	0.0625	0.0576	0.0579	0.0470	0.0448	0.0443	----	----	0.0524	6.97	0.993	0.997	15	250.0	500.0	1000.	2000.	2500.	3000.		
Dicamba	2	0	Avg	0.2314	0.2221	0.2396	0.2029	0.1961	0.1958	----	----	0.215	7.18	0.996	0.998	8.8	50.00	100.0	200.0	400.0	500.0	600.0		
Dichloroprop	2	0	Avg	0.0785	0.0763	0.0805	0.0645	0.0623	0.0616	----	----	0.0707	7.71	0.992	0.996	12	50.00	100.0	200.0	400.0	500.0	600.0		
2,4-D	2	0	Avg	0.0946	0.0930	0.0959	0.0773	0.0746	0.0734	----	----	0.0848	8.14	0.993	0.996	13	50.00	100.0	200.0	400.0	500.0	600.0		
Silvex	2	0	Avg	0.2849	0.2966	0.3324	0.2790	0.2753	0.2745	----	----	0.290	8.80	0.995	0.997	7.6	50.00	100.0	200.0	400.0	500.0	600.0		
2,4,5-T	2	0	Avg	0.2766	0.2800	0.2938	0.2561	0.2548	0.2523	----	----	0.269	9.37	0.998	0.999	6.3	50.00	100.0	200.0	400.0	500.0	600.0		
2,4-DB	2	0	Avg	0.0451	0.0475	0.0493	0.0404	0.0398	0.0402	----	----	0.0438	9.86	0.995	0.996	9.5	50.00	100.0	200.0	400.0	500.0	600.0		
Dinoseb	2	0	Avg	0.2658	0.2641	0.2789	0.2317	0.2271	0.2243	----	----	0.249	9.49	0.995	0.997	9.5	50.00	100.0	200.0	400.0	500.0	600.0		
Picloram	2	0	Avg	0.3206	0.2858	0.3358	0.2869	0.2934	0.2988	----	----	0.304	12.08	0.997	0.997	6.7	25.00	50.00	100.0	200.0	250.0	300.0		

Avg Rsd Col 1: 9.15 Avg Rsd Col 2: 9.40

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Form7
Continuing Calibration

Method: EPA 8151A

3082313 0345

Data File:				2G83449.D			2G83470.D			2G83476.D			2G83600.D			2G83616.D			
Method:				8151			8151			8151			8151			8151			
Calibration Name:				CAL HERB@200P			CAL HERB@400P			CAL HERB@400P			CAL HERB@400P			CAL HERB@400P			
Calibration Date/Time				08/19/13 09:49			08/19/13 17:14			08/19/13 19:15			08/28/13 10:02			08/28/13 15:26			
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	
Dalapon	15	1	0	217.6	200	8.8	374.3	400	6.4	372.7	400	6.8	400.2	400	0.1	414	400	3.5	
Dcaa-Surrogate	15	1	0	1180	1000	18.0*	1821	2000	9.0	1752	2000	12.4	1926	2000	3.7	1887	2000	5.6	
Dicamba	15	1	0	226	200	13.0	438.4	400	9.6	469.4	400	17.3*	413.7	400	3.4	427.3	400	6.8	
Dichloroprop	15	1	0	217.6	200	8.8	411.9	400	3.0	360.6	400	9.8	398.3	400	0.4	373.4	400	6.7	
2,4-D	15	1	0	214.9	200	7.4	381.8	400	4.6	371.7	400	7.1	397.4	400	0.7	377.4	400	5.7	
Silvex	15	1	0	223.1	200	11.6	405.9	400	1.5	391.2	400	2.2	418.4	400	4.6	386.9	400	3.3	
2,4,5-T	15	1	0	217.0	200	8.5	414.4	400	3.6	401.7	400	0.4	415.3	400	3.8	401.5	400	0.4	
2,4-DB	15	1	0	207	200	3.5	362.4	400	9.4	321.0	400	19.7*	418.3	400	4.6	395.6	400	1.1	
Dinoseb	15	1	0	228.6	200	14.3	414.9	400	3.7	401.6	400	0.4	394.5	400	1.4	376.3	400	5.9	
Picloram	15	1	0	104.2	100	4.2	189.4	200	5.3	189.8	200	5.1	215.8	200	7.9	228.6	200	14.3	
Average Difference	15	1	0			9.8			5.6			8.1			3.1			5.3	
Dalapon	15	2	0	231.3	200	15.7*	430.7	400	7.7	424.8	400	6.2	416.6	400	4.2	412.5	400	3.1	
Dcaa-Surrogate	15	2	0	1198	1000	19.8*	2187	2000	9.3	2146	2000	7.3	1870	2000	6.5	1892	2000	5.4	
Dicamba	15	2	0	218.3	200	9.2	429.7	400	7.4	421.5	400	5.4	398.0	400	0.5	370.6	400	7.4	
Dichloroprop	15	2	0	213.1	200	6.5	411.0	400	2.8	387.4	400	3.2	389.5	400	2.6	357	400	10.8	
2,4-D	15	2	0	228.1	200	14.0	418.6	400	4.6	446.8	400	11.7	391	400	2.3	359.3	400	10.2	
Silvex	15	2	0	227.7	200	13.8	465.4	400	16.4*	455.9	400	14.0	403.9	400	1.0	404.5	400	1.1	
2,4,5-T	15	2	0	252.8	200	26.4*	298.6	400	25.4*	274.9	400	31.3*	390	400	2.5	406.4	400	1.6	
2,4-DB	15	2	0	151.3	200	24.3*	434.1	400	8.5	564	400	41.0*	407.7	400	1.9	408.8	400	2.2	
Dinoseb	15	2	0	206	200	3.0	583.8	400	45.9*	577.5	400	44.4*	404.3	400	1.1	356.3	400	10.9	
Picloram	15	2	0	92.61	100	7.4	213.7	200	6.8	192.9	200	3.5	195.4	200	2.3	227	200	13.5	
Average Difference	15	2	0			14.0			13.5			16.8*			2.5			6.6	

Flags/Notes: **** - Values outside of limits for this column/run***

Form7

RtWindow Summary

Method: EPA 8151A

3082313 0346

Data File:	2G83110.D		2G83521.D		2G83449.D		2G83470.D		2G83600.D	
Calibration Name:	CAL HERB@50PPB		CAL HERB@50PPB		CAL HERB@200PPB		CAL HERB@400PPB		CAL HERB@400PPB	
Calibration Date/Time	8/6/2013 9:38:00 AM		8/22/2013 12:36:00 PM		8/19/2013 9:49:00 AM		8/19/2013 5:14:00 PM		8/28/2013 10:02:00 AM	

Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
Dalapon	1	0	2.57	(2.53 - 2.61)	2.60	(2.56 - 2.64)	2.57	(2.53 - 2.61)	2.57	(2.53 - 2.61)	2.60	(2.56 - 2.64)
Dcaa-Surrogate	1	0										
Dicamba	1	0	7.11	(7.07 - 7.15)	7.10	(7.06 - 7.14)	7.10	(7.06 - 7.14)	7.12	(7.08 - 7.16)	7.10	(7.06 - 7.14)
Dichloroprop	1	0	7.85	(7.81 - 7.89)	7.83	(7.79 - 7.87)	7.84	(7.80 - 7.88)	7.87	(7.83 - 7.91)	7.83	(7.79 - 7.87)
2,4-D	1	0	8.25	(8.21 - 8.29)	8.22	(8.18 - 8.26)	8.24	(8.20 - 8.28)	8.30	(8.26 - 8.34)	8.21	(8.17 - 8.25)
Silvex	1	0	8.98	(8.94 - 9.02)	8.96	(8.92 - 9.00)	8.97	(8.93 - 9.01)	9.01	(8.97 - 9.05)	8.95	(8.91 - 8.99)
2,4,5-T	1	0	9.51	(9.47 - 9.55)	9.48	(9.44 - 9.52)	9.50	(9.46 - 9.54)	9.56	(9.52 - 9.60)	9.47	(9.43 - 9.51)
2,4-DB	1	0	10.08	(10.04 - 10.12)	10.04	(10.00 - 10.08)	10.05	(10.01 - 10.09)	10.14	(10.10 - 10.18)	10.03	(9.99 - 10.07)
Dinoseb	1	0	10.65	(10.61 - 10.69)	10.63	(10.59 - 10.67)	10.63	(10.59 - 10.67)	10.65	(10.61 - 10.69)	10.62	(10.58 - 10.66)
Picloram	1	0	12.07	(12.03 - 12.11)	12.04	(12.00 - 12.08)	12.05	(12.01 - 12.09)	12.12	(12.08 - 12.16)	12.02	(11.98 - 12.06)
Dalapon	2	0	2.48	(2.44 - 2.52)	2.51	(2.47 - 2.55)	2.49	(2.45 - 2.53)	2.48	(2.44 - 2.52)	2.51	(2.47 - 2.55)
Dcaa-Surrogate	2	0										
Dicamba	2	0	7.19	(7.15 - 7.23)	7.18	(7.14 - 7.22)	7.19	(7.15 - 7.23)	7.20	(7.16 - 7.24)	7.18	(7.14 - 7.22)
Dichloroprop	2	0	7.73	(7.69 - 7.77)	7.71	(7.67 - 7.75)	7.73	(7.69 - 7.77)	7.76	(7.72 - 7.80)	7.71	(7.67 - 7.75)
2,4-D	2	0	8.17	(8.13 - 8.21)	8.14	(8.10 - 8.18)	8.17	(8.13 - 8.21)	8.24	(8.20 - 8.28)	8.14	(8.10 - 8.18)
Silvex	2	0	8.82	(8.78 - 8.86)	8.80	(8.76 - 8.84)	8.82	(8.78 - 8.86)	8.86	(8.82 - 8.90)	8.80	(8.76 - 8.84)
2,4,5-T	2	0	9.41	(9.37 - 9.45)	9.37	(9.33 - 9.41)	9.40	(9.36 - 9.44)	9.47	(9.43 - 9.51)	9.37	(9.33 - 9.41)
2,4-DB	2	0	9.91	(9.87 - 9.95)	9.86	(9.82 - 9.90)	9.90	(9.86 - 9.94)	9.98	(9.94 - 10.02)	9.87	(9.83 - 9.91)
Dinoseb	2	0	9.51	(9.47 - 9.55)	9.49	(9.45 - 9.53)	9.51	(9.47 - 9.55)	9.54	(9.49 - 9.57)	9.49	(9.45 - 9.53)
Picloram	2	0	12.12	(12.08 - 12.16)	12.08	(12.04 - 12.12)	12.12	(12.08 - 12.16)	12.19	(12.15 - 12.23)	12.08	(12.04 - 12.12)

TCLP Herbicide Data

Form1

ORGANICS HERBICIDE REPORT

Sample Number: AC74177-002(T)
Client Id: 006 SS-1 Composite
Data File: 2G83603.D
Analysis Date: 08/28/13 11:06
Date Rec/Extracted: 08/23/13-08/27/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8151A
Matrix: Aqueous
Initial Vol: 100ml
Final Vol: 10ml
Dilution: 1
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
94-75-7	2,4-D	0.0050	U	93-72-1	Silvex	0.0050	U

Worksheet #: 274899

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0349

Data Path : G:\Gcdata\2013\GC_2\Data\08-28-13\
Data File : 2G83603.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 11:06
Operator : MS
Sample : AC74177-002(T)
Misc : A,HERB
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 28 13:17:04 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_H0822.M
Quant Title : @GC_2,ug,8151
QLast Update : Thu Aug 22 16:18:19 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
Target Compounds						
2)Dcaa-Surrogate	6.939	6.970	699544	674660	1137.985m	1287.535

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

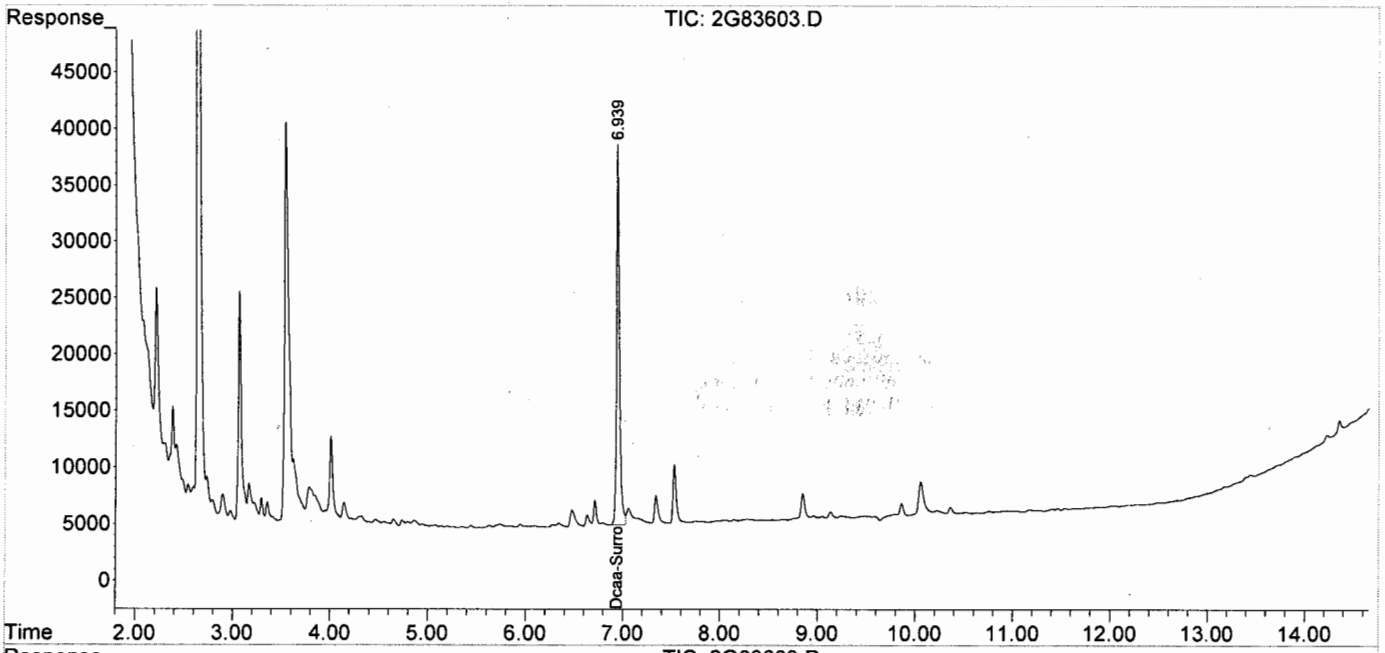
Quantitation Report (QT Reviewed)

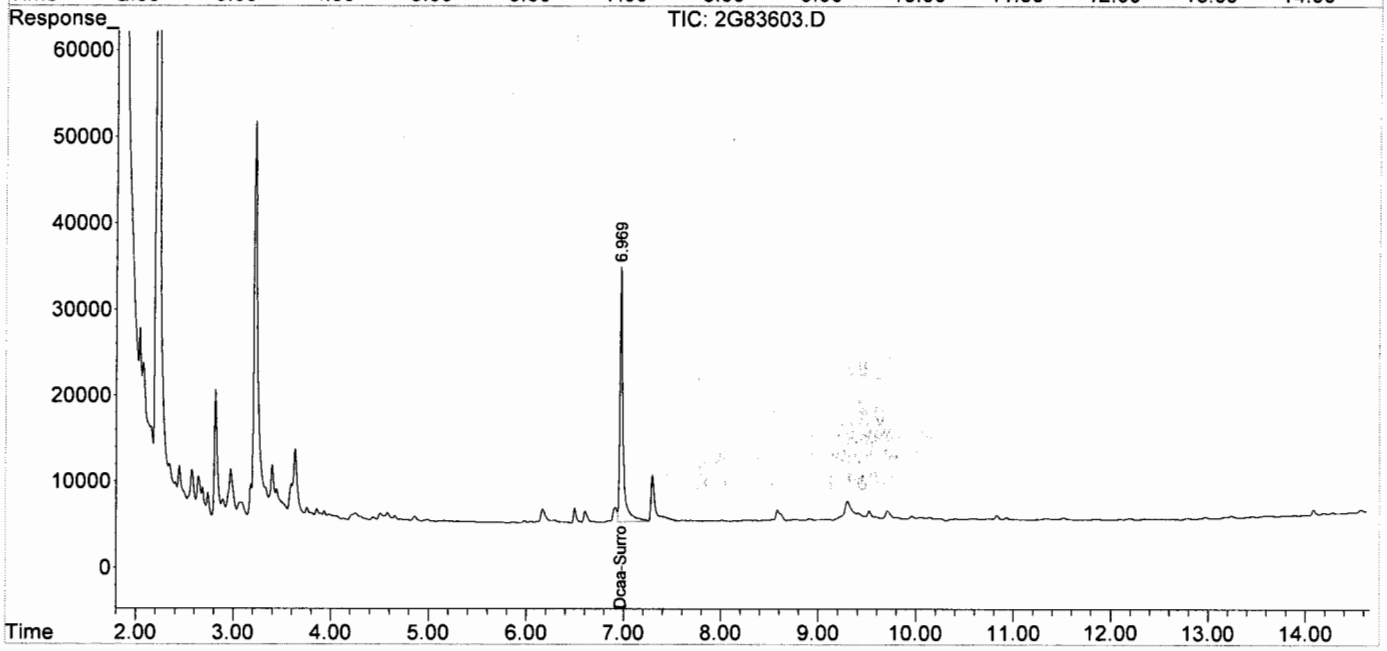
3082313 0350

Data Path : G:\Gcdata\2013\GC_2\Data\08-28-13\
Data File : 2G83603.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 11:06
Operator : MS
Sample : AC74177-002(T)
Misc : A,HERB
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 28 13:17:04 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_H0822.M
Quant Title : @GC_2,ug,8151
QLast Update : Thu Aug 22 16:18:19 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Form1

ORGANICS HERBICIDE REPORT

Sample Number: AC74177-004(T)
Client Id: 012 SS-2 Composite
Data File: 2G83604.D
Analysis Date: 08/28/13 11:26
Date Rec/Extracted: 08/23/13-08/27/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8151A
Matrix: Aqueous
Initial Vol: 100ml
Final Vol: 10ml
Dilution: 1
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
94-75-7	2,4-D	0.0050	U	93-72-1	Silvex	0.0050	U

Worksheet #: 274899

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3082313 0352

Data Path : G:\Gcdata\2013\GC_2\Data\08-28-13\
Data File : 2G83604.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 11:26
Operator : MS
Sample : AC74177-004(T)
Misc : A,HERB
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 28 13:17:29 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_H0822.M
Quant Title : @GC_2,ug,8151
QLast Update : Thu Aug 22 16:18:19 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

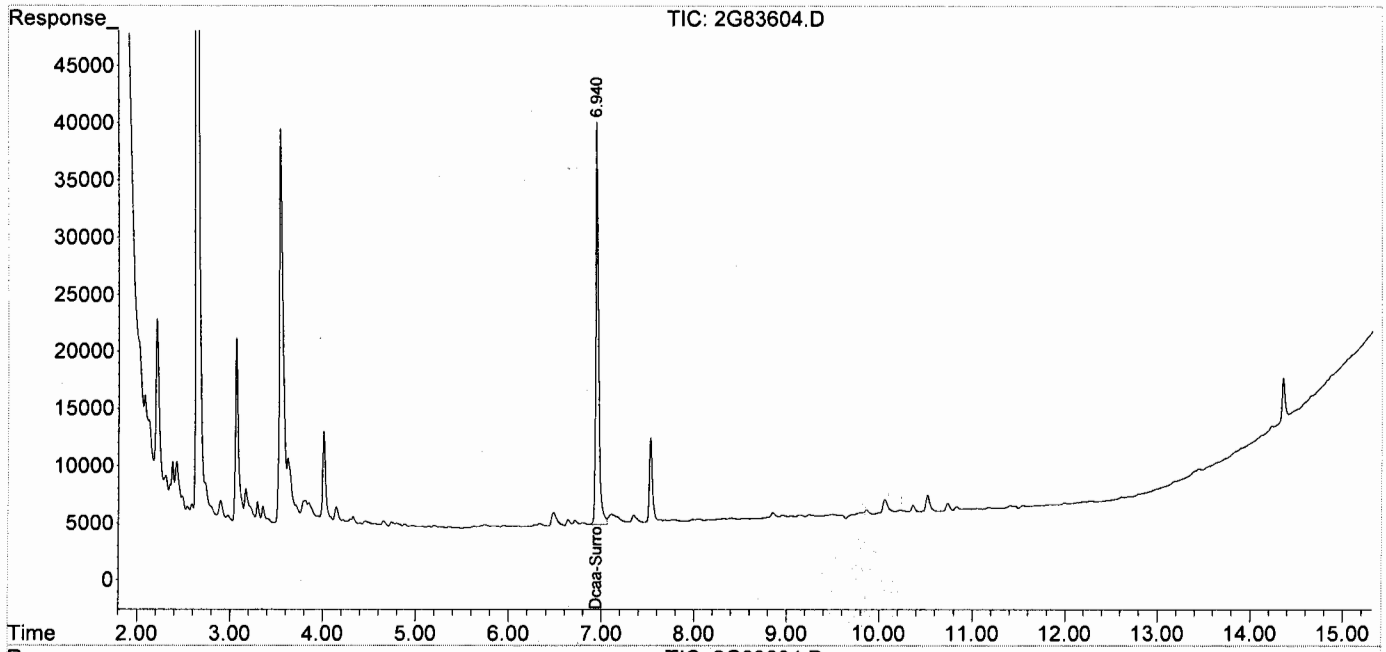
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
Target Compounds						
2)Dcaa-Surrogate	6.940	6.969	746058	674596	1213.652m	1287.412m

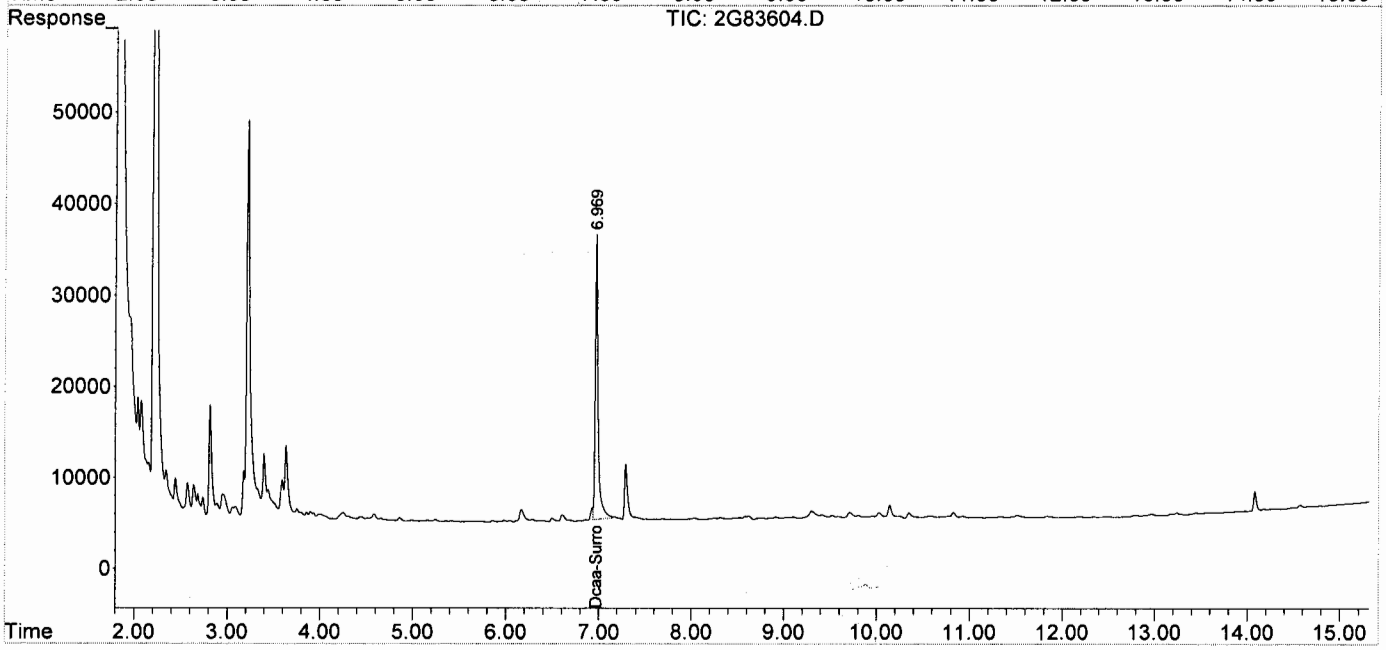
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2013\GC_2\Data\08-28-13\
Data File : 2G83604.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 11:26
Operator : MS
Sample : AC74177-004(T)
Misc : A,HERB
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 28 13:17:29 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_H0822.M
Quant Title : @GC_2,ug,8151
QLast Update : Thu Aug 22 16:18:19 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Form1

ORGANICS HERBICIDE REPORT

Sample Number: AC74177-006(T)
Client Id: 018 SS-3 Composite
Data File: 2G83605.D
Analysis Date: 08/28/13 11:46
Date Rec/Extracted: 08/23/13-08/27/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8151A
Matrix: Aqueous
Initial Vol: 100ml
Final Vol: 10ml
Dilution: 1
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
94-75-7	2,4-D	0.0050	U	93-72-1	Silvex	0.0050	U

Worksheet #: 274899

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3082313 0355

Data Path : G:\Gcdata\2013\GC_2\Data\08-28-13\
Data File : 2G83605.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 11:46
Operator : MS
Sample : AC74177-006(T)
Misc : A,HERB
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 28 13:17:54 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_H0822.M
Quant Title : @GC_2,ug,8151
QLast Update : Thu Aug 22 16:18:19 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
Target Compounds						
2)Dcaa-Surrogate	6.940	6.970	712621	694358	1159.258m	1325.127

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

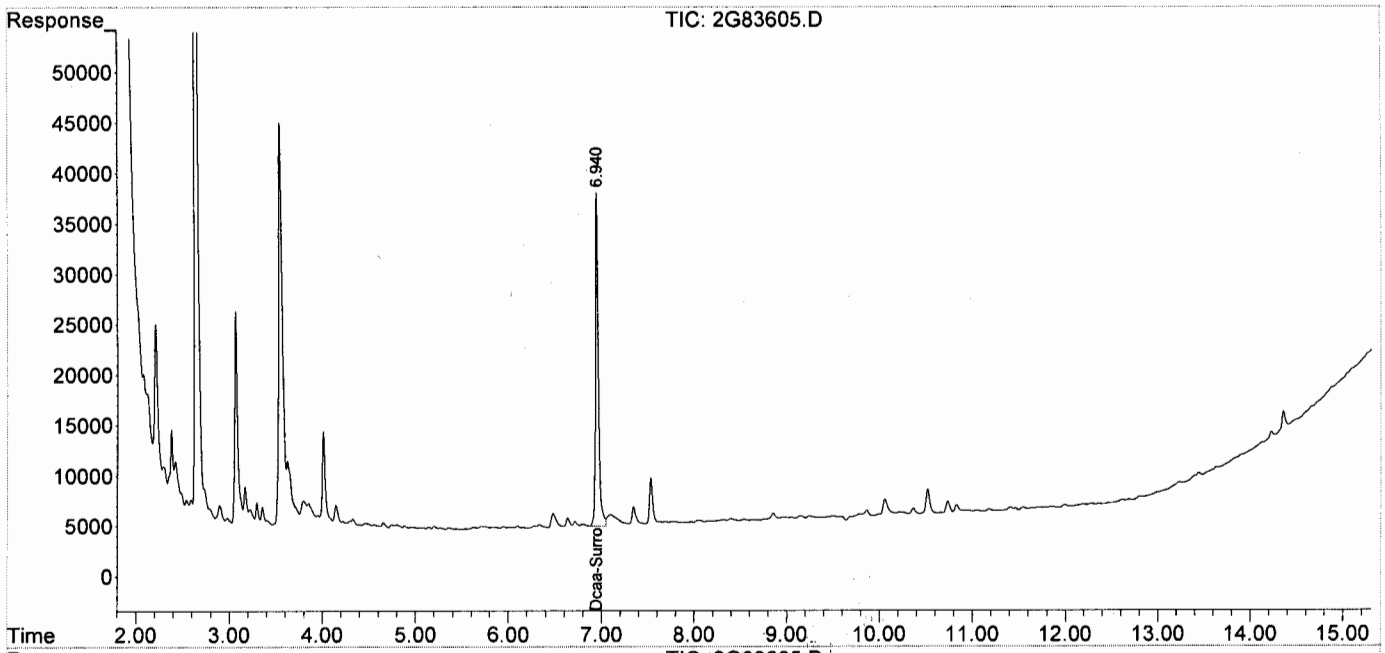
Quantitation Report (QT Reviewed)

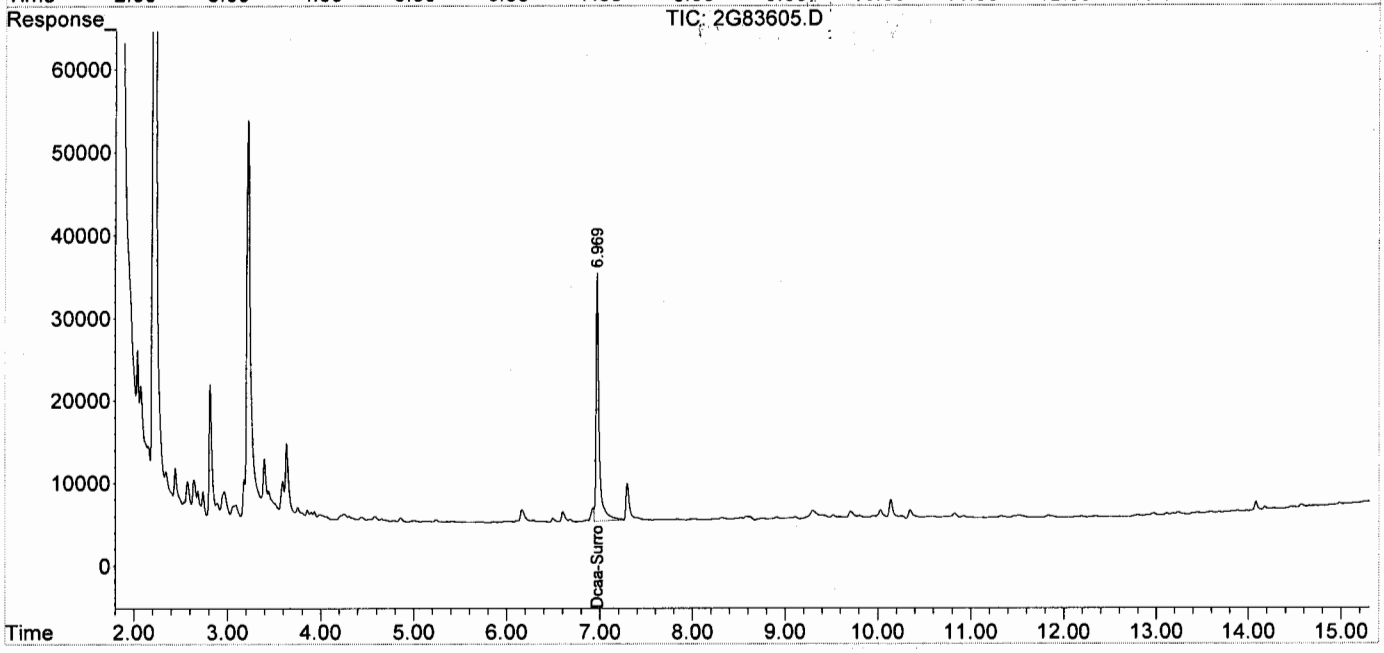
3082313 0356

Data Path : G:\Gcdata\2013\GC_2\Data\08-28-13\
Data File : 2G83605.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 11:46
Operator : MS
Sample : AC74177-006(T)
Misc : A,HERB
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 28 13:17:54 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_H0822.M
Quant Title : @GC_2,ug,8151
QLast Update : Thu Aug 22 16:18:19 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Form1

ORGANICS HERBICIDE REPORT

Sample Number: WMB26003
Client Id:
Data File: 2G83601.D
Analysis Date: 08/28/13 10:26
Date Rec/Extracted: NA-08/27/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8151A
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 10ml
Dilution: 1
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
94-75-7	2,4-D	0.00050	U	93-72-1	Silvex	0.00050	U

Worksheet #: 274899

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0358

Data Path : G:\Gcdata\2013\GC_2\Data\08-28-13\
Data File : 2G83601.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 10:26
Operator : MS
Sample : WMB26003
Misc : A,HERB
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 28 13:16:35 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_H0822.M
Quant Title : @GC_2,ug,8151
QLast Update : Thu Aug 22 16:18:19 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
Target Compounds						
2)Dcaa-Surrogate	6.941	6.969	722436	675992	1175.224	1290.076m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

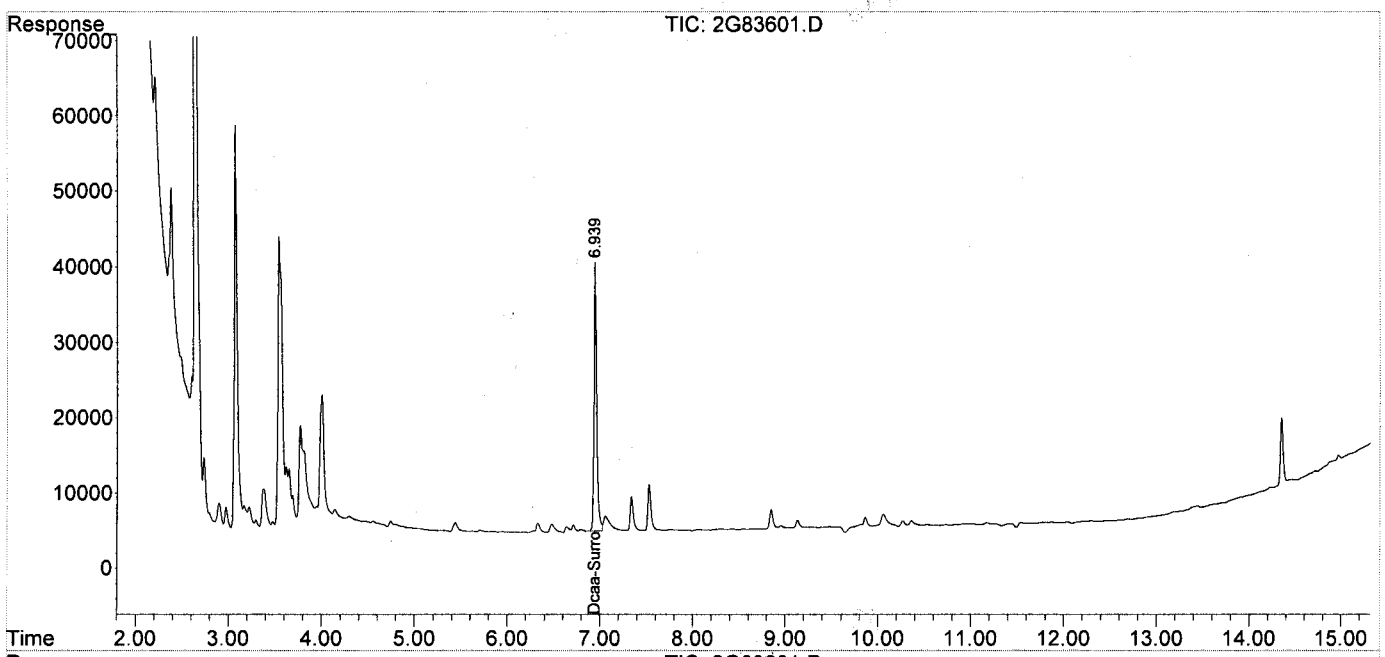
Quantitation Report (QT Reviewed)

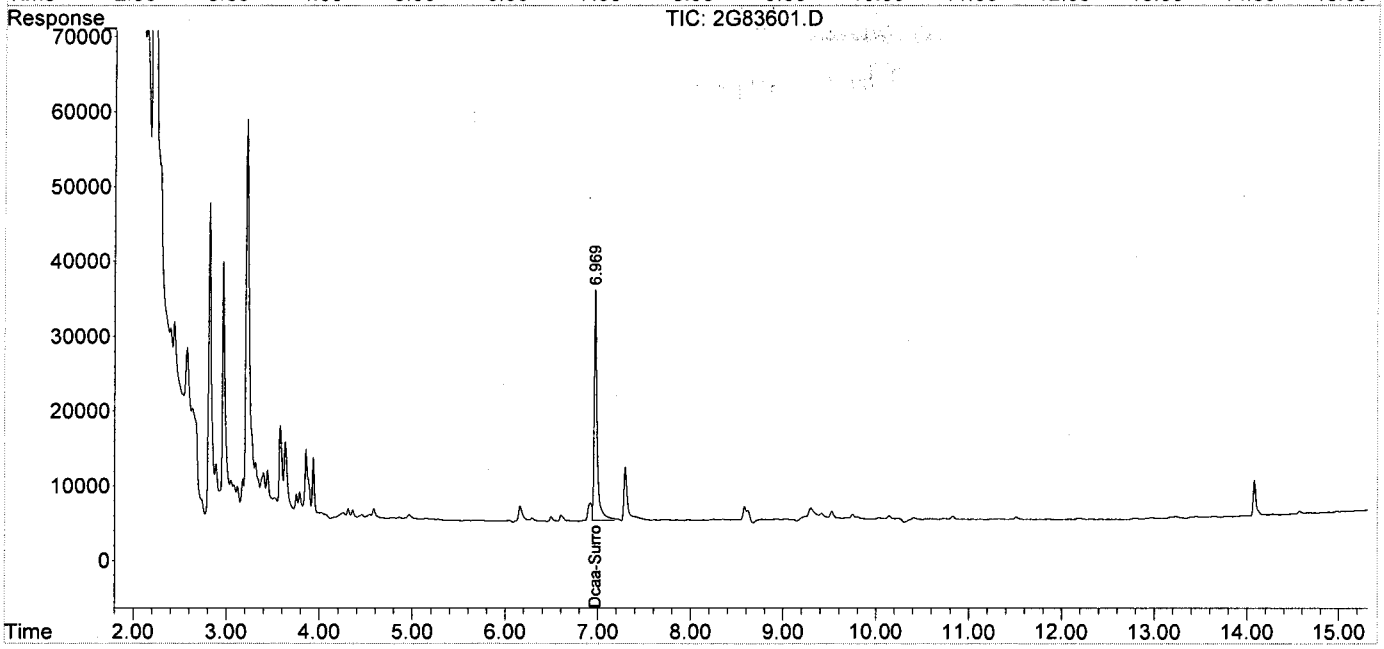
3082313 0359

Data Path : G:\Gcdata\2013\GC_2\Data\08-28-13\
Data File : 2G83601.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 10:26
Operator : MS
Sample : WMB26003
Misc : A,HERB
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 28 13:16:35 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_H0822.M
Quant Title : @GC_2,ug,8151
QLast Update : Thu Aug 22 16:18:19 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Form1

ORGANICS HERBICIDE REPORT

Sample Number: EF-1-V-171314(8/27)
Client Id:
Data File: 2G83606.D
Analysis Date: 08/28/13 12:06
Date Rec/Extracted: NA-08/27/13
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8151A
Matrix: Aqueous
Initial Vol: 100ml
Final Vol: 10ml
Dilution: 1
Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
94-75-7	2,4-D	0.0050	U	93-72-1	Silvex	0.0050	U

Worksheet #: 274899

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0361

Data Path : G:\Gcdata\2013\GC_2\Data\08-28-13\
Data File : 2G83606.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 12:06
Operator : MS
Sample : EF-1-V-171314(8/27)
Misc : A,HERB
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 28 13:18:50 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_H0822.M
Quant Title : @GC_2,ug,8151
QLast Update : Thu Aug 22 16:18:19 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
Target Compounds						
2)Dcaa-Surrogate	6.941	6.970	709645	715276	1154.418	1365.047

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

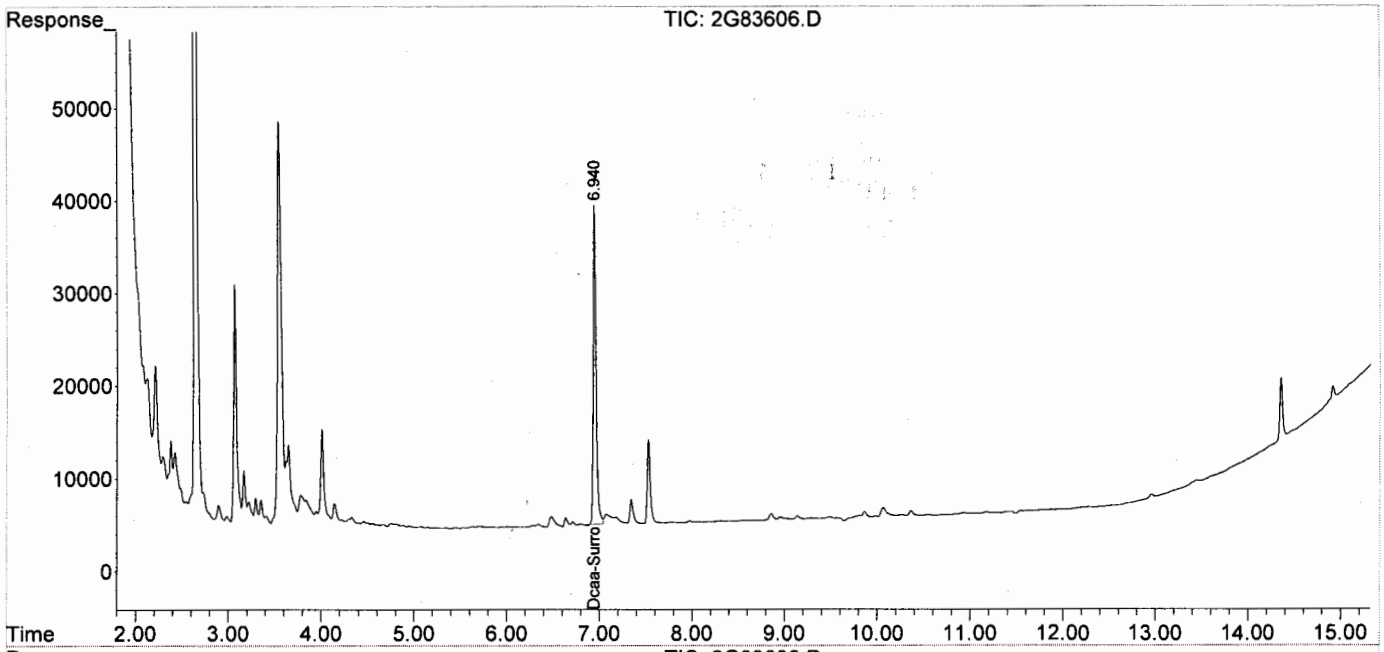
Quantitation Report (QT Reviewed)

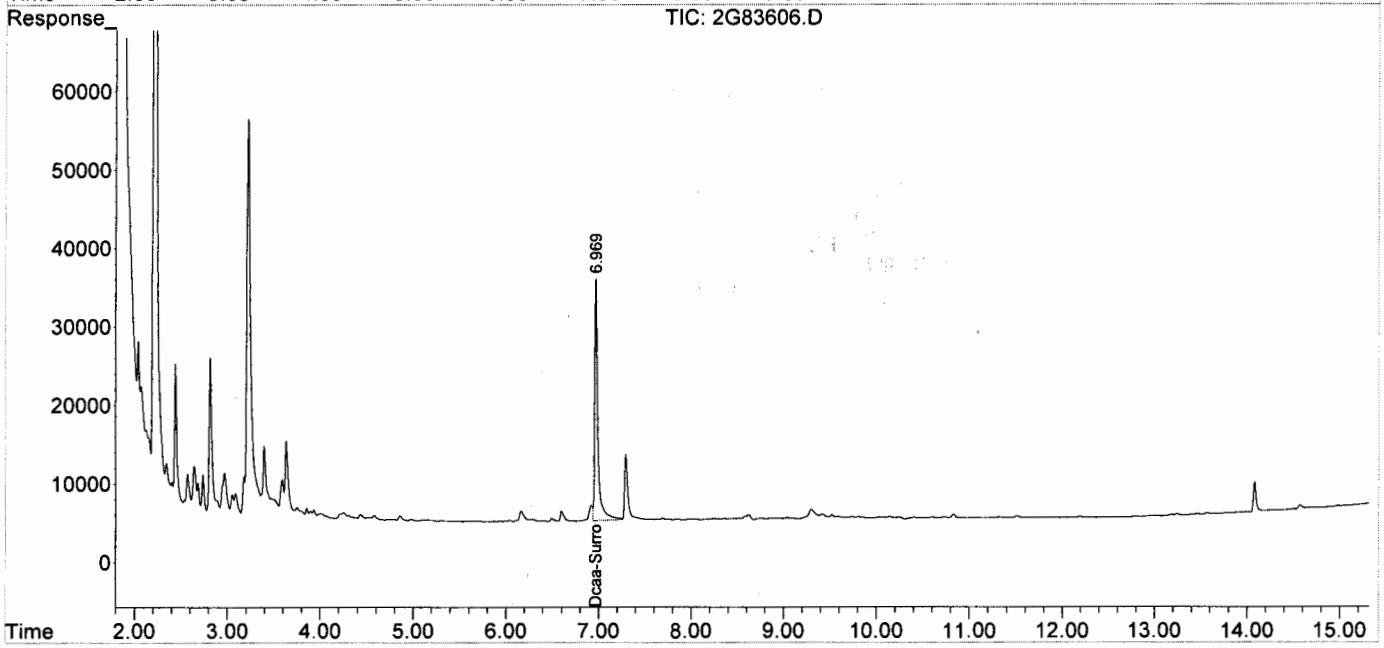
3082313 0362

Data Path : G:\Gcdata\2013\GC_2\Data\08-28-13\
Data File : 2G83606.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2013 12:06
Operator : MS
Sample : EF-1-V-171314(8/27)
Misc : A,HERB
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 28 13:18:50 2013
Quant Method : G:\GCDATA\2013\GC_2\METHODQT\2G_H0822.M
Quant Title : @GC_2,ug,8151
QLast Update : Thu Aug 22 16:18:19 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





FORM2

Surrogate Recovery

Method: EPA 8151A

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column2 S2 Recov	Column0 S3 Recov	Column0 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
2G83549.D	WMB25989	Aqueous	08/26/13 16:16	1		91	89				
2G83601.D	WMB26003	Aqueous	08/28/13 10:26	1		118	129				
2G83606.D	EF-1-V-17131	Aqueous	08/28/13 12:06	1		115	137				
2G83603.D	AC74177-002(	Aqueous	08/28/13 11:06	1		114	129				
2G83604.D	AC74177-004(	Aqueous	08/28/13 11:26	1		121	129				
2G83605.D	AC74177-006(	Aqueous	08/28/13 11:46	1		116	133				
2G83550.D	WMB25989(M	Aqueous	08/26/13 16:36	1		103	95				
2G83551.D	AC74110-001(	Aqueous	08/26/13 16:56	1		95	91				
2G83552.D	AC74110-001(	Aqueous	08/26/13 17:16	1		93	98				
2G83553.D	AC74110-001(	Aqueous	08/26/13 17:37	1		96	109				
2G83602.D	WMB26003(M	Aqueous	08/28/13 10:46	1		120	128				

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8151A

Aqueous Limits

Compound	Spike Amt	Limits
S1=Dcaa-Surrogate	1000	31-151
S2=Dcaa-Surrogate	1000	31-151

Form3
Recovery Data
QC Batch: WMB25989

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G83550.D	WMB25989(MS)	8/26/2013 4:36:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8151 Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Dicamba	1	387.38	0	400	97	25	130
2,4-D	1	306.34	0	400	77	10	130
Silvex	1	323.35	0	400	81	25	130
2,4,5-T	1	301.54	0	400	75	25	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: WMB26003

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G83602.D	WMB26003(MS)	8/28/2013 10:46:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8151 Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Dicamba	1	434.51	0	400	109	25	130
2,4-D	1	396.25	0	400	99	10	130
Silvex	1	410.57	0	400	103	25	130
2,4,5-T	1	410.27	0	400	103	25	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: WMB25989

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G83551.D	AC74110-001(T)(MS)	8/26/2013 4:56:00 PM
Non Spike(If applicable):	2G83553.D	AC74110-001(T)	8/26/2013 5:37:00 PM
Inst Blank(If applicable):			

Method: 8151 Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Dicamba	1	318.34	0	400	80	25	130
2,4-D	1	165.54	0	400	41	10	130
Silvex	1	225.76	0	400	56	25	130
2,4,5-T	1	174.28	0	400	44	25	130

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G83552.D	AC74110-001(T)(MSD)	8/26/2013 5:16:00 PM
Non Spike(If applicable):	2G83553.D	AC74110-001(T)	8/26/2013 5:37:00 PM
Inst Blank(If applicable):			

Method: 8151 Matrix: Aqueous QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Dicamba	1	336.7	0	400	84	25	130
2,4-D	1	177.27	0	400	44	10	130
Silvex	1	239.87	0	400	60	25	130
2,4,5-T	1	189.75	0	400	47	25	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA
QC Batch: WMB25989

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G83552.D	AC74110-001(T)(MSD)	8/26/2013 5:16:00 PM
Duplicate(If applicable):	2G83551.D	AC74110-001(T)(MS)	8/26/2013 4:56:00 PM
Inst Blank(If applicable):			

Method: 8151 Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Dicamba	1	336.7	318.34	5.6	40
2,4-D	1	177.27	165.54	6.8	40
Silvex	1	239.87	225.76	6.1	40
2,4,5-T	1	189.75	174.28	8.5	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: WMB25989
Blank Data File: 2G83549.D
Matrix: Aqueous

Blank Analysis Date: 08/26/13 16:16
Blank Extraction Date: 08/26/13
(If Applicable)
Method: EPA 8151A

Sample Number	Data File	Analysis Date
AC74110-001(T)	2G83553.D	08/26/13 17:37
AC74110-001(T)(M	2G83552.D	08/26/13 17:16
AC74110-001(T)(M	2G83551.D	08/26/13 16:56
WMB25989(MS)	2G83550.D	08/26/13 16:36

FORM 4
Blank Summary

Blank Number: WMB26003
Blank Data File: 2G83601.D
Matrix: Aqueous

Blank Analysis Date: 08/28/13 10:26
Blank Extraction Date: 08/27/13
(If Applicable)
Method: EPA 8151A

Sample Number	Data File	Analysis Date
AC74177-002(T)	2G83603.D	08/28/13 11:06
AC74177-004(T)	2G83604.D	08/28/13 11:26
AC74177-006(T)	2G83605.D	08/28/13 11:46
EF-1-V-171314(8/2	2G83606.D	08/28/13 12:06
WMB26003(MS)	2G83602.D	08/28/13 10:46

Form 5

Method: EPA 8151A

Instrument: GC_2

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
2G83519.D	CAL HERB@400PPB	08/22/13 11:28	Aqueous	2G83519.	6.9466	0	6.9660	0
2G83520.D	MBS	08/22/13 11:48	Aqueous	2G83519.	6.9483	0.0245	6.9721	0.0875
2G83521.D	CAL HERB@50PPB	08/22/13 12:36	Soil	2G83519.	6.9555	0	6.9706	0.066
2G83522.D	CAL HERB@100PPB	08/22/13 12:56	Soil	2G83521.	6.9487	0.0978	6.9718	0.0172
2G83523.D	CAL HERB@200PPB	08/22/13 13:16	Soil	2G83521.	6.9451	0.1496	6.9704	0.0029
2G83524.D	CAL HERB@400PPB	08/22/13 13:36	Soil	2G83521.	6.9437	0.1698	6.9699	0.01
2G83525.D	CAL HERB@500PPB	08/22/13 13:57	Soil	2G83521.	6.9428	0.1828	6.9692	0.0201
2G83526.D	CAL HERB@600PPB	08/22/13 14:17	Soil	2G83521.	6.9426	0.1856	6.9696	0.0143
2G83527.D	ICV	08/22/13 14:37	Soil	2G83521.	6.9452	0.1482	6.9700	0.0086
2G83528.D	SMB25962	08/22/13 14:57	Soil	2G83521.	6.9444	0.1597	6.9710	0.0057
2G83529.D	SMB25962(MS)	08/22/13 15:17	Soil	2G83521.	6.9435	0.1727	6.9707	0.0014
2G83530.D	AC74118-002	08/22/13 15:38	Soil	2G83521.	6.9451	0.1496	6.9702	0.0057
2G83531.D	CAL HERB@400PPB	08/22/13 15:58	Soil	2G83521.	6.9431	0.1784	6.9697	0.0129
2G83532.D	400PPB	08/22/13 16:18	Soil	2G83531.	6.9427	0.0058	6.9693	0.0057

6.9452

Drift Compound: Dcaa-Surrogate

Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph)

* - Values outside of limits for this column/run

Form 5

Method: EPA 8151A

Instrument: GC_2

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
2G83548.D	CAL HERB@400PPB	08/26/13 14:55	Aqueous	2G83548.	6.9398	0	6.9695	0
2G83549.D	WMB25989	08/26/13 16:16	Aqueous	2G83548.	6.9394	0.0058	6.9680	0.0215
2G83550.D	WMB25989(MS)	08/26/13 16:36	Aqueous	2G83548.	6.9400	0.0029	6.9686	0.0129
2G83551.D	AC74110-001(T)(MS)	08/26/13 16:56	Aqueous	2G83548.	6.9425	0.0389	6.9705	0.0143
2G83552.D	AC74110-001(T)(MSD)	08/26/13 17:16	Aqueous	2G83548.	6.9416	0.0259	6.9706	0.0158
2G83553.D	AC74110-001(T)	08/26/13 17:37	Aqueous	2G83548.	6.9421	0.0331	6.9688	0.01
2G83554.D	AC74110-002(T)	08/26/13 17:57	Aqueous	2G83548.	6.9401	0.0043	6.9703	0.0115
2G83555.D	AC74085-001(T)	08/26/13 18:17	Aqueous	2G83548.	6.9405	0.0101	6.9700	0.0072
2G83556.D	AC74085-002(T)	08/26/13 18:38	Aqueous	2G83548.	6.9412	0.0202	6.9699	0.0057
2G83557.D	AC74085-003(T)	08/26/13 18:58	Aqueous	2G83548.	6.9407	0.013	6.9689	0.0086
2G83558.D	AC74085-004(T)	08/26/13 19:18	Aqueous	2G83548.	6.9417	0.0274	6.9698	0.0043
2G83559.D	AC74085-008(T)	08/26/13 19:38	Aqueous	2G83548.	6.9402	0.0058	6.9698	0.0043
2G83560.D	EF-1-V-171314(8/22)	08/26/13 19:59	Aqueous	2G83548.	6.9418	0.0288	6.9699	0.0057
2G83561.D	EF-1-V-170460(8/21)	08/26/13 20:19	Aqueous	2G83548.	6.9413	0.0216	6.9683	0.0172
2G83562.D	CAL HERB@400PPB	08/26/13 20:39	Aqueous	2G83548.	6.9413	0.0216	6.9694	0.0014
2G83563.D	400PPB	08/26/13 21:00	Aqueous	2G83562.	6.9419	0.0086	6.9700	0.0086

Drift Compound: Dcaa-Surrogate

Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph)

* - Values outside of limits for this column/run

Form 5

Method: EPA 8151A

Instrument: GC_2

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
2G83599.D	200PPB	08/28/13 09:39	Soil					
2G83600.D	CAL HERB@400PPB	08/28/13 10:02	Soil	2G83600.	6.9391	0	6.9695	0
2G83601.D	WMB26003	08/28/13 10:26	Aqueous	2G83600.	6.9409	0.0259	6.9688	0.01
2G83602.D	WMB26003(MS)	08/28/13 10:46	Aqueous	2G83600.	6.9400	0.013	6.9701	0.0086
2G83603.D	AC74177-002(T)	08/28/13 11:06	Aqueous	2G83600.	6.9390	0.0014	6.9700	0.0072
2G83604.D	AC74177-004(T)	08/28/13 11:26	Aqueous	2G83600.	6.9396	0.0072	6.9686	0.0129
2G83605.D	AC74177-006(T)	08/28/13 11:46	Aqueous	2G83600.	6.9398	0.0101	6.9695	0
2G83606.D	EF-1-V-171314(8/27)	08/28/13 12:06	Aqueous	2G83600.	6.9413	0.0317	6.9700	0.0072
2G83607.D	SMB26002	08/28/13 12:26	Soil	2G83600.	6.9410	0.0274	6.9703	0.0115
2G83608.D	SMB26002(MS)	08/28/13 12:47	Soil	2G83600.	6.9409	0.0259	6.9711	0.023
2G83609.D	AC74177-002	08/28/13 13:07	Soil	2G83600.	6.9378	0.0187	6.9682	0.0187
2G83610.D	AC74177-004	08/28/13 13:27	Soil	2G83600.	6.9361	0.0432	6.9676	0.0273
2G83611.D	AC74177-006	08/28/13 13:47	Soil	2G83600.	6.9369	0.0317	6.9678	0.0244
2G83612.D	AC74158-001	08/28/13 14:07	Soil	2G83600.	6.9391	0	6.9694	0.0014
2G83613.D	AC74199-001	08/28/13 14:27	Soil	2G83600.	6.9349	0.0605	6.9673	0.0316
2G83614.D	AC74199-003	08/28/13 14:48	Soil	2G83600.	6.9368	0.0331	6.9672	0.033
2G83615.D	AC74199-005	08/28/13 15:08	Soil	2G83600.	6.9376	0.0216	6.9683	0.0172
2G83616.D	CAL HERB@400PPB	08/28/13 15:26	Soil	2G83600.	6.9395	0.0058	6.9679	0.023

Drift Compound: Dcaa-Surrogate

Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph)

* - Values outside of limits for this column/run

3082313 0373

Form 6
Initial Calibration

Method: EPA 8151A

Instrument: GC_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2G83521.	CAL HERB@50PPB	08/22/13 12:36	2	2G83522.	CAL HERB@100PPB	08/22/13 12:56
3	2G83523.	CAL HERB@200PPB	08/22/13 13:16	4	2G83524.	CAL HERB@400PPB	08/22/13 13:36
5	2G83525.	CAL HERB@500PPB	08/22/13 13:57	6	2G83526.	CAL HERB@600PPB	08/22/13 14:17

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Dalapon	1	0	Avg	0.1178	0.1182	0.1222	0.1055	0.1031	0.1029	----	----	0.112	2.60	0.997	0.998	7.8	50.00	100.0	200.0	400.0	500.0	600.0		
Dcaa-Surrogate	1	0	Avg	0.0719	0.0677	0.0680	0.0557	0.0530	0.0522	----	----	0.0615	6.95	0.993	0.997	14	250.0	500.0	1000.	2000.	2500.	3000.		
Dicamba	1	0	Avg	0.2380	0.2467	0.2680	0.2294	0.2205	0.2193	----	----	0.237	7.10	0.990	0.998	7.8	50.00	100.0	200.0	400.0	500.0	600.0		
Dichloroprop	1	0	Avg	0.0887	0.0905	0.0935	0.0767	0.0738	0.0727	----	----	0.0827	7.83	0.993	0.997	11	50.00	100.0	200.0	400.0	500.0	600.0		
2,4-D	1	0	Avg	0.1069	0.1090	0.1123	0.0936	0.0911	0.0913	----	----	0.101	8.22	0.995	0.997	9.6	50.00	100.0	200.0	400.0	500.0	600.0		
Silvex	1	0	Avg	0.3227	0.3433	0.3806	0.3276	0.3212	0.3206	----	----	0.336	8.96	0.996	0.998	7.0	50.00	100.0	200.0	400.0	500.0	600.0		
2,4,5-T	1	0	Avg	0.3353	0.3522	0.3718	0.3278	0.3249	0.3243	----	----	0.339	9.48	0.998	0.999	5.6	50.00	100.0	200.0	400.0	500.0	600.0		
2,4-DB	1	0	Avg	0.0570	0.0593	0.0658	0.0557	0.0554	0.0554	----	----	0.0581	10.04	0.996	0.997	7.0	50.00	100.0	200.0	400.0	500.0	600.0		
Dinoseb	1	0	Avg	0.2907	0.2930	0.3077	0.2537	0.2484	0.2468	----	----	0.273	10.62	0.995	0.997	9.8	50.00	100.0	200.0	400.0	500.0	600.0		
Picloram	1	0	Avg	0.3184	0.3386	0.4394	0.3806	0.3899	0.4004	----	----	0.378	12.04	0.996	0.996	12	25.00	50.00	100.0	200.0	250.0	300.0		
Dalapon	2	0	Avg	0.0882	0.0945	0.1045	0.0957	0.0980	0.0961	----	----	0.0962	2.51	0.999	0.999	5.5	50.00	100.0	200.0	400.0	500.0	600.0		
Dcaa-Surrogate	2	0	Avg	0.0625	0.0576	0.0579	0.0470	0.0448	0.0443	----	----	0.0524	6.97	0.993	0.997	15	250.0	500.0	1000.	2000.	2500.	3000.		
Dicamba	2	0	Avg	0.2314	0.2221	0.2396	0.2029	0.1961	0.1958	----	----	0.215	7.18	0.996	0.998	8.8	50.00	100.0	200.0	400.0	500.0	600.0		
Dichloroprop	2	0	Avg	0.0785	0.0763	0.0805	0.0645	0.0623	0.0616	----	----	0.0707	7.71	0.992	0.996	12	50.00	100.0	200.0	400.0	500.0	600.0		
2,4-D	2	0	Avg	0.0946	0.0930	0.0959	0.0773	0.0746	0.0734	----	----	0.0848	8.14	0.993	0.996	13	50.00	100.0	200.0	400.0	500.0	600.0		
Silvex	2	0	Avg	0.2849	0.2966	0.3324	0.2790	0.2753	0.2745	----	----	0.290	8.80	0.995	0.997	7.6	50.00	100.0	200.0	400.0	500.0	600.0		
2,4,5-T	2	0	Avg	0.2766	0.2800	0.2938	0.2561	0.2548	0.2523	----	----	0.269	9.37	0.998	0.999	6.3	50.00	100.0	200.0	400.0	500.0	600.0		
2,4-DB	2	0	Avg	0.0451	0.0475	0.0493	0.0404	0.0398	0.0402	----	----	0.0438	9.86	0.995	0.996	9.5	50.00	100.0	200.0	400.0	500.0	600.0		
Dinoseb	2	0	Avg	0.2658	0.2641	0.2789	0.2317	0.2271	0.2243	----	----	0.249	9.49	0.995	0.997	9.5	50.00	100.0	200.0	400.0	500.0	600.0		
Picloram	2	0	Avg	0.3206	0.2858	0.3358	0.2869	0.2934	0.2988	----	----	0.304	12.08	0.997	0.997	6.7	25.00	50.00	100.0	200.0	250.0	300.0		

Avg Rsd Col 1: 9.15 Avg Rsd Col 2: 9.40

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Form7
Continuing Calibration

Method: EPA 8151A

3082313 0374

Data File:				2G83548.D			2G83562.D			2G83600.D			2G83616.D						
Method:				8151			8151			8151			8151						
Calibration Name:				CAL HERB@400P			CAL HERB@400P			CAL HERB@400P			CAL HERB@400P						
Calibration Date/Time				08/26/13 14:55			08/26/13 20:39			08/28/13 10:02			08/28/13 15:26						
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff
Dalapon	15	1	0	366.3	400	8.4	397.6	400	0.6	400.2	400	0.1	414	400	3.5			
Dcaa-Surrogate	15	1	0	1782	2000	10.9	1906	2000	4.7	1926	2000	3.7	1887	2000	5.6			
Dicamba	15	1	0	382.3	400	4.4	405.5	400	1.4	413.7	400	3.4	427.3	400	6.8			
Dichloroprop	15	1	0	369.2	400	7.7	385.7	400	3.6	398.3	400	0.4	373.4	400	6.7			
2,4-D	15	1	0	365.8	400	8.6	407.1	400	1.8	397.4	400	0.7	377.4	400	5.7			
Silvex	15	1	0	382.2	400	4.5	408	400	2.0	418.4	400	4.6	386.9	400	3.3			
2,4,5-T	15	1	0	378.8	400	5.3	406.1	400	1.5	415.3	400	3.8	401.5	400	0.4			
2,4-DB	15	1	0	366.3	400	8.4	397.1	400	0.7	418.3	400	4.6	395.6	400	1.1			
Dinoseb	15	1	0	361.3	400	9.7	390.8	400	2.3	394.5	400	1.4	376.3	400	5.9			
Picloram	15	1	0	179.2	200	10.4	209.2	200	4.6	215.8	200	7.9	228.6	200	14.3			
Average Difference	15	1	0			7.8			2.3			3.1			5.3			
Dalapon	15	2	0	346.2	400	13.4	404.5	400	1.1	416.6	400	4.2	412.5	400	3.1			
Dcaa-Surrogate	15	2	0	1575	2000	21.2*	1836	2000	8.2	1870	2000	6.5	1892	2000	5.4			
Dicamba	15	2	0	344.3	400	13.9	393.0	400	1.7	398.0	400	0.5	370.6	400	7.4			
Dichloroprop	15	2	0	323.2	400	19.2*	372.5	400	6.9	389.5	400	2.6	357	400	10.8			
2,4-D	15	2	0	290	400	27.5*	367.5	400	8.1	391	400	2.3	359.3	400	10.2			
Silvex	15	2	0	328	400	18.0*	393.4	400	1.7	403.9	400	1.0	404.5	400	1.1			
2,4,5-T	15	2	0	289.8	400	27.6*	375.8	400	6.1	390	400	2.5	406.4	400	1.6			
2,4-DB	15	2	0	275.6	400	31.1*	362.2	400	9.5	407.7	400	1.9	408.8	400	2.2			
Dinoseb	15	2	0	333.5	400	16.6*	390.2	400	2.5	404.3	400	1.1	356.3	400	10.9			
Picloram	15	2	0	128	200	36.0*	182.6	200	8.7	195.4	200	2.3	227	200	13.5			
Average Difference	15	2	0			22.5*			5.4			2.5			6.6			

Flags/Notes: **** - Values outside of limits for this column/run***

Form7

RtWindow Summary

Method: EPA 8151A

Data File:			2G83521.D		2G83548.D		2G83600.D					
Calibration Name:			CAL HERB@50PPB		CAL HERB@400PPB		CAL HERB@400PPB					
Calibration Date/Time			8/22/2013 12:36:00 PM		8/26/2013 2:55:00 PM		8/28/2013 10:02:00 AM					
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
Dalapon	1	0	2.60	(2.56 - 2.64)	2.59	(2.55 - 2.63)	2.60	(2.56 - 2.64)				
Dcaa-Surrogate	1	0										
Dicamba	1	0	7.10	(7.06 - 7.14)	7.10	(7.06 - 7.14)	7.10	(7.06 - 7.14)				
Dichloroprop	1	0	7.83	(7.79 - 7.87)	7.83	(7.79 - 7.87)	7.83	(7.79 - 7.87)				
2,4-D	1	0	8.22	(8.18 - 8.26)	8.22	(8.18 - 8.26)	8.21	(8.17 - 8.25)				
Silvex	1	0	8.96	(8.92 - 9.00)	8.96	(8.92 - 9.00)	8.95	(8.91 - 8.99)				
2,4,5-T	1	0	9.48	(9.44 - 9.52)	9.47	(9.43 - 9.51)	9.47	(9.43 - 9.51)				
2,4-DB	1	0	10.04	(10.00 - 10.08)	10.04	(10.00 - 10.08)	10.03	(9.99 - 10.07)				
Dinoseb	1	0	10.63	(10.59 - 10.67)	10.62	(10.58 - 10.66)	10.62	(10.58 - 10.66)				
Picloram	1	0	12.04	(12.00 - 12.08)	12.04	(12.00 - 12.08)	12.02	(11.98 - 12.06)				
Dalapon	2	0	2.51	(2.47 - 2.55)	2.51	(2.47 - 2.55)	2.51	(2.47 - 2.55)				
Dcaa-Surrogate	2	0										
Dicamba	2	0	7.18	(7.14 - 7.22)	7.18	(7.14 - 7.22)	7.18	(7.14 - 7.22)				
Dichloroprop	2	0	7.71	(7.67 - 7.75)	7.71	(7.67 - 7.75)	7.71	(7.67 - 7.75)				
2,4-D	2	0	8.14	(8.10 - 8.18)	8.14	(8.10 - 8.18)	8.14	(8.10 - 8.18)				
Silvex	2	0	8.80	(8.76 - 8.84)	8.80	(8.76 - 8.84)	8.80	(8.76 - 8.84)				
2,4,5-T	2	0	9.37	(9.33 - 9.41)	9.37	(9.33 - 9.41)	9.37	(9.33 - 9.41)				
2,4-DB	2	0	9.86	(9.82 - 9.90)	9.87	(9.83 - 9.91)	9.87	(9.83 - 9.91)				
Dinoseb	2	0	9.49	(9.45 - 9.53)	9.49	(9.45 - 9.53)	9.49	(9.45 - 9.53)				
Picloram	2	0	12.08	(12.04 - 12.12)	12.08	(12.04 - 12.12)	12.08	(12.04 - 12.12)				

GRO Data

Form1

ORGANICS REPORT

Sample Number: AC74177-002
Client Id: 006 SS-1 Composite
Data File: 6M01414.D
Analysis Date: 08/29/13 09:25
Date Rec/Extracted: 08/23/13-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8015B
Matrix: Methanol
Initial Vol: 5.43g:10ml
Final Vol: NA
Dilution: 92.1
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
phcg	Gasoline Range Organics	50	U				

Worksheet #: 275184

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

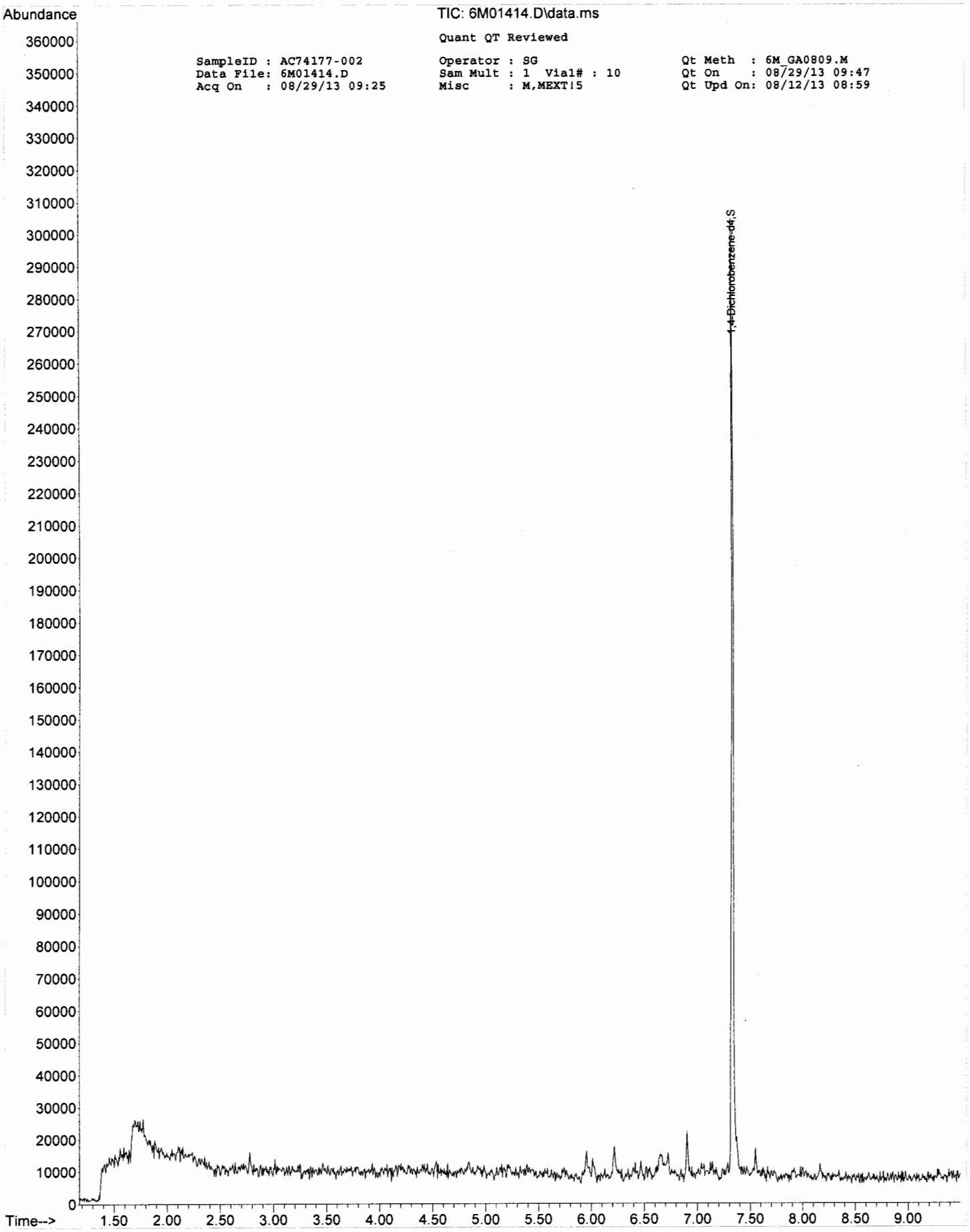
3082313 0378

SampleID : AC74177-002 Operator : SG Qt Meth : 6M_GA0809.M
Data File: 6M01414.D Sam Mult : 1 Vial# : 10 Qt On : 08/29/13 09:47
Acq On : 08/29/13 09:25 Misc : M,MEXT!5 Qt Upd On: 08/12/13 08:59

Data Path : G:\GcMsData\2013\GCMS_6\Data\08-29-13\
Qt Path : G:\GCMSDATA\2013\GCMS_6\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
System Monitoring Compounds					
1) 1,4-Dichlorobenzene-d4	7.332	152	579881	26.58	0.01
Target Compounds					Qvalue

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


Abundance
TIC: 6M01414.D\data.ms
Quant QT Reviewed
SampleID : AC74177-002
Data File: 6M01414.D
Acq On : 08/29/13 09:25
Operator : SG
Sam Mult : 1 Vial# : 10
Misc : M,MEXT!5
Qt Meth : 6M_GA0809.M
Qt On : 08/29/13 09:47
Qt Upd On: 08/12/13 08:59
1,4-Dichlorobenzene-d4,S
Time-->

Form1

ORGANICS REPORT

Sample Number: AC74177-004
Client Id: 012 SS-2 Composite
Data File: 6M01415.D
Analysis Date: 08/29/13 09:41
Date Rec/Extracted: 08/23/13-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8015B
Matrix: Methanol
Initial Vol: 5.2g:10ml
Final Vol: NA
Dilution: 96.2
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
phcg	Gasoline Range Organics	52	U				

Worksheet #: 275184

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0381

SampleID : AC74177-004 Operator : SG Qt Meth : 6M_GA0809.M
Data File: 6M01415.D Sam Mult : 1 Vial# : 11 Qt On : 08/29/13 10:12
Acq On : 08/29/13 09:41 Misc : M,MEXT!5 Qt Upd On: 08/12/13 08:59

Data Path : G:\GcMsData\2013\GCMS_6\Data\08-29-13\
Qt Path : G:\GCMSDATA\2013\GCMS_6\MethodQt\
Qt Resp Via : Initial Calibration

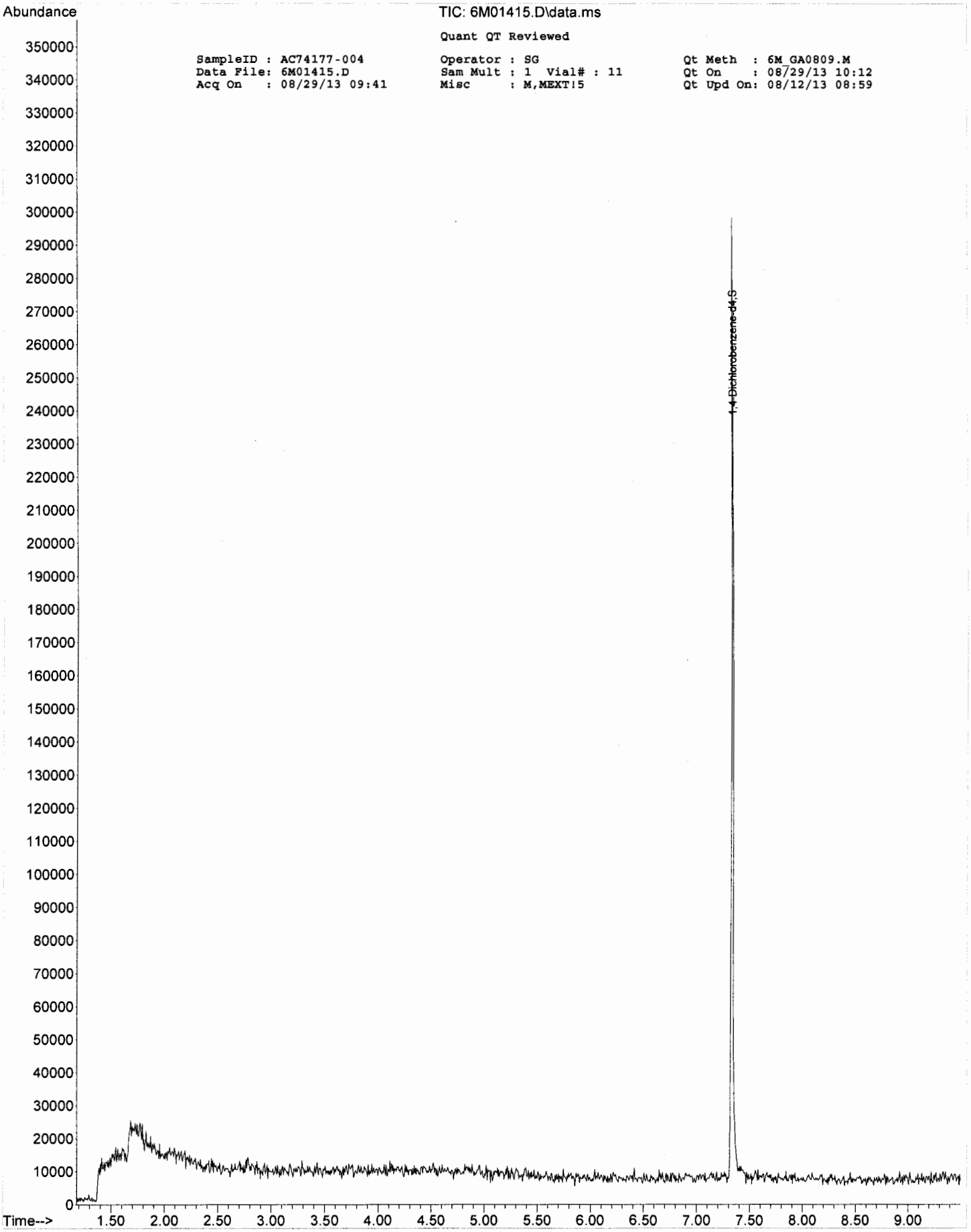
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
System Monitoring Compounds					
1) 1,4-Dichlorobenzene-d4	7.332	152	532365	24.40	0.01
Target Compounds					Qvalue

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

TIC: 6M01415.D\data.ms

Quant QT Reviewed

SampleID : AC74177-004	Operator : SG	Qt Meth : 6M_GA0809.M
Data File: 6M01415.D	Sam Mult : 1 Vial# : 11	Qt On : 08/29/13 10:12
Acq On : 08/29/13 09:41	Misc : M,MEXT!5	Qt Upd On: 08/12/13 08:59



Form1

ORGANICS REPORT

Sample Number: AC74177-006
Client Id: 018 SS-3 Composite
Data File: 6M01416.D
Analysis Date: 08/29/13 09:57
Date Rec/Extracted: 08/23/13-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8015B
Matrix: Methanol
Initial Vol: 5.22g:10ml
Final Vol: NA
Dilution: 95.8
Solids: 92

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
phcg	Gasoline Range Organics	52	U				

Worksheet #: 275184

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0384

SampleID : AC74177-006 Operator : SG Qt Meth : 6M_GA0809.M
Data File: 6M01416.D Sam Mult : 1 Vial# : 12 Qt On : 08/29/13 10:12
Acq On : 08/29/13 09:57 Misc : M,MEXT!5 Qt Upd On: 08/12/13 08:59

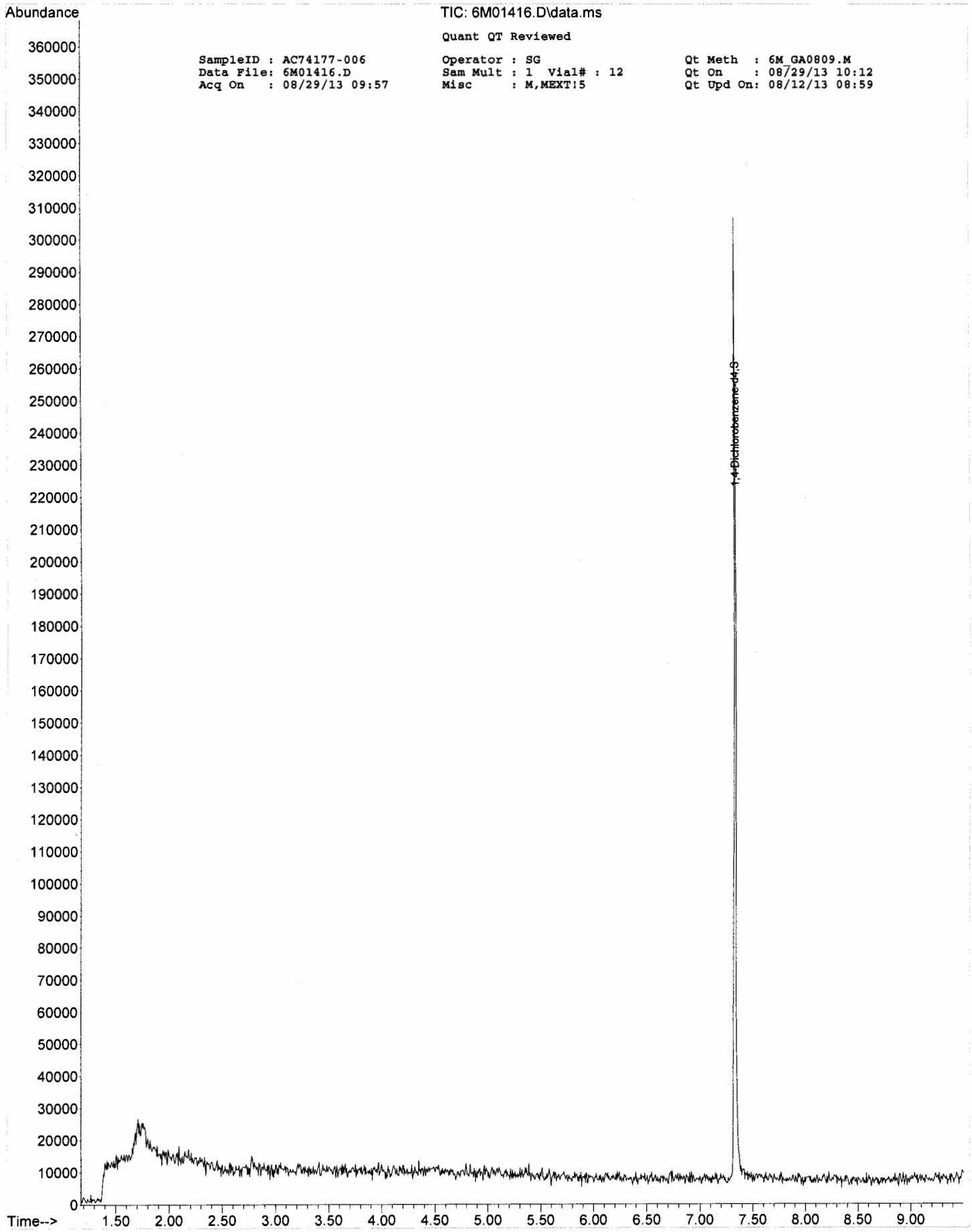
Data Path : G:\GcMsData\2013\GCMS_6\Data\08-29-13\
Qt Path : G:\GCMSDATA\2013\GCMS_6\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
System Monitoring Compounds					
1) 1,4-Dichlorobenzene-d4	7.332	152	533104	24.43	0.01

Target Compounds	Qvalue

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

Va


Abundance
TIC: 6M01416.D\data.ms
Quant QT Reviewed
SampleID : AC74177-006
Data File: 6M01416.D
Acq On : 08/29/13 09:57
Operator : SG
Sam Mult : 1 Vial# : 12
Misc : M,MEXT!5
Qt Meth : 6M_GA0809.M
Qt On : 08/29/13 10:12
Qt Upd On: 08/12/13 08:59
1,4-Dichlorobenzene-d4,3
Time-->

Form1

ORGANICS REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 6M01412.D
Analysis Date: 08/29/13 08:53
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8015B
Matrix: Methanol
Initial Vol: 5g:10ml
Final Vol: NA
Dilution: 100
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
phcg	Gasoline Range Organics	50	U				

Worksheet #: 275184

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0387

SampleID : DAILY BLANK
Data File: 6M01412.D
Acq On : 08/29/13 08:53

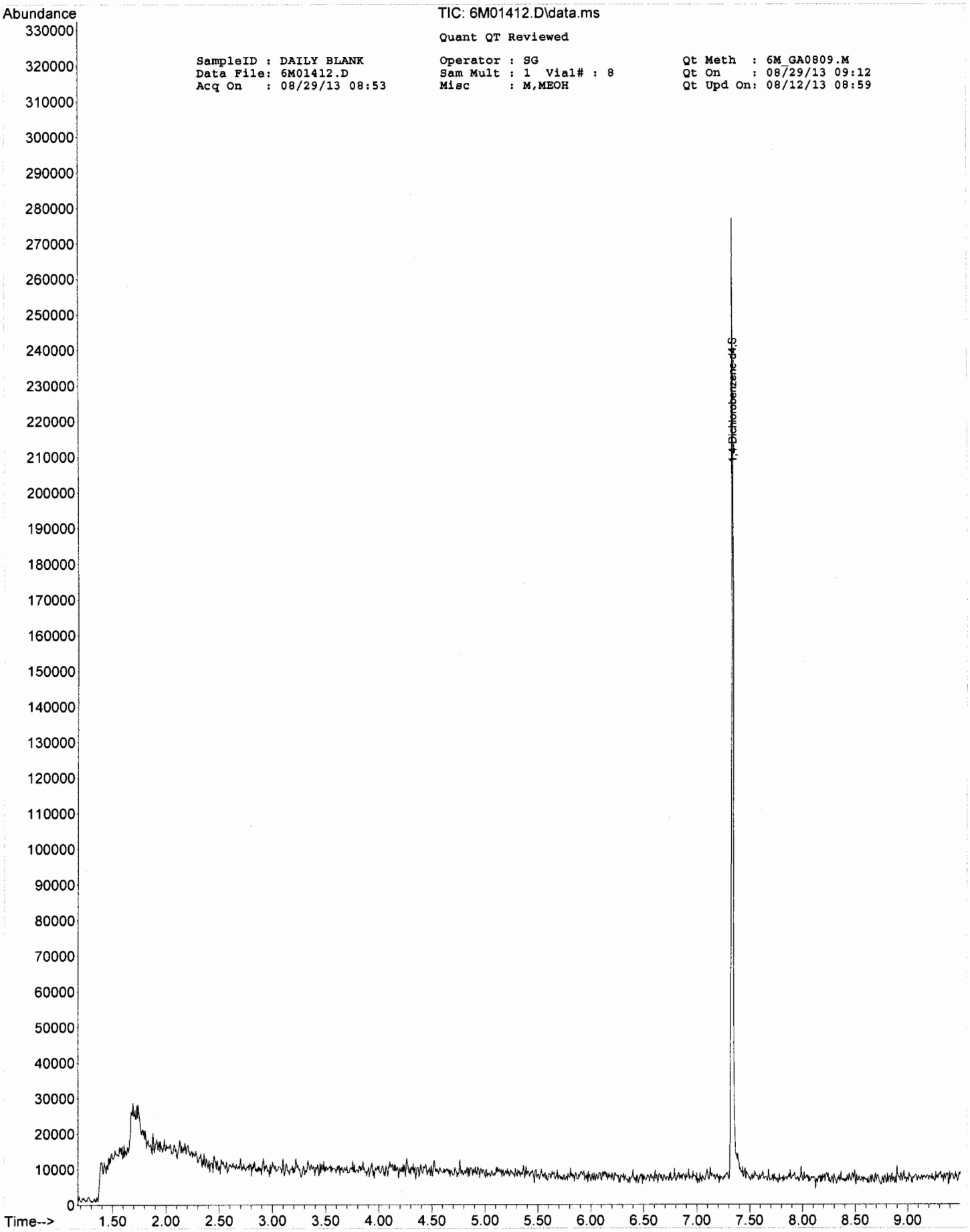
Operator : SG
Sam Mult : 1 Vial# : 8
Misc : M,MEOH

Qt Meth : 6M_GA0809.M
Qt On : 08/29/13 09:12
Qt Upd On: 08/12/13 08:59

Data Path : G:\GcMsData\2013\GCMS_6\Data\08-29-13\
Qt Path : G:\GCMSDATA\2013\GCMS_6\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
System Monitoring Compounds					
1) 1,4-Dichlorobenzene-d4	7.333	152	483889	22.18	0.01
Target Compounds					Qvalue

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


Abundance
TIC: 6M01412.D\data.ms
Quant QT Reviewed
SampleID : DAILY BLANK
Data File: 6M01412.D
Acq On : 08/29/13 08:53
Operator : SG
Sam Mult : 1 Vial# : 8
Misc : M,MEOH
Qt Meth : 6M_GA0809.M
Qt On : 08/29/13 09:12
Qt Upd On: 08/12/13 08:59
1,4-Dichlorobenzene-d4,S
Time-->

FORM2

Surrogate Recovery

Method: EPA 8015B

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column0 S2 Recov	Column0 S3 Recov	Column0 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
6M01148.D	DAILY BLANK	Methanol	08/21/13 10:24	1		87					
6M01412.D	DAILY BLANK	Methanol	08/29/13 08:53	1		74					
6M01414.D	AC74177-002	Methanol	08/29/13 09:25	1		89					
6M01415.D	AC74177-004	Methanol	08/29/13 09:41	1		81					
6M01416.D	AC74177-006	Methanol	08/29/13 09:57	1		81					
6M01149.D	MBS27869	Methanol	08/21/13 10:40	1		96					
6M01151.D	AC73967-001	Methanol	08/21/13 11:12	1		86					
6M01162.D	AC73967-001(	Methanol	08/21/13 14:09	1		93					
6M01163.D	AC73967-001(	Methanol	08/21/13 14:25	1		105					
6M01413.D	MBS28340	Methanol	08/29/13 09:09	1		86					

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8015B

Soil Limits

Compound	Spike Amt	Limits
S1=1,4-Dichlorobenzene-d4	30	29-149

Form3
Recovery Data
QC Batch: MBS28340

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M01413.D	MBS28340	8/29/2013 9:09:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8015 Matrix: Methanol QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	1293.299	0	2000	65	11	181

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS27869

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M01149.D	MBS27869	8/21/2013 10:40:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8015 Matrix: Methanol QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	2318.858	0	2000	116	11	181

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS27869

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M01162.D	AC73967-001(MS)	8/21/2013 2:09:00 PM
Non Spike(If applicable):	6M01151.D	AC73967-001	8/21/2013 11:12:00 AM
Inst Blank(If applicable):			

Method: 8015 Matrix: Methanol QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	1845.91	0	2000	92	11	181

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M01163.D	AC73967-001(MSD)	8/21/2013 2:25:00 PM
Non Spike(If applicable):	6M01151.D	AC73967-001	8/21/2013 11:12:00 AM
Inst Blank(If applicable):			

Method: 8015 Matrix: Methanol QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	1844.428	0	2000	92	11	181

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA
QC Batch: MBS27869

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M01163.D	AC73967-001(MSD)	8/21/2013 2:25:00 PM
Duplicate(If applicable):	6M01162.D	AC73967-001(MS)	8/21/2013 2:09:00 PM
Inst Blank(If applicable):			

Method: 8015 Matrix: Methanol QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Gasoline Range Organics	1	1844.428	1845.91	0.08	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 6M01148.D
Matrix: Methanol

Blank Analysis Date: 08/21/13 10:24
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8015B

Sample Number	Data File	Analysis Date
AC73967-001(MSD	6M01163.D	08/21/13 14:25
AC73967-001(MS)	6M01162.D	08/21/13 14:09
AC73967-001	6M01151.D	08/21/13 11:12
MBS27869	6M01149.D	08/21/13 10:40

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 6M01412.D
Matrix: Methanol

Blank Analysis Date: 08/29/13 08:53
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8015B

Sample Number	Data File	Analysis Date
AC74177-002	6M01414.D	08/29/13 09:25
AC74177-004	6M01415.D	08/29/13 09:41
AC74177-006	6M01416.D	08/29/13 09:57
MBS28340	6M01413.D	08/29/13 09:09

Form 5

Method: EPA 8015B

Instrument: GCMS_6 Column: DB-624 25M 0.200mm ID 1.12um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6M00740.D	CAL @ 10000 PPB	08/09/13 16:42	Aqueous					
6M00741.D	CAL @ 6000 PPB	08/09/13 16:59	Aqueous					
6M00742.D	CAL @ 4000 PPB	08/09/13 17:15	Aqueous					
6M00743.D	CAL @ 2000 PPB	08/09/13 17:31	Aqueous					
6M00744.D	CAL @ 1000 PPB	08/09/13 17:47	Aqueous					
6M00745.D	CAL @ 750 PPB	08/09/13 18:03	Aqueous					
6M00746.D	CAL @ 500 PPB	08/09/13 18:19	Aqueous					
6M00747.D	2000 PPB	08/09/13 18:35	Aqueous					
6M00748.D	2000 PPB	08/09/13 18:51	Aqueous					
6M00749.D	ICV	08/09/13 19:07	Aqueous					

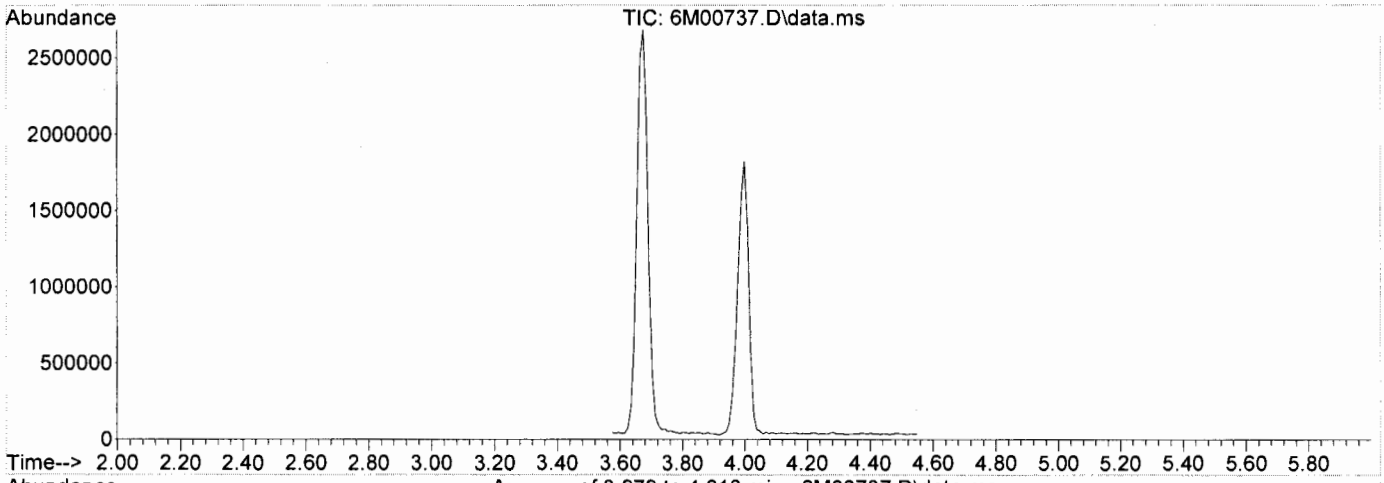
Drift Compound: Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

