APPENDIX K.1 OPERATING UNIT SAN MATEO (OU-SM) REMEDIAL ACTION PLAN (3 OF 4)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

TestAmerica Job ID: 320-42505-1
Client Project/Site: UPC OU-SM

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
9/4/2018 4:27:27 PM

Micah Smith, Project Manager II
(916)374-4302
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 6
Surrogate Summary 10
QC Sample Results 11
QC Association Summary 13
Lab Chronicle 14
Certification Summary 17
Method Summary 19
Sample Summary 20
Chain of Custody 21
Receipt Checklists 27

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 320-42505-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 320-42505-1

Laboratory: TestAmerica Sacramento

Narrative

Job Narrative
320-42505-1

Comments
No additional comments.

Receipt
The samples were received on 8/25/2018 9:05 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.3º C.

Receipt Exceptions
The container label for the following samples did not match the information listed on the Chain-of-Custody (COC): DG-B10S-0.5-1 (320-42505-5) and DG-B9S-0.5-1 (320-42505-8). The container labels list DG-B10S-0.5-1(#5), while the COC lists DG-B9S-0.5-1 and DG-9S-0.5-1(#8) is labeled DG-B9S-3.5-4. The client was contacted and samples should be labeled as follows: DG-B10S-0.5-1 (320-42505-5) and DG-B9S-0.5-1 (320-42505-8).

Sample DG-C7S-0.5-1 (320-42505-2) was listed on the Chain of Custody (COC); however, no samples were received. The lab received sample DUP-25 not listed on COC. As requested, DUP-25 was logged in for analysis.

GC/MS VOA
Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 490-539562.

Method(s) 8260B: The following samples were diluted due to the nature of the sample matrix: DG-M7S-0.5-1 (320-42505-7) and DG-K7S-0.5-1 (320-42505-13). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 320-42505-1

Client Sample ID: DG-A7S-0.5-1 — **Lab Sample ID: 320-42505-1**

No Detections.

Client Sample ID: DG-E7S-0.5-1 — **Lab Sample ID: 320-42505-3**

No Detections.

Client Sample ID: DG-G7S-0.5-1 — **Lab Sample ID: 320-42505-4**

No Detections.

Client Sample ID: DG-B10S-0.5-1 — **Lab Sample ID: 320-42505-5**

No Detections.

Client Sample ID: DG-I7S-0.5-1 — **Lab Sample ID: 320-42505-6**

No Detections.

Client Sample ID: DG-M7S-0.5-1 — **Lab Sample ID: 320-42505-7**

No Detections.

Client Sample ID: DG-B9S-0.5-1 — **Lab Sample ID: 320-42505-8**

No Detections.

Client Sample ID: DG-DE89-0.5-1 — **Lab Sample ID: 320-42505-9**

No Detections.

Client Sample ID: DUP-15 — **Lab Sample ID: 320-42505-10**

No Detections.

Client Sample ID: DG-D9S-0.5-1 — **Lab Sample ID: 320-42505-11**

No Detections.

Client Sample ID: DG-F9S-0.5-1 — **Lab Sample ID: 320-42505-12**

No Detections.

Client Sample ID: DG-K7S-0.5-1 — **Lab Sample ID: 320-42505-13**

No Detections.

Client Sample ID: DG-L135-0.5-1 — **Lab Sample ID: 320-42505-14**

No Detections.

Client Sample ID: DUP-25 — **Lab Sample ID: 320-42505-15**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-A7S-0.5-1

Lab Sample ID: 320-42505-1
Date Collected: 08/23/18 15:00
Matrix: Solid
Date Received: 08/25/18 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0017	0.00046	mg/Kg		08/23/18 17:00	08/30/18 03:26	1
1,2-Dibromo-3-Chloropropane	ND		0.0042	0.00058	mg/Kg		08/23/18 17:00	08/30/18 03:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*	*08/23/18 17:00*	*08/30/18 03:26*	*1*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*08/23/18 17:00*	*08/30/18 03:26*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*08/23/18 17:00*	*08/30/18 03:26*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*	*08/23/18 17:00*	*08/30/18 03:26*	*1*

Client Sample ID: DG-E7S-0.5-1

Lab Sample ID: 320-42505-3
Date Collected: 08/24/18 08:25
Matrix: Solid
Date Received: 08/25/18 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0017	0.00048	mg/Kg		08/24/18 10:25	08/30/18 03:54	1
1,2-Dibromo-3-Chloropropane	ND		0.0044	0.00061	mg/Kg		08/24/18 10:25	08/30/18 03:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 130*	*08/24/18 10:25*	*08/30/18 03:54*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*08/24/18 10:25*	*08/30/18 03:54*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*	*08/24/18 10:25*	*08/30/18 03:54*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*	*08/24/18 10:25*	*08/30/18 03:54*	*1*

Client Sample ID: DG-G7S-0.5-1

Lab Sample ID: 320-42505-4
Date Collected: 08/24/18 08:50
Matrix: Solid
Date Received: 08/25/18 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0017	0.00047	mg/Kg		08/24/18 10:50	08/30/18 04:22	1
1,2-Dibromo-3-Chloropropane	ND		0.0043	0.00060	mg/Kg		08/24/18 10:50	08/30/18 04:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*70 - 130*	*08/24/18 10:50*	*08/30/18 04:22*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*08/24/18 10:50*	*08/30/18 04:22*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*	*08/24/18 10:50*	*08/30/18 04:22*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*08/24/18 10:50*	*08/30/18 04:22*	*1*

Client Sample ID: DG-B10S-0.5-1

Lab Sample ID: 320-42505-5
Date Collected: 08/24/18 10:40
Matrix: Solid
Date Received: 08/25/18 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0012	0.00032	mg/Kg		08/24/18 12:40	08/30/18 04:51	1
1,2-Dibromo-3-Chloropropane	ND		0.0029	0.00041	mg/Kg		08/24/18 12:40	08/30/18 04:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*	*08/24/18 12:40*	*08/30/18 04:51*	*1*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*08/24/18 12:40*	*08/30/18 04:51*	*1*

Client Sample ID: DG-B10S-0.5-1

Lab Sample ID: 320-42505-5
Matrix: Solid
Date Collected: 08/24/18 10:40
Date Received: 08/25/18 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*98*		*70 - 130*	*08/24/18 12:40*	*08/30/18 04:51*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*	*08/24/18 12:40*	*08/30/18 04:51*	*1*

Client Sample ID: DG-I7S-0.5-1

Lab Sample ID: 320-42505-6
Matrix: Solid
Date Collected: 08/24/18 09:25
Date Received: 08/25/18 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0016	0.00045	mg/Kg		08/24/18 11:25	08/30/18 05:19	1
1,2-Dibromo-3-Chloropropane	ND		0.0041	0.00057	mg/Kg		08/24/18 11:25	08/30/18 05:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*80*		*70 - 130*	*08/24/18 11:25*	*08/30/18 05:19*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*08/24/18 11:25*	*08/30/18 05:19*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*	*08/24/18 11:25*	*08/30/18 05:19*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/24/18 11:25*	*08/30/18 05:19*	*1*

Client Sample ID: DG-M7S-0.5-1

Lab Sample ID: 320-42505-7
Matrix: Solid
Date Collected: 08/24/18 09:55
Date Received: 08/25/18 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.19	0.053	mg/Kg		08/24/18 11:55	08/31/18 15:33	1
1,2-Dibromo-3-Chloropropane	ND		0.47	0.066	mg/Kg		08/24/18 11:55	08/31/18 15:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*	*08/24/18 11:55*	*08/31/18 15:33*	*1*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*08/24/18 11:55*	*08/31/18 15:33*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*	*08/24/18 11:55*	*08/31/18 15:33*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*08/24/18 11:55*	*08/31/18 15:33*	*1*

Client Sample ID: DG-B9S-0.5-1

Lab Sample ID: 320-42505-8
Matrix: Solid
Date Collected: 08/24/18 10:20
Date Received: 08/25/18 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0013	0.00037	mg/Kg		08/24/18 12:20	08/30/18 06:15	1
1,2-Dibromo-3-Chloropropane	ND		0.0034	0.00047	mg/Kg		08/24/18 12:20	08/30/18 06:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*80*		*70 - 130*	*08/24/18 12:20*	*08/30/18 06:15*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*08/24/18 12:20*	*08/30/18 06:15*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*	*08/24/18 12:20*	*08/30/18 06:15*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*08/24/18 12:20*	*08/30/18 06:15*	*1*

Client Sample ID: DG-DE89-0.5-1

Lab Sample ID: 320-42505-9
Date Collected: 08/24/18 11:20
Matrix: Solid
Date Received: 08/25/18 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0014	0.00040	mg/Kg		08/24/18 13:20	08/30/18 06:43	1
1,2-Dibromo-3-Chloropropane	ND		0.0036	0.00051	mg/Kg		08/24/18 13:20	08/30/18 06:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*70 - 130*	*08/24/18 13:20*	*08/30/18 06:43*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*08/24/18 13:20*	*08/30/18 06:43*	*1*
Dibromofluoromethane (Surr)	*88*		*70 - 130*	*08/24/18 13:20*	*08/30/18 06:43*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/24/18 13:20*	*08/30/18 06:43*	*1*

Client Sample ID: DUP-15

Lab Sample ID: 320-42505-10
Date Collected: 08/24/18 00:00
Matrix: Solid
Date Received: 08/25/18 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0019	0.00052	mg/Kg		08/24/18 02:00	08/30/18 07:11	1
1,2-Dibromo-3-Chloropropane	ND		0.0048	0.00067	mg/Kg		08/24/18 02:00	08/30/18 07:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*70 - 130*	*08/24/18 02:00*	*08/30/18 07:11*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*08/24/18 02:00*	*08/30/18 07:11*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*	*08/24/18 02:00*	*08/30/18 07:11*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*08/24/18 02:00*	*08/30/18 07:11*	*1*

Client Sample ID: DG-D9S-0.5-1

Lab Sample ID: 320-42505-11
Date Collected: 08/24/18 11:35
Matrix: Solid
Date Received: 08/25/18 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0017	0.00046	mg/Kg		08/24/18 13:35	08/30/18 07:39	1
1,2-Dibromo-3-Chloropropane	ND		0.0042	0.00059	mg/Kg		08/24/18 13:35	08/30/18 07:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 130*	*08/24/18 13:35*	*08/30/18 07:39*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*08/24/18 13:35*	*08/30/18 07:39*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*	*08/24/18 13:35*	*08/30/18 07:39*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*08/24/18 13:35*	*08/30/18 07:39*	*1*

Client Sample ID: DG-F9S-0.5-1

Lab Sample ID: 320-42505-12
Date Collected: 08/24/18 12:10
Matrix: Solid
Date Received: 08/25/18 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0018	0.00049	mg/Kg		08/24/18 14:10	08/30/18 08:07	1
1,2-Dibromo-3-Chloropropane	ND		0.0045	0.00063	mg/Kg		08/24/18 14:10	08/30/18 08:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*70 - 130*	*08/24/18 14:10*	*08/30/18 08:07*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*08/24/18 14:10*	*08/30/18 08:07*	*1*

Client Sample ID: DG-F9S-0.5-1

Lab Sample ID: 320-42505-12
Date Collected: 08/24/18 12:10
Matrix: Solid
Date Received: 08/25/18 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*92*		*70 - 130*	*08/24/18 14:10*	*08/30/18 08:07*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*	*08/24/18 14:10*	*08/30/18 08:07*	*1*

Client Sample ID: DG-K7S-0.5-1

Lab Sample ID: 320-42505-13
Date Collected: 08/24/18 07:52
Matrix: Solid
Date Received: 08/25/18 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.10	0.029	mg/Kg		08/24/18 09:52	08/31/18 16:01	1
1,2-Dibromo-3-Chloropropane	ND		0.26	0.037	mg/Kg		08/24/18 09:52	08/31/18 16:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*	*08/24/18 09:52*	*08/31/18 16:01*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*08/24/18 09:52*	*08/31/18 16:01*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*	*08/24/18 09:52*	*08/31/18 16:01*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*	*08/24/18 09:52*	*08/31/18 16:01*	*1*

Client Sample ID: DG-L135-0.5-1

Lab Sample ID: 320-42505-14
Date Collected: 08/24/18 09:40
Matrix: Solid
Date Received: 08/25/18 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0017	0.00047	mg/Kg		08/24/18 11:40	08/30/18 09:03	1
1,2-Dibromo-3-Chloropropane	ND		0.0043	0.00060	mg/Kg		08/24/18 11:40	08/30/18 09:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*81*		*70 - 130*	*08/24/18 11:40*	*08/30/18 09:03*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*08/24/18 11:40*	*08/30/18 09:03*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*	*08/24/18 11:40*	*08/30/18 09:03*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*08/24/18 11:40*	*08/30/18 09:03*	*1*

Client Sample ID: DUP-25

Lab Sample ID: 320-42505-15
Date Collected: 08/24/18 00:00
Matrix: Solid
Date Received: 08/25/18 09:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0016	0.00045	mg/Kg		08/24/18 02:00	08/30/18 09:31	1
1,2-Dibromo-3-Chloropropane	ND		0.0041	0.00057	mg/Kg		08/24/18 02:00	08/30/18 09:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*	*08/24/18 02:00*	*08/30/18 09:31*	*1*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*08/24/18 02:00*	*08/30/18 09:31*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*	*08/24/18 02:00*	*08/30/18 09:31*	*1*
Toluene-d8 (Surr)	*109*		*70 - 130*	*08/24/18 02:00*	*08/30/18 09:31*	*1*

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 320-42505-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
320-42505-1	DG-A7S-0.5-1	84	115	100	105
320-42505-3	DG-E7S-0.5-1	82	98	96	97
320-42505-4	DG-G7S-0.5-1	81	95	96	100
320-42505-5	DG-B10S-0.5-1	88	113	98	105
320-42505-6	DG-I7S-0.5-1	80	100	90	101
320-42505-7	DG-M7S-0.5-1	84	92	96	98
320-42505-8	DG-B9S-0.5-1	80	93	93	102
320-42505-9	DG-DE89-0.5-1	80	98	88	101
320-42505-10	DUP-15	81	96	93	99
320-42505-11	DG-D9S-0.5-1	82	96	95	100
320-42505-12	DG-F9S-0.5-1	81	97	92	94
320-42505-13	DG-K7S-0.5-1	83	93	96	97
320-42505-14	DG-L135-0.5-1	81	104	92	100
320-42505-15	DUP-25	86	109	90	109
LCS 490-539562/3	Lab Control Sample	77	100	95	100
LCS 490-539982/3	Lab Control Sample	88	92	99	95
LCSD 490-539562/4	Lab Control Sample Dup	79	100	93	100
LCSD 490-539982/4	Lab Control Sample Dup	88	93	99	94
MB 490-539562/7	Method Blank	78	98	93	99
MB 490-539982/6	Method Blank	90	93	98	96

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-539562/7
Matrix: Solid
Analysis Batch: 539562

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0020	0.00055	mg/Kg			08/30/18 02:30	1
1,2-Dibromo-3-Chloropropane	ND		0.0050	0.00070	mg/Kg			08/30/18 02:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*70 - 130*		*08/30/18 02:30*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/30/18 02:30*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/30/18 02:30*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/30/18 02:30*	*1*

Lab Sample ID: LCS 490-539562/3
Matrix: Solid
Analysis Batch: 539562

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.0500	0.0389		mg/Kg		78	60 - 139
1,2-Dibromo-3-Chloropropane	0.0500	0.0382		mg/Kg		76	47 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*77*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 490-539562/4
Matrix: Solid
Analysis Batch: 539562

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.0500	0.0355		mg/Kg		71	60 - 139	9	16
1,2-Dibromo-3-Chloropropane	0.0500	0.0347		mg/Kg		69	47 - 144	10	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 490-539982/6
Matrix: Solid
Analysis Batch: 539982

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.10	0.028	mg/Kg			08/31/18 14:09	1
1,2-Dibromo-3-Chloropropane	ND		0.25	0.035	mg/Kg			08/31/18 14:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*08/31/18 14:09*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-539982/6
Matrix: Solid
Analysis Batch: 539982

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130		08/31/18 14:09	1
Dibromofluoromethane (Surr)	98		70 - 130		08/31/18 14:09	1
Toluene-d8 (Surr)	96		70 - 130		08/31/18 14:09	1

Lab Sample ID: LCS 490-539982/3
Matrix: Solid
Analysis Batch: 539982

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			2.50	2.22		mg/Kg		89	60 - 139		
1,2-Dibromo-3-Chloropropane			2.50	2.45		mg/Kg		98	47 - 144		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	88		70 - 130
4-Bromofluorobenzene (Surr)	92		70 - 130
Dibromofluoromethane (Surr)	99		70 - 130
Toluene-d8 (Surr)	95		70 - 130

Lab Sample ID: LCSD 490-539982/4
Matrix: Solid
Analysis Batch: 539982

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			2.50	2.43		mg/Kg		97	60 - 139	9	16
1,2-Dibromo-3-Chloropropane			2.50	2.59		mg/Kg		103	47 - 144	5	38

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	88		70 - 130
4-Bromofluorobenzene (Surr)	93		70 - 130
Dibromofluoromethane (Surr)	99		70 - 130
Toluene-d8 (Surr)	94		70 - 130

GC/MS VOA

Prep Batch: 539465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-42505-7	DG-M7S-0.5-1	Total/NA	Solid	5035	
320-42505-13	DG-K7S-0.5-1	Total/NA	Solid	5035	

Prep Batch: 539470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-42505-1	DG-A7S-0.5-1	Total/NA	Solid	5035	
320-42505-3	DG-E7S-0.5-1	Total/NA	Solid	5035	
320-42505-4	DG-G7S-0.5-1	Total/NA	Solid	5035	
320-42505-5	DG-B10S-0.5-1	Total/NA	Solid	5035	
320-42505-6	DG-I7S-0.5-1	Total/NA	Solid	5035	
320-42505-8	DG-B9S-0.5-1	Total/NA	Solid	5035	
320-42505-9	DG-DE89-0.5-1	Total/NA	Solid	5035	
320-42505-10	DUP-15	Total/NA	Solid	5035	
320-42505-11	DG-D9S-0.5-1	Total/NA	Solid	5035	
320-42505-12	DG-F9S-0.5-1	Total/NA	Solid	5035	
320-42505-14	DG-L135-0.5-1	Total/NA	Solid	5035	
320-42505-15	DUP-25	Total/NA	Solid	5035	

Analysis Batch: 539562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-42505-1	DG-A7S-0.5-1	Total/NA	Solid	8260B	539470
320-42505-3	DG-E7S-0.5-1	Total/NA	Solid	8260B	539470
320-42505-4	DG-G7S-0.5-1	Total/NA	Solid	8260B	539470
320-42505-5	DG-B10S-0.5-1	Total/NA	Solid	8260B	539470
320-42505-6	DG-I7S-0.5-1	Total/NA	Solid	8260B	539470
320-42505-8	DG-B9S-0.5-1	Total/NA	Solid	8260B	539470
320-42505-9	DG-DE89-0.5-1	Total/NA	Solid	8260B	539470
320-42505-10	DUP-15	Total/NA	Solid	8260B	539470
320-42505-11	DG-D9S-0.5-1	Total/NA	Solid	8260B	539470
320-42505-12	DG-F9S-0.5-1	Total/NA	Solid	8260B	539470
320-42505-14	DG-L135-0.5-1	Total/NA	Solid	8260B	539470
320-42505-15	DUP-25	Total/NA	Solid	8260B	539470
MB 490-539562/7	Method Blank	Total/NA	Solid	8260B	
LCS 490-539562/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-539562/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 539982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-42505-7	DG-M7S-0.5-1	Total/NA	Solid	8260B	539465
320-42505-13	DG-K7S-0.5-1	Total/NA	Solid	8260B	539465
MB 490-539982/6	Method Blank	Total/NA	Solid	8260B	
LCS 490-539982/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-539982/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 320-42505-1

Client Sample ID: DG-A7S-0.5-1
Date Collected: 08/23/18 15:00
Date Received: 08/25/18 09:05

Lab Sample ID: 320-42505-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.005 g	5.0 mL	539470	08/23/18 17:00	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	539562	08/30/18 03:26	PN	TAL NSH

Client Sample ID: DG-E7S-0.5-1
Date Collected: 08/24/18 08:25
Date Received: 08/25/18 09:05

Lab Sample ID: 320-42505-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.724 g	5.0 mL	539470	08/24/18 10:25	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	539562	08/30/18 03:54	PN	TAL NSH

Client Sample ID: DG-G7S-0.5-1
Date Collected: 08/24/18 08:50
Date Received: 08/25/18 09:05

Lab Sample ID: 320-42505-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.869 g	5.0 mL	539470	08/24/18 10:50	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	539562	08/30/18 04:22	PN	TAL NSH

Client Sample ID: DG-B10S-0.5-1
Date Collected: 08/24/18 10:40
Date Received: 08/25/18 09:05

Lab Sample ID: 320-42505-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8.501 g	5.0 mL	539470	08/24/18 12:40	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	539562	08/30/18 04:51	PN	TAL NSH

Client Sample ID: DG-I7S-0.5-1
Date Collected: 08/24/18 09:25
Date Received: 08/25/18 09:05

Lab Sample ID: 320-42505-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.128 g	5.0 mL	539470	08/24/18 11:25	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	539562	08/30/18 05:19	PN	TAL NSH

Client Sample ID: DG-M7S-0.5-1
Date Collected: 08/24/18 09:55
Date Received: 08/25/18 09:05

Lab Sample ID: 320-42505-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.273 g	10.0 mL	539465	08/24/18 11:55	DHC	TAL NSH
Total/NA	Analysis	8260B		1	0.1 mL	5 mL	539982	08/31/18 15:33	PN	TAL NSH

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 320-42505-1

Client Sample ID: DG-B9S-0.5-1
Lab Sample ID: 320-42505-8
Date Collected: 08/24/18 10:20
Matrix: Solid
Date Received: 08/25/18 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.416 g	5.0 mL	539470	08/24/18 12:20	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	539562	08/30/18 06:15	PN	TAL NSH

Client Sample ID: DG-DE89-0.5-1
Lab Sample ID: 320-42505-9
Date Collected: 08/24/18 11:20
Matrix: Solid
Date Received: 08/25/18 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.924 g	5.0 mL	539470	08/24/18 13:20	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	539562	08/30/18 06:43	PN	TAL NSH

Client Sample ID: DUP-15
Lab Sample ID: 320-42505-10
Date Collected: 08/24/18 00:00
Matrix: Solid
Date Received: 08/25/18 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.251 g	5.0 mL	539470	08/24/18 02:00	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	539562	08/30/18 07:11	PN	TAL NSH

Client Sample ID: DG-D9S-0.5-1
Lab Sample ID: 320-42505-11
Date Collected: 08/24/18 11:35
Matrix: Solid
Date Received: 08/25/18 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.924 g	5.0 mL	539470	08/24/18 13:35	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	539562	08/30/18 07:39	PN	TAL NSH

Client Sample ID: DG-F9S-0.5-1
Lab Sample ID: 320-42505-12
Date Collected: 08/24/18 12:10
Matrix: Solid
Date Received: 08/25/18 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.561 g	5.0 mL	539470	08/24/18 14:10	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	539562	08/30/18 08:07	PN	TAL NSH

Client Sample ID: DG-K7S-0.5-1
Lab Sample ID: 320-42505-13
Date Collected: 08/24/18 07:52
Matrix: Solid
Date Received: 08/25/18 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9.54 g	10.0 mL	539465	08/24/18 09:52	DHC	TAL NSH
Total/NA	Analysis	8260B		1	0.1 mL	5 mL	539982	08/31/18 16:01	PN	TAL NSH

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 320-42505-1

Client Sample ID: DG-L135-0.5-1

Lab Sample ID: 320-42505-14

Date Collected: 08/24/18 09:40

Matrix: Solid

Date Received: 08/25/18 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.833 g	5.0 mL	539470	08/24/18 11:40	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	539562	08/30/18 09:03	PN	TAL NSH

Client Sample ID: DUP-25

Lab Sample ID: 320-42505-15

Date Collected: 08/24/18 00:00

Matrix: Solid

Date Received: 08/25/18 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.099 g	5.0 mL	539470	08/24/18 02:00	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	539562	08/30/18 09:31	PN	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 320-42505-1

Laboratory: TestAmerica Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-020	01-20-21
ANAB	DoD ELAP		L2468	01-20-21
Arizona	State Program	9	AZ0708	08-11-19
Arkansas DEQ	State Program	6	88-0691	06-17-19
California	State Program	9	2897	01-31-19
Colorado	State Program	8	CA00044	08-31-19
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-19
Georgia	State Program	4	N/A	01-28-19
Hawaii	State Program	9	N/A	01-29-19
Illinois	NELAP	5	200060	03-17-19
Kansas	NELAP	7	E-10375	10-31-18
Louisiana	NELAP	6	30612	06-30-19
Maine	State Program	1	CA0004	04-14-20
Michigan	State Program	5	9947	01-31-20
Nevada	State Program	9	CA00044	07-31-19
New Hampshire	NELAP	1	2997	04-18-19
New Jersey	NELAP	2	CA005	06-30-19
New York	NELAP	2	11666	03-31-19
Oregon	NELAP	10	4040	01-29-19
Pennsylvania	NELAP	3	68-01272	03-31-19
Texas	NELAP	6	T104704399	05-31-19
US Fish & Wildlife	Federal		LE148388-0	07-31-19
USDA	Federal		P330-18-00239	01-17-21
USEPA UCMR	Federal	1	CA00044	11-06-18
Utah	NELAP	8	CA00044	02-28-19
Vermont	State Program	1	VT-4040	04-30-19
Virginia	NELAP	3	460278	03-14-19
Washington	State Program	10	C581	05-05-19
West Virginia (DW)	State Program	3	9930C	12-31-18
Wyoming	State Program	8	8TMS-L	01-28-19

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-19
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-19
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-19
Georgia	State Program	4	NA: NELAP & A2LA	12-31-19
Illinois	NELAP	5	200010	12-09-18
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-18
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-18
Louisiana	NELAP	6	30613	06-30-19

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc. TestAmerica Job ID: 320-42505-1
Project/Site: UPC OU-SM

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-19
Minnesota	NELAP	5	047-999-345	12-31-18
Mississippi	State Program	4	N/A	06-30-19
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-19
New Hampshire	NELAP	1	2963	10-09-18
New Jersey	NELAP	2	TN965	06-30-19
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-18
North Dakota	State Program	8	R-146	06-30-19
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-19
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	07-31-19
Rhode Island	State Program	1	LAO00268	12-30-18
South Carolina	State Program	4	84009 (001)	02-28-19
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-19
Washington	State Program	10	C789	07-19-19
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-19
Wyoming (UST)	A2LA	8	453.07	12-31-19

Laboratory: TestAmerica Pleasanton

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 320-42505-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
5035	Closed System Purge and Trap	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 320-42505-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-42505-1	DG-A7S-0.5-1	Solid	08/23/18 15:00	08/25/18 09:05
320-42505-3	DG-E7S-0.5-1	Solid	08/24/18 08:25	08/25/18 09:05
320-42505-4	DG-G7S-0.5-1	Solid	08/24/18 08:50	08/25/18 09:05
320-42505-5	DG-B10S-0.5-1	Solid	08/24/18 10:40	08/25/18 09:05
320-42505-6	DG-I7S-0.5-1	Solid	08/24/18 09:25	08/25/18 09:05
320-42505-7	DG-M7S-0.5-1	Solid	08/24/18 09:55	08/25/18 09:05
320-42505-8	DG-B9S-0.5-1	Solid	08/24/18 10:20	08/25/18 09:05
320-42505-9	DG-DE89-0.5-1	Solid	08/24/18 11:20	08/25/18 09:05
320-42505-10	DUP-15	Solid	08/24/18 00:00	08/25/18 09:05
320-42505-11	DG-D9S-0.5-1	Solid	08/24/18 11:35	08/25/18 09:05
320-42505-12	DG-F9S-0.5-1	Solid	08/24/18 12:10	08/25/18 09:05
320-42505-13	DG-K7S-0.5-1	Solid	08/24/18 07:52	08/25/18 09:05
320-42505-14	DG-L135-0.5-1	Solid	08/24/18 09:40	08/25/18 09:05
320-42505-15	DUP-25	Solid	08/24/18 00:00	08/25/18 09:05

SAC

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: _____

Date 8/24 Page 1 of 2

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
Bill To: GEOSYNTEC
Sampled By: M. KAHRILAS
Attn: A. SMITH
Phone: 347-530-7602

Analysis Request

Sample ID	Date	Time	Mat.	Preserv.	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B + 1,4-D	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)	1,2,3-TCP (8260B-SIM/5035)
DG-A7S-0.5-1	8/23	1500	5	Y																			X	X
DG-C7S-0.5-1	8/24	750																					X	X
DG-E7S-0.5-1		825																					X	X
DG-G7S-0.5-1		850																					X	X
DG-B9S-0.5-1		1040																					X	X
DG-I7S-0.5-1		925																					X	X
DG-M7S-0.5-1		955																					X	X
DG-B9S-0.5-1		1020																					X	X
DG-DE89-0.5-1		1120																					X	X
DUP-15	8/24																						X	X

320-42505 Chain of Custody

Project Info.

Project Name/ #: UPC OU-SM
PO#: WG2565/02
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers:
Head Space:
Temp:

10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other: 3)

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____
* did not receive on 8-25-18
Page 2 of 2

Terms and Conditions on reverse

1) Relinquished by:
Signature: [illegible] Time: 1315
Printed Name: MIRANDA KAHRILAS Date: 8/24
Company: GEO

2) Relinquished by:
Signature: [illegible] Time: 1500
Printed Name: [illegible] Date: 8/24/18
Company: TA

3) Relinquished by:
Signature: _____ Time: _____
Printed Name: _____ Date: _____
Company: _____

4) ~~Received by:~~ relinquished by:
Signature: [illegible] Time: 1315
Printed Name: Rohit Date: 8/24/18
Company: TA

** labeled as DG-B9S-0.5-1

2) Received by:
Signature: [illegible] Time: 905
Printed Name: C. Eftychiou Date: 8-25-18
Company: Fedex 2.5°C

3) Received by:
Signature: _____ Time: _____
Printed Name: _____ Date: _____
Company: _____

9/4/2018

SAC

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: _____

Date 8/24 Page 2 of 2

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: MKahrilas@geosyntec.com
Bill To: GEOSYNTEC
Sampled By: M. KAHRILAS
Attn: A SMITH
Phone: 347-530-7602

Analysis Request

Sample ID	Date	Time	Mat rix	Preserv	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	1,2,3-TCP (8260B - SIM/5035)
DG-D9S--0.5-1	8/24	1135	S	Y																				X
DG-F9S--0.5-1	8/24	1210	↓	↓																				X
DG-K7S--0.5-1	↓	0752	↓	↓																				X
DG-L13S--0.5-1	↓	0940	↓	↓																				X
Rec'd Dup 25	8-24-18																							
DG-B10S-0.5-1	8-24	1040																						

Page 22 of 27

Project Info.

Project Name/ #: LRL QU-SM
PO#: W625651012
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers:
Head Space:
Temp:

TAT: 10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other: 3)

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1315	Signature: [signature] Time: 1500	Signature: Time:
Printed Name: MIRANDA KAHRILAS Date: 8/24	Printed Name: [signature] Date: 8/24/18	Printed Name: Date:
Company: GEO	Company: TC	Company:

~~1) Received by:~~ relinquished by!	2) Received by:	3) Received by:
Signature: [signature] Time: 1315	Signature: [signature] Time: 905	Signature: Time:
Printed Name: Robert Date: 8/24/18	Printed Name: C Hytrek Date: 8-25-18	Printed Name: Date:
Company: TA	Company: [signature]	Company:
	2.3°C	

9/4/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

320-42505 Chain of Custody

COOLER RECEIPT FORM

Cooler Received/Opened On 8/29/2018 @ 1005

Time Samples Removed From Cooler 1129 Time Samples Placed In Storage 1133 (2 Hour Window)

1. Tracking # 5640 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17960357 pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: 1.2 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) GH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) GH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) GH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) GH

I certify that I attached a label with the unique LIMS number to each container (intial) GH

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

Loc: 320
42505

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 8/29/2018 @ 1005

Time Samples Removed From Cooler 1129 Time Samples Placed In Storage 1133 (2 Hour Window)

1. Tracking # 5630 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17960358 pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: 15.7 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? GH 8-29-18 YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) GH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) GH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) GH

I certify that I attached a label with the unique LIMS number to each container (intial) GH

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

TestAmerica Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	COC No: 320-127774.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State: California	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California	Job #: 320-42505-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 8/31/2018		
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: Brisbane Data Gap Invest Work Plan	Project #: 72013717		
Site:	SSOW#:		

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B/5035LP_Calc 1,2,3-TCP and 1,2-Dibromo-3-chloropropane	8260B/5035A_M_Calc 1,2,3-TCP and 1,2-Dibromo-3-chloropropane	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
DG-A7S-0.5-1 (320-42505-1)	8/23/18	15:00 Pacific		Solid			X	X	3	
DG-C7S-0.5-1 (320-42505-2)	8/24/18	07:50 Pacific		Solid			X	X	3	
DG-E7S-0.5-1 (320-42505-3)	8/24/18	08:25 Pacific		Solid			X	X	3	
DG-G7S-0.5-1 (320-42505-4)	8/24/18	08:50 Pacific		Solid			X	X	3	
DG-B9S-0.5-1 (320-42505-5)	8/24/18	10:40 Pacific		Solid			X	X	3	
DG-I7S-0.5-1 (320-42505-6)	8/24/18	09:25 Pacific		Solid			X	X	3	
DG-M7S-0.5-1 (320-42505-7)	8/24/18	09:55 Pacific		Solid			X	X	3	
DG-B9S-0.5-1 (320-42505-8)	8/24/18	10:20 Pacific		Solid			X	X	3	
DG-DE89-0.5-1 (320-42505-9)	8/24/18	11:20 Pacific		Solid			X	X	3	

Loc: 320
42505

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:	Date/Time: 8-28-18 1650	Company	Received by:	Date/Time: 8-29-18 1005	Company TA-NAS		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.2/-15.7	

Ver: 09/20/2016

TestAmerica Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600 Fax (916) 372-1059

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 320-127774.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California		Job #: 320-42505-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 8/31/2018			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: Brisbane Data Gap Invest Work Plan	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B/5035LP_Calc 1,2,3-TCP and 1,2-Dibromo-3-chloropane	8260B/5035A_M_Calc 1,2,3-TCP and 1,2-Dibromo-3-chloropane	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
DUP-15 (320-42505-10)	8/24/18	Pacific		Solid			X	X	3	Loc: 320 42505
DG-D9S-0.5-1 (320-42505-11)	8/24/18	11:35 Pacific		Solid			X	X	3	
DG-F9S-0.5-1 (320-42505-12)	8/24/18	12:10 Pacific		Solid			X	X	3	
DG-K7S-0.5-1 (320-42505-13)	8/24/18	07:52 Pacific		Solid			X	X	3	
DG-L135-0.5-1 (320-42505-14)	8/24/18	09:40 Pacific		Solid			X	X	3	
DUP-25 (320-42505-15)	8/24/18	Pacific		Solid			X	X	3	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	8-28-18 1630	[illegible]	[signature]	8-29-18 1005	TA-NAS
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.2 / -15.7

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 320-42505-1

Login Number: 42505
List Number: 1
Creator: Her, David A

List Source: TestAmerica Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	IDs on containers do not match the COC. Logged in per COC.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88125-1
Client Project/Site: UPC-Brisbane

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
8/27/2018 11:57:06 AM

Micah Smith, Project Manager II
(916)374-4302
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 6
Surrogate Summary 9
QC Sample Results 10
QC Association Summary 11
Lab Chronicle 12
Certification Summary 13
Method Summary 14
Sample Summary 15
Chain of Custody 16
Receipt Checklists 21

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-Brisbane

TestAmerica Job ID: 720-88125-1

Job ID: 720-88125-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88125-1

Comments
As discussed with the client, samples will be analyzed by method 8260B for 1,2,3-Trichloropropane and 1,2-Dibromo-3-Chloropropane.

Receipt
The samples were received on 8/20/2018 2:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.7º C.

Sample analysis for 720-88125-1, -4, and -6 (DG L1 (3.5-4), DGJ1 (3.5-4), and DG H1 (3.5-4) were canceled at the emailed request of the client on August 21, 2018.

Sample IDs for 720-88125-2, -3, and -5 (DG-L1S-0.5-1, DG-J1S-0.5-1, and DG-H1S-0.5-1) were changed also at the emailed request of the client on August 21, 2018.

GC/MS VOA
Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 490-537486.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-Brisbane

TestAmerica Job ID: 720-88125-1

Client Sample ID: DG-L1S-0.5-1 — Lab Sample ID: 720-88125-2

No Detections.

Client Sample ID: DG-J1S-0.5-1 — Lab Sample ID: 720-88125-3

No Detections.

Client Sample ID: DG-H1S-0.5-1 — Lab Sample ID: 720-88125-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-Brisbane

TestAmerica Job ID: 720-88125-1

Client Sample ID: DG-L1S-0.5-1
Date Collected: 08/20/18 09:30
Date Received: 08/20/18 14:15

Lab Sample ID: 720-88125-2
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.00091	0.00025	mg/Kg		08/21/18 13:08	08/21/18 19:28	1
1,2-Dibromo-3-Chloropropane	ND		0.0023	0.00032	mg/Kg		08/21/18 13:08	08/21/18 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*	*08/21/18 13:08*	*08/21/18 19:28*	*1*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*08/21/18 13:08*	*08/21/18 19:28*	*1*
Dibromofluoromethane (Surr)	*120*		*70 - 130*	*08/21/18 13:08*	*08/21/18 19:28*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/21/18 13:08*	*08/21/18 19:28*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-Brisbane

TestAmerica Job ID: 720-88125-1

Client Sample ID: DG-J1S-0.5-1
Date Collected: 08/20/18 11:15
Date Received: 08/20/18 14:15

Lab Sample ID: 720-88125-3
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0018	0.00048	mg/Kg		08/21/18 13:08	08/21/18 19:57	1
1,2-Dibromo-3-Chloropropane	ND		0.0044	0.00062	mg/Kg		08/21/18 13:08	08/21/18 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*	*08/21/18 13:08*	*08/21/18 19:57*	*1*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*08/21/18 13:08*	*08/21/18 19:57*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*	*08/21/18 13:08*	*08/21/18 19:57*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*	*08/21/18 13:08*	*08/21/18 19:57*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-Brisbane

TestAmerica Job ID: 720-88125-1

Client Sample ID: DG-H1S-0.5-1
Date Collected: 08/20/18 12:10
Date Received: 08/20/18 14:15

Lab Sample ID: 720-88125-5
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0017	0.00047	mg/Kg		08/21/18 13:08	08/21/18 20:26	1
1,2-Dibromo-3-Chloropropane	ND		0.0043	0.00060	mg/Kg		08/21/18 13:08	08/21/18 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*	*08/21/18 13:08*	*08/21/18 20:26*	*1*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*08/21/18 13:08*	*08/21/18 20:26*	*1*
Dibromofluoromethane (Surr)	*123*		*70 - 130*	*08/21/18 13:08*	*08/21/18 20:26*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*08/21/18 13:08*	*08/21/18 20:26*	*1*

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-Brisbane

TestAmerica Job ID: 720-88125-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
720-88125-2	DG-L1S-0.5-1	109	125	120	101
720-88125-3	DG-J1S-0.5-1	109	124	112	103
720-88125-5	DG-H1S-0.5-1	113	122	123	99
LCS 490-537486/4	Lab Control Sample	95	104	98	100
LCSD 490-537486/5	Lab Control Sample Dup	98	103	102	100
MB 490-537486/10	Method Blank	97	112	116	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-537486/10
Matrix: Solid
Analysis Batch: 537486

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0020	0.00055	mg/Kg			08/21/18 14:38	1
1,2-Dibromo-3-Chloropropane	ND		0.0050	0.00070	mg/Kg			08/21/18 14:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/21/18 14:38*	*1*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*		*08/21/18 14:38*	*1*
Dibromofluoromethane (Surr)	*116*		*70 - 130*		*08/21/18 14:38*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/21/18 14:38*	*1*

Lab Sample ID: LCS 490-537486/4
Matrix: Solid
Analysis Batch: 537486

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.0500	0.0433		mg/Kg		87	60 - 139
1,2-Dibromo-3-Chloropropane	0.0500	0.0392		mg/Kg		78	47 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 490-537486/5
Matrix: Solid
Analysis Batch: 537486

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.0500	0.0444		mg/Kg		89	60 - 139	2	16
1,2-Dibromo-3-Chloropropane	0.0500	0.0398		mg/Kg		80	47 - 144	2	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-Brisbane

TestAmerica Job ID: 720-88125-1

GC/MS VOA

Analysis Batch: 537486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88125-2	DG-L1S-0.5-1	Total/NA	Solid	8260B	537627
720-88125-3	DG-J1S-0.5-1	Total/NA	Solid	8260B	537627
720-88125-5	DG-H1S-0.5-1	Total/NA	Solid	8260B	537627
MB 490-537486/10	Method Blank	Total/NA	Solid	8260B	
LCS 490-537486/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-537486/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 537627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88125-2	DG-L1S-0.5-1	Total/NA	Solid	5035	
720-88125-3	DG-J1S-0.5-1	Total/NA	Solid	5035	
720-88125-5	DG-H1S-0.5-1	Total/NA	Solid	5035	

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-Brisbane

TestAmerica Job ID: 720-88125-1

Client Sample ID: DG-L1S-0.5-1

Lab Sample ID: 720-88125-2

Date Collected: 08/20/18 09:30

Matrix: Solid

Date Received: 08/20/18 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			537627	08/21/18 13:08	DHC	TAL NSH
Total/NA	Analysis	8260B		1	537486	08/21/18 19:28	P1B	TAL NSH

Client Sample ID: DG-J1S-0.5-1

Lab Sample ID: 720-88125-3

Date Collected: 08/20/18 11:15

Matrix: Solid

Date Received: 08/20/18 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			537627	08/21/18 13:08	DHC	TAL NSH
Total/NA	Analysis	8260B		1	537486	08/21/18 19:57	P1B	TAL NSH

Client Sample ID: DG-H1S-0.5-1

Lab Sample ID: 720-88125-5

Date Collected: 08/20/18 12:10

Matrix: Solid

Date Received: 08/20/18 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			537627	08/21/18 13:08	DHC	TAL NSH
Total/NA	Analysis	8260B		1	537486	08/21/18 20:26	P1B	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-Brisbane

TestAmerica Job ID: 720-88125-1

Laboratory: TestAmerica Pleasanton

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-18 *
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-19
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-19
Georgia	State Program	4	NA: NELAP & A2LA	12-31-19
Illinois	NELAP	5	200010	12-09-18
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-18
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-18
Louisiana	NELAP	6	30613	06-30-19
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-19
Minnesota	NELAP	5	047-999-345	12-31-18
Mississippi	State Program	4	N/A	06-30-19
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-19
New Hampshire	NELAP	1	2963	10-09-18
New Jersey	NELAP	2	TN965	06-30-19
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-18
North Dakota	State Program	8	R-146	06-30-19
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-18 *
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	07-31-19
Rhode Island	State Program	1	LAO00268	12-30-18
South Carolina	State Program	4	84009 (001)	02-28-19
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-19
Washington	State Program	10	C789	07-19-19
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-18 *
Wyoming (UST)	A2LA	8	453.07	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-Brisbane

TestAmerica Job ID: 720-88125-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
5035	Closed System Purge and Trap	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-Brisbane

TestAmerica Job ID: 720-88125-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88125-2	DG-L1S-0.5-1	Solid	08/20/18 09:30	08/20/18 14:15
720-88125-3	DG-J1S-0.5-1	Solid	08/20/18 11:15	08/20/18 14:15
720-88125-5	DG-H1S-0.5-1	Solid	08/20/18 12:10	08/20/18 14:15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88125

TESTAMERICA Pleasanton Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756

Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185004

Date 8/20/19 Page 1 of 1

8/27/2018

Report To

Attn: MIRANDA KAHRILAS

Company: GEOSYNTEC

Address: 111 BROADWAY 6TH FLOOR

Email: mkahrilas@geosyntec.com

Bill To:

Sampled By:

Attn:

Phone:

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	1-2-3 TCP (8260B - SIM ISVOA)
DG L1 (3.5-4)	8/20	950	S	Hcl																			X
DG L1 (0.5-1)		930																					X
DG J1 (0.5-1)		1115																					X
DG J1 (3.5-4)		1115																					X
DG H1 (0.5-1)		1210																					X
DG H1 (3.5-4)	↓	1210	↓	↓																			X

720-88125 Chain of Custody

Project Info.

Project Name/ #: LPC - Brisbane

PO#:

Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers: 18

Head Space:

Temp:

TAT: 10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF

Special Instructions / Comments: ☐ Global ID ___

1.7C

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1300	Signature: [signature] Time: 1415	Signature: Time:
Printed Name: MIRANDA KAHRILAS Date: 8/20	Printed Name: L. CEARLEY Date: 8/20/19	Printed Name: Date:
Company: GEOSYNTEC	Company: TA 720	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 1300	Signature: [signature] Time: 1415	Signature: Time:
Printed Name: L. CEARLEY Date: 8/20/19	Printed Name: DENNIS ARCAN Date: 8/20/19	Printed Name: Date:
Company: TA 720	Company: TA 720	Company:

Smith, Micah

From: Anthony Smith <TSmith@Geosyntec.com>
Sent: Tuesday, August 21, 2018 10:20 AM
To: Smith, Micah; Krzysztof Jesionek; Miranda Kahrilas
Subject: RE: TestAmerica Sample Login Confirmation files from 720-88125 UPC-Brisbane

-External Email-

Hi Micah,

I apologize, we're still working out the kinks.

1. Please cancel analysis of lab sample #s 1, 4, and 6
2. Please change remaining sample IDs as follows:
    a. DG-L1S-0.5-1
    b. DG-J1S-0.5-1
    c. DG-H1S-0.5-1

Thank you.

Tony Smith, Ph.D., P.E. (CA)
Senior Engineer

Geosyntec Consultants
1111 Broadway, 6th Floor
Oakland, CA 94607
Direct: (510) 285-2770
tsmith@geosyntec.com

From: Smith, Micah <micah.smith@testamericainc.com>
Sent: Monday, August 20, 2018 4:51 PM
To: Krzysztof Jesionek <KJesionek@Geosyntec.com>; Miranda Kahrilas <MKahrilas@Geosyntec.com>; Anthony Smith <TSmith@Geosyntec.com>
Subject: TestAmerica Sample Login Confirmation files from 720-88125 UPC-Brisbane

Hello,

Attached, please find the Sample Confirmation files for job 720-88125; UPC-Brisbane

Please feel free to contact me if you have any questions.

Thank you.

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: Project Feedback

MICAH SMITH
Project Manager

TestAmerica Pleasanton
THE LEADER IN ENVIRONMENTAL TESTING

Tel: 916.374.4302
www.testamericainc.com

Reference: [284669]
Attachments: 3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

720-88125 Chain of Custody

Cooler Received/Opened On 8/21/2018 @ 0930

Time Samples Removed From Cooler 1235 Time Samples Placed In Storage 1236 (2 Hour Window)

1. Tracking # 5097 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17960357 pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: 1.2 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1Side

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) GH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

● Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) GH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) GH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) GH

I certify that I attached a label with the unique LIMS number to each container (intial) GH

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

Loc: 720
88125

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah		COC No: 720-39356.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California		Job #: 720-88125-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 8/24/2018			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC-Brisbane	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B/5035LP_Calc 1,2,3-TCP and 1,2-Dibromo-3-chloropropane	8260B/5035A_M_Calc 1,2,3-TCP and 1,2-Dibromo-3-chloropropane	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
DG-L1(3.5-4) (720-88125-1)	8/20/18	09:50 Pacific		Solid			X	X	3	Loc: 720 88125
DG-L1(0.5-1) (720-88125-2)	8/20/18	09:30 Pacific		Solid			X	X	3	
DG-J1(0.5-1) (720-88125-3)	8/20/18	11:15 Pacific		Solid			X	X	3	
DG-J1(3.5-4) (720-88125-4)	8/20/18	11:15 Pacific		Solid			X	X	3	
DG-H1(0.5-1) (720-88125-5)	8/20/18	12:10 Pacific		Solid			X	X	3	
DG-H1(3.5-4) (720-88125-6)	8/20/18	12:10 Pacific		Solid			X	X	3	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 8-20-18 1511	Company TA-720	Received by:	Date/Time: 8-21-18/0930	Company TA-NAS
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.2

Ver: 09/20/2016

8/27/2018

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88125-1

Login Number: 88125
List Number: 1
Creator: Arauz, Dennis

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88148-1
Client Project/Site: UPC-OU-SM

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
8/27/2018 5:54:00 PM

Micah Smith, Project Manager II
(916)374-4302
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 6
Surrogate Summary 11
QC Sample Results 12
QC Association Summary 14
Lab Chronicle 15
Certification Summary 16
Method Summary 17
Sample Summary 18
Chain of Custody 19
Receipt Checklists 24

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88148-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88148-1

Comments
As discussed with the client, samples will be analyzed by method 8260B for 1,2,3-Trichloropropane and 1,2-Dibromo-3-Chloropropane.

The collection time used for sample number DG-C3S-0.5-1 (720-88148-5) was taken from the sample container labels.

The sample IDs were changes as requested in the included email.

Receipt
The samples were received on 8/21/2018 2:52 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9º C.

GC/MS VOA
Method(s) 8260B: The following samples were diluted due to the nature of the sample matrix: DG-A3S-0.5-1 (720-88148-4) and DG-C3S-0.5-1 (720-88148-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 490-538126 and batch 490-537814.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-OU-SM

TestAmerica Job ID: 720-88148-1

Client Sample ID: DG-F1S-0.5-1 — Lab Sample ID: 720-88148-1

No Detections.

Client Sample ID: DG-D1S-0.5-1 — Lab Sample ID: 720-88148-2

No Detections.

Client Sample ID: DG-B1S-0.5-1 — Lab Sample ID: 720-88148-3

No Detections.

Client Sample ID: DG-A3S-0.5-1 — Lab Sample ID: 720-88148-4

No Detections.

Client Sample ID: DG-C3S-0.5-1 — Lab Sample ID: 720-88148-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-OU-SM

TestAmerica Job ID: 720-88148-1

Client Sample ID: DG-F1S-0.5-1
Date Collected: 08/20/18 14:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88148-1
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0015	0.00042	mg/Kg		08/22/18 14:29	08/22/18 17:09	1
1,2-Dibromo-3-Chloropropane	ND		0.0038	0.00053	mg/Kg		08/22/18 14:29	08/22/18 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*	*08/22/18 14:29*	*08/22/18 17:09*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*08/22/18 14:29*	*08/22/18 17:09*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*	*08/22/18 14:29*	*08/22/18 17:09*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*08/22/18 14:29*	*08/22/18 17:09*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-OU-SM

TestAmerica Job ID: 720-88148-1

Client Sample ID: DG-D1S-0.5-1
Date Collected: 08/20/18 15:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88148-2
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0018	0.00048	mg/Kg		08/22/18 14:29	08/22/18 17:37	1
1,2-Dibromo-3-Chloropropane	ND		0.0044	0.00062	mg/Kg		08/22/18 14:29	08/22/18 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*	*08/22/18 14:29*	*08/22/18 17:37*	*1*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*08/22/18 14:29*	*08/22/18 17:37*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*08/22/18 14:29*	*08/22/18 17:37*	*1*
Toluene-d8 (Surr)	*113*		*70 - 130*	*08/22/18 14:29*	*08/22/18 17:37*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-OU-SM

TestAmerica Job ID: 720-88148-1

Client Sample ID: DG-B1S-0.5-1
Date Collected: 08/21/18 10:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88148-3
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0017	0.00048	mg/Kg		08/22/18 14:29	08/22/18 18:05	1
1,2-Dibromo-3-Chloropropane	ND		0.0044	0.00061	mg/Kg		08/22/18 14:29	08/22/18 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*	*08/22/18 14:29*	*08/22/18 18:05*	*1*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*08/22/18 14:29*	*08/22/18 18:05*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*	*08/22/18 14:29*	*08/22/18 18:05*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*	*08/22/18 14:29*	*08/22/18 18:05*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-OU-SM

TestAmerica Job ID: 720-88148-1

Client Sample ID: DG-A3S-0.5-1
Date Collected: 08/21/18 11:10
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88148-4
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.099	0.028	mg/Kg		08/22/18 14:17	08/23/18 15:54	1
1,2-Dibromo-3-Chloropropane	ND		0.25	0.035	mg/Kg		08/22/18 14:17	08/23/18 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*	*08/22/18 14:17*	*08/23/18 15:54*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*08/22/18 14:17*	*08/23/18 15:54*	*1*
Dibromofluoromethane (Surr)	*127*		*70 - 130*	*08/22/18 14:17*	*08/23/18 15:54*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*08/22/18 14:17*	*08/23/18 15:54*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-OU-SM

TestAmerica Job ID: 720-88148-1

Client Sample ID: DG-C3S-0.5-1
Date Collected: 08/21/18 12:05
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88148-5
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.11	0.030	mg/Kg		08/22/18 14:17	08/23/18 16:23	1
1,2-Dibromo-3-Chloropropane	ND		0.27	0.038	mg/Kg		08/22/18 14:17	08/23/18 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*	*08/22/18 14:17*	*08/23/18 16:23*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*08/22/18 14:17*	*08/23/18 16:23*	*1*
Dibromofluoromethane (Surr)	*118*		*70 - 130*	*08/22/18 14:17*	*08/23/18 16:23*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*08/22/18 14:17*	*08/23/18 16:23*	*1*

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-OU-SM

TestAmerica Job ID: 720-88148-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
720-88148-1	DG-F1S-0.5-1	87	102	95	102
720-88148-2	DG-D1S-0.5-1	88	124	99	113
720-88148-3	DG-B1S-0.5-1	86	119	96	106
720-88148-4	DG-A3S-0.5-1	115	106	127	98
720-88148-5	DG-C3S-0.5-1	106	106	118	99
LCS 490-537814/13	Lab Control Sample	84	100	96	102
LCS 490-538126/5	Lab Control Sample	105	102	104	99
LCSD 490-537814/14	Lab Control Sample Dup	83	101	96	102
LCSD 490-538126/6	Lab Control Sample Dup	106	102	104	99
MB 490-537814/12	Method Blank	79	102	94	104
MB 490-538126/8	Method Blank	119	107	123	96

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-537814/12
Matrix: Solid
Analysis Batch: 537814

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0020	0.00055	mg/Kg			08/22/18 15:17	1
1,2-Dibromo-3-Chloropropane	ND		0.0050	0.00070	mg/Kg			08/22/18 15:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*70 - 130*		*08/22/18 15:17*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*08/22/18 15:17*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*08/22/18 15:17*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*08/22/18 15:17*	*1*

Lab Sample ID: LCS 490-537814/13
Matrix: Solid
Analysis Batch: 537814

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.0500	0.0436		mg/Kg		87	60 - 139		
1,2-Dibromo-3-Chloropropane			0.0500	0.0385		mg/Kg		77	47 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 490-537814/14
Matrix: Solid
Analysis Batch: 537814

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			0.0500	0.0441		mg/Kg		88	60 - 139	1	16
1,2-Dibromo-3-Chloropropane			0.0500	0.0387		mg/Kg		77	47 - 144	0	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: MB 490-538126/8
Matrix: Solid
Analysis Batch: 538126

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.10	0.028	mg/Kg			08/23/18 13:30	1
1,2-Dibromo-3-Chloropropane	ND		0.25	0.035	mg/Kg			08/23/18 13:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*		*08/23/18 13:30*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-538126/8
Matrix: Solid
Analysis Batch: 538126

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130		08/23/18 13:30	1
Dibromofluoromethane (Surr)	123		70 - 130		08/23/18 13:30	1
Toluene-d8 (Surr)	96		70 - 130		08/23/18 13:30	1

Lab Sample ID: LCS 490-538126/5
Matrix: Solid
Analysis Batch: 538126

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			2.50	2.59		mg/Kg		103	60 - 139		
1,2-Dibromo-3-Chloropropane			2.50	2.51		mg/Kg		100	47 - 144		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		70 - 130
4-Bromofluorobenzene (Surr)	102		70 - 130
Dibromofluoromethane (Surr)	104		70 - 130
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: LCSD 490-538126/6
Matrix: Solid
Analysis Batch: 538126

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			2.50	2.52		mg/Kg		101	60 - 139	2	16
1,2-Dibromo-3-Chloropropane			2.50	2.56		mg/Kg		103	47 - 144	2	38

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		70 - 130
4-Bromofluorobenzene (Surr)	102		70 - 130
Dibromofluoromethane (Surr)	104		70 - 130
Toluene-d8 (Surr)	99		70 - 130

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-OU-SM

TestAmerica Job ID: 720-88148-1

GC/MS VOA

Analysis Batch: 537814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88148-1	DG-F1S-0.5-1	Total/NA	Solid	8260B	537877
720-88148-2	DG-D1S-0.5-1	Total/NA	Solid	8260B	537877
720-88148-3	DG-B1S-0.5-1	Total/NA	Solid	8260B	537877
MB 490-537814/12	Method Blank	Total/NA	Solid	8260B	
LCS 490-537814/13	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-537814/14	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 537877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88148-1	DG-F1S-0.5-1	Total/NA	Solid	5035	
720-88148-2	DG-D1S-0.5-1	Total/NA	Solid	5035	
720-88148-3	DG-B1S-0.5-1	Total/NA	Solid	5035	

Prep Batch: 537950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88148-4	DG-A3S-0.5-1	Total/NA	Solid	5035	
720-88148-5	DG-C3S-0.5-1	Total/NA	Solid	5035	

Analysis Batch: 538126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88148-4	DG-A3S-0.5-1	Total/NA	Solid	8260B	537950
720-88148-5	DG-C3S-0.5-1	Total/NA	Solid	8260B	537950
MB 490-538126/8	Method Blank	Total/NA	Solid	8260B	
LCS 490-538126/5	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-538126/6	Lab Control Sample Dup	Total/NA	Solid	8260B	

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-OU-SM

TestAmerica Job ID: 720-88148-1

Client Sample ID: DG-F1S-0.5-1
Date Collected: 08/20/18 14:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88148-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			537877	08/22/18 14:29	JLP	TAL NSH
Total/NA	Analysis	8260B		1	537814	08/22/18 17:09	RP	TAL NSH

Client Sample ID: DG-D1S-0.5-1
Date Collected: 08/20/18 15:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88148-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			537877	08/22/18 14:29	JLP	TAL NSH
Total/NA	Analysis	8260B		1	537814	08/22/18 17:37	RP	TAL NSH

Client Sample ID: DG-B1S-0.5-1
Date Collected: 08/21/18 10:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88148-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			537877	08/22/18 14:29	JLP	TAL NSH
Total/NA	Analysis	8260B		1	537814	08/22/18 18:05	RP	TAL NSH

Client Sample ID: DG-A3S-0.5-1
Date Collected: 08/21/18 11:10
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88148-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			537950	08/22/18 14:17	DHC	TAL NSH
Total/NA	Analysis	8260B		1	538126	08/23/18 15:54	P1B	TAL NSH

Client Sample ID: DG-C3S-0.5-1
Date Collected: 08/21/18 12:05
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88148-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			537950	08/22/18 14:17	DHC	TAL NSH
Total/NA	Analysis	8260B		1	538126	08/23/18 16:23	P1B	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-OU-SM

TestAmerica Job ID: 720-88148-1

Laboratory: TestAmerica Pleasanton

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-18 *
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-19
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-19
Georgia	State Program	4	NA: NELAP & A2LA	12-31-19
Illinois	NELAP	5	200010	12-09-18
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-18
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-18
Louisiana	NELAP	6	30613	06-30-19
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-19
Minnesota	NELAP	5	047-999-345	12-31-18
Mississippi	State Program	4	N/A	06-30-19
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-19
New Hampshire	NELAP	1	2963	10-09-18
New Jersey	NELAP	2	TN965	06-30-19
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-18
North Dakota	State Program	8	R-146	06-30-19
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-18 *
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	07-31-19
Rhode Island	State Program	1	LAO00268	12-30-18
South Carolina	State Program	4	84009 (001)	02-28-19
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-19
Washington	State Program	10	C789	07-19-19
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-18 *
Wyoming (UST)	A2LA	8	453.07	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-OU-SM

TestAmerica Job ID: 720-88148-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
5035	Closed System Purge and Trap	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC-OU-SM

TestAmerica Job ID: 720-88148-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88148-1	DG-F1S-0.5-1	Solid	08/20/18 14:45	08/21/18 14:52
720-88148-2	DG-D1S-0.5-1	Solid	08/20/18 15:45	08/21/18 14:52
720-88148-3	DG-B1S-0.5-1	Solid	08/21/18 10:30	08/21/18 14:52
720-88148-4	DG-A3S-0.5-1	Solid	08/21/18 11:10	08/21/18 14:52
720-88148-5	DG-C3S-0.5-1	Solid	08/21/18 12:05	08/21/18 14:52

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88148

TESTAMERICA Pleasanton Chain of Custody

1220 Quarry Lane ● Pleasanton CA 94566-4756

Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: 185025

Date 3/21/13 Page 1 of 1

8/27/2018

Report To

Attn: MIRANDA KAHRILAS

Company: GEOSYNTEC

Address: 1111 BROADWAY 6TH FLOOR

Email: mkahrilas@geosyntec.com

Bill To: GEOSYNTEC

Sampled By: M. KAHRILAS

Attn: ANTHONY SMITH

Phone: 347-530-7602

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides PCBs ☐ EPA 8081 ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	1,2,3-TCP (8260B-SIM) (5035)
DG-F1 (0.5-1)	3/20	1445	S	HCl																			X
DG-D1 (0.5-1)	3/20	1545																					X
DG-B1 (0.5-1)	3/21	1030																					X
DG-A3 (0.5-1)	↓	1110																					X
DG-C3 (0.5-1)			↓	↓																			

720-88148 Chain of Custody

2.9°C

Project Info.

Project Name/ #: VPC-OU-SM1

PO#: WG2445/01

Credit Card Y/N:

Sample Receipt

of Containers:

Head Space:

Temp: 2.9°C

If yes, please call with payment information ASAP

TAT: 10 Day | (5 Day) | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF

Special Instructions / Comments: ☐ Global ID ___

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1311	Signature: [signature] Time: 1452	Signature: Time:
Printed Name: MIRANDA KAHRILAS Date: 3/21/13	Printed Name: Cory Date: 3/21/13	Printed Name: Date:
Company: GEO	Company: TAT	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 1311	Signature: [signature] Time: 1452	Signature: Time:
Printed Name: Cory Date: 3/21/13	Printed Name: Dennis Arms Date: 3/21/13	Printed Name: Date:
Company: TAT	Company: TA-Pleasanton	Company:

Rev. 10/2012

Smith, Micah

From: Anthony Smith <TSmith@Geosyntec.com>
Sent: Tuesday, August 21, 2018 5:55 PM
To: Smith, Micah
Cc: Krzysztof Jesionek; Miranda Kahrilas
Subject: RE: TestAmerica Sample Login Confirmation files from 720-88148 UPC-OU-SM

-External Email-

Micah,
Please rename as follows:

- DG-F1S-0.5-1
- DG-D1S-0.5-1
- DG-B1S-0.5-1
- DG-A3S-0.5-1
- DG-C3S-0.5-1

If matrix is soil then preservative is either H2O or MeOH, not HCl, right? Are you able to correct COC or should I send markup?

Thanks.

Tony Smith, Ph.D., P.E. (CA)
Senior Engineer

Geosyntec Consultants
1111 Broadway, 6th Floor
Oakland, CA 94607
Direct: (510) 285-2770
tsmith@geosyntec.com

From: Smith, Micah <micah.smith@testamericainc.com>
Sent: Tuesday, August 21, 2018 5:06 PM
To: Krzysztof Jesionek <KJesionek@Geosyntec.com>; Miranda Kahrilas <MKahrilas@Geosyntec.com>; Anthony Smith <TSmith@Geosyntec.com>
Subject: TestAmerica Sample Login Confirmation files from 720-88148 UPC-OU-SM

Hello,

Attached, please find the Sample Confirmation files for job 720-88148; UPC-OU-SM

Please feel free to contact me if you have any questions.

Thank you.

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: Project Feedback

MICAH SMITH
Project Manager

TestAmerica Pleasanton
THE LEADER IN ENVIRONMENTAL TESTING

Tel: 916.374.4302
www.testamericainc.com

Reference: [284793]
Attachments: 3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

720-88148 Chain of Custody

Cooler Received/Opened On 08-22-2018 @ 09:40

Time Samples Removed From Cooler 1240 Time Samples Placed In Storage 1250 (2 Hour Window)

1. Tracking # 5178 (last 4 digits, FedEx) Courier: _FedEx_

IR Gun ID 14740456 pH Strip Lot _____ Chlorine Strip Lot _____

2. Temperature of rep. sample or temp blank when opened: 5.8 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (top)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) KD

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. *Did all containers arrive in good condition (unbroken)?* YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

● ⬅ Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (intial) TR

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. *Did the bottle labels indicate that the correct preservatives were used* YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) TR

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) TR

I certify that I attached a label with the unique LIMS number to each container (intial) TR

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# _____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39370.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California		Job #: 720-88148-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 8/28/2018			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: Brisbane Data Gap Invest Work Plan	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B/5035LP_Calc 1,2,3-TCP and 1,2-Dibromo-3-chloropropane	8260B/5035A_M_Calc 1,2,3-TCP and 1,2-Dibromo-3-chloropropane	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
DG-F1(0.5-1) (720-88148-1)	8/20/18	14:45 Pacific		Solid			X	X	3	
DG-D1(0.5-1) (720-88148-2)	8/20/18	15:45 Pacific		Solid			X	X	3	
DG-B1(0.5-1) (720-88148-3)	8/21/18	10:30 Pacific		Solid			X	X	3	Loc: 720 88148
DG-A3(0.5-1) (720-88148-4)	8/21/18	11:10 Pacific		Solid			X	X	3	
DG-C3(0.5-1) (720-88148-5)	8/21/18	12:05 Pacific		Solid			X	X	3	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		8/22/18 1555	TA-TTO			
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 8/22/18	Company TA-NAS

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 5.8

Ver: 09/20/2016

8/27/2018

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88148-1

Login Number: 88148
List Number: 1
Creator: Arauz, Dennis

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88162-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/9/2018 3:09:59 PM

Micah Smith, Project Manager II
(916)374-4302
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 5
Detection Summary 8
Client Sample Results 18
Surrogate Summary 65
QC Sample Results 68
QC Association Summary 92
Lab Chronicle 99
Certification Summary 106
Method Summary 107
Sample Summary 108
Subcontract Data 109
Chain of Custody 113
Receipt Checklists 119

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	ISTD response or retention time outside acceptable limits

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
F2	MS/MSD RPD exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88162-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88162-1

Comments
This report was revised on 10/15/18 to correct the instrument MDL for the CCVs and CRI associated with the metals data.

This report was revised again on 11/9/18 to change the units for the metals data to report in mg/Kg, as requested.

Receipt
The samples were received on 8/21/2018 2:52 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 1.7º C, 2.9º C, 3.1º C and 3.4º C.

Receipt Exceptions
A majority of CARB 435 Asbestos and PCB 8 oz. jars were not received full but we have enough volume to proceed with the analysis.

One of the DI with stir bar vials from sample DG-F1S-3.5-4 (720-88162-17) was wet and the pre-tared weight label is not legible. This vial was not needed for analysis.

The container label for the following samples did not match the information listed on the Chain-of-Custody (COC):
Sample DG-L1S-0.5-1 (720-88162-3): One of two DI vial label list DG-L1 (0.5-3), while the COC lists DG-L1 (0.5-1). The client confirmed the correct ID is DG-L1S-0.5-1.
Sample DG-L1S-10-10.5 (720-88162-5): One of two DI vial label list DG-L1 (9.5-10), while the COC lists DG-L1 (10-10.5). The client confirmed the correct ID is DG-L1S-10-10.5.
Sample DG-H1S-0.5-1 (720-88162-12): The 8 oz. jar labels list sample time of 14:05 while the COC lists sample time of 12:10. The client confirmed 14:05 is the correct time.
Sample DG-H1S-3.5-4 (720-88162-13): The 8 oz. jar labels list sample time of 14:05 while the COC lists sample time of 12:10. The client confirmed 14:05 is the correct time.

GC/MS VOA
Method(s) 8260B: Internal standard (ISTD) response for the following samples was outside control limits: DG-J1S-3.5-4 (720-88162-9) and DG-F1S-9.5-10 (720-88162-18). The sample(s) was re-extracted and/or re-analyzed with concurring results, and the second set of data has been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270C SIM: The following samples were diluted due to the abundance of non-target analytes: DG-L1S-0.5-1 (720-88162-3), DG-J1S-0.5-1 (720-88162-8), DG-F1S-0.5-1 (720-88162-16) and DG-F1S-3.5-4 (720-88162-17). Elevated reporting limits (RLs) are provided.

Method(s) 8270C SIM: The following samples required a dilution due to the nature of the sample matrix: DG-J1S-0.5-1 (720-88162-8) and DG-F1S-3.5-4 (720-88162-17). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8270C SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-249979 and analytical batch 720-250076 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8015B: The following sample required a dilution due to the nature of the sample matrix: DG-J1S-0.5-1 (720-88162-8). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Job ID: 720-88162-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Method(s) 8015B: The method blank for preparation batch 720-249949 and analytical batch 720-249942 contained Diesel Range Organics [C10-C28] above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 8081A: Surrogate recovery for the following samples were outside control limits: DG-J1S-0.5-1 (720-88162-8), DG-J1S-3.5-4 (720-88162-9) and (720-88162-D-16-J MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8081A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250005 and analytical batch 720-250125 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8081A: The %RPD between the primary and confirmation column / detector exceeded 40% for cis-Chlordane for the following sample: DG-L1S-0.5-1 (720-88162-3). The lower value has been reported and qualified in accordance with the laboratory's SOP.

Method(s) 8081A: The following sample was diluted due to the abundance of non-target analytes: DG-F1S-3.5-4 (720-88162-17). Elevated reporting limits (RLs) are provided.

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: DG-L1S-0.5-1 (720-88162-3), DG-L1S-3.5-4 (720-88162-4), DG-J1S-0.5-1 (720-88162-8), DG-F1S-0.5-1 (720-88162-16), (720-88162-E-16-B MS) and (720-88162-E-16-C MSD).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method(s) 6010B: The method blank for preparation batch 720-249965 and analytical batch 720-250033 contained Barium and Chromium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-249965 and analytical batch 720-250033 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The post digestion spike % recovery for As,Ba,Cu associated with batch 720-250033 was outside of control limits.

Arsenic recovery 133%; Barium recovery 128%; Copper recovery 129%. (Control limits 75-125%.)

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250033 was outside of the 10% control limits: (720-88162-A-14-C SD).

Analyte:	% D:
Arsenic	11%
Barium	11%
Cobalt	18%
Chromium	14%
Nickel	15%
Lead	16%
Vanadium	12%
Zinc	14%

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DG-M1S-0.5-1 (720-88162-1), DG-M1S-3.5-4 (720-88162-2), DG-L1S-0.5-1 (720-88162-3), DG-L1S-3.5-4 (720-88162-4), DG-L1S-10-10.5 (720-88162-5), DG-K1S-0.5-1 (720-88162-6), DG-K1S-3.5-4 (720-88162--7), DG-J1S-0.5-1 (720-88162-8), DG-J1S-3.5-4 (720-88162-9), DG-I1S-0.5-1 (720-88162-10), DG-I1S-3.5-4 (720-88162-11), DG-H1S-0.5-1 (720-88162-12), DG-H1S-3.5-4 (720-88162-13), DG-G1S-0.5-1 (720-88162-14), DG-G1S-3.5-4 (720-88162-15), DG-F1S-0.5-1 (720-88162-16), DG-F1S-3.5-4 (720-88162-17), DG-F1S-9.5-10 (720-88162-18),

Job ID: 720-88162-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

DG-E1S-0.5-1 (720-88162-19) and DG-E1S-3.5-4 (720-88162-20). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-249951 and analytical batch 720-250070 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method(s) 7471A: Due to the high concentration of Hg, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 720-249955 and analytical batch 720-250243 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method(s) 3546 / 8270C-SIM: Due to the viscosity of the sample extract the following sample was brought to a final volume of 2 ml: DG-F1S-3.5-4 (720-88162-17).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Subcontract Work

Method Asbestos - CARB 435: This method was subcontracted to ASBESTOS TEM LABORATORIES, INC. The subcontract laboratory certification is different from that of the facility issuing the final report.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-M1S-0.5-1 — Lab Sample ID: 720-88162-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.2		1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	350		3.6	0.30	mg/Kg	4		6010B	Total/NA
Barium	110		1.8	0.25	mg/Kg	4		6010B	Total/NA
Cadmium	3.4		0.45	0.044	mg/Kg	4		6010B	Total/NA
Chromium	39		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	130		5.4	2.5	mg/Kg	4		6010B	Total/NA
Lead	280		1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	1.7	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	28		1.8	0.18	mg/Kg	4		6010B	Total/NA
Silver	0.40	J	0.89	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	79		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	1900		5.4	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.14		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M1S-3.5-4 — Lab Sample ID: 720-88162-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.3	J	1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	16		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	39		1.7	0.24	mg/Kg	4		6010B	Total/NA
Beryllium	0.48		0.34	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	0.055	J	0.43	0.042	mg/Kg	4		6010B	Total/NA
Chromium	35		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.68	0.068	mg/Kg	4		6010B	Total/NA
Copper	26		5.1	2.4	mg/Kg	4		6010B	Total/NA
Lead	8.0		1.7	0.36	mg/Kg	4		6010B	Total/NA
Molybdenum	0.48	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	36		1.7	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	48		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	80		5.1	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.10		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L1S-0.5-1 — Lab Sample ID: 720-88162-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	40	J	48	24	ug/Kg	5		8270C SIM	Total/NA
Acenaphthylene	14	J	24	12	ug/Kg	5		8270C SIM	Total/NA
Anthracene	26		24	9.6	ug/Kg	5		8270C SIM	Total/NA
Benzo[a]anthracene	47		24	7.2	ug/Kg	5		8270C SIM	Total/NA
Benzo[a]pyrene	49		24	9.1	ug/Kg	5		8270C SIM	Total/NA
Benzo[b]fluoranthene	91		24	10	ug/Kg	5		8270C SIM	Total/NA
Benzo[g,h,i]perylene	24		24	21	ug/Kg	5		8270C SIM	Total/NA
Benzo[k]fluoranthene	29		24	10	ug/Kg	5		8270C SIM	Total/NA
Chrysene	52		24	6.7	ug/Kg	5		8270C SIM	Total/NA
Fluoranthene	80		24	6.7	ug/Kg	5		8270C SIM	Total/NA
Naphthalene	26		24	17	ug/Kg	5		8270C SIM	Total/NA
Phenanthrene	69		24	8.6	ug/Kg	5		8270C SIM	Total/NA
Pyrene	90		24	8.1	ug/Kg	5		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	84000	B	3800	1400	ug/Kg	2		8015B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-L1S-0.5-1 (Continued) — Lab Sample ID: 720-88162-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-Chlordane	0.57	J p	1.9	0.39	ug/Kg	1		8081A	Total/NA
Antimony	5.0		1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	220		3.6	0.30	mg/Kg	4		6010B	Total/NA
Barium	130		1.8	0.25	mg/Kg	4		6010B	Total/NA
Beryllium	0.21	J	0.36	0.12	mg/Kg	4		6010B	Total/NA
Cadmium	1.0		0.45	0.044	mg/Kg	4		6010B	Total/NA
Chromium	35		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	150		5.4	2.5	mg/Kg	4		6010B	Total/NA
Lead	270		1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	1.0	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	27		1.8	0.18	mg/Kg	4		6010B	Total/NA
Silver	0.47	J	0.89	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	53		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	350		5.4	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.48		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L1S-3.5-4 — Lab Sample ID: 720-88162-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	32		9.7	4.9	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	6.4		4.9	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	6.5		4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	17		4.9	1.5	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	20		4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	35		4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	17		4.9	4.2	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	7.5		4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	26		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	5.1		4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	23		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluorene	2.1	J	4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	11		4.9	4.1	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	30		4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	41		4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	37		4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	38000	B	1900	720	ug/Kg	1		8015B	Total/NA
Antimony	1.6	J	1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	59		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	74		1.7	0.24	mg/Kg	4		6010B	Total/NA
Beryllium	0.25	J	0.34	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	0.075	J	0.43	0.042	mg/Kg	4		6010B	Total/NA
Chromium	41		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	8.8		0.68	0.068	mg/Kg	4		6010B	Total/NA
Copper	24		5.1	2.4	mg/Kg	4		6010B	Total/NA
Lead	21		1.7	0.36	mg/Kg	4		6010B	Total/NA
Molybdenum	0.58	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	39		1.7	0.17	mg/Kg	4		6010B	Total/NA
Silver	0.18	J	0.85	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	44		1.7	0.23	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-L1S-3.5-4 (Continued) — Lab Sample ID: 720-88162-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	46		5.1	2.2	mg/Kg	4		6010B	Total/NA
Mercury	2.6		0.061	0.0090	mg/Kg	4		7471A	Total/NA

Client Sample ID: DG-L1S-10-10.5 — Lab Sample ID: 720-88162-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.4		1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	29		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	69		1.6	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.52		0.33	0.11	mg/Kg	4		6010B	Total/NA
Chromium	35		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.65	0.065	mg/Kg	4		6010B	Total/NA
Copper	51		4.9	2.3	mg/Kg	4		6010B	Total/NA
Lead	29		1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	0.69	J	1.6	0.21	mg/Kg	4		6010B	Total/NA
Nickel	31		1.6	0.17	mg/Kg	4		6010B	Total/NA
Silver	0.19	J	0.81	0.16	mg/Kg	4		6010B	Total/NA
Vanadium	50		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	65		4.9	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.040		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K1S-0.5-1 — Lab Sample ID: 720-88162-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.6	F1	1.6	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	380		3.1	0.26	mg/Kg	4		6010B	Total/NA
Barium	130	F1 F2	1.6	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.15	J F1	0.31	0.10	mg/Kg	4		6010B	Total/NA
Cadmium	0.35	J	0.39	0.038	mg/Kg	4		6010B	Total/NA
Chromium	25	F1	1.6	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	9.3	F1	0.62	0.062	mg/Kg	4		6010B	Total/NA
Copper	71	F1	4.7	2.2	mg/Kg	4		6010B	Total/NA
Lead	310		1.6	0.33	mg/Kg	4		6010B	Total/NA
Nickel	26	F1	1.6	0.16	mg/Kg	4		6010B	Total/NA
Vanadium	40	F1	1.6	0.21	mg/Kg	4		6010B	Total/NA
Zinc	220		4.7	2.0	mg/Kg	4		6010B	Total/NA
Mercury	3.6		0.17	0.025	mg/Kg	10		7471A	Total/NA

Client Sample ID: DG-K1S-3.5-4 — Lab Sample ID: 720-88162-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.1	J	1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	29		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	65		1.7	0.24	mg/Kg	4		6010B	Total/NA
Beryllium	0.20	J	0.34	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	0.061	J	0.42	0.042	mg/Kg	4		6010B	Total/NA
Chromium	66		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	7.3		0.67	0.067	mg/Kg	4		6010B	Total/NA
Copper	12		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	8.0		1.7	0.35	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-K1S-3.5-4 (Continued) — Lab Sample ID: 720-88162-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	47		1.7	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	49		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	33		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.055		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-J1S-0.5-1 — Lab Sample ID: 720-88162-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	810		400	200	ug/Kg	40		8270C SIM	Total/NA
Acenaphthene	1000		200	110	ug/Kg	40		8270C SIM	Total/NA
Acenaphthylene	1600		200	95	ug/Kg	40		8270C SIM	Total/NA
Anthracene	3200		200	80	ug/Kg	40		8270C SIM	Total/NA
Benzo[a]anthracene	5300		200	60	ug/Kg	40		8270C SIM	Total/NA
Benzo[a]pyrene	5000		200	76	ug/Kg	40		8270C SIM	Total/NA
Benzo[b]fluoranthene	5800		200	84	ug/Kg	40		8270C SIM	Total/NA
Benzo[g,h,i]perylene	2900		200	170	ug/Kg	40		8270C SIM	Total/NA
Benzo[k]fluoranthene	1900		200	84	ug/Kg	40		8270C SIM	Total/NA
Chrysene	4900		200	56	ug/Kg	40		8270C SIM	Total/NA
Dibenz(a,h)anthracene	930		200	140	ug/Kg	40		8270C SIM	Total/NA
Fluoranthene	9000		200	56	ug/Kg	40		8270C SIM	Total/NA
Fluorene	1700		200	88	ug/Kg	40		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	2300		200	170	ug/Kg	40		8270C SIM	Total/NA
Naphthalene	1000		200	140	ug/Kg	40		8270C SIM	Total/NA
Phenanthrene	10000		200	72	ug/Kg	40		8270C SIM	Total/NA
Pyrene	11000		200	68	ug/Kg	40		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	680000	B	9500	3600	ug/Kg	5		8015B	Total/NA
Antimony	1.0	J	1.6	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	150		3.1	0.27	mg/Kg	4		6010B	Total/NA
Barium	110		1.6	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.12	J	0.31	0.10	mg/Kg	4		6010B	Total/NA
Cadmium	0.17	J	0.39	0.039	mg/Kg	4		6010B	Total/NA
Chromium	30		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.63	0.063	mg/Kg	4		6010B	Total/NA
Copper	110		4.7	2.2	mg/Kg	4		6010B	Total/NA
Lead	120		1.6	0.33	mg/Kg	4		6010B	Total/NA
Molybdenum	0.61	J	1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	27		1.6	0.16	mg/Kg	4		6010B	Total/NA
Silver	0.26	J	0.79	0.16	mg/Kg	4		6010B	Total/NA
Vanadium	92		1.6	0.21	mg/Kg	4		6010B	Total/NA
Zinc	110		4.7	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.17		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-J1S-3.5-4 — Lab Sample ID: 720-88162-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	5.0	J	9.6	4.8	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	8.0		4.8	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	11		4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	28		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	29		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-J1S-3.5-4 (Continued) — Lab Sample ID: 720-88162-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	64		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	21		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	13		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	50		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	7.8		4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	47		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluorene	4.8		4.8	2.1	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	16		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	12		4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	82		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	50		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	6900	B	2000	740	ug/Kg	1		8015B	Total/NA
Antimony	1.8		1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	20		3.6	0.31	mg/Kg	4		6010B	Total/NA
Barium	120		1.8	0.26	mg/Kg	4		6010B	Total/NA
Beryllium	0.51		0.36	0.12	mg/Kg	4		6010B	Total/NA
Chromium	110		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	22		0.73	0.073	mg/Kg	4		6010B	Total/NA
Copper	57		5.5	2.6	mg/Kg	4		6010B	Total/NA
Lead	51		1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	0.37	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	140		1.8	0.19	mg/Kg	4		6010B	Total/NA
Vanadium	76		1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	80		5.5	2.3	mg/Kg	4		6010B	Total/NA
Mercury	3.8		0.17	0.025	mg/Kg	10		7471A	Total/NA

Client Sample ID: DG-I1S-0.5-1 — Lab Sample ID: 720-88162-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	5.1		1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	130		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	79		1.6	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.12	J	0.33	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	0.34	J	0.41	0.040	mg/Kg	4		6010B	Total/NA
Chromium	34		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.65	0.065	mg/Kg	4		6010B	Total/NA
Copper	78		4.9	2.3	mg/Kg	4		6010B	Total/NA
Lead	140		1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	0.44	J	1.6	0.21	mg/Kg	4		6010B	Total/NA
Nickel	34		1.6	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	53		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	110		4.9	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.092		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I1S-3.5-4 — Lab Sample ID: 720-88162-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.5		1.4	0.24	mg/Kg	4		6010B	Total/NA
Arsenic	43		2.9	0.25	mg/Kg	4		6010B	Total/NA
Barium	130		1.4	0.21	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-I1S-3.5-4 (Continued) — Lab Sample ID: 720-88162-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.38		0.29	0.094	mg/Kg	4		6010B	Total/NA
Chromium	140		1.4	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	23		0.58	0.058	mg/Kg	4		6010B	Total/NA
Copper	39		4.3	2.1	mg/Kg	4		6010B	Total/NA
Lead	10		1.4	0.30	mg/Kg	4		6010B	Total/NA
Molybdenum	1.2	J	1.4	0.19	mg/Kg	4		6010B	Total/NA
Nickel	170		1.4	0.15	mg/Kg	4		6010B	Total/NA
Vanadium	86		1.4	0.20	mg/Kg	4		6010B	Total/NA
Zinc	66		4.3	1.8	mg/Kg	4		6010B	Total/NA
Mercury	2.9		0.15	0.023	mg/Kg	10		7471A	Total/NA

Client Sample ID: DG-H1S-0.5-1 — Lab Sample ID: 720-88162-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	9.8		9.8	4.9	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	4.9		4.9	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	9.3		4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	27		4.9	1.5	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	31		4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	47		4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	24		4.9	4.2	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	17		4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	33		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	6.1		4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	46		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	18		4.9	4.1	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	10		4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	28		4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	54		4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	33000	B	1900	710	ug/Kg	1		8015B	Total/NA
Antimony	1.5	J	1.8	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	81		3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	73	B	1.8	0.25	mg/Kg	4		6010B	Total/NA
Cadmium	0.17	J	0.44	0.044	mg/Kg	4		6010B	Total/NA
Chromium	54	B	1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	67		5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	47		1.8	0.37	mg/Kg	4		6010B	Total/NA
Nickel	64		1.8	0.18	mg/Kg	4		6010B	Total/NA
Silver	0.23	J	0.88	0.18	mg/Kg	4		6010B	Total/NA
Thallium	1.2	J	1.8	0.51	mg/Kg	4		6010B	Total/NA
Vanadium	59		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	73		5.3	2.2	mg/Kg	4		6010B	Total/NA
Mercury	1.6		0.033	0.0049	mg/Kg	2		7471A	Total/NA

Client Sample ID: DG-H1S-3.5-4 — Lab Sample ID: 720-88162-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	2.7	J	4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	2.8	J	4.9	1.5	ug/Kg	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-H1S-3.5-4 (Continued) — Lab Sample ID: 720-88162-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	3.9	J	4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	11		4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	4.6	J	4.9	4.2	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	2.6	J	4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	7.0		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	6.5		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	5.0		4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	19		4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	8.0		4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	5500	B	2000	730	ug/Kg	1		8015B	Total/NA
Antimony	3.3		1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	96		3.6	0.30	mg/Kg	4		6010B	Total/NA
Barium	130	B	1.8	0.25	mg/Kg	4		6010B	Total/NA
Beryllium	0.14	J	0.36	0.12	mg/Kg	4		6010B	Total/NA
Chromium	150	B	1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	23		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	38		5.4	2.5	mg/Kg	4		6010B	Total/NA
Lead	14		1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	0.25	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	230		1.8	0.18	mg/Kg	4		6010B	Total/NA
Selenium	0.56	J	3.6	0.54	mg/Kg	4		6010B	Total/NA
Silver	0.23	J	0.89	0.18	mg/Kg	4		6010B	Total/NA
Thallium	1.2	J	1.8	0.52	mg/Kg	4		6010B	Total/NA
Vanadium	77		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	65		5.4	2.3	mg/Kg	4		6010B	Total/NA
Mercury	5.6		0.34	0.050	mg/Kg	20		7471A	Total/NA

Client Sample ID: DG-G1S-0.5-1 — Lab Sample ID: 720-88162-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	3.2	F1	1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	270		3.9	0.33	mg/Kg	4		6010B	Total/NA
Barium	120	B F1	1.9	0.28	mg/Kg	4		6010B	Total/NA
Cadmium	0.58		0.49	0.048	mg/Kg	4		6010B	Total/NA
Chromium	19	B F1	1.9	0.21	mg/Kg	4		6010B	Total/NA
Cobalt	8.0		0.78	0.078	mg/Kg	4		6010B	Total/NA
Copper	110	F1	5.8	2.8	mg/Kg	4		6010B	Total/NA
Lead	250		1.9	0.41	mg/Kg	4		6010B	Total/NA
Molybdenum	0.32	J	1.9	0.25	mg/Kg	4		6010B	Total/NA
Nickel	16		1.9	0.20	mg/Kg	4		6010B	Total/NA
Silver	0.30	J	0.97	0.20	mg/Kg	4		6010B	Total/NA
Vanadium	52	F1	1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	150		5.8	2.5	mg/Kg	4		6010B	Total/NA
Mercury	0.19		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-G1S-3.5-4 — Lab Sample ID: 720-88162-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.1		2.0	0.33	mg/Kg	4		6010B	Total/NA
Arsenic	44		4.0	0.34	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-G1S-3.5-4 (Continued) — Lab Sample ID: 720-88162-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	120	B	2.0	0.28	mg/Kg	4		6010B	Total/NA
Chromium	130	B	2.0	0.21	mg/Kg	4		6010B	Total/NA
Cobalt	18		0.79	0.079	mg/Kg	4		6010B	Total/NA
Copper	30		5.9	2.8	mg/Kg	4		6010B	Total/NA
Lead	3.8		2.0	0.42	mg/Kg	4		6010B	Total/NA
Nickel	160		2.0	0.20	mg/Kg	4		6010B	Total/NA
Silver	0.39	J	0.99	0.20	mg/Kg	4		6010B	Total/NA
Thallium	1.2	J	2.0	0.57	mg/Kg	4		6010B	Total/NA
Vanadium	81		2.0	0.27	mg/Kg	4		6010B	Total/NA
Zinc	57		5.9	2.5	mg/Kg	4		6010B	Total/NA
Mercury	4.3		0.30	0.044	mg/Kg	20		7471A	Total/NA