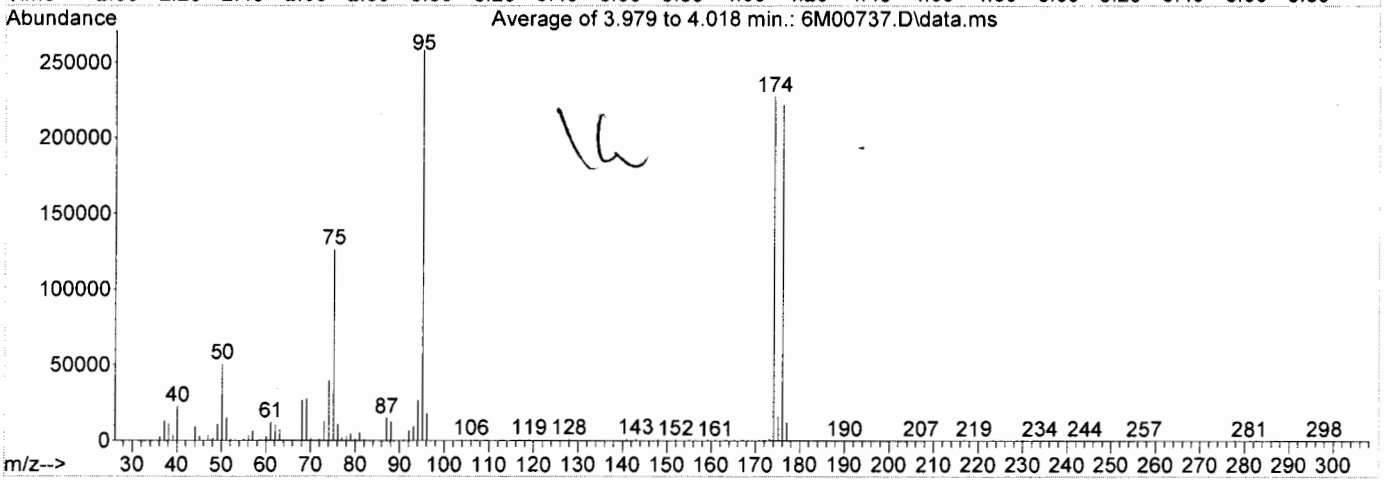
3082313 0397

Data Path : G:\GCMSDATA\2013\GCMS_6\DATA\08-0913\
Data File : 6M00737.D
Acq On : 9 Aug 2013 15:46
Operator : SG
Sample : GRO TUNE
Misc : A,5mL
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2013\GCMS_6\MethodQt\6M_GA0809.M
Title : @GCMS_6,ug,8015
Last Update : Mon Aug 12 08:59:02 2013





Spectrum Information: Average of 3.979 to 4.018 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.6	50546	PASS
75	95	30	60	48.9	126290	PASS
95	95	100	100	100.0	258240	PASS
96	95	5	9	7.0	18120	PASS
173	174	0.00	2	0.7	1535	PASS
174	95	50	100	88.2	227800	PASS
175	174	5	9	7.0	16038	PASS
176	174	95	101	97.4	221904	PASS
177	176	5	9	5.6	12444	PASS

Form 5

Method: EPA 8015B

Instrument: GCMS_6 Column: DB-624 25M 0.200mm ID 1.12um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6M01142.D	BLK	08/21/13 08:26	Aqueous					
6M01143.D	BLK	08/21/13 08:42	Aqueous					
6M01144.D	STD	08/21/13 08:58	Aqueous					
6M01145.D	BLK	08/21/13 09:18	Aqueous					
6M01146.D	CAL @ 2000 PPB	08/21/13 09:52	Aqueous					
6M01147.D	BLK	08/21/13 10:08	Aqueous					
6M01148.D	DAILY BLANK	08/21/13 10:24	Methanol					
6M01149.D	MBS27869	08/21/13 10:40	Methanol					
6M01150.D	BLK	08/21/13 10:56	Aqueous					
6M01151.D	AC73967-001	08/21/13 11:12	Methanol					
6M01152.D	AC73967-002	08/21/13 11:28	Methanol					
6M01153.D	AC73967-003	08/21/13 11:45	Methanol					
6M01154.D	AC73967-004	08/21/13 12:01	Methanol					
6M01155.D	AC73967-005	08/21/13 12:17	Methanol					
6M01156.D	AC73967-006	08/21/13 12:33	Methanol					
6M01157.D	AC73967-007	08/21/13 12:49	Methanol					
6M01158.D	AC73967-008	08/21/13 13:05	Methanol					
6M01159.D	AC73967-009	08/21/13 13:21	Methanol					
6M01160.D	AC73967-010	08/21/13 13:37	Methanol					
6M01161.D	AC73967-011	08/21/13 13:53	Methanol					
6M01162.D	AC73967-001(MS)	08/21/13 14:09	Methanol					
6M01163.D	AC73967-001(MSD)	08/21/13 14:25	Methanol					
6M01164.D	BLK	08/21/13 14:42	Aqueous					

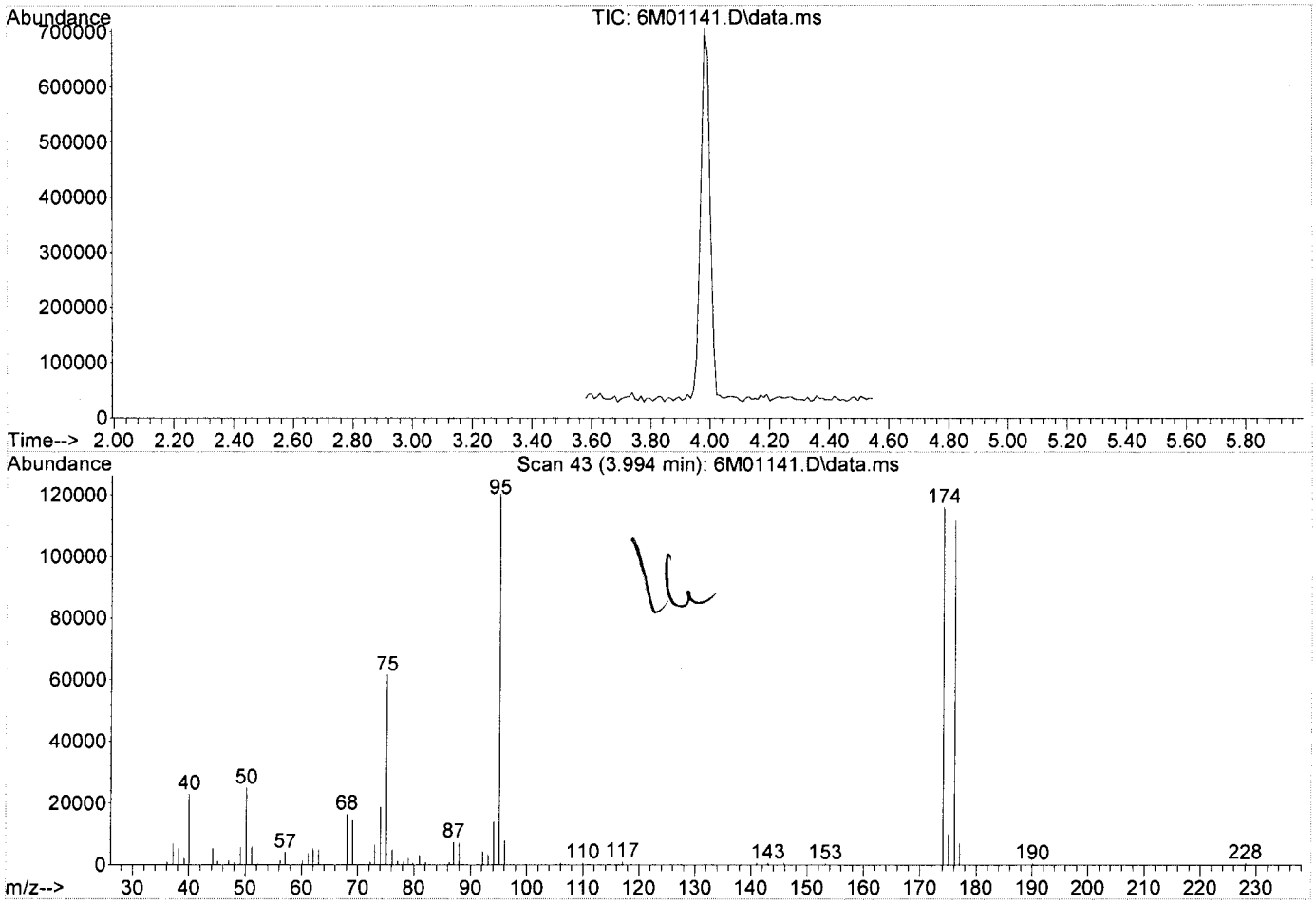
Drift Compound: Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

3082313 0399

Data Path : G:\GCMSDATA\2013\GCMS_6\DATA\08-21-13\
Data File : 6M01141.D
Acq On : 21 Aug 2013 8:15
Operator : DB
Sample : GRO TUNE
Misc : A,5mL
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2013\GCMS_6\MethodQt\6M_GA0809.M
Title : @GCMS_6,ug,8015
Last Update : Mon Aug 12 08:59:02 2013



Spectrum Information: Scan 43

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.8	24992	PASS
75	95	30	60	51.2	61632	PASS
95	95	100	100	100.0	120368	PASS
96	95	5	9	6.6	7960	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	96.4	116056	PASS
175	174	5	9	8.6	9967	PASS
176	174	95	101	96.5	112008	PASS
177	176	5	9	6.4	7183	PASS

Form 5

Method: EPA 8015B

Instrument: GCMS_6 Column: DB-624 25M 0.200mm ID 1.12um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6M01409.D	2000 PPB	08/29/13 07:58	Aqueous					
6M01410.D	CAL @ 2000 PPB	08/29/13 08:19	Aqueous					
6M01411.D	BLK	08/29/13 08:37	Aqueous					
6M01412.D	DAILY BLANK	08/29/13 08:53	Methanol					
6M01413.D	MBS28340	08/29/13 09:09	Methanol					
6M01414.D	AC74177-002	08/29/13 09:25	Methanol					
6M01415.D	AC74177-004	08/29/13 09:41	Methanol					
6M01416.D	AC74177-006	08/29/13 09:57	Methanol					
6M01417.D	AC74218-012	08/29/13 10:13	Methanol					
6M01418.D	AC74218-013	08/29/13 10:30	Methanol					
6M01419.D	AC74218-017	08/29/13 10:46	Methanol					
6M01420.D	AC74218-011	08/29/13 11:02	Methanol					
6M01421.D	MBS28348	08/29/13 11:18	Methanol					
6M01426.D	AC74218-001	08/29/13 12:59	Methanol					
6M01427.D	AC74218-002	08/29/13 13:15	Methanol					
6M01428.D	AC74218-003	08/29/13 13:31	Methanol					
6M01429.D	AC74218-004	08/29/13 13:47	Methanol					
6M01430.D	AC74218-005	08/29/13 14:03	Methanol					
6M01431.D	AC74218-006	08/29/13 14:20	Methanol					
6M01432.D	AC74218-007	08/29/13 14:36	Methanol					
6M01433.D	AC74218-008	08/29/13 14:52	Methanol					
6M01434.D	AC74218-009	08/29/13 15:08	Methanol					
6M01435.D	AC74218-010	08/29/13 15:24	Methanol					
6M01436.D	AC74218-014	08/29/13 15:40	Methanol					
6M01437.D	AC74218-015	08/29/13 15:55	Methanol					
6M01438.D	AC74218-016	08/29/13 16:11	Methanol					
6M01439.D	AC74218-001(MS)	08/29/13 16:27	Methanol					
6M01440.D	AC74218-001(MSD)	08/29/13 16:44	Methanol					

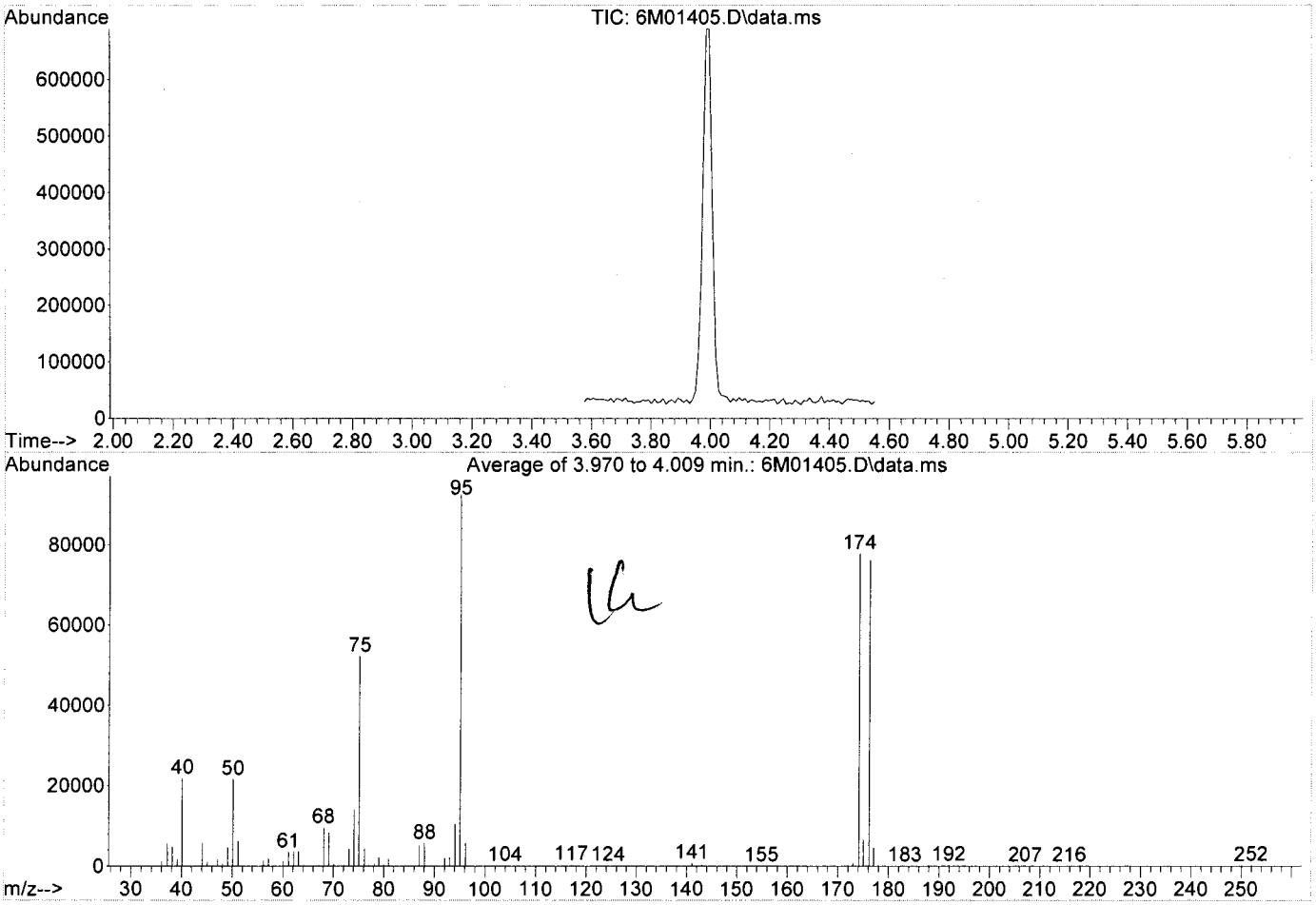
Drift Compound: Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

3082313 0401

Data Path : G:\GCMSDATA\2013\GCMS_6\DATA\08-29-13\
Data File : 6M01405.D
Acq On : 29 Aug 2013 7:02
Operator : SG
Sample : GRO TUNE
Misc : A,5mL
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2013\GCMS_6\MethodQt\6M_GA0809.M
Title : @GCMS_6,ug,8015
Last Update : Mon Aug 12 08:59:02 2013



Spectrum Information: Average of 3.970 to 4.009 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.4	21616	PASS
75	95	30	60	56.5	52250	PASS
95	95	100	100	100.0	92474	PASS
96	95	5	9	6.2	5690	PASS
173	174	0.00	2	1.1	818	PASS
174	95	50	100	84.2	77834	PASS
175	174	5	9	8.5	6630	PASS
176	174	95	101	97.9	76230	PASS
177	176	5	9	6.1	4688	PASS

3082313 0402

Method: EPA 8015B

Form 6
Initial Calibration

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M00740.	CAL @ 10000 PPB	08/09/13 16:42	2	6M00741.	CAL @ 6000 PPB	08/09/13 16:59
3	6M00742.	CAL @ 4000 PPB	08/09/13 17:15	4	6M00743.	CAL @ 2000 PPB	08/09/13 17:31
5	6M00744.	CAL @ 1000 PPB	08/09/13 17:47	6	6M00745.	CAL @ 750 PPB	08/09/13 18:03
7	6M00746.	CAL @ 500 PPB	08/09/13 18:19				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
1.4-Dichlorobenzene-d·	1	0	Avg	2.1753	2.3699	2.4037	2.1159	2.0042	2.2727	1.9319	-----	-----	2.18	7.32	-1	-1	8.2	30.00	30.00	30.00	30.00	30.00	30.00	30.00		
2-Methylpentane	1	0	Avg	0.1249	0.1249	0.1220	0.1084	0.1007	0.1040	0.1180	-----	-----	0.115	2.81	0.999	0.999	8.9	1000	6000.	4000.	2000.	1000.	750.0	500.0		
1.2.4-Trimethylbenzene	1	0	Avg	0.1157	0.1177	0.1125	0.1098	0.1155	0.0920	0.0974	-----	-----	0.109	7.11	1.00	1.00	9.2	1000	6000.	4000.	2000.	1000.	750.0	500.0		
Gasoline Range Organ	1	0	Avg	8.1838	8.7116	8.0152	7.7567	7.8107	7.5260	8.6420	-----	-----	8.09	4.94	0.998	0.998	5.6	1000	6000.	4000.	2000.	1000.	750.0	500.0		

Flags
a - failed the spcc criteria ** - ccc compound*
b - failed the ccc criteria *** - spcc compound*
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 7.95
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form7

Continuing Calibration

Calibration Name: CAL @ 2000 PPB **Data File:** 6M01146.D **Instrument:** GCMS 6

Cont Calibration Date/Time 8/21/2013 9:52:00 A Method: EPA 8015B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	%Diff	Flag
Gasoline Range Organics(Total)	1	0	GRO	5.39	1637.62	2000	20		8.092	18.12	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound I - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

Form7

Continuing Calibration

Calibration Name: CAL @ 2000 PPB **Data File:** 6M01410.D **Instrument:** GCMS 6

Cont Calibration Date/Time 8/29/2013 8:19:00 A Method: EPA 8015B

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	Hi Lim	Initial RF	%Diff	Flag
Gasoline Range Organics(Total)	1	0	GRO	5.39	1899.14	2000	20		8.092	5.04	

CC - Continuing Calibration Check Compound CP - System Performance Check Compound 1 - Internal Standard

N/O or N/O - Not applicable for this run * - Failed the C or P Criteria ** - No limit specified in method

Note:

8260/8270 limits are compared against the %DIFF/R.F. **625 limits are compared against the %DIFF.**

624 limits are compared against the concentration found. **524.2 limits are compared against the %DIFF**

DRO Data

Form1

ORGANICS PETROLEUM HYDROCARBON REPORT

Sample Number: AC74177-002
Client Id: 006 SS-1 Composite
Data File: 7G31456.D
Analysis Date: 08/27/13 18:21
Date Rec/Extracted: 08/23/13-08/27/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8015B
Matrix: Soil
Initial Vol: 5g
Final Vol: 1ml
Dilution: 1
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
PHCHPD2	Diesel Range Organics	65	U				

Worksheet #: 274908

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_7\Data\08-27-13\
Data File : 7G31456.D
Signal(s) : FID2B.CH
Acq On : 27 Aug 2013 18:21
Operator : RAK/KD/AHD
Sample : AC74177-002
Misc : S.TPH
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 28 09:58:29 2013
Quant Method : G:\GCDATA\2013\GC_7\METHODQT\7G_T0812.M
Quant Title : @GC_7,mg,8015
QLast Update : Tue Aug 13 10:10:15 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)mt	C8	0.000	0	N.D.		
2)mte	C9	0.000	0	N.D.		
3)mdte	C10	0.000	0	N.D.		
4)mdte	C12	0.000	0	N.D.		d
5)mdte	C14	0.000	0	N.D.		d
6)dte	C16	0.000	0	N.D.		d
7)dte	C17	0.000	0	N.D.		d
8)dte	Pristane	0.000	0	N.D.		d
9)dte	C18	0.000	0	N.D.		d
10)dte	Phytane	0.000	0	N.D.		d
11)dte	C20	0.000	0	N.D.		d
12)dte	C22	0.000	0	N.D.		d
13)dte	C24	0.000	0	N.D.		d
14)dte	C26	0.000	0	N.D.		d
15)dte	C28	0.000	0	N.D.		d
16)te	C30	0.000	0	N.D.		d
17)te	C32	0.000	0	N.D.		d
18)te	C34	0.000	0	N.D.		d
19)te	C36	0.000	0	N.D.		d
20)t	C40	0.000	0	N.D.		
21)	Chlorobenzene	3.012	50609	7.129		
22)	O-Terphenyl	8.726	201511	15.337		
23)d	Diesel Range Organics(T	8.726f	692641	55.628		m
24)t	Total Petroleum Hydroca	0.000	0	N.D.		
25)e	Ext. Petroleum Hydrocar	0.000	0	N.D.		
26)m	Mineral Spirits(TOTAL)	0.000	0	N.D.		
27)m	Stoddard Solvent(TOTAL)	0.000	0	N.D.		

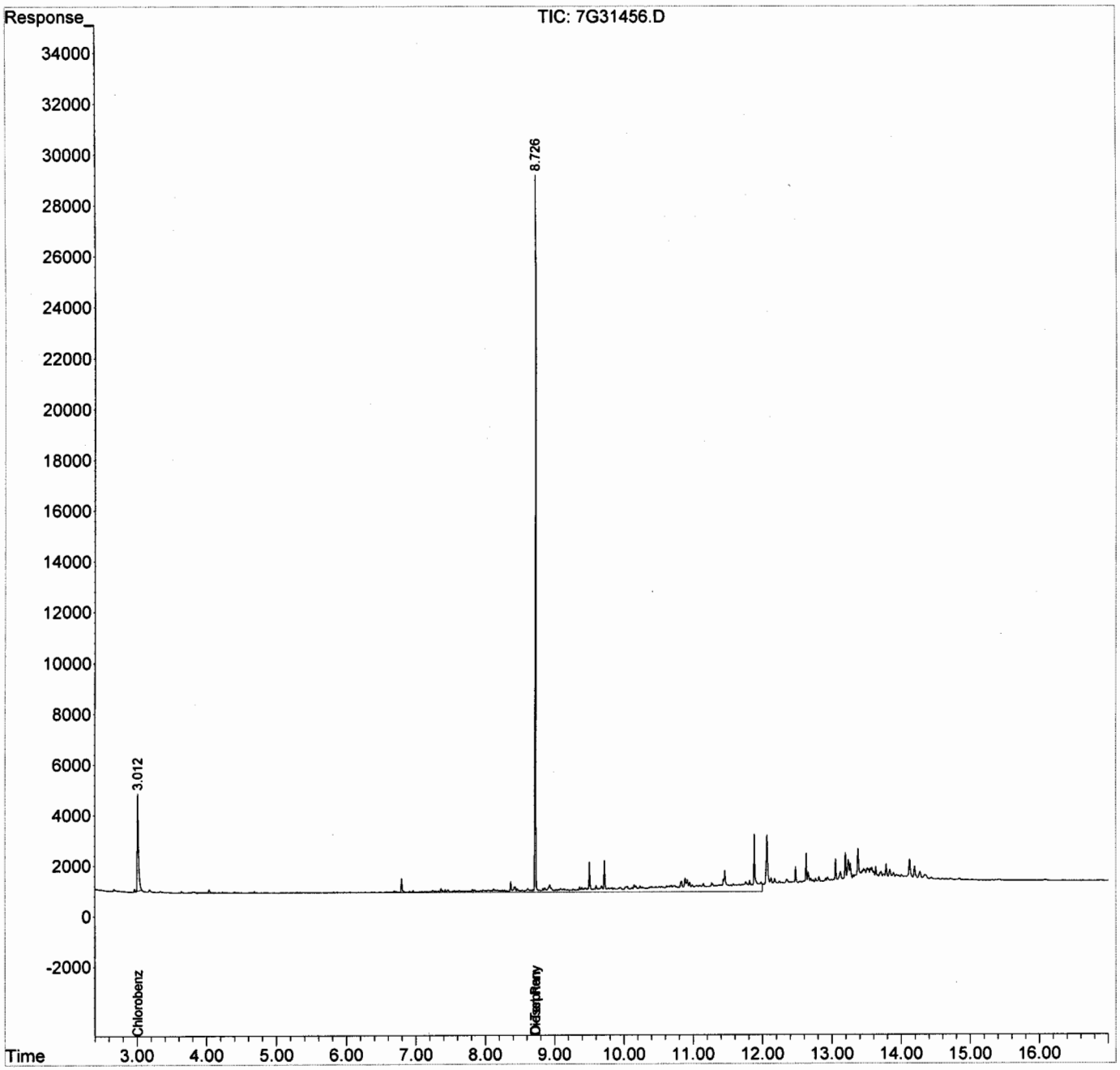
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_7\Data\08-27-13\
Data File : 7G31456.D
Signal(s) : FID2B.CH
Acq On : 27 Aug 2013 18:21
Operator : RAK/KD/AHD
Sample : AC74177-002
Misc : S.TPH
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 28 09:58:29 2013
Quant Method : G:\GCDATA\2013\GC_7\METHODQT\7G_T0812.M
Quant Title : @GC_7,mg,8015
QLast Update : Tue Aug 13 10:10:15 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Form1

ORGANICS PETROLEUM HYDROCARBON REPORT

Sample Number: AC74177-004
Client Id: 012 SS-2 Composite
Data File: 7G31457.D
Analysis Date: 08/27/13 18:48
Date Rec/Extracted: 08/23/13-08/27/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8015B
Matrix: Soil
Initial Vol: 5g
Final Vol: 1ml
Dilution: 1
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
PHCHPD2	Diesel Range Organics	65	U				

Worksheet #: 274908

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_7\Data\08-27-13\
Data File : 7G31457.D
Signal(s) : FID2B.CH
Acq On : 27 Aug 2013 18:48
Operator : RAK/KD/AHD
Sample : AC74177-004
Misc : S.TPH
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 28 10:00:02 2013
Quant Method : G:\GCDATA\2013\GC_7\METHODQT\7G_T0812.M
Quant Title : @GC_7,mg,8015
QLast Update : Tue Aug 13 10:10:15 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)mt	C8	0.000	0	N.D.		
2)mte	C9	0.000	0	N.D.		
3)mdte	C10	0.000	0	N.D.		
4)mdte	C12	0.000	0	N.D.		d
5)mdte	C14	0.000	0	N.D.		d
6)dte	C16	0.000	0	N.D.		d
7)dte	C17	0.000	0	N.D.		d
8)dte	Pristane	0.000	0	N.D.		d
9)dte	C18	0.000	0	N.D.		d
10)dte	Phytane	0.000	0	N.D.		d
11)dte	C20	0.000	0	N.D.		d
12)dte	C22	0.000	0	N.D.		d
13)dte	C24	0.000	0	N.D.		d
14)dte	C26	0.000	0	N.D.		d
15)dte	C28	0.000	0	N.D.		d
16)te	C30	0.000	0	N.D.		d
17)te	C32	0.000	0	N.D.		d
18)te	C34	0.000	0	N.D.		d
19)te	C36	0.000	0	N.D.		d
20)t	C40	0.000	0	N.D.		
21)	Chlorobenzene	3.011	55722	7.849		
22)	O-Terphenyl	8.726	216232	16.457		
23)d	Diesel Range Organics(T	8.726f	728104	58.476		m
24)t	Total Petroleum Hydroca	0.000	0	N.D.		
25)e	Ext. Petroleum Hydrocar	0.000	0	N.D.		
26)m	Mineral Spirits(TOTAL)	0.000	0	N.D.		
27)m	Stoddard Solvent(TOTAL)	0.000	0	N.D.		

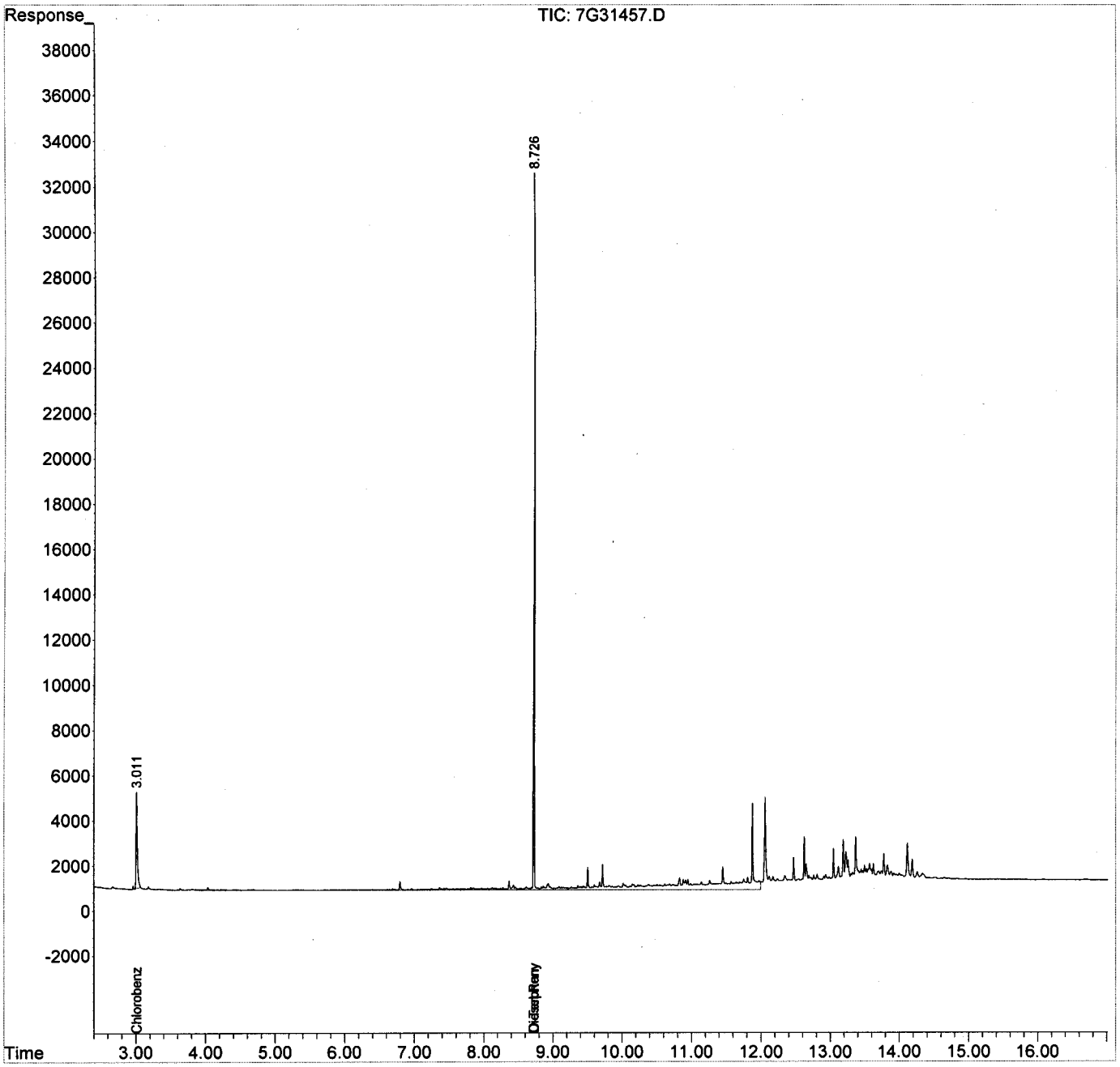
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_7\Data\08-27-13\
Data File : 7G31457.D
Signal(s) : FID2B.CH
Acq On : 27 Aug 2013 18:48
Operator : RAK/KD/AHD
Sample : AC74177-004
Misc : S.TPH
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 28 10:00:02 2013
Quant Method : G:\GCDATA\2013\GC_7\METHODQT\7G_T0812.M
Quant Title : @GC_7,mg,8015
QLast Update : Tue Aug 13 10:10:15 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Form1

ORGANICS PETROLEUM HYDROCARBON REPORT

Sample Number: AC74177-006
Client Id: 018 SS-3 Composite
Data File: 7G31458.D
Analysis Date: 08/27/13 19:15
Date Rec/Extracted: 08/23/13-08/27/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8015B
Matrix: Soil
Initial Vol: 5g
Final Vol: 1ml
Dilution: 1
Solids: 92

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
PHCHPD2	Diesel Range Organics	65	U				

Worksheet #: 274908

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_7\Data\08-27-13\
Data File : 7G31458.D
Signal(s) : FID2B.CH
Acq On : 27 Aug 2013 19:15
Operator : RAK/KD/AHD
Sample : AC74177-006
Misc : S.TPH
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 28 10:00:43 2013
Quant Method : G:\GCDATA\2013\GC_7\METHODQT\7G_T0812.M
Quant Title : @GC_7,mg,8015
QLast Update : Tue Aug 13 10:10:15 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)mt	C8	0.000	0	N.D.		
2)mte	C9	0.000	0	N.D.		
3)mdte	C10	0.000	0	N.D.		d
4)mdte	C12	0.000	0	N.D.		d
5)mdte	C14	0.000	0	N.D.		d
6)dte	C16	0.000	0	N.D.		d
7)dte	C17	0.000	0	N.D.		d
8)dte	Pristane	0.000	0	N.D.		d
9)dte	C18	0.000	0	N.D.		d
10)dte	Phytane	0.000	0	N.D.		d
11)dte	C20	0.000	0	N.D.		d
12)dte	C22	0.000	0	N.D.		d
13)dte	C24	0.000	0	N.D.		d
14)dte	C26	0.000	0	N.D.		d
15)dte	C28	0.000	0	N.D.		d
16)te	C30	0.000	0	N.D.		d
17)te	C32	0.000	0	N.D.		d
18)te	C34	0.000	0	N.D.		d
19)te	C36	0.000	0	N.D.		d
20)t	C40	0.000	0	N.D.		d
21)	Chlorobenzene	3.011	54666	7.700		
22)	O-Terphenyl	8.726	188261	14.328		
23)d	Diesel Range Organics(T	8.726f	996728	80.050		m
24)t	Total Petroleum Hydroca	0.000	0	N.D.		
25)e	Ext. Petroleum Hydrocar	0.000	0	N.D.		
26)m	Mineral Spirits(TOTAL)	0.000	0	N.D.		
27)m	Stoddard Solvent(TOTAL)	0.000	0	N.D.		

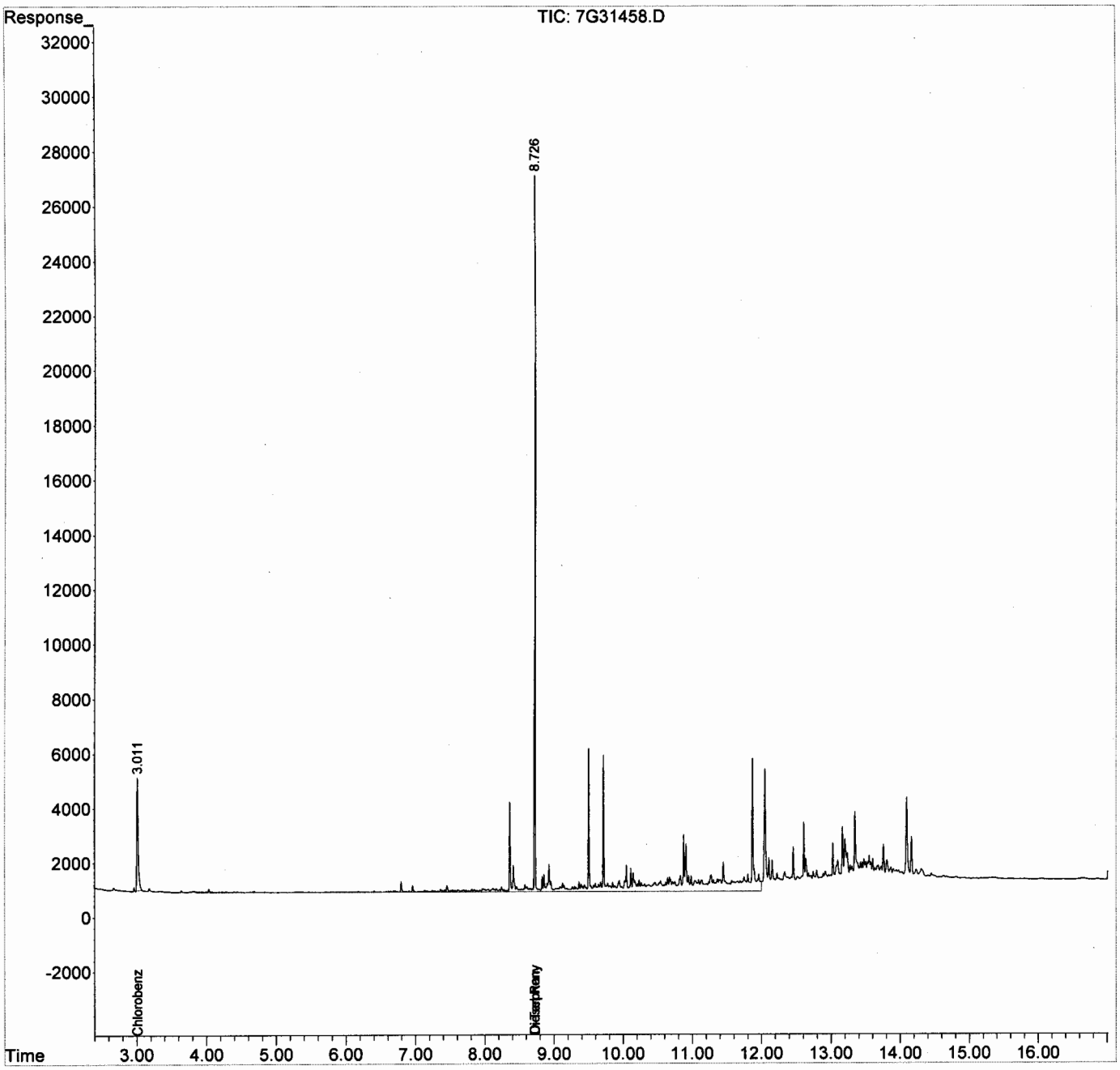
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_7\Data\08-27-13\
Data File : 7G31458.D
Signal(s) : FID2B.CH
Acq On : 27 Aug 2013 19:15
Operator : RAK/KD/AHD
Sample : AC74177-006
Misc : S.TPH
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 28 10:00:43 2013
Quant Method : G:\GCDATA\2013\GC_7\METHODQT\7G_T0812.M
Quant Title : @GC_7,mg,8015
QLast Update : Tue Aug 13 10:10:15 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Form1

ORGANICS PETROLEUM HYDROCARBON REPORT

Sample Number: SMB26009
Client Id:
Data File: 7G31455.D
Analysis Date: 08/27/13 17:54
Date Rec/Extracted: NA-08/27/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8015B
Matrix: Soil
Initial Vol: 5g
Final Vol: 1ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
PHCHPD2	Diesel Range Organics	60	U				

Worksheet #: 274908

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used.

Quantitation Report (QT Reviewed)

3082313 0416

Data Path : G:\Gcdata\2013\GC_7\Data\08-27-13\
Data File : 7G31455.D
Signal(s) : FID2B.CH
Acq On : 27 Aug 2013 17:54
Operator : RAK/KD/AHD
Sample : SMB26009
Misc : S.TPH
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 28 09:57:28 2013
Quant Method : G:\GCDATA\2013\GC_7\METHODQT\7G_T0812.M
Quant Title : @GC_7,mg,8015
QLast Update : Tue Aug 13 10:10:15 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)mt	C8	0.000	0	N.D.		
2)mte	C9	0.000	0	N.D.		
3)mdte	C10	0.000	0	N.D.		
4)mdte	C12	0.000	0	N.D.		
5)mdte	C14	0.000	0	N.D.		
6)dte	C16	0.000	0	N.D.		
7)dte	C17	0.000	0	N.D.		
8)dte	Pristane	0.000	0	N.D.		
9)dte	C18	0.000	0	N.D.		
10)dte	Phytane	0.000	0	N.D.		
11)dte	C20	0.000	0	N.D.		
12)dte	C22	0.000	0	N.D.		
13)dte	C24	0.000	0	N.D.		
14)dte	C26	0.000	0	N.D.		
15)dte	C28	0.000	0	N.D.		
16)te	C30	0.000	0	N.D.		
17)te	C32	0.000	0	N.D.		
18)te	C34	0.000	0	N.D.		
19)te	C36	0.000	0	N.D.		
20)t	C40	0.000	0	N.D.		
21)	Chlorobenzene	3.014	68447	9.642		
22)	O-Terphenyl	8.728	222563	16.939		
23)d	Diesel Range Organics(T	8.727f	435265	34.957		m
24)t	Total Petroleum Hydroca	8.727f	1412790	113.543		m
25)e	Ext. Petroleum Hydrocar	8.727f	867188	68.899		m
26)m	Mineral Spirits(TOTAL)	0.000	0	N.D.		
27)m	Stoddard Solvent(TOTAL)	0.000	0	N.D.		

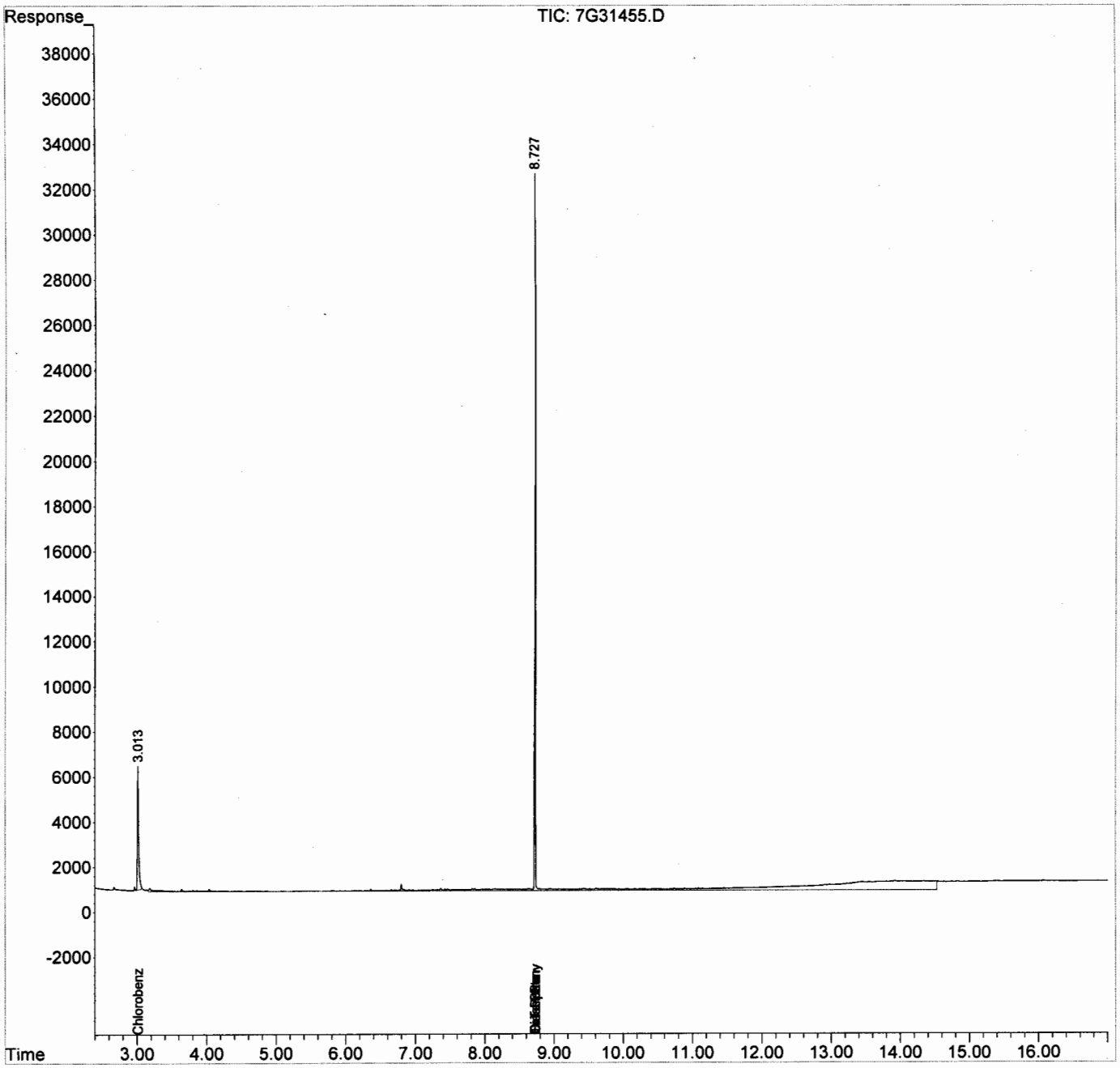
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_7\Data\08-27-13\
Data File : 7G31455.D
Signal(s) : FID2B.CH
Acq On : 27 Aug 2013 17:54
Operator : RAK/KD/AHD
Sample : SMB26009
Misc : S.TPH
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 28 09:57:28 2013
Quant Method : G:\GCDATA\2013\GC_7\METHODQT\7G_T0812.M
Quant Title : @GC_7,mg,8015
QLast Update : Tue Aug 13 10:10:15 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



FORM2

Surrogate Recovery

Method: EPA 8015B

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column0 S3 Recov	Column0 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
7G31161.D	SMB25768	Soil	08/02/13 13:21	1		73	119				
7G31455.D	SMB26009	Soil	08/27/13 17:54	1		48	85				
7G31456.D	AC74177-002	Soil	08/27/13 18:21	1		36	77				
7G31457.D	AC74177-004	Soil	08/27/13 18:48	1		39	82				
7G31458.D	AC74177-006	Soil	08/27/13 19:15	1		38	72				
7G31160.D	SMB25768(M	Soil	08/02/13 12:55	1		50	96				
7G31169.D	AC73722-003(	Soil	08/02/13 17:29	1		59	131				
7G31170.D	AC73722-003(	Soil	08/02/13 17:55	1		55	123				
7G31171.D	AC73722-003	Soil	08/02/13 18:22	1		54	110				
7G31454.D	SMB26009(M	Soil	08/27/13 17:28	1		43	92				

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8015B

Soil Limits

Compound	Spike Amt	Limits
S1=Chlorobenzene	20	20-117
S2=O-Terphenyl	20	30-146

Form3

MBS Data

Method: 8015

Data File:=====>					7G31454.D																		
Data/Batch/Sample ID:=====>					SMB26009(MS)-So																		
Date/Time:=====>					08/27/13 17:28																		
Compound	Limit(s) Soil	Limit(s) Aq	Col	Mr	Conc	Conc Exp	% Rec	Conc	Conc Exp	% Rec	Conc	Conc Exp	% Rec	Conc	Conc Exp	% Rec	Conc	Conc Exp	% Rec
Diesel Range Organ	26-153		1	0	1949	3000	65												

Flags/Notes:

**** - Values outside of limits for this column/run (8015 Special Note: n-Nonane may be >low limit but has a secondary limit of 40-140).***

FORM 3
Spike Recovery

Batch Number: SMB25768
Mbs Name: SMB25768(MS)
Ns Name: AC73722-003
Ms Name: AC73722-003(MS)
Msd Name: AC73722-003(MSD

Mbs File: 7G31160.D
Non Spk'd File: 7G31171.D
Spike File: 7G31169.D
Spike Dup File: 7G31170.D
Matrix: Soil
Method: EPA 8015B

Mbs Date: 08/02/13 12:55
Non Spk'd Date: 08/02/13 18:22
Spike Date : 08/02/13 17:29
Spike Dup Date: 08/02/13 17:55

Compound	C#	Co	Mr	Conc Exp	Lo Llm	Hi Lim	Rpd Llm	Mbs Conc	Sample Conc	Spike Conc	Spike Dup Conc	Mbs Rec	MS Rec	Msd Rec	Rpd
Diesel Range Organic	23	1	0	3000	26	153	42	1945.99	103.86	2611.65	2378.15	65	84	76	9.4

Note:
Rp = Failed Rpd Criteria **Mo = Failed Recovery Criteria**
^ - Both Ms and Msd Recoveries = 0 ... no valid information can be calculated

FORM 4
Blank Summary

Blank Number: SMB25768
Blank Data File: 7G31161.D
Matrix: Soil

Blank Analysis Date: 08/02/13 13:21
Blank Extraction Date: 08/02/13
(If Applicable)
Method: EPA 8015B

Sample Number	Data File	Analysis Date
AC73722-003	7G31171.D	08/02/13 18:22
AC73722-003(MSD	7G31170.D	08/02/13 17:55
AC73722-003(MS)	7G31169.D	08/02/13 17:29
SMB25768(MS)	7G31160.D	08/02/13 12:55

FORM 4
Blank Summary

Blank Number: SMB26009
Blank Data File: 7G31455.D
Matrix: Soil

Blank Analysis Date: 08/27/13 17:54
Blank Extraction Date: 08/27/13
(If Applicable)
Method: EPA 8015B

Sample Number	Data File	Analysis Date
AC74177-002	7G31456.D	08/27/13 18:21
AC74177-004	7G31457.D	08/27/13 18:48
AC74177-006	7G31458.D	08/27/13 19:15
SMB26009(MS)	7G31454.D	08/27/13 17:28

Form 5

Method: EPA 8015B

Instrument: GC_7

Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
7G30943.	INST BLK	07/05/13 11:22	Soil					
7G30944.	CALTPH@20PPM	07/05/13 12:00	Soil	7G30949.	8.7677	0.0844		
7G30945.	CAL TPH@500PPM	07/05/13 12:32	Soil	7G30949.	8.8160	0.6338		
7G30946.	CAL TPH@100PPM	07/05/13 12:59	Soil	7G30949.	8.7769	0.1893		
7G30947.	CAL TPH@40PPM	07/05/13 14:01	Soil	7G30949.	8.7686	0.0947		
7G30948.	CAL TPH@10PPM	07/05/13 14:29	Soil	7G30949.	8.7599	0.0046		
7G30949.	CAL TPH@5PPM	07/05/13 14:56	Soil	7G30949.	8.7603	0		
7G30950.	TEST-20	07/05/13 15:23	Soil	7G30949.	8.7636	0.0377		
7G30951.	CAL TPH@20PPM	07/05/13 15:54	Soil	7G30949.	8.7650	0.0536		
7G30952.	ICV	07/05/13 16:22	Soil	7G30949.	8.7630	0.0308		

Drift Compound: O-Terphenyl

Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph)

* - Values outside of limits for this column/run

Form 5

Method: EPA 8015B

Instrument: GC_7 Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
7G31153.	INST BLK	08/02/13 08:39	Soil					
7G31154.	CALTPH@20PPM	08/02/13 09:06	Soil	7G31154.	8.7517	0		
7G31155.	INST BLK	08/02/13 09:34	Soil	7G31154.	0.0000	200		
7G31156.	WMB25780(MS)	08/02/13 11:34	Aqueous	7G31154.	8.7578	0.0697		
7G31157.	WMB25780	08/02/13 12:01	Aqueous	7G31154.	8.7513	0.0046		
7G31158.	AC73651-001(R)	08/02/13 12:28	Aqueous	7G31154.	8.7506	0.0126		
7G31160.	SMB25768(MS)	08/02/13 12:55	Soil	7G31154.	8.7511	0.0069		
7G31161.	SMB25768	08/02/13 13:21	Soil	7G31154.	8.7500	0.0194		
7G31162.	AC73735-001	08/02/13 13:48	Soil	7G31154.	8.7499	0.0206		
7G31163.	AC73735-003	08/02/13 14:14	Soil	7G31154.	8.7499	0.0206		
7G31164.	AC73735-002(10X)	08/02/13 14:41	Soil	7G31154.	8.7449	0.0777		
7G31165.	AC73735-002	08/02/13 15:08	Soil	7G31154.	8.7508	0.0103		
7G31166.	20PPM	08/02/13 15:35	Soil	7G31154.	8.7512	0.0057		
7G31167.	CALTPH@20PPM	08/02/13 16:31	Soil	7G31154.	8.7499	0.0206		
7G31168.	INST BLK	08/02/13 17:02	Soil	7G31167.	0.0000	200		
7G31169.	AC73722-003(MS)	08/02/13 17:29	Soil	7G31167.	8.7545	0.0526		
7G31170.	AC73722-003(MSD)	08/02/13 17:55	Soil	7G31167.	8.7535	0.0411		
7G31171.	AC73722-003	08/02/13 18:22	Soil	7G31167.	8.7498	0.0011		
7G31172.	AC73742-001	08/02/13 18:48	Soil	7G31167.	8.7495	0.0046		
7G31173.	AC73748-001	08/02/13 19:15	Soil	7G31167.	8.7495	0.0046		
7G31174.	AC73749-001	08/02/13 19:42	Soil	7G31167.	8.7504	0.0057		
7G31175.	TEST	08/02/13 20:08	Soil	7G31167.	0.0000	200		
7G31176.	CALTPH@20PPM	08/02/13 20:35	Soil	7G31167.	8.7485	0.016		
7G31177.	20PPM	08/02/13 21:28	Soil	7G31176.	8.7471	0.016		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8015B

Instrument: GC_7 Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
7G31317.	INST BLK	08/12/13 14:25	Soil					
7G31318.	CALTPH@20PPM	08/12/13 14:52	Soil	7G31323.	8.7209	0.0642		
7G31319.	CALTPH@500PPM	08/12/13 15:19	Soil	7G31323.	8.7747	0.6793		
7G31320.	CALTPH@100PPM	08/12/13 15:46	Soil	7G31323.	8.7352	0.2281		
7G31321.	CALTPH@40PPM	08/12/13 16:13	Soil	7G31323.	8.7245	0.1055		
7G31322.	CALTPH@10PPM	08/12/13 16:40	Soil	7G31323.	8.7179	0.0298		
7G31323.	CALTPH@5PPM	08/12/13 17:07	Soil	7G31323.	8.7153	0		
7G31324.	ICVTPH@20PPM	08/12/13 17:34	Soil	7G31323.	8.7195	0.0482		
7G31325.	INST BLK	08/12/13 18:00	Soil	7G31323.	0.0000	200		
7G31326.	25863(MS)	08/12/13 18:27	Soil	7G31323.	8.7265	0.1284		
7G31327.	SMB25863	08/12/13 18:54	Soil	7G31323.	8.7201	0.0551		
7G31328.	25853(MS)	08/12/13 19:20	Soil	7G31323.	8.7226	0.0837		
7G31329.	MB25853	08/12/13 19:47	Soil	7G31323.	8.7186	0.0379		
7G31330.	AC73860-001	08/12/13 20:14	Soil	7G31323.	8.7176	0.0264		
7G31331.	AC73860-002	08/12/13 20:40	Soil	7G31323.	8.7175	0.0252		
7G31332.	TEST	08/12/13 21:08	Soil	7G31323.	0.0000	200		
7G31333.	CALTPH@20PPM	08/12/13 21:34	Soil	7G31323.	8.7195	0.0482		
7G31334.	20PPM	08/12/13 22:27	Soil	7G31333.	8.7191	0.0046		
7G31335.	INST BLK	08/12/13 23:21	Soil	7G31333.	0.0000	200		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8015B

Instrument: GC_7

Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
7G31440.	INST BLK	08/27/13 09:12	Soil					
7G31441.	CALTPH@20PPM	08/27/13 09:38	Soil	7G31441.	8.7313	0		
7G31442.	INST BLK	08/27/13 10:40	Soil	7G31441.	0.0000	200		
7G31443.	AC74109-003(MS)	08/27/13 11:07	Soil	7G31441.	8.7103	0.2408		
7G31444.	AC74109-004(MSD)	08/27/13 11:34	Soil	7G31441.	8.7542	0.2619		
7G31445.	AC74109-007	08/27/13 12:01	Soil	7G31441.	8.6172	1.3154		
7G31446.	AC74109-009	08/27/13 12:29	Soil	7G31441.	8.7355	0.0481		
7G31447.	AC74109-003(10X)(MS)	08/27/13 13:05	Soil	7G31441.	0.0000	200		
7G31448.	AC74109-004(10X)(MSD	08/27/13 13:31	Soil	7G31441.	0.0000	200		
7G31449.	AC74109-007(20X)	08/27/13 13:58	Soil	7G31441.	0.0000	200		
7G31450.	TEST	08/27/13 14:35	Soil	7G31441.	0.0000	200		
7G31451.	20PPM	08/27/13 15:01	Soil	7G31441.	8.7304	0.0103		
7G31452.	CALTPH@20PPM	08/27/13 15:30	Soil	7G31441.	8.7297	0.0183		
7G31453.	INST BLK	08/27/13 16:03	Soil	7G31452.	0.0000	200		
7G31454.	SMB26009(MS)	08/27/13 17:28	Soil	7G31452.	8.7341	0.0504		
7G31455.	SMB26009	08/27/13 17:54	Soil	7G31452.	8.7276	0.0241		
7G31456.	AC74177-002	08/27/13 18:21	Soil	7G31452.	8.7264	0.0378		
7G31457.	AC74177-004	08/27/13 18:48	Soil	7G31452.	8.7258	0.0447		
7G31458.	AC74177-006	08/27/13 19:15	Soil	7G31452.	8.7259	0.0435		
7G31459.	AC74085-001	08/27/13 19:42	Soil	7G31452.	8.7178	0.1364		
7G31460.	AC74085-002	08/27/13 20:09	Soil	7G31452.	8.7394	0.1111		
7G31461.	AC74085-003	08/27/13 20:36	Soil	7G31452.	8.7113	0.211		
7G31462.	AC74085-004	08/27/13 21:03	Soil	7G31452.	8.7281	0.0183		
7G31463.	AC74085-008	08/27/13 21:29	Soil	7G31452.	8.7416	0.1362		
7G31464.	AC74126-001	08/27/13 21:56	Soil	7G31452.	8.7403	0.1214		
7G31465.	TEST	08/27/13 22:23	Soil	7G31452.	0.0000	200		
7G31466.	CALTPH@20PPM	08/27/13 22:49	Soil	7G31452.	8.7292	0.0057		
7G31467.	20PPM	08/27/13 23:42	Soil	7G31466.	8.7291	0.0011		
7G31468.	INST BLK	08/28/13 00:36	Soil	7G31466.	0.0000	200		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

3082313 0427

Form 6
Initial Calibration

Method: EPA 8015B

Instrument: GC_7

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7G30949.D	CAL TPH@5PPM	07/05/13 14:56	2	7G30948.D	CAL TPH@10PPM	07/05/13 14:29
3	7G30951.D	CAL TPH@20PPM	07/05/13 15:54	4	7G30947.D	CAL TPH@40PPM	07/05/13 14:01
5	7G30946.D	CAL TPH@100PPM	07/05/13 12:59	6	7G30945.D	CAL TPH@500PPM	07/05/13 12:32

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
C8	1	0	Avg	0.7111	0.6851	0.8912	0.7293	0.6436	0.8062	----	----	0.744	2.70	0.998	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C9	1	0	Avg	0.8500	0.7965	1.0340	0.8309	0.7328	0.9139	----	----	0.860	3.40	0.998	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C10	1	0	Avg	0.9030	0.8490	1.1182	0.9041	0.8014	0.9899	----	----	0.928	4.08	0.998	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C12	1	0	Avg	0.9836	0.9251	1.2265	1.0016	0.8872	1.0486	----	----	1.01	5.34	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C14	1	0	Avg	1.0525	0.9799	1.3022	1.0658	0.9342	1.0781	----	----	1.07	6.45	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C16	1	0	Avg	1.1413	1.0634	1.4070	1.1466	1.0035	1.1436	----	----	1.15	7.43	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C17	1	0	Qua	1.1797	1.0932	1.4531	1.1914	1.1098	1.6575	----	----	1.28	7.89	0.996	1.00	18	5.00	10.00	20.00	40.00	100.0	500.0		
Pristane	1	0	Qua	1.1977	1.1318	1.5147	1.2293	0.9911	0.7453	----	----	1.14	7.90	0.995	0.999	23	5.00	10.00	20.00	40.00	100.0	500.0		
C18	1	0	Avg	1.1702	1.0868	1.4382	1.1705	1.0277	1.2626	----	----	1.19	8.32	0.998	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
Phytane	1	0	Avg	1.0814	1.0137	1.3536	1.1127	0.9778	1.0118	----	----	1.09	8.35	1.00	1.00	13	5.00	10.00	20.00	40.00	100.0	500.0		
C20	1	0	Avg	1.2121	1.1284	1.4855	1.2100	1.0673	1.2089	----	----	1.22	9.13	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C22	1	0	Avg	1.2156	1.1362	1.4832	1.2066	1.0629	1.2075	----	----	1.22	9.87	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C24	1	0	Avg	1.2738	1.1912	1.5660	1.2690	1.1160	1.2682	----	----	1.28	10.55	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C26	1	0	Avg	1.2897	1.2130	1.5966	1.2933	1.1365	1.2858	----	----	1.30	11.19	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C28	1	0	Avg	1.3079	1.2225	1.6203	1.3155	1.1586	1.3028	----	----	1.32	11.80	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C30	1	0	Avg	1.3313	1.2489	1.6605	1.3527	1.1980	1.3392	----	----	1.36	12.39	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C32	1	0	Avg	1.3774	1.2873	1.7154	1.3968	1.2427	1.3831	----	----	1.40	12.97	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C34	1	0	Avg	1.3339	1.2553	1.6735	1.3762	1.2281	1.3727	----	----	1.37	13.53	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C36	1	0	Avg	1.3644	1.2866	1.7130	1.4084	1.2580	1.3711	----	----	1.40	14.20	1.00	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C40	1	0	Avg	1.4035	1.3413	1.8078	1.4709	1.2924	1.3163	----	----	1.44	16.17	1.00	1.00	13	5.00	10.00	20.00	40.00	100.0	500.0		
Chlorobenzene	1	0	Avg	0.6035	0.5814	0.7766	0.6185	0.5459	0.6617	----	----	0.631	3.06	0.999	1.00	13	5.00	10.00	20.00	40.00	100.0	500.0		
O-Terphenyl	1	0	Avg	1.2482	1.1740	1.5694	1.2835	1.1207	1.2732	----	----	1.28	8.77	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
Diesel Range Organics(TO	1	0	Avg	1.1545	1.0795	1.4281	1.1628	1.0211	1.1700	----	----	1.17	4.08	0.999	1.00	12	65.00	130.0	260.0	520.0	1300.	6500.		
Total Petroleum Hydrocarb	1	0	Avg	1.1690	1.0967	1.4530	1.1841	1.0435	1.1857	----	----	1.19	2.70	0.999	1.00	12	100.0	200.0	400.0	800.0	2000.	10000		
Ext. Petroleum Hydrocarbo	1	0	Avg	1.1814	1.1060	1.4645	1.1934	1.0519	1.1995	----	----	1.20	3.40	0.999	1.00	12	90.00	180.0	360.0	720.0	1800.	9000.		
Mineral Spirits(TOTAL)	1	0	Avg	0.9000	0.8471	1.1144	0.9063	0.7998	0.9673	----	----	0.923	2.60	0.999	1.00	12	25.00	50.00	100.0	200.0	500.0	2500.		
Stoddard Solvent(TOTAL)	1	0	Avg	0.9000	0.8471	1.1144	0.9063	0.7998	0.9673	----	----	0.923	2.60	0.999	1.00	12	25.00	50.00	100.0	200.0	500.0	2500.		

Avg Rsd Col 1: 12.81 Avg Rsd Col 2: -1

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pch/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

3082313 0428

Form 6
Initial Calibration

Method: EPA 8015B

Instrument: GC_7

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7G31323.D	CALTPH@5PPM	08/12/13 17:07	2	7G31322.D	CALTPH@10PPM	08/12/13 16:40
3	7G31318.D	CALTPH@20PPM	08/12/13 14:52	4	7G31321.D	CALTPH@40PPM	08/12/13 16:13
5	7G31320.D	CALTPH@100PPM	08/12/13 15:46	6	7G31319.D	CALTPH@500PPM	08/12/13 15:19

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
C8	1	0	Avg	0.7369	0.8279	0.8089	0.8065	0.8217	1.0275	----	----	0.838	2.64	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C9	1	0	Avg	0.8538	0.9609	0.9189	0.9147	0.9589	1.1775	----	----	0.964	3.34	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C10	1	0	Avg	0.9301	1.0412	0.9740	0.9767	1.0463	1.2678	----	----	1.04	4.02	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C12	1	0	Avg	0.9736	1.1295	1.0379	1.0448	1.1370	1.3525	----	----	1.11	5.28	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C14	1	0	Avg	1.0195	1.2055	1.0755	1.0803	1.1855	1.3881	----	----	1.16	6.39	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C16	1	0	Avg	1.0874	1.2990	1.1364	1.1419	1.2598	1.4630	----	----	1.23	7.38	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C17	1	0	Qua	1.0969	1.4173	1.2096	1.1824	1.4961	2.3261	----	----	1.45	7.84	0.996	1.00	31	5.00	10.00	20.00	40.00	100.0	500.0		
Pristane	1	0	Qua	1.1786	1.3700	1.1806	1.1456	1.1315	0.6503	----	----	1.11	7.85	0.980	1.00	22	5.00	10.00	20.00	40.00	100.0	500.0		
C18	1	0	Qua	1.1078	1.3313	1.1457	1.1549	1.2857	1.6911	----	----	1.29	8.27	0.998	1.00	17	5.00	10.00	20.00	40.00	100.0	500.0		
Phytane	1	0	Avg	1.0482	1.2393	1.0596	1.0588	1.1660	1.1321	----	----	1.12	8.30	1.00	1.00	6.8	5.00	10.00	20.00	40.00	100.0	500.0		
C20	1	0	Avg	1.1504	1.3812	1.1884	1.1941	1.3248	1.5207	----	----	1.29	9.08	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C22	1	0	Avg	1.1613	1.3930	1.1870	1.1913	1.3221	1.5077	----	----	1.29	9.82	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C24	1	0	Avg	1.2232	1.4659	1.2449	1.2476	1.3885	1.5787	----	----	1.36	10.51	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C26	1	0	Avg	1.2319	1.4745	1.2507	1.2542	1.3963	1.5947	----	----	1.37	11.14	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C28	1	0	Avg	1.2214	1.4717	1.2482	1.2527	1.3938	1.5972	----	----	1.36	11.75	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C30	1	0	Avg	1.2261	1.4812	1.2580	1.2652	1.4266	1.6169	----	----	1.38	12.33	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C32	1	0	Avg	1.2484	1.4977	1.2825	1.2853	1.4377	1.6420	----	----	1.40	12.90	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C34	1	0	Avg	1.2065	1.4369	1.2350	1.2446	1.3995	1.6127	----	----	1.36	13.45	0.999	1.00	12	5.00	10.00	20.00	40.00	100.0	500.0		
C36	1	0	Avg	1.2248	1.4547	1.2461	1.2588	1.4171	1.6213	----	----	1.37	14.11	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
C40	1	0	Avg	1.2530	1.5068	1.2724	1.2837	1.4475	1.5881	----	----	1.39	16.04	1.00	1.00	10	5.00	10.00	20.00	40.00	100.0	500.0		
Chlorobenzene	1	0	Avg	0.6249	0.7150	0.6803	0.6822	0.7085	0.8482	----	----	0.710	3.00	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
O-Terphenyl	1	0	Avg	1.1781	1.4053	1.2082	1.2134	1.3353	1.5430	----	----	1.31	8.72	0.999	1.00	11	5.00	10.00	20.00	40.00	100.0	500.0		
Diesel Range Organics(TO	1	0	Avg	1.1100	1.3246	1.1491	1.1481	1.2718	1.4669	----	----	1.25	4.03	0.999	1.00	11	65.00	130.0	260.0	520.0	1300.	6500.		
Total Petroleum Hydrocarb	1	0	Avg	1.1090	1.3193	1.1480	1.1492	1.2721	1.4678	----	----	1.24	2.64	0.999	1.00	11	100.0	200.0	400.0	800.0	2000.	10000		
Ext. Petroleum Hydrocarbo	1	0	Avg	1.1217	1.3362	1.1599	1.1608	1.2874	1.4856	----	----	1.26	3.34	0.999	1.00	11	90.00	180.0	360.0	720.0	1800.	9000.		
Mineral Spirits(TOTAL)	1	0	Avg	0.9028	1.0330	0.9631	0.9646	1.0299	1.2427	----	----	1.02	2.60	0.999	1.00	12	25.00	50.00	100.0	200.0	500.0	2500.		
Stoddard Solvent(TOTAL)	1	0	Avg	0.9028	1.0330	0.9631	0.9646	1.0299	1.2427	----	----	1.02	2.60	0.999	1.00	12	25.00	50.00	100.0	200.0	500.0	2500.		

Avg Rsd Col 1: 12.59 Avg Rsd Col 2: -1

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Form7
Continuing Calibration

Method: EPA 8015B

Data File:				7G31154.D			7G31167.D			7G31176.D			7G31452.D			7G31466.D			
Method:				8015			8015			8015			8015			8015			
Calibration Name:				CALTPH@20PPM			CALTPH@20PPM			CALTPH@20PPM			CALTPH@20PPM			CALTPH@20PPM			
Calibration Date/Time				08/02/13 09:06			08/02/13 16:31			08/02/13 20:35			08/27/13 15:30			08/27/13 22:49			
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	
C8	20	1	0	18.72	20	6.4	16.73	20	16.4	20.91	20	4.5	17.51	20	12.5	19.27	20	3.6	
C9	20	1	0	19.03	20	4.8	16.94	20	15.3	21.59	20	8.0	17.67	20	11.7	19.79	20	1.0	
C10	20	1	0	18.93	20	5.3	17.27	20	13.7	22.13	20	10.7	17.95	20	10.3	20.36	20	1.8	
C12	20	1	0	18.8	20	6.0	17.33	20	13.4	22.3	20	11.5	17.61	20	12.0	19.97	20	0.2	
C14	20	1	0	19.39	20	3.1	17.91	20	10.5	23.13	20	15.6	18.97	20	5.2	21.62	20	8.1	
C16	20	1	0	19.45	20	2.7	18.07	20	9.7	23.29	20	16.5	20.55	20	2.7	23.52	20	17.6	
C17	20	1	0	21.81	20	9.0	19.92	20	0.4	27.95	20	39.8*	20.46	20	2.3	23.73	20	18.7	
Pristane	20	1	0	21.06	20	5.3	19.76	20	1.2	24.99	20	25.0*	21.6	20	8.0	23.97	20	19.9	
C18	20	1	0	19.16	20	4.2	17.82	20	10.9	23.08	20	15.4	22.16	20	10.8	25.38	20	26.9*	
Phytane	20	1	0	19.24	20	3.8	17.91	20	10.5	23.01	20	15.1	21.62	20	8.1	24.19	20	21.0*	
C20	20	1	0	19.38	20	3.1	18.09	20	9.5	23.56	20	17.8	21.33	20	6.6	24.36	20	21.8*	
C22	20	1	0	19.24	20	3.8	18.03	20	9.8	23.5	20	17.5	21.29	20	6.5	23.94	20	19.7	
C24	20	1	0	19.19	20	4.0	17.88	20	10.6	23.46	20	17.3	21.07	20	5.3	23.64	20	18.2	
C26	20	1	0	19.09	20	4.5	17.75	20	11.3	23.29	20	16.5	20.9	20	4.5	23.25	20	16.3	
C28	20	1	0	19	20	5.0	17.65	20	11.8	23.08	20	15.4	20.67	20	3.4	22.87	20	14.4	
C30	20	1	0	18.92	20	5.4	17.45	20	12.8	22.91	20	14.6	20.19	20	1.0	22.05	20	10.3	
C32	20	1	0	18.78	20	6.1	17.27	20	13.7	22.66	20	13.3	19.87	20	0.6	21.22	20	6.1	
C34	20	1	0	18.64	20	6.8	17.07	20	14.7	22.29	20	11.5	18.34	20	8.3	19.85	20	0.7	
C36	20	1	0	18.34	20	8.3	16.77	20	16.2	21.82	20	9.1	16.68	20	16.6	18.26	20	8.7	
C40	20	1	0	16.81	20	16.0	15.61	20	22.0*	19.21	20	4.0	12.11	20	39.5*	13.82	20	30.9*	
Chlorobenzene	20	1	0	19.09	20	4.5	17.38	20	13.1	22.38	20	11.9	17.53	20	12.4	19.61	20	1.9	
O-Terphenyl	20	1	0	19.14	20	4.3	17.82	20	10.9	23.27	20	16.4	21.8	20	9.0	24.36	20	21.8*	
Average Difference	20	1	0			5.6			11.7			14.9			9.0			13.2	

Flags/Notes: **** - Values outside of limits for this column/run***

EPH Category 2 Data

EPH Category 2 Data
Sample Data

Form1

ORGANICS REPORT

Sample Number: AC74177-002
Client Id: 006 SS-1 Composite
Data File: 9G156910.D
Analysis Date: 08/27/13 00:01
Date Rec/Extracted: 08/23/13-08/26/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: NJEPHRev3B
Matrix: Soil
Initial Vol: 10g
Final Vol: 1ml
Dilution: 1
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
ephc9c40	C9-C40	65	U				

Worksheet #: 274915

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-26-13\
Data File : 9G156910.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 00:01:31
Operator : KD/RAK/ABM
Sample : AC74177-002
Misc : S.TPH
ALS Vial : 24 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 11:41:24 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	11.853	275494	89.249		
22)S	1-Chlorooctadecane	13.285	211709	89.186		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	0.000	0	N.D.		
24)B	>C28-C40(Total)	0.000	0	N.D.		
25)t	C9-C40(TOTAL)	11.853f	2958831	1159.242		m

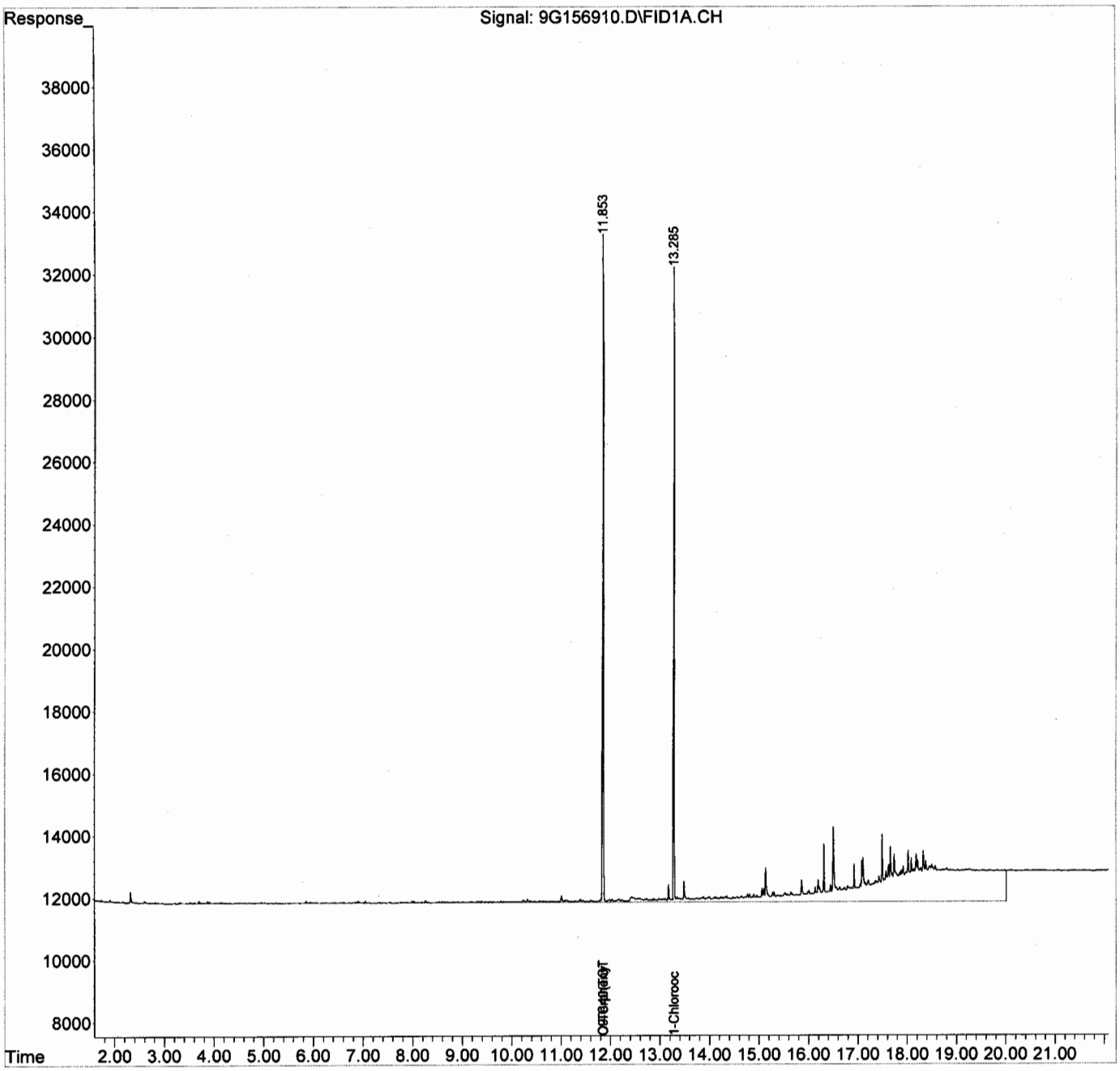
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-26-13\
Data File : 9G156910.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 00:01:31
Operator : KD/RAK/ABM
Sample : AC74177-002
Misc : S.TPH
ALS Vial : 24 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 11:41:24 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Form1

ORGANICS REPORT

Sample Number: AC74177-004
Client Id: 012 SS-2 Composite
Data File: 9G156915.D
Analysis Date: 08/27/13 03:28
Date Rec/Extracted: 08/23/13-08/26/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: NJEPHRev3B
Matrix: Soil
Initial Vol: 10g
Final Vol: 1ml
Dilution: 1
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
ephc9c40	C9-C40	65	U				

Worksheet #: 274915

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0436

Data Path : G:\Gcdata\2013\GC_9\Data\08-26-13\
Data File : 9G156915.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 03:28:02
Operator : KD/RAK/ABM
Sample : AC74177-004
Misc : S.TPH
ALS Vial : 26 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 11:49:03 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	11.851	272653	88.329		
22)S	1-Chlorooctadecane	13.284	201621	84.936		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	11.851f	3222353	1262.488		m

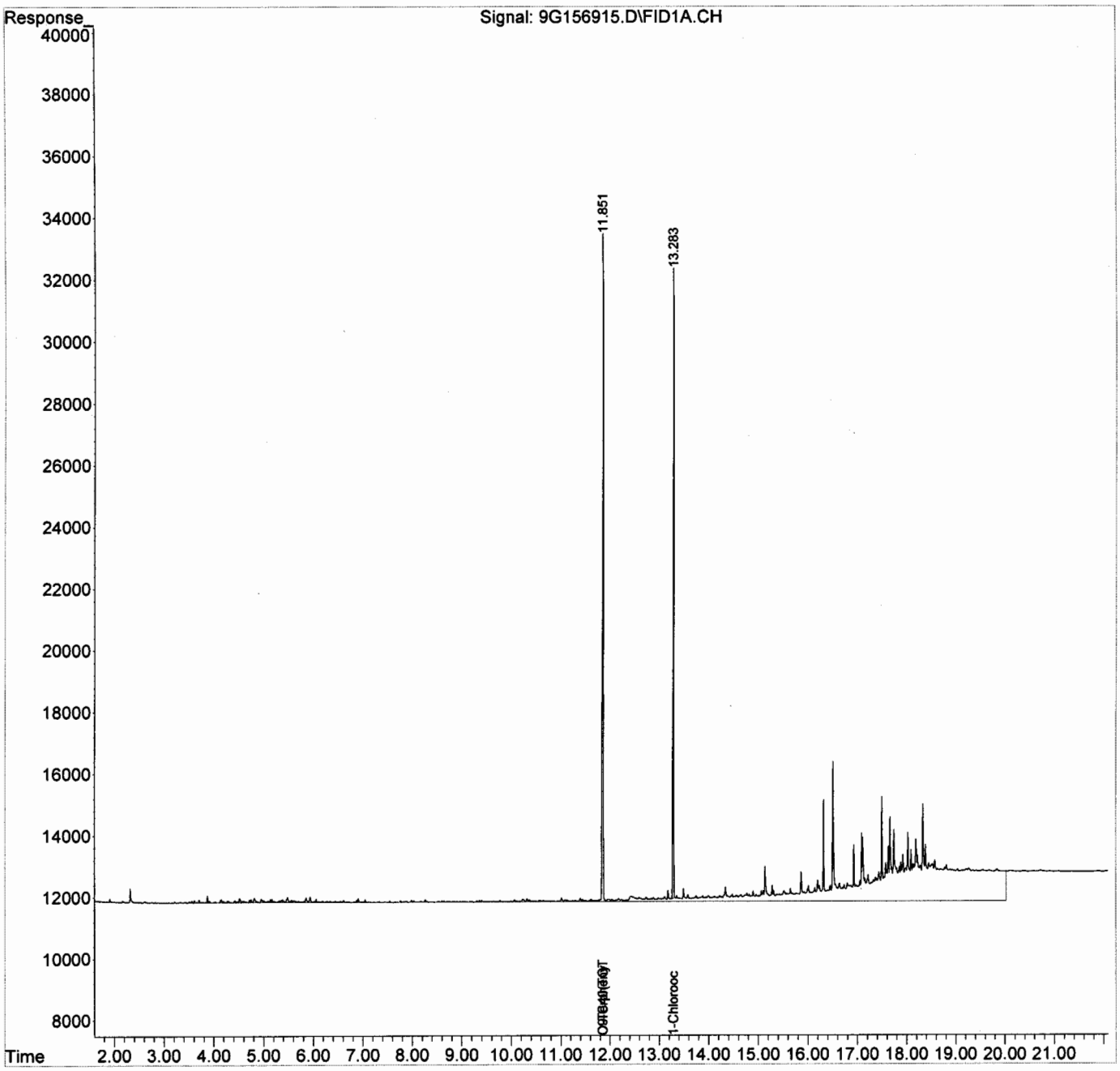
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-26-13\
Data File : 9G156915.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 03:28:02
Operator : KD/RAK/ABM
Sample : AC74177-004
Misc : S.TPH
ALS Vial : 26 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 11:49:03 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Form1

ORGANICS REPORT

Sample Number: AC74177-006
Client Id: 018 SS-3 Composite
Data File: 9G156916.D
Analysis Date: 08/27/13 03:57
Date Rec/Extracted: 08/23/13-08/26/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: NJEPHRev3B
Matrix: Soil
Initial Vol: 10g
Final Vol: 1ml
Dilution: 1
Solids: 92

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
ephc9c40	**C9-C40**	**65**	**77**				

Worksheet #: 274915 ***Total Target Concentration*** 77 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-26-13\
Data File : 9G156916.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 03:57:28
Operator : KD/RAK/ABM
Sample : AC74177-006
Misc : S.TPH
ALS Vial : 27 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 11:53:11 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	11.851	267898	86.788		
22)S	1-Chlorooctadecane	13.283	190872	80.408		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	0.000	0	N.D.		
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	11.851f	3665588	1436.143		m

(f)=RT Delta > 1/2 Window (m)=manual int.

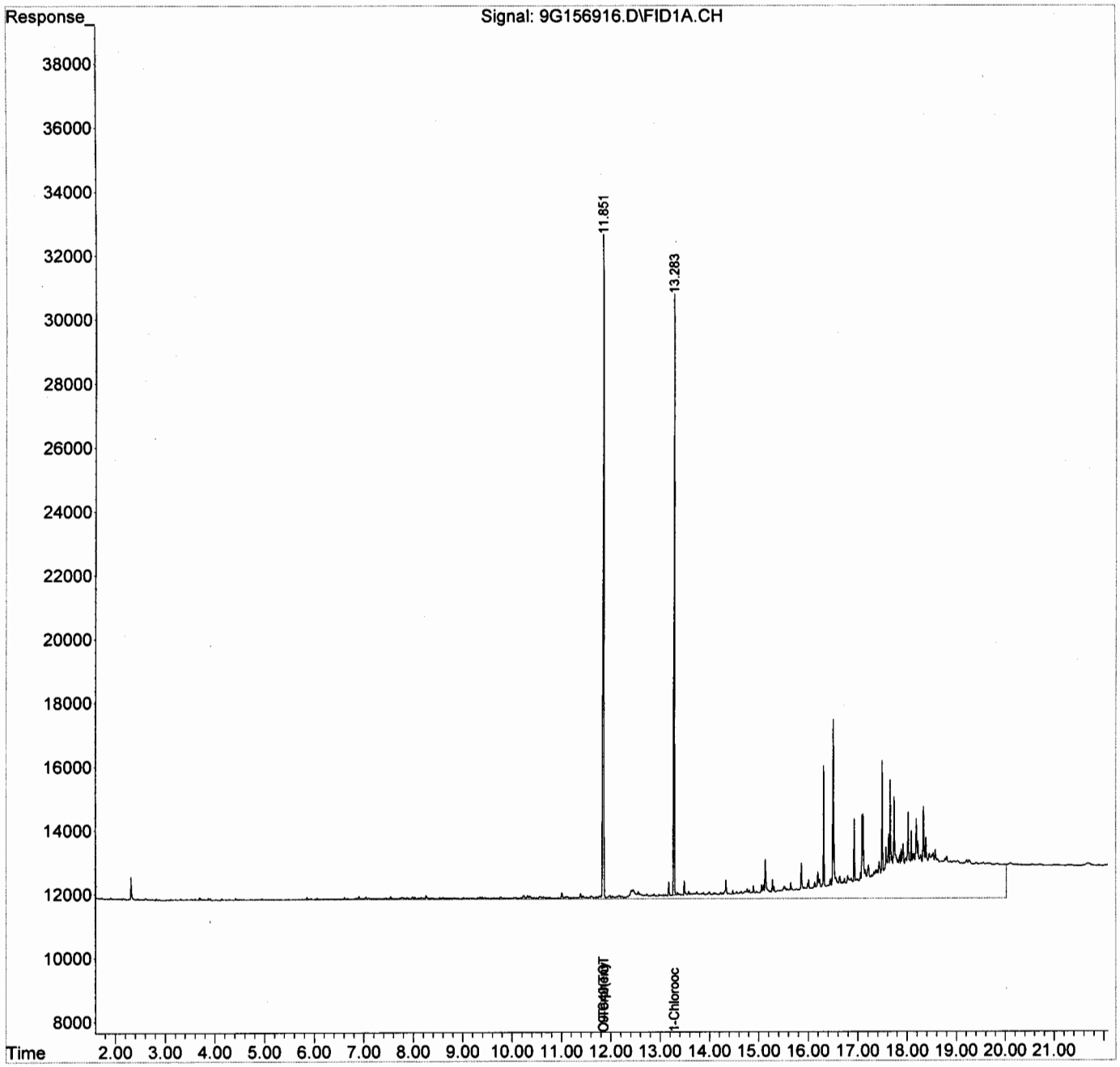
N

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-26-13\
Data File : 9G156916.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 03:57:28
Operator : KD/RAK/ABM
Sample : AC74177-006
Misc : S.TPH
ALS Vial : 27 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 11:53:11 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



EPH Category 2 Data
QC Summary

FORM2

Surrogate Recovery

Method: NJEPHRev3B

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column0 S3 Recov	Column0 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
8G42616.D	SMB25935	Soil	08/19/13 16:55	1		94	94				
8G42766.D	SMB25991	Soil	08/26/13 14:17	1		68	76				
9G156910.D	AC74177-002	Soil	08/27/13 00:01	1		89	89				
9G156915.D	AC74177-004	Soil	08/27/13 03:28	1		88	85				
9G156916.D	AC74177-006	Soil	08/27/13 03:57	1		87	80				
8G42620.D	SMB25935(M	Soil	08/19/13 18:56	1		110	115				
8G42621.D	SMB25935(M	Soil	08/19/13 19:26	1		90	94				
8G42622.D	AC73985-007(	Soil	08/19/13 19:56	1		74	78				
8G42623.D	AC73985-007(	Soil	08/19/13 20:26	1		70	71				
8G42624.D	AC73985-007	Soil	08/19/13 20:57	1		76	76				
8G42770.D	SMB25991(M	Soil	08/26/13 17:55	1		117	122				

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: NJEPHRev3B

Soil Limits

Compound	Spike Amt	Limits
S1=O-Terphenyl	100	40-140
S2=1-Chlorooctadecane	100	40-140

Form3
Recovery Data
QC Batch: SMB25935

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42620.D	SMB25935(MS)	8/19/2013 6:56:24 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42614.D	INST BLK(MECL2)	8/19/2013 3:35:29 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	75.26	0	100	75	25	140
n-Decane (C10)	1	89.49	0	100	89	40	140
n-Dodecane (C12)	1	99.37	0	100	99	40	140
n-Tetradecane (C14)	1	105.91	0	100	106	40	140
n-Hexadecane (C16)	1	111.69	0	100	112	40	140
n-Octadecane (C18)	1	107.97	0	100	108	40	140
n-Eicosane (C20)	1	106.12	0	100	106	40	140
n-Heneicosane (C21)	1	104.51	0	100	105	40	140
n-Docosane (C22)	1	105.65	0	100	106	40	140
n-Tetracosane (C24)	1	104.07	0	100	104	40	140
n-Hexacosane (C26)	1	107.88	0	100	108	40	140
n-Octacosane (C28)	1	105.25	0	100	105	40	140
n-Triacontane (C30)	1	103.87	0	100	104	40	140
n-Dotriacontane(C32)	1	103.05	0	100	103	40	140
n-Tetratriacontane (C34)	1	99.72	0	100	100	40	140
n-Hexatriacontane (C36)	1	100.66	0	100	101	40	140
n-Octatriacontane (C38)	1	101.11	0	100	101	40	140
n-Tetracontane (C40)	1	104.23	0	100	104	40	140

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42621.D	SMB25935(MSD)	8/19/2013 7:26:35 PM
Non Spike(If applicable):			
Inst Blank(If applicable):	8G42614.D	INST BLK(MECL2)	8/19/2013 3:35:29 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	67.2	0	100	67	25	140
n-Decane (C10)	1	80.5	0	100	80	40	140
n-Dodecane (C12)	1	87.64	0	100	88	40	140
n-Tetradecane (C14)	1	92.47	0	100	92	40	140
n-Hexadecane (C16)	1	98.22	0	100	98	40	140
n-Octadecane (C18)	1	94.08	0	100	94	40	140
n-Eicosane (C20)	1	92.55	0	100	93	40	140
n-Heneicosane (C21)	1	90.85	0	100	91	40	140
n-Docosane (C22)	1	91.35	0	100	91	40	140
n-Tetracosane (C24)	1	89.39	0	100	89	40	140
n-Hexacosane (C26)	1	93.38	0	100	93	40	140
n-Octacosane (C28)	1	90.78	0	100	91	40	140
n-Triacontane (C30)	1	89.15	0	100	89	40	140
n-Dotriacontane(C32)	1	88.62	0	100	89	40	140
n-Tetratriacontane (C34)	1	86.04	0	100	86	40	140
n-Hexatriacontane (C36)	1	87.18	0	100	87	40	140
n-Octatriacontane (C38)	1	88.83	0	100	89	40	140
n-Tetracontane (C40)	1	93.13	0	100	93	40	140

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA
QC Batch: SMB25935

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42621.D	SMB25935(MSD)	8/19/2013 7:26:35 PM
Duplicate(If applicable):	8G42620.D	SMB25935(MS)	8/19/2013 6:56:24 PM
Inst Blank(If applicable):	8G42614.D	INST BLK(MECL2)	8/19/2013 3:35:29 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Nonane (C9)	1	67.2	75.26	11	25
n-Decane (C10)	1	80.5	89.49	11	25
n-Dodecane (C12)	1	87.64	99.37	13	25
n-Tetradecane (C14)	1	92.47	105.91	14	25
n-Hexadecane (C16)	1	98.22	111.69	13	25
n-Octadecane (C18)	1	94.08	107.97	14	25
n-Eicosane (C20)	1	92.55	106.12	14	25
n-Heneicosane (C21)	1	90.85	104.51	14	25
n-Docosane (C22)	1	91.35	105.65	15	25
n-Tetracosane (C24)	1	89.39	104.07	15	25
n-Hexacosane (C26)	1	93.38	107.88	14	25
n-Octacosane (C28)	1	90.78	105.25	15	25
n-Triacontane (C30)	1	89.15	103.87	15	25
n-Dotriacontane(C32)	1	88.62	103.05	15	25
n-Tetratriacontane (C34)	1	86.04	99.72	15	25
n-Hexatriacontane (C36)	1	87.18	100.66	14	25
n-Octatriacontane (C38)	1	88.83	101.11	13	25
n-Tetracontane (C40)	1	93.13	104.23	11	25

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Form3
Recovery Data
QC Batch: SMB25991

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42770.D	SMB25991(MS)	8/26/2013 5:55:50 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	66.19	0	100	66	25	140
n-Decane (C10)	1	83.05	0	100	83	40	140
n-Dodecane (C12)	1	95.77	0	100	96	40	140
n-Tetradecane (C14)	1	102.07	0	100	102	40	140
n-Hexadecane (C16)	1	106.75	0	100	107	40	140
n-Octadecane (C18)	1	105.92	0	100	106	40	140
n-Eicosane (C20)	1	101.72	0	100	102	40	140
n-Heneicosane (C21)	1	99.47	0	100	99	40	140
n-Docosane (C22)	1	101.34	0	100	101	40	140
n-Tetracosane (C24)	1	99.52	0	100	100	40	140
n-Hexacosane (C26)	1	100.6	0	100	101	40	140
n-Octacosane (C28)	1	97.54	0	100	98	40	140
n-Triacontane (C30)	1	93.97	0	100	94	40	140
n-Dotriacontane(C32)	1	92.15	0	100	92	40	140
n-Tetratriacontane (C34)	1	87.79	0	100	88	40	140
n-Hexatriacontane (C36)	1	88.18	0	100	88	40	140
n-Octatriacontane (C38)	1	88.8	0	100	89	40	140
n-Tetracontane (C40)	1	92.54	0	100	93	40	140

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB25935

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42622.D	AC73985-007(MS)	8/19/2013 7:56:50 PM
Non Spike(If applicable):	8G42624.D	AC73985-007	8/19/2013 8:57:08 PM
Inst Blank(If applicable):	8G42614.D	INST BLK(MECL2)	8/19/2013 3:35:29 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Nonane (C9)	1	52.42	0	100	52	25	140
n-Decane (C10)	1	66.16	0	100	66	40	140
n-Dodecane (C12)	1	74.93	0	100	75	40	140
n-Tetradecane (C14)	1	80.76	0	100	81	40	140
n-Hexadecane (C16)	1	87.14	0	100	87	40	140
n-Octadecane (C18)	1	83.81	0	100	84	40	140
n-Eicosane (C20)	1	83.07	0	100	83	40	140
n-Heneicosane (C21)	1	81.23	0	100	81	40	140
n-Docosane (C22)	1	82.5	0	100	82	40	140
n-Tetracosane (C24)	1	81.18	0	100	81	40	140
n-Hexacosane (C26)	1	84.77	0	100	85	40	140
n-Octacosane (C28)	1	82.28	0	100	82	40	140
n-Triacontane (C30)	1	81.41	0	100	81	40	140
n-Dotriacontane(C32)	1	80.89	0	100	81	40	140
n-Tetratriacontane (C34)	1	78.2	0	100	78	40	140
n-Hexatriacontane (C36)	1	79.04	0	100	79	40	140
n-Octatriacontane (C38)	1	80.01	0	100	80	40	140
n-Tetracontane (C40)	1	83.41	0	100	83	40	140

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA
QC Batch: SMB25935

	Data File	Sample ID:	Analysis Date
Spike or Dup:	8G42623.D	AC73985-007(DUP)	8/19/2013 8:26:57 PM
Duplicate(If applicable):	8G42624.D	AC73985-007	8/19/2013 8:57:08 PM
Inst Blank(If applicable):	8G42614.D	INST BLK(MECL2)	8/19/2013 3:35:29 PM

Method: NJ EPH Rev 3 Matrix: Soil QC Type: DUP

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
C9-C28	1	0	0	NA	50
>C28-C40	1	0	0	NA	50
C9-C40	1	0	0	NA	50

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: SMB25935
Blank Data File: 8G42616.D
Matrix: Soil

Blank Analysis Date: 08/19/13 16:55
Blank Extraction Date: 08/19/13
(If Applicable)
Method: NJEPHRev3B

Sample Number	Data File	Analysis Date
AC73985-007	8G42624.D	08/19/13 20:57
AC73985-007(DUP	8G42623.D	08/19/13 20:26
AC73985-007(MS)	8G42622.D	08/19/13 19:56
SMB25935(MSD)	8G42621.D	08/19/13 19:26
SMB25935(MS)	8G42620.D	08/19/13 18:56

FORM 4
Blank Summary

Blank Number: SMB25991
Blank Data File: 8G42766.D
Matrix: Soil

Blank Analysis Date: 08/26/13 14:17
Blank Extraction Date: 08/26/13
(If Applicable)
Method: NJEPHRev3B

Sample Number	Data File	Analysis Date
AC74177-002	9G156910.D	08/27/13 00:01
AC74177-004	9G156915.D	08/27/13 03:28
AC74177-006	9G156916.D	08/27/13 03:57
SMB25991(MS)	8G42770.D	08/26/13 17:55

Form 5

Method: NJEPHRev3B

Instrument: GC_8 Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8G42603.D	INST BLK(MECL2)	08/19/13 08:39	Soil					
8G42604.D	CALDTH AL@100PPM	08/19/13 09:42	Soil	8G42604.	12.3785	0		
8G42605.D	CALDTH AL@500PPM	08/19/13 10:12	Soil	8G42604.	12.3944	0.1284		
8G42606.D	CALDTH AL@300PPM	08/19/13 10:42	Soil	8G42604.	12.3865	0.0646		
8G42607.D	CALDTH AL@200PPM	08/19/13 11:12	Soil	8G42604.	12.3819	0.0275		
8G42608.D	CALDTH AL@100PPM	08/19/13 11:42	Soil	8G42604.	12.3798	0.0105		
8G42609.D	CALDTH AL@50PPM	08/19/13 12:12	Soil	8G42604.	12.3742	0.0347		
8G42610.D	CALDTH AL@10PPM	08/19/13 12:43	Soil	8G42604.	12.3724	0.0493		
8G42611.D	CALDTH AL@10PPM	08/19/13 13:27	Soil	8G42604.	12.3755	0.0242		
8G42612.D	100PPM	08/19/13 14:20	Soil	8G42604.	12.3831	0.0372		
8G42613.D	ICV	08/19/13 15:05	Soil	8G42604.	12.3787	0.0016		
8G42614.D	INST BLK(MECL2)	08/19/13 15:35	Soil	8G42604.	0.0000	200*		
8G42615.D	SMB25934	08/19/13 16:25	Soil	8G42604.	12.3793	0.0065		
8G42616.D	SMB25935	08/19/13 16:55	Soil	8G42604.	12.3760	0.0202		
8G42617.D	SMB25928(MS)	08/19/13 17:25	Soil	8G42604.	12.3756	0.0234		
8G42618.D	SMB25934(MS)	08/19/13 17:55	Soil	8G42604.	12.3769	0.0129		
8G42619.D	SMB25934(MSD)	08/19/13 18:26	Soil	8G42604.	12.3759	0.021		
8G42620.D	SMB25935(MS)	08/19/13 18:56	Soil	8G42604.	12.3770	0.0121		
8G42621.D	SMB25935(MSD)	08/19/13 19:26	Soil	8G42604.	12.3761	0.0194		
8G42622.D	AC73985-007(MS)	08/19/13 19:56	Soil	8G42604.	12.3746	0.0315		
8G42623.D	AC73985-007(DUP)	08/19/13 20:26	Soil	8G42604.	12.3744	0.0331		
8G42624.D	AC73985-007	08/19/13 20:57	Soil	8G42604.	12.3746	0.0315		
8G42625.D	AC74046-001(DUP)	08/19/13 21:27	Soil	8G42604.	12.3739	0.0372		
8G42626.D	AC74046-001	08/19/13 21:57	Soil	8G42604.	12.3760	0.0202		
8G42627.D	AC74046-001(MS)	08/19/13 22:27	Soil	8G42604.	12.3730	0.0444		
8G42628.D	AC73985-009	08/19/13 22:57	Soil	8G42604.	12.3732	0.0428		
8G42629.D	AC73985-010	08/19/13 23:27	Soil	8G42604.	12.3722	0.0509		
8G42630.D	AC73985-008	08/19/13 23:57	Soil	8G42604.	12.3736	0.0396		
8G42631.D	AC73985-012	08/20/13 00:26	Soil	8G42604.	12.3732	0.0428		
8G42632.D	AC73985-011(10X)	08/20/13 00:56	Soil	8G42604.	12.3697	0.0711		
8G42633.D	TEST	08/20/13 01:26	Soil	8G42604.	0.0000	200*		
8G42634.D	CALDTH AL@100PPM	08/20/13 01:56	Soil	8G42604.	12.3740	0.0364		
8G42635.D	CALDTH AL@100PPM	08/20/13 02:26	Soil	8G42604.	12.3737	0.0388		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: NJEPHRev3B

Instrument: GC_9

Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
9G156776.D	INST BLK(MECL2)	08/21/13 09:27	Soil					
9G156777.D	CALDTH AL@100PPM	08/21/13 09:56	Soil		11.8733	0		
9G156778.D	CALDTH AL@500PPM	08/21/13 10:26	Soil	9G15678	11.8952	0		
9G156779.D	CALDTH AL@300PPM	08/21/13 10:55	Soil	9G15678	11.8838	0.1019		
9G156780.D	CALDTH AL@200PPM	08/21/13 11:25	Soil	9G15678	11.8790	0.0615		
9G156781.D	CALDTH AL@100PPM	08/21/13 11:55	Soil	9G15678	11.8717	0		
9G156782.D	CALDTH AL@50PPM	08/21/13 12:25	Soil	9G15678	11.8683	0.0286		
9G156783.D	10PPM	08/21/13 12:54	Soil	9G15678	11.8658	0.0497		
9G156784.D	CALDTH AL@10PPM	08/21/13 13:35	Soil	9G15678	11.8682	0.0295		
9G156785.D	ICV	08/21/13 14:50	Soil	9G15678	11.8747	0.0253		
9G156786.D	INST BLK(MECL2)	08/21/13 15:23	Soil	9G15678	0.0000	200*		
9G156787.D	TEST	08/21/13 16:01	Soil	9G15678	0.0000	200*		
9G156788.D	AC74049-004	08/21/13 16:36	Soil	9G15678	11.8730	0.0109		
9G156789.D	AC74049-001	08/21/13 17:06	Soil	9G15678	11.8701	0.0135		
9G156790.D	AC74013-001	08/21/13 17:36	Soil	9G15678	11.8689	0.0236		
9G156791.D	AC74013-002	08/21/13 18:06	Soil	9G15678	11.8693	0.0202		
9G156792.D	AC74013-003	08/21/13 18:36	Soil	9G15678	11.8699	0.0152		
9G156793.D	AC74014-001	08/21/13 19:06	Soil	9G15678	11.8683	0.0286		
9G156794.D	AC74014-002	08/21/13 19:36	Soil	9G15678	11.8679	0.032		
9G156795.D	AC74014-003	08/21/13 20:06	Soil	9G15678	11.8684	0.0278		
9G156796.D	AC74015-001	08/21/13 20:36	Soil	9G15678	11.8684	0.0278		
9G156797.D	AC74064-001	08/21/13 21:06	Soil	9G15678	11.8737	0.0168		
9G156798.D	AC74064-002	08/21/13 21:35	Soil	9G15678	11.8710	0.0059		
9G156799.D	AC74064-003	08/21/13 22:05	Soil	9G15678	11.8668	0.0413		
9G156800.D	TEST	08/21/13 22:35	Soil	9G15678	0.0000	200*		
9G156801.D	CALDTH AL@100PPM	08/21/13 23:04	Soil	9G15678	11.8701	0.0135		
9G156802.D	100PPM	08/21/13 23:34	Soil	9G15680	11.8713	0.0101		

Drift Compound: O-Terphenyl

Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph)

* - Values outside of limits for this column/run

Form 5

Method: NJEPHRev3B

Instrument: GC_8 Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
8G42760.D	INST BLK(MEL2)	08/26/13 08:44	Soil					
8G42761.D	CALDTH AL@100PPM	08/26/13 09:14	Soil	8G42761.	12.3415	0		
8G42762.D	INST BLK(MEL2)	08/26/13 10:05	Soil	8G42761.	0.0000	200*		
8G42763.D	74106-001	08/26/13 12:18	Soil	8G42761.	12.3429	0.0113		
8G42764.D	MBS25983	08/26/13 13:17	Soil	8G42761.	12.3423	0.0065		
8G42765.D	SMB25983(MSD)	08/26/13 13:47	Soil	8G42761.	12.3414	0.0008		
8G42766.D	SMB25991	08/26/13 14:17	Soil	8G42761.	12.3395	0.0162		
8G42767.D	CALDTH AL@100PPM	08/26/13 14:47	Soil	8G42761.	12.3406	0.0073		
8G42768.D	INST BLK(MECL2)	08/26/13 16:54	Soil	8G42767.	0.0000	200*		
8G42769.D	SMB25983(MS)	08/26/13 17:25	Soil	8G42767.	12.3391	0.0122		
8G42770.D	SMB25991(MS)	08/26/13 17:55	Soil	8G42767.	12.3405	0.0008		
8G42771.D	AC74140-001(MS)	08/26/13 18:26	Soil	8G42767.	12.3398	0.0065		
8G42772.D	AC74140-001(DUP)	08/26/13 18:56	Soil	8G42767.	12.3393	0.0105		
8G42773.D	AC74140-001	08/26/13 19:27	Soil	8G42767.	12.3393	0.0105		
8G42774.D	TEST	08/26/13 19:57	Soil	8G42767.	0.0000	200*		
8G42775.D	TEST	08/26/13 21:28	Soil	8G42767.	0.0000	200*		
8G42776.D	CALDTH AL@100PPM	08/26/13 21:58	Soil	8G42767.	12.3395	0.0089		
8G42777.D	CALDTH AL@100PPM	08/26/13 22:29	Soil	8G42776.	12.3393	0.0016		
8G42778.D	INST BLK(MECL2)	08/26/13 22:59	Soil	8G42776.	0.0000	200*		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: NJEPHRev3B

Instrument: GC_9 Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
9G156884.D	INST BLK(MECL2)	08/26/13 08:52	Soil					
9G156885.D	CALDTH AL@1OOPPM	08/26/13 09:22	Soil	9G15688	11.8557	0		
9G156886.D	INST BLK(MECL2)	08/26/13 10:09	Soil	9G15688	0.0000	200*		
9G156887.D	AC74128-004(3X)	08/26/13 11:14	Soil	9G15688	11.8549	0.0067		
9G156888.D	AC74086-018(5X)	08/26/13 11:44	Soil	9G15688	11.8518	0.0329		
9G156889.D	AC74112-001(5X)	08/26/13 12:14	Soil	9G15688	11.8491	0.0557		
9G156890.D	AC74114-004(3X)	08/26/13 12:44	Soil	9G15688	11.8505	0.0439		
9G156891.D	CALDTH AL@100PPM	08/26/13 13:13	Soil	9G15688	11.8546	0.0093		
9G156892.D	INST BLK(MECL2)	08/26/13 13:46	Soil	9G15689	0.0000	200*		
9G156893.D	SMB25992	08/26/13 15:28	Soil	9G15689	11.8577	0.0262		
9G156894.D	MBS25992	08/26/13 15:57	Soil	9G15689	11.8499	0.0397		
9G156895.D	SMB25992(DIESEL)(MS	08/26/13 16:27	Soil	9G15689	11.8551	0.0042		
9G156896.D	AC74140-002	08/26/13 17:04	Soil	9G15689	11.8546	0		
9G156897.D	AC74140-003	08/26/13 17:34	Soil	9G15689	11.8531	0.0127		
9G156898.D	AC74140-004	08/26/13 18:04	Soil	9G15689	11.8521	0.0211		
9G156899.D	AC74140-005	08/26/13 18:34	Soil	9G15689	11.8491	0.0464		
9G156900.D	AC74162-001	08/26/13 19:04	Soil	9G15689	11.8517	0.0245		
9G156901.D	AC74162-002	08/26/13 19:33	Soil	9G15689	11.8515	0.0262		
9G156902.D	AC74162-003	08/26/13 20:03	Soil	9G15689	11.8523	0.0194		
9G156903.D	AC74162-004	08/26/13 20:33	Soil	9G15689	11.8530	0.0135		
9G156904.D	AC74147-005	08/26/13 21:03	Soil	9G15689	11.8511	0.0295		
9G156905.D	AC74147-003	08/26/13 21:33	Soil	9G15689	11.8516	0.0253		
9G156906.D	AC74147-004	08/26/13 22:03	Soil	9G15689	11.8524	0.0186		
9G156907.D	AC74147-001	08/26/13 22:32	Soil	9G15689	11.8518	0.0236		
9G156908.D	AC74093-001	08/26/13 23:02	Soil	9G15689	11.8517	0.0245		
9G156909.D	AC74093-002	08/26/13 23:31	Soil	9G15689	11.8493	0.0447		
9G156910.D	AC74177-002	08/27/13 00:01	Soil	9G15689	11.8530	0.0135		
9G156911.D	TEST	08/27/13 00:31	Soil	9G15689	0.0000	200*		
9G156912.D	CALDTH AL@100PPM	08/27/13 01:00	Soil	9G15689	11.8538	0.0067		
9G156913.D	100PPM	08/27/13 01:59	Soil	9G15691	11.8548	0.0084		
9G156914.D	INST BLK(MECL2)	08/27/13 02:58	Soil	9G15691	0.0000	200*		
9G156915.D	AC74177-004	08/27/13 03:28	Soil	9G15691	11.8510	0.0236		
9G156916.D	AC74177-006	08/27/13 03:57	Soil	9G15691	11.8510	0.0236		
9G156917.D	AC74113-007	08/27/13 04:26	Soil	9G15691	11.8518	0.0169		
9G156918.D	AC74147-002	08/27/13 04:56	Soil	9G15691	11.8591	0.0447		
9G156919.D	AC74048-001(5X)	08/27/13 05:25	Soil	9G15691	11.8482	0.0473		
9G156920.D	TEST	08/27/13 05:55	Soil	9G15691	0.0000	200*		
9G156921.D	CALDTH AL@100PPM	08/27/13 06:24	Soil	9G15691	11.8533	0.0042		
9G156922.D	100PPM	08/27/13 06:54	Soil	9G15692	11.8547	0.0118		

Drift Compound: O-Terphenyl Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form8

EPH Surrogate Initial Calibration Areas And Area Recovery Limits

Inital Calibration File: 8G42604.D
Analysis Date: 8/19/2013 9:42:08 AM
Analytical Method: NJEPHRev3B

Surrogate	Area Found	Area Limit
1-Chlorooctadecane	233361	116680-466722
O-Terphenyl	307130	153565-614260

Continuing Calibration Data

Data File	TxtSamNum:	Analysis Date	Surrogate: 1-Chlorooctadecane	Surrogate O-Terphenyl
8G42634.D	CALDTH AL@100PPM	8/20/13 01:56	206760	272304
8G42761.D	CALDTH AL@100PPM	8/26/13 09:14	237758	315720
8G42767.D	CALDTH AL@100PPM	8/26/13 14:47	235293	310080
8G42776.D	CALDTH AL@100PPM	8/26/13 21:58	264338	346701

* - Indicates Area Failed Criteria

Form8

EPH Surrogate Initial Calibration Areas And Area Recovery Limits

Inital Calibration File: 9G156781.D
Analysis Date: 8/21/2013 11:55:20 AM
Analytical Method: NJEPHRev3B

Surrogate	Area Found	Area Limit
1-Chlorooctadecane	247274	123637-494548
O-Terphenyl	315267	157634-630534

Continuing Calibration Data

Data File	TxtSamNum:	Analysis Date	Surrogate: 1-Chlorooctadecane	Surrogate O-Terphenyl
9G156891.D	CALDTH AL@100PPM	8/26/13 13:13	229058	298472
9G156912.D	CALDTH AL@100PPM	8/27/13 01:00	265210	342729
9G156921.D	CALDTH AL@100PPM	8/27/13 06:24	262265	338564

* - Indicates Area Failed Criteria

EPH Category 2 Data
Standards Data

3082313 0457

Form 6
Initial Calibration

Method: NJEPHRev3B

Instrument: GC_8

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	8G42604.D	CALDTH AL@100PP	08/19/13 09:42	2	8G42611.D	CALDTH AL@10PPM	08/19/13 13:27
3	8G42609.D	CALDTH AL@50PPM	08/19/13 12:12	4	8G42607.D	CALDTH AL@200PP	08/19/13 11:12
5	8G42606.D	CALDTH AL@300PP	08/19/13 10:42	6	8G42605.D	CALDTH AL@500PP	08/19/13 10:12

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
n-Nonane (C9)	1	0	Avg	0.2526	0.2111	0.2287	0.2383	0.2603	0.2870	---	---	0.246	3.26	0.994	1.00	11	100.0	10.00	50.00	200.0	300.0	500.0		
n-Decane (C10)	1	0	Avg	0.2599	0.1997	0.2226	0.2409	0.2627	0.2857	---	---	0.245	4.31	0.996	0.999	13	100.0	10.00	50.00	200.0	300.0	500.0		
Naphthalene	1	0	Avg	0.2949	0.2284	0.2689	0.2713	0.2936	0.3147	---	---	0.279	6.28	0.997	0.999	11	100.0	10.00	50.00	200.0	300.0	500.0		
n-Dodecane (C12)	1	0	Avg	0.2643	0.2164	0.2433	0.2396	0.2622	0.2786	---	---	0.251	6.35	0.997	0.999	8.8	100.0	10.00	50.00	200.0	300.0	500.0		
2-Methylnaphthalene	1	0	Avg	0.2966	0.2242	0.2668	0.2705	0.2934	0.3126	---	---	0.277	7.33	0.997	0.999	11	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetradecane (C14)	1	0	Avg	0.2591	0.1820	0.2370	0.2381	0.2553	0.2697	---	---	0.240	8.17	0.998	0.999	13	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexadecane (C16)	1	0	Avg	0.2625	0.1524	0.2315	0.2352	0.2481	0.2586	---	---	0.231	9.84	0.998	0.999	18	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octadecane (C18)	1	0	Avg	0.2613	0.1488	0.2435	0.2336	0.2424	0.2490	---	---	0.230	11.59	0.999	0.999	18	100.0	10.00	50.00	200.0	300.0	500.0		
n-Eicosane (C20)	1	0	Avg	0.2568	0.2237	0.2416	0.2309	0.2354	0.2388	---	---	0.238	13.15	0.999	0.999	4.7	100.0	10.00	50.00	200.0	300.0	500.0		
n-Heneicosane (C21)	1	0	Avg	0.2588	0.2456	0.2489	0.2327	0.2353	0.2375	---	---	0.243	13.73	0.999	0.999	4.1	100.0	10.00	50.00	200.0	300.0	500.0		
n-Docosane (C22)	1	0	Avg	0.2558	0.2268	0.2460	0.2311	0.2322	0.2333	---	---	0.238	14.24	1.00	1.00	4.6	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetracosane (C24)	1	0	Avg	0.2526	0.2311	0.2468	0.2317	0.2303	0.2281	---	---	0.237	15.11	1.00	1.00	4.3	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexacosane (C26)	1	0	Avg	0.2430	0.2263	0.2414	0.2263	0.2228	0.2180	---	---	0.230	15.85	0.999	1.00	4.5	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octacosane (C28)	1	0	Avg	0.2348	0.2322	0.2409	0.2254	0.2193	0.2128	---	---	0.228	16.52	0.999	1.00	4.6	100.0	10.00	50.00	200.0	300.0	500.0		
n-Triacontane (C30)	1	0	Avg	0.2321	0.2321	0.2428	0.2265	0.2195	0.2136	---	---	0.228	17.13	0.999	1.00	4.5	100.0	10.00	50.00	200.0	300.0	500.0		
n-Dotriacontane(C32)	1	0	Avg	0.2238	0.2270	0.2413	0.2238	0.2174	0.2138	---	---	0.225	17.70	1.00	1.00	4.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetratriacontane (C34)	1	0	Avg	0.2186	0.2271	0.2387	0.2222	0.2174	0.2159	---	---	0.223	18.26	1.00	1.00	3.8	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexatriacontane (C36)	1	0	Avg	0.2125	0.2291	0.2323	0.2174	0.2143	0.2141	---	---	0.220	18.85	1.00	1.00	3.9	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octatriacontane (C38)	1	0	Avg	0.2078	0.2123	0.2251	0.2135	0.2112	0.2127	---	---	0.214	19.61	1.00	1.00	2.8	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetracontane (C40)	1	0	Avg	0.2067	0.1845	0.2208	0.2113	0.2103	0.2131	---	---	0.208	20.60	1.00	1.00	5.9	100.0	10.00	50.00	200.0	300.0	500.0		
O-Terphenyl	1	0	Avg	0.3071	0.2852	0.2922	0.2765	0.2860	0.2932	---	---	0.290	12.38	0.999	0.999	3.5	100.0	10.00	50.00	200.0	300.0	500.0		
1-Chlorooctadecane	1	0	Avg	0.2333	0.1991	0.2248	0.2106	0.2132	0.2162	---	---	0.216	13.67	0.999	0.999	5.5	100.0	10.00	50.00	200.0	300.0	500.0		
C9-C28(Total)	1	0	Avg	0.2551	0.2080	0.2394	0.2336	0.2422	0.2498	---	---	0.238	3.26	0.999	1.00	7.0	1200.	120.0	600.0	2400.	3600.	6000.		
>C28-C40(Total)	1	0	Avg	0.2169	0.2187	0.2335	0.2191	0.2150	0.2139	---	---	0.220	16.62	1.00	1.00	3.3	600.0	60.00	300.0	1200.	1800.	3000.		
C9-C40(TOTAL)	1	0	Avg	0.2424	0.2116	0.2374	0.2288	0.2331	0.2378	---	---	0.232	3.26	1.00	1.00	4.7	1800.	180.0	900.0	3600.	5400.	9000.		

Avg Rsd Col 1: 7.424 Avg Rsd Col 2: -1

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42604.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 09:42:08
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 19 11:06:15 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.379	307130	91.123		
22)S	1-Chlorooctadecane	13.668	233361	90.940		m
Target Compounds						
1)AT	n-Nonane (C9)	3.256	252676	95.970		
2)AT	n-Decane (C10)	4.309	259931	96.617		
3)	Naphthalene	6.277	294904	94.761		m
4)AT	n-Dodecane (C12)	6.346	264333	96.917		
5)	2-Methylnaphthalene	7.329	296672	97.157		
6)AT	n-Tetradecane (C14)	8.172	259145	94.864		
7)AT	n-Hexadecane (C16)	9.842	262546	96.178		
8)AT	n-Octadecane (C18)	11.593f	261395	96.030		
9)AT	n-Eicosane (C20)	13.149	256808	94.329		
10)AT	n-Heneicosane (C21)	13.733	258796	94.566		
11)AT	n-Docosane (C22)	14.240	255882	94.255		
12)AT	n-Tetracosane (C24)	15.107	252669	93.900		
13)AT	n-Hexacosane (C26)	15.852	243084	92.369		
14)AT	n-Octacosane (C28)	16.517	234808	90.802		
15)BT	n-Triacontane (C30)	17.128	232171	90.089		
16)BT	n-Dotriacontane(C32)	17.704	223843	88.688		
17)BT	n-Tetratriacontane (C34	18.255	218598	89.788		
18)BT	n-Hexatriacontane (C36)	18.854	212546	88.351		
19)BT	n-Octatriacontane (C38)	19.610	207823	89.459		
20)BT	n-Tetracontane (C40)	20.598	206773	92.010		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

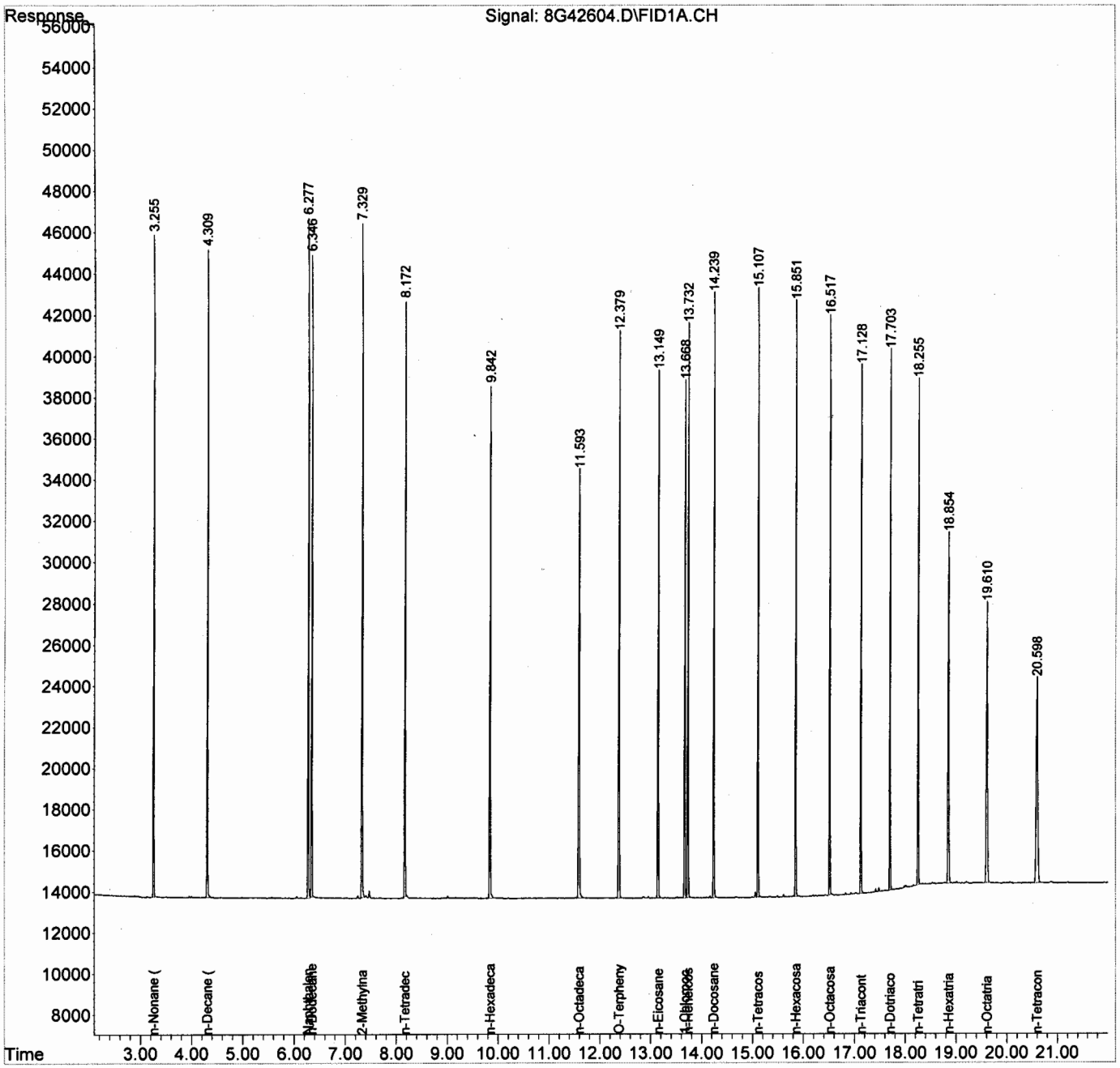
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42604.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 09:42:08
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 19 11:06:15 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42611.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 13:27:50
Operator : KD/RAK/ABM
Sample : CALDTH AL@10PPM
Misc : S.TPH
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 19 13:53:12 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Aug 19 13:21:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.375	28529	9.835		
22)S	1-Chlorooctadecane	13.668	19910	9.022		
Target Compounds						
1)AT	n-Nonane (C9)	3.251	21117	8.599		
2)AT	n-Decane (C10)	4.305	19976	8.212		
3)	Naphthalene	6.274	22846	8.180		
4)AT	n-Dodecane (C12)	6.343	21643	8.664		
5)	2-Methylnaphthalene	7.327	22426	8.147		
6)AT	n-Tetradecane (C14)	8.170	18201	7.712		
7)AT	n-Hexadecane (C16)	9.841	15243	6.617		
8)AT	n-Octadecane (C18)	11.592	14882	6.623		
9)AT	n-Eicosane (C20)	13.149	22377	9.370		
10)AT	n-Heneicosane (C21)	13.732	24567	10.103		
11)AT	n-Docosane (C22)	14.239	22688	9.559		
12)AT	n-Tetracosane (C24)	15.107	23113	9.760		
13)AT	n-Hexacosane (C26)	15.851	22630	9.836		
14)AT	n-Octacosane (C28)	16.517	23228	10.196		
15)BT	n-Triacontane (C30)	17.136	23215	10.153		
16)BT	n-Dotriacontane(C32)	17.722	22706	10.026		
17)BT	n-Tetratriacontane (C34	18.287	22719	10.123		
18)BT	n-Hexatriacontane (C36)	18.889	22918	10.398		
19)BT	n-Octatriacontane (C38)	19.646	21233	9.846		
20)BT	n-Tetracontane (C40)	20.637	18458	8.700		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

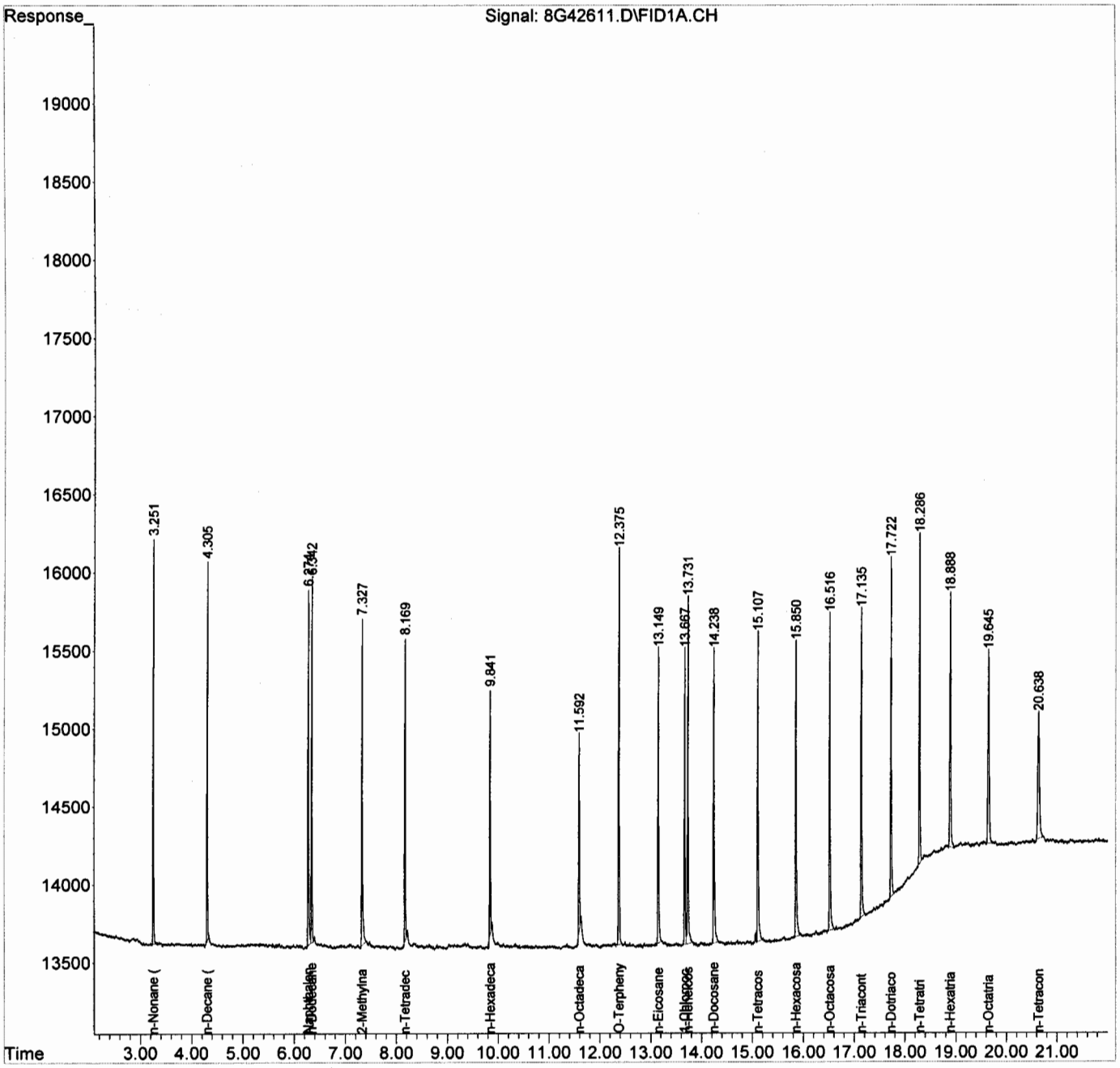
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42611.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 13:27:50
Operator : KD/RAK/ABM
Sample : CALDTH AL@10PPM
Misc : S.TPH
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 19 13:53:12 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Aug 19 13:21:21 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42609.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 12:12:56
Operator : KD/RAK/ABM
Sample : CALDTH AL@50PPM
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 19 13:05:53 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.374	146116	43.352		
22)S	1-Chlorooctadecane	13.665	112424	43.811		m
Target Compounds						
1)AT	n-Nonane (C9)	3.253	114353	43.433		
2)AT	n-Decane (C10)	4.306	111346	41.387		
3)	Naphthalene	6.274	134484	43.214		m
4)AT	n-Dodecane (C12)	6.343	121669	44.610		
5)	2-Methylnaphthalene	7.326	133414	43.692		
6)AT	n-Tetradecane (C14)	8.169	118541	43.394		m
7)AT	n-Hexadecane (C16)	9.839f	115772	42.410		m
8)AT	n-Octadecane (C18)	11.589f	121785	44.741		
9)AT	n-Eicosane (C20)	13.146	120841	44.387		
10)AT	n-Heneicosane (C21)	13.729	124486	45.488		
11)AT	n-Docosane (C22)	14.236	123005	45.309		
12)AT	n-Tetracosane (C24)	15.104	123446	45.877		
13)AT	n-Hexacosane (C26)	15.849	120721	45.872		
14)AT	n-Octacosane (C28)	16.517	120468	46.586		
15)BT	n-Triacontane (C30)	17.140	121418	47.114		
16)BT	n-Dotriacontane(C32)	17.739	120669	47.809		
17)BT	n-Tetratriacontane (C34	18.320	119386	49.037		
18)BT	n-Hexatriacontane (C36)	18.928	116194	48.299		
19)BT	n-Octatriacontane (C38)	19.688	112566	48.455		
20)BT	n-Tetracontane (C40)	20.678	110424	49.137		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

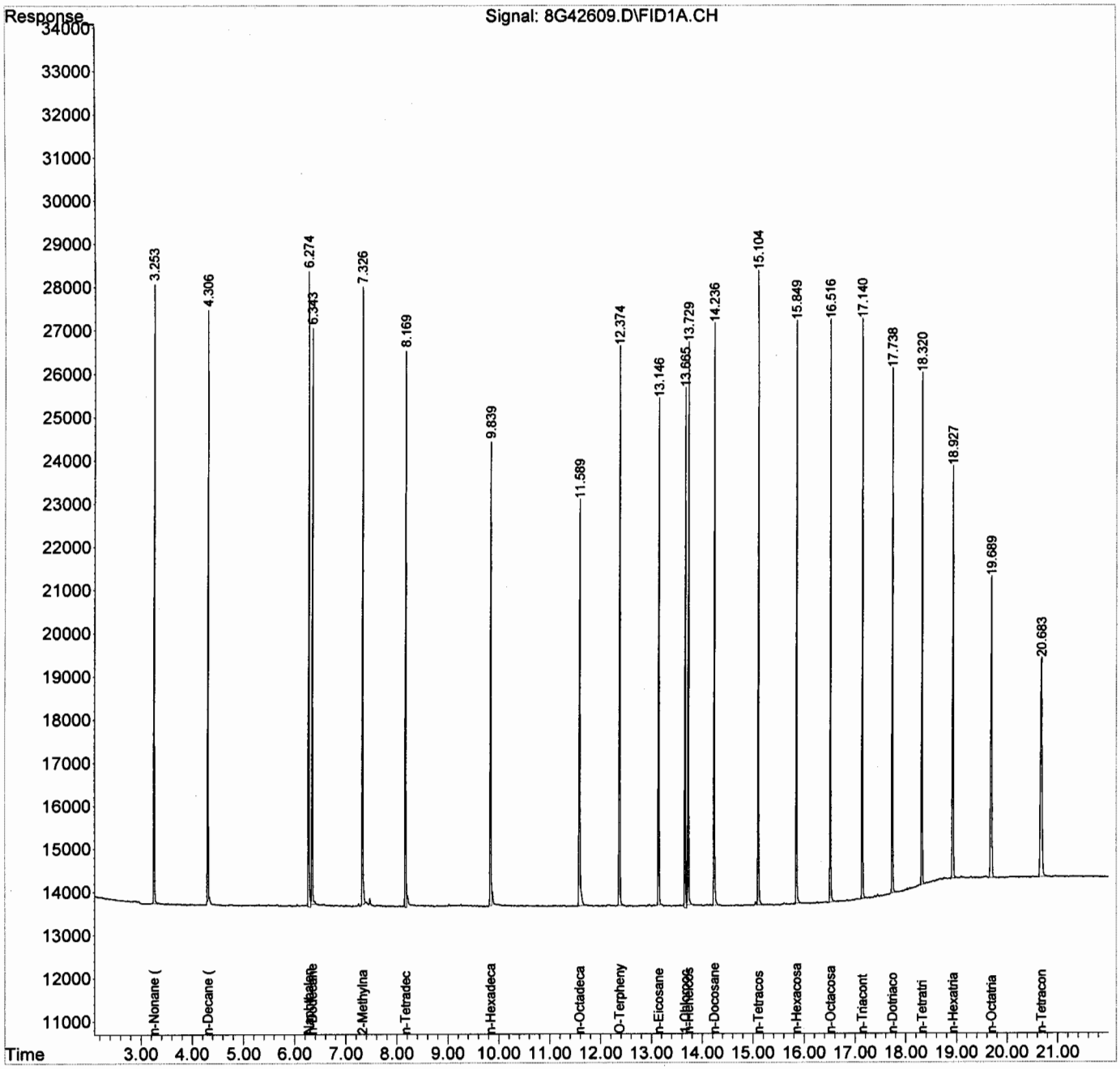
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42609.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 12:12:56
Operator : KD/RAK/ABM
Sample : CALDTH AL@50PPM
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 19 13:05:53 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42607.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 11:12:38
Operator : KD/RAK/ABM
Sample : CALDTH AL@200PPM
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 20 10:40:40 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.382	552997	164.070		
22)S	1-Chlorooctadecane	13.670	421332	164.191		m
	Target Compounds					
1)AT	n-Nonane (C9)	3.256	476641	181.036		
2)AT	n-Decane (C10)	4.310	481956	179.144		
3)	Naphthalene	6.278	542743	174.399		m
4)AT	n-Dodecane (C12)	6.348	479350	175.753		
5)	2-Methylnaphthalene	7.331	541086	177.200		
6)AT	n-Tetradecane (C14)	8.173	476190	174.318		m
7)AT	n-Hexadecane (C16)	9.844	470399	172.320		
8)AT	n-Octadecane (C18)	11.595f	467251	171.657		
9)AT	n-Eicosane (C20)	13.151	461980	169.692		
10)AT	n-Heneicosane (C21)	13.734	465426	170.069		
11)AT	n-Docosane (C22)	14.240	462339	170.303		
12)AT	n-Tetracosane (C24)	15.109	463486	172.247		
13)AT	n-Hexacosane (C26)	15.852	452619	171.989		
14)AT	n-Octacosane (C28)	16.517	450818	174.334		
15)BT	n-Triacontane (C30)	17.128	453057	175.800		
16)BT	n-Dotriacontane(C32)	17.706	447787	177.415		
17)BT	n-Tetratriacontane (C34	18.261	444426	182.545		
18)BT	n-Hexatriacontane (C36)	18.863	434839	180.754		
19)BT	n-Octatriacontane (C38)	19.617	427053	183.827		
20)BT	n-Tetracontane (C40)	20.608	422758	188.120		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

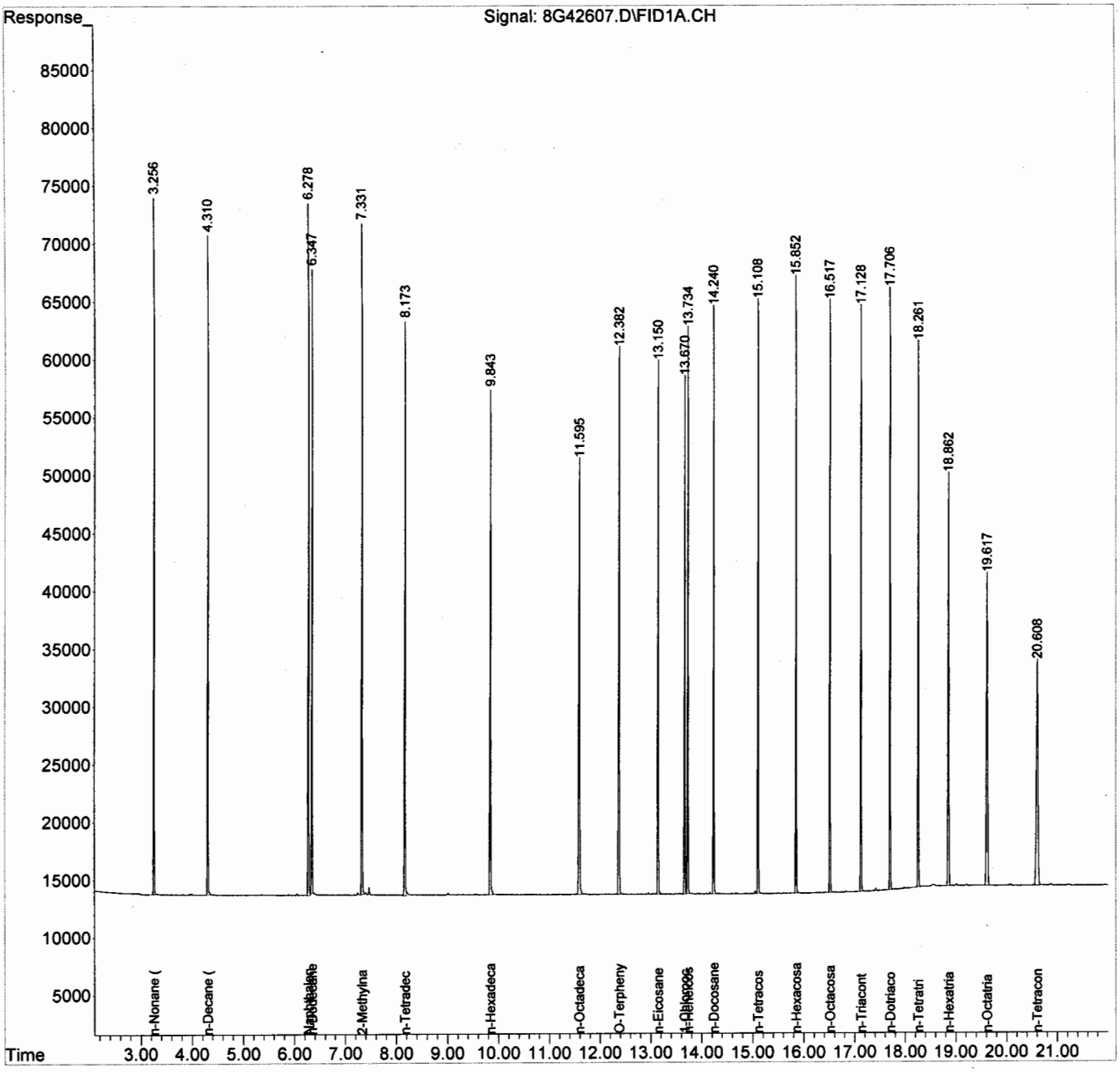
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42607.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 11:12:38
Operator : KD/RAK/ABM
Sample : CALDTH AL@200PPM
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 20 10:40:40 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3082313 0466

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42606.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 10:42:30
Operator : KD/RAK/ABM
Sample : CALDTH AL@300PPM
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 19 11:07:42 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.387	858076	254.585		
22)S	1-Chlorooctadecane	13.673	639621	249.258		m
	Target Compounds					
1)AT	n-Nonane (C9)	3.259	781143	296.691		
2)AT	n-Decane (C10)	4.313	788088	292.934		
3)	Naphthalene	6.283	880948	283.075		m
4)AT	n-Dodecane (C12)	6.351	786680	288.436		
5)	2-Methylnaphthalene	7.336	880254	288.273		
6)AT	n-Tetradecane (C14)	8.177	766120	280.451		
7)AT	n-Hexadecane (C16)	9.849	744320	272.665		
8)AT	n-Octadecane (C18)	11.600f	727369	267.218		
9)AT	n-Eicosane (C20)	13.154	706201	259.398		
10)AT	n-Heneicosane (C21)	13.737	706038	257.990		
11)AT	n-Docosane (C22)	14.244	696639	256.608		
12)AT	n-Tetracosane (C24)	15.111	690901	256.762		
13)AT	n-Hexacosane (C26)	15.855	668650	254.078		
14)AT	n-Octacosane (C28)	16.520	657927	254.425		
15)BT	n-Triacontane (C30)	17.136	658770	255.622		
16)BT	n-Dotriacontane(C32)	17.722	652367	258.470		
17)BT	n-Tetratriacontane (C34	18.291	652279	267.920		
18)BT	n-Hexatriacontane (C36)	18.895	643160	267.348		
19)BT	n-Octatriacontane (C38)	19.656	633716	272.786		
20)BT	n-Tetracontane (C40)	20.650	631156	280.853		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

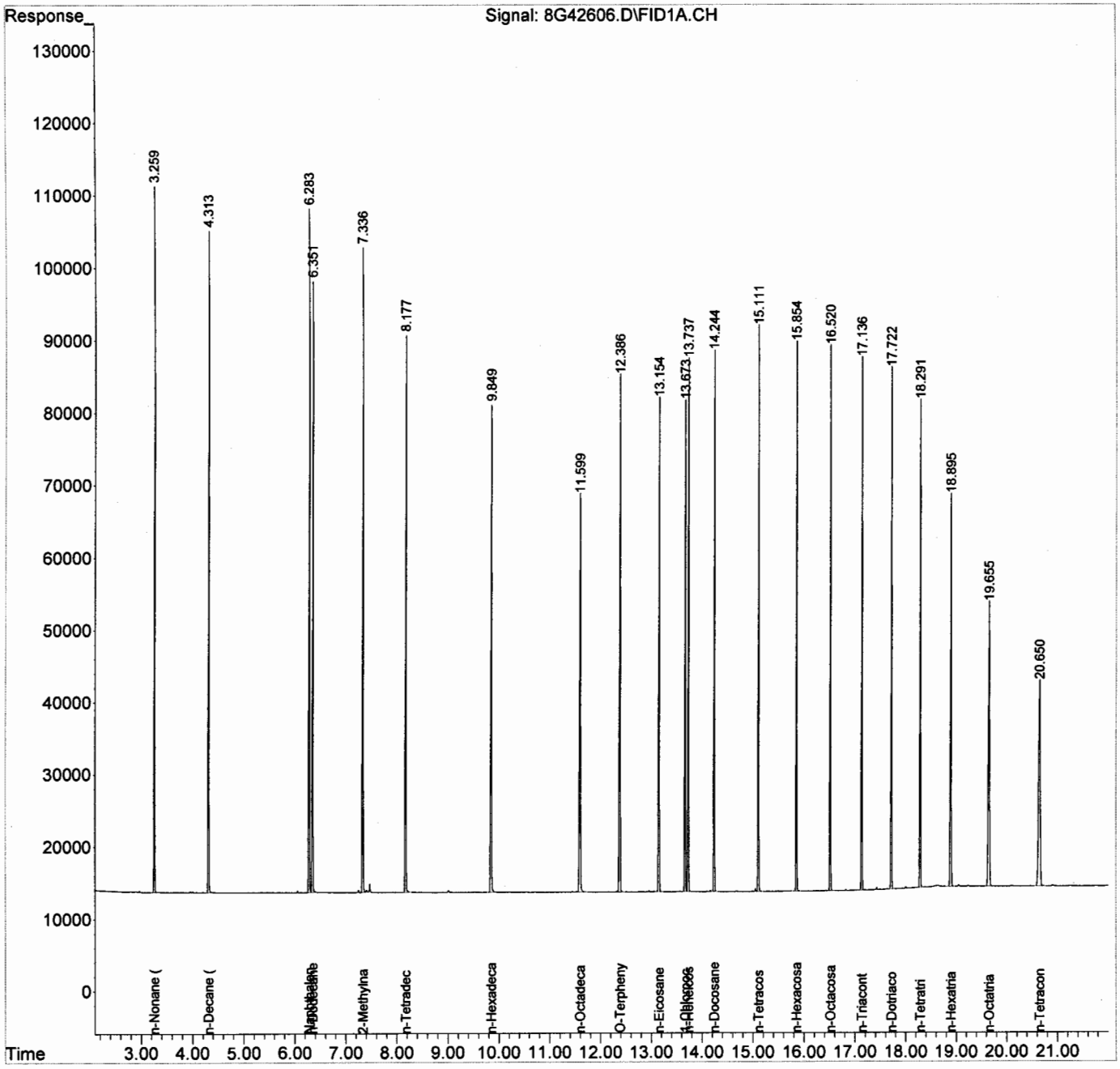
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42606.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 10:42:30
Operator : KD/RAK/ABM
Sample : CALDTH AL@300PPM
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 19 11:07:42 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42605.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 10:12:20
Operator : KD/RAK/ABM
Sample : CALDTH AL@500PPM
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 19 11:06:38 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.394	1466026	434.959		
22)S	1-Chlorooctadecane	13.677	1081462	421.442		
Target Compounds						
1)AT	n-Nonane (C9)	3.267	1435196	545.111		
2)AT	n-Decane (C10)	4.320	1428918	531.131		
3)	Naphthalene	6.290	1573779	505.702		
4)AT	n-Dodecane (C12)	6.357	1393130	510.790		
5)	2-Methylnaphthalene	7.343	1563229	511.940		
6)AT	n-Tetradecane (C14)	8.182	1348841	493.766		
7)AT	n-Hexadecane (C16)	9.854	1293363	473.795		
8)AT	n-Octadecane (C18)	11.607	1245411	457.534		
9)AT	n-Eicosane (C20)	13.159	1194373	438.711		
10)AT	n-Heneicosane (C21)	13.742	1187515	433.924		
11)AT	n-Docosane (C22)	14.248	1166594	429.716		
12)AT	n-Tetracosane (C24)	15.115	1140564	423.871		
13)AT	n-Hexacosane (C26)	15.858	1090205	414.264		
14)AT	n-Octacosane (C28)	16.525	1064453	411.631		
15)BT	n-Triacontane (C30)	17.147	1068065	414.441		
16)BT	n-Dotriacontane(C32)	17.742	1069454	423.721		
17)BT	n-Tetratriacontane (C34	18.320	1079755	443.504		
18)BT	n-Hexatriacontane (C36)	18.930	1070531	444.997		
19)BT	n-Octatriacontane (C38)	19.695	1063643	457.851		
20)BT	n-Tetracontane (C40)	20.694	1065539	474.146		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

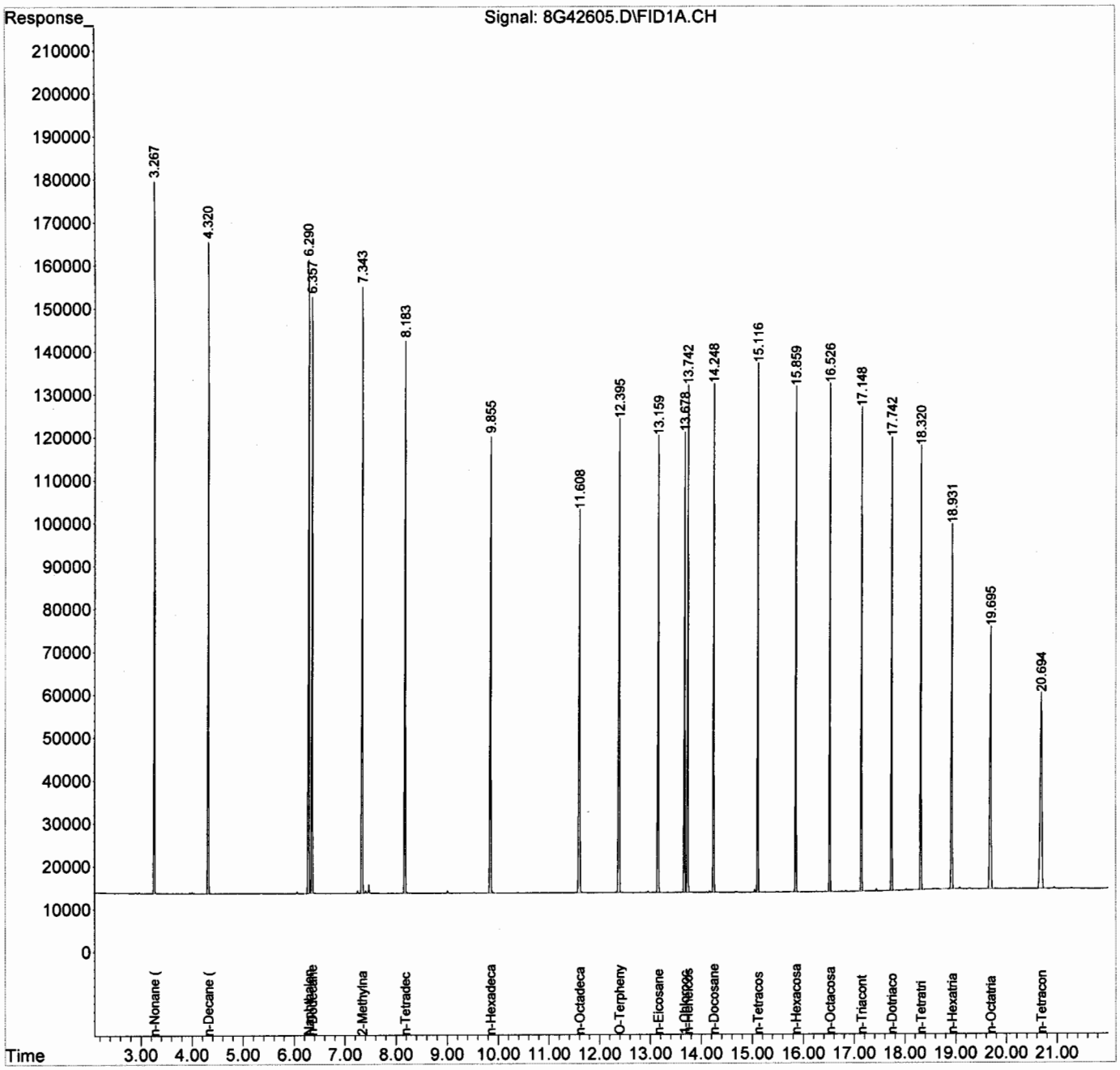
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42605.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 10:12:20
Operator : KD/RAK/ABM
Sample : CALDTH AL@500PPM
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 19 11:06:38 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Jul 15 14:29:33 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



3082313 0470

Form 6
Initial Calibration

Method: NJEPHRev3B

Instrument: GC_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9G156781.	CALDTH AL@100PP	08/21/13 11:55	2	9G156784.	CALDTH AL@10PPM	08/21/13 13:35
3	9G156782.	CALDTH AL@50PPM	08/21/13 12:25	4	9G156780.	CALDTH AL@200PP	08/21/13 11:25
5	9G156779.	CALDTH AL@300PP	08/21/13 10:55	6	9G156778.	CALDTH AL@500PP	08/21/13 10:26

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
n-Nonane (C9)	1	0	Avg	0.2466	0.2263	0.2258	0.2450	0.2553	0.2851	----	----	0.247	2.88	0.995	1.00	8.9	100.0	10.00	50.00	200.0	300.0	500.0		
n-Decane (C10)	1	0	Avg	0.2536	0.2330	0.2320	0.2503	0.2595	0.2877	----	----	0.253	3.93	0.996	1.00	8.1	100.0	10.00	50.00	200.0	300.0	500.0		
Naphthalene	1	0	Avg	0.2880	0.2545	0.2632	0.2832	0.2913	0.3194	----	----	0.283	5.87	0.997	1.00	8.1	100.0	10.00	50.00	200.0	300.0	500.0		
n-Dodecane (C12)	1	0	Avg	0.2621	0.2482	0.2428	0.2567	0.2636	0.2876	----	----	0.260	5.96	0.997	1.00	6.0	100.0	10.00	50.00	200.0	300.0	500.0		
2-Methylnaphthalene	1	0	Avg	0.2937	0.2570	0.2696	0.2881	0.2956	0.3217	----	----	0.288	6.92	0.997	1.00	7.8	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetradecane (C14)	1	0	Avg	0.2656	0.2483	0.2463	0.2581	0.2640	0.2842	----	----	0.261	7.78	0.998	1.00	5.3	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexadecane (C16)	1	0	Avg	0.2678	0.2469	0.2478	0.2586	0.2639	0.2799	----	----	0.261	9.42	0.998	1.00	4.8	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octadecane (C18)	1	0	Avg	0.2705	0.2621	0.2508	0.2598	0.2636	0.2749	----	----	0.264	11.11	0.999	1.00	3.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Eicosane (C20)	1	0	Avg	0.2728	0.2576	0.2562	0.2591	0.2615	0.2675	----	----	0.263	12.75	1.00	1.00	2.5	100.0	10.00	50.00	200.0	300.0	500.0		
n-Heneicosane (C21)	1	0	Avg	0.2768	0.2640	0.2606	0.2622	0.2642	0.2678	----	----	0.266	13.37	1.00	1.00	2.2	100.0	10.00	50.00	200.0	300.0	500.0		
n-Docosane (C22)	1	0	Avg	0.2766	0.2586	0.2599	0.2613	0.2630	0.2641	----	----	0.264	13.90	1.00	1.00	2.5	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetracosane (C24)	1	0	Avg	0.2803	0.2617	0.2631	0.2630	0.2637	0.2598	----	----	0.265	14.79	1.00	1.00	2.8	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexacosane (C26)	1	0	Avg	0.2762	0.2604	0.2606	0.2572	0.2565	0.2480	----	----	0.260	15.54	0.999	1.00	3.5	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octacosane (C28)	1	0	Avg	0.2763	0.2651	0.2616	0.2551	0.2526	0.2403	----	----	0.259	16.21	0.999	1.00	4.7	100.0	10.00	50.00	200.0	300.0	500.0		
n-Triacontane (C30)	1	0	Avg	0.2787	0.2712	0.2651	0.2542	0.2504	0.2363	----	----	0.259	16.82	0.998	1.00	5.9	100.0	10.00	50.00	200.0	300.0	500.0		
n-Dotriacontane(C32)	1	0	Avg	0.2743	0.2729	0.2636	0.2474	0.2430	0.2304	----	----	0.255	17.39	0.998	1.00	6.9	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetratriacontane (C34)	1	0	Avg	0.2686	0.2721	0.2583	0.2407	0.2373	0.2286	----	----	0.251	17.95	0.999	1.00	7.1	100.0	10.00	50.00	200.0	300.0	500.0		
n-Hexatriacontane (C36)	1	0	Avg	0.2569	0.2587	0.2477	0.2304	0.2289	0.2243	----	----	0.241	18.49	0.999	1.00	6.3	100.0	10.00	50.00	200.0	300.0	500.0		
n-Octatriacontane (C38)	1	0	Avg	0.2457	0.2605	0.2369	0.2227	0.2224	0.2209	----	----	0.235	19.13	1.00	1.00	6.8	100.0	10.00	50.00	200.0	300.0	500.0		
n-Tetracontane (C40)	1	0	Avg	0.2390	0.2475	0.2294	0.2191	0.2276	0.2199	----	----	0.230	19.96	0.999	0.999	4.8	100.0	10.00	50.00	200.0	300.0	500.0		
O-Terphenyl	1	0	Avg	0.3152	0.3171	0.2981	0.3002	0.3038	0.3174	----	----	0.309	11.87	0.999	1.00	2.9	100.0	10.00	50.00	200.0	300.0	500.0		
1-Chlorooctadecane	1	0	Avg	0.2472	0.2345	0.2329	0.2336	0.2357	0.2401	----	----	0.237	13.30	1.00	1.00	2.3	100.0	10.00	50.00	200.0	300.0	500.0		
C9-C28(Total)	1	0	Avg	0.2688	0.2527	0.2506	0.2572	0.2610	0.2706	----	----	0.260	2.88	0.999	1.00	3.2	1200.	120.0	600.0	2400.	3600.	6000.		
>C28-C40(Total)	1	0	Avg	0.2605	0.2638	0.2501	0.2357	0.2349	0.2267	----	----	0.245	16.31	0.999	1.00	6.2	600.0	60.00	300.0	1200.	1800.	3000.		
C9-C40(TOTAL)	1	0	Avg	0.2660	0.2564	0.2505	0.2500	0.2523	0.2560	----	----	0.255	2.88	1.00	1.00	2.3	1800.	180.0	900.0	3600.	5400.	9000.		

Avg Rsd Col 1: 5.159 Avg Rsd Col 2: -1

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156781.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 11:55:20
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:27:59 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	11.872	315267	79.164		
22)S	1-Chlorooctadecane	13.300	247274	80.774		m
	Target Compounds					
1)AT	n-Nonane (C9)	2.884	246626	74.830		
2)AT	n-Decane (C10)	3.925	253667	75.933		
3)	Naphthalene	5.866	288081	76.216		
4)AT	n-Dodecane (C12)	5.957	262146	77.139		
5)	2-Methylnaphthalene	6.916	293719	77.052		
6)AT	n-Tetradecane (C14)	7.780	265668	77.785		
7)AT	n-Hexadecane (C16)	9.419	267842	76.062		
8)AT	n-Octadecane (C18)	11.108	270520	79.349		
9)AT	n-Eicosane (C20)	12.753	272894	81.397		
10)AT	n-Heneicosane (C21)	13.372	276821	81.195		
11)AT	n-Docosane (C22)	13.900	276612	82.518		
12)AT	n-Tetracosane (C24)	14.787	280333	84.167		
13)AT	n-Hexacosane (C26)	15.537	276211	86.273		
14)AT	n-Octacosane (C28)	16.205	276300	87.850		
15)BT	n-Triacontane (C30)	16.817	278737	90.236		
16)BT	n-Dotriacontane(C32)	17.394	274306	92.436		
17)BT	n-Tetratriacontane (C34	17.949f	268645	92.758		
18)BT	n-Hexatriacontane (C36)	18.494f	256992	97.502		
19)BT	n-Octatriacontane (C38)	19.133f	245711	98.502		
20)BT	n-Tetracontane (C40)	19.955f	239044	97.132		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

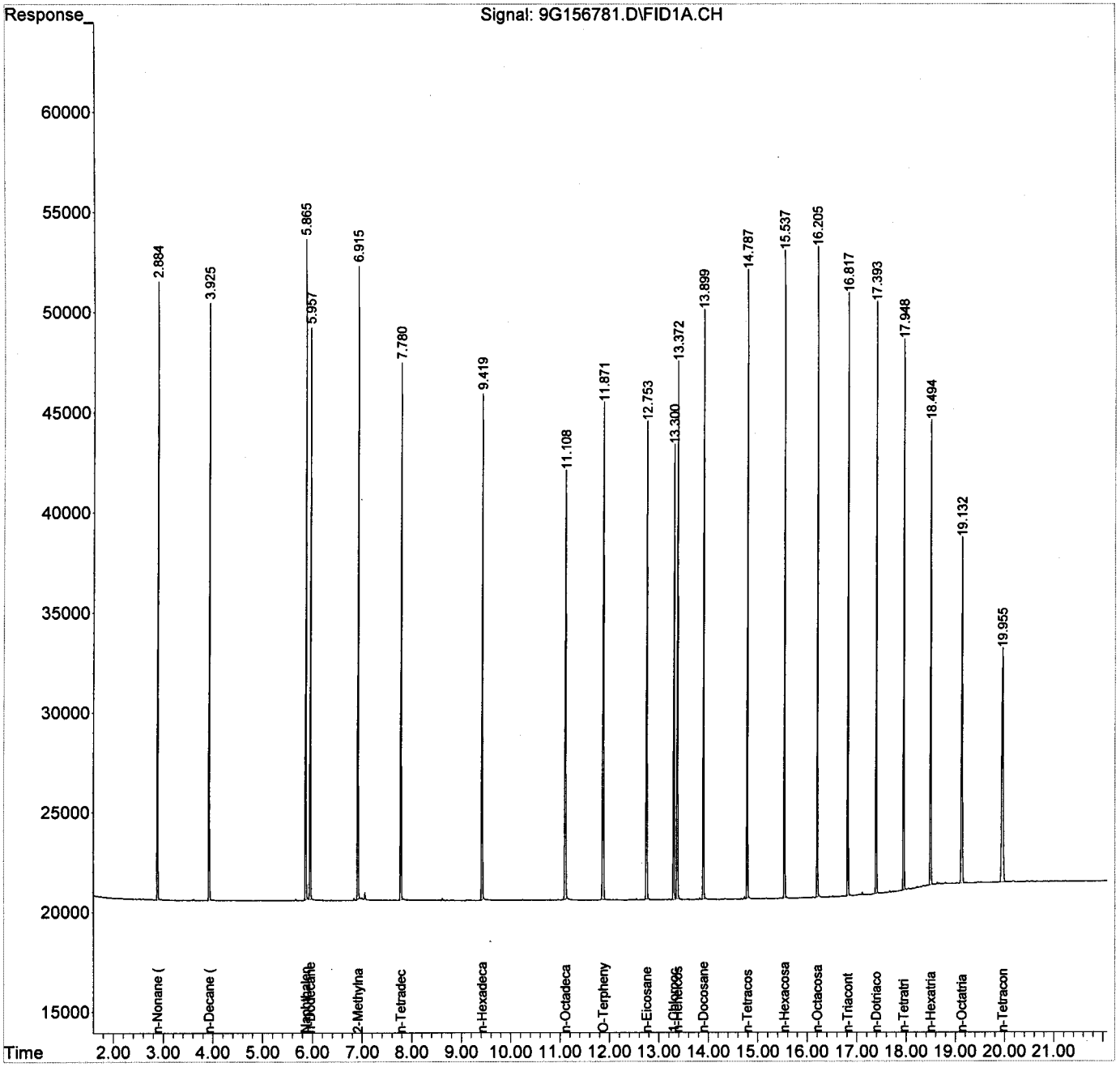
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156781.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 11:55:20
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:27:59 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3082313 0473

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156784.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 13:35:34
Operator : KD/RAK/ABM
Sample : CALDTH AL@10PPM
Misc : S.TPH
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 14:29:30 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units
System Monitoring Compounds					
21)S	O-Terphenyl	11.868	31714	7.963	
22)S	1-Chlorooctadecane	13.300	23450	7.660	m
Target Compounds					
1)AT	n-Nonane (C9)	2.884	22636	6.868	
2)AT	n-Decane (C10)	3.925	23305	6.976	
3)	Naphthalene	5.865	25456	6.735	
4)AT	n-Dodecane (C12)	5.957	24821	7.304	
5)	2-Methylnaphthalene	6.915	25707	6.744	
6)AT	n-Tetradecane (C14)	7.779	24839	7.273	
7)AT	n-Hexadecane (C16)	9.419	24690	7.012	
8)AT	n-Octadecane (C18)	11.105	26219	7.691	m
9)AT	n-Eicosane (C20)	12.751	25762	7.684	
10)AT	n-Heneicosane (C21)	13.370	26409	7.746	
11)AT	n-Docosane (C22)	13.899	25865	7.716	
12)AT	n-Tetracosane (C24)	14.786	26173	7.858	
13)AT	n-Hexacosane (C26)	15.537	26045	8.135	
14)AT	n-Octacosane (C28)	16.203	26518	8.431	
15)BT	n-Triacontane (C30)	16.817	27123	8.781	
16)BT	n-Dotriacontane(C32)	17.398	27297	9.199	
17)BT	n-Tetratriacontane (C34	17.962f	27220	9.398	
18)BT	n-Hexatriacontane (C36)	18.513	25875	9.817	
19)BT	n-Octatriacontane (C38)	19.153f	26054	10.445	m
20)BT	n-Tetracontane (C40)	19.978f	24756	10.059	m
23)A	C9-C28(Total)	0.000	0	N.D.	d
24)B	>C28-C40(Total)	0.000	0	N.D.	d
25)t	C9-C40(TOTAL)	0.000	0	N.D.	d

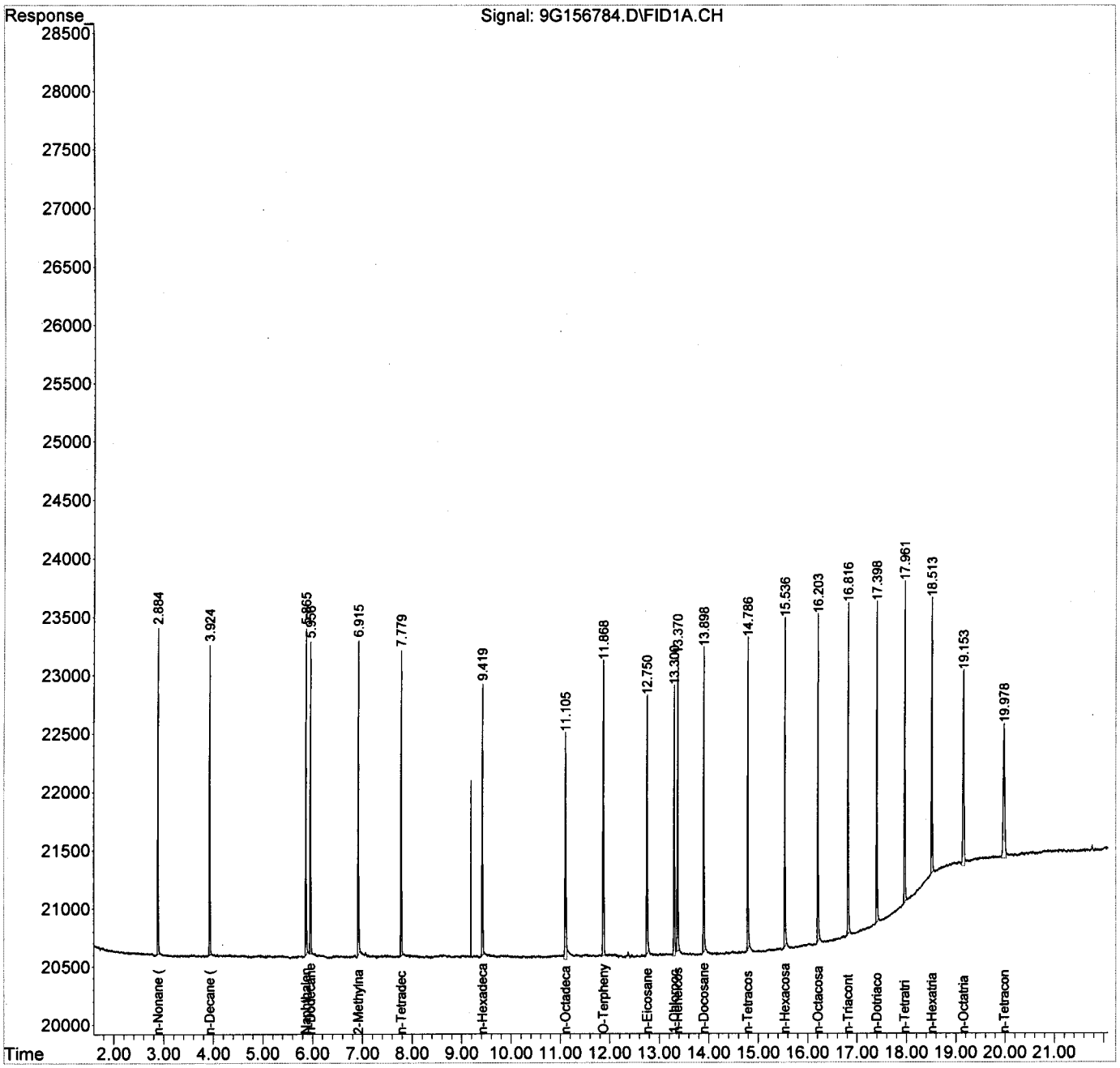
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156784.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 13:35:34
Operator : KD/RAK/ABM
Sample : CALDTH AL@10PPM
Misc : S.TPH
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 14:29:30 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156782.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 12:25:05
Operator : KD/RAK/ABM
Sample : CALDTH AL@50PPM
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:28:49 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	11.868	149085	37.435		
22)S	1-Chlorooctadecane	13.298	116493	38.053		m
	Target Compounds					
1)AT	n-Nonane (C9)	2.883	112930	34.264		
2)AT	n-Decane (C10)	3.924	116003	34.725		
3)	Naphthalene	5.864	131609	34.819		
4)AT	n-Dodecane (C12)	5.956	121405	35.724		
5)	2-Methylnaphthalene	6.914	134810	35.365		
6)AT	n-Tetradecane (C14)	7.779	123178	36.065		
7)AT	n-Hexadecane (C16)	9.417	123920	35.191		
8)AT	n-Octadecane (C18)	11.106	125404	36.784		
9)AT	n-Eicosane (C20)	12.750	128132	38.218		
10)AT	n-Heneicosane (C21)	13.370	130324	38.226		
11)AT	n-Docosane (C22)	13.897	129951	38.767		
12)AT	n-Tetracosane (C24)	14.785	131571	39.503		
13)AT	n-Hexacosane (C26)	15.537	130301	40.699		
14)AT	n-Octacosane (C28)	16.204	130825	41.596		
15)BT	n-Triacontane (C30)	16.820	132556	42.913		
16)BT	n-Dotriacontane(C32)	17.402	131803	44.415		
17)BT	n-Tetratriacontane (C34	17.961f	129156	44.595		
18)BT	n-Hexatriacontane (C36)	18.505f	123854	46.990		
19)BT	n-Octatriacontane (C38)	19.145f	118473	47.494		
20)BT	n-Tetracontane (C40)	19.968f	114711	46.611		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

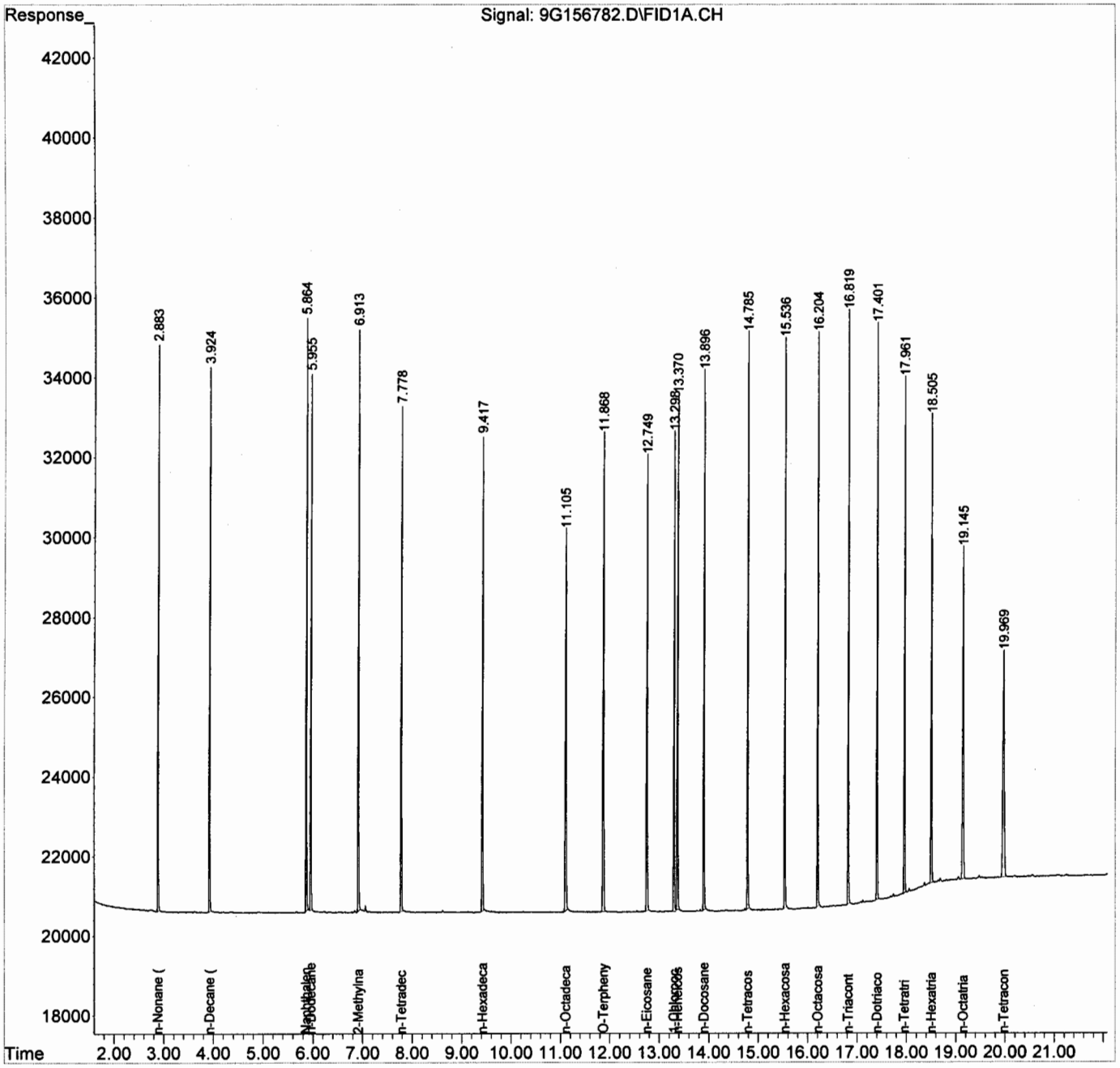
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156782.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 12:25:05
Operator : KD/RAK/ABM
Sample : CALDTH AL@50PPM
Misc : S.TPH
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:28:49 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156780.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 11:25:34
Operator : KD/RAK/ABM
Sample : CALDTH AL@200PPM
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:26:37 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	11.879	600415	150.765		
22)S	1-Chlorooctadecane	13.304	467326	152.655		
Target Compounds						
1)AT	n-Nonane (C9)	2.887	490054	148.689		
2)AT	n-Decane (C10)	3.928	500612	149.854		
3)	Naphthalene	5.869	566443	149.861		
4)AT	n-Dodecane (C12)	5.961	513560	151.120		
5)	2-Methylnaphthalene	6.920	576339	151.193		
6)AT	n-Tetradecane (C14)	7.784	516203	151.140		
7)AT	n-Hexadecane (C16)	9.423	517211	146.878		
8)AT	n-Octadecane (C18)	11.113	519747	152.453		
9)AT	n-Eicosane (C20)	12.757	518271	154.586		
10)AT	n-Heneicosane (C21)	13.377	524430	153.822		
11)AT	n-Docosane (C22)	13.903	522684	155.925		
12)AT	n-Tetracosane (C24)	14.790	526091	157.953		
13)AT	n-Hexacosane (C26)	15.540	514493	160.700		
14)AT	n-Octacosane (C28)	16.207	510260	162.239		
15)BT	n-Triacontane (C30)	16.817	508428	164.595		
16)BT	n-Dotriacontane(C32)	17.387	494942	166.787		
17)BT	n-Tetratriacontane (C34	17.932f	481504	166.255		
18)BT	n-Hexatriacontane (C36)	18.466f	460860	174.848		
19)BT	n-Octatriacontane (C38)	19.104f	445465	178.580		
20)BT	n-Tetracontane (C40)	19.925f	438302	178.097		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

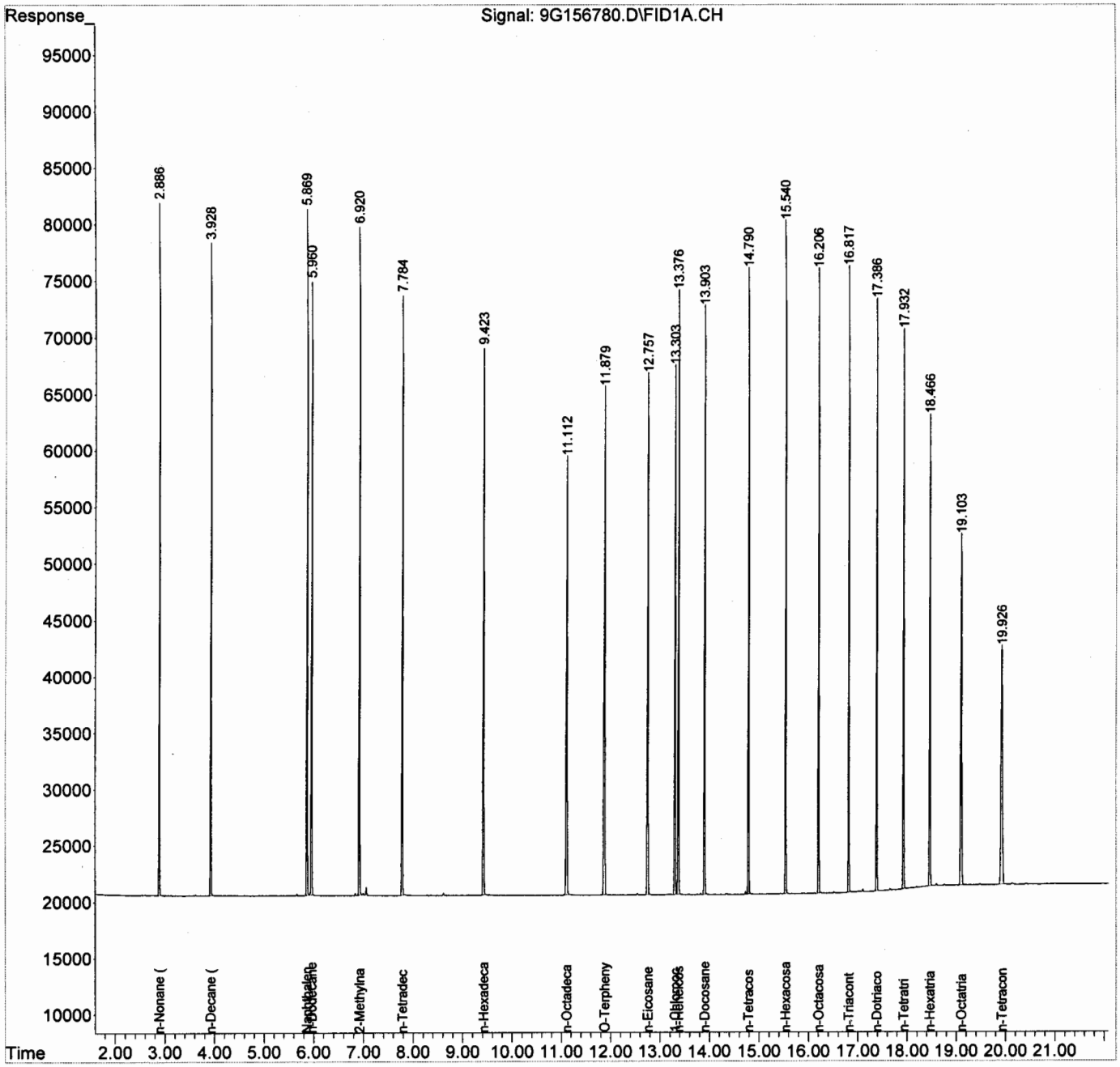
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156780.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 11:25:34
Operator : KD/RAK/ABM
Sample : CALDTH AL@200PPM
Misc : S.TPH
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:26:37 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156779.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 10:55:53
Operator : KD/RAK/ABM
Sample : CALDTH AL@300PPM
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:25:51 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	11.884	911478	228.873		
22)S	1-Chlorooctadecane	13.308	707270	231.034		
	Target Compounds					
1)AT	n-Nonane (C9)	2.889	766157	232.463		
2)AT	n-Decane (C10)	3.931	778645	233.081		
3)	Naphthalene	5.873	873942	231.215		
4)AT	n-Dodecane (C12)	5.964	790957	232.747		
5)	2-Methylnaphthalene	6.924	886910	232.666		
6)AT	n-Tetradecane (C14)	7.788	792125	231.928		
7)AT	n-Hexadecane (C16)	9.427	791974	224.906		
8)AT	n-Octadecane (C18)	11.118	791068	232.037		
9)AT	n-Eicosane (C20)	12.761	784734	234.064		
10)AT	n-Heneicosane (C21)	13.380	792831	232.547		
11)AT	n-Docosane (C22)	13.907	789053	235.387		
12)AT	n-Tetracosane (C24)	14.794	791316	237.583		
13)AT	n-Hexacosane (C26)	15.545	769696	240.411		
14)AT	n-Octacosane (C28)	16.211	757864	240.966		
15)BT	n-Triacontane (C30)	16.820	751397	243.252		
16)BT	n-Dotriacontane(C32)	17.388	729122	245.701		
17)BT	n-Tetratriacontane (C34	17.930f	712122	245.883		
18)BT	n-Hexatriacontane (C36)	18.462f	686777	260.560		
19)BT	n-Octatriacontane (C38)	19.101f	667426	267.561		
20)BT	n-Tetracontane (C40)	19.922f	682826	277.455		m
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

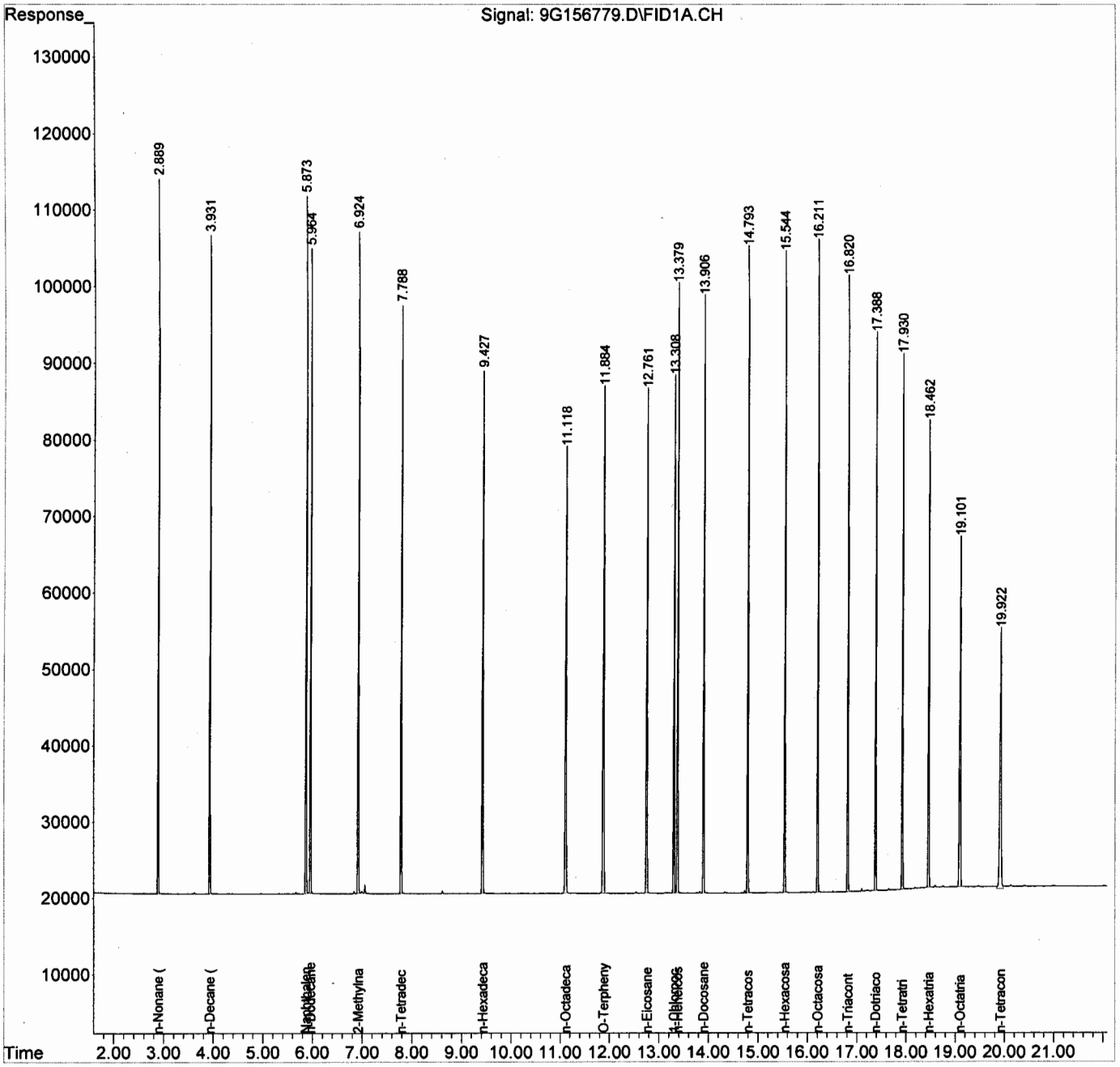
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156779.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 10:55:53
Operator : KD/RAK/ABM
Sample : CALDTH AL@300PPM
Misc : S.TPH
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:25:51 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156778.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 10:26:13
Operator : KD/RAK/ABM
Sample : CALDTH AL@500PPM
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:24:51 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	11.895	1587320	398.578		
22)S	1-Chlorooctadecane	13.314	1200510	392.155		
Target Compounds						
1)AT	n-Nonane (C9)	2.897	1425635	432.558		
2)AT	n-Decane (C10)	3.938	1438476	430.596		
3)	Naphthalene	5.881	1597219	422.569		
4)AT	n-Dodecane (C12)	5.971	1438329	423.242		
5)	2-Methylnaphthalene	6.933	1608559	421.978		
6)AT	n-Tetradecane (C14)	7.794	1421015	416.061		
7)AT	n-Hexadecane (C16)	9.434	1399893	397.544		
8)AT	n-Octadecane (C18)	11.127	1374650	403.215		
9)AT	n-Eicosane (C20)	12.768	1337736	399.009		
10)AT	n-Heneicosane (C21)	13.387	1339175	392.797		
11)AT	n-Docosane (C22)	13.913	1320505	393.928		
12)AT	n-Tetracosane (C24)	14.799	1299206	390.071		
13)AT	n-Hexacosane (C26)	15.548	1240283	387.397		
14)AT	n-Octacosane (C28)	16.216	1201604	382.055		
15)BT	n-Triacontane (C30)	16.831	1181916	382.624		
16)BT	n-Dotriacontane(C32)	17.417	1152460	388.358		
17)BT	n-Tetratriacontane (C34	17.986	1143072	394.683		
18)BT	n-Hexatriacontane (C36)	18.540	1121532	425.504		
19)BT	n-Octatriacontane (C38)	19.183	1104946	442.956		
20)BT	n-Tetracontane (C40)	20.016	1099750	446.866		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