Client Sample ID: DG-F1S-0.5-1 — Lab Sample ID: 720-88162-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	100		20	9.9	ug/Kg	2		8270C SIM	Total/NA
Acenaphthylene	20		9.9	4.7	ug/Kg	2		8270C SIM	Total/NA
Anthracene	42		9.9	4.0	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	37		9.9	3.0	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	34		9.9	3.8	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	78		9.9	4.2	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	26		9.9	8.5	ug/Kg	2		8270C SIM	Total/NA
Benzo[k]fluoranthene	21		9.9	4.2	ug/Kg	2		8270C SIM	Total/NA
Chrysene	52		9.9	2.8	ug/Kg	2		8270C SIM	Total/NA
Dibenz(a,h)anthracene	7.6	J	9.9	6.9	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	81		9.9	2.8	ug/Kg	2		8270C SIM	Total/NA
Fluorene	4.5	J	9.9	4.3	ug/Kg	2		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	17		9.9	8.3	ug/Kg	2		8270C SIM	Total/NA
Naphthalene	92		9.9	6.9	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	100		9.9	3.6	ug/Kg	2		8270C SIM	Total/NA
Pyrene	78		9.9	3.4	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	120000	B	2000	750	ug/Kg	1		8015B	Total/NA
Antimony	16		1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	47		3.6	0.31	mg/Kg	4		6010B	Total/NA
Barium	80	B	1.8	0.26	mg/Kg	4		6010B	Total/NA
Cadmium	0.75		0.45	0.045	mg/Kg	4		6010B	Total/NA
Chromium	21	B	1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.72	0.072	mg/Kg	4		6010B	Total/NA
Copper	180		5.4	2.6	mg/Kg	4		6010B	Total/NA
Lead	460		1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	0.37	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	12		1.8	0.18	mg/Kg	4		6010B	Total/NA
Selenium	1.2	J	3.6	0.54	mg/Kg	4		6010B	Total/NA
Silver	0.42	J	0.90	0.18	mg/Kg	4		6010B	Total/NA
Thallium	1.0	J	1.8	0.52	mg/Kg	4		6010B	Total/NA
Vanadium	97		1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	240		5.4	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.18		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-F1S-3.5-4 — Lab Sample ID: 720-88162-17

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-F1S-3.5-4 (Continued) — Lab Sample ID: 720-88162-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	29	J	39	29	ug/Kg	1		8260B	Total/NA
Benzo[a]pyrene	95	J	190	74	ug/Kg	20		8270C SIM	Total/NA
Benzo[b]fluoranthene	90	J	190	82	ug/Kg	20		8270C SIM	Total/NA
Fluoranthene	63	J	190	54	ug/Kg	20		8270C SIM	Total/NA
Pyrene	87	J	190	66	ug/Kg	20		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	4600		1900	730	ug/Kg	1		8015B	Total/NA
Antimony	2.0		1.6	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	110		3.1	0.27	mg/Kg	4		6010B	Total/NA
Barium	81	B	1.6	0.22	mg/Kg	4		6010B	Total/NA
Cadmium	0.19	J	0.39	0.039	mg/Kg	4		6010B	Total/NA
Chromium	24	B	1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	10		0.63	0.063	mg/Kg	4		6010B	Total/NA
Copper	72		4.7	2.2	mg/Kg	4		6010B	Total/NA
Lead	180		1.6	0.33	mg/Kg	4		6010B	Total/NA
Nickel	21		1.6	0.16	mg/Kg	4		6010B	Total/NA
Silver	0.38	J	0.79	0.16	mg/Kg	4		6010B	Total/NA
Vanadium	63		1.6	0.21	mg/Kg	4		6010B	Total/NA
Zinc	110		4.7	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.065		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-F1S-9.5-10 — Lab Sample ID: 720-88162-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	33	J	39	29	ug/Kg	1		8260B	Total/NA
Trichloroethene	0.96	J	3.9	0.49	ug/Kg	1		8260B	Total/NA
Acenaphthylene	2.3	J	4.7	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	2.1	J	4.7	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	2.2	J	4.7	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	26		4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	2.5	J	4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	17		4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	3.4	J	4.7	3.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	9.0		4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	5.3		4.7	3.3	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	47		4.7	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	6.5		4.7	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	100000		2000	740	ug/Kg	1		8015B	Total/NA
Antimony	6.4		1.6	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	180		3.1	0.27	mg/Kg	4		6010B	Total/NA
Barium	85	B	1.6	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.40		0.31	0.10	mg/Kg	4		6010B	Total/NA
Chromium	66	B	1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	21		0.63	0.063	mg/Kg	4		6010B	Total/NA
Copper	100		4.7	2.2	mg/Kg	4		6010B	Total/NA
Lead	36		1.6	0.33	mg/Kg	4		6010B	Total/NA
Molybdenum	0.62	J	1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	94		1.6	0.16	mg/Kg	4		6010B	Total/NA
Selenium	2.0	J	3.1	0.47	mg/Kg	4		6010B	Total/NA
Silver	1.0		0.79	0.16	mg/Kg	4		6010B	Total/NA
Thallium	0.85	J	1.6	0.46	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-F1S-9.5-10 (Continued) — Lab Sample ID: 720-88162-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	51		1.6	0.21	mg/Kg	4		6010B	Total/NA
Zinc	73		4.7	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.49		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E1S-0.5-1 — Lab Sample ID: 720-88162-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	22		3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	62	B	1.7	0.25	mg/Kg	4		6010B	Total/NA
Chromium	16	B	1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.70	0.070	mg/Kg	4		6010B	Total/NA
Copper	160		5.2	2.5	mg/Kg	4		6010B	Total/NA
Lead	40		1.7	0.37	mg/Kg	4		6010B	Total/NA
Nickel	4.9		1.7	0.18	mg/Kg	4		6010B	Total/NA
Silver	0.27	J	0.87	0.18	mg/Kg	4		6010B	Total/NA
Thallium	0.90	J	1.7	0.50	mg/Kg	4		6010B	Total/NA
Vanadium	130		1.7	0.24	mg/Kg	4		6010B	Total/NA
Zinc	67		5.2	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.085		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E1S-3.5-4 — Lab Sample ID: 720-88162-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.3	J	1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	160		3.2	0.27	mg/Kg	4		6010B	Total/NA
Barium	90	B	1.6	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.11	J	0.32	0.10	mg/Kg	4		6010B	Total/NA
Cadmium	0.11	J	0.40	0.040	mg/Kg	4		6010B	Total/NA
Chromium	32	B	1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	5.8		0.64	0.064	mg/Kg	4		6010B	Total/NA
Copper	29		4.8	2.3	mg/Kg	4		6010B	Total/NA
Lead	68		1.6	0.34	mg/Kg	4		6010B	Total/NA
Nickel	29		1.6	0.16	mg/Kg	4		6010B	Total/NA
Silver	0.20	J	0.80	0.16	mg/Kg	4		6010B	Total/NA
Vanadium	25		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	83		4.8	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.054		0.016	0.0024	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-M1S-0.5-1
Date Collected: 08/20/18 08:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-1
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.2		1.8	0.30	mg/Kg		08/22/18 11:50	08/23/18 10:56	4
Arsenic	350		3.6	0.30	mg/Kg		08/22/18 11:50	08/23/18 10:56	4
Barium	110		1.8	0.25	mg/Kg		08/22/18 11:50	08/23/18 10:56	4
Beryllium	ND		0.36	0.12	mg/Kg		08/22/18 11:50	08/23/18 10:56	4
Cadmium	3.4		0.45	0.044	mg/Kg		08/22/18 11:50	08/23/18 10:56	4
Chromium	39		1.8	0.19	mg/Kg		08/22/18 11:50	08/23/18 10:56	4
Cobalt	12		0.71	0.071	mg/Kg		08/22/18 11:50	08/23/18 10:56	4
Copper	130		5.4	2.5	mg/Kg		08/22/18 11:50	08/23/18 10:56	4
Lead	280		1.8	0.38	mg/Kg		08/22/18 11:50	08/23/18 10:56	4
Molybdenum	1.7	J	1.8	0.23	mg/Kg		08/22/18 11:50	08/23/18 10:56	4
Nickel	28		1.8	0.18	mg/Kg		08/22/18 11:50	08/23/18 10:56	4
Selenium	ND		3.6	0.54	mg/Kg		08/22/18 11:50	08/23/18 10:56	4
Silver	0.40	J	0.89	0.18	mg/Kg		08/22/18 11:50	08/23/18 10:56	4
Thallium	ND		1.8	0.52	mg/Kg		08/22/18 11:50	08/23/18 10:56	4
Vanadium	79		1.8	0.24	mg/Kg		08/22/18 11:50	08/23/18 10:56	4
Zinc	1900		5.4	2.3	mg/Kg		08/22/18 11:50	08/23/18 10:56	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14		0.017	0.0025	mg/Kg		08/25/18 11:36	08/25/18 14:45	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-M1S-3.5-4
Date Collected: 08/20/18 08:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-2
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.3	J	1.7	0.28	mg/Kg		08/22/18 11:50	08/23/18 11:00	4
Arsenic	16		3.4	0.29	mg/Kg		08/22/18 11:50	08/23/18 11:00	4
Barium	39		1.7	0.24	mg/Kg		08/22/18 11:50	08/23/18 11:00	4
Beryllium	0.48		0.34	0.11	mg/Kg		08/22/18 11:50	08/23/18 11:00	4
Cadmium	0.055	J	0.43	0.042	mg/Kg		08/22/18 11:50	08/23/18 11:00	4
Chromium	35		1.7	0.18	mg/Kg		08/22/18 11:50	08/23/18 11:00	4
Cobalt	12		0.68	0.068	mg/Kg		08/22/18 11:50	08/23/18 11:00	4
Copper	26		5.1	2.4	mg/Kg		08/22/18 11:50	08/23/18 11:00	4
Lead	8.0		1.7	0.36	mg/Kg		08/22/18 11:50	08/23/18 11:00	4
Molybdenum	0.48	J	1.7	0.22	mg/Kg		08/22/18 11:50	08/23/18 11:00	4
Nickel	36		1.7	0.17	mg/Kg		08/22/18 11:50	08/23/18 11:00	4
Selenium	ND		3.4	0.51	mg/Kg		08/22/18 11:50	08/23/18 11:00	4
Silver	ND		0.85	0.17	mg/Kg		08/22/18 11:50	08/23/18 11:00	4
Thallium	ND		1.7	0.50	mg/Kg		08/22/18 11:50	08/23/18 11:00	4
Vanadium	48		1.7	0.23	mg/Kg		08/22/18 11:50	08/23/18 11:00	4
Zinc	80		5.1	2.2	mg/Kg		08/22/18 11:50	08/23/18 11:00	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10		0.016	0.0023	mg/Kg		08/25/18 11:36	08/25/18 14:47	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-L1S-0.5-1
Date Collected: 08/20/18 09:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-3
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2.1	0.50	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Acetone	ND		21	16	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Benzene	ND		2.1	0.27	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Dichlorobromomethane	ND		2.1	0.30	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Bromobenzene	ND		2.1	0.33	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Chlorobromomethane	ND		8.4	0.30	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Bromoform	ND		2.1	0.84	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Bromomethane	ND		4.2	0.33	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
2-Butanone (MEK)	ND		21	8.8	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
n-Butylbenzene	ND		2.1	0.42	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
sec-Butylbenzene	ND		2.1	0.30	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
tert-Butylbenzene	ND		2.1	0.31	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Carbon disulfide	ND		2.1	0.84	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Carbon tetrachloride	ND		2.1	0.26	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Chlorobenzene	ND		2.1	0.29	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Chloroethane	ND		4.2	0.23	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Chloroform	ND		2.1	0.28	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Chloromethane	ND		4.2	0.33	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
2-Chlorotoluene	ND		2.1	0.27	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
4-Chlorotoluene	ND		2.1	0.29	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Chlorodibromomethane	ND		2.1	0.30	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
1,2-Dichlorobenzene	ND		2.1	0.29	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
1,3-Dichlorobenzene	ND		2.1	0.30	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
1,4-Dichlorobenzene	ND		2.1	0.30	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
1,3-Dichloropropane	ND		2.1	0.31	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
1,1-Dichloropropene	ND		2.1	0.29	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
1,2-Dibromo-3-Chloropropane	ND		4.2	0.71	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Ethylene Dibromide	ND		2.1	0.60	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Dibromomethane	ND		4.2	0.36	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Dichlorodifluoromethane	ND		4.2	0.33	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
1,1-Dichloroethane	ND		2.1	0.29	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
1,2-Dichloroethane	ND		2.1	0.32	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
1,1-Dichloroethene	ND		2.1	0.26	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
cis-1,2-Dichloroethene	ND		2.1	0.29	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
trans-1,2-Dichloroethene	ND		2.1	0.31	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
1,2-Dichloropropane	ND		2.1	0.26	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
cis-1,3-Dichloropropene	ND		2.1	0.29	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
trans-1,3-Dichloropropene	ND		2.1	0.28	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Ethylbenzene	ND		2.1	0.31	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Hexachlorobutadiene	ND		2.1	0.38	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
2-Hexanone	ND		21	4.2	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Isopropylbenzene	ND		2.1	0.29	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
4-Isopropyltoluene	ND		2.1	1.0	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Methylene Chloride	ND		4.2	2.3	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
4-Methyl-2-pentanone (MIBK)	ND		21	4.2	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Naphthalene	ND		4.2	0.63	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
N-Propylbenzene	ND		2.1	0.28	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Styrene	ND		2.1	0.26	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
1,1,1,2-Tetrachloroethane	ND		2.1	0.32	ug/Kg		08/22/18 01:00	08/23/18 19:58	1

Client Sample ID: DG-L1S-0.5-1
Date Collected: 08/20/18 09:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-3
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		2.1	0.31	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Tetrachloroethene	ND		2.1	0.28	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Toluene	ND		2.1	0.30	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
1,2,3-Trichlorobenzene	ND		2.1	0.31	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
1,2,4-Trichlorobenzene	ND		2.1	0.30	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
1,1,1-Trichloroethane	ND		2.1	0.26	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
1,1,2-Trichloroethane	ND		2.1	0.29	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Trichloroethene	ND		2.1	0.26	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Trichlorofluoromethane	ND		2.1	0.23	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
1,2,3-Trichloropropane	ND		2.1	0.32	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.1	0.87	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
1,2,4-Trimethylbenzene	ND		2.1	0.69	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
1,3,5-Trimethylbenzene	ND		2.1	0.27	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Vinyl acetate	ND		8.4	2.1	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Vinyl chloride	ND		2.1	0.31	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Xylenes, Total	ND		2.1	0.51	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
2,2-Dichloropropane	ND		2.1	0.84	ug/Kg		08/22/18 01:00	08/23/18 19:58	1
Gasoline Range Organics (GRO) -C4-C12	ND		100	42	ug/Kg		08/22/18 01:00	08/23/18 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*45 - 131*	*08/22/18 01:00*	*08/23/18 19:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*60 - 140*	*08/22/18 01:00*	*08/23/18 19:58*	*1*
Toluene-d8 (Surr)	*91*		*58 - 140*	*08/22/18 01:00*	*08/23/18 19:58*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**40**	**J**	48	24	ug/Kg		08/22/18 12:41	08/23/18 23:29	5
Acenaphthene	ND		24	13	ug/Kg		08/22/18 12:41	08/23/18 23:29	5
Acenaphthylene	**14**	**J**	24	12	ug/Kg		08/22/18 12:41	08/23/18 23:29	5
Anthracene	**26**		24	9.6	ug/Kg		08/22/18 12:41	08/23/18 23:29	5
Benzo[a]anthracene	**47**		24	7.2	ug/Kg		08/22/18 12:41	08/23/18 23:29	5
Benzo[a]pyrene	**49**		24	9.1	ug/Kg		08/22/18 12:41	08/23/18 23:29	5
Benzo[b]fluoranthene	**91**		24	10	ug/Kg		08/22/18 12:41	08/23/18 23:29	5
Benzo[g,h,i]perylene	**24**		24	21	ug/Kg		08/22/18 12:41	08/23/18 23:29	5
Benzo[k]fluoranthene	**29**		24	10	ug/Kg		08/22/18 12:41	08/23/18 23:29	5
Chrysene	**52**		24	6.7	ug/Kg		08/22/18 12:41	08/23/18 23:29	5
Dibenz(a,h)anthracene	ND		24	17	ug/Kg		08/22/18 12:41	08/23/18 23:29	5
Fluoranthene	**80**		24	6.7	ug/Kg		08/22/18 12:41	08/23/18 23:29	5
Fluorene	ND		24	11	ug/Kg		08/22/18 12:41	08/23/18 23:29	5
Indeno[1,2,3-cd]pyrene	ND		24	20	ug/Kg		08/22/18 12:41	08/23/18 23:29	5
Naphthalene	**26**		24	17	ug/Kg		08/22/18 12:41	08/23/18 23:29	5
Phenanthrene	**69**		24	8.6	ug/Kg		08/22/18 12:41	08/23/18 23:29	5
Pyrene	**90**		24	8.1	ug/Kg		08/22/18 12:41	08/23/18 23:29	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*33 - 120*	*08/22/18 12:41*	*08/23/18 23:29*	*5*
Terphenyl-d14	*105*		*35 - 146*	*08/22/18 12:41*	*08/23/18 23:29*	*5*

Client Sample ID: DG-L1S-0.5-1

Date Collected: 08/20/18 09:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-3

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**84000**	**B**	3800	1400	ug/Kg		08/22/18 08:37	08/23/18 04:36	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*107*		*40 - 130*	*08/22/18 08:37*	*08/23/18 04:36*	*2*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
Aldrin	ND		1.9	0.48	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
cis-Chlordane	**0.57**	**J p**	1.9	0.39	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
delta-BHC	ND		1.9	0.43	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
Endosulfan II	ND		1.9	0.48	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
Endrin	ND		1.9	0.45	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
Heptachlor	ND		1.9	0.45	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
Toxaphene	ND		39	6.6	ug/Kg		08/22/18 15:45	08/24/18 05:25	1
trans-Chlordane	ND		1.9	0.45	ug/Kg		08/22/18 15:45	08/24/18 05:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*127*		*21 - 136*	*08/22/18 15:45*	*08/24/18 05:25*	*1*
Tetrachloro-m-xylene	*86*		*21 - 145*	*08/22/18 15:45*	*08/24/18 05:25*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		48	21	ug/Kg		08/24/18 09:31	08/27/18 15:49	1
Aroclor-1221	ND		48	23	ug/Kg		08/24/18 09:31	08/27/18 15:49	1
Aroclor-1232	ND		48	22	ug/Kg		08/24/18 09:31	08/27/18 15:49	1
Aroclor-1242	ND		48	18	ug/Kg		08/24/18 09:31	08/27/18 15:49	1
Aroclor-1248	ND		48	23	ug/Kg		08/24/18 09:31	08/27/18 15:49	1
Aroclor-1254	ND		48	22	ug/Kg		08/24/18 09:31	08/27/18 15:49	1
Aroclor-1260	ND		48	21	ug/Kg		08/24/18 09:31	08/27/18 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*72*		*14 - 128*	*08/24/18 09:31*	*08/27/18 15:49*	*1*
DCB Decachlorobiphenyl	*85*		*10 - 132*	*08/24/18 09:31*	*08/27/18 15:49*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**5.0**		1.8	0.30	mg/Kg		08/22/18 11:50	08/23/18 11:05	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-L1S-0.5-1
Date Collected: 08/20/18 09:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-3
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	220		3.6	0.30	mg/Kg		08/22/18 11:50	08/23/18 11:05	4
Barium	130		1.8	0.25	mg/Kg		08/22/18 11:50	08/23/18 11:05	4
Beryllium	0.21	J	0.36	0.12	mg/Kg		08/22/18 11:50	08/23/18 11:05	4
Cadmium	1.0		0.45	0.044	mg/Kg		08/22/18 11:50	08/23/18 11:05	4
Chromium	35		1.8	0.19	mg/Kg		08/22/18 11:50	08/23/18 11:05	4
Cobalt	11		0.71	0.071	mg/Kg		08/22/18 11:50	08/23/18 11:05	4
Copper	150		5.4	2.5	mg/Kg		08/22/18 11:50	08/23/18 11:05	4
Lead	270		1.8	0.38	mg/Kg		08/22/18 11:50	08/23/18 11:05	4
Molybdenum	1.0	J	1.8	0.23	mg/Kg		08/22/18 11:50	08/23/18 11:05	4
Nickel	27		1.8	0.18	mg/Kg		08/22/18 11:50	08/23/18 11:05	4
Selenium	ND		3.6	0.54	mg/Kg		08/22/18 11:50	08/23/18 11:05	4
Silver	0.47	J	0.89	0.18	mg/Kg		08/22/18 11:50	08/23/18 11:05	4
Thallium	ND		1.8	0.52	mg/Kg		08/22/18 11:50	08/23/18 11:05	4
Vanadium	53		1.8	0.24	mg/Kg		08/22/18 11:50	08/23/18 11:05	4
Zinc	350		5.4	2.3	mg/Kg		08/22/18 11:50	08/23/18 11:05	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.48		0.016	0.0023	mg/Kg		08/25/18 11:36	08/25/18 14:50	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-L1S-3.5-4
Date Collected: 08/20/18 09:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-4
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2.3	0.54	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Acetone	ND		23	17	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Benzene	ND		2.3	0.29	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Dichlorobromomethane	ND		2.3	0.33	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Bromobenzene	ND		2.3	0.36	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Chlorobromomethane	ND		9.0	0.33	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Bromoform	ND		2.3	0.90	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Bromomethane	ND		4.5	0.36	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
2-Butanone (MEK)	ND		23	9.5	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
n-Butylbenzene	ND		2.3	0.45	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
sec-Butylbenzene	ND		2.3	0.33	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
tert-Butylbenzene	ND		2.3	0.33	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Carbon disulfide	ND		2.3	0.90	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Carbon tetrachloride	ND		2.3	0.28	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Chlorobenzene	ND		2.3	0.31	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Chloroethane	ND		4.5	0.25	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Chloroform	ND		2.3	0.30	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Chloromethane	ND		4.5	0.36	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
2-Chlorotoluene	ND		2.3	0.29	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
4-Chlorotoluene	ND		2.3	0.31	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Chlorodibromomethane	ND		2.3	0.32	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
1,2-Dichlorobenzene	ND		2.3	0.31	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
1,3-Dichlorobenzene	ND		2.3	0.33	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
1,4-Dichlorobenzene	ND		2.3	0.32	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
1,3-Dichloropropane	ND		2.3	0.33	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
1,1-Dichloropropene	ND		2.3	0.31	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
1,2-Dibromo-3-Chloropropane	ND		4.5	0.77	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Ethylene Dibromide	ND		2.3	0.65	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Dibromomethane	ND		4.5	0.39	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Dichlorodifluoromethane	ND		4.5	0.36	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
1,1-Dichloroethane	ND		2.3	0.31	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
1,2-Dichloroethane	ND		2.3	0.34	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
1,1-Dichloroethene	ND		2.3	0.28	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
cis-1,2-Dichloroethene	ND		2.3	0.31	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
trans-1,2-Dichloroethene	ND		2.3	0.34	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
1,2-Dichloropropane	ND		2.3	0.28	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
cis-1,3-Dichloropropene	ND		2.3	0.31	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
trans-1,3-Dichloropropene	ND		2.3	0.30	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Ethylbenzene	ND		2.3	0.34	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Hexachlorobutadiene	ND		2.3	0.41	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
2-Hexanone	ND		23	4.5	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Isopropylbenzene	ND		2.3	0.31	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
4-Isopropyltoluene	ND		2.3	1.1	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Methylene Chloride	ND		4.5	2.5	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
4-Methyl-2-pentanone (MIBK)	ND		23	4.5	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Naphthalene	ND		4.5	0.68	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
N-Propylbenzene	ND		2.3	0.30	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Styrene	ND		2.3	0.28	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
1,1,1,2-Tetrachloroethane	ND		2.3	0.34	ug/Kg		08/22/18 01:00	08/23/18 20:26	1

Client Sample ID: DG-L1S-3.5-4

Date Collected: 08/20/18 09:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-4

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		2.3	0.34	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Tetrachloroethene	ND		2.3	0.30	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Toluene	ND		2.3	0.32	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
1,2,3-Trichlorobenzene	ND		2.3	0.33	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
1,2,4-Trichlorobenzene	ND		2.3	0.32	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
1,1,1-Trichloroethane	ND		2.3	0.28	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
1,1,2-Trichloroethane	ND		2.3	0.32	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Trichloroethene	ND		2.3	0.28	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Trichlorofluoromethane	ND		2.3	0.25	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
1,2,3-Trichloropropane	ND		2.3	0.35	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.3	0.94	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
1,2,4-Trimethylbenzene	ND		2.3	0.74	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
1,3,5-Trimethylbenzene	ND		2.3	0.29	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Vinyl acetate	ND		9.0	2.3	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Vinyl chloride	ND		2.3	0.33	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Xylenes, Total	ND		2.3	0.55	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
2,2-Dichloropropane	ND		2.3	0.90	ug/Kg		08/22/18 01:00	08/23/18 20:26	1
Gasoline Range Organics (GRO) -C4-C12	ND		110	45	ug/Kg		08/22/18 01:00	08/23/18 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*45 - 131*	*08/22/18 01:00*	*08/23/18 20:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*60 - 140*	*08/22/18 01:00*	*08/23/18 20:26*	*1*
Toluene-d8 (Surr)	*92*		*58 - 140*	*08/22/18 01:00*	*08/23/18 20:26*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**32**		9.7	4.9	ug/Kg		08/22/18 12:41	08/23/18 19:33	1
Acenaphthene	ND		4.9	2.7	ug/Kg		08/22/18 12:41	08/23/18 19:33	1
Acenaphthylene	**6.4**		4.9	2.3	ug/Kg		08/22/18 12:41	08/23/18 19:33	1
Anthracene	**6.5**		4.9	1.9	ug/Kg		08/22/18 12:41	08/23/18 19:33	1
Benzo[a]anthracene	**17**		4.9	1.5	ug/Kg		08/22/18 12:41	08/23/18 19:33	1
Benzo[a]pyrene	**20**		4.9	1.8	ug/Kg		08/22/18 12:41	08/23/18 19:33	1
Benzo[b]fluoranthene	**35**		4.9	2.0	ug/Kg		08/22/18 12:41	08/23/18 19:33	1
Benzo[g,h,i]perylene	**17**		4.9	4.2	ug/Kg		08/22/18 12:41	08/23/18 19:33	1
Benzo[k]fluoranthene	**7.5**		4.9	2.0	ug/Kg		08/22/18 12:41	08/23/18 19:33	1
Chrysene	**26**		4.9	1.4	ug/Kg		08/22/18 12:41	08/23/18 19:33	1
Dibenz(a,h)anthracene	**5.1**		4.9	3.4	ug/Kg		08/22/18 12:41	08/23/18 19:33	1
Fluoranthene	**23**		4.9	1.4	ug/Kg		08/22/18 12:41	08/23/18 19:33	1
Fluorene	**2.1**	**J**	4.9	2.1	ug/Kg		08/22/18 12:41	08/23/18 19:33	1
Indeno[1,2,3-cd]pyrene	**11**		4.9	4.1	ug/Kg		08/22/18 12:41	08/23/18 19:33	1
Naphthalene	**30**		4.9	3.4	ug/Kg		08/22/18 12:41	08/23/18 19:33	1
Phenanthrene	**41**		4.9	1.7	ug/Kg		08/22/18 12:41	08/23/18 19:33	1
Pyrene	**37**		4.9	1.7	ug/Kg		08/22/18 12:41	08/23/18 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*33 - 120*	*08/22/18 12:41*	*08/23/18 19:33*	*1*
Terphenyl-d14	*97*		*35 - 146*	*08/22/18 12:41*	*08/23/18 19:33*	*1*

Client Sample ID: DG-L1S-3.5-4
Date Collected: 08/20/18 09:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-4
Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	38000	B	1900	720	ug/Kg		08/22/18 08:37	08/22/18 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*113*		*40 - 130*	*08/22/18 08:37*	*08/22/18 21:19*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
4,4'-DDE	ND		2.0	0.41	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
4,4'-DDT	ND		2.0	0.40	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
Aldrin	ND		2.0	0.49	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
Chlordane (technical)	ND		39	3.2	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
cis-Chlordane	ND		2.0	0.39	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
Endrin	ND		2.0	0.45	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
Toxaphene	ND		39	6.7	ug/Kg		08/22/18 15:45	08/26/18 06:09	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		08/22/18 15:45	08/26/18 06:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*47*	*p*	*21 - 136*	*08/22/18 15:45*	*08/26/18 06:09*	*1*
Tetrachloro-m-xylene	*77*		*21 - 145*	*08/22/18 15:45*	*08/26/18 06:09*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		52	23	ug/Kg		08/24/18 09:31	08/27/18 16:07	1
Aroclor-1221	ND		52	25	ug/Kg		08/24/18 09:31	08/27/18 16:07	1
Aroclor-1232	ND		52	24	ug/Kg		08/24/18 09:31	08/27/18 16:07	1
Aroclor-1242	ND		52	20	ug/Kg		08/24/18 09:31	08/27/18 16:07	1
Aroclor-1248	ND		52	25	ug/Kg		08/24/18 09:31	08/27/18 16:07	1
Aroclor-1254	ND		52	24	ug/Kg		08/24/18 09:31	08/27/18 16:07	1
Aroclor-1260	ND		52	23	ug/Kg		08/24/18 09:31	08/27/18 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*64*		*14 - 128*	*08/24/18 09:31*	*08/27/18 16:07*	*1*
DCB Decachlorobiphenyl	*65*		*10 - 132*	*08/24/18 09:31*	*08/27/18 16:07*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.6	J	1.7	0.28	mg/Kg		08/22/18 11:50	08/23/18 11:10	4

Client Sample ID: DG-L1S-3.5-4
Date Collected: 08/20/18 09:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-4
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	59		3.4	0.29	mg/Kg		08/22/18 11:50	08/23/18 11:10	4
Barium	74		1.7	0.24	mg/Kg		08/22/18 11:50	08/23/18 11:10	4
Beryllium	0.25	J	0.34	0.11	mg/Kg		08/22/18 11:50	08/23/18 11:10	4
Cadmium	0.075	J	0.43	0.042	mg/Kg		08/22/18 11:50	08/23/18 11:10	4
Chromium	41		1.7	0.18	mg/Kg		08/22/18 11:50	08/23/18 11:10	4
Cobalt	8.8		0.68	0.068	mg/Kg		08/22/18 11:50	08/23/18 11:10	4
Copper	24		5.1	2.4	mg/Kg		08/22/18 11:50	08/23/18 11:10	4
Lead	21		1.7	0.36	mg/Kg		08/22/18 11:50	08/23/18 11:10	4
Molybdenum	0.58	J	1.7	0.22	mg/Kg		08/22/18 11:50	08/23/18 11:10	4
Nickel	39		1.7	0.17	mg/Kg		08/22/18 11:50	08/23/18 11:10	4
Selenium	ND		3.4	0.51	mg/Kg		08/22/18 11:50	08/23/18 11:10	4
Silver	0.18	J	0.85	0.17	mg/Kg		08/22/18 11:50	08/23/18 11:10	4
Thallium	ND		1.7	0.50	mg/Kg		08/22/18 11:50	08/23/18 11:10	4
Vanadium	44		1.7	0.23	mg/Kg		08/22/18 11:50	08/23/18 11:10	4
Zinc	46		5.1	2.2	mg/Kg		08/22/18 11:50	08/23/18 11:10	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.6		0.061	0.0090	mg/Kg		08/25/18 11:36	08/25/18 15:20	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-L1S-10-10.5
Date Collected: 08/20/18 10:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-5
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.4		1.6	0.27	mg/Kg		08/22/18 11:50	08/23/18 11:24	4
Arsenic	29		3.3	0.28	mg/Kg		08/22/18 11:50	08/23/18 11:24	4
Barium	69		1.6	0.23	mg/Kg		08/22/18 11:50	08/23/18 11:24	4
Beryllium	0.52		0.33	0.11	mg/Kg		08/22/18 11:50	08/23/18 11:24	4
Cadmium	ND		0.41	0.040	mg/Kg		08/22/18 11:50	08/23/18 11:24	4
Chromium	35		1.6	0.17	mg/Kg		08/22/18 11:50	08/23/18 11:24	4
Cobalt	11		0.65	0.065	mg/Kg		08/22/18 11:50	08/23/18 11:24	4
Copper	51		4.9	2.3	mg/Kg		08/22/18 11:50	08/23/18 11:24	4
Lead	29		1.6	0.34	mg/Kg		08/22/18 11:50	08/23/18 11:24	4
Molybdenum	0.69	J	1.6	0.21	mg/Kg		08/22/18 11:50	08/23/18 11:24	4
Nickel	31		1.6	0.17	mg/Kg		08/22/18 11:50	08/23/18 11:24	4
Selenium	ND		3.3	0.49	mg/Kg		08/22/18 11:50	08/23/18 11:24	4
Silver	0.19	J	0.81	0.16	mg/Kg		08/22/18 11:50	08/23/18 11:24	4
Thallium	ND		1.6	0.47	mg/Kg		08/22/18 11:50	08/23/18 11:24	4
Vanadium	50		1.6	0.22	mg/Kg		08/22/18 11:50	08/23/18 11:24	4
Zinc	65		4.9	2.1	mg/Kg		08/22/18 11:50	08/23/18 11:24	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040		0.015	0.0023	mg/Kg		08/25/18 11:36	08/25/18 14:54	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-K1S-0.5-1
Date Collected: 08/20/18 10:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-6
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.6**	**F1**	1.6	0.26	mg/Kg		08/22/18 11:50	08/23/18 10:32	4
Arsenic	**380**		3.1	0.26	mg/Kg		08/22/18 11:50	08/23/18 10:32	4
Barium	**130**	**F1 F2**	1.6	0.22	mg/Kg		08/22/18 11:50	08/23/18 10:32	4
Beryllium	**0.15**	**J F1**	0.31	0.10	mg/Kg		08/22/18 11:50	08/23/18 10:32	4
Cadmium	**0.35**	**J**	0.39	0.038	mg/Kg		08/22/18 11:50	08/23/18 10:32	4
Chromium	**25**	**F1**	1.6	0.16	mg/Kg		08/22/18 11:50	08/23/18 10:32	4
Cobalt	**9.3**	**F1**	0.62	0.062	mg/Kg		08/22/18 11:50	08/23/18 10:32	4
Copper	**71**	**F1**	4.7	2.2	mg/Kg		08/22/18 11:50	08/23/18 10:32	4
Lead	**310**		1.6	0.33	mg/Kg		08/22/18 11:50	08/23/18 10:32	4
Molybdenum	ND		1.6	0.20	mg/Kg		08/22/18 11:50	08/23/18 10:32	4
Nickel	**26**	**F1**	1.6	0.16	mg/Kg		08/22/18 11:50	08/23/18 10:32	4
Selenium	ND		3.1	0.47	mg/Kg		08/22/18 11:50	08/23/18 10:32	4
Silver	ND		0.78	0.16	mg/Kg		08/22/18 11:50	08/23/18 10:32	4
Thallium	ND		1.6	0.45	mg/Kg		08/22/18 11:50	08/23/18 10:32	4
Vanadium	**40**	**F1**	1.6	0.21	mg/Kg		08/22/18 11:50	08/23/18 10:32	4
Zinc	**220**		4.7	2.0	mg/Kg		08/22/18 11:50	08/23/18 10:32	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**3.6**		0.17	0.025	mg/Kg		08/25/18 11:36	08/25/18 15:18	10

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-K1S-3.5-4
Date Collected: 08/20/18 10:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-7
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.1	J	1.7	0.28	mg/Kg		08/22/18 11:50	08/23/18 11:29	4
Arsenic	29		3.4	0.29	mg/Kg		08/22/18 11:50	08/23/18 11:29	4
Barium	65		1.7	0.24	mg/Kg		08/22/18 11:50	08/23/18 11:29	4
Beryllium	0.20	J	0.34	0.11	mg/Kg		08/22/18 11:50	08/23/18 11:29	4
Cadmium	0.061	J	0.42	0.042	mg/Kg		08/22/18 11:50	08/23/18 11:29	4
Chromium	66		1.7	0.18	mg/Kg		08/22/18 11:50	08/23/18 11:29	4
Cobalt	7.3		0.67	0.067	mg/Kg		08/22/18 11:50	08/23/18 11:29	4
Copper	12		5.0	2.4	mg/Kg		08/22/18 11:50	08/23/18 11:29	4
Lead	8.0		1.7	0.35	mg/Kg		08/22/18 11:50	08/23/18 11:29	4
Molybdenum	ND		1.7	0.22	mg/Kg		08/22/18 11:50	08/23/18 11:29	4
Nickel	47		1.7	0.17	mg/Kg		08/22/18 11:50	08/23/18 11:29	4
Selenium	ND		3.4	0.50	mg/Kg		08/22/18 11:50	08/23/18 11:29	4
Silver	ND		0.84	0.17	mg/Kg		08/22/18 11:50	08/23/18 11:29	4
Thallium	ND		1.7	0.49	mg/Kg		08/22/18 11:50	08/23/18 11:29	4
Vanadium	49		1.7	0.23	mg/Kg		08/22/18 11:50	08/23/18 11:29	4
Zinc	33		5.0	2.1	mg/Kg		08/22/18 11:50	08/23/18 11:29	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.055		0.016	0.0024	mg/Kg		08/25/18 11:36	08/25/18 14:57	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-J1S-0.5-1
Date Collected: 08/20/18 11:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-8
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.8	1.2	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Acetone	ND		48	36	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Benzene	ND		4.8	0.62	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Dichlorobromomethane	ND		4.8	0.69	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Bromobenzene	ND		4.8	0.76	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Chlorobromomethane	ND		19	0.69	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Bromoform	ND		4.8	1.9	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Bromomethane	ND		9.6	0.76	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
2-Butanone (MEK)	ND		48	20	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
n-Butylbenzene	ND		4.8	0.96	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
sec-Butylbenzene	ND		4.8	0.69	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
tert-Butylbenzene	ND		4.8	0.70	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Carbon disulfide	ND		4.8	1.9	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Carbon tetrachloride	ND		4.8	0.60	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Chlorobenzene	ND		4.8	0.66	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Chloroethane	ND		9.6	0.54	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Chloroform	ND		4.8	0.63	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Chloromethane	ND		9.6	0.76	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
2-Chlorotoluene	ND		4.8	0.62	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
4-Chlorotoluene	ND		4.8	0.65	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Chlorodibromomethane	ND		4.8	0.68	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
1,2-Dichlorobenzene	ND		4.8	0.65	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
1,3-Dichlorobenzene	ND		4.8	0.69	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
1,4-Dichlorobenzene	ND		4.8	0.68	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
1,3-Dichloropropane	ND		4.8	0.70	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
1,1-Dichloropropene	ND		4.8	0.66	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
1,2-Dibromo-3-Chloropropane	ND		9.6	1.6	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Ethylene Dibromide	ND		4.8	1.4	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Dibromomethane	ND		9.6	0.83	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Dichlorodifluoromethane	ND		9.6	0.76	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
1,1-Dichloroethane	ND		4.8	0.65	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
1,2-Dichloroethane	ND		4.8	0.73	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
1,1-Dichloroethene	ND		4.8	0.60	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
cis-1,2-Dichloroethene	ND		4.8	0.65	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
trans-1,2-Dichloroethene	ND		4.8	0.72	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
1,2-Dichloropropane	ND		4.8	0.60	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
cis-1,3-Dichloropropene	ND		4.8	0.66	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
trans-1,3-Dichloropropene	ND		4.8	0.64	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Ethylbenzene	ND		4.8	0.72	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Hexachlorobutadiene	ND		4.8	0.86	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
2-Hexanone	ND		48	9.6	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Isopropylbenzene	ND		4.8	0.65	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
4-Isopropyltoluene	ND		4.8	2.4	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Methylene Chloride	ND		9.6	5.4	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
4-Methyl-2-pentanone (MIBK)	ND		48	9.6	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Naphthalene	ND		9.6	1.4	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
N-Propylbenzene	ND		4.8	0.63	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Styrene	ND		4.8	0.60	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
1,1,1,2-Tetrachloroethane	ND		4.8	0.73	ug/Kg		08/22/18 01:00	08/25/18 13:30	1

Client Sample ID: DG-J1S-0.5-1
Date Collected: 08/20/18 11:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-8
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.8	0.72	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Tetrachloroethene	ND		4.8	0.64	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Toluene	ND		4.8	0.68	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
1,2,3-Trichlorobenzene	ND		4.8	0.71	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
1,2,4-Trichlorobenzene	ND		4.8	0.68	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
1,1,1-Trichloroethane	ND		4.8	0.59	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
1,1,2-Trichloroethane	ND		4.8	0.67	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Trichloroethene	ND		4.8	0.60	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Trichlorofluoromethane	ND		4.8	0.54	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
1,2,3-Trichloropropane	ND		4.8	0.74	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.8	2.0	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
1,2,4-Trimethylbenzene	ND		4.8	1.6	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
1,3,5-Trimethylbenzene	ND		4.8	0.62	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Vinyl acetate	ND		19	4.8	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Vinyl chloride	ND		4.8	0.70	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Xylenes, Total	ND		4.8	1.2	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
2,2-Dichloropropane	ND		4.8	1.9	ug/Kg		08/22/18 01:00	08/25/18 13:30	1
Gasoline Range Organics (GRO) -C4-C12	ND		240	96	ug/Kg		08/22/18 01:00	08/25/18 13:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*45 - 131*	*08/22/18 01:00*	*08/25/18 13:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*60 - 140*	*08/22/18 01:00*	*08/25/18 13:30*	*1*
Toluene-d8 (Surr)	*97*		*58 - 140*	*08/22/18 01:00*	*08/25/18 13:30*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**810**		400	200	ug/Kg		08/22/18 12:41	08/24/18 15:45	40
Acenaphthene	**1000**		200	110	ug/Kg		08/22/18 12:41	08/24/18 15:45	40
Acenaphthylene	**1600**		200	95	ug/Kg		08/22/18 12:41	08/24/18 15:45	40
Anthracene	**3200**		200	80	ug/Kg		08/22/18 12:41	08/24/18 15:45	40
Benzo[a]anthracene	**5300**		200	60	ug/Kg		08/22/18 12:41	08/24/18 15:45	40
Benzo[a]pyrene	**5000**		200	76	ug/Kg		08/22/18 12:41	08/24/18 15:45	40
Benzo[b]fluoranthene	**5800**		200	84	ug/Kg		08/22/18 12:41	08/24/18 15:45	40
Benzo[g,h,i]perylene	**2900**		200	170	ug/Kg		08/22/18 12:41	08/24/18 15:45	40
Benzo[k]fluoranthene	**1900**		200	84	ug/Kg		08/22/18 12:41	08/24/18 15:45	40
Chrysene	**4900**		200	56	ug/Kg		08/22/18 12:41	08/24/18 15:45	40
Dibenz(a,h)anthracene	**930**		200	140	ug/Kg		08/22/18 12:41	08/24/18 15:45	40
Fluoranthene	**9000**		200	56	ug/Kg		08/22/18 12:41	08/24/18 15:45	40
Fluorene	**1700**		200	88	ug/Kg		08/22/18 12:41	08/24/18 15:45	40
Indeno[1,2,3-cd]pyrene	**2300**		200	170	ug/Kg		08/22/18 12:41	08/24/18 15:45	40
Naphthalene	**1000**		200	140	ug/Kg		08/22/18 12:41	08/24/18 15:45	40
Phenanthrene	**10000**		200	72	ug/Kg		08/22/18 12:41	08/24/18 15:45	40
Pyrene	**11000**		200	68	ug/Kg		08/22/18 12:41	08/24/18 15:45	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*33 - 120*	*08/22/18 12:41*	*08/24/18 15:45*	*40*
Terphenyl-d14	*0*	*X*	*35 - 146*	*08/22/18 12:41*	*08/24/18 15:45*	*40*

Client Sample ID: DG-J1S-0.5-1

Date Collected: 08/20/18 11:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-8

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	680000	B	9500	3600	ug/Kg		08/22/18 08:37	08/23/18 00:09	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*D X*	*40 - 130*	*08/22/18 08:37*	*08/23/18 00:09*	*5*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
Aldrin	ND		1.9	0.48	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
Endrin	ND		1.9	0.44	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
Toxaphene	ND		38	6.5	ug/Kg		08/22/18 15:45	08/24/18 05:41	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/22/18 15:45	08/24/18 05:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*180*	*p X*	*21 - 136*	*08/22/18 15:45*	*08/24/18 05:41*	*1*
Tetrachloro-m-xylene	*74*		*21 - 145*	*08/22/18 15:45*	*08/24/18 05:41*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	21	ug/Kg		08/24/18 09:31	08/27/18 16:24	1
Aroclor-1221	ND		49	23	ug/Kg		08/24/18 09:31	08/27/18 16:24	1
Aroclor-1232	ND		49	22	ug/Kg		08/24/18 09:31	08/27/18 16:24	1
Aroclor-1242	ND		49	18	ug/Kg		08/24/18 09:31	08/27/18 16:24	1
Aroclor-1248	ND		49	23	ug/Kg		08/24/18 09:31	08/27/18 16:24	1
Aroclor-1254	ND		49	22	ug/Kg		08/24/18 09:31	08/27/18 16:24	1
Aroclor-1260	ND		49	21	ug/Kg		08/24/18 09:31	08/27/18 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*14 - 128*	*08/24/18 09:31*	*08/27/18 16:24*	*1*
DCB Decachlorobiphenyl	*36*	*p*	*10 - 132*	*08/24/18 09:31*	*08/27/18 16:24*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.0	J	1.6	0.26	mg/Kg		08/22/18 11:50	08/23/18 11:34	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-J1S-0.5-1
Date Collected: 08/20/18 11:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-8
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	150		3.1	0.27	mg/Kg		08/22/18 11:50	08/23/18 11:34	4
Barium	110		1.6	0.22	mg/Kg		08/22/18 11:50	08/23/18 11:34	4
Beryllium	0.12	J	0.31	0.10	mg/Kg		08/22/18 11:50	08/23/18 11:34	4
Cadmium	0.17	J	0.39	0.039	mg/Kg		08/22/18 11:50	08/23/18 11:34	4
Chromium	30		1.6	0.17	mg/Kg		08/22/18 11:50	08/23/18 11:34	4
Cobalt	13		0.63	0.063	mg/Kg		08/22/18 11:50	08/23/18 11:34	4
Copper	110		4.7	2.2	mg/Kg		08/22/18 11:50	08/23/18 11:34	4
Lead	120		1.6	0.33	mg/Kg		08/22/18 11:50	08/23/18 11:34	4
Molybdenum	0.61	J	1.6	0.20	mg/Kg		08/22/18 11:50	08/23/18 11:34	4
Nickel	27		1.6	0.16	mg/Kg		08/22/18 11:50	08/23/18 11:34	4
Selenium	ND		3.1	0.47	mg/Kg		08/22/18 11:50	08/23/18 11:34	4
Silver	0.26	J	0.79	0.16	mg/Kg		08/22/18 11:50	08/23/18 11:34	4
Thallium	ND		1.6	0.46	mg/Kg		08/22/18 11:50	08/23/18 11:34	4
Vanadium	92		1.6	0.21	mg/Kg		08/22/18 11:50	08/23/18 11:34	4
Zinc	110		4.7	2.0	mg/Kg		08/22/18 11:50	08/23/18 11:34	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17		0.015	0.0022	mg/Kg		08/25/18 11:36	08/25/18 15:04	1

Client Sample ID: DG-J1S-3.5-4
Date Collected: 08/20/18 11:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-9
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.3	1.0	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Acetone	ND		43	33	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Benzene	ND		4.3	0.56	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Dichlorobromomethane	ND		4.3	0.62	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Bromobenzene	ND	*	4.3	0.68	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Chlorobromomethane	ND		17	0.62	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Bromoform	ND		4.3	1.7	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Bromomethane	ND		8.6	0.68	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
2-Butanone (MEK)	ND		43	18	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
n-Butylbenzene	ND	*	4.3	0.86	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
sec-Butylbenzene	ND	*	4.3	0.62	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
tert-Butylbenzene	ND	*	4.3	0.63	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Carbon disulfide	ND		4.3	1.7	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Carbon tetrachloride	ND		4.3	0.54	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Chlorobenzene	ND		4.3	0.60	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Chloroethane	ND		8.6	0.48	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Chloroform	ND		4.3	0.57	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Chloromethane	ND		8.6	0.68	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
2-Chlorotoluene	ND	*	4.3	0.56	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
4-Chlorotoluene	ND	*	4.3	0.59	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Chlorodibromomethane	ND		4.3	0.61	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
1,2-Dichlorobenzene	ND	*	4.3	0.59	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
1,3-Dichlorobenzene	ND	*	4.3	0.62	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
1,4-Dichlorobenzene	ND	*	4.3	0.61	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
1,3-Dichloropropane	ND		4.3	0.63	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
1,1-Dichloropropene	ND		4.3	0.60	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
1,2-Dibromo-3-Chloropropane	ND	*	8.6	1.5	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Ethylene Dibromide	ND		4.3	1.2	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Dibromomethane	ND		8.6	0.74	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Dichlorodifluoromethane	ND		8.6	0.68	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
1,1-Dichloroethane	ND		4.3	0.59	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
1,2-Dichloroethane	ND		4.3	0.66	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
1,1-Dichloroethene	ND		4.3	0.54	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
cis-1,2-Dichloroethene	ND		4.3	0.59	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
trans-1,2-Dichloroethene	ND		4.3	0.65	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
1,2-Dichloropropane	ND		4.3	0.54	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
cis-1,3-Dichloropropene	ND		4.3	0.60	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
trans-1,3-Dichloropropene	ND		4.3	0.58	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Ethylbenzene	ND		4.3	0.65	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Hexachlorobutadiene	ND	*	4.3	0.78	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
2-Hexanone	ND		43	8.6	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Isopropylbenzene	ND		4.3	0.59	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
4-Isopropyltoluene	ND	*	4.3	2.2	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Methylene Chloride	ND		8.6	4.8	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
4-Methyl-2-pentanone (MIBK)	ND		43	8.6	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Naphthalene	ND	*	8.6	1.3	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
N-Propylbenzene	ND	*	4.3	0.57	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Styrene	ND		4.3	0.54	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
1,1,1,2-Tetrachloroethane	ND		4.3	0.66	ug/Kg		08/22/18 01:00	08/23/18 21:23	1

Client Sample ID: DG-J1S-3.5-4

Date Collected: 08/20/18 11:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-9

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.3	0.65	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Tetrachloroethene	ND		4.3	0.58	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Toluene	ND		4.3	0.61	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
1,2,3-Trichlorobenzene	ND	*	4.3	0.64	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
1,2,4-Trichlorobenzene	ND	*	4.3	0.61	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
1,1,1-Trichloroethane	ND		4.3	0.53	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
1,1,2-Trichloroethane	ND		4.3	0.60	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Trichloroethene	ND		4.3	0.54	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Trichlorofluoromethane	ND		4.3	0.48	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
1,2,3-Trichloropropane	ND	*	4.3	0.67	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.3	1.8	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
1,2,4-Trimethylbenzene	ND	*	4.3	1.4	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
1,3,5-Trimethylbenzene	ND	*	4.3	0.56	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Vinyl acetate	ND		17	4.3	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Vinyl chloride	ND		4.3	0.63	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Xylenes, Total	ND		4.3	1.1	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
2,2-Dichloropropane	ND		4.3	1.7	ug/Kg		08/22/18 01:00	08/23/18 21:23	1
Gasoline Range Organics (GRO) -C4-C12	ND		220	86	ug/Kg		08/22/18 01:00	08/23/18 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*45 - 131*	*08/22/18 01:00*	*08/23/18 21:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*121*		*60 - 140*	*08/22/18 01:00*	*08/23/18 21:23*	*1*
Toluene-d8 (Surr)	*86*		*58 - 140*	*08/22/18 01:00*	*08/23/18 21:23*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**5.0**	**J**	9.6	4.8	ug/Kg		08/22/18 12:41	08/23/18 17:34	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/22/18 12:41	08/23/18 17:34	1
Acenaphthylene	**8.0**		4.8	2.3	ug/Kg		08/22/18 12:41	08/23/18 17:34	1
Anthracene	**11**		4.8	1.9	ug/Kg		08/22/18 12:41	08/23/18 17:34	1
Benzo[a]anthracene	**28**		4.8	1.4	ug/Kg		08/22/18 12:41	08/23/18 17:34	1
Benzo[a]pyrene	**29**		4.8	1.8	ug/Kg		08/22/18 12:41	08/23/18 17:34	1
Benzo[b]fluoranthene	**64**		4.8	2.0	ug/Kg		08/22/18 12:41	08/23/18 17:34	1
Benzo[g,h,i]perylene	**21**		4.8	4.1	ug/Kg		08/22/18 12:41	08/23/18 17:34	1
Benzo[k]fluoranthene	**13**		4.8	2.0	ug/Kg		08/22/18 12:41	08/23/18 17:34	1
Chrysene	**50**		4.8	1.4	ug/Kg		08/22/18 12:41	08/23/18 17:34	1
Dibenz(a,h)anthracene	**7.8**		4.8	3.4	ug/Kg		08/22/18 12:41	08/23/18 17:34	1
Fluoranthene	**47**		4.8	1.4	ug/Kg		08/22/18 12:41	08/23/18 17:34	1
Fluorene	**4.8**		4.8	2.1	ug/Kg		08/22/18 12:41	08/23/18 17:34	1
Indeno[1,2,3-cd]pyrene	**16**		4.8	4.1	ug/Kg		08/22/18 12:41	08/23/18 17:34	1
Naphthalene	**12**		4.8	3.4	ug/Kg		08/22/18 12:41	08/23/18 17:34	1
Phenanthrene	**82**		4.8	1.7	ug/Kg		08/22/18 12:41	08/23/18 17:34	1
Pyrene	**50**		4.8	1.6	ug/Kg		08/22/18 12:41	08/23/18 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*33 - 120*	*08/22/18 12:41*	*08/23/18 17:34*	*1*
Terphenyl-d14	*100*		*35 - 146*	*08/22/18 12:41*	*08/23/18 17:34*	*1*

Client Sample ID: DG-J1S-3.5-4

Date Collected: 08/20/18 11:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-9

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	6900	B	2000	740	ug/Kg		08/22/18 08:37	08/22/18 20:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*93*		*40 - 130*	*08/22/18 08:37*	*08/22/18 20:30*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
Aldrin	ND		1.9	0.49	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
delta-BHC	ND		1.9	0.43	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
Endosulfan II	ND		1.9	0.48	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
Endrin	ND		1.9	0.45	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
Heptachlor	ND		1.9	0.45	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
Toxaphene	ND		39	6.6	ug/Kg		08/22/18 15:45	08/24/18 05:57	1
trans-Chlordane	ND		1.9	0.45	ug/Kg		08/22/18 15:45	08/24/18 05:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*183*	*p X*	*21 - 136*	*08/22/18 15:45*	*08/24/18 05:57*	*1*
Tetrachloro-m-xylene	*75*		*21 - 145*	*08/22/18 15:45*	*08/24/18 05:57*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/24/18 09:31	08/27/18 16:42	1
Aroclor-1221	ND		51	24	ug/Kg		08/24/18 09:31	08/27/18 16:42	1
Aroclor-1232	ND		51	23	ug/Kg		08/24/18 09:31	08/27/18 16:42	1
Aroclor-1242	ND		51	19	ug/Kg		08/24/18 09:31	08/27/18 16:42	1
Aroclor-1248	ND		51	24	ug/Kg		08/24/18 09:31	08/27/18 16:42	1
Aroclor-1254	ND		51	23	ug/Kg		08/24/18 09:31	08/27/18 16:42	1
Aroclor-1260	ND		51	22	ug/Kg		08/24/18 09:31	08/27/18 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*58*		*14 - 128*	*08/24/18 09:31*	*08/27/18 16:42*	*1*
DCB Decachlorobiphenyl	*61*		*10 - 132*	*08/24/18 09:31*	*08/27/18 16:42*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.8		1.8	0.30	mg/Kg		08/22/18 11:50	08/23/18 11:38	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-J1S-3.5-4
Date Collected: 08/20/18 11:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-9
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20		3.6	0.31	mg/Kg		08/22/18 11:50	08/23/18 11:38	4
Barium	120		1.8	0.26	mg/Kg		08/22/18 11:50	08/23/18 11:38	4
Beryllium	0.51		0.36	0.12	mg/Kg		08/22/18 11:50	08/23/18 11:38	4
Cadmium	ND		0.45	0.045	mg/Kg		08/22/18 11:50	08/23/18 11:38	4
Chromium	110		1.8	0.19	mg/Kg		08/22/18 11:50	08/23/18 11:38	4
Cobalt	22		0.73	0.073	mg/Kg		08/22/18 11:50	08/23/18 11:38	4
Copper	57		5.5	2.6	mg/Kg		08/22/18 11:50	08/23/18 11:38	4
Lead	51		1.8	0.38	mg/Kg		08/22/18 11:50	08/23/18 11:38	4
Molybdenum	0.37	J	1.8	0.23	mg/Kg		08/22/18 11:50	08/23/18 11:38	4
Nickel	140		1.8	0.19	mg/Kg		08/22/18 11:50	08/23/18 11:38	4
Selenium	ND		3.6	0.55	mg/Kg		08/22/18 11:50	08/23/18 11:38	4
Silver	ND		0.91	0.18	mg/Kg		08/22/18 11:50	08/23/18 11:38	4
Thallium	ND		1.8	0.53	mg/Kg		08/22/18 11:50	08/23/18 11:38	4
Vanadium	76		1.8	0.25	mg/Kg		08/22/18 11:50	08/23/18 11:38	4
Zinc	80		5.5	2.3	mg/Kg		08/22/18 11:50	08/23/18 11:38	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.8		0.17	0.025	mg/Kg		08/25/18 11:36	08/25/18 15:22	10

Client Sample ID: DG-I1S-0.5-1

Date Collected: 08/20/18 11:40
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-10

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.1		1.6	0.27	mg/Kg		08/22/18 11:50	08/23/18 11:43	4
Arsenic	130		3.3	0.28	mg/Kg		08/22/18 11:50	08/23/18 11:43	4
Barium	79		1.6	0.23	mg/Kg		08/22/18 11:50	08/23/18 11:43	4
Beryllium	0.12	J	0.33	0.11	mg/Kg		08/22/18 11:50	08/23/18 11:43	4
Cadmium	0.34	J	0.41	0.040	mg/Kg		08/22/18 11:50	08/23/18 11:43	4
Chromium	34		1.6	0.17	mg/Kg		08/22/18 11:50	08/23/18 11:43	4
Cobalt	11		0.65	0.065	mg/Kg		08/22/18 11:50	08/23/18 11:43	4
Copper	78		4.9	2.3	mg/Kg		08/22/18 11:50	08/23/18 11:43	4
Lead	140		1.6	0.34	mg/Kg		08/22/18 11:50	08/23/18 11:43	4
Molybdenum	0.44	J	1.6	0.21	mg/Kg		08/22/18 11:50	08/23/18 11:43	4
Nickel	34		1.6	0.17	mg/Kg		08/22/18 11:50	08/23/18 11:43	4
Selenium	ND		3.3	0.49	mg/Kg		08/22/18 11:50	08/23/18 11:43	4
Silver	ND		0.81	0.16	mg/Kg		08/22/18 11:50	08/23/18 11:43	4
Thallium	ND		1.6	0.47	mg/Kg		08/22/18 11:50	08/23/18 11:43	4
Vanadium	53		1.6	0.22	mg/Kg		08/22/18 11:50	08/23/18 11:43	4
Zinc	110		4.9	2.1	mg/Kg		08/22/18 11:50	08/23/18 11:43	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.092		0.016	0.0024	mg/Kg		08/25/18 11:36	08/25/18 15:08	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-I1S-3.5-4
Date Collected: 08/20/18 11:40
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-11
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.5		1.4	0.24	mg/Kg		08/22/18 11:50	08/23/18 11:48	4
Arsenic	43		2.9	0.25	mg/Kg		08/22/18 11:50	08/23/18 11:48	4
Barium	130		1.4	0.21	mg/Kg		08/22/18 11:50	08/23/18 11:48	4
Beryllium	0.38		0.29	0.094	mg/Kg		08/22/18 11:50	08/23/18 11:48	4
Cadmium	ND		0.36	0.036	mg/Kg		08/22/18 11:50	08/23/18 11:48	4
Chromium	140		1.4	0.15	mg/Kg		08/22/18 11:50	08/23/18 11:48	4
Cobalt	23		0.58	0.058	mg/Kg		08/22/18 11:50	08/23/18 11:48	4
Copper	39		4.3	2.1	mg/Kg		08/22/18 11:50	08/23/18 11:48	4
Lead	10		1.4	0.30	mg/Kg		08/22/18 11:50	08/23/18 11:48	4
Molybdenum	1.2	J	1.4	0.19	mg/Kg		08/22/18 11:50	08/23/18 11:48	4
Nickel	170		1.4	0.15	mg/Kg		08/22/18 11:50	08/23/18 11:48	4
Selenium	ND		2.9	0.43	mg/Kg		08/22/18 11:50	08/23/18 11:48	4
Silver	ND		0.72	0.15	mg/Kg		08/22/18 11:50	08/23/18 11:48	4
Thallium	ND		1.4	0.42	mg/Kg		08/22/18 11:50	08/23/18 11:48	4
Vanadium	86		1.4	0.20	mg/Kg		08/22/18 11:50	08/23/18 11:48	4
Zinc	66		4.3	1.8	mg/Kg		08/22/18 11:50	08/23/18 11:48	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.9		0.15	0.023	mg/Kg		08/24/18 15:47	08/27/18 13:53	10

Client Sample ID: DG-H1S-0.5-1
Date Collected: 08/20/18 14:05
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-12
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.0	0.95	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Acetone	ND		40	30	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Benzene	ND		4.0	0.51	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Dichlorobromomethane	ND		4.0	0.57	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Bromobenzene	ND		4.0	0.62	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Chlorobromomethane	ND		16	0.57	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Bromoform	ND		4.0	1.6	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Bromomethane	ND		7.9	0.62	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
2-Butanone (MEK)	ND		40	17	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
n-Butylbenzene	ND		4.0	0.79	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
sec-Butylbenzene	ND		4.0	0.57	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
tert-Butylbenzene	ND		4.0	0.58	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Carbon disulfide	ND		4.0	1.6	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Carbon tetrachloride	ND		4.0	0.49	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Chlorobenzene	ND		4.0	0.55	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Chloroethane	ND		7.9	0.44	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Chloroform	ND		4.0	0.52	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Chloromethane	ND		7.9	0.62	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
2-Chlorotoluene	ND		4.0	0.51	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
4-Chlorotoluene	ND		4.0	0.54	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Chlorodibromomethane	ND		4.0	0.56	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
1,2-Dichlorobenzene	ND		4.0	0.54	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
1,3-Dichlorobenzene	ND		4.0	0.57	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
1,4-Dichlorobenzene	ND		4.0	0.56	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
1,3-Dichloropropane	ND		4.0	0.58	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
1,1-Dichloropropene	ND		4.0	0.55	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
1,2-Dibromo-3-Chloropropane	ND		7.9	1.3	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Ethylene Dibromide	ND		4.0	1.1	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Dibromomethane	ND		7.9	0.68	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Dichlorodifluoromethane	ND		7.9	0.62	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
1,1-Dichloroethane	ND		4.0	0.54	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
1,2-Dichloroethane	ND		4.0	0.60	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
1,1-Dichloroethene	ND		4.0	0.49	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
cis-1,2-Dichloroethene	ND		4.0	0.54	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
trans-1,2-Dichloroethene	ND		4.0	0.59	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
1,2-Dichloropropane	ND		4.0	0.50	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
cis-1,3-Dichloropropene	ND		4.0	0.55	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
trans-1,3-Dichloropropene	ND		4.0	0.53	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Ethylbenzene	ND		4.0	0.59	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Hexachlorobutadiene	ND		4.0	0.71	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
2-Hexanone	ND		40	7.9	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Isopropylbenzene	ND		4.0	0.54	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
4-Isopropyltoluene	ND		4.0	2.0	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Methylene Chloride	ND		7.9	4.4	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
4-Methyl-2-pentanone (MIBK)	ND		40	7.9	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Naphthalene	ND		7.9	1.2	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
N-Propylbenzene	ND		4.0	0.52	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Styrene	ND		4.0	0.50	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
1,1,1,2-Tetrachloroethane	ND		4.0	0.60	ug/Kg		08/22/18 01:00	08/23/18 21:53	1

Client Sample ID: DG-H1S-0.5-1
Date Collected: 08/20/18 14:05
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-12
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.0	0.59	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Tetrachloroethene	ND		4.0	0.53	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Toluene	ND		4.0	0.56	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
1,2,3-Trichlorobenzene	ND		4.0	0.58	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
1,2,4-Trichlorobenzene	ND		4.0	0.56	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
1,1,1-Trichloroethane	ND		4.0	0.48	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
1,1,2-Trichloroethane	ND		4.0	0.55	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Trichloroethene	ND		4.0	0.50	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Trichlorofluoromethane	ND		4.0	0.44	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
1,2,3-Trichloropropane	ND		4.0	0.61	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.6	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
1,2,4-Trimethylbenzene	ND		4.0	1.3	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
1,3,5-Trimethylbenzene	ND		4.0	0.51	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Vinyl acetate	ND		16	4.0	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Vinyl chloride	ND		4.0	0.58	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Xylenes, Total	ND		4.0	0.96	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
2,2-Dichloropropane	ND		4.0	1.6	ug/Kg		08/22/18 01:00	08/23/18 21:53	1
Gasoline Range Organics (GRO) -C4-C12	ND		200	79	ug/Kg		08/22/18 01:00	08/23/18 21:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*45 - 131*	*08/22/18 01:00*	*08/23/18 21:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*121*		*60 - 140*	*08/22/18 01:00*	*08/23/18 21:53*	*1*
Toluene-d8 (Surr)	*89*		*58 - 140*	*08/22/18 01:00*	*08/23/18 21:53*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**9.8**		9.8	4.9	ug/Kg		08/22/18 12:41	08/23/18 19:57	1
Acenaphthene	ND		4.9	2.7	ug/Kg		08/22/18 12:41	08/23/18 19:57	1
Acenaphthylene	**4.9**		4.9	2.3	ug/Kg		08/22/18 12:41	08/23/18 19:57	1
Anthracene	**9.3**		4.9	2.0	ug/Kg		08/22/18 12:41	08/23/18 19:57	1
Benzo[a]anthracene	**27**		4.9	1.5	ug/Kg		08/22/18 12:41	08/23/18 19:57	1
Benzo[a]pyrene	**31**		4.9	1.9	ug/Kg		08/22/18 12:41	08/23/18 19:57	1
Benzo[b]fluoranthene	**47**		4.9	2.0	ug/Kg		08/22/18 12:41	08/23/18 19:57	1
Benzo[g,h,i]perylene	**24**		4.9	4.2	ug/Kg		08/22/18 12:41	08/23/18 19:57	1
Benzo[k]fluoranthene	**17**		4.9	2.0	ug/Kg		08/22/18 12:41	08/23/18 19:57	1
Chrysene	**33**		4.9	1.4	ug/Kg		08/22/18 12:41	08/23/18 19:57	1
Dibenz(a,h)anthracene	**6.1**		4.9	3.4	ug/Kg		08/22/18 12:41	08/23/18 19:57	1
Fluoranthene	**46**		4.9	1.4	ug/Kg		08/22/18 12:41	08/23/18 19:57	1
Fluorene	ND		4.9	2.1	ug/Kg		08/22/18 12:41	08/23/18 19:57	1
Indeno[1,2,3-cd]pyrene	**18**		4.9	4.1	ug/Kg		08/22/18 12:41	08/23/18 19:57	1
Naphthalene	**10**		4.9	3.4	ug/Kg		08/22/18 12:41	08/23/18 19:57	1
Phenanthrene	**28**		4.9	1.8	ug/Kg		08/22/18 12:41	08/23/18 19:57	1
Pyrene	**54**		4.9	1.7	ug/Kg		08/22/18 12:41	08/23/18 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*33 - 120*	*08/22/18 12:41*	*08/23/18 19:57*	*1*
Terphenyl-d14	*98*		*35 - 146*	*08/22/18 12:41*	*08/23/18 19:57*	*1*

Client Sample ID: DG-H1S-0.5-1

Date Collected: 08/20/18 14:05
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-12

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	33000	B	1900	710	ug/Kg		08/22/18 08:37	08/23/18 13:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*75*		*40 - 130*	*08/22/18 08:37*	*08/23/18 13:17*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
Aldrin	ND		1.9	0.47	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
Endosulfan II	ND		1.9	0.46	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
Endrin	ND		1.9	0.43	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
Heptachlor	ND		1.9	0.43	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
Methoxychlor	ND		1.9	0.64	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
Toxaphene	ND		38	6.4	ug/Kg		08/22/18 15:45	08/24/18 06:14	1
trans-Chlordane	ND		1.9	0.43	ug/Kg		08/22/18 15:45	08/24/18 06:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*106*		*21 - 136*	*08/22/18 15:45*	*08/24/18 06:14*	*1*
Tetrachloro-m-xylene	*82*		*21 - 145*	*08/22/18 15:45*	*08/24/18 06:14*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		48	21	ug/Kg		08/24/18 09:31	08/27/18 16:59	1
Aroclor-1221	ND		48	23	ug/Kg		08/24/18 09:31	08/27/18 16:59	1
Aroclor-1232	ND		48	22	ug/Kg		08/24/18 09:31	08/27/18 16:59	1
Aroclor-1242	ND		48	18	ug/Kg		08/24/18 09:31	08/27/18 16:59	1
Aroclor-1248	ND		48	23	ug/Kg		08/24/18 09:31	08/27/18 16:59	1
Aroclor-1254	ND		48	22	ug/Kg		08/24/18 09:31	08/27/18 16:59	1
Aroclor-1260	ND		48	21	ug/Kg		08/24/18 09:31	08/27/18 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*14 - 128*	*08/24/18 09:31*	*08/27/18 16:59*	*1*
DCB Decachlorobiphenyl	*69*		*10 - 132*	*08/24/18 09:31*	*08/27/18 16:59*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.5	J	1.8	0.29	mg/Kg		08/22/18 11:50	08/22/18 17:03	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-H1S-0.5-1
Date Collected: 08/20/18 14:05
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-12
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	81		3.5	0.30	mg/Kg		08/22/18 11:50	08/22/18 17:03	4
Barium	73	B	1.8	0.25	mg/Kg		08/22/18 11:50	08/22/18 17:03	4
Beryllium	ND		0.35	0.12	mg/Kg		08/22/18 11:50	08/22/18 17:03	4
Cadmium	0.17	J	0.44	0.044	mg/Kg		08/22/18 11:50	08/22/18 17:03	4
Chromium	54	B	1.8	0.19	mg/Kg		08/22/18 11:50	08/22/18 17:03	4
Cobalt	12		0.71	0.071	mg/Kg		08/22/18 11:50	08/22/18 17:03	4
Copper	67		5.3	2.5	mg/Kg		08/22/18 11:50	08/22/18 17:03	4
Lead	47		1.8	0.37	mg/Kg		08/22/18 11:50	08/22/18 17:03	4
Molybdenum	ND		1.8	0.23	mg/Kg		08/22/18 11:50	08/22/18 17:03	4
Nickel	64		1.8	0.18	mg/Kg		08/22/18 11:50	08/22/18 17:03	4
Selenium	ND		3.5	0.53	mg/Kg		08/22/18 11:50	08/22/18 17:03	4
Silver	0.23	J	0.88	0.18	mg/Kg		08/22/18 11:50	08/22/18 17:03	4
Thallium	1.2	J	1.8	0.51	mg/Kg		08/22/18 11:50	08/22/18 17:03	4
Vanadium	59		1.8	0.24	mg/Kg		08/22/18 11:50	08/22/18 17:03	4
Zinc	73		5.3	2.2	mg/Kg		08/22/18 11:50	08/22/18 17:03	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.6		0.033	0.0049	mg/Kg		08/22/18 11:39	08/27/18 16:37	2

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-H1S-3.5-4
Date Collected: 08/20/18 14:05
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-13
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.2	1.0	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Acetone	ND		42	32	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Benzene	ND		4.2	0.55	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Dichlorobromomethane	ND		4.2	0.60	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Bromobenzene	ND		4.2	0.66	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Chlorobromomethane	ND		17	0.60	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Bromoform	ND		4.2	1.7	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Bromomethane	ND		8.4	0.66	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
2-Butanone (MEK)	ND		42	18	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
n-Butylbenzene	ND		4.2	0.84	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
sec-Butylbenzene	ND		4.2	0.60	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
tert-Butylbenzene	ND		4.2	0.61	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Carbon disulfide	ND		4.2	1.7	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Carbon tetrachloride	ND		4.2	0.52	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Chlorobenzene	ND		4.2	0.58	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Chloroethane	ND		8.4	0.47	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Chloroform	ND		4.2	0.55	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Chloromethane	ND		8.4	0.66	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
2-Chlorotoluene	ND		4.2	0.55	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
4-Chlorotoluene	ND		4.2	0.57	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Chlorodibromomethane	ND		4.2	0.60	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
1,2-Dichlorobenzene	ND		4.2	0.57	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
1,3-Dichlorobenzene	ND		4.2	0.60	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
1,4-Dichlorobenzene	ND		4.2	0.60	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
1,3-Dichloropropane	ND		4.2	0.61	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
1,1-Dichloropropene	ND		4.2	0.58	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
1,2-Dibromo-3-Chloropropane	ND		8.4	1.4	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Ethylene Dibromide	ND		4.2	1.2	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Dibromomethane	ND		8.4	0.72	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Dichlorodifluoromethane	ND		8.4	0.66	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
1,1-Dichloroethane	ND		4.2	0.57	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
1,2-Dichloroethane	ND		4.2	0.64	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
1,1-Dichloroethene	ND		4.2	0.52	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
cis-1,2-Dichloroethene	ND		4.2	0.57	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
trans-1,2-Dichloroethene	ND		4.2	0.63	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
1,2-Dichloropropane	ND		4.2	0.53	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
cis-1,3-Dichloropropene	ND		4.2	0.58	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
trans-1,3-Dichloropropene	ND		4.2	0.56	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Ethylbenzene	ND		4.2	0.63	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Hexachlorobutadiene	ND		4.2	0.75	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
2-Hexanone	ND		42	8.4	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Isopropylbenzene	ND		4.2	0.57	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
4-Isopropyltoluene	ND		4.2	2.1	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Methylene Chloride	ND		8.4	4.7	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
4-Methyl-2-pentanone (MIBK)	ND		42	8.4	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Naphthalene	ND		8.4	1.3	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
N-Propylbenzene	ND		4.2	0.55	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Styrene	ND		4.2	0.53	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
1,1,1,2-Tetrachloroethane	ND		4.2	0.64	ug/Kg		08/22/18 01:00	08/23/18 22:23	1

Client Sample ID: DG-H1S-3.5-4

Date Collected: 08/20/18 14:05
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-13

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.2	0.63	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Toluene	ND		4.2	0.60	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
1,2,3-Trichlorobenzene	ND		4.2	0.62	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
1,2,4-Trichlorobenzene	ND		4.2	0.60	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
1,1,1-Trichloroethane	ND		4.2	0.51	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
1,1,2-Trichloroethane	ND		4.2	0.59	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Trichloroethene	ND		4.2	0.53	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Trichlorofluoromethane	ND		4.2	0.47	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
1,2,3-Trichloropropane	ND		4.2	0.65	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	1.7	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
1,2,4-Trimethylbenzene	ND		4.2	1.4	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
1,3,5-Trimethylbenzene	ND		4.2	0.55	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Vinyl acetate	ND		17	4.2	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Vinyl chloride	ND		4.2	0.61	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Xylenes, Total	ND		4.2	1.0	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
2,2-Dichloropropane	ND		4.2	1.7	ug/Kg		08/22/18 01:00	08/23/18 22:23	1
Gasoline Range Organics (GRO) -C4-C12	ND		210	84	ug/Kg		08/22/18 01:00	08/23/18 22:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*45 - 131*	*08/22/18 01:00*	*08/23/18 22:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*124*		*60 - 140*	*08/22/18 01:00*	*08/23/18 22:23*	*1*
Toluene-d8 (Surr)	*90*		*58 - 140*	*08/22/18 01:00*	*08/23/18 22:23*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.8	4.9	ug/Kg		08/22/18 12:41	08/23/18 17:58	1
Acenaphthene	ND		4.9	2.8	ug/Kg		08/22/18 12:41	08/23/18 17:58	1
Acenaphthylene	ND		4.9	2.4	ug/Kg		08/22/18 12:41	08/23/18 17:58	1
Anthracene	**2.7**	**J**	4.9	2.0	ug/Kg		08/22/18 12:41	08/23/18 17:58	1
Benzo[a]anthracene	**2.8**	**J**	4.9	1.5	ug/Kg		08/22/18 12:41	08/23/18 17:58	1
Benzo[a]pyrene	**3.9**	**J**	4.9	1.9	ug/Kg		08/22/18 12:41	08/23/18 17:58	1
Benzo[b]fluoranthene	**11**		4.9	2.1	ug/Kg		08/22/18 12:41	08/23/18 17:58	1
Benzo[g,h,i]perylene	**4.6**	**J**	4.9	4.2	ug/Kg		08/22/18 12:41	08/23/18 17:58	1
Benzo[k]fluoranthene	**2.6**	**J**	4.9	2.1	ug/Kg		08/22/18 12:41	08/23/18 17:58	1
Chrysene	**7.0**		4.9	1.4	ug/Kg		08/22/18 12:41	08/23/18 17:58	1
Dibenz(a,h)anthracene	ND		4.9	3.4	ug/Kg		08/22/18 12:41	08/23/18 17:58	1
Fluoranthene	**6.5**		4.9	1.4	ug/Kg		08/22/18 12:41	08/23/18 17:58	1
Fluorene	ND		4.9	2.2	ug/Kg		08/22/18 12:41	08/23/18 17:58	1
Indeno[1,2,3-cd]pyrene	ND		4.9	4.1	ug/Kg		08/22/18 12:41	08/23/18 17:58	1
Naphthalene	**5.0**		4.9	3.4	ug/Kg		08/22/18 12:41	08/23/18 17:58	1
Phenanthrene	**19**		4.9	1.8	ug/Kg		08/22/18 12:41	08/23/18 17:58	1
Pyrene	**8.0**		4.9	1.7	ug/Kg		08/22/18 12:41	08/23/18 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*33 - 120*	*08/22/18 12:41*	*08/23/18 17:58*	*1*
Terphenyl-d14	*100*		*35 - 146*	*08/22/18 12:41*	*08/23/18 17:58*	*1*

Client Sample ID: DG-H1S-3.5-4

Date Collected: 08/20/18 14:05
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-13

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	5500	B	2000	730	ug/Kg		08/22/18 08:37	08/22/18 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*97*		*40 - 130*	*08/22/18 08:37*	*08/22/18 20:06*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
Aldrin	ND		1.9	0.47	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
Endrin	ND		1.9	0.44	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
Toxaphene	ND		38	6.5	ug/Kg		08/22/18 15:45	08/24/18 06:30	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/22/18 15:45	08/24/18 06:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*99*		*21 - 136*	*08/22/18 15:45*	*08/24/18 06:30*	*1*
Tetrachloro-m-xylene	*78*		*21 - 145*	*08/22/18 15:45*	*08/24/18 06:30*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	21	ug/Kg		08/24/18 09:31	08/27/18 17:17	1
Aroclor-1221	ND		49	23	ug/Kg		08/24/18 09:31	08/27/18 17:17	1
Aroclor-1232	ND		49	22	ug/Kg		08/24/18 09:31	08/27/18 17:17	1
Aroclor-1242	ND		49	18	ug/Kg		08/24/18 09:31	08/27/18 17:17	1
Aroclor-1248	ND		49	23	ug/Kg		08/24/18 09:31	08/27/18 17:17	1
Aroclor-1254	ND		49	22	ug/Kg		08/24/18 09:31	08/27/18 17:17	1
Aroclor-1260	ND		49	21	ug/Kg		08/24/18 09:31	08/27/18 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*59*		*14 - 128*	*08/24/18 09:31*	*08/27/18 17:17*	*1*
DCB Decachlorobiphenyl	*67*		*10 - 132*	*08/24/18 09:31*	*08/27/18 17:17*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.3		1.8	0.30	mg/Kg		08/22/18 11:50	08/22/18 17:08	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-H1S-3.5-4
Date Collected: 08/20/18 14:05
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-13
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	96		3.6	0.30	mg/Kg		08/22/18 11:50	08/22/18 17:08	4
Barium	130	B	1.8	0.25	mg/Kg		08/22/18 11:50	08/22/18 17:08	4
Beryllium	0.14	J	0.36	0.12	mg/Kg		08/22/18 11:50	08/22/18 17:08	4
Cadmium	ND		0.45	0.044	mg/Kg		08/22/18 11:50	08/22/18 17:08	4
Chromium	150	B	1.8	0.19	mg/Kg		08/22/18 11:50	08/22/18 17:08	4
Cobalt	23		0.71	0.071	mg/Kg		08/22/18 11:50	08/22/18 17:08	4
Copper	38		5.4	2.5	mg/Kg		08/22/18 11:50	08/22/18 17:08	4
Lead	14		1.8	0.38	mg/Kg		08/22/18 11:50	08/22/18 17:08	4
Molybdenum	0.25	J	1.8	0.23	mg/Kg		08/22/18 11:50	08/22/18 17:08	4
Nickel	230		1.8	0.18	mg/Kg		08/22/18 11:50	08/22/18 17:08	4
Selenium	0.56	J	3.6	0.54	mg/Kg		08/22/18 11:50	08/22/18 17:08	4
Silver	0.23	J	0.89	0.18	mg/Kg		08/22/18 11:50	08/22/18 17:08	4
Thallium	1.2	J	1.8	0.52	mg/Kg		08/22/18 11:50	08/22/18 17:08	4
Vanadium	77		1.8	0.24	mg/Kg		08/22/18 11:50	08/22/18 17:08	4
Zinc	65		5.4	2.3	mg/Kg		08/22/18 11:50	08/22/18 17:08	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	5.6		0.34	0.050	mg/Kg		08/22/18 11:39	08/27/18 16:39	20

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-G1S-0.5-1
Date Collected: 08/20/18 14:00
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-14
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.2	F1	1.9	0.32	mg/Kg		08/22/18 11:50	08/22/18 16:58	4
Arsenic	270		3.9	0.33	mg/Kg		08/22/18 11:50	08/22/18 16:58	4
Barium	120	B F1	1.9	0.28	mg/Kg		08/22/18 11:50	08/22/18 16:58	4
Beryllium	ND	F1	0.39	0.13	mg/Kg		08/22/18 11:50	08/22/18 16:58	4
Cadmium	0.58		0.49	0.048	mg/Kg		08/22/18 11:50	08/22/18 16:58	4
Chromium	19	B F1	1.9	0.21	mg/Kg		08/22/18 11:50	08/22/18 16:58	4
Cobalt	8.0		0.78	0.078	mg/Kg		08/22/18 11:50	08/22/18 16:58	4
Copper	110	F1	5.8	2.8	mg/Kg		08/22/18 11:50	08/22/18 16:58	4
Lead	250		1.9	0.41	mg/Kg		08/22/18 11:50	08/22/18 16:58	4
Molybdenum	0.32	J	1.9	0.25	mg/Kg		08/22/18 11:50	08/22/18 16:58	4
Nickel	16		1.9	0.20	mg/Kg		08/22/18 11:50	08/22/18 16:58	4
Selenium	ND		3.9	0.58	mg/Kg		08/22/18 11:50	08/22/18 16:58	4
Silver	0.30	J	0.97	0.20	mg/Kg		08/22/18 11:50	08/22/18 16:58	4
Thallium	ND		1.9	0.56	mg/Kg		08/22/18 11:50	08/22/18 16:58	4
Vanadium	52	F1	1.9	0.26	mg/Kg		08/22/18 11:50	08/22/18 16:58	4
Zinc	150		5.8	2.5	mg/Kg		08/22/18 11:50	08/22/18 16:58	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19		0.016	0.0024	mg/Kg		08/22/18 11:39	08/27/18 15:22	1

Client Sample ID: DG-G1S-3.5-4

Date Collected: 08/20/18 14:00
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-15

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**2.1**		2.0	0.33	mg/Kg		08/22/18 11:50	08/22/18 17:13	4
Arsenic	**44**		4.0	0.34	mg/Kg		08/22/18 11:50	08/22/18 17:13	4
Barium	**120**	**B**	2.0	0.28	mg/Kg		08/22/18 11:50	08/22/18 17:13	4
Beryllium	ND		0.40	0.13	mg/Kg		08/22/18 11:50	08/22/18 17:13	4
Cadmium	ND		0.50	0.049	mg/Kg		08/22/18 11:50	08/22/18 17:13	4
Chromium	**130**	**B**	2.0	0.21	mg/Kg		08/22/18 11:50	08/22/18 17:13	4
Cobalt	**18**		0.79	0.079	mg/Kg		08/22/18 11:50	08/22/18 17:13	4
Copper	**30**		5.9	2.8	mg/Kg		08/22/18 11:50	08/22/18 17:13	4
Lead	**3.8**		2.0	0.42	mg/Kg		08/22/18 11:50	08/22/18 17:13	4
Molybdenum	ND		2.0	0.25	mg/Kg		08/22/18 11:50	08/22/18 17:13	4
Nickel	**160**		2.0	0.20	mg/Kg		08/22/18 11:50	08/22/18 17:13	4
Selenium	ND		4.0	0.59	mg/Kg		08/22/18 11:50	08/22/18 17:13	4
Silver	**0.39**	**J**	0.99	0.20	mg/Kg		08/22/18 11:50	08/22/18 17:13	4
Thallium	**1.2**	**J**	2.0	0.57	mg/Kg		08/22/18 11:50	08/22/18 17:13	4
Vanadium	**81**		2.0	0.27	mg/Kg		08/22/18 11:50	08/22/18 17:13	4
Zinc	**57**		5.9	2.5	mg/Kg		08/22/18 11:50	08/22/18 17:13	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**4.3**		0.30	0.044	mg/Kg		08/22/18 11:39	08/27/18 16:41	20

Client Sample ID: DG-F1S-0.5-1
Date Collected: 08/20/18 14:35
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-16
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.8	0.91	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Acetone	ND		38	29	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Benzene	ND		3.8	0.50	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Dichlorobromomethane	ND		3.8	0.55	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Bromobenzene	ND		3.8	0.60	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Chlorobromomethane	ND		15	0.55	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Bromoform	ND		3.8	1.5	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Bromomethane	ND		7.6	0.60	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
2-Butanone (MEK)	ND		38	16	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
n-Butylbenzene	ND		3.8	0.76	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
sec-Butylbenzene	ND		3.8	0.55	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
tert-Butylbenzene	ND		3.8	0.56	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Carbon disulfide	ND		3.8	1.5	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Carbon tetrachloride	ND		3.8	0.47	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Chlorobenzene	ND		3.8	0.53	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Chloroethane	ND		7.6	0.43	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Chloroform	ND		3.8	0.50	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Chloromethane	ND		7.6	0.60	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
2-Chlorotoluene	ND		3.8	0.50	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
4-Chlorotoluene	ND		3.8	0.52	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Chlorodibromomethane	ND		3.8	0.54	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
1,2-Dichlorobenzene	ND		3.8	0.52	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
1,3-Dichlorobenzene	ND		3.8	0.55	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
1,4-Dichlorobenzene	ND		3.8	0.54	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
1,3-Dichloropropane	ND		3.8	0.56	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
1,1-Dichloropropene	ND		3.8	0.53	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
1,2-Dibromo-3-Chloropropane	ND		7.6	1.3	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Ethylene Dibromide	ND		3.8	1.1	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Dibromomethane	ND		7.6	0.66	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Dichlorodifluoromethane	ND		7.6	0.60	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
1,1-Dichloroethane	ND		3.8	0.52	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
1,2-Dichloroethane	ND		3.8	0.58	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
1,1-Dichloroethene	ND		3.8	0.47	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
cis-1,2-Dichloroethene	ND		3.8	0.52	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
trans-1,2-Dichloroethene	ND		3.8	0.57	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
1,2-Dichloropropane	ND		3.8	0.48	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
cis-1,3-Dichloropropene	ND		3.8	0.53	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
trans-1,3-Dichloropropene	ND		3.8	0.51	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Ethylbenzene	ND		3.8	0.57	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Hexachlorobutadiene	ND		3.8	0.69	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
2-Hexanone	ND		38	7.6	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Isopropylbenzene	ND		3.8	0.52	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
4-Isopropyltoluene	ND		3.8	1.9	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Methylene Chloride	ND		7.6	4.3	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
4-Methyl-2-pentanone (MIBK)	ND		38	7.6	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Naphthalene	ND		7.6	1.1	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
N-Propylbenzene	ND		3.8	0.50	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Styrene	ND		3.8	0.48	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
1,1,1,2-Tetrachloroethane	ND		3.8	0.58	ug/Kg		08/22/18 01:00	08/23/18 22:54	1