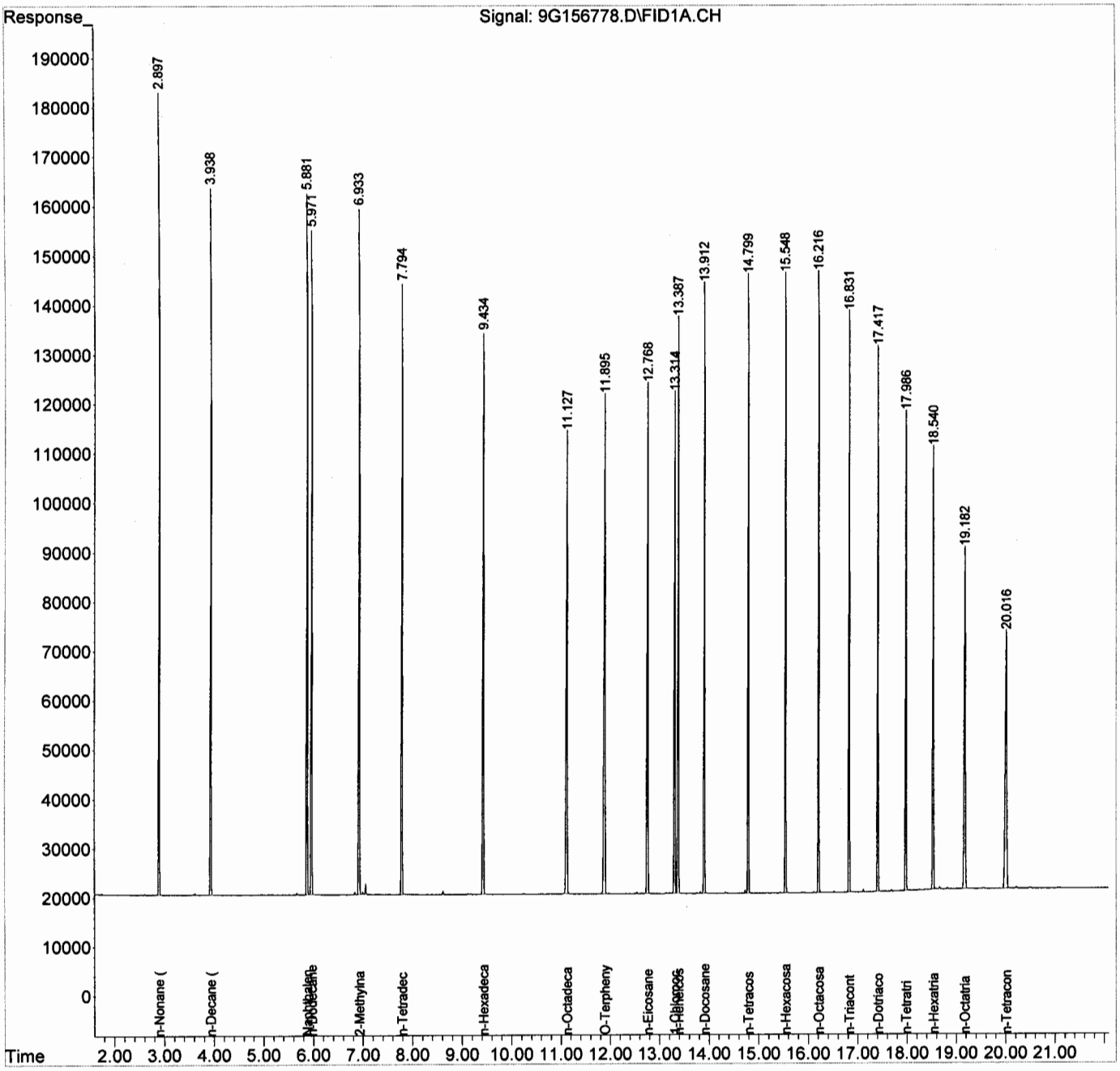
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-21-13\
Data File : 9G156778.D
Signal(s) : FID1A.CH
Acq On : 21-Aug-13, 10:26:13
Operator : KD/RAK/ABM
Sample : CALDTH AL@500PPM
Misc : S.TPH
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 21 13:24:51 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Fri Aug 02 14:52:09 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Form7
Continuing Calibration

Method: NJEPHRev3B

Data File:				8G42634.D			8G42761.D			8G42767.D			8G42776.D			9G156891.D		
Method:				8015-EPHCAT			8015-EPHCAT			8015-EPHCAT			8015-EPHCAT			8015-EPHCAT		
Calibration Name:				CALDTH AL@100			CALDTH AL@100			CALDTH AL@100			CALDTH AL@100			CALDTH AL@100		
Calibration Date/Time				08/20/13 01:56			08/26/13 09:14			08/26/13 14:47			08/26/13 21:58			08/26/13 13:13		
Compound	Limit	Col	Mr	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff
n-Nonane (C9)	30	1	0	90.94	100	9.1	103	100	3.0	106.7	100	6.7	112.4	100	12.4	104.7	100	4.7
n-Decane (C10)	30	1	0	90.83	100	9.2	105.7	100	5.7	109.7	100	9.7	115.2	100	15.2	103.3	100	3.3
Naphthalene	30	1	0	92.56	100	7.4	106.8	100	6.8	108.9	100	8.9	116.0	100	16.0	101.6	100	1.6
n-Dodecane (C12)	30	1	0	92.36	100	7.6	107	100	6.9	109.0	100	9.0	115.7	100	15.7	101.6	100	1.6
2-Methylnaphthalene	30	1	0	94.09	100	5.9	108.7	100	8.7	109.7	100	9.7	117.9	100	17.9	100.9	100	0.9
n-Tetradecane (C14)	30	1	0	96.36	100	3.6	111.5	100	11.5	112.3	100	12.3	121.1	100	21.1	101.2	100	1.2
n-Hexadecane (C16)	30	1	0	99.53	100	0.5	115.7	100	15.7	115.8	100	15.8	125.7	100	25.7	101.1	100	1.1
n-Octadecane (C18)	30	1	0	100.1	100	0.1	117.0	100	17.0	115.8	100	15.8	126.9	100	26.9	99.77	100	0.2
n-Eicosane (C20)	30	1	0	95.8	100	4.2	112.1	100	12.1	110.3	100	10.3	121.4	100	21.4	98.95	100	1.1
n-Heneicosane (C21)	30	1	0	95.25	100	4.8	111.1	100	11.1	109.1	100	9.1	120.3	100	20.3	98.5	100	1.5
n-Docosane (C22)	30	1	0	96.72	100	3.3	113.1	100	13.1	110.7	100	10.7	122.5	100	22.5	98.41	100	1.6
n-Tetracosane (C24)	30	1	0	97.7	100	2.3	113.6	100	13.6	111.5	100	11.5	122.9	100	22.9	97.78	100	2.2
n-Hexacosane (C26)	30	1	0	98.61	100	1.4	115.1	100	15.1	112.1	100	12.1	123.9	100	23.9	97.2	100	2.8
n-Octacosane (C28)	30	1	0	99.18	100	0.8	115.1	100	15.1	112.2	100	12.2	123.9	100	23.9	96.92	100	3.1
n-Triacontane (C30)	30	1	0	99.56	100	0.4	115.6	100	15.6	112.6	100	12.6	124.4	100	24.4	97.27	100	2.7
n-Dotriacontane(C32)	30	1	0	100.4	100	0.4	115.9	100	15.9	113	100	13.0	124.4	100	24.4	97.83	100	2.2
n-Tetratriacontane (C	30	1	0	102.3	100	2.3	116.3	100	16.3	119	100	19.0	123.5	100	23.5	98.67	100	1.3
n-Hexatriacontane (C	30	1	0	100.3	100	0.3	112.4	100	12.4	113.9	100	13.9	120.8	100	20.8	98.78	100	1.2
n-Octatriacontane (C3	30	1	0	101.3	100	1.3	110.8	100	10.8	112.8	100	12.8	120.0	100	20.0	94.69	100	5.3
n-Tetracontane (C40)	30	1	0	103.2	100	3.2	108.1	100	8.1	115.2	100	15.2	120.5	100	20.5	85.47	100	14.5
O-Terphenyl	30	1	0	93.88	100	6.1	108.8	100	8.8	106.9	100	6.9	119.5	100	19.5	96.69	100	3.3
1-Chlorooctadecane	30	1	0	94.02	100	6.0	110	100	9.9	108.8	100	8.8	122.2	100	22.2	96.49	100	3.5
C9-C28	25	1	0	1153	1200	3.9	1340	1200	11.7	1335	1200	11.3	1452	1200	21.0	1199	1200	0.0
>C28-C40	25	1	0	607.0	600	1.2	679.1	600	13.2	686.5	600	14.4	733.7	600	22.3	572.7	600	4.5
C9-C40	25	1	0	1760	1800	2.2	2019	1800	12.2	2022	1800	12.3	2186	1800	21.4	1772	1800	1.5

Flags/Notes: **** - Values outside of limits for this column/run***

Form7
Continuing Calibration

Method: NJEPHRev3B

Data File:				9G156912.D			9G156921.D												
Method:				8015-EPHCAT			8015-EPHCAT												
Calibration Name:				CALDTH AL@100			CALDTH AL@100												
Calibration Date/Time				08/27/13 01:00			08/27/13 06:24												
					Conc			Conc			Conc			Conc			Conc		
Compound	Limit	Col	Mr	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff
n-Nonane (C9)	30	1	0	120.1	100	20.1	116.3	100	16.3									
n-Decane (C10)	30	1	0	118.3	100	18.3	116.2	100	16.2									
Naphthalene	30	1	0	115.9	100	15.9	115.4	100	15.4									
n-Dodecane (C12)	30	1	0	115.6	100	15.6	115.2	100	15.2									
2-Methylnaphthalene	30	1	0	115.3	100	15.3	114.6	100	14.6									
n-Tetradecane (C14)	30	1	0	115.2	100	15.2	115.2	100	15.2									
n-Hexadecane (C16)	30	1	0	115.4	100	15.4	115.1	100	15.1									
n-Octadecane (C18)	30	1	0	114.2	100	14.2	113.4	100	13.4									
n-Eicosane (C20)	30	1	0	113.7	100	13.7	112.2	100	12.2									
n-Heneicosane (C21)	30	1	0	113.3	100	13.3	111.5	100	11.5									
n-Docosane (C22)	30	1	0	113.5	100	13.5	111.7	100	11.7									
n-Tetracosane (C24)	30	1	0	113.4	100	13.4	111.4	100	11.4									
n-Hexacosane (C26)	30	1	0	112.3	100	12.3	110.3	100	10.3									
n-Octacosane (C28)	30	1	0	111.7	100	11.7	110.2	100	10.2									
n-Triacontane (C30)	30	1	0	111.9	100	11.9	111.0	100	11.0									
n-Dotriacontane(C32)	30	1	0	112.4	100	12.4	112.2	100	12.2									
n-Tetratriacontane (C	30	1	0	113.5	100	13.5	113.9	100	13.9									
n-Hexatriacontane (C	30	1	0	114.9	100	14.9	115.9	100	15.9									
n-Octatriacontane (C3	30	1	0	113	100	13.0	116.1	100	16.1									
n-Tetracontane (C40)	30	1	0	107.9	100	7.9	117.3	100	17.3									
O-Terphenyl	30	1	0	111.0	100	11.0	109.7	100	9.7									
1-Chlorooctadecane	30	1	0	111.7	100	11.7	110.5	100	10.5									
C9-C28	25	1	0	1377	1200	14.7	1359	1200	13.2									
>C28-C40	25	1	0	673.4	600	12.2	686.4	600	14.4									
C9-C40	25	1	0	2050	1800	13.9	2045	1800	13.6									

Flags/Notes: **** - Values outside of limits for this column/run***

Form7

RtWindow Summary

Method: NJEPHRev3B

Data File:			8G42604.D		9G156781.D		8G42604.D		8G42761.D		8G42767.D	
Calibration Name:			CALDTH AL@100PPM		CALDTH AL@100PPM		CALDTH AL@100PPM		CALDTH AL@100PPM		CALDTH AL@100PPM	
Calibration Date/Time			8/19/2013 9:42:08 AM		8/21/2013 11:55:20 AM		8/19/2013 9:42:08 AM		8/26/2013 9:14:29 AM		8/26/2013 2:47:53 PM	
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
n-Nonane (C9)	1	0	3.26	(3.21 - 3.31)	2.89	(2.84 - 2.94)	3.26	(3.21 - 3.31)	3.23	(3.18 - 3.28)	3.23	(3.18 - 3.28)
n-Decane (C10)	1	0	4.31	(4.26 - 4.36)	3.93	(3.88 - 3.98)	4.31	(4.26 - 4.36)	4.28	(4.23 - 4.33)	4.28	(4.23 - 4.33)
Naphthalene	1	0	6.28	(6.23 - 6.33)	5.87	(5.82 - 5.92)	6.28	(6.23 - 6.33)	6.25	(6.20 - 6.30)	6.25	(6.20 - 6.30)
n-Dodecane (C12)	1	0	6.35	(6.30 - 6.40)	5.96	(5.91 - 6.01)	6.35	(6.30 - 6.40)	6.32	(6.27 - 6.37)	6.32	(6.27 - 6.37)
2-Methylnaphthalene	1	0	7.33	(7.28 - 7.38)	6.92	(6.87 - 6.97)	7.33	(7.28 - 7.38)	7.30	(7.25 - 7.35)	7.30	(7.25 - 7.35)
n-Tetradecane (C14)	1	0	8.17	(8.12 - 8.22)	7.78	(7.73 - 7.83)	8.17	(8.12 - 8.22)	8.14	(8.09 - 8.19)	8.14	(8.09 - 8.19)
n-Hexadecane (C16)	1	0	9.84	(9.79 - 9.89)	9.42	(9.37 - 9.47)	9.84	(9.79 - 9.69)	9.81	(9.76 - 9.86)	9.81	(9.76 - 9.86)
n-Octadecane (C18)	1	0	11.60	(11.55 - 11.65)	11.11	(11.06 - 11.16)	11.59	(11.54 - 11.64)	11.55	(11.50 - 11.60)	11.55	(11.50 - 11.60)
n-Eicosane (C20)	1	0	13.15	(13.10 - 13.20)	12.76	(12.71 - 12.81)	13.15	(13.10 - 13.20)	13.12	(13.07 - 13.17)	13.11	(13.06 - 13.16)
n-Heneicosane (C21)	1	0	13.73	(13.68 - 13.78)	13.38	(13.33 - 13.43)	13.73	(13.68 - 13.78)	13.70	(13.65 - 13.75)	13.70	(13.65 - 13.75)
n-Docosane (C22)	1	0	14.24	(14.19 - 14.29)	13.90	(13.85 - 13.95)	14.24	(14.19 - 14.29)	14.21	(14.16 - 14.26)	14.21	(14.16 - 14.26)
n-Tetracosane (C24)	1	0	15.11	(15.06 - 15.16)	14.79	(14.74 - 14.84)	15.11	(15.06 - 15.16)	15.08	(15.03 - 15.13)	15.08	(15.03 - 15.13)
n-Hexacosane (C26)	1	0	15.85	(15.80 - 15.90)	15.54	(15.49 - 15.59)	15.85	(15.80 - 15.90)	15.82	(15.77 - 15.87)	15.82	(15.77 - 15.87)
n-Octacosane (C28)	1	0	16.52	(16.47 - 16.57)	16.21	(16.16 - 16.26)	16.52	(16.47 - 16.57)	16.49	(16.44 - 16.54)	16.49	(16.44 - 16.54)
n-Triacontane (C30)	1	0	17.14	(17.09 - 17.19)	16.82	(16.77 - 16.87)	17.13	(17.08 - 17.18)	17.10	(17.05 - 17.15)	17.10	(17.05 - 17.15)
n-Dotriacontane(C32)	1	0	17.72	(17.67 - 17.77)	17.40	(17.35 - 17.45)	17.70	(17.65 - 17.75)	17.67	(17.62 - 17.72)	17.67	(17.62 - 17.72)
n-Tetratriacontane (C	1	0	18.29	(18.24 - 18.34)	17.95	(17.90 - 18.00)	18.26	(18.21 - 18.31)	18.23	(18.18 - 18.28)	18.23	(18.18 - 18.28)
n-Hexatriacontane (C	1	0	18.89	(18.84 - 18.94)	18.50	(18.45 - 18.55)	18.85	(18.80 - 18.90)	18.82	(18.77 - 18.87)	18.81	(18.76 - 18.86)
n-Octatriacontane (C	1	0	19.65	(19.60 - 19.70)	19.14	(19.09 - 19.19)	19.61	(19.56 - 19.66)	19.56	(19.51 - 19.61)	19.56	(19.51 - 19.61)
n-Tetracontane (C40)	1	0	20.64	(20.59 - 20.69)	19.96	(19.91 - 20.01)	20.60	(20.55 - 20.65)	20.53	(20.48 - 20.58)	20.53	(20.48 - 20.58)
O-Terphenyl	1	0	12.38	(12.34 - 12.42)	11.88	(11.84 - 11.92)	12.38	(12.34 - 12.42)	12.34	(12.30 - 12.38)	12.34	(12.30 - 12.38)
1-Chlorooctadecane	1	0	13.67	(13.63 - 13.71)	13.30	(13.26 - 13.34)	13.67	(13.63 - 13.71)	13.64	(13.60 - 13.68)	13.64	(13.60 - 13.68)
C9-C28	1	0										
>C28-C40	1	0										
C9-C40	1	0										

Form7

RtWindow Summary

Method: NJEPHRev3B

Data File:			9G156891.D		9G156912.D							
Calibration Name:			CALDTH AL@100PPM		CALDTH AL@100PPM							
Calibration Date/Time			8/26/2013 1:13:58 PM		8/27/2013 1:00:39 AM							
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
n-Nonane (C9)	1	0	2.87	(2.82 - 2.92)	2.87	(2.82 - 2.92)						
n-Decane (C10)	1	0	3.91	(3.86 - 3.96)	3.91	(3.86 - 3.96)						
Naphthalene	1	0	5.85	(5.80 - 5.90)	5.85	(5.80 - 5.90)						
n-Dodecane (C12)	1	0	5.94	(5.89 - 5.99)	5.94	(5.89 - 5.99)						
2-Methylnaphthalene	1	0	6.90	(6.85 - 6.95)	6.90	(6.85 - 6.95)						
n-Tetradecane (C14)	1	0	7.77	(7.72 - 7.82)	7.76	(7.71 - 7.81)						
n-Hexadecane (C16)	1	0	9.40	(9.35 - 9.45)	9.40	(9.35 - 9.45)						
n-Octadecane (C18)	1	0	11.09	(11.04 - 11.14)	11.09	(11.04 - 11.14)						
n-Eicosane (C20)	1	0	12.74	(12.69 - 12.79)	12.74	(12.69 - 12.79)						
n-Heneicosane (C21)	1	0	13.36	(13.31 - 13.41)	13.36	(13.31 - 13.41)						
n-Docosane (C22)	1	0	13.89	(13.84 - 13.94)	13.89	(13.84 - 13.94)						
n-Tetracosane (C24)	1	0	14.77	(14.72 - 14.82)	14.77	(14.72 - 14.82)						
n-Hexacosane (C26)	1	0	15.52	(15.47 - 15.57)	15.52	(15.47 - 15.57)						
n-Octacosane (C28)	1	0	16.19	(16.14 - 16.24)	16.19	(16.14 - 16.24)						
n-Triacontane (C30)	1	0	16.81	(16.76 - 16.86)	16.80	(16.75 - 16.85)						
n-Dotriacontane(C32)	1	0	17.39	(17.34 - 17.44)	17.37	(17.32 - 17.42)						
n-Tetratriacontane (C	1	0	17.95	(17.90 - 18.00)	17.89	(17.84 - 17.94)						
n-Hexatriacontane (C	1	0	18.50	(18.45 - 18.55)	18.41	(18.36 - 18.46)						
n-Octatriacontane (C	1	0	19.13	(19.08 - 19.18)	19.04	(18.99 - 19.09)						
n-Tetracontane (C40)	1	0	19.95	(19.90 - 20.00)	19.85	(19.80 - 19.90)						
O-Terphenyl	1	0	11.85	(11.81 - 11.89)	11.85	(11.81 - 11.89)						
1-Chlorooctadecane	1	0	13.29	(13.25 - 13.33)	13.29	(13.25 - 13.33)						
C9-C28	1	0										
>C28-C40	1	0										
C9-C40	1	0										

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42634.D
Signal(s) : FID1A.CH
Acq On : 20-Aug-13, 01:56:40
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 20 08:14:00 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Aug 19 14:14:28 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.374	272304	93.877		
22)S	1-Chlorooctadecane	13.665	206760	94.016		
Target Compounds						
1)AT	n-Nonane (C9)	3.252	224065	90.942		
2)AT	n-Decane (C10)	4.306	222821	90.833		
3)	Naphthalene	6.274	257957	92.562		
4)AT	n-Dodecane (C12)	6.343	231623	92.364		
5)	2-Methylnaphthalene	7.326	261011	94.094		
6)AT	n-Tetradecane (C14)	8.168	231504	96.362		
7)AT	n-Hexadecane (C16)	9.838	230335	99.533		
8)AT	n-Octadecane (C18)	11.589	230152	100.143		
9)AT	n-Eicosane (C20)	13.145	227922	95.798		
10)AT	n-Heneicosane (C21)	13.728	231610	95.247		
11)AT	n-Docosane (C22)	14.236	229785	96.720		
12)AT	n-Tetracosane (C24)	15.104	231351	97.696		
13)AT	n-Hexacosane (C26)	15.848	226480	98.608		
14)AT	n-Octacosane (C28)	16.513	225728	99.175		
15)BT	n-Triacontane (C30)	17.122	226803	99.556		
16)BT	n-Dotriacontane(C32)	17.688	225403	100.366		
17)BT	n-Tetratriacontane (C34	18.220	228583	102.339		
18)BT	n-Hexatriacontane (C36)	18.817	220688	100.310		
19)BT	n-Octatriacontane (C38)	19.568	216583	101.303		
20)BT	n-Tetracontane (C40)	20.553	214421	103.164		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

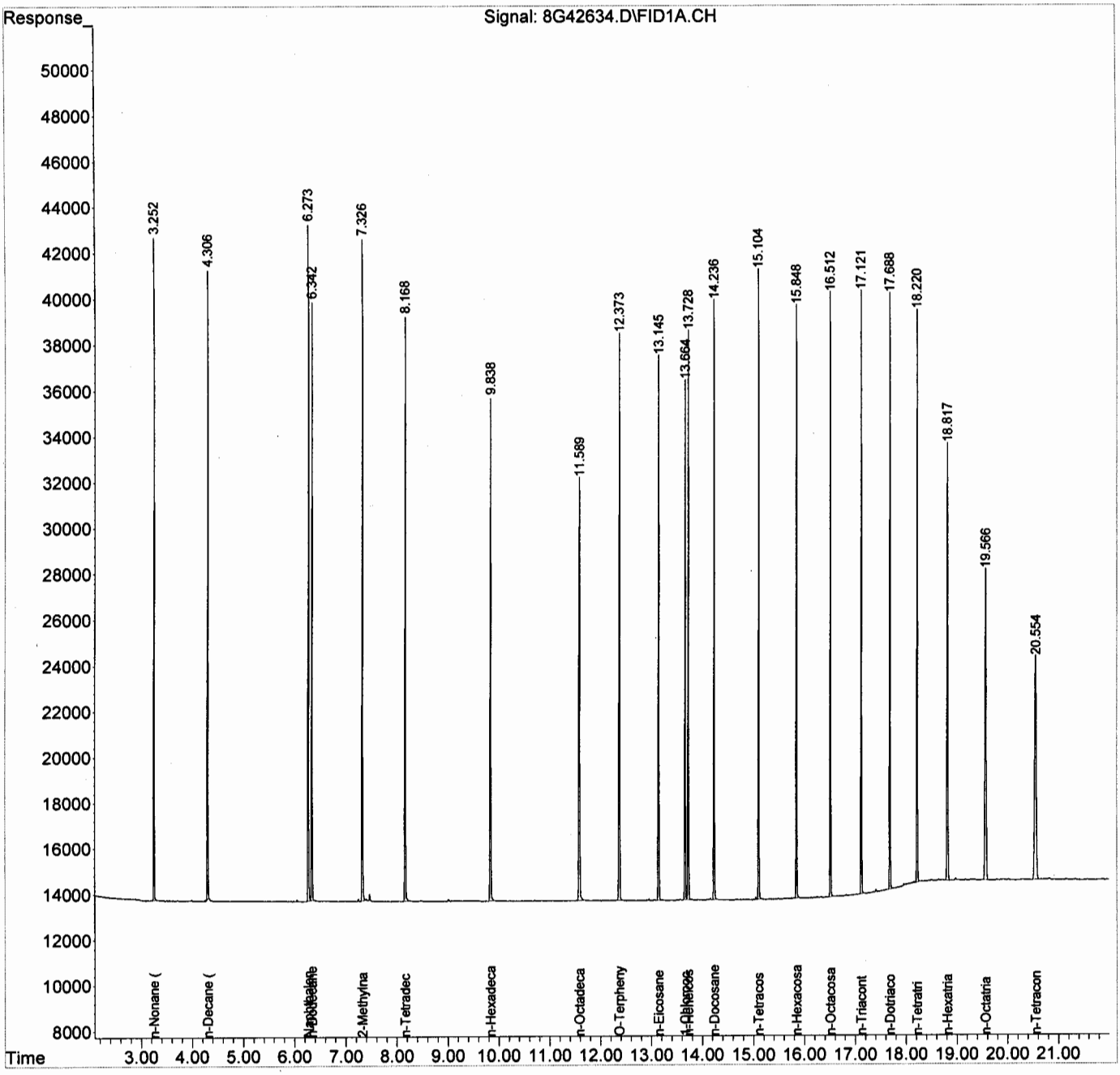
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42634.D
Signal(s) : FID1A.CH
Acq On : 20-Aug-13, 01:56:40
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 20 08:14:00 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Aug 19 14:14:28 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3082313 0489

Data Path : G:\Gcdata\2013\GC_8\Data\08-26-13\
Data File : 8G42761.D
Signal(s) : FID1A.CH
Acq On : 26-Aug-13, 09:14:29
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 26 09:57:37 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.341	315720	108.845		
22)S	1-Chlorooctadecane	13.638	237758	109.948		
Target Compounds						
1)AT	n-Nonane (C9)	3.233	253690	102.966		
2)AT	n-Decane (C10)	4.285	259219	105.671		
3)	Naphthalene	6.252	297696	106.822		
4)AT	n-Dodecane (C12)	6.320	268197	106.948		
5)	2-Methylnaphthalene	7.303	301620	108.733		
6)AT	n-Tetradecane (C14)	8.143	267750	111.449		
7)AT	n-Hexadecane (C16)	9.809	267731	115.692		
8)AT	n-Octadecane (C18)	11.553	268982	117.038		
9)AT	n-Eicosane (C20)	13.116	266707	112.099		
10)AT	n-Heneicosane (C21)	13.700	270137	111.091		
11)AT	n-Docosane (C22)	14.210	268630	113.070		
12)AT	n-Tetracosane (C24)	15.079	269057	113.618		
13)AT	n-Hexacosane (C26)	15.822	264396	115.116		
14)AT	n-Octacosane (C28)	16.488	261912	115.073		
15)BT	n-Triacontane (C30)	17.098	263375	115.609		
16)BT	n-Dotriacontane(C32)	17.673	260209	115.865		
17)BT	n-Tetratriacontane (C34	18.229	259790	116.311		
18)BT	n-Hexatriacontane (C36)	18.820	247279	112.397		
19)BT	n-Octatriacontane (C38)	19.562	236827	110.772		
20)BT	n-Tetracontane (C40)	20.530	224766	108.141		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

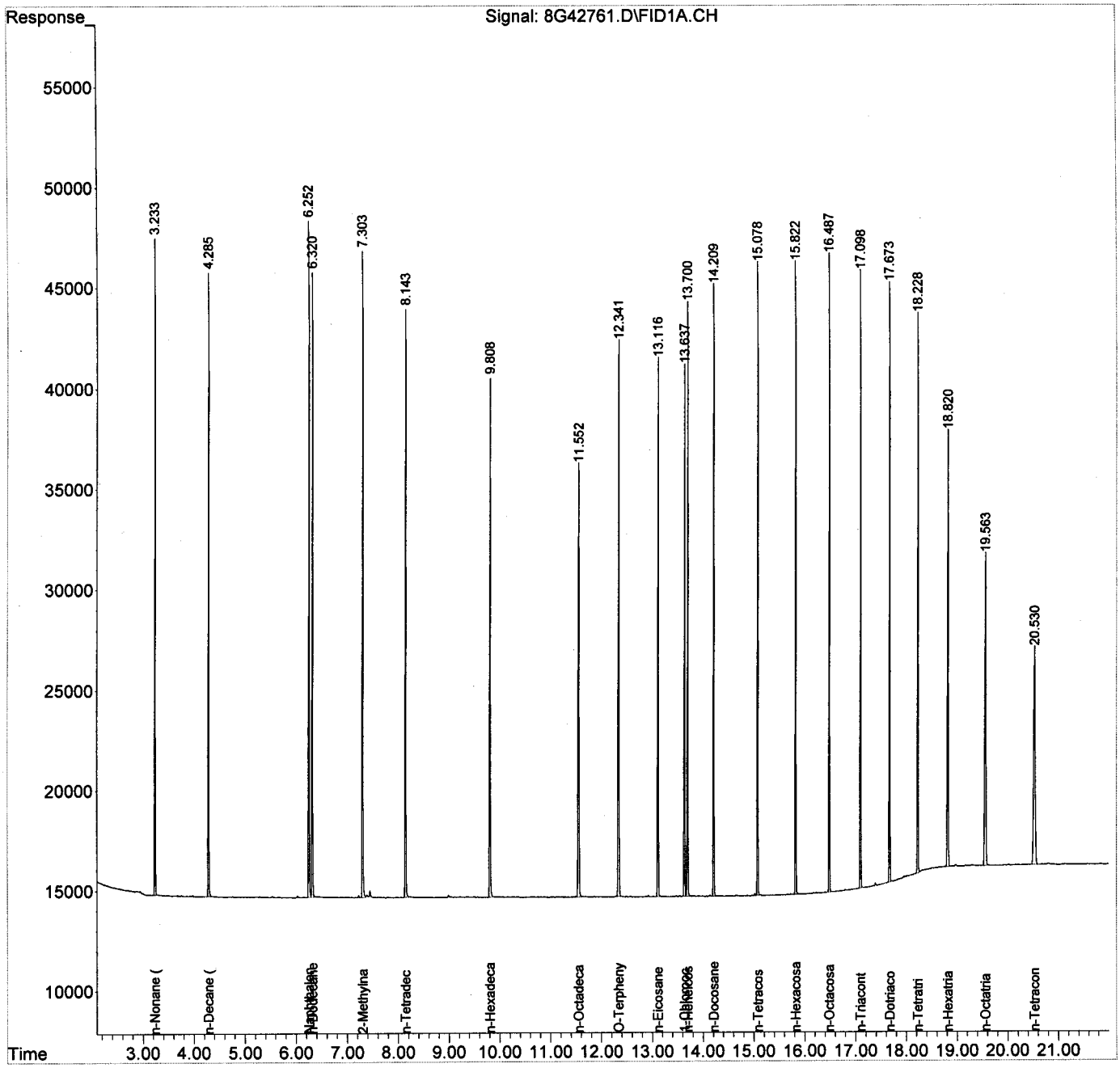
N

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-26-13\
Data File : 8G42761.D
Signal(s) : FID1A.CH
Acq On : 26-Aug-13, 09:14:29
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 26 09:57:37 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-26-13\
Data File : 9G156891.D
Signal(s) : FID1A.CH
Acq On : 26-Aug-13, 13:13:58
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 26 13:37:33 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	11.855	298472	96.693		
22)S	1-Chlorooctadecane	13.287	229058	96.494		
Target Compounds						
1)AT	n-Nonane (C9)	2.873	258992	104.687		
2)AT	n-Decane (C10)	3.913	261157	103.342		
3)	Naphthalene	5.853	287812	101.590		
4)AT	n-Dodecane (C12)	5.943	264468	101.637		
5)	2-Methylnaphthalene	6.903	290258	100.905		
6)AT	n-Tetradecane (C14)	7.766	264188	101.173		
7)AT	n-Hexadecane (C16)	9.404	263725	101.098		
8)AT	n-Octadecane (C18)	11.090	263073	99.774		
9)AT	n-Eicosane (C20)	12.737	259762	98.954		
10)AT	n-Heneicosane (C21)	13.357	261977	98.495		
11)AT	n-Docosane (C22)	13.886	259754	98.415		
12)AT	n-Tetracosane (C24)	14.774	259411	97.776		
13)AT	n-Hexacosane (C26)	15.525	252570	97.197		
14)AT	n-Octacosane (C28)	16.192	250571	96.920		
15)BT	n-Triacontane (C30)	16.805	252274	97.269		
16)BT	n-Dotriacontane(C32)	17.388	249770	97.828		
17)BT	n-Tetratriacontane (C34	17.950	247650	98.672		
18)BT	n-Hexatriacontane (C36)	18.499	238242	98.780		
19)BT	n-Octatriacontane (C38)	19.132	222425	94.689		
20)BT	n-Tetracontane (C40)	19.947	196982	85.475		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

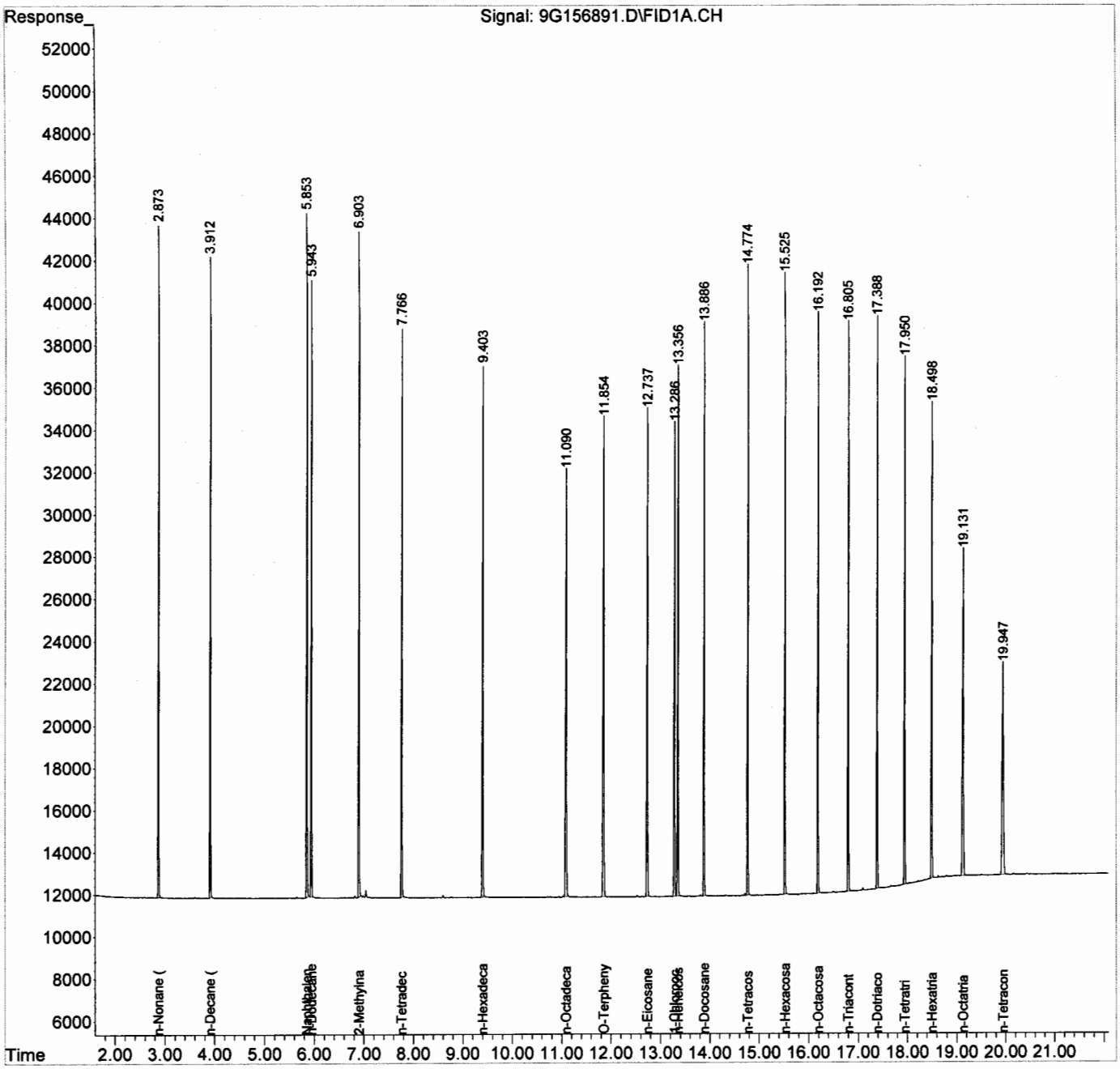
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-26-13\
Data File : 9G156891.D
Signal(s) : FID1A.CH
Acq On : 26-Aug-13, 13:13:58
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 26 13:37:33 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-26-13\
Data File : 8G42767.D
Signal(s) : FID1A.CH
Acq On : 26-Aug-13, 14:47:53
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 26 15:14:28 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.341	310080	106.900		
22)S	1-Chlorooctadecane	13.636	235293	108.808		
	Target Compounds					
1)AT	n-Nonane (C9)	3.231	262911	106.709		
2)AT	n-Decane (C10)	4.284	269184	109.733		
3)	Naphthalene	6.252	303391	108.865		
4)AT	n-Dodecane (C12)	6.320	273445	109.041		
5)	2-Methylnaphthalene	7.302	304266	109.687		
6)AT	n-Tetradecane (C14)	8.142	269880	112.335		
7)AT	n-Hexadecane (C16)	9.809	267903	115.767		
8)AT	n-Octadecane (C18)	11.552	266199	115.827		
9)AT	n-Eicosane (C20)	13.115	262346	110.266		
10)AT	n-Heneicosane (C21)	13.700	265222	109.070		
11)AT	n-Docosane (C22)	14.209	262968	110.687		
12)AT	n-Tetracosane (C24)	15.079	264009	111.487		
13)AT	n-Hexacosane (C26)	15.823	257476	112.104		
14)AT	n-Octacosane (C28)	16.488	255317	112.175		
15)BT	n-Triacontane (C30)	17.097	256452	112.570		
16)BT	n-Dotriacontane(C32)	17.672	253736	112.982		
17)BT	n-Tetratriacontane (C34	18.225	265794	118.999		
18)BT	n-Hexatriacontane (C36)	18.814	250565	113.891		
19)BT	n-Octatriacontane (C38)	19.558	241197	112.816		
20)BT	n-Tetracontane (C40)	20.527	239457	115.209		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

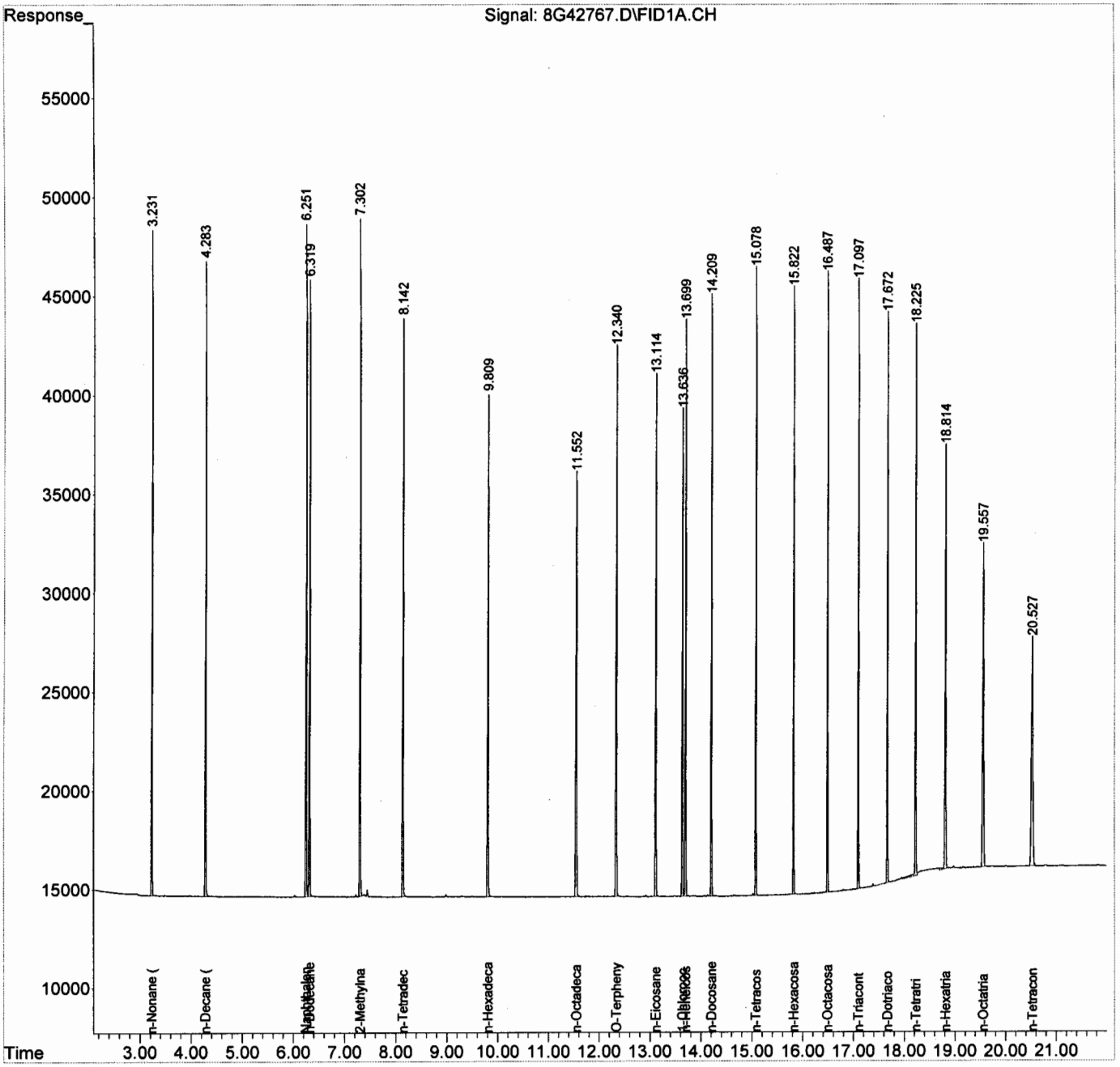
R

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-26-13\
Data File : 8G42767.D
Signal(s) : FID1A.CH
Acq On : 26-Aug-13, 14:47:53
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 26 15:14:28 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3082313 0495

Data Path : G:\Gcdata\2013\GC_8\Data\08-26-13\
Data File : 8G42776.D
Signal(s) : FID1A.CH
Acq On : 26-Aug-13, 21:58:57
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 07:36:32 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.339	346701	119.525		
22)S	1-Chlorooctadecane	13.634	264338	122.240		m
Target Compounds						
1)AT	n-Nonane (C9)	3.232	277022	112.436		
2)AT	n-Decane (C10)	4.283	282608	115.206		
3)	Naphthalene	6.251	323369	116.034		
4)AT	n-Dodecane (C12)	6.319	290044	115.661		
5)	2-Methylnaphthalene	7.302	326911	117.851		
6)AT	n-Tetradecane (C14)	8.141	290834	121.057		
7)AT	n-Hexadecane (C16)	9.807	290962	125.731		
8)AT	n-Octadecane (C18)	11.550	291664	126.907		
9)AT	n-Eicosane (C20)	13.113	288939	121.444		
10)AT	n-Heneicosane (C21)	13.699	292468	120.274		
11)AT	n-Docosane (C22)	14.207	291095	122.526		
12)AT	n-Tetracosane (C24)	15.077	291045	122.903		
13)AT	n-Hexacosane (C26)	15.821	284493	123.867		
14)AT	n-Octacosane (C28)	16.486	281912	123.860		
15)BT	n-Triacontane (C30)	17.094	283425	124.410		
16)BT	n-Dotriacontane(C32)	17.659	279449	124.432		
17)BT	n-Tetratriacontane (C34	18.191	275801	123.479		
18)BT	n-Hexatriacontane (C36)	18.777f	265652	120.748		
19)BT	n-Octatriacontane (C38)	19.515	256638	120.038		
20)BT	n-Tetracontane (C40)	20.480f	250528	120.536		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

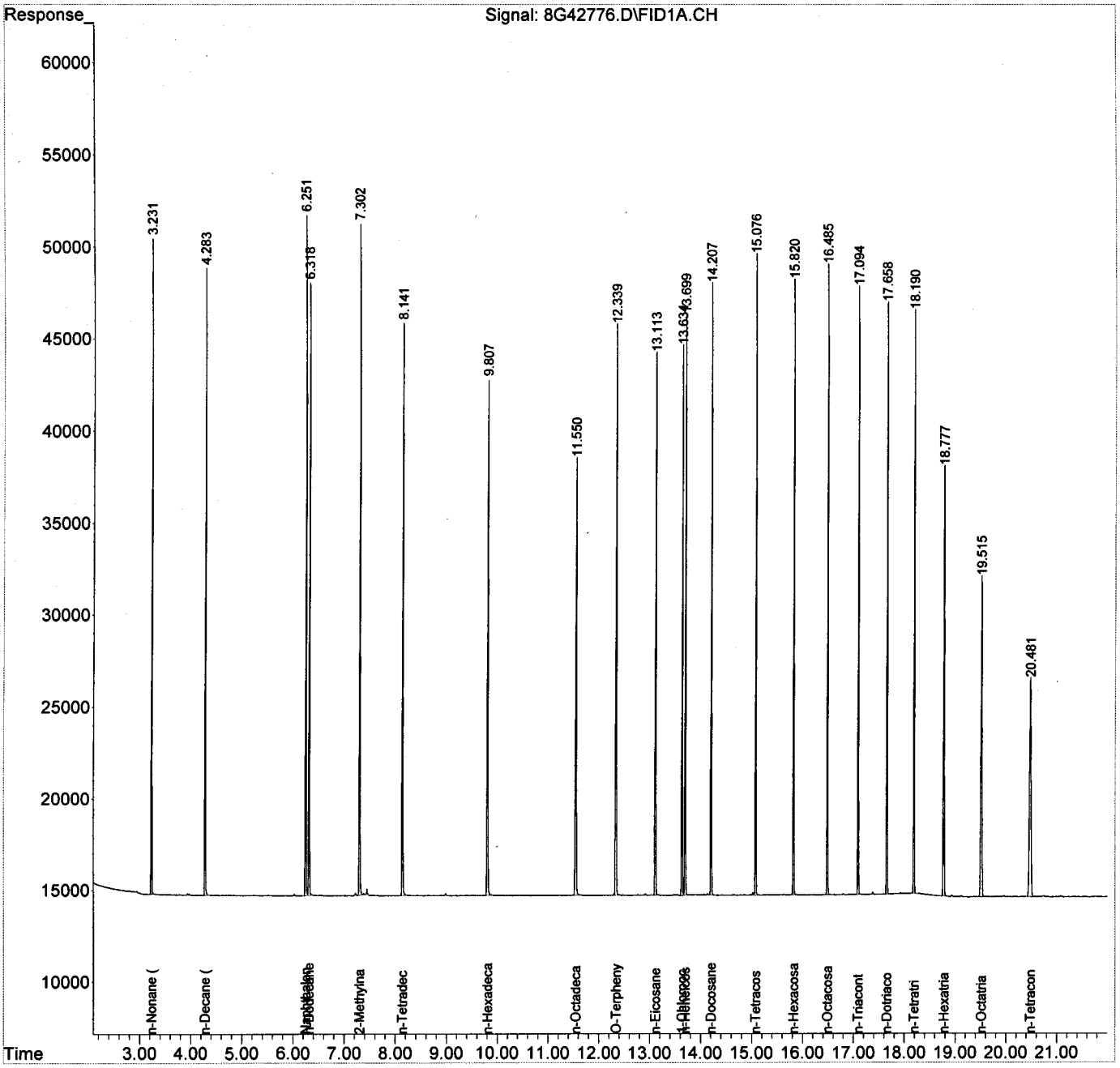
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-26-13\
Data File : 8G42776.D
Signal(s) : FID1A.CH
Acq On : 26-Aug-13, 21:58:57
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 07:36:32 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-26-13\
Data File : 9G156912.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 01:00:39
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 09:31:06 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	11.854	342729	111.031		
22)S	1-Chlorooctadecane	13.286	265210	111.723		
	Target Compounds					
1)AT	n-Nonane (C9)	2.872	297212	120.136		
2)AT	n-Decane (C10)	3.911	299040	118.332		
3)	Naphthalene	5.852	328358	115.902		
4)AT	n-Dodecane (C12)	5.942	300707	115.563		
5)	2-Methylnaphthalene	6.902	331579	115.270		
6)AT	n-Tetradecane (C14)	7.765	300926	115.242		
7)AT	n-Hexadecane (C16)	9.402	301063	115.412		
8)AT	n-Octadecane (C18)	11.089	301115	114.202		
9)AT	n-Eicosane (C20)	12.736	298541	113.727		
10)AT	n-Heneicosane (C21)	13.357	301438	113.331		
11)AT	n-Docosane (C22)	13.885	299549	113.492		
12)AT	n-Tetracosane (C24)	14.774	300897	113.413		
13)AT	n-Hexacosane (C26)	15.525	291848	112.312		
14)AT	n-Octacosane (C28)	16.192	288894	111.744		
15)BT	n-Triacontane (C30)	16.801	290109	111.857		
16)BT	n-Dotriacontane(C32)	17.366	286836	112.346		
17)BT	n-Tetratriacontane (C34	17.893f	284799	113.474		
18)BT	n-Hexatriacontane (C36)	18.411f	276997	114.849		
19)BT	n-Octatriacontane (C38)	19.039f	265311	112.947		
20)BT	n-Tetracontane (C40)	19.846f	248638	107.890		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

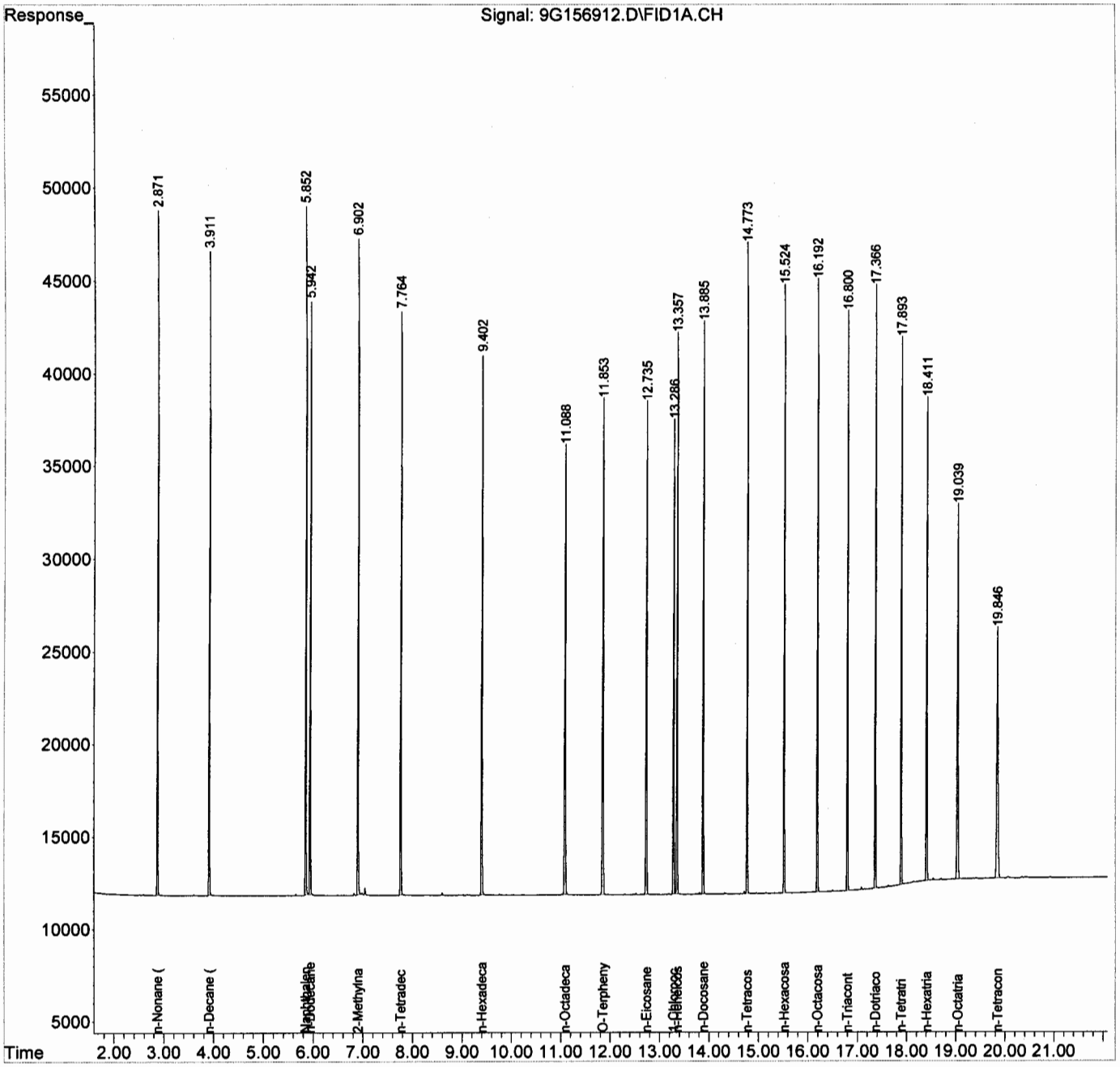
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-26-13\
Data File : 9G156912.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 01:00:39
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 09:31:06 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3082313 0499

Data Path : G:\Gcdata\2013\GC_9\Data\08-26-13\
Data File : 9G156921.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 06:24:37
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 31 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 09:41:16 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	11.853	338564	109.681		
22)S	1-Chlorooctadecane	13.286	262265	110.483		
Target Compounds						
1)AT	n-Nonane (C9)	2.871	287737	116.306		
2)AT	n-Decane (C10)	3.910	293728	116.230		
3)	Naphthalene	5.851	326799	115.352		
4)AT	n-Dodecane (C12)	5.941	299707	115.179		
5)	2-Methylnaphthalene	6.901	329693	114.615		
6)AT	n-Tetradecane (C14)	7.764	300894	115.230		
7)AT	n-Hexadecane (C16)	9.402	300274	115.109		
8)AT	n-Octadecane (C18)	11.088	299027	113.410		
9)AT	n-Eicosane (C20)	12.736	294572	112.215		
10)AT	n-Heneicosane (C21)	13.358	296652	111.532		
11)AT	n-Docosane (C22)	13.886	294724	111.664		
12)AT	n-Tetracosane (C24)	14.774	295434	111.354		
13)AT	n-Hexacosane (C26)	15.526	286534	110.267		
14)AT	n-Octacosane (C28)	16.192	284922	110.207		
15)BT	n-Triacontane (C30)	16.802	287993	111.041		
16)BT	n-Dotriacontane(C32)	17.366	286465	112.201		
17)BT	n-Tetratriacontane (C34	17.895f	285798	113.872		
18)BT	n-Hexatriacontane (C36)	18.415f	279493	115.883		
19)BT	n-Octatriacontane (C38)	19.043f	272670	116.080		
20)BT	n-Tetracontane (C40)	19.852f	270268	117.275		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

(f)=RT Delta > 1/2 Window (m)=manual int.

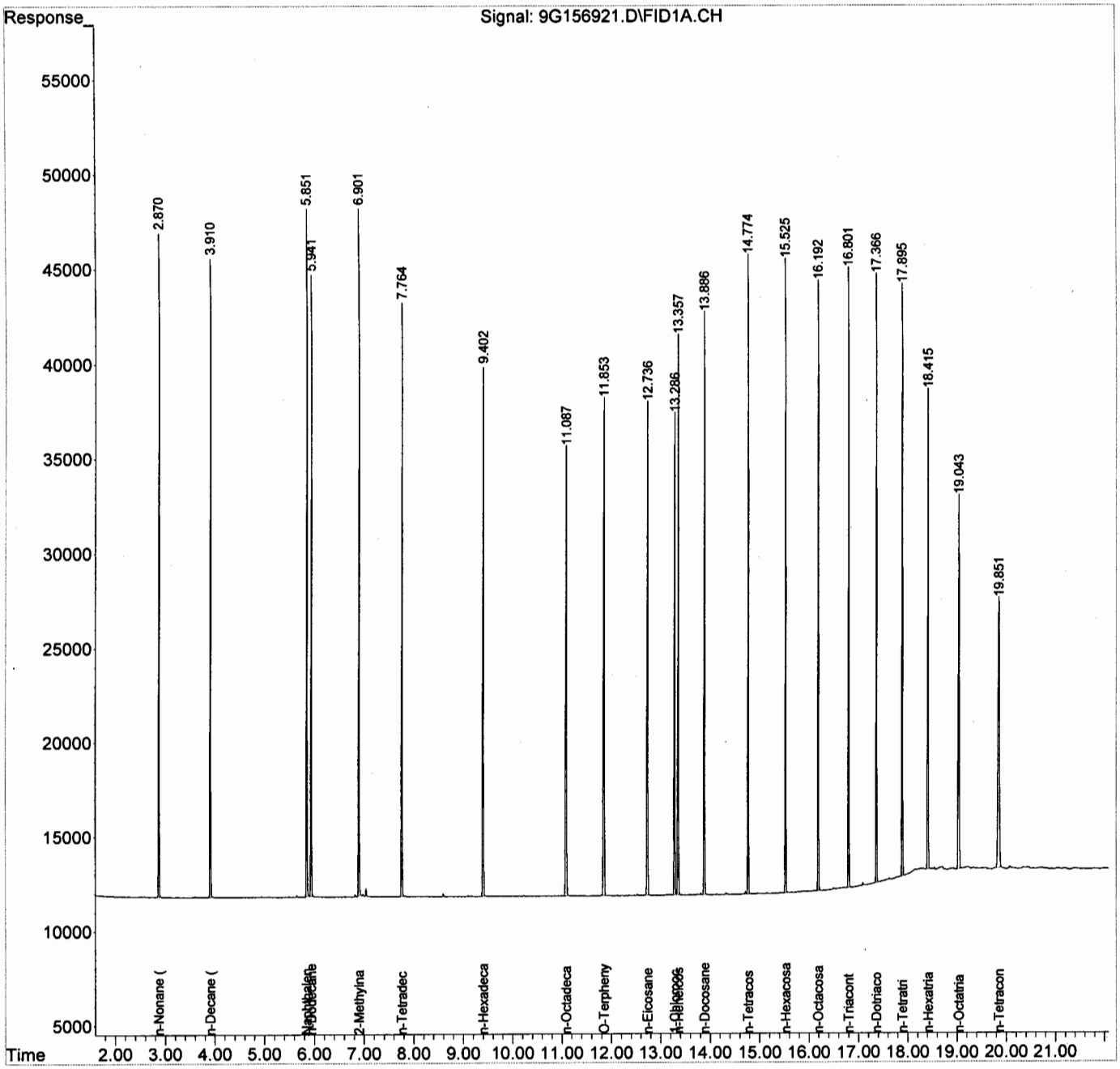
Quantitation Report (QT Reviewed)

3082313 0500

Data Path : G:\Gcdata\2013\GC_9\Data\08-26-13\
Data File : 9G156921.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 06:24:37
Operator : KD/RAK/ABM
Sample : CALDTH AL@100PPM
Misc : S.TPH
ALS Vial : 31 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 09:41:16 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



EPH Category 2 Data
Raw QC Data

Form1

ORGANICS REPORT

Sample Number: SMB25991
Client Id:
Data File: 8G42766.D
Analysis Date: 08/26/13 14:17
Date Rec/Extracted: NA-08/26/13
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: NJEPHRev3B
Matrix: Soil
Initial Vol: 10g
Final Vol: 1ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
ephc9c40	C9-C40	60	U				

Worksheet #: 274915

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0503

Data Path : G:\Gcdata\2013\GC_8\Data\08-26-13\
Data File : 8G42766.D
Signal(s) : FID1A.CH
Acq On : 26-Aug-13, 14:17:38
Operator : KD/RAK/ABM
Sample : SMB25991
Misc : S.TPH
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 11:00:21 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	12.339	197352	68.038		
22)S	1-Chlorooctadecane	13.636	164792	76.206		
	Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		d
4)AT	n-Dodecane (C12)	0.000	0	N.D.		d
5)	2-Methylnaphthalene	0.000	0	N.D.		d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	12.339f	697238	292.885		m
24)B	>C28-C40(Total)	20.436f	2753277	1253.959		m
25)t	C9-C40(TOTAL)	12.339f	3441198	1483.949		m

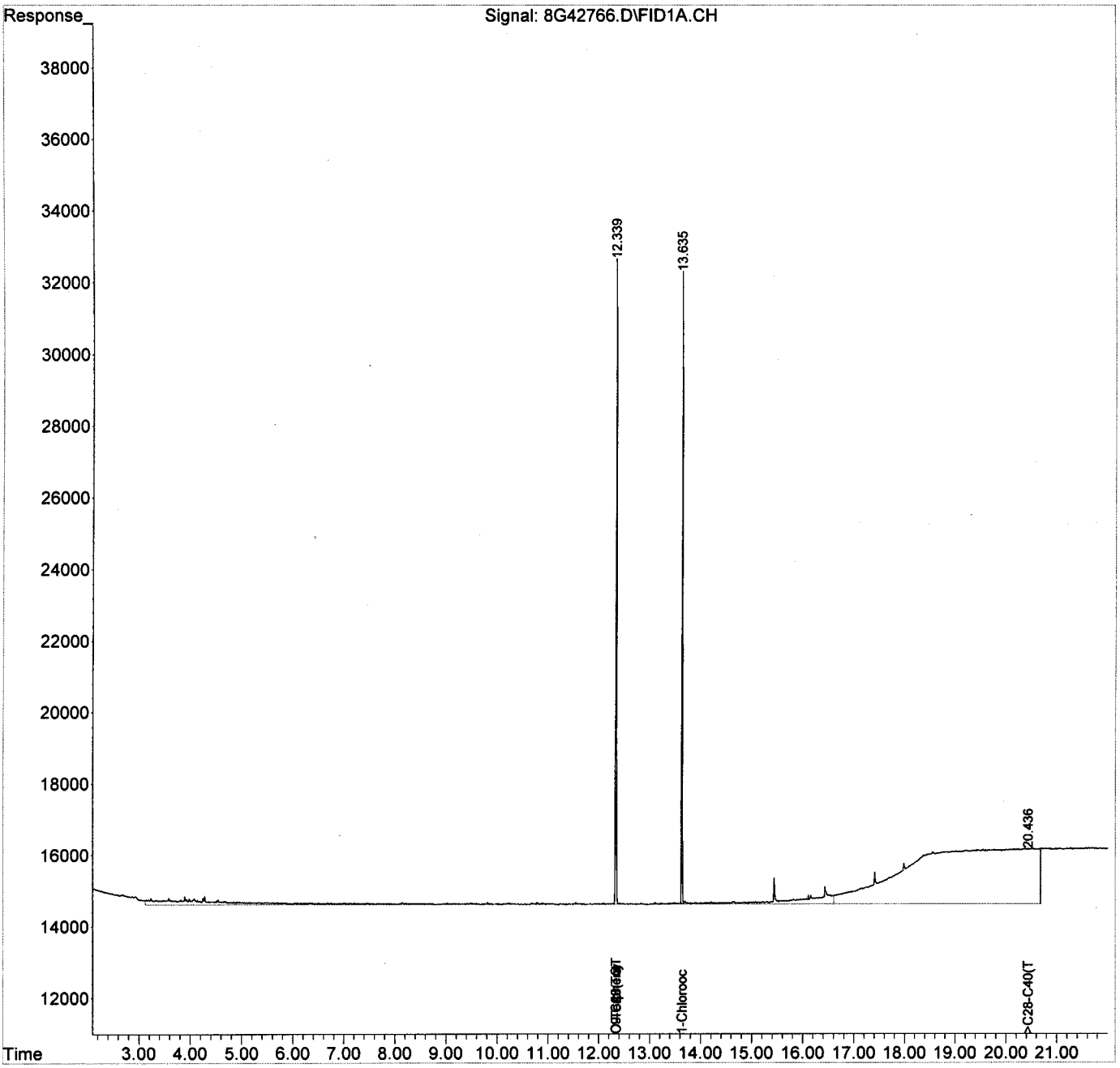
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-26-13\
Data File : 8G42766.D
Signal(s) : FID1A.CH
Acq On : 26-Aug-13, 14:17:38
Operator : KD/RAK/ABM
Sample : SMB25991
Misc : S.TPH
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 11:00:21 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3082313 0505

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42614.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 15:35:29
Operator : KD/RAK/ABM
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 19 17:14:00 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Aug 19 14:14:28 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	0.000	0	N.D.		
22)S	1-Chlorooctadecane	0.000	0	N.D.		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		
9)AT	n-Eicosane (C20)	0.000	0	N.D.		
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		
11)AT	n-Docosane (C22)	0.000	0	N.D.		
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		
14)AT	n-Octacosane (C28)	0.000	0	N.D.		
15)BT	n-Triacontane (C30)	0.000	0	N.D.		
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	7.236f	201356	84.582		m
24)B	>C28-C40(Total)	20.675f	1156523	526.729		m
25)t	C9-C40(TOTAL)	20.675f	1362372	587.496		m

(f)=RT Delta > 1/2 Window (m)=manual int.

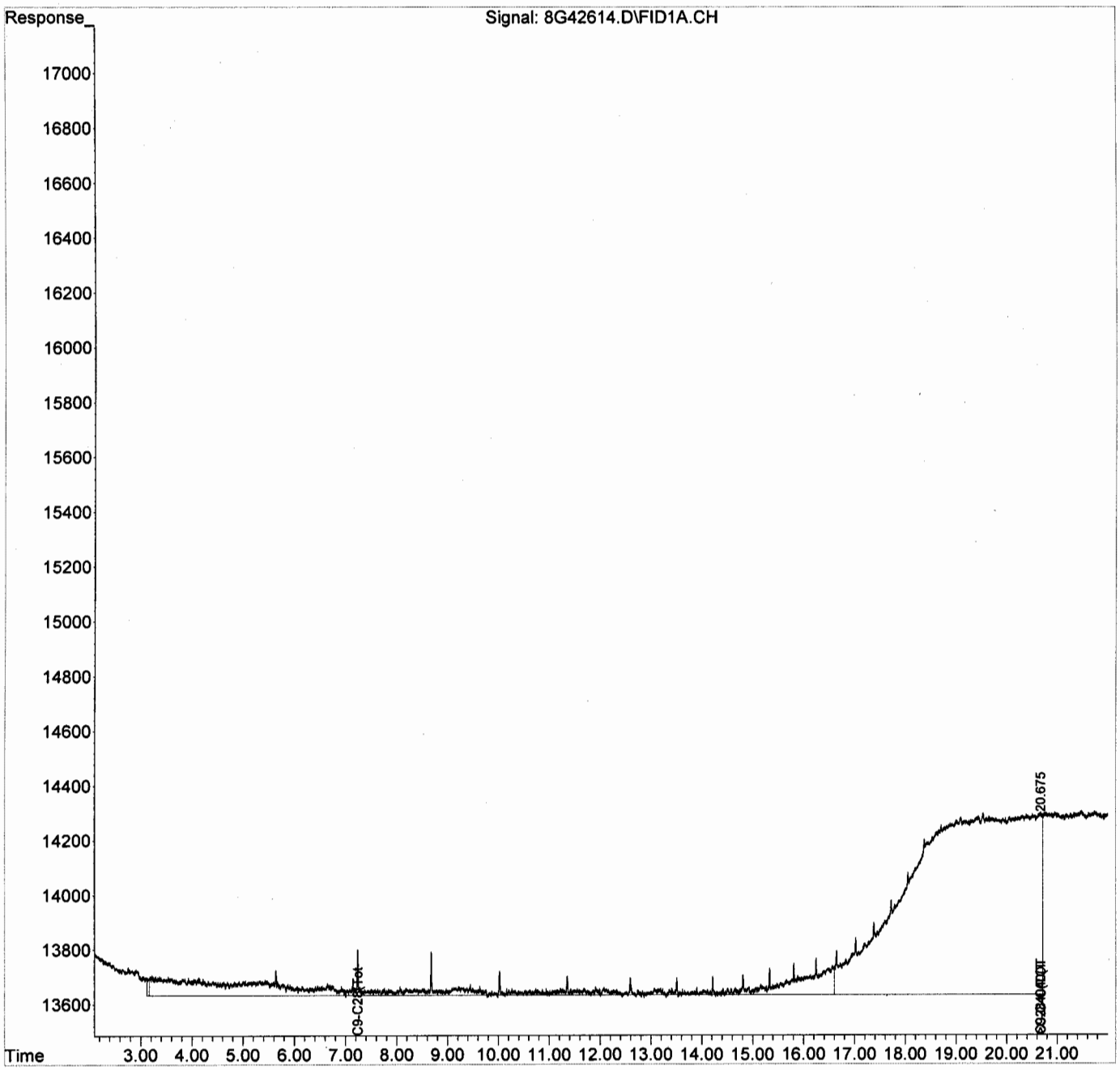
N

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42614.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 15:35:29
Operator : KD/RAK/ABM
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 19 17:14:00 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Aug 19 14:14:28 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3082313 0507

Data Path : G:\Gcdata\2013\GC_8\Data\08-26-13\
Data File : 8G42762.D
Signal(s) : FID1A.CH
Acq On : 26-Aug-13, 10:05:09
Operator : KD/RAK/ABM
Sample : INST BLK(MEL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 11:19:03 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
21)S	O-Terphenyl	0.000	0	N.D.		d
22)S	1-Chlorooctadecane	0.000	0	N.D.		d
	Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		d
3)	Naphthalene	0.000	0	N.D.		d
4)AT	n-Dodecane (C12)	0.000	0	N.D.		d
5)	2-Methylnaphthalene	0.000	0	N.D.		d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		d
8)AT	n-Octadecane (C18)	0.000	0	N.D.		d
9)AT	n-Eicosane (C20)	0.000	0	N.D.		d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		d
14)AT	n-Octacosane (C28)	0.000	0	N.D.		d
15)BT	n-Triacontane (C30)	0.000	0	N.D.		d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		d
23)A	C9-C28(Total)	11.126f	289904	121.778		m
24)B	>C28-C40(Total)	20.558f	2777605	1265.039		m
25)t	C9-C40(TOTAL)	20.558f	3058002	1318.703		m

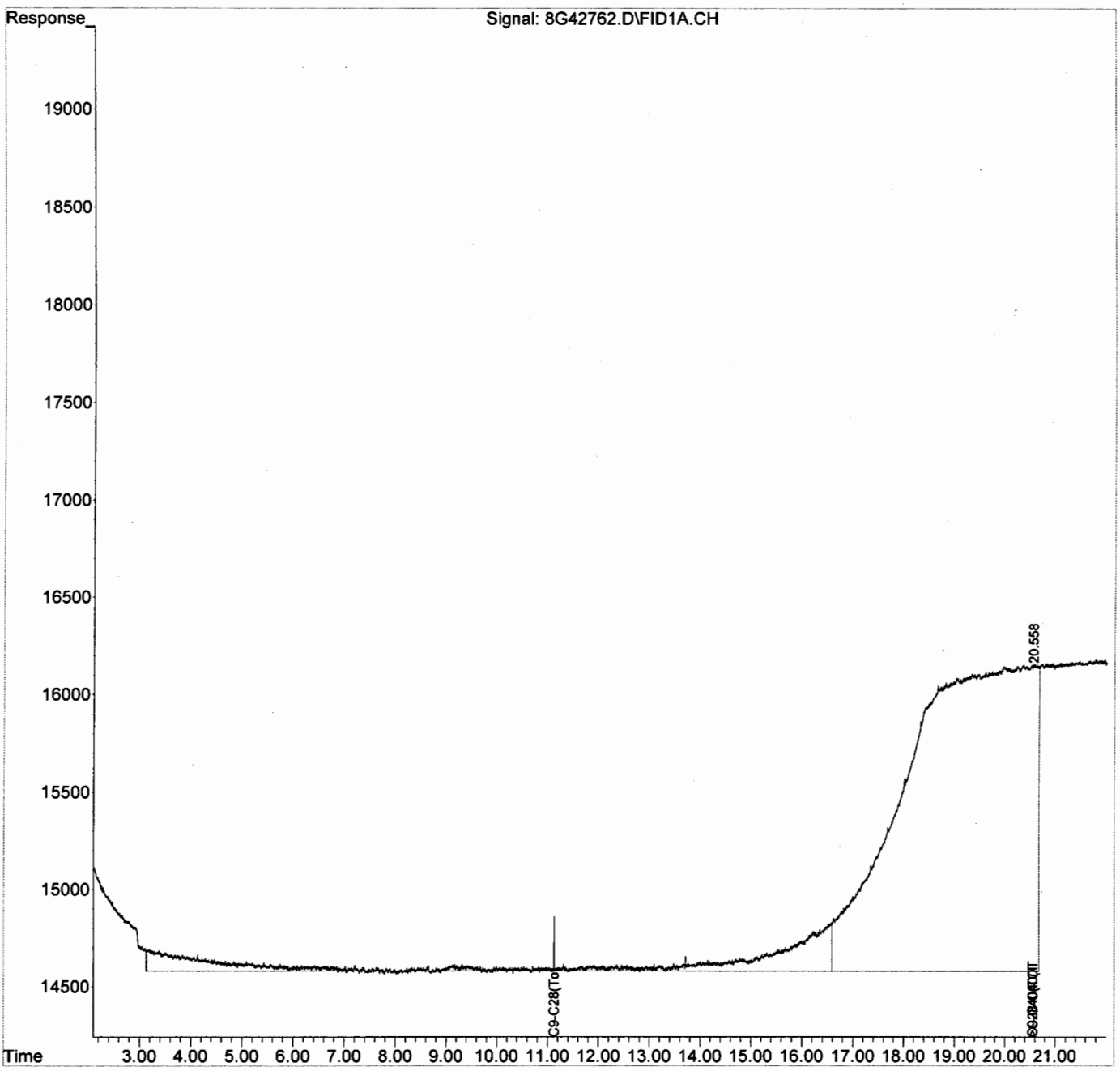
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-26-13\
Data File : 8G42762.D
Signal(s) : FID1A.CH
Acq On : 26-Aug-13, 10:05:09
Operator : KD/RAK/ABM
Sample : INST BLK(MEL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 11:19:03 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3082313 0509

Data Path : G:\Gcdata\2013\GC_9\Data\08-26-13\
Data File : 9G156892.D
Signal(s) : FID1A.CH
Acq On : 26-Aug-13, 13:46:34
Operator : KD/RAK/ABM
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 26 15:08:10 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

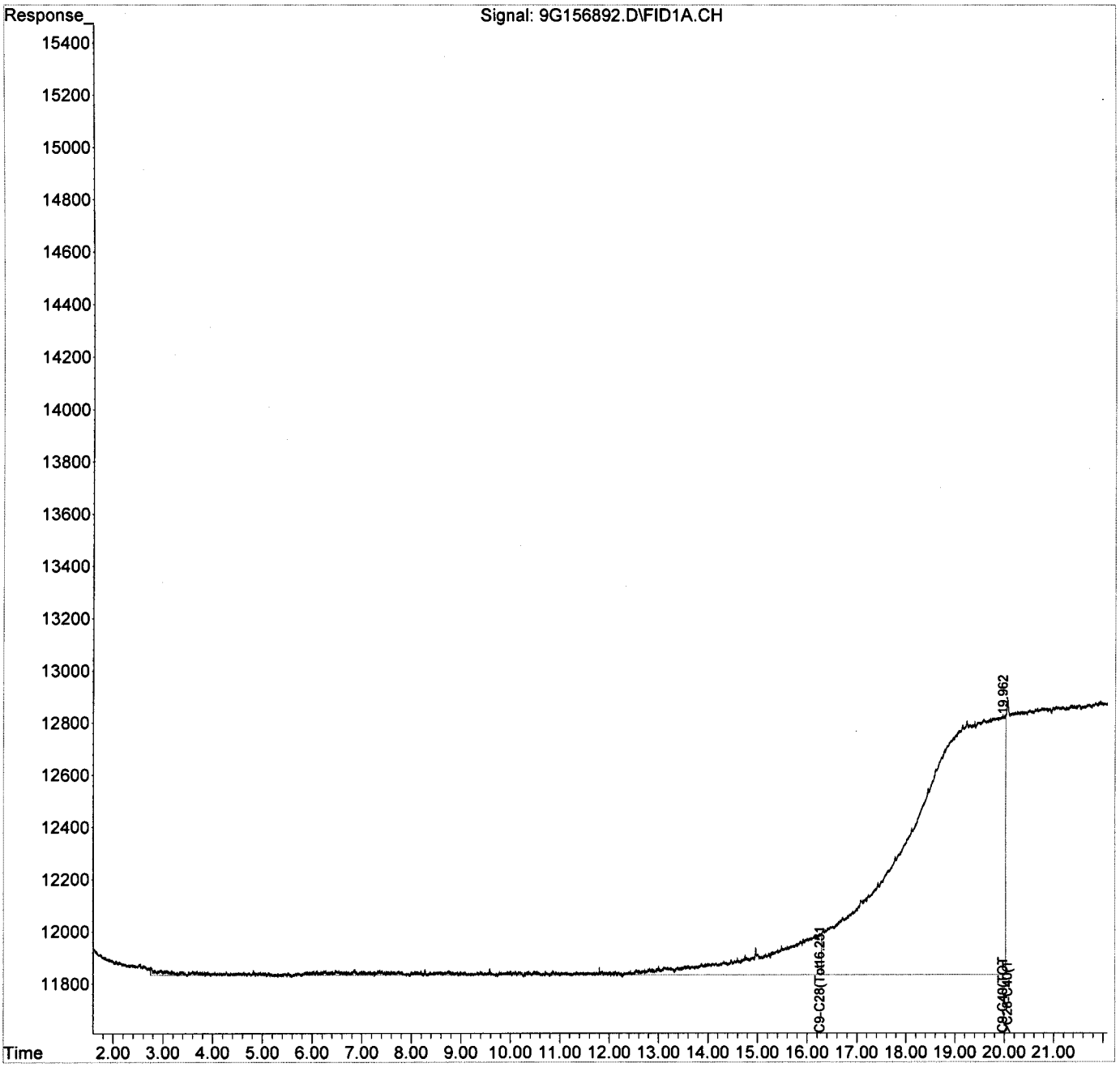
	Compound	R.T.	Response	Conc	Units
System Monitoring Compounds					
21)S	O-Terphenyl	0.000	0	N.D.	d
22)S	1-Chlorooctadecane	0.000	0	N.D.	d
Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.	
2)AT	n-Decane (C10)	0.000	0	N.D.	
3)	Naphthalene	0.000	0	N.D.	
4)AT	n-Dodecane (C12)	0.000	0	N.D.	
5)	2-Methylnaphthalene	0.000	0	N.D.	d
6)AT	n-Tetradecane (C14)	0.000	0	N.D.	d
7)AT	n-Hexadecane (C16)	0.000	0	N.D.	d
8)AT	n-Octadecane (C18)	0.000	0	N.D.	d
9)AT	n-Eicosane (C20)	0.000	0	N.D.	d
10)AT	n-Heneicosane (C21)	0.000	0	N.D.	d
11)AT	n-Docosane (C22)	0.000	0	N.D.	d
12)AT	n-Tetracosane (C24)	0.000	0	N.D.	d
13)AT	n-Hexacosane (C26)	0.000	0	N.D.	d
14)AT	n-Octacosane (C28)	0.000	0	N.D.	d
15)BT	n-Triacontane (C30)	0.000	0	N.D.	d
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.	d
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.	d
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.	d
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.	d
20)BT	n-Tetracontane (C40)	0.000	0	N.D.	d
23)A	C9-C28(Total)	16.251f	163738	62.934	m
24)B	>C28-C40(Total)	20.052f	1340049	546.144	m
25)t	C9-C40(TOTAL)	19.962f	1486896	582.552	m

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_9\Data\08-26-13\
Data File : 9G156892.D
Signal(s) : FID1A.CH
Acq On : 26-Aug-13, 13:46:34
Operator : KD/RAK/ABM
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 26 15:08:10 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3082313 0511

Data Path : G:\Gcdata\2013\GC_9\Data\08-26-13\
Data File : 9G156914.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 02:58:35
Operator : KD/RAK/ABM
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 11:46:34 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units
System Monitoring Compounds					
21)S	O-Terphenyl	0.000	0	N.D.	
22)S	1-Chlorooctadecane	0.000	0	N.D.	
Target Compounds					
1)AT	n-Nonane (C9)	0.000	0	N.D.	
2)AT	n-Decane (C10)	0.000	0	N.D.	
3)	Naphthalene	0.000	0	N.D.	
4)AT	n-Dodecane (C12)	0.000	0	N.D.	
5)	2-Methylnaphthalene	0.000	0	N.D.	
6)AT	n-Tetradecane (C14)	0.000	0	N.D.	
7)AT	n-Hexadecane (C16)	0.000	0	N.D.	
8)AT	n-Octadecane (C18)	0.000	0	N.D.	
9)AT	n-Eicosane (C20)	0.000	0	N.D.	
10)AT	n-Heneicosane (C21)	0.000	0	N.D.	
11)AT	n-Docosane (C22)	0.000	0	N.D.	
12)AT	n-Tetracosane (C24)	0.000	0	N.D.	
13)AT	n-Hexacosane (C26)	0.000	0	N.D.	
14)AT	n-Octacosane (C28)	0.000	0	N.D.	
15)BT	n-Triacontane (C30)	0.000	0	N.D.	
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.	
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.	
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.	
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.	
20)BT	n-Tetracontane (C40)	0.000	0	N.D.	
23)A	C9-C28(Total)	16.264f	188762	72.552	m
24)B	>C28-C40(Total)	19.847f	1254123	511.124	m
25)t	C9-C40(TOTAL)	19.847f	1434405	561.987	m

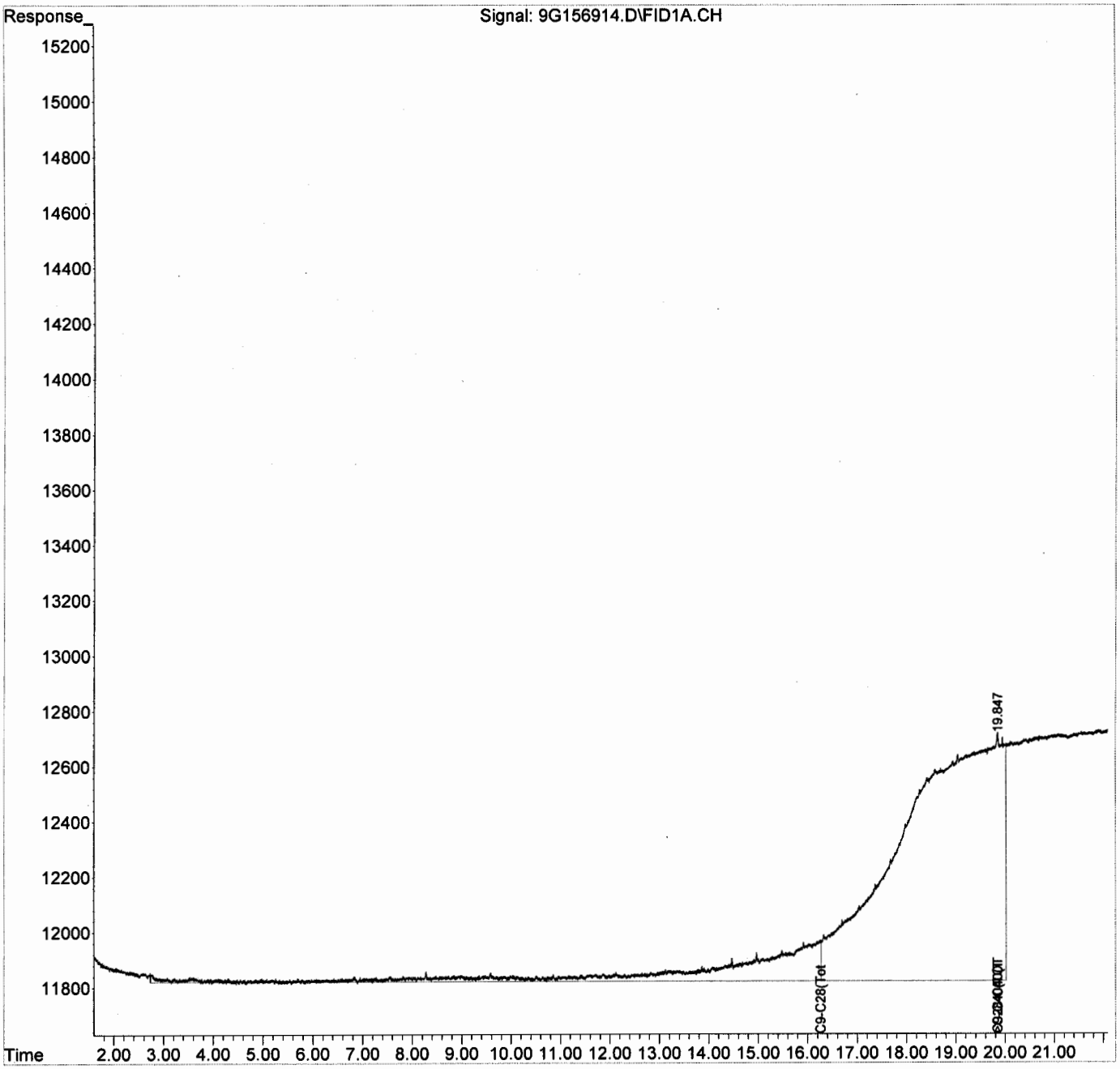
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_9\Data\08-26-13\
Data File : 9G156914.D
Signal(s) : FID1A.CH
Acq On : 27-Aug-13, 02:58:35
Operator : KD/RAK/ABM
Sample : INST BLK(MECL2)
Misc : S.TPH
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 11:46:34 2013
Quant Method : G:\GCDATA\2013\GC_9\MethodQt\9GC_DT0821.M
Quant Title : @GC_9,mg,8015
QLast Update : Wed Aug 21 14:42:50 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3082313 0513

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42620.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 18:56:24
Operator : KD/RAK/ABM
Sample : SMB25935(MS)
Misc : S.TPH
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 20 09:36:19 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Aug 19 14:14:28 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.377	319983	110.315		
22)S	1-Chlorooctadecane	13.667	252759	114.932		
Target Compounds						
1)AT	n-Nonane (C9)	3.253	185435	75.263		
2)AT	n-Decane (C10)	4.307	219524	89.489		
3)	Naphthalene	6.276	281152	100.885		
4)AT	n-Dodecane (C12)	6.344	249186	99.368		
5)	2-Methylnaphthalene	7.327	277635	100.087		
6)AT	n-Tetradecane (C14)	8.171	254439	105.908		
7)AT	n-Hexadecane (C16)	9.841	258466	111.689		
8)AT	n-Octadecane (C18)	11.591	248145	107.972		
9)AT	n-Eicosane (C20)	13.148	252492	106.124		
10)AT	n-Heneicosane (C21)	13.730	254130	104.509		
11)AT	n-Docosane (C22)	14.237	251000	105.650		
12)AT	n-Tetracosane (C24)	15.105	246451	104.072		
13)AT	n-Hexacosane (C26)	15.850	247780	107.882		
14)AT	n-Octacosane (C28)	16.514	239549	105.248		
15)BT	n-Triacontane (C30)	17.125	236630	103.869		
16)BT	n-Dotriacontane(C32)	17.693	231434	103.052		
17)BT	n-Tetratriacontane (C34	18.238	222723	99.716		
18)BT	n-Hexatriacontane (C36)	18.835	221461	100.662		
19)BT	n-Octatriacontane (C38)	19.588	216162	101.106		
20)BT	n-Tetracontane (C40)	20.570	216627	104.225		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

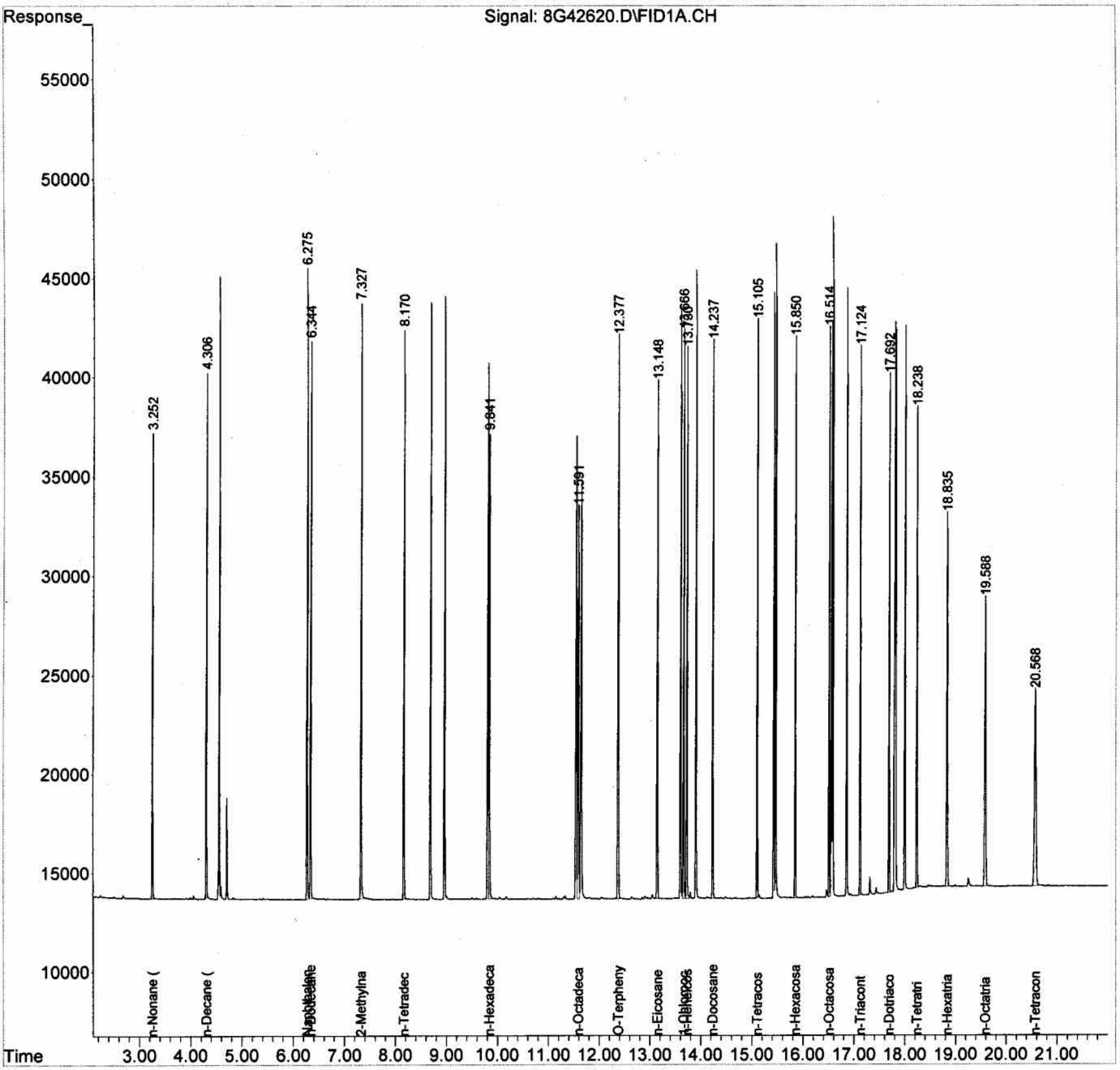
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42620.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 18:56:24
Operator : KD/RAK/ABM
Sample : SMB25935(MS)
Misc : S.TPH
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 20 09:36:19 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Aug 19 14:14:28 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42621.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 19:26:35
Operator : KD/RAK/ABM
Sample : SMB25935(MSD)
Misc : S.TPH
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 20 09:36:32 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Aug 19 14:14:28 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.376	261559	90.173		
22)S	1-Chlorooctadecane	13.666	207422	94.317		
Target Compounds						
1)AT	n-Nonane (C9)	3.253	165573	67.202		
2)AT	n-Decane (C10)	4.307	197463	80.496		
3)	Naphthalene	6.275	246099	88.307		
4)AT	n-Dodecane (C12)	6.344	219773	87.638		
5)	2-Methylnaphthalene	7.327	244577	88.169		
6)AT	n-Tetradecane (C14)	8.170	222148	92.467		
7)AT	n-Hexadecane (C16)	9.840	227287	98.215		
8)AT	n-Octadecane (C18)	11.591	216209	94.076		
9)AT	n-Eicosane (C20)	13.147	220190	92.548		
10)AT	n-Heneicosane (C21)	13.730	220918	90.850		
11)AT	n-Docosane (C22)	14.237	217021	91.347		
12)AT	n-Tetracosane (C24)	15.106	211684	89.391		
13)AT	n-Hexacosane (C26)	15.850	214478	93.383		
14)AT	n-Octacosane (C28)	16.514	206620	90.780		
15)BT	n-Triacontane (C30)	17.124	203094	89.149		
16)BT	n-Dotriacontane(C32)	17.692	199021	88.619		
17)BT	n-Tetratriacontane (C34	18.230	192167	86.035		
18)BT	n-Hexatriacontane (C36)	18.828	191802	87.181		
19)BT	n-Octatriacontane (C38)	19.580	189919	88.832		
20)BT	n-Tetracontane (C40)	20.566	193573	93.133		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

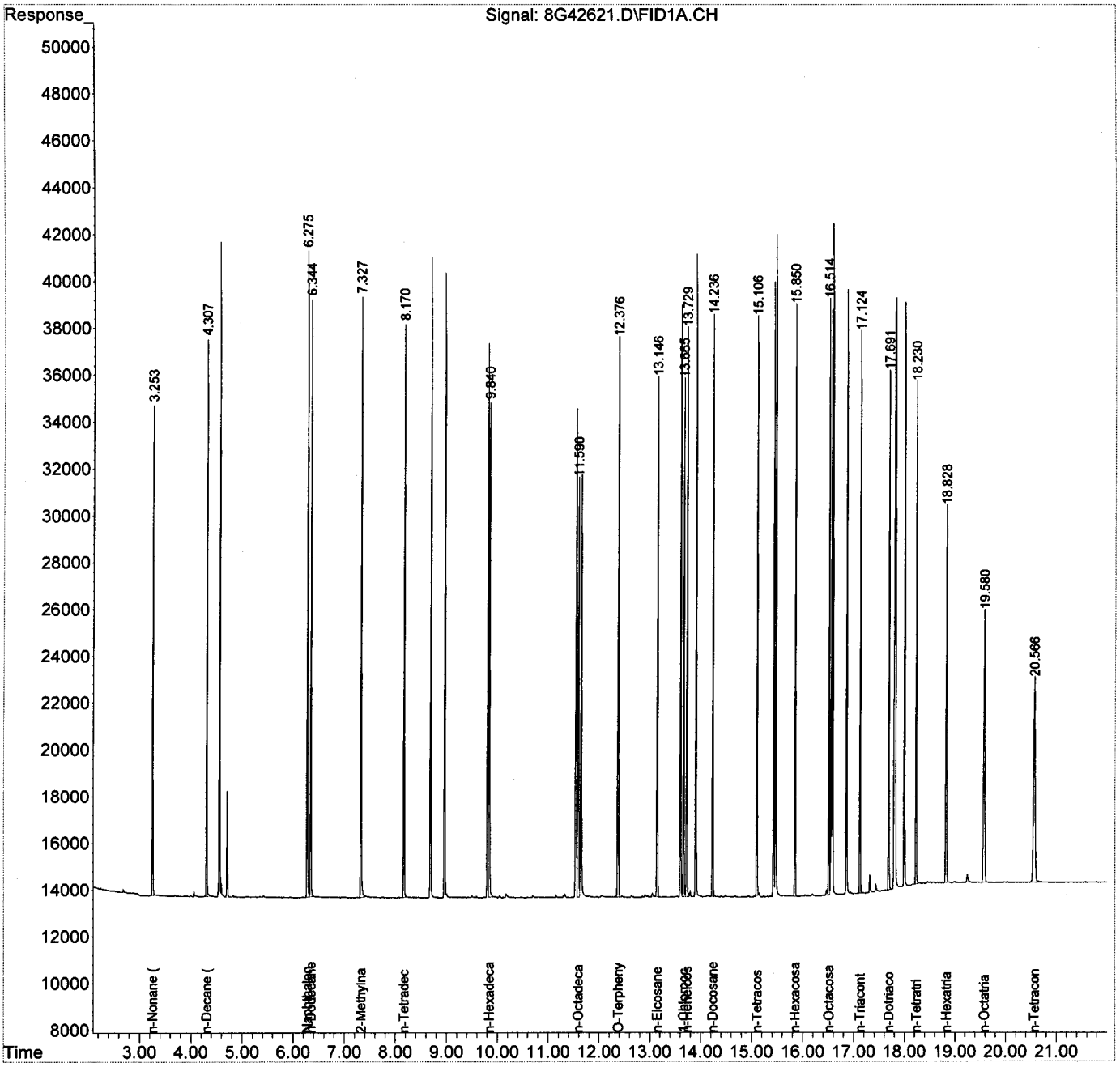
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42621.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 19:26:35
Operator : KD/RAK/ABM
Sample : SMB25935(MSD)
Misc : S.TPH
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 20 09:36:32 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Aug 19 14:14:28 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3082313 0517

Data Path : G:\Gcdata\2013\GC_8\Data\08-26-13\
Data File : 8G42770.D
Signal(s) : FID1A.CH
Acq On : 26-Aug-13, 17:55:50
Operator : KD/RAK/ABM
Sample : SMB25991(MS)
Misc : S.TPH
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 11:07:41 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.340	339133	116.916		
22)S	1-Chlorooctadecane	13.636	264033	122.099		m
Target Compounds						
1)AT	n-Nonane (C9)	3.231	163078	66.189		
2)AT	n-Decane (C10)	4.284	203728	83.050		
3)	Naphthalene	6.251	273175	98.023		
4)AT	n-Dodecane (C12)	6.319	240153	95.765		
5)	2-Methylnaphthalene	7.302	271488	97.871		
6)AT	n-Tetradecane (C14)	8.143	245230	102.075		
7)AT	n-Hexadecane (C16)	9.807	247048	106.755		
8)AT	n-Octadecane (C18)	11.550	243439	105.924		m
9)AT	n-Eicosane (C20)	13.115	242001	101.715		
10)AT	n-Heneicosane (C21)	13.699	241869	99.466		
11)AT	n-Docosane (C22)	14.208	240767	101.342		
12)AT	n-Tetracosane (C24)	15.077	235682	99.524		
13)AT	n-Hexacosane (C26)	15.821	231065	100.605		
14)AT	n-Octacosane (C28)	16.486	221998	97.536		m
15)BT	n-Triacontane (C30)	17.095	214082	93.972		
16)BT	n-Dotriacontane(C32)	17.661	206952	92.151		
17)BT	n-Tetratriacontane (C34	18.198	196080	87.787		
18)BT	n-Hexatriacontane (C36)	18.783	193997	88.179		
19)BT	n-Octatriacontane (C38)	19.520	189859	88.804		
20)BT	n-Tetracontane (C40)	20.485f	192342	92.541		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

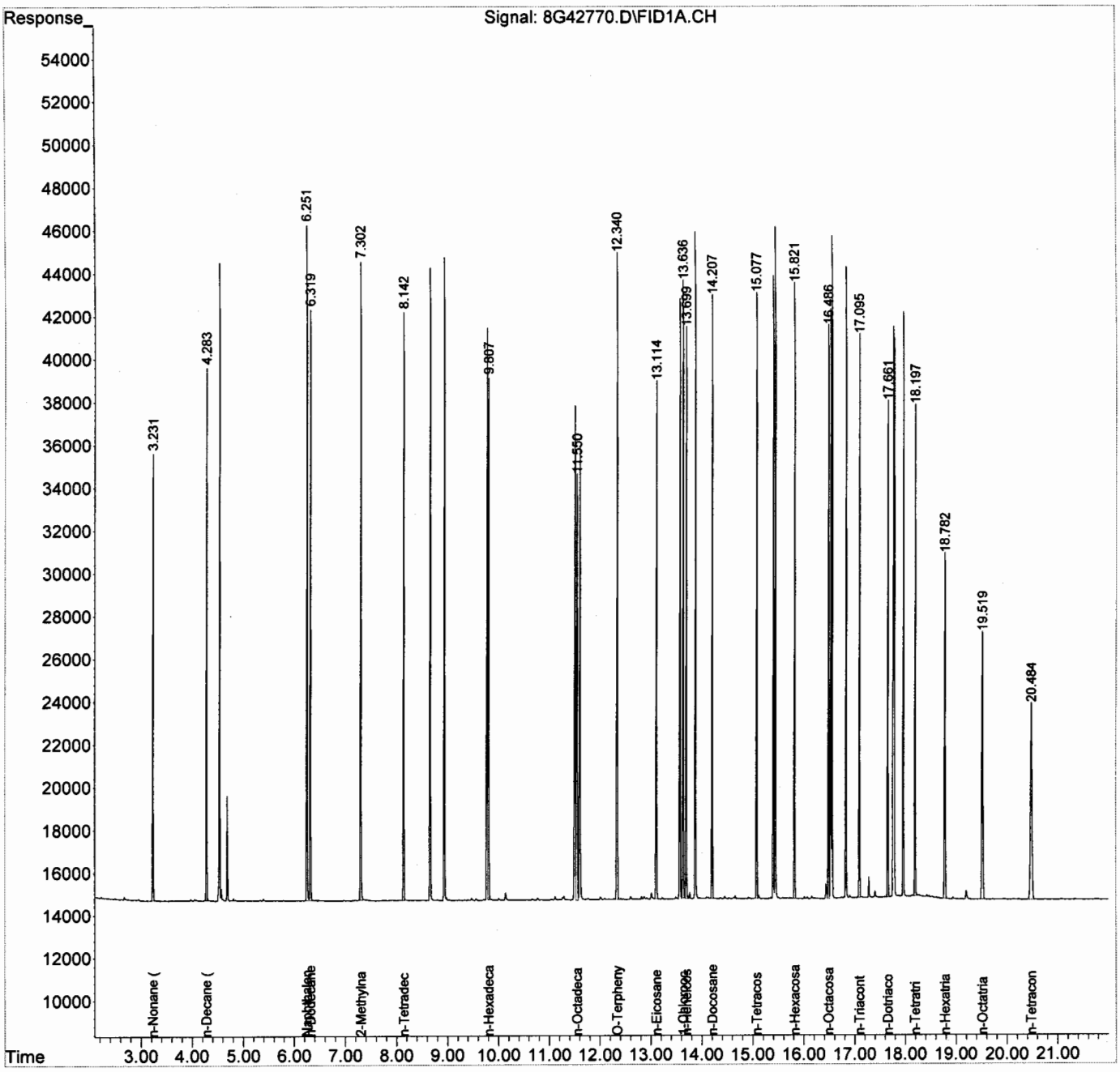
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-26-13\
Data File : 8G42770.D
Signal(s) : FID1A.CH
Acq On : 26-Aug-13, 17:55:50
Operator : KD/RAK/ABM
Sample : SMB25991(MS)
Misc : S.TPH
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 27 11:07:41 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Tue Aug 20 10:42:52 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

3082313 0519

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42622.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 19:56:50
Operator : KD/RAK/ABM
Sample : AC73985-007(MS)
Misc : S.TPH
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 20 09:37:23 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Aug 19 14:14:28 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.375	215765	74.385		
22)S	1-Chlorooctadecane	13.666	170599	77.573		
Target Compounds						
1)AT	n-Nonane (C9)	3.252	129148	52.418		
2)AT	n-Decane (C10)	4.306	162300	66.162		
3)	Naphthalene	6.274	214148	76.842		
4)AT	n-Dodecane (C12)	6.344	187895	74.927		
5)	2-Methylnaphthalene	7.326	211925	76.398		
6)AT	n-Tetradecane (C14)	8.170	194010	80.755		
7)AT	n-Hexadecane (C16)	9.840	201658	87.141		
8)AT	n-Octadecane (C18)	11.590	192606	83.806		
9)AT	n-Eicosane (C20)	13.147	197633	83.067		
10)AT	n-Heneicosane (C21)	13.729	197530	81.232		
11)AT	n-Docosane (C22)	14.237	195992	82.496		
12)AT	n-Tetracosane (C24)	15.105	192233	81.177		
13)AT	n-Hexacosane (C26)	15.850	194706	84.774		
14)AT	n-Octacosane (C28)	16.515	187278	82.282		
15)BT	n-Triacontane (C30)	17.123	185468	81.412		
16)BT	n-Dotriacontane(C32)	17.690	181663	80.890		
17)BT	n-Tetratriacontane (C34	18.224	174661	78.197		
18)BT	n-Hexatriacontane (C36)	18.821	173899	79.043		
19)BT	n-Octatriacontane (C38)	19.570	171068	80.014		
20)BT	n-Tetracontane (C40)	20.555	173371	83.414		
23)A	C9-C28(Total)	0.000	0	N.D.		d
24)B	>C28-C40(Total)	0.000	0	N.D.		d
25)t	C9-C40(TOTAL)	0.000	0	N.D.		d

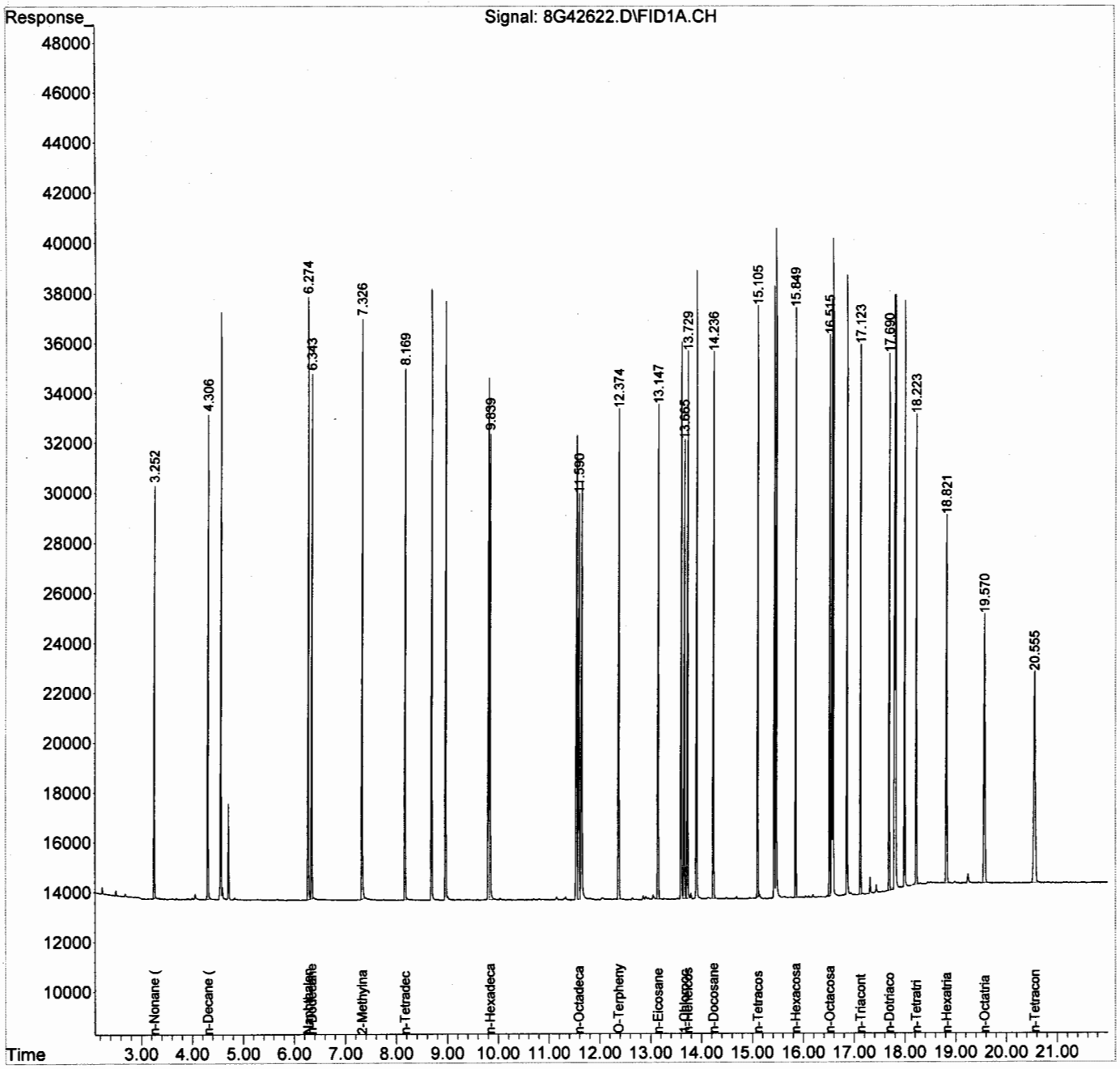
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42622.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 19:56:50
Operator : KD/RAK/ABM
Sample : AC73985-007(MS)
Misc : S.TPH
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 20 09:37:23 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Aug 19 14:14:28 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42623.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 20:26:57
Operator : KD/RAK/ABM
Sample : AC73985-007(DUP)
Misc : S.TPH
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 20 10:05:34 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Aug 19 14:14:28 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.374	202954	69.969		
22)S	1-Chlorooctadecane	13.665	156860	71.326		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		
9)AT	n-Eicosane (C20)	0.000	0	N.D.		
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		
14)AT	n-Octacosane (C28)	0.000	0	N.D.		
15)BT	n-Triacontane (C30)	0.000	0	N.D.		
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	12.374f	707814	297.328		m
24)B	>C28-C40(Total)	19.320f	1282117	583.930		m
25)t	C9-C40(TOTAL)	12.374f	1950468	841.101		m

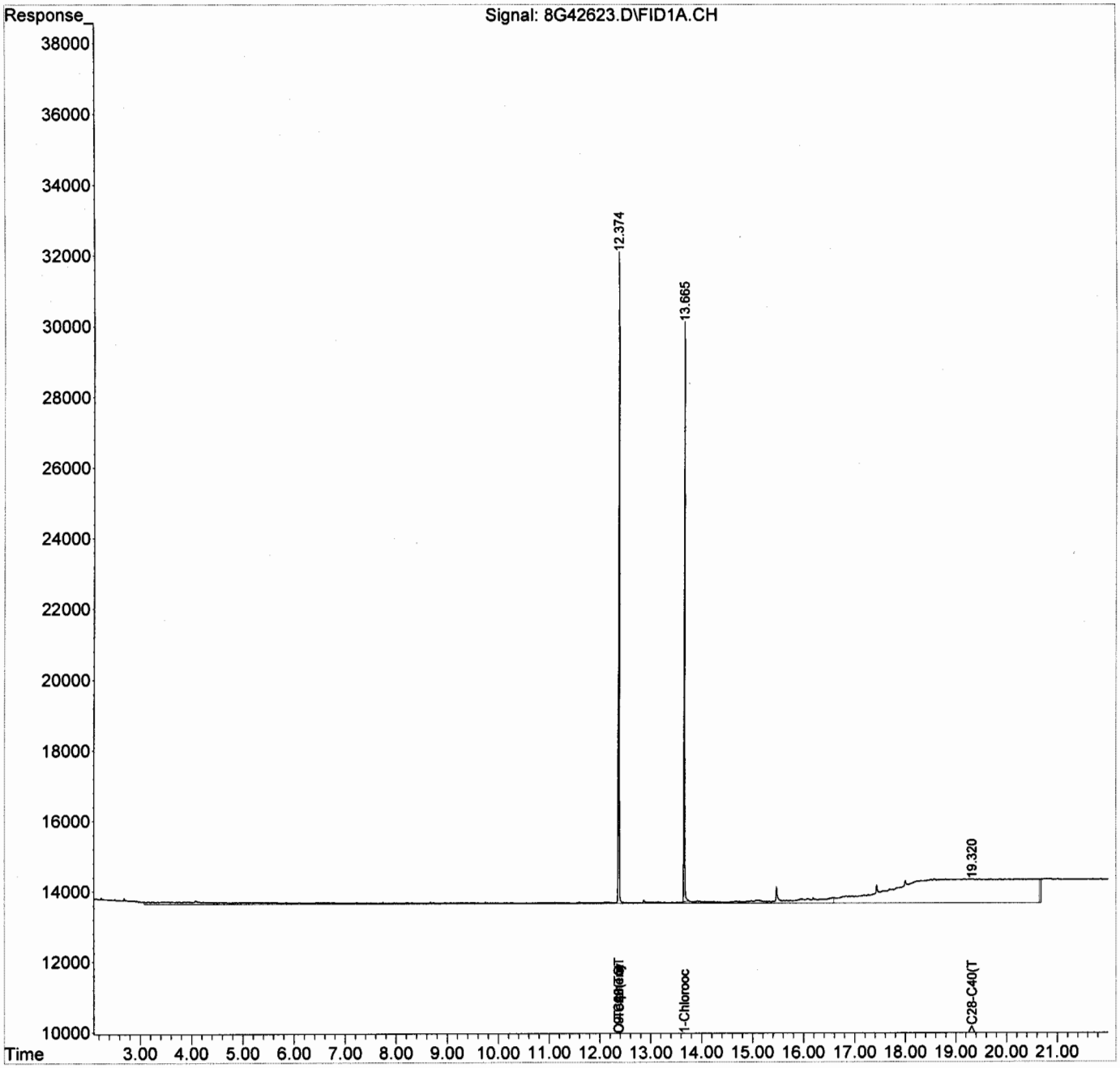
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42623.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 20:26:57
Operator : KD/RAK/ABM
Sample : AC73985-007(DUP)
Misc : S.TPH
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 20 10:05:34 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Aug 19 14:14:28 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42624.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 20:57:08
Operator : KD/RAK/ABM
Sample : AC73985-007
Misc : S.TPH
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 20 10:20:23 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Aug 19 14:14:28 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds						
21)S	O-Terphenyl	12.375	219229	75.580		
22)S	1-Chlorooctadecane	13.665	168204	76.484		
Target Compounds						
1)AT	n-Nonane (C9)	0.000	0	N.D.		
2)AT	n-Decane (C10)	0.000	0	N.D.		
3)	Naphthalene	0.000	0	N.D.		
4)AT	n-Dodecane (C12)	0.000	0	N.D.		
5)	2-Methylnaphthalene	0.000	0	N.D.		
6)AT	n-Tetradecane (C14)	0.000	0	N.D.		
7)AT	n-Hexadecane (C16)	0.000	0	N.D.		
8)AT	n-Octadecane (C18)	0.000	0	N.D.		
9)AT	n-Eicosane (C20)	0.000	0	N.D.		
10)AT	n-Heneicosane (C21)	0.000	0	N.D.		d
11)AT	n-Docosane (C22)	0.000	0	N.D.		
12)AT	n-Tetracosane (C24)	0.000	0	N.D.		
13)AT	n-Hexacosane (C26)	0.000	0	N.D.		
14)AT	n-Octacosane (C28)	0.000	0	N.D.		
15)BT	n-Triacontane (C30)	0.000	0	N.D.		
16)BT	n-Dotriacontane(C32)	0.000	0	N.D.		
17)BT	n-Tetratriacontane (C34	0.000	0	N.D.		
18)BT	n-Hexatriacontane (C36)	0.000	0	N.D.		
19)BT	n-Octatriacontane (C38)	0.000	0	N.D.		
20)BT	n-Tetracontane (C40)	0.000	0	N.D.		
23)A	C9-C28(Total)	12.374f	657837	276.334		m
24)B	>C28-C40(Total)	19.962f	1261142	574.377		m
25)t	C9-C40(TOTAL)	12.374f	1880918	811.109		m

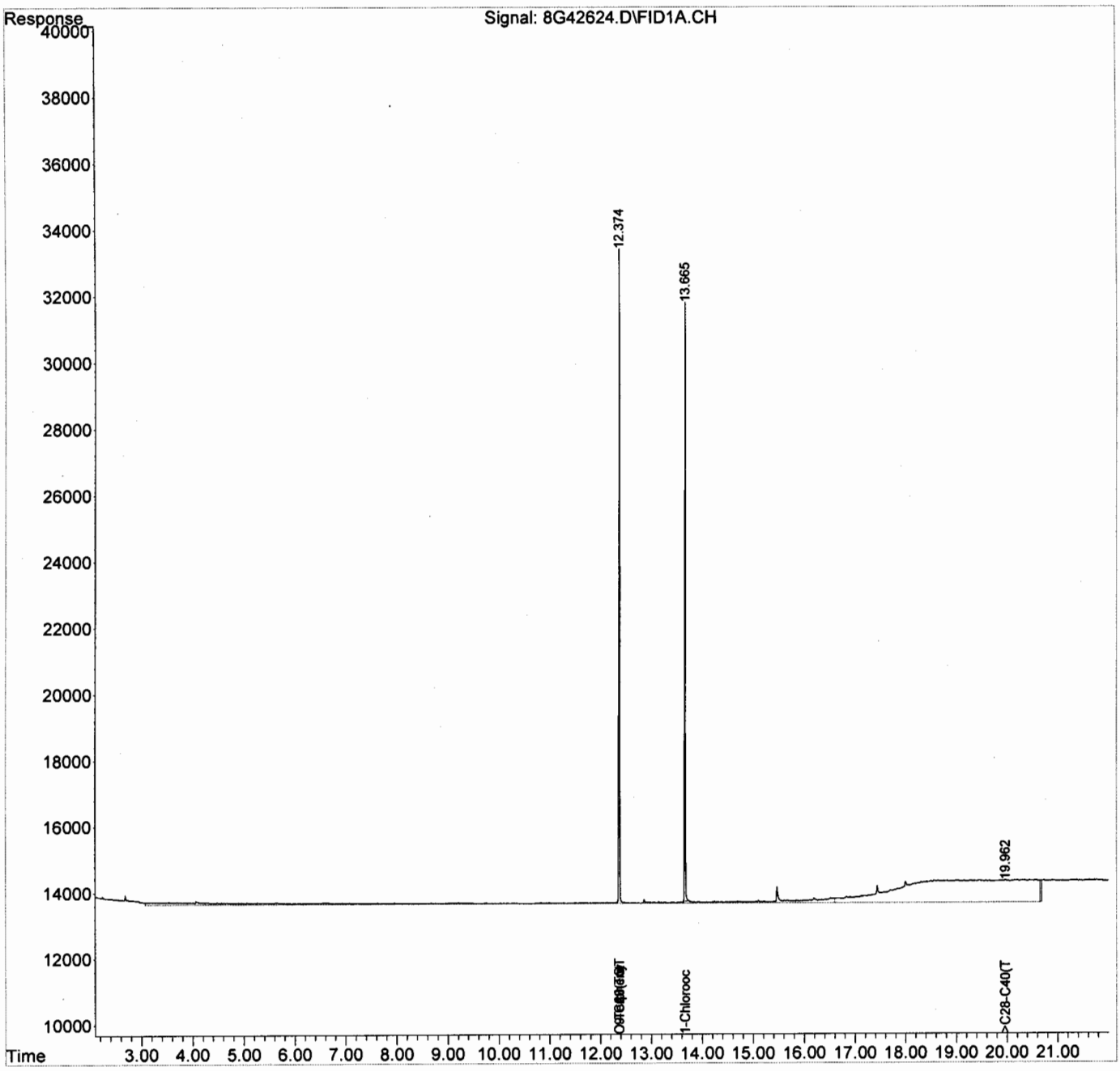
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2013\GC_8\Data\08-19-13\
Data File : 8G42624.D
Signal(s) : FID1A.CH
Acq On : 19-Aug-13, 20:57:08
Operator : KD/RAK/ABM
Sample : AC73985-007
Misc : S.TPH
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Aug 20 10:20:23 2013
Quant Method : G:\GCDATA\2013\GC_8\MethodQt\8GC_DT0819.M
Quant Title : @GC_8,mg,8015
QLast Update : Mon Aug 19 14:14:28 2013
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal Phase :
Signal Info :



Glycol Data

Form1

ORGANICS REPORT

Sample Number: AC74177-002
Client Id: 006 SS-1 Composite
Data File: 1G05993.D
Analysis Date: 08/28/13 14:26
Date Rec/Extracted: 08/23/13-08/28/13
Column: HP-1 30m 0.530mm ID 2.65um film

Method: EPA 8015B
Matrix: Soil
Initial Vol: 5g
Final Vol: 5ml
Dilution: 1
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
107-21-1	ETHYLENE GLYCOL	54	U	57-55-6	PROPYLENE GLYCOL	54	U

Worksheet #: 274976

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0527

Data Path : G:\Gcdata\2013\GC_1\Data\08-28-13\
Data File : 1G05993.D
Signal(s) : FID1A.CH
Acq On : 28 Aug 2013 14:26
Operator : MS
Sample : AC74177-002
Misc : S,GLY
ALS Vial : 8 Sample Multiplier: 1

Integration File: events.e
Quant Time: Aug 28 16:07:22 2013
Quant Method : G:\GCDATA\2013\GC_1\METHODQT\1G_A0729.M
Quant Title : @GC_1
QLast Update : Mon Jul 29 13:02:35 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
Target Compounds				
11)	3-PENTANOL(SURROGATE)	3.011	5730097	392.166

(f)=RT Delta > 1/2 Window (m)=manual int.

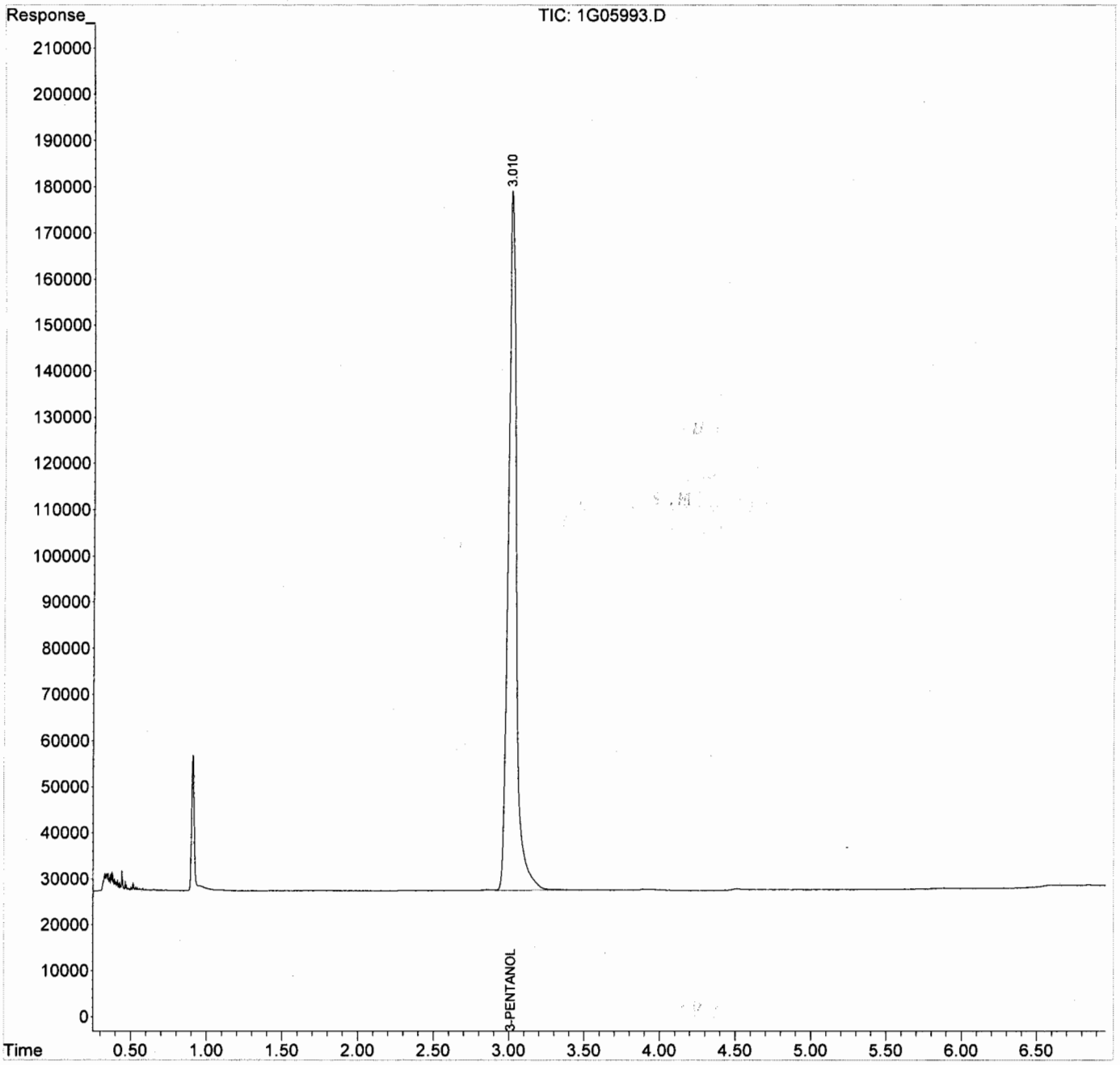
Quantitation Report (QT Reviewed)

3082313 0528

Data Path : G:\Gcdata\2013\GC_1\Data\08-28-13\
Data File : 1G05993.D
Signal(s) : FID1A.CH
Acq On : 28 Aug 2013 14:26
Operator : MS
Sample : AC74177-002
Misc : S,GLY
ALS Vial : 8 Sample Multiplier: 1

Integration File: events.e
Quant Time: Aug 28 16:07:22 2013
Quant Method : G:\GCDATA\2013\GC_1\METHODQT\1G_A0729.M
Quant Title : @GC_1
QLast Update : Mon Jul 29 13:02:35 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Form1

ORGANICS REPORT

Sample Number: AC74177-004
Client Id: 012 SS-2 Composite
Data File: 1G05994.D
Analysis Date: 08/28/13 14:38
Date Rec/Extracted: 08/23/13-08/28/13
Column: HP-1 30m 0.530mm ID 2.65um film

Method: EPA 8015B
Matrix: Soil
Initial Vol: 5g
Final Vol: 5ml
Dilution: 1
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
107-21-1	ETHYLENE GLYCOL	54	U	57-55-6	PROPYLENE GLYCOL	54	U

Worksheet #: 274976

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0530

Data Path : G:\Gcdata\2013\GC_1\Data\08-28-13\
Data File : 1G05994.D
Signal(s) : FID1A.CH
Acq On : 28 Aug 2013 14:38
Operator : MS
Sample : AC74177-004
Misc : S,GLY
ALS Vial : 9 Sample Multiplier: 1

Integration File: events.e
Quant Time: Aug 28 16:07:33 2013
Quant Method : G:\GCDATA\2013\GC_1\METHODQT\1G_A0729.M
Quant Title : @GC_1
QLast Update : Mon Jul 29 13:02:35 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
11) 3-PENTANOL(SURROGATE)	3.008	5876401	401.435

(f)=RT Delta > 1/2 Window (m)=manual int.

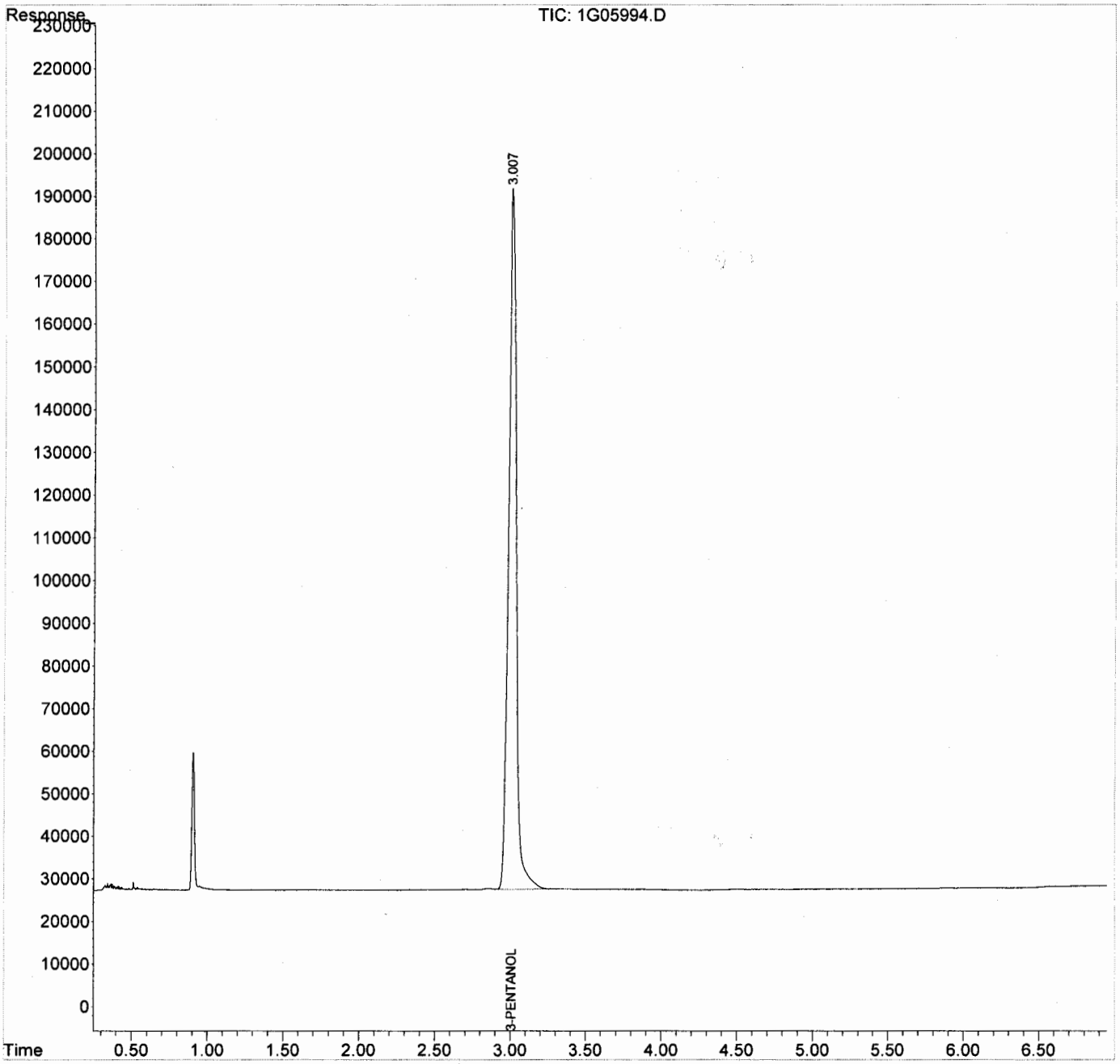
Quantitation Report (QT Reviewed)

3082313 0531

Data Path : G:\Gcdata\2013\GC_1\Data\08-28-13\
Data File : 1G05994.D
Signal(s) : FID1A.CH
Acq On : 28 Aug 2013 14:38
Operator : MS
Sample : AC74177-004
Misc : S,GLY
ALS Vial : 9 Sample Multiplier: 1

Integration File: events.e
Quant Time: Aug 28 16:07:33 2013
Quant Method : G:\GCDATA\2013\GC_1\METHODQT\1G_A0729.M
Quant Title : @GC_1
QLast Update : Mon Jul 29 13:02:35 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Form1

ORGANICS REPORT

Sample Number: AC74177-006
Client Id: 018 SS-3 Composite
Data File: 1G05995.D
Analysis Date: 08/28/13 14:51
Date Rec/Extracted: 08/23/13-08/28/13
Column: HP-1 30m 0.530mm ID 2.65um film

Method: EPA 8015B
Matrix: Soil
Initial Vol: 5g
Final Vol: 5ml
Dilution: 1
Solids: 92

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
107-21-1	ETHYLENE GLYCOL	54	U	57-55-6	PROPYLENE GLYCOL	54	U

Worksheet #: 274976

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Quantitation Report (QT Reviewed)

3082313 0533

Data Path : G:\Gcdata\2013\GC_1\Data\08-28-13\
Data File : 1G05995.D
Signal(s) : FID1A.CH
Acq On : 28 Aug 2013 14:51
Operator : MS
Sample : AC74177-006
Misc : S,GLY
ALS Vial : 10 Sample Multiplier: 1

Integration File: events.e
Quant Time: Aug 28 16:07:42 2013
Quant Method : G:\GCDATA\2013\GC_1\METHODQT\1G_A0729.M
Quant Title : @GC_1
QLast Update : Mon Jul 29 13:02:35 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

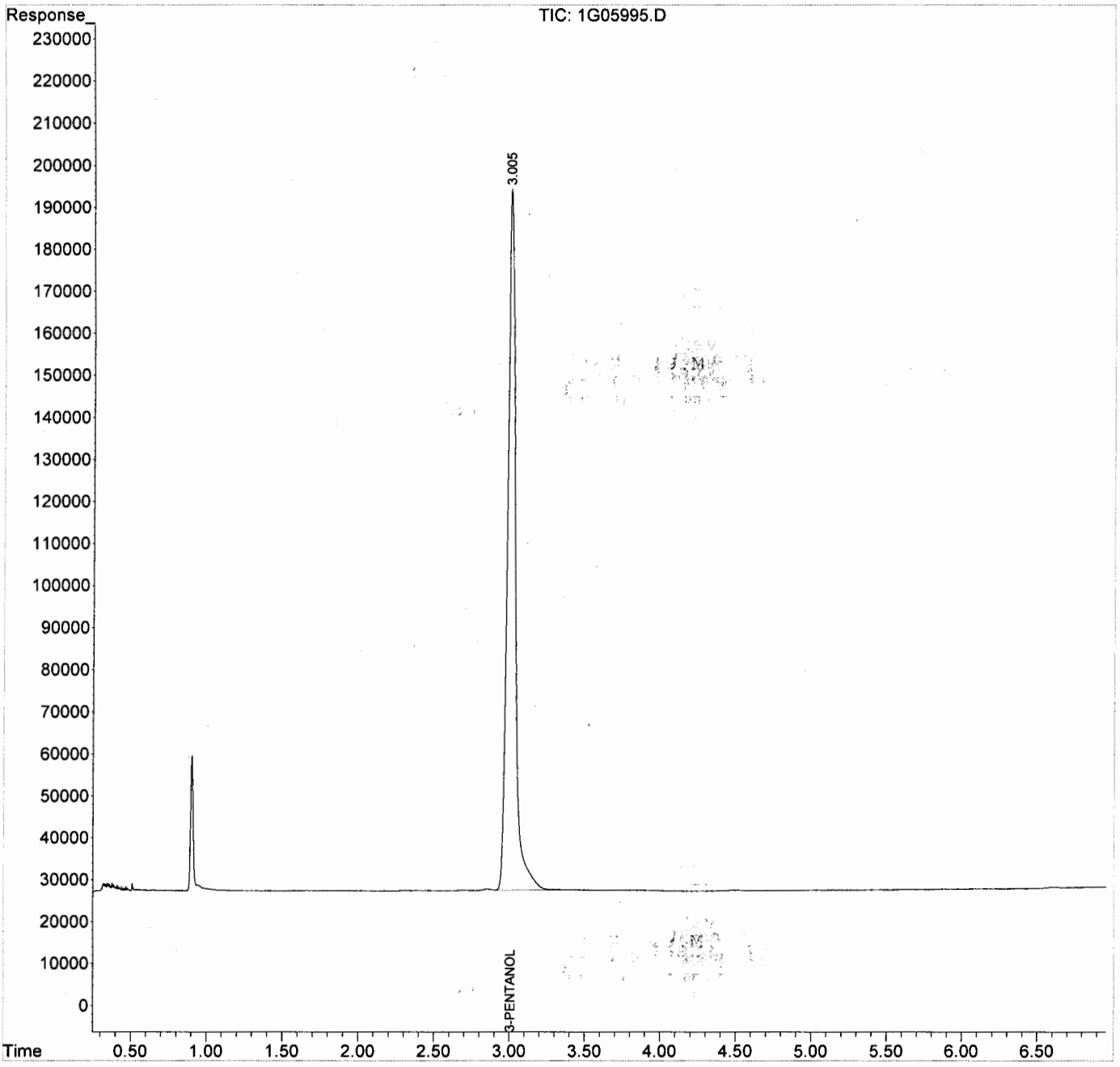
Compound	R.T.	Response	Conc Units
Target Compounds			
11) 3-PENTANOL(SURROGATE)	3.006	6275922	426.587

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : G:\Gcdata\2013\GC_1\Data\08-28-13\
Data File : 1G05995.D
Signal(s) : FID1A.CH
Acq On : 28 Aug 2013 14:51
Operator : MS
Sample : AC74177-006
Misc : S,GLY
ALS Vial : 10 Sample Multiplier: 1

Integration File: events.e
Quant Time: Aug 28 16:07:42 2013
Quant Method : G:\GCDATA\2013\GC_1\METHODQT\1G_A0729.M
Quant Title : @GC_1
QLast Update : Mon Jul 29 13:02:35 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



Form1

ORGANICS REPORT

Sample Number: SMB26015
Client Id:
Data File: 1G05991.D
Analysis Date: 08/28/13 14:02
Date Rec/Extracted: NA-08/28/13
Column: HP-1 30m 0.530mm ID 2.65um film

Method: EPA 8015B
Matrix: Soil
Initial Vol: 5g
Final Vol: 5ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
107-21-1	ETHYLENE GLYCOL	50	U	57-55-6	PROPYLENE GLYCOL	50	U

Worksheet #: 274976

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Quantitation Report (QT Reviewed)

3082313 0536

Data Path : G:\Gcdata\2013\GC_1\Data\08-28-13\
Data File : 1G05991.D
Signal(s) : FID1A.CH
Acq On : 28 Aug 2013 14:02
Operator : MS
Sample : SMB26015
Misc : S,GLY
ALS Vial : 2 Sample Multiplier: 1

Integration File: events.e
Quant Time: Aug 28 16:07:04 2013
Quant Method : G:\GCDATA\2013\GC_1\METHODQT\1G_A0729.M
Quant Title : @GC_1
QLast Update : Mon Jul 29 13:02:35 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
11) 3-PENTANOL(SURROGATE)	3.003	5475871	375.983

(f)=RT Delta > 1/2 Window (m)=manual int.

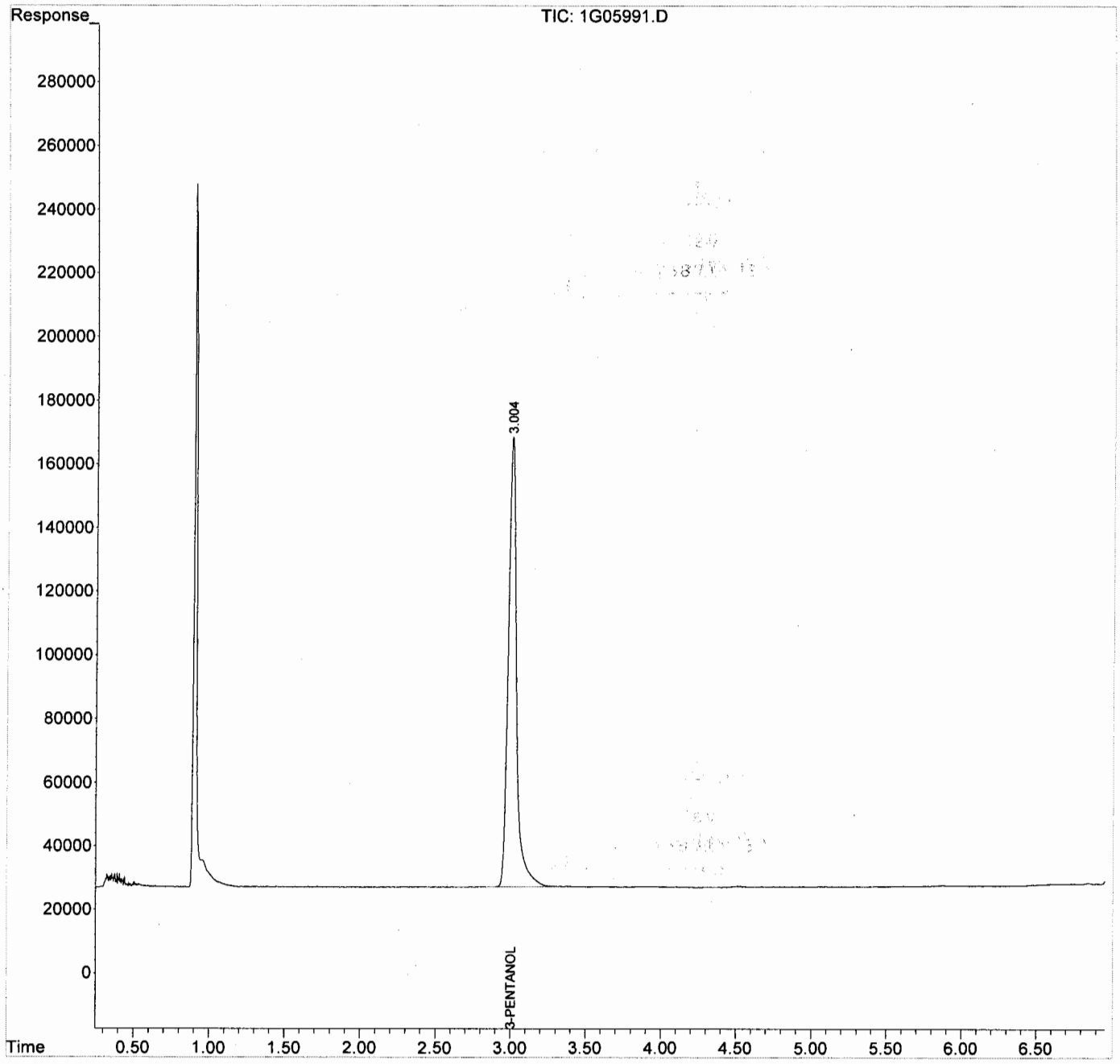
Quantitation Report (QT Reviewed)

3082313 0537

Data Path : G:\Gcdata\2013\GC_1\Data\08-28-13\
Data File : 1G05991.D
Signal(s) : FID1A.CH
Acq On : 28 Aug 2013 14:02
Operator : MS
Sample : SMB26015
Misc : S,GLY
ALS Vial : 2 Sample Multiplier: 1

Integration File: events.e
Quant Time: Aug 28 16:07:04 2013
Quant Method : G:\GCDATA\2013\GC_1\METHODQT\1G_A0729.M
Quant Title : @GC_1
QLast Update : Mon Jul 29 13:02:35 2013
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :



FORM2

Surrogate Recovery

Method: EPA 8015B

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column0 S2 Recov	Column0 S3 Recov	Column0 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
1G05960.D	SMB25731	Soil	07/29/13 15:22	1		104					
1G05991.D	SMB26015	Soil	08/28/13 14:02	1		75					
1G05993.D	AC74177-002	Soil	08/28/13 14:26	1		78					
1G05994.D	AC74177-004	Soil	08/28/13 14:38	1		80					
1G05995.D	AC74177-006	Soil	08/28/13 14:51	1		85					
1G05961.D	SMB25731(M	Soil	07/29/13 15:35	1		109					
1G05962.D	AC73666-001	Soil	07/29/13 15:47	1		122					
1G05964.D	AC73666-001(	Soil	07/29/13 16:11	1		118					
1G05965.D	AC73666-001(	Soil	07/29/13 16:23	1		125					
1G05992.D	SMB26015(M	Soil	08/28/13 14:14	1		77					

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8015B

Soil Limits

Compound	Spike Amt	Limits
S1=3-PENTANOL(SURROGATE	500	39-148

Form3
Recovery Data
QC Batch: SMB25731

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1G05961.D	SMB25731(MS)	7/29/2013 3:35:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8015 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
METHANOL	1	419.83	0	500	84	70	130
ETHANOL	1	488.85	0	500	98	70	130
ISOPROPANOL	1	455.52	0	500	91	70	130
2-METHYL-2-PROPANOL	1	482.19	0	500	96	70	130
1-PROPANOL	1	540.65	0	500	108	70	130
2-BUTANOL	1	527.35	0	500	105	70	130
ISOBUTYL ALCOHOL	1	544.41	0	500	109	70	130
1-BUTANOL	1	590.86	0	500	118	70	130
ETHYLENE GLYCOL	1	540.34	0	500	108	30	130
PROPYLENE GLYCOL	1	501.69	0	500	100	30	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB26015

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1G05992.D	SMB26015(MS)	8/28/2013 2:14:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8015 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
METHANOL	1	339.7	0	500	68 *	70	130
ETHANOL	1	361.95	0	500	72	70	130
ISOPROPANOL	1	306.23	0	500	61 *	70	130
2-METHYL-2-PROPANOL	1	327.08	0	500	65 *	70	130
1-PROPANOL	1	368.83	0	500	74	70	130
2-BUTANOL	1	390.04	0	500	78	70	130
ISOBUTYL ALCOHOL	1	388.56	0	500	78	70	130
1-BUTANOL	1	427.18	0	500	85	70	130
ETHYLENE GLYCOL	1	390.4	0	500	78	30	130
PROPYLENE GLYCOL	1	404.34	0	500	81	30	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: SMB25731

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1G05964.D	AC73666-001(MS)	7/29/2013 4:11:00 PM
Non Spike(If applicable):	1G05962.D	AC73666-001	7/29/2013 3:47:00 PM
Inst Blank(If applicable):			

Method: 8015 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
METHANOL	1	559.67	0	500	112	70	130
ETHANOL	1	577.53	0	500	116	70	130
ISOPROPANOL	1	492.1	0	500	98	70	130
2-METHYL-2-PROPANOL	1	523.98	0	500	105	70	130
1-PROPANOL	1	593.97	0	500	119	70	130
2-BUTANOL	1	575.04	0	500	115	70	130
ISOBUTYL ALCOHOL	1	600.42	0	500	120	70	130
1-BUTANOL	1	655.27	0	500	131 *	70	130
ETHYLENE GLYCOL	1	591.53	0	500	118	30	130
PROPYLENE GLYCOL	1	565.23	0	500	113	30	130

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1G05965.D	AC73666-001(MSD)	7/29/2013 4:23:00 PM
Non Spike(If applicable):	1G05962.D	AC73666-001	7/29/2013 3:47:00 PM
Inst Blank(If applicable):			

Method: 8015 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
METHANOL	1	587.73	0	500	118	70	130
ETHANOL	1	622.75	0	500	125	70	130
ISOPROPANOL	1	546.26	0	500	109	70	130
2-METHYL-2-PROPANOL	1	580.14	0	500	116	70	130
1-PROPANOL	1	644.35	0	500	129	70	130
2-BUTANOL	1	616.99	0	500	123	70	130
ISOBUTYL ALCOHOL	1	650.69	0	500	130	70	130
1-BUTANOL	1	709.78	0	500	142 *	70	130
ETHYLENE GLYCOL	1	652.62	0	500	131 *	30	130
PROPYLENE GLYCOL	1	621.48	0	500	124	30	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA

QC Batch: SMB25731

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1G05965.D	AC73666-001(MSD)	7/29/2013 4:23:00 PM
Duplicate(If applicable):	1G05964.D	AC73666-001(MS)	7/29/2013 4:11:00 PM
Inst Blank(If applicable):			

Method: 8015 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
METHANOL	1	587.73	559.67	4.9	40
ETHANOL	1	622.75	577.53	7.5	40
ISOPROPANOL	1	546.26	492.1	10	40
2-METHYL-2-PROPANOL	1	580.14	523.98	10	40
1-PROPANOL	1	644.35	593.97	8.1	40
2-BUTANOL	1	616.99	575.04	7	40
ISOBUTYL ALCOHOL	1	650.69	600.42	8	40
1-BUTANOL	1	709.78	655.27	8	40
ETHYLENE GLYCOL	1	652.62	591.53	9.8	40
PROPYLENE GLYCOL	1	621.48	565.23	9.5	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: SMB25731
Blank Data File: 1G05960.D
Matrix: Soil

Blank Analysis Date: 07/29/13 15:22
Blank Extraction Date: 07/29/13
(If Applicable)
Method: EPA 8015B

Sample Number	Data File	Analysis Date
AC73666-001(MSD	1G05965.D	07/29/13 16:23
AC73666-001(MS)	1G05964.D	07/29/13 16:11
AC73666-001	1G05962.D	07/29/13 15:47
SMB25731(MS)	1G05961.D	07/29/13 15:35

FORM 4
Blank Summary

Blank Number: SMB26015
Blank Data File: 1G05991.D
Matrix: Soil

Blank Analysis Date: 08/28/13 14:02
Blank Extraction Date: 08/28/13
(If Applicable)
Method: EPA 8015B

Sample Number	Data File	Analysis Date
AC74177-002	1G05993.D	08/28/13 14:26
AC74177-004	1G05994.D	08/28/13 14:38
AC74177-006	1G05995.D	08/28/13 14:51
SMB26015(MS)	1G05992.D	08/28/13 14:14

Form 5

Method: EPA 8015B

Instrument: GC_1 Column: HP-1 30m 0.530mm ID 2.65um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
1G05951.D	CAL GLY@500PPM	07/29/13 10:04	Aqueous	1G05958.	2.9990	0.08		
1G05952.D	CAL GLY@200PPM	07/29/13 10:18	Aqueous	1G05958.	2.9883	0.4374		
1G05953.D	CAL GLY@100PPM	07/29/13 10:49	Aqueous	1G05958.	3.0070	0.1864		
1G05954.D	CAL GLY@50PPM	07/29/13 11:13	Aqueous	1G05958.	3.0076	0.2064		
1G05955.D	CAL GLY@5PPM	07/29/13 11:46	Aqueous	1G05958.	3.0107	0.3094		
1G05956.D	CAL GLY@0.5PPM	07/29/13 11:59	Aqueous	1G05958.	2.9987	0.09		
1G05957.D	CAL GLY@750PPM	07/29/13 12:15	Aqueous	1G05958.	3.0083	0.2296		
1G05958.D	CAL GLY@1000PPM	07/29/13 12:43	Aqueous	1G05958.	3.0014	0		
1G05959.D	ICV	07/29/13 13:04	Aqueous	1G05958.	2.9861	0.5111		
1G05960.D	SMB25731	07/29/13 15:22	Soil	1G05958.	3.0120	0.3525		
1G05961.D	SMB25731(MS)	07/29/13 15:35	Soil	1G05958.	3.0086	0.2396		
1G05962.D	AC73666-001	07/29/13 15:47	Soil	1G05958.	2.9997	0.0567		
1G05963.D	AC73666-002	07/29/13 15:59	Soil	1G05958.	3.0029	0.05		
1G05964.D	AC73666-001(MS)	07/29/13 16:11	Soil	1G05958.	2.9941	0.2435		
1G05965.D	AC73666-001(MSD)	07/29/13 16:23	Soil	1G05958.	2.9986	0.0933		
1G05966.D	CAL GLY@500PPM	07/29/13 16:36	Soil	1G05958.	2.9949	0.2168		

Drift Compound: 3-PENTANOL(S Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8015B

Instrument: GC_1 Column: HP-1 30m 0.530mm ID 2.65um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
1G05989.D	500	08/28/13 10:57	Aqueous					
1G05990.D	CAL GLY@500PPM	08/28/13 12:21	Aqueous	1G05990.	3.0079	0		
1G05991.D	SMB26015	08/28/13 14:02	Soil	1G05990.	3.0034	0.1497		
1G05992.D	SMB26015(MS)	08/28/13 14:14	Soil	1G05990.	3.0107	0.093		
1G05993.D	AC74177-002	08/28/13 14:26	Soil	1G05990.	3.0110	0.103		
1G05994.D	AC74177-004	08/28/13 14:38	Soil	1G05990.	3.0077	0.0067		
1G05995.D	AC74177-006	08/28/13 14:51	Soil	1G05990.	3.0057	0.0732		
1G05996.D	AC74093-001	08/28/13 15:18	Soil	1G05990.	3.0051	0.0931		
1G05997.D	AC74093-002	08/28/13 15:30	Soil	1G05990.	3.0131	0.1727		
1G05998.D	AC74091-001	08/28/13 15:43	Soil	1G05990.	3.0113	0.113		
1G05999.D	AC74091-002	08/28/13 15:55	Soil	1G05990.	3.0060	0.0632		
1G06000.D	500	08/28/13 16:07	Soil	1G05990.	3.0070	0.0299		
1G06001.D	CAL GLY@500PPM	08/28/13 16:19	Soil	1G05990.	3.0065	0.0466		

3.0113
3.0077

3.0113
3.0077

Drift Compound: 3-PENTANOL(S Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

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Form 6
Initial Calibration

Method: EPA 8015B

Instrument: GC_1

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	1G05958.	CAL GLY@1000PPM	07/29/13 12:43	2	1G05957.	CAL GLY@750PPM	07/29/13 12:15
3	1G05951.	CAL GLY@500PPM	07/29/13 10:04	4	1G05952.	CAL GLY@200PPM	07/29/13 10:18
5	1G05953.	CAL GLY@100PPM	07/29/13 10:49	6	1G05954.	CAL GLY@50PPM	07/29/13 11:13
7	1G05955.	CAL GLY@5PPM	07/29/13 11:46	8	1G05956.	CAL GLY@0.5PPM	07/29/13 11:59

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
METHANOL	1	0	Qua	0.6825	0.8645	0.7776	0.8711	0.8342	0.7988	1.2973	1.1421	0.909	0.64	0.989	0.993	23	1000.	750.0	500.0	200.0	100.0	50.00	5.00	0.50
ETHANOL	1	0	Avg	1.1364	1.2700	1.1700	1.2612	1.2282	1.1004	1.2893	0.9911	1.18	0.79	0.995	0.997	8.6	1000.	750.0	500.0	200.0	100.0	50.00	5.00	0.50
ISOPROPANOL	1	0	Qua	1.1664	1.3519	1.4053	1.4937	1.5015	3.6493	2.0432	3.1623	1.97	0.94	0.984	0.993	47	1000.	750.0	500.0	200.0	100.0	50.00	5.00	0.50
2-METHYL-2-PROPANOL	1	0	Qua	1.5413	1.8423	1.8446	1.8292	1.9051	1.8941	2.1915	2.9277	2.00	1.08	0.986	0.996	21	1000.	750.0	500.0	200.0	100.0	50.00	5.00	0.50
1-PROPANOL	1	0	Avg	1.2464	1.5946	1.5420	1.5750	1.5918	1.4537	1.6343	1.0278	1.46	1.29	0.975	0.992	15	1000.	750.0	500.0	200.0	100.0	50.00	5.00	0.50
2-BUTANOL	1	0	Qua	----	1.6222	1.4945	1.4305	1.6228	0.8259	0.7725	0.2580	1.15	1.65	0.997	0.999	46		750.0	500.0	200.0	100.0	50.00	5.00	0.50
ISOBUTYL ALCOHOL	1	0	Avg	1.0344	1.8463	1.7531	1.8106	1.8564	1.7435	1.8630	1.7467	1.71	1.95	0.866	0.957	16	1000.	750.0	500.0	200.0	100.0	50.00	5.00	0.50
1-BUTANOL	1	0	Avg	0.9245	1.6986	1.5787	1.6559	1.6654	1.5004	1.4394	1.1124	1.45	2.42	0.856	0.951	20	1000.	750.0	500.0	200.0	100.0	50.00	5.00	0.50
ETHYLENE GLYCOL	1	0	Qua	0.7108	0.6025	0.5795	0.5203	0.3198	0.1184	----	----	0.475	3.91	0.989	0.997	46	1000.	750.0	500.0	200.0	100.0	50.00		
PROPYLENE GLYCOL	1	0	Qua	0.9582	0.9038	0.8449	0.8168	0.6409	0.3358	----	----	0.750	4.52	0.998	1.00	31	1000.	750.0	500.0	200.0	100.0	50.00		
3-PENTANOL(SURROGA	1	0	Qua	----	1.5834	1.4226	1.5343	1.5858	1.4536	1.4763	1.3181	1.48	3.00	0.996	0.998	6.5		750.0	500.0	200.0	100.0	50.00	5.00	0.50
DIMETHYL SULFOXIDE	1	0	Avg	1.0642	1.0367	0.9959	1.0283	1.0060	0.8743	----	----	1.00	5.64	0.999	1.00	6.6	1000.	750.0	500.0	200.0	100.0	50.00		

Avg Rsd Col 1: 23.8 Avg Rsd Col 2: -1

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Form7
Continuing Calibration

Method: EPA 8015B

Data File:				1G05966.D			1G05990.D			1G06001.D								
Method:				8015			8015			8015								
Calibration Name:				CAL GLY@500PP			CAL GLY@500PP			CAL GLY@500PP								
Calibration Date/Time				07/29/13 16:36			08/28/13 12:21			08/28/13 16:19								
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff
METHANOL	20	1	0	519.4	500	3.9	361.7	500	27.7*	388.8	500	22.2*						
ETHANOL	20	1	0	538.4	500	7.7	384.1	500	23.2*	418.9	500	16.2						
ISOPROPANOL	20	1	0	470.7	500	5.9	373.7	500	25.3*	371.8	500	25.6*						
2-METHYL-2-PROPA	20	1	0	480.9	500	3.8	346.1	500	30.8*	378.5	500	24.3*						
1-PROPANOL	20	1	0	539.5	500	7.9	385.9	500	22.8*	441.2	500	11.8						
2-BUTANOL	20	1	0	500.6	500	0.1	381.8	500	23.6*	437.1	500	12.6						
ISOBUTYL ALCOHO	20	1	0	521.7	500	4.3	417.6	500	16.5	446	500	10.8						
1-BUTANOL	20	1	0	554.9	500	11.0	456.8	500	8.6	487.3	500	2.5						
ETHYLENE GLYCOL	20	1	0	622.3	500	24.5*	479.7	500	4.1	478.0	500	4.4						
PROPYLENE GLYC	20	1	0	558.5	500	11.7	473	500	5.4	473.5	500	5.3						
DIMETHYL SULFOXI	20	1	0	521.3	500	4.3	425.1	500	15.0	420.4	500	15.9						
Average Difference	20	1	0			7.7			18.4			13.8						

Flags/Notes: **** - Values outside of limits for this column/run***

Form7

RtWindow Summary

Method: EPA 8015B

Data File:			1G05958.D		1G05958.D		1G05990.D					
Calibration Name:			CAL GLY@1000PPM		CAL GLY@1000PPM		CAL GLY@500PPM					
Calibration Date/Time			7/29/2013 12:43:00 PM		7/29/2013 12:43:00 PM		8/28/2013 12:21:00 PM					
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
METHANOL	1	0	0.64	(0.58 - 0.70)	0.64	(0.58 - 0.70)	0.64	(0.58 - 0.70)				
ETHANOL	1	0	0.79	(0.73 - 0.85)	0.79	(0.73 - 0.85)	0.79	(0.73 - 0.85)				
ISOPROPANOL	1	0	0.94	(0.88 - 1.00)	0.94	(0.88 - 1.00)	0.95	(0.89 - 1.01)				
2-METHYL-2-PROPA	1	0	1.09	(1.03 - 1.15)	1.08	(1.02 - 1.14)	1.09	(1.03 - 1.15)				
1-PROPANOL	1	0										
2-BUTANOL	1	0	1.65	(1.59 - 1.71)	1.65	(1.59 - 1.71)	1.66	(1.60 - 1.72)				
ISOBUTYL ALCOHO	1	0	1.95	(1.89 - 2.01)	1.95	(1.89 - 2.01)	1.96	(1.90 - 2.02)				
1-BUTANOL	1	0	2.42	(2.36 - 2.48)	2.42	(2.36 - 2.48)	2.43	(2.37 - 2.49)				
ETHYLENE GLYCOL	1	0	3.93	(3.78 - 4.08)	4.04	(3.89 - 4.19)	3.92	(3.77 - 4.07)				
PROPYLENE GLYC	1	0	4.54	(4.39 - 4.69)	4.59	(4.44 - 4.74)	4.52	(4.37 - 4.67)				
3-PENTANOL(SURR	1	0										
DIMETHYL SULFOXI	1	0	5.66	(5.60 - 5.72)	5.68	(5.62 - 5.74)	5.65	(5.59 - 5.71)				

Metal Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC74177-002	% Solid:	93	Lab Name:	Veritech	Nras No:	
Client Id:	006 SS-1 Composite	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/23/2013	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	220	7800	1	0.5	50	08/27/13	26655	S15400C3	13	P	PEICPRAD3A
7440-36-0	Antimony	2.2	ND	1	0.5	50	08/27/13	26655	S15400B3	14	P	PEICP3A
7440-38-2	Arsenic	2.2	4.5	1	0.5	50	08/27/13	26655	S15400B3	14	P	PEICP3A
7440-39-3	Barium	11	97	1	0.5	50	08/27/13	26655	S15400B3	14	P	PEICP3A
7440-41-7	Beryllium	0.65	0.85	1	0.5	50	08/27/13	26655	S15400B3	14	P	PEICP3A
7440-43-9	Cadmium	0.65	ND	1	0.5	50	08/27/13	26655	S15400B3	14	P	PEICP3A
7440-70-2	Calcium	1100	5100	1	0.5	50	08/27/13	26655	S15400C3	13	P	PEICPRAD3A
7440-47-3	Chromium	5.4	22	1	0.5	50	08/27/13	26655	S15400B3	14	P	PEICP3A
7440-48-4	Cobalt	2.7	9.0	1	0.5	50	08/27/13	26655	S15400B3	14	P	PEICP3A
7440-50-8	Copper	5.4	27	1	0.5	50	08/27/13	26655	S15400B3	14	P	PEICP3A
7439-89-6	Iron	220	18000	1	0.5	50	08/27/13	26655	S15400C3	13	P	PEICPRAD3A
7439-92-1	Lead	5.4	40	1	0.5	50	08/27/13	26655	S15400B3	14	P	PEICP3A
7439-95-4	Magnesium	540	4100	1	0.5	50	08/27/13	26655	S15400C3	13	P	PEICPRAD3A
7439-96-5	Manganese	11	380	1	0.5	50	08/27/13	26655	S15400C3	13	P	PEICPRAD3A
7439-97-6	Mercury	0.090	ND	1	0.15	25	08/26/13	26655	H15400S	16	CV	HGCV1A
7440-02-0	Nickel	5.4	37	1	0.5	50	08/27/13	26655	S15400B3	14	P	PEICP3A
7440-09-7	Potassium	540	1400	1	0.5	50	08/27/13	26655	S15400C3	13	P	PEICPRAD3A
7782-49-2	Selenium	1.9	ND	1	0.5	50	08/27/13	26655	S15400B3	14	P	PEICP3A
7440-22-4	Silver	1.6	ND	1	0.5	50	08/27/13	26655	S15400B3	14	P	PEICP3A
7440-23-5	Sodium	270	ND	1	0.5	50	08/27/13	26655	S15400C3	13	P	PEICPRAD3A
7440-28-0	Thallium	1.3	ND	1	0.5	50	08/27/13	26655	S15400B3	14	P	PEICP3A
7440-62-2	Vanadium	11	27	1	0.5	50	08/27/13	26655	S15400B3	14	P	PEICP3A
7440-66-6	Zinc	11	61	1	0.5	50	08/27/13	26655	S15400B3	14	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC74177-004	% Solid:	93	Lab Name:	Veritech	Nras No:	
Client Id:	012 SS-2 Composite	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/23/2013	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	220	8500	1	0.5	50	08/28/13	26655	S15400C3	41	P	PEICPRAD3A
7440-36-0	Antimony	2.2	3.3	1	0.5	50	08/27/13	26655	S15400B3	43	P	PEICP3A
7440-38-2	Arsenic	2.2	5.6	1	0.5	50	08/27/13	26655	S15400B3	43	P	PEICP3A
7440-39-3	Barium	11	90	1	0.5	50	08/27/13	26655	S15400B3	43	P	PEICP3A
7440-41-7	Beryllium	0.65	0.83	1	0.5	50	08/27/13	26655	S15400B3	43	P	PEICP3A
7440-43-9	Cadmium	0.65	ND	1	0.5	50	08/27/13	26655	S15400B3	43	P	PEICP3A
7440-70-2	Calcium	1100	3200	1	0.5	50	08/28/13	26655	S15400C3	41	P	PEICPRAD3A
7440-47-3	Chromium	5.4	52	1	0.5	50	08/27/13	26655	S15400B3	43	P	PEICP3A
7440-48-4	Cobalt	2.7	20	1	0.5	50	08/27/13	26655	S15400B3	43	P	PEICP3A
7440-50-8	Copper	5.4	57	1	0.5	50	08/27/13	26655	S15400B3	43	P	PEICP3A
7439-89-6	Iron	220	24000	1	0.5	50	08/28/13	26655	S15400C3	41	P	PEICPRAD3A
7439-92-1	Lead	5.4	54	1	0.5	50	08/27/13	26655	S15400B3	43	P	PEICP3A
7439-95-4	Magnesium	540	4400	1	0.5	50	08/28/13	26655	S15400C3	41	P	PEICPRAD3A
7439-96-5	Manganese	11	760	1	0.5	50	08/28/13	26655	S15400C3	41	P	PEICPRAD3A
7439-97-6	Mercury	0.090	ND	1	0.15	25	08/26/13	26655	H15400S	37	CV	HGCV1A
7440-02-0	Nickel	5.4	42	1	0.5	50	08/27/13	26655	S15400B3	43	P	PEICP3A
7440-09-7	Potassium	540	1200	1	0.5	50	08/28/13	26655	S15400C3	41	P	PEICPRAD3A
7782-49-2	Selenium	1.9	ND	1	0.5	50	08/27/13	26655	S15400B3	43	P	PEICP3A
7440-22-4	Silver	1.6	ND	1	0.5	50	08/27/13	26655	S15400B3	43	P	PEICP3A
7440-23-5	Sodium	270	ND	1	0.5	50	08/28/13	26655	S15400C3	41	P	PEICPRAD3A
7440-28-0	Thallium	1.3	ND	1	0.5	50	08/27/13	26655	S15400B3	43	P	PEICP3A
7440-62-2	Vanadium	11	48	1	0.5	50	08/27/13	26655	S15400B3	43	P	PEICP3A
7440-66-6	Zinc	11	100	1	0.5	50	08/27/13	26655	S15400B3	43	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC74177-006	% Solid:	92	Lab Name:	Veritech	Nras No:	
Client Id:	018 SS-3 Composite	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	8/23/2013	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	220	8400	1	0.5	50	08/28/13	26655	S15400C3	42	P	PEICPRAD3A
7440-36-0	Antimony	2.2	ND	1	0.5	50	08/27/13	26655	S15400B3	44	P	PEICP3A
7440-38-2	Arsenic	2.2	5.3	1	0.5	50	08/27/13	26655	S15400B3	44	P	PEICP3A
7440-39-3	Barium	11	99	1	0.5	50	08/27/13	26655	S15400B3	44	P	PEICP3A
7440-41-7	Beryllium	0.65	0.81	1	0.5	50	08/27/13	26655	S15400B3	44	P	PEICP3A
7440-43-9	Cadmium	0.65	ND	1	0.5	50	08/27/13	26655	S15400B3	44	P	PEICP3A
7440-70-2	Calcium	1100	4600	1	0.5	50	08/28/13	26655	S15400C3	42	P	PEICPRAD3A
7440-47-3	Chromium	5.4	26	1	0.5	50	08/27/13	26655	S15400B3	44	P	PEICP3A
7440-48-4	Cobalt	2.7	11	1	0.5	50	08/27/13	26655	S15400B3	44	P	PEICP3A
7440-50-8	Copper	5.4	34	1	0.5	50	08/27/13	26655	S15400B3	44	P	PEICP3A
7439-89-6	Iron	220	19000	1	0.5	50	08/28/13	26655	S15400C3	42	P	PEICPRAD3A
7439-92-1	Lead	5.4	56	1	0.5	50	08/27/13	26655	S15400B3	44	P	PEICP3A
7439-95-4	Magnesium	540	4500	1	0.5	50	08/28/13	26655	S15400C3	42	P	PEICPRAD3A
7439-96-5	Manganese	11	450	1	0.5	50	08/28/13	26655	S15400C3	42	P	PEICPRAD3A
7439-97-6	Mercury	0.091	ND	1	0.15	25	08/26/13	26655	H15400S	38	CV	HGCV1A
7440-02-0	Nickel	5.4	46	1	0.5	50	08/27/13	26655	S15400B3	44	P	PEICP3A
7440-09-7	Potassium	540	1500	1	0.5	50	08/28/13	26655	S15400C3	42	P	PEICPRAD3A
7782-49-2	Selenium	2.0	ND	1	0.5	50	08/27/13	26655	S15400B3	44	P	PEICP3A
7440-22-4	Silver	1.6	ND	1	0.5	50	08/27/13	26655	S15400B3	44	P	PEICP3A
7440-23-5	Sodium	270	ND	1	0.5	50	08/28/13	26655	S15400C3	42	P	PEICPRAD3A
7440-28-0	Thallium	1.3	ND	1	0.5	50	08/27/13	26655	S15400B3	44	P	PEICP3A
7440-62-2	Vanadium	11	30	1	0.5	50	08/27/13	26655	S15400B3	44	P	PEICP3A
7440-66-6	Zinc	11	81	1	0.5	50	08/27/13	26655	S15400B3	44	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 26655 (100) % Solid: 0 Lab Name: Veritech
Client Id: MB 26655 (100) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	0.5	50	08/27/13	26655	S15400C3	10	P	PEICPRAD3A
7440-36-0	Antimony	2.0	ND	1	0.5	50	08/27/13	26655	S15400B3	11	P	PEICP3A
7440-38-2	Arsenic	2.0	ND	1	0.5	50	08/27/13	26655	S15400B3	11	P	PEICP3A
7440-39-3	Barium	10	ND	1	0.5	50	08/27/13	26655	S15400B3	11	P	PEICP3A
7440-41-7	Beryllium	0.60	ND	1	0.5	50	08/27/13	26655	S15400B3	11	P	PEICP3A
7440-43-9	Cadmium	0.60	ND	1	0.5	50	08/27/13	26655	S15400B3	11	P	PEICP3A
7440-70-2	Calcium	1000	ND	1	0.5	50	08/27/13	26655	S15400C3	10	P	PEICPRAD3A
7440-47-3	Chromium	5.0	ND	1	0.5	50	08/27/13	26655	S15400B3	11	P	PEICP3A
7440-48-4	Cobalt	2.5	ND	1	0.5	50	08/27/13	26655	S15400B3	11	P	PEICP3A
7440-50-8	Copper	5.0	ND	1	0.5	50	08/27/13	26655	S15400B3	11	P	PEICP3A
7439-89-6	Iron	200	ND	1	0.5	50	08/27/13	26655	S15400C3	10	P	PEICPRAD3A
7439-92-1	Lead	5.0	ND	1	0.5	50	08/27/13	26655	S15400B3	11	P	PEICP3A
7439-95-4	Magnesium	500	ND	1	0.5	50	08/27/13	26655	S15400C3	10	P	PEICPRAD3A
7439-96-5	Manganese	10	ND	1	0.5	50	08/27/13	26655	S15400C3	10	P	PEICPRAD3A
7439-98-7	Molybdenum	2.5	ND	1	0.5	50	08/27/13	26655	S15400B3	11	P	PEICP3A
7440-02-0	Nickel	5.0	ND	1	0.5	50	08/27/13	26655	S15400B3	11	P	PEICP3A
7440-09-7	Potassium	500	ND	1	0.5	50	08/27/13	26655	S15400C3	10	P	PEICPRAD3A
7782-49-2	Selenium	1.8	ND	1	0.5	50	08/27/13	26655	S15400B3	11	P	PEICP3A
7440-22-4	Silver	1.5	ND	1	0.5	50	08/27/13	26655	S15400B3	11	P	PEICP3A
7440-23-5	Sodium	250	ND	1	0.5	50	08/27/13	26655	S15400C3	10	P	PEICPRAD3A
7440-28-0	Thallium	1.2	ND	1	0.5	50	08/27/13	26655	S15400B3	11	P	PEICP3A
7440-31-5	Tin	5.7	ND	1	0.5	50	08/27/13	26655	S15400B3	11	P	PEICP3A
7440-32-6	Titanium	35	ND	1	0.5	50	08/27/13	26655	S15400B3	11	P	PEICP3A
7440-62-2	Vanadium	10	ND	1	0.5	50	08/27/13	26655	S15400B3	11	P	PEICP3A
7440-66-6	Zinc	10	ND	1	0.5	50	08/27/13	26655	S15400B3	11	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 26655 (167) % Solid: 0 Lab Name: Veritech
Client Id: MB 26655 (167) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7439-97-6	Mercury	0.083	ND	1	0.15	25	08/26/13	26655	H15400S	11	CV	HGCV1A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/27/13
Data File: S15400B3
Prep Batch: 26655
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3082313

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV (2) V-168169-7	Rec	CCV V-168988-19	Rec	CCV V-168988-30	Rec	CCV V-168988-41	Rec	CCV V-168988-50	Rec		Rec		Rec		Rec
Antimony	1/.5	1.02722	103	0.48204	96	0.46808	94	0.50660	101	0.50650	101						
Arsenic	1/.5	1.04392	104	0.47547	95	0.46490	93	0.50549	101	0.50770	102						
Barium	1/.5	1.04084	104	0.51055	102	0.49897	100	0.50852	102	0.50849	102						
Beryllium	1/.5	1.03319	103	0.49656	99	0.49096	98	0.49936	100	0.49576	99						
Cadmium	1/.5	1.03862	104	0.49938	100	0.48952	98	0.50103	100	0.50131	100						
Chromium	1/.5	1.03776	104	0.50605	101	0.49712	99	0.50316	101	0.50440	101						
Cobalt	1/.5	1.03867	104	0.50970	102	0.49872	100	0.51161	102	0.51272	103						
Copper	1/.5	1.02734	103	0.49929	100	0.48851	98	0.49284	99	0.49444	99						
Lead	1/.5	1.02312	102	0.49441	99	0.48521	97	0.50960	102	0.50784	102						
Molybdenum	1/.5	1.03242	103	0.49168	98	0.47698	95	0.51606	103	0.52127	104						
Nickel	1/.5	1.02021	102	0.50045	100	0.49218	98	0.50279	101	0.50321	101						
Selenium	1/.5	1.03104	103	0.48090	96	0.45465	91	0.49603	99	0.50577	101						
Silver	0.2/0.1	0.20927	105	0.10083	101	0.09935	99	0.10046	100	0.10065	101						
Thallium	1/.5	1.05918	106	0.51296	103	0.49525	99	0.52741	105	0.54456	109						
Vanadium	1/.5	1.02511	103	0.50175	100	0.49311	99	0.50039	100	0.50127	100						
Zinc	1/.5	1.02914	103	0.49120	98	0.47618	95	0.51057	102	0.51540	103						

Notes:
a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits:
ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-110

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/27/13
Data File: S15400C3
Prep Batch: 26655
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICPRAD3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3082313

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV (2) V-168989-6	Rec	CCV V-170158-18	Rec	CCV V-170158-29	Rec	CCV V-170158-39	Rec	CCV V-170158-47	Rec		Rec		Rec		Rec
Aluminum	10/5	10.06140	101	5.03742	101	5.06424	101	5.07463	101	4.97763	100						
Calcium	100/50	98.10960	98	50.44300	101	50.25140	101	50.90800	102	49.63440	99						
Iron	10/5	9.79884	98	4.98426	100	4.99114	100	4.98187	100	4.91964	98						
Magnesium	100/50	97.57600	98	49.90430	100	49.96460	100	49.83870	100	49.21280	98						
Manganese	1/.5	0.97667	98	0.49757	100	0.49785	100	0.49808	100	0.49372	99						
Potassium	100/50	98.71950	99	50.26400	101	50.68680	101	51.37200	103	50.89670	102						
Sodium	100/50	98.71110	99	50.53500	101	50.69440	101	51.56060	103	50.52840	101						

Notes:
a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits:
ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-110

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/26/13
Data File: H15400S
Prep Batch: 26655
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3082313

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV (2)-9	Rec	CCV-21	Rec	CCV-33	Rec	CCV-45	Rec	CCV-53	Rec		Rec		Rec		Rec
Mercury	20/10	19.49041	97	10.05430	101	10.07316	101	10.00492	100	0.55530	5.6 **cd**						

Notes:
a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits:
ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-110

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/26/13
Data File: H15400Sb
Prep Batch: 26655
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3082313

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV (2)-9	Rec	CCV-17	Rec		Rec		Rec		Rec		Rec		Rec		Rec
Mercury	20/10	19.51603	98	9.88335	99												

Notes:
a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits:
ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-110

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/27/13
Data File: S15400C3
Prep Batch: 26655
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICPRAD3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3082313

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-166272-7	CCB V-166272-19	CCB V-166272-30	CCB V-166272-40	CCB V-166272-48	MB 26655 (100)-10	MB FB (1)-43
Aluminum	2 U	2 U	2 U	2 U	2 U	200U	2U
Calcium	10 U	10 U	10 U	10 U	10 U	1000U	10U
Iron	2 U	2 U	2 U	2 U	2 U	200U	2U
Magnesium	5 U	5 U	5 U	5 U	5 U	500U	5U
Manganese	.1 U	.1 U	.1 U	.1 U	.1 U	10U	.1U
Potassium	5 U	5 U	5 U	5 U	5 U	500U	5U
Sodium	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	250U	2.5U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/27/13
Data File: S15400B3
Prep Batch: 26655
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3082313

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-170817-8	CCB V-170817-20	CCB V-170817-31	CCB V-170817-42	CCB V-170817-51	MB 26655 (100)-11	MB FB (1)-46
Antimony	.02 U	.02 U	.02 U	.02 U	.02 U	2U	.02U
Arsenic	.02 U	.02 U	.02 U	.02 U	.02 U	2U	.02U
Barium	.1 U	.1 U	.1 U	.1 U	.1 U	10U	.1U
Beryllium	.006 U	.006 U	.006 U	.006 U	.006 U	.6U	.006U
Cadmium	.006 U	.006 U	.006 U	.006 U	.006 U	.6U	.006U
Chromium	.05 U	.05 U	.05 U	.05 U	.05 U	5U	.05U
Cobalt	.025 U	.025 U	.025 U	.025 U	.025 U	2.5U	.025U
Copper	.05 U	.05 U	.05 U	.05 U	.05 U	5U	.05U
Lead	.05 U	.05 U	.05 U	.05 U	.05 U	5U	.05U
Molybdenum	.025 U	.025 U	.025 U	.025 U	.025 U	2.5U	.025U
Nickel	.05 U	.05 U	.05 U	.05 U	.05 U	5U	.05U
Selenium	.018 U	.018 U	.018 U	.018 U	.018 U	1.8U	.018U
Silver	.015 U	.015 U	.015 U	.015 U	.015 U	1.5U	.015U
Thallium	.012 U	.012 U	.012 U	.012 U	.012 U	1.2U	.012U
Vanadium	.1 U	.1 U	.1 U	.1 U	.1 U	10U	.1U
Zinc	.1 U	.1 U	.1 U	.1 U	.1 U	10U	.1U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/26/13
Data File: H15400S
Prep Batch: 26655
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3082313

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-46	CCB-54	MB 26655 (167)-11		
Mercury	.5 U	.5 U	.5 U	.5 U	.5 U	83 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/26/13
Data File: H15400Sb
Prep Batch: 26655
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3082313

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-18						
Mercury	.5 U	.5 U						

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 08/27/13
Data File: S15400C3
Prep Batch: 26655
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICPRAD3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3082313

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-169992-8	Rec	ICSAB V-169994-9	Rec	ICSA V-169992-27	Rec	ICSAB V-169994-28	Rec	ICSA V-169992-37	Rec	ICSAB V-169994-38	Rec	ICSA V-169992-45	Rec	ICSAB V-169994-46	Rec
Aluminum	500	474.953	95	469.63300	94	484.416	97	472.30700	94	485.2	97	471.36400	94	482.381	96	475.88100	95
Calcium	500	475.051	95	470.47100	94	482.471	96	466.57500	93	476.58	95	465.88900	93	477.856	96	469.81400	94
Iron	200	182.771	91	181.18300	91	185.913	93	181.61400	91	185.567	93	180.91300	90	184.367	92	182.48600	91
Magnesium	500	477.505	96	473.70900	95	483.566	97	472.15800	94	481.862	96	469.52200	94	478.06	96	473.76200	95
Manganese	.5	U		0.49804	100	U		0.49611	99	U		0.49420	99	U		0.50170	100

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 08/27/13
Data File: S15400B3
Prep Batch: 26655
Reporting Limits Used: SOIL,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3082313

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-169160-9	Rec	ICSAB V-169161-10	Rec	ICSA V-169160-28	Rec	ICSAB V-169161-29	Rec	ICSA V-169160-39	Rec	ICSAB V-169161-40	Rec	ICSA V-169160-48	Rec	ICSAB V-169161-49	Rec
Aluminum	500	492.166	98	474.87100	95	482.619	97	481.41600	96	484.867	97	481.42100	96	491.774	98	485.12000	97
Antimony	1	U		1.00524	101	U		1.01325	101	U		1.05575	106	U		1.09018	109
Arsenic	1	U		1.00495	100	U		0.99596	100	U		1.05107	105	U		1.08237	108
Barium	.5	U		0.51914	104	U		0.52124	104	U		0.52370	105	U		0.52875	106
Beryllium	.5	U		0.50722	101	U		0.51206	102	U		0.51409	103	U		0.51721	103
Cadmium	1	U		1.01829	102	U		1.02963	103	U		1.03004	103	U		1.04961	105
Calcium	500	472.874	95	457.70100	92	462.075	92	460.84800	92	462.956	93	459.68200	92	469.052	94	461.85700	92
Chromium	.5	U		0.49122	98	U		0.49870	100	U		0.49435	99	U		0.50412	101
Cobalt	.5	U		0.47882	96	U		0.48463	97	U		0.48616	97	U		0.49607	99
Copper	.5	U		0.52689	105	U		0.52776	106	U		0.52749	105	U		0.53532	107
Iron	200	187.092	94	180.92900	90	183.172	92	182.99100	91	184.791	92	183.69400	92	186.68	93	184.68600	92
Lead	1	U		0.93157	93	U		0.93311	93	U		0.95630	96	U		0.98021	98
Magnesium	500	503.928	101	486.72000	97	492.177	98	491.47800	98	496.614	99	494.36900	99	503.369	101	496.87000	99
Nickel	1	U		0.91741	92	U		0.92783	93	U		0.92726	93	U		0.94464	94
Selenium	1	U		0.98459	98	U		0.96201	96	U		1.02266	102	U		1.05564	106
Silver	1	U		1.07707	108	U		1.07386	107	U		1.07583	108	U		1.09256	109
Thallium	1	U		0.93650	94	U		0.92034	92	U		0.96434	96	U		1.00423	100
Vanadium	.5	U		0.48194	96	U		0.48371	97	U		0.48446	97	U		0.48855	98
Zinc	1	U		0.92788	93	U		0.92531	93	U		0.96525	97	U		0.98991	99

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

FORM5/FORM7

3082313 0566

SPIKE RECOVERY DATA

PREP BATCH: 26655

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS Matrix: AQUEOUS SampleID: LCSW

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	26655	1	S15400C3	44	5.1219	5.0	102		80	120
Antimony	26655	1	S15400B3	47	0.5135	0.500	103		80	120
Arsenic	26655	1	S15400B3	47	0.5016	0.500	100		80	120
Barium	26655	1	S15400B3	47	0.5153	0.500	103		80	120
Beryllium	26655	1	S15400B3	47	0.5063	0.500	101		80	120
Cadmium	26655	1	S15400B3	47	0.5027	0.500	101		80	120
Calcium	26655	1	S15400C3	44	50.3456	50	101		80	120
Chromium	26655	1	S15400B3	47	0.5116	0.500	102		80	120
Cobalt	26655	1	S15400B3	47	0.5185	0.500	104		80	120
Copper	26655	1	S15400B3	47	0.5110	0.500	102		80	120
Iron	26655	1	S15400C3	44	5.0459	5.0	101		80	120
Lead	26655	1	S15400B3	47	0.5065	0.500	101		80	120
Magnesium	26655	1	S15400C3	44	50.3202	50	101		80	120
Manganese	26655	1	S15400C3	44	0.5071	0.5	101		80	120
Nickel	26655	1	S15400B3	47	0.5072	0.500	101		80	120
Potassium	26655	1	S15400C3	44	51.3083	50	103		80	120
Selenium	26655	1	S15400B3	47	0.4963	0.500	99		80	120
Silver	26655	1	S15400B3	47	0.1008	0.100	101		80	120
Sodium	26655	1	S15400C3	44	51.1572	50	102		80	120
Thallium	26655	1	S15400B3	47	0.5382	0.500	108		80	120
Vanadium	26655	1	S15400B3	47	0.5101	0.500	102		80	120
Zinc	26655	1	S15400B3	47	0.5099	0.500	102		80	120

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 26655

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	26655	1	S15400C3	12	63.9766	90.6	71		46	153
Antimony	26655	1	S15400B3	13	0.7775	1.06	73		1.9	219
Arsenic	26655	1	S15400B3	13	1.6243	1.82	89		83	118
Barium	26655	1	S15400B3	13	1.3052	1.43	91		83	117
Beryllium	26655	1	S15400B3	13	0.8938	0.983	91		84	116
Cadmium	26655	1	S15400B3	13	0.5573	0.604	92		83	117
Calcium	26655	1	S15400C3	12	55.4732	60.4	92		83	117
Chromium	26655	1	S15400B3	13	1.1370	1.25	91		82	118
Cobalt	26655	1	S15400B3	13	1.5649	1.63	96		85	115
Copper	26655	1	S15400B3	13	0.7563	0.801	94		84	116
Iron	26655	1	S15400C3	12	106.5530	129	83		51	150
Lead	26655	1	S15400B3	13	1.2078	1.36	89		84	117
Magnesium	26655	1	S15400C3	12	23.0923	26.4	87		75	124
Manganese	26655	1	S15400C3	12	2.4761	2.79	89		83	118
Mercury	26655	5	H15400S	15	10.0402	55.5	90		72	129
Nickel	26655	1	S15400B3	13	1.2155	1.28	95		84	116
Potassium	26655	1	S15400C3	12	23.8070	28.2	84		73	127
Selenium	26655	1	S15400B3	13	0.7608	0.859	89		80	120
Silver	26655	1	S15400B3	13	0.5649	0.613	92		66	134
Sodium	26655	1	S15400C3	12	3.9147	4.39	89		74	126
Thallium	26655	1	S15400B3	13	1.3260	1.44	92		81	119
Vanadium	26655	1	S15400B3	13	0.8985	1.04	86		75	124
Zinc	26655	1	S15400B3	13	1.8273	2.04	90		82	118

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 26655

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS Matrix: SOIL SampleID: LCS 26655

Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	26655	1	S15400C3	11	64.3779	90.6	71		46	153
Antimony	26655	1	S15400B3	12	0.8172	1.06	77		1.9	219
Arsenic	26655	1	S15400B3	12	1.7021	1.82	94		83	118
Barium	26655	1	S15400B3	12	1.3608	1.43	95		83	117
Beryllium	26655	1	S15400B3	12	0.9210	0.983	94		84	116
Cadmium	26655	1	S15400B3	12	0.5876	0.604	97		83	117
Calcium	26655	1	S15400C3	11	56.2317	60.4	93		83	117
Chromium	26655	1	S15400B3	12	1.1894	1.25	95		82	118
Cobalt	26655	1	S15400B3	12	1.6247	1.63	100		85	115
Copper	26655	1	S15400B3	12	0.7863	0.801	98		84	116
Iron	26655	1	S15400C3	11	109.6410	129	85		51	150
Lead	26655	1	S15400B3	12	1.2843	1.36	94		84	117
Magnesium	26655	1	S15400C3	11	23.7749	26.4	90		75	124
Manganese	26655	1	S15400C3	11	2.5874	2.79	93		83	118
Mercury	26655	5	H15400S	14	10.5947	55.5	95		72	129
Nickel	26655	1	S15400B3	12	1.2652	1.28	99		84	116
Potassium	26655	1	S15400C3	11	24.5354	28.2	87		73	127
Selenium	26655	1	S15400B3	12	0.7823	0.859	91		80	120
Silver	26655	1	S15400B3	12	0.5958	0.613	97		66	134
Sodium	26655	1	S15400C3	11	4.2361	4.39	96		74	126
Thallium	26655	1	S15400B3	12	1.4237	1.44	99		81	119
Vanadium	26655	1	S15400B3	12	0.9369	1.04	90		75	124
Zinc	26655	1	S15400B3	12	1.8850	2.04	92		82	118

TxtQcType: MSD Matrix: SOIL SampleID: AC74177-002

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	26655	1	S15400C3	16	S15400C3	13	96.2671	72.4110	5.0	477	b	75	125
Antimony	26655	1	S15400B3	17	S15400B3	14	0.2589	0.02U	0.5	52	a	75	125
Arsenic	26655	1	S15400B3	17	S15400B3	14	0.4829	0.0418	0.5	88		75	125
Barium	26655	1	S15400B3	17	S15400B3	14	1.4075	0.9016	0.5	101		75	125
Beryllium	26655	1	S15400B3	17	S15400B3	14	0.4653	0.0079	0.5	91		75	125
Cadmium	26655	1	S15400B3	17	S15400B3	14	0.4538	0.006U	0.5	91		75	125
Calcium	26655	1	S15400C3	16	S15400C3	13	92.9600	47.1739	50	92		75	125
Chromium	26655	1	S15400B3	17	S15400B3	14	0.6831	0.2062	0.5	95		75	125
Cobalt	26655	1	S15400B3	17	S15400B3	14	0.5575	0.0839	0.5	95		75	125
Copper	26655	1	S15400B3	17	S15400B3	14	0.7614	0.2541	0.5	101		75	125
Iron	26655	1	S15400C3	16	S15400C3	13	186.7610	165.1300	5.0	433	b	75	125
Lead	26655	1	S15400B3	17	S15400B3	14	0.8277	0.3678	0.5	92		75	125
Magnesium	26655	1	S15400C3	16	S15400C3	13	91.7805	38.5307	50	106		75	125
Manganese	26655	1	S15400C3	16	S15400C3	13	4.2867	3.5061	0.5	156	b	75	125
Mercury	26655	1	H15400S	19	H15400S	16	10.4696	.5U	10	105		75	125
Nickel	26655	1	S15400B3	17	S15400B3	14	0.8235	0.3435	0.5	96		75	125
Potassium	26655	1	S15400C3	16	S15400C3	13	63.8175	12.6711	50	102		75	125
Selenium	26655	1	S15400B3	17	S15400B3	14	0.4229	0.018U	0.5	85		75	125
Silver	26655	1	S15400B3	17	S15400B3	14	0.0924	0.015U	0.10	92		75	125
Sodium	26655	1	S15400C3	16	S15400C3	13	48.6731	2.5U	50	97		75	125
Thallium	26655	1	S15400B3	17	S15400B3	14	0.4563	0.012U	0.5	91		75	125
Vanadium	26655	1	S15400B3	17	S15400B3	14	0.7381	0.2527	0.5	97		75	125
Zinc	26655	1	S15400B3	17	S15400B3	14	1.0687	0.5649	0.5	101		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 26655