Client Sample ID: DG-F1S-0.5-1
Date Collected: 08/20/18 14:35
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-16
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.8	0.57	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Tetrachloroethene	ND		3.8	0.51	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Toluene	ND		3.8	0.54	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
1,2,3-Trichlorobenzene	ND		3.8	0.56	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
1,2,4-Trichlorobenzene	ND		3.8	0.54	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
1,1,1-Trichloroethane	ND		3.8	0.46	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
1,1,2-Trichloroethane	ND		3.8	0.53	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Trichloroethene	ND		3.8	0.48	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Trichlorofluoromethane	ND		3.8	0.43	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
1,2,3-Trichloropropane	ND		3.8	0.59	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.8	1.6	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
1,2,4-Trimethylbenzene	ND		3.8	1.2	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
1,3,5-Trimethylbenzene	ND		3.8	0.50	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Vinyl acetate	ND		15	3.8	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Vinyl chloride	ND		3.8	0.56	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Xylenes, Total	ND		3.8	0.93	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
2,2-Dichloropropane	ND		3.8	1.5	ug/Kg		08/22/18 01:00	08/23/18 22:54	1
Gasoline Range Organics (GRO) -C4-C12	ND		190	76	ug/Kg		08/22/18 01:00	08/23/18 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*45 - 131*	*08/22/18 01:00*	*08/23/18 22:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*122*		*60 - 140*	*08/22/18 01:00*	*08/23/18 22:54*	*1*
Toluene-d8 (Surr)	*89*		*58 - 140*	*08/22/18 01:00*	*08/23/18 22:54*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**100**		20	9.9	ug/Kg		08/22/18 12:41	08/23/18 22:42	2
Acenaphthene	ND		9.9	5.5	ug/Kg		08/22/18 12:41	08/23/18 22:42	2
Acenaphthylene	**20**		9.9	4.7	ug/Kg		08/22/18 12:41	08/23/18 22:42	2
Anthracene	**42**		9.9	4.0	ug/Kg		08/22/18 12:41	08/23/18 22:42	2
Benzo[a]anthracene	**37**		9.9	3.0	ug/Kg		08/22/18 12:41	08/23/18 22:42	2
Benzo[a]pyrene	**34**		9.9	3.8	ug/Kg		08/22/18 12:41	08/23/18 22:42	2
Benzo[b]fluoranthene	**78**		9.9	4.2	ug/Kg		08/22/18 12:41	08/23/18 22:42	2
Benzo[g,h,i]perylene	**26**		9.9	8.5	ug/Kg		08/22/18 12:41	08/23/18 22:42	2
Benzo[k]fluoranthene	**21**		9.9	4.2	ug/Kg		08/22/18 12:41	08/23/18 22:42	2
Chrysene	**52**		9.9	2.8	ug/Kg		08/22/18 12:41	08/23/18 22:42	2
Dibenz(a,h)anthracene	**7.6**	**J**	9.9	6.9	ug/Kg		08/22/18 12:41	08/23/18 22:42	2
Fluoranthene	**81**		9.9	2.8	ug/Kg		08/22/18 12:41	08/23/18 22:42	2
Fluorene	**4.5**	**J**	9.9	4.3	ug/Kg		08/22/18 12:41	08/23/18 22:42	2
Indeno[1,2,3-cd]pyrene	**17**		9.9	8.3	ug/Kg		08/22/18 12:41	08/23/18 22:42	2
Naphthalene	**92**		9.9	6.9	ug/Kg		08/22/18 12:41	08/23/18 22:42	2
Phenanthrene	**100**		9.9	3.6	ug/Kg		08/22/18 12:41	08/23/18 22:42	2
Pyrene	**78**		9.9	3.4	ug/Kg		08/22/18 12:41	08/23/18 22:42	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*33 - 120*	*08/22/18 12:41*	*08/23/18 22:42*	*2*
Terphenyl-d14	*102*		*35 - 146*	*08/22/18 12:41*	*08/23/18 22:42*	*2*

Client Sample ID: DG-F1S-0.5-1
Date Collected: 08/20/18 14:35
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-16
Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	120000	B	2000	750	ug/Kg		08/22/18 08:37	08/22/18 21:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*69*		*40 - 130*	*08/22/18 08:37*	*08/22/18 21:43*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND	F1	2.0	0.60	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
Aldrin	ND		2.0	0.50	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
Endosulfan II	ND	F1	2.0	0.49	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
Endosulfan sulfate	ND	F1	2.0	0.38	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
Endrin	ND		2.0	0.46	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
Endrin aldehyde	ND	F1	2.0	0.62	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
Endrin ketone	ND	F1	2.0	0.33	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
Methoxychlor	ND	F1	2.0	0.67	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
Toxaphene	ND		40	6.7	ug/Kg		08/22/18 15:45	08/24/18 05:08	1
trans-Chlordane	ND	F1	2.0	0.46	ug/Kg		08/22/18 15:45	08/24/18 05:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*128*		*21 - 136*	*08/22/18 15:45*	*08/24/18 05:08*	*1*
Tetrachloro-m-xylene	*82*		*21 - 145*	*08/22/18 15:45*	*08/24/18 05:08*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	22	ug/Kg		08/24/18 09:31	08/27/18 17:34	1
Aroclor-1221	ND		49	24	ug/Kg		08/24/18 09:31	08/27/18 17:34	1
Aroclor-1232	ND		49	23	ug/Kg		08/24/18 09:31	08/27/18 17:34	1
Aroclor-1242	ND		49	19	ug/Kg		08/24/18 09:31	08/27/18 17:34	1
Aroclor-1248	ND		49	24	ug/Kg		08/24/18 09:31	08/27/18 17:34	1
Aroclor-1254	ND		49	23	ug/Kg		08/24/18 09:31	08/27/18 17:34	1
Aroclor-1260	ND		49	22	ug/Kg		08/24/18 09:31	08/27/18 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*58*		*14 - 128*	*08/24/18 09:31*	*08/27/18 17:34*	*1*
DCB Decachlorobiphenyl	*60*		*10 - 132*	*08/24/18 09:31*	*08/27/18 17:34*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	16		1.8	0.30	mg/Kg		08/22/18 11:50	08/22/18 17:27	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-F1S-0.5-1
Date Collected: 08/20/18 14:35
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-16
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	47		3.6	0.31	mg/Kg		08/22/18 11:50	08/22/18 17:27	4
Barium	80	B	1.8	0.26	mg/Kg		08/22/18 11:50	08/22/18 17:27	4
Beryllium	ND		0.36	0.12	mg/Kg		08/22/18 11:50	08/22/18 17:27	4
Cadmium	0.75		0.45	0.045	mg/Kg		08/22/18 11:50	08/22/18 17:27	4
Chromium	21	B	1.8	0.19	mg/Kg		08/22/18 11:50	08/22/18 17:27	4
Cobalt	11		0.72	0.072	mg/Kg		08/22/18 11:50	08/22/18 17:27	4
Copper	180		5.4	2.6	mg/Kg		08/22/18 11:50	08/22/18 17:27	4
Lead	460		1.8	0.38	mg/Kg		08/22/18 11:50	08/22/18 17:27	4
Molybdenum	0.37	J	1.8	0.23	mg/Kg		08/22/18 11:50	08/22/18 17:27	4
Nickel	12		1.8	0.18	mg/Kg		08/22/18 11:50	08/22/18 17:27	4
Selenium	1.2	J	3.6	0.54	mg/Kg		08/22/18 11:50	08/22/18 17:27	4
Silver	0.42	J	0.90	0.18	mg/Kg		08/22/18 11:50	08/22/18 17:27	4
Thallium	1.0	J	1.8	0.52	mg/Kg		08/22/18 11:50	08/22/18 17:27	4
Vanadium	97		1.8	0.25	mg/Kg		08/22/18 11:50	08/22/18 17:27	4
Zinc	240		5.4	2.3	mg/Kg		08/22/18 11:50	08/22/18 17:27	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.18		0.015	0.0022	mg/Kg		08/22/18 11:39	08/27/18 15:15	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-F1S-3.5-4
Date Collected: 08/20/18 14:35
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-17
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.9	0.93	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Acetone	**29**	**J**	39	29	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Benzene	ND		3.9	0.50	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Dichlorobromomethane	ND		3.9	0.56	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Bromobenzene	ND		3.9	0.61	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Chlorobromomethane	ND		15	0.56	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Bromoform	ND		3.9	1.5	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Bromomethane	ND		7.7	0.61	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
2-Butanone (MEK)	ND		39	16	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
n-Butylbenzene	ND		3.9	0.77	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
sec-Butylbenzene	ND		3.9	0.56	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
tert-Butylbenzene	ND		3.9	0.56	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Carbon disulfide	ND		3.9	1.5	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Carbon tetrachloride	ND		3.9	0.48	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Chlorobenzene	ND		3.9	0.53	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Chloroethane	ND		7.7	0.43	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Chloroform	ND		3.9	0.51	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Chloromethane	ND		7.7	0.61	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
2-Chlorotoluene	ND		3.9	0.50	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
4-Chlorotoluene	ND		3.9	0.53	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Chlorodibromomethane	ND		3.9	0.55	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
1,2-Dichlorobenzene	ND		3.9	0.53	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
1,3-Dichlorobenzene	ND		3.9	0.56	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
1,4-Dichlorobenzene	ND		3.9	0.55	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
1,3-Dichloropropane	ND		3.9	0.56	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
1,1-Dichloropropene	ND		3.9	0.53	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
1,2-Dibromo-3-Chloropropane	ND		7.7	1.3	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Ethylene Dibromide	ND		3.9	1.1	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Dibromomethane	ND		7.7	0.66	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Dichlorodifluoromethane	ND		7.7	0.61	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
1,1-Dichloroethane	ND		3.9	0.53	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
1,2-Dichloroethane	ND		3.9	0.59	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
1,1-Dichloroethene	ND		3.9	0.48	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
cis-1,2-Dichloroethene	ND		3.9	0.53	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
trans-1,2-Dichloroethene	ND		3.9	0.58	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
1,2-Dichloropropane	ND		3.9	0.49	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
cis-1,3-Dichloropropene	ND		3.9	0.53	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
trans-1,3-Dichloropropene	ND		3.9	0.52	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Ethylbenzene	ND		3.9	0.58	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Hexachlorobutadiene	ND		3.9	0.69	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
2-Hexanone	ND		39	7.7	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Isopropylbenzene	ND		3.9	0.53	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
4-Isopropyltoluene	ND		3.9	1.9	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Methylene Chloride	ND		7.7	4.3	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
4-Methyl-2-pentanone (MIBK)	ND		39	7.7	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Naphthalene	ND		7.7	1.2	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
N-Propylbenzene	ND		3.9	0.51	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Styrene	ND		3.9	0.49	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
1,1,1,2-Tetrachloroethane	ND		3.9	0.59	ug/Kg		08/22/18 01:00	08/23/18 23:25	1

Client Sample ID: DG-F1S-3.5-4
Date Collected: 08/20/18 14:35
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-17
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.9	0.58	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Tetrachloroethene	ND		3.9	0.52	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Toluene	ND		3.9	0.55	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
1,2,3-Trichlorobenzene	ND		3.9	0.57	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
1,2,4-Trichlorobenzene	ND		3.9	0.55	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
1,1,1-Trichloroethane	ND		3.9	0.47	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
1,1,2-Trichloroethane	ND		3.9	0.54	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Trichloroethene	ND		3.9	0.49	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Trichlorofluoromethane	ND		3.9	0.43	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
1,2,3-Trichloropropane	ND		3.9	0.59	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.9	1.6	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
1,2,4-Trimethylbenzene	ND		3.9	1.3	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
1,3,5-Trimethylbenzene	ND		3.9	0.50	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Vinyl acetate	ND		15	3.9	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Vinyl chloride	ND		3.9	0.56	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Xylenes, Total	ND		3.9	0.94	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
2,2-Dichloropropane	ND		3.9	1.5	ug/Kg		08/22/18 01:00	08/23/18 23:25	1
Gasoline Range Organics (GRO) -C4-C12	ND		190	77	ug/Kg		08/22/18 01:00	08/23/18 23:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*45 - 131*	*08/22/18 01:00*	*08/23/18 23:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*127*		*60 - 140*	*08/22/18 01:00*	*08/23/18 23:25*	*1*
Toluene-d8 (Surr)	*89*		*58 - 140*	*08/22/18 01:00*	*08/23/18 23:25*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		390	190	ug/Kg		08/22/18 12:41	08/24/18 16:09	20
Acenaphthene	ND		190	110	ug/Kg		08/22/18 12:41	08/24/18 16:09	20
Acenaphthylene	ND		190	93	ug/Kg		08/22/18 12:41	08/24/18 16:09	20
Anthracene	ND		190	78	ug/Kg		08/22/18 12:41	08/24/18 16:09	20
Benzo[a]anthracene	ND		190	58	ug/Kg		08/22/18 12:41	08/24/18 16:09	20
Benzo[a]pyrene	**95**	**J**	190	74	ug/Kg		08/22/18 12:41	08/24/18 16:09	20
Benzo[b]fluoranthene	**90**	**J**	190	82	ug/Kg		08/22/18 12:41	08/24/18 16:09	20
Benzo[g,h,i]perylene	ND		190	170	ug/Kg		08/22/18 12:41	08/24/18 16:09	20
Benzo[k]fluoranthene	ND		190	82	ug/Kg		08/22/18 12:41	08/24/18 16:09	20
Chrysene	ND		190	54	ug/Kg		08/22/18 12:41	08/24/18 16:09	20
Dibenz(a,h)anthracene	ND		190	140	ug/Kg		08/22/18 12:41	08/24/18 16:09	20
Fluoranthene	**63**	**J**	190	54	ug/Kg		08/22/18 12:41	08/24/18 16:09	20
Fluorene	ND		190	86	ug/Kg		08/22/18 12:41	08/24/18 16:09	20
Indeno[1,2,3-cd]pyrene	ND		190	160	ug/Kg		08/22/18 12:41	08/24/18 16:09	20
Naphthalene	ND		190	140	ug/Kg		08/22/18 12:41	08/24/18 16:09	20
Phenanthrene	ND		190	70	ug/Kg		08/22/18 12:41	08/24/18 16:09	20
Pyrene	**87**	**J**	190	66	ug/Kg		08/22/18 12:41	08/24/18 16:09	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*33 - 120*	*08/22/18 12:41*	*08/24/18 16:09*	*20*
Terphenyl-d14	*0*	*X*	*35 - 146*	*08/22/18 12:41*	*08/24/18 16:09*	*20*

Client Sample ID: DG-F1S-3.5-4

Date Collected: 08/20/18 14:35
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-17

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	4600		1900	730	ug/Kg		08/22/18 09:40	08/23/18 13:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*93*		*40 - 130*	*08/22/18 09:40*	*08/23/18 13:47*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.9	1.2	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
4,4'-DDE	ND		3.9	0.83	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
4,4'-DDT	ND		3.9	0.81	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
Aldrin	ND		3.9	0.99	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
alpha-BHC	ND		3.9	1.1	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
beta-BHC	ND		3.9	0.71	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
Chlordane (technical)	ND		79	6.3	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
cis-Chlordane	ND		3.9	0.79	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
delta-BHC	ND		3.9	0.87	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
Dieldrin	ND		3.9	1.2	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
Endosulfan I	ND		3.9	0.63	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
Endosulfan II	ND		3.9	0.97	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
Endosulfan sulfate	ND		3.9	0.75	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
Endrin	ND		3.9	0.91	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
Endrin aldehyde	ND		3.9	1.2	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
Endrin ketone	ND		3.9	0.65	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
gamma-BHC (Lindane)	ND		3.9	1.2	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
Heptachlor	ND		3.9	0.91	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
Heptachlor epoxide	ND		3.9	0.69	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
Methoxychlor	ND		3.9	1.3	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
Toxaphene	ND		79	13	ug/Kg		08/22/18 15:45	08/26/18 06:26	2
trans-Chlordane	ND		3.9	0.91	ug/Kg		08/22/18 15:45	08/26/18 06:26	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*45*		*21 - 136*	*08/22/18 15:45*	*08/26/18 06:26*	*2*
Tetrachloro-m-xylene	*75*		*21 - 145*	*08/22/18 15:45*	*08/26/18 06:26*	*2*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/24/18 09:31	08/27/18 18:27	1
Aroclor-1221	ND		51	24	ug/Kg		08/24/18 09:31	08/27/18 18:27	1
Aroclor-1232	ND		51	23	ug/Kg		08/24/18 09:31	08/27/18 18:27	1
Aroclor-1242	ND		51	19	ug/Kg		08/24/18 09:31	08/27/18 18:27	1
Aroclor-1248	ND		51	24	ug/Kg		08/24/18 09:31	08/27/18 18:27	1
Aroclor-1254	ND		51	23	ug/Kg		08/24/18 09:31	08/27/18 18:27	1
Aroclor-1260	ND		51	22	ug/Kg		08/24/18 09:31	08/27/18 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*14 - 128*	*08/24/18 09:31*	*08/27/18 18:27*	*1*
DCB Decachlorobiphenyl	*85*		*10 - 132*	*08/24/18 09:31*	*08/27/18 18:27*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.0		1.6	0.26	mg/Kg		08/22/18 11:50	08/22/18 17:32	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-F1S-3.5-4
Date Collected: 08/20/18 14:35
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-17
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	110		3.1	0.27	mg/Kg		08/22/18 11:50	08/22/18 17:32	4
Barium	81	B	1.6	0.22	mg/Kg		08/22/18 11:50	08/22/18 17:32	4
Beryllium	ND		0.31	0.10	mg/Kg		08/22/18 11:50	08/22/18 17:32	4
Cadmium	0.19	J	0.39	0.039	mg/Kg		08/22/18 11:50	08/22/18 17:32	4
Chromium	24	B	1.6	0.17	mg/Kg		08/22/18 11:50	08/22/18 17:32	4
Cobalt	10		0.63	0.063	mg/Kg		08/22/18 11:50	08/22/18 17:32	4
Copper	72		4.7	2.2	mg/Kg		08/22/18 11:50	08/22/18 17:32	4
Lead	180		1.6	0.33	mg/Kg		08/22/18 11:50	08/22/18 17:32	4
Molybdenum	ND		1.6	0.20	mg/Kg		08/22/18 11:50	08/22/18 17:32	4
Nickel	21		1.6	0.16	mg/Kg		08/22/18 11:50	08/22/18 17:32	4
Selenium	ND		3.1	0.47	mg/Kg		08/22/18 11:50	08/22/18 17:32	4
Silver	0.38	J	0.79	0.16	mg/Kg		08/22/18 11:50	08/22/18 17:32	4
Thallium	ND		1.6	0.46	mg/Kg		08/22/18 11:50	08/22/18 17:32	4
Vanadium	63		1.6	0.21	mg/Kg		08/22/18 11:50	08/22/18 17:32	4
Zinc	110		4.7	2.0	mg/Kg		08/22/18 11:50	08/22/18 17:32	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.065		0.016	0.0024	mg/Kg		08/22/18 11:39	08/27/18 15:27	1

Client Sample ID: DG-F1S-9.5-10

Date Collected: 08/20/18 14:35
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-18

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.9	0.93	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Acetone	**33**	**J**	39	29	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Benzene	ND		3.9	0.50	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Dichlorobromomethane	ND		3.9	0.56	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Bromobenzene	ND	*	3.9	0.61	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Chlorobromomethane	ND		15	0.56	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Bromoform	ND	*	3.9	1.5	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Bromomethane	ND		7.7	0.61	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
2-Butanone (MEK)	ND		39	16	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
n-Butylbenzene	ND	*	3.9	0.77	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
sec-Butylbenzene	ND	*	3.9	0.56	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
tert-Butylbenzene	ND	*	3.9	0.56	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Carbon disulfide	ND		3.9	1.5	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Carbon tetrachloride	ND		3.9	0.48	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Chlorobenzene	ND	*	3.9	0.53	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Chloroethane	ND		7.7	0.43	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Chloroform	ND		3.9	0.51	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Chloromethane	ND		7.7	0.61	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
2-Chlorotoluene	ND	*	3.9	0.50	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
4-Chlorotoluene	ND	*	3.9	0.53	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Chlorodibromomethane	ND		3.9	0.55	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
1,2-Dichlorobenzene	ND	*	3.9	0.53	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
1,3-Dichlorobenzene	ND	*	3.9	0.56	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
1,4-Dichlorobenzene	ND	*	3.9	0.55	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
1,3-Dichloropropane	ND		3.9	0.56	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
1,1-Dichloropropene	ND		3.9	0.53	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
1,2-Dibromo-3-Chloropropane	ND	*	7.7	1.3	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Ethylene Dibromide	ND		3.9	1.1	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Dibromomethane	ND		7.7	0.66	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Dichlorodifluoromethane	ND		7.7	0.61	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
1,1-Dichloroethane	ND		3.9	0.53	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
1,2-Dichloroethane	ND		3.9	0.59	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
1,1-Dichloroethene	ND		3.9	0.48	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
cis-1,2-Dichloroethene	ND		3.9	0.53	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
trans-1,2-Dichloroethene	ND		3.9	0.58	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
1,2-Dichloropropane	ND		3.9	0.49	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
cis-1,3-Dichloropropene	ND		3.9	0.53	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
trans-1,3-Dichloropropene	ND		3.9	0.52	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Ethylbenzene	ND	*	3.9	0.58	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Hexachlorobutadiene	ND	*	3.9	0.70	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
2-Hexanone	ND		39	7.7	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Isopropylbenzene	ND	*	3.9	0.53	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
4-Isopropyltoluene	ND	*	3.9	1.9	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Methylene Chloride	ND		7.7	4.3	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
4-Methyl-2-pentanone (MIBK)	ND		39	7.7	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Naphthalene	ND	*	7.7	1.2	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
N-Propylbenzene	ND	*	3.9	0.51	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Styrene	ND	*	3.9	0.49	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
1,1,1,2-Tetrachloroethane	ND	*	3.9	0.59	ug/Kg		08/22/18 01:00	08/25/18 14:32	1

Client Sample ID: DG-F1S-9.5-10

Date Collected: 08/20/18 14:35
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-18

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	3.9	0.58	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Tetrachloroethene	ND		3.9	0.52	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Toluene	ND	*	3.9	0.55	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
1,2,3-Trichlorobenzene	ND	*	3.9	0.57	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
1,2,4-Trichlorobenzene	ND	*	3.9	0.55	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
1,1,1-Trichloroethane	ND		3.9	0.47	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
1,1,2-Trichloroethane	ND		3.9	0.54	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Trichloroethene	**0.96**	**J**	3.9	0.49	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Trichlorofluoromethane	ND		3.9	0.43	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
1,2,3-Trichloropropane	ND	*	3.9	0.59	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.9	1.6	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
1,2,4-Trimethylbenzene	ND	*	3.9	1.3	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
1,3,5-Trimethylbenzene	ND	*	3.9	0.50	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Vinyl acetate	ND		15	3.9	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Vinyl chloride	ND		3.9	0.56	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Xylenes, Total	ND		3.9	0.94	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
2,2-Dichloropropane	ND		3.9	1.5	ug/Kg		08/22/18 01:00	08/25/18 14:32	1
Gasoline Range Organics (GRO) -C4-C12	ND		190	77	ug/Kg		08/22/18 01:00	08/25/18 14:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*72*	*	*45 - 131*	*08/22/18 01:00*	*08/25/18 14:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*60 - 140*	*08/22/18 01:00*	*08/25/18 14:32*	*1*
Toluene-d8 (Surr)	*89*		*58 - 140*	*08/22/18 01:00*	*08/25/18 14:32*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.5	4.7	ug/Kg		08/22/18 12:41	08/23/18 18:22	1
Acenaphthene	ND		4.7	2.7	ug/Kg		08/22/18 12:41	08/23/18 18:22	1
Acenaphthylene	**2.3**	**J**	4.7	2.3	ug/Kg		08/22/18 12:41	08/23/18 18:22	1
Anthracene	**2.1**	**J**	4.7	1.9	ug/Kg		08/22/18 12:41	08/23/18 18:22	1
Benzo[a]anthracene	ND		4.7	1.4	ug/Kg		08/22/18 12:41	08/23/18 18:22	1
Benzo[a]pyrene	**2.2**	**J**	4.7	1.8	ug/Kg		08/22/18 12:41	08/23/18 18:22	1
Benzo[b]fluoranthene	**26**		4.7	2.0	ug/Kg		08/22/18 12:41	08/23/18 18:22	1
Benzo[g,h,i]perylene	ND		4.7	4.1	ug/Kg		08/22/18 12:41	08/23/18 18:22	1
Benzo[k]fluoranthene	**2.5**	**J**	4.7	2.0	ug/Kg		08/22/18 12:41	08/23/18 18:22	1
Chrysene	**17**		4.7	1.3	ug/Kg		08/22/18 12:41	08/23/18 18:22	1
Dibenz(a,h)anthracene	**3.4**	**J**	4.7	3.3	ug/Kg		08/22/18 12:41	08/23/18 18:22	1
Fluoranthene	**9.0**		4.7	1.3	ug/Kg		08/22/18 12:41	08/23/18 18:22	1
Fluorene	ND		4.7	2.1	ug/Kg		08/22/18 12:41	08/23/18 18:22	1
Indeno[1,2,3-cd]pyrene	ND		4.7	4.0	ug/Kg		08/22/18 12:41	08/23/18 18:22	1
Naphthalene	**5.3**		4.7	3.3	ug/Kg		08/22/18 12:41	08/23/18 18:22	1
Phenanthrene	**47**		4.7	1.7	ug/Kg		08/22/18 12:41	08/23/18 18:22	1
Pyrene	**6.5**		4.7	1.6	ug/Kg		08/22/18 12:41	08/23/18 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*33 - 120*	*08/22/18 12:41*	*08/23/18 18:22*	*1*
Terphenyl-d14	*99*		*35 - 146*	*08/22/18 12:41*	*08/23/18 18:22*	*1*

Client Sample ID: DG-F1S-9.5-10

Date Collected: 08/20/18 14:35
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-18

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	100000		2000	740	ug/Kg		08/22/18 09:40	08/23/18 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*50*		*40 - 130*	*08/22/18 09:40*	*08/23/18 16:19*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
4,4'-DDE	ND		2.0	0.41	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
4,4'-DDT	ND		2.0	0.40	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
Aldrin	ND		2.0	0.49	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
beta-BHC	ND		2.0	0.35	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
cis-Chlordane	ND		2.0	0.39	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
Endosulfan I	ND		2.0	0.31	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
Endosulfan sulfate	ND		2.0	0.37	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
Endrin	ND		2.0	0.45	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
Endrin ketone	ND		2.0	0.32	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
Heptachlor epoxide	ND		2.0	0.34	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
Methoxychlor	ND		2.0	0.66	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
Toxaphene	ND		39	6.6	ug/Kg		08/22/18 15:45	08/26/18 06:45	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		08/22/18 15:45	08/26/18 06:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*80*		*21 - 136*	*08/22/18 15:45*	*08/26/18 06:45*	*1*
Tetrachloro-m-xylene	*79*		*21 - 145*	*08/22/18 15:45*	*08/26/18 06:45*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		48	21	ug/Kg		08/24/18 09:31	08/27/18 18:44	1
Aroclor-1221	ND		48	23	ug/Kg		08/24/18 09:31	08/27/18 18:44	1
Aroclor-1232	ND		48	22	ug/Kg		08/24/18 09:31	08/27/18 18:44	1
Aroclor-1242	ND		48	18	ug/Kg		08/24/18 09:31	08/27/18 18:44	1
Aroclor-1248	ND		48	23	ug/Kg		08/24/18 09:31	08/27/18 18:44	1
Aroclor-1254	ND		48	22	ug/Kg		08/24/18 09:31	08/27/18 18:44	1
Aroclor-1260	ND		48	21	ug/Kg		08/24/18 09:31	08/27/18 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*14 - 128*	*08/24/18 09:31*	*08/27/18 18:44*	*1*
DCB Decachlorobiphenyl	*79*		*10 - 132*	*08/24/18 09:31*	*08/27/18 18:44*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	6.4		1.6	0.26	mg/Kg		08/22/18 11:50	08/22/18 17:36	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-F1S-9.5-10
Date Collected: 08/20/18 14:35
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-18
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	180		3.1	0.27	mg/Kg		08/22/18 11:50	08/22/18 17:36	4
Barium	85	B	1.6	0.22	mg/Kg		08/22/18 11:50	08/22/18 17:36	4
Beryllium	0.40		0.31	0.10	mg/Kg		08/22/18 11:50	08/22/18 17:36	4
Cadmium	ND		0.39	0.039	mg/Kg		08/22/18 11:50	08/22/18 17:36	4
Chromium	66	B	1.6	0.17	mg/Kg		08/22/18 11:50	08/22/18 17:36	4
Cobalt	21		0.63	0.063	mg/Kg		08/22/18 11:50	08/22/18 17:36	4
Copper	100		4.7	2.2	mg/Kg		08/22/18 11:50	08/22/18 17:36	4
Lead	36		1.6	0.33	mg/Kg		08/22/18 11:50	08/22/18 17:36	4
Molybdenum	0.62	J	1.6	0.20	mg/Kg		08/22/18 11:50	08/22/18 17:36	4
Nickel	94		1.6	0.16	mg/Kg		08/22/18 11:50	08/22/18 17:36	4
Selenium	2.0	J	3.1	0.47	mg/Kg		08/22/18 11:50	08/22/18 17:36	4
Silver	1.0		0.79	0.16	mg/Kg		08/22/18 11:50	08/22/18 17:36	4
Thallium	0.85	J	1.6	0.46	mg/Kg		08/22/18 11:50	08/22/18 17:36	4
Vanadium	51		1.6	0.21	mg/Kg		08/22/18 11:50	08/22/18 17:36	4
Zinc	73		4.7	2.0	mg/Kg		08/22/18 11:50	08/22/18 17:36	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.49		0.016	0.0024	mg/Kg		08/22/18 11:39	08/27/18 15:34	1

Client Sample ID: DG-E1S-0.5-1

Date Collected: 08/20/18 15:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-19

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.7	0.29	mg/Kg		08/22/18 11:50	08/22/18 17:41	4
Arsenic	**22**		3.5	0.30	mg/Kg		08/22/18 11:50	08/22/18 17:41	4
Barium	**62**	**B**	1.7	0.25	mg/Kg		08/22/18 11:50	08/22/18 17:41	4
Beryllium	ND		0.35	0.11	mg/Kg		08/22/18 11:50	08/22/18 17:41	4
Cadmium	ND		0.43	0.043	mg/Kg		08/22/18 11:50	08/22/18 17:41	4
Chromium	**16**	**B**	1.7	0.18	mg/Kg		08/22/18 11:50	08/22/18 17:41	4
Cobalt	**11**		0.70	0.070	mg/Kg		08/22/18 11:50	08/22/18 17:41	4
Copper	**160**		5.2	2.5	mg/Kg		08/22/18 11:50	08/22/18 17:41	4
Lead	**40**		1.7	0.37	mg/Kg		08/22/18 11:50	08/22/18 17:41	4
Molybdenum	ND		1.7	0.22	mg/Kg		08/22/18 11:50	08/22/18 17:41	4
Nickel	**4.9**		1.7	0.18	mg/Kg		08/22/18 11:50	08/22/18 17:41	4
Selenium	ND		3.5	0.52	mg/Kg		08/22/18 11:50	08/22/18 17:41	4
Silver	**0.27**	**J**	0.87	0.18	mg/Kg		08/22/18 11:50	08/22/18 17:41	4
Thallium	**0.90**	**J**	1.7	0.50	mg/Kg		08/22/18 11:50	08/22/18 17:41	4
Vanadium	**130**		1.7	0.24	mg/Kg		08/22/18 11:50	08/22/18 17:41	4
Zinc	**67**		5.2	2.2	mg/Kg		08/22/18 11:50	08/22/18 17:41	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.085**		0.016	0.0024	mg/Kg		08/22/18 11:39	08/27/18 15:36	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-E1S-3.5-4
Date Collected: 08/20/18 15:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88162-20
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.3	J	1.6	0.27	mg/Kg		08/22/18 11:50	08/22/18 17:46	4
Arsenic	160		3.2	0.27	mg/Kg		08/22/18 11:50	08/22/18 17:46	4
Barium	90	B	1.6	0.23	mg/Kg		08/22/18 11:50	08/22/18 17:46	4
Beryllium	0.11	J	0.32	0.10	mg/Kg		08/22/18 11:50	08/22/18 17:46	4
Cadmium	0.11	J	0.40	0.040	mg/Kg		08/22/18 11:50	08/22/18 17:46	4
Chromium	32	B	1.6	0.17	mg/Kg		08/22/18 11:50	08/22/18 17:46	4
Cobalt	5.8		0.64	0.064	mg/Kg		08/22/18 11:50	08/22/18 17:46	4
Copper	29		4.8	2.3	mg/Kg		08/22/18 11:50	08/22/18 17:46	4
Lead	68		1.6	0.34	mg/Kg		08/22/18 11:50	08/22/18 17:46	4
Molybdenum	ND		1.6	0.20	mg/Kg		08/22/18 11:50	08/22/18 17:46	4
Nickel	29		1.6	0.16	mg/Kg		08/22/18 11:50	08/22/18 17:46	4
Selenium	ND		3.2	0.48	mg/Kg		08/22/18 11:50	08/22/18 17:46	4
Silver	0.20	J	0.80	0.16	mg/Kg		08/22/18 11:50	08/22/18 17:46	4
Thallium	ND		1.6	0.46	mg/Kg		08/22/18 11:50	08/22/18 17:46	4
Vanadium	25		1.6	0.22	mg/Kg		08/22/18 11:50	08/22/18 17:46	4
Zinc	83		4.8	2.0	mg/Kg		08/22/18 11:50	08/22/18 17:46	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.054		0.016	0.0024	mg/Kg		08/22/18 11:39	08/27/18 15:38	1

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(45-131)	(60-140)	(58-140)
720-88162-3	DG-L1S-0.5-1	91	112	91
720-88162-4	DG-L1S-3.5-4	92	116	92
720-88162-8	DG-J1S-0.5-1	97	117	97
720-88162-9	DG-J1S-3.5-4	78	121	86
720-88162-12	DG-H1S-0.5-1	87	121	89
720-88162-13	DG-H1S-3.5-4	87	124	90
720-88162-16	DG-F1S-0.5-1	94	122	89
720-88162-17	DG-F1S-3.5-4	88	127	89
720-88162-18	DG-F1S-9.5-10	72 *	110	89
LCS 720-250088/5	Lab Control Sample	96	107	94
LCS 720-250088/7	Lab Control Sample	96	104	94
LCS 720-250216/5	Lab Control Sample	103	99	101
LCS 720-250216/7	Lab Control Sample	102	102	102
LCSD 720-250088/6	Lab Control Sample Dup	96	108	94
LCSD 720-250088/8	Lab Control Sample Dup	96	107	94
LCSD 720-250216/6	Lab Control Sample Dup	99	99	100
LCSD 720-250216/8	Lab Control Sample Dup	102	104	103
MB 720-250088/4	Method Blank	95	105	93
MB 720-250216/4	Method Blank	99	103	101

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		FBP	TPHL
Lab Sample ID	Client Sample ID	(33-120)	(35-146)
720-88156-A-5-C MS	Matrix Spike	51	13 X
720-88156-A-5-D MSD	Matrix Spike Duplicate	41	5 X
720-88162-3	DG-L1S-0.5-1	84	105
720-88162-4	DG-L1S-3.5-4	79	97
720-88162-8	DG-J1S-0.5-1	0 X	0 X
720-88162-9	DG-J1S-3.5-4	83	100
720-88162-12	DG-H1S-0.5-1	78	98
720-88162-13	DG-H1S-3.5-4	79	100
720-88162-16	DG-F1S-0.5-1	83	102
720-88162-17	DG-F1S-3.5-4	0 X	0 X
720-88162-18	DG-F1S-9.5-10	72	99
LCS 720-249979/2-A	Lab Control Sample	75	94
MB 720-249979/1-A	Method Blank	84	102

Surrogate Legend

FBP = 2-Fluorobiphenyl
TPHL = Terphenyl-d14

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TPH1 (40-130)
720-88162-3	DG-L1S-0.5-1	107
720-88162-4	DG-L1S-3.5-4	113
720-88162-8	DG-J1S-0.5-1	0 D X
720-88162-9	DG-J1S-3.5-4	93
720-88162-12	DG-H1S-0.5-1	75
720-88162-13	DG-H1S-3.5-4	97
720-88162-16	DG-F1S-0.5-1	69
720-88162-16 MS	DG-F1S-0.5-1	105
720-88162-16 MSD	DG-F1S-0.5-1	88
720-88162-17	DG-F1S-3.5-4	93
720-88162-18	DG-F1S-9.5-10	50
720-88164-E-1-A MS	Matrix Spike	98
720-88164-E-1-B MSD	Matrix Spike Duplicate	88
LCS 720-249949/2-A	Lab Control Sample	111
LCS 720-249957/2-A	Lab Control Sample	108
MB 720-249949/1-A	Method Blank	80
MB 720-249957/1-A	Method Blank	103

Surrogate Legend

TPH = p-Terphenyl

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP1 (21-136)	TCX1 (21-145)
720-88162-4	DG-L1S-3.5-4	47 p	77
720-88162-12	DG-H1S-0.5-1	106	82
720-88162-16 MS	DG-F1S-0.5-1	128	82

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP1 (21-136)	TCX2 (21-145)
720-88162-13	DG-H1S-3.5-4	99	78
LCS 720-250005/2-A	Lab Control Sample	95	78
MB 720-250005/1-A	Method Blank	94	74

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX1 (21-145)
720-88162-3	DG-L1S-0.5-1	127	86
720-88162-8	DG-J1S-0.5-1	180 p X	74
720-88162-16	DG-F1S-0.5-1	128	82

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX2 (21-145)
720-88162-9	DG-J1S-3.5-4	183 p X	75
720-88162-16 MSD	DG-F1S-0.5-1	138 X	90
720-88162-17	DG-F1S-3.5-4	45	75
720-88162-18	DG-F1S-9.5-10	80	79

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX2 (14-128)	DCBP2 (10-132)
720-88162-3	DG-L1S-0.5-1	72	85
720-88162-4	DG-L1S-3.5-4	64	65
720-88162-8	DG-J1S-0.5-1	73	36 p
720-88162-9	DG-J1S-3.5-4	58	61
720-88162-12	DG-H1S-0.5-1	65	69
720-88162-13	DG-H1S-3.5-4	59	67
720-88162-16	DG-F1S-0.5-1	58	60
720-88162-16 MS	DG-F1S-0.5-1	74	98
720-88162-16 MSD	DG-F1S-0.5-1	70	75
720-88162-17	DG-F1S-3.5-4	81	85
720-88162-18	DG-F1S-9.5-10	71	79
LCS 240-342387/21-A	Lab Control Sample	78	82
MB 240-342387/20-A	Method Blank	78	82

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-250088/4
Matrix: Solid
Analysis Batch: 250088

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/23/18 17:44	1
Acetone	ND		50	38	ug/Kg			08/23/18 17:44	1
Benzene	ND		5.0	0.65	ug/Kg			08/23/18 17:44	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/23/18 17:44	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/23/18 17:44	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/23/18 17:44	1
Bromoform	ND		5.0	2.0	ug/Kg			08/23/18 17:44	1
Bromomethane	ND		10	0.79	ug/Kg			08/23/18 17:44	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/23/18 17:44	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/23/18 17:44	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/23/18 17:44	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/23/18 17:44	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/23/18 17:44	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/23/18 17:44	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/23/18 17:44	1
Chloroethane	ND		10	0.56	ug/Kg			08/23/18 17:44	1
Chloroform	ND		5.0	0.66	ug/Kg			08/23/18 17:44	1
Chloromethane	ND		10	0.79	ug/Kg			08/23/18 17:44	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/23/18 17:44	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/23/18 17:44	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/23/18 17:44	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/23/18 17:44	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/23/18 17:44	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/23/18 17:44	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/23/18 17:44	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/23/18 17:44	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/23/18 17:44	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/23/18 17:44	1
Dibromomethane	ND		10	0.86	ug/Kg			08/23/18 17:44	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/23/18 17:44	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/23/18 17:44	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/23/18 17:44	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/23/18 17:44	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/23/18 17:44	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/23/18 17:44	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/23/18 17:44	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/23/18 17:44	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/23/18 17:44	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/23/18 17:44	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/23/18 17:44	1
2-Hexanone	ND		50	10	ug/Kg			08/23/18 17:44	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/23/18 17:44	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/23/18 17:44	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/23/18 17:44	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/23/18 17:44	1
Naphthalene	ND		10	1.5	ug/Kg			08/23/18 17:44	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/23/18 17:44	1
Styrene	ND		5.0	0.63	ug/Kg			08/23/18 17:44	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250088/4
Matrix: Solid
Analysis Batch: 250088

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/23/18 17:44	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/23/18 17:44	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/23/18 17:44	1
Toluene	ND		5.0	0.71	ug/Kg			08/23/18 17:44	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/23/18 17:44	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/23/18 17:44	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/23/18 17:44	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/23/18 17:44	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/23/18 17:44	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/23/18 17:44	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/23/18 17:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/23/18 17:44	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/23/18 17:44	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/23/18 17:44	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/23/18 17:44	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/23/18 17:44	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/23/18 17:44	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/23/18 17:44	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/23/18 17:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*45 - 131*		*08/23/18 17:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*60 - 140*		*08/23/18 17:44*	*1*
Toluene-d8 (Surr)	*93*		*58 - 140*		*08/23/18 17:44*	*1*

Lab Sample ID: LCS 720-250088/5
Matrix: Solid
Analysis Batch: 250088

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	52.7		ug/Kg		105	70 - 144
Acetone	250	259		ug/Kg		104	30 - 162
Benzene	50.0	44.3		ug/Kg		89	70 - 130
Dichlorobromomethane	50.0	49.3		ug/Kg		99	70 - 140
Bromobenzene	50.0	45.4		ug/Kg		91	70 - 130
Chlorobromomethane	50.0	47.3		ug/Kg		95	70 - 130
Bromoform	50.0	48.5		ug/Kg		97	59 - 158
Bromomethane	50.0	48.9		ug/Kg		98	59 - 132
2-Butanone (MEK)	250	233		ug/Kg		93	59 - 159
n-Butylbenzene	50.0	46.2		ug/Kg		92	70 - 142
sec-Butylbenzene	50.0	46.0		ug/Kg		92	70 - 136
tert-Butylbenzene	50.0	45.6		ug/Kg		91	70 - 130
Carbon disulfide	50.0	48.0		ug/Kg		96	60 - 140
Carbon tetrachloride	50.0	50.1		ug/Kg		100	70 - 142
Chlorobenzene	50.0	44.3		ug/Kg		89	70 - 130
Chloroethane	50.0	47.1		ug/Kg		94	65 - 130
Chloroform	50.0	48.3		ug/Kg		97	77 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250088/5
Matrix: Solid
Analysis Batch: 250088

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	41.8		ug/Kg		84	55 - 140
2-Chlorotoluene	50.0	46.2		ug/Kg		92	70 - 138
4-Chlorotoluene	50.0	46.7		ug/Kg		93	70 - 136
Chlorodibromomethane	50.0	51.1		ug/Kg		102	70 - 146
1,2-Dichlorobenzene	50.0	45.0		ug/Kg		90	70 - 130
1,3-Dichlorobenzene	50.0	44.6		ug/Kg		89	70 - 131
1,4-Dichlorobenzene	50.0	44.8		ug/Kg		90	70 - 130
1,3-Dichloropropane	50.0	46.4		ug/Kg		93	70 - 140
1,1-Dichloropropene	50.0	47.2		ug/Kg		94	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	45.5		ug/Kg		91	60 - 145
Ethylene Dibromide	50.0	47.7		ug/Kg		95	70 - 140
Dibromomethane	50.0	47.8		ug/Kg		96	70 - 139
Dichlorodifluoromethane	50.0	42.3		ug/Kg		85	37 - 158
1,1-Dichloroethane	50.0	47.3		ug/Kg		95	70 - 130
1,2-Dichloroethane	50.0	51.5		ug/Kg		103	70 - 130
1,1-Dichloroethene	50.0	48.7		ug/Kg		97	74 - 122
cis-1,2-Dichloroethene	50.0	47.2		ug/Kg		94	70 - 138
trans-1,2-Dichloroethene	50.0	46.5		ug/Kg		93	67 - 130
1,2-Dichloropropane	50.0	45.3		ug/Kg		91	73 - 127
cis-1,3-Dichloropropene	50.0	51.2		ug/Kg		102	68 - 147
trans-1,3-Dichloropropene	50.0	51.1		ug/Kg		102	70 - 155
Ethylbenzene	50.0	44.5		ug/Kg		89	80 - 137
Hexachlorobutadiene	50.0	45.6		ug/Kg		91	70 - 132
2-Hexanone	250	261		ug/Kg		104	62 - 158
Isopropylbenzene	50.0	45.1		ug/Kg		90	70 - 130
4-Isopropyltoluene	50.0	46.7		ug/Kg		93	70 - 133
Methylene Chloride	50.0	45.2		ug/Kg		90	70 - 134
4-Methyl-2-pentanone (MIBK)	250	265		ug/Kg		106	60 - 160
Naphthalene	50.0	44.7		ug/Kg		89	60 - 147
N-Propylbenzene	50.0	46.3		ug/Kg		93	70 - 130
Styrene	50.0	45.7		ug/Kg		91	70 - 130
1,1,1,2-Tetrachloroethane	50.0	47.6		ug/Kg		95	70 - 130
1,1,2,2-Tetrachloroethane	50.0	45.5		ug/Kg		91	70 - 146
Tetrachloroethene	50.0	44.7		ug/Kg		89	70 - 132
Toluene	50.0	44.3		ug/Kg		89	75 - 120
1,2,3-Trichlorobenzene	50.0	44.9		ug/Kg		90	60 - 140
1,2,4-Trichlorobenzene	50.0	45.4		ug/Kg		91	60 - 140
1,1,1-Trichloroethane	50.0	50.5		ug/Kg		101	70 - 130
1,1,2-Trichloroethane	50.0	47.7		ug/Kg		95	70 - 130
Trichloroethene	50.0	45.1		ug/Kg		90	70 - 133
Trichlorofluoromethane	50.0	50.7		ug/Kg		101	60 - 140
1,2,3-Trichloropropane	50.0	48.4		ug/Kg		97	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	49.1		ug/Kg		98	60 - 140
1,2,4-Trimethylbenzene	50.0	46.6		ug/Kg		93	70 - 130
1,3,5-Trimethylbenzene	50.0	46.8		ug/Kg		94	70 - 131
Vinyl acetate	50.0	62.9		ug/Kg		126	38 - 176
Vinyl chloride	50.0	45.5		ug/Kg		91	58 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250088/5
Matrix: Solid
Analysis Batch: 250088

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	50.0	45.8		ug/Kg		92	70 - 146
o-Xylene	50.0	45.7		ug/Kg		91	70 - 140
2,2-Dichloropropane	50.0	50.8		ug/Kg		102	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*107*		*60 - 140*
Toluene-d8 (Surr)	*94*		*58 - 140*

Lab Sample ID: LCS 720-250088/7
Matrix: Solid
Analysis Batch: 250088

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1040		ug/Kg		104	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*104*		*60 - 140*
Toluene-d8 (Surr)	*94*		*58 - 140*

Lab Sample ID: LCSD 720-250088/6
Matrix: Solid
Analysis Batch: 250088

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	54.9		ug/Kg		110	70 - 144	4	20
Acetone	250	239		ug/Kg		96	30 - 162	8	30
Benzene	50.0	45.1		ug/Kg		90	70 - 130	2	20
Dichlorobromomethane	50.0	51.1		ug/Kg		102	70 - 140	4	20
Bromobenzene	50.0	46.9		ug/Kg		94	70 - 130	3	20
Chlorobromomethane	50.0	47.9		ug/Kg		96	70 - 130	1	20
Bromoform	50.0	50.8		ug/Kg		102	59 - 158	5	20
Bromomethane	50.0	51.4		ug/Kg		103	59 - 132	5	20
2-Butanone (MEK)	250	252		ug/Kg		101	59 - 159	8	20
n-Butylbenzene	50.0	43.8		ug/Kg		88	70 - 142	6	20
sec-Butylbenzene	50.0	44.7		ug/Kg		89	70 - 136	3	20
tert-Butylbenzene	50.0	45.5		ug/Kg		91	70 - 130	0	20
Carbon disulfide	50.0	47.5		ug/Kg		95	60 - 140	1	20
Carbon tetrachloride	50.0	48.9		ug/Kg		98	70 - 142	3	20
Chlorobenzene	50.0	45.4		ug/Kg		91	70 - 130	2	20
Chloroethane	50.0	48.4		ug/Kg		97	65 - 130	3	20
Chloroform	50.0	49.8		ug/Kg		100	77 - 127	3	20
Chloromethane	50.0	45.6		ug/Kg		91	55 - 140	9	20
2-Chlorotoluene	50.0	46.4		ug/Kg		93	70 - 138	1	20
4-Chlorotoluene	50.0	46.9		ug/Kg		94	70 - 136	0	20
Chlorodibromomethane	50.0	52.4		ug/Kg		105	70 - 146	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250088/6
Matrix: Solid
Analysis Batch: 250088

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene			50.0	46.5		ug/Kg		93	70 - 130	3	20
1,3-Dichlorobenzene			50.0	45.0		ug/Kg		90	70 - 131	1	20
1,4-Dichlorobenzene			50.0	44.8		ug/Kg		90	70 - 130	0	20
1,3-Dichloropropane			50.0	48.6		ug/Kg		97	70 - 140	5	20
1,1-Dichloropropene			50.0	46.3		ug/Kg		93	70 - 130	2	20
1,2-Dibromo-3-Chloropropane			50.0	49.5		ug/Kg		99	60 - 145	8	20
Ethylene Dibromide			50.0	49.2		ug/Kg		98	70 - 140	3	20
Dibromomethane			50.0	49.2		ug/Kg		98	70 - 139	3	20
Dichlorodifluoromethane			50.0	42.4		ug/Kg		85	37 - 158	0	20
1,1-Dichloroethane			50.0	48.3		ug/Kg		97	70 - 130	2	20
1,2-Dichloroethane			50.0	53.9		ug/Kg		108	70 - 130	4	20
1,1-Dichloroethene			50.0	48.1		ug/Kg		96	74 - 122	1	20
cis-1,2-Dichloroethene			50.0	48.0		ug/Kg		96	70 - 138	2	20
trans-1,2-Dichloroethene			50.0	46.8		ug/Kg		94	67 - 130	1	20
1,2-Dichloropropane			50.0	46.6		ug/Kg		93	73 - 127	3	20
cis-1,3-Dichloropropene			50.0	52.8		ug/Kg		106	68 - 147	3	20
trans-1,3-Dichloropropene			50.0	52.8		ug/Kg		106	70 - 155	3	20
Ethylbenzene			50.0	44.8		ug/Kg		90	80 - 137	1	20
Hexachlorobutadiene			50.0	43.5		ug/Kg		87	70 - 132	5	20
2-Hexanone			250	278		ug/Kg		111	62 - 158	6	20
Isopropylbenzene			50.0	45.0		ug/Kg		90	70 - 130	0	20
4-Isopropyltoluene			50.0	45.4		ug/Kg		91	70 - 133	3	20
Methylene Chloride			50.0	46.0		ug/Kg		92	70 - 134	2	20
4-Methyl-2-pentanone (MIBK)			250	275		ug/Kg		110	60 - 160	4	20
Naphthalene			50.0	48.4		ug/Kg		97	60 - 147	8	20
N-Propylbenzene			50.0	45.5		ug/Kg		91	70 - 130	2	20
Styrene			50.0	47.2		ug/Kg		94	70 - 130	3	20
1,1,1,2-Tetrachloroethane			50.0	49.7		ug/Kg		99	70 - 130	4	20
1,1,2,2-Tetrachloroethane			50.0	47.3		ug/Kg		95	70 - 146	4	20
Tetrachloroethene			50.0	42.4		ug/Kg		85	70 - 132	5	20
Toluene			50.0	45.0		ug/Kg		90	75 - 120	2	20
1,2,3-Trichlorobenzene			50.0	47.3		ug/Kg		95	60 - 140	5	20
1,2,4-Trichlorobenzene			50.0	46.3		ug/Kg		93	60 - 140	2	20
1,1,1-Trichloroethane			50.0	51.0		ug/Kg		102	70 - 130	1	20
1,1,2-Trichloroethane			50.0	49.4		ug/Kg		99	70 - 130	4	20
Trichloroethene			50.0	44.2		ug/Kg		88	70 - 133	2	20
Trichlorofluoromethane			50.0	51.9		ug/Kg		104	60 - 140	2	20
1,2,3-Trichloropropane			50.0	50.7		ug/Kg		101	70 - 146	5	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	46.8		ug/Kg		94	60 - 140	5	20
1,2,4-Trimethylbenzene			50.0	46.6		ug/Kg		93	70 - 130	0	20
1,3,5-Trimethylbenzene			50.0	46.4		ug/Kg		93	70 - 131	1	20
Vinyl acetate			50.0	66.2		ug/Kg		132	38 - 176	5	20
Vinyl chloride			50.0	47.9		ug/Kg		96	58 - 125	5	20
m-Xylene & p-Xylene			50.0	46.0		ug/Kg		92	70 - 146	1	20
o-Xylene			50.0	46.5		ug/Kg		93	70 - 140	2	20
2,2-Dichloropropane			50.0	51.8		ug/Kg		104	70 - 162	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250088/6
Matrix: Solid
Analysis Batch: 250088

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*96*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*108*		*60 - 140*
Toluene-d8 (Surr)	*94*		*58 - 140*

Lab Sample ID: LCSD 720-250088/8
Matrix: Solid
Analysis Batch: 250088

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1010		ug/Kg		101	70 - 122	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*96*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*107*		*60 - 140*
Toluene-d8 (Surr)	*94*		*58 - 140*

Lab Sample ID: MB 720-250216/4
Matrix: Solid
Analysis Batch: 250216

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/25/18 09:57	1
Acetone	ND		50	38	ug/Kg			08/25/18 09:57	1
Benzene	ND		5.0	0.65	ug/Kg			08/25/18 09:57	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/25/18 09:57	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/25/18 09:57	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/25/18 09:57	1
Bromoform	ND		5.0	2.0	ug/Kg			08/25/18 09:57	1
Bromomethane	ND		10	0.79	ug/Kg			08/25/18 09:57	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/25/18 09:57	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/25/18 09:57	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/25/18 09:57	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/25/18 09:57	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/25/18 09:57	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/25/18 09:57	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/25/18 09:57	1
Chloroethane	ND		10	0.56	ug/Kg			08/25/18 09:57	1
Chloroform	ND		5.0	0.66	ug/Kg			08/25/18 09:57	1
Chloromethane	ND		10	0.79	ug/Kg			08/25/18 09:57	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/25/18 09:57	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/25/18 09:57	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/25/18 09:57	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/25/18 09:57	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/25/18 09:57	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/25/18 09:57	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/25/18 09:57	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/25/18 09:57	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250216/4
Matrix: Solid
Analysis Batch: 250216

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/25/18 09:57	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/25/18 09:57	1
Dibromomethane	ND		10	0.86	ug/Kg			08/25/18 09:57	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/25/18 09:57	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/25/18 09:57	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/25/18 09:57	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/25/18 09:57	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/25/18 09:57	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/25/18 09:57	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/25/18 09:57	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/25/18 09:57	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/25/18 09:57	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/25/18 09:57	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/25/18 09:57	1
2-Hexanone	ND		50	10	ug/Kg			08/25/18 09:57	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/25/18 09:57	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/25/18 09:57	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/25/18 09:57	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/25/18 09:57	1
Naphthalene	ND		10	1.5	ug/Kg			08/25/18 09:57	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/25/18 09:57	1
Styrene	ND		5.0	0.63	ug/Kg			08/25/18 09:57	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/25/18 09:57	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/25/18 09:57	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/25/18 09:57	1
Toluene	ND		5.0	0.71	ug/Kg			08/25/18 09:57	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/25/18 09:57	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/25/18 09:57	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/25/18 09:57	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/25/18 09:57	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/25/18 09:57	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/25/18 09:57	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/25/18 09:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/25/18 09:57	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/25/18 09:57	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/25/18 09:57	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/25/18 09:57	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/25/18 09:57	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/25/18 09:57	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/25/18 09:57	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/25/18 09:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*45 - 131*		*08/25/18 09:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*		*08/25/18 09:57*	*1*
Toluene-d8 (Surr)	*101*		*58 - 140*		*08/25/18 09:57*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250216/5
Matrix: Solid
Analysis Batch: 250216

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	53.3		ug/Kg		107	70 - 144
Acetone	250	223		ug/Kg		89	30 - 162
Benzene	50.0	51.4		ug/Kg		103	70 - 130
Dichlorobromomethane	50.0	51.3		ug/Kg		103	70 - 140
Bromobenzene	50.0	47.6		ug/Kg		95	70 - 130
Chlorobromomethane	50.0	53.3		ug/Kg		107	70 - 130
Bromoform	50.0	52.3		ug/Kg		105	59 - 158
Bromomethane	50.0	47.5		ug/Kg		95	59 - 132
2-Butanone (MEK)	250	235		ug/Kg		94	59 - 159
n-Butylbenzene	50.0	51.8		ug/Kg		104	70 - 142
sec-Butylbenzene	50.0	51.8		ug/Kg		104	70 - 136
tert-Butylbenzene	50.0	49.9		ug/Kg		100	70 - 130
Carbon disulfide	50.0	65.9		ug/Kg		132	60 - 140
Carbon tetrachloride	50.0	54.3		ug/Kg		109	70 - 142
Chlorobenzene	50.0	50.2		ug/Kg		100	70 - 130
Chloroethane	50.0	45.1		ug/Kg		90	65 - 130
Chloroform	50.0	51.3		ug/Kg		103	77 - 127
Chloromethane	50.0	41.9		ug/Kg		84	55 - 140
2-Chlorotoluene	50.0	49.8		ug/Kg		100	70 - 138
4-Chlorotoluene	50.0	50.8		ug/Kg		102	70 - 136
Chlorodibromomethane	50.0	52.3		ug/Kg		105	70 - 146
1,2-Dichlorobenzene	50.0	48.4		ug/Kg		97	70 - 130
1,3-Dichlorobenzene	50.0	49.3		ug/Kg		99	70 - 131
1,4-Dichlorobenzene	50.0	49.2		ug/Kg		98	70 - 130
1,3-Dichloropropane	50.0	50.8		ug/Kg		102	70 - 140
1,1-Dichloropropene	50.0	53.3		ug/Kg		107	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	50.5		ug/Kg		101	60 - 145
Ethylene Dibromide	50.0	52.8		ug/Kg		106	70 - 140
Dibromomethane	50.0	51.1		ug/Kg		102	70 - 139
Dichlorodifluoromethane	50.0	34.4		ug/Kg		69	37 - 158
1,1-Dichloroethane	50.0	53.3		ug/Kg		107	70 - 130
1,2-Dichloroethane	50.0	51.1		ug/Kg		102	70 - 130
1,1-Dichloroethene	50.0	58.1		ug/Kg		116	74 - 122
cis-1,2-Dichloroethene	50.0	52.8		ug/Kg		106	70 - 138
trans-1,2-Dichloroethene	50.0	56.3		ug/Kg		113	67 - 130
1,2-Dichloropropane	50.0	53.2		ug/Kg		106	73 - 127
cis-1,3-Dichloropropene	50.0	55.5		ug/Kg		111	68 - 147
trans-1,3-Dichloropropene	50.0	54.1		ug/Kg		108	70 - 155
Ethylbenzene	50.0	52.5		ug/Kg		105	80 - 137
Hexachlorobutadiene	50.0	47.4		ug/Kg		95	70 - 132
2-Hexanone	250	256		ug/Kg		102	62 - 158
Isopropylbenzene	50.0	51.4		ug/Kg		103	70 - 130
4-Isopropyltoluene	50.0	51.7		ug/Kg		103	70 - 133
Methylene Chloride	50.0	51.5		ug/Kg		103	70 - 134
4-Methyl-2-pentanone (MIBK)	250	259		ug/Kg		104	60 - 160
Naphthalene	50.0	48.3		ug/Kg		97	60 - 147
N-Propylbenzene	50.0	51.7		ug/Kg		103	70 - 130
Styrene	50.0	51.1		ug/Kg		102	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250216/5
Matrix: Solid
Analysis Batch: 250216

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	51.8		ug/Kg		104	70 - 130
1,1,2,2-Tetrachloroethane	50.0	50.0		ug/Kg		100	70 - 146
Tetrachloroethene	50.0	51.8		ug/Kg		104	70 - 132
Toluene	50.0	50.3		ug/Kg		101	75 - 120
1,2,3-Trichlorobenzene	50.0	47.7		ug/Kg		95	60 - 140
1,2,4-Trichlorobenzene	50.0	49.1		ug/Kg		98	60 - 140
1,1,1-Trichloroethane	50.0	52.7		ug/Kg		105	70 - 130
1,1,2-Trichloroethane	50.0	52.7		ug/Kg		105	70 - 130
Trichloroethene	50.0	50.1		ug/Kg		100	70 - 133
Trichlorofluoromethane	50.0	50.7		ug/Kg		101	60 - 140
1,2,3-Trichloropropane	50.0	49.4		ug/Kg		99	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	63.0		ug/Kg		126	60 - 140
1,2,4-Trimethylbenzene	50.0	50.7		ug/Kg		101	70 - 130
1,3,5-Trimethylbenzene	50.0	50.7		ug/Kg		101	70 - 131
Vinyl acetate	50.0	51.1		ug/Kg		102	38 - 176
Vinyl chloride	50.0	44.8		ug/Kg		90	58 - 125
m-Xylene & p-Xylene	50.0	51.5		ug/Kg		103	70 - 146
o-Xylene	50.0	52.0		ug/Kg		104	70 - 140
2,2-Dichloropropane	50.0	56.0		ug/Kg		112	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*99*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: LCS 720-250216/7
Matrix: Solid
Analysis Batch: 250216

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1020		ug/Kg		102	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*102*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: LCSD 720-250216/6
Matrix: Solid
Analysis Batch: 250216

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	53.3		ug/Kg		107	70 - 144	0	20
Acetone	250	223		ug/Kg		89	30 - 162	0	30
Benzene	50.0	50.8		ug/Kg		102	70 - 130	1	20
Dichlorobromomethane	50.0	52.1		ug/Kg		104	70 - 140	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250216/6
Matrix: Solid
Analysis Batch: 250216

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	50.0	47.9		ug/Kg		96	70 - 130	1	20
Chlorobromomethane	50.0	52.7		ug/Kg		105	70 - 130	1	20
Bromoform	50.0	50.4		ug/Kg		101	59 - 158	4	20
Bromomethane	50.0	47.6		ug/Kg		95	59 - 132	0	20
2-Butanone (MEK)	250	239		ug/Kg		96	59 - 159	2	20
n-Butylbenzene	50.0	51.9		ug/Kg		104	70 - 142	0	20
sec-Butylbenzene	50.0	51.5		ug/Kg		103	70 - 136	1	20
tert-Butylbenzene	50.0	50.1		ug/Kg		100	70 - 130	0	20
Carbon disulfide	50.0	64.7		ug/Kg		129	60 - 140	2	20
Carbon tetrachloride	50.0	53.9		ug/Kg		108	70 - 142	1	20
Chlorobenzene	50.0	48.5		ug/Kg		97	70 - 130	4	20
Chloroethane	50.0	45.7		ug/Kg		91	65 - 130	1	20
Chloroform	50.0	51.5		ug/Kg		103	77 - 127	0	20
Chloromethane	50.0	41.6		ug/Kg		83	55 - 140	1	20
2-Chlorotoluene	50.0	50.0		ug/Kg		100	70 - 138	0	20
4-Chlorotoluene	50.0	50.6		ug/Kg		101	70 - 136	0	20
Chlorodibromomethane	50.0	52.9		ug/Kg		106	70 - 146	1	20
1,2-Dichlorobenzene	50.0	48.7		ug/Kg		97	70 - 130	0	20
1,3-Dichlorobenzene	50.0	49.0		ug/Kg		98	70 - 131	1	20
1,4-Dichlorobenzene	50.0	48.8		ug/Kg		98	70 - 130	1	20
1,3-Dichloropropane	50.0	49.9		ug/Kg		100	70 - 140	2	20
1,1-Dichloropropene	50.0	52.6		ug/Kg		105	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	50.7		ug/Kg		101	60 - 145	0	20
Ethylene Dibromide	50.0	52.6		ug/Kg		105	70 - 140	0	20
Dibromomethane	50.0	50.9		ug/Kg		102	70 - 139	0	20
Dichlorodifluoromethane	50.0	33.7		ug/Kg		67	37 - 158	2	20
1,1-Dichloroethane	50.0	52.9		ug/Kg		106	70 - 130	1	20
1,2-Dichloroethane	50.0	51.0		ug/Kg		102	70 - 130	0	20
1,1-Dichloroethene	50.0	57.4		ug/Kg		115	74 - 122	1	20
cis-1,2-Dichloroethene	50.0	52.3		ug/Kg		105	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	55.4		ug/Kg		111	67 - 130	2	20
1,2-Dichloropropane	50.0	52.9		ug/Kg		106	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	55.1		ug/Kg		110	68 - 147	1	20
trans-1,3-Dichloropropene	50.0	53.3		ug/Kg		107	70 - 155	1	20
Ethylbenzene	50.0	50.1		ug/Kg		100	80 - 137	5	20
Hexachlorobutadiene	50.0	48.6		ug/Kg		97	70 - 132	2	20
2-Hexanone	250	259		ug/Kg		103	62 - 158	1	20
Isopropylbenzene	50.0	49.5		ug/Kg		99	70 - 130	4	20
4-Isopropyltoluene	50.0	51.8		ug/Kg		104	70 - 133	0	20
Methylene Chloride	50.0	51.6		ug/Kg		103	70 - 134	0	20
4-Methyl-2-pentanone (MIBK)	250	262		ug/Kg		105	60 - 160	1	20
Naphthalene	50.0	49.3		ug/Kg		99	60 - 147	2	20
N-Propylbenzene	50.0	51.6		ug/Kg		103	70 - 130	0	20
Styrene	50.0	49.6		ug/Kg		99	70 - 130	3	20
1,1,1,2-Tetrachloroethane	50.0	50.2		ug/Kg		100	70 - 130	3	20
1,1,2,2-Tetrachloroethane	50.0	49.4		ug/Kg		99	70 - 146	1	20
Tetrachloroethene	50.0	50.9		ug/Kg		102	70 - 132	2	20
Toluene	50.0	48.4		ug/Kg		97	75 - 120	4	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250216/6
Matrix: Solid
Analysis Batch: 250216

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene			50.0	49.1		ug/Kg		98	60 - 140	3	20
1,2,4-Trichlorobenzene			50.0	49.9		ug/Kg		100	60 - 140	2	20
1,1,1-Trichloroethane			50.0	52.4		ug/Kg		105	70 - 130	1	20
1,1,2-Trichloroethane			50.0	52.2		ug/Kg		104	70 - 130	1	20
Trichloroethene			50.0	49.6		ug/Kg		99	70 - 133	1	20
Trichlorofluoromethane			50.0	51.4		ug/Kg		103	60 - 140	1	20
1,2,3-Trichloropropane			50.0	49.6		ug/Kg		99	70 - 146	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	62.8		ug/Kg		126	60 - 140	0	20
1,2,4-Trimethylbenzene			50.0	50.8		ug/Kg		102	70 - 130	0	20
1,3,5-Trimethylbenzene			50.0	50.6		ug/Kg		101	70 - 131	0	20
Vinyl acetate			50.0	53.3		ug/Kg		107	38 - 176	4	20
Vinyl chloride			50.0	44.0		ug/Kg		88	58 - 125	2	20
m-Xylene & p-Xylene			50.0	49.6		ug/Kg		99	70 - 146	4	20
o-Xylene			50.0	50.0		ug/Kg		100	70 - 140	4	20
2,2-Dichloropropane			50.0	55.3		ug/Kg		111	70 - 162	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*99*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCSD 720-250216/8
Matrix: Solid
Analysis Batch: 250216

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1040		ug/Kg		104	70 - 122	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*104*		*60 - 140*
Toluene-d8 (Surr)	*103*		*58 - 140*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 720-249979/1-A
Matrix: Solid
Analysis Batch: 250076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249979

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Anthracene	ND		5.0	2.0	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/22/18 12:41	08/23/18 15:59	1

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 720-249979/1-A
Matrix: Solid
Analysis Batch: 250076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249979

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Chrysene	ND		5.0	1.4	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Fluorene	ND		5.0	2.2	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Pyrene	ND		5.0	1.7	ug/Kg		08/22/18 12:41	08/23/18 15:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*33 - 120*	*08/22/18 12:41*	*08/23/18 15:59*	*1*
Terphenyl-d14	*102*		*35 - 146*	*08/22/18 12:41*	*08/23/18 15:59*	*1*

Lab Sample ID: LCS 720-249979/2-A
Matrix: Solid
Analysis Batch: 250076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249979

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	1330	1030		ug/Kg		77	46 - 110
Acenaphthene	667	527		ug/Kg		79	46 - 106
Acenaphthylene	667	494		ug/Kg		74	46 - 108
Anthracene	667	548		ug/Kg		82	55 - 103
Benzo[a]anthracene	667	597		ug/Kg		89	54 - 110
Benzo[a]pyrene	667	598		ug/Kg		90	62 - 111
Benzo[b]fluoranthene	667	618		ug/Kg		93	60 - 109
Benzo[g,h,i]perylene	667	624		ug/Kg		94	52 - 114
Benzo[k]fluoranthene	667	606		ug/Kg		91	58 - 109
Chrysene	667	560		ug/Kg		84	54 - 108
Dibenz(a,h)anthracene	667	631		ug/Kg		95	58 - 112
Fluoranthene	667	591		ug/Kg		89	59 - 109
Fluorene	667	547		ug/Kg		82	52 - 106
Indeno[1,2,3-cd]pyrene	667	677		ug/Kg		102	55 - 120
Naphthalene	667	499		ug/Kg		75	49 - 110
Phenanthrene	667	564		ug/Kg		85	57 - 110
Pyrene	667	595		ug/Kg		89	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*33 - 120*
Terphenyl-d14	*94*		*35 - 146*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88156-A-5-C MS
Matrix: Solid
Analysis Batch: 250076

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 249979

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	ND	F1	1310	567	F1	ug/Kg		43	46 - 110
Acenaphthene	ND	F1	655	386		ug/Kg		59	46 - 106
Acenaphthylene	34	F2 F1	655	257	F1	ug/Kg		34	46 - 108
Anthracene	ND	F2 F1	655	66.5	F1	ug/Kg		10	55 - 103
Benzo[a]anthracene	ND	F2 F1	655	16.8	J F1	ug/Kg		3	54 - 110
Benzo[a]pyrene	ND	F1	655	11.6	J F1	ug/Kg		2	62 - 111
Benzo[b]fluoranthene	ND	F2 F1	655	15.6	J F1	ug/Kg		2	60 - 109
Benzo[g,h,i]perylene	ND	F1	655	ND	F1	ug/Kg		0	52 - 114
Benzo[k]fluoranthene	ND	F2 F1	655	12.1	J F1	ug/Kg		2	58 - 109
Chrysene	ND	F1	655	11.3	J F1	ug/Kg		2	54 - 108
Dibenz(a,h)anthracene	ND	F1	655	ND	F1	ug/Kg		0	58 - 112
Fluoranthene	ND	F2 F1	655	65.7	F1	ug/Kg		10	59 - 109
Fluorene	ND	F2 F1	655	265	F1	ug/Kg		40	52 - 106
Indeno[1,2,3-cd]pyrene	ND	F1	655	ND	F1	ug/Kg		0	55 - 120
Naphthalene	ND	F1	655	370		ug/Kg		57	49 - 110
Phenanthrene	ND	F2 F1	655	107	F1	ug/Kg		16	57 - 110
Pyrene	ND	F2 F1	655	53.6	F1	ug/Kg		8	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*51*		*33 - 120*
Terphenyl-d14	*13*	*X*	*35 - 146*

Lab Sample ID: 720-88156-A-5-D MSD
Matrix: Solid
Analysis Batch: 250076

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 249979

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	ND	F1	1310	401	F1	ug/Kg		31	46 - 110	34	35
Acenaphthene	ND	F1	654	293	F1	ug/Kg		45	46 - 106	27	35
Acenaphthylene	34	F2 F1	654	164	F2 F1	ug/Kg		20	46 - 108	44	35
Anthracene	ND	F2 F1	654	26.6	F2 F1	ug/Kg		4	55 - 103	86	35
Benzo[a]anthracene	ND	F2 F1	654	9.21	J F2 F1	ug/Kg		1	54 - 110	58	35
Benzo[a]pyrene	ND	F1	654	8.44	J F1	ug/Kg		1	62 - 111	31	35
Benzo[b]fluoranthene	ND	F2 F1	654	9.69	J F2 F1	ug/Kg		1	60 - 109	47	35
Benzo[g,h,i]perylene	ND	F1	654	ND	F1	ug/Kg		0	52 - 114	NC	35
Benzo[k]fluoranthene	ND	F2 F1	654	8.21	J F2 F1	ug/Kg		1	58 - 109	39	35
Chrysene	ND	F1	654	ND	F1	ug/Kg		0	54 - 108	NC	35
Dibenz(a,h)anthracene	ND	F1	654	ND	F1	ug/Kg		0	58 - 112	NC	35
Fluoranthene	ND	F2 F1	654	26.7	F2 F1	ug/Kg		4	59 - 109	84	35
Fluorene	ND	F2 F1	654	140	F2 F1	ug/Kg		21	52 - 106	62	35
Indeno[1,2,3-cd]pyrene	ND	F1	654	ND	F1	ug/Kg		0	55 - 120	NC	35
Naphthalene	ND	F1	654	276	F1	ug/Kg		42	49 - 110	29	35
Phenanthrene	ND	F2 F1	654	43.9	F2 F1	ug/Kg		7	57 - 110	84	35
Pyrene	ND	F2 F1	654	22.6	F2 F1	ug/Kg		3	50 - 120	81	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*41*		*33 - 120*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88156-A-5-D MSD
Matrix: Solid
Analysis Batch: 250076

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 249979

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*5*	*X*	*35 - 146*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-249949/1-A
Matrix: Solid
Analysis Batch: 249942

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249949

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1680	J	2000	750	ug/Kg		08/22/18 08:37	08/22/18 18:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*80*		*40 - 130*	*08/22/18 08:37*	*08/22/18 18:52*	*1*

Lab Sample ID: LCS 720-249949/2-A
Matrix: Solid
Analysis Batch: 249942

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249949

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			167000	166000		ug/Kg		99	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*111*		*40 - 130*

Lab Sample ID: 720-88162-16 MS
Matrix: Solid
Analysis Batch: 249942

Client Sample ID: DG-F1S-0.5-1
Prep Type: Total/NA
Prep Batch: 249949

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	120000	B	165000	262000		ug/Kg		88	50 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*105*		*40 - 130*

Lab Sample ID: 720-88162-16 MSD
Matrix: Solid
Analysis Batch: 249942

Client Sample ID: DG-F1S-0.5-1
Prep Type: Total/NA
Prep Batch: 249949

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	120000	B	165000	292000		ug/Kg		106	50 - 150	11	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*88*		*40 - 130*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 720-249957/1-A
Matrix: Solid
Analysis Batch: 250036

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249957

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/22/18 09:40	08/23/18 11:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*103*		*40 - 130*	*08/22/18 09:40*	*08/23/18 11:34*	*1*

Lab Sample ID: LCS 720-249957/2-A
Matrix: Solid
Analysis Batch: 250037

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	167000	161000		ug/Kg		97	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*108*		*40 - 130*

Lab Sample ID: 720-88164-E-1-A MS
Matrix: Solid
Analysis Batch: 250037

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 249957

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	160000		161000	293000		ug/Kg		85	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*98*		*40 - 130*

Lab Sample ID: 720-88164-E-1-B MSD
Matrix: Solid
Analysis Batch: 250037

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 249957

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	160000		161000	316000		ug/Kg		99	50 - 150	8	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*88*		*40 - 130*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-250005/1-A
Matrix: Solid
Analysis Batch: 250125

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250005

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/22/18 15:45	08/24/18 04:02	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 720-250005/1-A
Matrix: Solid
Analysis Batch: 250125

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250005

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Aldrin	ND		2.0	0.50	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Endrin	ND		2.0	0.46	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Toxaphene	ND		40	6.8	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/22/18 15:45	08/24/18 04:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*94*		*21 - 136*	*08/22/18 15:45*	*08/24/18 04:02*	*1*
Tetrachloro-m-xylene	*74*		*21 - 145*	*08/22/18 15:45*	*08/24/18 04:02*	*1*

Lab Sample ID: LCS 720-250005/2-A
Matrix: Solid
Analysis Batch: 250125

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250005

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	15.8		ug/Kg		95	75 - 128
4,4'-DDE	16.7	15.5		ug/Kg		93	76 - 126
4,4'-DDT	16.7	15.3		ug/Kg		92	63 - 127
Aldrin	16.7	12.7		ug/Kg		76	65 - 120
alpha-BHC	16.7	9.99		ug/Kg		60	46 - 122
beta-BHC	16.7	15.4		ug/Kg		92	78 - 136
cis-Chlordane	16.7	14.9		ug/Kg		90	70 - 120
delta-BHC	16.7	13.1		ug/Kg		79	43 - 125
Dieldrin	16.7	15.1		ug/Kg		90	72 - 120
Endosulfan I	16.7	15.0		ug/Kg		90	62 - 120
Endosulfan II	16.7	16.3		ug/Kg		98	65 - 120
Endosulfan sulfate	16.7	15.0		ug/Kg		90	72 - 121
Endrin	16.7	16.5		ug/Kg		99	68 - 120
Endrin aldehyde	16.7	16.1		ug/Kg		97	68 - 120
Endrin ketone	16.7	16.4		ug/Kg		98	75 - 136
gamma-BHC (Lindane)	16.7	13.9		ug/Kg		83	72 - 120
Heptachlor	16.7	14.7		ug/Kg		88	69 - 120
Heptachlor epoxide	16.7	15.0		ug/Kg		90	68 - 120

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-250005/2-A
Matrix: Solid
Analysis Batch: 250125

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250005

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methoxychlor			16.7	16.8		ug/Kg		101	71 - 132		
trans-Chlordane			16.7	14.8		ug/Kg		89	68 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*95*		*21 - 136*
Tetrachloro-m-xylene	*78*		*21 - 145*

Lab Sample ID: 720-88162-16 MS
Matrix: Solid
Analysis Batch: 250125

Client Sample ID: DG-F1S-0.5-1
Prep Type: Total/NA
Prep Batch: 250005

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
4,4'-DDD	ND	F1	16.4	21.6	F1	ug/Kg		132	40 - 120		
4,4'-DDE	ND		16.4	17.8		ug/Kg		109	40 - 120		
4,4'-DDT	ND		16.4	19.4		ug/Kg		118	17 - 144		
Aldrin	ND		16.4	15.9		ug/Kg		97	53 - 120		
alpha-BHC	ND		16.4	12.5		ug/Kg		76	40 - 120		
beta-BHC	ND		16.4	17.6		ug/Kg		107	40 - 120		
cis-Chlordane	ND		16.4	17.9		ug/Kg		109	40 - 120		
delta-BHC	ND		16.4	15.6		ug/Kg		95	40 - 120		
Dieldrin	ND		16.4	18.2		ug/Kg		111	46 - 130		
Endosulfan I	ND		16.4	19.1		ug/Kg		117	40 - 120		
Endosulfan II	ND	F1	16.4	21.4	F1	ug/Kg		131	40 - 120		
Endosulfan sulfate	ND	F1	16.4	22.1	F1	ug/Kg		135	40 - 120		
Endrin	ND		16.4	20.1		ug/Kg		122	32 - 143		
Endrin aldehyde	ND	F1	16.4	19.7		ug/Kg		120	40 - 120		
Endrin ketone	ND	F1	16.4	22.5	F1	ug/Kg		137	40 - 120		
gamma-BHC (Lindane)	ND		16.4	17.3		ug/Kg		106	58 - 120		
Heptachlor	ND		16.4	17.1		ug/Kg		104	52 - 120		
Heptachlor epoxide	ND		16.4	17.4		ug/Kg		106	40 - 120		
Methoxychlor	ND	F1	16.4	21.9	F1	ug/Kg		133	40 - 120		
trans-Chlordane	ND	F1	16.4	19.1		ug/Kg		117	40 - 120		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*128*		*21 - 136*
Tetrachloro-m-xylene	*82*		*21 - 145*

Lab Sample ID: 720-88162-16 MSD
Matrix: Solid
Analysis Batch: 250125

Client Sample ID: DG-F1S-0.5-1
Prep Type: Total/NA
Prep Batch: 250005

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND	F1	16.5	21.3	F1	ug/Kg		129	40 - 120	2	20
4,4'-DDE	ND		16.5	18.5		ug/Kg		112	40 - 120	4	20
4,4'-DDT	ND		16.5	20.2		ug/Kg		122	17 - 144	4	20
Aldrin	ND		16.5	16.7		ug/Kg		101	53 - 120	5	20
alpha-BHC	ND		16.5	13.0		ug/Kg		79	40 - 120	4	20
beta-BHC	ND		16.5	18.2		ug/Kg		111	40 - 120	4	20

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88162-16 MSD
Matrix: Solid
Analysis Batch: 250125

Client Sample ID: DG-F1S-0.5-1
Prep Type: Total/NA
Prep Batch: 250005

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-Chlordane	ND		16.5	18.5		ug/Kg		112	40 - 120	3	20
delta-BHC	ND		16.5	16.4		ug/Kg		99	40 - 120	5	20
Dieldrin	ND		16.5	19.1		ug/Kg		115	46 - 130	4	20
Endosulfan I	ND		16.5	18.8		ug/Kg		114	40 - 120	2	20
Endosulfan II	ND	F1	16.5	21.8	F1	ug/Kg		132	40 - 120	2	30
Endosulfan sulfate	ND	F1	16.5	22.3	F1	ug/Kg		135	40 - 120	1	20
Endrin	ND		16.5	21.0		ug/Kg		127	32 - 143	4	20
Endrin aldehyde	ND	F1	16.5	20.4	F1	ug/Kg		123	40 - 120	3	20
Endrin ketone	ND	F1	16.5	21.4	F1	ug/Kg		130	40 - 120	5	20
gamma-BHC (Lindane)	ND		16.5	18.5		ug/Kg		112	58 - 120	7	20
Heptachlor	ND		16.5	18.0		ug/Kg		109	52 - 120	5	20
Heptachlor epoxide	ND		16.5	18.0		ug/Kg		109	40 - 120	4	20
Methoxychlor	ND	F1	16.5	24.2	F1	ug/Kg		147	40 - 120	10	20
trans-Chlordane	ND	F1	16.5	18.7	p	ug/Kg		114	40 - 120	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*138*	*X*	*21 - 136*
Tetrachloro-m-xylene	*90*		*21 - 145*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-342387/20-A
Matrix: Solid
Analysis Batch: 342677

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 342387

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/24/18 09:31	08/27/18 20:47	1
Aroclor-1221	ND		50	24	ug/Kg		08/24/18 09:31	08/27/18 20:47	1
Aroclor-1232	ND		50	23	ug/Kg		08/24/18 09:31	08/27/18 20:47	1
Aroclor-1242	ND		50	19	ug/Kg		08/24/18 09:31	08/27/18 20:47	1
Aroclor-1248	ND		50	24	ug/Kg		08/24/18 09:31	08/27/18 20:47	1
Aroclor-1254	ND		50	23	ug/Kg		08/24/18 09:31	08/27/18 20:47	1
Aroclor-1260	ND		50	22	ug/Kg		08/24/18 09:31	08/27/18 20:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*14 - 128*	*08/24/18 09:31*	*08/27/18 20:47*	*1*
DCB Decachlorobiphenyl	*82*		*10 - 132*	*08/24/18 09:31*	*08/27/18 20:47*	*1*

Lab Sample ID: LCS 240-342387/21-A
Matrix: Solid
Analysis Batch: 342677

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 342387

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	701		ug/Kg		70	47 - 120
Aroclor-1260	1000	773		ug/Kg		77	46 - 120

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 240-342387/21-A
Matrix: Solid
Analysis Batch: 342677

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 342387

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*78*		*14 - 128*
DCB Decachlorobiphenyl	*82*		*10 - 132*

Lab Sample ID: 720-88162-16 MS
Matrix: Solid
Analysis Batch: 342677

Client Sample ID: DG-F1S-0.5-1
Prep Type: Total/NA
Prep Batch: 342387

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	ND		1040	657		ug/Kg		63	31 - 120
Aroclor-1260	ND		1040	779		ug/Kg		75	21 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*74*		*14 - 128*
DCB Decachlorobiphenyl	*98*		*10 - 132*

Lab Sample ID: 720-88162-16 MSD
Matrix: Solid
Analysis Batch: 342677

Client Sample ID: DG-F1S-0.5-1
Prep Type: Total/NA
Prep Batch: 342387

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		994	602		ug/Kg		61	31 - 120	9	30
Aroclor-1260	ND		994	677		ug/Kg		68	21 - 122	14	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*70*		*14 - 128*
DCB Decachlorobiphenyl	*75*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-249951/1-A
Matrix: Solid
Analysis Batch: 250070

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/22/18 11:50	08/23/18 09:55	1
Arsenic	ND		1.0	0.085	mg/Kg		08/22/18 11:50	08/23/18 09:55	1
Barium	ND		0.50	0.071	mg/Kg		08/22/18 11:50	08/23/18 09:55	1
Beryllium	ND		0.10	0.033	mg/Kg		08/22/18 11:50	08/23/18 09:55	1
Cadmium	ND		0.13	0.012	mg/Kg		08/22/18 11:50	08/23/18 09:55	1
Chromium	ND		0.50	0.053	mg/Kg		08/22/18 11:50	08/23/18 09:55	1
Cobalt	ND		0.20	0.020	mg/Kg		08/22/18 11:50	08/23/18 09:55	1
Copper	ND		1.5	0.71	mg/Kg		08/22/18 11:50	08/23/18 09:55	1
Lead	ND		0.50	0.11	mg/Kg		08/22/18 11:50	08/23/18 09:55	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/22/18 11:50	08/23/18 09:55	1
Nickel	ND		0.50	0.051	mg/Kg		08/22/18 11:50	08/23/18 09:55	1
Selenium	ND		1.0	0.15	mg/Kg		08/22/18 11:50	08/23/18 09:55	1
Silver	ND		0.25	0.051	mg/Kg		08/22/18 11:50	08/23/18 09:55	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-249951/1-A
Matrix: Solid
Analysis Batch: 250070

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		0.50	0.15	mg/Kg		08/22/18 11:50	08/23/18 09:55	1
Vanadium	ND		0.50	0.068	mg/Kg		08/22/18 11:50	08/23/18 09:55	1
Zinc	ND		1.5	0.64	mg/Kg		08/22/18 11:50	08/23/18 09:55	1

Lab Sample ID: LCS 720-249951/2-A
Matrix: Solid
Analysis Batch: 250070

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.8		mg/Kg		96	80 - 120
Arsenic	50.0	47.7		mg/Kg		95	80 - 120
Barium	50.0	49.5		mg/Kg		99	80 - 120
Beryllium	50.0	51.0		mg/Kg		102	80 - 120
Cadmium	50.0	48.6		mg/Kg		97	80 - 120
Chromium	50.0	49.9		mg/Kg		100	80 - 120
Cobalt	50.0	49.9		mg/Kg		100	80 - 120
Copper	50.0	48.9		mg/Kg		98	80 - 120
Lead	50.0	49.3		mg/Kg		99	80 - 120
Molybdenum	50.0	49.2		mg/Kg		98	80 - 120
Nickel	50.0	48.9		mg/Kg		98	80 - 120
Selenium	50.0	47.1		mg/Kg		94	80 - 120
Silver	25.0	24.1		mg/Kg		96	80 - 120
Thallium	50.0	49.1		mg/Kg		98	80 - 120
Vanadium	50.0	49.8		mg/Kg		100	80 - 120
Zinc	50.0	49.0		mg/Kg		98	80 - 120

Lab Sample ID: 720-88162-6 MS
Matrix: Solid
Analysis Batch: 250070

Client Sample ID: DG-K1S-0.5-1
Prep Type: Total/NA
Prep Batch: 249951

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.6	F1	50.0	16.4	F1	mg/Kg		29	75 - 125
Arsenic	380		50.0	720	4	mg/Kg		675	75 - 125
Barium	130	F1 F2	50.0	337	F1	mg/Kg		407	75 - 125
Beryllium	0.15	J F1	50.0	63.6	F1	mg/Kg		127	75 - 125
Cadmium	0.35	J	50.0	57.1		mg/Kg		113	75 - 125
Chromium	25	F1	50.0	99.6	F1	mg/Kg		149	75 - 125
Cobalt	9.3	F1	50.0	70.7		mg/Kg		123	75 - 125
Copper	71	F1	50.0	182	F1	mg/Kg		221	75 - 125
Lead	310		50.0	740	4	mg/Kg		868	75 - 125
Molybdenum	ND		50.0	55.0		mg/Kg		110	75 - 125
Nickel	26	F1	50.0	93.7	F1	mg/Kg		134	75 - 125
Selenium	ND		50.0	54.7		mg/Kg		109	75 - 125
Silver	ND		25.0	30.3		mg/Kg		121	75 - 125
Thallium	ND		50.0	52.2		mg/Kg		104	75 - 125
Vanadium	40	F1	50.0	125	F1	mg/Kg		168	75 - 125
Zinc	220		50.0	427	4	mg/Kg		408	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88162-6 MSD
Matrix: Solid
Analysis Batch: 250070

Client Sample ID: DG-K1S-0.5-1
Prep Type: Total/NA
Prep Batch: 249951

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.6	F1	50.0	17.4	F1	mg/Kg		31	75 - 125	6	20
Arsenic	380		50.0	618	4	mg/Kg		471	75 - 125	15	20
Barium	130	F1 F2	50.0	415	F1 F2	mg/Kg		562	75 - 125	21	20
Beryllium	0.15	J F1	50.0	65.3	F1	mg/Kg		130	75 - 125	3	20
Cadmium	0.35	J	50.0	58.7		mg/Kg		117	75 - 125	3	20
Chromium	25	F1	50.0	100	F1	mg/Kg		151	75 - 125	1	20
Cobalt	9.3	F1	50.0	74.9	F1	mg/Kg		131	75 - 125	6	20
Copper	71	F1	50.0	172	F1	mg/Kg		201	75 - 125	6	20
Lead	310		50.0	895	4	mg/Kg		1178	75 - 125	19	20
Molybdenum	ND		50.0	56.4		mg/Kg		113	75 - 125	2	20
Nickel	26	F1	50.0	94.7	F1	mg/Kg		136	75 - 125	1	20
Selenium	ND		50.0	56.3		mg/Kg		113	75 - 125	3	20
Silver	ND		25.0	31.2		mg/Kg		125	75 - 125	3	20
Thallium	ND		50.0	53.5		mg/Kg		107	75 - 125	3	20
Vanadium	40	F1	50.0	126	F1	mg/Kg		171	75 - 125	1	20
Zinc	220		50.0	414	4	mg/Kg		382	75 - 125	3	20

Lab Sample ID: MB 720-249965/1-A
Matrix: Solid
Analysis Batch: 250033

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249965

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Arsenic	ND		1.0	0.085	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Barium	0.103	J	0.50	0.071	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Beryllium	ND		0.10	0.033	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Cadmium	ND		0.13	0.012	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Chromium	0.108	J	0.50	0.053	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Cobalt	ND		0.20	0.020	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Copper	ND		1.5	0.71	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Lead	ND		0.50	0.11	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Nickel	ND		0.50	0.051	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Selenium	ND		1.0	0.15	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Silver	ND		0.25	0.051	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Thallium	ND		0.50	0.15	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Vanadium	ND		0.50	0.068	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Zinc	ND		1.5	0.64	mg/Kg		08/22/18 11:50	08/22/18 16:30	1

Lab Sample ID: LCS 720-249965/2-A
Matrix: Solid
Analysis Batch: 250033

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249965

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony			50.0	48.1		mg/Kg		96	80 - 120		
Arsenic			50.0	47.2		mg/Kg		94	80 - 120		
Barium			50.0	48.0		mg/Kg		96	80 - 120		
Beryllium			50.0	49.2		mg/Kg		98	80 - 120		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-249965/2-A
Matrix: Solid
Analysis Batch: 250033

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249965

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	50.0	47.8		mg/Kg		96	80 - 120
Chromium	50.0	48.4		mg/Kg		97	80 - 120
Cobalt	50.0	48.1		mg/Kg		96	80 - 120
Copper	50.0	48.5		mg/Kg		97	80 - 120
Lead	50.0	48.4		mg/Kg		97	80 - 120
Molybdenum	50.0	49.0		mg/Kg		98	80 - 120
Nickel	50.0	49.2		mg/Kg		98	80 - 120
Selenium	50.0	46.5		mg/Kg		93	80 - 120
Silver	25.0	23.8		mg/Kg		95	80 - 120
Thallium	50.0	49.2		mg/Kg		98	80 - 120
Vanadium	50.0	47.3		mg/Kg		95	80 - 120
Zinc	50.0	47.2		mg/Kg		94	80 - 120

Lab Sample ID: 720-88162-14 MS
Matrix: Solid
Analysis Batch: 250033

Client Sample ID: DG-G1S-0.5-1
Prep Type: Total/NA
Prep Batch: 249965

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	3.2	F1	44.2	13.9	F1	mg/Kg		24	75 - 125
Arsenic	270		44.2	310	4	mg/Kg		91	75 - 125
Barium	120	B F1	44.2	174	F1	mg/Kg		133	75 - 125
Beryllium	ND	F1	44.2	52.3		mg/Kg		118	75 - 125
Cadmium	0.58		44.2	47.1		mg/Kg		105	75 - 125
Chromium	19	B F1	44.2	72.9		mg/Kg		121	75 - 125
Cobalt	8.0		44.2	54.7		mg/Kg		106	75 - 125
Copper	110	F1	44.2	168	F1	mg/Kg		135	75 - 125
Lead	250		44.2	232	4	mg/Kg		-51	75 - 125
Molybdenum	0.32	J	44.2	46.4		mg/Kg		104	75 - 125
Nickel	16		44.2	63.9		mg/Kg		109	75 - 125
Selenium	ND		44.2	46.6		mg/Kg		105	75 - 125
Silver	0.30	J	22.1	26.0		mg/Kg		116	75 - 125
Thallium	ND		44.2	46.6		mg/Kg		105	75 - 125
Vanadium	52	F1	44.2	112	F1	mg/Kg		137	75 - 125
Zinc	150		44.2	193		mg/Kg		105	75 - 125

Lab Sample ID: 720-88162-14 MSD
Matrix: Solid
Analysis Batch: 250033

Client Sample ID: DG-G1S-0.5-1
Prep Type: Total/NA
Prep Batch: 249965

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	3.2	F1	44.6	15.3	F1	mg/Kg		27	75 - 125	9	20
Arsenic	270		44.6	327	4	mg/Kg		126	75 - 125	5	20
Barium	120	B F1	44.6	208	F1	mg/Kg		207	75 - 125	17	20
Beryllium	ND	F1	44.6	58.1	F1	mg/Kg		130	75 - 125	11	20
Cadmium	0.58		44.6	51.4		mg/Kg		114	75 - 125	9	20
Chromium	19	B F1	44.6	79.0	F1	mg/Kg		134	75 - 125	8	20
Cobalt	8.0		44.6	58.7		mg/Kg		114	75 - 125	7	20
Copper	110	F1	44.6	178	F1	mg/Kg		155	75 - 125	5	20
Lead	250		44.6	217	4	mg/Kg		-84	75 - 125	7	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88162-14 MSD — **Client Sample ID: DG-G1S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250033 — **Prep Batch: 249965**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Molybdenum	0.32	J	44.6	50.4		mg/Kg		112	75 - 125	8	20
Nickel	16		44.6	69.2		mg/Kg		120	75 - 125	8	20
Selenium	ND		44.6	50.5		mg/Kg		113	75 - 125	8	20
Silver	0.30	J	22.3	28.1		mg/Kg		125	75 - 125	8	20
Thallium	ND		44.6	50.3		mg/Kg		113	75 - 125	8	20
Vanadium	52	F1	44.6	110	F1	mg/Kg		131	75 - 125	2	20
Zinc	150		44.6	195		mg/Kg		108	75 - 125	1	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-249955/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250243 — **Prep Batch: 249955**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/25/18 11:36	08/25/18 14:10	1

Lab Sample ID: LCS 720-249955/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250243 — **Prep Batch: 249955**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.782		mg/Kg		94	80 - 120

Lab Sample ID: 720-88162-6 MS — **Client Sample ID: DG-K1S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250243 — **Prep Batch: 249955**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.6		0.725	4.29	4	mg/Kg		98	75 - 125

Lab Sample ID: 720-88162-6 MSD — **Client Sample ID: DG-K1S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250243 — **Prep Batch: 249955**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	3.6		0.735	4.82	4	mg/Kg		169	75 - 125	12	20

Lab Sample ID: MB 720-249973/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250321 — **Prep Batch: 249973**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/22/18 11:39	08/27/18 15:06	1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 720-249973/2-A
Matrix: Solid
Analysis Batch: 250321

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249973

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.874		mg/Kg		105	80 - 120

Lab Sample ID: 720-88162-16 MS
Matrix: Solid
Analysis Batch: 250321

Client Sample ID: DG-F1S-0.5-1
Prep Type: Total/NA
Prep Batch: 249973

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.18		0.781	1.04		mg/Kg		110	75 - 125

Lab Sample ID: 720-88162-16 MSD
Matrix: Solid
Analysis Batch: 250321

Client Sample ID: DG-F1S-0.5-1
Prep Type: Total/NA
Prep Batch: 249973

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.18		0.806	0.978		mg/Kg		99	75 - 125	6	20

Lab Sample ID: MB 720-250192/1-A
Matrix: Solid
Analysis Batch: 250311

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250192

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/24/18 15:47	08/27/18 12:18	1

Lab Sample ID: LCS 720-250192/2-A
Matrix: Solid
Analysis Batch: 250311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250192

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.869		mg/Kg		104	80 - 120

Lab Sample ID: 720-88189-A-2-B MS
Matrix: Solid
Analysis Batch: 250311

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250192

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.023		0.794	0.827		mg/Kg		101	75 - 125

Lab Sample ID: 720-88189-A-2-C MSD
Matrix: Solid
Analysis Batch: 250311

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250192

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.023		0.794	0.849		mg/Kg		104	75 - 125	3	20

GC/MS VOA

Prep Batch: 250069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-3	DG-L1S-0.5-1	Total/NA	Solid	5035	
720-88162-4	DG-L1S-3.5-4	Total/NA	Solid	5035	
720-88162-9	DG-J1S-3.5-4	Total/NA	Solid	5035	
720-88162-12	DG-H1S-0.5-1	Total/NA	Solid	5035	
720-88162-13	DG-H1S-3.5-4	Total/NA	Solid	5035	
720-88162-16	DG-F1S-0.5-1	Total/NA	Solid	5035	
720-88162-17	DG-F1S-3.5-4	Total/NA	Solid	5035	

Analysis Batch: 250088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-3	DG-L1S-0.5-1	Total/NA	Solid	8260B	250069
720-88162-4	DG-L1S-3.5-4	Total/NA	Solid	8260B	250069
720-88162-9	DG-J1S-3.5-4	Total/NA	Solid	8260B	250069
720-88162-12	DG-H1S-0.5-1	Total/NA	Solid	8260B	250069
720-88162-13	DG-H1S-3.5-4	Total/NA	Solid	8260B	250069
720-88162-16	DG-F1S-0.5-1	Total/NA	Solid	8260B	250069
720-88162-17	DG-F1S-3.5-4	Total/NA	Solid	8260B	250069
MB 720-250088/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250088/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250088/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250088/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250088/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-8	DG-J1S-0.5-1	Total/NA	Solid	8260B	250226
720-88162-18	DG-F1S-9.5-10	Total/NA	Solid	8260B	250226
MB 720-250216/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250216/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250216/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250216/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250216/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-8	DG-J1S-0.5-1	Total/NA	Solid	5035	
720-88162-18	DG-F1S-9.5-10	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 249979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-3	DG-L1S-0.5-1	Total/NA	Solid	3546	
720-88162-4	DG-L1S-3.5-4	Total/NA	Solid	3546	
720-88162-8	DG-J1S-0.5-1	Total/NA	Solid	3546	
720-88162-9	DG-J1S-3.5-4	Total/NA	Solid	3546	
720-88162-12	DG-H1S-0.5-1	Total/NA	Solid	3546	
720-88162-13	DG-H1S-3.5-4	Total/NA	Solid	3546	
720-88162-16	DG-F1S-0.5-1	Total/NA	Solid	3546	
720-88162-17	DG-F1S-3.5-4	Total/NA	Solid	3546	

GC/MS Semi VOA (Continued)

Prep Batch: 249979 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-18	DG-F1S-9.5-10	Total/NA	Solid	3546	
MB 720-249979/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-249979/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88156-A-5-C MS	Matrix Spike	Total/NA	Solid	3546	
720-88156-A-5-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-3	DG-L1S-0.5-1	Total/NA	Solid	8270C SIM	249979
720-88162-4	DG-L1S-3.5-4	Total/NA	Solid	8270C SIM	249979
720-88162-9	DG-J1S-3.5-4	Total/NA	Solid	8270C SIM	249979
720-88162-12	DG-H1S-0.5-1	Total/NA	Solid	8270C SIM	249979
720-88162-13	DG-H1S-3.5-4	Total/NA	Solid	8270C SIM	249979
720-88162-16	DG-F1S-0.5-1	Total/NA	Solid	8270C SIM	249979
720-88162-18	DG-F1S-9.5-10	Total/NA	Solid	8270C SIM	249979
MB 720-249979/1-A	Method Blank	Total/NA	Solid	8270C SIM	249979
LCS 720-249979/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	249979
720-88156-A-5-C MS	Matrix Spike	Total/NA	Solid	8270C SIM	249979
720-88156-A-5-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	249979

Analysis Batch: 250185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-8	DG-J1S-0.5-1	Total/NA	Solid	8270C SIM	249979
720-88162-17	DG-F1S-3.5-4	Total/NA	Solid	8270C SIM	249979

GC Semi VOA

Analysis Batch: 249942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-3	DG-L1S-0.5-1	Total/NA	Solid	8015B	249949
720-88162-4	DG-L1S-3.5-4	Total/NA	Solid	8015B	249949
720-88162-8	DG-J1S-0.5-1	Total/NA	Solid	8015B	249949
720-88162-9	DG-J1S-3.5-4	Total/NA	Solid	8015B	249949
720-88162-13	DG-H1S-3.5-4	Total/NA	Solid	8015B	249949
720-88162-16	DG-F1S-0.5-1	Total/NA	Solid	8015B	249949
MB 720-249949/1-A	Method Blank	Total/NA	Solid	8015B	249949
LCS 720-249949/2-A	Lab Control Sample	Total/NA	Solid	8015B	249949
720-88162-16 MS	DG-F1S-0.5-1	Total/NA	Solid	8015B	249949
720-88162-16 MSD	DG-F1S-0.5-1	Total/NA	Solid	8015B	249949

Prep Batch: 249949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-3	DG-L1S-0.5-1	Total/NA	Solid	3546	
720-88162-4	DG-L1S-3.5-4	Total/NA	Solid	3546	
720-88162-8	DG-J1S-0.5-1	Total/NA	Solid	3546	
720-88162-9	DG-J1S-3.5-4	Total/NA	Solid	3546	
720-88162-12	DG-H1S-0.5-1	Total/NA	Solid	3546	
720-88162-13	DG-H1S-3.5-4	Total/NA	Solid	3546	
720-88162-16	DG-F1S-0.5-1	Total/NA	Solid	3546	
MB 720-249949/1-A	Method Blank	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 249949 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-249949/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88162-16 MS	DG-F1S-0.5-1	Total/NA	Solid	3546	
720-88162-16 MSD	DG-F1S-0.5-1	Total/NA	Solid	3546	

Prep Batch: 249957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-17	DG-F1S-3.5-4	Total/NA	Solid	3546	
720-88162-18	DG-F1S-9.5-10	Total/NA	Solid	3546	
MB 720-249957/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-249957/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88164-E-1-A MS	Matrix Spike	Total/NA	Solid	3546	
720-88164-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-3	DG-L1S-0.5-1	Total/NA	Solid	3546	
720-88162-4	DG-L1S-3.5-4	Total/NA	Solid	3546	
720-88162-8	DG-J1S-0.5-1	Total/NA	Solid	3546	
720-88162-9	DG-J1S-3.5-4	Total/NA	Solid	3546	
720-88162-12	DG-H1S-0.5-1	Total/NA	Solid	3546	
720-88162-13	DG-H1S-3.5-4	Total/NA	Solid	3546	
720-88162-16	DG-F1S-0.5-1	Total/NA	Solid	3546	
720-88162-17	DG-F1S-3.5-4	Total/NA	Solid	3546	
720-88162-18	DG-F1S-9.5-10	Total/NA	Solid	3546	
MB 720-250005/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250005/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88162-16 MS	DG-F1S-0.5-1	Total/NA	Solid	3546	
720-88162-16 MSD	DG-F1S-0.5-1	Total/NA	Solid	3546	

Analysis Batch: 250034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-18	DG-F1S-9.5-10	Total/NA	Solid	8015B	249957

Analysis Batch: 250035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-12	DG-H1S-0.5-1	Total/NA	Solid	8015B	249949
720-88162-17	DG-F1S-3.5-4	Total/NA	Solid	8015B	249957

Analysis Batch: 250036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-249957/1-A	Method Blank	Total/NA	Solid	8015B	249957

Analysis Batch: 250037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-249957/2-A	Lab Control Sample	Total/NA	Solid	8015B	249957
720-88164-E-1-A MS	Matrix Spike	Total/NA	Solid	8015B	249957
720-88164-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	249957

Analysis Batch: 250125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-3	DG-L1S-0.5-1	Total/NA	Solid	8081A	250005

GC Semi VOA (Continued)

Analysis Batch: 250125 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-8	DG-J1S-0.5-1	Total/NA	Solid	8081A	250005
720-88162-9	DG-J1S-3.5-4	Total/NA	Solid	8081A	250005
720-88162-12	DG-H1S-0.5-1	Total/NA	Solid	8081A	250005
720-88162-13	DG-H1S-3.5-4	Total/NA	Solid	8081A	250005
720-88162-16	DG-F1S-0.5-1	Total/NA	Solid	8081A	250005
MB 720-250005/1-A	Method Blank	Total/NA	Solid	8081A	250005
LCS 720-250005/2-A	Lab Control Sample	Total/NA	Solid	8081A	250005
720-88162-16 MS	DG-F1S-0.5-1	Total/NA	Solid	8081A	250005
720-88162-16 MSD	DG-F1S-0.5-1	Total/NA	Solid	8081A	250005

Analysis Batch: 250248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-4	DG-L1S-3.5-4	Total/NA	Solid	8081A	250005
720-88162-17	DG-F1S-3.5-4	Total/NA	Solid	8081A	250005
720-88162-18	DG-F1S-9.5-10	Total/NA	Solid	8081A	250005

Prep Batch: 342387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-3	DG-L1S-0.5-1	Total/NA	Solid	3540C	
720-88162-4	DG-L1S-3.5-4	Total/NA	Solid	3540C	
720-88162-8	DG-J1S-0.5-1	Total/NA	Solid	3540C	
720-88162-9	DG-J1S-3.5-4	Total/NA	Solid	3540C	
720-88162-12	DG-H1S-0.5-1	Total/NA	Solid	3540C	
720-88162-13	DG-H1S-3.5-4	Total/NA	Solid	3540C	
720-88162-16	DG-F1S-0.5-1	Total/NA	Solid	3540C	
720-88162-17	DG-F1S-3.5-4	Total/NA	Solid	3540C	
720-88162-18	DG-F1S-9.5-10	Total/NA	Solid	3540C	
MB 240-342387/20-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-342387/21-A	Lab Control Sample	Total/NA	Solid	3540C	
720-88162-16 MS	DG-F1S-0.5-1	Total/NA	Solid	3540C	
720-88162-16 MSD	DG-F1S-0.5-1	Total/NA	Solid	3540C	

Analysis Batch: 342677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-3	DG-L1S-0.5-1	Total/NA	Solid	8082	342387
720-88162-4	DG-L1S-3.5-4	Total/NA	Solid	8082	342387
720-88162-8	DG-J1S-0.5-1	Total/NA	Solid	8082	342387
720-88162-9	DG-J1S-3.5-4	Total/NA	Solid	8082	342387
720-88162-12	DG-H1S-0.5-1	Total/NA	Solid	8082	342387
720-88162-13	DG-H1S-3.5-4	Total/NA	Solid	8082	342387
720-88162-16	DG-F1S-0.5-1	Total/NA	Solid	8082	342387
720-88162-17	DG-F1S-3.5-4	Total/NA	Solid	8082	342387
720-88162-18	DG-F1S-9.5-10	Total/NA	Solid	8082	342387
MB 240-342387/20-A	Method Blank	Total/NA	Solid	8082	342387
LCS 240-342387/21-A	Lab Control Sample	Total/NA	Solid	8082	342387
720-88162-16 MS	DG-F1S-0.5-1	Total/NA	Solid	8082	342387
720-88162-16 MSD	DG-F1S-0.5-1	Total/NA	Solid	8082	342387

Metals

Prep Batch: 249951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-1	DG-M1S-0.5-1	Total/NA	Solid	3050B	
720-88162-2	DG-M1S-3.5-4	Total/NA	Solid	3050B	
720-88162-3	DG-L1S-0.5-1	Total/NA	Solid	3050B	
720-88162-4	DG-L1S-3.5-4	Total/NA	Solid	3050B	
720-88162-5	DG-L1S-10-10.5	Total/NA	Solid	3050B	
720-88162-6	DG-K1S-0.5-1	Total/NA	Solid	3050B	
720-88162-7	DG-K1S-3.5-4	Total/NA	Solid	3050B	
720-88162-8	DG-J1S-0.5-1	Total/NA	Solid	3050B	
720-88162-9	DG-J1S-3.5-4	Total/NA	Solid	3050B	
720-88162-10	DG-I1S-0.5-1	Total/NA	Solid	3050B	
720-88162-11	DG-I1S-3.5-4	Total/NA	Solid	3050B	
MB 720-249951/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-249951/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88162-6 MS	DG-K1S-0.5-1	Total/NA	Solid	3050B	
720-88162-6 MSD	DG-K1S-0.5-1	Total/NA	Solid	3050B	

Prep Batch: 249955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-1	DG-M1S-0.5-1	Total/NA	Solid	7471A	
720-88162-2	DG-M1S-3.5-4	Total/NA	Solid	7471A	
720-88162-3	DG-L1S-0.5-1	Total/NA	Solid	7471A	
720-88162-4	DG-L1S-3.5-4	Total/NA	Solid	7471A	
720-88162-5	DG-L1S-10-10.5	Total/NA	Solid	7471A	
720-88162-6	DG-K1S-0.5-1	Total/NA	Solid	7471A	
720-88162-7	DG-K1S-3.5-4	Total/NA	Solid	7471A	
720-88162-8	DG-J1S-0.5-1	Total/NA	Solid	7471A	
720-88162-9	DG-J1S-3.5-4	Total/NA	Solid	7471A	
720-88162-10	DG-I1S-0.5-1	Total/NA	Solid	7471A	
MB 720-249955/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-249955/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88162-6 MS	DG-K1S-0.5-1	Total/NA	Solid	7471A	
720-88162-6 MSD	DG-K1S-0.5-1	Total/NA	Solid	7471A	

Prep Batch: 249965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-12	DG-H1S-0.5-1	Total/NA	Solid	3050B	
720-88162-13	DG-H1S-3.5-4	Total/NA	Solid	3050B	
720-88162-14	DG-G1S-0.5-1	Total/NA	Solid	3050B	
720-88162-15	DG-G1S-3.5-4	Total/NA	Solid	3050B	
720-88162-16	DG-F1S-0.5-1	Total/NA	Solid	3050B	
720-88162-17	DG-F1S-3.5-4	Total/NA	Solid	3050B	
720-88162-18	DG-F1S-9.5-10	Total/NA	Solid	3050B	
720-88162-19	DG-E1S-0.5-1	Total/NA	Solid	3050B	
720-88162-20	DG-E1S-3.5-4	Total/NA	Solid	3050B	
MB 720-249965/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-249965/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88162-14 MS	DG-G1S-0.5-1	Total/NA	Solid	3050B	
720-88162-14 MSD	DG-G1S-0.5-1	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 249973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-12	DG-H1S-0.5-1	Total/NA	Solid	7471A	
720-88162-13	DG-H1S-3.5-4	Total/NA	Solid	7471A	
720-88162-14	DG-G1S-0.5-1	Total/NA	Solid	7471A	
720-88162-15	DG-G1S-3.5-4	Total/NA	Solid	7471A	
720-88162-16	DG-F1S-0.5-1	Total/NA	Solid	7471A	
720-88162-17	DG-F1S-3.5-4	Total/NA	Solid	7471A	
720-88162-18	DG-F1S-9.5-10	Total/NA	Solid	7471A	
720-88162-19	DG-E1S-0.5-1	Total/NA	Solid	7471A	
720-88162-20	DG-E1S-3.5-4	Total/NA	Solid	7471A	
MB 720-249973/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-249973/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88162-16 MS	DG-F1S-0.5-1	Total/NA	Solid	7471A	
720-88162-16 MSD	DG-F1S-0.5-1	Total/NA	Solid	7471A	

Analysis Batch: 250033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-12	DG-H1S-0.5-1	Total/NA	Solid	6010B	249965
720-88162-13	DG-H1S-3.5-4	Total/NA	Solid	6010B	249965
720-88162-14	DG-G1S-0.5-1	Total/NA	Solid	6010B	249965
720-88162-15	DG-G1S-3.5-4	Total/NA	Solid	6010B	249965
720-88162-16	DG-F1S-0.5-1	Total/NA	Solid	6010B	249965
720-88162-17	DG-F1S-3.5-4	Total/NA	Solid	6010B	249965
720-88162-18	DG-F1S-9.5-10	Total/NA	Solid	6010B	249965
720-88162-19	DG-E1S-0.5-1	Total/NA	Solid	6010B	249965
720-88162-20	DG-E1S-3.5-4	Total/NA	Solid	6010B	249965
MB 720-249965/1-A	Method Blank	Total/NA	Solid	6010B	249965
LCS 720-249965/2-A	Lab Control Sample	Total/NA	Solid	6010B	249965
720-88162-14 MS	DG-G1S-0.5-1	Total/NA	Solid	6010B	249965
720-88162-14 MSD	DG-G1S-0.5-1	Total/NA	Solid	6010B	249965

Analysis Batch: 250070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-1	DG-M1S-0.5-1	Total/NA	Solid	6010B	249951
720-88162-2	DG-M1S-3.5-4	Total/NA	Solid	6010B	249951
720-88162-3	DG-L1S-0.5-1	Total/NA	Solid	6010B	249951
720-88162-4	DG-L1S-3.5-4	Total/NA	Solid	6010B	249951
720-88162-5	DG-L1S-10-10.5	Total/NA	Solid	6010B	249951
720-88162-6	DG-K1S-0.5-1	Total/NA	Solid	6010B	249951
720-88162-7	DG-K1S-3.5-4	Total/NA	Solid	6010B	249951
720-88162-8	DG-J1S-0.5-1	Total/NA	Solid	6010B	249951
720-88162-9	DG-J1S-3.5-4	Total/NA	Solid	6010B	249951
720-88162-10	DG-I1S-0.5-1	Total/NA	Solid	6010B	249951
720-88162-11	DG-I1S-3.5-4	Total/NA	Solid	6010B	249951
MB 720-249951/1-A	Method Blank	Total/NA	Solid	6010B	249951
LCS 720-249951/2-A	Lab Control Sample	Total/NA	Solid	6010B	249951
720-88162-6 MS	DG-K1S-0.5-1	Total/NA	Solid	6010B	249951
720-88162-6 MSD	DG-K1S-0.5-1	Total/NA	Solid	6010B	249951

Prep Batch: 250192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-11	DG-I1S-3.5-4	Total/NA	Solid	7471A	

Metals (Continued)

Prep Batch: 250192 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250192/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250192/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88189-A-2-B MS	Matrix Spike	Total/NA	Solid	7471A	
720-88189-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 250243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-1	DG-M1S-0.5-1	Total/NA	Solid	7471A	249955
720-88162-2	DG-M1S-3.5-4	Total/NA	Solid	7471A	249955
720-88162-3	DG-L1S-0.5-1	Total/NA	Solid	7471A	249955
720-88162-4	DG-L1S-3.5-4	Total/NA	Solid	7471A	249955
720-88162-5	DG-L1S-10-10.5	Total/NA	Solid	7471A	249955
720-88162-6	DG-K1S-0.5-1	Total/NA	Solid	7471A	249955
720-88162-7	DG-K1S-3.5-4	Total/NA	Solid	7471A	249955
720-88162-8	DG-J1S-0.5-1	Total/NA	Solid	7471A	249955
720-88162-9	DG-J1S-3.5-4	Total/NA	Solid	7471A	249955
720-88162-10	DG-I1S-0.5-1	Total/NA	Solid	7471A	249955
MB 720-249955/1-A	Method Blank	Total/NA	Solid	7471A	249955
LCS 720-249955/2-A	Lab Control Sample	Total/NA	Solid	7471A	249955
720-88162-6 MS	DG-K1S-0.5-1	Total/NA	Solid	7471A	249955
720-88162-6 MSD	DG-K1S-0.5-1	Total/NA	Solid	7471A	249955

Analysis Batch: 250311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-11	DG-I1S-3.5-4	Total/NA	Solid	7471A	250192
MB 720-250192/1-A	Method Blank	Total/NA	Solid	7471A	250192
LCS 720-250192/2-A	Lab Control Sample	Total/NA	Solid	7471A	250192
720-88189-A-2-B MS	Matrix Spike	Total/NA	Solid	7471A	250192
720-88189-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250192

Analysis Batch: 250321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-12	DG-H1S-0.5-1	Total/NA	Solid	7471A	249973
720-88162-13	DG-H1S-3.5-4	Total/NA	Solid	7471A	249973
720-88162-14	DG-G1S-0.5-1	Total/NA	Solid	7471A	249973
720-88162-15	DG-G1S-3.5-4	Total/NA	Solid	7471A	249973
720-88162-16	DG-F1S-0.5-1	Total/NA	Solid	7471A	249973
720-88162-17	DG-F1S-3.5-4	Total/NA	Solid	7471A	249973
720-88162-18	DG-F1S-9.5-10	Total/NA	Solid	7471A	249973
720-88162-19	DG-E1S-0.5-1	Total/NA	Solid	7471A	249973
720-88162-20	DG-E1S-3.5-4	Total/NA	Solid	7471A	249973
MB 720-249973/1-A	Method Blank	Total/NA	Solid	7471A	249973
LCS 720-249973/2-A	Lab Control Sample	Total/NA	Solid	7471A	249973
720-88162-16 MS	DG-F1S-0.5-1	Total/NA	Solid	7471A	249973
720-88162-16 MSD	DG-F1S-0.5-1	Total/NA	Solid	7471A	249973

Client Sample ID: DG-M1S-0.5-1

Lab Sample ID: 720-88162-1

Date Collected: 08/20/18 08:30

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249951	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250070	08/23/18 10:56	BKR	TAL PLS
Total/NA	Prep	7471A			249955	08/25/18 11:36	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250243	08/25/18 14:45	MAG	TAL PLS

Client Sample ID: DG-M1S-3.5-4

Lab Sample ID: 720-88162-2

Date Collected: 08/20/18 08:30

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249951	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250070	08/23/18 11:00	BKR	TAL PLS
Total/NA	Prep	7471A			249955	08/25/18 11:36	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250243	08/25/18 14:47	MAG	TAL PLS

Client Sample ID: DG-L1S-0.5-1

Lab Sample ID: 720-88162-3

Date Collected: 08/20/18 09:30

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250069	08/22/18 01:00	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250088	08/23/18 19:58	AJS	TAL PLS
Total/NA	Prep	3546			249979	08/22/18 12:41	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		5	250076	08/23/18 23:29	LPL	TAL PLS
Total/NA	Prep	3546			249949	08/22/18 08:37	MAB	TAL PLS
Total/NA	Analysis	8015B		2	249942	08/23/18 04:36	JXL	TAL PLS
Total/NA	Prep	3546			250005	08/22/18 15:45	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250125	08/24/18 05:25	MQL	TAL PLS
Total/NA	Prep	3540C			342387	08/24/18 09:31	DVT	TAL CAN
Total/NA	Analysis	8082		1	342677	08/27/18 15:49	KMG	TAL CAN
Total/NA	Prep	3050B			249951	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250070	08/23/18 11:05	BKR	TAL PLS
Total/NA	Prep	7471A			249955	08/25/18 11:36	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250243	08/25/18 14:50	MAG	TAL PLS

Client Sample ID: DG-L1S-3.5-4

Lab Sample ID: 720-88162-4

Date Collected: 08/20/18 09:30

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250069	08/22/18 01:00	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250088	08/23/18 20:26	AJS	TAL PLS
Total/NA	Prep	3546			249979	08/22/18 12:41	MAB	TAL PLS

Client Sample ID: DG-L1S-3.5-4

Lab Sample ID: 720-88162-4

Date Collected: 08/20/18 09:30

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C SIM		1	250076	08/23/18 19:33	LPL	TAL PLS
Total/NA	Prep	3546			249949	08/22/18 08:37	MAB	TAL PLS
Total/NA	Analysis	8015B		1	249942	08/22/18 21:19	JXL	TAL PLS
Total/NA	Prep	3546			250005	08/22/18 15:45	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250248	08/26/18 06:09	MQL	TAL PLS
Total/NA	Prep	3540C			342387	08/24/18 09:31	DVT	TAL CAN
Total/NA	Analysis	8082		1	342677	08/27/18 16:07	KMG	TAL CAN
Total/NA	Prep	3050B			249951	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250070	08/23/18 11:10	BKR	TAL PLS
Total/NA	Prep	7471A			249955	08/25/18 11:36	MAG	TAL PLS
Total/NA	Analysis	7471A		4	250243	08/25/18 15:20	MAG	TAL PLS

Client Sample ID: DG-L1S-10-10.5

Lab Sample ID: 720-88162-5

Date Collected: 08/20/18 10:15

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249951	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250070	08/23/18 11:24	BKR	TAL PLS
Total/NA	Prep	7471A			249955	08/25/18 11:36	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250243	08/25/18 14:54	MAG	TAL PLS

Client Sample ID: DG-K1S-0.5-1

Lab Sample ID: 720-88162-6

Date Collected: 08/20/18 10:45

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249951	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250070	08/23/18 10:32	BKR	TAL PLS
Total/NA	Prep	7471A			249955	08/25/18 11:36	MAG	TAL PLS
Total/NA	Analysis	7471A		10	250243	08/25/18 15:18	MAG	TAL PLS

Client Sample ID: DG-K1S-3.5-4

Lab Sample ID: 720-88162-7

Date Collected: 08/20/18 10:45

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249951	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250070	08/23/18 11:29	BKR	TAL PLS
Total/NA	Prep	7471A			249955	08/25/18 11:36	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250243	08/25/18 14:57	MAG	TAL PLS

Client Sample ID: DG-J1S-0.5-1

Lab Sample ID: 720-88162-8

Date Collected: 08/20/18 11:15

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250226	08/22/18 01:00	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250216	08/25/18 13:30	A1C	TAL PLS
Total/NA	Prep	3546			249979	08/22/18 12:41	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		40	250185	08/24/18 15:45	LPL	TAL PLS
Total/NA	Prep	3546			249949	08/22/18 08:37	MAB	TAL PLS
Total/NA	Analysis	8015B		5	249942	08/23/18 00:09	JXL	TAL PLS
Total/NA	Prep	3546			250005	08/22/18 15:45	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250125	08/24/18 05:41	MQL	TAL PLS
Total/NA	Prep	3540C			342387	08/24/18 09:31	DVT	TAL CAN
Total/NA	Analysis	8082		1	342677	08/27/18 16:24	KMG	TAL CAN
Total/NA	Prep	3050B			249951	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250070	08/23/18 11:34	BKR	TAL PLS
Total/NA	Prep	7471A			249955	08/25/18 11:36	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250243	08/25/18 15:04	MAG	TAL PLS

Client Sample ID: DG-J1S-3.5-4

Lab Sample ID: 720-88162-9

Date Collected: 08/20/18 11:15

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250069	08/22/18 01:00	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250088	08/23/18 21:23	AJS	TAL PLS
Total/NA	Prep	3546			249979	08/22/18 12:41	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250076	08/23/18 17:34	LPL	TAL PLS
Total/NA	Prep	3546			249949	08/22/18 08:37	MAB	TAL PLS
Total/NA	Analysis	8015B		1	249942	08/22/18 20:30	JXL	TAL PLS
Total/NA	Prep	3546			250005	08/22/18 15:45	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250125	08/24/18 05:57	MQL	TAL PLS
Total/NA	Prep	3540C			342387	08/24/18 09:31	DVT	TAL CAN
Total/NA	Analysis	8082		1	342677	08/27/18 16:42	KMG	TAL CAN
Total/NA	Prep	3050B			249951	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250070	08/23/18 11:38	BKR	TAL PLS
Total/NA	Prep	7471A			249955	08/25/18 11:36	MAG	TAL PLS
Total/NA	Analysis	7471A		10	250243	08/25/18 15:22	MAG	TAL PLS

Client Sample ID: DG-I1S-0.5-1

Lab Sample ID: 720-88162-10

Date Collected: 08/20/18 11:40

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249951	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250070	08/23/18 11:43	BKR	TAL PLS
Total/NA	Prep	7471A			249955	08/25/18 11:36	MAG	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-I1S-0.5-1

Lab Sample ID: 720-88162-10

Date Collected: 08/20/18 11:40
Matrix: Solid
Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	250243	08/25/18 15:08	MAG	TAL PLS

Client Sample ID: DG-I1S-3.5-4

Lab Sample ID: 720-88162-11

Date Collected: 08/20/18 11:40
Matrix: Solid
Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249951	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250070	08/23/18 11:48	BKR	TAL PLS
Total/NA	Prep	7471A			250192	08/24/18 15:47	MAG	TAL PLS
Total/NA	Analysis	7471A		10	250311	08/27/18 13:53	OBI	TAL PLS

Client Sample ID: DG-H1S-0.5-1

Lab Sample ID: 720-88162-12

Date Collected: 08/20/18 14:05
Matrix: Solid
Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250069	08/22/18 01:00	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250088	08/23/18 21:53	AJS	TAL PLS
Total/NA	Prep	3546			249979	08/22/18 12:41	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250076	08/23/18 19:57	LPL	TAL PLS
Total/NA	Prep	3546			249949	08/22/18 08:37	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250035	08/23/18 13:17	JXL	TAL PLS
Total/NA	Prep	3546			250005	08/22/18 15:45	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250125	08/24/18 06:14	MQL	TAL PLS
Total/NA	Prep	3540C			342387	08/24/18 09:31	DVT	TAL CAN
Total/NA	Analysis	8082		1	342677	08/27/18 16:59	KMG	TAL CAN
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250033	08/22/18 17:03	BKR	TAL PLS
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		2	250321	08/27/18 16:37	OBI	TAL PLS

Client Sample ID: DG-H1S-3.5-4

Lab Sample ID: 720-88162-13

Date Collected: 08/20/18 14:05
Matrix: Solid
Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250069	08/22/18 01:00	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250088	08/23/18 22:23	AJS	TAL PLS
Total/NA	Prep	3546			249979	08/22/18 12:41	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250076	08/23/18 17:58	LPL	TAL PLS
Total/NA	Prep	3546			249949	08/22/18 08:37	MAB	TAL PLS
Total/NA	Analysis	8015B		1	249942	08/22/18 20:06	JXL	TAL PLS

Client Sample ID: DG-H1S-3.5-4

Lab Sample ID: 720-88162-13

Date Collected: 08/20/18 14:05

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			250005	08/22/18 15:45	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250125	08/24/18 06:30	MQL	TAL PLS
Total/NA	Prep	3540C			342387	08/24/18 09:31	DVT	TAL CAN
Total/NA	Analysis	8082		1	342677	08/27/18 17:17	KMG	TAL CAN
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250033	08/22/18 17:08	BKR	TAL PLS
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		20	250321	08/27/18 16:39	OBI	TAL PLS

Client Sample ID: DG-G1S-0.5-1

Lab Sample ID: 720-88162-14

Date Collected: 08/20/18 14:00

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250033	08/22/18 16:58	BKR	TAL PLS
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		1	250321	08/27/18 15:22	OBI	TAL PLS

Client Sample ID: DG-G1S-3.5-4

Lab Sample ID: 720-88162-15

Date Collected: 08/20/18 14:00

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250033	08/22/18 17:13	BKR	TAL PLS
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		20	250321	08/27/18 16:41	OBI	TAL PLS

Client Sample ID: DG-F1S-0.5-1

Lab Sample ID: 720-88162-16

Date Collected: 08/20/18 14:35

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250069	08/22/18 01:00	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250088	08/23/18 22:54	AJS	TAL PLS
Total/NA	Prep	3546			249979	08/22/18 12:41	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250076	08/23/18 22:42	LPL	TAL PLS
Total/NA	Prep	3546			249949	08/22/18 08:37	MAB	TAL PLS
Total/NA	Analysis	8015B		1	249942	08/22/18 21:43	JXL	TAL PLS
Total/NA	Prep	3546			250005	08/22/18 15:45	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250125	08/24/18 05:08	MQL	TAL PLS
Total/NA	Prep	3540C			342387	08/24/18 09:31	DVT	TAL CAN

Client Sample ID: DG-F1S-0.5-1

Lab Sample ID: 720-88162-16

Date Collected: 08/20/18 14:35

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		1	342677	08/27/18 17:34	KMG	TAL CAN
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250033	08/22/18 17:27	BKR	TAL PLS
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		1	250321	08/27/18 15:15	OBI	TAL PLS

Client Sample ID: DG-F1S-3.5-4

Lab Sample ID: 720-88162-17

Date Collected: 08/20/18 14:35

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250069	08/22/18 01:00	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250088	08/23/18 23:25	AJS	TAL PLS
Total/NA	Prep	3546			249979	08/22/18 12:41	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		20	250185	08/24/18 16:09	LPL	TAL PLS
Total/NA	Prep	3546			249957	08/22/18 09:40	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250035	08/23/18 13:47	JXL	TAL PLS
Total/NA	Prep	3546			250005	08/22/18 15:45	MAB	TAL PLS
Total/NA	Analysis	8081A		2	250248	08/26/18 06:26	MQL	TAL PLS
Total/NA	Prep	3540C			342387	08/24/18 09:31	DVT	TAL CAN
Total/NA	Analysis	8082		1	342677	08/27/18 18:27	KMG	TAL CAN
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250033	08/22/18 17:32	BKR	TAL PLS
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		1	250321	08/27/18 15:27	OBI	TAL PLS

Client Sample ID: DG-F1S-9.5-10

Lab Sample ID: 720-88162-18

Date Collected: 08/20/18 14:35

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250226	08/22/18 01:00	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250216	08/25/18 14:32	A1C	TAL PLS
Total/NA	Prep	3546			249979	08/22/18 12:41	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250076	08/23/18 18:22	LPL	TAL PLS
Total/NA	Prep	3546			249957	08/22/18 09:40	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250034	08/23/18 16:19	JXL	TAL PLS
Total/NA	Prep	3546			250005	08/22/18 15:45	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250248	08/26/18 06:45	MQL	TAL PLS
Total/NA	Prep	3540C			342387	08/24/18 09:31	DVT	TAL CAN
Total/NA	Analysis	8082		1	342677	08/27/18 18:44	KMG	TAL CAN
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250033	08/22/18 17:36	BKR	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Client Sample ID: DG-F1S-9.5-10

Lab Sample ID: 720-88162-18

Date Collected: 08/20/18 14:35

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		1	250321	08/27/18 15:34	OBI	TAL PLS

Client Sample ID: DG-E1S-0.5-1

Lab Sample ID: 720-88162-19

Date Collected: 08/20/18 15:15

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250033	08/22/18 17:41	BKR	TAL PLS
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		1	250321	08/27/18 15:36	OBI	TAL PLS

Client Sample ID: DG-E1S-3.5-4

Lab Sample ID: 720-88162-20

Date Collected: 08/20/18 15:15

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250033	08/22/18 17:46	BKR	TAL PLS
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		1	250321	08/27/18 15:38	OBI	TAL PLS

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-17-9	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
Subcontract	Asbestos - CARB 435	None	
3050B	Preparation, Metals	SW846	TAL PLS
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL PLS
5035	Closed System Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88162-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88162-1	DG-M1S-0.5-1	Solid	08/20/18 08:30	08/21/18 14:52
720-88162-2	DG-M1S-3.5-4	Solid	08/20/18 08:30	08/21/18 14:52
720-88162-3	DG-L1S-0.5-1	Solid	08/20/18 09:30	08/21/18 14:52
720-88162-4	DG-L1S-3.5-4	Solid	08/20/18 09:30	08/21/18 14:52
720-88162-5	DG-L1S-10-10.5	Solid	08/20/18 10:15	08/21/18 14:52
720-88162-6	DG-K1S-0.5-1	Solid	08/20/18 10:45	08/21/18 14:52
720-88162-7	DG-K1S-3.5-4	Solid	08/20/18 10:45	08/21/18 14:52
720-88162-8	DG-J1S-0.5-1	Solid	08/20/18 11:15	08/21/18 14:52
720-88162-9	DG-J1S-3.5-4	Solid	08/20/18 11:15	08/21/18 14:52
720-88162-10	DG-I1S-0.5-1	Solid	08/20/18 11:40	08/21/18 14:52
720-88162-11	DG-I1S-3.5-4	Solid	08/20/18 11:40	08/21/18 14:52
720-88162-12	DG-H1S-0.5-1	Solid	08/20/18 14:05	08/21/18 14:52
720-88162-13	DG-H1S-3.5-4	Solid	08/20/18 14:05	08/21/18 14:52
720-88162-14	DG-G1S-0.5-1	Solid	08/20/18 14:00	08/21/18 14:52
720-88162-15	DG-G1S-3.5-4	Solid	08/20/18 14:00	08/21/18 14:52
720-88162-16	DG-F1S-0.5-1	Solid	08/20/18 14:35	08/21/18 14:52
720-88162-17	DG-F1S-3.5-4	Solid	08/20/18 14:35	08/21/18 14:52
720-88162-18	DG-F1S-9.5-10	Solid	08/20/18 14:35	08/21/18 14:52
720-88162-19	DG-E1S-0.5-1	Solid	08/20/18 15:15	08/21/18 14:52
720-88162-20	DG-E1S-3.5-4	Solid	08/20/18 15:15	08/21/18 14:52

ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01190

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Aug/31/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01190
Polarized light microscopy analytical results for 9 bulk sample(s).
Job Site: 720-88162-1
Job No.: UPC-OU-SM

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 9

Samples Analyzed: 9

Job Site / No. UPC-OU-SM
720-88162-1

Report No. **359802**
Date Submitted: Aug-22-18
Date Reported: Aug-28-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DG-L1S-0.5-1		**<0.25%**	**None Detected**	720-88162-3
Lab ID # 1283-01190-001	**400** - Total Points			No Asbestos Detected
DG-L1S-3.5-4		**<0.25%**	**None Detected**	720-88162-4
Lab ID # 1283-01190-002	**400** - Total Points			No Asbestos Detected
DG-J1S-0.5-1		**<0.25%**	**None Detected**	720-88162-8
Lab ID # 1283-01190-003	**400** - Total Points			No Asbestos Detected
DG-J1S-3.5-4		**<0.25%**	**None Detected**	720-88162-9
Lab ID # 1283-01190-004	**400** - Total Points			No Asbestos Detected
DG-H1S-0.5-1		**<0.25%**	**None Detected**	720-88162-12
Lab ID # 1283-01190-005	**400** - Total Points			No Asbestos Detected
DG-H1S-3.5-4		**<0.25%**	**None Detected**	720-88162-13
Lab ID # 1283-01190-006	**400** - Total Points			No Asbestos Detected
DG-F1S-0.5-1		**<0.25%**	**None Detected**	720-88162-16
Lab ID # 1283-01190-007	**400** - Total Points			No Asbestos Detected
DG-F1S-3.5-4		**<0.25%**	**None Detected**	720-88162-17
Lab ID # 1283-01190-008	**400** - Total Points			No Asbestos Detected
DG-F1S-9.5-10		**<0.25%**	**None Detected**	720-88162-18
Lab ID # 1283-01190-009	**400** - Total Points			No Asbestos Detected
Lab ID #	- Total Points			

QC Reviewer _____ **Analys** _____

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

#359802

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39375.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: Asbestos TEM Laborstories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88162-1
Address: 930 BANCROFT WAY, .	Due Date Requested: 8/28/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCl, B - NaOH, C - Zn Acetate, D - Nitric Acid, F - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-L1-(0.5-1) (720-88162-3)	8/20/18	09:30 Pacific		Solid			X	1	
DG-L1-(3.5-4) (720-88162-4)	8/20/18	09:30 Pacific		Solid			X	1	
DG-J1-(0.5-1) (720-88162-8)	8/20/18	11:15 Pacific		Solid			X	1	
DG-J1-(3.5-4) (720-88162-9)	8/20/18	11:15 Pacific		Solid			X	1	
DG-H1-(0.5-1) (720-88162-12)	8/20/18	12:10 Pacific		Solid			X	1	
DG-H1-(3.5-4) (720-88162-13)	8/20/18	12:10 Pacific		Solid			X	1	
DG-F1-(0.5-1) (720-88162-16)	8/20/18	14:35 Pacific		Solid			X	1	
DG-F1-(3.5-4) (720-88162-17)	8/20/18	14:35 Pacific		Solid			X	1	
DG-F1-(9.5-10) (720-88162-18)	8/20/18	14:35 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification Unconfirmed	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature] TA-TV	8/22/18 1315		MB	AUG22 '18 1:21PM	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88162

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: 185023

Date 8/20/18 Page 1 of 2

11/9/2018 (Rev. 1)

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
Bill To: GEOSYNTEC ANTHONY SMITH
Sampled By: MIRANDA KAHRILAS
Attn:
Phone: 847-530-7602

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B ☐ GRO	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GC/MS ☐ EPA 8270C ☒ 8270C SIM	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☒ EPA 8081A ☒ EPA 8082 PCBs	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)
DG-M1 (0.5-1)	8/20	830	S	NA									X										
DG-M1 (3.5-4)		830		NA									X										
DG-L1 (0.5-1)		930		Methanol	X			X	X	X		X	X										X
DG-L1 (3.5-4)		930		Meth.	X			X	X	X		X	X										X
DG-L1 (10-10.5)		1015		NA									X										
DG-K1 (0.5-1)		1045		↓									X										
DG-K1 (3.5-4)		1045		↓									X										
DG-J1 (0.5-1)		1115		Meth	X			X	X	X		X	X										X
DG-J1 (3.5-4)		1115		↓	X			X	X	X		X	X										X
DG-I1 (0.5-1)	↓	1140	↓	NA									X										

Page 113 of 119

Project Info.

Project Name/ #: UPL OU-SIM
PO#: WG2445101
Credit Card Y/N:

Sample Receipt

of Containers:
Head Space:
Temp: 3.4, 3.1, 1.7, 2.9 °C

If yes, please call with payment information ASAP

TAT: 10 Day | (5 Day) | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID ___

* No SVOCs only PAHs 8270C SIM

See Terms and Conditions on reverse

1) Relinquished by: (MK)
Signature — Time: ~~8/21~~ 1311
Printed Name: MIRANDA KAHRILAS 8/21 — Date
Company: GEO

1) Received by:
Signature — Time: 1311
Printed Name: Lary — Date: 8/21/18
Company: TA 720

2) Relinquished by:
Signature — Time: 1452
Printed Name: Lary — Date: 8/21/18
Company: TA 720

2) Received by:
Signature — Time: 1452
Printed Name: Bullock — Date: 8/21/18
Company: TA-720

3) Relinquished by:
720-88162 Chain of Custody
Company

3) Received by:
Signature — Time
Printed Name — Date
Company — 8/21/18
3.4 / 3.1 / 1.7 / 2.9 °C

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88162

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185023

Date 8/20/18 Page 2 of 2

11/9/2018 (Rev. 1)

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: MKahrilas@geosyntec.com
Bill To: GEOSYNTEC
Sampled By: MIRANDA KAHRILAS
Attn: ANTHONY SMITH
Phone: 847-530-7602

Analysis Request

Sample ID	Date	Time	Mat.	Preserv.	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B + GRO	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☒ EPA 8270C SIM	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☒ EPA 8081 PCBs ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)
DG-I1 (3.5-4)	8/20	1140											X										
DG-H1 (0.5-1)		1210			X			X	X	X		X	X										X
DG-H1 (3.5-4)		1210			X			X		X		X	X										X
DG-G1 (0.5-1)		1400											X										
DG-G1 (3.5-4)		1400											X										
DG-F1 (0.5-1)		1435			X			X		X		X	X										X
DG-F1 (3.5-4)		1435			X			X		X		X	X										X
DG-F1 (9.5-10)		1435			X			X		X		X	X										X
DG-E1 (0.5-1)		1515											X										
DG-E1 (3.5-4)	↓	1515											X										

Project Info.

Project Name/ #: UPC 001-SM
PO#: WG2445101
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers:
Head Space:
Temp:

TAT: 10 Day | (5 Day) | 4 Day | 3 Day | 2 Day | 1 Day | Other:

*No SVOCs only PAHs (8270C SIM)

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1311	Signature: [signature] Time: 1453	Signature: Time:
Printed Name: MIRANDA KAHRILAS Date: 8/21	Printed Name: Lenny Date: 8/21/18	Printed Name: Date:
Company: GEO	Company: TTTW	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 1311	Signature: [signature] Time: 1452	Signature: Time:
Printed Name: Lenny Date: 8/21/18	Printed Name: T Bullock Date: 8/21/18	Printed Name: Date:
Company: TTTW	Company: TA	Company: Date: 8/21/18

3-4/3 1 1.7 2-9

Smith, Micah

From: Miranda Kahrilas <MKahrilas@Geosyntec.com>
Sent: Thursday, August 23, 2018 7:51 AM
To: Krzysztof Jesionek; Anthony Smith; Smith, Micah
Subject: Re: TestAmerica Sample Login Confirmation files from 720-88162 UPC OU-SM

-External Email-

Hi Micah,

See responses below.

Get Outlook for Android

From: Smith, Micah
Sent: Wednesday, August 22, 6:26 PM
Subject: TestAmerica Sample Login Confirmation files from 720-88162 UPC OU-SM
To: Krzysztof Jesionek, Miranda Kahrilas, Anthony Smith

Hello,

Sample (#17) DG-F1 (3.5-4) one of the two DI with stir bar vial label was wet and the pre-tared weight label is not legible.

The container label for the following samples did not match the information listed on the Chain-of-Custody (COC):
DG-L1 (0.5-1). One of two DI vial label list DG-L1 (0.5-3). while the COC lists DG-L1 (0.5-1).

0.5-1 is correct

DG-L1 (10-10.5). One of two DI vial label list DG-L1 (9.5-10). while the COC lists DG-L1 (10-10.5).

It should be 10-10.5

DG-H1 (0.5-1). The 8oz jar labels list sample time : 14:05 while the COC lists sample time : 12:10.
DG-H1 (3.5-4). The 8oz jar labels list sample time : 14:05 while the COC lists sample time : 12:10.

14:05 is correct for both of these.

Please let me know the times and ID we should use.

Attached, please find the Sample Confirmation files for job 720-88162; UPC OU-SM

Please feel free to contact me if you have any questions.

Thank you.

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: Project Feedback

MICAH SMITH
Project Manager

TestAmerica Pleasanton
THE LEADER IN ENVIRONMENTAL TESTING

Tel: 916.374.4302
www.testamericainc.com

Reference: [284904]
Attachments: 3

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39377.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88162-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 8/28/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

C195

Special Instructions/Note:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers
			Preservation Code:					
DG-L1-(0.5-1) (720-88162-3)	8/20/18	09:30 Pacific		Solid			X	1
DG-L1-(3.5-4) (720-88162-4)	8/20/18	09:30 Pacific		Solid			X	1
DG-J1-(0.5-1) (720-88162-8)	8/20/18	11:15 Pacific		Solid			X	1
DG-J1-(3.5-4) (720-88162-9)	8/20/18	11:15 Pacific		Solid			X	1
DG-H1-(0.5-1) (720-88162-12)	8/20/18	12:10 Pacific		Solid			X	1
DG-H1-(3.5-4) (720-88162-13)	8/20/18	12:10 Pacific		Solid			X	1
DG-F1-(0.5-1) (720-88162-16)	8/20/18	14:35 Pacific		Solid			X	1
DG-F1-(3.5-4) (720-88162-17)	8/20/18	14:35 Pacific		Solid			X	1
DG-F1-(9.5-10) (720-88162-18)	8/20/18	14:35 Pacific		Solid			X	1

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	8/22/18 14:04	TMT		8-23-18 820	DAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client TA PLEASANTON Site Name _____ Cooler unpacked by: BOB

Cooler Received on 8-23-18 Opened on 8-23-18

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 0.6 °C Corrected Cooler Temp. 0.6 °C
   IR GUN #36 (CF -0.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC849161
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
16. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

WI-NC-099

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88162-1

Login Number: 88162
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	False	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88163-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/9/2018 3:46:53 PM

Micah Smith, Project Manager II
(916)374-4302
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 6
Client Sample Results 12
Surrogate Summary 34
QC Sample Results 36
QC Association Summary 55
Lab Chronicle 60
Certification Summary 64
Method Summary 65
Sample Summary 66
Subcontract Data 67
Chain of Custody 71
Receipt Checklists 77

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
F2	MS/MSD RPD exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88163-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88163-1

Comments
This report was revised on 11/9/18 to change the units for the metals data to report in mg/Kg, as requested. Also the job was revised to correct the instrument MDL for the CCVs and CRI associated with the metals data.

Receipt
The samples were received on 8/21/2018 2:52 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 1.7º C, 2.9º C, 3.1º C and 3.4º C.

Receipt Exceptions
The container label for the following samples did not match the information listed on the Chain-of-Custody (COC):
Sample DG-D2S-3.5-4 (720-88163-5): The container labels list DG-D2 (3.5-5), while the COC lists DG-D2 (3.5-4). The client confirmed the ID should be DG-D2S-3.5-4.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270C SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-249979 and analytical batch 720-250076 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8081A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250005 and analytical batch 720-250125 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8015B: The following sample required a dilution due to the nature of the sample matrix: DG-D1S-0.5-1 (720-88163-1). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8082: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 240-342371 and analytical batch 240-342551 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected. The MS/MSD recoveries and the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-249965 and analytical batch 720-250033 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DG-D1S-0.5-1 (720-88163-1), DG-D1S-3.5-4 (720-88163-2), DG-D1S-9.5-10 (720-88163-3), DG-D2S-0.5-1 (720-88163-4), DG-D2S-3.5-4 (720-88163-5), DG-E2S-0.5-1 (720-88163-6), DG-E2S-3.5-4 (720-88163-7), DG-F2S-0.5-1 (720-88163-8), DG-F2S-3.5-4 (720-88163-9), DG-G2S-0.5-1 (720-88163-10), DG-G2S-3.5-4 (720-88163-11), DG-H2S-0.5-1 (720-88163-12) and DG-H2S-3.5-4 (720-88163-13). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-249990 and analytical batch 720-250078 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Job ID: 720-88163-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250071 and analytical batch 720-250222 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method(s) 6010B: The method blank for preparation batch 720-249965 and analytical batch 720-250033 contained Barium and Chromium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: The method blank for preparation batch 720-250071 and analytical batch 720-250222 contained Antimony above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Subcontract Work
Method Asbestos - CARB 435: This method was subcontracted to ASBESTOS TEM LABORATORIES, INC. The subcontract laboratory certification is different from that of the facility issuing the final report.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Client Sample ID: DG-01(0.05-1) — Lab Sample ID: 720-88163-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	3.3	J	4.7	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	4.5	J	4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	2.3	J	4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	2.0	J	4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	4.0	J	4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	3.3	J	4.7	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	4.5	J	4.7	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	260000		19000	7200	ug/Kg	10		8015B	Total/NA
Antimony	2.3		1.4	0.24	mg/Kg	4		6010B	Total/NA
Arsenic	92		2.9	0.24	mg/Kg	4		6010B	Total/NA
Barium	95	B	1.4	0.20	mg/Kg	4		6010B	Total/NA
Cadmium	0.44		0.36	0.036	mg/Kg	4		6010B	Total/NA
Chromium	13	B	1.4	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.58	0.058	mg/Kg	4		6010B	Total/NA
Copper	100		4.3	2.0	mg/Kg	4		6010B	Total/NA
Lead	95		1.4	0.30	mg/Kg	4		6010B	Total/NA
Molybdenum	0.22	J	1.4	0.18	mg/Kg	4		6010B	Total/NA
Nickel	11		1.4	0.15	mg/Kg	4		6010B	Total/NA
Silver	0.24	J	0.72	0.15	mg/Kg	4		6010B	Total/NA
Thallium	0.86	J	1.4	0.42	mg/Kg	4		6010B	Total/NA
Vanadium	75		1.4	0.20	mg/Kg	4		6010B	Total/NA
Zinc	130		4.3	1.8	mg/Kg	4		6010B	Total/NA
Mercury	0.12		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-D1(3.5-4) — Lab Sample ID: 720-88163-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	2.8	J	4.7	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	4.3	J	4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	1.7	J	4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	2.3	J	4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	1.8	J	4.7	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	3.0	J	4.7	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	3500		2000	730	ug/Kg	1		8015B	Total/NA
Antimony	1.3	J	1.5	0.24	mg/Kg	4		6010B	Total/NA
Arsenic	75		2.9	0.25	mg/Kg	4		6010B	Total/NA
Barium	100	B	1.5	0.21	mg/Kg	4		6010B	Total/NA
Beryllium	0.16	J	0.29	0.095	mg/Kg	4		6010B	Total/NA
Chromium	64	B	1.5	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	14		0.58	0.058	mg/Kg	4		6010B	Total/NA
Copper	22		4.4	2.1	mg/Kg	4		6010B	Total/NA
Lead	11		1.5	0.31	mg/Kg	4		6010B	Total/NA
Nickel	110		1.5	0.15	mg/Kg	4		6010B	Total/NA
Silver	0.18	J	0.73	0.15	mg/Kg	4		6010B	Total/NA
Thallium	0.44	J	1.5	0.42	mg/Kg	4		6010B	Total/NA
Vanadium	27		1.5	0.20	mg/Kg	4		6010B	Total/NA
Zinc	40		4.4	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.054		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-D1(9.5-10) — Lab Sample ID: 720-88163-3

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-D1(9.5-10) (Continued) — Lab Sample ID: 720-88163-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	2.8	J	4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	39		4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	6.8		4.9	4.2	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	3.0	J	4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	27		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	4.8	J	4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	11		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	8.3		4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	70		4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	8.1		4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	11000		1900	710	ug/Kg	1		8015B	Total/NA
Antimony	2.2		1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	12		3.2	0.27	mg/Kg	4		6010B	Total/NA
Barium	95	B	1.6	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.66		0.32	0.10	mg/Kg	4		6010B	Total/NA
Chromium	120	B	1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	28		0.64	0.064	mg/Kg	4		6010B	Total/NA
Copper	44		4.8	2.3	mg/Kg	4		6010B	Total/NA
Lead	7.9		1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	0.40	J	1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	250		1.6	0.16	mg/Kg	4		6010B	Total/NA
Selenium	0.83	J	3.2	0.48	mg/Kg	4		6010B	Total/NA
Silver	0.29	J	0.80	0.16	mg/Kg	4		6010B	Total/NA
Thallium	0.74	J	1.6	0.46	mg/Kg	4		6010B	Total/NA
Vanadium	55		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	78		4.8	2.0	mg/Kg	4		6010B	Total/NA
Mercury	2.7		0.15	0.022	mg/Kg	10		7471A	Total/NA

Client Sample ID: DG-D2(0.5-1) — Lab Sample ID: 720-88163-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.2	J	3.7	0.31	mg/Kg	4		6010B	Total/NA
Barium	48	B	1.9	0.26	mg/Kg	4		6010B	Total/NA
Chromium	12	B	1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	10		0.74	0.074	mg/Kg	4		6010B	Total/NA
Copper	140		5.6	2.6	mg/Kg	4		6010B	Total/NA
Lead	7.3		1.9	0.39	mg/Kg	4		6010B	Total/NA
Nickel	4.5		1.9	0.19	mg/Kg	4		6010B	Total/NA
Selenium	0.83	J	3.7	0.56	mg/Kg	4		6010B	Total/NA
Silver	0.20	J	0.93	0.19	mg/Kg	4		6010B	Total/NA
Thallium	1.2	J	1.9	0.54	mg/Kg	4		6010B	Total/NA
Vanadium	120		1.9	0.25	mg/Kg	4		6010B	Total/NA
Zinc	41		5.6	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.075		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-D2(3.5-4) — Lab Sample ID: 720-88163-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.1		1.4	0.23	mg/Kg	4		6010B	Total/NA
Arsenic	62		2.7	0.23	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-D2(3.5-4) (Continued) — Lab Sample ID: 720-88163-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	230	B	1.4	0.19	mg/Kg	4		6010B	Total/NA
Beryllium	0.35		0.27	0.088	mg/Kg	4		6010B	Total/NA
Cadmium	0.24	J	0.34	0.034	mg/Kg	4		6010B	Total/NA
Chromium	56	B	1.4	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	14		0.54	0.054	mg/Kg	4		6010B	Total/NA
Copper	58		4.1	1.9	mg/Kg	4		6010B	Total/NA
Lead	180		1.4	0.29	mg/Kg	4		6010B	Total/NA
Molybdenum	0.37	J	1.4	0.17	mg/Kg	4		6010B	Total/NA
Nickel	80		1.4	0.14	mg/Kg	4		6010B	Total/NA
Silver	0.45	J	0.68	0.14	mg/Kg	4		6010B	Total/NA
Thallium	0.57	J	1.4	0.39	mg/Kg	4		6010B	Total/NA
Vanadium	43		1.4	0.19	mg/Kg	4		6010B	Total/NA
Zinc	170		4.1	1.7	mg/Kg	4		6010B	Total/NA
Mercury	0.12		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E2(0.5-1) — Lab Sample ID: 720-88163-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	3.2		1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	11		3.8	0.32	mg/Kg	4		6010B	Total/NA
Barium	94	B	1.9	0.27	mg/Kg	4		6010B	Total/NA
Cadmium	1.5		0.48	0.047	mg/Kg	4		6010B	Total/NA
Chromium	22	B	1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.76	0.076	mg/Kg	4		6010B	Total/NA
Copper	180		5.7	2.7	mg/Kg	4		6010B	Total/NA
Lead	430		1.9	0.40	mg/Kg	4		6010B	Total/NA
Molybdenum	1.1	J	1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	18		1.9	0.19	mg/Kg	4		6010B	Total/NA
Selenium	0.58	J	3.8	0.57	mg/Kg	4		6010B	Total/NA
Silver	0.53	J	0.95	0.19	mg/Kg	4		6010B	Total/NA
Thallium	0.78	J	1.9	0.55	mg/Kg	4		6010B	Total/NA
Vanadium	98		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	490		5.7	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.36		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E2(3.5-4) — Lab Sample ID: 720-88163-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.7		1.2	0.20	mg/Kg	4		6010B	Total/NA
Arsenic	120		2.4	0.20	mg/Kg	4		6010B	Total/NA
Barium	470	B	1.2	0.17	mg/Kg	4		6010B	Total/NA
Beryllium	0.12	J	0.24	0.076	mg/Kg	4		6010B	Total/NA
Cadmium	0.45		0.29	0.029	mg/Kg	4		6010B	Total/NA
Chromium	21	B	1.2	0.12	mg/Kg	4		6010B	Total/NA
Cobalt	10		0.47	0.047	mg/Kg	4		6010B	Total/NA
Copper	330		3.5	1.7	mg/Kg	4		6010B	Total/NA
Lead	620		1.2	0.25	mg/Kg	4		6010B	Total/NA
Molybdenum	0.39	J	1.2	0.15	mg/Kg	4		6010B	Total/NA
Nickel	19		1.2	0.12	mg/Kg	4		6010B	Total/NA
Silver	1.4		0.59	0.12	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-E2(3.5-4) (Continued) — Lab Sample ID: 720-88163-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Thallium	1.0	J	1.2	0.34	mg/Kg	4		6010B	Total/NA
Vanadium	87		1.2	0.16	mg/Kg	4		6010B	Total/NA
Zinc	400		3.5	1.5	mg/Kg	4		6010B	Total/NA
Mercury	0.074		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-F2(0.5-1) — Lab Sample ID: 720-88163-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.0		1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	18		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	66	B	1.7	0.24	mg/Kg	4		6010B	Total/NA
Cadmium	0.82		0.42	0.042	mg/Kg	4		6010B	Total/NA
Chromium	15	B	1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.67	0.067	mg/Kg	4		6010B	Total/NA
Copper	170		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	130		1.7	0.35	mg/Kg	4		6010B	Total/NA
Molybdenum	0.84	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	13		1.7	0.17	mg/Kg	4		6010B	Total/NA
Selenium	0.85	J	3.4	0.50	mg/Kg	4		6010B	Total/NA
Silver	0.43	J	0.84	0.17	mg/Kg	4		6010B	Total/NA
Thallium	0.92	J	1.7	0.49	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	170		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.27		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-F2(3.5-4) — Lab Sample ID: 720-88163-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.44	J	1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	82		3.7	0.31	mg/Kg	4		6010B	Total/NA
Barium	79	B	1.8	0.26	mg/Kg	4		6010B	Total/NA
Chromium	14	B	1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.73	0.073	mg/Kg	4		6010B	Total/NA
Copper	98		5.5	2.6	mg/Kg	4		6010B	Total/NA
Lead	20		1.8	0.39	mg/Kg	4		6010B	Total/NA
Molybdenum	0.30	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	11		1.8	0.19	mg/Kg	4		6010B	Total/NA
Silver	0.21	J	0.92	0.19	mg/Kg	4		6010B	Total/NA
Thallium	0.98	J	1.8	0.53	mg/Kg	4		6010B	Total/NA
Vanadium	93		1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	58		5.5	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.060		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-G2(0.5-1) — Lab Sample ID: 720-88163-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	4.8		2.0	0.33	mg/Kg	4		6010B	Total/NA
Arsenic	320		3.9	0.33	mg/Kg	4		6010B	Total/NA
Barium	130	B	2.0	0.28	mg/Kg	4		6010B	Total/NA
Cadmium	1.6		0.49	0.049	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-G2(0.5-1) (Continued) — Lab Sample ID: 720-88163-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	22	B	2.0	0.21	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.78	0.078	mg/Kg	4		6010B	Total/NA
Copper	210		5.9	2.8	mg/Kg	4		6010B	Total/NA
Lead	440		2.0	0.41	mg/Kg	4		6010B	Total/NA
Molybdenum	0.67	J	2.0	0.25	mg/Kg	4		6010B	Total/NA
Nickel	23		2.0	0.20	mg/Kg	4		6010B	Total/NA
Selenium	0.60	J	3.9	0.59	mg/Kg	4		6010B	Total/NA
Silver	0.90	J	0.98	0.20	mg/Kg	4		6010B	Total/NA
Thallium	1.6	J	2.0	0.57	mg/Kg	4		6010B	Total/NA
Vanadium	68		2.0	0.27	mg/Kg	4		6010B	Total/NA
Zinc	360		5.9	2.5	mg/Kg	4		6010B	Total/NA
Mercury	0.42		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-G2(3.5-4) — Lab Sample ID: 720-88163-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	110		4.9	0.81	mg/Kg	10		6010B	Total/NA
Arsenic	39		9.7	0.83	mg/Kg	10		6010B	Total/NA
Barium	1700	B	1.9	0.28	mg/Kg	4		6010B	Total/NA
Beryllium	0.82		0.39	0.13	mg/Kg	4		6010B	Total/NA
Cadmium	1.7		1.2	0.12	mg/Kg	10		6010B	Total/NA
Chromium	52	B	4.9	0.51	mg/Kg	10		6010B	Total/NA
Cobalt	9.0		1.9	0.19	mg/Kg	10		6010B	Total/NA
Copper	620		15	6.9	mg/Kg	10		6010B	Total/NA
Lead	8800		4.9	1.0	mg/Kg	10		6010B	Total/NA
Molybdenum	2.8		1.9	0.25	mg/Kg	4		6010B	Total/NA
Nickel	45		4.9	0.50	mg/Kg	10		6010B	Total/NA
Selenium	2.3	J	9.7	1.5	mg/Kg	10		6010B	Total/NA
Silver	5.2		2.4	0.49	mg/Kg	10		6010B	Total/NA
Thallium	1.8	J	4.9	1.4	mg/Kg	10		6010B	Total/NA
Vanadium	38		4.9	0.66	mg/Kg	10		6010B	Total/NA
Zinc	2600		15	6.2	mg/Kg	10		6010B	Total/NA
Mercury	0.69		0.015	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H2(0.5-1) — Lab Sample ID: 720-88163-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.3	J B	1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	180		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	140		1.6	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.39		0.33	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	0.11	J	0.41	0.040	mg/Kg	4		6010B	Total/NA
Chromium	41		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	9.5		0.65	0.065	mg/Kg	4		6010B	Total/NA
Copper	120		4.9	2.3	mg/Kg	4		6010B	Total/NA
Lead	140		1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	0.51	J	1.6	0.21	mg/Kg	4		6010B	Total/NA
Nickel	33		1.6	0.17	mg/Kg	4		6010B	Total/NA
Selenium	0.66	J	3.3	0.49	mg/Kg	4		6010B	Total/NA
Vanadium	37		1.6	0.22	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-H2(0.5-1) (Continued) — Lab Sample ID: 720-88163-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	110		4.9	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.10		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H2(3.5-4) — Lab Sample ID: 720-88163-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	9.4		1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	49		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	590		1.7	0.24	mg/Kg	4		6010B	Total/NA
Beryllium	0.24	J	0.34	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	1.8		0.43	0.042	mg/Kg	4		6010B	Total/NA
Chromium	170		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	17		0.68	0.068	mg/Kg	4		6010B	Total/NA
Copper	270		5.1	2.4	mg/Kg	4		6010B	Total/NA
Lead	1300		1.7	0.36	mg/Kg	4		6010B	Total/NA
Molybdenum	1.5	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	110		1.7	0.17	mg/Kg	4		6010B	Total/NA
Silver	4.6		0.85	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	59		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	1100		5.1	2.2	mg/Kg	4		6010B	Total/NA
Mercury	2.9		0.15	0.023	mg/Kg	10		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Client Sample ID: DG-01(0.05-1)
Date Collected: 08/20/18 15:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-1
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.0	0.97	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Acetone	ND		40	31	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Benzene	ND		4.0	0.53	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Dichlorobromomethane	ND		4.0	0.58	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Bromobenzene	ND		4.0	0.64	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Chlorobromomethane	ND		16	0.58	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Bromoform	ND		4.0	1.6	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Bromomethane	ND		8.1	0.64	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
2-Butanone (MEK)	ND		40	17	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
n-Butylbenzene	ND		4.0	0.81	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
sec-Butylbenzene	ND		4.0	0.58	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
tert-Butylbenzene	ND		4.0	0.59	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Carbon disulfide	ND		4.0	1.6	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Carbon tetrachloride	ND		4.0	0.50	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Chlorobenzene	ND		4.0	0.56	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Chloroethane	ND		8.1	0.45	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Chloroform	ND		4.0	0.53	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Chloromethane	ND		8.1	0.64	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
2-Chlorotoluene	ND		4.0	0.53	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
4-Chlorotoluene	ND		4.0	0.55	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Chlorodibromomethane	ND		4.0	0.57	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
1,2-Dichlorobenzene	ND		4.0	0.55	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
1,3-Dichlorobenzene	ND		4.0	0.58	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
1,4-Dichlorobenzene	ND		4.0	0.57	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
1,3-Dichloropropane	ND		4.0	0.59	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
1,1-Dichloropropene	ND		4.0	0.56	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
1,2-Dibromo-3-Chloropropane	ND		8.1	1.4	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Ethylene Dibromide	ND		4.0	1.2	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Dibromomethane	ND		8.1	0.70	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Dichlorodifluoromethane	ND		8.1	0.64	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
1,1-Dichloroethane	ND		4.0	0.55	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
1,2-Dichloroethane	ND		4.0	0.61	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
1,1-Dichloroethene	ND		4.0	0.50	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
cis-1,2-Dichloroethene	ND		4.0	0.55	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
trans-1,2-Dichloroethene	ND		4.0	0.61	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
1,2-Dichloropropane	ND		4.0	0.51	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
cis-1,3-Dichloropropene	ND		4.0	0.56	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
trans-1,3-Dichloropropene	ND		4.0	0.54	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Ethylbenzene	ND		4.0	0.61	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Hexachlorobutadiene	ND		4.0	0.73	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
2-Hexanone	ND		40	8.1	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Isopropylbenzene	ND		4.0	0.55	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
4-Isopropyltoluene	ND		4.0	2.0	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Methylene Chloride	ND		8.1	4.5	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
4-Methyl-2-pentanone (MIBK)	ND		40	8.1	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Naphthalene	ND		8.1	1.2	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
N-Propylbenzene	ND		4.0	0.53	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Styrene	ND		4.0	0.51	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
1,1,1,2-Tetrachloroethane	ND		4.0	0.61	ug/Kg		08/22/18 01:45	08/25/18 15:03	1

Client Sample ID: DG-01(0.05-1)
Date Collected: 08/20/18 15:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-1
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.0	0.61	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Tetrachloroethene	ND		4.0	0.54	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Toluene	ND		4.0	0.57	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
1,2,3-Trichlorobenzene	ND		4.0	0.60	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
1,2,4-Trichlorobenzene	ND		4.0	0.57	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
1,1,1-Trichloroethane	ND		4.0	0.49	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
1,1,2-Trichloroethane	ND		4.0	0.57	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Trichloroethene	ND		4.0	0.51	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Trichlorofluoromethane	ND		4.0	0.45	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
1,2,3-Trichloropropane	ND		4.0	0.62	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.7	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
1,2,4-Trimethylbenzene	ND		4.0	1.3	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
1,3,5-Trimethylbenzene	ND		4.0	0.53	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Vinyl acetate	ND		16	4.0	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Vinyl chloride	ND		4.0	0.59	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Xylenes, Total	ND		4.0	0.99	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
2,2-Dichloropropane	ND		4.0	1.6	ug/Kg		08/22/18 01:45	08/25/18 15:03	1
Gasoline Range Organics (GRO) -C4-C12	ND		200	81	ug/Kg		08/22/18 01:45	08/25/18 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*45 - 131*	*08/22/18 01:45*	*08/25/18 15:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*60 - 140*	*08/22/18 01:45*	*08/25/18 15:03*	*1*
Toluene-d8 (Surr)	*96*		*58 - 140*	*08/22/18 01:45*	*08/25/18 15:03*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.4	4.7	ug/Kg		08/22/18 12:41	08/23/18 16:23	1
Acenaphthene	ND		4.7	2.6	ug/Kg		08/22/18 12:41	08/23/18 16:23	1
Acenaphthylene	ND		4.7	2.3	ug/Kg		08/22/18 12:41	08/23/18 16:23	1
Anthracene	ND		4.7	1.9	ug/Kg		08/22/18 12:41	08/23/18 16:23	1
Benzo[a]anthracene	ND		4.7	1.4	ug/Kg		08/22/18 12:41	08/23/18 16:23	1
Benzo[a]pyrene	**3.3**	**J**	4.7	1.8	ug/Kg		08/22/18 12:41	08/23/18 16:23	1
Benzo[b]fluoranthene	**4.5**	**J**	4.7	2.0	ug/Kg		08/22/18 12:41	08/23/18 16:23	1
Benzo[g,h,i]perylene	ND		4.7	4.1	ug/Kg		08/22/18 12:41	08/23/18 16:23	1
Benzo[k]fluoranthene	**2.3**	**J**	4.7	2.0	ug/Kg		08/22/18 12:41	08/23/18 16:23	1
Chrysene	**2.0**	**J**	4.7	1.3	ug/Kg		08/22/18 12:41	08/23/18 16:23	1
Dibenz(a,h)anthracene	ND		4.7	3.3	ug/Kg		08/22/18 12:41	08/23/18 16:23	1
Fluoranthene	**4.0**	**J**	4.7	1.3	ug/Kg		08/22/18 12:41	08/23/18 16:23	1
Fluorene	ND		4.7	2.1	ug/Kg		08/22/18 12:41	08/23/18 16:23	1
Indeno[1,2,3-cd]pyrene	ND		4.7	4.0	ug/Kg		08/22/18 12:41	08/23/18 16:23	1
Naphthalene	ND		4.7	3.3	ug/Kg		08/22/18 12:41	08/23/18 16:23	1
Phenanthrene	**3.3**	**J**	4.7	1.7	ug/Kg		08/22/18 12:41	08/23/18 16:23	1
Pyrene	**4.5**	**J**	4.7	1.6	ug/Kg		08/22/18 12:41	08/23/18 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*33 - 120*	*08/22/18 12:41*	*08/23/18 16:23*	*1*
Terphenyl-d14	*95*		*35 - 146*	*08/22/18 12:41*	*08/23/18 16:23*	*1*

Client Sample ID: DG-01(0.05-1)

Date Collected: 08/20/18 15:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-1

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	260000		19000	7200	ug/Kg		08/22/18 09:40	08/23/18 14:17	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*D X*	*40 - 130*	*08/22/18 09:40*	*08/23/18 14:17*	*10*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
Aldrin	ND		1.9	0.48	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
Endrin	ND		1.9	0.44	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
Toxaphene	ND		38	6.5	ug/Kg		08/22/18 15:45	08/28/18 10:06	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/22/18 15:45	08/28/18 10:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*78*		*21 - 136*	*08/22/18 15:45*	*08/28/18 10:06*	*1*
Tetrachloro-m-xylene	*80*		*21 - 145*	*08/22/18 15:45*	*08/28/18 10:06*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/24/18 08:44	08/27/18 17:02	1
Aroclor-1221	ND		51	25	ug/Kg		08/24/18 08:44	08/27/18 17:02	1
Aroclor-1232	ND		51	23	ug/Kg		08/24/18 08:44	08/27/18 17:02	1
Aroclor-1242	ND		51	19	ug/Kg		08/24/18 08:44	08/27/18 17:02	1
Aroclor-1248	ND		51	25	ug/Kg		08/24/18 08:44	08/27/18 17:02	1
Aroclor-1254	ND		51	23	ug/Kg		08/24/18 08:44	08/27/18 17:02	1
Aroclor-1260	ND		51	22	ug/Kg		08/24/18 08:44	08/27/18 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*14 - 128*	*08/24/18 08:44*	*08/27/18 17:02*	*1*
DCB Decachlorobiphenyl	*78*		*10 - 132*	*08/24/18 08:44*	*08/27/18 17:02*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3		1.4	0.24	mg/Kg		08/22/18 11:50	08/22/18 17:50	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Client Sample ID: DG-01(0.05-1)
Date Collected: 08/20/18 15:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-1
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	92		2.9	0.24	mg/Kg		08/22/18 11:50	08/22/18 17:50	4
Barium	95	B	1.4	0.20	mg/Kg		08/22/18 11:50	08/22/18 17:50	4
Beryllium	ND		0.29	0.094	mg/Kg		08/22/18 11:50	08/22/18 17:50	4
Cadmium	0.44		0.36	0.036	mg/Kg		08/22/18 11:50	08/22/18 17:50	4
Chromium	13	B	1.4	0.15	mg/Kg		08/22/18 11:50	08/22/18 17:50	4
Cobalt	11		0.58	0.058	mg/Kg		08/22/18 11:50	08/22/18 17:50	4
Copper	100		4.3	2.0	mg/Kg		08/22/18 11:50	08/22/18 17:50	4
Lead	95		1.4	0.30	mg/Kg		08/22/18 11:50	08/22/18 17:50	4
Molybdenum	0.22	J	1.4	0.18	mg/Kg		08/22/18 11:50	08/22/18 17:50	4
Nickel	11		1.4	0.15	mg/Kg		08/22/18 11:50	08/22/18 17:50	4
Selenium	ND		2.9	0.43	mg/Kg		08/22/18 11:50	08/22/18 17:50	4
Silver	0.24	J	0.72	0.15	mg/Kg		08/22/18 11:50	08/22/18 17:50	4
Thallium	0.86	J	1.4	0.42	mg/Kg		08/22/18 11:50	08/22/18 17:50	4
Vanadium	75		1.4	0.20	mg/Kg		08/22/18 11:50	08/22/18 17:50	4
Zinc	130		4.3	1.8	mg/Kg		08/22/18 11:50	08/22/18 17:50	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.015	0.0023	mg/Kg		08/22/18 11:39	08/27/18 15:41	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Client Sample ID: DG-D1(3.5-4)
Date Collected: 08/20/18 15:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-2
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.4	1.1	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Acetone	ND		44	33	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Benzene	ND		4.4	0.57	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Dichlorobromomethane	ND		4.4	0.63	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Bromobenzene	ND		4.4	0.69	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Chlorobromomethane	ND		18	0.63	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Bromoform	ND		4.4	1.8	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Bromomethane	ND		8.8	0.69	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
2-Butanone (MEK)	ND		44	18	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
n-Butylbenzene	ND		4.4	0.88	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
sec-Butylbenzene	ND		4.4	0.63	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
tert-Butylbenzene	ND		4.4	0.64	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Carbon disulfide	ND		4.4	1.8	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Carbon tetrachloride	ND		4.4	0.54	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Chlorobenzene	ND		4.4	0.60	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Chloroethane	ND		8.8	0.49	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Chloroform	ND		4.4	0.58	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Chloromethane	ND		8.8	0.69	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
2-Chlorotoluene	ND		4.4	0.57	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
4-Chlorotoluene	ND		4.4	0.60	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Chlorodibromomethane	ND		4.4	0.62	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
1,2-Dichlorobenzene	ND		4.4	0.60	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
1,3-Dichlorobenzene	ND		4.4	0.63	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
1,4-Dichlorobenzene	ND		4.4	0.62	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
1,3-Dichloropropane	ND		4.4	0.64	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
1,1-Dichloropropene	ND		4.4	0.60	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
1,2-Dibromo-3-Chloropropane	ND		8.8	1.5	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Ethylene Dibromide	ND		4.4	1.3	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Dibromomethane	ND		8.8	0.75	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Dichlorodifluoromethane	ND		8.8	0.69	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
1,1-Dichloroethane	ND		4.4	0.60	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
1,2-Dichloroethane	ND		4.4	0.67	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
cis-1,2-Dichloroethene	ND		4.4	0.60	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
trans-1,2-Dichloroethene	ND		4.4	0.66	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
1,2-Dichloropropane	ND		4.4	0.55	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
cis-1,3-Dichloropropene	ND		4.4	0.60	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
trans-1,3-Dichloropropene	ND		4.4	0.59	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Ethylbenzene	ND		4.4	0.66	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Hexachlorobutadiene	ND		4.4	0.79	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
2-Hexanone	ND		44	8.8	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Isopropylbenzene	ND		4.4	0.60	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
4-Isopropyltoluene	ND		4.4	2.2	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Methylene Chloride	ND		8.8	4.9	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
4-Methyl-2-pentanone (MIBK)	ND		44	8.8	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Naphthalene	ND		8.8	1.3	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
N-Propylbenzene	ND		4.4	0.58	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Styrene	ND		4.4	0.55	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
1,1,1,2-Tetrachloroethane	ND		4.4	0.67	ug/Kg		08/22/18 01:45	08/25/18 13:00	1

Client Sample ID: DG-D1(3.5-4)