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MS Matrix: SOIL SampleID: AC74177-002

Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	26655	1	S15400C3	15	S15400C3	13	97.4260	72.4110	5.0	500	b	75	125
Antimony	26655	1	S15400B3	16	S15400B3	14	0.2590	0.02U	0.5	52	a	75	125
Arsenic	26655	1	S15400B3	16	S15400B3	14	0.4931	0.0418	0.5	90		75	125
Barium	26655	1	S15400B3	16	S15400B3	14	3.7215	0.9016	0.5	564	a	75	125
Beryllium	26655	1	S15400B3	16	S15400B3	14	0.4709	0.0079	0.5	93		75	125
Cadmium	26655	1	S15400B3	16	S15400B3	14	0.4588	0.006U	0.5	92		75	125
Calcium	26655	1	S15400C3	15	S15400C3	13	100.7140	47.1739	50	107		75	125
Chromium	26655	1	S15400B3	16	S15400B3	14	0.6726	0.2062	0.5	93		75	125
Cobalt	26655	1	S15400B3	16	S15400B3	14	0.5571	0.0839	0.5	95		75	125
Copper	26655	1	S15400B3	16	S15400B3	14	0.7405	0.2541	0.5	97		75	125
Iron	26655	1	S15400C3	15	S15400C3	13	187.3490	165.1300	5.0	444	b	75	125
Lead	26655	1	S15400B3	16	S15400B3	14	0.8441	0.3678	0.5	95		75	125
Magnesium	26655	1	S15400C3	15	S15400C3	13	93.1109	38.5307	50	109		75	125
Manganese	26655	1	S15400C3	15	S15400C3	13	4.3663	3.5061	0.5	172	b	75	125
Mercury	26655	1	H15400S	18	H15400S	16	10.4732	.5U	10	105		75	125
Nickel	26655	1	S15400B3	16	S15400B3	14	0.7982	0.3435	0.5	91		75	125
Potassium	26655	1	S15400C3	15	S15400C3	13	65.6476	12.6711	50	106		75	125
Selenium	26655	1	S15400B3	16	S15400B3	14	0.4204	0.018U	0.5	84		75	125
Silver	26655	1	S15400B3	16	S15400B3	14	0.0932	0.015U	0.10	93		75	125
Sodium	26655	1	S15400C3	15	S15400C3	13	51.0661	2.5U	50	102		75	125
Thallium	26655	1	S15400B3	16	S15400B3	14	0.4610	0.012U	0.5	92		75	125
Vanadium	26655	1	S15400B3	16	S15400B3	14	0.7126	0.2527	0.5	92		75	125
Zinc	26655	1	S15400B3	16	S15400B3	14	1.8537	0.5649	0.5	258	a	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 26655

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 26655

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	26655	S15400C3	12	S15400C3	11	63.9766	64.3779	.63	20
Antimony	26655	S15400B3	13	S15400B3	12	0.7775	0.8172	5	20
Arsenic	26655	S15400B3	13	S15400B3	12	1.6243	1.7021	4.7	20
Barium	26655	S15400B3	13	S15400B3	12	1.3052	1.3608	4.2	20
Beryllium	26655	S15400B3	13	S15400B3	12	0.8938	0.9210	3	20
Cadmium	26655	S15400B3	13	S15400B3	12	0.5573	0.5876	5.3	20
Calcium	26655	S15400C3	12	S15400C3	11	55.4732	56.2317	1.4	20
Chromium	26655	S15400B3	13	S15400B3	12	1.1370	1.1894	4.5	20
Cobalt	26655	S15400B3	13	S15400B3	12	1.5649	1.6247	3.8	20
Copper	26655	S15400B3	13	S15400B3	12	0.7563	0.7863	3.9	20
Iron	26655	S15400C3	12	S15400C3	11	106.5530	109.6410	2.9	20
Lead	26655	S15400B3	13	S15400B3	12	1.2078	1.2843	6.1	20
Magnesium	26655	S15400C3	12	S15400C3	11	23.0923	23.7749	2.9	20
Manganese	26655	S15400C3	12	S15400C3	11	2.4761	2.5874	4.4	20
Mercury	26655	H15400S	15	H15400S	14	10.0402	10.5947	5.4	20
Nickel	26655	S15400B3	13	S15400B3	12	1.2155	1.2652	4	20
Potassium	26655	S15400C3	12	S15400C3	11	23.8070	24.5354	3	20
Selenium	26655	S15400B3	13	S15400B3	12	0.7608	0.7823	2.8	20
Silver	26655	S15400B3	13	S15400B3	12	0.5649	0.5958	5.3	20
Sodium	26655	S15400C3	12	S15400C3	11	3.9147	4.2361	7.9	20
Thallium	26655	S15400B3	13	S15400B3	12	1.3260	1.4237	7.1	20
Vanadium	26655	S15400B3	13	S15400B3	12	0.8985	0.9369	4.2	20
Zinc	26655	S15400B3	13	S15400B3	12	1.8273	1.8850	3.1	20

TxtQcType: MR Matrix: SOIL SampleID: AC74177-002

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	26655	S15400C3	14	S15400C3	13	66.9907	72.4110	7.8	20
Antimony	26655	S15400B3	15	S15400B3	14	0.02U	0.02U	---	20
Arsenic	26655	S15400B3	15	S15400B3	14	0.0348	0.0418	18	20
Barium	26655	S15400B3	15	S15400B3	14	0.9373	0.9016	3.9	20
Beryllium	26655	S15400B3	15	S15400B3	14	0.0070	0.0079	13	20
Cadmium	26655	S15400B3	15	S15400B3	14	0.006U	0.006U	---	20
Calcium	26655	S15400C3	14	S15400C3	13	43.0122	47.1739	9.2	20
Chromium	26655	S15400B3	15	S15400B3	14	0.1865	0.2062	10	20
Cobalt	26655	S15400B3	15	S15400B3	14	0.0808	0.0839	3.7	20
Copper	26655	S15400B3	15	S15400B3	14	0.2690	0.2541	5.7	20
Iron	26655	S15400C3	14	S15400C3	13	150.3760	165.1300	9.4	20
Lead	26655	S15400B3	15	S15400B3	14	0.4309	0.3678	16	20
Magnesium	26655	S15400C3	14	S15400C3	13	35.1459	38.5307	9.2	20
Manganese	26655	S15400C3	14	S15400C3	13	3.4220	3.5061	2.4	20
Mercury	26655	H15400S	17	H15400S	16	.5U	.5U	---	20
Nickel	26655	S15400B3	15	S15400B3	14	0.3237	0.3435	5.9	20
Potassium	26655	S15400C3	14	S15400C3	13	11.8345	12.6711	6.8	20
Selenium	26655	S15400B3	15	S15400B3	14	0.018U	0.018U	---	20
Silver	26655	S15400B3	15	S15400B3	14	0.015U	0.015U	---	20
Sodium	26655	S15400C3	14	S15400C3	13	2.5U	2.5U	---	20
Thallium	26655	S15400B3	15	S15400B3	14	0.012U	0.012U	---	20
Vanadium	26655	S15400B3	15	S15400B3	14	0.2464	0.2527	2.5	20
Zinc	26655	S15400B3	15	S15400B3	14	0.6171	0.5649	8.8	20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 26655

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MSD Matrix: SOIL SampleID: AC74177-002

Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	26655	S15400C3	16	S15400C3	15	96.2671	97.4260	1.2		20
Antimony	26655	S15400B3	17	S15400B3	16	0.2589	0.2590	.053		20
Arsenic	26655	S15400B3	17	S15400B3	16	0.4829	0.4931	2.1		20
Barium	26655	S15400B3	17	S15400B3	16	1.4075	3.7215	90	a	20
Beryllium	26655	S15400B3	17	S15400B3	16	0.4653	0.4709	1.2		20
Cadmium	26655	S15400B3	17	S15400B3	16	0.4538	0.4588	1.1		20
Calcium	26655	S15400C3	16	S15400C3	15	92.9600	100.7140	8		20
Chromium	26655	S15400B3	17	S15400B3	16	0.6831	0.6726	1.5		20
Cobalt	26655	S15400B3	17	S15400B3	16	0.5575	0.5571	.068		20
Copper	26655	S15400B3	17	S15400B3	16	0.7614	0.7405	2.8		20
Iron	26655	S15400C3	16	S15400C3	15	186.7610	187.3490	.31		20
Lead	26655	S15400B3	17	S15400B3	16	0.8277	0.8441	2		20
Magnesium	26655	S15400C3	16	S15400C3	15	91.7805	93.1109	1.4		20
Manganese	26655	S15400C3	16	S15400C3	15	4.2867	4.3663	1.8		20
Mercury	26655	H15400S	19	H15400S	18	10.4696	10.4732	.034		20
Nickel	26655	S15400B3	17	S15400B3	16	0.8235	0.7982	3.1		20
Potassium	26655	S15400C3	16	S15400C3	15	63.8175	65.6476	2.8		20
Selenium	26655	S15400B3	17	S15400B3	16	0.4229	0.4204	.59		20
Silver	26655	S15400B3	17	S15400B3	16	0.0924	0.0932	.94		20
Sodium	26655	S15400C3	16	S15400C3	15	48.6731	51.0661	4.8		20
Thallium	26655	S15400B3	17	S15400B3	16	0.4563	0.4610	1		20
Vanadium	26655	S15400B3	17	S15400B3	16	0.7381	0.7126	3.5		20
Zinc	26655	S15400B3	17	S15400B3	16	1.0687	1.8537	54	a	20

TxtQcType: SD Matrix: SOIL SampleID: AC74177-002

Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Aluminum	26655	S15400C3	20	S15400C3	13	5	14.9472	72.4110	3.2		10
Antimony	26655	S15400B3	21	S15400B3	14	5	0.0067	0.0160	---		10
Arsenic	26655	S15400B3	21	S15400B3	14	5	0.0081	0.0418	3.2		10
Barium	26655	S15400B3	21	S15400B3	14	5	0.1934	0.9016	7.3		10
Beryllium	26655	S15400B3	21	S15400B3	14	5	0.0026	0.0079	66	a	10
Cadmium	26655	S15400B3	21	S15400B3	14	5	0.0016	0.0043	86	c	10
Calcium	26655	S15400C3	20	S15400C3	13	5	9.9330	47.1739	5.3		10
Chromium	26655	S15400B3	21	S15400B3	14	5	0.0451	0.2062	9.3		10
Cobalt	26655	S15400B3	21	S15400B3	14	5	0.0184	0.0839	9.5		10
Copper	26655	S15400B3	21	S15400B3	14	5	0.0561	0.2541	10		10
Iron	26655	S15400C3	20	S15400C3	13	5	34.0579	165.1300	3.1		10
Lead	26655	S15400B3	21	S15400B3	14	5	0.0825	0.3678	12	a	10
Magnesium	26655	S15400C3	20	S15400C3	13	5	8.1607	38.5307	5.9		10
Manganese	26655	S15400C3	20	S15400C3	13	5	0.7269	3.5061	3.7		10
Nickel	26655	S15400B3	21	S15400B3	14	5	0.0726	0.3435	5.7		10
Potassium	26655	S15400C3	20	S15400C3	13	5	2.8886	12.6711	14	a	10
Selenium	26655	S15400B3	21	S15400B3	14	5	-0.0002	-0.0103	---		10
Silver	26655	S15400B3	21	S15400B3	14	5	0.0007	-0.0021	---		10
Sodium	26655	S15400C3	20	S15400C3	13	5	0.2375	1.0859	9.4		10
Thallium	26655	S15400B3	21	S15400B3	14	5	-0.0017	0.0003	---		10
Vanadium	26655	S15400B3	21	S15400B3	14	5	0.0541	0.2527	7		10
Zinc	26655	S15400B3	21	S15400B3	14	5	0.1191	0.5649	5.4		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Hampton-Clarke/Veritech

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B (6020) 200.7/200.8 OTHER_____

Batch No.: 15400 Analyst: km

QC Number: 26655 Prep Date: 8/26/13

Matrix: soil Reviewed By: QA

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				–	
LCS	0.5g					–	
LCSD						–	
1. ~~QC~~ 74177-002							
MR 74177-002							
MS 74177-002							
MSD 74177-002							
2. 74157-001							
3. 74157-002							
4. 74157-003							
5. 74157-004							
6. 74157-005							
7. 74157-006							
8. 74157-007							
9. 74157-008							
10. 74157-009							
11. 74157-010							
12. 74157-012	50ml						
13. 74158-001	0.5g						
14. 74156-001							
15. 74177-004							
16. 74177-006							
17. 74155-001							
18. ~~74173-001~~							
19. 74bmb	50ml						
20. LCSW							

Hot Plate Temperature: 92.1 C (90-95° C)

	Volume mL	Lot #
LCS, LCSD	0.5g	V- 7835
LLLCS, LLLCSD		V-
MS, MSD	0.5ml	V-7685, 7686
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO_3	2.5ml	V- 8067
HCl	5ml	V- 8070
H_2O_2	1.5ml	V-7423

Acid	Vol mL	Lot#
1:1 HNO_3	5ml	V-170825
1:1 HCl		V-

Relinquished By km Date 8/26/13

Received By QA Date 08/28/2013

T:\QC\FORMS\LOGBOOK FORMS\METALS\ICP sample prep log 2012.DOC

Hampton-Clarke/Veritech

HG SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 245.1 7470A (7471A) OTHER_____

Batch No.:* 15400

QC Number: 26655

Matrix: Soil

Analyst: km

Prep Date: 8/26/13

Review By: [illegible]

LAB ID#	MERCURY INITIAL	MERCURY FINAL	COMMENTS
Method blank	25~~0~~ml	25~~0~~ml	
LCS	0.159		
LCSD			
1 ~~LC~~ 74177-002			
MR 74177-002			
MS 74177-002			
MSD 74177-002			
2 74157-001			
3 74157-002			
4 74157-003			
5 74157-004			
6 74157-005			
7 74157-006			
8 74157-007			
9 74157-008			
10 74157-009			
11 74157-010			
12 74157-012	25~~0~~ml		
13 74158-001	0.159		
14 74156-001			
15 74177-004			
16 74177-006			
17 74159-001			
18 ~~74177~~ FBMB	25~~0~~ml		
19 LCSW			
20 74173-001	0.159		
74173-002			
74173-003			

Lot Numbers	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 168354	HNO_3		V-
$K_2S_2O_8$: V-	HCl		V-
NH_2OH: V- 166613	H_2SO_4		V-
	Aqua Regia	1.25ml	V-

**Block Temp:	95.8°C
Time In Block:	1:30
Time Out of Block:	2:00
** Required range = 92-98C	

Spike Volume & Lot #

☐ LCS V- 7835 (0.15g / 0.25 ml)

☐ MS V- ~~16156~~ 171474 0.250 ml

☐ Standards/Control Batch B- 16156

Relinquished By: km

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S15400B3.txt

Analysis Date: 08/27/13 **Instrument:** PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calib Blank 1 V-170817	1	CAL	12:52	1							V-170817(ICB/CCB)
Calib 1 V-167308	1	CAL	12:55	2							V-167308(ICS1 Lowest std)
Calib 2 V-168853	1	CAL	12:59	3							V-168853(ICS2- Low Std)
Calib 3 V-168467	1	CAL	13:02	4							V-168467(ICS3 - Middle Std)
Calib 4 V-168987	1	CAL	13:05	5							V-168987(ICS4 - High std)
ICS3 V-168467	1	ICS	13:10	6							V-168467(ICS3 - Middle Std)
ICV (2) V-168169	1	ICV	13:14	7							V-168169(ICV)
ICB V-170817	1	ICB	13:18	8							V-170817(ICB/CCB)
ICSA V-169160	1	ICSA	13:21	9							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	13:26	10							V-169161(ICSAB)
MB 26655 (100)	1	MB	13:31	11		SOIL	SOIL	SW846	26655		0
LCS 26655	1	LCS	13:34	12		SOIL	SOIL	SW846	26655		0
LCS MR 26655	1	LCS	13:39	13		SOIL	SOIL	SW846	26655		0
AC74177-002	1	SMP	13:43	14	METALS-TAL-S	SOIL	SOIL	SW846	26655		0
AC74177-002	1	MR	13:47	15	METALS-TAL-S	SOIL	SOIL	SW846	26655		0
AC74177-002	1	MS	13:51	16	METALS-TAL-S	SOIL	SOIL	SW846	26655		0
AC74177-002	1	MSD	13:55	17	METALS-TAL-S	SOIL	SOIL	SW846	26655		0
AC74177-002	1	PS	14:00	18	METALS-TAL-S	SOIL	SOIL	SW846	26655		0
CCV V-168988	1	CCV	14:04	19							V-168988(CCV)
CCB V-170817	1	CCB	14:07	20							V-170817(ICB/CCB)
AC74177-002	5	SD	14:10	21	METALS-TAL-S	SOIL	SOIL	SW846	26655		0
AC74157-001	1	SMP	14:14	22	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
AC74157-002	1	SMP	14:18	23	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
AC74157-003	1	SMP	14:21	24	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
AC74157-004	1	SMP	14:25	25	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
AC74157-005	1	SMP	14:28	26	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
AC74157-006	1	SMP	14:32	27	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
ICSA V-169160	1	ICSA	14:35	28							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	14:40	29							V-169161(ICSAB)
CCV V-168988	1	CCV	14:45	30							V-168988(CCV)
CCB V-170817	1	CCB	14:48	31							V-170817(ICB/CCB)
AC74157-007	1	SMP	14:51	32	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
AC74157-008	1	SMP	14:56	33	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
AC74157-009	1	SMP	15:00	34	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
AC74157-010	1	SMP	15:03	35	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
AC74157-012	1	SMP	15:07	36	MET-RCRA-S	SOIL	AQUEO	SW846	26655		0
AC74158-001	1	SMP	15:10	37	METALS-TAL-S	SOIL	SOIL	SW846	26655		0
AC74156-001	1	SMP	15:15	38	MET-10-SOIL	SOIL	SOIL	SW846	26655		0
ICSA V-169160	1	ICSA	15:18	39							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	15:23	40							V-169161(ICSAB)
CCV V-168988	1	CCV	15:28	41							V-168988(CCV)
CCB V-170817	1	CCB	15:31	42							V-170817(ICB/CCB)
AC74177-004	1	SMP	15:34	43	METALS-TAL-S	SOIL	SOIL	SW846	26655		0
AC74177-006	1	SMP	15:39	44	METALS-TAL-S	SOIL	SOIL	SW846	26655		0
AC74159-001	1	SMP	15:44	45	MET-10-SOIL	SOIL	SOIL	SW846	26655		0
MB FB (1)	1	MB	15:47	46		SOIL	AQUEO	SW846	26655		0
LCSW	1	LCS	15:51	47		SOIL	AQUEO	SW846	26655		0
ICSA V-169160	1	ICSA	15:54	48							V-169160(ICSA)
ICSAB V-169161	1	ICSAB	15:59	49							V-169161(ICSAB)
CCV V-168988	1	CCV	16:04	50							V-168988(CCV)
CCB V-170817	1	CCB	16:07	51							V-170817(ICB/CCB)

Comments/Reviewedby:

olufemi
192.168.1.89 8/28/2013 9:43:34 AM

RUN IS OK
All elements reported except Mn and the earth elements

8/28/13

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD3A\S15400C3.txt

Analysis Date: 08/27/13 **Instrument:** PEICPRAD3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calib Blk 1 V-166272	1	CAL	22:05	1							V-166272(ICB/CCB)
Calib 1 V-168986	1	CAL	22:08	2							V-168986(ICS2- Low Std)
Calib 2 V-168854	1	CAL	22:11	3							V-168854(ICS3 - Middle Std)
Calib 3 V-169890	1	CAL	22:14	4							V-169890(ICS4 - High std)
ICS3 V-168854	1	ICS	22:18	5							V-168854(ICS3 - Middle Std)
ICV (2) V-168989	1	ICV	22:21	6							V-168989(ICV)
ICB V-166272	1	ICB	22:24	7							V-166272(ICB/CCB)
ICSA V-169992	1	ICSA	22:27	8							V-169992(ICSA)
ICSAB V-169994	1	ICSAB	22:31	9							V-169994(ICSAB)
MB 26655 (100)	1	MB	22:36	10		SOIL	SOIL	SW846	26655		0
LCS 26655	1	LCS	22:39	11		SOIL	SOIL	SW846	26655		0
LCS MR 26655	1	LCS	22:42	12		SOIL	SOIL	SW846	26655		0
AC74177-002	1	SMP	22:44	13	METALS-TAL-S	SOIL	SOIL	SW846	26655		0
AC74177-002	1	MR	22:47	14	METALS-TAL-S	SOIL	SOIL	SW846	26655		0
AC74177-002	1	MS	22:50	15	METALS-TAL-S	SOIL	SOIL	SW846	26655		0
AC74177-002	1	MSD	22:52	16	METALS-TAL-S	SOIL	SOIL	SW846	26655		0
AC74177-002	1	PS	22:55	17	METALS-TAL-S	SOIL	SOIL	SW846	26655		0
CCV V-170158	1	CCV	22:58	18							V-170158(CCV)
CCB V-166272	1	CCB	23:01	19							V-166272(ICB/CCB)
AC74177-002	5	SD	23:04	20	METALS-TAL-S	SOIL	SOIL	SW846	26655		0
AC74157-001	1	SMP	23:08	21	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
AC74157-002	1	SMP	23:11	22	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
AC74157-003	1	SMP	23:14	23	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
AC74157-004	1	SMP	23:18	24	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
AC74157-005	1	SMP	23:21	25	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
AC74157-006	1	SMP	23:24	26	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
ICSA V-169992	1	ICSA	23:27	27							V-169992(ICSA)
ICSAB V-169994	1	ICSAB	23:32	28							V-169994(ICSAB)
CCV V-170158	1	CCV	23:36	29							V-170158(CCV)
CCB V-166272	1	CCB	23:39	30							V-166272(ICB/CCB)
AC74157-007	1	SMP	23:42	31	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
AC74157-008	1	SMP	23:45	32	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
AC74157-009	1	SMP	23:49	33	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
AC74157-010	1	SMP	23:52	34	MET-RCRA-S	SOIL	SOIL	SW846	26655		0
AC74157-012	1	SMP	23:55	35	MET-RCRA-S	SOIL	AQUEO	SW846	26655		0
AC74158-001	1	SMP	23:58	36	METALS-TAL-S	SOIL	SOIL	SW846	26655		0
ICSA V-169992	1	ICSA	00:03	37							V-169992(ICSA)
ICSAB V-169994	1	ICSAB	00:07	38							V-169994(ICSAB)
CCV V-170158	1	CCV	00:11	39							V-170158(CCV)
CCB V-166272	1	CCB	00:14	40							V-166272(ICB/CCB)
AC74177-004	1	SMP	00:17	41	METALS-TAL-S	SOIL	SOIL	SW846	26655		0
AC74177-006	1	SMP	00:21	42	METALS-TAL-S	SOIL	SOIL	SW846	26655		0
MB FB (1)	1	MB	00:24	43		SOIL	AQUEO	SW846	26655		0
LCSW	1	LCS	00:27	44		SOIL	AQUEO	SW846	26655		0
ICSA V-169992	1	ICSA	00:30	45							V-169992(ICSA)
ICSAB V-169994	1	ICSAB	00:34	46							V-169994(ICSAB)
CCV V-170158	1	CCV	00:38	47							V-170158(CCV)
CCB V-166272	1	CCB	00:42	48							V-166272(ICB/CCB)

Comments/Reviewedby:

olufemi
192.168.1.89 8/28/2013 9:47:24 AM

RUN IS OK
Mn and the earth elements reported

8/28/13

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV1A\H15400S.txt

Analysis Date: 08/26/13

Instrument: HGCV1A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	15:15	1							0
.2 PPB	1	CAL	15:17	2							0
.5 PPB	1	CAL	15:18	3							0
1 PPB	1	CAL	15:20	4							0
2 PPB	1	CAL	15:21	5							0
5 PPB	1	CAL	15:23	6							0
10 PPB	1	CAL	15:24	7							0
25 PPB	1	CAL	15:26	8							0
ICV (2)	1	ICV	15:27	9							0
ICB	1	ICB	15:29	10							0
MB 26655 (167)	1	MB	15:31	11	HG-SOIL	SOIL	SOIL	SW846	26655		0
LCS 26655	1	NA	15:32	12	HG-SOIL	SOIL	SOIL	SW846	26655	over calibration range	0
LCS MR 26655	1	NA	15:34	13	HG-SOIL	SOIL	SOIL	SW846	26655	over calibration range	0
LCS 5D 26655	5	LCS	15:35	14	HG-SOIL	SOIL	SOIL	SW846	26655		0
LCS MR 5D 26655	5	LCS	15:37	15	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74177-002	1	SMP	15:38	16	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74177-002	1	MR	15:40	17	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74177-002	1	MS	15:41	18	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74177-002	1	MSD	15:43	19	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74157-001	1	SMP	15:44	20	HG-SOIL	SOIL	SOIL	SW846	26655		0
CCV	1	CCV	15:46	21							0
CCB	1	CCB	15:47	22							0
AC74157-002	1	SMP	15:49	23	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74157-003	1	NA	15:50	24	HG-SOIL	SOIL	SOIL	SW846	26655	over calibration range	0
AC74157-004	1	SMP	15:52	25	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74157-005	1	SMP	15:53	26	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74157-006	1	NA	15:55	27	HG-SOIL	SOIL	SOIL	SW846	26655	over calibration range	0
AC74157-007	1	SMP	15:57	28	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74157-008	1	SMP	15:58	29	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74157-009	1	SMP	16:00	30	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74157-010	1	SMP	16:01	31	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74157-012	1	NA	16:03	32		SOIL	AQUEO	SW846	26655	not required	0
CCV	1	CCV	16:04	33							0
CCB	1	CCB	16:06	34							0
AC74158-001	1	SMP	16:07	35	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74156-001	1	SMP	16:09	36	HG-TCLP	SOIL	SOIL	SW846	26655		0
AC74177-004	1	SMP	16:10	37	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74177-006	1	SMP	16:12	38	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74159-001	1	SMP	16:13	39	HG-TCLP	SOIL	SOIL	SW846	26655		0
AC74173-001	1	NA	16:15	40	HG-SOIL	SOIL	SOIL	SW846	26655	over calibration range	0
AC74173-002	1	NA	16:17	41	HG-SOIL	SOIL	SOIL	SW846	26655	over calibration range	0
AC74173-003	1	SMP	16:19	42	HG-SOIL	SOIL	SOIL	SW846	26655		0
MB FB 26655	1	NA	16:20	43	HG-SOIL	SOIL	AQUEO	SW846	26655	not required	0
LCSW 26655	1	NA	16:22	44	HG-SOIL	SOIL	AQUEO	SW846	26655	not required	0
CCV	1	CCV	16:23	45							0
CCB	1	CCB	16:25	46							0
AC74157-003	5	NA	16:27	47	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74157-006	2	NA	16:28	48	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74173-001	50	NA	16:30	49	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74173-002	50	NA	16:32	50	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74173-001	500	NA	16:33	51	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74173-002	250	NA	16:35	52	HG-SOIL	SOIL	SOIL	SW846	26655		0
CCV	1	CCV	16:36	53						failed	0
CCB	1	CCB	16:38	54							0

Comments/Reviewedby:

olufemi
192.168.1.89 8/27/2013 11:57:42 AM

RUN IS OK

8/27/13

Standard/Batch/SnCl2 Lot #:

V-171461

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV1A\H15400Sb.txt

Analysis Date: 08/26/13

Instrument: HGCV1A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	16:44	1							0
.2 PPB	1	CAL	16:46	2							0
.5 PPB	1	CAL	16:48	3							0
1 PPB	1	CAL	16:49	4							0
2 PPB	1	CAL	16:51	5							0
5 PPB	1	CAL	16:52	6							0
10 PPB	1	CAL	16:54	7							0
25 PPB	1	CAL	16:55	8							0
ICV (2)	1	ICV	16:57	9							0
ICB	1	ICB	16:58	10							0
AC74157-003	5	SMP	17:00	11	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74157-006	2	SMP	17:01	12	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74173-001	50	NA	17:03	13	HG-SOIL	SOIL	SOIL	SW846	26655	over calibration range	0
AC74173-002	50	NA	17:05	14	HG-SOIL	SOIL	SOIL	SW846	26655	over calibration range	0
AC74173-001	500	SMP	17:06	15	HG-SOIL	SOIL	SOIL	SW846	26655		0
AC74173-002	250	SMP	17:08	16	HG-SOIL	SOIL	SOIL	SW846	26655		0
CCV	1	CCV	17:09	17							0
CCB	1	CCB	17:11	18							0

Comments/Reviewedby:

olufemi
192.168.1.89 8/27/2013 12:08:20 PM

RUN IS OK

8/27/13

Standard/Batch/SnCl2 Lot #:

V-171461

TCLP Metal Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC74177-002	% Solid:	0	Lab Name:	Veritech	Nras No:	
Client Id:	006 SS-1 Composite	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/23/2013	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.20	ND	1	50	50	08/28/13	26654	T15399A2	22	P	PEICP2A
7440-39-3	Barium	0.25	0.56	1	50	50	08/28/13	26654	T15399A2	22	P	PEICP2A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/28/13	26654	T15399A2	22	P	PEICP2A
7440-47-3	Chromium	0.20	ND	1	50	50	08/28/13	26654	T15399A2	22	P	PEICP2A
7440-50-8	Copper	0.20	ND	1	50	50	08/28/13	26654	T15399A2	22	P	PEICP2A
7439-92-1	Lead	0.15	ND	1	50	50	08/28/13	26654	T15399A2	22	P	PEICP2A
7439-97-6	Mercury	0.00070	ND	1	25	25	08/28/13	26654	H15399T	29	CV	HGCV1A
7440-02-0	Nickel	0.20	ND	1	50	50	08/28/13	26654	T15399A2	22	P	PEICP2A
7782-49-2	Selenium	0.10	ND	1	50	50	08/28/13	26654	T15399A2	22	P	PEICP2A
7440-22-4	Silver	0.050	ND	1	50	50	08/28/13	26654	T15399A2	22	P	PEICP2A
7440-66-6	Zinc	0.20	ND	1	50	50	08/28/13	26654	T15399A2	22	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC74177-004	% Solid:	0	Lab Name:	Veritech	Nras No:	
Client Id:	012 SS-2 Composite	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/23/2013	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.20	ND	1	50	50	08/28/13	26654	T15399A2	23	P	PEICP2A
7440-39-3	Barium	0.25	0.40	1	50	50	08/28/13	26654	T15399A2	23	P	PEICP2A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/28/13	26654	T15399A2	23	P	PEICP2A
7440-47-3	Chromium	0.20	ND	1	50	50	08/28/13	26654	T15399A2	23	P	PEICP2A
7440-50-8	Copper	0.20	ND	1	50	50	08/28/13	26654	T15399A2	23	P	PEICP2A
7439-92-1	Lead	0.15	ND	1	50	50	08/28/13	26654	T15399A2	23	P	PEICP2A
7439-97-6	Mercury	0.00070	ND	1	25	25	08/28/13	26654	H15399T	30	CV	HGCV1A
7440-02-0	Nickel	0.20	ND	1	50	50	08/28/13	26654	T15399A2	23	P	PEICP2A
7782-49-2	Selenium	0.10	ND	1	50	50	08/28/13	26654	T15399A2	23	P	PEICP2A
7440-22-4	Silver	0.050	ND	1	50	50	08/28/13	26654	T15399A2	23	P	PEICP2A
7440-66-6	Zinc	0.20	ND	1	50	50	08/28/13	26654	T15399A2	23	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC74177-006	% Solid:	0	Lab Name:	Veritech	Nras No:	
Client Id:	018 SS-3 Composite	Units:	MG/L	Lab Code:		Sdg No:	
Matrix:	TCLP	Date Rec:	8/23/2013	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.20	ND	1	50	50	08/28/13	26654	T15399A2	24	P	PEICP2A
7440-39-3	Barium	0.25	0.29	1	50	50	08/28/13	26654	T15399A2	24	P	PEICP2A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/28/13	26654	T15399A2	24	P	PEICP2A
7440-47-3	Chromium	0.20	ND	1	50	50	08/28/13	26654	T15399A2	24	P	PEICP2A
7440-50-8	Copper	0.20	ND	1	50	50	08/28/13	26654	T15399A2	24	P	PEICP2A
7439-92-1	Lead	0.15	ND	1	50	50	08/28/13	26654	T15399A2	24	P	PEICP2A
7439-97-6	Mercury	0.00070	ND	1	25	25	08/28/13	26654	H15399T	31	CV	HGCV1A
7440-02-0	Nickel	0.20	ND	1	50	50	08/28/13	26654	T15399A2	24	P	PEICP2A
7782-49-2	Selenium	0.10	ND	1	50	50	08/28/13	26654	T15399A2	24	P	PEICP2A
7440-22-4	Silver	0.050	ND	1	50	50	08/28/13	26654	T15399A2	24	P	PEICP2A
7440-66-6	Zinc	0.20	ND	1	50	50	08/28/13	26654	T15399A2	24	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 26654 (1) % Solid: 0 Lab Name: Veritech
Client Id: MB 26654 (1) Units: MG/L Lab Code:
Matrix: TCLP
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	1.0	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7440-36-0	Antimony	0.20	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7440-38-2	Arsenic	0.20	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7440-39-3	Barium	0.25	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7440-41-7	Beryllium	0.050	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7440-43-9	Cadmium	0.050	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7440-70-2	Calcium	5.0	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7440-47-3	Chromium	0.20	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7440-48-4	Cobalt	0.20	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7440-50-8	Copper	0.20	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7439-89-6	Iron	1.0	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7439-92-1	Lead	0.15	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7439-95-4	Magnesium	5.0	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7439-96-5	Manganese	0.20	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7439-97-6	Mercury	0.00070	ND	1	25	25	08/28/13	26654	H15399T	11	CV	HGCV1A
7439-98-7	Molybdenum	0.20	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7440-02-0	Nickel	0.20	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7782-49-2	Selenium	0.10	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7440-22-4	Silver	0.050	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7440-28-0	Thallium	0.20	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7440-31-5	Tin	0.20	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7440-32-6	Titanium	0.20	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7440-62-2	Vanadium	0.20	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A
7440-66-6	Zinc	0.20	ND	1	50	50	08/28/13	26654	T15399A2	11	P	PEICP2A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/28/13
Data File: T15399A2
Prep Batch: 26654
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3082313

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V-168989 (2)-7	Rec	CCV V-170158-19	Rec	CCV V-170158-29	Rec	CCV V-170158-38	Rec	CCV V-170158-44	Rec		Rec		Rec		Rec
Arsenic	1/.5	1.01952	102	0.50355	101	0.49799	100	0.50126	100	0.50467	101						
Barium	1/.5	1.03676	104	0.50884	102	0.51572	103	0.51332	103	0.51575	103						
Cadmium	1/.5	1.03270	103	0.50065	100	0.50618	101	0.50478	101	0.50665	101						
Chromium	1/.5	1.02585	103	0.50232	100	0.50675	101	0.50419	101	0.50629	101						
Copper	1/.5	1.01842	102	0.49737	99	0.50066	100	0.50046	100	0.50040	100						
Lead	1/.5	1.02439	102	0.50808	102	0.51188	102	0.50867	102	0.51431	103						
Nickel	1/.5	1.01629	102	0.50946	102	0.51511	103	0.51502	103	0.51697	103						
Selenium	1/.5	1.03904	104	0.51241	102	0.50366	101	0.50900	102	0.50798	102						
Silver	0.2/0.1	0.20286	101	0.09832	98	0.09984	100	0.09853	99	0.09955	100						
Zinc	1/.5	1.02770	103	0.50934	102	0.51509	103	0.51480	103	0.51582	103						

Notes:
a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits:
ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-11

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 2
(ICV/CCV Summary)

Date Analyzed: 08/28/13
Data File: H15399T
Prep Batch: 26654
Analytical Method: 6010B(ICP)/7470A,7471A(Hg),6020
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3082313

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: VHG LABS

		ICV (2)-9		CCV-21		CCV-33		CCV-36									
Analyte	ICV/CCV Amt		Rec		Rec		Rec		Rec		Rec		Rec		Rec		Rec
Mercury	20/10	19.21549	96	9.96462	100	10.44830	104	10.48151	105								

Notes:
a-indicates analyte failed the ICV limits for 6010B, 6020
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B (Except Hg 7470A,7471A),6020
d-indicates analyte failed the CCV limits Hg 7470A/7471A

Qc Limits:
ICV - 200.7 : 95-105
CCV- 200.7/200.8/6010B/245.1 : 90-110 (Except Hg 7470A/ 7471A=80-120)
ICV -6010B/6020/200.8 : 90-11

CLP ICP ICV/CCV: 90-110
CLP Hg ICV/CCV: 80-120

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/28/13
Data File: T15399A2
Prep Batch: 26654
Reporting Limits Used: TCLP,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3082313

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-170817-8	CCB-20	CCB-30	CCB-39	CCB-45	MB 26654 (1)-11	EF-V-171314-21
Arsenic	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U
Barium	.25 U	.25 U	.25 U	.25 U	.25 U	.25 U	.25 U
Cadmium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Chromium	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U
Copper	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U
Lead	.15 U	.15 U	.15 U	.15 U	.15 U	.15 U	.15 U
Nickel	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U
Selenium	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U
Silver	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Zinc	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 08/28/13
Data File: H15399T
Prep Batch: 26654
Reporting Limits Used: TCLP,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3082313

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-37	MB 26654 (1)-11	EF-V-171314-35		
Mercury	.7 U	.7 U	.7 U	.7 U	.7 U	.7 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 08/28/13
Data File: T15399A2
Prep Batch: 26654
Reporting Limits Used: TCLP,6010B(ICP)/7470A,7471A(Hg),6020
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 3082313

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-169992-9	Rec	ICSAB V-169994-10	Rec	ICSA V-169992-27	Rec	ICSAB V-169994-28	Rec	ICSA V-169992-42	Rec	ICSAB V-169994-43	Rec		Rec		Rec
Aluminum	500	512.077	102	505.37400	101	507.242	101	503.94300	101	514.804	103	502.86100	101				
Arsenic	1	U		1.06364	106	U		1.06415	106	U		1.06778	107				
Barium	.5	U		0.54467	109	U		0.53922	108	U		0.53936	108				
Cadmium	1	U		1.09633	110	U		1.08481	108	U		1.08029	108				
Calcium	500	494.777	99	486.11500	97	489.351	98	486.74300	97	498.782	100	489.25700	98				
Chromium	.5	U		0.52465	105	U		0.51909	104	U		0.51563	103				
Copper	.5	U		0.55025	110	U		0.54438	109	U		0.53822	108				
Iron	200	192.439	96	188.10700	94	193.224	97	189.88400	95	196.818	98	190.31900	95				
Lead	1	U		0.98805	99	U		0.99309	99	U		0.99035	99				
Magnesium	500	511.738	102	509.79900	102	521.965	104	508.01900	102	522.478	104	511.67800	102				
Nickel	1	U		0.98598	99	U		0.98219	98	U		0.98407	98				
Selenium	1	U		1.07815	108	U		1.07801	108	U		1.08528	109				
Silver	1	U		1.12131	112	U		1.10680	111	U		1.09751	110				
Zinc	1	U		0.98310	98	U		0.98863	99	U		0.99196	99				

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 26654

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: TCLP SampleID: LCSW MR 26654

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	26654	1	T15399A2	13	0.5050	0.500	101		80	120
Barium	26654	1	T15399A2	13	0.5226	.5	105		80	120
Cadmium	26654	1	T15399A2	13	0.5120	0.500	102		80	120
Chromium	26654	1	T15399A2	13	0.5148	0.500	103		80	120
Copper	26654	1	T15399A2	13	0.5130	0.500	103		80	120
Lead	26654	1	T15399A2	13	0.5171	.5	103		80	120
Mercury	26654	1	H15399T	13	10.0300	10	100		80	120
Nickel	26654	1	T15399A2	13	0.5209	0.500	104		80	120
Selenium	26654	1	T15399A2	13	0.5098	0.500	102		80	120
Silver	26654	1	T15399A2	13	0.0992	0.100	99		80	120
Zinc	26654	1	T15399A2	13	0.5200	0.500	104		80	120

TxtQcType: LCS Matrix: TCLP SampleID: LCSW 26654

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	26654	1	T15399A2	12	0.4959	0.500	99		80	120
Barium	26654	1	T15399A2	12	0.5144	.5	103		80	120
Cadmium	26654	1	T15399A2	12	0.5047	0.500	101		80	120
Chromium	26654	1	T15399A2	12	0.5079	0.500	102		80	120
Copper	26654	1	T15399A2	12	0.5047	0.500	101		80	120
Lead	26654	1	T15399A2	12	0.5063	.5	101		80	120
Mercury	26654	1	H15399T	12	9.5725	10	96		80	120
Nickel	26654	1	T15399A2	12	0.5134	0.500	103		80	120
Selenium	26654	1	T15399A2	12	0.4942	0.500	99		80	120
Silver	26654	1	T15399A2	12	0.0980	0.100	98		80	120
Zinc	26654	1	T15399A2	12	0.5142	0.500	103		80	120

TxtQcType: MS Matrix: TCLP SampleID: AC74157-001

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	26654	1	T15399A2	16	T15399A2	14	0.5529	.2U	0.5	111		50	
Barium	26654	1	T15399A2	16	T15399A2	14	0.9526	0.4240	0.5	106		50	
Cadmium	26654	1	T15399A2	16	T15399A2	14	0.5517	.05U	0.5	110		50	
Chromium	26654	1	T15399A2	16	T15399A2	14	0.5220	.2U	0.5	104		50	
Copper	26654	1	T15399A2	16	T15399A2	14	0.5492	.2U	0.5	110		50	
Lead	26654	1	T15399A2	16	T15399A2	14	0.7517	0.2376	0.5	103		50	
Mercury	26654	1	H15399T	16	H15399T	14	10.3608	.70U	10	104		50	
Nickel	26654	1	T15399A2	16	T15399A2	14	0.5367	.2U	0.5	107		50	
Selenium	26654	1	T15399A2	16	T15399A2	14	0.5895	.1U	0.5	118		50	
Silver	26654	1	T15399A2	16	T15399A2	14	0.1070	0.05U	0.10	107		50	
Zinc	26654	1	T15399A2	16	T15399A2	14	3.5744	3.0174	0.5	111		50	

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 26654

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: TCLP SampleID: LCSW MR 26654

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	26654	T15399A2	13	T15399A2	12	0.5050	0.4959	1.8	20
Barium	26654	T15399A2	13	T15399A2	12	0.5226	0.5144	1.6	20
Cadmium	26654	T15399A2	13	T15399A2	12	0.5120	0.5047	1.4	20
Chromium	26654	T15399A2	13	T15399A2	12	0.5148	0.5079	1.3	20
Copper	26654	T15399A2	13	T15399A2	12	0.5130	0.5047	1.6	20
Lead	26654	T15399A2	13	T15399A2	12	0.5171	0.5063	2.1	20
Mercury	26654	H15399T	13	H15399T	12	10.0300	9.5725	4.7	20
Nickel	26654	T15399A2	13	T15399A2	12	0.5209	0.5134	1.4	20
Selenium	26654	T15399A2	13	T15399A2	12	0.5098	0.4942	3.1	20
Silver	26654	T15399A2	13	T15399A2	12	0.0992	0.0980	1.2	20
Zinc	26654	T15399A2	13	T15399A2	12	0.5200	0.5142	1.1	20

TxtQcType: MR Matrix: TCLP SampleID: AC74157-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	26654	T15399A2	15	T15399A2	14	.2U	.2U	---	20
Barium	26654	T15399A2	15	T15399A2	14	0.4284	0.4240	1	20
Cadmium	26654	T15399A2	15	T15399A2	14	.05U	.05U	---	20
Chromium	26654	T15399A2	15	T15399A2	14	.2U	.2U	---	20
Copper	26654	T15399A2	15	T15399A2	14	.2U	.2U	---	20
Lead	26654	T15399A2	15	T15399A2	14	0.2436	0.2376	2.5	20
Mercury	26654	H15399T	15	H15399T	14	.70U	.70U	---	20
Nickel	26654	T15399A2	15	T15399A2	14	.2U	.2U	---	20
Selenium	26654	T15399A2	15	T15399A2	14	.1U	.1U	---	20
Silver	26654	T15399A2	15	T15399A2	14	0.05U	0.05U	---	20
Zinc	26654	T15399A2	15	T15399A2	14	3.0596	3.0174	1.4	20

TxtQcType: SD Matrix: TCLP SampleID: AC74157-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Arsenic	26654	T15399A2	18	T15399A2	14	5	0.0056	0.0035	---		10
Barium	26654	T15399A2	18	T15399A2	14	5	0.0837	0.4240	1.3		10
Cadmium	26654	T15399A2	18	T15399A2	14	5	0.0038	0.0095	99	c	10
Chromium	26654	T15399A2	18	T15399A2	14	5	0.0036	0.0093	93	a	10
Copper	26654	T15399A2	18	T15399A2	14	5	0.0038	0.0180	4.3		10
Lead	26654	T15399A2	18	T15399A2	14	5	0.0506	0.2376	6.4		10
Nickel	26654	T15399A2	18	T15399A2	14	5	0.0053	0.0224	19	c	10
Selenium	26654	T15399A2	18	T15399A2	14	5	-0.0017	0.0062	---		10
Silver	26654	T15399A2	18	T15399A2	14	5	0.0017	0.0024	249	c	10
Zinc	26654	T15399A2	18	T15399A2	14	5	0.5866	3.0174	2.8		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Hampton-Clarke/Veritech

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: (3010A) 3005A 3050B (6020) 200.7/200.8 OTHER_____

Batch No.: 15399 Analyst: JY

QC Number: 26654 Prep Date: 8/27/13.

Matrix: TCLP Reviewed By: MS

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				--	
LCS	↓	↓				--	
LCSD						--	
1. 74157 001					171314	74157.001	
MR 74157 001					↓	↓	
MS 74157 001	↓	↓					
MSD							
2. 74157 002	50ml	50ml			171314	74157.001	
3. 74157 003	↓	↓			↓	↓	
4. 74157 004							
5. 74157 005							
6. 74157 006							
7. 74157 007							
8. 74157 008							
9. 74157 009							
10. 74157 010							
11. 74156 001							
12. 74177 002							
13. 74177 004							
14. 74177 006							
15. 74158 9 SD 8/27 001					↓	↓	
16. EF.V. 171314	↓	↓					
17.							
18.							
19.							
20.							

Hot Plate Temperature: 93.8° C (90-95° C)

	Volume mL	Lot #
LCS, LCSD	0.5, 0.5	V-7685, 7686
LLLCS, LLLCSD		V-
MS, MSD	0.5, 0.5	V-7685, 7686
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO_3	3	V- 8067
HCl		V-
H_2O_2		V-

Acid	Vol mL	Lot#
1:1 HNO_3		V-
1:1 HCl	5	V- 16679

Relinquished By JY Date 8/27/13.

Received By [illegible] Date 8/27/13

0158

T:\QC\FORMS\LOGBOOK FORMS\METALS\ICP sample prep log 2012.DOC

Hampton-Clarke/Veritech

HG SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 245.1 (7470A) 7471A **OTHER**_____

Batch No.:* 15399

Analyst: JY

QC Number: 26654

Prep Date: 08/27/2013

Matrix: TCLP

Review By: QA

LAB ID#	MERCURY		COMMENTS
	INITIAL	FINAL	
Method blank	25ml	25ml	
LCS			
LCSD			
1 AC74157-001			
MR AC74157-001			
MS AC74157-001			
MSD			
2 AC74157-002	25ml	25ml	
3 AC74157-003			
4 AC74157-004			
5 AC74157-005			
6 AC74157-006			
7 AC74157-007			
8 AC74157-008			
9 AC74157-009			
10 AC74157-010			
11 AC74156-001			
12 AC74177-002			
13 AC74177-004			
14 AC74177-006			
15 AC74159-001			
16 EF-V-171314			
17			
18			
19			
20			

Lot Numbers	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 168354	HNO_3	0.625mL	V- 7838
$K_2S_2O_8$: V- 166616	HCl		V-
NH_2OH: V- 166613	H_2SO_4	1.25mL	V- 7331
	Aqua Regia		V-

**Block Temp.:	94.1°C
Time In Block:	1600
Time Out of Block:	1800
** Required range = 92-98C	

Spike Volume & Lot #

☐ LCS V- 171576 0.15g (0.25 ml)

☐ MS V- 171576 0.250 ml

☐ Standards/Control Batch B- 16162

Relinquished By: JY

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP2A\T15399A2.txt

Analysis Date: 08/28/13

Instrument: PEICP2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calib Blk 1 V-170817	1	CAL	10:14	1							V-170817(ICB/CCB)
Calib 1 V-167308	1	CAL	10:18	2							V-167308(ICS1 Lowest std)
Calib 2 V-168986	1	CAL	10:21	3							V-168986(ICS2- Low Std)
Calib 3 V-168854	1	CAL	10:25	4							V-168854(ICS3 - Middle Std)
Calib 4 V-169890	1	CAL	10:29	5							V-169890(ICS4 - High std)
ICS3 V-168854	1	ICS	10:34	6							V-168854(ICS3 - Middle Std)
ICV V-168989 (2)	1	ICV	10:37	7							V-168989(ICV)
ICB V-170817	1	ICB	10:42	8							V-170817(ICB/CCB)
ICSA V-169992	1	ICSA	10:46	9							V-169992(ICSA)
ICSAB V-169994	1	ICSAB	10:51	10							V-169994(ICSAB)
MB 26654 (1)	1	MB	10:56	11		TCLP	TCLP	SW846	26654		0
LCSW 26654	1	LCS	11:00	12		TCLP	TCLP	SW846	26654		0
LCSW MR 26654	1	LCS	11:04	13		TCLP	TCLP	SW846	26654		0
AC74157-001	1	SMP	11:07	14	METALS-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-001	1	MR	11:11	15	METALS-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-001	1	MS	11:15	16	METALS-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-001	1	PS	11:19	17	METALS-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-001	5	SD	11:23	18	METALS-TCLP	TCLP	TCLP	SW846	26654		0
CCV V-170158	1	CCV	11:27	19							V-170158(CCV)
CCB	1	CCB	11:30	20							0
EF-V-171314	1	EF	11:34	21		TCLP	TCLP	SW846	26654		V-171314(EF-1)
AC74177-002	1	SMP	11:37	22	MET-TCLP-XL	TCLP	TCLP	SW846	26654		0
AC74177-004	1	SMP	11:41	23	MET-TCLP-XL	TCLP	TCLP	SW846	26654		0
AC74177-006	1	SMP	11:45	24	MET-TCLP-XL	TCLP	TCLP	SW846	26654		0
AC74157-002	1	SMP	11:48	25	METALS-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-003	1	SMP	11:52	26	METALS-TCLP	TCLP	TCLP	SW846	26654		0
ICSA V-169992	1	ICSA	11:56	27							V-169992(ICSA)
ICSAB V-169994	1	ICSAB	12:01	28							V-169994(ICSAB)
CCV V-170158	1	CCV	12:07	29							V-170158(CCV)
CCB	1	CCB	12:10	30							0
AC74157-004	1	SMP	12:14	31	METALS-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-005	1	SMP	12:17	32	METALS-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-006	1	SMP	12:21	33	METALS-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-007	1	SMP	12:25	34	METALS-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-008	1	SMP	12:28	35	METALS-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-009	1	SMP	12:32	36	METALS-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-010	1	SMP	12:36	37	METALS-TCLP	TCLP	TCLP	SW846	26654		0
CCV V-170158	1	CCV	12:39	38							V-170158(CCV)
CCB	1	CCB	12:43	39							0
AC74156-001	1	SMP	12:46	40	METALS-TCLP	TCLP	TCLP	SW846	26654		0
AC74159-001	1	SMP	12:50	41	METALS-TCLP	TCLP	TCLP	SW846	26654		0
ICSA V-169992	1	ICSA	12:54	42							V-169992(ICSA)
ICSAB V-169994	1	ICSAB	12:59	43							V-169994(ICSAB)
CCV V-170158	1	CCV	13:04	44							V-170158(CCV)
CCB	1	CCB	13:08	45							0

Comments/Reviewedby:

sean
192.168.1.78 8/28/2013 2:25:26 PM

OK

8/28/13

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV1A\H15399T.txt

Analysis Date: 08/28/13

Instrument: HGCV1A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	11:34	1							0
.2 PPB	1	CAL	11:35	2							0
.5 PPB	1	CAL	11:37	3							0
1 PPB	1	CAL	11:38	4							0
2 PPB	1	CAL	11:40	5							0
5 PPB	1	CAL	11:41	6							0
10 PPB	1	CAL	11:42	7							0
25 PPB	1	CAL	11:44	8							0
ICV (2)	1	ICV	11:45	9							0
ICB	1	ICB	11:46	10							0
MB 26654 (1)	1	MB	11:48	11		TCLP	TCLP	SW846	26654		0
LCSW 26654	1	LCS	11:49	12		TCLP	TCLP	SW846	26654		0
LCSW MR 26654	1	LCS	11:50	13		TCLP	TCLP	SW846	26654		0
AC74157-001	1	SMP	11:52	14	HG-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-001	1	MR	11:53	15	HG-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-001	1	MS	11:55	16	HG-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-002	1	SMP	11:56	17	HG-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-003	1	SMP	11:57	18	HG-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-004	1	SMP	11:59	19	HG-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-005	1	SMP	12:00	20	HG-TCLP	TCLP	TCLP	SW846	26654		0
CCV	1	CCV	12:01	21							0
CCB	1	CCB	12:03	22							0
AC74157-006	1	SMP	12:04	23	HG-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-007	1	SMP	12:05	24	HG-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-008	1	SMP	12:07	25	HG-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-009	1	SMP	12:08	26	HG-TCLP	TCLP	TCLP	SW846	26654		0
AC74157-010	1	SMP	12:10	27	HG-TCLP	TCLP	TCLP	SW846	26654		0
AC74156-001	1	SMP	12:11	28	HG-TCLP	TCLP	TCLP	SW846	26654		0
AC74177-002	1	SMP	12:12	29	HG-TCLP	TCLP	TCLP	SW846	26654		0
AC74177-004	1	SMP	12:14	30	HG-TCLP	TCLP	TCLP	SW846	26654		0
AC74177-006	1	SMP	12:15	31	HG-TCLP	TCLP	TCLP	SW846	26654		0
AC74159-001	1	SMP	12:16	32	HG-TCLP	TCLP	TCLP	SW846	26654		0
CCV	1	CCV	12:18	33							0
CCB	1	CCB	12:19	34							0
EF-V-171314	1	EF	12:20	35		TCLP	TCLP	SW846	26654		V-171314(EF-1)
CCV	1	CCV	12:22	36							0
CCB	1	CCB	12:23	37							0

Comments/Reviewedby:

olufemi
192.168.1.89 8/28/2013 1:35:55 PM

RUN IS OK

8/28/13

Standard/Batch/SnCl2 Lot #:

V-171651

Wet Chemistry Data

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AC74177-002
Matrix Soil
Client SampleID: 006 SS-1 Composite

Project Number: 3082313
Received Date: 8/23/2013
Collect Date: 8/23/2013

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Ammonia	AMMONIA-SOIL	1	48	MG/KG	13	08/28/13	08/28/13
Chloride	CHLORIDE-ICS	1	ND	mg/Kg	22	08/26/13	08/26/13
Cyanide (Reactive)	CN-REACTIVE	1	ND	mg/Kg	0.50	08/26/13	08/27/13
Cyanide	CN-S-9012	1	ND	mg/Kg	0.26	08/27/13	08/27/13
Eh	CR6-EH	1	250	mv		08/26/13	08/26/13
pH	CR6-PH	1	8.0	pH		08/26/13	08/26/13
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.1	08/26/13	08/27/13
Ignitability	IGNIT-MOD	1	>141	Deg. F			08/26/13
Nitrite	NO2-ICS	1	ND	mg/Kg	11	08/26/13	08/26/13
Nitrate	NO3-ICS	1	13	mg/Kg	11	08/26/13	08/26/13
Paint Filter Test	PAINT FILTER	1	NEG				08/27/13
Sulfate	SO4-ICS	1	ND	mg/Kg	22	08/26/13	08/26/13
Sulfide (Reactive)	S-REACTIVE	1	ND	mg/kg	100	08/26/13	08/27/13

Lab#: AC74177-004
Matrix Soil
Client SampleID: 012 SS-2 Composite

Project Number: 3082313
Received Date: 8/23/2013
Collect Date: 8/23/2013

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Ammonia	AMMONIA-SOIL	1	67	MG/KG	13	08/28/13	08/28/13
Chloride	CHLORIDE-ICS	1	22	mg/Kg	22	08/26/13	08/26/13
Cyanide (Reactive)	CN-REACTIVE	1	ND	mg/Kg	0.50	08/26/13	08/27/13
Cyanide	CN-S-9012	1	ND	mg/Kg	0.26	08/27/13	08/27/13
Eh	CR6-EH	1	250	mv		08/26/13	08/26/13
pH	CR6-PH	1	7.6	pH		08/26/13	08/26/13
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.1	08/26/13	08/27/13
Ignitability	IGNIT-MOD	1	>141	Deg. F			08/26/13
Nitrite	NO2-ICS	1	ND	mg/Kg	11	08/26/13	08/26/13
Nitrate	NO3-ICS	1	18	mg/Kg	11	08/26/13	08/26/13
Paint Filter Test	PAINT FILTER	1	NEG				08/27/13
Sulfate	SO4-ICS	1	24	mg/Kg	22	08/26/13	08/26/13
Sulfide (Reactive)	S-REACTIVE	1	ND	mg/kg	100	08/26/13	08/27/13

Lab#: AC74177-006
Matrix Soil
Client SampleID: 018 SS-3 Composite

Project Number: 3082313
Received Date: 8/23/2013
Collect Date: 8/23/2013

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Ammonia	AMMONIA-SOIL	1	98	MG/KG	13	08/28/13	08/28/13
Chloride	CHLORIDE-ICS	1	ND	mg/Kg	22	08/26/13	08/26/13
Cyanide (Reactive)	CN-REACTIVE	1	ND	mg/Kg	0.50	08/26/13	08/27/13
Cyanide	CN-S-9012	1	ND	mg/Kg	0.26	08/27/13	08/27/13
Eh	CR6-EH	1	250	mv		08/26/13	08/26/13
pH	CR6-PH	1	7.6	pH		08/26/13	08/26/13
Cr (Hexavalent)	CR6-SOIL	1	ND	mg/Kg	1.1	08/26/13	08/27/13
Ignitability	IGNIT-MOD	1	>141	Deg. F			08/26/13
Nitrite	NO2-ICS	1	ND	mg/Kg	11	08/26/13	08/26/13
Nitrate	NO3-ICS	1	21	mg/Kg	11	08/26/13	08/26/13
Paint Filter Test	PAINT FILTER	1	NEG				08/27/13
Sulfate	SO4-ICS	1	ND	mg/Kg	22	08/26/13	08/26/13
Sulfide (Reactive)	S-REACTIVE	1	ND	mg/kg	100	08/26/13	08/27/13

VERITECH Wet Chem Form1 Analysis Summary
% Solids

TestGroupName: % Solids SM2540G **Project #: 3082313**

TestGroup: %SOLIDS

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AC74177-001	002 SS-1B (1.5-2')	Soil/Encore	1	94	Percent			08/26/13	08/23/13	08/23/13
AC74177-002	006 SS-1 Compos	Soil	1	93	Percent			08/26/13	08/23/13	08/23/13
AC74177-003	010 SS-2D (4-4.5')	Soil/Encore	1	94	Percent			08/26/13	08/23/13	08/23/13
AC74177-004	012 SS-2 Compos	Soil	1	93	Percent			08/26/13	08/23/13	08/23/13
AC74177-005	017 SS-3E (8-8.5')	Soil/Encore	1	92	Percent			08/26/13	08/23/13	08/23/13
AC74177-006	018 SS-3 Compos	Soil	1	92	Percent			08/26/13	08/23/13	08/23/13

% Solids Report

Analysis Type: SOLIDS-SS
BatchID: SOLIDS-SS-2197

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AC74164-015	80	80.08811	Percent	1.10	12.45	10.20	08/26/13	hossain	0.48	5
Sample	AC74164-010	82	82.24907	Percent	1.09	11.85	9.94	08/26/13	hossain		
Sample	AC74164-011	78	77.97903	Percent	1.10	11.59	9.28	08/26/13	hossain		
Sample	AC74164-012	79	79.37132	Percent	1.10	11.28	9.17	08/26/13	hossain		
Sample	AC74164-013	79	79.39221	Percent	1.10	11.63	9.45	08/26/13	hossain		
Sample	AC74164-014	80	79.90521	Percent	1.10	11.65	9.53	08/26/13	hossain		
Sample	AC74164-015	80	79.70123	Percent	1.10	12.48	10.17	08/26/13	hossain		
Sample	AC74164-016	90	89.82387	Percent	1.11	11.33	10.29	08/26/13	hossain		
Sample	AC74173-001	91	91.10459	Percent	1.11	11.34	10.43	08/26/13	hossain		
Sample	AC74173-002	90	89.63832	Percent	1.11	11.34	10.28	08/26/13	hossain		
Sample	AC74173-003	82	82.12291	Percent	1.11	11.85	9.93	08/26/13	hossain		
Sample	AC74173-004	83	82.90909	Percent	1.10	12.10	10.22	08/26/13	hossain		
Sample	AC74173-005	51	50.55970	Percent	1.09	11.81	6.51	08/26/13	hossain		
Sample	AC74173-006	60	59.82742	Percent	1.10	11.53	7.35	08/26/13	hossain		
Sample	AC74177-001	94	93.61702	Percent	1.09	11.43	10.76	08/26/13	hossain		
Sample	AC74177-002	93	92.63158	Percent	1.10	11.55	10.79	08/26/13	hossain		
Sample	AC74177-003	94	94.11224	Percent	1.11	11.98	11.34	08/26/13	hossain		
Sample	AC74177-004	93	93.14286	Percent	1.11	11.61	10.89	08/26/13	hossain		
Sample	AC74177-005	92	92.10762	Percent	1.11	12.26	11.38	08/26/13	hossain		
Sample	AC74177-006	92	91.98869	Percent	1.11	11.72	10.87	08/26/13	hossain		
Sample	AC74183-001	82	82.32143	Percent	1.10	12.30	10.32	08/26/13	hossain		

* - Indicates Failed Rpd Criteria

Analysis	Ammonia Soil ISE							
Batch#	NH3-S-1							
Date	08/28/13							
Analyst	BCT/JW							
Q.C. DATA								
		Spike Amt	Result	Adj Conc	% REC	Limits	RPD	Limits
		PPM	PPM	PPM				
	LCS	600.00	544.80	544.80	91%	75-125%	0.46%	20%
	LCSD	600.00	542.40	542.40	90%	75-125%		
	MS	600.00	673.55	625.81	104%	75-125%	2.51%	20%
	MSD	600.00	658.06	610.32	102%	75-125%		
	SAMPLE	NA	47.74	NA	NA	NA	4.42%	20%
	SAMPLE DUP	NA	45.68	NA	NA	NA		

****

Samples #	mg/L NH3	Solid Factor	Sample Weight	DF	Final vol(mL)	NH3-N (ppm)	MDL (PPM)	%REC
ICV	53.7	1	1	1	1	53.7	1	107%
ICB	0.140	1	1	1	1	ND	1	
MB	0.133	1	0.5	1	6	ND	12	
LCS	45.4	1	0.5	1	6	544.8	12	
LCSD	45.2	1	0.5	1	6	542.4	12	
AC74177-002	3.70	0.93	0.5	1	6	47.74	12.903226	
AC74177-002 DUP	3.54	0.93	0.5	1	6	45.68	12.903226	
AC74177-002 MS	52.2	0.93	0.5	1	6	673.5	12.903226	
AC74177-002 MSD	51.0	0.93	0.5	1	6	658.1	12.903226	
AC74177-004	5.21	0.93	0.5	1	6	67.2	12.903226	
AC74177-006	7.54	0.92	0.5	1	6	98.3	13.043478	
CCV	47.5	1	1	1	1	47.5	1	95%
CCB	0.126	1	1	1	1	ND	1	

JW
8/28/13

BTB
8/28/13

Calibration Summary:

3082313 0598

Instrument: IC1
Analysis Meth: EPA 9056A

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Chloride	20130826141	7	ICV	92	10	90-110
Chloride	20130826141	19	CCV	91	10	90-110
Chloride	20130826141	27	CCV	91	10	90-110
Nitrate	20130826141	7	ICV	94	10	90-110
Nitrate	20130826141	19	CCV	94	10	90-110
Nitrate	20130826141	27	CCV	95	10	90-110
Nitrite	20130826141	7	ICV	96	10	90-110
Nitrite	20130826141	19	CCV	97	10	90-110
Nitrite	20130826141	27	CCV	97	10	90-110
Sulfate	20130826141	7	ICV	97	10	90-110
Sulfate	20130826141	19	CCV	96	10	90-110
Sulfate	20130826141	27	CCV	98	10	90-110

Blank Summary

Instrument: IC1

Qc Type: Method Blank Summary Prep Date: 8/26/13

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130826141	8/26/13 17:07	MBS-1114	9	Chloride	ND	20
20130826141	8/26/13 17:07	MBS-1114	9	Nitrate	ND	10
20130826141	8/26/13 17:07	MBS-1114	9	Nitrite	ND	10
20130826141	8/26/13 17:07	MBS-1114	9	Sulfate	ND	20

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130826141	8/26/13 16:45	ICB	8	Chloride	ND	2.0
20130826141	8/26/13 16:45	ICB	8	Nitrate	ND	1.0
20130826141	8/26/13 16:45	ICB	8	Nitrite	ND	1.0
20130826141	8/26/13 16:45	ICB	8	Sulfate	ND	2.0

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130826141	8/26/13 21:06	CCB	20	Chloride	ND	2.0
20130826141	8/27/13 00:00	CCB	28	Chloride	ND	2.0
20130826141	8/26/13 21:06	CCB	20	Nitrate	ND	1.0
20130826141	8/27/13 00:00	CCB	28	Nitrate	ND	1.0
20130826141	8/26/13 21:06	CCB	20	Nitrite	ND	1.0
20130826141	8/27/13 00:00	CCB	28	Nitrite	ND	1.0
20130826141	8/26/13 21:06	CCB	20	Sulfate	ND	2.0
20130826141	8/27/13 00:00	CCB	28	Sulfate	ND	2.0

Ref SampleID:	Ref Standard RunID	Ref Standard Date
5 PPM	3	8/26/2013 2:56:00 PM

Sample ID: CCV RunID: 19 Analysis Date: 8/26/2013 8:44:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.364	7.354	9.374001	
Chloride	5.607	5.22	6	
Fluoride	3.687	3.547	3.827	
Nitrate	9.577	8.400001	10.78	
Nitrite	6.747	6.164	7.324	
Phosphorus (Ortho)	12.624	11.544	13.764	
Sulfate	14.36	13.37	15.37	

Sample ID: CCV RunID: 27 Analysis Date: 8/26/2013 11:38:00 PM

Analyte	RT	LowLimit	Hi LImit	Flag
Bromide	8.364	7.354	9.374001	
Chloride	5.61	5.22	6	
Fluoride	3.69	3.547	3.827	
Nitrate	9.58	8.400001	10.78	
Nitrite	6.75	6.164	7.324	
Phosphorus (Ortho)	12.62	11.544	13.764	
Sulfate	14.367	13.37	15.37	

LCS Recoveries

BatchRunID/RunID:=====>				201308261415-10								
QcBatchID:=====>				LCSS-1114								
Date/Time:=====>				08/26/13 17:29								
Analytical Method:=====>				EPA 9056A								
Matrix:=====>				Soil		Soil		Soil		Soil		Soil
Analyte	EPA 9056A **Amt**	**Limits**	**Amt**	**Limits**	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags
Chloride	5	80-120			100									
Nitrate	5	80-120			96									
Nitrite	5	80-120			98									
Sulfate	5	80-120			98									

MS/MSD/DUP Recovery

3082313 0602

Prep Batch: S-1114 Sample ID: AC74167-001
Method: EPA 9056A Matrix Soil

Qc Type: MS

Analyte	Amt	Limits Recov	Dil	MS Conc	Sam Conc	Recov	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Chloride	5	80-120	1	5.2582	0	105		20130826141	14	08/26/13 18:55	20130826141	13	08/26/13 18:34
Nitrate	5	80-120	1	4.7912	0	96		20130826141	14	08/26/13 18:55	20130826141	13	08/26/13 18:34
Nitrite	5	80-120	1	5.0594	0	101		20130826141	14	08/26/13 18:55	20130826141	13	08/26/13 18:34
Sulfate	5	80-120	1	6.3471	0	127	Ms	20130826141	14	08/26/13 18:55	20130826141	13	08/26/13 18:34

Qc Type: MSD

Analyte	Amt	Limits Recov	Limits Rpd	Dil	MS Conc	Sam Conc	Recov	Rpd	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Chloride	5	80-120	20	1	5.0488	0	101	4.1		20130826141	15	08/26/13 19:17	20130826141	13	08/26/13 18:34
Nitrate	5	80-120	20	1	4.7303	0	95	1.3		20130826141	15	08/26/13 19:17	20130826141	13	08/26/13 18:34
Nitrite	5	80-120	20	1	4.9617	0	99	1.9		20130826141	15	08/26/13 19:17	20130826141	13	08/26/13 18:34
Sulfate	5	80-120	20	1	6.2386	0	125	1.7	Ms	20130826141	15	08/26/13 19:17	20130826141	13	08/26/13 18:34

Calibration Summary:

Instrument: DA1
Analysis Meth: SW846 7.3.3

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide (Reactive)	20130827075	9	ICV	97	0.4	90-110
Cyanide (Reactive)	20130827075	21	CCV	96	0.4	90-110
Cyanide (Reactive)	20130827075	33	CCV	97	0.4	90-110
Cyanide (Reactive)	20130827075	39	CCV	97	0.4	90-110

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 8/26/13

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130827075	8/27/13 08:15	MBS-586	11	Cyanide (	ND	0.50

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130827075	8/27/13 08:13	CCB	10	Cyanide (	ND	0.02

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130827075	8/27/13 08:38	CCB	22	Cyanide (	ND	0.02
20130827075	8/27/13 09:04	CCB	34	Cyanide (	ND	0.02
20130827075	8/27/13 09:14	CCB	40	Cyanide (	ND	0.02

LCS Recoveries

			BatchRunID/RunID:====>	201308270754-12							
			QcBatchID:====>	LCSS-586							
			Date/Time:====>	08/27/13 08:17							
			Analytical Method:====>	SW846 7.3.3							
			Matrix:====>	Soil		Soil		Soil		Soil		Soil	
Analyte	SW846 7.3. Amt	Limits	Amt	Limits	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags
Cyanide (Rea	0.4	75-125			110									

MS/MSD/DUP Recovery

3082313 0606

Prep Batch: S-586 Sample ID: AC74177-002
Method: SW846 7.3.3 Matrix: Soil

Qc Type: MS		Limits			MS	Sample			MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov		Dil	Conc	Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide (Reactive)	0.4	75-125		1	0.432	0	108		20130827075	13	08/27/13 08:19	20130827075	15	08/27/13 08:24

Qc Type: MSD		Limits			MSD	Sample				MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Rpd	Dil	Conc	Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide (Reactive)	0.4	75-125	20	1	0.4222	0	106	2.3		20130827075	14	08/27/13 08:22	20130827075	15	08/27/13 08:24

Calibration Summary:

Instrument: DA1
Analysis Meth: EPA 9012B

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20130827111	9	ICV	103	0.4	90-110
Cyanide	20130827111	21	CCV	107	0.4	90-110
Cyanide	20130827111	30	CCV	103	0.4	90-110

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 8/27/13

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130827111	8/27/13 11:32	MBS-1222	11	Cyanide	ND	0.24

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130827111	8/27/13 11:30	CCB	10	Cyanide	ND	0.02

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20130827111	8/27/13 11:55	CCB	22	Cyanide	ND	0.02
20130827111	8/27/13 12:11	CCB	31	Cyanide	ND	0.02

LCS Recoveries

BatchRunID/RunID:===>			201308271111-12									
QcBatchID:===>			LCSS-1222									
Date/Time:===>			08/27/13 11:34									
Analytical Method:===>			EPA 9012B									
Matrix:===>			Soil		Soil		Soil		Soil		Soil	
	EPA 9012B											
Analyte	**Amt**	**Limits**	**Amt**	**Limits**	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags
Cyanide	0.4	90-110			103							

MS/MSD/DUP Recovery

Prep Batch: S-1222 Sample ID: AC74130-007
Method: EPA 9012B Matrix: Soil

Qc Type: DUP	Limits			DUP	Sample			MS/MSD/DUP			Non Spike		
Analyte		Rpd	Dil	Conc	Conc	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide		20	1	0	0	NA		20130827111	15	08/27/13 11:40	20130827111	14	08/27/13 11:38

Qc Type: MS		Limits			MS	Sample			MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov		Dil	Conc	Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125		1	0.4091	0	102		20130827111	16	08/27/13 11:42	20130827111	14	08/27/13 11:38

Qc Type: MSD		Limits			MSD	Sample				MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Rpd	Dil	Conc	Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125	20	1	0.4172	0	104	2		20130827111	17	08/27/13 11:45	20130827111	14	08/27/13 11:38

3082313 0611

Analysis Type: IGNIT-MOD

Batch Number: IGNIT-MOD-179

Units: Deg. F

Calibration Curve Information

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-08/26/13	81	90-110	NA	~~82.92~~ 82.68	102	NA	
DUP	AC74177-006	0	NA	20	#Error	NA	NA	Nc

PA 8/26/13

Analytical Method(s)

EPA 1010

PA 8/26/13

Sam #	Type	MB	Result	RL	Per Sol	Full Result	Obs FP	Press	p-Xylene Std	Prep Date	Prep By	Anal Date	Anal By
CAL-01-08/26/13	CAL-01		83		100	~~82.92~~ 82.68	82.8	762	82.68			08/26/13	SDL
AC74177-006	DUP		>141		100	0	>141	762	82.68			08/26/13	SDL
AC74177-002	Sample		>141		100	0	>141	762	82.00			08/26/13	SDL
AC74177-004	Sample		>141		100	0	>141	762	82.68			08/26/13	SDL
AC74177-006	Sample		>141		100	0	>141	762	82.00			08/26/13	SDL

Susan D Cerwick 8/26/13

PA 8/27/13

Flag Codes: Ra - Recovery failed specified criteria (PVS/LCS/MS/MSD/ICV/CAL)
Na - Not Applicable
Rp - RPD failed specified criteria.
Nc - Not Checked ..either one or both values =ND

Analysis Type: PAINT FILT

Batch Number: PAINT FILT-347

Units:

Calibration Curve Information

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
DUP	AC74177-004	0	NA	NA	#Error	NA	NA	

Analytical Method(s)

EPA 9095A

Sam #	Type	MB	Result	RL	Per Sol	Full Result	Pos/Neg	Prep Date	Prep By	Anal Date	Anal By
AC74177-004	DUP		NEG		100	0	NEG			08/27/13	SDL
AC74177-004	Sample		NEG		100	0	NEG			08/27/13	SDL
AC74177-002	Sample		NEG		100	0	NEG			08/27/13	SDL
AC74177-006	Sample		NEG		100	0	NEG			08/27/13	SDL
AC74159-001	Sample		NEG		100	0	NEG			08/27/13	SDL

Simon D. Cerezo
8/27/13

MA 8/27/13

Flag Codes: Ra - Recovery failed specified criteria (PVS/LCS/MS/MSD/ICV/CAL)
Na - Not Applicable
Rp - RPD failed specified criteria.
Nc - Not Checked ..either one or both values =ND

Hampton-Clarke/Veritech

PAINT FILTER DATA SHEET
METHOD SW-846 9095

Batch No. 347

Veritech Sample No.	Paint Filter (Pos/Neg)	Date	Analyst
Dup AC74177-004	NEG	8/27/13	SDC
1. AC74177-004			
2. AC74177-002			
3. AC74177-006			
4. AC74159-001			
5.			
6.			
7.			
8.			
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20.			

Reviewed By: _____ Date Reviewed: _____

3082313 0614

Analysis Type: RS

Batch Number: RS-586

Units: mg/kg

Calibration Curve Information

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-08/27/13	16	90-110	NA	14.82775	93	NA	
LCS	LCS	400	75-125	NA	380.7125	95	NA	
MS	AC74177-002	400	75-125	NA	380.7125	95	NA	
MSD	AC74177-002	400	75-125	20	370.69375	93	2.7	

Analytical Method(s)

SW846 7.3.4

Sam #	Type	MB	Result	RL	Per Sol	Full Result	Titr Vol	Iod Vol	DF	Sam Wt (g)	Scrb Vol (ml)	Prep Date	Prep By	Anal Date	Anal By
CAL-01-08/27/13	CAL-01		15		100	14.828	6.3	10	1	250	250			08/27/13	HS
MB-1-08/26/13	MB	MB-1-08/26/13	ND	100	100	0	10.0	10	1	10	250	08/26/13	HS	08/27/13	HS
LCS	LCS	MB-1-08/26/13	380	100	100	380.71	6.2	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74177-002	Sample	MB-1-08/26/13	ND	100	93	30.056	9.7	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74177-002	MS	MB-1-08/26/13	380	100	93	380.71	6.2	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74177-002	MSD	MB-1-08/26/13	370	100	93	370.69	6.3	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74177-004	Sample	MB-1-08/26/13	ND	100	93	10.019	9.9	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74177-006	Sample	MB-1-08/26/13	ND	100	92	20.038	9.8	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74156-001	Sample	MB-1-08/26/13	ND	100	93	30.056	9.7	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74157-001	Sample	MB-1-08/26/13	ND	100	88	20.038	9.8	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74157-002	Sample	MB-1-08/26/13	ND	100	90	20.038	9.8	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74157-003	Sample	MB-1-08/26/13	ND	100	90	20.038	9.8	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74157-004	Sample	MB-1-08/26/13	ND	100	88	30.056	9.7	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74157-005	Sample	MB-1-08/26/13	ND	100	84	0	10.0	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74157-006	Sample	MB-1-08/26/13	ND	100	87	20.038	9.8	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74157-007	Sample	MB-1-08/26/13	ND	100	92	10.019	9.9	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74157-008	Sample	MB-1-08/26/13	ND	100	91	20.038	9.8	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74157-009	Sample	MB-1-08/26/13	ND	100	83	10.019	9.9	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74157-010	Sample	MB-1-08/26/13	ND	100	93	30.056	9.7	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74182-001	Sample	MB-1-08/26/13	ND	100	86	30.056	9.7	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74182-007	Sample	MB-1-08/26/13	ND	100	90	40.075	9.6	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74182-009	Sample	MB-1-08/26/13	ND	100	93	30.056	9.7	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74182-010	Sample	MB-1-08/26/13	ND	100	90	40.075	9.6	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74182-005	Sample	MB-1-08/26/13	ND	100	94	30.056	9.7	10	1	10	250	08/26/13	HS	08/27/13	HS
AC74182-006	Sample	MB-1-08/26/13	ND	100	92	30.056	9.7	10	1	10	250	08/26/13	HS	08/27/13	HS

HS 8/27/13

DB 8/28/13

Flag Codes: Ra - Recovery failed specified criteria (PVS/LCS/MS/MSD/ICV/CAL) Rp - RPD failed specified criteria.

Na - Not Applicable Nc - Not Checked ..either one or both values =ND

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)
Method 3060A

Batch: 169 Analyst Beena Date 8/26/13
Digestion Start: 10:00 Finish: 11:00 Hot Plate Temp 1: 91°C Hot Plate Temp 2: 90°C

Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 From	0.0 ml	7.85	100	1.97	
Cal Curve 0.025 100	0.025	7.80		1.80	V. 171566
Cal Curve 0.25 ppm	0.25	7.46		1.91	V. 171567
Cal Curve 0.5	0.5	7.39		2.11	V. 171568
Cal Curve 1.0	1.0	7.15		2.13	V. 171569
MB	2.5gm	7.66		1.94	
LCS		7.41		1.98	V. 171572
QC Sample AC74177.002					
PDS		7.26		1.86	ICV V. 171570
DUP		7.31		1.93	CCV V. 171571
(Sol) MS		7.28		2.04	
(Insol) MSD		7.30		2.10	
1 AC74102.005		7.14		1.96	
2. 011		7.26		1.86	
3. AC74177.002		7.67		1.91	
4. 004		7.90		2.13	
5. 006		7.59		2.10	
6. AC74126.001		7.66		2.14	
7. AC74157.001		7.12		2.16	
8. 002		7.13		1.98	
9. 003		7.51		1.88	
10. 004		7.60		1.91	
11. 005		7.48		1.93	
12. 006		7.50		1.98	
13. 007		7.69		2.17	
14. 008		7.71		2.05	
15. 009		7.26		2.14	
16. 010		7.33		2.16	
17 AC74182.001		7.41		2.19	
18. 005		7.56		2.17	
19. 006		7.69		2.00	
20. 007		7.69		1.90	

Reagent	Lot #:		$MgCl_2$	#
				7734
Digestion Solution - pH must be > 11.5. If not, discard	V- 170954	pH 13.14	Lead Chromate (PbCr)	# 6413
Phosphate Buffer	V- 164939		Weight of PbCr (10-20mg)	~~0.01909~~ 0.01900 mg
			PVS Volume 0.5 ml. 1g 100 ppm ml	10% H_2SO_4 V: 170990
			Sample chosen for PVS should be spiked at 40 mg/kg. If sample is > 40 mg/kg, use 2X	5 M HNO_3 V: 171336
			Spike Volume 1ml & Lot # V- 167177	Col Rea. V: 171331

HEXAVALENT CHROMIUM PREPARATION DATA SHEET
(SOIL SAMPLES ONLY)

Method 3060A

Batch: 169 A Analyst Beena Date 8/20/13
Digestion Start: 12:00 Finish: 13:00 Hot Plate Temp 1: 90°C Hot Plate Temp 2: 91°C

Laboratory Sample No.	Sample Wt (g)	pH 7.5 ± 0.5	Final Vol (ml)	pH 2.0 ± 0.5	Comments
Cal Curve 0.0 From	0.0 ml	7.85	100	1.97	
Cal Curve 0.025 100ppm	0.025	7.80		1.80	V. 171566
Cal Curve 0.25	0.25	7.46		1.91	V. 171567
Cal Curve 0.5	0.5	7.39		2.11	V. 171568
Cal Curve 1.0	1.0	7.15		2.13	V. 171569
MB	2.5gm	7.89		1.97	
LCS		7.63		2.18	V. 171573
QC Sample AC74177.002					
PDS		7.54		2.17	ICV V. 171570
DUP		7.57		2.04	CCV V. 171571
(Sol) MS		7.66		2.03	
(Insol) MSD		7.14		1.90	
1. AC74102.005		7.39		1.84	
2. 011		7.37		1.80	
3. AC74177.002		7.84		1.79	
4. 004		7.71		1.66	
5. 006		7.69		1.71	
6. AC74126.001		7.33		1.81	
7. AC74157.001		7.27		1.86	
8. 002		7.56		2.07	
9. 003		7.45		2.03	
10. 004		7.92		2.00	
11. 005		7.90		2.04	
12. 006		7.71		2.13	
13. 007		7.84		2.12	
14. 008		7.69		2.16	
15. 009		7.54		1.90	
16. 010		7.55		1.84	
17. AC74182.001		7.17		1.86	
18. 005		7.37		1.80	
19. 006		7.50		1.76	
20. 007		7.41		1.69	

Reagent	Lot #:		$MgCl_2$	# 7734
Digestion Solution - pH must be > 11.5. If not, discard	V- 170954	pH 13.14	Lead Chromate (PbCr)	# 6413
Phosphate Buffer	V- 164939		Weight of PbCr (10-20mg)	0.0190 g ~~mg~~
			PVS Volume 0.5m.19 ml (copper)	10% H_2SO_4 V: 170990
			Sample chosen for PVS should be spiked at 40 mg/kg. If sample is > 40 mg/kg, use 2X	5 M HNO_3 V: 171336
			Spike Volume 1ml & Lot # V- 167177	Col Rea. V: 171331

3082313 0617

Hex-Cr Soil SW-846 3060A / 7196A

Cr6 soil curve		Date	8/27/2013			Batch #	169			TestGroupID	CR6-SOIL
										TestID:	CR-HEX
STD ppm			ABS								
0			0.0007		Intercept	Constant	0.009342094				
0.025			0.0195								
0.25			0.1800		Slope	X Coefficients	0.658585652				
0.5			0.3592								
1			0.6563								

****

STD mg/L			ABS		PPM	DIFF					
0			0.0007		-0.013122202	0.013122202					
0.025			0.0195		0.01542382	0.00957618					
0.25			0.1800		0.259127884	-0.009127884					
0.5			0.3592		0.531226129	-0.031226129					
1			0.6563		0.982344369	0.017655631					

****

SUMMARY OUTPUT											
Regression Statistics											
Multiple R	0.998805944										
R Square	0.997613314										
Adjusted R Square	0.996817753										
Standard Error	0.015370163										
Observations	5										
ANOVA											
	df	*SS*	*MS*	*F*	*Significance F*						
Regression	1	0.296241046	0.296241046	1253.973278	4.95214E-05						
Residual	3	0.000708726	0.000236242								
Total	4	0.296949772									
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*			
Intercept	0.009342094	0.009530949	0.980185024	0.399277086	-0.020989669	0.039673856	-0.020989669	0.039673856			
X Variable 1	0.658585652	0.018598081	35.41148512	4.95214E-05	0.599398203	0.7177731	0.599398203	0.7177731			

BK 8/27/13

169 JW 8/27/13

3082313 0618

Hex-Cr Soil SW-846 3060A / 7196A

	Hex-Cr Soil		Q.C. DATA										
Batch#	169		QC Sample	AC74177-002 NS.Sample									
Date	8/26/2013			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD	
Analyst	JW			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL	
PrepBy	BCT		LCS	20.00	21.23	21.23	106%	75-125%	NA	NA	PASS		
			MS(Sol)	20.00	12.56	12.56	63%	75-125%	NA	NA			
			MS(Insol)	1314.06	426.65	426.65	32%	75-125%	NA	20%		PASS	
			Sample	NA	ND	NA	NA	NA	NA	NA			
			Sample Dup	NA	ND	NA	NA	NA	NA	20%		PASS	
			PVS	20.00	20.65	20.65	103%	75-125%	NA	NA	PASS		
Lead Chromate Added :	0.019	g											
Upper Calibration Abbsorbance:	0.6563												

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ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3520	0.0000	0.3520	0.520293607	1	1	1	1	0.520	0.500	104	8/27/13 11:55	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	0.0008	0.0000	0.0008	-0.012970361	1	1	1	1	-0.013	0.025		8/27/13 11:56	
MB.Sample	0.0001	0.0000	0.0001	-0.014033245	1	2.5	1	100	-0.561	1.000		8/27/13 11:57	
LCS.Sample	0.3588	0.0000	0.3588	0.530618758	1	2.5	1	100	21.225	1.000		8/27/13 11:58	
AC74177-002 NS.Sample	0.0118	0.0039	0.0079	-0.002189682	0.93	2.5	1	100	-0.094	1.075		8/27/13 11:59	
AC74177-002 D.Sample	0.0112	0.0039	0.0073	-0.003100727	0.93	2.5	1	100	-0.133	1.075		8/27/13 12:00	
AC74177-002 MS.Sample	0.2055	0.0039	0.2016	0.291925451	0.93	2.5	1	100	12.556	1.075		8/27/13 12:00	
AC74177-002 50X MSD.Sample	0.1439	0.0039	0.1400	0.198391679	0.93	2.5	50	100	426.649	53.763		8/27/13 12:01	
AC74177-002 PVS.Sample	0.3295	0.0039	0.3256	0.480207693	0.93	2.5	1	100	20.654	1.075		8/27/13 12:03	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3520		0.3520	0.520293607	1	1	1	1	0.520	0.025	104	8/27/13 11:55	PASS
ICB.Sample	0.0008		0.0008	-0.012970361	1	1	1	1	-0.013	0.025		8/27/13 11:56	
MB.Sample	0.0001		0.0001	-0.014033245	1	2.5	1	100	-0.561	1.000		8/27/13 11:57	
LCS.Sample	0.3588		0.3588	0.530618758	1	2.5	1	100	21.225	1.000		8/27/13 11:58	
AC74177-002 NS.Sample	0.0118	0.0039	0.0079	-0.002189682	0.93	2.5	1	100	-0.094	1.075		8/27/13 11:59	
AC74177-002 D.Sample	0.0112	0.0039	0.0073	-0.003100727	0.93	2.5	1	100	-0.133	1.075		8/27/13 12:00	
AC74177-002 MS.Sample	0.2055	0.0039	0.2016	0.291925451	0.93	2.5	1	100	12.556	1.075		8/27/13 12:00	
AC74177-002 XXX.Sample	3.6285	0.0039	3.6246	5.489427051	0.93	2.5	1	100	236.104	1.075		8/27/13 12:01	
AC74177-002 50X MSD.Sample	0.1439	0.0039	0.1400	0.198391679	0.93	2.5	50	100	426.649	53.763		8/27/13 12:01	
AC74177-002 PVS.Sample	0.3295	0.0039	0.3256	0.480207693	0.93	2.5	1	100	20.654	1.075		8/27/13 12:03	
CCV.Control	0.3540		0.3540	0.523330424	1	1	1	1	0.523	0.025		8/27/13 12:04	
CCB.Sample	0.0025		0.0025	-0.010389072	1	1	1	1	-0.010	0.025		8/27/13 12:04	
AC74102-005.Sample	0.0377	0.0356	0.0021	-0.010996431	0.86	2.5	1	100	-0.511	1.163		8/27/13 12:04	
AC74102-011.Sample	0.0247	0.0263	-0.0016	-0.016614533	0.83	2.5	1	100	-0.801	1.205		8/27/13 12:05	
AC74177-004.Sample	0.0233	0.0139	0.0094	8.7925E-05	0.93	2.5	1	100	0.004	1.075		8/27/13 12:06	
AC74177-006.Sample	0.0402	0.0407	-0.0005	-0.01494429	0.92	2.5	1	100	-0.650	1.087		8/27/13 12:06	
AC74126-001.Sample	0.0096	0.0087	0.0009	-0.01281852	0.78	2.5	1	100	-0.657	1.282		8/27/13 12:06	
AC74157-001.Sample	0.0269	0.0196	0.0073	-0.003100725	0.88	2.5	1	100	-0.141	1.136		8/27/13 12:07	
AC74157-002.Sample	0.0086	0.0063	0.0023	-0.010692753	0.9	2.5	1	100	-0.475	1.111		8/27/13 12:07	
AC74157-003.Sample	0.0116	0.0068	0.0048	-0.00689674	0.9	2.5	1	100	-0.307	1.111		8/27/13 12:08	
AC74157-004.Sample	0.0426	0.0341	0.0085	-0.001278642	0.88	2.5	1	100	-0.058	1.136		8/27/13 12:09	
AC74157-005.Sample	0.0434	0.0358	0.0076	-0.002645201	0.84	2.5	1	100	-0.126	1.190		8/27/13 12:09	
CCV-2.Control	0.3509		0.3509	0.518623356	1	1	1	1	0.519	0.025	104	8/27/13 12:09	PASS
CCB-2.Sample	0.0037		0.0037	-0.008566985	1	1	1	1	-0.009	0.025		8/27/13 12:10	
AC74157-006.Sample	0.0399	0.0299	0.0100	0.000998971	0.87	2.5	1	100	0.046	1.149		8/27/13 12:10	
AC74157-007.Sample	0.0134	0.0053	0.0081	-0.001886002	0.92	2.5	1	100	-0.082	1.087		8/27/13 12:11	
AC74157-008.Sample	0.0193	0.0094	0.0099	0.000847129	0.91	2.5	1	100	0.037	1.099		8/27/13 12:11	
AC74157-009.Sample	0.0376	0.0263	0.0113	0.002972895	0.83	2.5	1	100	0.143	1.205		8/27/13 12:12	
AC74157-010.Sample	0.0320	0.0295	0.0025	-0.01038907	0.93	2.5	1	100	-0.447	1.075		8/27/13 12:12	
AC74182-001.Sample	0.0306	0.0301	0.0005	-0.013425881	0.86	2.5	1	100	-0.624	1.163		8/27/13 12:13	

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AC74182-005.Sample	0.0079	0.0059	0.0020	-0.011148276	0.94	2.5	1	100	-0.474	1.064		8/27/13 12:13	
AC74182-006.Sample	0.0231	0.0125	0.0106	0.001910011	0.92	2.5	1	100	0.083	1.087		8/27/13 12:13	
AC74182-007.Sample	0.0305	0.0277	0.0028	-0.009933549	0.9	2.5	1	100	-0.441	1.111		8/27/13 12:14	
AC74102-005 T.Sample	0.0356		0.0356	0.039870145	0.86	2.5	1	100	1.854	1.163		8/27/13 12:15	
CCV-3.Control	0.3471		0.3471	0.512853408	1	1	1	1	0.513	0.025	103	8/27/13 12:16	PASS
CCB-3.Sample	0.0027		0.0027	-0.010085391	1	1	1	1	-0.010	0.025		8/27/13 12:16	
AC74102-011 T.Sample	0.0263		0.0263	0.025748976	0.83	2.5	1	100	1.241	1.205		8/27/13 12:16	
AC74177-002 T.Sample	0.0039		0.0039	-0.008263305	0.93	2.5	1	100	-0.355	1.075		8/27/13 12:17	
AC74177-004 T.Sample	0.0139		0.0139	0.006920749	0.93	2.5	1	100	0.298	1.075		8/27/13 12:17	
AC74177-006 T.Sample	0.0407		0.0407	0.047614013	0.92	2.5	1	100	2.070	1.087		8/27/13 12:18	
AC74126-001 T.Sample	0.0087		0.0087	-0.000974958	0.78	2.5	1	100	-0.050	1.282		8/27/13 12:19	
AC74157-001 T.Sample	0.0196		0.0196	0.015575661	0.88	2.5	1	100	0.708	1.136		8/27/13 12:20	
AC74157-002 T.Sample	0.0063		0.0063	-0.004619131	0.9	2.5	1	100	-0.205	1.111		8/27/13 12:22	
AC74157-003 T.Sample	0.0068		0.0068	-0.003859929	0.9	2.5	1	100	-0.172	1.111		8/27/13 12:23	
AC74157-004 T.Sample	0.0341		0.0341	0.037592538	0.88	2.5	1	100	1.709	1.136		8/27/13 12:25	
AC74157-005 T.Sample	0.0358		0.0358	0.040173826	0.84	2.5	1	100	1.913	1.190		8/27/13 12:27	
CCV-4.Control	0.3455		0.3455	0.510423964	1	1	1	1	0.510	0.025	102	8/27/13 12:27	PASS
CCB-4.Sample	0.0042		0.0042	-0.007807783	1	1	1	1	-0.008	0.025		8/27/13 12:28	
AC74157-006 T.Sample	0.0299		0.0299	0.031215235	0.87	2.5	1	100	1.435	1.149		8/27/13 12:29	
AC74157-007 T.Sample	0.0053		0.0053	-0.006137537	0.92	2.5	1	100	-0.267	1.087		8/27/13 12:29	
AC74157-008 T.Sample	0.0094		0.0094	8.7925E-05	0.91	2.5	1	100	0.004	1.099		8/27/13 12:30	
AC74157-009 T.Sample	0.0263		0.0263	0.025748976	0.83	2.5	1	100	1.241	1.205		8/27/13 12:31	
AC74157-010 T.Sample	0.0295		0.0295	0.030607874	0.93	2.5	1	100	1.316	1.075		8/27/13 12:32	
AC74182-001 T.Sample	0.0301		0.0301	0.031518915	0.86	2.5	1	100	1.466	1.163		8/27/13 12:33	
AC74182-005 T.Sample	0.0059		0.0059	-0.005226493	0.94	2.5	1	100	-0.222	1.064		8/27/13 12:34	
AC74182-006 T.Sample	0.0125		0.0125	0.004794982	0.92	2.5	1	100	0.208	1.087		8/27/13 12:34	
AC74182-007 T.Sample	0.0277		0.0277	0.027874743	0.9	2.5	1	100	1.239	1.111		8/27/13 12:35	
CCV-5.Control	0.3445		0.3445	0.508905578	1	1	1	1	0.509	0.025	102	8/27/13 12:36	PASS
CCB-5.Sample	0.0017		0.0017	-0.011603796	1	1	1	1	-0.012	0.025		8/27/13 12:36	