Date Collected: 08/20/18 15:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-2
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.4	0.66	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Toluene	ND		4.4	0.62	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
1,2,3-Trichlorobenzene	ND		4.4	0.65	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
1,2,4-Trichlorobenzene	ND		4.4	0.62	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
1,1,1-Trichloroethane	ND		4.4	0.53	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
1,1,2-Trichloroethane	ND		4.4	0.61	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Trichloroethene	ND		4.4	0.55	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Trichlorofluoromethane	ND		4.4	0.49	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
1,2,3-Trichloropropane	ND		4.4	0.67	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.8	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
1,2,4-Trimethylbenzene	ND		4.4	1.4	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
1,3,5-Trimethylbenzene	ND		4.4	0.57	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Vinyl acetate	ND		18	4.4	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Vinyl chloride	ND		4.4	0.64	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Xylenes, Total	ND		4.4	1.1	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
2,2-Dichloropropane	ND		4.4	1.8	ug/Kg		08/22/18 01:45	08/25/18 13:00	1
Gasoline Range Organics (GRO) -C4-C12	ND		220	88	ug/Kg		08/22/18 01:45	08/25/18 13:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*45 - 131*	*08/22/18 01:45*	*08/25/18 13:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*60 - 140*	*08/22/18 01:45*	*08/25/18 13:00*	*1*
Toluene-d8 (Surr)	*98*		*58 - 140*	*08/22/18 01:45*	*08/25/18 13:00*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.5	4.7	ug/Kg		08/22/18 12:41	08/23/18 16:47	1
Acenaphthene	ND		4.7	2.6	ug/Kg		08/22/18 12:41	08/23/18 16:47	1
Acenaphthylene	ND		4.7	2.3	ug/Kg		08/22/18 12:41	08/23/18 16:47	1
Anthracene	ND		4.7	1.9	ug/Kg		08/22/18 12:41	08/23/18 16:47	1
Benzo[a]anthracene	ND		4.7	1.4	ug/Kg		08/22/18 12:41	08/23/18 16:47	1
Benzo[a]pyrene	**2.8**	**J**	4.7	1.8	ug/Kg		08/22/18 12:41	08/23/18 16:47	1
Benzo[b]fluoranthene	**4.3**	**J**	4.7	2.0	ug/Kg		08/22/18 12:41	08/23/18 16:47	1
Benzo[g,h,i]perylene	ND		4.7	4.1	ug/Kg		08/22/18 12:41	08/23/18 16:47	1
Benzo[k]fluoranthene	ND		4.7	2.0	ug/Kg		08/22/18 12:41	08/23/18 16:47	1
Chrysene	**1.7**	**J**	4.7	1.3	ug/Kg		08/22/18 12:41	08/23/18 16:47	1
Dibenz(a,h)anthracene	ND		4.7	3.3	ug/Kg		08/22/18 12:41	08/23/18 16:47	1
Fluoranthene	**2.3**	**J**	4.7	1.3	ug/Kg		08/22/18 12:41	08/23/18 16:47	1
Fluorene	ND		4.7	2.1	ug/Kg		08/22/18 12:41	08/23/18 16:47	1
Indeno[1,2,3-cd]pyrene	ND		4.7	4.0	ug/Kg		08/22/18 12:41	08/23/18 16:47	1
Naphthalene	ND		4.7	3.3	ug/Kg		08/22/18 12:41	08/23/18 16:47	1
Phenanthrene	**1.8**	**J**	4.7	1.7	ug/Kg		08/22/18 12:41	08/23/18 16:47	1
Pyrene	**3.0**	**J**	4.7	1.6	ug/Kg		08/22/18 12:41	08/23/18 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*33 - 120*	*08/22/18 12:41*	*08/23/18 16:47*	*1*
Terphenyl-d14	*98*		*35 - 146*	*08/22/18 12:41*	*08/23/18 16:47*	*1*

Client Sample ID: DG-D1(3.5-4)

Date Collected: 08/20/18 15:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-2

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3500		2000	730	ug/Kg		08/22/18 09:40	08/23/18 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*88*		*40 - 130*	*08/22/18 09:40*	*08/23/18 14:17*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
Aldrin	ND		1.9	0.48	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
Endrin	ND		1.9	0.44	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
Toxaphene	ND		38	6.5	ug/Kg		08/22/18 15:45	08/24/18 06:47	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/22/18 15:45	08/24/18 06:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*107*		*21 - 136*	*08/22/18 15:45*	*08/24/18 06:47*	*1*
Tetrachloro-m-xylene	*87*		*21 - 145*	*08/22/18 15:45*	*08/24/18 06:47*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/24/18 08:44	08/27/18 17:16	1
Aroclor-1221	ND		50	24	ug/Kg		08/24/18 08:44	08/27/18 17:16	1
Aroclor-1232	ND		50	23	ug/Kg		08/24/18 08:44	08/27/18 17:16	1
Aroclor-1242	ND		50	19	ug/Kg		08/24/18 08:44	08/27/18 17:16	1
Aroclor-1248	ND		50	24	ug/Kg		08/24/18 08:44	08/27/18 17:16	1
Aroclor-1254	ND		50	23	ug/Kg		08/24/18 08:44	08/27/18 17:16	1
Aroclor-1260	ND		50	22	ug/Kg		08/24/18 08:44	08/27/18 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*14 - 128*	*08/24/18 08:44*	*08/27/18 17:16*	*1*
DCB Decachlorobiphenyl	*90*		*10 - 132*	*08/24/18 08:44*	*08/27/18 17:16*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.3	J	1.5	0.24	mg/Kg		08/22/18 11:50	08/22/18 17:55	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Client Sample ID: DG-D1(3.5-4)
Date Collected: 08/20/18 15:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-2
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	75		2.9	0.25	mg/Kg		08/22/18 11:50	08/22/18 17:55	4
Barium	100	B	1.5	0.21	mg/Kg		08/22/18 11:50	08/22/18 17:55	4
Beryllium	0.16	J	0.29	0.095	mg/Kg		08/22/18 11:50	08/22/18 17:55	4
Cadmium	ND		0.36	0.036	mg/Kg		08/22/18 11:50	08/22/18 17:55	4
Chromium	64	B	1.5	0.15	mg/Kg		08/22/18 11:50	08/22/18 17:55	4
Cobalt	14		0.58	0.058	mg/Kg		08/22/18 11:50	08/22/18 17:55	4
Copper	22		4.4	2.1	mg/Kg		08/22/18 11:50	08/22/18 17:55	4
Lead	11		1.5	0.31	mg/Kg		08/22/18 11:50	08/22/18 17:55	4
Molybdenum	ND		1.5	0.19	mg/Kg		08/22/18 11:50	08/22/18 17:55	4
Nickel	110		1.5	0.15	mg/Kg		08/22/18 11:50	08/22/18 17:55	4
Selenium	ND		2.9	0.44	mg/Kg		08/22/18 11:50	08/22/18 17:55	4
Silver	0.18	J	0.73	0.15	mg/Kg		08/22/18 11:50	08/22/18 17:55	4
Thallium	0.44	J	1.5	0.42	mg/Kg		08/22/18 11:50	08/22/18 17:55	4
Vanadium	27		1.5	0.20	mg/Kg		08/22/18 11:50	08/22/18 17:55	4
Zinc	40		4.4	1.9	mg/Kg		08/22/18 11:50	08/22/18 17:55	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.054		0.015	0.0022	mg/Kg		08/22/18 11:39	08/27/18 15:43	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Client Sample ID: DG-D1(9.5-10)
Date Collected: 08/20/18 15:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-3
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.2	1.0	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Acetone	ND		42	32	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Benzene	ND		4.2	0.55	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Dichlorobromomethane	ND		4.2	0.61	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Bromobenzene	ND		4.2	0.67	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Chlorobromomethane	ND		17	0.61	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Bromoform	ND		4.2	1.7	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Bromomethane	ND		8.4	0.67	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
2-Butanone (MEK)	ND		42	18	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
n-Butylbenzene	ND		4.2	0.84	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
sec-Butylbenzene	ND		4.2	0.61	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
tert-Butylbenzene	ND		4.2	0.62	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Carbon disulfide	ND		4.2	1.7	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Carbon tetrachloride	ND		4.2	0.52	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Chlorobenzene	ND		4.2	0.58	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Chloroethane	ND		8.4	0.47	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Chloroform	ND		4.2	0.56	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Chloromethane	ND		8.4	0.67	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
2-Chlorotoluene	ND		4.2	0.55	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
4-Chlorotoluene	ND		4.2	0.57	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Chlorodibromomethane	ND		4.2	0.60	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
1,2-Dichlorobenzene	ND		4.2	0.57	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
1,3-Dichlorobenzene	ND		4.2	0.61	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
1,4-Dichlorobenzene	ND		4.2	0.60	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
1,3-Dichloropropane	ND		4.2	0.62	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
1,1-Dichloropropene	ND		4.2	0.58	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
1,2-Dibromo-3-Chloropropane	ND		8.4	1.4	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Ethylene Dibromide	ND		4.2	1.2	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Dibromomethane	ND		8.4	0.73	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Dichlorodifluoromethane	ND		8.4	0.67	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
1,1-Dichloroethane	ND		4.2	0.57	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
1,2-Dichloroethane	ND		4.2	0.64	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
1,1-Dichloroethene	ND		4.2	0.52	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
cis-1,2-Dichloroethene	ND		4.2	0.57	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
trans-1,2-Dichloroethene	ND		4.2	0.63	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
1,2-Dichloropropane	ND		4.2	0.53	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
cis-1,3-Dichloropropene	ND		4.2	0.58	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
trans-1,3-Dichloropropene	ND		4.2	0.57	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Ethylbenzene	ND		4.2	0.63	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Hexachlorobutadiene	ND		4.2	0.76	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
2-Hexanone	ND		42	8.4	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Isopropylbenzene	ND		4.2	0.57	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
4-Isopropyltoluene	ND		4.2	2.1	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Methylene Chloride	ND		8.4	4.7	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
4-Methyl-2-pentanone (MIBK)	ND		42	8.4	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Naphthalene	ND		8.4	1.3	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
N-Propylbenzene	ND		4.2	0.56	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Styrene	ND		4.2	0.53	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
1,1,1,2-Tetrachloroethane	ND		4.2	0.64	ug/Kg		08/22/18 01:45	08/25/18 12:29	1

Client Sample ID: DG-D1(9.5-10)

Date Collected: 08/20/18 15:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-3

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.2	0.63	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Tetrachloroethene	ND		4.2	0.57	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Toluene	ND		4.2	0.60	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
1,2,3-Trichlorobenzene	ND		4.2	0.62	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
1,2,4-Trichlorobenzene	ND		4.2	0.60	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
1,1,1-Trichloroethane	ND		4.2	0.52	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
1,1,2-Trichloroethane	ND		4.2	0.59	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Trichloroethene	ND		4.2	0.53	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Trichlorofluoromethane	ND		4.2	0.47	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
1,2,3-Trichloropropane	ND		4.2	0.65	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	1.8	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
1,2,4-Trimethylbenzene	ND		4.2	1.4	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
1,3,5-Trimethylbenzene	ND		4.2	0.55	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Vinyl acetate	ND		17	4.2	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Vinyl chloride	ND		4.2	0.62	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Xylenes, Total	ND		4.2	1.0	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
2,2-Dichloropropane	ND		4.2	1.7	ug/Kg		08/22/18 01:45	08/25/18 12:29	1
Gasoline Range Organics (GRO) -C4-C12	ND		210	84	ug/Kg		08/22/18 01:45	08/25/18 12:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*45 - 131*	*08/22/18 01:45*	*08/25/18 12:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*60 - 140*	*08/22/18 01:45*	*08/25/18 12:29*	*1*
Toluene-d8 (Surr)	*100*		*58 - 140*	*08/22/18 01:45*	*08/25/18 12:29*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.9	4.9	ug/Kg		08/22/18 12:41	08/23/18 17:10	1
Acenaphthene	ND		4.9	2.8	ug/Kg		08/22/18 12:41	08/23/18 17:10	1
Acenaphthylene	ND		4.9	2.4	ug/Kg		08/22/18 12:41	08/23/18 17:10	1
Anthracene	ND		4.9	2.0	ug/Kg		08/22/18 12:41	08/23/18 17:10	1
Benzo[a]anthracene	ND		4.9	1.5	ug/Kg		08/22/18 12:41	08/23/18 17:10	1
Benzo[a]pyrene	**2.8**	**J**	4.9	1.9	ug/Kg		08/22/18 12:41	08/23/18 17:10	1
Benzo[b]fluoranthene	**39**		4.9	2.1	ug/Kg		08/22/18 12:41	08/23/18 17:10	1
Benzo[g,h,i]perylene	**6.8**		4.9	4.2	ug/Kg		08/22/18 12:41	08/23/18 17:10	1
Benzo[k]fluoranthene	**3.0**	**J**	4.9	2.1	ug/Kg		08/22/18 12:41	08/23/18 17:10	1
Chrysene	**27**		4.9	1.4	ug/Kg		08/22/18 12:41	08/23/18 17:10	1
Dibenz(a,h)anthracene	**4.8**	**J**	4.9	3.4	ug/Kg		08/22/18 12:41	08/23/18 17:10	1
Fluoranthene	**11**		4.9	1.4	ug/Kg		08/22/18 12:41	08/23/18 17:10	1
Fluorene	ND		4.9	2.2	ug/Kg		08/22/18 12:41	08/23/18 17:10	1
Indeno[1,2,3-cd]pyrene	ND		4.9	4.1	ug/Kg		08/22/18 12:41	08/23/18 17:10	1
Naphthalene	**8.3**		4.9	3.4	ug/Kg		08/22/18 12:41	08/23/18 17:10	1
Phenanthrene	**70**		4.9	1.8	ug/Kg		08/22/18 12:41	08/23/18 17:10	1
Pyrene	**8.1**		4.9	1.7	ug/Kg		08/22/18 12:41	08/23/18 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*33 - 120*	*08/22/18 12:41*	*08/23/18 17:10*	*1*
Terphenyl-d14	*88*		*35 - 146*	*08/22/18 12:41*	*08/23/18 17:10*	*1*

Client Sample ID: DG-D1(9.5-10)
Date Collected: 08/20/18 15:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-3
Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	11000		1900	710	ug/Kg		08/22/18 09:40	08/23/18 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*86*		*40 - 130*	*08/22/18 09:40*	*08/23/18 14:47*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
4,4'-DDE	ND		2.0	0.41	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
4,4'-DDT	ND		2.0	0.40	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
Aldrin	ND		2.0	0.49	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
beta-BHC	ND		2.0	0.35	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
cis-Chlordane	ND		2.0	0.39	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
Endosulfan I	ND		2.0	0.31	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
Endosulfan sulfate	ND		2.0	0.37	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
Endrin	ND		2.0	0.45	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
Endrin ketone	ND		2.0	0.32	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
Heptachlor epoxide	ND		2.0	0.34	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
Toxaphene	ND		39	6.7	ug/Kg		08/22/18 15:45	08/26/18 07:02	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		08/22/18 15:45	08/26/18 07:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*77*	*p*	*21 - 136*	*08/22/18 15:45*	*08/26/18 07:02*	*1*
Tetrachloro-m-xylene	*82*		*21 - 145*	*08/22/18 15:45*	*08/26/18 07:02*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/24/18 08:44	08/27/18 17:31	1
Aroclor-1221	ND		51	24	ug/Kg		08/24/18 08:44	08/27/18 17:31	1
Aroclor-1232	ND		51	23	ug/Kg		08/24/18 08:44	08/27/18 17:31	1
Aroclor-1242	ND		51	19	ug/Kg		08/24/18 08:44	08/27/18 17:31	1
Aroclor-1248	ND		51	24	ug/Kg		08/24/18 08:44	08/27/18 17:31	1
Aroclor-1254	ND		51	23	ug/Kg		08/24/18 08:44	08/27/18 17:31	1
Aroclor-1260	ND		51	22	ug/Kg		08/24/18 08:44	08/27/18 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*14 - 128*	*08/24/18 08:44*	*08/27/18 17:31*	*1*
DCB Decachlorobiphenyl	*81*		*10 - 132*	*08/24/18 08:44*	*08/27/18 17:31*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.2		1.6	0.27	mg/Kg		08/22/18 11:50	08/22/18 18:00	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Client Sample ID: DG-D1(9.5-10)
Date Collected: 08/20/18 15:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-3
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12		3.2	0.27	mg/Kg		08/22/18 11:50	08/22/18 18:00	4
Barium	95	B	1.6	0.23	mg/Kg		08/22/18 11:50	08/22/18 18:00	4
Beryllium	0.66		0.32	0.10	mg/Kg		08/22/18 11:50	08/22/18 18:00	4
Cadmium	ND		0.40	0.040	mg/Kg		08/22/18 11:50	08/22/18 18:00	4
Chromium	120	B	1.6	0.17	mg/Kg		08/22/18 11:50	08/22/18 18:00	4
Cobalt	28		0.64	0.064	mg/Kg		08/22/18 11:50	08/22/18 18:00	4
Copper	44		4.8	2.3	mg/Kg		08/22/18 11:50	08/22/18 18:00	4
Lead	7.9		1.6	0.34	mg/Kg		08/22/18 11:50	08/22/18 18:00	4
Molybdenum	0.40	J	1.6	0.20	mg/Kg		08/22/18 11:50	08/22/18 18:00	4
Nickel	250		1.6	0.16	mg/Kg		08/22/18 11:50	08/22/18 18:00	4
Selenium	0.83	J	3.2	0.48	mg/Kg		08/22/18 11:50	08/22/18 18:00	4
Silver	0.29	J	0.80	0.16	mg/Kg		08/22/18 11:50	08/22/18 18:00	4
Thallium	0.74	J	1.6	0.46	mg/Kg		08/22/18 11:50	08/22/18 18:00	4
Vanadium	55		1.6	0.22	mg/Kg		08/22/18 11:50	08/22/18 18:00	4
Zinc	78		4.8	2.0	mg/Kg		08/22/18 11:50	08/22/18 18:00	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.7		0.15	0.022	mg/Kg		08/22/18 11:39	08/27/18 16:44	10

Client Sample ID: DG-D2(0.5-1)

Date Collected: 08/20/18 16:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-4

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.9	0.31	mg/Kg		08/22/18 11:50	08/22/18 18:05	4
Arsenic	**2.2**	**J**	3.7	0.31	mg/Kg		08/22/18 11:50	08/22/18 18:05	4
Barium	**48**	**B**	1.9	0.26	mg/Kg		08/22/18 11:50	08/22/18 18:05	4
Beryllium	ND		0.37	0.12	mg/Kg		08/22/18 11:50	08/22/18 18:05	4
Cadmium	ND		0.46	0.046	mg/Kg		08/22/18 11:50	08/22/18 18:05	4
Chromium	**12**	**B**	1.9	0.20	mg/Kg		08/22/18 11:50	08/22/18 18:05	4
Cobalt	**10**		0.74	0.074	mg/Kg		08/22/18 11:50	08/22/18 18:05	4
Copper	**140**		5.6	2.6	mg/Kg		08/22/18 11:50	08/22/18 18:05	4
Lead	**7.3**		1.9	0.39	mg/Kg		08/22/18 11:50	08/22/18 18:05	4
Molybdenum	ND		1.9	0.24	mg/Kg		08/22/18 11:50	08/22/18 18:05	4
Nickel	**4.5**		1.9	0.19	mg/Kg		08/22/18 11:50	08/22/18 18:05	4
Selenium	**0.83**	**J**	3.7	0.56	mg/Kg		08/22/18 11:50	08/22/18 18:05	4
Silver	**0.20**	**J**	0.93	0.19	mg/Kg		08/22/18 11:50	08/22/18 18:05	4
Thallium	**1.2**	**J**	1.9	0.54	mg/Kg		08/22/18 11:50	08/22/18 18:05	4
Vanadium	**120**		1.9	0.25	mg/Kg		08/22/18 11:50	08/22/18 18:05	4
Zinc	**41**		5.6	2.4	mg/Kg		08/22/18 11:50	08/22/18 18:05	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.075**		0.016	0.0024	mg/Kg		08/22/18 11:39	08/27/18 15:48	1

Client Sample ID: DG-D2(3.5-4)

Date Collected: 08/20/18 16:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-5
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.1		1.4	0.23	mg/Kg		08/22/18 11:50	08/22/18 18:09	4
Arsenic	62		2.7	0.23	mg/Kg		08/22/18 11:50	08/22/18 18:09	4
Barium	230	B	1.4	0.19	mg/Kg		08/22/18 11:50	08/22/18 18:09	4
Beryllium	0.35		0.27	0.088	mg/Kg		08/22/18 11:50	08/22/18 18:09	4
Cadmium	0.24	J	0.34	0.034	mg/Kg		08/22/18 11:50	08/22/18 18:09	4
Chromium	56	B	1.4	0.14	mg/Kg		08/22/18 11:50	08/22/18 18:09	4
Cobalt	14		0.54	0.054	mg/Kg		08/22/18 11:50	08/22/18 18:09	4
Copper	58		4.1	1.9	mg/Kg		08/22/18 11:50	08/22/18 18:09	4
Lead	180		1.4	0.29	mg/Kg		08/22/18 11:50	08/22/18 18:09	4
Molybdenum	0.37	J	1.4	0.17	mg/Kg		08/22/18 11:50	08/22/18 18:09	4
Nickel	80		1.4	0.14	mg/Kg		08/22/18 11:50	08/22/18 18:09	4
Selenium	ND		2.7	0.41	mg/Kg		08/22/18 11:50	08/22/18 18:09	4
Silver	0.45	J	0.68	0.14	mg/Kg		08/22/18 11:50	08/22/18 18:09	4
Thallium	0.57	J	1.4	0.39	mg/Kg		08/22/18 11:50	08/22/18 18:09	4
Vanadium	43		1.4	0.19	mg/Kg		08/22/18 11:50	08/22/18 18:09	4
Zinc	170		4.1	1.7	mg/Kg		08/22/18 11:50	08/22/18 18:09	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.014	0.0021	mg/Kg		08/22/18 11:39	08/27/18 15:50	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Client Sample ID: DG-E2(0.5-1)
Date Collected: 08/20/18 16:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-6
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.2		1.9	0.32	mg/Kg		08/22/18 11:50	08/22/18 18:24	4
Arsenic	11		3.8	0.32	mg/Kg		08/22/18 11:50	08/22/18 18:24	4
Barium	94	B	1.9	0.27	mg/Kg		08/22/18 11:50	08/22/18 18:24	4
Beryllium	ND		0.38	0.12	mg/Kg		08/22/18 11:50	08/22/18 18:24	4
Cadmium	1.5		0.48	0.047	mg/Kg		08/22/18 11:50	08/22/18 18:24	4
Chromium	22	B	1.9	0.20	mg/Kg		08/22/18 11:50	08/22/18 18:24	4
Cobalt	12		0.76	0.076	mg/Kg		08/22/18 11:50	08/22/18 18:24	4
Copper	180		5.7	2.7	mg/Kg		08/22/18 11:50	08/22/18 18:24	4
Lead	430		1.9	0.40	mg/Kg		08/22/18 11:50	08/22/18 18:24	4
Molybdenum	1.1	J	1.9	0.24	mg/Kg		08/22/18 11:50	08/22/18 18:24	4
Nickel	18		1.9	0.19	mg/Kg		08/22/18 11:50	08/22/18 18:24	4
Selenium	0.58	J	3.8	0.57	mg/Kg		08/22/18 11:50	08/22/18 18:24	4
Silver	0.53	J	0.95	0.19	mg/Kg		08/22/18 11:50	08/22/18 18:24	4
Thallium	0.78	J	1.9	0.55	mg/Kg		08/22/18 11:50	08/22/18 18:24	4
Vanadium	98		1.9	0.26	mg/Kg		08/22/18 11:50	08/22/18 18:24	4
Zinc	490		5.7	2.4	mg/Kg		08/22/18 11:50	08/22/18 18:24	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.36		0.017	0.0025	mg/Kg		08/22/18 11:39	08/27/18 15:52	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Client Sample ID: DG-E2(3.5-4)
Date Collected: 08/20/18 16:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-7
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.7		1.2	0.20	mg/Kg		08/22/18 11:50	08/22/18 18:28	4
Arsenic	120		2.4	0.20	mg/Kg		08/22/18 11:50	08/22/18 18:28	4
Barium	470	B	1.2	0.17	mg/Kg		08/22/18 11:50	08/22/18 18:28	4
Beryllium	0.12	J	0.24	0.076	mg/Kg		08/22/18 11:50	08/22/18 18:28	4
Cadmium	0.45		0.29	0.029	mg/Kg		08/22/18 11:50	08/22/18 18:28	4
Chromium	21	B	1.2	0.12	mg/Kg		08/22/18 11:50	08/22/18 18:28	4
Cobalt	10		0.47	0.047	mg/Kg		08/22/18 11:50	08/22/18 18:28	4
Copper	330		3.5	1.7	mg/Kg		08/22/18 11:50	08/22/18 18:28	4
Lead	620		1.2	0.25	mg/Kg		08/22/18 11:50	08/22/18 18:28	4
Molybdenum	0.39	J	1.2	0.15	mg/Kg		08/22/18 11:50	08/22/18 18:28	4
Nickel	19		1.2	0.12	mg/Kg		08/22/18 11:50	08/22/18 18:28	4
Selenium	ND		2.4	0.35	mg/Kg		08/22/18 11:50	08/22/18 18:28	4
Silver	1.4		0.59	0.12	mg/Kg		08/22/18 11:50	08/22/18 18:28	4
Thallium	1.0	J	1.2	0.34	mg/Kg		08/22/18 11:50	08/22/18 18:28	4
Vanadium	87		1.2	0.16	mg/Kg		08/22/18 11:50	08/22/18 18:28	4
Zinc	400		3.5	1.5	mg/Kg		08/22/18 11:50	08/22/18 18:28	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.074		0.017	0.0025	mg/Kg		08/22/18 11:39	08/27/18 15:55	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Client Sample ID: DG-F2(0.5-1)
Date Collected: 08/20/18 16:35
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-8
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.0		1.7	0.28	mg/Kg		08/22/18 11:50	08/22/18 18:33	4
Arsenic	18		3.4	0.29	mg/Kg		08/22/18 11:50	08/22/18 18:33	4
Barium	66	B	1.7	0.24	mg/Kg		08/22/18 11:50	08/22/18 18:33	4
Beryllium	ND		0.34	0.11	mg/Kg		08/22/18 11:50	08/22/18 18:33	4
Cadmium	0.82		0.42	0.042	mg/Kg		08/22/18 11:50	08/22/18 18:33	4
Chromium	15	B	1.7	0.18	mg/Kg		08/22/18 11:50	08/22/18 18:33	4
Cobalt	13		0.67	0.067	mg/Kg		08/22/18 11:50	08/22/18 18:33	4
Copper	170		5.0	2.4	mg/Kg		08/22/18 11:50	08/22/18 18:33	4
Lead	130		1.7	0.35	mg/Kg		08/22/18 11:50	08/22/18 18:33	4
Molybdenum	0.84	J	1.7	0.22	mg/Kg		08/22/18 11:50	08/22/18 18:33	4
Nickel	13		1.7	0.17	mg/Kg		08/22/18 11:50	08/22/18 18:33	4
Selenium	0.85	J	3.4	0.50	mg/Kg		08/22/18 11:50	08/22/18 18:33	4
Silver	0.43	J	0.84	0.17	mg/Kg		08/22/18 11:50	08/22/18 18:33	4
Thallium	0.92	J	1.7	0.49	mg/Kg		08/22/18 11:50	08/22/18 18:33	4
Vanadium	110		1.7	0.23	mg/Kg		08/22/18 11:50	08/22/18 18:33	4
Zinc	170		5.0	2.1	mg/Kg		08/22/18 11:50	08/22/18 18:33	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.27		0.017	0.0025	mg/Kg		08/22/18 11:39	08/27/18 16:02	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Client Sample ID: DG-F2(3.5-4)
Date Collected: 08/20/18 16:35
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-9
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.44	J	1.8	0.30	mg/Kg		08/22/18 11:50	08/22/18 18:38	4
Arsenic	82		3.7	0.31	mg/Kg		08/22/18 11:50	08/22/18 18:38	4
Barium	79	B	1.8	0.26	mg/Kg		08/22/18 11:50	08/22/18 18:38	4
Beryllium	ND		0.37	0.12	mg/Kg		08/22/18 11:50	08/22/18 18:38	4
Cadmium	ND		0.46	0.046	mg/Kg		08/22/18 11:50	08/22/18 18:38	4
Chromium	14	B	1.8	0.19	mg/Kg		08/22/18 11:50	08/22/18 18:38	4
Cobalt	13		0.73	0.073	mg/Kg		08/22/18 11:50	08/22/18 18:38	4
Copper	98		5.5	2.6	mg/Kg		08/22/18 11:50	08/22/18 18:38	4
Lead	20		1.8	0.39	mg/Kg		08/22/18 11:50	08/22/18 18:38	4
Molybdenum	0.30	J	1.8	0.23	mg/Kg		08/22/18 11:50	08/22/18 18:38	4
Nickel	11		1.8	0.19	mg/Kg		08/22/18 11:50	08/22/18 18:38	4
Selenium	ND		3.7	0.55	mg/Kg		08/22/18 11:50	08/22/18 18:38	4
Silver	0.21	J	0.92	0.19	mg/Kg		08/22/18 11:50	08/22/18 18:38	4
Thallium	0.98	J	1.8	0.53	mg/Kg		08/22/18 11:50	08/22/18 18:38	4
Vanadium	93		1.8	0.25	mg/Kg		08/22/18 11:50	08/22/18 18:38	4
Zinc	58		5.5	2.3	mg/Kg		08/22/18 11:50	08/22/18 18:38	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.060		0.015	0.0022	mg/Kg		08/22/18 11:39	08/27/18 16:04	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Client Sample ID: DG-G2(0.5-1)
Date Collected: 08/20/18 16:40
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-10
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.8		2.0	0.33	mg/Kg		08/22/18 11:50	08/22/18 18:42	4
Arsenic	320		3.9	0.33	mg/Kg		08/22/18 11:50	08/22/18 18:42	4
Barium	130	B	2.0	0.28	mg/Kg		08/22/18 11:50	08/22/18 18:42	4
Beryllium	ND		0.39	0.13	mg/Kg		08/22/18 11:50	08/22/18 18:42	4
Cadmium	1.6		0.49	0.049	mg/Kg		08/22/18 11:50	08/22/18 18:42	4
Chromium	22	B	2.0	0.21	mg/Kg		08/22/18 11:50	08/22/18 18:42	4
Cobalt	12		0.78	0.078	mg/Kg		08/22/18 11:50	08/22/18 18:42	4
Copper	210		5.9	2.8	mg/Kg		08/22/18 11:50	08/22/18 18:42	4
Lead	440		2.0	0.41	mg/Kg		08/22/18 11:50	08/22/18 18:42	4
Molybdenum	0.67	J	2.0	0.25	mg/Kg		08/22/18 11:50	08/22/18 18:42	4
Nickel	23		2.0	0.20	mg/Kg		08/22/18 11:50	08/22/18 18:42	4
Selenium	0.60	J	3.9	0.59	mg/Kg		08/22/18 11:50	08/22/18 18:42	4
Silver	0.90	J	0.98	0.20	mg/Kg		08/22/18 11:50	08/22/18 18:42	4
Thallium	1.6	J	2.0	0.57	mg/Kg		08/22/18 11:50	08/22/18 18:42	4
Vanadium	68		2.0	0.27	mg/Kg		08/22/18 11:50	08/22/18 18:42	4
Zinc	360		5.9	2.5	mg/Kg		08/22/18 11:50	08/22/18 18:42	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.42		0.014	0.0021	mg/Kg		08/22/18 11:39	08/27/18 16:06	1

Client Sample ID: DG-G2(3.5-4)

Date Collected: 08/20/18 16:40
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-11

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	110		4.9	0.81	mg/Kg		08/22/18 11:50	08/29/18 13:52	10
Arsenic	39		9.7	0.83	mg/Kg		08/22/18 11:50	08/29/18 13:52	10
Barium	1700	B	1.9	0.28	mg/Kg		08/22/18 11:50	08/22/18 18:47	4
Beryllium	0.82		0.39	0.13	mg/Kg		08/22/18 11:50	08/22/18 18:47	4
Cadmium	1.7		1.2	0.12	mg/Kg		08/22/18 11:50	08/29/18 13:52	10
Chromium	52	B	4.9	0.51	mg/Kg		08/22/18 11:50	08/29/18 13:52	10
Cobalt	9.0		1.9	0.19	mg/Kg		08/22/18 11:50	08/29/18 13:52	10
Copper	620		15	6.9	mg/Kg		08/22/18 11:50	08/29/18 13:52	10
Lead	8800		4.9	1.0	mg/Kg		08/22/18 11:50	08/29/18 13:52	10
Molybdenum	2.8		1.9	0.25	mg/Kg		08/22/18 11:50	08/22/18 18:47	4
Nickel	45		4.9	0.50	mg/Kg		08/22/18 11:50	08/29/18 13:52	10
Selenium	2.3	J	9.7	1.5	mg/Kg		08/22/18 11:50	08/29/18 13:52	10
Silver	5.2		2.4	0.49	mg/Kg		08/22/18 11:50	08/29/18 13:52	10
Thallium	1.8	J	4.9	1.4	mg/Kg		08/22/18 11:50	08/29/18 13:52	10
Vanadium	38		4.9	0.66	mg/Kg		08/22/18 11:50	08/29/18 13:52	10
Zinc	2600		15	6.2	mg/Kg		08/22/18 11:50	08/29/18 13:52	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.69		0.015	0.0021	mg/Kg		08/22/18 11:39	08/27/18 16:09	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Client Sample ID: DG-H2(0.5-1)

Date Collected: 08/20/18 16:55
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-12

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.3	J B	1.6	0.27	mg/Kg		08/23/18 12:48	08/24/18 20:41	4
Arsenic	180		3.3	0.28	mg/Kg		08/23/18 12:48	08/24/18 20:41	4
Barium	140		1.6	0.23	mg/Kg		08/23/18 12:48	08/24/18 20:41	4
Beryllium	0.39		0.33	0.11	mg/Kg		08/23/18 12:48	08/24/18 20:41	4
Cadmium	0.11	J	0.41	0.040	mg/Kg		08/23/18 12:48	08/24/18 20:41	4
Chromium	41		1.6	0.17	mg/Kg		08/23/18 12:48	08/24/18 20:41	4
Cobalt	9.5		0.65	0.065	mg/Kg		08/23/18 12:48	08/24/18 20:41	4
Copper	120		4.9	2.3	mg/Kg		08/23/18 12:48	08/24/18 20:41	4
Lead	140		1.6	0.34	mg/Kg		08/23/18 12:48	08/24/18 20:41	4
Molybdenum	0.51	J	1.6	0.21	mg/Kg		08/23/18 12:48	08/24/18 20:41	4
Nickel	33		1.6	0.17	mg/Kg		08/23/18 12:48	08/24/18 20:41	4
Selenium	0.66	J	3.3	0.49	mg/Kg		08/23/18 12:48	08/24/18 20:41	4
Silver	ND		0.81	0.16	mg/Kg		08/23/18 12:48	08/24/18 20:41	4
Thallium	ND		1.6	0.47	mg/Kg		08/23/18 12:48	08/24/18 20:41	4
Vanadium	37		1.6	0.22	mg/Kg		08/23/18 12:48	08/24/18 20:41	4
Zinc	110		4.9	2.1	mg/Kg		08/23/18 12:48	08/24/18 20:41	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10		0.017	0.0025	mg/Kg		08/23/18 10:11	08/24/18 16:20	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Client Sample ID: DG-H2(3.5-4)
Date Collected: 08/20/18 16:55
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-13
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	9.4		1.7	0.28	mg/Kg		08/22/18 15:58	08/23/18 20:54	4
Arsenic	49		3.4	0.29	mg/Kg		08/22/18 15:58	08/23/18 20:54	4
Barium	590		1.7	0.24	mg/Kg		08/22/18 15:58	08/23/18 20:54	4
Beryllium	0.24	J	0.34	0.11	mg/Kg		08/22/18 15:58	08/23/18 20:54	4
Cadmium	1.8		0.43	0.042	mg/Kg		08/22/18 15:58	08/23/18 20:54	4
Chromium	170		1.7	0.18	mg/Kg		08/22/18 15:58	08/23/18 20:54	4
Cobalt	17		0.68	0.068	mg/Kg		08/22/18 15:58	08/23/18 20:54	4
Copper	270		5.1	2.4	mg/Kg		08/22/18 15:58	08/23/18 20:54	4
Lead	1300		1.7	0.36	mg/Kg		08/22/18 15:58	08/23/18 20:54	4
Molybdenum	1.5	J	1.7	0.22	mg/Kg		08/22/18 15:58	08/23/18 20:54	4
Nickel	110		1.7	0.17	mg/Kg		08/22/18 15:58	08/23/18 20:54	4
Selenium	ND		3.4	0.51	mg/Kg		08/22/18 15:58	08/23/18 20:54	4
Silver	4.6		0.85	0.17	mg/Kg		08/22/18 15:58	08/23/18 20:54	4
Thallium	ND		1.7	0.50	mg/Kg		08/22/18 15:58	08/23/18 20:54	4
Vanadium	59		1.7	0.23	mg/Kg		08/22/18 15:58	08/23/18 20:54	4
Zinc	1100		5.1	2.2	mg/Kg		08/22/18 15:58	08/23/18 20:54	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.9		0.15	0.023	mg/Kg		08/23/18 10:11	08/24/18 16:22	10

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(45-131)	(60-140)	(58-140)
720-88163-1	DG-01(0.05-1)	91	118	96
720-88163-2	DG-D1(3.5-4)	91	114	98
720-88163-3	DG-D1(9.5-10)	96	117	100
LCS 720-250216/5	Lab Control Sample	103	99	101
LCS 720-250216/7	Lab Control Sample	102	102	102
LCSD 720-250216/6	Lab Control Sample Dup	99	99	100
LCSD 720-250216/8	Lab Control Sample Dup	102	104	103
MB 720-250216/4	Method Blank	99	103	101

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		FBP	TPHL
Lab Sample ID	Client Sample ID	(33-120)	(35-146)
720-88156-A-5-C MS	Matrix Spike	51	13 X
720-88156-A-5-D MSD	Matrix Spike Duplicate	41	5 X
720-88163-1	DG-01(0.05-1)	77	95
720-88163-2	DG-D1(3.5-4)	65	98
720-88163-3	DG-D1(9.5-10)	65	88
LCS 720-249979/2-A	Lab Control Sample	75	94
MB 720-249979/1-A	Method Blank	84	102

Surrogate Legend

FBP = 2-Fluorobiphenyl
TPHL = Terphenyl-d14

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TPH1
Lab Sample ID	Client Sample ID	(40-130)
720-88163-1	DG-01(0.05-1)	0 D X
720-88163-2	DG-D1(3.5-4)	88
720-88163-3	DG-D1(9.5-10)	86
720-88164-E-1-A MS	Matrix Spike	98
720-88164-E-1-B MSD	Matrix Spike Duplicate	88
LCS 720-249957/2-A	Lab Control Sample	108
MB 720-249957/1-A	Method Blank	103

Surrogate Legend

TPH = p-Terphenyl

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP1 (21-136)	TCX1 (21-145)
720-88162-D-16-I MS	Matrix Spike	128	82
720-88163-1	DG-01(0.05-1)	78	80
720-88163-3	DG-D1(9.5-10)	77 p	82

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX2 (21-145)
720-88162-D-16-J MSD	Matrix Spike Duplicate	138 X	90
720-88163-2	DG-D1(3.5-4)	107	87

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP1 (21-136)	TCX2 (21-145)
LCS 720-250005/2-A	Lab Control Sample	95	78
MB 720-250005/1-A	Method Blank	94	74

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX1 (14-128)	DCBP1 (10-132)
240-100238-A-6-C MS	Matrix Spike	52	64
240-100238-A-6-D MSD	Matrix Spike Duplicate	33	51
720-88163-1	DG-01(0.05-1)	74	78
720-88163-2	DG-D1(3.5-4)	77	90
720-88163-3	DG-D1(9.5-10)	73	81
LCS 240-342371/20-A	Lab Control Sample	73	78
MB 240-342371/19-A	Method Blank	64	83

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-250216/4
Matrix: Solid
Analysis Batch: 250216

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/25/18 09:57	1
Acetone	ND		50	38	ug/Kg			08/25/18 09:57	1
Benzene	ND		5.0	0.65	ug/Kg			08/25/18 09:57	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/25/18 09:57	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/25/18 09:57	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/25/18 09:57	1
Bromoform	ND		5.0	2.0	ug/Kg			08/25/18 09:57	1
Bromomethane	ND		10	0.79	ug/Kg			08/25/18 09:57	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/25/18 09:57	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/25/18 09:57	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/25/18 09:57	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/25/18 09:57	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/25/18 09:57	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/25/18 09:57	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/25/18 09:57	1
Chloroethane	ND		10	0.56	ug/Kg			08/25/18 09:57	1
Chloroform	ND		5.0	0.66	ug/Kg			08/25/18 09:57	1
Chloromethane	ND		10	0.79	ug/Kg			08/25/18 09:57	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/25/18 09:57	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/25/18 09:57	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/25/18 09:57	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/25/18 09:57	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/25/18 09:57	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/25/18 09:57	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/25/18 09:57	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/25/18 09:57	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/25/18 09:57	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/25/18 09:57	1
Dibromomethane	ND		10	0.86	ug/Kg			08/25/18 09:57	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/25/18 09:57	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/25/18 09:57	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/25/18 09:57	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/25/18 09:57	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/25/18 09:57	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/25/18 09:57	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/25/18 09:57	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/25/18 09:57	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/25/18 09:57	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/25/18 09:57	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/25/18 09:57	1
2-Hexanone	ND		50	10	ug/Kg			08/25/18 09:57	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/25/18 09:57	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/25/18 09:57	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/25/18 09:57	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/25/18 09:57	1
Naphthalene	ND		10	1.5	ug/Kg			08/25/18 09:57	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/25/18 09:57	1
Styrene	ND		5.0	0.63	ug/Kg			08/25/18 09:57	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250216/4
Matrix: Solid
Analysis Batch: 250216

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/25/18 09:57	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/25/18 09:57	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/25/18 09:57	1
Toluene	ND		5.0	0.71	ug/Kg			08/25/18 09:57	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/25/18 09:57	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/25/18 09:57	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/25/18 09:57	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/25/18 09:57	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/25/18 09:57	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/25/18 09:57	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/25/18 09:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/25/18 09:57	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/25/18 09:57	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/25/18 09:57	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/25/18 09:57	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/25/18 09:57	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/25/18 09:57	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/25/18 09:57	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/25/18 09:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*45 - 131*		*08/25/18 09:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*		*08/25/18 09:57*	*1*
Toluene-d8 (Surr)	*101*		*58 - 140*		*08/25/18 09:57*	*1*

Lab Sample ID: LCS 720-250216/5
Matrix: Solid
Analysis Batch: 250216

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	53.3		ug/Kg		107	70 - 144
Acetone	250	223		ug/Kg		89	30 - 162
Benzene	50.0	51.4		ug/Kg		103	70 - 130
Dichlorobromomethane	50.0	51.3		ug/Kg		103	70 - 140
Bromobenzene	50.0	47.6		ug/Kg		95	70 - 130
Chlorobromomethane	50.0	53.3		ug/Kg		107	70 - 130
Bromoform	50.0	52.3		ug/Kg		105	59 - 158
Bromomethane	50.0	47.5		ug/Kg		95	59 - 132
2-Butanone (MEK)	250	235		ug/Kg		94	59 - 159
n-Butylbenzene	50.0	51.8		ug/Kg		104	70 - 142
sec-Butylbenzene	50.0	51.8		ug/Kg		104	70 - 136
tert-Butylbenzene	50.0	49.9		ug/Kg		100	70 - 130
Carbon disulfide	50.0	65.9		ug/Kg		132	60 - 140
Carbon tetrachloride	50.0	54.3		ug/Kg		109	70 - 142
Chlorobenzene	50.0	50.2		ug/Kg		100	70 - 130
Chloroethane	50.0	45.1		ug/Kg		90	65 - 130
Chloroform	50.0	51.3		ug/Kg		103	77 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250216/5
Matrix: Solid
Analysis Batch: 250216

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	41.9		ug/Kg		84	55 - 140
2-Chlorotoluene	50.0	49.8		ug/Kg		100	70 - 138
4-Chlorotoluene	50.0	50.8		ug/Kg		102	70 - 136
Chlorodibromomethane	50.0	52.3		ug/Kg		105	70 - 146
1,2-Dichlorobenzene	50.0	48.4		ug/Kg		97	70 - 130
1,3-Dichlorobenzene	50.0	49.3		ug/Kg		99	70 - 131
1,4-Dichlorobenzene	50.0	49.2		ug/Kg		98	70 - 130
1,3-Dichloropropane	50.0	50.8		ug/Kg		102	70 - 140
1,1-Dichloropropene	50.0	53.3		ug/Kg		107	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	50.5		ug/Kg		101	60 - 145
Ethylene Dibromide	50.0	52.8		ug/Kg		106	70 - 140
Dibromomethane	50.0	51.1		ug/Kg		102	70 - 139
Dichlorodifluoromethane	50.0	34.4		ug/Kg		69	37 - 158
1,1-Dichloroethane	50.0	53.3		ug/Kg		107	70 - 130
1,2-Dichloroethane	50.0	51.1		ug/Kg		102	70 - 130
1,1-Dichloroethene	50.0	58.1		ug/Kg		116	74 - 122
cis-1,2-Dichloroethene	50.0	52.8		ug/Kg		106	70 - 138
trans-1,2-Dichloroethene	50.0	56.3		ug/Kg		113	67 - 130
1,2-Dichloropropane	50.0	53.2		ug/Kg		106	73 - 127
cis-1,3-Dichloropropene	50.0	55.5		ug/Kg		111	68 - 147
trans-1,3-Dichloropropene	50.0	54.1		ug/Kg		108	70 - 155
Ethylbenzene	50.0	52.5		ug/Kg		105	80 - 137
Hexachlorobutadiene	50.0	47.4		ug/Kg		95	70 - 132
2-Hexanone	250	256		ug/Kg		102	62 - 158
Isopropylbenzene	50.0	51.4		ug/Kg		103	70 - 130
4-Isopropyltoluene	50.0	51.7		ug/Kg		103	70 - 133
Methylene Chloride	50.0	51.5		ug/Kg		103	70 - 134
4-Methyl-2-pentanone (MIBK)	250	259		ug/Kg		104	60 - 160
Naphthalene	50.0	48.3		ug/Kg		97	60 - 147
N-Propylbenzene	50.0	51.7		ug/Kg		103	70 - 130
Styrene	50.0	51.1		ug/Kg		102	70 - 130
1,1,1,2-Tetrachloroethane	50.0	51.8		ug/Kg		104	70 - 130
1,1,2,2-Tetrachloroethane	50.0	50.0		ug/Kg		100	70 - 146
Tetrachloroethene	50.0	51.8		ug/Kg		104	70 - 132
Toluene	50.0	50.3		ug/Kg		101	75 - 120
1,2,3-Trichlorobenzene	50.0	47.7		ug/Kg		95	60 - 140
1,2,4-Trichlorobenzene	50.0	49.1		ug/Kg		98	60 - 140
1,1,1-Trichloroethane	50.0	52.7		ug/Kg		105	70 - 130
1,1,2-Trichloroethane	50.0	52.7		ug/Kg		105	70 - 130
Trichloroethene	50.0	50.1		ug/Kg		100	70 - 133
Trichlorofluoromethane	50.0	50.7		ug/Kg		101	60 - 140
1,2,3-Trichloropropane	50.0	49.4		ug/Kg		99	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	63.0		ug/Kg		126	60 - 140
1,2,4-Trimethylbenzene	50.0	50.7		ug/Kg		101	70 - 130
1,3,5-Trimethylbenzene	50.0	50.7		ug/Kg		101	70 - 131
Vinyl acetate	50.0	51.1		ug/Kg		102	38 - 176
Vinyl chloride	50.0	44.8		ug/Kg		90	58 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250216/5
Matrix: Solid
Analysis Batch: 250216

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	50.0	51.5		ug/Kg		103	70 - 146
o-Xylene	50.0	52.0		ug/Kg		104	70 - 140
2,2-Dichloropropane	50.0	56.0		ug/Kg		112	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*99*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: LCS 720-250216/7
Matrix: Solid
Analysis Batch: 250216

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1020		ug/Kg		102	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*102*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: LCSD 720-250216/6
Matrix: Solid
Analysis Batch: 250216

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	53.3		ug/Kg		107	70 - 144	0	20
Acetone	250	223		ug/Kg		89	30 - 162	0	30
Benzene	50.0	50.8		ug/Kg		102	70 - 130	1	20
Dichlorobromomethane	50.0	52.1		ug/Kg		104	70 - 140	1	20
Bromobenzene	50.0	47.9		ug/Kg		96	70 - 130	1	20
Chlorobromomethane	50.0	52.7		ug/Kg		105	70 - 130	1	20
Bromoform	50.0	50.4		ug/Kg		101	59 - 158	4	20
Bromomethane	50.0	47.6		ug/Kg		95	59 - 132	0	20
2-Butanone (MEK)	250	239		ug/Kg		96	59 - 159	2	20
n-Butylbenzene	50.0	51.9		ug/Kg		104	70 - 142	0	20
sec-Butylbenzene	50.0	51.5		ug/Kg		103	70 - 136	1	20
tert-Butylbenzene	50.0	50.1		ug/Kg		100	70 - 130	0	20
Carbon disulfide	50.0	64.7		ug/Kg		129	60 - 140	2	20
Carbon tetrachloride	50.0	53.9		ug/Kg		108	70 - 142	1	20
Chlorobenzene	50.0	48.5		ug/Kg		97	70 - 130	4	20
Chloroethane	50.0	45.7		ug/Kg		91	65 - 130	1	20
Chloroform	50.0	51.5		ug/Kg		103	77 - 127	0	20
Chloromethane	50.0	41.6		ug/Kg		83	55 - 140	1	20
2-Chlorotoluene	50.0	50.0		ug/Kg		100	70 - 138	0	20
4-Chlorotoluene	50.0	50.6		ug/Kg		101	70 - 136	0	20
Chlorodibromomethane	50.0	52.9		ug/Kg		106	70 - 146	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250216/6
Matrix: Solid
Analysis Batch: 250216

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene			50.0	48.7		ug/Kg		97	70 - 130	0	20
1,3-Dichlorobenzene			50.0	49.0		ug/Kg		98	70 - 131	1	20
1,4-Dichlorobenzene			50.0	48.8		ug/Kg		98	70 - 130	1	20
1,3-Dichloropropane			50.0	49.9		ug/Kg		100	70 - 140	2	20
1,1-Dichloropropene			50.0	52.6		ug/Kg		105	70 - 130	1	20
1,2-Dibromo-3-Chloropropane			50.0	50.7		ug/Kg		101	60 - 145	0	20
Ethylene Dibromide			50.0	52.6		ug/Kg		105	70 - 140	0	20
Dibromomethane			50.0	50.9		ug/Kg		102	70 - 139	0	20
Dichlorodifluoromethane			50.0	33.7		ug/Kg		67	37 - 158	2	20
1,1-Dichloroethane			50.0	52.9		ug/Kg		106	70 - 130	1	20
1,2-Dichloroethane			50.0	51.0		ug/Kg		102	70 - 130	0	20
1,1-Dichloroethene			50.0	57.4		ug/Kg		115	74 - 122	1	20
cis-1,2-Dichloroethene			50.0	52.3		ug/Kg		105	70 - 138	1	20
trans-1,2-Dichloroethene			50.0	55.4		ug/Kg		111	67 - 130	2	20
1,2-Dichloropropane			50.0	52.9		ug/Kg		106	73 - 127	1	20
cis-1,3-Dichloropropene			50.0	55.1		ug/Kg		110	68 - 147	1	20
trans-1,3-Dichloropropene			50.0	53.3		ug/Kg		107	70 - 155	1	20
Ethylbenzene			50.0	50.1		ug/Kg		100	80 - 137	5	20
Hexachlorobutadiene			50.0	48.6		ug/Kg		97	70 - 132	2	20
2-Hexanone			250	259		ug/Kg		103	62 - 158	1	20
Isopropylbenzene			50.0	49.5		ug/Kg		99	70 - 130	4	20
4-Isopropyltoluene			50.0	51.8		ug/Kg		104	70 - 133	0	20
Methylene Chloride			50.0	51.6		ug/Kg		103	70 - 134	0	20
4-Methyl-2-pentanone (MIBK)			250	262		ug/Kg		105	60 - 160	1	20
Naphthalene			50.0	49.3		ug/Kg		99	60 - 147	2	20
N-Propylbenzene			50.0	51.6		ug/Kg		103	70 - 130	0	20
Styrene			50.0	49.6		ug/Kg		99	70 - 130	3	20
1,1,1,2-Tetrachloroethane			50.0	50.2		ug/Kg		100	70 - 130	3	20
1,1,2,2-Tetrachloroethane			50.0	49.4		ug/Kg		99	70 - 146	1	20
Tetrachloroethene			50.0	50.9		ug/Kg		102	70 - 132	2	20
Toluene			50.0	48.4		ug/Kg		97	75 - 120	4	20
1,2,3-Trichlorobenzene			50.0	49.1		ug/Kg		98	60 - 140	3	20
1,2,4-Trichlorobenzene			50.0	49.9		ug/Kg		100	60 - 140	2	20
1,1,1-Trichloroethane			50.0	52.4		ug/Kg		105	70 - 130	1	20
1,1,2-Trichloroethane			50.0	52.2		ug/Kg		104	70 - 130	1	20
Trichloroethene			50.0	49.6		ug/Kg		99	70 - 133	1	20
Trichlorofluoromethane			50.0	51.4		ug/Kg		103	60 - 140	1	20
1,2,3-Trichloropropane			50.0	49.6		ug/Kg		99	70 - 146	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	62.8		ug/Kg		126	60 - 140	0	20
1,2,4-Trimethylbenzene			50.0	50.8		ug/Kg		102	70 - 130	0	20
1,3,5-Trimethylbenzene			50.0	50.6		ug/Kg		101	70 - 131	0	20
Vinyl acetate			50.0	53.3		ug/Kg		107	38 - 176	4	20
Vinyl chloride			50.0	44.0		ug/Kg		88	58 - 125	2	20
m-Xylene & p-Xylene			50.0	49.6		ug/Kg		99	70 - 146	4	20
o-Xylene			50.0	50.0		ug/Kg		100	70 - 140	4	20
2,2-Dichloropropane			50.0	55.3		ug/Kg		111	70 - 162	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250216/6
Matrix: Solid
Analysis Batch: 250216

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*99*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCSD 720-250216/8
Matrix: Solid
Analysis Batch: 250216

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1040		ug/Kg		104	70 - 122	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*102*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*104*		*60 - 140*
Toluene-d8 (Surr)	*103*		*58 - 140*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 720-249979/1-A
Matrix: Solid
Analysis Batch: 250076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249979

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Anthracene	ND		5.0	2.0	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Chrysene	ND		5.0	1.4	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Fluorene	ND		5.0	2.2	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Pyrene	ND		5.0	1.7	ug/Kg		08/22/18 12:41	08/23/18 15:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	*84*		*33 - 120*	*08/22/18 12:41*	*08/23/18 15:59*	*1*
Terphenyl-d14	*102*		*35 - 146*	*08/22/18 12:41*	*08/23/18 15:59*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 720-249979/2-A
Matrix: Solid
Analysis Batch: 250076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249979

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	1330	1030		ug/Kg		77	46 - 110
Acenaphthene	667	527		ug/Kg		79	46 - 106
Acenaphthylene	667	494		ug/Kg		74	46 - 108
Anthracene	667	548		ug/Kg		82	55 - 103
Benzo[a]anthracene	667	597		ug/Kg		89	54 - 110
Benzo[a]pyrene	667	598		ug/Kg		90	62 - 111
Benzo[b]fluoranthene	667	618		ug/Kg		93	60 - 109
Benzo[g,h,i]perylene	667	624		ug/Kg		94	52 - 114
Benzo[k]fluoranthene	667	606		ug/Kg		91	58 - 109
Chrysene	667	560		ug/Kg		84	54 - 108
Dibenz(a,h)anthracene	667	631		ug/Kg		95	58 - 112
Fluoranthene	667	591		ug/Kg		89	59 - 109
Fluorene	667	547		ug/Kg		82	52 - 106
Indeno[1,2,3-cd]pyrene	667	677		ug/Kg		102	55 - 120
Naphthalene	667	499		ug/Kg		75	49 - 110
Phenanthrene	667	564		ug/Kg		85	57 - 110
Pyrene	667	595		ug/Kg		89	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*33 - 120*
Terphenyl-d14	*94*		*35 - 146*

Lab Sample ID: 720-88156-A-5-C MS
Matrix: Solid
Analysis Batch: 250076

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 249979

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	ND	F1	1310	567	F1	ug/Kg		43	46 - 110
Acenaphthene	ND	F1	655	386		ug/Kg		59	46 - 106
Acenaphthylene	34	F2 F1	655	257	F1	ug/Kg		34	46 - 108
Anthracene	ND	F2 F1	655	66.5	F1	ug/Kg		10	55 - 103
Benzo[a]anthracene	ND	F2 F1	655	16.8	J F1	ug/Kg		3	54 - 110
Benzo[a]pyrene	ND	F1	655	11.6	J F1	ug/Kg		2	62 - 111
Benzo[b]fluoranthene	ND	F2 F1	655	15.6	J F1	ug/Kg		2	60 - 109
Benzo[g,h,i]perylene	ND	F1	655	ND	F1	ug/Kg		0	52 - 114
Benzo[k]fluoranthene	ND	F2 F1	655	12.1	J F1	ug/Kg		2	58 - 109
Chrysene	ND	F1	655	11.3	J F1	ug/Kg		2	54 - 108
Dibenz(a,h)anthracene	ND	F1	655	ND	F1	ug/Kg		0	58 - 112
Fluoranthene	ND	F2 F1	655	65.7	F1	ug/Kg		10	59 - 109
Fluorene	ND	F2 F1	655	265	F1	ug/Kg		40	52 - 106
Indeno[1,2,3-cd]pyrene	ND	F1	655	ND	F1	ug/Kg		0	55 - 120
Naphthalene	ND	F1	655	370		ug/Kg		57	49 - 110
Phenanthrene	ND	F2 F1	655	107	F1	ug/Kg		16	57 - 110
Pyrene	ND	F2 F1	655	53.6	F1	ug/Kg		8	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*51*		*33 - 120*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88156-A-5-C MS
Matrix: Solid
Analysis Batch: 250076

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 249979

Surrogate	MS %Recovery	MS Qualifier	Limits
Terphenyl-d14	13	X	35 - 146

Lab Sample ID: 720-88156-A-5-D MSD
Matrix: Solid
Analysis Batch: 250076

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 249979

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	ND	F1	1310	401	F1	ug/Kg		31	46 - 110	34	35
Acenaphthene	ND	F1	654	293	F1	ug/Kg		45	46 - 106	27	35
Acenaphthylene	34	F2 F1	654	164	F2 F1	ug/Kg		20	46 - 108	44	35
Anthracene	ND	F2 F1	654	26.6	F2 F1	ug/Kg		4	55 - 103	86	35
Benzo[a]anthracene	ND	F2 F1	654	9.21	J F2 F1	ug/Kg		1	54 - 110	58	35
Benzo[a]pyrene	ND	F1	654	8.44	J F1	ug/Kg		1	62 - 111	31	35
Benzo[b]fluoranthene	ND	F2 F1	654	9.69	J F2 F1	ug/Kg		1	60 - 109	47	35
Benzo[g,h,i]perylene	ND	F1	654	ND	F1	ug/Kg		0	52 - 114	NC	35
Benzo[k]fluoranthene	ND	F2 F1	654	8.21	J F2 F1	ug/Kg		1	58 - 109	39	35
Chrysene	ND	F1	654	ND	F1	ug/Kg		0	54 - 108	NC	35
Dibenz(a,h)anthracene	ND	F1	654	ND	F1	ug/Kg		0	58 - 112	NC	35
Fluoranthene	ND	F2 F1	654	26.7	F2 F1	ug/Kg		4	59 - 109	84	35
Fluorene	ND	F2 F1	654	140	F2 F1	ug/Kg		21	52 - 106	62	35
Indeno[1,2,3-cd]pyrene	ND	F1	654	ND	F1	ug/Kg		0	55 - 120	NC	35
Naphthalene	ND	F1	654	276	F1	ug/Kg		42	49 - 110	29	35
Phenanthrene	ND	F2 F1	654	43.9	F2 F1	ug/Kg		7	57 - 110	84	35
Pyrene	ND	F2 F1	654	22.6	F2 F1	ug/Kg		3	50 - 120	81	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	41		33 - 120
Terphenyl-d14	5	X	35 - 146

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-249957/1-A
Matrix: Solid
Analysis Batch: 250036

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249957

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/22/18 09:40	08/23/18 11:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	103		40 - 130	08/22/18 09:40	08/23/18 11:34	1

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 720-249957/2-A
Matrix: Solid
Analysis Batch: 250037

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249957

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			167000	161000		ug/Kg		97	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*108*		*40 - 130*

Lab Sample ID: 720-88164-E-1-A MS
Matrix: Solid
Analysis Batch: 250037

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 249957

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	160000		161000	293000		ug/Kg		85	50 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*98*		*40 - 130*

Lab Sample ID: 720-88164-E-1-B MSD
Matrix: Solid
Analysis Batch: 250037

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 249957

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	160000		161000	316000		ug/Kg		99	50 - 150	8	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*88*		*40 - 130*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-250005/1-A
Matrix: Solid
Analysis Batch: 250125

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250005

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Aldrin	ND		2.0	0.50	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/22/18 15:45	08/24/18 04:02	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 720-250005/1-A
Matrix: Solid
Analysis Batch: 250125

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250005

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin	ND		2.0	0.46	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Toxaphene	ND		40	6.8	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/22/18 15:45	08/24/18 04:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*94*		*21 - 136*	*08/22/18 15:45*	*08/24/18 04:02*	*1*
Tetrachloro-m-xylene	*74*		*21 - 145*	*08/22/18 15:45*	*08/24/18 04:02*	*1*

Lab Sample ID: LCS 720-250005/2-A
Matrix: Solid
Analysis Batch: 250125

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250005

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	15.8		ug/Kg		95	75 - 128
4,4'-DDE	16.7	15.5		ug/Kg		93	76 - 126
4,4'-DDT	16.7	15.3		ug/Kg		92	63 - 127
Aldrin	16.7	12.7		ug/Kg		76	65 - 120
alpha-BHC	16.7	9.99		ug/Kg		60	46 - 122
beta-BHC	16.7	15.4		ug/Kg		92	78 - 136
cis-Chlordane	16.7	14.9		ug/Kg		90	70 - 120
delta-BHC	16.7	13.1		ug/Kg		79	43 - 125
Dieldrin	16.7	15.1		ug/Kg		90	72 - 120
Endosulfan I	16.7	15.0		ug/Kg		90	62 - 120
Endosulfan II	16.7	16.3		ug/Kg		98	65 - 120
Endosulfan sulfate	16.7	15.0		ug/Kg		90	72 - 121
Endrin	16.7	16.5		ug/Kg		99	68 - 120
Endrin aldehyde	16.7	16.1		ug/Kg		97	68 - 120
Endrin ketone	16.7	16.4		ug/Kg		98	75 - 136
gamma-BHC (Lindane)	16.7	13.9		ug/Kg		83	72 - 120
Heptachlor	16.7	14.7		ug/Kg		88	69 - 120
Heptachlor epoxide	16.7	15.0		ug/Kg		90	68 - 120
Methoxychlor	16.7	16.8		ug/Kg		101	71 - 132
trans-Chlordane	16.7	14.8		ug/Kg		89	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*95*		*21 - 136*
Tetrachloro-m-xylene	*78*		*21 - 145*

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88162-D-16-I MS
Matrix: Solid
Analysis Batch: 250125

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250005

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND	F1	16.4	21.6	F1	ug/Kg		132	40 - 120
4,4'-DDE	ND		16.4	17.8		ug/Kg		109	40 - 120
4,4'-DDT	ND		16.4	19.4		ug/Kg		118	17 - 144
Aldrin	ND		16.4	15.9		ug/Kg		97	53 - 120
alpha-BHC	ND		16.4	12.5		ug/Kg		76	40 - 120
beta-BHC	ND		16.4	17.6		ug/Kg		107	40 - 120
cis-Chlordane	ND		16.4	17.9		ug/Kg		109	40 - 120
delta-BHC	ND		16.4	15.6		ug/Kg		95	40 - 120
Dieldrin	ND		16.4	18.2		ug/Kg		111	46 - 130
Endosulfan I	ND		16.4	19.1		ug/Kg		117	40 - 120
Endosulfan II	ND	F1	16.4	21.4	F1	ug/Kg		131	40 - 120
Endosulfan sulfate	ND	F1	16.4	22.1	F1	ug/Kg		135	40 - 120
Endrin	ND		16.4	20.1		ug/Kg		122	32 - 143
Endrin aldehyde	ND	F1	16.4	19.7		ug/Kg		120	40 - 120
Endrin ketone	ND	F1	16.4	22.5	F1	ug/Kg		137	40 - 120
gamma-BHC (Lindane)	ND		16.4	17.3		ug/Kg		106	58 - 120
Heptachlor	ND		16.4	17.1		ug/Kg		104	52 - 120
Heptachlor epoxide	ND		16.4	17.4		ug/Kg		106	40 - 120
Methoxychlor	ND	F1	16.4	21.9	F1	ug/Kg		133	40 - 120
trans-Chlordane	ND	F1	16.4	19.1		ug/Kg		117	40 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*128*		*21 - 136*
Tetrachloro-m-xylene	*82*		*21 - 145*

Lab Sample ID: 720-88162-D-16-J MSD
Matrix: Solid
Analysis Batch: 250125

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250005

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND	F1	16.5	21.3	F1	ug/Kg		129	40 - 120	2	20
4,4'-DDE	ND		16.5	18.5		ug/Kg		112	40 - 120	4	20
4,4'-DDT	ND		16.5	20.2		ug/Kg		122	17 - 144	4	20
Aldrin	ND		16.5	16.7		ug/Kg		101	53 - 120	5	20
alpha-BHC	ND		16.5	13.0		ug/Kg		79	40 - 120	4	20
beta-BHC	ND		16.5	18.2		ug/Kg		111	40 - 120	4	20
cis-Chlordane	ND		16.5	18.5		ug/Kg		112	40 - 120	3	20
delta-BHC	ND		16.5	16.4		ug/Kg		99	40 - 120	5	20
Dieldrin	ND		16.5	19.1		ug/Kg		115	46 - 130	4	20
Endosulfan I	ND		16.5	18.8		ug/Kg		114	40 - 120	2	20
Endosulfan II	ND	F1	16.5	21.8	F1	ug/Kg		132	40 - 120	2	30
Endosulfan sulfate	ND	F1	16.5	22.3	F1	ug/Kg		135	40 - 120	1	20
Endrin	ND		16.5	21.0		ug/Kg		127	32 - 143	4	20
Endrin aldehyde	ND	F1	16.5	20.4	F1	ug/Kg		123	40 - 120	3	20
Endrin ketone	ND	F1	16.5	21.4	F1	ug/Kg		130	40 - 120	5	20
gamma-BHC (Lindane)	ND		16.5	18.5		ug/Kg		112	58 - 120	7	20
Heptachlor	ND		16.5	18.0		ug/Kg		109	52 - 120	5	20
Heptachlor epoxide	ND		16.5	18.0		ug/Kg		109	40 - 120	4	20

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88162-D-16-J MSD
Matrix: Solid
Analysis Batch: 250125

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250005

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methoxychlor	ND	F1	16.5	24.2	F1	ug/Kg		147	40 - 120	10	20
trans-Chlordane	ND	F1	16.5	18.7	p	ug/Kg		114	40 - 120	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*138*	*X*	*21 - 136*
Tetrachloro-m-xylene	*90*		*21 - 145*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-342371/19-A
Matrix: Solid
Analysis Batch: 342551

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 342371

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/24/18 08:44	08/27/18 20:42	1
Aroclor-1221	ND		50	24	ug/Kg		08/24/18 08:44	08/27/18 20:42	1
Aroclor-1232	ND		50	23	ug/Kg		08/24/18 08:44	08/27/18 20:42	1
Aroclor-1242	ND		50	19	ug/Kg		08/24/18 08:44	08/27/18 20:42	1
Aroclor-1248	ND		50	24	ug/Kg		08/24/18 08:44	08/27/18 20:42	1
Aroclor-1254	ND		50	23	ug/Kg		08/24/18 08:44	08/27/18 20:42	1
Aroclor-1260	ND		50	22	ug/Kg		08/24/18 08:44	08/27/18 20:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*64*		*14 - 128*	*08/24/18 08:44*	*08/27/18 20:42*	*1*
DCB Decachlorobiphenyl	*83*		*10 - 132*	*08/24/18 08:44*	*08/27/18 20:42*	*1*

Lab Sample ID: LCS 240-342371/20-A
Matrix: Solid
Analysis Batch: 342551

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 342371

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	631		ug/Kg		63	47 - 120
Aroclor-1260	1000	774		ug/Kg		77	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*73*		*14 - 128*
DCB Decachlorobiphenyl	*78*		*10 - 132*

Lab Sample ID: 240-100238-A-6-C MS
Matrix: Solid
Analysis Batch: 342551

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 342371

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	ND	F2	8930	4860		ug/Kg		54	31 - 120
Aroclor-1260	ND	F2	8930	5620		ug/Kg		63	21 - 122

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 240-100238-A-6-C MS
Matrix: Solid
Analysis Batch: 342551

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 342371

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*52*		*14 - 128*
DCB Decachlorobiphenyl	*64*		*10 - 132*

Lab Sample ID: 240-100238-A-6-D MSD
Matrix: Solid
Analysis Batch: 342551

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 342371

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND	F2	8550	3070	F2	ug/Kg		36	31 - 120	45	30
Aroclor-1260	ND	F2	8550	3900	F2	ug/Kg		46	21 - 122	36	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*33*		*14 - 128*
DCB Decachlorobiphenyl	*51*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-249965/1-A
Matrix: Solid
Analysis Batch: 250033

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249965

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Arsenic	ND		1.0	0.085	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Barium	0.103	J	0.50	0.071	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Beryllium	ND		0.10	0.033	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Cadmium	ND		0.13	0.012	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Chromium	0.108	J	0.50	0.053	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Cobalt	ND		0.20	0.020	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Copper	ND		1.5	0.71	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Lead	ND		0.50	0.11	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Nickel	ND		0.50	0.051	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Selenium	ND		1.0	0.15	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Silver	ND		0.25	0.051	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Thallium	ND		0.50	0.15	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Vanadium	ND		0.50	0.068	mg/Kg		08/22/18 11:50	08/22/18 16:30	1
Zinc	ND		1.5	0.64	mg/Kg		08/22/18 11:50	08/22/18 16:30	1

Lab Sample ID: LCS 720-249965/2-A
Matrix: Solid
Analysis Batch: 250033

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249965

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	48.1		mg/Kg		96	80 - 120
Arsenic	50.0	47.2		mg/Kg		94	80 - 120
Barium	50.0	48.0		mg/Kg		96	80 - 120
Beryllium	50.0	49.2		mg/Kg		98	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-249965/2-A
Matrix: Solid
Analysis Batch: 250033

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249965

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	50.0	47.8		mg/Kg		96	80 - 120
Chromium	50.0	48.4		mg/Kg		97	80 - 120
Cobalt	50.0	48.1		mg/Kg		96	80 - 120
Copper	50.0	48.5		mg/Kg		97	80 - 120
Lead	50.0	48.4		mg/Kg		97	80 - 120
Molybdenum	50.0	49.0		mg/Kg		98	80 - 120
Nickel	50.0	49.2		mg/Kg		98	80 - 120
Selenium	50.0	46.5		mg/Kg		93	80 - 120
Silver	25.0	23.8		mg/Kg		95	80 - 120
Thallium	50.0	49.2		mg/Kg		98	80 - 120
Vanadium	50.0	47.3		mg/Kg		95	80 - 120
Zinc	50.0	47.2		mg/Kg		94	80 - 120

Lab Sample ID: 720-88162-A-14-A MS
Matrix: Solid
Analysis Batch: 250033

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 249965

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	3.2	F1	44.2	13.9	F1	mg/Kg		24	75 - 125
Arsenic	270		44.2	310	4	mg/Kg		91	75 - 125
Barium	120	B F1	44.2	174	F1	mg/Kg		133	75 - 125
Beryllium	ND	F1	44.2	52.3		mg/Kg		118	75 - 125
Cadmium	0.58		44.2	47.1		mg/Kg		105	75 - 125
Chromium	19	B F1	44.2	72.9		mg/Kg		121	75 - 125
Cobalt	8.0		44.2	54.7		mg/Kg		106	75 - 125
Copper	110	F1	44.2	168	F1	mg/Kg		135	75 - 125
Lead	250		44.2	232	4	mg/Kg		-51	75 - 125
Molybdenum	0.32	J	44.2	46.4		mg/Kg		104	75 - 125
Nickel	16		44.2	63.9		mg/Kg		109	75 - 125
Selenium	ND		44.2	46.6		mg/Kg		105	75 - 125
Silver	0.30	J	22.1	26.0		mg/Kg		116	75 - 125
Thallium	ND		44.2	46.6		mg/Kg		105	75 - 125
Vanadium	52	F1	44.2	112	F1	mg/Kg		137	75 - 125
Zinc	150		44.2	193		mg/Kg		105	75 - 125

Lab Sample ID: 720-88162-A-14-B MSD
Matrix: Solid
Analysis Batch: 250033

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 249965

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	3.2	F1	44.6	15.3	F1	mg/Kg		27	75 - 125	9	20
Arsenic	270		44.6	327	4	mg/Kg		126	75 - 125	5	20
Barium	120	B F1	44.6	208	F1	mg/Kg		207	75 - 125	17	20
Beryllium	ND	F1	44.6	58.1	F1	mg/Kg		130	75 - 125	11	20
Cadmium	0.58		44.6	51.4		mg/Kg		114	75 - 125	9	20
Chromium	19	B F1	44.6	79.0	F1	mg/Kg		134	75 - 125	8	20
Cobalt	8.0		44.6	58.7		mg/Kg		114	75 - 125	7	20
Copper	110	F1	44.6	178	F1	mg/Kg		155	75 - 125	5	20
Lead	250		44.6	217	4	mg/Kg		-84	75 - 125	7	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88162-A-14-B MSD
Matrix: Solid
Analysis Batch: 250033

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 249965

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Molybdenum	0.32	J	44.6	50.4		mg/Kg		112	75 - 125	8	20
Nickel	16		44.6	69.2		mg/Kg		120	75 - 125	8	20
Selenium	ND		44.6	50.5		mg/Kg		113	75 - 125	8	20
Silver	0.30	J	22.3	28.1		mg/Kg		125	75 - 125	8	20
Thallium	ND		44.6	50.3		mg/Kg		113	75 - 125	8	20
Vanadium	52	F1	44.6	110	F1	mg/Kg		131	75 - 125	2	20
Zinc	150		44.6	195		mg/Kg		108	75 - 125	1	20

Lab Sample ID: MB 720-249990/1-A
Matrix: Solid
Analysis Batch: 250078

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249990

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Arsenic	ND		1.0	0.085	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Barium	ND		0.50	0.071	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Beryllium	ND		0.10	0.033	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Cadmium	ND		0.13	0.012	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Chromium	ND		0.50	0.053	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Cobalt	ND		0.20	0.020	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Copper	ND		1.5	0.71	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Lead	ND		0.50	0.11	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Nickel	ND		0.50	0.051	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Selenium	ND		1.0	0.15	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Silver	ND		0.25	0.051	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Thallium	ND		0.50	0.15	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Vanadium	ND		0.50	0.068	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Zinc	ND		1.5	0.64	mg/Kg		08/22/18 15:58	08/23/18 12:43	1

Lab Sample ID: LCS 720-249990/2-A
Matrix: Solid
Analysis Batch: 250078

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249990

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	46.6		mg/Kg		93	80 - 120
Arsenic	50.0	46.5		mg/Kg		93	80 - 120
Barium	50.0	47.9		mg/Kg		96	80 - 120
Beryllium	50.0	48.6		mg/Kg		97	80 - 120
Cadmium	50.0	46.8		mg/Kg		94	80 - 120
Chromium	50.0	47.6		mg/Kg		95	80 - 120
Cobalt	50.0	47.7		mg/Kg		95	80 - 120
Copper	50.0	47.0		mg/Kg		94	80 - 120
Lead	50.0	47.7		mg/Kg		95	80 - 120
Molybdenum	50.0	47.2		mg/Kg		94	80 - 120
Nickel	50.0	47.5		mg/Kg		95	80 - 120
Selenium	50.0	45.8		mg/Kg		92	80 - 120
Silver	25.0	23.5		mg/Kg		94	80 - 120
Thallium	50.0	48.2		mg/Kg		96	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-249990/2-A
Matrix: Solid
Analysis Batch: 250078

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249990

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	50.0	47.3		mg/Kg		95	80 - 120
Zinc	50.0	46.8		mg/Kg		94	80 - 120

Lab Sample ID: 720-88164-E-1-E MS
Matrix: Solid
Analysis Batch: 250078

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 249990

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.89	J F1	41.7	10.8	F1	mg/Kg		24	75 - 125
Arsenic	110		41.7	153		mg/Kg		102	75 - 125
Barium	48		41.7	82.2		mg/Kg		82	75 - 125
Beryllium	ND		41.7	41.7		mg/Kg		100	75 - 125
Cadmium	0.26	J	41.7	40.3		mg/Kg		96	75 - 125
Chromium	23		41.7	63.2		mg/Kg		96	75 - 125
Cobalt	6.1		41.7	46.6		mg/Kg		97	75 - 125
Copper	56		41.7	92.7		mg/Kg		88	75 - 125
Lead	66		41.7	108		mg/Kg		101	75 - 125
Molybdenum	0.33	J	41.7	37.1		mg/Kg		88	75 - 125
Nickel	18		41.7	60.5		mg/Kg		102	75 - 125
Selenium	ND		41.7	38.5		mg/Kg		92	75 - 125
Silver	ND		20.8	20.3		mg/Kg		97	75 - 125
Thallium	ND		41.7	38.5		mg/Kg		92	75 - 125
Vanadium	36		41.7	72.2		mg/Kg		88	75 - 125
Zinc	73		41.7	110		mg/Kg		89	75 - 125

Lab Sample ID: 720-88164-E-1-F MSD
Matrix: Solid
Analysis Batch: 250078

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 249990

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.89	J F1	42.0	11.5	F1	mg/Kg		25	75 - 125	7	20
Arsenic	110		42.0	152		mg/Kg		98	75 - 125	1	20
Barium	48		42.0	80.5		mg/Kg		77	75 - 125	2	20
Beryllium	ND		42.0	40.9		mg/Kg		97	75 - 125	2	20
Cadmium	0.26	J	42.0	39.1		mg/Kg		92	75 - 125	3	20
Chromium	23		42.0	62.8		mg/Kg		95	75 - 125	1	20
Cobalt	6.1		42.0	44.5		mg/Kg		91	75 - 125	5	20
Copper	56		42.0	99.4		mg/Kg		103	75 - 125	7	20
Lead	66		42.0	108		mg/Kg		101	75 - 125	0	20
Molybdenum	0.33	J	42.0	37.0		mg/Kg		87	75 - 125	0	20
Nickel	18		42.0	55.8		mg/Kg		90	75 - 125	8	20
Selenium	ND		42.0	38.4		mg/Kg		91	75 - 125	0	20
Silver	ND		21.0	20.1		mg/Kg		96	75 - 125	1	20
Thallium	ND		42.0	36.7		mg/Kg		87	75 - 125	5	20
Vanadium	36		42.0	79.8		mg/Kg		105	75 - 125	10	20
Zinc	73		42.0	109		mg/Kg		86	75 - 125	1	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250071/1-A
Matrix: Solid
Analysis Batch: 250222

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250071

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.123	J	0.50	0.083	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Arsenic	ND		1.0	0.085	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Barium	ND		0.50	0.071	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Beryllium	ND		0.10	0.033	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Cadmium	ND		0.13	0.012	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Chromium	ND		0.50	0.053	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Cobalt	ND		0.20	0.020	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Copper	ND		1.5	0.71	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Lead	ND		0.50	0.11	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Nickel	ND		0.50	0.051	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Selenium	ND		1.0	0.15	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Silver	ND		0.25	0.051	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Thallium	ND		0.50	0.15	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Vanadium	ND		0.50	0.068	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Zinc	ND		1.5	0.64	mg/Kg		08/23/18 12:48	08/24/18 18:51	1

Lab Sample ID: LCS 720-250071/2-A
Matrix: Solid
Analysis Batch: 250222

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250071

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	53.2		mg/Kg		106	80 - 120
Arsenic	50.0	49.2		mg/Kg		98	80 - 120
Barium	50.0	47.8		mg/Kg		96	80 - 120
Beryllium	50.0	47.2		mg/Kg		94	80 - 120
Cadmium	50.0	53.1		mg/Kg		106	80 - 120
Chromium	50.0	50.3		mg/Kg		101	80 - 120
Cobalt	50.0	55.1		mg/Kg		110	80 - 120
Copper	50.0	50.5		mg/Kg		101	80 - 120
Lead	50.0	53.5		mg/Kg		107	80 - 120
Molybdenum	50.0	49.5		mg/Kg		99	80 - 120
Nickel	50.0	53.6		mg/Kg		107	80 - 120
Selenium	50.0	47.1		mg/Kg		94	80 - 120
Silver	25.0	26.3		mg/Kg		105	80 - 120
Thallium	50.0	53.2		mg/Kg		106	80 - 120
Vanadium	50.0	51.9		mg/Kg		104	80 - 120
Zinc	50.0	53.8		mg/Kg		108	80 - 120

Lab Sample ID: 720-88189-A-1-B MS
Matrix: Solid
Analysis Batch: 250222

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250071

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.4	J B F1	48.5	15.1	F1	mg/Kg		28	75 - 125
Arsenic	120	F1	48.5	139	F1	mg/Kg		35	75 - 125
Barium	140	F1 F2	48.5	134	F1	mg/Kg		-5	75 - 125
Beryllium	0.21	J	48.5	44.4		mg/Kg		91	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88189-A-1-B MS
Matrix: Solid
Analysis Batch: 250222

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250071

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.50		48.5	45.4		mg/Kg		92	75 - 125
Chromium	15		48.5	59.1		mg/Kg		90	75 - 125
Cobalt	8.5		48.5	54.1		mg/Kg		94	75 - 125
Copper	92	F1	48.5	122	F1	mg/Kg		61	75 - 125
Lead	160	F1 F2	48.5	145	F1	mg/Kg		-31	75 - 125
Molybdenum	0.78	J	48.5	44.5		mg/Kg		90	75 - 125
Nickel	13		48.5	54.4		mg/Kg		85	75 - 125
Selenium	0.87	J	48.5	44.5		mg/Kg		90	75 - 125
Silver	ND		24.3	24.0		mg/Kg		99	75 - 125
Thallium	ND		48.5	42.6		mg/Kg		88	75 - 125
Vanadium	59		48.5	104		mg/Kg		93	75 - 125
Zinc	170	F1 F2	48.5	171	F1	mg/Kg		-3	75 - 125

Lab Sample ID: 720-88189-A-1-C MSD
Matrix: Solid
Analysis Batch: 250222

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250071

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.4	J B F1	49.5	13.6	F1	mg/Kg		25	75 - 125	10	20
Arsenic	120	F1	49.5	159	F1	mg/Kg		74	75 - 125	13	20
Barium	140	F1 F2	49.5	174	F2	mg/Kg		76	75 - 125	26	20
Beryllium	0.21	J	49.5	46.5		mg/Kg		94	75 - 125	5	20
Cadmium	0.50		49.5	48.7		mg/Kg		97	75 - 125	7	20
Chromium	15		49.5	64.3		mg/Kg		99	75 - 125	8	20
Cobalt	8.5		49.5	59.8		mg/Kg		104	75 - 125	10	20
Copper	92	F1	49.5	144		mg/Kg		104	75 - 125	17	20
Lead	160	F1 F2	49.5	196	F1 F2	mg/Kg		71	75 - 125	30	20
Molybdenum	0.78	J	49.5	45.2		mg/Kg		90	75 - 125	2	20
Nickel	13		49.5	62.2		mg/Kg		99	75 - 125	13	20
Selenium	0.87	J	49.5	46.2		mg/Kg		92	75 - 125	4	20
Silver	ND		24.8	24.9		mg/Kg		100	75 - 125	3	20
Thallium	ND		49.5	45.1		mg/Kg		91	75 - 125	6	20
Vanadium	59		49.5	119		mg/Kg		122	75 - 125	14	20
Zinc	170	F1 F2	49.5	225	F2	mg/Kg		106	75 - 125	27	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-249973/1-A
Matrix: Solid
Analysis Batch: 250321

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249973

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/22/18 11:39	08/27/18 15:06	1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 720-249973/2-A
Matrix: Solid
Analysis Batch: 250321

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249973

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.833	0.874		mg/Kg		105	80 - 120		

Lab Sample ID: 720-88162-D-16-E MS
Matrix: Solid
Analysis Batch: 250321

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 249973

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.18		0.781	1.04		mg/Kg		110	75 - 125		

Lab Sample ID: 720-88162-D-16-F MSD
Matrix: Solid
Analysis Batch: 250321

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 249973

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.18		0.806	0.978		mg/Kg		99	75 - 125	6	20

Lab Sample ID: MB 720-250050/1-A
Matrix: Solid
Analysis Batch: 250200

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250050

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/23/18 10:11	08/24/18 16:08	1

Lab Sample ID: LCS 720-250050/2-A
Matrix: Solid
Analysis Batch: 250200

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250050

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.833	0.817		mg/Kg		98	80 - 120		

Lab Sample ID: 720-88164-D-1-A MS
Matrix: Solid
Analysis Batch: 250200

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250050

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.045		0.806	0.861		mg/Kg		101	75 - 125		

Lab Sample ID: 720-88164-D-1-B MSD
Matrix: Solid
Analysis Batch: 250200

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250050

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.045		0.806	0.876		mg/Kg		103	75 - 125	2	20

GC/MS VOA

Prep Batch: 250069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-2	DG-D1(3.5-4)	Total/NA	Solid	5035	
720-88163-3	DG-D1(9.5-10)	Total/NA	Solid	5035	

Analysis Batch: 250216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-1	DG-01(0.05-1)	Total/NA	Solid	8260B	250226
720-88163-2	DG-D1(3.5-4)	Total/NA	Solid	8260B	250069
720-88163-3	DG-D1(9.5-10)	Total/NA	Solid	8260B	250069
MB 720-250216/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250216/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250216/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250216/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250216/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-1	DG-01(0.05-1)	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 249979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-1	DG-01(0.05-1)	Total/NA	Solid	3546	
720-88163-2	DG-D1(3.5-4)	Total/NA	Solid	3546	
720-88163-3	DG-D1(9.5-10)	Total/NA	Solid	3546	
MB 720-249979/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-249979/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88156-A-5-C MS	Matrix Spike	Total/NA	Solid	3546	
720-88156-A-5-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-1	DG-01(0.05-1)	Total/NA	Solid	8270C SIM	249979
720-88163-2	DG-D1(3.5-4)	Total/NA	Solid	8270C SIM	249979
720-88163-3	DG-D1(9.5-10)	Total/NA	Solid	8270C SIM	249979
MB 720-249979/1-A	Method Blank	Total/NA	Solid	8270C SIM	249979
LCS 720-249979/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	249979
720-88156-A-5-C MS	Matrix Spike	Total/NA	Solid	8270C SIM	249979
720-88156-A-5-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	249979

GC Semi VOA

Prep Batch: 249957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-1	DG-01(0.05-1)	Total/NA	Solid	3546	
720-88163-2	DG-D1(3.5-4)	Total/NA	Solid	3546	
720-88163-3	DG-D1(9.5-10)	Total/NA	Solid	3546	
MB 720-249957/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-249957/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88164-E-1-A MS	Matrix Spike	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 249957 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-1	DG-01(0.05-1)	Total/NA	Solid	3546	
720-88163-2	DG-D1(3.5-4)	Total/NA	Solid	3546	
720-88163-3	DG-D1(9.5-10)	Total/NA	Solid	3546	
MB 720-250005/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250005/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88162-D-16-I MS	Matrix Spike	Total/NA	Solid	3546	
720-88162-D-16-J MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-1	DG-01(0.05-1)	Total/NA	Solid	8015B	249957

Analysis Batch: 250035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-2	DG-D1(3.5-4)	Total/NA	Solid	8015B	249957
720-88163-3	DG-D1(9.5-10)	Total/NA	Solid	8015B	249957

Analysis Batch: 250036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-249957/1-A	Method Blank	Total/NA	Solid	8015B	249957

Analysis Batch: 250037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-249957/2-A	Lab Control Sample	Total/NA	Solid	8015B	249957
720-88164-E-1-A MS	Matrix Spike	Total/NA	Solid	8015B	249957
720-88164-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	249957

Analysis Batch: 250125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-2	DG-D1(3.5-4)	Total/NA	Solid	8081A	250005
MB 720-250005/1-A	Method Blank	Total/NA	Solid	8081A	250005
LCS 720-250005/2-A	Lab Control Sample	Total/NA	Solid	8081A	250005
720-88162-D-16-I MS	Matrix Spike	Total/NA	Solid	8081A	250005
720-88162-D-16-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	250005

Analysis Batch: 250248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-3	DG-D1(9.5-10)	Total/NA	Solid	8081A	250005

Analysis Batch: 250335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-1	DG-01(0.05-1)	Total/NA	Solid	8081A	250005

Processed Batch: 342154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-100238-A-6-C MS	Matrix Spike	Total/NA	Solid	Part Size Red	
240-100238-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	Part Size Red	

Prep Batch: 342371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-1	DG-01(0.05-1)	Total/NA	Solid	3540C	
720-88163-2	DG-D1(3.5-4)	Total/NA	Solid	3540C	
720-88163-3	DG-D1(9.5-10)	Total/NA	Solid	3540C	
MB 240-342371/19-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-342371/20-A	Lab Control Sample	Total/NA	Solid	3540C	
240-100238-A-6-C MS	Matrix Spike	Total/NA	Solid	3540C	342154
240-100238-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3540C	342154

Analysis Batch: 342551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-1	DG-01(0.05-1)	Total/NA	Solid	8082	342371
720-88163-2	DG-D1(3.5-4)	Total/NA	Solid	8082	342371
720-88163-3	DG-D1(9.5-10)	Total/NA	Solid	8082	342371
MB 240-342371/19-A	Method Blank	Total/NA	Solid	8082	342371
LCS 240-342371/20-A	Lab Control Sample	Total/NA	Solid	8082	342371
240-100238-A-6-C MS	Matrix Spike	Total/NA	Solid	8082	342371
240-100238-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8082	342371

Metals

Prep Batch: 249965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-1	DG-01(0.05-1)	Total/NA	Solid	3050B	
720-88163-2	DG-D1(3.5-4)	Total/NA	Solid	3050B	
720-88163-3	DG-D1(9.5-10)	Total/NA	Solid	3050B	
720-88163-4	DG-D2(0.5-1)	Total/NA	Solid	3050B	
720-88163-5	DG-D2(3.5-4)	Total/NA	Solid	3050B	
720-88163-6	DG-E2(0.5-1)	Total/NA	Solid	3050B	
720-88163-7	DG-E2(3.5-4)	Total/NA	Solid	3050B	
720-88163-8	DG-F2(0.5-1)	Total/NA	Solid	3050B	
720-88163-9	DG-F2(3.5-4)	Total/NA	Solid	3050B	
720-88163-10	DG-G2(0.5-1)	Total/NA	Solid	3050B	
720-88163-11	DG-G2(3.5-4)	Total/NA	Solid	3050B	
MB 720-249965/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-249965/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88162-A-14-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88162-A-14-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 249973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-1	DG-01(0.05-1)	Total/NA	Solid	7471A	
720-88163-2	DG-D1(3.5-4)	Total/NA	Solid	7471A	
720-88163-3	DG-D1(9.5-10)	Total/NA	Solid	7471A	
720-88163-4	DG-D2(0.5-1)	Total/NA	Solid	7471A	
720-88163-5	DG-D2(3.5-4)	Total/NA	Solid	7471A	
720-88163-6	DG-E2(0.5-1)	Total/NA	Solid	7471A	
720-88163-7	DG-E2(3.5-4)	Total/NA	Solid	7471A	
720-88163-8	DG-F2(0.5-1)	Total/NA	Solid	7471A	
720-88163-9	DG-F2(3.5-4)	Total/NA	Solid	7471A	
720-88163-10	DG-G2(0.5-1)	Total/NA	Solid	7471A	
720-88163-11	DG-G2(3.5-4)	Total/NA	Solid	7471A	
MB 720-249973/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-249973/2-A	Lab Control Sample	Total/NA	Solid	7471A	

Metals (Continued)

Prep Batch: 249973 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88162-D-16-E MS	Matrix Spike	Total/NA	Solid	7471A	
720-88162-D-16-F MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Prep Batch: 249990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-13	DG-H2(3.5-4)	Total/NA	Solid	3050B	
MB 720-249990/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-249990/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88164-E-1-E MS	Matrix Spike	Total/NA	Solid	3050B	
720-88164-E-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 250033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-1	DG-01(0.05-1)	Total/NA	Solid	6010B	249965
720-88163-2	DG-D1(3.5-4)	Total/NA	Solid	6010B	249965
720-88163-3	DG-D1(9.5-10)	Total/NA	Solid	6010B	249965
720-88163-4	DG-D2(0.5-1)	Total/NA	Solid	6010B	249965
720-88163-5	DG-D2(3.5-4)	Total/NA	Solid	6010B	249965
720-88163-6	DG-E2(0.5-1)	Total/NA	Solid	6010B	249965
720-88163-7	DG-E2(3.5-4)	Total/NA	Solid	6010B	249965
720-88163-8	DG-F2(0.5-1)	Total/NA	Solid	6010B	249965
720-88163-9	DG-F2(3.5-4)	Total/NA	Solid	6010B	249965
720-88163-10	DG-G2(0.5-1)	Total/NA	Solid	6010B	249965
720-88163-11	DG-G2(3.5-4)	Total/NA	Solid	6010B	249965
MB 720-249965/1-A	Method Blank	Total/NA	Solid	6010B	249965
LCS 720-249965/2-A	Lab Control Sample	Total/NA	Solid	6010B	249965
720-88162-A-14-A MS	Matrix Spike	Total/NA	Solid	6010B	249965
720-88162-A-14-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	249965

Prep Batch: 250050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-12	DG-H2(0.5-1)	Total/NA	Solid	7471A	
720-88163-13	DG-H2(3.5-4)	Total/NA	Solid	7471A	
MB 720-250050/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250050/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88164-D-1-A MS	Matrix Spike	Total/NA	Solid	7471A	
720-88164-D-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Prep Batch: 250071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-12	DG-H2(0.5-1)	Total/NA	Solid	3050B	
MB 720-250071/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250071/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88189-A-1-B MS	Matrix Spike	Total/NA	Solid	3050B	
720-88189-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 250078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-249990/1-A	Method Blank	Total/NA	Solid	6010B	249990
LCS 720-249990/2-A	Lab Control Sample	Total/NA	Solid	6010B	249990
720-88164-E-1-E MS	Matrix Spike	Total/NA	Solid	6010B	249990

Metals (Continued)

Analysis Batch: 250078 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-E-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	249990

Analysis Batch: 250137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-13	DG-H2(3.5-4)	Total/NA	Solid	6010B	249990

Analysis Batch: 250200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-12	DG-H2(0.5-1)	Total/NA	Solid	7471A	250050
720-88163-13	DG-H2(3.5-4)	Total/NA	Solid	7471A	250050
MB 720-250050/1-A	Method Blank	Total/NA	Solid	7471A	250050
LCS 720-250050/2-A	Lab Control Sample	Total/NA	Solid	7471A	250050
720-88164-D-1-A MS	Matrix Spike	Total/NA	Solid	7471A	250050
720-88164-D-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250050

Analysis Batch: 250222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-12	DG-H2(0.5-1)	Total/NA	Solid	6010B	250071
MB 720-250071/1-A	Method Blank	Total/NA	Solid	6010B	250071
LCS 720-250071/2-A	Lab Control Sample	Total/NA	Solid	6010B	250071
720-88189-A-1-B MS	Matrix Spike	Total/NA	Solid	6010B	250071
720-88189-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250071

Analysis Batch: 250321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-1	DG-01(0.05-1)	Total/NA	Solid	7471A	249973
720-88163-2	DG-D1(3.5-4)	Total/NA	Solid	7471A	249973
720-88163-3	DG-D1(9.5-10)	Total/NA	Solid	7471A	249973
720-88163-4	DG-D2(0.5-1)	Total/NA	Solid	7471A	249973
720-88163-5	DG-D2(3.5-4)	Total/NA	Solid	7471A	249973
720-88163-6	DG-E2(0.5-1)	Total/NA	Solid	7471A	249973
720-88163-7	DG-E2(3.5-4)	Total/NA	Solid	7471A	249973
720-88163-8	DG-F2(0.5-1)	Total/NA	Solid	7471A	249973
720-88163-9	DG-F2(3.5-4)	Total/NA	Solid	7471A	249973
720-88163-10	DG-G2(0.5-1)	Total/NA	Solid	7471A	249973
720-88163-11	DG-G2(3.5-4)	Total/NA	Solid	7471A	249973
MB 720-249973/1-A	Method Blank	Total/NA	Solid	7471A	249973
LCS 720-249973/2-A	Lab Control Sample	Total/NA	Solid	7471A	249973
720-88162-D-16-E MS	Matrix Spike	Total/NA	Solid	7471A	249973
720-88162-D-16-F MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	249973

Analysis Batch: 250506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88163-11	DG-G2(3.5-4)	Total/NA	Solid	6010B	249965

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Client Sample ID: DG-01(0.05-1)

Date Collected: 08/20/18 15:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250226	08/22/18 01:45	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250216	08/25/18 15:03	A1C	TAL PLS
Total/NA	Prep	3546			249979	08/22/18 12:41	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250076	08/23/18 16:23	LPL	TAL PLS
Total/NA	Prep	3546			249957	08/22/18 09:40	MAB	TAL PLS
Total/NA	Analysis	8015B		10	250034	08/23/18 14:17	JXL	TAL PLS
Total/NA	Prep	3546			250005	08/22/18 15:45	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250335	08/28/18 10:06	MQL	TAL PLS
Total/NA	Prep	3540C			342371	08/24/18 08:44	AMT	TAL CAN
Total/NA	Analysis	8082		1	342551	08/27/18 17:02	KMG	TAL CAN
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250033	08/22/18 17:50	BKR	TAL PLS
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		1	250321	08/27/18 15:41	OBI	TAL PLS

Client Sample ID: DG-D1(3.5-4)

Date Collected: 08/20/18 15:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250069	08/22/18 01:45	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250216	08/25/18 13:00	A1C	TAL PLS
Total/NA	Prep	3546			249979	08/22/18 12:41	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250076	08/23/18 16:47	LPL	TAL PLS
Total/NA	Prep	3546			249957	08/22/18 09:40	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250035	08/23/18 14:17	JXL	TAL PLS
Total/NA	Prep	3546			250005	08/22/18 15:45	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250125	08/24/18 06:47	MQL	TAL PLS
Total/NA	Prep	3540C			342371	08/24/18 08:44	AMT	TAL CAN
Total/NA	Analysis	8082		1	342551	08/27/18 17:16	KMG	TAL CAN
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250033	08/22/18 17:55	BKR	TAL PLS
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		1	250321	08/27/18 15:43	OBI	TAL PLS

Client Sample ID: DG-D1(9.5-10)

Date Collected: 08/20/18 15:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88163-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250069	08/22/18 01:45	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250216	08/25/18 12:29	A1C	TAL PLS
Total/NA	Prep	3546			249979	08/22/18 12:41	MAB	TAL PLS

Client Sample ID: DG-D1(9.5-10)

Lab Sample ID: 720-88163-3
Matrix: Solid
Date Collected: 08/20/18 15:45
Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C SIM		1	250076	08/23/18 17:10	LPL	TAL PLS
Total/NA	Prep	3546			249957	08/22/18 09:40	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250035	08/23/18 14:47	JXL	TAL PLS
Total/NA	Prep	3546			250005	08/22/18 15:45	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250248	08/26/18 07:02	MQL	TAL PLS
Total/NA	Prep	3540C			342371	08/24/18 08:44	AMT	TAL CAN
Total/NA	Analysis	8082		1	342551	08/27/18 17:31	KMG	TAL CAN
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250033	08/22/18 18:00	BKR	TAL PLS
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		10	250321	08/27/18 16:44	OBI	TAL PLS

Client Sample ID: DG-D2(0.5-1)

Lab Sample ID: 720-88163-4
Matrix: Solid
Date Collected: 08/20/18 16:15
Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250033	08/22/18 18:05	BKR	TAL PLS
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		1	250321	08/27/18 15:48	OBI	TAL PLS

Client Sample ID: DG-D2(3.5-4)

Lab Sample ID: 720-88163-5
Matrix: Solid
Date Collected: 08/20/18 16:15
Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250033	08/22/18 18:09	BKR	TAL PLS
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		1	250321	08/27/18 15:50	OBI	TAL PLS

Client Sample ID: DG-E2(0.5-1)

Lab Sample ID: 720-88163-6
Matrix: Solid
Date Collected: 08/20/18 16:30
Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250033	08/22/18 18:24	BKR	TAL PLS
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		1	250321	08/27/18 15:52	OBI	TAL PLS

Client Sample ID: DG-E2(3.5-4)

Lab Sample ID: 720-88163-7

Date Collected: 08/20/18 16:30

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250033	08/22/18 18:28	BKR	TAL PLS
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		1	250321	08/27/18 15:55	OBI	TAL PLS

Client Sample ID: DG-F2(0.5-1)

Lab Sample ID: 720-88163-8

Date Collected: 08/20/18 16:35

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250033	08/22/18 18:33	BKR	TAL PLS
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		1	250321	08/27/18 16:02	OBI	TAL PLS

Client Sample ID: DG-F2(3.5-4)

Lab Sample ID: 720-88163-9

Date Collected: 08/20/18 16:35

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250033	08/22/18 18:38	BKR	TAL PLS
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		1	250321	08/27/18 16:04	OBI	TAL PLS

Client Sample ID: DG-G2(0.5-1)

Lab Sample ID: 720-88163-10

Date Collected: 08/20/18 16:40

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250033	08/22/18 18:42	BKR	TAL PLS
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		1	250321	08/27/18 16:06	OBI	TAL PLS

Client Sample ID: DG-G2(3.5-4)

Lab Sample ID: 720-88163-11

Date Collected: 08/20/18 16:40

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS
Total/NA	Analysis	6010B		10	250506	08/29/18 13:52	OBI	TAL PLS
Total/NA	Prep	3050B			249965	08/22/18 11:50	MAG	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Client Sample ID: DG-G2(3.5-4)

Lab Sample ID: 720-88163-11

Date Collected: 08/20/18 16:40
Matrix: Solid
Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		4	250033	08/22/18 18:47	BKR	TAL PLS
Total/NA	Prep	7471A			249973	08/22/18 11:39	OBI	TAL PLS
Total/NA	Analysis	7471A		1	250321	08/27/18 16:09	OBI	TAL PLS

Client Sample ID: DG-H2(0.5-1)

Lab Sample ID: 720-88163-12

Date Collected: 08/20/18 16:55
Matrix: Solid
Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250071	08/23/18 12:48	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250222	08/24/18 20:41	OBI	TAL PLS
Total/NA	Prep	7471A			250050	08/23/18 10:11	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250200	08/24/18 16:20	MAG	TAL PLS

Client Sample ID: DG-H2(3.5-4)

Lab Sample ID: 720-88163-13

Date Collected: 08/20/18 16:55
Matrix: Solid
Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249990	08/22/18 15:58	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250137	08/23/18 20:54	OBI	TAL PLS
Total/NA	Prep	7471A			250050	08/23/18 10:11	MAG	TAL PLS
Total/NA	Analysis	7471A		10	250200	08/24/18 16:22	MAG	TAL PLS

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-17-9	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
Subcontract	Asbestos - CARB 435	None	
3050B	Preparation, Metals	SW846	TAL PLS
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL PLS
5035	Closed System Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88163-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88163-1	DG-01(0.05-1)	Solid	08/20/18 15:45	08/21/18 14:52
720-88163-2	DG-D1(3.5-4)	Solid	08/20/18 15:45	08/21/18 14:52
720-88163-3	DG-D1(9.5-10)	Solid	08/20/18 15:45	08/21/18 14:52
720-88163-4	DG-D2(0.5-1)	Solid	08/20/18 16:15	08/21/18 14:52
720-88163-5	DG-D2(3.5-4)	Solid	08/20/18 16:15	08/21/18 14:52
720-88163-6	DG-E2(0.5-1)	Solid	08/20/18 16:30	08/21/18 14:52
720-88163-7	DG-E2(3.5-4)	Solid	08/20/18 16:30	08/21/18 14:52
720-88163-8	DG-F2(0.5-1)	Solid	08/20/18 16:35	08/21/18 14:52
720-88163-9	DG-F2(3.5-4)	Solid	08/20/18 16:35	08/21/18 14:52
720-88163-10	DG-G2(0.5-1)	Solid	08/20/18 16:40	08/21/18 14:52
720-88163-11	DG-G2(3.5-4)	Solid	08/20/18 16:40	08/21/18 14:52
720-88163-12	DG-H2(0.5-1)	Solid	08/20/18 16:55	08/21/18 14:52
720-88163-13	DG-H2(3.5-4)	Solid	08/20/18 16:55	08/21/18 14:52

ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01191

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Aug/31/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01191
Polarized light microscopy analytical results for 3 bulk sample(s).
Job Site: 720-88163-1
Job No.: UPC-OU-SM

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 3

Samples Analyzed: 3

Job Site / No. UPC-OU-SM
720-88163-1

Report No. **359803**
Date Submitted: Aug-22-18
Date Reported: Aug-28-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DG-D12-0.5-1		**<0.25%**	**None Detected**	720-88163-1
Lab ID # 1283-01191-001	**400** - Total Points			No Asbestos Detected
DG-D1S-3.5-4		**<0.25%**	**None Detected**	720-88163-2
Lab ID # 1283-01191-002	**400** - Total Points			No Asbestos Detected
DG-D1S-9.5-10		**<0.25%**	**None Detected**	720-88163-3
Lab ID # 1283-01191-003	**400** - Total Points			No Asbestos Detected
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			

QC Reviewer _____ **Analys** _____

#359803

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39375.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88163-1
Address: 630 BANCROFT WAY, ,	Due Date Requested: 8/28/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SEOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-D1-(0.5-1) (720-88163-1)	8/20/18	15:45 Pacific		Solid			X	1	
DG-D1-(3.5-4) (720-88163-2)	8/20/18	15:45 Pacific		Solid			X	1	
DG-D1-(9.5-10) (720-88163-3)	8/20/18	15:45 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature] TA 720	8/24/18 1315	TA 720	MB	AUG22 '18 1421PM	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88163

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: 185024

Date 8/20/18 Page 1 of 2

11/9/2018 (Rev. 1)

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: MKahrilas@geosyntec.com
Bill To: GEOSYNTEC
Sampled By: M. KAHRILAS
Attn: ANTHONY SMITH
Phone: 347-530-7652

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B + GRO	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☒ EPA 8270C - SIM	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease ☐ Petroleum (EPA 1664/9071) ☐ Total	Pesticides ☒ EPA 8081 A PCBs ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)
DG-D1 (0.5-1)	8/20	1515	S		X			X		X		X	X										
DG-D1 (3.5-4)		1545			X			X		X		X	X										X
DG-D1 (9.5-10)		1545			X			X		X		X	X										X
DG-D2 (0.5-1)		1615											X										
DG-D2 (3.5-4)		1615											X										
DG-E2 (0.5-1)		1630											X										
DG-E2 (3.5-4)		1630											X										
DG-F2 (0.5-1)		1635											X										
DG-F2 (3.5-4)		1635											X										
DG-G2 (0.5-1)	↓	1640	↓										X										

Project Info.

Project Name/ #: UPC DV-SM
PO#: WG2495101
Credit Card Y/N:

Sample Receipt

of Containers:
Head Space:
Temp: 3.4, 3.1, 1.7, 2.9°C

If yes, please call with payment information ASAP

TAT: 10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

See Terms and Conditions on reverse

1) Relinquished by:
Signature — Time: 1311
Printed Name: MIRANDA KAHRILAS — Date: 8/21
Company: GSW

2) Relinquished by:
Signature — Time: 1452
Printed Name: Cory — Date: 8/21/18
Company: TA 720

3) Relinquished by:
Signature — Time
Printed Name — Date
Company

1) Received by:
Signature — Time: 1311
Printed Name: Cory — Date: 8/21/18
Company: TA 720

2) Received by:
Signature — Time: 1452
Printed Name: T Bullock — Date: 8/21/18
Company: TA 720

3) Received by:
720-88163 Chain of Custody
Company: 3.4/3.1/1.7/2.9

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88163

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: 165034 4 day

Date 8/20/18 Page 2 of 2

11/9/2018 (Rev. 1)

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
Bill To: GEOSYNTEC
Sampled By: M. KAHRILAS
Attn: ANTHONY SMITH
Phone:

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity
DG-G2 (3.5-4)	8/20	1640	S										X									
DG-H2 (0.5-1)	↓	1655	↓										X									
DG-H2 (3.5-4)	↓	1655	↓										X									

Project Info.

Project Name/ #: UPC OU-SM.
PO#: WG2445101
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers:
Head Space:
Temp:

TAT	10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:
	☐	☐	☐	☐	☐	☐	

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID ___

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature]	Signature: [signature]	Signature:
Time: 1311	Time: 1452	Time:
Printed Name: MIRANDA KAHRILAS	Printed Name:	Printed Name:
Date: 8/21	Date: 8/21/18	Date:
Company: GEO	Company: TA720	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: [signature]	Signature: [signature]	Signature:
Time: 1311	Time: 1452	Time:
Printed Name: LARRY	Printed Name: T Bullock	Printed Name:
Date: 8/21/18	Date: 8/21/18	Date:
Company: TA720	Company: TA-720	Company: 3-4)2-1/17/20

Smith, Micah

From: Miranda Kahrilas <MKahrilas@Geosyntec.com>
Sent: Thursday, August 23, 2018 7:52 AM
To: Krzysztof Jesionek; Anthony Smith; Smith, Micah
Subject: Re: TestAmerica Sample Login Confirmation files from 720-88163 UPC OU-SM

-External Email-

See response below.

Get Outlook for Android

From: Smith, Micah
Sent: Wednesday, August 22, 6:41 PM
Subject: TestAmerica Sample Login Confirmation files from 720-88163 UPC OU-SM
To: Krzysztof Jesionek, Miranda Kahrilas, Anthony Smith

Hello,

The container label for the following samples did not match the information listed on the Chain-of-Custody (COC):
DG-D2 (3.5-4). The container labels list DG-D2 (3.5-5), while the COC lists DG-D2 (3.5-4).

It should be 3.5-4.

Please let me know the correct sample ID.

Attached, please find the Sample Confirmation files for job 720-88163; UPC OU-SM

Please feel free to contact me if you have any questions.

Thank you.

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: Project Feedback

MICAH SMITH
Project Manager

TestAmerica Pleasanton
THE LEADER IN ENVIRONMENTAL TESTING

Tel: 916.374.4302
www.testamericainc.com

Reference: [284907]
Attachments: 3

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39377.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88163-1
Address: 4101 Shuffel Street NW,	Due Date Requested: 8/28/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

C195

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-D1-(0.5-1) (720-88163-1)	8/20/18	15:45 Pacific		Solid			X	1	
DG-D1-(3.5-4) (720-88163-2)	8/20/18	15:45 Pacific		Solid			X	1	
DG-D1-(9.5-10) (720-88163-3)	8/20/18	15:45 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8/22/18 14:04	TAT		8-23-18 920	TAC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client TA PLEASANTON Site Name – Cooler unpacked by: BOP

Cooler Received on 5-23-18 Opened on 5-23-18

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 0.6 °C Corrected Cooler Temp. 0.6 °C
   IR GUN #36 (CF -0.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC849161
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
16. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88163-1

Login Number: 88163
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88164-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/14/2018 7:35:32 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 5
Detection Summary 7
Client Sample Results 14
Surrogate Summary 196
QC Sample Results 200
QC Association Summary 239
Lab Chronicle 247
Certification Summary 253
Method Summary 254
Sample Summary 255
Subcontract Data 256
Chain of Custody 260
Receipt Checklists 266

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
F2	MS/MSD RPD exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88164-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88164-1

Comments
This report was revised on 11/14/18 to change the units for the metals data to report in mg/Kg, as requested. Also, the job was revised to correct the instrument MDL for the CCVs and CRI associated with the metals data.

Receipt
The samples were received on 8/21/2018 2:52 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 1.7º C, 2.9º C, 3.1º C and 3.4º C.

Receipt Exceptions
Samples DG-A3S-0.5-1 (720-88164-7), DG-A3S-3.5-4 (720-88164-8), DG-A3S-9.5-10 (720-88164-9), DG-C3S-0.5-1 (720-88164-12), DG-C3S-3.5-4 (720-88164-13) and DG-C3S-9.5-10 (720-88164-14) were received in pre-weighed containers with a label that was added in the field. The label weight was approximately 0.15 g which does not significantly bias the final results.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC):
Sample DG-A3S-0.5-1 (720-88164-7): One of two DI w/ stir bar vial label list DG-A3S-3.5-4, while the COC lists DG-A3S-(0.5-1). This one DI vial will not be used for testing.
Sample DG-B3S-0.5-1 (720-88164-10): The container label list sample time 11:43, while the COC lists sample time 11:45. The client confirmed the correct time is 11:45.

GC/MS VOA
Method(s) 8260B: Internal standard (ISTD) response for the following samples were outside control limits: DG-C3S-0.5-1 (720-88164-12) and DG-C3S-3.5-4 (720-88164-13). The sample(s) was re-extracted and/or re-analyzed with concurring results, and the second set of data has been reported.

Method(s) 8260B: The laboratory control sample duplicate (LCSD) for analytical batch 720-250352 recovered outside control limits for the following analytes: Vinyl chloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250407 recovered outside control limits for the following analytes: Carbon disulfide and 1,1-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270C SIM: The following samples were diluted due to the abundance of non-target analytes: DG-B1S-0.5-1 (720-88164-1), DG-A3S-0.5-1 (720-88164-7), DG-A3S-9.5-10 (720-88164-9), DG-C3S-3.5-4 (720-88164-13) and DG-C3S-9.5-10 (720-88164-14). Elevated reporting limits (RLs) are provided.

Method(s) 8270C SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-249979 and analytical batch 720-250076 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8081A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250005 and analytical batch 720-250125 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8015B: The following sample required a dilution due to the nature of the sample matrix: DG-A3S-0.5-1 (720-88164-7). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide

Job ID: 720-88164-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

useful information.

Method(s) 8082: Surrogate Decachlorobiphenyl recovery for the following sample was outside control limits: DG-A3S-0.5-1 (720-88164-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: DG-A3S-9.5-10 (720-88164-9), DG-C3S-3.5-4 (720-88164-13), (240-100238-A-6-B), (240-100238-A-6-C MS) and (240-100238-A-6-D MSD).

Method(s) 8082: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 240-342371 and analytical batch 240-342551 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected. The MS/MSD recoveries and the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-249990 and analytical batch 720-250078 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DG-B1S-0.5-1 (720-88164-1), DG-B1S-3.5-4 (720-88164-2), DG-C1S-0.5-1 (720-88164-3), DG-C1S-3.5-4 (720-88164-4), DG-A1S-0.5-1 (720-88164-5), DG-A1S-3.5-4 (720-88164-6), DG-A3S-0.5-1 (720-88164-7), DG-A3S-3.5-4 (720-88164-8), DG-A3S-9.5-10 (720-88164-9), DG-B3S-0.5-1 (720-88164-10), DG-B3S-3.5-4 (720-88164-11), DG-C3S-0.5-1 (720-88164-12), DG-C3S-3.5-4 (720-88164-13) and DG-C3S-9.5-10 (720-88164-14). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250046 and analytical batch 720-250164 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250071 and analytical batch 720-250222 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method(s) 6010B: The method blank for preparation batch 720-250046 and analytical batch 720-250164 contained Chromium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: The method blank for preparation batch 720-250071 and analytical batch 720-250222 contained Antimony above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method(s) 3546 / 8270C-SIM: Due to the viscosity of the sample extract the following sample was brought to a final volume of 2 ml: DG-C3S-9.5-10 (720-88164-14).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Subcontract Work

Method Asbestos - CARB 435: This method was subcontracted to ASBESTOS TEM LABORATORIES, INC. The subcontract laboratory certification is different from that of the facility issuing the final report.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-B1S-0.5-1 — Lab Sample ID: 720-88164-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	19	J	39	16	ug/Kg	8		8270C SIM	Total/NA
Benzo[a]anthracene	30	J	39	12	ug/Kg	8		8270C SIM	Total/NA
Benzo[a]pyrene	32	J	39	15	ug/Kg	8		8270C SIM	Total/NA
Benzo[b]fluoranthene	36	J	39	16	ug/Kg	8		8270C SIM	Total/NA
Benzo[k]fluoranthene	20	J	39	16	ug/Kg	8		8270C SIM	Total/NA
Chrysene	21	J	39	11	ug/Kg	8		8270C SIM	Total/NA
Fluoranthene	40		39	11	ug/Kg	8		8270C SIM	Total/NA
Phenanthrene	29	J	39	14	ug/Kg	8		8270C SIM	Total/NA
Pyrene	49		39	13	ug/Kg	8		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	160000		3900	1400	ug/Kg	2		8015B	Total/NA
Antimony	0.89	J F1	1.7	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	110		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	48		1.7	0.23	mg/Kg	4		6010B	Total/NA
Cadmium	0.26	J	0.41	0.041	mg/Kg	4		6010B	Total/NA
Chromium	23		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	6.1		0.66	0.066	mg/Kg	4		6010B	Total/NA
Copper	56		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	66		1.7	0.35	mg/Kg	4		6010B	Total/NA
Molybdenum	0.33	J	1.7	0.21	mg/Kg	4		6010B	Total/NA
Nickel	18		1.7	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	36		1.7	0.22	mg/Kg	4		6010B	Total/NA
Zinc	73		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.045		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B1S-3.5-4 — Lab Sample ID: 720-88164-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	2.2	J	5.0	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	4.6	J	5.0	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	2.3	J	5.0	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	2.2	J	5.0	1.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	6.7		5.0	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	3.2	J	5.0	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	9100		2000	740	ug/Kg	1		8015B	Total/NA
Antimony	1.3	J	1.9	0.31	mg/Kg	4		6010B	Total/NA
Arsenic	94		3.7	0.32	mg/Kg	4		6010B	Total/NA
Barium	100		1.9	0.27	mg/Kg	4		6010B	Total/NA
Beryllium	0.12	J	0.37	0.12	mg/Kg	4		6010B	Total/NA
Cadmium	0.077	J	0.47	0.046	mg/Kg	4		6010B	Total/NA
Chromium	85		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	18		0.75	0.075	mg/Kg	4		6010B	Total/NA
Copper	33		5.6	2.7	mg/Kg	4		6010B	Total/NA
Lead	3.5		1.9	0.39	mg/Kg	4		6010B	Total/NA
Nickel	120		1.9	0.19	mg/Kg	4		6010B	Total/NA
Vanadium	71		1.9	0.25	mg/Kg	4		6010B	Total/NA
Zinc	53		5.6	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.48		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-C1S-0.5-1 — Lab Sample ID: 720-88164-3

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-C1S-0.5-1 (Continued) — Lab Sample ID: 720-88164-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	3.0		1.7	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	270		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	63		1.7	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.13	J	0.33	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	0.63		0.41	0.041	mg/Kg	4		6010B	Total/NA
Chromium	17		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	10		0.66	0.066	mg/Kg	4		6010B	Total/NA
Copper	110		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	250		1.7	0.35	mg/Kg	4		6010B	Total/NA
Molybdenum	0.37	J	1.7	0.21	mg/Kg	4		6010B	Total/NA
Nickel	15		1.7	0.17	mg/Kg	4		6010B	Total/NA
Silver	0.17	J	0.83	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	59		1.7	0.22	mg/Kg	4		6010B	Total/NA
Zinc	180		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.12		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-C1S-3.5-4 — Lab Sample ID: 720-88164-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	100		1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	30		3.2	0.27	mg/Kg	4		6010B	Total/NA
Barium	75		1.6	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.12	J	0.32	0.10	mg/Kg	4		6010B	Total/NA
Cadmium	0.16	J	0.40	0.040	mg/Kg	4		6010B	Total/NA
Chromium	35		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	9.8		0.64	0.064	mg/Kg	4		6010B	Total/NA
Copper	92		4.8	2.3	mg/Kg	4		6010B	Total/NA
Lead	220		1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	0.24	J	1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	46		1.6	0.16	mg/Kg	4		6010B	Total/NA
Vanadium	43		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	83		4.8	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.050		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-A1S-0.5-1 — Lab Sample ID: 720-88164-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	3.5		1.5	0.24	mg/Kg	4		6010B	Total/NA
Arsenic	160		2.9	0.25	mg/Kg	4		6010B	Total/NA
Barium	85		1.5	0.21	mg/Kg	4		6010B	Total/NA
Beryllium	0.18	J	0.29	0.096	mg/Kg	4		6010B	Total/NA
Cadmium	0.14	J	0.37	0.036	mg/Kg	4		6010B	Total/NA
Chromium	63		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.59	0.059	mg/Kg	4		6010B	Total/NA
Copper	77		4.4	2.1	mg/Kg	4		6010B	Total/NA
Lead	100		1.5	0.31	mg/Kg	4		6010B	Total/NA
Nickel	71		1.5	0.15	mg/Kg	4		6010B	Total/NA
Selenium	0.59	J	2.9	0.44	mg/Kg	4		6010B	Total/NA
Vanadium	57		1.5	0.20	mg/Kg	4		6010B	Total/NA
Zinc	110		4.4	1.9	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-A1S-0.5-1 (Continued) — Lab Sample ID: 720-88164-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.73		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-A1S-3.5-4 — Lab Sample ID: 720-88164-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.85	J	1.7	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	7.8		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	58		1.7	0.24	mg/Kg	4		6010B	Total/NA
Beryllium	0.60		0.34	0.11	mg/Kg	4		6010B	Total/NA
Chromium	31		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	17		0.69	0.069	mg/Kg	4		6010B	Total/NA
Copper	19		5.2	2.5	mg/Kg	4		6010B	Total/NA
Lead	9.9		1.7	0.36	mg/Kg	4		6010B	Total/NA
Nickel	28		1.7	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	42		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	58		5.2	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.041		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-A3S-0.5-1 — Lab Sample ID: 720-88164-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	28	J	39	19	ug/Kg	4		8270C SIM	Total/NA
Acenaphthylene	9.4	J	19	9.4	ug/Kg	4		8270C SIM	Total/NA
Anthracene	14	J	19	7.8	ug/Kg	4		8270C SIM	Total/NA
Benzo[a]anthracene	26		19	5.8	ug/Kg	4		8270C SIM	Total/NA
Benzo[a]pyrene	32		19	7.4	ug/Kg	4		8270C SIM	Total/NA
Benzo[b]fluoranthene	51		19	8.2	ug/Kg	4		8270C SIM	Total/NA
Benzo[g,h,i]perylene	20		19	17	ug/Kg	4		8270C SIM	Total/NA
Benzo[k]fluoranthene	16	J	19	8.2	ug/Kg	4		8270C SIM	Total/NA
Chrysene	40		19	5.5	ug/Kg	4		8270C SIM	Total/NA
Fluoranthene	47		19	5.5	ug/Kg	4		8270C SIM	Total/NA
Naphthalene	15	J	19	14	ug/Kg	4		8270C SIM	Total/NA
Phenanthrene	60		19	7.0	ug/Kg	4		8270C SIM	Total/NA
Pyrene	63		19	6.6	ug/Kg	4		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	620000		19000	7100	ug/Kg	10		8015B	Total/NA
Aroclor-1260	87	p	51	23	ug/Kg	1		8082	Total/NA
Antimony	1.8	J	1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	41		3.8	0.32	mg/Kg	4		6010B	Total/NA
Barium	74		1.9	0.27	mg/Kg	4		6010B	Total/NA
Beryllium	0.30	J	0.38	0.12	mg/Kg	4		6010B	Total/NA
Cadmium	0.19	J	0.48	0.047	mg/Kg	4		6010B	Total/NA
Chromium	65		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.76	0.076	mg/Kg	4		6010B	Total/NA
Copper	43		5.7	2.7	mg/Kg	4		6010B	Total/NA
Lead	59		1.9	0.40	mg/Kg	4		6010B	Total/NA
Molybdenum	0.35	J	1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	71		1.9	0.19	mg/Kg	4		6010B	Total/NA
Vanadium	58		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	120		5.7	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.044		0.014	0.0021	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-A3S-3.5-4 — Lab Sample ID: 720-88164-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	2.8	J	4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	6.6		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	2.1	J	4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	4.4	J	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	4.5	J	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	3.5	J	4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	13		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	4.7	J	4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	6900		1900	720	ug/Kg	1		8015B	Total/NA
Antimony	0.72	J	1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	3.2	J	3.6	0.30	mg/Kg	4		6010B	Total/NA
Barium	110		1.8	0.25	mg/Kg	4		6010B	Total/NA
Beryllium	0.28	J	0.36	0.12	mg/Kg	4		6010B	Total/NA
Chromium	43		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	5.2		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	12		5.4	2.5	mg/Kg	4		6010B	Total/NA
Lead	5.3		1.8	0.38	mg/Kg	4		6010B	Total/NA
Nickel	30		1.8	0.18	mg/Kg	4		6010B	Total/NA
Selenium	0.56	J	3.6	0.54	mg/Kg	4		6010B	Total/NA
Vanadium	50		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	32		5.4	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.17		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-A3S-9.5-10 — Lab Sample ID: 720-88164-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	39		36	28	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	19		19	9.6	ug/Kg	2		8270C SIM	Total/NA
Acenaphthylene	5.7	J	9.6	4.6	ug/Kg	2		8270C SIM	Total/NA
Anthracene	6.3	J	9.6	3.8	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	15		9.6	2.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	16		9.6	3.7	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	28		9.6	4.0	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	13		9.6	8.3	ug/Kg	2		8270C SIM	Total/NA
Benzo[k]fluoranthene	9.6		9.6	4.0	ug/Kg	2		8270C SIM	Total/NA
Chrysene	21		9.6	2.7	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	27		9.6	2.7	ug/Kg	2		8270C SIM	Total/NA
Naphthalene	13		9.6	6.7	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	26		9.6	3.5	ug/Kg	2		8270C SIM	Total/NA
Pyrene	33		9.6	3.3	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	6300		2000	730	ug/Kg	1		8015B	Total/NA
Antimony	1.4	J	1.8	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	1.9	J	3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	50		1.8	0.25	mg/Kg	4		6010B	Total/NA
Beryllium	0.14	J	0.35	0.11	mg/Kg	4		6010B	Total/NA
Chromium	130		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	4.4		0.70	0.070	mg/Kg	4		6010B	Total/NA
Copper	3.9	J	5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	1.1	J	1.8	0.37	mg/Kg	4		6010B	Total/NA
Nickel	20		1.8	0.18	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-A3S-9.5-10 (Continued) — Lab Sample ID: 720-88164-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	58		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	15		5.3	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.013	J	0.015	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B3S-0.5-1 — Lab Sample ID: 720-88164-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	24		3.8	0.63	mg/Kg	10		6010B	Total/NA
Arsenic	67		7.6	0.64	mg/Kg	10		6010B	Total/NA
Barium	630		1.5	0.22	mg/Kg	4		6010B	Total/NA
Cadmium	5.7		0.95	0.094	mg/Kg	10		6010B	Total/NA
Chromium	210		3.8	0.40	mg/Kg	10		6010B	Total/NA
Cobalt	14		1.5	0.15	mg/Kg	10		6010B	Total/NA
Copper	870		11	5.4	mg/Kg	10		6010B	Total/NA
Lead	5300		3.8	0.80	mg/Kg	10		6010B	Total/NA
Molybdenum	1.5		1.5	0.19	mg/Kg	4		6010B	Total/NA
Nickel	43		3.8	0.39	mg/Kg	10		6010B	Total/NA
Silver	4.4		1.9	0.38	mg/Kg	10		6010B	Total/NA
Thallium	1.9	J	3.8	1.1	mg/Kg	10		6010B	Total/NA
Vanadium	56		3.8	0.52	mg/Kg	10		6010B	Total/NA
Zinc	1900		11	4.8	mg/Kg	10		6010B	Total/NA
Mercury	0.81		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B3S-3.5-4 — Lab Sample ID: 720-88164-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	10		1.4	0.23	mg/Kg	4		6010B	Total/NA
Arsenic	9.7		2.7	0.23	mg/Kg	4		6010B	Total/NA
Barium	640		1.4	0.19	mg/Kg	4		6010B	Total/NA
Cadmium	2.2		0.34	0.034	mg/Kg	4		6010B	Total/NA
Chromium	19	B	1.4	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	3.8		0.54	0.054	mg/Kg	4		6010B	Total/NA
Copper	2100		4.1	1.9	mg/Kg	4		6010B	Total/NA
Lead	2300		1.4	0.29	mg/Kg	4		6010B	Total/NA
Nickel	16		1.4	0.14	mg/Kg	4		6010B	Total/NA
Silver	1.2		0.68	0.14	mg/Kg	4		6010B	Total/NA
Thallium	0.53	J	1.4	0.39	mg/Kg	4		6010B	Total/NA
Vanadium	7.5		1.4	0.19	mg/Kg	4		6010B	Total/NA
Zinc	2100		4.1	1.7	mg/Kg	4		6010B	Total/NA
Mercury	1.3		0.066	0.0097	mg/Kg	4		7471A	Total/NA

Client Sample ID: DG-C3S-0.5-1 — Lab Sample ID: 720-88164-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	76	*	53	40	ug/Kg	1		8260B	Total/NA
Benzene	0.86	J *	5.3	0.69	ug/Kg	1		8260B	Total/NA
Toluene	1.7	J *	5.3	0.75	ug/Kg	1		8260B	Total/NA
Trichloroethene	18	*	5.3	0.67	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	7.1	J	9.7	4.8	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	12		4.8	2.3	ug/Kg	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-C3S-0.5-1 (Continued) — Lab Sample ID: 720-88164-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	7.7		4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	43		4.8	1.5	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	51		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	71		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	35		4.8	4.2	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	26		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	59		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	9.3		4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	71		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	26		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	18		4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	57		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	120		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	41000		1900	730	ug/Kg	1		8015B	Total/NA
Antimony	16		1.6	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	5.2		3.2	0.27	mg/Kg	4		6010B	Total/NA
Barium	110		1.6	0.23	mg/Kg	4		6010B	Total/NA
Cadmium	0.40		0.40	0.039	mg/Kg	4		6010B	Total/NA
Chromium	13	B	1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.63	0.063	mg/Kg	4		6010B	Total/NA
Copper	240		4.8	2.3	mg/Kg	4		6010B	Total/NA
Lead	670		1.6	0.33	mg/Kg	4		6010B	Total/NA
Molybdenum	0.56	J	1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	26		1.6	0.16	mg/Kg	4		6010B	Total/NA
Silver	0.36	J	0.79	0.16	mg/Kg	4		6010B	Total/NA
Vanadium	120		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	300		4.8	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.21		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-C3S-3.5-4 — Lab Sample ID: 720-88164-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	44	J *	54	41	ug/Kg	1		8260B	Total/NA
Benzene	1.6	J *	5.4	0.71	ug/Kg	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.4	J *	5.4	0.74	ug/Kg	1		8260B	Total/NA
Toluene	1.6	J *	5.4	0.77	ug/Kg	1		8260B	Total/NA
Trichloroethene	22	*	5.4	0.68	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	12	J	20	9.8	ug/Kg	2		8270C SIM	Total/NA
Acenaphthylene	39		9.8	4.7	ug/Kg	2		8270C SIM	Total/NA
Anthracene	21		9.8	3.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	100		9.8	2.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	100		9.8	3.7	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	170		9.8	4.1	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	41		9.8	8.4	ug/Kg	2		8270C SIM	Total/NA
Benzo[k]fluoranthene	50		9.8	4.1	ug/Kg	2		8270C SIM	Total/NA
Chrysene	110		9.8	2.7	ug/Kg	2		8270C SIM	Total/NA
Dibenz(a,h)anthracene	17		9.8	6.9	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	120		9.8	2.7	ug/Kg	2		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	32		9.8	8.2	ug/Kg	2		8270C SIM	Total/NA
Naphthalene	23		9.8	6.9	ug/Kg	2		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-C3S-3.5-4 (Continued)

Lab Sample ID: 720-88164-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	58		9.8	3.5	ug/Kg	2		8270C SIM	Total/NA
Pyrene	170		9.8	3.3	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	64000		2000	740	ug/Kg	1		8015B	Total/NA
Antimony	38		7.9	1.3	mg/Kg	20		6010B	Total/NA
Arsenic	49		16	1.3	mg/Kg	20		6010B	Total/NA
Barium	1100		1.6	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.28	J	0.31	0.10	mg/Kg	4		6010B	Total/NA
Cadmium	9.2		2.0	0.20	mg/Kg	20		6010B	Total/NA
Chromium	38	B	7.9	0.83	mg/Kg	20		6010B	Total/NA
Cobalt	12		3.1	0.31	mg/Kg	20		6010B	Total/NA
Copper	10000		24	11	mg/Kg	20		6010B	Total/NA
Lead	5200		7.9	1.7	mg/Kg	20		6010B	Total/NA
Molybdenum	3.6		1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	39		7.9	0.80	mg/Kg	20		6010B	Total/NA
Silver	3.9		3.9	0.80	mg/Kg	20		6010B	Total/NA
Thallium	2.5	J	7.9	2.3	mg/Kg	20		6010B	Total/NA
Vanadium	28		7.9	1.1	mg/Kg	20		6010B	Total/NA
Zinc	5700		24	10	mg/Kg	20		6010B	Total/NA
Mercury	6.0		0.14	0.021	mg/Kg	10		7471A	Total/NA

Client Sample ID: DG-C3S-9.5-10

Lab Sample ID: 720-88164-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	5.7		4.6	1.8	ug/Kg	1		8260B	Total/NA
Anthracene	16	J	19	7.6	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	20		19	5.7	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	19		19	7.3	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	25		19	8.0	ug/Kg	2		8270C SIM	Total/NA
Benzo[k]fluoranthene	8.9	J	19	8.0	ug/Kg	2		8270C SIM	Total/NA
Chrysene	35		19	5.4	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	49		19	5.4	ug/Kg	2		8270C SIM	Total/NA
Fluorene	13	J	19	8.4	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	29		19	6.9	ug/Kg	2		8270C SIM	Total/NA
Pyrene	75		19	6.5	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	31000		1900	710	ug/Kg	1		8015B	Total/NA
Arsenic	4.4		3.6	0.30	mg/Kg	4		6010B	Total/NA
Barium	21		1.8	0.25	mg/Kg	4		6010B	Total/NA
Beryllium	0.34	J	0.36	0.12	mg/Kg	4		6010B	Total/NA
Cadmium	0.10	J	0.45	0.044	mg/Kg	4		6010B	Total/NA
Chromium	51		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	9.0		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	23		5.4	2.5	mg/Kg	4		6010B	Total/NA
Lead	8.0		1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	1.0	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	48		1.8	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	41		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	49		5.4	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.037		0.016	0.0023	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-B1S-0.5-1
Date Collected: 08/21/18 10:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-1
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.9	0.93	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Acetone	ND		39	29	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Benzene	ND		3.9	0.50	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Dichlorobromomethane	ND		3.9	0.56	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Bromobenzene	ND		3.9	0.61	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Chlorobromomethane	ND		15	0.56	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Bromoform	ND		3.9	1.5	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Bromomethane	ND		7.7	0.61	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
2-Butanone (MEK)	ND		39	16	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
n-Butylbenzene	ND		3.9	0.77	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
sec-Butylbenzene	ND		3.9	0.56	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
tert-Butylbenzene	ND		3.9	0.57	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Carbon disulfide	ND		3.9	1.5	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Carbon tetrachloride	ND		3.9	0.48	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Chlorobenzene	ND		3.9	0.53	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Chloroethane	ND		7.7	0.43	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Chloroform	ND		3.9	0.51	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Chloromethane	ND		7.7	0.61	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
2-Chlorotoluene	ND		3.9	0.50	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
4-Chlorotoluene	ND		3.9	0.53	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Chlorodibromomethane	ND		3.9	0.55	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
1,2-Dichlorobenzene	ND		3.9	0.53	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
1,3-Dichlorobenzene	ND		3.9	0.56	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
1,4-Dichlorobenzene	ND		3.9	0.55	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
1,3-Dichloropropane	ND		3.9	0.57	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
1,1-Dichloropropene	ND		3.9	0.53	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
1,2-Dibromo-3-Chloropropane	ND		7.7	1.3	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Ethylene Dibromide	ND		3.9	1.1	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Dibromomethane	ND		7.7	0.67	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Dichlorodifluoromethane	ND		7.7	0.61	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
1,1-Dichloroethane	ND		3.9	0.53	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
1,2-Dichloroethane	ND		3.9	0.59	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
1,1-Dichloroethene	ND		3.9	0.48	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
cis-1,2-Dichloroethene	ND		3.9	0.53	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
trans-1,2-Dichloroethene	ND		3.9	0.58	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
1,2-Dichloropropane	ND		3.9	0.49	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
cis-1,3-Dichloropropene	ND		3.9	0.53	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
trans-1,3-Dichloropropene	ND		3.9	0.52	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Ethylbenzene	ND		3.9	0.58	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Hexachlorobutadiene	ND		3.9	0.70	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
2-Hexanone	ND		39	7.7	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Isopropylbenzene	ND		3.9	0.53	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
4-Isopropyltoluene	ND		3.9	1.9	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Methylene Chloride	ND		7.7	4.3	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
4-Methyl-2-pentanone (MIBK)	ND		39	7.7	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Naphthalene	ND		7.7	1.2	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
N-Propylbenzene	ND		3.9	0.51	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Styrene	ND		3.9	0.49	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
1,1,1,2-Tetrachloroethane	ND		3.9	0.59	ug/Kg		08/22/18 01:45	08/27/18 14:16	1

Client Sample ID: DG-B1S-0.5-1
Date Collected: 08/21/18 10:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-1
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.9	0.58	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Tetrachloroethene	ND		3.9	0.52	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Toluene	ND		3.9	0.55	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
1,2,3-Trichlorobenzene	ND		3.9	0.57	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
1,2,4-Trichlorobenzene	ND		3.9	0.55	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
1,1,1-Trichloroethane	ND		3.9	0.47	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
1,1,2-Trichloroethane	ND		3.9	0.54	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Trichloroethene	ND		3.9	0.49	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Trichlorofluoromethane	ND		3.9	0.43	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
1,2,3-Trichloropropane	ND		3.9	0.60	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.9	1.6	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
1,2,4-Trimethylbenzene	ND		3.9	1.3	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
1,3,5-Trimethylbenzene	ND		3.9	0.50	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Vinyl acetate	ND		15	3.9	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Vinyl chloride	ND		3.9	0.57	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Xylenes, Total	ND		3.9	0.94	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
2,2-Dichloropropane	ND		3.9	1.5	ug/Kg		08/22/18 01:45	08/27/18 14:16	1
Gasoline Range Organics (GRO) -C4-C12	ND		190	77	ug/Kg		08/22/18 01:45	08/27/18 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*45 - 131*	*08/22/18 01:45*	*08/27/18 14:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*	*08/22/18 01:45*	*08/27/18 14:16*	*1*
Toluene-d8 (Surr)	*93*		*58 - 140*	*08/22/18 01:45*	*08/27/18 14:16*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		78	39	ug/Kg		08/22/18 12:41	08/24/18 16:33	8
Acenaphthene	ND		39	22	ug/Kg		08/22/18 12:41	08/24/18 16:33	8
Acenaphthylene	ND		39	19	ug/Kg		08/22/18 12:41	08/24/18 16:33	8
Anthracene	**19**	**J**	39	16	ug/Kg		08/22/18 12:41	08/24/18 16:33	8
Benzo[a]anthracene	**30**	**J**	39	12	ug/Kg		08/22/18 12:41	08/24/18 16:33	8
Benzo[a]pyrene	**32**	**J**	39	15	ug/Kg		08/22/18 12:41	08/24/18 16:33	8
Benzo[b]fluoranthene	**36**	**J**	39	16	ug/Kg		08/22/18 12:41	08/24/18 16:33	8
Benzo[g,h,i]perylene	ND		39	33	ug/Kg		08/22/18 12:41	08/24/18 16:33	8
Benzo[k]fluoranthene	**20**	**J**	39	16	ug/Kg		08/22/18 12:41	08/24/18 16:33	8
Chrysene	**21**	**J**	39	11	ug/Kg		08/22/18 12:41	08/24/18 16:33	8
Dibenz(a,h)anthracene	ND		39	27	ug/Kg		08/22/18 12:41	08/24/18 16:33	8
Fluoranthene	**40**		39	11	ug/Kg		08/22/18 12:41	08/24/18 16:33	8
Fluorene	ND		39	17	ug/Kg		08/22/18 12:41	08/24/18 16:33	8
Indeno[1,2,3-cd]pyrene	ND		39	33	ug/Kg		08/22/18 12:41	08/24/18 16:33	8
Naphthalene	ND		39	27	ug/Kg		08/22/18 12:41	08/24/18 16:33	8
Phenanthrene	**29**	**J**	39	14	ug/Kg		08/22/18 12:41	08/24/18 16:33	8
Pyrene	**49**		39	13	ug/Kg		08/22/18 12:41	08/24/18 16:33	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*33 - 120*	*08/22/18 12:41*	*08/24/18 16:33*	*8*
Terphenyl-d14	*79*		*35 - 146*	*08/22/18 12:41*	*08/24/18 16:33*	*8*

Client Sample ID: DG-B1S-0.5-1

Date Collected: 08/21/18 10:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-1

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	160000		3900	1400	ug/Kg		08/22/18 09:40	08/23/18 11:10	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*70*		*40 - 130*	*08/22/18 09:40*	*08/23/18 11:10*	*2*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
Aldrin	ND		1.9	0.48	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
Endrin	ND		1.9	0.44	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
Toxaphene	ND		38	6.5	ug/Kg		08/22/18 15:45	08/26/18 07:20	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/22/18 15:45	08/26/18 07:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*99*		*21 - 136*	*08/22/18 15:45*	*08/26/18 07:20*	*1*
Tetrachloro-m-xylene	*75*		*21 - 145*	*08/22/18 15:45*	*08/26/18 07:20*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/24/18 08:44	08/27/18 17:46	1
Aroclor-1221	ND		50	24	ug/Kg		08/24/18 08:44	08/27/18 17:46	1
Aroclor-1232	ND		50	23	ug/Kg		08/24/18 08:44	08/27/18 17:46	1
Aroclor-1242	ND		50	19	ug/Kg		08/24/18 08:44	08/27/18 17:46	1
Aroclor-1248	ND		50	24	ug/Kg		08/24/18 08:44	08/27/18 17:46	1
Aroclor-1254	ND		50	23	ug/Kg		08/24/18 08:44	08/27/18 17:46	1
Aroclor-1260	ND		50	22	ug/Kg		08/24/18 08:44	08/27/18 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*14 - 128*	*08/24/18 08:44*	*08/27/18 17:46*	*1*
DCB Decachlorobiphenyl	*62*		*10 - 132*	*08/24/18 08:44*	*08/27/18 17:46*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.89	J F1	1.7	0.27	mg/Kg		08/22/18 15:58	08/23/18 13:11	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-B1S-0.5-1
Date Collected: 08/21/18 10:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-1
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	110		3.3	0.28	mg/Kg		08/22/18 15:58	08/23/18 13:11	4
Barium	48		1.7	0.23	mg/Kg		08/22/18 15:58	08/23/18 13:11	4
Beryllium	ND		0.33	0.11	mg/Kg		08/22/18 15:58	08/23/18 13:11	4
Cadmium	0.26	J	0.41	0.041	mg/Kg		08/22/18 15:58	08/23/18 13:11	4
Chromium	23		1.7	0.18	mg/Kg		08/22/18 15:58	08/23/18 13:11	4
Cobalt	6.1		0.66	0.066	mg/Kg		08/22/18 15:58	08/23/18 13:11	4
Copper	56		5.0	2.4	mg/Kg		08/22/18 15:58	08/23/18 13:11	4
Lead	66		1.7	0.35	mg/Kg		08/22/18 15:58	08/23/18 13:11	4
Molybdenum	0.33	J	1.7	0.21	mg/Kg		08/22/18 15:58	08/23/18 13:11	4
Nickel	18		1.7	0.17	mg/Kg		08/22/18 15:58	08/23/18 13:11	4
Selenium	ND		3.3	0.50	mg/Kg		08/22/18 15:58	08/23/18 13:11	4
Silver	ND		0.83	0.17	mg/Kg		08/22/18 15:58	08/23/18 13:11	4
Thallium	ND		1.7	0.48	mg/Kg		08/22/18 15:58	08/23/18 13:11	4
Vanadium	36		1.7	0.22	mg/Kg		08/22/18 15:58	08/23/18 13:11	4
Zinc	73		5.0	2.1	mg/Kg		08/22/18 15:58	08/23/18 13:11	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.045		0.015	0.0022	mg/Kg		08/23/18 10:11	08/24/18 16:18	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-B1S-3.5-4
Date Collected: 08/21/18 10:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-2
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.7	1.1	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Acetone	ND		47	36	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Benzene	ND		4.7	0.61	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Dichlorobromomethane	ND		4.7	0.68	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Bromobenzene	ND		4.7	0.74	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Chlorobromomethane	ND		19	0.68	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Bromoform	ND		4.7	1.9	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Bromomethane	ND		9.4	0.74	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
2-Butanone (MEK)	ND		47	20	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
n-Butylbenzene	ND		4.7	0.94	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
sec-Butylbenzene	ND		4.7	0.68	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
tert-Butylbenzene	ND		4.7	0.69	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Carbon disulfide	ND		4.7	1.9	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Carbon tetrachloride	ND		4.7	0.58	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Chlorobenzene	ND		4.7	0.65	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Chloroethane	ND		9.4	0.53	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Chloroform	ND		4.7	0.62	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Chloromethane	ND		9.4	0.74	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
2-Chlorotoluene	ND		4.7	0.61	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
4-Chlorotoluene	ND		4.7	0.64	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Chlorodibromomethane	ND		4.7	0.67	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
1,2-Dichlorobenzene	ND		4.7	0.64	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
1,3-Dichlorobenzene	ND		4.7	0.68	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
1,4-Dichlorobenzene	ND		4.7	0.67	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
1,3-Dichloropropane	ND		4.7	0.69	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
1,1-Dichloropropene	ND		4.7	0.65	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
1,2-Dibromo-3-Chloropropane	ND		9.4	1.6	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Ethylene Dibromide	ND		4.7	1.3	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Dibromomethane	ND		9.4	0.81	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Dichlorodifluoromethane	ND		9.4	0.74	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
1,1-Dichloroethane	ND		4.7	0.64	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
1,2-Dichloroethane	ND		4.7	0.71	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
1,1-Dichloroethene	ND		4.7	0.58	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
cis-1,2-Dichloroethene	ND		4.7	0.64	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
trans-1,2-Dichloroethene	ND		4.7	0.70	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
1,2-Dichloropropane	ND		4.7	0.59	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
cis-1,3-Dichloropropene	ND		4.7	0.65	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
trans-1,3-Dichloropropene	ND		4.7	0.63	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Ethylbenzene	ND		4.7	0.70	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Hexachlorobutadiene	ND		4.7	0.84	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
2-Hexanone	ND		47	9.4	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Isopropylbenzene	ND		4.7	0.64	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
4-Isopropyltoluene	ND		4.7	2.3	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Methylene Chloride	ND		9.4	5.3	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
4-Methyl-2-pentanone (MIBK)	ND		47	9.4	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Naphthalene	ND		9.4	1.4	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
N-Propylbenzene	ND		4.7	0.62	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Styrene	ND		4.7	0.59	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
1,1,1,2-Tetrachloroethane	ND		4.7	0.71	ug/Kg		08/22/18 01:45	08/27/18 14:45	1

Client Sample ID: DG-B1S-3.5-4
Date Collected: 08/21/18 10:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-2
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.7	0.70	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Tetrachloroethene	ND		4.7	0.63	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Toluene	ND		4.7	0.67	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
1,2,3-Trichlorobenzene	ND		4.7	0.69	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
1,2,4-Trichlorobenzene	ND		4.7	0.67	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
1,1,1-Trichloroethane	ND		4.7	0.57	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
1,1,2-Trichloroethane	ND		4.7	0.66	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Trichloroethene	ND		4.7	0.59	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Trichlorofluoromethane	ND		4.7	0.53	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
1,2,3-Trichloropropane	ND		4.7	0.72	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7	2.0	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
1,2,4-Trimethylbenzene	ND		4.7	1.5	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
1,3,5-Trimethylbenzene	ND		4.7	0.61	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Vinyl acetate	ND		19	4.7	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Vinyl chloride	ND		4.7	0.69	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Xylenes, Total	ND		4.7	1.1	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
2,2-Dichloropropane	ND		4.7	1.9	ug/Kg		08/22/18 01:45	08/27/18 14:45	1
Gasoline Range Organics (GRO) -C4-C12	ND		230	94	ug/Kg		08/22/18 01:45	08/27/18 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*45 - 131*	*08/22/18 01:45*	*08/27/18 14:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*60 - 140*	*08/22/18 01:45*	*08/27/18 14:45*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*	*08/22/18 01:45*	*08/27/18 14:45*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/22/18 12:41	08/23/18 18:45	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/22/18 12:41	08/23/18 18:45	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/22/18 12:41	08/23/18 18:45	1
Anthracene	ND		5.0	2.0	ug/Kg		08/22/18 12:41	08/23/18 18:45	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/22/18 12:41	08/23/18 18:45	1
Benzo[a]pyrene	**2.2**	**J**	5.0	1.9	ug/Kg		08/22/18 12:41	08/23/18 18:45	1
Benzo[b]fluoranthene	**4.6**	**J**	5.0	2.1	ug/Kg		08/22/18 12:41	08/23/18 18:45	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/22/18 12:41	08/23/18 18:45	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/22/18 12:41	08/23/18 18:45	1
Chrysene	**2.3**	**J**	5.0	1.4	ug/Kg		08/22/18 12:41	08/23/18 18:45	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/22/18 12:41	08/23/18 18:45	1
Fluoranthene	**2.2**	**J**	5.0	1.4	ug/Kg		08/22/18 12:41	08/23/18 18:45	1
Fluorene	ND		5.0	2.2	ug/Kg		08/22/18 12:41	08/23/18 18:45	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/22/18 12:41	08/23/18 18:45	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/22/18 12:41	08/23/18 18:45	1
Phenanthrene	**6.7**		5.0	1.8	ug/Kg		08/22/18 12:41	08/23/18 18:45	1
Pyrene	**3.2**	**J**	5.0	1.7	ug/Kg		08/22/18 12:41	08/23/18 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*33 - 120*	*08/22/18 12:41*	*08/23/18 18:45*	*1*
Terphenyl-d14	*94*		*35 - 146*	*08/22/18 12:41*	*08/23/18 18:45*	*1*

Client Sample ID: DG-B1S-3.5-4

Date Collected: 08/21/18 10:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-2

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	9100		2000	740	ug/Kg		08/22/18 09:40	08/23/18 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*91*		*40 - 130*	*08/22/18 09:40*	*08/23/18 15:17*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
Aldrin	ND		2.0	0.50	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
Endrin	ND		2.0	0.46	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
Toxaphene	ND		40	6.7	ug/Kg		08/22/18 15:45	08/26/18 07:38	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/22/18 15:45	08/26/18 07:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*80*		*21 - 136*	*08/22/18 15:45*	*08/26/18 07:38*	*1*
Tetrachloro-m-xylene	*80*		*21 - 145*	*08/22/18 15:45*	*08/26/18 07:38*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/24/18 08:44	08/27/18 18:01	1
Aroclor-1221	ND		50	24	ug/Kg		08/24/18 08:44	08/27/18 18:01	1
Aroclor-1232	ND		50	23	ug/Kg		08/24/18 08:44	08/27/18 18:01	1
Aroclor-1242	ND		50	19	ug/Kg		08/24/18 08:44	08/27/18 18:01	1
Aroclor-1248	ND		50	24	ug/Kg		08/24/18 08:44	08/27/18 18:01	1
Aroclor-1254	ND		50	23	ug/Kg		08/24/18 08:44	08/27/18 18:01	1
Aroclor-1260	ND		50	22	ug/Kg		08/24/18 08:44	08/27/18 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*14 - 128*	*08/24/18 08:44*	*08/27/18 18:01*	*1*
DCB Decachlorobiphenyl	*102*		*10 - 132*	*08/24/18 08:44*	*08/27/18 18:01*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.3	J	1.9	0.31	mg/Kg		08/22/18 15:58	08/23/18 20:02	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-B1S-3.5-4
Date Collected: 08/21/18 10:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-2
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	94		3.7	0.32	mg/Kg		08/22/18 15:58	08/23/18 20:02	4
Barium	100		1.9	0.27	mg/Kg		08/22/18 15:58	08/23/18 20:02	4
Beryllium	0.12	J	0.37	0.12	mg/Kg		08/22/18 15:58	08/23/18 20:02	4
Cadmium	0.077	J	0.47	0.046	mg/Kg		08/22/18 15:58	08/23/18 20:02	4
Chromium	85		1.9	0.20	mg/Kg		08/22/18 15:58	08/23/18 20:02	4
Cobalt	18		0.75	0.075	mg/Kg		08/22/18 15:58	08/23/18 20:02	4
Copper	33		5.6	2.7	mg/Kg		08/22/18 15:58	08/23/18 20:02	4
Lead	3.5		1.9	0.39	mg/Kg		08/22/18 15:58	08/23/18 20:02	4
Molybdenum	ND		1.9	0.24	mg/Kg		08/22/18 15:58	08/23/18 20:02	4
Nickel	120		1.9	0.19	mg/Kg		08/22/18 15:58	08/23/18 20:02	4
Selenium	ND		3.7	0.56	mg/Kg		08/22/18 15:58	08/23/18 20:02	4
Silver	ND		0.93	0.19	mg/Kg		08/22/18 15:58	08/23/18 20:02	4
Thallium	ND		1.9	0.54	mg/Kg		08/22/18 15:58	08/23/18 20:02	4
Vanadium	71		1.9	0.25	mg/Kg		08/22/18 15:58	08/23/18 20:02	4
Zinc	53		5.6	2.4	mg/Kg		08/22/18 15:58	08/23/18 20:02	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.48		0.017	0.0025	mg/Kg		08/23/18 10:11	08/24/18 16:25	1

Client Sample ID: DG-C1S-0.5-1

Date Collected: 08/21/18 10:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-3

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**3.0**		1.7	0.27	mg/Kg		08/22/18 15:58	08/23/18 20:07	4
Arsenic	**270**		3.3	0.28	mg/Kg		08/22/18 15:58	08/23/18 20:07	4
Barium	**63**		1.7	0.23	mg/Kg		08/22/18 15:58	08/23/18 20:07	4
Beryllium	**0.13**	**J**	0.33	0.11	mg/Kg		08/22/18 15:58	08/23/18 20:07	4
Cadmium	**0.63**		0.41	0.041	mg/Kg		08/22/18 15:58	08/23/18 20:07	4
Chromium	**17**		1.7	0.18	mg/Kg		08/22/18 15:58	08/23/18 20:07	4
Cobalt	**10**		0.66	0.066	mg/Kg		08/22/18 15:58	08/23/18 20:07	4
Copper	**110**		5.0	2.4	mg/Kg		08/22/18 15:58	08/23/18 20:07	4
Lead	**250**		1.7	0.35	mg/Kg		08/22/18 15:58	08/23/18 20:07	4
Molybdenum	**0.37**	**J**	1.7	0.21	mg/Kg		08/22/18 15:58	08/23/18 20:07	4
Nickel	**15**		1.7	0.17	mg/Kg		08/22/18 15:58	08/23/18 20:07	4
Selenium	ND		3.3	0.50	mg/Kg		08/22/18 15:58	08/23/18 20:07	4
Silver	**0.17**	**J**	0.83	0.17	mg/Kg		08/22/18 15:58	08/23/18 20:07	4
Thallium	ND		1.7	0.48	mg/Kg		08/22/18 15:58	08/23/18 20:07	4
Vanadium	**59**		1.7	0.22	mg/Kg		08/22/18 15:58	08/23/18 20:07	4
Zinc	**180**		5.0	2.1	mg/Kg		08/22/18 15:58	08/23/18 20:07	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.12**		0.015	0.0023	mg/Kg		08/23/18 10:11	08/24/18 16:27	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-C1S-3.5-4
Date Collected: 08/21/18 10:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-4
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	100		1.6	0.27	mg/Kg		08/22/18 15:58	08/23/18 20:12	4
Arsenic	30		3.2	0.27	mg/Kg		08/22/18 15:58	08/23/18 20:12	4
Barium	75		1.6	0.23	mg/Kg		08/22/18 15:58	08/23/18 20:12	4
Beryllium	0.12	J	0.32	0.10	mg/Kg		08/22/18 15:58	08/23/18 20:12	4
Cadmium	0.16	J	0.40	0.040	mg/Kg		08/22/18 15:58	08/23/18 20:12	4
Chromium	35		1.6	0.17	mg/Kg		08/22/18 15:58	08/23/18 20:12	4
Cobalt	9.8		0.64	0.064	mg/Kg		08/22/18 15:58	08/23/18 20:12	4
Copper	92		4.8	2.3	mg/Kg		08/22/18 15:58	08/23/18 20:12	4
Lead	220		1.6	0.34	mg/Kg		08/22/18 15:58	08/23/18 20:12	4
Molybdenum	0.24	J	1.6	0.20	mg/Kg		08/22/18 15:58	08/23/18 20:12	4
Nickel	46		1.6	0.16	mg/Kg		08/22/18 15:58	08/23/18 20:12	4
Selenium	ND		3.2	0.48	mg/Kg		08/22/18 15:58	08/23/18 20:12	4
Silver	ND		0.80	0.16	mg/Kg		08/22/18 15:58	08/23/18 20:12	4
Thallium	ND		1.6	0.46	mg/Kg		08/22/18 15:58	08/23/18 20:12	4
Vanadium	43		1.6	0.22	mg/Kg		08/22/18 15:58	08/23/18 20:12	4
Zinc	83		4.8	2.0	mg/Kg		08/22/18 15:58	08/23/18 20:12	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.050		0.016	0.0023	mg/Kg		08/23/18 10:11	08/24/18 16:29	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-A1S-0.5-1
Date Collected: 08/21/18 10:40
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-5
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.5		1.5	0.24	mg/Kg		08/22/18 15:58	08/23/18 20:17	4
Arsenic	160		2.9	0.25	mg/Kg		08/22/18 15:58	08/23/18 20:17	4
Barium	85		1.5	0.21	mg/Kg		08/22/18 15:58	08/23/18 20:17	4
Beryllium	0.18	J	0.29	0.096	mg/Kg		08/22/18 15:58	08/23/18 20:17	4
Cadmium	0.14	J	0.37	0.036	mg/Kg		08/22/18 15:58	08/23/18 20:17	4
Chromium	63		1.5	0.16	mg/Kg		08/22/18 15:58	08/23/18 20:17	4
Cobalt	13		0.59	0.059	mg/Kg		08/22/18 15:58	08/23/18 20:17	4
Copper	77		4.4	2.1	mg/Kg		08/22/18 15:58	08/23/18 20:17	4
Lead	100		1.5	0.31	mg/Kg		08/22/18 15:58	08/23/18 20:17	4
Molybdenum	ND		1.5	0.19	mg/Kg		08/22/18 15:58	08/23/18 20:17	4
Nickel	71		1.5	0.15	mg/Kg		08/22/18 15:58	08/23/18 20:17	4
Selenium	0.59	J	2.9	0.44	mg/Kg		08/22/18 15:58	08/23/18 20:17	4
Silver	ND		0.74	0.15	mg/Kg		08/22/18 15:58	08/23/18 20:17	4
Thallium	ND		1.5	0.43	mg/Kg		08/22/18 15:58	08/23/18 20:17	4
Vanadium	57		1.5	0.20	mg/Kg		08/22/18 15:58	08/23/18 20:17	4
Zinc	110		4.4	1.9	mg/Kg		08/22/18 15:58	08/23/18 20:17	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.73		0.017	0.0025	mg/Kg		08/23/18 10:11	08/24/18 16:37	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-A1S-3.5-4
Date Collected: 08/21/18 10:40
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-6
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.85	J	1.7	0.29	mg/Kg		08/22/18 15:58	08/23/18 20:31	4
Arsenic	7.8		3.4	0.29	mg/Kg		08/22/18 15:58	08/23/18 20:31	4
Barium	58		1.7	0.24	mg/Kg		08/22/18 15:58	08/23/18 20:31	4
Beryllium	0.60		0.34	0.11	mg/Kg		08/22/18 15:58	08/23/18 20:31	4
Cadmium	ND		0.43	0.043	mg/Kg		08/22/18 15:58	08/23/18 20:31	4
Chromium	31		1.7	0.18	mg/Kg		08/22/18 15:58	08/23/18 20:31	4
Cobalt	17		0.69	0.069	mg/Kg		08/22/18 15:58	08/23/18 20:31	4
Copper	19		5.2	2.5	mg/Kg		08/22/18 15:58	08/23/18 20:31	4
Lead	9.9		1.7	0.36	mg/Kg		08/22/18 15:58	08/23/18 20:31	4
Molybdenum	ND		1.7	0.22	mg/Kg		08/22/18 15:58	08/23/18 20:31	4
Nickel	28		1.7	0.18	mg/Kg		08/22/18 15:58	08/23/18 20:31	4
Selenium	ND		3.4	0.52	mg/Kg		08/22/18 15:58	08/23/18 20:31	4
Silver	ND		0.86	0.17	mg/Kg		08/22/18 15:58	08/23/18 20:31	4
Thallium	ND		1.7	0.50	mg/Kg		08/22/18 15:58	08/23/18 20:31	4
Vanadium	42		1.7	0.23	mg/Kg		08/22/18 15:58	08/23/18 20:31	4
Zinc	58		5.2	2.2	mg/Kg		08/22/18 15:58	08/23/18 20:31	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.041		0.017	0.0025	mg/Kg		08/23/18 10:11	08/24/18 16:39	1

Client Sample ID: DG-A3S-0.5-1
Date Collected: 08/21/18 11:10
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-7
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.4	1.1	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Acetone	ND		44	34	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Benzene	ND		4.4	0.58	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Dichlorobromomethane	ND		4.4	0.64	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Bromobenzene	ND		4.4	0.70	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Chlorobromomethane	ND		18	0.64	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Bromoform	ND		4.4	1.8	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Bromomethane	ND		8.9	0.70	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
2-Butanone (MEK)	ND		44	19	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
n-Butylbenzene	ND		4.4	0.89	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
sec-Butylbenzene	ND		4.4	0.64	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
tert-Butylbenzene	ND		4.4	0.65	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Carbon disulfide	ND		4.4	1.8	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Carbon tetrachloride	ND		4.4	0.55	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Chlorobenzene	ND		4.4	0.61	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Chloroethane	ND		8.9	0.50	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Chloroform	ND		4.4	0.58	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Chloromethane	ND		8.9	0.70	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
2-Chlorotoluene	ND		4.4	0.58	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
4-Chlorotoluene	ND		4.4	0.60	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Chlorodibromomethane	ND		4.4	0.63	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
1,2-Dichlorobenzene	ND		4.4	0.60	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
1,3-Dichlorobenzene	ND		4.4	0.64	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
1,4-Dichlorobenzene	ND		4.4	0.63	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
1,3-Dichloropropane	ND		4.4	0.65	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
1,1-Dichloropropene	ND		4.4	0.61	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
1,2-Dibromo-3-Chloropropane	ND		8.9	1.5	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Ethylene Dibromide	ND		4.4	1.3	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Dibromomethane	ND		8.9	0.76	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Dichlorodifluoromethane	ND		8.9	0.70	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
1,1-Dichloroethane	ND		4.4	0.60	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
1,2-Dichloroethane	ND		4.4	0.67	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
1,1-Dichloroethene	ND		4.4	0.55	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
cis-1,2-Dichloroethene	ND		4.4	0.60	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
trans-1,2-Dichloroethene	ND		4.4	0.66	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
1,2-Dichloropropane	ND		4.4	0.56	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
cis-1,3-Dichloropropene	ND		4.4	0.61	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
trans-1,3-Dichloropropene	ND		4.4	0.59	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Ethylbenzene	ND		4.4	0.66	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Hexachlorobutadiene	ND		4.4	0.80	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
2-Hexanone	ND		44	8.9	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Isopropylbenzene	ND		4.4	0.60	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
4-Isopropyltoluene	ND		4.4	2.2	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Methylene Chloride	ND		8.9	5.0	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
4-Methyl-2-pentanone (MIBK)	ND		44	8.9	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Naphthalene	ND		8.9	1.3	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
N-Propylbenzene	ND		4.4	0.58	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Styrene	ND		4.4	0.56	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
1,1,1,2-Tetrachloroethane	ND		4.4	0.67	ug/Kg		08/22/18 01:45	08/27/18 15:15	1

Client Sample ID: DG-A3S-0.5-1
Date Collected: 08/21/18 11:10
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-7
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.4	0.66	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Toluene	ND		4.4	0.63	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
1,2,3-Trichlorobenzene	ND		4.4	0.66	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
1,2,4-Trichlorobenzene	ND		4.4	0.63	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
1,1,1-Trichloroethane	ND		4.4	0.54	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
1,1,2-Trichloroethane	ND		4.4	0.62	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Trichloroethene	ND		4.4	0.56	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Trichlorofluoromethane	ND		4.4	0.50	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
1,2,3-Trichloropropane	ND		4.4	0.68	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.8	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
1,2,4-Trimethylbenzene	ND		4.4	1.5	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
1,3,5-Trimethylbenzene	ND		4.4	0.58	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Vinyl acetate	ND		18	4.4	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Vinyl chloride	ND		4.4	0.65	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Xylenes, Total	ND		4.4	1.1	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
2,2-Dichloropropane	ND		4.4	1.8	ug/Kg		08/22/18 01:45	08/27/18 15:15	1
Gasoline Range Organics (GRO) -C4-C12	ND		220	89	ug/Kg		08/22/18 01:45	08/27/18 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*45 - 131*	*08/22/18 01:45*	*08/27/18 15:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*	*08/22/18 01:45*	*08/27/18 15:15*	*1*
Toluene-d8 (Surr)	*91*		*58 - 140*	*08/22/18 01:45*	*08/27/18 15:15*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**28**	**J**	39	19	ug/Kg		08/22/18 12:41	08/24/18 16:56	4
Acenaphthene	ND		19	11	ug/Kg		08/22/18 12:41	08/24/18 16:56	4
Acenaphthylene	**9.4**	**J**	19	9.4	ug/Kg		08/22/18 12:41	08/24/18 16:56	4
Anthracene	**14**	**J**	19	7.8	ug/Kg		08/22/18 12:41	08/24/18 16:56	4
Benzo[a]anthracene	**26**		19	5.8	ug/Kg		08/22/18 12:41	08/24/18 16:56	4
Benzo[a]pyrene	**32**		19	7.4	ug/Kg		08/22/18 12:41	08/24/18 16:56	4
Benzo[b]fluoranthene	**51**		19	8.2	ug/Kg		08/22/18 12:41	08/24/18 16:56	4
Benzo[g,h,i]perylene	**20**		19	17	ug/Kg		08/22/18 12:41	08/24/18 16:56	4
Benzo[k]fluoranthene	**16**	**J**	19	8.2	ug/Kg		08/22/18 12:41	08/24/18 16:56	4
Chrysene	**40**		19	5.5	ug/Kg		08/22/18 12:41	08/24/18 16:56	4
Dibenz(a,h)anthracene	ND		19	14	ug/Kg		08/22/18 12:41	08/24/18 16:56	4
Fluoranthene	**47**		19	5.5	ug/Kg		08/22/18 12:41	08/24/18 16:56	4
Fluorene	ND		19	8.6	ug/Kg		08/22/18 12:41	08/24/18 16:56	4
Indeno[1,2,3-cd]pyrene	ND		19	16	ug/Kg		08/22/18 12:41	08/24/18 16:56	4
Naphthalene	**15**	**J**	19	14	ug/Kg		08/22/18 12:41	08/24/18 16:56	4
Phenanthrene	**60**		19	7.0	ug/Kg		08/22/18 12:41	08/24/18 16:56	4
Pyrene	**63**		19	6.6	ug/Kg		08/22/18 12:41	08/24/18 16:56	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*33 - 120*	*08/22/18 12:41*	*08/24/18 16:56*	*4*
Terphenyl-d14	*76*		*35 - 146*	*08/22/18 12:41*	*08/24/18 16:56*	*4*

Client Sample ID: DG-A3S-0.5-1

Date Collected: 08/21/18 11:10
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-7

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	620000		19000	7100	ug/Kg		08/22/18 09:40	08/23/18 15:17	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*D X*	*40 - 130*	*08/22/18 09:40*	*08/23/18 15:17*	*10*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.59	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
4,4'-DDE	ND		2.0	0.41	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
4,4'-DDT	ND		2.0	0.40	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
Aldrin	ND		2.0	0.49	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
beta-BHC	ND		2.0	0.35	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
cis-Chlordane	ND		2.0	0.39	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
Endosulfan I	ND		2.0	0.31	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
Endosulfan sulfate	ND		2.0	0.37	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
Endrin	ND		2.0	0.45	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
Endrin aldehyde	ND		2.0	0.61	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
Endrin ketone	ND		2.0	0.32	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
gamma-BHC (Lindane)	ND		2.0	0.61	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
Heptachlor epoxide	ND		2.0	0.34	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
Methoxychlor	ND		2.0	0.66	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
Toxaphene	ND		39	6.6	ug/Kg		08/22/18 15:45	08/24/18 07:03	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		08/22/18 15:45	08/24/18 07:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*88*		*21 - 136*	*08/22/18 15:45*	*08/24/18 07:03*	*1*
Tetrachloro-m-xylene	*83*		*21 - 145*	*08/22/18 15:45*	*08/24/18 07:03*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	23	ug/Kg		08/24/18 08:44	08/27/18 18:16	1
Aroclor-1221	ND		51	25	ug/Kg		08/24/18 08:44	08/27/18 18:16	1
Aroclor-1232	ND		51	24	ug/Kg		08/24/18 08:44	08/27/18 18:16	1
Aroclor-1242	ND		51	19	ug/Kg		08/24/18 08:44	08/27/18 18:16	1
Aroclor-1248	ND		51	25	ug/Kg		08/24/18 08:44	08/27/18 18:16	1
Aroclor-1254	ND		51	24	ug/Kg		08/24/18 08:44	08/27/18 18:16	1
Aroclor-1260	87	p	51	23	ug/Kg		08/24/18 08:44	08/27/18 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*61*		*14 - 128*	*08/24/18 08:44*	*08/27/18 18:16*	*1*
DCB Decachlorobiphenyl	*361*	*X*	*10 - 132*	*08/24/18 08:44*	*08/27/18 18:16*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.8	J	1.9	0.32	mg/Kg		08/22/18 15:58	08/23/18 20:36	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-A3S-0.5-1
Date Collected: 08/21/18 11:10
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-7
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	41		3.8	0.32	mg/Kg		08/22/18 15:58	08/23/18 20:36	4
Barium	74		1.9	0.27	mg/Kg		08/22/18 15:58	08/23/18 20:36	4
Beryllium	0.30	J	0.38	0.12	mg/Kg		08/22/18 15:58	08/23/18 20:36	4
Cadmium	0.19	J	0.48	0.047	mg/Kg		08/22/18 15:58	08/23/18 20:36	4
Chromium	65		1.9	0.20	mg/Kg		08/22/18 15:58	08/23/18 20:36	4
Cobalt	13		0.76	0.076	mg/Kg		08/22/18 15:58	08/23/18 20:36	4
Copper	43		5.7	2.7	mg/Kg		08/22/18 15:58	08/23/18 20:36	4
Lead	59		1.9	0.40	mg/Kg		08/22/18 15:58	08/23/18 20:36	4
Molybdenum	0.35	J	1.9	0.24	mg/Kg		08/22/18 15:58	08/23/18 20:36	4
Nickel	71		1.9	0.19	mg/Kg		08/22/18 15:58	08/23/18 20:36	4
Selenium	ND		3.8	0.57	mg/Kg		08/22/18 15:58	08/23/18 20:36	4
Silver	ND		0.95	0.19	mg/Kg		08/22/18 15:58	08/23/18 20:36	4
Thallium	ND		1.9	0.55	mg/Kg		08/22/18 15:58	08/23/18 20:36	4
Vanadium	58		1.9	0.26	mg/Kg		08/22/18 15:58	08/23/18 20:36	4
Zinc	120		5.7	2.4	mg/Kg		08/22/18 15:58	08/23/18 20:36	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044		0.014	0.0021	mg/Kg		08/23/18 10:11	08/24/18 16:41	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-A3S-3.5-4
Date Collected: 08/21/18 11:10
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-8
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.4	0.82	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Acetone	ND		34	26	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Benzene	ND		3.4	0.44	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Dichlorobromomethane	ND		3.4	0.49	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Bromobenzene	ND		3.4	0.54	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Chlorobromomethane	ND		14	0.49	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Bromoform	ND		3.4	1.4	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Bromomethane	ND		6.8	0.54	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
2-Butanone (MEK)	ND		34	14	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
n-Butylbenzene	ND		3.4	0.68	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
sec-Butylbenzene	ND		3.4	0.49	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
tert-Butylbenzene	ND		3.4	0.50	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Carbon disulfide	ND		3.4	1.4	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Carbon tetrachloride	ND		3.4	0.42	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Chlorobenzene	ND		3.4	0.47	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Chloroethane	ND		6.8	0.38	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Chloroform	ND		3.4	0.45	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Chloromethane	ND		6.8	0.54	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
2-Chlorotoluene	ND		3.4	0.44	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
4-Chlorotoluene	ND		3.4	0.46	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Chlorodibromomethane	ND		3.4	0.48	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
1,2-Dichlorobenzene	ND		3.4	0.46	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
1,3-Dichlorobenzene	ND		3.4	0.49	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
1,4-Dichlorobenzene	ND		3.4	0.48	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
1,3-Dichloropropane	ND		3.4	0.50	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
1,1-Dichloropropene	ND		3.4	0.47	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
1,2-Dibromo-3-Chloropropane	ND		6.8	1.2	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Ethylene Dibromide	ND		3.4	0.97	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Dibromomethane	ND		6.8	0.58	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Dichlorodifluoromethane	ND		6.8	0.54	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
1,1-Dichloroethane	ND		3.4	0.46	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
1,2-Dichloroethane	ND		3.4	0.52	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
1,1-Dichloroethene	ND		3.4	0.42	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
cis-1,2-Dichloroethene	ND		3.4	0.46	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
trans-1,2-Dichloroethene	ND		3.4	0.51	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
1,2-Dichloropropane	ND		3.4	0.43	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
cis-1,3-Dichloropropene	ND		3.4	0.47	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
trans-1,3-Dichloropropene	ND		3.4	0.46	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Ethylbenzene	ND		3.4	0.51	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Hexachlorobutadiene	ND		3.4	0.61	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
2-Hexanone	ND		34	6.8	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Isopropylbenzene	ND		3.4	0.46	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
4-Isopropyltoluene	ND		3.4	1.7	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Methylene Chloride	ND		6.8	3.8	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
4-Methyl-2-pentanone (MIBK)	ND		34	6.8	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Naphthalene	ND		6.8	1.0	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
N-Propylbenzene	ND		3.4	0.45	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Styrene	ND		3.4	0.43	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
1,1,1,2-Tetrachloroethane	ND		3.4	0.52	ug/Kg		08/22/18 01:45	08/27/18 16:48	1