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Hex-Cr Soil SW-846 3060A / 7196A

Cr6 soil curve		Date	8/27/2013			Batch #	169 A			TestGroupID	CR6-SOIL
										TestID:	CR-HEX
STD ppm			ABS								
0			0.0007		Intercept	Constant	0.009342094				
0.025			0.0195								
0.25			0.1800		Slope	X Coefficients	0.658585652				
0.5			0.3592								
1			0.6563								
STD mg/L			ABS		PPM	DIFF					
0			0.0007		-0.013122202	0.013122202					
0.025			0.0195		0.01542382	0.00957618					
0.25			0.1800		0.259127884	-0.009127884					
0.5			0.3592		0.531226129	-0.031226129					
1			0.6563		0.982344369	0.017655631					
SUMMARY OUTPUT											
Regression Statistics											
Multiple R	0.998805944										
R Square	0.997613314										
Adjusted R Square	0.996817753										
Standard Error	0.015370163										
Observations	5										
ANOVA											
	df	*SS*	*MS*	*F*	*Significance F*						
Regression	1	0.296241046	0.296241046	1253.973278	4.95214E-05						
Residual	3	0.000708726	0.000236242								
Total	4	0.296949772									
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*			
Intercept	0.009342094	0.009530949	0.980185024	0.399277086	-0.020989669	0.039673856	-0.020989669	0.039673856			
X Variable 1	0.658585652	0.018598081	35.41148512	4.95214E-05	0.599398203	0.7177731	0.599398203	0.7177731			

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Hex-Cr Soil SW-846 3060A / 7196A

	Hex-Cr Soil		Q.C. DATA										
Batch#	169A		QC Sample	AC74177-002 NS.Sample									
Date	8/26/2013			Spike Amount	Result	Adjusted Conc	% REC	Limits	RPD	Limits	%REC	RPD	
Analyst	JW			PPM	PPM	PPM					PASS/FAIL	PASS/FAIL	
PrepBy	BCT		LCS	20.00	18.60	18.60	93%	75-125%	NA	NA	PASS		
			MS(Sol)	20.00	12.20	12.20	61%	75-125%	NA	NA			
			MS(Insol)	1314.06	382.24	382.24	29%	75-125%	NA	20%		PASS	
			Sample	NA	ND	NA	NA	NA	NA	NA			
			Sample Dup	NA	ND	NA	NA	NA	NA	20%		PASS	
			PVS	20.00	18.44	18.44	92%	75-125%	NA	NA	PASS		
Lead Chromate Added :	0.019	g											
Upper Calibration Abbsorbance:	0.6563												

ICV Data	ABS	Turb ABS	Crct. ABS	PPM	Solid Factor	Sample wt (g)	Dilution Factor	Final vol (mL)	Hex-Cr (ppm)	True Value(ppm	% REC (90-110%)	AnalysisDate	
ICV.Control	0.3422	0.0000	0.3422	0.505413254	1	1	1	1	0.505	0.500	101	8/27/13 14:02	PASS
QC Data	**ABS**	**Turb ABS**	**Crct. ABS**	**PPM**	**Solid Factor**	**Sample wt (g)**	**Dilution Factor**	**Final vol (mL)**	**Hex-Cr (ppm)**	**RL**			
ICB.Sample	0.0001	0.0000	0.0001	-0.014033245	1	1	1	1	-0.014	0.025		8/27/13 14:03	
MB.Sample	0.0025	0.0000	0.0025	-0.010389072	1	2.5	1	100	-0.416	1.000		8/27/13 14:03	
LCS.Sample	0.3155	0.0000	0.3155	0.4648718	1	2.5	1	100	18.595	1.000		8/27/13 14:04	
AC74177-002 NS.Sample	0.0198	0.0166	0.0032	-0.009326188	0.93	2.5	1	100	-0.401	1.075		8/27/13 14:04	
AC74177-002 D.Sample	0.0186	0.0166	0.0020	-0.011148274	0.93	2.5	1	100	-0.479	1.075		8/27/13 14:04	
AC74177-002 MS.Sample	0.2127	0.0166	0.1961	0.283574203	0.93	2.5	1	100	12.197	1.075		8/27/13 14:05	
AC74177-002 50X MSD.Sample	0.1430	0.0166	0.1264	0.177741366	0.93	2.5	50	100	382.239	53.763		8/27/13 14:06	
AC74177-002 PVS.Sample	0.3083	0.0166	0.2917	0.428733748	0.93	2.5	1	100	18.440	1.075		8/27/13 14:07	
Analytical Run					1	2.5	1	100					
ICV.Control	0.3422		0.3422	0.505413254	1	1	1	1	0.505	0.025	101	8/27/13 14:02	PASS
ICB.Sample	0.0001		0.0001	-0.014033245	1	1	1	1	-0.014	0.025		8/27/13 14:03	
MB.Sample	0.0025		0.0025	-0.010389072	1	2.5	1	100	-0.416	1.000		8/27/13 14:03	
LCS.Sample	0.3155		0.3155	0.4648718	1	2.5	1	100	18.595	1.000		8/27/13 14:04	
AC74177-002 NS.Sample	0.0198	0.0166	0.0032	-0.009326188	0.93	2.5	1	100	-0.401	1.075		8/27/13 14:04	
AC74177-002 D.Sample	0.0186	0.0166	0.0020	-0.011148274	0.93	2.5	1	100	-0.479	1.075		8/27/13 14:04	
AC74177-002 MS.Sample	0.2127	0.0166	0.1961	0.283574203	0.93	2.5	1	100	12.197	1.075		8/27/13 14:05	
AC74177-002 XXX.Sample	3.7966	0.0166	3.7800	5.725387429	0.93	2.5	1	100	246.253	1.075		8/27/13 14:05	
AC74177-002 50X MSD.Sample	0.1430	0.0166	0.1264	0.177741366	0.93	2.5	50	100	382.239	53.763		8/27/13 14:06	
AC74177-002 PVS.Sample	0.3083	0.0166	0.2917	0.428733748	0.93	2.5	1	100	18.440	1.075		8/27/13 14:07	
CCV.Control	0.3297		0.3297	0.48643316	1	1	1	1	0.486	0.025		8/27/13 14:07	
CCB.Sample	0.0004		0.0004	-0.013577723	1	1	1	1	-0.014	0.025		8/27/13 14:08	
AC74102-005.Sample	0.0395	0.0382	0.0013	-0.012211153	0.86	2.5	1	100	-0.568	1.163		8/27/13 14:08	
AC74102-011.Sample	0.0135	0.0142	-0.0007	-0.015247969	0.83	2.5	1	100	-0.735	1.205		8/27/13 14:09	
AC74177-004.Sample	0.0152	0.0136	0.0016	-0.011755637	0.93	2.5	1	100	-0.506	1.075		8/27/13 14:10	
AC74177-006.Sample	0.0280	0.0237	0.0043	-0.007655942	0.92	2.5	1	100	-0.333	1.087		8/27/13 14:10	
AC74126-001.Sample	0.0081	0.0078	0.0003	-0.013729563	0.78	2.5	1	100	-0.704	1.282		8/27/13 14:11	
AC74157-001.Sample	0.0253	0.0150	0.0103	0.00145449	0.88	2.5	1	100	0.066	1.136		8/27/13 14:11	
AC74157-002.Sample	0.0111	0.0085	0.0026	-0.010237232	0.9	2.5	1	100	-0.455	1.111		8/27/13 14:12	
AC74157-003.Sample	0.0234	0.0171	0.0063	-0.004619134	0.9	2.5	1	100	-0.205	1.111		8/27/13 14:14	
AC74157-004.Sample	0.0386	0.0314	0.0072	-0.003252563	0.88	2.5	1	100	-0.148	1.136		8/27/13 14:15	
AC74157-005.Sample	0.0171	0.0109	0.0062	-0.004770971	0.84	2.5	1	100	-0.227	1.190		8/27/13 14:17	
CCV-2.Control	0.3283		0.3283	0.484307401	1	1	1	1	0.484	0.025	97	8/27/13 14:17	PASS
CCB-2.Sample	0.0003		0.0003	-0.013729564	1	1	1	1	-0.014	0.025		8/27/13 14:17	
AC74157-006.Sample	0.0236	0.0174	0.0062	-0.004770971	0.87	2.5	1	100	-0.219	1.149		8/27/13 14:18	
AC74157-007.Sample	0.0165	0.0127	0.0038	-0.008415145	0.92	2.5	1	100	-0.366	1.087		8/27/13 14:18	
AC74157-008.Sample	0.0087	0.0086	0.0001	-0.014033245	0.91	2.5	1	100	-0.617	1.099		8/27/13 14:19	
AC74157-009.Sample	0.0782	0.0706	0.0076	-0.002645213	0.83	2.5	1	100	-0.127	1.205		8/27/13 14:19	
AC74157-010.Sample	0.0398	0.0336	0.0062	-0.004770971	0.93	2.5	1	100	-0.205	1.075		8/27/13 14:20	
AC74182-001.Sample	0.0308	0.0262	0.0046	-0.007200421	0.86	2.5	1	100	-0.335	1.163		8/27/13 14:22	

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AC74182-005.Sample	0.0119	0.0104	0.0015	-0.011907477	0.94	2.5	1	100	-0.507	1.064		8/27/13 14:23	
AC74182-006.Sample	0.0146	0.0072	0.0074	-0.002948885	0.92	2.5	1	100	-0.128	1.087		8/27/13 14:23	
AC74182-007.Sample	0.0194	0.0157	0.0037	-0.008566984	0.9	2.5	1	100	-0.381	1.111		8/27/13 14:24	
AC74102-005 T.Sample	0.0382		0.0382	0.043817998	0.86	2.5	1	100	2.038	1.163		8/27/13 14:29	
CCV-3.Control	0.3258		0.3258	0.480511392	1	1	1	1	0.481	0.025	96	8/27/13 14:30	PASS
CCB-3.Sample	0.0004		0.0004	-0.013577723	1	1	1	1	-0.014	0.025		8/27/13 14:30	
AC74102-011 T.Sample	0.0142		0.0142	0.007376271	0.83	2.5	1	100	0.355	1.205		8/27/13 14:31	
AC74177-002 T.Sample	0.0166		0.0166	0.011020444	0.93	2.5	1	100	0.474	1.075		8/27/13 14:32	
AC74177-004 T.Sample	0.0136		0.0136	0.006465228	0.93	2.5	1	100	0.278	1.075		8/27/13 14:33	
AC74177-006 T.Sample	0.0237		0.0237	0.021801123	0.92	2.5	1	100	0.948	1.087		8/27/13 14:34	
AC74126-001 T.Sample	0.0078		0.0078	-0.002341524	0.78	2.5	1	100	-0.120	1.282		8/27/13 14:35	
AC74157-001 T.Sample	0.0150		0.0150	0.008590995	0.88	2.5	1	100	0.390	1.136		8/27/13 14:35	
AC74157-002 T.Sample	0.0085		0.0085	-0.001278639	0.9	2.5	1	100	-0.057	1.111		8/27/13 14:36	
AC74157-003 T.Sample	0.0171		0.0171	0.011779648	0.9	2.5	1	100	0.524	1.111		8/27/13 14:37	
AC74157-004 T.Sample	0.0314		0.0314	0.033492842	0.88	2.5	1	100	1.522	1.136		8/27/13 14:38	
AC74157-005 T.Sample	0.0109		0.0109	0.002365533	0.84	2.5	1	100	0.113	1.190		8/27/13 14:39	
CCV-4.Control	0.3243		0.3243	0.478233768	1	1	1	1	0.478	0.025	96	8/27/13 14:39	PASS
CCB-4.Sample	0.0004		0.0004	-0.013577723	1	1	1	1	-0.014	0.025		8/27/13 14:39	
AC74157-006 T.Sample	0.0174		0.0174	0.012235169	0.87	2.5	1	100	0.563	1.149		8/27/13 14:40	
AC74157-007 T.Sample	0.0127		0.0127	0.005098663	0.92	2.5	1	100	0.222	1.087		8/27/13 14:40	
AC74157-008 T.Sample	0.0086		0.0086	-0.001126799	0.91	2.5	1	100	-0.050	1.099		8/27/13 14:41	
AC74157-009 T.Sample	0.0706		0.0706	0.093014339	0.83	2.5	1	100	4.483	1.205		8/27/13 14:42	
AC74157-010 T.Sample	0.0336		0.0336	0.036833334	0.93	2.5	1	100	1.584	1.075		8/27/13 14:43	
AC74182-001 T.Sample	0.0262		0.0262	0.025597136	0.86	2.5	1	100	1.191	1.163		8/27/13 14:45	
AC74182-005 T.Sample	0.0104		0.0104	0.001606331	0.94	2.5	1	100	0.068	1.064		8/27/13 14:45	
AC74182-006 T.Sample	0.0072		0.0072	-0.003252567	0.92	2.5	1	100	-0.141	1.087		8/27/13 14:47	
AC74182-007 T.Sample	0.0157		0.0157	0.009653878	0.9	2.5	1	100	0.429	1.111		8/27/13 14:47	
CCV-5.Control	0.3219		0.3219	0.474589623	1	1	1	1	0.475	0.025	95	8/27/13 14:47	PASS
CCB-5.Sample	0.0004		0.0004	-0.013577723	1	1	1	1	-0.014	0.025		8/27/13 14:48	

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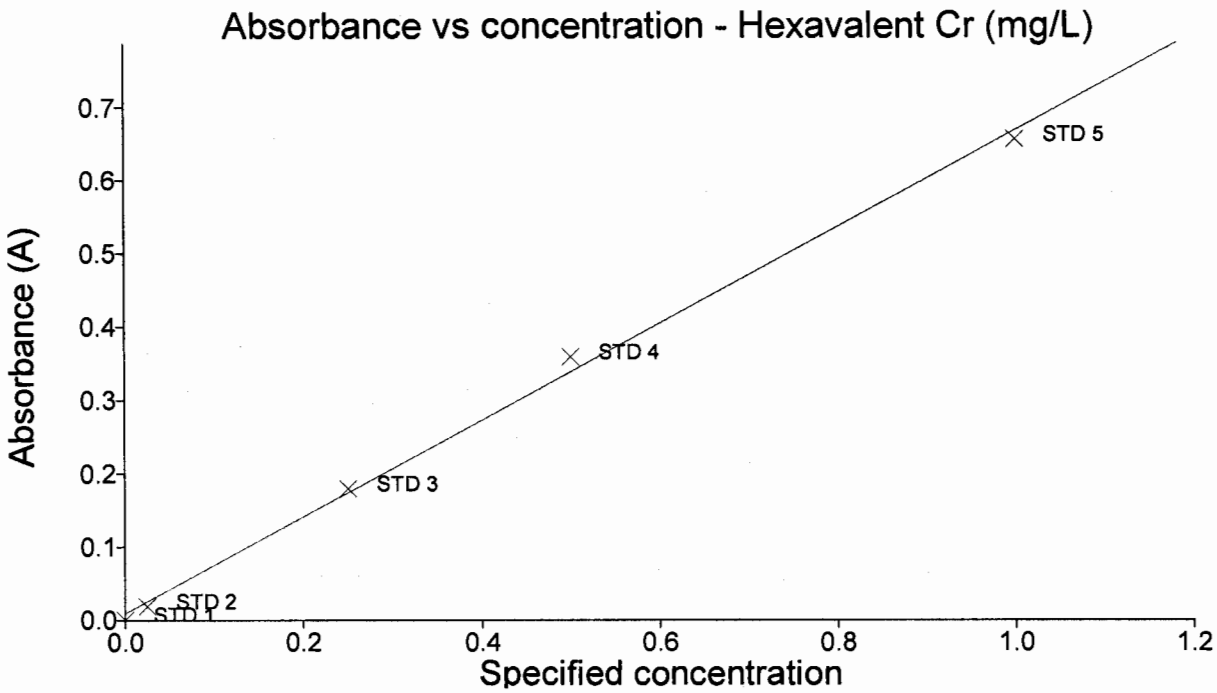
Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9989

Calibrated on: 08/27/13 15:43

User name: wet chem

Method name: Hexavalent Cr

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample.Cycle1	0.0000	-0.0131	0.0131	0.0007
STD 2.Sample.Cycle1	0.0250	0.0154	0.0096	0.0195
STD 3.Sample.Cycle1	0.2500	0.2592	-0.0092	0.1800
STD 4.Sample.Cycle1	0.5000	0.5312	-0.0312	0.3592
STD 5.Sample.Cycle1	1.0000	0.9823	0.0177	0.6563

Report Generated On:08/27/2013 12:37

AA 8/27/13

169
JW
8/27/13

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		08/27/13 11:55:48	0.5000	-0.0203	0.3520	0.5203
ICB.Sample		08/27/13 11:56:59			0.0008	-0.0129 : Exceeded calibration limits.
MB.Sample		08/27/13 11:57:46			0.0001	-0.0141 : Exceeded calibration limits.
LCS.Sample		08/27/13 11:58:10			0.3588	0.5306
AC74177-002 NS.Sample		08/27/13 11:59:33			0.0118	0.0037
AC74177-002 D.Sample		08/27/13 12:00:11			0.0112	0.0027
AC74177-002 MS.Sample		08/27/13 12:00:39			0.2055	0.2979
AC74177-002 XXX.Sample		08/27/13 12:01:09			3.6285	5.4957 : Exceeded calibration limits.
AC74177-002 50X MSD.Sample	50	08/27/13 12:01:23			0.1439	0.2043
AC74177-002 PVS.Sample		08/27/13 12:03:13			0.3295	0.4861
CCV.Control		08/27/13 12:04:13	0.5000	-0.0234	0.3540	0.5234
CCB.Sample		08/27/13 12:04:27			0.0025	-0.0104 : Exceeded calibration limits.
AC74102-005.Sample		08/27/13 12:04:56			0.0377	0.0431
AC74102-011.Sample		08/27/13 12:05:19			0.0247	0.0233
AC74177-004.Sample		08/27/13 12:06:02			0.0233	0.0211
AC74177-006.Sample		08/27/13 12:06:24			0.0402	0.0468
AC74126-001.Sample		08/27/13 12:06:44			0.0096	0.0004
AC74157-001.Sample		08/27/13 12:07:08			0.0269	0.0267
AC74157-002.Sample		08/27/13 12:07:36			0.0086	-0.0012 : Exceeded calibration limits.
AC74157-003.Sample		08/27/13 12:08:29			0.0116	0.0034
AC74157-004.Sample		08/27/13 12:09:09			0.0426	0.0504
AC74157-005.Sample		08/27/13 12:09:34			0.0434	0.0517
CCV-2.Control		08/27/13 12:09:57	0.5000	-0.0187	0.3509	0.5187

Report Generated On:08/27/2013 12:37

AA 8/27/13

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JW
8/27/13

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
CCB-2.Sample		08/27/13 12:10:22			0.0037	-0.0086 : Exceeded calibration limits
AC74157-006.Sample		08/27/13 12:10:54			0.0399	0.0464
AC74157-007.Sample		08/27/13 12:11:20			0.0134	0.0062
AC74157-008.Sample		08/27/13 12:11:53			0.0193	0.0152
AC74157-009.Sample		08/27/13 12:12:29			0.0376	0.0429
AC74157-010.Sample		08/27/13 12:12:42			0.0320	0.0344
AC74182-001.Sample		08/27/13 12:13:22			0.0306	0.0322
AC74182-005.Sample		08/27/13 12:13:34			0.0079	-0.0023 : Exceeded calibration limits
AC74182-006.Sample		08/27/13 12:13:59			0.0231	0.0209
AC74182-007.Sample		08/27/13 12:14:25			0.0305	0.0321
AC74102-005 T.Sample		08/27/13 12:15:47			0.0356	0.0399
CCV-3.Control		08/27/13 12:16:04	0.5000	-0.0128	0.3471	0.5128
CCB-3.Sample		08/27/13 12:16:19			0.0027	-0.0102 : Exceeded calibration limits
AC74102-011 T.Sample		08/27/13 12:16:46			0.0263	0.0257
AC74177-002 T.Sample		08/27/13 12:17:26			0.0039	-0.0083 : Exceeded calibration limits
AC74177-004 T.Sample		08/27/13 12:17:53			0.0139	0.0068
AC74177-006 T.Sample		08/27/13 12:18:40			0.0407	0.0476
AC74126-001 T.Sample		08/27/13 12:19:08			0.0087	-0.0010 : Exceeded calibration limits
AC74157-001 T.Sample		08/27/13 12:20:58			0.0196	0.0156
AC74157-002 T.Sample		08/27/13 12:22:43			0.0063	-0.0047 : Exceeded calibration limits
AC74157-003 T.Sample		08/27/13 12:23:32			0.0068	-0.0039 : Exceeded calibration limits
AC74157-004 T.Sample		08/27/13 12:25:15			0.0341	0.0376

Report Generated On:08/27/2013 12:37

DA ~~8/27/13~~ 8/27/13

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JW
8/27/13

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
AC74157-005 T.Sample		08/27/13 12:27:23			0.0358	0.0401
CCV-4.Control		08/27/13 12:27:42	0.5000	-0.0104	0.3455	0.5104
CCB-4.Sample		08/27/13 12:28:01			0.0042	-0.0078 : Exceeded calibration limits
AC74157-006 T.Sample		08/27/13 12:29:21			0.0299	0.0311
AC74157-007 T.Sample		08/27/13 12:29:56			0.0053	-0.0062 : Exceeded calibration limits
AC74157-008 T.Sample		08/27/13 12:30:49			0.0094	0.0001
AC74157-009 T.Control		08/27/13 12:31:59	0.5000	0.4742	0.0263	0.0258
AC74157-010 T.Sample		08/27/13 12:32:43			0.0295	0.0306
AC74182-001 T.Sample		08/27/13 12:33:41			0.0301	0.0315
AC74182-005 T.Sample		08/27/13 12:34:06			0.0059	-0.0052 : Exceeded calibration limits
AC74182-006 T.Sample		08/27/13 12:34:59			0.0125	0.0048
AC74182-007 T.Sample		08/27/13 12:35:47			0.0277	0.0278
CCV-5.Control		08/27/13 12:36:04	0.5000	-0.0089	0.3445	0.5089
CCB-5.Sample		08/27/13 12:36:21			0.0017	-0.0116 : Exceeded calibration limits

Report Generated On:08/27/2013 12:37

AB 8/27/13

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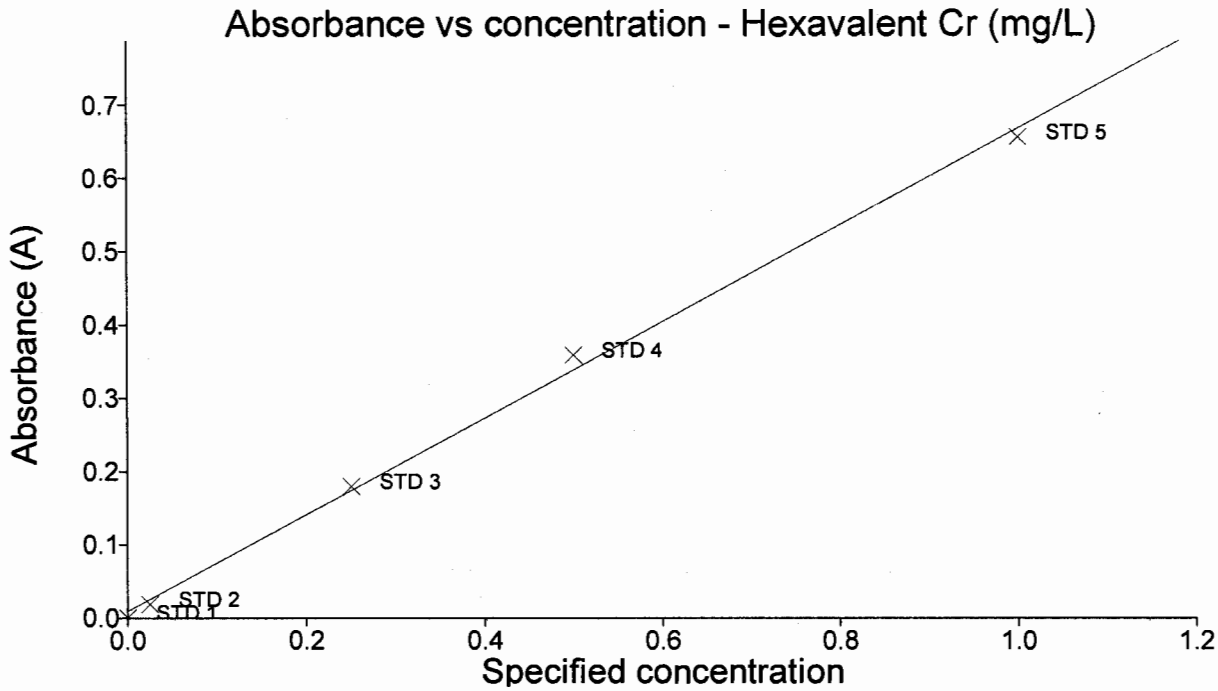
JW
8/27/13

Perkin-Elmer UV-VIS Lambda 20 **Instrument ID: UV1**

Quant Report with Calibration Graph, Instrument Settings and Sample Prediction Results

Calibration Graph



Correlation Coefficient: 0.9989

Calibrated on: 08/27/13 15:43

User name: wet chem

Method name: Hexavalent Cr

Standards Table

Sample ID	Concentration	Hexavalent Cr	Residual	Ordinate
STD 1.Sample	0.0000	-0.0131	0.0131	0.0007
STD 2.Sample	0.0250	0.0154	0.0096	0.0195
STD 3.Sample	0.2500	0.2592	-0.0092	0.1800
STD 4.Sample	0.5000	0.5312	-0.0312	0.3592
STD 5.Sample	1.0000	0.9823	0.0177	0.6563

Report Generated On:08/27/2013 14:49

MS 8/27/13

169A
JW
8/27/13

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
ICV.Control		08/27/13 14:02:51	0.5000	-0.0054	0.3422	0.5054
ICB.Sample		08/27/13 14:03:12			0.0001	-0.0140 : Exceeded calibration limits.
MB.Sample		08/27/13 14:03:37			0.0025	-0.0104 : Exceeded calibration limits.
LCS.Sample		08/27/13 14:04:01			0.3155	0.4649
AC74177-002 NS.Sample		08/27/13 14:04:23			0.0198	0.0159
AC74177-002 D.Sample		08/27/13 14:04:45			0.0186	0.0140
AC74177-002 MS.Sample		08/27/13 14:05:17			0.2127	0.3087
AC74177-002 XXX.Sample		08/27/13 14:05:45			3.7966	5.7510 : Exceeded calibration limits.
AC74177-002 50X MSD.Sample	50	08/27/13 14:06:05			0.1430	0.2029
AC74177-002 PVS.Sample		08/27/13 14:07:19			0.3083	0.4540
CCV.Control		08/27/13 14:07:52	0.5000	0.0135	0.3297	0.4865
CCB.Sample		08/27/13 14:08:07			0.0004	-0.0137 : Exceeded calibration limits.
AC74102-005.Sample		08/27/13 14:08:48			0.0395	0.0458
AC74102-011.Sample		08/27/13 14:09:11			0.0135	0.0063
AC74177-004.Sample		08/27/13 14:10:11			0.0152	0.0089
AC74177-006.Sample		08/27/13 14:10:40			0.0280	0.0284
AC74126-001.Sample		08/27/13 14:11:11			0.0081	-0.0019 : Exceeded calibration limits.
AC74157-001.Sample		08/27/13 14:11:48			0.0253	0.0242
AC74157-002.Sample		08/27/13 14:12:19			0.0111	0.0027
AC74157-003.Sample		08/27/13 14:14:41			0.0234	0.0214
AC74157-004.Sample		08/27/13 14:15:21			0.0386	0.0444
AC74157-005.Sample		08/27/13 14:17:18			0.0171	0.0118
CCV-2.Control		08/27/13 14:17:35	0.5000	0.0157	0.3283	0.4843

Report Generated On:08/27/2013 14:49

MA 8/27/13

169A
JW
8/27/13

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
CCB-2.Sample		08/27/13 14:17:52			0.0003	-0.0138 : Exceeded calibration limits
AC74157-006.Sample		08/27/13 14:18:29			0.0236	0.0216
AC74157-007.Sample		08/27/13 14:18:52			0.0165	0.0108
AC74157-008.Sample		08/27/13 14:19:13			0.0087	-0.0010 : Exceeded calibration limits
AC74157-009.Sample		08/27/13 14:19:36			0.0782	0.1045
AC74157-010.Sample		08/27/13 14:20:04			0.0398	0.0462
AC74182-001.Sample		08/27/13 14:22:49			0.0308	0.0325
AC74182-005.Sample		08/27/13 14:23:13			0.0119	0.0038
AC74182-006.Sample		08/27/13 14:23:37			0.0146	0.0080
AC74182-007.Sample		08/27/13 14:24:02			0.0194	0.0153
AC74102-005 T.Sample		08/27/13 14:29:45			0.0382	0.0439
CCV-3.Control		08/27/13 14:30:07	0.5000	0.0194	0.3258	0.4806
CCB-3.Sample		08/27/13 14:30:24			0.0004	-0.0136 : Exceeded calibration limits
AC74102-011 T.Sample		08/27/13 14:31:05			0.0142	0.0073
AC74177-002 T.Sample		08/27/13 14:32:38			0.0166	0.0109
AC74177-004 T.Sample		08/27/13 14:33:37			0.0136	0.0065
AC74177-006 T.Sample		08/27/13 14:34:04			0.0237	0.0217
AC74126-001 T.Sample		08/27/13 14:35:03			0.0078	-0.0023 : Exceeded calibration limits
AC74157-001 T.Sample		08/27/13 14:35:46			0.0150	0.0086
AC74157-002 T.Sample		08/27/13 14:36:51			0.0085	-0.0012 : Exceeded calibration limits
AC74157-003 T.Sample		08/27/13 14:37:22			0.0171	0.0118
AC74157-004 T.Sample		08/27/13 14:38:38			0.0314	0.0334
AC74157-005 T.Sample		08/27/13 14:39:03			0.0109	0.0023
CCV-4.Control		08/27/13 14:39:20	0.5000	0.0218	0.3243	0.4782

Report Generated On:08/27/2013 14:49

AA 8/27/13

169A
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8/27/13

Results Table

Units: mg/L

Sample ID	Des	Analyzed On	Concentration	Residual	Ordinate	Hexavalent Cr
CCB-4.Sample		08/27/13 14:39:37			0.0004	-0.0136 : Exceeded calibration limits
AC74157-006 T.Sample		08/27/13 14:40:07			0.0174	0.0123
AC74157-007 T.Sample		08/27/13 14:40:30			0.0127	0.0051
AC74157-008 T.Sample		08/27/13 14:41:12			0.0086	-0.0012 : Exceeded calibration limits
AC74157-009 T.Control		08/27/13 14:42:49	0.5000	0.4070	0.0706	0.0930
AC74157-010 T.Sample		08/27/13 14:43:44			0.0336	0.0368
AC74182-001 T.Sample		08/27/13 14:45:00			0.0262	0.0256
AC74182-005 T.Sample		08/27/13 14:45:27			0.0104	0.0016
AC74182-006 T.Sample		08/27/13 14:47:13			0.0072	-0.0033 : Exceeded calibration limits
AC74182-007 T.Sample		08/27/13 14:47:40			0.0157	0.0097
CCV-5.Control		08/27/13 14:47:59	0.5000	0.0254	0.3219	0.4746
CCB-5.Sample		08/27/13 14:48:14			0.0004	-0.0136 : Exceeded calibration limits

Report Generated On:08/27/2013 14:49

MA 8/27/13

169A
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Veritech Internally Prepared Standard Log

Veritech Lot Number: V-164939

Prepared By: Lewis, Simon D.
Description: Phosphate Buffer
Prep Date: 5/9/2013
Expiration Date: 11/8/2013

Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 1000 ml

ApprovedBy: aurora
ApproveDate: 05/21/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7487	POTASSIUM PHOSPHATE MONOBASIC	68.04 g	NEAT neat	
6514	Potassium Phosphate Dibasic Anhydrous	87.09 g	neat neat	
	DI WATER (FILL TO VOLUME)			

Veritech Lot Number: V-167177

Prepared By: Wonge, Janee
Description: 100 ppm cr6 std
Prep Date: 6/17/2013
Expiration Date: 12/16/2013

Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml

ApprovedBy: aurora
ApproveDate: 06/19/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7906	Chromium 1000 ppm Standard	10 ml	1000 mg/l	100 mg/l
	DI WATER FILL TO THE VOLUME			

Veritech Lot Number: V-167178

Prepared By: Wonge, Janee
Description: 100 ppm CR6 FOR CCV
Prep Date: 6/17/2013
Expiration Date: 12/16/2013

Department: WetChem
BatchNumber:
Concentration: 100 mg/l
Final Volume: 100 ml

ApprovedBy: aurora
ApproveDate: 06/19/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
6758	Hexavalent Chromium	10 ml	1000 mg/l	100 mg/l
	DI WATER FILL TO THE VOLUME			

Veritech Lot Number: V-170954

Prepared By: Lewis, Simon D.
Description: Cr6 digestion solution
Prep Date: 8/15/2013
Expiration Date: 2/14/2014

Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 3000 ml

ApprovedBy: aurora
ApproveDate: 08/22/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7864	Sodium Carbonate Anhydrous	90 g	neat neat	
7490	Sodium Hydroxide	60 g	neat neat	
	DI WATER FILL TO THE VOLUME			

Veritech Lot Number: V-170990

Prepared By: Neil, Neceta
Description: 10 % H2SO4
Prep Date: 8/16/2013
Expiration Date: 2/14/2014

Department: WetChem
BatchNumber:
Concentration: 10 %
Final Volume: 2000 ml

ApprovedBy: aurora
ApproveDate: 08/20/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7940	Sulfuric Acid	200 ml	neat neat	
	DI WATER FILL TO THE VOLUME			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-171331

Prepared By: Wonge, Janee
Description: Cr6 Color Reagent
Prep Date: 8/22/2013
Expiration Date: 10/21/2013
Department: WetChem
BatchNumber:
Concentration: Reagent reag
Final Volume: 200 ml
ApprovedBy: aurora
ApproveDate: 08/22/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7705	1,5-Diphenylcarbezide	1 g	NEAT neat	
8064	Acetone	200 ml	neat neat	

Veritech Lot Number: V-171336

Prepared By: Trivedi, Beena
Description: 5 M HNO3
Prep Date: 8/22/2013
Expiration Date: 2/21/2014
Department: WetChem
BatchNumber:
Concentration: 5 m
Final Volume: 2000 ml
ApprovedBy: aurora
ApproveDate: 08/22/13
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8078	Nitric Acid	640 ml	neat neat	
	DI WATER FILL TO THE VOLUME			

Veritech Lot Number: V-171566

Prepared By: Trivedi, Beena
Description: 0.025 ppm
Prep Date: 8/26/2013
Expiration Date: 8/26/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.025 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

AB 8/27/13

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	.025 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-170954	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-171567

Prepared By: Trivedi, Beena
Description: 0.25 ppm
Prep Date: 8/26/2013
Expiration Date: 8/26/2013
Department: WetChem
BatchNumber:
Concentration: 0.25 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
	DI WATER FILL TO THE VOLUME			
V-170954	Cr6 digestion solution	50 ml	Reagent reag	
V-167177	100 ppm cr6 std	.25 ml	100 mg/l	

Veritech Lot Number: V-171568

Prepared By: Trivedi, Beena
Description: 0.5 ppm
Prep Date: 8/26/2013
Expiration Date: 8/26/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
	DI WATER FILL TO THE VOLUME			
V-167177	100 ppm cr6 std	.5 ml	100 mg/l	
V-170954	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-171569

Prepared By: Trivedi, Beena
Description: 1 ppm
Prep Date: 8/26/2013
Expiration Date: 8/26/2013
Department: Wet Lab
BatchNumber:
Concentration: 1 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167177	100 ppm cr6 std	1 ml	100 mg/l	
V-170954	Cr6 digestion solution	50 ml	Reagent reag	
	DI WATER FILL TO THE VOLUME			

Veritech Lot Number: V-171570

Prepared By: Trivedi, Beena
Description: ICV
Prep Date: 8/26/2013
Expiration Date: 8/26/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167178	100 ppm CR6 FOR CCV	.5 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-170954	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-171571

Prepared By: Trivedi, Beena
Description: CCV
Prep Date: 8/26/2013
Expiration Date: 8/26/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-167178	100 ppm CR6 FOR CCV	.5 ml	100 mg/l	
	DI WATER FILL TO THE VOLUME			
V-170954	Cr6 digestion solution	50 ml	Reagent reag	

Veritech Lot Number: V-171572

Prepared By: Trivedi, Beena
Description: LCS
Prep Date: 8/26/2013
Expiration Date: 8/26/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
	DI WATER FILL TO THE VOLUME			
V-170954	Cr6 digestion solution	50 ml	Reagent reag	
V-167178	100 ppm CR6 FOR CCV	.5 ml	100 mg/l	

Veritech Lot Number: V-171573

Prepared By: Trivedi, Beena
Description: LCS-2
Prep Date: 8/26/2013
Expiration Date: 8/26/2013
Department: Wet Lab
BatchNumber:
Concentration: 0.5 ppm
Final Volume: 100 ml
ApprovedBy:
ApproveDate:
Checked: No

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
	DI WATER FILL TO THE VOLUME			
V-167178	100 ppm CR6 FOR CCV	.5 ml	100 mg/l	
V-170954	Cr6 digestion solution	50 ml	Reagent reag	

AM 8/27/13

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 6514

Description
Potassium Phosphate Dibasic Anhydrous

ApprovedBy: jean
ApproveDate: 08/17/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	m-8391	112839	12/02/11	12/01/15	Soules, John	1	500g	neat	neat

Veritech Control/Receipt Number: 6758

Description
Hexavalent Chromium

ApprovedBy: melissa
ApproveDate: 02/17/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
HACH	14664-42	A1320	02/17/12	11/01/16	Dalmeida, Melissa	2	100m	1000	mg/L

Veritech Control/Receipt Number: 7487

Description
POTASSIUM PHOSPHATE MONOBASIC

ApprovedBy: jean
ApproveDate: 11/27/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	P 285-500	124970	11/26/12	11/25/20	Trivedi, Beena	1	500 G	NEAT	NEAT

Veritech Control/Receipt Number: 7490

Description
Sodium Hydroxide

ApprovedBy: richq
ApproveDate: 11/27/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EMD	SX0590-7	B0729269 152	11/21/12	11/20/16	Quimby, Richard	4	12KG	neat	neat

Veritech Control/Receipt Number: 7705

Description
1,5-Diphenylcarbezide

ApprovedBy: melissa
ApproveDate: 02/19/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	D85-25	120894	02/19/13	02/18/18	Trivedi, Beena	1	25G	NEAT	NEAT

Veritech Control/Receipt Number: 7864

Description
Sodium Carbonate Anhydrous

ApprovedBy: melissa
ApproveDate: 04/24/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LabChem	LC22965-1	C046-24	04/24/13	04/23/15	Dalmeida, Melissa	11	500g	neat	neat

Veritech Control/Receipt Number: 7906

Description
Chromium 1000 ppm Standard

ApprovedBy: melissa
ApproveDate: 06/13/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	SC192-100	125581	05/22/13	09/30/14	Dalmeida, Melissa	1	100 m	1000	mg/L

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 7940

Description
Sulfuric Acid

ApprovedBy: aurora
ApproveDate: 07/01/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	A510-P212	3112052	06/05/13	11/19/15	Lopez, Jose	6	2.5L	neat	neat

Veritech Control/Receipt Number: 8064

Description
Acetone

ApprovedBy: jean
ApproveDate: 08/16/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9254-03	43333	08/13/13	12/05/15	Lopez, Jose	44	4L	neat	neat

Veritech Control/Receipt Number: 8078

Description
Nitric Acid

ApprovedBy: aurora
ApproveDate: 08/22/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	50770	08/20/13	06/23/18	Lopez, Jose	11	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 6413

Description
Lead Chromate

ApprovedBy: melissa
ApproveDate: 01/23/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Pfaltz & Bauer inc	L01745	A056-5	10/27/11	10/26/14	Soules, John	1	500g	neat	neat

Veritech Control/Receipt Number: 7734

Description
Magnesium Chloride, Anhydrous

ApprovedBy: melissa
ApproveDate: 02/25/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
AMRESCO	J364-500G	1932C182	02/25/13	02/24/18	Dalmeida, Melissa	2	500g	Neat	Neat

3082313 0637

Hampton-Clarke/Veritech

OXIDATION-REDUCTION POTENTIAL & pH (SM2580B & SM4500 H+ B)

Batch #: 222

Platinum Ag/AgCl Combination Electrode with 4 M KCl Filling Solution

Meter #: 25641

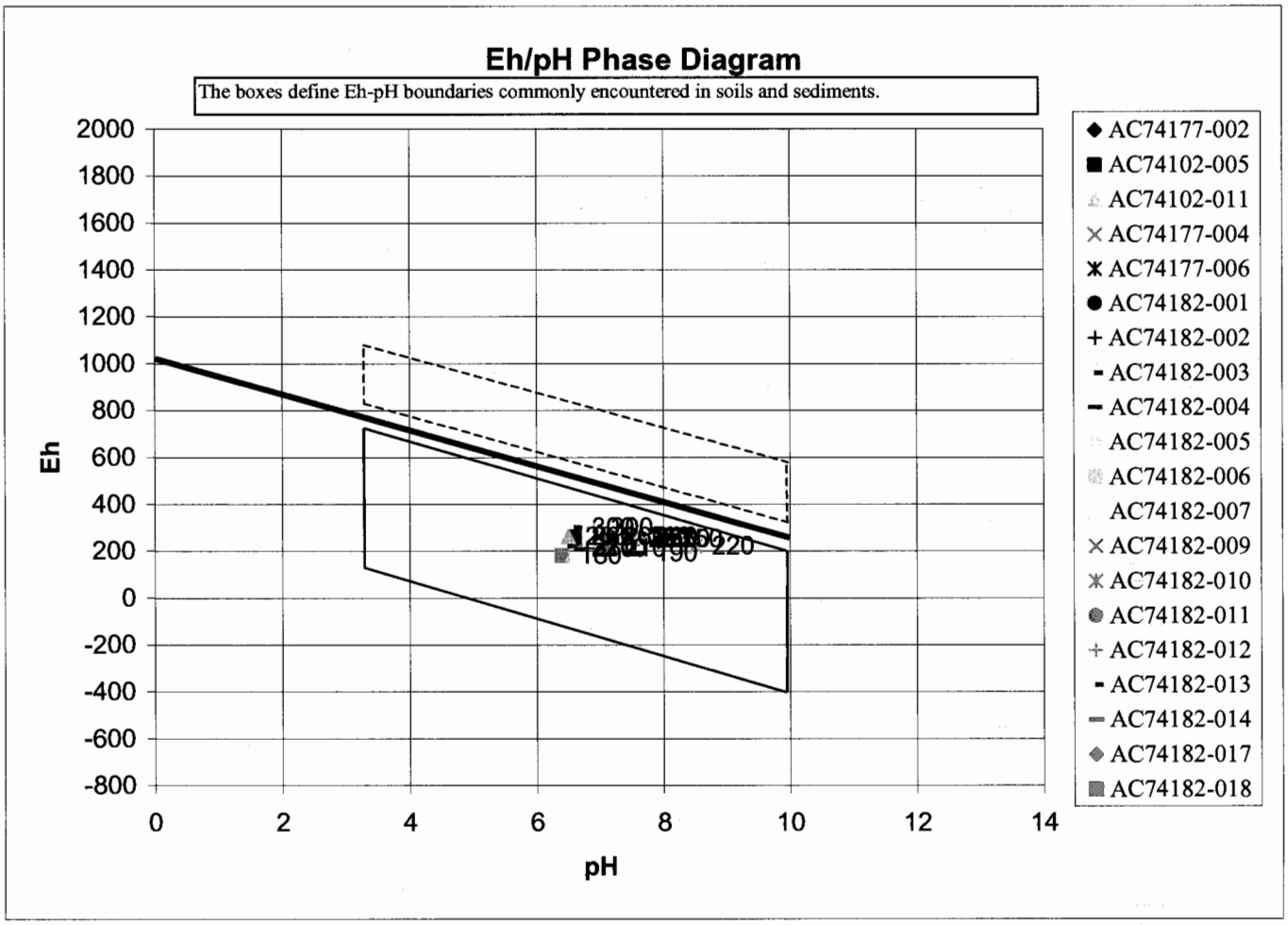
Veritech Sample No.	Reading 1* mV	Temp 1 °C	Reading 2* mV	Temp 2 °C	PH 4.2 - 4.6 Units	Sample Weight	DI H_2O Vol.	Date / Time	Analyst
ZoBell's Solution (228 ± 10 mV)	221.0	21.3 ~~29.3~~	221.1	21.3	LCS: 4.41	—	—	08/26/13 11:45	JV
DUP AC74177-002	252.7	23.8	252.9	23.8	DUP: 7.99	25	25		
1. AC74177-002	245.4	23.7	243.8	23.7	8.02				
2. AC74102-005	259.5	23.3	260.1	23.3	6.59				
3. AC74102-011	264.2	24.6	263.4	24.6	6.49				
4. AC74177-004	254.2	23.6	254.0	23.6	7.63				
5. AC74177-006	254.0	24.0	255.1	24.0	7.56				
6. AC74182-001	255.3	23.0	252.4	23.0	7.57				
7. -002	214.5	23.7	213.8	23.7	6.84				
8. -003	210.2	24.5	209.5	24.5	6.63				
9. -004	224.0	23.9	226.1	23.9	6.63				
10. -005	251.7	23.2	254.5	23.2	7.83				
11. -006	261.4	22.9	260.7	22.9	7.54				
12. AC74182-007	256.2	22.8	256.1	22.8	7.64				
13. AC74182-009	217.6	22.9	217.9	23.0	8.48				
14. -010	254.6	23.3	254.7	23.3	7.48				
15. -011	261.9	23.1	260.9	23.1	7.09				
16. -012	297.2	23.2	297.6	23.2	6.85				
17. -013	302.2	23.2	302.4	23.2	6.61				
18. -014	189.0	23.3	188.7	23.3	7.56				
19. -017	212.5	22.8	244.8	22.8	7.12				
20. -018	176.2	23.0	174.3	23.0	6.42				

* Reading 1 and Reading 2 must agree within ± 10 mV

Reviewed by: _____

Date Reviewed: _____

Solution	Manufacturer's Lot #
ZoBell's Solution	7917
4 M KCl Filling Solution	5450
LCS	V- 169601



Sample	Eh	pH
AC74177-002	250	8
AC74102-005	260	6.6
AC74102-011	260	6.5
AC74177-004	250	7.6
AC74177-006	250	7.6
AC74182-001	260	7.6
AC74182-002	210	6.8
AC74182-003	210	6.6
AC74182-004	220	6.6
AC74182-005	250	7.8
AC74182-006	260	7.5
AC74182-007	260	7.6
AC74182-009	220	8.5
AC74182-010	250	7.5
AC74182-011	260	7.1
AC74182-012	300	6.9
AC74182-013	300	6.6
AC74182-014	190	7.6
AC74182-017	210	7.1
AC74182-018	180	6.4

Reducing

Oxidizing

*Note the Eh values plotted on this diagram are corrected for the reference electrode voltage :199 mV units must be added for the combination platinum electrode used.

2 08/26/13

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-169601

Prepared By:	Trivedi, Beena	Department:	WetChem	ApprovedBy:	aurora
Description:	KHP LCS	BatchNumber:		ApproveDate:	07/26/13
Prep Date:	7/24/2013	Concentration:	300 ppm	Checked:	Yes
Expiration Date:	1/24/2014	Final Volume:	2000 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
5981	POTASSIUM HYDROGEN PHTHALATE DI WATER FILL TO THE VOLUME	600 mg	NEAT	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 5981

Description
POTASSIUM HYDROGEN PHTHALATE

ApprovedBy: jean
ApproveDate: 05/24/11
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	P243-500	101727	05/24/11	05/31/21	Revolus, Jean	1	500g	NEAT	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 5456

Description
Redox reference probe solution

ApprovedBy: brent
ApproveDate: 06/15/11
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
fisher	SP135-500	105440	11/19/10	11/18/13	Miller,Gael E.	1	500ml	4	M

Veritech Control/Receipt Number: 7917

Description
ZoBell's Solution

ApprovedBy: melissa
ApproveDate: 05/29/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Ricca	9880-32	2305597	05/23/13	01/31/14	Dalmeida, Melissa	1	1 L	228	mV

Hampton-Clarke/Veritech

pH CALIBRATION RECORD

pH Meter: Orion 3 Star

Serial # 25641

Date	Calibration				Checks				Buffer Lot #s		
	Initials Time	Calibrate Buffer 1	Calibrate Buffer 2	Read pH 7.0 Buffer	Initials Time	Read pH 7.0 Buffer	Initials Time	Read pH 7.0 Buffer	pH 4.0	pH 10.0	pH 7.0
07/29/13	SV 7:40	4.00	10.00	~~7.04~~ 7.05					7601	7691	7922
07/30/13	SV 7:40	4.00	10.00	7.05					7601	7691	7922
07/31/13	SV 7:55	4.00	10.00	7.03					7601	8004	7922
08/01/13	SV 7:45	4.00	10.00	7.04					7601	8004	7922
08/02/13	SV 7:50	4.00	10.00	7.03					7601	8004	7922
08/05/13	SV 7:40	4.00	10.00	7.04	SV 11:30	7.05			7601	8004	7922
08/06/13	SV 7:30	4.00	10.00	7.04	SV 10:10	7.04			7601	8004	7922
08/07/13	SV 7:05	4.00	10.00	7.04	SV 12:05	7.04			7601	8004	7922
08/08/13	SV 7:30	4.00	10.00	7.04	SV 11:15	7.05			7601	8004	7922
08/09/13	SV 7:45	4.00	10.00	7.04					7601	8004	7922
08/12/13	SV 7:25	4.00	10.00	7.05	HS 11:00	7.04			7601	8004	7922
08/13/13	SV 7:20	4.00	10.00	7.05	SV 10:10	7.05	BJ		7601	8004	7922
08/14/13	SV 7:10	4.00	10.00	7.02	BJ 13:10	7.04			7601	8004	7922
08/15/13	SV 7:45	4.00	10.00	7.03					7601	8004	7922
08/16/13	SV 7:45	4.00	10.00	7.03	SV 11:30	7.02			7601	8004	7922
08/19/13	SV 7:10	4.00	10.00	7.07					7601	8004	7922
8/20/13	BG 10:30	4.00	10.00	7.04					7601	8004	7922
08/21/13	SV 7:20	4.00	10.00	7.04	SV 10:30	7.04			7601	8004	7922
08/22/13	SV 8:30	4.00	10.00	7.04	SV 11:05	7.05			7601	8004	7922
08/23/13	SV 7:45	4.00	10.00	7.03	SV 12:40	7.03	BJ 13:00	7.04	7601	8004	7922
08/26/13	SV 7:55	4.00	10.00	7.04	SV 11:45	7.03			7601	8004	7922

Calibrate using pH 4.0 and pH 10.0/Read and record pH 7.0 (the pH 7.0 must agree within ± 0.1 pH units)
When using the pH meter more for analysis and more than 3 hours has passed calibration, read and record pH 7.0
If pH 7.0 is off by ± 0.2 units, re-calibrate using the pH 4.0 and pH 10.0 buffers.

Miscellaneous Data

ZERO HEADSPACE EXTRACTION- SAMPLE ENTRY

Sample ID	Vessel #	Initial Pressure	Final Pressure	Ext. Fluid #	Wt./Vol. Of Sample	Start Date	Start Time	Finish Date	Finish Time	Final pH	Ext. Type*	Analyst (s)	Transfer To**	Transfer To**	Comments
EF1, V-171617	A5	20	20	EF1 V-171617	500 ml	8/28/13	12:30 P.M.	8/29/13	10:00		T	KVR/BS.	RS		
AC74230-001	23				25 gm / 500 ml										
AC74230-002	30														
AC74177-001	20														
AC74177-003	5														
AC74177-005	A8														
AC74136-001	22														
AC74136-002	A5														
AC74136-003	32														
AC74136-004	13														

*Ext. Type TCLP=T ASTM=A SPLP=S MEP = M

** Initials of person taking custody of extractions

3082313 0644

3082313 0645

LEACHATE PREPARATION LOG
(TCLP, SPLP)

Start Date: 8/26/13

Finish Date: 8/27/13

**TCLP Ext. Fluid #1 pH: 4.88 (criteria: 4.93 ± 0.5)
**TCLP Ext. Fluid #2 pH: (criteria: 2.88 ± 0.05)
**SPLP Ext. Fluid #3 pH: 4.20 (criteria: 4.20 ± 0.5)

Sample #	pH (units)	pH in HCL (units)	Final pH (units)	Ext. Fluid (number)	Wt./Vol of Sample (g or mL)	Start Time	Finish Time	Analyst (s)	Ext. Type*	Comments
AC 74157-001	9.91	1.60	5.14	150g/3L	EF1 171314	18:00	11:00	E.R.	T	Metals and Organics
AC 74157-002	8.03	1.54	4.70							
AC 74157-003	8.34	1.57	4.97							
AC 74157-004	8.13	1.58	4.72							
AC 74157-005	7.55	1.59	4.94							
AC 74157-006	7.83	1.58	5.00							
AC 74157-007	7.11	1.60	4.77							
AC 74157-008	8.70	1.57	5.50							
AC 74157-009	6.94	1.62	4.71							
AC 74157-010	8.16	1.58	5.00							
AC 74156-001	10.08	1.71	4.85							
AC 74177-002	9.64	1.90	4.95							
AC 74177-004	8.98	1.72	4.88							
AC 74177-006	8.78	1.85	5.44							
AC 74159-001	8.94	1.64	5.54	100g/2L						Metals only.
AC 74064-001	—	—	9.91		SPLP 71643				P	Organics Only.
AC 74049-003			7.36							
AC 74062-002			9.69							
SPLP 171043	4.20		9.94	2L					P	
EF1 171314	4.88	—	5.00	3L	EF1 171314				T	Metals and Organics

* Ext. Type: TCLP = T (Method 1311) LAMP=L (Methods 1311 / ANSI/NEMA C78.LL 1256-2003)
SPLP = P (Method 1312) MEP=M (Method 1320)
ZHE = Z (Method 1311/1312)

** The pH of the extraction fluid must be checked prior to use and must be within limits specified above

9808

Leachate prep log 2010

Subcontracted Data

This is the last page of the data generated by Hampton-Clarke/Veritech.
The following pages were submitted to HCV by subcontracted laboratories.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Hampton-Clarke Veritech
175 Route 46 West
Fairfield NJ 07004

September 03, 2013

Project: Hampton-Clarke

Submittal Date: 08/24/2013
Group Number: 1414037
SDG: VRU42
PO Number: 9116
State of Sample Origin: NJ

Client Sample Description	Lancaster Labs (LL) #
AC74177-002 Composite Soil	7173662
AC74177-004 Composite Soil	7173663
AC74177-006 Composite Soil	7173664

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Hampton-Clarke Veritech Attn: Nick Yannacone

Respectfully Submitted,

Angela M. Miller
Specialist

(717) 556-7260

eurofins
Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: AC74177-002 Composite Soil
Hampton-Clarke

LL Sample # SW 7173662
LL Group # 1414037
Account # 10819

Project Name: Hampton-Clarke

Collected: 08/23/2013

Submitted: 08/24/2013 09:00
Reported: 09/03/2013 16:22

Hampton-Clarke Veritech
175 Route 46 West
Fairfield NJ 07004

HCV06 SDG#: VRU42-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides	**SW-846 8141A**		ug/kg	ug/kg	ug/kg	
10408	Ethyl Parathion	56-38-2	N.D.	24	72	1
10408	Methyl Parathion	298-00-0	N.D.	24	72	1
Wet Chemistry	**SM 2540 G-1997**		%	%	%	
00111	Moisture	n.a.	6.6	0.50	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10408	Ethyl & Methyl Parathion	SW-846 8141A	1	132380015A	08/28/2013 22:22	Richard A Shober	1
06677	OP Pesticides Solid Extraction	SW-846 3540C	1	132380015A	08/26/2013 19:50	Wanda F Oswald	1
00111	Moisture	SM 2540 G-1997	1	13239820003B	08/27/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

eurofins
Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: AC74177-004 Composite Soil
Hampton-Clarke

LL Sample # SW 7173663
LL Group # 1414037
Account # 10819

Project Name: Hampton-Clarke

Collected: 08/23/2013

Submitted: 08/24/2013 09:00
Reported: 09/03/2013 16:22

Hampton-Clarke Veritech
175 Route 46 West
Fairfield NJ 07004

HCV12 SDG#: VRU42-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides	**SW-846 8141A**		ug/kg	ug/kg	ug/kg	
10408	Ethyl Parathion	56-38-2	N.D.	24	72	1
10408	Methyl Parathion	298-00-0	N.D.	24	72	1
Wet Chemistry	**SM 2540 G-1997**		%	%	%	
00111	Moisture	n.a.	7.0	0.50	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10408	Ethyl & Methyl Parathion	SW-846 8141A	1	132380015A	08/29/2013 00:07	Richard A Shober	1
06677	OP Pesticides Solid Extraction	SW-846 3540C	1	132380015A	08/26/2013 19:50	Wanda F Oswald	1
00111	Moisture	SM 2540 G-1997	1	13239820003B	08/27/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: AC74177-006 Composite Soil
Hampton-Clarke

LL Sample # SW 7173664
LL Group # 1414037
Account # 10819

Project Name: Hampton-Clarke

Collected: 08/23/2013

Submitted: 08/24/2013 09:00
Reported: 09/03/2013 16:22

Hampton-Clarke Veritech
175 Route 46 West
Fairfield NJ 07004

HCV18 SDG#: VRU42-03*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides	**SW-846 8141A**		ug/kg	ug/kg	ug/kg	
10408	Ethyl Parathion	56-38-2	N.D.	24	74	1
10408	Methyl Parathion	298-00-0	N.D.	24	74	1
Wet Chemistry	**SM 2540 G-1997**		%	%	%	
00111	Moisture	n.a.	10.0	0.50	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10408	Ethyl & Methyl Parathion	SW-846 8141A	1	132380015A	08/29/2013 00:42	Richard A Shober	1
06677	OP Pesticides Solid Extraction	SW-846 3540C	1	132380015A	08/26/2013 19:50	Wanda F Oswald	1
00111	Moisture	SM 2540 G-1997	1	13239820003B	08/27/2013 23:23	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: Hampton-Clarke Veritech Group Number: 1414037
Reported: 09/03/13 at 04:22 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 132380015A	Sample number(s): 7173662-7173664								
Ethyl Parathion	N.D.	22.	67	ug/kg	98		61-127		
Methyl Parathion	N.D.	22.	67	ug/kg	106		80-129		
Batch number: 13239820003B	Sample number(s): 7173662-7173664								
Moisture					100		99-101		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 132380015A	Sample number(s): 7173662-7173664 UNSPK: 7173662								
Ethyl Parathion	100	99	52-151	1	35				
Methyl Parathion	109	109	37-171	0	35				
Batch number: 13239820003B	Sample number(s): 7173662-7173664 BKG: P169717								
Moisture						18.1	20.7	13*	5

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: Ethyl & Methyl Parathion
Batch number: 132380015A

	2-Nitro-m-xylene
7173662	103
7173663	113
7173664	108
Blank	131
LCS	111
MS	103
MSD	102

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Hampton-Clarke Veritech Group Number: 1414037
Reported: 09/03/13 at 04:22 PM

Surrogate Quality Control

Limits: 45-133

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

CHAIN OF CUSTODY RECORD

10819|1414037|7173662-64

Veritech/Division of Hampton-Clarke
175 US Hwy 46 West
Fairfield, New Jersey, 07004
Ph:800-426-9992 Fax:973-439-1458

Report To:	Invoice To:	Project #:	CocID#:
Hampton-Clarke: Attn:Reporting/Natasha 175 Route 46 West Fairfield New Jersey 07004	Hampton-Clarke: Attn:Accounting 175 Route 46 West Fairfield New Jersey 07004	3082313	3935

FINAL RESULTS TO: atineo@hcvlab.com;pm@hcvlab.com
PRELIM/VERBAL RESULTS TO: pm@hcvlab.com

EDD: NEW JERSEY HAZRESULT OR EQUIS EZEDD REQUIRED FOR ALL DATA SUBMITALS!

MS 8/23/13

Turn Around Time: 1-week **Preliminary Due Date:** 9/3/2013
Report Type: NJDEP-R (REDUCED) **Hard Copy Due Date:** 9/3/2013

Sample Number:	Client ID	Matrix:	Date Collected:	Time Collected:	Analysis Requested
AC74177-002	006 SS-1 Composite	Soil	8/23/2013		Parathion (Final results in 5 days) Method 8141
AC74177-004	012 SS-2 Composite	Soil	8/23/2013		Parathion (Final results in 5 days)
AC74177-006	018 SS-3 Composite	Soil	8/23/2013		Parathion (Final results in 5 days)

Relinquished By:	Accepted By:	Date:	Time:	Comments, Notes, Special Requirements, HAZARDS
[signature]	UPS	8/23/13	17:00	
UPS				
	[signature]	8-24-13	0900	Cooler Temp: 4.6

Veritech Lab Use Only: **Subcontracted Lab Id and Contact:** Angela Miller, (717) 556-7260, LabID: H, 2425 New Holland Pike, , Lancaster, PA, 17601

eurofins | Lancaster Laboratories Environmental

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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WWW.HCVLAB.COM

Project: BayonneBridge-NY-Perfetto

Client PO: B06-264.054

Report To: PORT AUTHORITY OF NY & NJ
MATERIALS ENGINEERING DIV.
241 ERIE ST.
ROOM 234
JERSEY CITY, NJ 07310-1397

Attn: D.Bailey/A.Zafirelis

Received Date: 8/1/2013

Report Date: 8/15/2013

Deliverables: NYDOH-R

Lab ID: AC73771

Lab Project No: 3080110

REVISED

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Veritech to all parties shall not exceed Veritech's total fee for analytical services rendered.

Robin Cousineau - Quality Assurance Director OR **Stanley Gilewicz - Laboratory Director**

NJ (07071) NY (ELAP11408) CT (PH-0671)
PA (68-00463) KY (90124)

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Sample DUP Quantitation Reports/Chromatograms

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Form 8 - Surrogate Area Summary

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Method Blank Form 1 with Quantitation Reports/Chromatograms

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Sample Summary

Client: PORT AUTHORITY OF NY & NJ

Project: BayonneBridge-NY

HCV Project #: 3080110

Lab#	SampleID	Matrix	Collection Date	Receipt Date
AC73771-001	BB-COMP-1-0801113	Soil	8/1/2013	8/1/2013
AC73771-002	BB-COMP-2-0801113	Soil	8/1/2013	8/1/2013
AC73771-003	BB-GRAB-5-0801113	Soil/Encore	8/1/2013	8/1/2013
AC73771-004	BB-GRAB-10-0801113	Soil/Encore	8/1/2013	8/1/2013

HCV Case Narrative

Client: Port Authority of NY & NJ
Project: Bayonne Bridge-NY

HCV Project: 3080110

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Volatile Organic Analysis:
Data conforms to method requirements.

Base Neutral/Acid Extractable Analysis:
Dimethylphthalate was recovered in Method Blank 25788 and in sample AC73771-002 due to laboratory contamination. Samples are flagged with "B" qualifier.

PCB Analysis:
Data conforms to method requirements.

Pesticide Analysis:
The Matrix Spike, Matrix Spike Duplicate and/or MS/MSD RPD for batch 25778 had recoveries outside QC limits. However, since the associated Method Blank and Laboratory Control Sample were within control, no corrective action was necessary.

Extractable Petroleum Hydrocarbon Analysis:
The Matrix Spike for batch 25787 had recoveries outside QC limits. However, since the associated Laboratory Control Samples (MBS/MBSD) were within control, no corrective action was necessary.

Metals Analysis:
The Matrix Spike and/or Matrix Spike Duplicate for batch 26592 had recoveries outside QC limits. However, since the associated Method Blank and Laboratory Control Sample were within control, no corrective action was necessary.
The MS/MSD RPD and RPD between the QC sample and the Method Replicate had recoveries outside QC limits also. The RPD criteria were met between the LCS/LCS Method Replicate. In addition, the serial dilution is outside QC limits suggesting matrix interference.

Wet Chemistry Analysis:
The insoluble spike for batch 163-Hex-Cr recovered outside QC limits. The batch was re-analyzed confirming low recovery of insoluble spike. The initial analysis is reported.

Samples AC73771-001 and 002 were analyzed for Reactivity using SW-846 7.3. SW-846 7.3 is not a NELAP accredited parameter.

Per client request samples AC73771-001 and 002 for TOC were analyzed outside the hold time.

Robin Cousineau Quality Assurance Director	Or	Stanley Gilewicz Laboratory Director	8/15/2013 Date

HCV Executive Summary

Client: PORT AUTHORITY OF NY & NJ **HCV Project #:** 3080110

Project: BayonneBridge-NY-Perfetto

Lab#: AC73771-001 **Sample ID: BB-COMP-1-0801113**

Analyte	Units	RL	Result	Analytical Method
pH	ph		7.3	9040C/9045D
Ignitability	deg. f		>141	EPA 1010
Aluminum	mg/kg	220	8900	EPA 6010B
Arsenic	mg/kg	2.2	8.1	EPA 6010B
Barium	mg/l	0.25	0.56	EPA 6010B
Barium	mg/kg	11	74	EPA 6010B
Beryllium	mg/kg	0.66	0.80	EPA 6010B
Calcium	mg/kg	1100	2600	EPA 6010B
Chromium	mg/kg	5.5	21	EPA 6010B
Cobalt	mg/kg	2.7	9.4	EPA 6010B
Copper	mg/kg	5.5	38	EPA 6010B
Iron	mg/kg	220	17000	EPA 6010B
Lead	mg/kg	5.5	80	EPA 6010B
Magnesium	mg/kg	550	4300	EPA 6010B
Manganese	mg/kg	11	450	EPA 6010B
Nickel	mg/kg	5.5	34	EPA 6010B
Potassium	mg/kg	550	1100	EPA 6010B
Vanadium	mg/kg	11	35	EPA 6010B
Zinc	mg/kg	11	88	EPA 6010B
p,p'-DDD	mg/kg	0.0027	0.0034	EPA 8081A
p,p'-DDE	mg/kg	0.0027	0.059	EPA 8081A
p,p'-DDT	mg/kg	0.0027	0.037	EPA 8081A
Benzo[a]anthracene	mg/kg	0.037	0.058	EPA 8270C
Benzo[a]pyrene	mg/kg	0.037	0.057	EPA 8270C
Benzo[b]fluoranthene	mg/kg	0.037	0.081	EPA 8270C
Benzo[g,h,i]perylene	mg/kg	0.0092	0.053	EPA 8270C
Chrysene	mg/kg	0.037	0.071	EPA 8270C
Fluoranthene	mg/kg	0.037	0.088	EPA 8270C
Indeno[1,2,3-cd]pyrene	mg/kg	0.037	0.045	EPA 8270C
Phenanthrene	mg/kg	0.037	0.052	EPA 8270C
Pyrene	mg/kg	0.037	0.11	EPA 8270C
TotalSemiVolatileTic	mg/kg	NA	47J	EPA 8270C
Total Organic Carbon	mg/kg	1300	16000	EPA Kahn
C9-C40	mg/kg	66	70	NJEPHRev3B
Eh	mv		290	SM 2580

HCV Executive Summary

Client: PORT AUTHORITY OF NY & NJ **HCV Project #:** 3080110

Project: BayonneBridge-NY-Perfetto

Lab#: AC73771-002 **Sample ID: BB-COMP-2-0801113**

Analyte	Units	RL	Result	Analytical Method
pH	ph		6.8	9040C/9045D
Ignitability	deg. f		>141	EPA 1010
Aluminum	mg/kg	220	9500	EPA 6010B
Arsenic	mg/kg	2.2	8.3	EPA 6010B
Barium	mg/l	0.25	0.57	EPA 6010B
Barium	mg/kg	11	78	EPA 6010B
Beryllium	mg/kg	0.67	0.85	EPA 6010B
Calcium	mg/kg	1100	2100	EPA 6010B
Chromium	mg/kg	5.6	18	EPA 6010B
Cobalt	mg/kg	2.8	8.1	EPA 6010B
Copper	mg/kg	5.6	36	EPA 6010B
Iron	mg/kg	220	17000	EPA 6010B
Lead	mg/kg	5.6	69	EPA 6010B
Magnesium	mg/kg	560	4300	EPA 6010B
Manganese	mg/kg	11	430	EPA 6010B
Nickel	mg/kg	5.6	16	EPA 6010B
Potassium	mg/kg	560	1200	EPA 6010B
Vanadium	mg/kg	11	37	EPA 6010B
Zinc	mg/kg	11	76	EPA 6010B
p,p'-DDE	mg/kg	0.0028	0.0090	EPA 8081A
p,p'-DDT	mg/kg	0.0028	0.012	EPA 8081A
Anthracene	mg/kg	0.037	0.040	EPA 8270C
Benzo[a]anthracene	mg/kg	0.037	0.14	EPA 8270C
Benzo[a]pyrene	mg/kg	0.037	0.12	EPA 8270C
Benzo[b]fluoranthene	mg/kg	0.037	0.19	EPA 8270C
Benzo[g,h,i]perylene	mg/kg	0.0094	0.093	EPA 8270C
Benzo[k]fluoranthene	mg/kg	0.037	0.058	EPA 8270C
Carbazole	mg/kg	0.037	0.040	EPA 8270C
Chrysene	mg/kg	0.037	0.15	EPA 8270C
Dibenzofuran	mg/kg	0.0094	0.026	EPA 8270C
Dimethylphthalate	mg/kg	0.037	0.038B	EPA 8270C
Fluoranthene	mg/kg	0.037	0.30	EPA 8270C
Indeno[1,2,3-cd]pyrene	mg/kg	0.037	0.091	EPA 8270C
Naphthalene	mg/kg	0.0094	0.019	EPA 8270C
Phenanthrene	mg/kg	0.037	0.30	EPA 8270C
Pyrene	mg/kg	0.037	0.32	EPA 8270C
TotalSemiVolatileTic	mg/kg	NA	53J	EPA 8270C
Total Organic Carbon	mg/kg	1400	13000	EPA Kahn
Eh	mv		290	SM 2580

Lab#: AC73771-004 **Sample ID: BB-GRAB-10-0801113**

Analyte	Units	RL	Result	Analytical Method
TotalVolatileTic	mg/kg	NA	0.0061J	EPA 8260B

HCV Report Of Analysis

Client: PORT AUTHORITY OF NY & NJ
Project: BayonneBridge-NY-Perfetto

HCV Project #: 3080110

Sample ID: BB-COMP-1-0801113
Lab#: AC73771-001
Matrix: Soil

Collection Date: 8/1/2013
Receipt Date: 8/1/2013

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		91

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.1	ND

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.26	ND

Eh

Analyte	DF	Units	RL	Result
Eh	1	mv		290

Ignitability (1010 modified)

Analyte	DF	Units	RL	Result
Ignitability	1	deg. f		>141

Mercury (Soil/Waste) 7471A

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.092	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00070	ND

NJ EPH Category 1

Analyte	DF	Units	RL	Result
>C28-C40	1	mg/kg	66	ND
C9-C28	1	mg/kg	66	ND
C9-C40 Cat1 Total EPH	1	mg/kg	66	ND

NJ EPH Category 2

Analyte	DF	Units	RL	Result
C9-C40	1	mg/kg	66	70

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0055	ND
Aldrin	1	mg/kg	0.0055	ND
Alpha-BHC	1	mg/kg	0.0011	ND
beta-BHC	1	mg/kg	0.0011	ND
delta-BHC	1	mg/kg	0.0055	ND
Dieldrin	1	mg/kg	0.0011	ND
Endosulfan I	1	mg/kg	0.0055	ND
Endosulfan II	1	mg/kg	0.0055	ND
Endosulfan Sulfate	1	mg/kg	0.0055	ND
Endrin	1	mg/kg	0.0055	ND
Endrin Aldehyde	1	mg/kg	0.0055	ND
Endrin Ketone	1	mg/kg	0.0055	ND

Sample ID: BB-COMP-1-0801113 **Collection Date: 8/1/2013**
Lab#: AC73771-001 **Receipt Date: 8/1/2013**
Matrix: Soil

gamma-BHC	1	mg/kg	0.0011	ND
Heptachlor	1	mg/kg	0.0055	ND
Heptachlor Epoxide	1	mg/kg	0.0055	ND
Methoxychlor	1	mg/kg	0.0055	ND
p,p'-DDD	**1**	**mg/kg**	**0.0027**	**0.0034**
p,p'-DDE	**1**	**mg/kg**	**0.0027**	**0.059**
p,p'-DDT	**1**	**mg/kg**	**0.0027**	**0.037**
Toxaphene	1	mg/kg	0.027	ND
y-Chlordane	1	mg/kg	0.0055	ND

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.027	ND
Aroclor-1016	1	mg/kg	0.027	ND
Aroclor-1221	1	mg/kg	0.027	ND
Aroclor-1232	1	mg/kg	0.027	ND
Aroclor-1242	1	mg/kg	0.027	ND
Aroclor-1248	1	mg/kg	0.027	ND
Aroclor-1254	1	mg/kg	0.027	ND
Aroclor-1260	1	mg/kg	0.027	ND
Aroclor-1262	1	mg/kg	0.027	ND
Aroclor-1268	1	mg/kg	0.027	ND

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	**1**	**ph**		**7.3**

Reactive Cyanide

Analyte	DF	Units	RL	Result
Cyanide (Reactive)	1	mg/kg	0.50	ND

Reactive Sulfide

Analyte	DF	Units	RL	Result
Sulfide (Reactive)	1	mg/kg	100	ND

Semivolatile Organics + 25 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.037	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.037	ND
1,2-Diphenylhydrazine	1	mg/kg	0.037	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.037	ND
2,4,5-Trichlorophenol	1	mg/kg	0.037	ND
2,4,6-Trichlorophenol	1	mg/kg	0.037	ND
2,4-Dichlorophenol	1	mg/kg	0.0092	ND
2,4-Dimethylphenol	1	mg/kg	0.0092	ND
2,4-Dinitrophenol	1	mg/kg	0.18	ND
2,4-Dinitrotoluene	1	mg/kg	0.037	ND
2,6-Dinitrotoluene	1	mg/kg	0.037	ND
2-Chloronaphthalene	1	mg/kg	0.037	ND
2-Chlorophenol	1	mg/kg	0.037	ND
2-Methylnaphthalene	1	mg/kg	0.037	ND
2-Methylphenol	1	mg/kg	0.0092	ND
2-Nitroaniline	1	mg/kg	0.037	ND
2-Nitrophenol	1	mg/kg	0.037	ND
3&4-Methylphenol	1	mg/kg	0.0092	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.037	ND
3-Nitroaniline	1	mg/kg	0.037	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.037	ND

Sample ID: BB-COMP-1-0801113 **Collection Date: 8/1/2013**
Lab#: AC73771-001 **Receipt Date: 8/1/2013**
Matrix: Soil

4-Bromophenyl-phenylether	1	mg/kg	0.037	ND
4-Chloro-3-methylphenol	1	mg/kg	0.037	ND
4-Chloroaniline	1	mg/kg	0.017	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.037	ND
4-Nitroaniline	1	mg/kg	0.037	ND
4-Nitrophenol	1	mg/kg	0.037	ND
Acenaphthene	1	mg/kg	0.037	ND
Acenaphthylene	1	mg/kg	0.037	ND
Acetophenone	1	mg/kg	0.037	ND
Anthracene	1	mg/kg	0.037	ND
Atrazine	1	mg/kg	0.037	ND
Benzaldehyde	1	mg/kg	0.037	ND
Benzidine	1	mg/kg	0.037	ND
Benzo[a]anthracene	**1**	**mg/kg**	**0.037**	**0.058**
Benzo[a]pyrene	**1**	**mg/kg**	**0.037**	**0.057**
Benzo[b]fluoranthene	**1**	**mg/kg**	**0.037**	**0.081**
Benzo[g,h,i]perylene	**1**	**mg/kg**	**0.0092**	**0.053**
Benzo[k]fluoranthene	1	mg/kg	0.037	ND
Benzyl alcohol	1	mg/kg	0.037	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.037	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0092	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.037	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.037	ND
Butylbenzylphthalate	1	mg/kg	0.037	ND
Caprolactam	1	mg/kg	0.037	ND
Carbazole	1	mg/kg	0.037	ND
Chrysene	**1**	**mg/kg**	**0.037**	**0.071**
Dibenzo[a,h]anthracene	1	mg/kg	0.037	ND
Dibenzofuran	1	mg/kg	0.0092	ND
Diethylphthalate	1	mg/kg	0.037	ND
Dimethylphthalate	1	mg/kg	0.037	ND
Di-n-butylphthalate	1	mg/kg	0.018	ND
Di-n-octylphthalate	1	mg/kg	0.037	ND
Fluoranthene	**1**	**mg/kg**	**0.037**	**0.088**
Fluorene	1	mg/kg	0.037	ND
Hexachlorobenzene	1	mg/kg	0.037	ND
Hexachlorobutadiene	1	mg/kg	0.037	ND
Hexachlorocyclopentadiene	1	mg/kg	0.037	ND
Hexachloroethane	1	mg/kg	0.037	ND
Indeno[1,2,3-cd]pyrene	**1**	**mg/kg**	**0.037**	**0.045**
Isophorone	1	mg/kg	0.037	ND
Naphthalene	1	mg/kg	0.0092	ND
Nitrobenzene	1	mg/kg	0.037	ND
N-Nitrosodimethylamine	1	mg/kg	0.037	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.0092	ND
N-Nitrosodiphenylamine	1	mg/kg	0.037	ND
Pentachlorophenol	1	mg/kg	0.062	ND
Phenanthrene	**1**	**mg/kg**	**0.037**	**0.052**
Phenol	1	mg/kg	0.037	ND
Pyrene	**1**	**mg/kg**	**0.037**	**0.11**

Semivolatile Organics + 25 (8270) Library Searches

Analyte	DF	Units	RT	Result
Hexadecanoic acid	**1**	**mg/kg**	**10.45**	**0.087J**
unknown	**1**	**mg/kg**	**12.62**	**0.086J**
Phosphonic acid, dioctadecyl ester	**1**	**mg/kg**	**12.8**	**0.24JB**
3,5,7-Trimethoxy-2,8-dimethyldibenzopho	**1**	**mg/kg**	**13.33**	**0.13J**

Sample ID: BB-COMP-1-0801113
Lab#: AC73771-001
Matrix: Soil

Collection Date: 8/1/2013
Receipt Date: 8/1/2013

1-Hentetracontanol	1	mg/kg	13.58	0.12J
9-Octadecenamide, (Z)-	1	mg/kg	13.91	0.081J
Docosane, 11-decyl-	1	mg/kg	14.31	0.19J
unknown	1	mg/kg	14.33	0.22J
Octadecane	1	mg/kg	15.13	0.18J
11-Tricosene	1	mg/kg	15.17	0.13J
unknown	1	mg/kg	15.9	0.10J
unknown	1	mg/kg	16.02	0.11J
Stigmasta-5,23-dien-3.beta.-ol	1	mg/kg	16.17	0.18J
9-Eicosene, (E)-	1	mg/kg	16.23	0.11J
Stigmast-5-en-3-ol, (3.beta.,24S)-	1	mg/kg	16.55	0.52J
unknown	1	mg/kg	4.15	1.3JB
2-Pentanone, 4-hydroxy-4-methyl-	1	mg/kg	4.48	43JAB
unknown	1	mg/kg	5.12	0.21JB
TotalSemiVolatileTic	1	mg/kg	NA	47J

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	220	8900
Antimony	1	mg/kg	2.2	ND
Arsenic	1	mg/kg	2.2	8.1
Barium	1	mg/kg	11	74
Beryllium	1	mg/kg	0.66	0.80
Cadmium	1	mg/kg	0.66	ND
Calcium	1	mg/kg	1100	2600
Chromium	1	mg/kg	5.5	21
Cobalt	1	mg/kg	2.7	9.4
Copper	1	mg/kg	5.5	38
Iron	1	mg/kg	220	17000
Lead	1	mg/kg	5.5	80
Magnesium	1	mg/kg	550	4300
Manganese	1	mg/kg	11	450
Nickel	1	mg/kg	5.5	34
Potassium	1	mg/kg	550	1100
Selenium	1	mg/kg	2.0	ND
Silver	1	mg/kg	1.6	ND
Sodium	1	mg/kg	270	ND
Thallium	1	mg/kg	1.3	ND
Vanadium	1	mg/kg	11	35
Zinc	1	mg/kg	11	88

TCLP Metals 6010

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.20	ND
Barium	1	mg/l	0.25	0.56
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.20	ND
Lead	1	mg/l	0.15	ND
Selenium	1	mg/l	0.20	ND
Silver	1	mg/l	0.050	ND

TOC (Region II/Kahn)

Analyte	DF	Units	RL	Result
Total Organic Carbon	1	mg/kg	1300	16000

Sample ID: BB-COMP-2-0801113
Lab#: AC73771-002
Matrix: Soil

Collection Date: 8/1/2013
Receipt Date: 8/1/2013

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		89

Cr (Hexavalent) 7196A

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/kg	1.1	ND

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.27	ND

Eh

Analyte	DF	Units	RL	Result
Eh	1	mv		290

Ignitability (1010 modified)

Analyte	DF	Units	RL	Result
Ignitability	1	deg. f		>141

Mercury (Soil/Waste) 7471A

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.094	ND

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00070	ND

NJ EPH Category 1

Analyte	DF	Units	RL	Result
>C28-C40	1	mg/kg	67	ND
C9-C28	1	mg/kg	67	ND
C9-C40 Cat1 Total EPH	1	mg/kg	67	ND

NJ EPH Category 2

Analyte	DF	Units	RL	Result
C9-C40	1	mg/kg	67	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0056	ND
Aldrin	1	mg/kg	0.0056	ND
Alpha-BHC	1	mg/kg	0.0011	ND
beta-BHC	1	mg/kg	0.0011	ND
delta-BHC	1	mg/kg	0.0056	ND
Dieldrin	1	mg/kg	0.0011	ND
Endosulfan I	1	mg/kg	0.0056	ND
Endosulfan II	1	mg/kg	0.0056	ND
Endosulfan Sulfate	1	mg/kg	0.0056	ND
Endrin	1	mg/kg	0.0056	ND
Endrin Aldehyde	1	mg/kg	0.0056	ND
Endrin Ketone	1	mg/kg	0.0056	ND
gamma-BHC	1	mg/kg	0.0011	ND
Heptachlor	1	mg/kg	0.0056	ND
Heptachlor Epoxide	1	mg/kg	0.0056	ND
Methoxychlor	1	mg/kg	0.0056	ND
p,p'-DDD	1	mg/kg	0.0028	ND
p,p'-DDE	**1**	**mg/kg**	**0.0028**	**0.0090**

Sample ID: BB-COMP-2-0801113 **Collection Date: 8/1/2013**
Lab#: AC73771-002 **Receipt Date: 8/1/2013**
Matrix: Soil

p,p'-DDT	**1**	**mg/kg**	**0.0028**	**0.012**
Toxaphene	1	mg/kg	0.028	ND
y-Chlordane	1	mg/kg	0.0056	ND

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.028	ND
Aroclor-1016	1	mg/kg	0.028	ND
Aroclor-1221	1	mg/kg	0.028	ND
Aroclor-1232	1	mg/kg	0.028	ND
Aroclor-1242	1	mg/kg	0.028	ND
Aroclor-1248	1	mg/kg	0.028	ND
Aroclor-1254	1	mg/kg	0.028	ND
Aroclor-1260	1	mg/kg	0.028	ND
Aroclor-1262	1	mg/kg	0.028	ND
Aroclor-1268	1	mg/kg	0.028	ND

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	**1**	**ph**		**6.8**

Reactive Cyanide

Analyte	DF	Units	RL	Result
Cyanide (Reactive)	1	mg/kg	0.50	ND

Reactive Sulfide

Analyte	DF	Units	RL	Result
Sulfide (Reactive)	1	mg/kg	100	ND

Semivolatile Organics + 25 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.037	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.037	ND
1,2-Diphenylhydrazine	1	mg/kg	0.037	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.037	ND
2,4,5-Trichlorophenol	1	mg/kg	0.037	ND
2,4,6-Trichlorophenol	1	mg/kg	0.037	ND
2,4-Dichlorophenol	1	mg/kg	0.0094	ND
2,4-Dimethylphenol	1	mg/kg	0.0094	ND
2,4-Dinitrophenol	1	mg/kg	0.19	ND
2,4-Dinitrotoluene	1	mg/kg	0.037	ND
2,6-Dinitrotoluene	1	mg/kg	0.037	ND
2-Chloronaphthalene	1	mg/kg	0.037	ND
2-Chlorophenol	1	mg/kg	0.037	ND
2-Methylnaphthalene	1	mg/kg	0.037	ND
2-Methylphenol	1	mg/kg	0.0094	ND
2-Nitroaniline	1	mg/kg	0.037	ND
2-Nitrophenol	1	mg/kg	0.037	ND
3&4-Methylphenol	1	mg/kg	0.0094	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.037	ND
3-Nitroaniline	1	mg/kg	0.037	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.037	ND
4-Bromophenyl-phenylether	1	mg/kg	0.037	ND
4-Chloro-3-methylphenol	1	mg/kg	0.037	ND
4-Chloroaniline	1	mg/kg	0.018	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.037	ND
4-Nitroaniline	1	mg/kg	0.037	ND
4-Nitrophenol	1	mg/kg	0.037	ND

Sample ID: BB-COMP-2-0801113 **Collection Date: 8/1/2013**
Lab#: AC73771-002 **Receipt Date: 8/1/2013**
Matrix: Soil

Acenaphthene	1	mg/kg	0.037	ND
Acenaphthylene	1	mg/kg	0.037	ND
Acetophenone	1	mg/kg	0.037	ND
Anthracene	**1**	**mg/kg**	**0.037**	**0.040**
Atrazine	1	mg/kg	0.037	ND
Benzaldehyde	1	mg/kg	0.037	ND
Benzidine	1	mg/kg	0.037	ND
Benzo[a]anthracene	**1**	**mg/kg**	**0.037**	**0.14**
Benzo[a]pyrene	**1**	**mg/kg**	**0.037**	**0.12**
Benzo[b]fluoranthene	**1**	**mg/kg**	**0.037**	**0.19**
Benzo[g,h,i]perylene	**1**	**mg/kg**	**0.0094**	**0.093**
Benzo[k]fluoranthene	**1**	**mg/kg**	**0.037**	**0.058**
Benzyl alcohol	1	mg/kg	0.037	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.037	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0094	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.037	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.037	ND
Butylbenzylphthalate	1	mg/kg	0.037	ND
Caprolactam	1	mg/kg	0.037	ND
Carbazole	**1**	**mg/kg**	**0.037**	**0.040**
Chrysene	**1**	**mg/kg**	**0.037**	**0.15**
Dibenzo[a,h]anthracene	1	mg/kg	0.037	ND
Dibenzofuran	**1**	**mg/kg**	**0.0094**	**0.026**
Diethylphthalate	1	mg/kg	0.037	ND
Dimethylphthalate	**1**	**mg/kg**	**0.037**	**0.038B**
Di-n-butylphthalate	1	mg/kg	0.019	ND
Di-n-octylphthalate	1	mg/kg	0.037	ND
Fluoranthene	**1**	**mg/kg**	**0.037**	**0.30**
Fluorene	1	mg/kg	0.037	ND
Hexachlorobenzene	1	mg/kg	0.037	ND
Hexachlorobutadiene	1	mg/kg	0.037	ND
Hexachlorocyclopentadiene	1	mg/kg	0.037	ND
Hexachloroethane	1	mg/kg	0.037	ND
Indeno[1,2,3-cd]pyrene	**1**	**mg/kg**	**0.037**	**0.091**
Isophorone	1	mg/kg	0.037	ND
Naphthalene	**1**	**mg/kg**	**0.0094**	**0.019**
Nitrobenzene	1	mg/kg	0.037	ND
N-Nitrosodimethylamine	1	mg/kg	0.037	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.0094	ND
N-Nitrosodiphenylamine	1	mg/kg	0.037	ND
Pentachlorophenol	1	mg/kg	0.063	ND
Phenanthrene	**1**	**mg/kg**	**0.037**	**0.30**
Phenol	1	mg/kg	0.037	ND
Pyrene	**1**	**mg/kg**	**0.037**	**0.32**

Semivolatile Organics + 25 (8270) Library Searches

Analyte	DF	Units	RT	Result
Hexadecanoic acid	**1**	**mg/kg**	**10.45**	**0.20J**
unknown	**1**	**mg/kg**	**11.96**	**0.10J**
5-Eicosene, (E)-	**1**	**mg/kg**	**12.8**	**0.38J**
3,5,7-Trimethoxy-2,8-dimethyldibenzopho	**1**	**mg/kg**	**13.33**	**0.29J**
1-Octadecene	**1**	**mg/kg**	**13.58**	**0.21J**
7-Tetradecyne	**1**	**mg/kg**	**13.7**	**0.39J**
unknown	**1**	**mg/kg**	**13.91**	**0.24J**
16-Octadecenal	**1**	**mg/kg**	**14.09**	**0.26J**
Cyclotetracosane	**1**	**mg/kg**	**14.33**	**0.78J**
Perylene	**1**	**mg/kg**	**14.46**	**0.12J**

Sample ID: BB-COMP-2-0801113
Lab#: AC73771-002
Matrix: Soil

Collection Date: 8/1/2013
Receipt Date: 8/1/2013

(Z)14-TRICOSENYL FORMATE	1	mg/kg	14.9	0.15J
Heneicosane	1	mg/kg	15.13	0.18J
Cyclohexane, 1,2-dimethyl-3-pentyl-4-pr	1	mg/kg	15.17	0.24J
unknown	1	mg/kg	15.88	0.17J
Ergost-5-en-3-ol, (3.beta.)-	1	mg/kg	16.03	0.13J
unknown	1	mg/kg	16.17	0.23J
3-Eicosene, (E)-	1	mg/kg	16.24	0.18J
unknown	1	mg/kg	4.16	1.4JB
2-Pentanone, 4-hydroxy-4-methyl-	1	mg/kg	4.49	47JAB
unknown	1	mg/kg	5.13	0.24JB
TotalSemiVolatileTic	1	mg/kg	NA	53J

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	220	9500
Antimony	1	mg/kg	2.2	ND
Arsenic	1	mg/kg	2.2	8.3
Barium	1	mg/kg	11	78
Beryllium	1	mg/kg	0.67	0.85
Cadmium	1	mg/kg	0.67	ND
Calcium	1	mg/kg	1100	2100
Chromium	1	mg/kg	5.6	18
Cobalt	1	mg/kg	2.8	8.1
Copper	1	mg/kg	5.6	36
Iron	1	mg/kg	220	17000
Lead	1	mg/kg	5.6	69
Magnesium	1	mg/kg	560	4300
Manganese	1	mg/kg	11	430
Nickel	1	mg/kg	5.6	16
Potassium	1	mg/kg	560	1200
Selenium	1	mg/kg	2.0	ND
Silver	1	mg/kg	1.7	ND
Sodium	1	mg/kg	280	ND
Thallium	1	mg/kg	1.3	ND
Vanadium	1	mg/kg	11	37
Zinc	1	mg/kg	11	76

TCLP Metals 6010

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.20	ND
Barium	1	mg/l	0.25	0.57
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.20	ND
Lead	1	mg/l	0.15	ND
Selenium	1	mg/l	0.20	ND
Silver	1	mg/l	0.050	ND

TOC (Region II/Kahn)

Analyte	DF	Units	RL	Result
Total Organic Carbon	1	mg/kg	1400	13000

Sample ID: BB-GRAB-5-0801113
Lab#: AC73771-003
Matrix: Soil/Encore

Collection Date: 8/1/2013
Receipt Date: 8/1/2013

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		90

Volatile Organics + 10 (8260)

Analyte	DF	Units	RL	Result
1,1,1,2-Tetrachloroethane	1.13	mg/kg	0.0025	ND
1,1,1-Trichloroethane	1.13	mg/kg	0.0025	ND
1,1,2,2-Tetrachloroethane	1.13	mg/kg	0.0025	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.13	mg/kg	0.0025	ND
1,1,2-Trichloroethane	1.13	mg/kg	0.0025	ND
1,1-Dichloroethane	1.13	mg/kg	0.0025	ND
1,1-Dichloroethene	1.13	mg/kg	0.0025	ND
1,2,3-Trichlorobenzene	1.13	mg/kg	0.0025	ND
1,2,4-Trichlorobenzene	1.13	mg/kg	0.0025	ND
1,2-Dibromo-3-chloropropane	1.13	mg/kg	0.0025	ND
1,2-Dibromoethane	1.13	mg/kg	0.0025	ND
1,2-Dichlorobenzene	1.13	mg/kg	0.0025	ND
1,2-Dichloroethane	1.13	mg/kg	0.0013	ND
1,2-Dichloropropane	1.13	mg/kg	0.0025	ND
1,3-Dichlorobenzene	1.13	mg/kg	0.0025	ND
1,4-Dichlorobenzene	1.13	mg/kg	0.0025	ND
1,4-Dioxane	1.13	mg/kg	0.13	ND
2-Butanone	1.13	mg/kg	0.0025	ND
2-Hexanone	1.13	mg/kg	0.0025	ND
4-Methyl-2-pentanone	1.13	mg/kg	0.0025	ND
Acetone	1.13	mg/kg	0.013	ND
Acrolein	1.13	mg/kg	0.013	ND
Acrylonitrile	1.13	mg/kg	0.0063	ND
Benzene	1.13	mg/kg	0.0013	ND
Bromochloromethane	1.13	mg/kg	0.0025	ND
Bromodichloromethane	1.13	mg/kg	0.0025	ND
Bromoform	1.13	mg/kg	0.0025	ND
Bromomethane	1.13	mg/kg	0.0025	ND
Carbon disulfide	1.13	mg/kg	0.0025	ND
Carbon tetrachloride	1.13	mg/kg	0.0025	ND
Chlorobenzene	1.13	mg/kg	0.0025	ND
Chloroethane	1.13	mg/kg	0.0025	ND
Chloroform	1.13	mg/kg	0.0025	ND
Chloromethane	1.13	mg/kg	0.0025	ND
cis-1,2-Dichloroethene	1.13	mg/kg	0.0025	ND
cis-1,3-Dichloropropene	1.13	mg/kg	0.0025	ND
Cyclohexane	1.13	mg/kg	0.0025	ND
Dibromochloromethane	1.13	mg/kg	0.0025	ND
Dichlorodifluoromethane	1.13	mg/kg	0.0025	ND
Ethylbenzene	1.13	mg/kg	0.0013	ND
Isopropylbenzene	1.13	mg/kg	0.0013	ND
m&p-Xylenes	1.13	mg/kg	0.0013	ND
Methyl Acetate	1.13	mg/kg	0.0025	ND
Methylcyclohexane	1.13	mg/kg	0.0025	ND
Methylene chloride	1.13	mg/kg	0.0025	ND
Methyl-t-butyl ether	1.13	mg/kg	0.0013	ND
o-Xylene	1.13	mg/kg	0.0013	ND
Styrene	1.13	mg/kg	0.0025	ND
t-Butyl Alcohol	1.13	mg/kg	0.013	ND
Tetrachloroethene	1.13	mg/kg	0.0025	ND

Sample ID: BB-GRAB-5-0801113
Lab#: AC73771-003
Matrix: Soil/Encore

Collection Date: 8/1/2013
Receipt Date: 8/1/2013

Toluene	1.13	mg/kg	0.0013	ND
trans-1,2-Dichloroethene	1.13	mg/kg	0.0025	ND
trans-1,3-Dichloropropene	1.13	mg/kg	0.0025	ND
Trichloroethene	1.13	mg/kg	0.0025	ND
Trichlorofluoromethane	1.13	mg/kg	0.0025	ND
Vinyl chloride	1.13	mg/kg	0.0025	ND
Xylenes (Total)	1.13	mg/kg	0.0013	ND

Volatile Organics + 10 (8260) Library Searches

Analyte	DF	Units	RT	Result
No Unknown Compounds Detected	1.13	mg/kg	NA	ND
TotalVolatileTic	1.13	mg/kg	NA	ND

Sample ID: BB-GRAB-10-0801113
Lab#: AC73771-004
Matrix: Soil/Encore

Collection Date: 8/1/2013
Receipt Date: 8/1/2013

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		85

Volatile Organics + 10 (8260)

Analyte	DF	Units	RL	Result
1,1,1,2-Tetrachloroethane	1.16	mg/kg	0.0027	ND
1,1,1-Trichloroethane	1.16	mg/kg	0.0027	ND
1,1,2,2-Tetrachloroethane	1.16	mg/kg	0.0027	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.16	mg/kg	0.0027	ND
1,1,2-Trichloroethane	1.16	mg/kg	0.0027	ND
1,1-Dichloroethane	1.16	mg/kg	0.0027	ND
1,1-Dichloroethene	1.16	mg/kg	0.0027	ND
1,2,3-Trichlorobenzene	1.16	mg/kg	0.0027	ND
1,2,4-Trichlorobenzene	1.16	mg/kg	0.0027	ND
1,2-Dibromo-3-chloropropane	1.16	mg/kg	0.0027	ND
1,2-Dibromoethane	1.16	mg/kg	0.0027	ND
1,2-Dichlorobenzene	1.16	mg/kg	0.0027	ND
1,2-Dichloroethane	1.16	mg/kg	0.0014	ND
1,2-Dichloropropane	1.16	mg/kg	0.0027	ND
1,3-Dichlorobenzene	1.16	mg/kg	0.0027	ND
1,4-Dichlorobenzene	1.16	mg/kg	0.0027	ND
1,4-Dioxane	1.16	mg/kg	0.14	ND
2-Butanone	1.16	mg/kg	0.0027	ND
2-Hexanone	1.16	mg/kg	0.0027	ND
4-Methyl-2-pentanone	1.16	mg/kg	0.0027	ND
Acetone	1.16	mg/kg	0.014	ND
Acrolein	1.16	mg/kg	0.014	ND
Acrylonitrile	1.16	mg/kg	0.0068	ND
Benzene	1.16	mg/kg	0.0014	ND
Bromochloromethane	1.16	mg/kg	0.0027	ND
Bromodichloromethane	1.16	mg/kg	0.0027	ND
Bromoform	1.16	mg/kg	0.0027	ND
Bromomethane	1.16	mg/kg	0.0027	ND
Carbon disulfide	1.16	mg/kg	0.0027	ND
Carbon tetrachloride	1.16	mg/kg	0.0027	ND
Chlorobenzene	1.16	mg/kg	0.0027	ND
Chloroethane	1.16	mg/kg	0.0027	ND
Chloroform	1.16	mg/kg	0.0027	ND
Chloromethane	1.16	mg/kg	0.0027	ND
cis-1,2-Dichloroethene	1.16	mg/kg	0.0027	ND
cis-1,3-Dichloropropene	1.16	mg/kg	0.0027	ND
Cyclohexane	1.16	mg/kg	0.0027	ND
Dibromochloromethane	1.16	mg/kg	0.0027	ND
Dichlorodifluoromethane	1.16	mg/kg	0.0027	ND
Ethylbenzene	1.16	mg/kg	0.0014	ND
Isopropylbenzene	1.16	mg/kg	0.0014	ND
m&p-Xylenes	1.16	mg/kg	0.0014	ND
Methyl Acetate	1.16	mg/kg	0.0027	ND
Methylcyclohexane	1.16	mg/kg	0.0027	ND
Methylene chloride	1.16	mg/kg	0.0027	ND
Methyl-t-butyl ether	1.16	mg/kg	0.0014	ND
o-Xylene	1.16	mg/kg	0.0014	ND
Styrene	1.16	mg/kg	0.0027	ND
t-Butyl Alcohol	1.16	mg/kg	0.014	ND
Tetrachloroethene	1.16	mg/kg	0.0027	ND

Sample ID: BB-GRAB-10-0801113
Lab#: AC73771-004
Matrix: Soil/Encore

Collection Date: 8/1/2013
Receipt Date: 8/1/2013

Toluene	1.16	mg/kg	0.0014	ND
trans-1,2-Dichloroethene	1.16	mg/kg	0.0027	ND
trans-1,3-Dichloropropene	1.16	mg/kg	0.0027	ND
Trichloroethene	1.16	mg/kg	0.0027	ND
Trichlorofluoromethane	1.16	mg/kg	0.0027	ND
Vinyl chloride	1.16	mg/kg	0.0027	ND
Xylenes (Total)	1.16	mg/kg	0.0014	ND

Volatile Organics + 10 (8260) Library Searches

Analyte	DF	Units	RT	Result
unknown	**1.16**	**mg/kg**	**2.83**	**0.0061J**
TotalVolatileTic	**1.16**	**mg/kg**	**NA**	**0.0061J**

HCV Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

MDL = Method Detection Limit

RL* = Reporting Limit

ND = Not Detected

RT = Retention Time

NA = Not Applicable

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

B- Indicates analyte was present in the Method Blank and sample.

d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.