Client Sample ID: DG-A3S-3.5-4
Date Collected: 08/21/18 11:10
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-8
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.4	0.51	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Tetrachloroethene	ND		3.4	0.46	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Toluene	ND		3.4	0.48	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
1,2,3-Trichlorobenzene	ND		3.4	0.50	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
1,2,4-Trichlorobenzene	ND		3.4	0.48	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
1,1,1-Trichloroethane	ND		3.4	0.41	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
1,1,2-Trichloroethane	ND		3.4	0.48	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Trichloroethene	ND		3.4	0.43	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Trichlorofluoromethane	ND		3.4	0.38	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
1,2,3-Trichloropropane	ND		3.4	0.52	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.4	1.4	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
1,2,4-Trimethylbenzene	ND		3.4	1.1	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
1,3,5-Trimethylbenzene	ND		3.4	0.44	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Vinyl acetate	ND		14	3.4	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Vinyl chloride	ND		3.4	0.50	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Xylenes, Total	ND		3.4	0.83	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
2,2-Dichloropropane	ND		3.4	1.4	ug/Kg		08/22/18 01:45	08/27/18 16:48	1
Gasoline Range Organics (GRO) -C4-C12	ND		170	68	ug/Kg		08/22/18 01:45	08/27/18 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*45 - 131*	*08/22/18 01:45*	*08/27/18 16:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*	*08/22/18 01:45*	*08/27/18 16:48*	*1*
Toluene-d8 (Surr)	*94*		*58 - 140*	*08/22/18 01:45*	*08/27/18 16:48*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.6	4.8	ug/Kg		08/22/18 12:41	08/23/18 19:09	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/22/18 12:41	08/23/18 19:09	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		08/22/18 12:41	08/23/18 19:09	1
Anthracene	ND		4.8	1.9	ug/Kg		08/22/18 12:41	08/23/18 19:09	1
Benzo[a]anthracene	ND		4.8	1.4	ug/Kg		08/22/18 12:41	08/23/18 19:09	1
Benzo[a]pyrene	**2.8**	**J**	4.8	1.8	ug/Kg		08/22/18 12:41	08/23/18 19:09	1
Benzo[b]fluoranthene	**6.6**		4.8	2.0	ug/Kg		08/22/18 12:41	08/23/18 19:09	1
Benzo[g,h,i]perylene	ND		4.8	4.1	ug/Kg		08/22/18 12:41	08/23/18 19:09	1
Benzo[k]fluoranthene	**2.1**	**J**	4.8	2.0	ug/Kg		08/22/18 12:41	08/23/18 19:09	1
Chrysene	**4.4**	**J**	4.8	1.3	ug/Kg		08/22/18 12:41	08/23/18 19:09	1
Dibenz(a,h)anthracene	ND		4.8	3.4	ug/Kg		08/22/18 12:41	08/23/18 19:09	1
Fluoranthene	**4.5**	**J**	4.8	1.3	ug/Kg		08/22/18 12:41	08/23/18 19:09	1
Fluorene	ND		4.8	2.1	ug/Kg		08/22/18 12:41	08/23/18 19:09	1
Indeno[1,2,3-cd]pyrene	ND		4.8	4.0	ug/Kg		08/22/18 12:41	08/23/18 19:09	1
Naphthalene	**3.5**	**J**	4.8	3.4	ug/Kg		08/22/18 12:41	08/23/18 19:09	1
Phenanthrene	**13**		4.8	1.7	ug/Kg		08/22/18 12:41	08/23/18 19:09	1
Pyrene	**4.7**	**J**	4.8	1.6	ug/Kg		08/22/18 12:41	08/23/18 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*33 - 120*	*08/22/18 12:41*	*08/23/18 19:09*	*1*
Terphenyl-d14	*98*		*35 - 146*	*08/22/18 12:41*	*08/23/18 19:09*	*1*

Client Sample ID: DG-A3S-3.5-4

Date Collected: 08/21/18 11:10
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-8

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	6900		1900	720	ug/Kg		08/22/18 09:40	08/23/18 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*89*		*40 - 130*	*08/22/18 09:40*	*08/23/18 15:46*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
Aldrin	ND		1.9	0.47	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
Endosulfan II	ND		1.9	0.46	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
Endrin	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
Methoxychlor	ND		1.9	0.64	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
Toxaphene	ND		38	6.5	ug/Kg		08/23/18 10:51	08/26/18 08:50	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/26/18 08:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*83*		*21 - 136*	*08/23/18 10:51*	*08/26/18 08:50*	*1*
Tetrachloro-m-xylene	*84*		*21 - 145*	*08/23/18 10:51*	*08/26/18 08:50*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	21	ug/Kg		08/24/18 08:44	08/27/18 18:29	1
Aroclor-1221	ND		49	23	ug/Kg		08/24/18 08:44	08/27/18 18:29	1
Aroclor-1232	ND		49	22	ug/Kg		08/24/18 08:44	08/27/18 18:29	1
Aroclor-1242	ND		49	19	ug/Kg		08/24/18 08:44	08/27/18 18:29	1
Aroclor-1248	ND		49	23	ug/Kg		08/24/18 08:44	08/27/18 18:29	1
Aroclor-1254	ND		49	22	ug/Kg		08/24/18 08:44	08/27/18 18:29	1
Aroclor-1260	ND		49	21	ug/Kg		08/24/18 08:44	08/27/18 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*70*		*14 - 128*	*08/24/18 08:44*	*08/27/18 18:29*	*1*
DCB Decachlorobiphenyl	*93*		*10 - 132*	*08/24/18 08:44*	*08/27/18 18:29*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.72	J	1.8	0.30	mg/Kg		08/22/18 15:58	08/23/18 20:40	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-A3S-3.5-4
Date Collected: 08/21/18 11:10
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-8
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.2	J	3.6	0.30	mg/Kg		08/22/18 15:58	08/23/18 20:40	4
Barium	110		1.8	0.25	mg/Kg		08/22/18 15:58	08/23/18 20:40	4
Beryllium	0.28	J	0.36	0.12	mg/Kg		08/22/18 15:58	08/23/18 20:40	4
Cadmium	ND		0.45	0.044	mg/Kg		08/22/18 15:58	08/23/18 20:40	4
Chromium	43		1.8	0.19	mg/Kg		08/22/18 15:58	08/23/18 20:40	4
Cobalt	5.2		0.71	0.071	mg/Kg		08/22/18 15:58	08/23/18 20:40	4
Copper	12		5.4	2.5	mg/Kg		08/22/18 15:58	08/23/18 20:40	4
Lead	5.3		1.8	0.38	mg/Kg		08/22/18 15:58	08/23/18 20:40	4
Molybdenum	ND		1.8	0.23	mg/Kg		08/22/18 15:58	08/23/18 20:40	4
Nickel	30		1.8	0.18	mg/Kg		08/22/18 15:58	08/23/18 20:40	4
Selenium	0.56	J	3.6	0.54	mg/Kg		08/22/18 15:58	08/23/18 20:40	4
Silver	ND		0.89	0.18	mg/Kg		08/22/18 15:58	08/23/18 20:40	4
Thallium	ND		1.8	0.52	mg/Kg		08/22/18 15:58	08/23/18 20:40	4
Vanadium	50		1.8	0.24	mg/Kg		08/22/18 15:58	08/23/18 20:40	4
Zinc	32		5.4	2.3	mg/Kg		08/22/18 15:58	08/23/18 20:40	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17		0.016	0.0024	mg/Kg		08/23/18 10:11	08/24/18 16:44	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-A3S-9.5-10
Date Collected: 08/21/18 11:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-9
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.6	0.87	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Acetone	**39**		36	28	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Benzene	ND		3.6	0.47	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Dichlorobromomethane	ND		3.6	0.52	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Bromobenzene	ND		3.6	0.57	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Chlorobromomethane	ND		14	0.52	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Bromoform	ND		3.6	1.4	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Bromomethane	ND		7.2	0.57	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
2-Butanone (MEK)	ND		36	15	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
n-Butylbenzene	ND		3.6	0.72	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
sec-Butylbenzene	ND		3.6	0.52	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
tert-Butylbenzene	ND		3.6	0.53	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Carbon disulfide	ND		3.6	1.4	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Carbon tetrachloride	ND		3.6	0.45	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Chlorobenzene	ND		3.6	0.50	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Chloroethane	ND		7.2	0.41	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Chloroform	ND		3.6	0.48	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Chloromethane	ND		7.2	0.57	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
2-Chlorotoluene	ND		3.6	0.47	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
4-Chlorotoluene	ND		3.6	0.49	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Chlorodibromomethane	ND		3.6	0.51	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
1,2-Dichlorobenzene	ND		3.6	0.49	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
1,3-Dichlorobenzene	ND		3.6	0.52	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
1,4-Dichlorobenzene	ND		3.6	0.51	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
1,3-Dichloropropane	ND		3.6	0.53	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
1,1-Dichloropropene	ND		3.6	0.50	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
1,2-Dibromo-3-Chloropropane	ND		7.2	1.2	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Ethylene Dibromide	ND		3.6	1.0	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Dibromomethane	ND		7.2	0.62	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Dichlorodifluoromethane	ND		7.2	0.57	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
1,1-Dichloroethane	ND		3.6	0.49	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
1,2-Dichloroethane	ND		3.6	0.55	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
1,1-Dichloroethene	ND		3.6	0.45	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
cis-1,2-Dichloroethene	ND		3.6	0.49	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
trans-1,2-Dichloroethene	ND		3.6	0.54	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
1,2-Dichloropropane	ND		3.6	0.46	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
cis-1,3-Dichloropropene	ND		3.6	0.50	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
trans-1,3-Dichloropropene	ND		3.6	0.49	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Ethylbenzene	ND		3.6	0.54	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Hexachlorobutadiene	ND		3.6	0.65	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
2-Hexanone	ND		36	7.2	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Isopropylbenzene	ND		3.6	0.49	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
4-Isopropyltoluene	ND		3.6	1.8	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Methylene Chloride	ND		7.2	4.1	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
4-Methyl-2-pentanone (MIBK)	ND		36	7.2	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Naphthalene	ND		7.2	1.1	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
N-Propylbenzene	ND		3.6	0.48	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Styrene	ND		3.6	0.46	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
1,1,1,2-Tetrachloroethane	ND		3.6	0.55	ug/Kg		08/22/18 01:45	08/27/18 17:19	1

Client Sample ID: DG-A3S-9.5-10
Date Collected: 08/21/18 11:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-9
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.6	0.54	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Tetrachloroethene	ND		3.6	0.49	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Toluene	ND		3.6	0.51	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
1,2,3-Trichlorobenzene	ND		3.6	0.54	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
1,2,4-Trichlorobenzene	ND		3.6	0.51	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
1,1,1-Trichloroethane	ND		3.6	0.44	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
1,1,2-Trichloroethane	ND		3.6	0.51	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Trichloroethene	ND		3.6	0.46	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Trichlorofluoromethane	ND		3.6	0.41	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
1,2,3-Trichloropropane	ND		3.6	0.56	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.6	1.5	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
1,2,4-Trimethylbenzene	ND		3.6	1.2	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
1,3,5-Trimethylbenzene	ND		3.6	0.47	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Vinyl acetate	ND		14	3.6	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Vinyl chloride	ND		3.6	0.53	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Xylenes, Total	ND		3.6	0.88	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
2,2-Dichloropropane	ND		3.6	1.4	ug/Kg		08/22/18 01:45	08/27/18 17:19	1
Gasoline Range Organics (GRO) -C4-C12	ND		180	72	ug/Kg		08/22/18 01:45	08/27/18 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*45 - 131*	*08/22/18 01:45*	*08/27/18 17:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*	*08/22/18 01:45*	*08/27/18 17:19*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*	*08/22/18 01:45*	*08/27/18 17:19*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**19**		19	9.6	ug/Kg		08/22/18 12:41	08/23/18 21:55	2
Acenaphthene	ND		9.6	5.4	ug/Kg		08/22/18 12:41	08/23/18 21:55	2
Acenaphthylene	**5.7**	**J**	9.6	4.6	ug/Kg		08/22/18 12:41	08/23/18 21:55	2
Anthracene	**6.3**	**J**	9.6	3.8	ug/Kg		08/22/18 12:41	08/23/18 21:55	2
Benzo[a]anthracene	**15**		9.6	2.9	ug/Kg		08/22/18 12:41	08/23/18 21:55	2
Benzo[a]pyrene	**16**		9.6	3.7	ug/Kg		08/22/18 12:41	08/23/18 21:55	2
Benzo[b]fluoranthene	**28**		9.6	4.0	ug/Kg		08/22/18 12:41	08/23/18 21:55	2
Benzo[g,h,i]perylene	**13**		9.6	8.3	ug/Kg		08/22/18 12:41	08/23/18 21:55	2
Benzo[k]fluoranthene	**9.6**		9.6	4.0	ug/Kg		08/22/18 12:41	08/23/18 21:55	2
Chrysene	**21**		9.6	2.7	ug/Kg		08/22/18 12:41	08/23/18 21:55	2
Dibenz(a,h)anthracene	ND		9.6	6.7	ug/Kg		08/22/18 12:41	08/23/18 21:55	2
Fluoranthene	**27**		9.6	2.7	ug/Kg		08/22/18 12:41	08/23/18 21:55	2
Fluorene	ND		9.6	4.2	ug/Kg		08/22/18 12:41	08/23/18 21:55	2
Indeno[1,2,3-cd]pyrene	ND		9.6	8.1	ug/Kg		08/22/18 12:41	08/23/18 21:55	2
Naphthalene	**13**		9.6	6.7	ug/Kg		08/22/18 12:41	08/23/18 21:55	2
Phenanthrene	**26**		9.6	3.5	ug/Kg		08/22/18 12:41	08/23/18 21:55	2
Pyrene	**33**		9.6	3.3	ug/Kg		08/22/18 12:41	08/23/18 21:55	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*33 - 120*	*08/22/18 12:41*	*08/23/18 21:55*	*2*
Terphenyl-d14	*93*		*35 - 146*	*08/22/18 12:41*	*08/23/18 21:55*	*2*

Client Sample ID: DG-A3S-9.5-10

Date Collected: 08/21/18 11:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-9

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	6300		2000	730	ug/Kg		08/22/18 09:40	08/23/18 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*86*		*40 - 130*	*08/22/18 09:40*	*08/23/18 16:19*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
Aldrin	ND		1.9	0.48	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
Endrin	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
Toxaphene	ND		38	6.5	ug/Kg		08/23/18 10:51	08/26/18 09:07	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/26/18 09:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*86*		*21 - 136*	*08/23/18 10:51*	*08/26/18 09:07*	*1*
Tetrachloro-m-xylene	*84*		*21 - 145*	*08/23/18 10:51*	*08/26/18 09:07*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		52	23	ug/Kg		08/24/18 08:44	08/27/18 18:44	1
Aroclor-1221	ND		52	25	ug/Kg		08/24/18 08:44	08/27/18 18:44	1
Aroclor-1232	ND		52	24	ug/Kg		08/24/18 08:44	08/27/18 18:44	1
Aroclor-1242	ND		52	20	ug/Kg		08/24/18 08:44	08/27/18 18:44	1
Aroclor-1248	ND		52	25	ug/Kg		08/24/18 08:44	08/27/18 18:44	1
Aroclor-1254	ND		52	24	ug/Kg		08/24/18 08:44	08/27/18 18:44	1
Aroclor-1260	ND		52	23	ug/Kg		08/24/18 08:44	08/27/18 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*66*		*14 - 128*	*08/24/18 08:44*	*08/27/18 18:44*	*1*
DCB Decachlorobiphenyl	*96*		*10 - 132*	*08/24/18 08:44*	*08/27/18 18:44*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.4	J	1.8	0.29	mg/Kg		08/22/18 15:58	08/23/18 20:45	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-A3S-9.5-10
Date Collected: 08/21/18 11:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-9
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.9	J	3.5	0.30	mg/Kg		08/22/18 15:58	08/23/18 20:45	4
Barium	50		1.8	0.25	mg/Kg		08/22/18 15:58	08/23/18 20:45	4
Beryllium	0.14	J	0.35	0.11	mg/Kg		08/22/18 15:58	08/23/18 20:45	4
Cadmium	ND		0.44	0.044	mg/Kg		08/22/18 15:58	08/23/18 20:45	4
Chromium	130		1.8	0.19	mg/Kg		08/22/18 15:58	08/23/18 20:45	4
Cobalt	4.4		0.70	0.070	mg/Kg		08/22/18 15:58	08/23/18 20:45	4
Copper	3.9	J	5.3	2.5	mg/Kg		08/22/18 15:58	08/23/18 20:45	4
Lead	1.1	J	1.8	0.37	mg/Kg		08/22/18 15:58	08/23/18 20:45	4
Molybdenum	ND		1.8	0.22	mg/Kg		08/22/18 15:58	08/23/18 20:45	4
Nickel	20		1.8	0.18	mg/Kg		08/22/18 15:58	08/23/18 20:45	4
Selenium	ND		3.5	0.53	mg/Kg		08/22/18 15:58	08/23/18 20:45	4
Silver	ND		0.88	0.18	mg/Kg		08/22/18 15:58	08/23/18 20:45	4
Thallium	ND		1.8	0.51	mg/Kg		08/22/18 15:58	08/23/18 20:45	4
Vanadium	58		1.8	0.24	mg/Kg		08/22/18 15:58	08/23/18 20:45	4
Zinc	15		5.3	2.2	mg/Kg		08/22/18 15:58	08/23/18 20:45	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	J	0.015	0.0021	mg/Kg		08/23/18 10:11	08/24/18 16:46	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-B3S-0.5-1
Date Collected: 08/21/18 11:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-10
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	24		3.8	0.63	mg/Kg		08/22/18 15:58	08/27/18 12:53	10
Arsenic	67		7.6	0.64	mg/Kg		08/22/18 15:58	08/27/18 12:53	10
Barium	630		1.5	0.22	mg/Kg		08/22/18 15:58	08/23/18 20:50	4
Beryllium	ND		0.30	0.098	mg/Kg		08/22/18 15:58	08/23/18 20:50	4
Cadmium	5.7		0.95	0.094	mg/Kg		08/22/18 15:58	08/27/18 12:53	10
Chromium	210		3.8	0.40	mg/Kg		08/22/18 15:58	08/27/18 12:53	10
Cobalt	14		1.5	0.15	mg/Kg		08/22/18 15:58	08/27/18 12:53	10
Copper	870		11	5.4	mg/Kg		08/22/18 15:58	08/27/18 12:53	10
Lead	5300		3.8	0.80	mg/Kg		08/22/18 15:58	08/27/18 12:53	10
Molybdenum	1.5		1.5	0.19	mg/Kg		08/22/18 15:58	08/23/18 20:50	4
Nickel	43		3.8	0.39	mg/Kg		08/22/18 15:58	08/27/18 12:53	10
Selenium	ND		7.6	1.1	mg/Kg		08/22/18 15:58	08/27/18 12:53	10
Silver	4.4		1.9	0.38	mg/Kg		08/22/18 15:58	08/29/18 13:56	10
Thallium	1.9	J	3.8	1.1	mg/Kg		08/22/18 15:58	08/27/18 12:53	10
Vanadium	56		3.8	0.52	mg/Kg		08/22/18 15:58	08/27/18 12:53	10
Zinc	1900		11	4.8	mg/Kg		08/22/18 15:58	08/27/18 12:53	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.81		0.015	0.0023	mg/Kg		08/23/18 10:11	08/24/18 16:48	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-B3S-3.5-4
Date Collected: 08/21/18 11:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-11
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	10		1.4	0.23	mg/Kg		08/23/18 10:47	08/24/18 11:15	4
Arsenic	9.7		2.7	0.23	mg/Kg		08/23/18 10:47	08/24/18 11:15	4
Barium	640		1.4	0.19	mg/Kg		08/23/18 10:47	08/24/18 11:15	4
Beryllium	ND		0.27	0.088	mg/Kg		08/23/18 10:47	08/24/18 11:15	4
Cadmium	2.2		0.34	0.034	mg/Kg		08/23/18 10:47	08/24/18 11:15	4
Chromium	19	B	1.4	0.14	mg/Kg		08/23/18 10:47	08/24/18 11:15	4
Cobalt	3.8		0.54	0.054	mg/Kg		08/23/18 10:47	08/24/18 11:15	4
Copper	2100		4.1	1.9	mg/Kg		08/23/18 10:47	08/24/18 11:15	4
Lead	2300		1.4	0.29	mg/Kg		08/23/18 10:47	08/24/18 11:15	4
Molybdenum	ND		1.4	0.17	mg/Kg		08/23/18 10:47	08/24/18 11:15	4
Nickel	16		1.4	0.14	mg/Kg		08/23/18 10:47	08/24/18 11:15	4
Selenium	ND		2.7	0.41	mg/Kg		08/23/18 10:47	08/24/18 11:15	4
Silver	1.2		0.68	0.14	mg/Kg		08/23/18 10:47	08/24/18 11:15	4
Thallium	0.53	J	1.4	0.39	mg/Kg		08/23/18 10:47	08/24/18 11:15	4
Vanadium	7.5		1.4	0.19	mg/Kg		08/23/18 10:47	08/24/18 11:15	4
Zinc	2100		4.1	1.7	mg/Kg		08/23/18 10:47	08/24/18 11:15	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.3		0.066	0.0097	mg/Kg		08/23/18 10:11	08/24/18 16:50	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-C3S-0.5-1
Date Collected: 08/21/18 12:05
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-12
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	*	5.3	1.3	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Acetone	**76**	*	53	40	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Benzene	**0.86**	J *	5.3	0.69	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Dichlorobromomethane	ND	*	5.3	0.77	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Bromobenzene	ND	*	5.3	0.84	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Chlorobromomethane	ND	*	21	0.77	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Bromoform	ND	*	5.3	2.1	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Bromomethane	ND	*	11	0.84	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
2-Butanone (MEK)	ND	*	53	22	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
n-Butylbenzene	ND	*	5.3	1.1	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
sec-Butylbenzene	ND	*	5.3	0.77	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
tert-Butylbenzene	ND	*	5.3	0.78	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Carbon disulfide	ND	*	5.3	2.1	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Carbon tetrachloride	ND	*	5.3	0.66	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Chlorobenzene	ND	*	5.3	0.73	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Chloroethane	ND	*	11	0.60	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Chloroform	ND	*	5.3	0.70	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Chloromethane	ND	*	11	0.84	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
2-Chlorotoluene	ND	*	5.3	0.69	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
4-Chlorotoluene	ND	*	5.3	0.72	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Chlorodibromomethane	ND	*	5.3	0.75	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
1,2-Dichlorobenzene	ND	*	5.3	0.72	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
1,3-Dichlorobenzene	ND	*	5.3	0.77	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
1,4-Dichlorobenzene	ND	*	5.3	0.75	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
1,3-Dichloropropane	ND	*	5.3	0.78	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
1,1-Dichloropropene	ND	*	5.3	0.73	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
1,2-Dibromo-3-Chloropropane	ND	*	11	1.8	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Ethylene Dibromide	ND	*	5.3	1.5	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Dibromomethane	ND	*	11	0.91	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Dichlorodifluoromethane	ND	*	11	0.84	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
1,1-Dichloroethane	ND	*	5.3	0.72	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
1,2-Dichloroethane	ND	*	5.3	0.81	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
1,1-Dichloroethene	ND	*	5.3	0.66	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
cis-1,2-Dichloroethene	ND	*	5.3	0.72	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
trans-1,2-Dichloroethene	ND	*	5.3	0.80	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
1,2-Dichloropropane	ND	*	5.3	0.67	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
cis-1,3-Dichloropropene	ND	*	5.3	0.73	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
trans-1,3-Dichloropropene	ND	*	5.3	0.71	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Ethylbenzene	ND	*	5.3	0.80	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Hexachlorobutadiene	ND	*	5.3	0.96	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
2-Hexanone	ND	*	53	11	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Isopropylbenzene	ND	*	5.3	0.72	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
4-Isopropyltoluene	ND	*	5.3	2.7	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Methylene Chloride	ND	*	11	6.0	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
4-Methyl-2-pentanone (MIBK)	ND	*	53	11	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Naphthalene	ND	*	11	1.6	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
N-Propylbenzene	ND	*	5.3	0.70	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Styrene	ND	*	5.3	0.67	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
1,1,1,2-Tetrachloroethane	ND	*	5.3	0.81	ug/Kg		08/22/18 01:45	08/28/18 15:57	1

Client Sample ID: DG-C3S-0.5-1
Date Collected: 08/21/18 12:05
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-12
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	5.3	0.80	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Tetrachloroethene	ND	*	5.3	0.71	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Toluene	**1.7**	**J ***	5.3	0.75	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
1,2,3-Trichlorobenzene	ND	*	5.3	0.79	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
1,2,4-Trichlorobenzene	ND	*	5.3	0.75	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
1,1,1-Trichloroethane	ND	*	5.3	0.65	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
1,1,2-Trichloroethane	ND	*	5.3	0.74	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Trichloroethene	**18**	****	5.3	0.67	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Trichlorofluoromethane	ND	*	5.3	0.60	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
1,2,3-Trichloropropane	ND	*	5.3	0.82	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	5.3	2.2	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
1,2,4-Trimethylbenzene	ND	*	5.3	1.7	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
1,3,5-Trimethylbenzene	ND	*	5.3	0.69	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Vinyl acetate	ND	*	21	5.3	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Vinyl chloride	ND	*	5.3	0.78	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Xylenes, Total	ND		5.3	1.3	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
2,2-Dichloropropane	ND	*	5.3	2.1	ug/Kg		08/22/18 01:45	08/28/18 15:57	1
Gasoline Range Organics (GRO) -C4-C12	ND	*	270	110	ug/Kg		08/22/18 01:45	08/28/18 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*37*	*X	*45 - 131*	*08/22/18 01:45*	*08/28/18 15:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*156*	*X	*60 - 140*	*08/22/18 01:45*	*08/28/18 15:57*	*1*
Toluene-d8 (Surr)	*60*	*	*58 - 140*	*08/22/18 01:45*	*08/28/18 15:57*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**7.1**	**J**	9.7	4.8	ug/Kg		08/22/18 12:41	08/23/18 20:20	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/22/18 12:41	08/23/18 20:20	1
Acenaphthylene	**12**		4.8	2.3	ug/Kg		08/22/18 12:41	08/23/18 20:20	1
Anthracene	**7.7**		4.8	1.9	ug/Kg		08/22/18 12:41	08/23/18 20:20	1
Benzo[a]anthracene	**43**		4.8	1.5	ug/Kg		08/22/18 12:41	08/23/18 20:20	1
Benzo[a]pyrene	**51**		4.8	1.8	ug/Kg		08/22/18 12:41	08/23/18 20:20	1
Benzo[b]fluoranthene	**71**		4.8	2.0	ug/Kg		08/22/18 12:41	08/23/18 20:20	1
Benzo[g,h,i]perylene	**35**		4.8	4.2	ug/Kg		08/22/18 12:41	08/23/18 20:20	1
Benzo[k]fluoranthene	**26**		4.8	2.0	ug/Kg		08/22/18 12:41	08/23/18 20:20	1
Chrysene	**59**		4.8	1.4	ug/Kg		08/22/18 12:41	08/23/18 20:20	1
Dibenz(a,h)anthracene	**9.3**		4.8	3.4	ug/Kg		08/22/18 12:41	08/23/18 20:20	1
Fluoranthene	**71**		4.8	1.4	ug/Kg		08/22/18 12:41	08/23/18 20:20	1
Fluorene	ND		4.8	2.1	ug/Kg		08/22/18 12:41	08/23/18 20:20	1
Indeno[1,2,3-cd]pyrene	**26**		4.8	4.1	ug/Kg		08/22/18 12:41	08/23/18 20:20	1
Naphthalene	**18**		4.8	3.4	ug/Kg		08/22/18 12:41	08/23/18 20:20	1
Phenanthrene	**57**		4.8	1.7	ug/Kg		08/22/18 12:41	08/23/18 20:20	1
Pyrene	**120**		4.8	1.6	ug/Kg		08/22/18 12:41	08/23/18 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*33 - 120*	*08/22/18 12:41*	*08/23/18 20:20*	*1*
Terphenyl-d14	*98*		*35 - 146*	*08/22/18 12:41*	*08/23/18 20:20*	*1*

Client Sample ID: DG-C3S-0.5-1
Date Collected: 08/21/18 12:05
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-12
Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	41000		1900	730	ug/Kg		08/22/18 09:40	08/23/18 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*67*		*40 - 130*	*08/22/18 09:40*	*08/23/18 16:49*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.59	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
4,4'-DDE	ND		2.0	0.41	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
4,4'-DDT	ND		2.0	0.40	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
Aldrin	ND		2.0	0.49	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
beta-BHC	ND		2.0	0.35	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
cis-Chlordane	ND		2.0	0.39	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
Endosulfan I	ND		2.0	0.31	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
Endosulfan sulfate	ND		2.0	0.37	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
Endrin	ND		2.0	0.45	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
Endrin aldehyde	ND		2.0	0.61	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
Endrin ketone	ND		2.0	0.32	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
gamma-BHC (Lindane)	ND		2.0	0.61	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
Heptachlor epoxide	ND		2.0	0.34	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
Methoxychlor	ND		2.0	0.66	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
Toxaphene	ND		39	6.6	ug/Kg		08/23/18 10:51	08/26/18 09:25	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		08/23/18 10:51	08/26/18 09:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*86*		*21 - 136*	*08/23/18 10:51*	*08/26/18 09:25*	*1*
Tetrachloro-m-xylene	*83*		*21 - 145*	*08/23/18 10:51*	*08/26/18 09:25*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	21	ug/Kg		08/24/18 08:44	08/27/18 18:58	1
Aroclor-1221	ND		49	23	ug/Kg		08/24/18 08:44	08/27/18 18:58	1
Aroclor-1232	ND		49	22	ug/Kg		08/24/18 08:44	08/27/18 18:58	1
Aroclor-1242	ND		49	18	ug/Kg		08/24/18 08:44	08/27/18 18:58	1
Aroclor-1248	ND		49	23	ug/Kg		08/24/18 08:44	08/27/18 18:58	1
Aroclor-1254	ND		49	22	ug/Kg		08/24/18 08:44	08/27/18 18:58	1
Aroclor-1260	ND		49	21	ug/Kg		08/24/18 08:44	08/27/18 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*63*		*14 - 128*	*08/24/18 08:44*	*08/27/18 18:58*	*1*
DCB Decachlorobiphenyl	*120*		*10 - 132*	*08/24/18 08:44*	*08/27/18 18:58*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	16		1.6	0.26	mg/Kg		08/23/18 10:47	08/24/18 11:20	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-C3S-0.5-1
Date Collected: 08/21/18 12:05
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-12
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.2		3.2	0.27	mg/Kg		08/23/18 10:47	08/24/18 11:20	4
Barium	110		1.6	0.23	mg/Kg		08/23/18 10:47	08/24/18 11:20	4
Beryllium	ND		0.32	0.10	mg/Kg		08/23/18 10:47	08/24/18 11:20	4
Cadmium	0.40		0.40	0.039	mg/Kg		08/23/18 10:47	08/24/18 11:20	4
Chromium	13	B	1.6	0.17	mg/Kg		08/23/18 10:47	08/24/18 11:20	4
Cobalt	15		0.63	0.063	mg/Kg		08/23/18 10:47	08/24/18 11:20	4
Copper	240		4.8	2.3	mg/Kg		08/23/18 10:47	08/24/18 11:20	4
Lead	670		1.6	0.33	mg/Kg		08/23/18 10:47	08/24/18 11:20	4
Molybdenum	0.56	J	1.6	0.20	mg/Kg		08/23/18 10:47	08/24/18 11:20	4
Nickel	26		1.6	0.16	mg/Kg		08/23/18 10:47	08/24/18 11:20	4
Selenium	ND		3.2	0.48	mg/Kg		08/23/18 10:47	08/24/18 11:20	4
Silver	0.36	J	0.79	0.16	mg/Kg		08/23/18 10:47	08/24/18 11:20	4
Thallium	ND		1.6	0.46	mg/Kg		08/23/18 10:47	08/24/18 11:20	4
Vanadium	120		1.6	0.22	mg/Kg		08/23/18 10:47	08/24/18 11:20	4
Zinc	300		4.8	2.0	mg/Kg		08/23/18 10:47	08/24/18 11:20	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.21		0.017	0.0025	mg/Kg		08/23/18 10:11	08/24/18 16:53	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-C3S-3.5-4
Date Collected: 08/21/18 12:05
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-13
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	*	5.4	1.3	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Acetone	**44**	**J ***	54	41	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Benzene	**1.6**	**J ***	5.4	0.71	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Dichlorobromomethane	ND	*	5.4	0.78	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Bromobenzene	ND	*	5.4	0.86	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Chlorobromomethane	ND	*	22	0.78	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Bromoform	ND	*	5.4	2.2	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Bromomethane	ND	*	11	0.86	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
2-Butanone (MEK)	ND	*	54	23	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
n-Butylbenzene	ND	*	5.4	1.1	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
sec-Butylbenzene	ND	*	5.4	0.78	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
tert-Butylbenzene	ND	*	5.4	0.79	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Carbon disulfide	ND	*	5.4	2.2	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Carbon tetrachloride	ND	*	5.4	0.67	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Chlorobenzene	ND	*	5.4	0.75	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Chloroethane	ND	*	11	0.61	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Chloroform	ND	*	5.4	0.72	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Chloromethane	ND	*	11	0.86	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
2-Chlorotoluene	ND	*	5.4	0.71	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
4-Chlorotoluene	ND	*	5.4	0.74	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Chlorodibromomethane	ND	*	5.4	0.77	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
1,2-Dichlorobenzene	ND	*	5.4	0.74	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
1,3-Dichlorobenzene	ND	*	5.4	0.78	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
1,4-Dichlorobenzene	ND	*	5.4	0.77	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
1,3-Dichloropropane	ND	*	5.4	0.79	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
1,1-Dichloropropene	ND	*	5.4	0.75	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
1,2-Dibromo-3-Chloropropane	ND	*	11	1.8	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Ethylene Dibromide	ND	*	5.4	1.6	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Dibromomethane	ND	*	11	0.93	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Dichlorodifluoromethane	ND	*	11	0.86	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
1,1-Dichloroethane	ND	*	5.4	0.74	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
1,2-Dichloroethane	ND	*	5.4	0.83	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
1,1-Dichloroethene	ND	*	5.4	0.67	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
cis-1,2-Dichloroethene	**1.4**	**J ***	5.4	0.74	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
trans-1,2-Dichloroethene	ND	*	5.4	0.82	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
1,2-Dichloropropane	ND	*	5.4	0.68	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
cis-1,3-Dichloropropene	ND	*	5.4	0.75	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
trans-1,3-Dichloropropene	ND	*	5.4	0.73	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Ethylbenzene	ND	*	5.4	0.82	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Hexachlorobutadiene	ND	*	5.4	0.98	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
2-Hexanone	ND	*	54	11	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Isopropylbenzene	ND	*	5.4	0.74	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
4-Isopropyltoluene	ND	*	5.4	2.7	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Methylene Chloride	ND	*	11	6.1	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
4-Methyl-2-pentanone (MIBK)	ND	*	54	11	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Naphthalene	ND	*	11	1.6	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
N-Propylbenzene	ND	*	5.4	0.72	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Styrene	ND	*	5.4	0.68	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
1,1,1,2-Tetrachloroethane	ND	*	5.4	0.83	ug/Kg		08/22/18 01:45	08/28/18 16:26	1

Client Sample ID: DG-C3S-3.5-4

Date Collected: 08/21/18 12:05
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-13

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	5.4	0.82	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Tetrachloroethene	ND	*	5.4	0.73	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Toluene	**1.6**	**J ***	5.4	0.77	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
1,2,3-Trichlorobenzene	ND	*	5.4	0.80	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
1,2,4-Trichlorobenzene	ND	*	5.4	0.77	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
1,1,1-Trichloroethane	ND	*	5.4	0.66	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
1,1,2-Trichloroethane	ND	*	5.4	0.76	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Trichloroethene	**22**	****	5.4	0.68	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Trichlorofluoromethane	ND	*	5.4	0.61	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
1,2,3-Trichloropropane	ND	*	5.4	0.84	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	5.4	2.3	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
1,2,4-Trimethylbenzene	ND	*	5.4	1.8	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
1,3,5-Trimethylbenzene	ND	*	5.4	0.71	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Vinyl acetate	ND	*	22	5.4	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Vinyl chloride	ND	*	5.4	0.79	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Xylenes, Total	ND		5.4	1.3	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
2,2-Dichloropropane	ND	*	5.4	2.2	ug/Kg		08/22/18 01:45	08/28/18 16:26	1
Gasoline Range Organics (GRO) -C4-C12	ND	*	270	110	ug/Kg		08/22/18 01:45	08/28/18 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*57*	*	*45 - 131*	*08/22/18 01:45*	*08/28/18 16:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*126*	*	*60 - 140*	*08/22/18 01:45*	*08/28/18 16:26*	*1*
Toluene-d8 (Surr)	*79*	*	*58 - 140*	*08/22/18 01:45*	*08/28/18 16:26*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**12**	**J**	20	9.8	ug/Kg		08/22/18 12:41	08/23/18 22:19	2
Acenaphthene	ND		9.8	5.5	ug/Kg		08/22/18 12:41	08/23/18 22:19	2
Acenaphthylene	**39**		9.8	4.7	ug/Kg		08/22/18 12:41	08/23/18 22:19	2
Anthracene	**21**		9.8	3.9	ug/Kg		08/22/18 12:41	08/23/18 22:19	2
Benzo[a]anthracene	**100**		9.8	2.9	ug/Kg		08/22/18 12:41	08/23/18 22:19	2
Benzo[a]pyrene	**100**		9.8	3.7	ug/Kg		08/22/18 12:41	08/23/18 22:19	2
Benzo[b]fluoranthene	**170**		9.8	4.1	ug/Kg		08/22/18 12:41	08/23/18 22:19	2
Benzo[g,h,i]perylene	**41**		9.8	8.4	ug/Kg		08/22/18 12:41	08/23/18 22:19	2
Benzo[k]fluoranthene	**50**		9.8	4.1	ug/Kg		08/22/18 12:41	08/23/18 22:19	2
Chrysene	**110**		9.8	2.7	ug/Kg		08/22/18 12:41	08/23/18 22:19	2
Dibenz(a,h)anthracene	**17**		9.8	6.9	ug/Kg		08/22/18 12:41	08/23/18 22:19	2
Fluoranthene	**120**		9.8	2.7	ug/Kg		08/22/18 12:41	08/23/18 22:19	2
Fluorene	ND		9.8	4.3	ug/Kg		08/22/18 12:41	08/23/18 22:19	2
Indeno[1,2,3-cd]pyrene	**32**		9.8	8.2	ug/Kg		08/22/18 12:41	08/23/18 22:19	2
Naphthalene	**23**		9.8	6.9	ug/Kg		08/22/18 12:41	08/23/18 22:19	2
Phenanthrene	**58**		9.8	3.5	ug/Kg		08/22/18 12:41	08/23/18 22:19	2
Pyrene	**170**		9.8	3.3	ug/Kg		08/22/18 12:41	08/23/18 22:19	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*33 - 120*	*08/22/18 12:41*	*08/23/18 22:19*	*2*
Terphenyl-d14	*85*		*35 - 146*	*08/22/18 12:41*	*08/23/18 22:19*	*2*

Client Sample ID: DG-C3S-3.5-4

Date Collected: 08/21/18 12:05
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-13

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	64000		2000	740	ug/Kg		08/22/18 09:40	08/23/18 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*55*		*40 - 130*	*08/22/18 09:40*	*08/23/18 15:46*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
Aldrin	ND		1.9	0.48	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
Endrin	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
Toxaphene	ND		38	6.5	ug/Kg		08/23/18 10:51	08/26/18 09:43	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/26/18 09:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*78*		*21 - 136*	*08/23/18 10:51*	*08/26/18 09:43*	*1*
Tetrachloro-m-xylene	*87*		*21 - 145*	*08/23/18 10:51*	*08/26/18 09:43*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/24/18 08:44	08/27/18 19:13	1
Aroclor-1221	ND		50	24	ug/Kg		08/24/18 08:44	08/27/18 19:13	1
Aroclor-1232	ND		50	23	ug/Kg		08/24/18 08:44	08/27/18 19:13	1
Aroclor-1242	ND		50	19	ug/Kg		08/24/18 08:44	08/27/18 19:13	1
Aroclor-1248	ND		50	24	ug/Kg		08/24/18 08:44	08/27/18 19:13	1
Aroclor-1254	ND		50	23	ug/Kg		08/24/18 08:44	08/27/18 19:13	1
Aroclor-1260	ND		50	22	ug/Kg		08/24/18 08:44	08/27/18 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*63*		*14 - 128*	*08/24/18 08:44*	*08/27/18 19:13*	*1*
DCB Decachlorobiphenyl	*92*		*10 - 132*	*08/24/18 08:44*	*08/27/18 19:13*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	38		7.9	1.3	mg/Kg		08/23/18 10:47	08/24/18 13:30	20

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-C3S-3.5-4
Date Collected: 08/21/18 12:05
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-13
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	49		16	1.3	mg/Kg		08/23/18 10:47	08/24/18 13:30	20
Barium	1100		1.6	0.22	mg/Kg		08/23/18 10:47	08/24/18 11:25	4
Beryllium	0.28	J	0.31	0.10	mg/Kg		08/23/18 10:47	08/24/18 11:25	4
Cadmium	9.2		2.0	0.20	mg/Kg		08/23/18 10:47	08/24/18 13:30	20
Chromium	38	B	7.9	0.83	mg/Kg		08/23/18 10:47	08/24/18 13:30	20
Cobalt	12		3.1	0.31	mg/Kg		08/23/18 10:47	08/24/18 13:30	20
Copper	10000		24	11	mg/Kg		08/23/18 10:47	08/24/18 13:30	20
Lead	5200		7.9	1.7	mg/Kg		08/23/18 10:47	08/24/18 13:30	20
Molybdenum	3.6		1.6	0.20	mg/Kg		08/23/18 10:47	08/24/18 11:25	4
Nickel	39		7.9	0.80	mg/Kg		08/23/18 10:47	08/24/18 13:30	20
Selenium	ND		16	2.4	mg/Kg		08/23/18 10:47	08/24/18 13:30	20
Silver	3.9		3.9	0.80	mg/Kg		08/23/18 10:47	08/24/18 13:30	20
Thallium	2.5	J	7.9	2.3	mg/Kg		08/23/18 10:47	08/24/18 13:30	20
Vanadium	28		7.9	1.1	mg/Kg		08/23/18 10:47	08/24/18 13:30	20
Zinc	5700		24	10	mg/Kg		08/23/18 10:47	08/24/18 13:30	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	6.0		0.14	0.021	mg/Kg		08/23/18 10:11	08/24/18 16:55	10

Client Sample ID: DG-C3S-9.5-10
Date Collected: 08/21/18 12:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-14
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.7	0.89	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Acetone	ND		37	28	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Benzene	ND		3.7	0.48	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Dichlorobromomethane	ND		3.7	0.54	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Bromobenzene	ND		3.7	0.59	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Chlorobromomethane	ND		15	0.54	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Bromoform	ND		3.7	1.5	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Bromomethane	ND		7.4	0.59	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
2-Butanone (MEK)	ND		37	16	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
n-Butylbenzene	ND		3.7	0.74	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
sec-Butylbenzene	ND		3.7	0.54	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
tert-Butylbenzene	ND		3.7	0.54	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Carbon disulfide	**5.7**		4.6	1.8	ug/Kg		08/22/18 01:45	08/28/18 11:50	1
Carbon tetrachloride	ND		3.7	0.46	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Chlorobenzene	ND		3.7	0.51	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Chloroethane	ND		7.4	0.42	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Chloroform	ND		3.7	0.49	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Chloromethane	ND		7.4	0.59	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
2-Chlorotoluene	ND		3.7	0.48	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
4-Chlorotoluene	ND		3.7	0.51	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Chlorodibromomethane	ND		3.7	0.53	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
1,2-Dichlorobenzene	ND		3.7	0.51	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
1,3-Dichlorobenzene	ND		3.7	0.54	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
1,4-Dichlorobenzene	ND		3.7	0.53	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
1,3-Dichloropropane	ND		3.7	0.54	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
1,1-Dichloropropene	ND		3.7	0.51	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
1,2-Dibromo-3-Chloropropane	ND		7.4	1.3	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Ethylene Dibromide	ND		3.7	1.1	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Dibromomethane	ND		7.4	0.64	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Dichlorodifluoromethane	ND		7.4	0.59	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
1,1-Dichloroethane	ND		3.7	0.51	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
1,2-Dichloroethane	ND		3.7	0.57	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
1,1-Dichloroethene	ND	*	3.7	0.46	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
cis-1,2-Dichloroethene	ND		3.7	0.51	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
trans-1,2-Dichloroethene	ND		3.7	0.56	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
1,2-Dichloropropane	ND		3.7	0.47	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
cis-1,3-Dichloropropene	ND		3.7	0.51	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
trans-1,3-Dichloropropene	ND		3.7	0.50	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Ethylbenzene	ND		3.7	0.56	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Hexachlorobutadiene	ND		3.7	0.67	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
2-Hexanone	ND		37	7.4	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Isopropylbenzene	ND		3.7	0.51	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
4-Isopropyltoluene	ND		3.7	1.9	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Methylene Chloride	ND		7.4	4.2	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
4-Methyl-2-pentanone (MIBK)	ND		37	7.4	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Naphthalene	ND		7.4	1.1	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
N-Propylbenzene	ND		3.7	0.49	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Styrene	ND		3.7	0.47	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
1,1,1,2-Tetrachloroethane	ND		3.7	0.57	ug/Kg		08/22/18 01:45	08/28/18 20:17	1

Client Sample ID: DG-C3S-9.5-10
Date Collected: 08/21/18 12:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-14
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.7	0.56	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Tetrachloroethene	ND		3.7	0.50	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Toluene	ND		3.7	0.53	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
1,2,3-Trichlorobenzene	ND		3.7	0.55	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
1,2,4-Trichlorobenzene	ND		3.7	0.53	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
1,1,1-Trichloroethane	ND		3.7	0.45	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
1,1,2-Trichloroethane	ND		3.7	0.52	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Trichloroethene	ND		3.7	0.47	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Trichlorofluoromethane	ND		3.7	0.42	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
1,2,3-Trichloropropane	ND		3.7	0.57	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.7	1.5	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
1,2,4-Trimethylbenzene	ND		3.7	1.2	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
1,3,5-Trimethylbenzene	ND		3.7	0.48	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Vinyl acetate	ND		15	3.7	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Vinyl chloride	ND		3.7	0.54	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Xylenes, Total	ND		3.7	0.91	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
2,2-Dichloropropane	ND		3.7	1.5	ug/Kg		08/22/18 01:45	08/28/18 20:17	1
Gasoline Range Organics (GRO) -C4-C12	ND		190	74	ug/Kg		08/22/18 01:45	08/28/18 20:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*	*	*45 - 131*	*08/22/18 01:45*	*08/28/18 11:50*	*1*
4-Bromofluorobenzene	*96*		*45 - 131*	*08/22/18 01:45*	*08/28/18 20:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*60 - 140*	*08/22/18 01:45*	*08/28/18 11:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*60 - 140*	*08/22/18 01:45*	*08/28/18 20:17*	*1*
Toluene-d8 (Surr)	*83*		*58 - 140*	*08/22/18 01:45*	*08/28/18 11:50*	*1*
Toluene-d8 (Surr)	*100*		*58 - 140*	*08/22/18 01:45*	*08/28/18 20:17*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		38	19	ug/Kg		08/23/18 09:43	08/25/18 05:21	2
Acenaphthene	ND		19	11	ug/Kg		08/23/18 09:43	08/25/18 05:21	2
Acenaphthylene	ND		19	9.2	ug/Kg		08/23/18 09:43	08/25/18 05:21	2
Anthracene	**16**	**J**	19	7.6	ug/Kg		08/23/18 09:43	08/25/18 05:21	2
Benzo[a]anthracene	**20**		19	5.7	ug/Kg		08/23/18 09:43	08/25/18 05:21	2
Benzo[a]pyrene	**19**		19	7.3	ug/Kg		08/23/18 09:43	08/25/18 05:21	2
Benzo[b]fluoranthene	**25**		19	8.0	ug/Kg		08/23/18 09:43	08/25/18 05:21	2
Benzo[g,h,i]perylene	ND		19	16	ug/Kg		08/23/18 09:43	08/25/18 05:21	2
Benzo[k]fluoranthene	**8.9**	**J**	19	8.0	ug/Kg		08/23/18 09:43	08/25/18 05:21	2
Chrysene	**35**		19	5.4	ug/Kg		08/23/18 09:43	08/25/18 05:21	2
Dibenz(a,h)anthracene	ND		19	13	ug/Kg		08/23/18 09:43	08/25/18 05:21	2
Fluoranthene	**49**		19	5.4	ug/Kg		08/23/18 09:43	08/25/18 05:21	2
Fluorene	**13**	**J**	19	8.4	ug/Kg		08/23/18 09:43	08/25/18 05:21	2
Indeno[1,2,3-cd]pyrene	ND		19	16	ug/Kg		08/23/18 09:43	08/25/18 05:21	2
Naphthalene	ND		19	13	ug/Kg		08/23/18 09:43	08/25/18 05:21	2
Phenanthrene	**29**		19	6.9	ug/Kg		08/23/18 09:43	08/25/18 05:21	2
Pyrene	**75**		19	6.5	ug/Kg		08/23/18 09:43	08/25/18 05:21	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*33 - 120*	*08/23/18 09:43*	*08/25/18 05:21*	*2*

Client Sample ID: DG-C3S-9.5-10
Date Collected: 08/21/18 12:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-14
Matrix: Solid

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*95*		*35 - 146*	*08/23/18 09:43*	*08/25/18 05:21*	*2*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**31000**		1900	710	ug/Kg		08/22/18 09:40	08/23/18 17:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	*69*		*40 - 130*	*08/22/18 09:40*	*08/23/18 17:19*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
Aldrin	ND		1.9	0.48	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
delta-BHC	ND		1.9	0.43	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
Endrin	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
Toxaphene	ND		39	6.6	ug/Kg		08/23/18 10:51	08/26/18 10:01	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/26/18 10:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*60*		*21 - 136*	*08/23/18 10:51*	*08/26/18 10:01*	*1*
Tetrachloro-m-xylene	*50*		*21 - 145*	*08/23/18 10:51*	*08/26/18 10:01*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		48	21	ug/Kg		08/24/18 08:44	08/27/18 19:28	1
Aroclor-1221	ND		48	23	ug/Kg		08/24/18 08:44	08/27/18 19:28	1
Aroclor-1232	ND		48	22	ug/Kg		08/24/18 08:44	08/27/18 19:28	1
Aroclor-1242	ND		48	18	ug/Kg		08/24/18 08:44	08/27/18 19:28	1
Aroclor-1248	ND		48	23	ug/Kg		08/24/18 08:44	08/27/18 19:28	1
Aroclor-1254	ND		48	22	ug/Kg		08/24/18 08:44	08/27/18 19:28	1
Aroclor-1260	ND		48	21	ug/Kg		08/24/18 08:44	08/27/18 19:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*63*		*14 - 128*	*08/24/18 08:44*	*08/27/18 19:28*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-C3S-9.5-10
Date Collected: 08/21/18 12:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-14
Matrix: Solid

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	76		10 - 132	08/24/18 08:44	08/27/18 19:28	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.8	0.30	mg/Kg		08/23/18 12:48	08/24/18 20:36	4
Arsenic	**4.4**		3.6	0.30	mg/Kg		08/23/18 12:48	08/24/18 20:36	4
Barium	**21**		1.8	0.25	mg/Kg		08/23/18 12:48	08/24/18 20:36	4
Beryllium	**0.34**	**J**	0.36	0.12	mg/Kg		08/23/18 12:48	08/24/18 20:36	4
Cadmium	**0.10**	**J**	0.45	0.044	mg/Kg		08/23/18 12:48	08/24/18 20:36	4
Chromium	**51**		1.8	0.19	mg/Kg		08/23/18 12:48	08/24/18 20:36	4
Cobalt	**9.0**		0.71	0.071	mg/Kg		08/23/18 12:48	08/24/18 20:36	4
Copper	**23**		5.4	2.5	mg/Kg		08/23/18 12:48	08/24/18 20:36	4
Lead	**8.0**		1.8	0.38	mg/Kg		08/23/18 12:48	08/24/18 20:36	4
Molybdenum	**1.0**	**J**	1.8	0.23	mg/Kg		08/23/18 12:48	08/24/18 20:36	4
Nickel	**48**		1.8	0.18	mg/Kg		08/23/18 12:48	08/24/18 20:36	4
Selenium	ND		3.6	0.54	mg/Kg		08/23/18 12:48	08/24/18 20:36	4
Silver	ND		0.89	0.18	mg/Kg		08/23/18 12:48	08/24/18 20:36	4
Thallium	ND		1.8	0.52	mg/Kg		08/23/18 12:48	08/24/18 20:36	4
Vanadium	**41**		1.8	0.24	mg/Kg		08/23/18 12:48	08/24/18 20:36	4
Zinc	**49**		5.4	2.3	mg/Kg		08/23/18 12:48	08/24/18 20:36	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.037**		0.016	0.0023	mg/Kg		08/23/18 10:11	08/24/18 16:57	1

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-B1S-0.5-1 Lab Sample ID: 720-88164-1

Matrix: Solid Lab File ID: FID2000007.D

Analysis Method: 8015B Date Collected: 08/21/2018 10:30

Extraction Method: 3546 Date Extracted: 08/22/2018 09:40

Sample wt/vol: 15.54(g) Date Analyzed: 08/23/2018 11:10

Con. Extract Vol.: 2(mL) Dilution Factor: 2

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250037 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	160000		3900	1400

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	70		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000007.D
Lims ID: 720-88164-E-1-C
Client ID: DG-B1S-0.5-1
Sample Type: Client
Inject. Date: 23-Aug-2018 11:10:00 ALS Bottle#: 57 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 2.0000
Sample Info: 720-0053435-007
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m
Limit Group: DRO
Last Update: 23-Aug-2018 12:09:31 Calib Date: 23-Aug-2018 08:54:15
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK014

First Level Reviewer: luj Date: 23-Aug-2018 12:09:31

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.334			ND	
	23 n-Decane		2.190			ND	
A	1 C9-C13	2.799	(1.334-4.263)		6013591	2.76	M
A	21 Stoddard Solvent	2.799	(1.334-4.263)		6013591	NC	M
A	57 C10-C12	2.919	(2.190-3.648)		3157745	9.09	M
	24 Dodecane	3.645	3.648	-0.003	188541	NC	M
A	3 C9 - C17	3.828	(1.334-6.322)		39675193	18.9	M
A	60 C10-C16	4.019	(2.190-5.847)		24088483	12.9	M
A	47 C9 - C18	4.049	(1.334-6.765)		55837993	29.5	M
A	15 Kerosene	4.261	(1.334-7.188)		96613587	50.9	M
A	25 C9-C19	4.261	(1.334-7.188)		96613587	45.7	M
	26 C13	4.251	4.263	-0.012	431241	NC	M
$	27 n-Decanoic Acid (Surr)		4.640			ND	U
A	59 C12-C16	4.747	(3.648-5.847)		21119279	19.3	M
A	61 C10-C20	4.893	(2.190-7.596)		215401709	129.3	M
A	28 C9-C24	5.199	(1.334-9.064)		590525879	341.7	M
A	29 C9-C25	5.365	(1.334-9.396)		647296093	373.8	M
A	54 C10-C23	5.454	(2.190-8.719)		489383642	284.4	M
A	4 C10-C24	5.627	(2.190-9.064)		590385797	341.6	M
A	16 C10-C25	5.793	(2.190-9.396)		647156011	373.7	M
	45 Hexadecane	5.872	5.847	0.025	6131811	NC	M
A	14 C10-C26	5.953	(2.190-9.717)		710098992	409.4	M
A	67 C12-C22	6.004	(3.648-8.360)		409618715	239.2	M
A	32 C10-C28	6.258	(2.190-10.325)		1057881499	606.3	M
A	5 Diesel	6.258	(2.190-10.325)		1057881499	606.3	M
A	12 Unknown Hydrocarbons	6.258	(2.190-10.325)		1057881499	NC	M
A	30 C13-C22	6.311	(4.263-8.360)		406714410	237.6	M
	44 Heptadecane	6.358	6.322	0.036	16162800	NC	M
A	31 C12-C24	6.356	(3.648-9.064)		587416593	339.9	M
	49 n-Octadecane	6.823	6.765	0.058	40775594	NC	M
A	9 Crude Oil Range Organics (	6.873	(1.334-12.411)		2869778307	NC	M
A	11 Bunker Range Organics (C9-	6.873	(1.334-12.411)		2869778307	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.873	(1.334-12.411)		2869778307	1359.4	M
33 C19	7.198	7.188	0.010	57047904	NC	M
A 64 C13-C28	7.294	(4.263-10.325)		1052007990	603.0	M
A 17 C10-C36	7.301	(2.190-12.411)		2869638225	1632.1	M
A 13 C9-C40	7.364	(1.334-13.393)		3862365914	2472.2	M
A 68 Crude Oil Range Organics (	7.364	(1.334-13.393)		3862365914	NC	M
A 58 C16-C24	7.455	(5.847-9.064)		566297314	327.9	M
62 icosane	7.608	7.596	0.012	30764975	NC	M
A 6 C10-C40	7.792	(2.190-13.393)		3862225832	2474.8	M
$ 34 p-Terphenyl	8.081	8.083	-0.002	17786971	8.75	
35 n-Docosane	8.368	8.360	0.008	38643250	NC	M
A 18 C12-C40	8.520	(3.648-13.393)		3859256628	2479.8	M
36 Tricosane	8.731	8.719	0.012	30930731	NC	M
A 66 C13-C40	8.828	(4.263-13.393)		3856352323	2480.8	M
37 n-Tetracosane	9.066	9.064	0.002	25275846	NC	M
A 2 C16-C36 ORO	9.129	(5.847-12.411)		2845549742	2406.5	M
38 C25	9.423	9.396	0.027	62942981	NC	M
A 19 C16-C40	9.620	(5.847-13.393)		3838137349	2477.2	M
46 n-Hexacosane		9.717			ND	
A 20 C19-C36	9.800	(7.188-12.411)		2214314424	1626.6	
A 55 C23-C32	10.074	(8.719-11.430)		1317022726	1701.8	M
39 n-Octacosane		10.325			ND	
65 C29		10.614			ND	
A 40 C24-C36	10.737	(9.064-12.411)		2227978362	2272.5	M
A 7 Motor Oil	10.737	(9.064-12.411)		2012898140	2053.2	
A 10 C22-C40	10.876	(8.360-13.393)		2840196951	2043.3	
A 50 C25-C36	10.904	(9.396-12.411)		1867112965	2026.8	
A 41 C23-C40	11.056	(8.719-13.393)		2785204782	2037.9	
A 8 C24-C40	11.228	(9.064-13.393)		2761394728	2058.8	
56 Dotriacontane		11.430			ND	
A 51 C28-C40	11.859	(10.325-13.393)		2398347404	2211.0	
A 63 C29-C40	12.004	(10.614-13.393)		2233248082	2234.7	
42 n-Hexatriacontane	12.368	12.411	-0.043	164787087	NC	M
43 C40		13.393			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

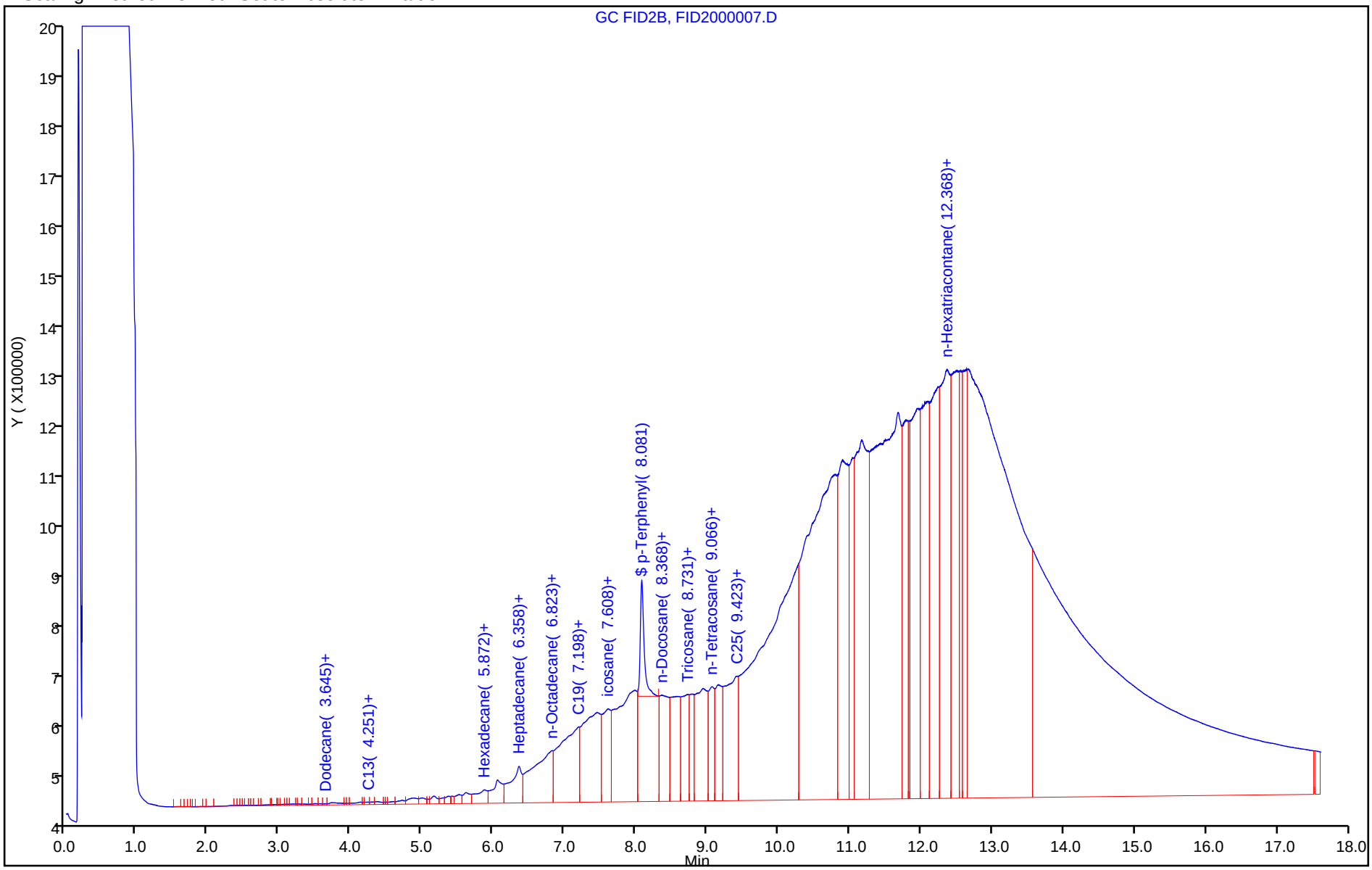
Report Date: 23-Aug-2018 12:09:32 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000007.D

Injection Date:	23-Aug-2018 11:10:00	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88164-E-1-C	Lab Sample ID:	720-88164-1	Worklist Smp#:	7
Client ID:	DG-B1S-0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	2.0000	ALS Bottle#:	57
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000007.D				
Lims ID:	720-88164-E-1-C				
Client ID:	DG-B1S-0.5-1				
Sample Type:	Client				
Inject. Date:	23-Aug-2018 11:10:00	ALS Bottle#:	57	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Sample Info:	720-0053435-007				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	23-Aug-2018 12:09:31	Calib Date:	23-Aug-2018 08:54:15		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK014				
First Level Reviewer: luj		Date:	23-Aug-2018 12:09:31		

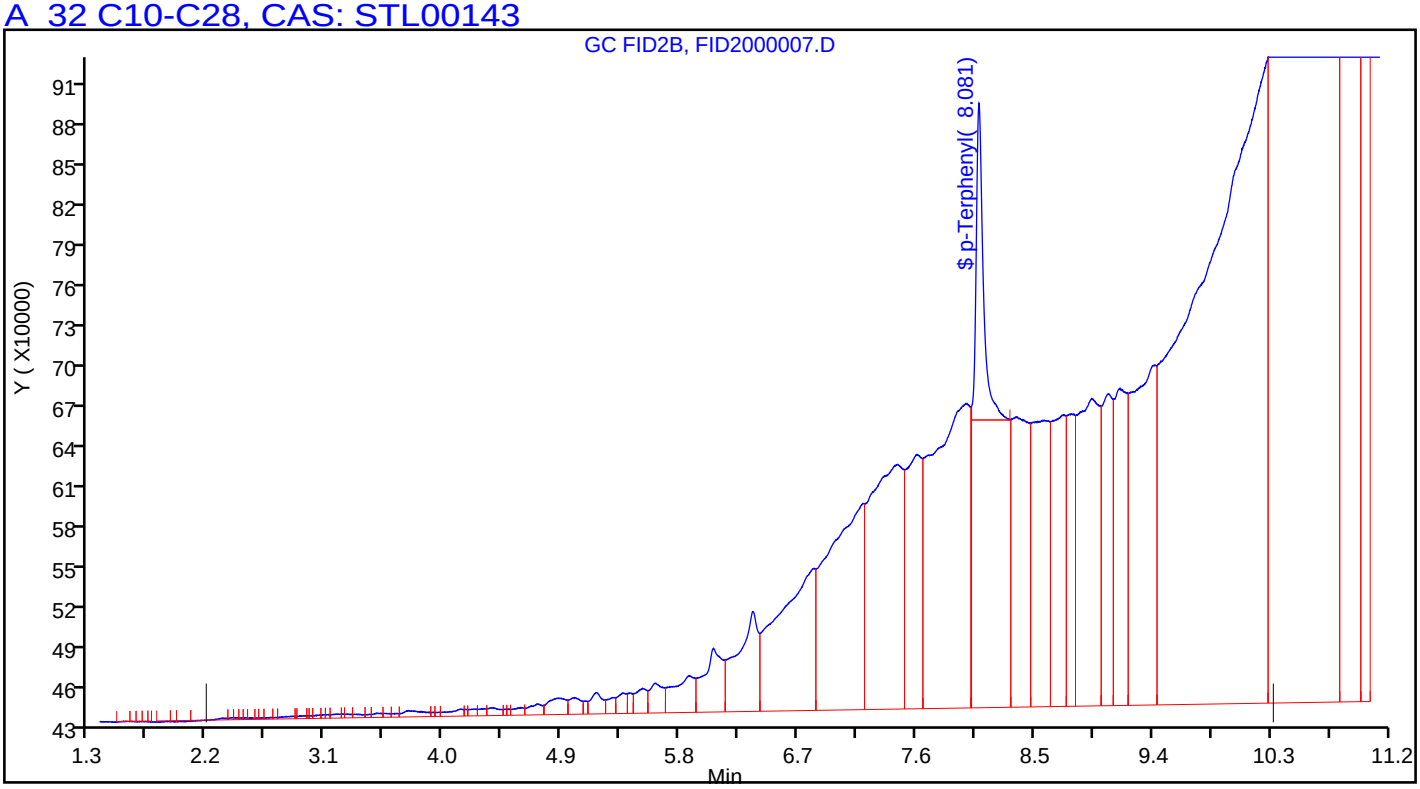
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	8.75	34.99

Report Date: 23-Aug-2018 12:09:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000007.D				
Injection Date:	23-Aug-2018 11:10:00	Instrument ID:	CHDRO6		
Lims ID:	720-88164-E-1-C	Lab Sample ID:	720-88164-1		
Client ID:	DG-B1S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	57	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A_32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

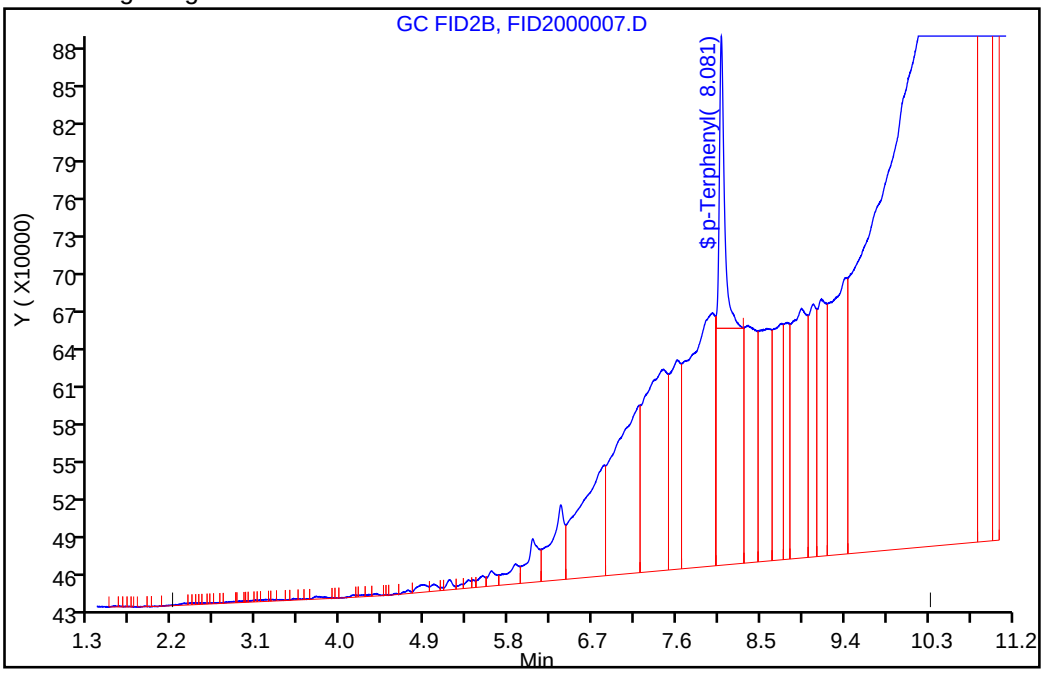
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000007.D				
Injection Date:	23-Aug-2018 11:10:00	Instrument ID:	CHDRO6		
Lims ID:	720-88164-E-1-C	Lab Sample ID:	720-88164-1		
Client ID:	DG-B1S-0.5-1				
Operator ID:	DCH	ALS Bottle#:	57	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.258, CAS: STL00143

Signal: 1

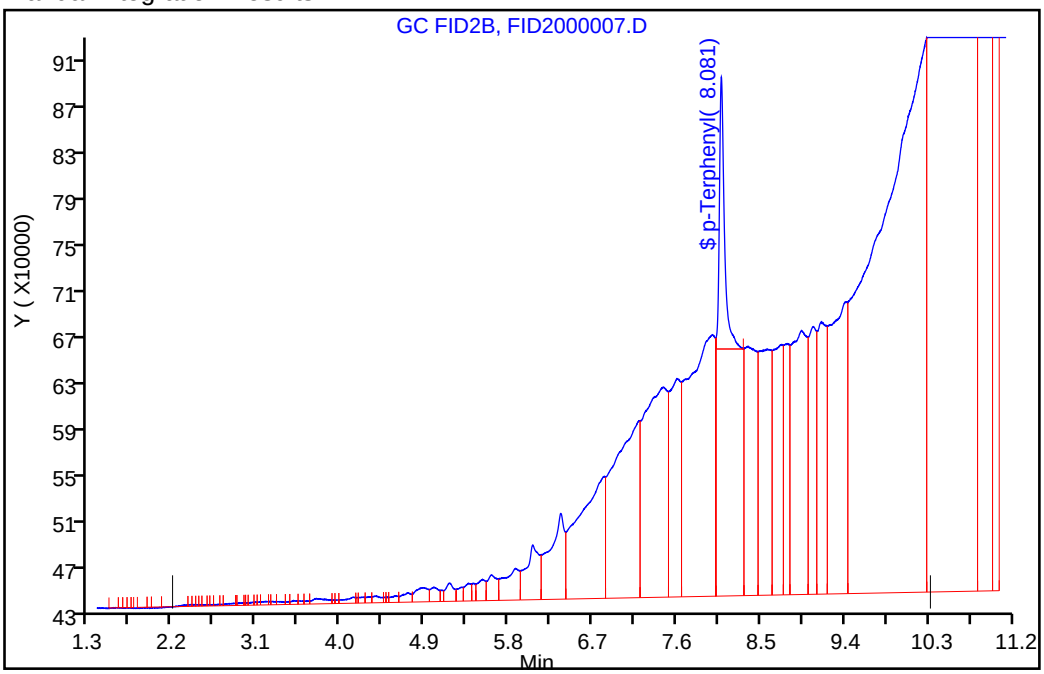
Processing Integration Results

RT: 6.26
Response: 602731520
Amount: 348.5782



Manual Integration Results

RT: 6.26
Response: 1057881499
Amount: 606.2935



Reviewer: luj, 23-Aug-2018 12:09:27

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-B1S-3.5-4 Lab Sample ID: 720-88164-2

Matrix: Solid Lab File ID: 5b082318_014.d

Analysis Method: 8015B Date Collected: 08/21/2018 10:30

Extraction Method: 3546 Date Extracted: 08/22/2018 09:40

Sample wt/vol: 15.26(g) Date Analyzed: 08/23/2018 15:17

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250035 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	9100		2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	91		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_014.d
Lims ID: 720-88164-D-2-A
Client ID: DG-B1S-3.5-4
Sample Type: Client
Inject. Date: 23-Aug-2018 15:17:07 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 103 Name: 720-0053433-014
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\DRO5B.m
Limit Group: DRO
Last Update: 24-Aug-2018 12:50:25 Calib Date: 23-Aug-2018 09:03:07
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 12:50:25

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	2.736	2.688	0.048	386	NC	
	23 n-Decane	3.937	3.915	0.022	1765	NC	
A	1 C9-C13	4.658	(2.688-6.629)		20790	1.64	
A	21 Stoddard Solvent	4.658	(2.688-6.629)		20790	NC	
A	57 C10-C12	4.869	(3.915-5.824)		7280	0.6999	
	24 Dodecane	5.824	5.824	0.000	2699	NC	
A	3 C9 - C17	6.023	(2.688-9.359)		49781	4.20	
A	60 C10-C16	6.318	(3.915-8.721)		28975	2.80	
A	47 C9 - C18	6.320	(2.688-9.952)		69972	6.23	
A	15 Kerosene	6.590	(2.688-10.492)		80895	7.19	
A	25 C9-C19	6.590	(2.688-10.492)		80895	6.82	
	26 C13	6.599	6.629	-0.030	8285	NC	
$	27 n-Decanoic Acid (Surr)		7.254			ND	U
A	59 C12-C16	7.272	(5.824-8.721)		21695	2.09	
A	62 C10-C20	7.472	(3.915-11.029)		155396	14.9	
A	28 C9-C24	7.825	(2.688-12.962)		442066	42.5	
A	29 C9-C25	8.044	(2.688-13.400)		483445	46.5	
A	54 C10-C23	8.212	(3.915-12.508)		383421	36.9	
A	4 C10-C24	8.439	(3.915-12.962)		439540	42.3	
A	16 C10-C25	8.658	(3.915-13.400)		480919	46.2	
	45 Hexadecane	8.724	8.721	0.003	2194	NC	
A	14 C10-C26	8.868	(3.915-13.821)		553393	53.2	
A	67 C12-C22	8.930	(5.824-12.036)		294845	28.3	
A	5 Diesel	9.268	(3.915-14.620)		725968	69.8	
A	32 C10-C28	9.268	(3.915-14.620)		725968	69.8	
A	12 Unknown Hydrocarbons	9.268	(3.915-14.620)		725968	NC	
A	30 C13-C22	9.332	(6.629-12.036)		292146	28.1	
	44 Heptadecane	9.351	9.359	-0.008	8495	NC	
A	31 C12-C24	9.393	(5.824-12.962)		432260	41.6	
	49 n-Octadecane	9.928	9.952	-0.024	20191	NC	
A	52 Mineral oil	10.021	(2.688-17.353)		1820148	191.8	
A	9 Crude Oil Range Organics (	10.021	(2.688-17.353)		1820148	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 11 Bunker Range Organics (C9-	10.021	(2.688-17.353)		2389998	NC	
33 C19		10.492			ND	
A 64 C13-C28	10.624	(6.629-14.620)		715989	68.8	
A 17 C10-C36	10.634	(3.915-17.353)		2387472	229.5	
A 58 C16-C24	10.842	(8.721-12.962)		410565	39.5	
A 68 Crude Oil Range Organics (	10.843	(2.688-18.998)		2272668	NC	
A 13 C9-C40	10.843	(2.688-18.998)		2272668	248.4	
61 icosane	11.061	11.029	0.032	26856	NC	
A 6 C10-C40	11.457	(3.915-18.998)		2268199	248.2	
$ 34 p-Terphenyl	12.020	12.030	-0.010	289376	22.7	M
35 n-Docosane		12.036			ND	
A 18 C12-C40	12.411	(5.824-18.998)		2253014	247.1	
36 Tricosane		12.508			ND	
A 66 C13-C40	12.814	(6.629-18.998)		2105120	232.2	
37 n-Tetracosane	12.959	12.962	-0.003	56119	NC	
A 2 C16-C36 ORO	13.037	(8.721-17.353)		1333428	200.2	
38 C25	13.398	13.400	-0.002	41379	NC	
46 n-Hexacosane	13.820	13.821	-0.001	38176	NC	
A 19 C16-C40	13.859	(8.721-18.998)		2206986	243.1	
A 20 C19-C36	13.923	(10.492-17.353)		1253889	153.9	
A 55 C23-C32	14.287	(12.508-16.066)		810243	207.9	
39 n-Octacosane	14.601	14.620	-0.019	49719	NC	
65 C29	14.996	14.999	-0.003	170434	NC	
A 40 C24-C36	15.158	(12.962-17.353)		1188942	203.6	
A 7 Motor Oil	15.158	(12.962-17.353)		1188942	203.6	
A 50 C25-C36	15.377	(13.400-17.353)		1135003	204.5	
A 10 C22-C40	15.517	(12.036-18.998)		1498025	180.1	
A 41 C23-C40	15.753	(12.508-18.998)		1651734	203.0	
A 8 C24-C40	15.980	(12.962-18.998)		1596845	202.4	
56 Dotriacontane	16.061	16.066	-0.005	60207	NC	
A 51 C28-C40	16.809	(14.620-18.998)		1307807	204.7	
A 63 C29-C40	16.999	(14.999-18.998)		1198563	203.5	
42 n-Hexatriacontane		17.353			ND	
43 C40		18.998			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

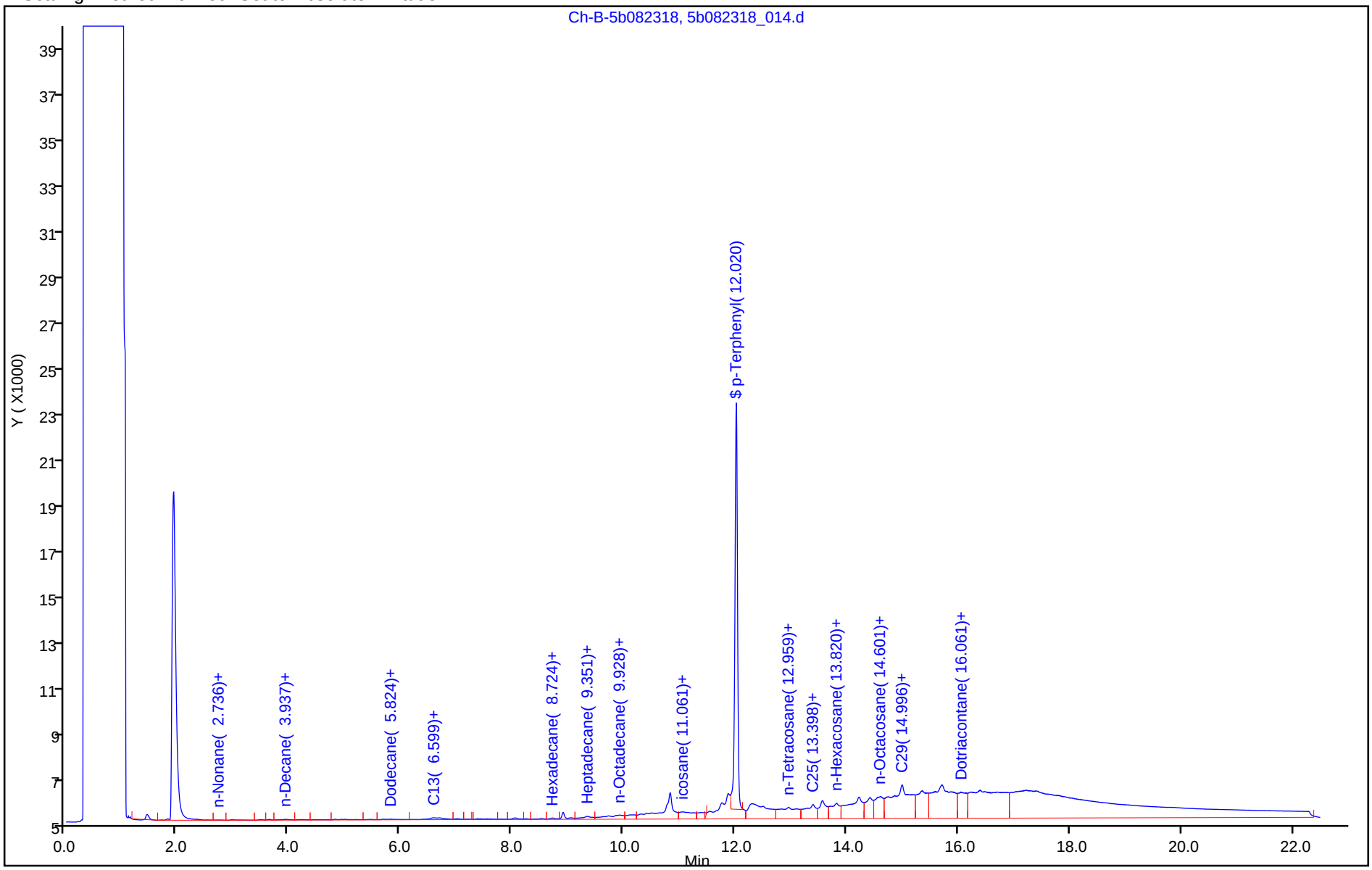
Report Date: 24-Aug-2018 12:50:26 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_014.d

Injection Date:	23-Aug-2018 15:17:07	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88164-D-2-A	Lab Sample ID:	720-88164-2	Worklist Smp#:	14
Client ID:	DG-B1S-3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_014.d				
Lims ID:	720-88164-D-2-A				
Client ID:	DG-B1S-3.5-4				
Sample Type:	Client				
Inject. Date:	23-Aug-2018 15:17:07	ALS Bottle#:	0	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 103 Name: 720-0053433-014				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\DRO5B.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 12:50:25	Calib Date:	23-Aug-2018 09:03:07		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				
First Level Reviewer: luj		Date:	24-Aug-2018 12:50:25		

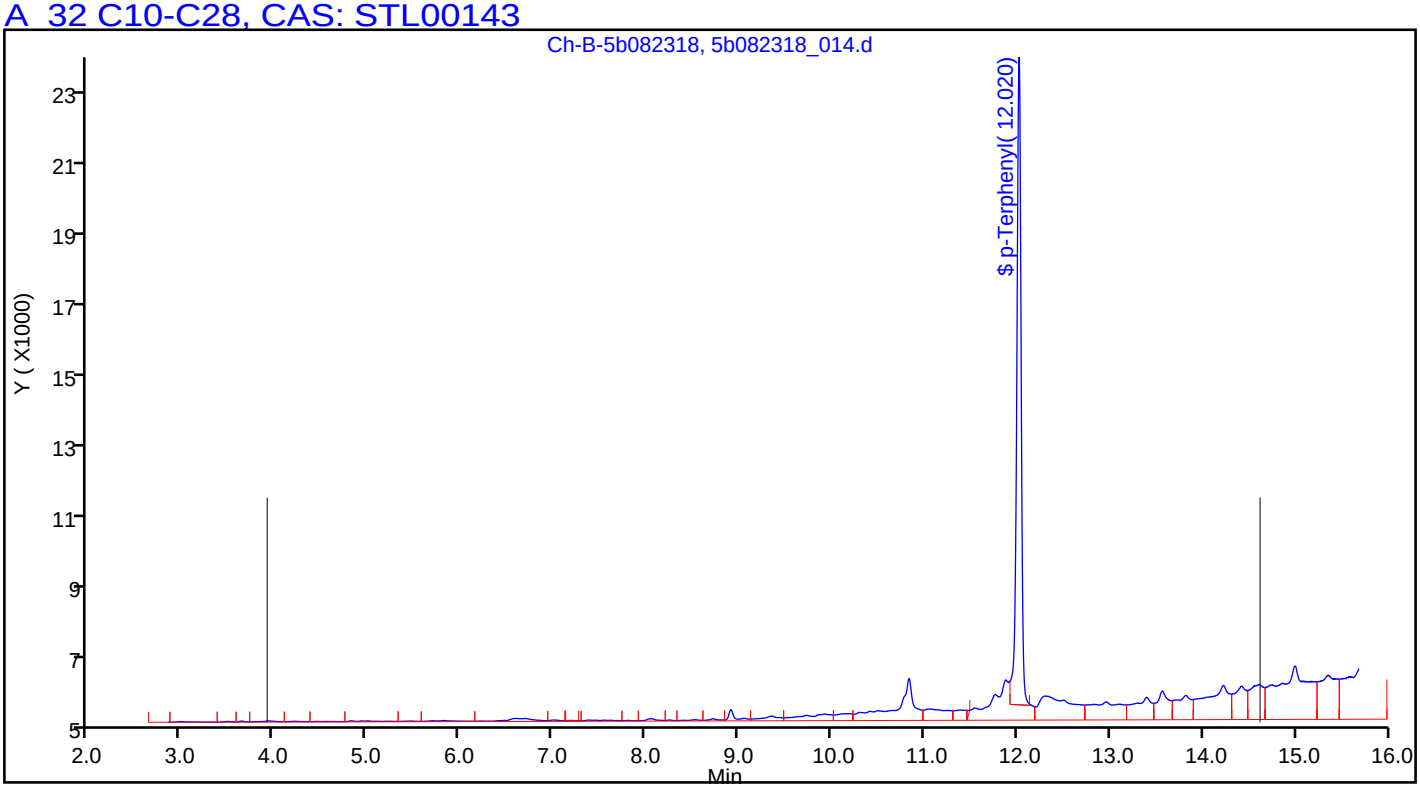
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	22.7	90.71

Report Date: 24-Aug-2018 12:50:26 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_014.d				
Injection Date:	23-Aug-2018 15:17:07	Instrument ID:	CHDRO5		
Lims ID:	720-88164-D-2-A	Lab Sample ID:	720-88164-2		
Client ID:	DG-B1S-3.5-4				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

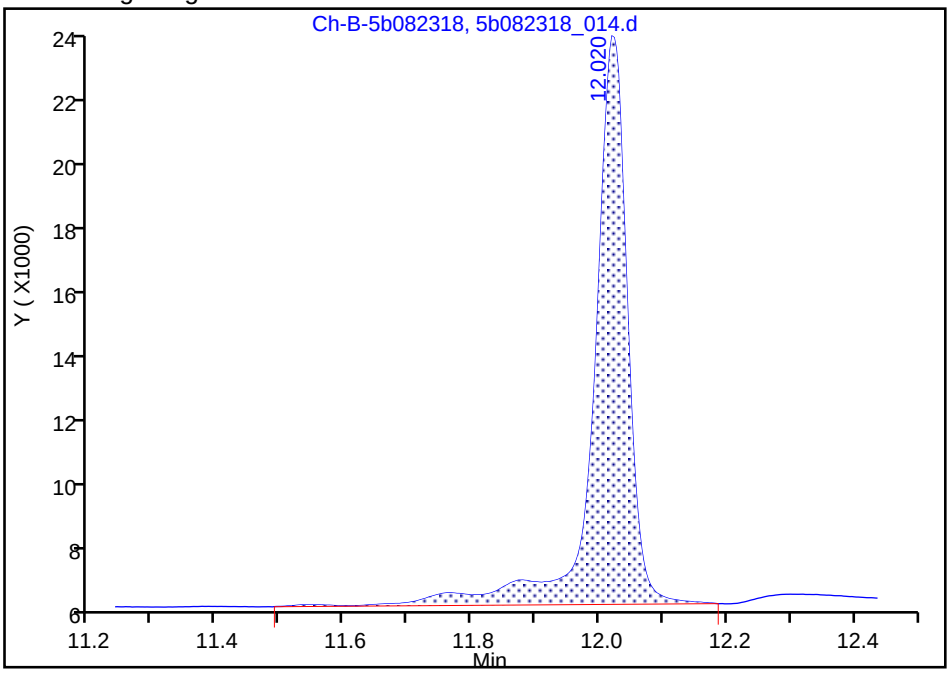
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_014.d				
Injection Date:	23-Aug-2018 15:17:07	Instrument ID:	CHDRO5		
Lims ID:	720-88164-D-2-A	Lab Sample ID:	720-88164-2		
Client ID:	DG-B1S-3.5-4				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