E- Indicates the concentration exceeded the upper calibration range of the instrument.

J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

Laboratory Chronicle

Client: PORT AUTHORITY OF NY & NJ **HCV Project #:** 3080110

Project: BayonneBridge-NY-Perfetto

Lab#: AC73771-001 **Sample ID: BB-COMP-1-0801113**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	8/2/13 00:00	melissa
Cr (Hexavalent) 7196A	EPA 3060A	08/06/13	BCT	EPA 7196A	8/6/13 14:01	BCT/JW
Cyanide (Soil/Waste) 9012B	EPA 9012B	08/05/13	Melissa	EPA 9012B	8/5/13 14:14	af
Eh		08/02/13	sn	SM 2580	8/2/13 00:00	sn
Ignitability (1010 modified)				EPA 1010	8/1/13 00:00	sdl
Mercury (Soil/Waste) 7471A	EPA 7471A	08/06/13	Olufemi	EPA 7471A	8/6/13 16:58	OA
Mercury (TCLP) 7470A	EPA 7470A	08/05/13	Julijana	EPA 7470A	8/6/13 13:10	OA
NJ EPH Category 1	EPA3510/3545	08/02/13	dyr/jessica	NJEPHRev3A	8/3/13 21:47	KD/RAK/MS
NJ EPH Category 2	EPA3510/3545	08/02/13	dyr/jessica	NJEPHRev3B	8/3/13 21:47	KD/RAK/MS
Organochlorine Pesticides 8081	3510C/3550B	08/02/13	lmilteer	EPA 8081A	8/5/13 11:29	MS
PCB 8082	3510C/3550B	08/02/13	lmilteer	EPA 8082	8/2/13 13:11	MS
pH 9040C/9045D		08/02/13	sn	9040C/9045D	8/2/13 10:35	sn
Reactive Cyanide	SW846 7.3.3	08/01/13	hossain	SW846 7.3.3	8/5/13 11:00	af
Reactive Sulfide	SW846 7.3.4	08/01/13	HS	SW846 7.3.4	8/2/13 00:00	BCT
Semivolatile Organics + 25 (8270)	3510C/3550B	08/02/13	hj	EPA 8270C	8/2/13 18:49	AHD/JB
TAL Metals 6010	3005&10/3050	08/02/13	aadewusi	EPA 6010B	8/6/13 15:37	OA
TAL Metals 6010	3005&10/3050	08/02/13	aadewusi	EPA 6010B	8/2/13 19:36	OA
TCLP Metals 6010	3005&10/3050	08/05/13	Julijana	EPA 6010B	8/5/13 17:58	SRB
TCLP Metals Extraction 1311	EPA 1311	08/01/13	Ramos		8/2/13 00:00	Ramos
TOC (Region II/Kahn)		08/14/13	Anthony	EPA Kahn	8/14/13 00:00	Anthony

Lab#: AC73771-002 **Sample ID: BB-COMP-2-0801113**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	8/2/13 00:00	melissa
Cr (Hexavalent) 7196A	EPA 3060A	08/06/13	BCT	EPA 7196A	8/6/13 14:02	BCT/JW
Cyanide (Soil/Waste) 9012B	EPA 9012B	08/05/13	Melissa	EPA 9012B	8/5/13 14:22	af
Eh		08/02/13	sn	SM 2580	8/2/13 00:00	sn
Ignitability (1010 modified)				EPA 1010	8/1/13 00:00	sdl
Mercury (Soil/Waste) 7471A	EPA 7471A	08/06/13	Olufemi	EPA 7471A	8/6/13 16:52	OA
Mercury (TCLP) 7470A	EPA 7470A	08/05/13	Julijana	EPA 7470A	8/6/13 13:23	OA
NJ EPH Category 1	EPA3510/3545	08/02/13	dyr/jessica	NJEPHRev3A	8/3/13 22:17	KD/RAK/MS
NJ EPH Category 2	EPA3510/3545	08/02/13	dyr/jessica	NJEPHRev3B	8/3/13 22:17	KD/RAK/MS
Organochlorine Pesticides 8081	3510C/3550B	08/02/13	lmilteer	EPA 8081A	8/5/13 11:47	MS
PCB 8082	3510C/3550B	08/02/13	lmilteer	EPA 8082	8/2/13 13:26	MS
pH 9040C/9045D		08/02/13	sn	9040C/9045D	8/2/13 10:35	sn
Reactive Cyanide	SW846 7.3.3	08/01/13	hossain	SW846 7.3.3	8/5/13 11:02	af
Reactive Sulfide	SW846 7.3.4	08/01/13	HS	SW846 7.3.4	8/2/13 00:00	BCT
Semivolatile Organics + 25 (8270)	3510C/3550B	08/02/13	hj	EPA 8270C	8/2/13 19:12	AHD/JB
TAL Metals 6010	3005&10/3050	08/02/13	aadewusi	EPA 6010B	8/2/13 19:07	OA
TAL Metals 6010	3005&10/3050	08/02/13	aadewusi	EPA 6010B	8/6/13 15:14	OA
TCLP Metals 6010	3005&10/3050	08/05/13	Julijana	EPA 6010B	8/5/13 18:40	SRB
TCLP Metals Extraction 1311	EPA 1311	08/01/13	Ramos		8/2/13 00:00	Ramos
TOC (Region II/Kahn)		08/14/13	Anthony	EPA Kahn	8/14/13 00:00	Anthony

Laboratory Chronicle

Client: PORT AUTHORITY OF NY & NJ

HCV Project #: 3080110

Project: BayonneBridge-NY-Perfetto

Lab#: AC73771-003 **Sample ID: BB-GRAB-5-0801113**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	8/2/13 00:00	melissa
Volatile Organics + 10 (8260)	EPA5030/5035			EPA 8260B	8/5/13 11:27	SG

Lab#: AC73771-004 **Sample ID: BB-GRAB-10-0801113**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	8/2/13 00:00	melissa
Volatile Organics + 10 (8260)	EPA5030/5035			EPA 8260B	8/5/13 11:11	SG

Chain of Custody

3080110 0021

HE PORT AUTHORITY OF NY & NJ

Materials Engineering Division - 241 Erie Street, Room 234

Jersey City, NJ 07310

Chain-of-Custody

PAGE _1_ OF _1_ PA PROJECT SDG NO__

3080110

Contact Name	Dorian Bailey / Angelos Zafirelis
Contact Phone No.	201-216-2963 / 201-216-2960
Contact Fax No.	201-216-2158
Contact Email	dbailey@PANYNJ.gov / azafirel@PANYNJ.gov
Destination Laboratory:	HC-V
Lab Case/SDG:	

Facility	Bayonne Bridge - NY
Project Info.	2 Additional Soil Piles at BB - NY Side
Charge Code #	B06-264.054

EQUIS Sys_Sample_Code	Contract Lab Sample ID	Date of Collection	Time of Collection	Geotech Cross ID	# of Containers	Preservative Code (MeOH No.)	Grab or Composite	Cat#1 HZ EPH TCL Bnas+20 (X)	Ignitability, Corrosivity, Reactivity	TCL - VO + 10 (X)	Total Cyanide	TAL Metals & Hexavalent Chromium and Mercury	TCLP Metals (8), PCBs, Pesticides (X)	Equis / PDF
	AC73771													
BB-COMP-1-080113	Lab composites Grabs 1-5	8/1/2013	0:00	001	5		COMP	X	X		X	X	X	X
BB-COMP-2-080113	Lab composites Grabs 6-10	8/1/2013	0:00	002	5		COMP	X	X		X	X	X	X
BB-GRAB-5-080113	EnCore	8/1/2013	8:17	003	1		GRAB			X				
BB-GRAB-10-080113	EnCore	8/1/2013	8:35	004	1		GRAB			X				

Sampled By: MM
Sampling Method: Spoon

Preservatives:
1. Ice 2. HCl 3. HNO3
4. NaOH 5. MeOH 6. H2SO4

TAT: 72 Hour
(*) TCL+30 + NYDEP SCC List + SRS List

Deliverables: Data Summary

Relinquished By: [signature] Date: 8/1/13 Received By: [signature] Date: 8/1/13 13:32

Relinquished By: John Burwell Date: 8/1/13 14:24 Received By: [signature] Date: 8/1/13 1424

3.0°

CONDITION UPON RECEIPT

Batch Number AC73771

Entered By: Frantz
Date Entered 8/1/2013 2:31:00 PM

1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	Yes	Are the COC seals intact?
4	Yes	Please specify the Temperature inside the container (in degC) 3.0
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	Yes	Do the contents match the COC? If no, specify
10	Yes	Is there enough sample sent for the analyses listed on the COC? If no, specify:
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify
14	NA	Corrective actions (Specify item number and corrective action taken).

Internal Chain of Custody

3080110 0023

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AC73771-001	08/01/13 14:24	FRAN	0	M	Received
AC73771-001	08/01/13 14:31	FRAN	0	M	Login
AC73771-001	08/01/13 15:21	SDL	1	A	mixing/ignit mod
AC73771-001	08/01/13 17:57	R12	1	A	NONE
AC73771-001	08/01/13 18:34	RAMO	1	A	tclp
AC73771-001	08/01/13 18:34	RAMO	1	A	r12
AC73771-001	08/02/13 04:42	LMILT	1	A	p/p
AC73771-001	08/02/13 04:42	R12	1	A	NONE
AC73771-001	08/02/13 07:12	HJ	1	A	bn
AC73771-001	08/02/13 07:13	R12	1	A	NONE
AC73771-001	08/02/13 08:35	DYR/J	1	A	eph
AC73771-001	08/02/13 09:07	SN	1	A	Eh/pH
AC73771-001	08/02/13 10:41	AM	1	A	tdsi/hg
AC73771-001	08/02/13 10:41	AM	1	A	r12
AC73771-001	08/05/13 07:37	DYR/J	1	A	eph
AC73771-001	08/05/13 09:16	MD	1	A	CN S 9012
AC73771-001	08/05/13 11:24	R12	1	A	NONE
AC73771-001	08/05/13 15:21	R12	1	A	NONE
AC73771-001	08/06/13 09:04	BCT	1	A	cr6 s
AC73771-001	08/06/13 15:38	OA	1	A	tdshg
AC73771-001	08/06/13 15:41	R12	1	A	NONE
AC73771-001	08/14/13 06:39	ANTH	1	A	toc-kahn
AC73771-001	08/14/13 08:34	R12	1	A	NONE
AC73771-002	08/01/13 14:24	FRAN	0	M	Received
AC73771-002	08/01/13 14:31	FRAN	0	M	Login
AC73771-002	08/01/13 15:21	SDL	1	A	mixing/ignit mod
AC73771-002	08/01/13 17:57	R12	1	A	NONE
AC73771-002	08/01/13 18:34	RAMO	1	A	tclp
AC73771-002	08/01/13 18:34	RAMO	1	A	r12
AC73771-002	08/02/13 04:42	R12	1	A	NONE
AC73771-002	08/02/13 04:42	LMILT	1	A	p/p
AC73771-002	08/02/13 07:12	HJ	1	A	bn
AC73771-002	08/02/13 07:13	R12	1	A	NONE
AC73771-002	08/02/13 08:35	DYR/J	1	A	eph
AC73771-002	08/02/13 09:07	SN	1	A	Eh/pH
AC73771-002	08/02/13 10:41	AM	1	A	tdsi/hg
AC73771-002	08/02/13 10:41	AM	1	A	r12
AC73771-002	08/05/13 07:37	DYR/J	1	A	eph
AC73771-002	08/05/13 09:16	MD	1	A	CN S 9012
AC73771-002	08/05/13 11:24	R12	1	A	NONE
AC73771-002	08/05/13 15:21	R12	1	A	NONE
AC73771-002	08/06/13 09:04	BCT	1	A	cr6 s
AC73771-002	08/06/13 15:38	OA	1	A	tdshg
AC73771-002	08/06/13 15:41	R12	1	A	NONE
AC73771-002	08/14/13 06:39	ANTH	1	A	toc-kahn
AC73771-002	08/14/13 08:34	R12	1	A	NONE
AC73771-003	08/01/13 14:24	FRAN	0	M	Received
AC73771-003	08/01/13 14:31	FRAN	0	M	Login
AC73771-003	08/01/13 22:16	PA	2	A	mixing
AC73771-003	08/01/13 22:17	R12	2	A	NONE
AC73771-003	08/02/13 07:58	HS	2	A	% SOLIDS
AC73771-003	08/02/13 11:58	R12	2	A	NONE
AC73771-003	08/02/13 15:50	R31	3	A	NONE
AC73771-003	08/05/13 10:41	A BM	3	A	voa
AC73771-003	08/05/13 10:42	R31	3	A	NONE
AC73771-003	08/02/13 15:51	F19	4	A	none
AC73771-003	08/02/13 15:51	F19	5	A	none
AC73771-003	08/05/13 10:58	WP	5	A	VOA
AC73771-003	08/02/13 15:51	F19	6	A	none
AC73771-003	08/02/13 15:51	F19	7	A	none
AC73771-004	08/01/13 14:24	FRAN	0	M	Received
AC73771-004	08/01/13 14:31	FRAN	0	M	Login
AC73771-004	08/01/13 22:16	PA	2	A	mixing
AC73771-004	08/01/13 22:17	R12	2	A	NONE
AC73771-004	08/02/13 07:58	HS	2	A	% SOLIDS
AC73771-004	08/02/13 11:58	R12	2	A	NONE
AC73771-004	08/02/13 15:50	R31	3	A	NONE
AC73771-004	08/05/13 10:41	A BM	3	A	voa
AC73771-004	08/05/13 10:42	R31	3	A	NONE
AC73771-004	08/02/13 15:51	F19	4	A	none
AC73771-004	08/02/13 15:51	F19	5	A	none
AC73771-004	08/05/13 10:58	WP	5	A	VOA
AC73771-004	08/02/13 15:51	F19	6	A	none
AC73771-004	08/02/13 15:51	F19	7	A	none

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Volatile Data

Form1

ORGANICS VOLATILE REPORT

Sample Number: AC73771-003
Client Id: BB-GRAB-5-0801113
Data File: 6M00540.D
Analysis Date: 08/05/13 11:27
Date Rec/Extracted: 08/01/13-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260B
Matrix: Soil
Initial Vol: 4.44g
Final Vol: NA
Dilution: 1.13
Solids: 90

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
630-20-6	1,1,1,2-Tetrachloroethane	0.0025	U	75-15-0	Carbon Disulfide	0.0025	U
71-55-6	1,1,1-Trichloroethane	0.0025	U	56-23-5	Carbon Tetrachloride	0.0025	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0025	U	108-90-7	Chlorobenzene	0.0025	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0025	U	75-00-3	Chloroethane	0.0025	U
79-00-5	1,1,2-Trichloroethane	0.0025	U	67-66-3	Chloroform	0.0025	U
75-34-3	1,1-Dichloroethane	0.0025	U	74-87-3	Chloromethane	0.0025	U
75-35-4	1,1-Dichloroethene	0.0025	U	156-59-2	cis-1,2-Dichloroethene	0.0025	U
87-61-6	1,2,3-Trichlorobenzene	0.0025	U	10061-01-5	cis-1,3-Dichloropropene	0.0025	U
120-82-1	1,2,4-Trichlorobenzene	0.0025	U	110-82-7	Cyclohexane	0.0025	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0025	U	124-48-1	Dibromochloromethane	0.0025	U
106-93-4	1,2-Dibromoethane	0.0025	U	75-71-8	Dichlorodifluoromethane	0.0025	U
95-50-1	1,2-Dichlorobenzene	0.0025	U	100-41-4	Ethylbenzene	0.0013	U
107-06-2	1,2-Dichloroethane	0.0013	U	98-82-8	Isopropylbenzene	0.0013	U
78-87-5	1,2-Dichloropropane	0.0025	U	136777612	m&p-Xylenes	0.0013	U
541-73-1	1,3-Dichlorobenzene	0.0025	U	79-20-9	Methyl Acetate	0.0025	U
106-46-7	1,4-Dichlorobenzene	0.0025	U	108-87-2	Methylcyclohexane	0.0025	U
123-91-1	1,4-Dioxane	0.13	U	75-09-2	Methylene Chloride	0.0025	U
78-93-3	2-Butanone	0.0025	U	1634-04-4	Methyl-t-butyl ether	0.0013	U
591-78-6	2-Hexanone	0.0025	U	95-47-6	o-Xylene	0.0013	U
108-10-1	4-Methyl-2-Pentanone	0.0025	U	100-42-5	Styrene	0.0025	U
67-64-1	Acetone	0.013	U	75-65-0	t-Butyl Alcohol	0.013	U
107-02-8	Acrolein	0.013	U	127-18-4	Tetrachloroethene	0.0025	U
107-13-1	Acrylonitrile	0.0063	U	108-88-3	Toluene	0.0013	U
71-43-2	Benzene	0.0013	U	156-60-5	trans-1,2-Dichloroethene	0.0025	U
74-97-5	Bromochloromethane	0.0025	U	10061-02-6	trans-1,3-Dichloropropene	0.0025	U
75-27-4	Bromodichloromethane	0.0025	U	79-01-6	Trichloroethene	0.0025	U
75-25-2	Bromoform	0.0025	U	75-69-4	Trichlorofluoromethane	0.0025	U
74-83-9	Bromomethane	0.0025	U	75-01-4	Vinyl Chloride	0.0025	U
1330-20-7	Xylenes (Total)	0.0013	U				

Worksheet #: 272480

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number:	AC73771-003	Matrix:	Soil
Client Id:	BB-GRAB-5-0801113	Initial Vol:	4.44g
Data File:	6M00540.D	Final Vol:	NA
Analysis Date:	08/05/13 11:27	Dilution:	1.13
Date Rec/Extracted:	08/01/13-NA	Solids:	90
		Method:	EPA 8260B

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		No Unknown Compounds Detected	0.00	0 J

Worksheet #: 272480

Total Tentatively Identified Concentration 0

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

3080110 0027

SampleID : AC73771-003 Operator : SG Qt Meth : 6M_S0718.M
Data File: 6M00540.D Sam Mult : 1 Vial# : 20 Qt On : 08/05/13 11:53
Acq On : 08/ 5/13 11:27 Misc : S,5G!5 Qt Upd On: 07/18/13 12:17

Data Path : G:\GcMsData\2013\GCMS_6\Data\08-05-13\
Qt Path : G:\GcMsData\2013\GCMS_6\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.527	96	306070	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.096	117	185031	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.334	152	73360	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.118	111	82833	30.29	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.97%	
39) 1,2-Dichloroethane-d4	4.328	67	28661	30.98	ug/l	0.00
Spiked Amount 30.000			Recovery	=	103.27%	
66) Toluene-d8	5.356	98	288567	29.68	ug/l	0.00
Spiked Amount 30.000			Recovery	=	98.93%	
76) Bromofluorobenzene	6.703	174	73467	35.39	ug/l	0.00
Spiked Amount 30.000			Recovery	=	117.97%	
Target Compounds						Qvalue
Library Search Internal Standards TIC Results						
1) Fluorobenzene	4.527		631964	30.00	ug/l	--
2) Chlorobenzene-d5	6.096		632690	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	7.334		439213	30.00	ug/l	--
Library Search Compounds						

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

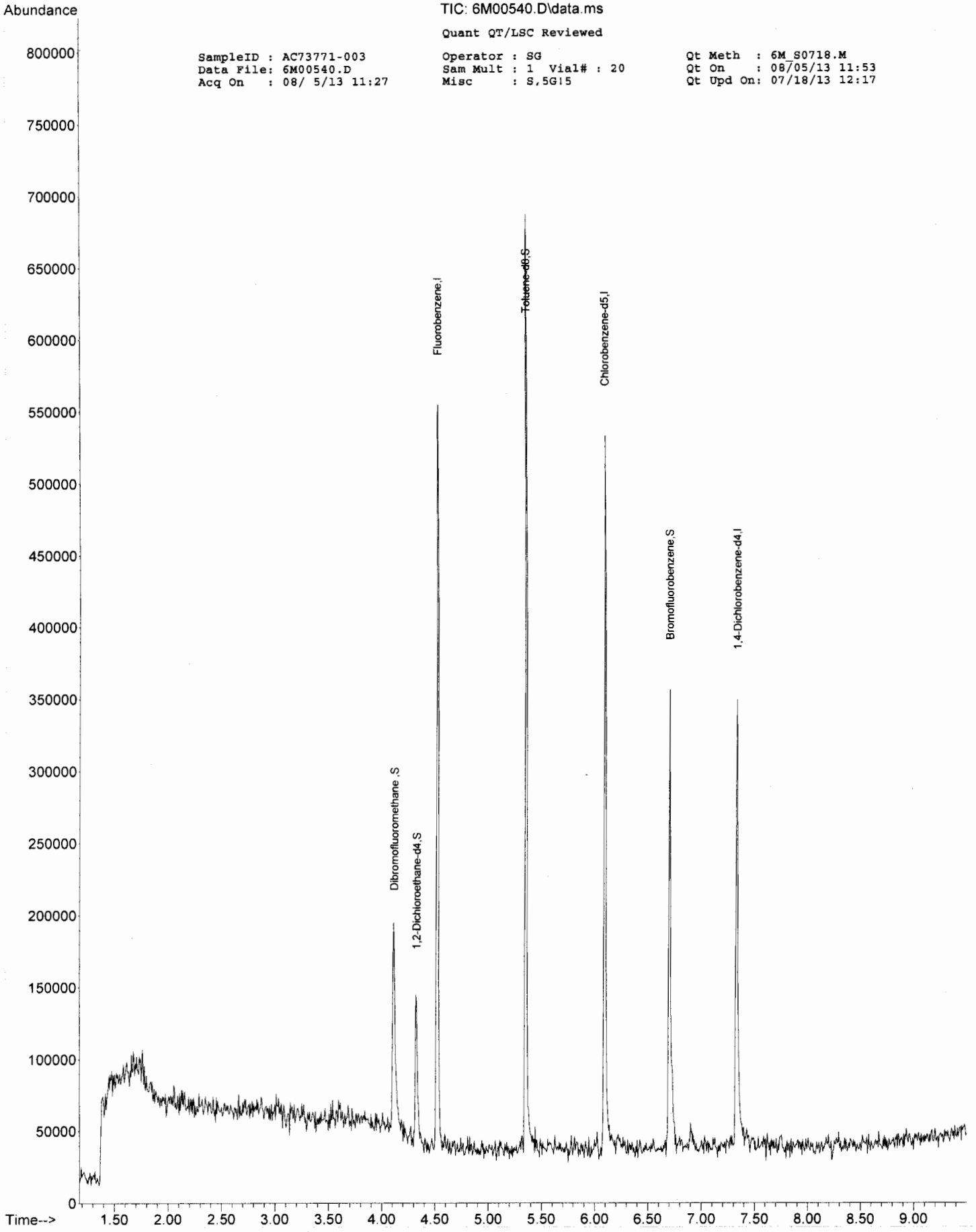
TIC: 6M00540.D\data.ms

Quant QT/LSC Reviewed

SampleID : AC73771-003
Data File: 6M00540.D
Acq On : 08/ 5/13 11:27

Operator : SG
Sam Mult : 1 Vial# : 20
Misc : S,5G!5

Qt Meth : 6M_S0718.M
Qt On : 08/05/13 11:53
Qt Upd On: 07/18/13 12:17



Form1

ORGANICS VOLATILE REPORT

Sample Number: AC73771-004
Client Id: BB-GRAB-10-0801113
Data File: 6M00539.D
Analysis Date: 08/05/13 11:11
Date Rec/Extracted: 08/01/13-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260B
Matrix: Soil
Initial Vol: 4.31g
Final Vol: NA
Dilution: 1.16
Solids: 85

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
630-20-6	1,1,1,2-Tetrachloroethane	0.0027	U	75-15-0	Carbon Disulfide	0.0027	U
71-55-6	1,1,1-Trichloroethane	0.0027	U	56-23-5	Carbon Tetrachloride	0.0027	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0027	U	108-90-7	Chlorobenzene	0.0027	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0027	U	75-00-3	Chloroethane	0.0027	U
79-00-5	1,1,2-Trichloroethane	0.0027	U	67-66-3	Chloroform	0.0027	U
75-34-3	1,1-Dichloroethane	0.0027	U	74-87-3	Chloromethane	0.0027	U
75-35-4	1,1-Dichloroethene	0.0027	U	156-59-2	cis-1,2-Dichloroethene	0.0027	U
87-61-6	1,2,3-Trichlorobenzene	0.0027	U	10061-01-5	cis-1,3-Dichloropropene	0.0027	U
120-82-1	1,2,4-Trichlorobenzene	0.0027	U	110-82-7	Cyclohexane	0.0027	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0027	U	124-48-1	Dibromochloromethane	0.0027	U
106-93-4	1,2-Dibromoethane	0.0027	U	75-71-8	Dichlorodifluoromethane	0.0027	U
95-50-1	1,2-Dichlorobenzene	0.0027	U	100-41-4	Ethylbenzene	0.0014	U
107-06-2	1,2-Dichloroethane	0.0014	U	98-82-8	Isopropylbenzene	0.0014	U
78-87-5	1,2-Dichloropropane	0.0027	U	136777612	m&p-Xylenes	0.0014	U
541-73-1	1,3-Dichlorobenzene	0.0027	U	79-20-9	Methyl Acetate	0.0027	U
106-46-7	1,4-Dichlorobenzene	0.0027	U	108-87-2	Methylcyclohexane	0.0027	U
123-91-1	1,4-Dioxane	0.14	U	75-09-2	Methylene Chloride	0.0027	U
78-93-3	2-Butanone	0.0027	U	1634-04-4	Methyl-t-butyl ether	0.0014	U
591-78-6	2-Hexanone	0.0027	U	95-47-6	o-Xylene	0.0014	U
108-10-1	4-Methyl-2-Pentanone	0.0027	U	100-42-5	Styrene	0.0027	U
67-64-1	Acetone	0.014	U	75-65-0	t-Butyl Alcohol	0.014	U
107-02-8	Acrolein	0.014	U	127-18-4	Tetrachloroethene	0.0027	U
107-13-1	Acrylonitrile	0.0068	U	108-88-3	Toluene	0.0014	U
71-43-2	Benzene	0.0014	U	156-60-5	trans-1,2-Dichloroethene	0.0027	U
74-97-5	Bromochloromethane	0.0027	U	10061-02-6	trans-1,3-Dichloropropene	0.0027	U
75-27-4	Bromodichloromethane	0.0027	U	79-01-6	Trichloroethene	0.0027	U
75-25-2	Bromoform	0.0027	U	75-69-4	Trichlorofluoromethane	0.0027	U
74-83-9	Bromomethane	0.0027	U	75-01-4	Vinyl Chloride	0.0027	U
1330-20-7	Xylenes (Total)	0.0014	U				

Worksheet #: 272480

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number:	AC73771-004	Matrix:	Soil
Client Id:	BB-GRAB-10-0801113	Initial Vol:	4.31g
Data File:	6M00539.D	Final Vol:	NA
Analysis Date:	08/05/13 11:11	Dilution:	1.16
Date Rec/Extracted:	08/01/13-NA	Solids:	85
		Method:	EPA 8260B

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	2.83	0.0061 J

Worksheet #: 272480

Total Tentatively Identified Concentration 0.0061

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

3080110 0031

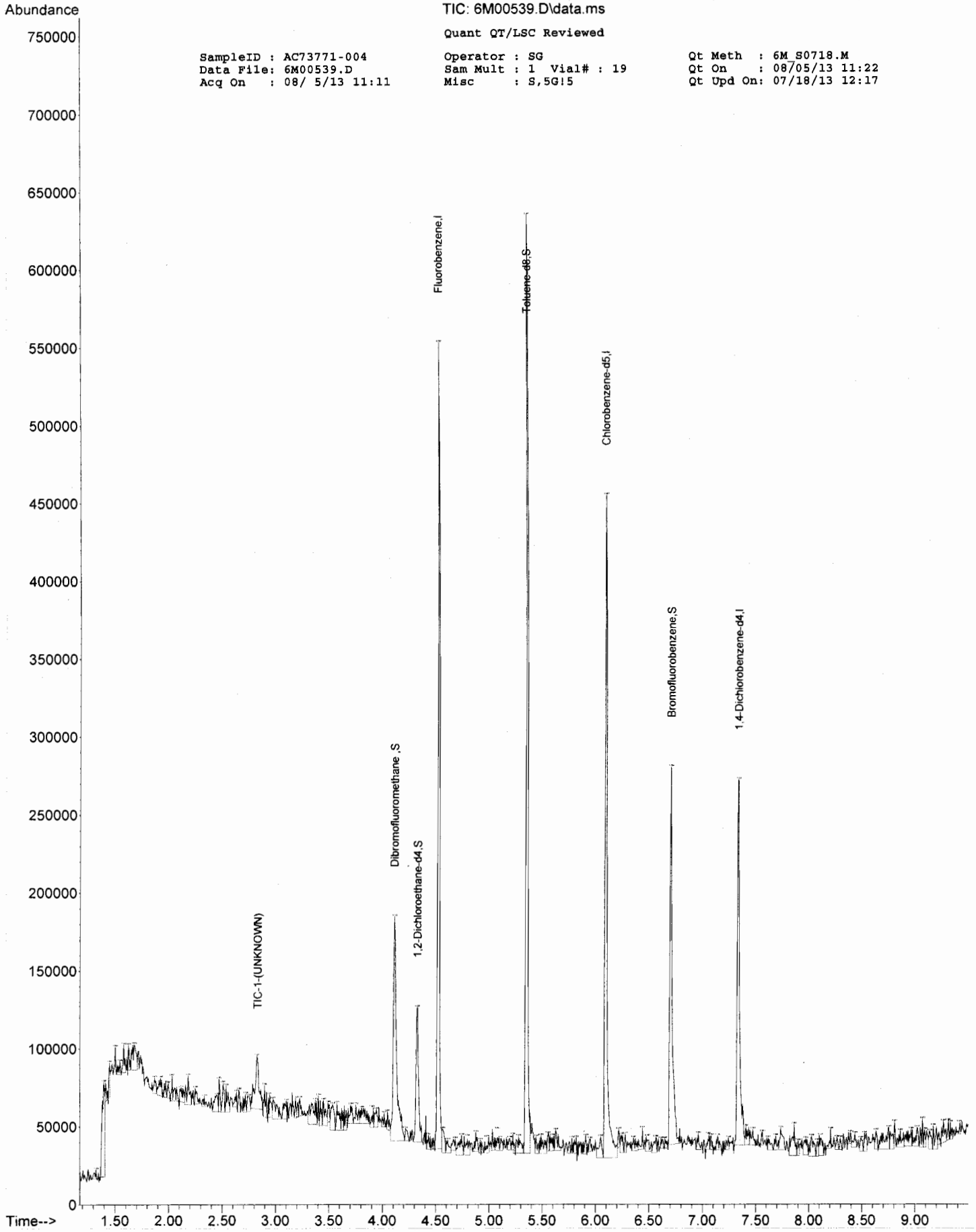
SampleID : AC73771-004 Operator : SG Qt Meth : 6M_S0718.M
Data File: 6M00539.D Sam Mult : 1 Vial# : 19 Qt On : 08/05/13 11:22
Acq On : 08/ 5/13 11:11 Misc : S,5G!5 Qt Upd On: 07/18/13 12:17

Data Path : G:\GcMsData\2013\GCMS_6\Data\08-05-13\
Qt Path : G:\GcMsData\2013\GCMS_6\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.522	96	284129	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.097	117	159446	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.335	152	69814	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.113	111	71387	28.12	ug/l	0.00
Spiked Amount 30.000			Recovery = 93.73%			
39) 1,2-Dichloroethane-d4	4.329	67	24321	28.32	ug/l	0.00
Spiked Amount 30.000			Recovery = 94.40%			
66) Toluene-d8	5.351	98	272404	32.51	ug/l	0.00
Spiked Amount 30.000			Recovery = 108.37%			
76) Bromofluorobenzene	6.704	174	63112	31.95	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.50%			
Target Compounds						Qvalue
Library Search Internal Standards TIC Results						
1) Fluorobenzene	4.522		632262	30.00	ug/l	--
2) Chlorobenzene-d5	6.097		586705	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	7.335		419501	30.00	ug/l	--
Library Search Compounds						
1) UNKNOWN	2.830		94954	4.51	ug/l	--

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

Vu


Abundance
TIC: 6M00539.D\data.ms
Quant QT/LSC Reviewed
SampleID : AC73771-004
Data File: 6M00539.D
Acq On : 08/ 5/13 11:11
Operator : SG
Sam Mult : 1 Vial# : 19
Misc : S,5G!5
Qt Meth : 6M_S0718.M
Qt On : 08/05/13 11:22
Qt Upd On: 07/18/13 12:17
750000
700000
650000
600000
550000
500000
450000
400000
350000
300000
250000
200000
150000
100000
50000
0
TIC-1-(UNKNOWN)
Dibromofluoromethane ,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->
1.50
2.00
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
8.00
8.50
9.00

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 6M00529.D
Analysis Date: 08/05/13 08:26
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260B
Matrix: Soil
Initial Vol: 5g
Final Vol: NA
Dilution: 1.00
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
630-20-6	1,1,1,2-Tetrachloroethane	0.0020	U	75-15-0	Carbon Disulfide	0.0020	U
71-55-6	1,1,1-Trichloroethane	0.0020	U	56-23-5	Carbon Tetrachloride	0.0020	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0020	U	108-90-7	Chlorobenzene	0.0020	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0020	U	75-00-3	Chloroethane	0.0020	U
79-00-5	1,1,2-Trichloroethane	0.0020	U	67-66-3	Chloroform	0.0020	U
75-34-3	1,1-Dichloroethane	0.0020	U	74-87-3	Chloromethane	0.0020	U
75-35-4	1,1-Dichloroethene	0.0020	U	156-59-2	cis-1,2-Dichloroethene	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	0.0020	U	10061-01-5	cis-1,3-Dichloropropene	0.0020	U
120-82-1	1,2,4-Trichlorobenzene	0.0020	U	110-82-7	Cyclohexane	0.0020	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0020	U	124-48-1	Dibromochloromethane	0.0020	U
106-93-4	1,2-Dibromoethane	0.0020	U	75-71-8	Dichlorodifluoromethane	0.0020	U
95-50-1	1,2-Dichlorobenzene	0.0020	U	100-41-4	Ethylbenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.0010	U	98-82-8	Isopropylbenzene	0.0010	U
78-87-5	1,2-Dichloropropane	0.0020	U	136777612	m&p-Xylenes	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.0020	U	79-20-9	Methyl Acetate	0.0020	U
106-46-7	1,4-Dichlorobenzene	0.0020	U	108-87-2	Methylcyclohexane	0.0020	U
123-91-1	1,4-Dioxane	0.10	U	75-09-2	Methylene Chloride	0.0020	U
78-93-3	2-Butanone	0.0020	U	1634-04-4	Methyl-t-butyl ether	0.0010	U
591-78-6	2-Hexanone	0.0020	U	95-47-6	o-Xylene	0.0010	U
108-10-1	4-Methyl-2-Pentanone	0.0020	U	100-42-5	Styrene	0.0020	U
67-64-1	Acetone	0.010	U	75-65-0	t-Butyl Alcohol	0.010	U
107-02-8	Acrolein	0.010	U	127-18-4	Tetrachloroethene	0.0020	U
107-13-1	Acrylonitrile	0.0050	U	108-88-3	Toluene	0.0010	U
71-43-2	Benzene	0.0010	U	156-60-5	trans-1,2-Dichloroethene	0.0020	U
74-97-5	Bromochloromethane	0.0020	U	10061-02-6	trans-1,3-Dichloropropene	0.0020	U
75-27-4	Bromodichloromethane	0.0020	U	79-01-6	Trichloroethene	0.0020	U
75-25-2	Bromoform	0.0020	U	75-69-4	Trichlorofluoromethane	0.0020	U
74-83-9	Bromomethane	0.0020	U	75-01-4	Vinyl Chloride	0.0020	U

Worksheet #: 272480 ***Total Target Concentration*** 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number:	DAILY BLANK	Matrix:	Soil
Client Id:		Initial Vol:	5g
Data File:	6M00529.D	Final Vol:	NA
Analysis Date:	08/05/13 08:26	Dilution:	1.00
Date Rec/Extracted:		Solids:	100
		Method:	EPA 8260B

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		No Unknown Compounds Detected	0.00	0 J

Worksheet #: 272480

Total Tentatively Identified Concentration 0

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

3080110 0035

SampleID : DAILY BLANK
Data File: 6M00529.D
Acq On : 08/ 5/13 08:26

Operator : SG
Sam Mult : 1 Vial# : 9
Misc : S,5G

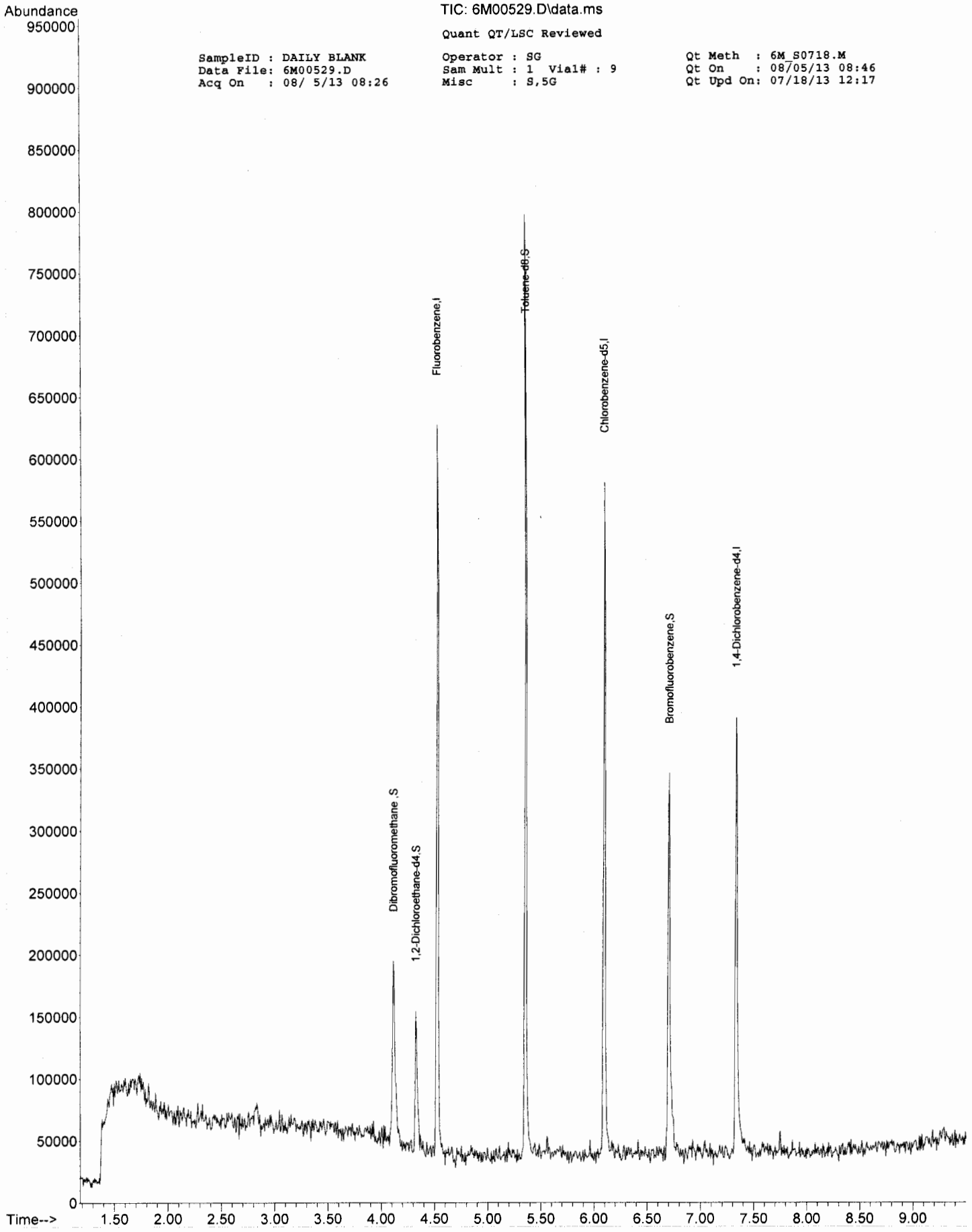
Qt Meth : 6M_S0718.M
Qt On : 08/05/13 08:46
Qt Upd On: 07/18/13 12:17

Data Path : G:\GcMsData\2013\GCMS_6\Data\08-05-13\
Qt Path : G:\GcMsData\2013\GCMS_6\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.522	96	339016	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.097	117	213465	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.329	152	86903	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.113	111	83228	27.47	ug/l	0.00
Spiked Amount 30.000			Recovery = 91.57%			
39) 1,2-Dichloroethane-d4	4.324	67	31514	30.75	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.50%			
66) Toluene-d8	5.358	98	331456	29.55	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.50%			
76) Bromofluorobenzene	6.704	174	72661	29.55	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.50%			
Target Compounds						Qvalue
Library Search Internal Standards TIC Results						
1) Fluorobenzene	4.522		739030	30.00	ug/l	--
2) Chlorobenzene-d5	6.097		642861	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	7.329		543323	30.00	ug/l	--
Library Search Compounds						

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

Dr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TIC: 6M00529.D\data.ms
Quant QT/LSC Reviewed
SampleID : DAILY BLANK
Data File: 6M00529.D
Acq On : 08/ 5/13 08:26
Operator : SG
Sam Mult : 1 Vial# : 9
Misc : S,5G
Qt Meth : 6M_S0718.M
Qt On : 08/05/13 08:46
Qt Upd On: 07/18/13 12:17
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

FORM2

Surrogate Recovery

Method: EPA 8260B

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
6M00234.D	DAILY BLANK	Soil	07/26/13 10:06	1		88	81	104	97		
6M00333.D	DAILY BLANK	Soil	07/30/13 07:33	1		86	87	102	103		
6M00529.D	DAILY BLANK	Soil	08/05/13 08:26	1		92	103	98	99		
6M00540.D	AC73771-003	Soil	08/05/13 11:27	1		101	103	99	118		
6M00539.D	AC73771-004	Soil	08/05/13 11:11	1		94	94	108	106		
6M00255.D	MBS27639	Soil	07/26/13 17:27	1		78	96	103	101		
6M00256.D	MBS27640	Soil	07/26/13 17:43	1		83	87	99	98		
6M00263.D	AC73611-010	Soil	07/26/13 19:36	1		93	99	120	96		
6M00354.D	MBS27665	Soil	07/30/13 13:15	1		86	91	101	106		
6M00355.D	AC73611-010(	Soil	07/30/13 13:31	1		85	81	99	103		
6M00356.D	AC73611-010(	Soil	07/30/13 13:48	1		86	85	118	102		
6M00530.D	MBS27721	Soil	08/05/13 08:42	1		87	99	98	104		
6M00556.D	MBS27731	Soil	08/05/13 15:46	1		93	108	115	103		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8260B

Soil Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	63-140
S2=1,2-Dichloroethane-d4	30	63-143
S3=Toluene-d8	30	68-122
S4=Bromofluorobenzene	30	64-129

Form3
Recovery Data
QC Batch: MBS27639

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M00255.D	MBS27639	7/26/2013 5:27:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	53.5352	0	50	107	20	130
1,1-Dichloroethene	1	46.0599	0	50	92	50	130
1,1-Dichloroethane	1	39.6183	0	50	79	50	130
Chloroform	1	35.2319	0	50	70	50	130
1,2-Dichloroethane	1	36.9176	0	50	74	50	130
2-Butanone	1	62.002	0	50	124	20	130
Carbon Tetrachloride	1	29.3464	0	50	59	50	130
Trichloroethene	1	28.513	0	50	57	50	130
Benzene	1	36.0981	0	50	72	50	130
Tetrachloroethene	1	27.1943	0	50	54	50	130
Toluene	1	35.53	0	50	71	50	130
Chlorobenzene	1	31.8548	0	50	64	50	130
1,4-Dichlorobenzene	1	29.4765	0	50	59	50	130
1,2-Dichlorobenzene	1	31.5099	0	50	63	50	130
n-Propylbenzene	1	37.8136	0	50	76	50	130
sec-Butylbenzene	1	35.2538	0	50	71	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS27640

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M00256.D	MBS27640	7/26/2013 5:43:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	57.1972	0	50	114	20	130
1,1-Dichloroethene	1	49.6053	0	50	99	50	130
1,1-Dichloroethane	1	50.4259	0	50	101	50	130
Chloroform	1	41.3737	0	50	83	50	130
1,2-Dichloroethane	1	42.379	0	50	85	50	130
2-Butanone	1	55.8483	0	50	112	20	130
Carbon Tetrachloride	1	33.6304	0	50	67	50	130
Trichloroethene	1	33.294	0	50	67	50	130
Benzene	1	47.3414	0	50	95	50	130
Tetrachloroethene	1	32.7635	0	50	66	50	130
Toluene	1	45.0699	0	50	90	50	130
Chlorobenzene	1	36.7581	0	50	74	50	130
1,4-Dichlorobenzene	1	36.2027	0	50	72	50	130
1,2-Dichlorobenzene	1	38.3953	0	50	77	50	130
n-Propylbenzene	1	46.6131	0	50	93	50	130
sec-Butylbenzene	1	42.3933	0	50	85	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS27665

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M00354.D	MBS27665	7/30/2013 1:15:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	47.6338	0	50	95	20	130
1,1-Dichloroethene	1	44.3754	0	50	89	50	130
1,1-Dichloroethane	1	36.1263	0	50	72	50	130
Chloroform	1	33.0924	0	50	66	50	130
1,2-Dichloroethane	1	33.3042	0	50	67	50	130
2-Butanone	1	36.0379	0	50	72	20	130
Carbon Tetrachloride	1	30.4861	0	50	61	50	130
Trichloroethene	1	28.9799	0	50	58	50	130
Benzene	1	35.4363	0	50	71	50	130
Tetrachloroethene	1	30.2114	0	50	60	50	130
Toluene	1	35.7806	0	50	72	50	130
Chlorobenzene	1	35.8244	0	50	72	50	130
1,4-Dichlorobenzene	1	32.7927	0	50	66	50	130
1,2-Dichlorobenzene	1	34.769	0	50	70	50	130
n-Propylbenzene	1	40.2035	0	50	80	50	130
sec-Butylbenzene	1	37.7569	0	50	76	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS27721

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M00530.D	MBS27721	8/5/2013 8:42:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	53.3793	0	50	107	20	130
1,1-Dichloroethene	1	50.2622	0	50	101	50	130
1,1-Dichloroethane	1	45.8644	0	50	92	50	130
Chloroform	1	37.2996	0	50	75	50	130
1,2-Dichloroethane	1	40.0468	0	50	80	50	130
2-Butanone	1	64.143	0	50	128	20	130
Carbon Tetrachloride	1	34.0608	0	50	68	50	130
Trichloroethene	1	31.6757	0	50	63	50	130
Benzene	1	39.1761	0	50	78	50	130
Tetrachloroethene	1	28.0292	0	50	56	50	130
Toluene	1	33.3384	0	50	67	50	130
Chlorobenzene	1	30.8202	0	50	62	50	130
1,4-Dichlorobenzene	1	32.9362	0	50	66	50	130
1,2-Dichlorobenzene	1	32.9965	0	50	66	50	130
n-Propylbenzene	1	38.6592	0	50	77	50	130
sec-Butylbenzene	1	35.1429	0	50	70	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS27731

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M00556.D	MBS27731	8/5/2013 3:46:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	44.6116	0	50	89	20	130
1,1-Dichloroethene	1	46.2576	0	50	93	50	130
1,1-Dichloroethane	1	40.4231	0	50	81	50	130
Chloroform	1	34.2951	0	50	69	50	130
1,2-Dichloroethane	1	36.0384	0	50	72	50	130
2-Butanone	1	52.9115	0	50	106	20	130
Carbon Tetrachloride	1	29.8935	0	50	60	50	130
Trichloroethene	1	30.0665	0	50	60	50	130
Benzene	1	39.2626	0	50	79	50	130
Tetrachloroethene	1	32.4672	0	50	65	50	130
Toluene	1	38.4293	0	50	77	50	130
Chlorobenzene	1	35.5999	0	50	71	50	130
1,4-Dichlorobenzene	1	31.3121	0	50	63	50	130
1,2-Dichlorobenzene	1	32.8621	0	50	66	50	130
n-Propylbenzene	1	41.2709	0	50	83	50	130
sec-Butylbenzene	1	39.7693	0	50	80	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data
QC Batch: MBS27665

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M00355.D	AC73611-010(MS)	7/30/2013 1:31:00 PM
Non Spike(If applicable):	6M00263.D	AC73611-010	7/26/2013 7:36:00 PM
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	51.3174	0	50	103	20	130
1,1-Dichloroethene	1	45.1006	0	50	90	50	130
1,1-Dichloroethane	1	38.974	0	50	78	50	130
Chloroform	1	35.5226	0	50	71	50	130
1,2-Dichloroethane	1	35.1965	0	50	70	50	130
2-Butanone	1	43.5876	0	50	87	20	130
Carbon Tetrachloride	1	30.711	0	50	61	50	130
Trichloroethene	1	30.5023	0	50	61	50	130
Benzene	1	38.8447	0	50	78	50	130
Tetrachloroethene	1	32.9964	0	50	66	50	130
Toluene	1	36.3039	0	50	73	50	130
Chlorobenzene	1	34.7032	0	50	69	50	130
1,4-Dichlorobenzene	1	35.1445	0	50	70	50	130
1,2-Dichlorobenzene	1	36.0007	0	50	72	50	130
n-Propylbenzene	1	40.8617	0	50	82	50	130
sec-Butylbenzene	1	40.2939	0	50	81	50	130

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M00356.D	AC73611-010(MSD)	7/30/2013 1:48:00 PM
Non Spike(If applicable):	6M00263.D	AC73611-010	7/26/2013 7:36:00 PM
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	57.8628	0	50	116	20	130
1,1-Dichloroethene	1	48.8065	0	50	98	50	130
1,1-Dichloroethane	1	38.9272	0	50	78	50	130
Chloroform	1	36.5457	0	50	73	50	130
1,2-Dichloroethane	1	35.4578	0	50	71	50	130
2-Butanone	1	52.8635	0	50	106	20	130
Carbon Tetrachloride	1	32.4634	0	50	65	50	130
Trichloroethene	1	32.1071	0	50	64	50	130
Benzene	1	39.126	0	50	78	50	130
Tetrachloroethene	1	34.8737	0	50	70	50	130
Toluene	1	42.5246	0	50	85	50	130
Chlorobenzene	1	39.4665	0	50	79	50	130
1,4-Dichlorobenzene	1	30.1969	0	50	60	50	130
1,2-Dichlorobenzene	1	33.3893	0	50	67	50	130
n-Propylbenzene	1	39.8843	0	50	80	50	130
sec-Butylbenzene	1	37.5544	0	50	75	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD DATA

QC Batch: MBS27665

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M00356.D	AC73611-010(MSD)	7/30/2013 1:48:00 PM
Duplicate(If applicable):	6M00355.D	AC73611-010(MS)	7/30/2013 1:31:00 PM
Inst Blank(If applicable):			

Method: 8260 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Vinyl Chloride	1	57.8628	51.3174	12	40
1,1-Dichloroethene	1	48.8065	45.1006	7.9	40
1,1-Dichloroethane	1	38.9272	38.974	0.12	40
Chloroform	1	36.5457	35.5226	2.8	40
1,2-Dichloroethane	1	35.4578	35.1965	0.74	40
2-Butanone	1	52.8635	43.5876	19	40
Carbon Tetrachloride	1	32.4634	30.711	5.5	40
Trichloroethene	1	32.1071	30.5023	5.1	40
Benzene	1	39.126	38.8447	0.72	40
Tetrachloroethene	1	34.8737	32.9964	5.5	40
Toluene	1	42.5246	36.3039	16	40
Chlorobenzene	1	39.4665	34.7032	13	40
1,4-Dichlorobenzene	1	30.1969	35.1445	15	40
1,2-Dichlorobenzene	1	33.3893	36.0007	7.5	40
n-Propylbenzene	1	39.8843	40.8617	2.4	40
sec-Butylbenzene	1	37.5544	40.2939	7	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 6M00234.D
Matrix: Soil

Blank Analysis Date: 07/26/13 10:06
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260B

Sample Number	Data File	Analysis Date
MBS27640	6M00256.D	07/26/13 17:43
MBS27639	6M00255.D	07/26/13 17:27
AC73611-010	6M00263.D	07/26/13 19:36

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 6M00333.D
Matrix: Soil

Blank Analysis Date: 07/30/13 07:33
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260B

Sample Number	Data File	Analysis Date
AC73611-010(MSD	6M00356.D	07/30/13 13:48
AC73611-010(MS)	6M00355.D	07/30/13 13:31
MBS27665	6M00354.D	07/30/13 13:15

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 6M00529.D
Matrix: Soil

Blank Analysis Date: 08/05/13 08:26
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260B

Sample Number	Data File	Analysis Date
AC73771-003	6M00540.D	08/05/13 11:27
AC73771-004	6M00539.D	08/05/13 11:11
MBS27731	6M00556.D	08/05/13 15:46
MBS27721	6M00530.D	08/05/13 08:42

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6

Data File: 6M99860.D
Analysis Date: 07/18/13 07:59
Method: EPA 8260B

Tune Scan/Time Range: Average of 3.972 to 3.982 min

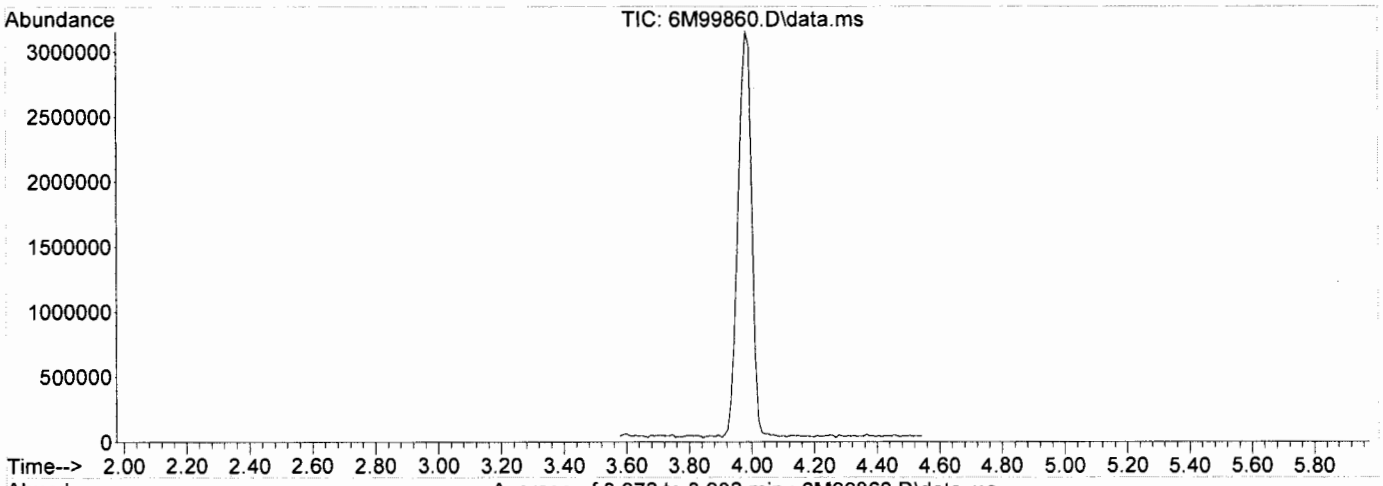
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	17.8	104920	PASS
75	95	30	60	46.5	274752	PASS
95	95	100	100	100.0	590688	PASS
96	95	5	9	6.8	40212	PASS
173	174	0.00	2	1.0	5487	PASS
174	95	50	100	91.9	543104	PASS
175	174	5	9	7.9	42924	PASS
176	174	95	101	99.7	541600	PASS
177	176	5	9	6.6	35852	PASS

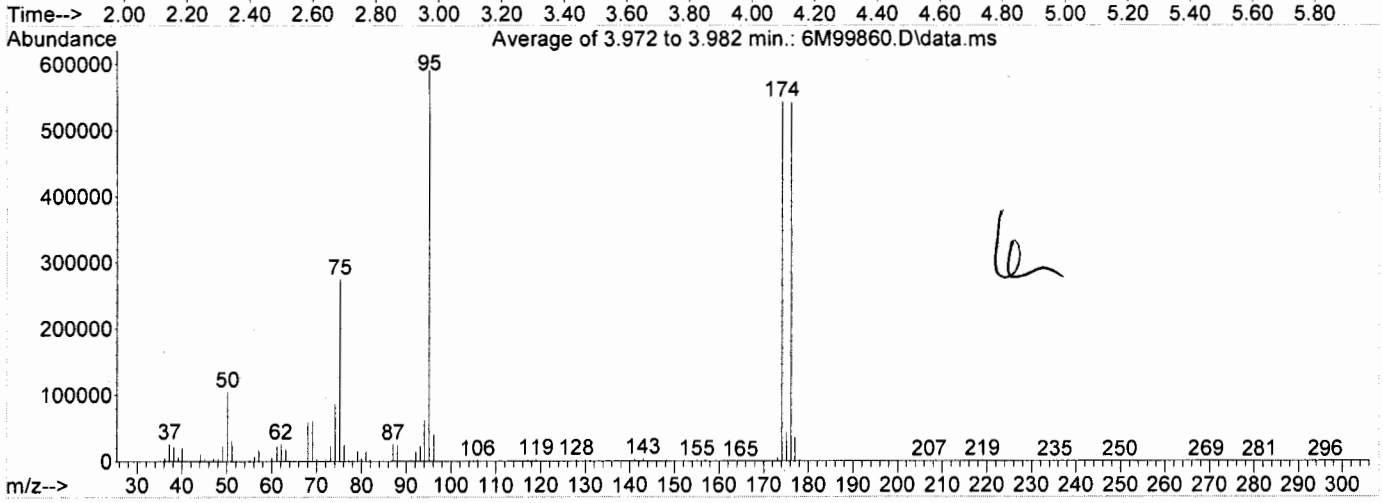
Data File	Sample Number	Analysis Date:
6M99861.D	BLK	07/18/13 08:09
6M99862.D	CAL @ 0.5 PPB	07/18/13 08:26
6M99863.D	CAL @ 1 PPB	07/18/13 08:42
6M99864.D	CAL @ 2 PPB	07/18/13 08:58
6M99865.D	CAL @ 5 PPB	07/18/13 09:14
6M99866.D	CAL @ 500 PPB	07/18/13 09:31
6M99867.D	CAL @ 250 PPB	07/18/13 09:47
6M99868.D	CAL @ 100 PPB	07/18/13 10:03
6M99869.D	CAL @ 50 PPB	07/18/13 10:19
6M99870.D	CAL @ 20 PPB	07/18/13 10:36
6M99873.D	ICV	07/18/13 11:25

Data Path : G:\GcMsData\2013\GCMS_6\Data\07-18-13\
Data File : 6M99860.D
Acq On : 18 Jul 2013 7:59
Operator : SG
Sample : BFB TUNE
Misc : S,5g
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2013\GCMS_6\MethodQt\6M_S0711.M
Title : @GCMS_6,ug,624,8260
Last Update : Fri Jul 12 08:21:44 2013





Spectrum Information: Average of 3.972 to 3.982 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	104920	PASS
75	95	30	60	46.5	274752	PASS
95	95	100	100	100.0	590688	PASS
96	95	5	9	6.8	40212	PASS
173	174	0.00	2	1.0	5487	PASS
174	95	50	100	91.9	543104	PASS
175	174	5	9	7.9	42924	PASS
176	174	95	101	99.7	541600	PASS
177	176	5	9	6.6	35852	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6

Data File: 6M00228.D
Analysis Date: 07/26/13 08:26
Method: EPA 8260B

Tune Scan/Time Range: Average of 3.954 to 4.042 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.6	4994	PASS
75	95	30	60	47.1	12022	PASS
95	95	100	100	100.0	25535	PASS
96	95	5	9	7.0	1790	PASS
173	174	0.00	2	0.5	130	PASS
174	95	50	100	97.0	24774	PASS
175	174	5	9	6.5	1602	PASS
176	174	95	101	99.7	24691	PASS
177	176	5	9	6.0	1490	PASS

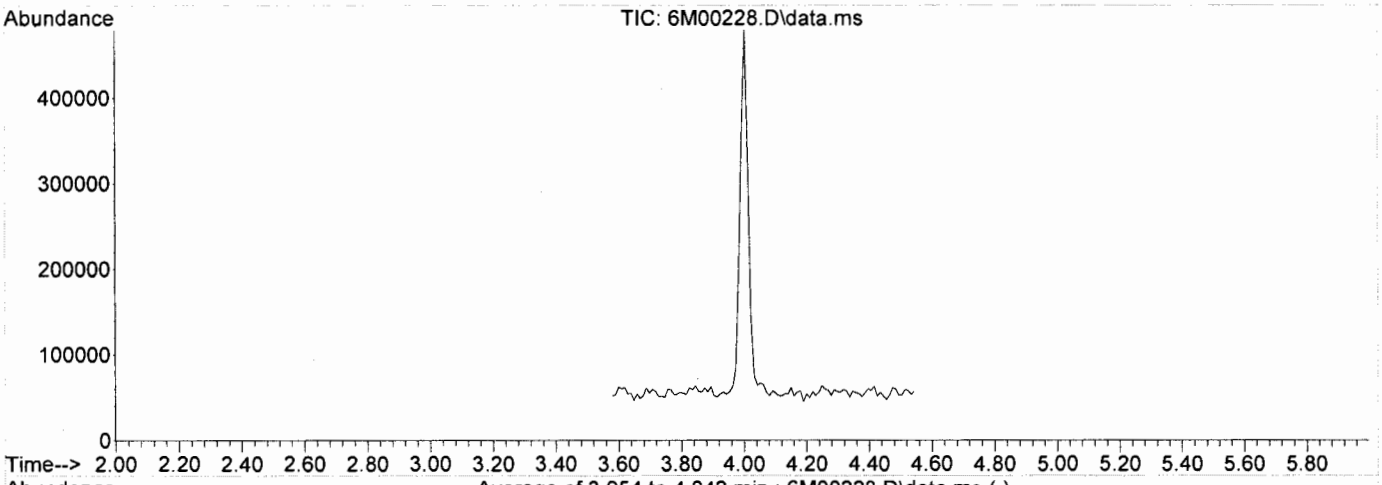
Data File	Sample Number	Analysis Date:
6M00229.D	BLK	07/26/13 08:38
6M00230.D	50 PPB	07/26/13 08:55
6M00231.D	CAL @ 50 PPB	07/26/13 09:16
6M00232.D	BLK	07/26/13 09:33
6M00233.D	BLK	07/26/13 09:49
6M00234.D	DAILY BLANK	07/26/13 10:06
6M00235.D	MBS27634	07/26/13 10:22
6M00236.D	BLK	07/26/13 10:38
6M00237.D	AC73583-005	07/26/13 10:54
6M00238.D	AC73583-007	07/26/13 11:10
6M00239.D	AC73583-009	07/26/13 11:27
6M00240.D	AC73583-011	07/26/13 11:43
6M00241.D	AC73583-015	07/26/13 11:59
6M00242.D	AC73607-002	07/26/13 12:16
6M00243.D	AC73607-003	07/26/13 12:32
6M00244.D	STDTEST	07/26/13 12:48
6M00245.D	AC73571-006(MS)	07/26/13 13:04
6M00246.D	STD	07/26/13 13:20
6M00247.D	AC73571-006(MSD	07/26/13 13:37
6M00248.D	BLK	07/26/13 13:53
6M00249.D	AC73581-001	07/26/13 14:09
6M00250.D	AC73599-003	07/26/13 14:26
6M00251.D	STD	07/26/13 15:01
6M00252.D	STD	07/26/13 15:17
6M00253.D	AC73611-003	07/26/13 16:48
6M00254.D	STD	07/26/13 17:04
6M00255.D	MBS27639	07/26/13 17:27
6M00256.D	MBS27640	07/26/13 17:43
6M00257.D	AC73611-004	07/26/13 17:59
6M00258.D	AC73611-005	07/26/13 18:15
6M00259.D	AC73611-006(MS:	07/26/13 18:31
6M00260.D	AC73611-007(MSD	07/26/13 18:47
6M00261.D	AC73611-008	07/26/13 19:04
6M00262.D	AC73611-009	07/26/13 19:20
6M00263.D	AC73611-010	07/26/13 19:36
6M00264.D	AC73548-005	07/26/13 19:52
6M00265.D	AC73548-006	07/26/13 20:08
6M00266.D	AC73611-020	07/26/13 20:24
6M00267.D	BLK	07/26/13 20:40
6M00268.D	BLK	07/26/13 20:57
6M00269.D	BLK	07/26/13 21:13

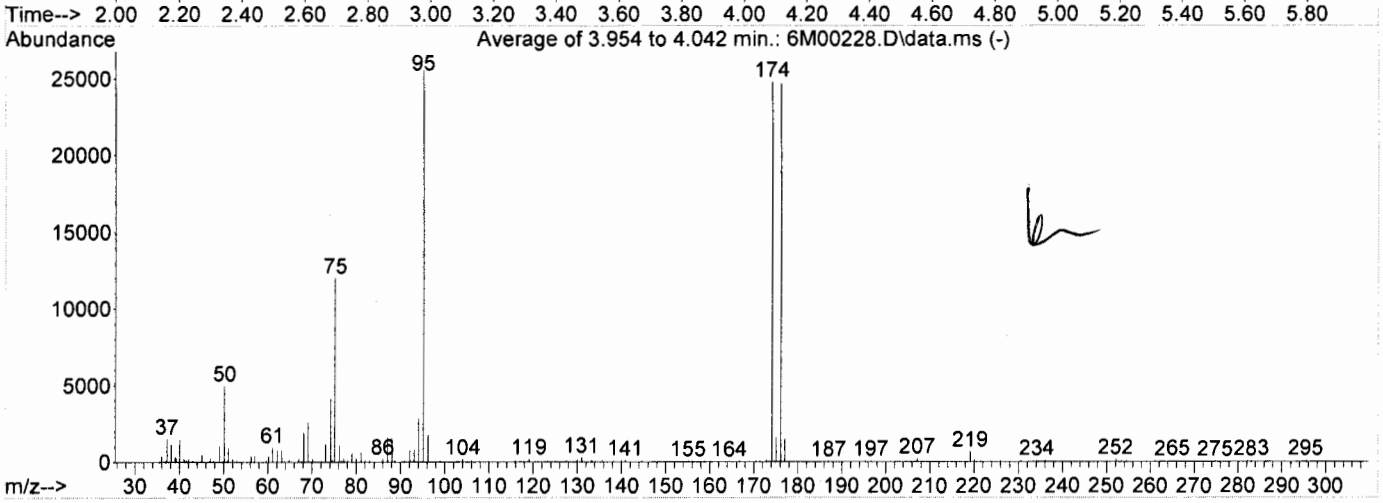
3080110 0051

Data Path : G:\GcMsData\2013\GCMS_6\Data\07-26-13\
Data File : 6M00228.D
Acq On : 26 Jul 2013 8:26
Operator : WP
Sample : BFB TUNE
Misc : S,5g
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : G:\GCMSDATA\2013\GCMS_6\MethodQt\6M_GA0708.M
Title : @GCMS_6,ug,8015
Last Update : Tue Jul 09 08:00:03 2013





Spectrum Information: Average of 3.954 to 4.042 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.6	4994	PASS
75	95	30	60	47.1	12022	PASS
95	95	100	100	100.0	25535	PASS
96	95	5	9	7.0	1790	PASS
173	174	0.00	2	0.5	130	PASS
174	95	50	100	97.0	24774	PASS
175	174	5	9	6.5	1602	PASS
176	174	95	101	99.7	24691	PASS
177	176	5	9	6.0	1490	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6

Data File: 6M00327.D
Analysis Date: 07/30/13 06:02
Method: EPA 8260B

Tune Scan/Time Range: Average of 3.968 to 3.968 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	16.5	49088	PASS
75	95	30	60	49.5	146816	PASS
95	95	100	100	100.0	296704	PASS
96	95	5	9	5.8	17080	PASS
173	174	0.00	2	0.9	2362	PASS
174	95	50	100	91.1	270400	PASS
175	174	5	9	6.3	17008	PASS
176	174	95	101	99.3	268608	PASS
177	176	5	9	7.3	19488	PASS

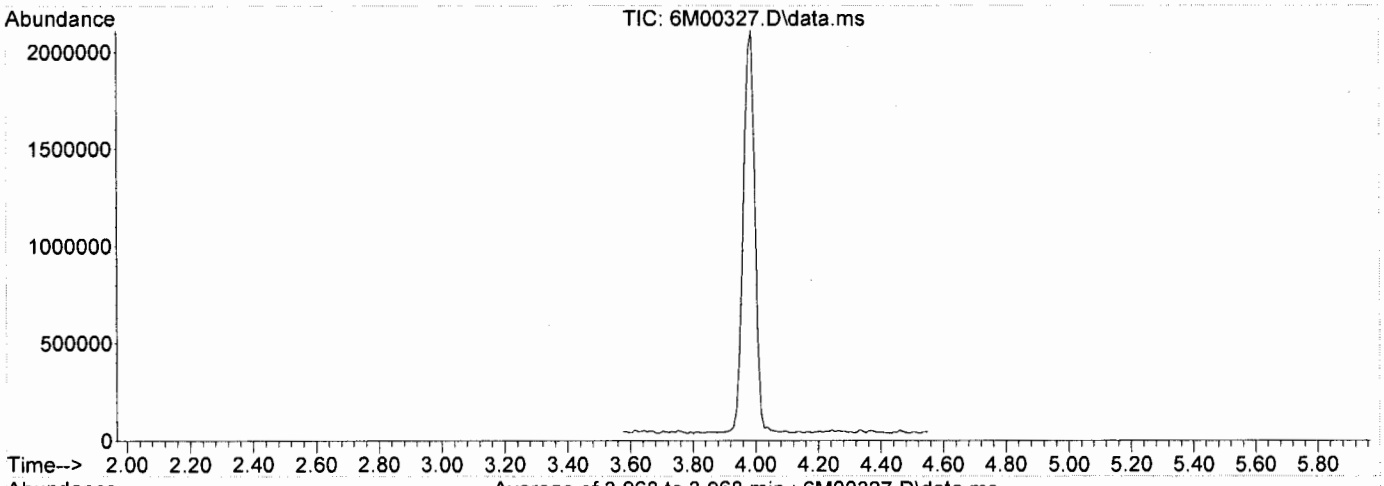
Data File	Sample Number	Analysis Date:
6M00330.D	CAL @ 50 PPB	07/30/13 06:45
6M00332.D	BLK	07/30/13 07:17
6M00333.D	DAILY BLANK	07/30/13 07:33
6M00334.D	MBS27658	07/30/13 07:50
6M00335.D	AC73651-002	07/30/13 08:07
6M00336.D	BLK	07/30/13 08:23
6M00337.D	AC73651-003	07/30/13 08:39
6M00338.D	BLK	07/30/13 08:55
6M00339.D	AC73611-009(MS)	07/30/13 09:12
6M00340.D	AC73611-009(MSD	07/30/13 09:28
6M00341.D	BLK	07/30/13 09:44
6M00342.D	AC73634-001	07/30/13 10:00
6M00343.D	AC73634-002	07/30/13 10:17
6M00344.D	AC73631-001	07/30/13 10:33
6M00345.D	AC73631-002	07/30/13 10:49
6M00346.D	BLK	07/30/13 11:05
6M00347.D	AC73670-001	07/30/13 11:22
6M00348.D	AC73632-001	07/30/13 11:38
6M00349.D	BLK	07/30/13 11:54
6M00350.D	AC73679-003	07/30/13 12:10
6M00351.D	AC73679-004	07/30/13 12:26
6M00352.D	AC73679-005	07/30/13 12:43
6M00353.D	BLK	07/30/13 12:59
6M00354.D	MBS27665	07/30/13 13:15
6M00355.D	AC73611-010(MS)	07/30/13 13:31
6M00356.D	AC73611-010(MSD	07/30/13 13:48
6M00357.D	BLK	07/30/13 14:04

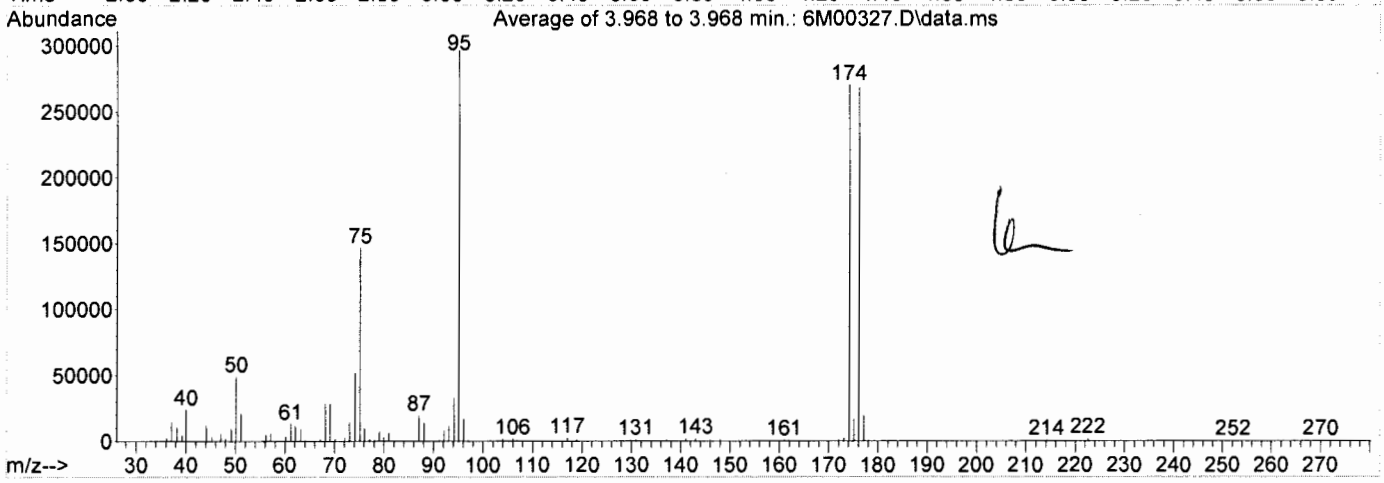
3080110 0053

Data Path : G:\GcMsData\2013\GCMS_6\Data\07-30-13\
Data File : 6M00327.D
Acq On : 30 Jul 2013 6:02
Operator : SG
Sample : BFB TUNE
Misc : S,5g
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2013\GCMS_6\MethodQt\6M_S0718.M
Title : @GCMS_6,ug,624,8260
Last Update : Thu Jul 18 10:53:43 2013





Spectrum Information: Average of 3.968 to 3.968 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.5	49088	PASS
75	95	30	60	49.5	146816	PASS
95	95	100	100	100.0	296704	PASS
96	95	5	9	5.8	17080	PASS
173	174	0.00	2	0.9	2362	PASS
174	95	50	100	91.1	270400	PASS
175	174	5	9	6.3	17008	PASS
176	174	95	101	99.3	268608	PASS
177	176	5	9	7.3	19488	PASS

```
NJDEP HZRESULT Error Report
File:       G:\Project\04907098\RAWP\EDDs\35682\FINAL EDDs 35682\HZRESULT
Date:       04/09/2012 16:12
Errors#:    (0)
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No HZRESULT errors have been identified!

NJDEP HZSAMPLE Error Report
File: G:\Project\04907098\RAWP\EDDs\35951\FINAL EDDs 35951\HZSAMPLE
Date: 04/09/2012 16:21
Errors#: (0)

No HZSAMPLE errors have been identified!

NJDEP Constituent Warning Report
File: G:\Project\04907098\RAWP\EDDs\35951\FINAL EDDs 35951\HZRESULT (RSTP)
Date: 04/09/2012 16:21
Warnings#: (1)

Analyte/Desc	Type	CAS
Arsenic	P	7440-38-2

Possible match with SRP Result Type: A

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SRPID    SAMPDATE         SAMPNUM SAMPTIME         DUPSAMP MATRIX   FIELDID AOCID
LAT_DEGREE       LAT_MINUTE       LAT_SECOND       LON_DEGREE       LON_MINUTE
LON_SECOND       SP_X     SP_Y    DEPTH_TOP        DEPTH_BOTTOM     GROUNDELEV
WELL_ELEV        SAMPTYPE         DATETOLAB        SAMPMETHOD       SAMPNOTE
SUBMITDATE       QAQC
G000021830       01/17/2012       59       10:44   N        Ground Water    ASPAMW14WG1
                                                             592068.12       660982.84
59                                Monitor Well     01/19/2012
04/09/2012
G000021831       01/18/2012       60       11:39   N        Ground Water    ASPAMW13WG1
                                                             592068.12       660982.84
60                                Monitor Well     01/19/2012
04/09/2012
G000021832       01/18/2012       61       12:44   N        Ground Water    ASPAMW06WG1
                                                             592068.12       660982.84
61                                Monitor Well     01/19/2012
04/09/2012
G000021833       01/18/2012       62       09:05   N        Ground Water    ASPAMW09WG1
                                                             592068.12       660982.84
62                                Monitor Well     01/19/2012
04/09/2012
G000021834       01/18/2012       63       09:40   N        Ground Water    ASPAMW02WG1
                                                             592068.12       660982.84
63                                Monitor Well     01/19/2012
04/09/2012
G000021835       01/18/2012       64       09:40   N        Ground Water    ASPAMW02WG1P
                                                             592068.12       660982.84
64                                Monitor Well     01/19/2012
04/09/2012
G000021836       01/18/2012       65       11:10   N        Ground Water    ASPAMW12WG1
                                                             592068.12       660982.84
65                                Monitor Well     01/19/2012
04/09/2012
G000021837       01/18/2012       66       12:20   N        Ground Water    ASPAMW01WG1
                                                             592068.12       660982.84
66                                Monitor Well     01/19/2012
04/09/2012
G000021838       01/18/2012       67       08:55   N        Ground Water    ASPAFB01WQ1
                                                             592068.12       660982.84
67                                Monitor Well     01/19/2012
04/09/2012
G000021839       01/19/2012       68       09:30   N        Ground Water    ASWPMW12WG1
                                                             592068.12       660982.84
68                                Monitor Well     01/19/2012
04/09/2012
G000021840       01/19/2012       69       09:30   N        Ground Water    ASWPMW12WG1P
                                                             592068.12       660982.84
69                                Monitor Well     01/19/2012
04/09/2012
G000021841       01/17/2012       70       11:39   N        Ground Water    ASPAMW03WG1
                                                             592068.12       660982.84
70                                Monitor Well     01/19/2012
04/09/2012
G000021842       01/19/2012       71       10:15   N        Ground Water    ASWPMW13WG1
                                                             592068.12       660982.84
71                                Monitor Well     01/19/2012
04/09/2012
G000021843       01/19/2012       72       11:00   N        Ground Water    ASWPMW14WG1
                                                             592068.12       660982.84
72                                Monitor Well     01/19/2012
04/09/2012
G000021844       01/19/2012       73       09:29   N        Ground Water    ASWPMW04WG1
                                                             592068.12       660982.84
```

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73                                  Monitor Well    01/19/2012
04/09/2012
G000021845      01/19/2012      74      10:29   N       Ground Water    ASWPMW15WG1
                                                        592068.12       660982.84
74                                  Monitor Well    01/19/2012
04/09/2012
G000021846      01/19/2012      75      12:25   N       Ground Water    ASPAMW17WG1
                                                        592068.12       660982.84
75                                  Monitor Well    01/19/2012
04/09/2012
G000021847      01/19/2012      76      11:44   N       Ground Water    ASPAMW18WG1
                                                        592068.12       660982.84
76                                  Monitor Well    01/19/2012
04/09/2012
G000021848      01/19/2012      77      10:25   N       Ground Water    ASPAFB01WQ1
                                                        592068.12       660982.84
77                                  Monitor Well    01/19/2012
04/09/2012
G000021849      01/17/2012      78      12:39   N       Ground Water    ASPAMW10WG1
                                                        592068.12       660982.84
78                                  Monitor Well    01/19/2012
04/09/2012
G000021850      01/17/2012      79      10:40   N       Ground Water    ASPAMW05WG1
                                                        592068.12       660982.84
79                                  Monitor Well    01/19/2012
04/09/2012
G000021851      01/17/2012      80      11:30   N       Ground Water    ASPAMW04WG1
                                                        592068.12       660982.84
80                                  Monitor Well    01/19/2012
04/09/2012
G000021852      01/17/2012      81      12:45   N       Ground Water    ASPAMW11WG1
                                                        592068.12       660982.84
81                                  Monitor Well    01/19/2012
04/09/2012
G000021853      01/17/2012      82      11:35   N       Ground Water    ASPAFB01WQ1
                                                        592068.12       660982.84
82                                  Monitor Well    01/19/2012
04/09/2012
G000021854      01/18/2012      83      09:04   N       Ground Water    ASPAMW08WG1
                                                        592068.12       660982.84
83                                  Monitor Well    01/19/2012
04/09/2012
G000021855      01/18/2012      84      09:39   N       Ground Water    ASPAMW07WG1
                                                        592068.12       660982.84
84                                  Monitor Well    01/19/2012
04/09/2012
```

DIRECTORY	DESCRIPT	SRPID	CONSULTANT	PHASE	STATUS	TRANSMIT	SUBMITDATE	PACKNUM
7	BB - Arsenic Site	G000021830	BB - Arsenic Site					
Packaged		04/09/2012						

SRPID	SAMPDATE	SAMPNUM	LABID	DANALYZ	LABNAME	NJLABCERT	RESULTTYPE
ANALTPARAM	CAS	FILTUNFILT	CONC	CONCUNITS	QAQUAL	MDL	
QUANTTYPE	QUANTLEVEL	ANLYS_MTHD	QAQC				
G000021830	01/17/2012	59	460-35951-1	01/26/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	5.2	ppb	1.8
PQL 2.5	200.8						
G000021831	01/18/2012	60	460-35951-10	01/31/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	1150	ppb	1.8
PQL 2.5	200.8						
G000021832	01/18/2012	61	460-35951-11	01/31/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	372	ppb	1.8
PQL 2.5	200.8						
G000021833	01/18/2012	62	460-35951-12	01/31/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	3630	ppb	1.8
PQL 2.5	200.8						
G000021834	01/18/2012	63	460-35951-13	01/31/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	244000	ppb	72.8
PQL 100	200.8						
G000021835	01/18/2012	64	460-35951-14	01/31/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	243000	ppb	72.8
PQL 100	200.8						
G000021836	01/18/2012	65	460-35951-15	01/31/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	1430	ppb	1.8
PQL 2.5	200.8						
G000021837	01/18/2012	66	460-35951-16	01/31/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	615	ppb	1.8
PQL 2.5	200.8						
G000021838	01/18/2012	67	460-35951-17	01/31/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	ND	ppb	U 1.8
PQL 2.5	200.8						
G000021839	01/19/2012	68	460-35951-18	01/31/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	23200	ppb	7.3
PQL 10.0	200.8						
G000021840	01/19/2012	69	460-35951-19	01/31/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	23100	ppb	7.3
PQL 10.0	200.8						
G000021841	01/17/2012	70	460-35951-2	01/26/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	80.1	ppb	1.8
PQL 2.5	200.8						
G000021842	01/19/2012	71	460-35951-20	01/31/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	6950	ppb	1.8
PQL 2.5	200.8						
G000021843	01/19/2012	72	460-35951-21	01/31/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	19800	ppb	7.3
PQL 10.0	200.8						
G000021844	01/19/2012	73	460-35951-22	01/27/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	47.2	ppb	1.8
PQL 2.5	200.8						
G000021845	01/19/2012	74	460-35951-23	01/31/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	15700	ppb	7.3
PQL 10.0	200.8						
G000021846	01/19/2012	75	460-35951-24	01/31/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	8910	ppb	3.6
PQL 5.0	200.8						
G000021847	01/19/2012	76	460-35951-25	01/27/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	4370	ppb	1.8
PQL 2.5	200.8						
G000021848	01/19/2012	77	460-35951-26	01/27/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	ND	ppb	U 1.8
PQL 2.5	200.8						
G000021849	01/17/2012	78	460-35951-3	01/26/2012	TestAmerica		
Edison 12028	P	Arsenic	7440-38-2	U	12200	ppb	3.6
PQL 5.0	200.8						

```
G000021850      01/17/2012      79      460-35951-4     01/26/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2       U       329     ppb             1.8
PQL     2.5     200.8
G000021851      01/17/2012      80      460-35951-5     01/26/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2       U       160     ppb             1.8
PQL     2.5     200.8
G000021852      01/17/2012      81      460-35951-6     01/30/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2       U       287     ppb             1.8
PQL     2.5     200.8
G000021853      01/17/2012      82      460-35951-7     01/31/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2       U       ND      ppb     U       1.8
PQL     2.5     200.8
G000021854      01/18/2012      83      460-35951-8     01/31/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2       U       306000  ppb             72.8
PQL     100     200.8
G000021855      01/18/2012      84      460-35951-9     01/31/2012      TestAmerica
Edison  12028   P       Arsenic 7440-38-2       U       2640    ppb             1.8
PQL     2.5     200.8
```

NJDEP HZSAMPLE Error Report
File: G:\Project\04907098\RAWP\EDDs\36122\Final EDD 36122\HZSAMPLE
Date: 04/09/2012 16:26
Errors#: (0)

No HZSAMPLE errors have been identified!

SRPID SAMPDATE SAMPNUM LABID DANALYZ LABNAME NJLABCERT RESULTTYPE
ANALTPARAM CAS FILTUNFILT CONC CONCUNITS QAQUAL MDL
QUANTTYPE QUANTLEVEL ANLYS_MTHD QAQC
G000021830 01/25/2012 85 460-36122-1 01/27/2012 TestAmerica
Edison 12028 P Arsenic 7440-38-2 U 9340 ppb 3.6
PQL 5.0 200.8
G000021831 01/25/2012 86 460-36122-2 01/27/2012 TestAmerica
Edison 12028 P Arsenic 7440-38-2 U ND ppb U 1.8
PQL 2.5 200.8

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SRPID    SAMPDATE         SAMPNUM SAMPTIME         DUPSAMP MATRIX   FIELDID AOCID
LAT_DEGREE       LAT_MINUTE       LAT_SECOND       LON_DEGREE       LON_MINUTE
LON_SECOND       SP_X     SP_Y    DEPTH_TOP        DEPTH_BOTTOM     GROUNDELEV
WELL_ELEV        SAMPTYPE         DATETOLAB        SAMPMETHOD       SAMPNOTE
SUBMITDATE       QAQC
G000021830       01/25/2012       85       10:20   N        Ground Water     ASPAMW16WG1
                                                           592068.12        660982.84
85                                Monitor Well     01/25/2012
04/09/2012
G000021831       01/25/2012       86       08:30   N        Ground Water     ASPAFB01WQ1
                                                           592068.12        660982.84
86                                Monitor Well     01/25/2012
04/09/2012
```

NJDEP Constituent Warning Report
File: G:\Project\04907098\RAWP\EDDs\36122\Final EDD 36122\HZRESULT (RSTP)
Date: 04/09/2012 16:26
Warnings#: (1)

Analyte/Desc	Type	CAS
Arsenic	P	7440-38-2

Possible match with SRP Result Type: A

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NJDEP HZRESULT Error Report
File:       G:\Project\04907098\RAWP\EDDs\36122\Final EDD 36122\HZRESULT
Date:       04/09/2012 16:26
Errors#:    (0)
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No HZRESULT errors have been identified!