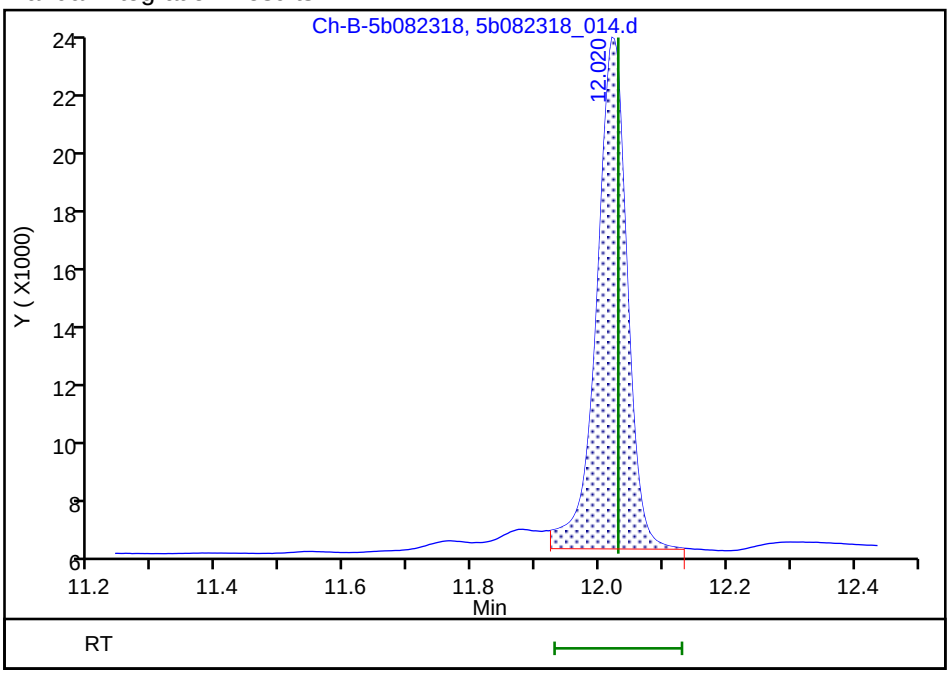
Processing Integration Results

RT: 12.02
Area: 327166
Amount: 25.640376
Amount Units: mg/L



Manual Integration Results

RT: 12.02
Area: 289376
Amount: 22.678730
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 12:50:16

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-A3S-0.5-1 Lab Sample ID: 720-88164-7

Matrix: Solid Lab File ID: 5a082318_014.d

Analysis Method: 8015B Date Collected: 08/21/2018 11:10

Extraction Method: 3546 Date Extracted: 08/22/2018 09:40

Sample wt/vol: 15.82(g) Date Analyzed: 08/23/2018 15:17

Con. Extract Vol.: 2(mL) Dilution Factor: 10

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250034 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	620000		19000	7100

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	D X	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_014.d
Lims ID: 720-88164-D-7-A
Client ID: DG-A3S-0.5-1
Sample Type: Client
Inject. Date: 23-Aug-2018 15:17:07 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Sample Info: #: 004 Name: 720-0053432-014
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\DRO5A.m
Limit Group: DRO
Last Update: 23-Aug-2018 16:26:40 Calib Date: 23-Aug-2018 09:03:07
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK014

First Level Reviewer: luj Date: 23-Aug-2018 16:26:40

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		2.402			ND	
	23 n-Decane		3.672			ND	
A	21 Stoddard Solvent	4.416	(2.402-6.430)		12216	1.17	
A	1 C9-C13	4.416	(2.402-6.430)		12216	1.09	
A	57 C10-C12	4.646	(3.672-5.621)		1787	0.1825	
	24 Dodecane		5.621			ND	
A	3 C9 - C17	5.779	(2.402-9.157)		104676	8.30	
A	47 C9 - C18	6.077	(2.402-9.752)		104676	9.87	
A	60 C10-C16	6.098	(3.672-8.523)		95429	8.48	
A	25 C9-C19	6.349	(2.402-10.297)		104676	8.23	
A	15 Kerosene	6.349	(2.402-10.297)		104676	9.85	
	26 C13		6.430			ND	
A	59 C12-C16	7.072	(5.621-8.523)		93642	9.56	
$	27 n-Decanoic Acid (Surr)		7.156			ND	
A	62 C10-C20	7.253	(3.672-10.834)		1522156	155.5	
A	28 C9-C24	7.586	(2.402-12.769)		3444801	351.8	
A	29 C9-C25	7.804	(2.402-13.207)		3669116	374.7	M
A	54 C10-C23	7.993	(3.672-12.314)		3128479	319.5	
A	4 C10-C24	8.221	(3.672-12.769)		3435554	350.9	
A	16 C10-C25	8.439	(3.672-13.207)		3659869	373.8	M
	45 Hexadecane		8.523			ND	
A	14 C10-C26	8.650	(3.672-13.629)		3659869	373.8	M
A	67 C12-C22	8.731	(5.621-11.842)		2460689	251.3	
A	5 Diesel	9.050	(3.672-14.428)		4787391	488.9	M
A	32 C10-C28	9.050	(3.672-14.428)		4787391	488.9	M
A	12 Unknown Hydrocarbons	9.050	(3.672-14.428)		4787391	NC	M
A	30 C13-C22	9.136	(6.430-11.842)		2459507	251.2	
	44 Heptadecane		9.157			ND	
A	31 C12-C24	9.195	(5.621-12.769)		3433767	350.7	
	49 n-Octadecane		9.752			ND	
A	11 Bunker Range Organics (C9-	9.784	(2.402-17.165)		8606924	NC	M
A	52 Mineral oil	9.784	(2.402-17.165)		9557017	849.4	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	9.784	(2.402-17.165)		9557017	NC	
33 C19		10.297			ND	
A 17 C10-C36	10.419	(3.672-17.165)		8597677	878.1	M
A 64 C13-C28	10.429	(6.430-14.428)		4784422	488.6	M
A 68 Crude Oil Range Organics (	10.537	(2.402-18.672)		11801515	NC	
A 13 C9-C40	10.537	(2.402-18.672)		11801515	1272.9	
A 58 C16-C24	10.646	(8.523-12.769)		3340125	341.1	
61 icosane		10.834			ND	
A 6 C10-C40	11.172	(3.672-18.672)		11800064	1272.9	
35 n-Docosane		11.842			ND	
$ 34 p-Terphenyl		11.903			ND	U
A 18 C12-C40	12.146	(5.621-18.672)		11793719	1272.6	
36 Tricosane		12.314			ND	
A 66 C13-C40	12.551	(6.430-18.672)		11786084	1272.0	
37 n-Tetracosane		12.769			ND	
A 2 C16-C36 ORO	12.844	(8.523-17.165)		9306842	1153.3	
38 C25		13.207			ND	
A 19 C16-C40	13.598	(8.523-18.672)		11551340	1247.8	
46 n-Hexacosane		13.629			ND	
A 20 C19-C36	13.731	(10.297-17.165)		7973530	1024.7	
A 55 C23-C32	14.096	(12.314-15.879)		4187061	858.2	
39 n-Octacosane		14.428			ND	
65 C29	14.343	14.808	-0.465	1127522	NC	M
A 40 C24-C36	14.967	(12.769-17.165)		5773128	909.4	
A 7 Motor Oil	14.967	(12.769-17.165)		5773128	909.4	
A 50 C25-C36	15.186	(13.207-17.165)		5404692	901.2	
A 10 C22-C40	15.257	(11.842-18.672)		8773363	957.2	
A 41 C23-C40	15.493	(12.314-18.672)		8328353	930.8	
A 8 C24-C40	15.721	(12.769-18.672)		7935362	917.4	
56 Dotriacontane		15.879			ND	
A 51 C28-C40	16.550	(14.428-18.672)		6380643	925.0	
A 63 C29-C40	16.740	(14.808-18.672)		5906232	931.5	
42 n-Hexatriacontane		17.165			ND	
43 C40		18.672			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

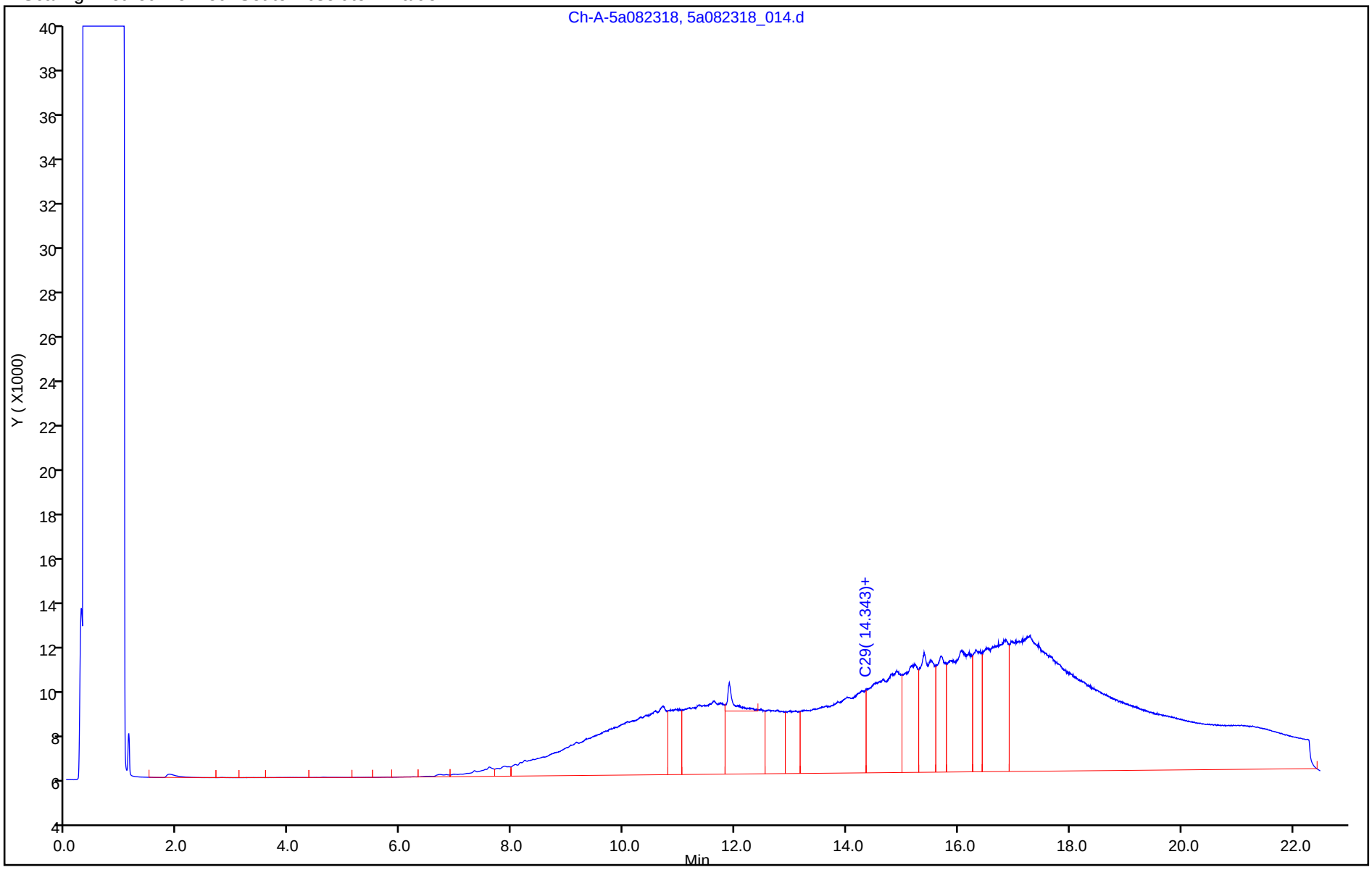
Report Date: 23-Aug-2018 16:26:40 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_014.d

Injection Date:	23-Aug-2018 15:17:07	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88164-D-7-A	Lab Sample ID:	720-88164-7	Worklist Smp#:	14
Client ID:	DG-A3S-0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	0
Method:	DRO5A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

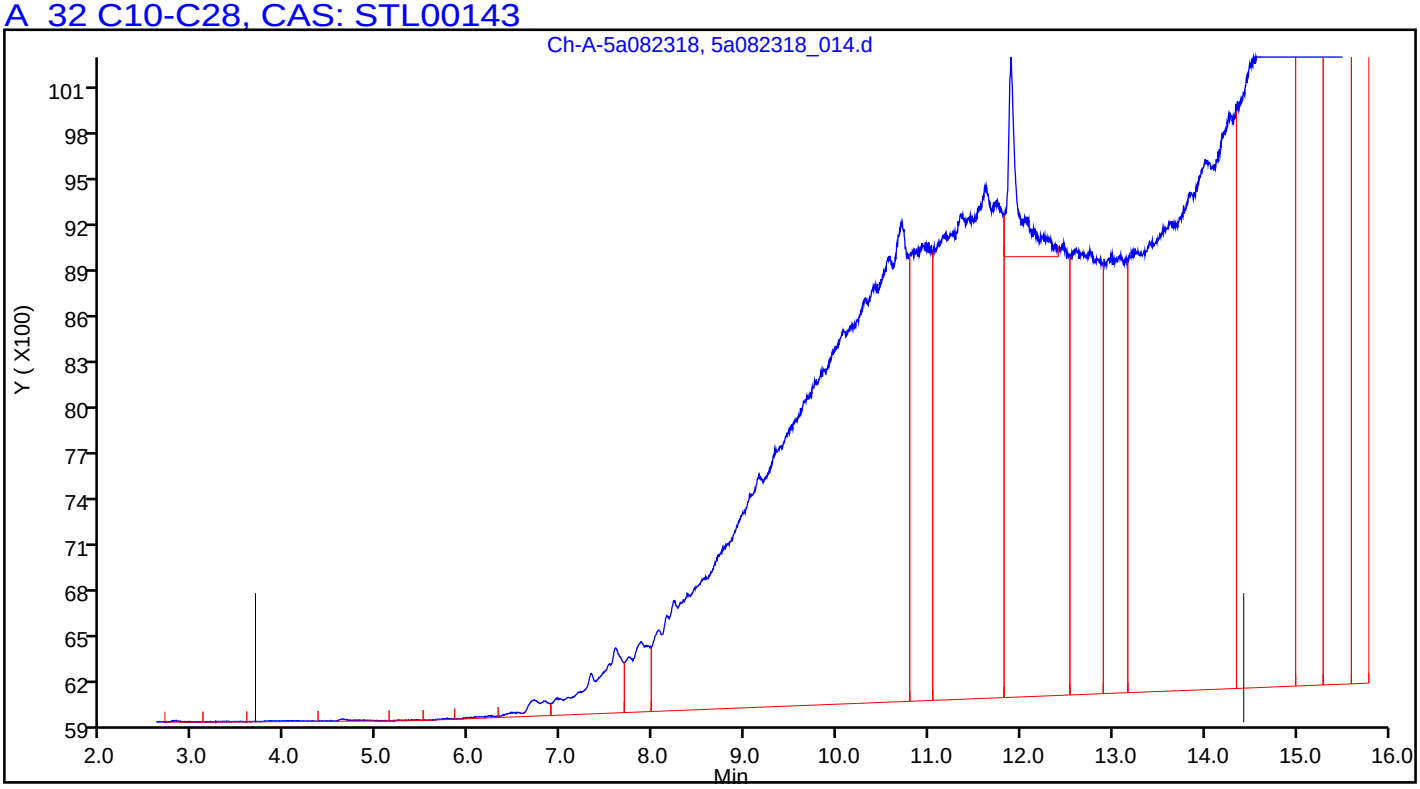


Report Date: 23-Aug-2018 16:26:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_014.d				
Injection Date:	23-Aug-2018 15:17:07	Instrument ID:	CHDRO5		
Lims ID:	720-88164-D-7-A	Lab Sample ID:	720-88164-7		
Client ID:	DG-A3S-0.5-1				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

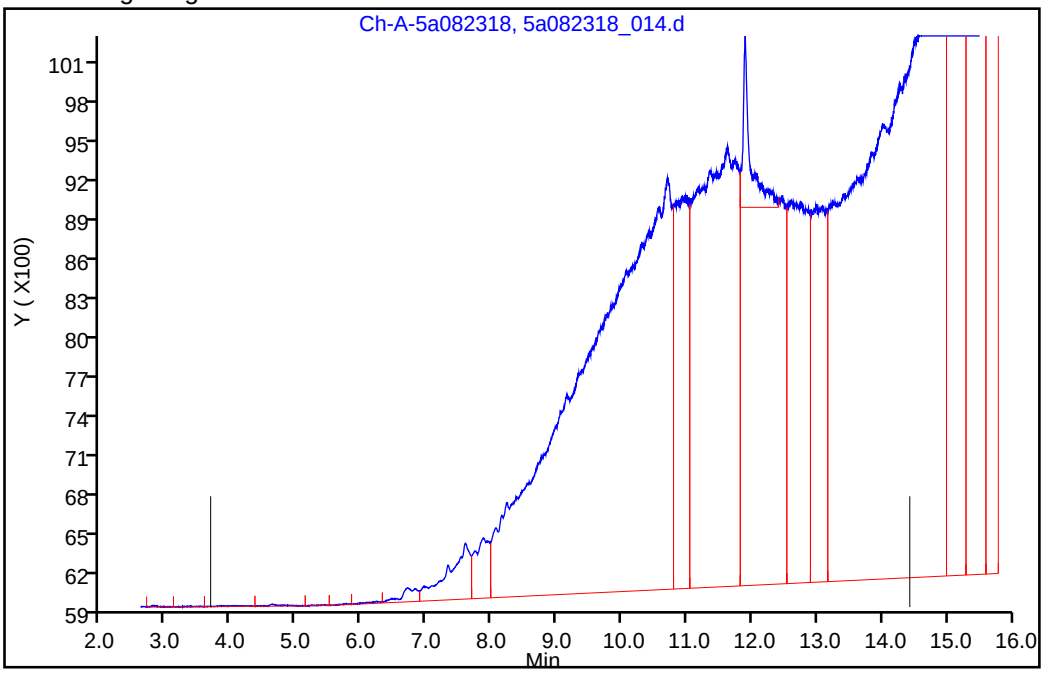
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_014.d				
Injection Date:	23-Aug-2018 15:17:07	Instrument ID:	CHDRO5		
Lims ID:	720-88164-D-7-A	Lab Sample ID:	720-88164-7		
Client ID:	DG-A3S-0.5-1				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 9.050, CAS: STL00143

Signal: 1

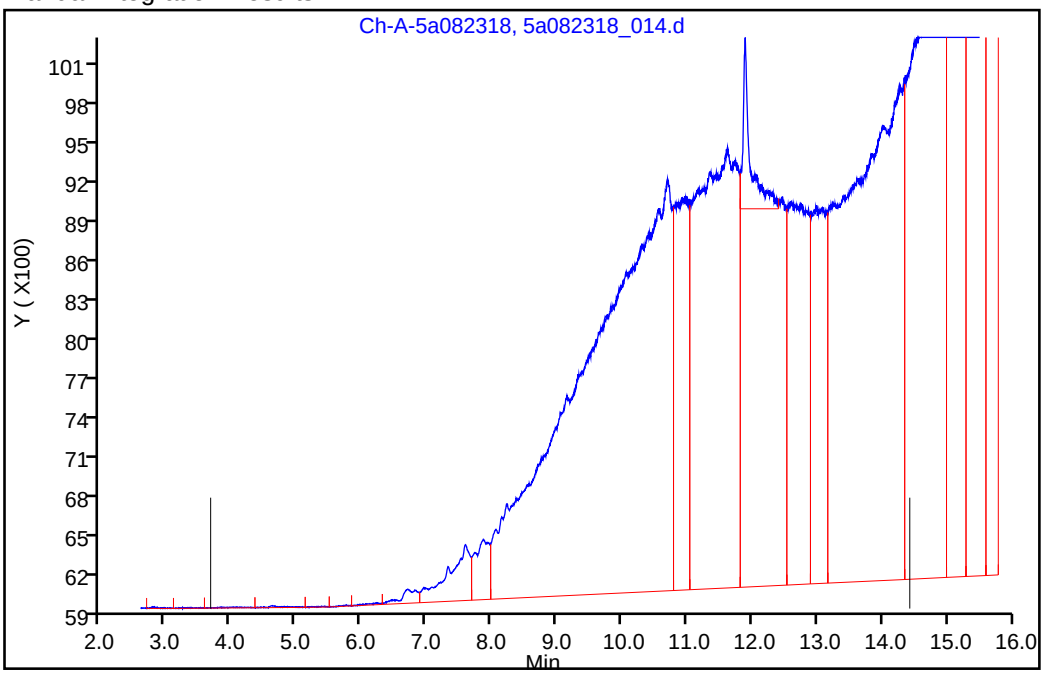
Processing Integration Results

RT: 9.05
Response: 3610382
Amount: 368.7386



Manual Integration Results

RT: 9.05
Response: 4787391
Amount: 488.9499



Reviewer: luj, 23-Aug-2018 16:26:31

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

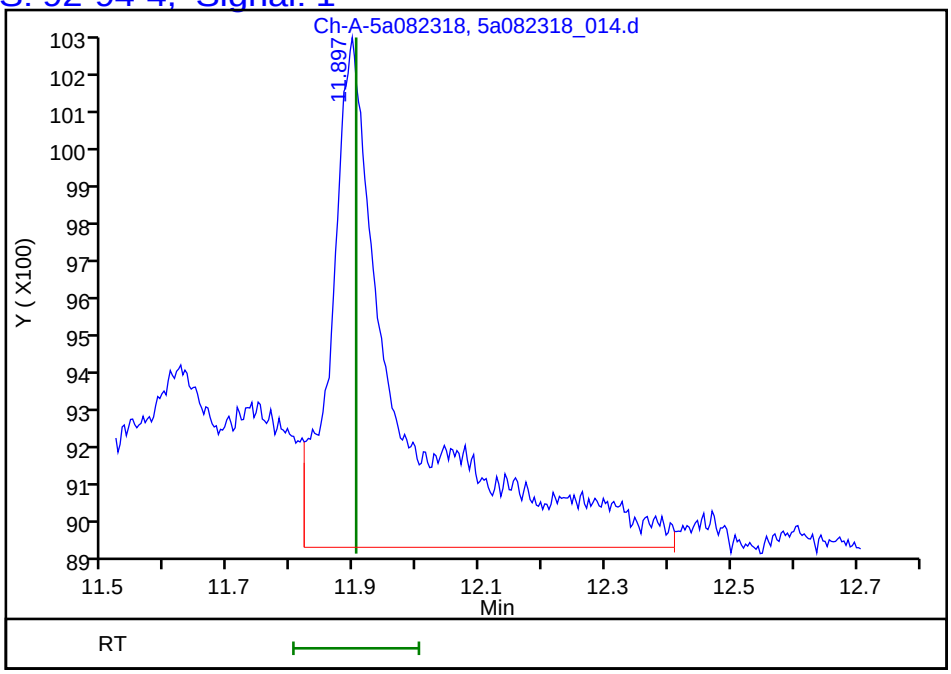
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_014.d				
Injection Date:	23-Aug-2018 15:17:07	Instrument ID:	CHDRO5		
Lims ID:	720-88164-D-7-A	Lab Sample ID:	720-88164-7		
Client ID:	DG-A3S-0.5-1				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 11.90
Response: 49487
Amount: 3.793714



Reviewer: luj, 23-Aug-2018 16:26:40
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-A3S-3.5-4 Lab Sample ID: 720-88164-8

Matrix: Solid Lab File ID: 5b082318_015.d

Analysis Method: 8015B Date Collected: 08/21/2018 11:10

Extraction Method: 3546 Date Extracted: 08/22/2018 09:40

Sample wt/vol: 15.62(g) Date Analyzed: 08/23/2018 15:46

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250035 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	6900		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	89		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_015.d
Lims ID: 720-88164-E-8-A
Client ID: DG-A3S-3.5-4
Sample Type: Client
Inject. Date: 23-Aug-2018 15:46:46 ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 104 Name: 720-0053433-015
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\DRO5B.m
Limit Group: DRO
Last Update: 24-Aug-2018 12:52:24 Calib Date: 23-Aug-2018 09:03:07
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 12:52:24

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	2.766	2.688	0.078	159	NC	
	23 n-Decane	3.945	3.915	0.030	1455	NC	
A	1 C9-C13	4.658	(2.688-6.629)		173081	13.7	
A	21 Stoddard Solvent	4.658	(2.688-6.629)		173081	NC	
A	57 C10-C12	4.869	(3.915-5.824)		8360	0.8038	
	24 Dodecane		5.824			ND	
A	3 C9 - C17	6.023	(2.688-9.359)		191217	16.1	
A	60 C10-C16	6.318	(3.915-8.721)		22901	2.21	
A	47 C9 - C18	6.320	(2.688-9.952)		208882	18.6	
A	15 Kerosene	6.590	(2.688-10.492)		208882	18.6	
A	25 C9-C19	6.590	(2.688-10.492)		208882	17.6	
	26 C13	6.636	6.629	0.007	4529	NC	
$	27 n-Decanoic Acid (Surr)		7.254			ND	U
A	59 C12-C16	7.272	(5.824-8.721)		17108	1.64	
A	62 C10-C20	7.472	(3.915-11.029)		105598	10.2	
A	28 C9-C24	7.825	(2.688-12.962)		439395	42.2	
A	29 C9-C25	8.044	(2.688-13.400)		523465	50.3	
A	54 C10-C23	8.212	(3.915-12.508)		274674	26.4	
A	4 C10-C24	8.439	(3.915-12.962)		274674	26.4	
A	16 C10-C25	8.658	(3.915-13.400)		358744	34.5	
	45 Hexadecane	8.726	8.721	0.005	2021	NC	
A	14 C10-C26	8.868	(3.915-13.821)		418038	40.2	
A	67 C12-C22	8.930	(5.824-12.036)		185015	17.8	
A	5 Diesel	9.268	(3.915-14.620)		563132	54.1	
A	32 C10-C28	9.268	(3.915-14.620)		563132	54.1	
A	12 Unknown Hydrocarbons	9.268	(3.915-14.620)		563132	NC	
A	30 C13-C22	9.332	(6.629-12.036)		182448	17.5	
	44 Heptadecane	9.366	9.359	0.007	5138	NC	
A	31 C12-C24	9.393	(5.824-12.962)		268881	25.9	
	49 n-Octadecane		9.952			ND	
A	52 Mineral oil	10.021	(2.688-17.353)		1223809	129.0	
A	9 Crude Oil Range Organics (	10.052	(2.750-17.353)		1223669	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 11 Bunker Range Organics (C9-	10.021	(2.688-17.353)		1686406	NC	
33 C19		10.492			ND	
A 64 C13-C28	10.624	(6.629-14.620)		554772	53.3	
A 17 C10-C36	10.634	(3.915-17.353)		1521685	146.3	
A 58 C16-C24	10.842	(8.721-12.962)		251773	24.2	
A 68 Crude Oil Range Organics (	10.843	(2.688-18.998)		1498387	NC	
A 13 C9-C40	10.843	(2.688-18.998)		1498387	163.8	
61 icosane		11.029			ND	
A 6 C10-C40	11.457	(3.915-18.998)		1495126	163.6	
$ 34 p-Terphenyl	12.023	12.030	-0.007	284114	22.3	M
35 n-Docosane		12.036			ND	
A 18 C12-C40	12.411	(5.824-18.998)		1482417	162.6	
36 Tricosane		12.508			ND	
A 66 C13-C40	12.814	(6.629-18.998)		1347764	148.7	
37 n-Tetracosane	12.964	12.962	0.002	44870	NC	
A 2 C16-C36 ORO	13.037	(8.721-17.353)		934395	140.3	
38 C25	13.400	13.400	0.000	39200	NC	
46 n-Hexacosane	13.821	13.821	0.000	23668	NC	
A 19 C16-C40	13.859	(8.721-18.998)		1443459	159.0	
A 20 C19-C36	13.923	(10.492-17.353)		758637	93.1	
A 55 C23-C32	14.287	(12.508-16.066)		544574	139.7	
39 n-Octacosane	14.595	14.620	-0.025	60883	NC	
65 C29	14.997	14.999	-0.002	90934	NC	
A 40 C24-C36	15.158	(12.962-17.353)		726885	124.5	
A 7 Motor Oil	15.158	(12.962-17.353)		726885	124.5	
A 50 C25-C36	15.377	(13.400-17.353)		678292	122.2	
A 10 C22-C40	15.517	(12.036-18.998)		864746	104.0	
A 41 C23-C40	15.753	(12.508-18.998)		1011334	124.3	
A 8 C24-C40	15.980	(12.962-18.998)		960051	121.7	
56 Dotriacontane	16.067	16.066	0.001	34606	NC	
A 51 C28-C40	16.809	(14.620-18.998)		733304	114.8	
A 63 C29-C40	16.999	(14.999-18.998)		664464	112.8	
42 n-Hexatriacontane	17.350	17.353	-0.003	582752	NC	
43 C40		18.998			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

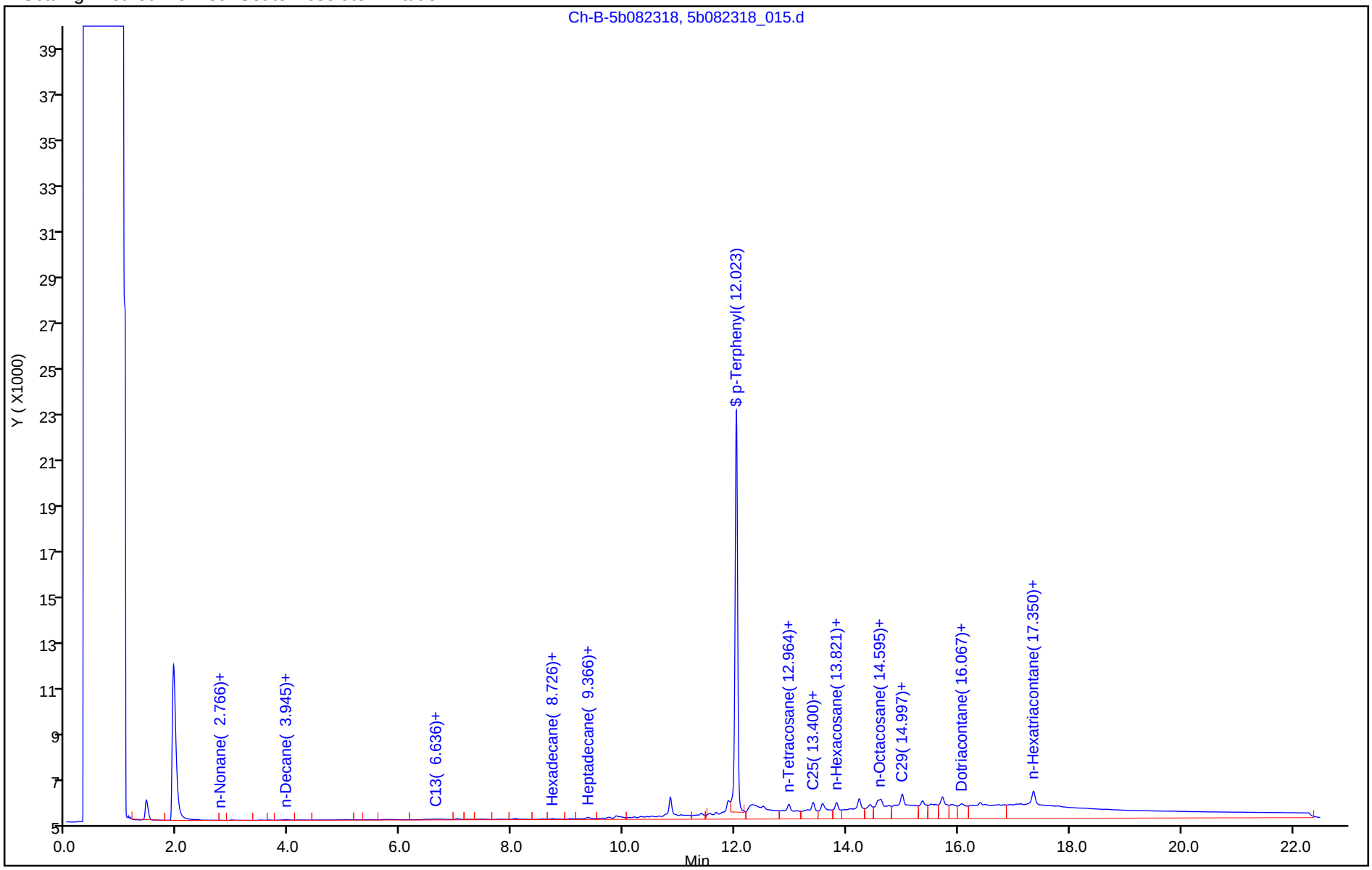
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 24-Aug-2018 12:52:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_015.d				
Injection Date:	23-Aug-2018 15:46:46	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88164-E-8-A	Lab Sample ID:	720-88164-8	Worklist Smp#:	15
Client ID:	DG-A3S-3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_015.d				
Lims ID:	720-88164-E-8-A				
Client ID:	DG-A3S-3.5-4				
Sample Type:	Client				
Inject. Date:	23-Aug-2018 15:46:46	ALS Bottle#:	0	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 104 Name: 720-0053433-015				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\DRO5B.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 12:52:24	Calib Date:	23-Aug-2018 09:03:07		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				

First Level Reviewer: luj Date: 24-Aug-2018 12:52:24

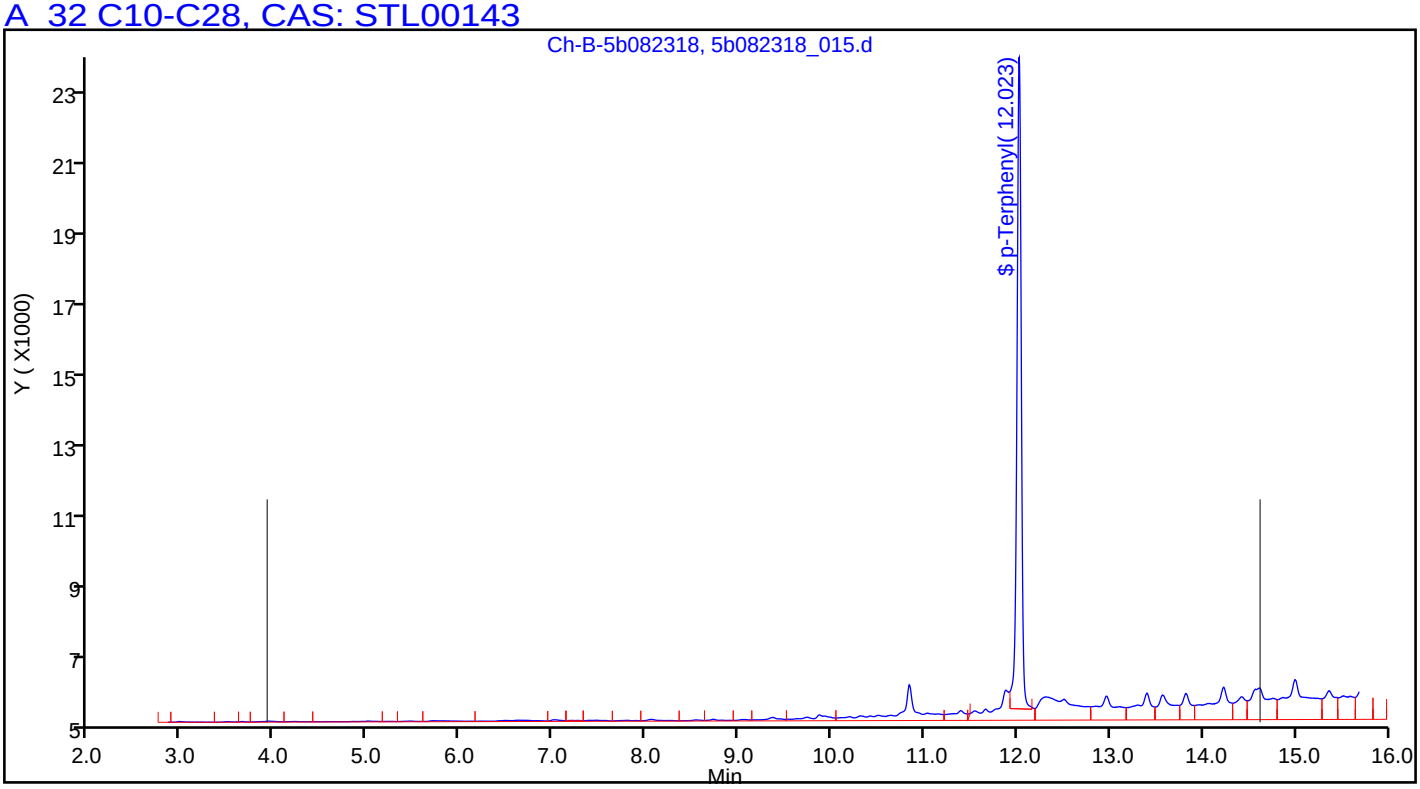
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	22.3	89.07

Report Date: 24-Aug-2018 12:52:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_015.d				
Injection Date:	23-Aug-2018 15:46:46	Instrument ID:	CHDRO5		
Lims ID:	720-88164-E-8-A	Lab Sample ID:	720-88164-8		
Client ID:	DG-A3S-3.5-4				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

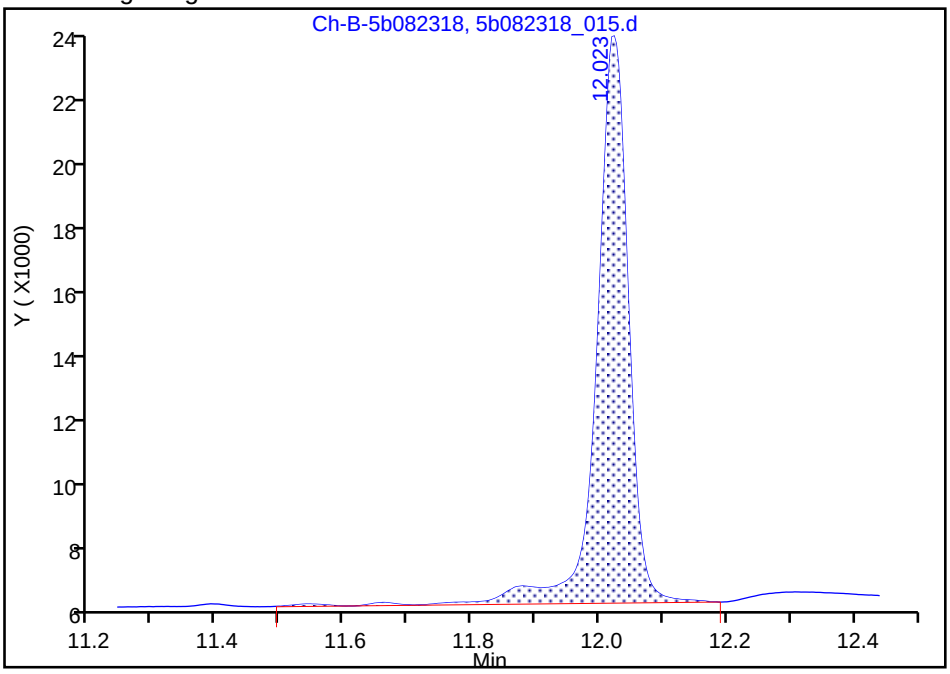
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_015.d				
Injection Date:	23-Aug-2018 15:46:46	Instrument ID:	CHDRO5		
Lims ID:	720-88164-E-8-A	Lab Sample ID:	720-88164-8		
Client ID:	DG-A3S-3.5-4				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

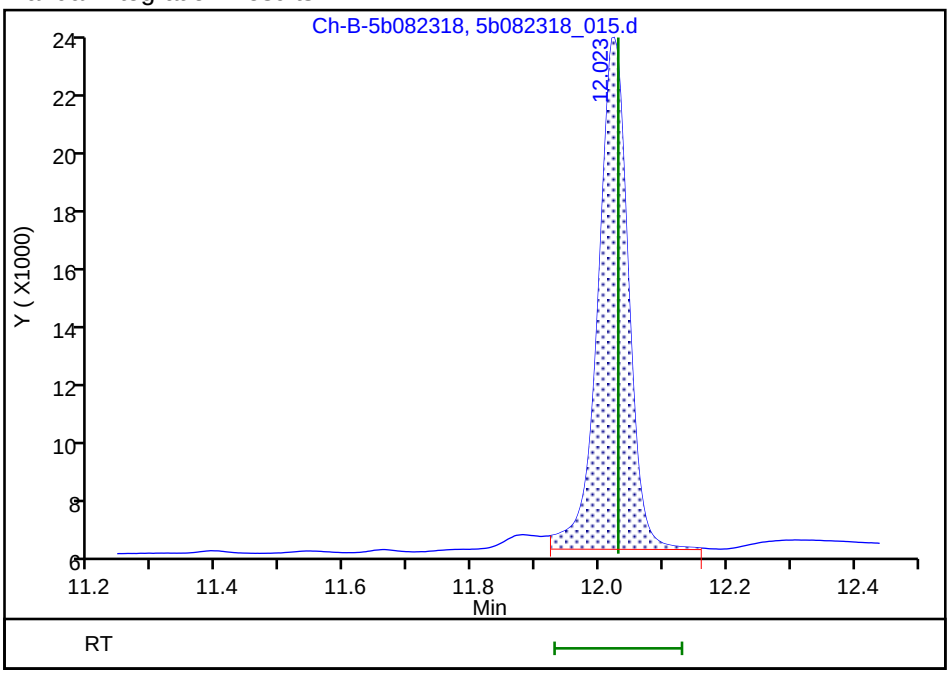
Processing Integration Results

RT: 12.02
Area: 302462
Amount: 23.704295
Amount Units: mg/L



Manual Integration Results

RT: 12.02
Area: 284114
Amount: 22.266341
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 12:52:12

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-A3S-9.5-10 Lab Sample ID: 720-88164-9

Matrix: Solid Lab File ID: 5b082318_016.d

Analysis Method: 8015B Date Collected: 08/21/2018 11:30

Extraction Method: 3546 Date Extracted: 08/22/2018 09:40

Sample wt/vol: 15.33(g) Date Analyzed: 08/23/2018 16:19

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250035 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	6300		2000	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	86		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_016.d
Lims ID: 720-88164-E-9-A
Client ID: DG-A3S-9.5-10
Sample Type: Client
Inject. Date: 23-Aug-2018 16:19:53 ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 105 Name: 720-0053433-016
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\DRO5B.m
Limit Group: DRO
Last Update: 24-Aug-2018 12:53:13 Calib Date: 23-Aug-2018 09:03:07
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 12:53:13

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	2.672	2.688	-0.016	626	NC	
23 n-Decane	3.952	3.915	0.037	1573	NC	
A 1 C9-C13	4.658	(2.688-6.629)		28535	2.25	
A 21 Stoddard Solvent	4.658	(2.688-6.629)		28535	NC	
A 57 C10-C12	4.869	(3.915-5.824)		20170	1.94	
24 Dodecane	5.755	5.824	-0.069	3333	NC	
A 3 C9 - C17	6.023	(2.688-9.359)		58292	4.92	M
A 60 C10-C16	6.318	(3.915-8.721)		43937	4.24	M
A 47 C9 - C18	6.320	(2.688-9.952)		72128	6.43	M
A 15 Kerosene	6.590	(2.688-10.492)		98589	8.76	M
A 25 C9-C19	6.590	(2.688-10.492)		98589	8.31	M
26 C13	6.625	6.629	-0.004	742	NC	
$ 27 n-Decanoic Acid (Surr)		7.254			ND	
A 59 C12-C16	7.272	(5.824-8.721)		27100	2.61	M
A 62 C10-C20	7.472	(3.915-11.029)		141580	13.6	M
A 28 C9-C24	7.825	(2.688-12.962)		320217	30.8	M
A 29 C9-C25	8.044	(2.688-13.400)		349747	33.6	M
A 54 C10-C23	8.212	(3.915-12.508)		276916	26.6	M
A 4 C10-C24	8.439	(3.915-12.962)		315250	30.3	M
A 16 C10-C25	8.658	(3.915-13.400)		344780	33.1	M
45 Hexadecane	8.723	8.721	0.002	3059	NC	M
A 14 C10-C26	8.868	(3.915-13.821)		403045	38.7	M
A 67 C12-C22	8.930	(5.824-12.036)		205053	19.7	M
A 5 Diesel	9.268	(3.915-14.620)		499157	48.0	M
A 32 C10-C28	9.268	(3.915-14.620)		499157	48.0	M
A 12 Unknown Hydrocarbons	9.268	(3.915-14.620)		499157	NC	M
A 30 C13-C22	9.332	(6.629-12.036)		199064	19.1	M
44 Heptadecane	9.437	9.359	0.078	7126	NC	M
A 31 C12-C24	9.393	(5.824-12.962)		298413	28.7	M
49 n-Octadecane		9.952			ND	
A 52 Mineral oil	10.021	(2.688-17.353)		1394975	147.0	
A 9 Crude Oil Range Organics (	10.113	(2.750-17.353)		1394488	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 11 Bunker Range Organics (C9-	10.021	(2.688-17.353)		1034463	NC	M
33 C19		10.492			ND	
A 64 C13-C28	10.624	(6.629-14.620)		476331	45.8	M
A 17 C10-C36	10.546	(3.915-17.177)		1029496	99.0	M
A 58 C16-C24	10.842	(8.721-12.962)		271313	26.1	M
A 68 Crude Oil Range Organics (	10.843	(2.688-18.998)		1714254	NC	
A 13 C9-C40	10.843	(2.688-18.998)		1714254	187.4	
61 icosane		11.029			ND	
A 6 C10-C40	11.457	(3.915-18.998)		1706187	186.7	
$ 34 p-Terphenyl	12.023	12.030	-0.007	272785	21.4	M
35 n-Docosane		12.036			ND	
A 18 C12-C40	12.411	(5.824-18.998)		1674684	183.7	
36 Tricosane		12.508			ND	
A 66 C13-C40	12.814	(6.629-18.998)		1497885	165.2	
37 n-Tetracosane	12.957	12.962	-0.005	38334	NC	M
A 2 C16-C36 ORO	13.037	(8.721-17.353)		1032968	155.1	
38 C25	13.397	13.400	-0.003	29530	NC	M
46 n-Hexacosane	13.820	13.821	-0.001	37797	NC	M
A 19 C16-C40	13.859	(8.721-18.998)		1611347	177.5	
A 20 C19-C36	13.923	(10.492-17.353)		841219	103.2	
A 55 C23-C32	14.287	(12.508-16.066)		519633	133.3	
39 n-Octacosane	14.617	14.620	-0.003	56979	NC	M
65 C29	14.997	14.999	-0.002	53907	NC	M
A 40 C24-C36	15.158	(12.962-17.353)		820772	140.5	
A 7 Motor Oil	15.158	(12.962-17.353)		820772	140.5	
A 50 C25-C36	15.377	(13.400-17.353)		783509	141.2	
A 10 C22-C40	15.517	(12.036-18.998)		982928	118.2	
A 41 C23-C40	15.753	(12.508-18.998)		1132225	139.2	
A 8 C24-C40	15.980	(12.962-18.998)		1094941	138.8	
56 Dotriacontane		16.066			ND	
A 51 C28-C40	16.809	(14.620-18.998)		900724	141.0	
A 63 C29-C40	16.999	(14.999-18.998)		824655	140.0	
42 n-Hexatriacontane	17.357	17.353	0.004	451506	NC	M
43 C40		18.998			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

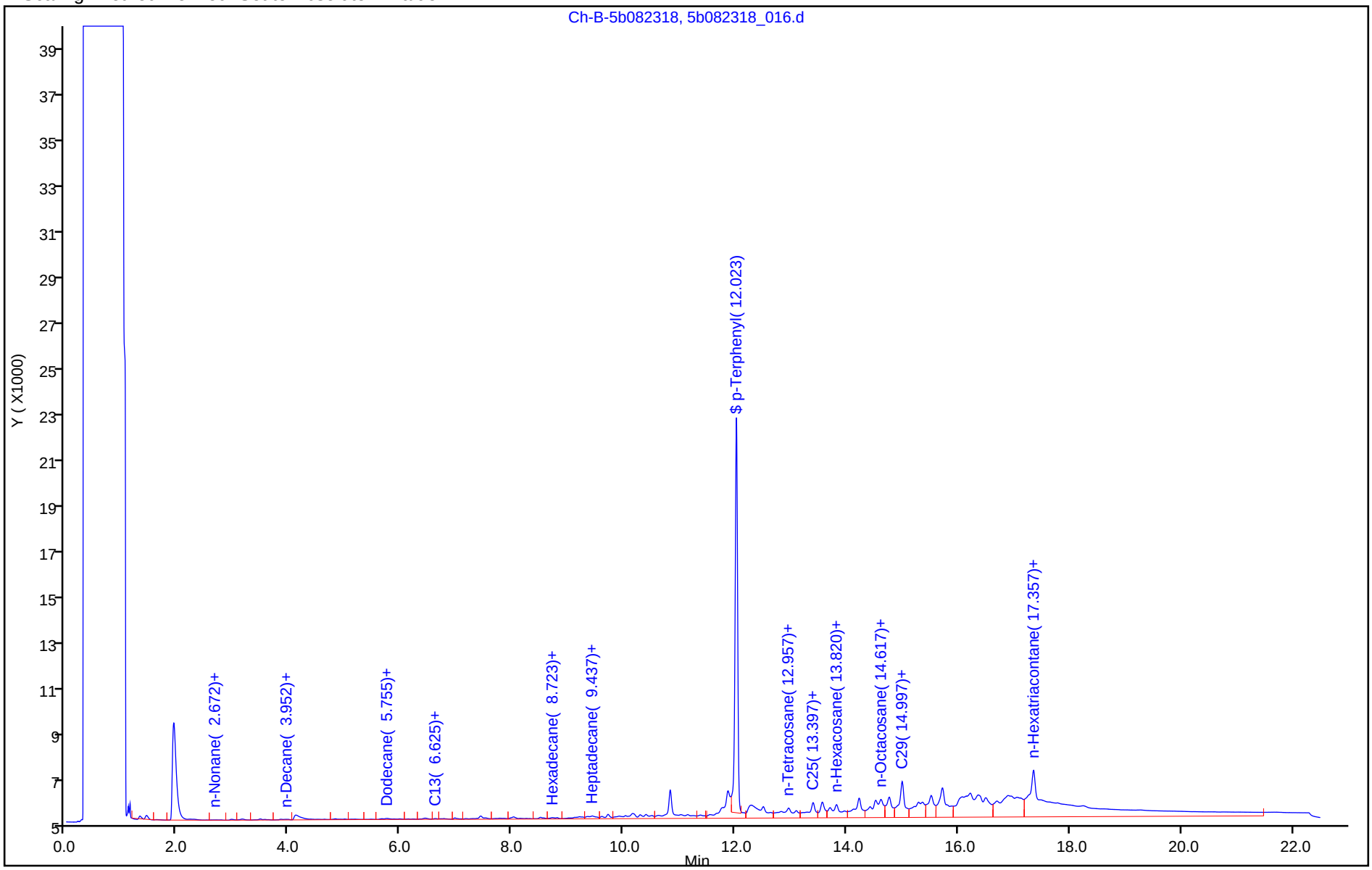
M - Manually Integrated

Report Date: 24-Aug-2018 12:53:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_016.d				
Injection Date:	23-Aug-2018 16:19:53	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88164-E-9-A	Lab Sample ID:	720-88164-9	Worklist Smp#:	16
Client ID:	DG-A3S-9.5-10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_016.d
Lims ID: 720-88164-E-9-A
Client ID: DG-A3S-9.5-10
Sample Type: Client
Inject. Date: 23-Aug-2018 16:19:53 ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 105 Name: 720-0053433-016
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\DRO5B.m
Limit Group: DRO
Last Update: 24-Aug-2018 12:53:13 Calib Date: 23-Aug-2018 09:03:07
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 12:53:13

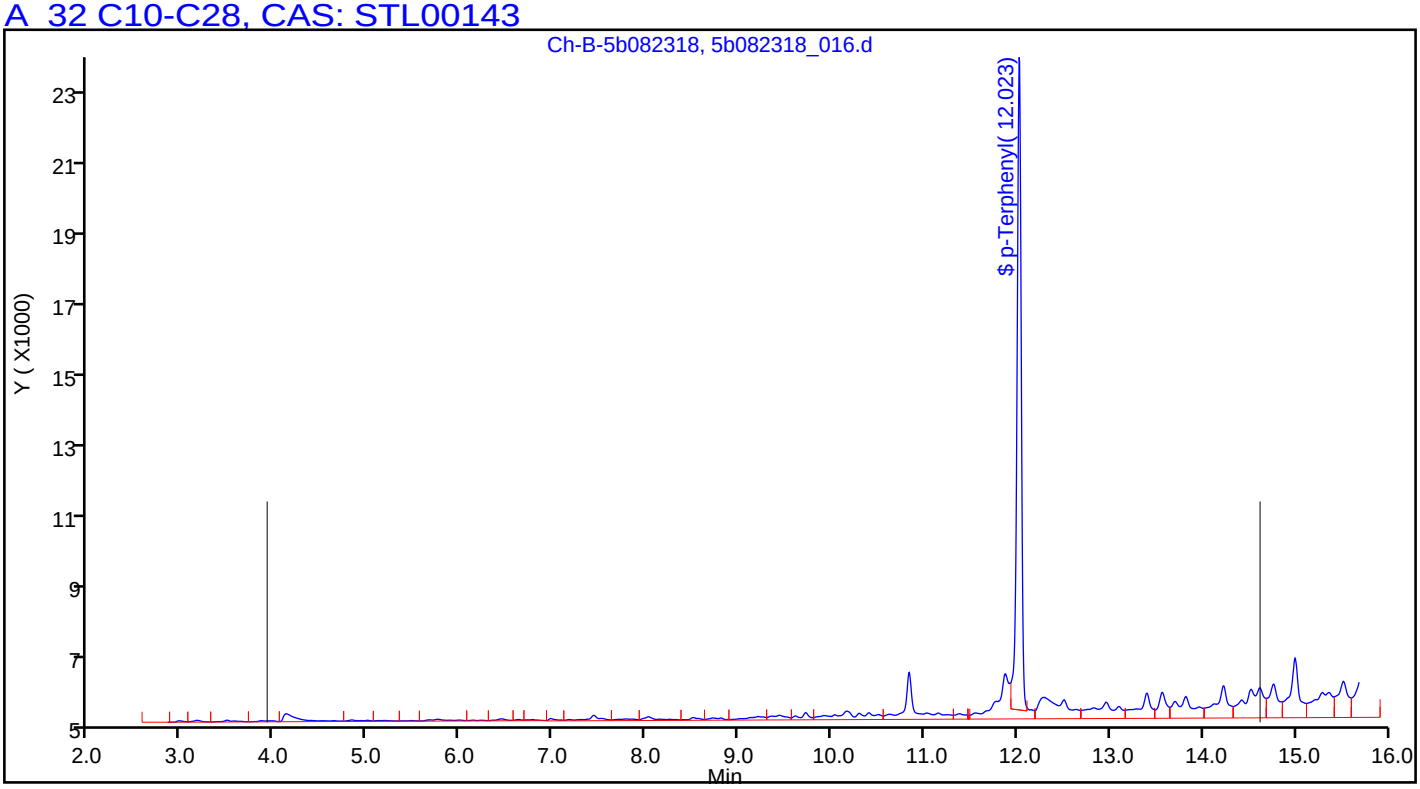
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	21.4	85.51

Report Date: 24-Aug-2018 12:53:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_016.d				
Injection Date:	23-Aug-2018 16:19:53	Instrument ID:	CHDRO5		
Lims ID:	720-88164-E-9-A	Lab Sample ID:	720-88164-9		
Client ID:	DG-A3S-9.5-10				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

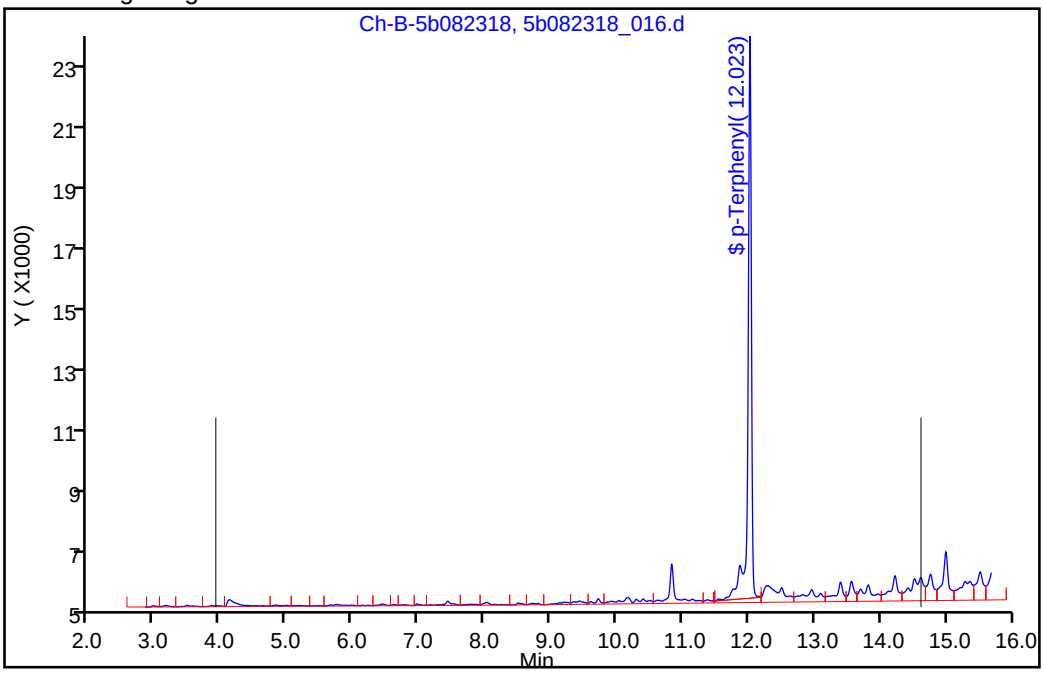
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_016.d				
Injection Date:	23-Aug-2018 16:19:53	Instrument ID:	CHDRO5		
Lims ID:	720-88164-E-9-A	Lab Sample ID:	720-88164-9		
Client ID:	DG-A3S-9.5-10				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 9.268, CAS: STL00143

Signal: 1

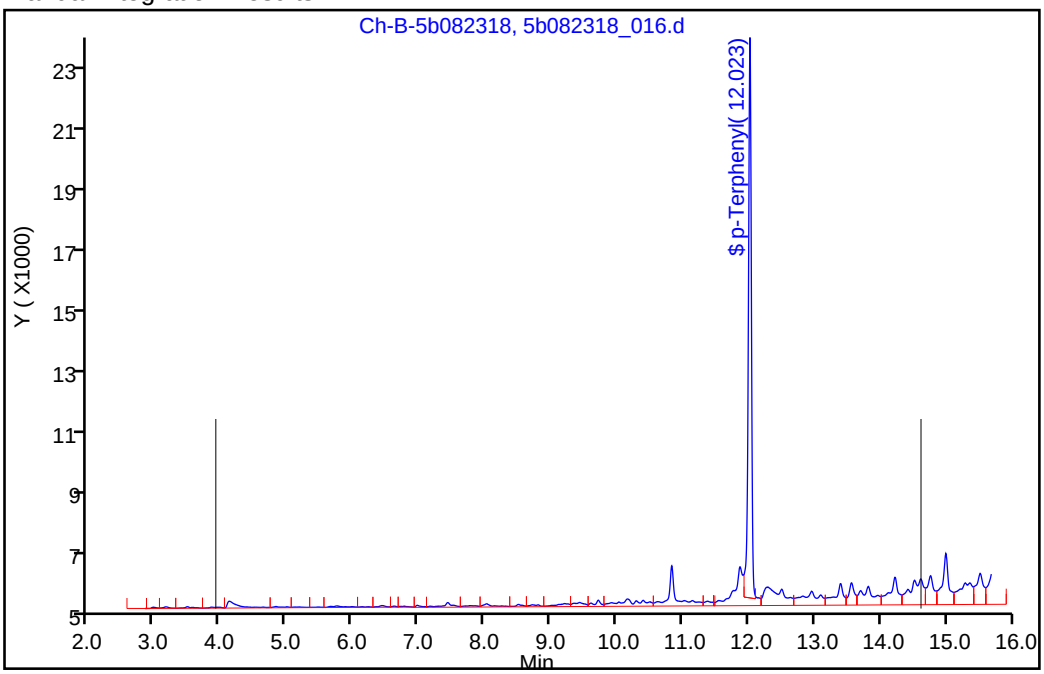
Processing Integration Results

RT: 9.27
Response: 365004
Amount: 35.092476



Manual Integration Results

RT: 9.27
Response: 499157
Amount: 47.990309



Reviewer: luj, 24-Aug-2018 12:52:50

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

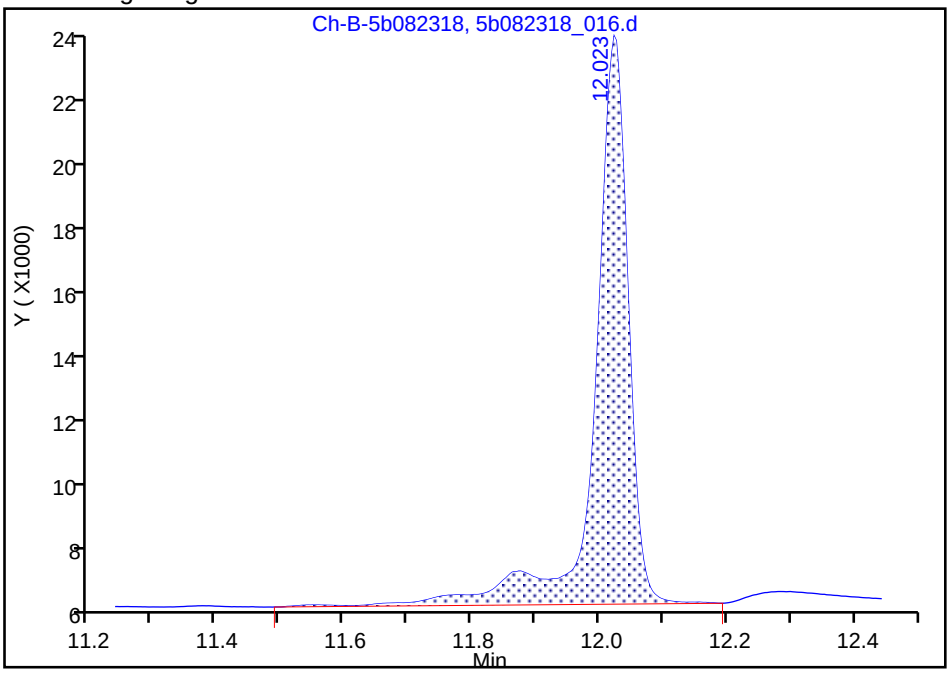
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_016.d				
Injection Date:	23-Aug-2018 16:19:53	Instrument ID:	CHDRO5		
Lims ID:	720-88164-E-9-A	Lab Sample ID:	720-88164-9		
Client ID:	DG-A3S-9.5-10				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

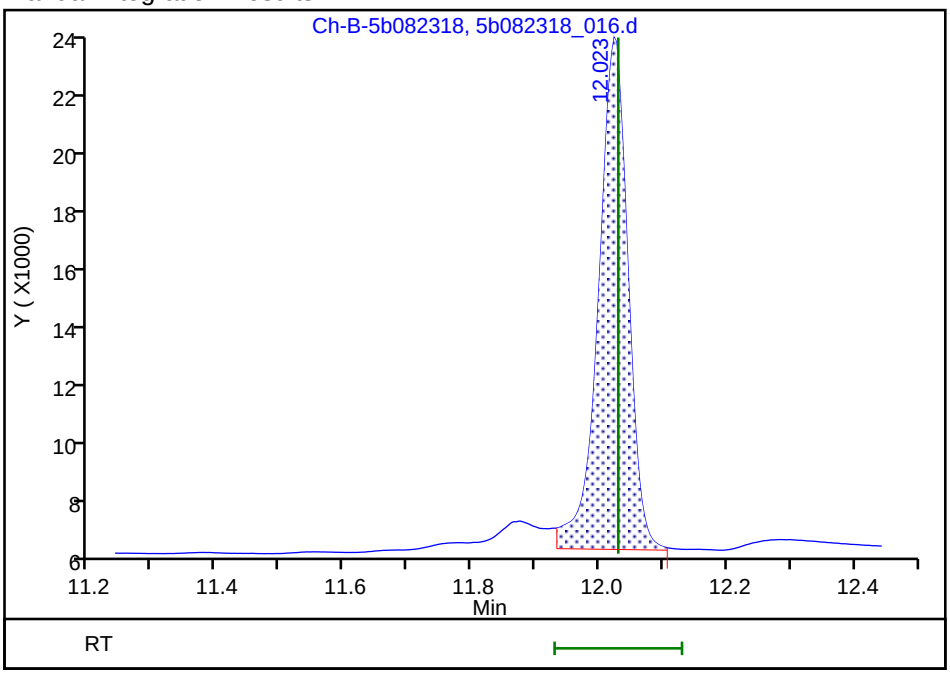
Processing Integration Results

RT: 12.02
Area: 314354
Amount: 24.636284
Amount Units: mg/L



Manual Integration Results

RT: 12.02
Area: 272785
Amount: 21.378474
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 12:53:05

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-C3S-0.5-1 Lab Sample ID: 720-88164-12

Matrix: Solid Lab File ID: 5b082318_017.d

Analysis Method: 8015B Date Collected: 08/21/2018 12:05

Extraction Method: 3546 Date Extracted: 08/22/2018 09:40

Sample wt/vol: 15.51(g) Date Analyzed: 08/23/2018 16:49

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250035 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	41000		1900	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	67		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_017.d
Lims ID: 720-88164-D-12-A
Client ID: DG-C3S-0.5-1
Sample Type: Client
Inject. Date: 23-Aug-2018 16:49:28 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 106 Name: 720-0053433-017
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\DRO5B.m
Limit Group: DRO
Last Update: 24-Aug-2018 12:54:19 Calib Date: 23-Aug-2018 09:03:07
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 12:54:19

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	2.656	2.688	-0.032	1133	NC	
	23 n-Decane		3.915			ND	
A	1 C9-C13	4.658	(2.688-6.629)		38345	3.03	
A	21 Stoddard Solvent	4.658	(2.688-6.629)		38345	NC	
A	57 C10-C12	4.869	(3.915-5.824)		17229	1.66	
	24 Dodecane		5.824			ND	
A	3 C9 - C17	6.023	(2.688-9.359)		129746	11.0	
A	60 C10-C16	6.318	(3.915-8.721)		106034	10.2	
A	47 C9 - C18	6.320	(2.688-9.952)		287591	25.6	
A	15 Kerosene	6.590	(2.688-10.492)		287591	25.6	
A	25 C9-C19	6.590	(2.688-10.492)		287591	24.2	
	26 C13	6.607	6.629	-0.022	8278	NC	
$	27 n-Decanoic Acid (Surr)		7.254			ND	U
A	59 C12-C16	7.272	(5.824-8.721)		94599	9.10	
A	62 C10-C20	7.472	(3.915-11.029)		536296	51.6	
A	28 C9-C24	7.825	(2.688-12.962)		1458831	140.3	
A	29 C9-C25	8.044	(2.688-13.400)		2107949	202.7	
A	54 C10-C23	8.212	(3.915-12.508)		1454744	139.9	
A	4 C10-C24	8.439	(3.915-12.962)		1454744	139.9	
A	16 C10-C25	8.658	(3.915-13.400)		2103862	202.3	
	45 Hexadecane	8.717	8.721	-0.004	14465	NC	
A	14 C10-C26	8.868	(3.915-13.821)		2229110	214.3	
A	67 C12-C22	8.930	(5.824-12.036)		1180680	113.5	
A	5 Diesel	9.268	(3.915-14.620)		3292463	316.5	
A	32 C10-C28	9.268	(3.915-14.620)		3292463	316.5	
A	12 Unknown Hydrocarbons	9.268	(3.915-14.620)		3292463	NC	
A	30 C13-C22	9.332	(6.629-12.036)		1166135	112.1	
	44 Heptadecane	9.367	9.359	0.008	44641	NC	
A	31 C12-C24	9.393	(5.824-12.962)		1443309	138.8	
	49 n-Octadecane		9.952			ND	
A	52 Mineral oil	10.021	(2.688-17.353)		5940544	626.1	
A	9 Crude Oil Range Organics (	10.110	(2.867-17.353)		5939950	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 11 Bunker Range Organics (C9-	10.021	(2.688-17.353)		6986511	NC	
33 C19	10.510	10.492	0.018	93720	NC	
A 64 C13-C28	10.624	(6.629-14.620)		3266483	314.0	
A 17 C10-C36	10.712	(4.070-17.353)		6980055	671.1	
A 58 C16-C24	10.842	(8.721-12.962)		1363175	131.1	
A 68 Crude Oil Range Organics (	10.843	(2.688-18.998)		6725297	NC	
A 13 C9-C40	10.843	(2.688-18.998)		6725297	735.2	
61 icosane		11.029			ND	
A 6 C10-C40	11.457	(3.915-18.998)		6718724	735.1	
$ 34 p-Terphenyl	12.020	12.030	-0.010	213531	16.7	M
35 n-Docosane		12.036			ND	
A 18 C12-C40	12.411	(5.824-18.998)		6694036	734.1	
36 Tricosane	12.507	12.508	-0.001	97648	NC	
A 66 C13-C40	12.814	(6.629-18.998)		6407420	706.8	
37 n-Tetracosane	12.968	12.962	0.006	299911	NC	
A 2 C16-C36 ORO	13.037	(8.721-17.353)		4454996	669.0	
38 C25		13.400			ND	
46 n-Hexacosane	13.822	13.821	0.001	203078	NC	
A 19 C16-C40	13.859	(8.721-18.998)		6579296	724.6	
A 20 C19-C36	13.923	(10.492-17.353)		4910244	602.6	
A 55 C23-C32	14.287	(12.508-16.066)		3157948	810.2	
39 n-Octacosane	14.577	14.620	-0.043	473467	NC	
65 C29		14.999			ND	
A 40 C24-C36	15.158	(12.962-17.353)		3987002	682.6	M
A 7 Motor Oil	15.158	(12.962-17.353)		3865746	661.9	
A 50 C25-C36	15.377	(13.400-17.353)		3545446	638.9	
A 10 C22-C40	15.517	(12.036-18.998)		4965085	597.1	
A 41 C23-C40	15.753	(12.508-18.998)		4852439	596.5	
A 8 C24-C40	15.980	(12.962-18.998)		4560280	578.0	
56 Dotriacontane	16.054	16.066	-0.012	145543	NC	
A 51 C28-C40	16.809	(14.620-18.998)		3189664	499.2	
A 63 C29-C40	16.999	(14.999-18.998)		2778006	471.8	
42 n-Hexatriacontane		17.353			ND	
43 C40		18.998			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

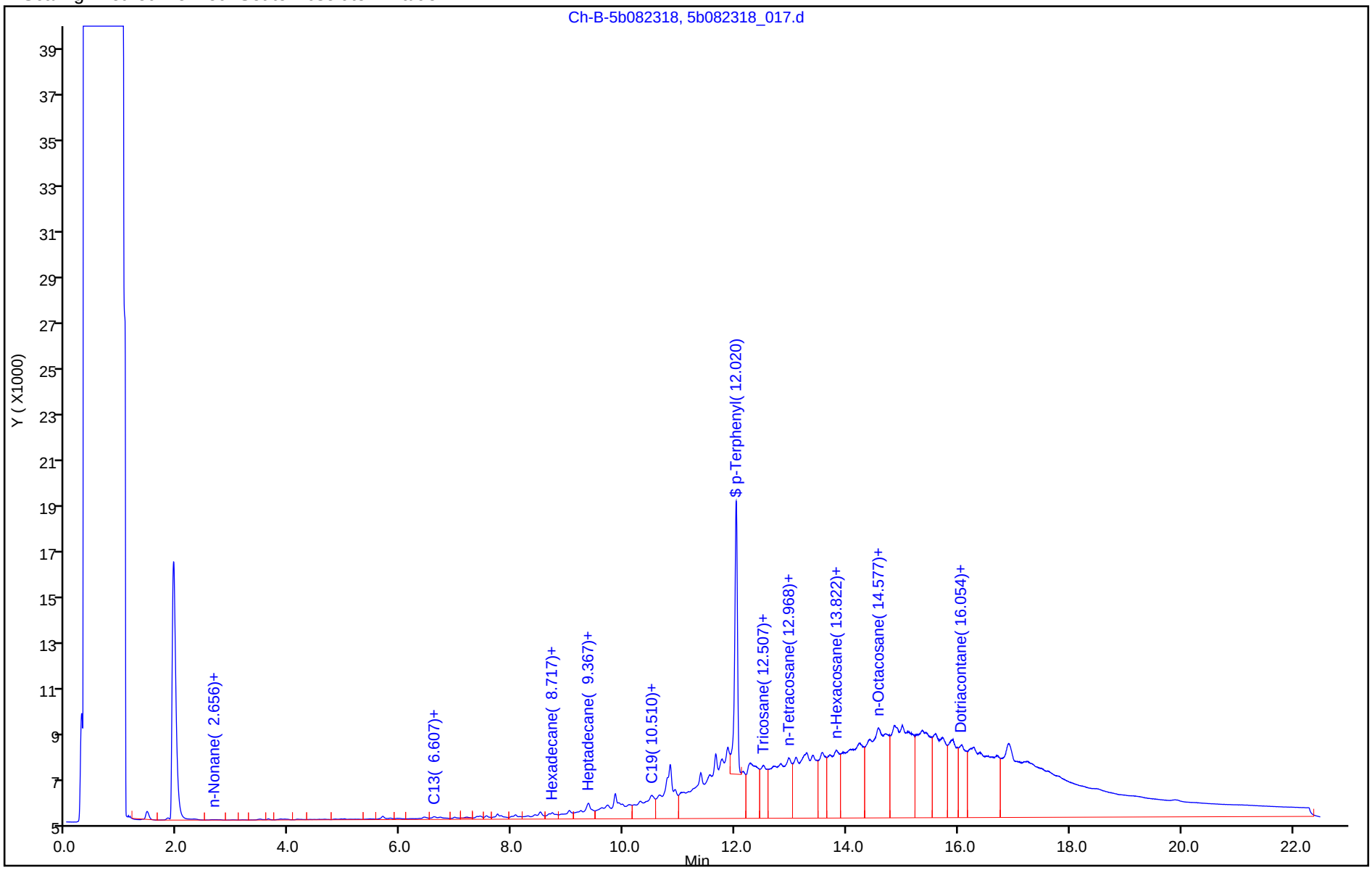
Report Date: 24-Aug-2018 12:54:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_017.d

Injection Date:	23-Aug-2018 16:49:28	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88164-D-12-A	Lab Sample ID:	720-88164-12	Worklist Smp#:	17
Client ID:	DG-C3S-0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_017.d				
Lims ID:	720-88164-D-12-A				
Client ID:	DG-C3S-0.5-1				
Sample Type:	Client				
Inject. Date:	23-Aug-2018 16:49:28	ALS Bottle#:	0	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 106 Name: 720-0053433-017				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\DRO5B.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 12:54:19	Calib Date:	23-Aug-2018 09:03:07		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				

First Level Reviewer: luj Date: 24-Aug-2018 12:54:19

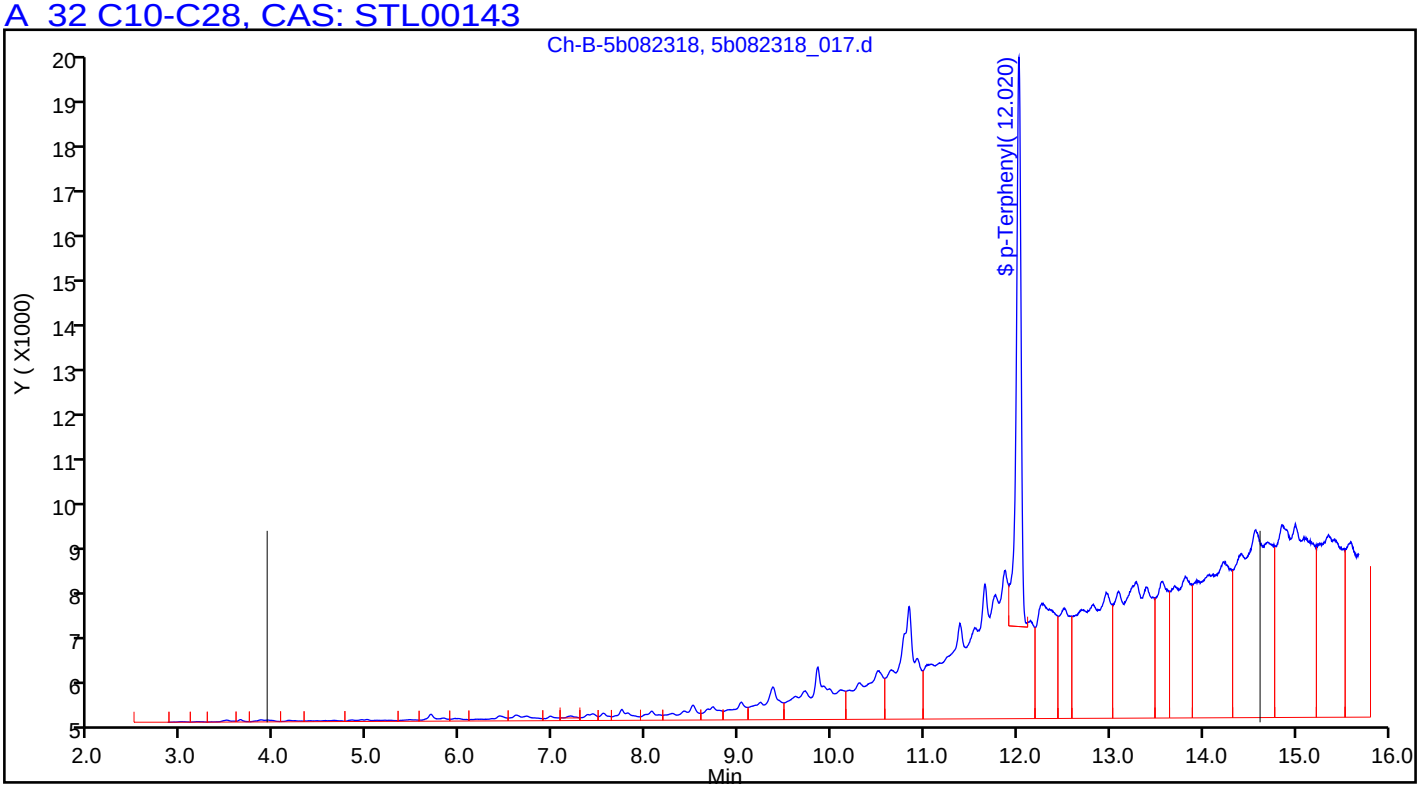
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	16.7	66.94

Report Date: 24-Aug-2018 12:54:20 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_017.d				
Injection Date:	23-Aug-2018 16:49:28	Instrument ID:	CHDRO5		
Lims ID:	720-88164-D-12-A	Lab Sample ID:	720-88164-12		
Client ID:	DG-C3S-0.5-1				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

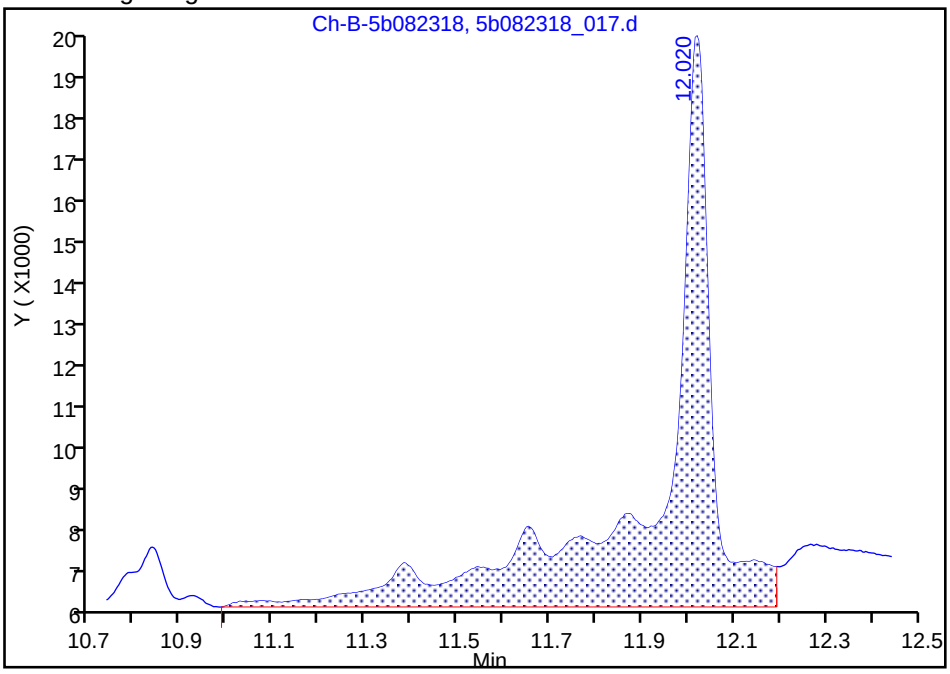
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_017.d				
Injection Date:	23-Aug-2018 16:49:28	Instrument ID:	CHDRO5		
Lims ID:	720-88164-D-12-A	Lab Sample ID:	720-88164-12		
Client ID:	DG-C3S-0.5-1				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

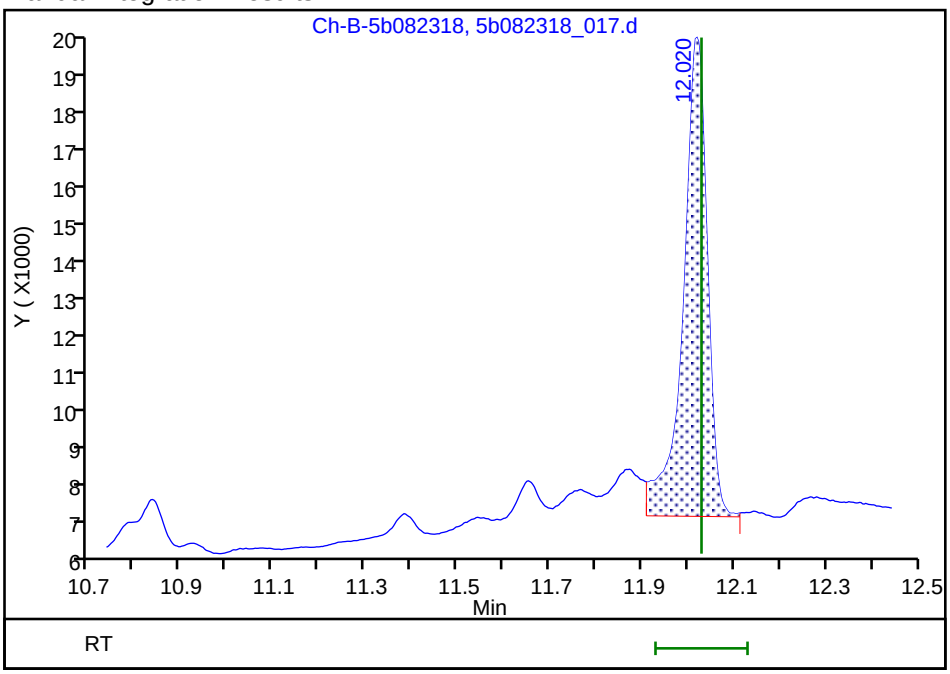
Processing Integration Results

RT: 12.02
Area: 508891
Amount: 39.882373
Amount Units: mg/L



Manual Integration Results

RT: 12.02
Area: 213531
Amount: 16.734670
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 12:53:43

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-C3S-3.5-4 Lab Sample ID: 720-88164-13

Matrix: Solid Lab File ID: 5a082318_015.d

Analysis Method: 8015B Date Collected: 08/21/2018 12:05

Extraction Method: 3546 Date Extracted: 08/22/2018 09:40

Sample wt/vol: 15.20(g) Date Analyzed: 08/23/2018 15:46

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250034 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	64000		2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	55		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_015.d
Lims ID: 720-88164-D-13-A
Client ID: DG-C3S-3.5-4
Sample Type: Client
Inject. Date: 23-Aug-2018 15:46:46 ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 005 Name: 720-0053432-015
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\DRO5A.m
Limit Group: DRO
Last Update: 23-Aug-2018 16:26:59 Calib Date: 23-Aug-2018 09:03:07
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK014

First Level Reviewer: luj Date: 23-Aug-2018 16:26:59

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	2.432	2.402	0.030	1580	NC	
	23 n-Decane	3.714	3.672	0.042	3887	NC	
A	21 Stoddard Solvent	4.416	(2.402-6.430)		67076	6.41	
A	1 C9-C13	4.416	(2.402-6.430)		67076	5.99	
A	57 C10-C12	4.646	(3.672-5.621)		42445	4.34	
	24 Dodecane	5.619	5.621	-0.002	6626	NC	
A	3 C9 - C17	5.779	(2.402-9.157)		381959	30.3	
A	47 C9 - C18	6.077	(2.402-9.752)		495064	46.7	
A	60 C10-C16	6.098	(3.672-8.523)		267779	23.8	
A	25 C9-C19	6.349	(2.402-10.297)		567930	44.6	
A	15 Kerosene	6.349	(2.402-10.297)		567930	53.5	
	26 C13	6.443	6.430	0.013	24682	NC	
A	59 C12-C16	7.072	(5.621-8.523)		231960	23.7	
$	27 n-Decanoic Acid (Surr)		7.156			ND	U
A	62 C10-C20	7.253	(3.672-10.834)		1028867	105.1	
A	28 C9-C24	7.586	(2.402-12.769)		2870793	293.2	
A	29 C9-C25	7.804	(2.402-13.207)		3234759	330.4	
A	54 C10-C23	7.993	(3.672-12.314)		2332286	238.2	
A	4 C10-C24	8.221	(3.672-12.769)		2866148	292.7	
A	16 C10-C25	8.439	(3.672-13.207)		3230114	329.9	
	45 Hexadecane	8.498	8.523	-0.025	72105	NC	
A	14 C10-C26	8.650	(3.672-13.629)		3677806	375.6	
A	67 C12-C22	8.731	(5.621-11.842)		1768335	180.6	
A	5 Diesel	9.050	(3.672-14.428)		4733528	483.4	
A	32 C10-C28	9.050	(3.672-14.428)		4733528	483.4	
A	12 Unknown Hydrocarbons	9.050	(3.672-14.428)		4733528	NC	
A	30 C13-C22	9.136	(6.430-11.842)		1741723	177.9	
	44 Heptadecane	9.147	9.157	-0.011	73939	NC	
A	31 C12-C24	9.195	(5.621-12.769)		2830329	289.1	
	49 n-Octadecane	9.745	9.752	-0.007	39194	NC	
A	11 Bunker Range Organics (C9-	9.784	(2.402-17.165)		9313852	NC	
A	52 Mineral oil	9.784	(2.402-17.165)		9854629	875.8	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	9.784	(2.402-17.165)		9854629	NC	
33 C19		10.297			ND	
A 17 C10-C36	10.419	(3.672-17.165)		9309207	950.8	
A 64 C13-C28	10.429	(6.430-14.428)		4671097	477.1	
A 68 Crude Oil Range Organics (	10.537	(2.402-18.672)		12035526	NC	
A 13 C9-C40	10.537	(2.402-18.672)		12035526	1298.8	
A 58 C16-C24	10.646	(8.523-12.769)		2670474	272.7	
61 icosane		10.834			ND	
A 6 C10-C40	11.172	(3.672-18.672)		12027662	1298.1	
35 n-Docosane		11.842			ND	
$ 34 p-Terphenyl	11.860	11.903	-0.043	180007	13.8	
A 18 C12-C40	12.146	(5.621-18.672)		11979237	1293.1	
36 Tricosane	12.305	12.314	-0.009	139686	NC	
A 66 C13-C40	12.551	(6.430-18.672)		11944062	1289.4	
37 n-Tetracosane	12.762	12.769	-0.007	533862	NC	
A 2 C16-C36 ORO	12.844	(8.523-17.165)		9560116	1184.7	
38 C25	13.205	13.207	-0.002	199741	NC	
A 19 C16-C40	13.598	(8.523-18.672)		11741013	1268.8	
46 n-Hexacosane	13.620	13.629	-0.009	447692	NC	
A 20 C19-C36	13.731	(10.297-17.165)		8687699	1116.5	
A 55 C23-C32	14.096	(12.314-15.879)		5017724	1028.4	
39 n-Octacosane	14.401	14.428	-0.027	519897	NC	
65 C29	14.810	14.808	0.002	630527	NC	
A 40 C24-C36	14.967	(12.769-17.165)		6785954	1068.9	
A 7 Motor Oil	14.967	(12.769-17.165)		6785954	1068.9	
A 50 C25-C36	15.186	(13.207-17.165)		6353196	1059.4	
A 10 C22-C40	15.257	(11.842-18.672)		9600741	1047.5	
A 41 C23-C40	15.493	(12.314-18.672)		9263400	1035.3	
A 8 C24-C40	15.721	(12.769-18.672)		8872157	1025.7	
56 Dotriacontane	15.872	15.879	-0.006	281908	NC	
A 51 C28-C40	16.550	(14.428-18.672)		6938807	1006.0	
A 63 C29-C40	16.740	(14.808-18.672)		6337999	999.6	
42 n-Hexatriacontane	17.175	17.165	0.010	4803854	NC	
43 C40		18.672			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

U - Marked Undetected

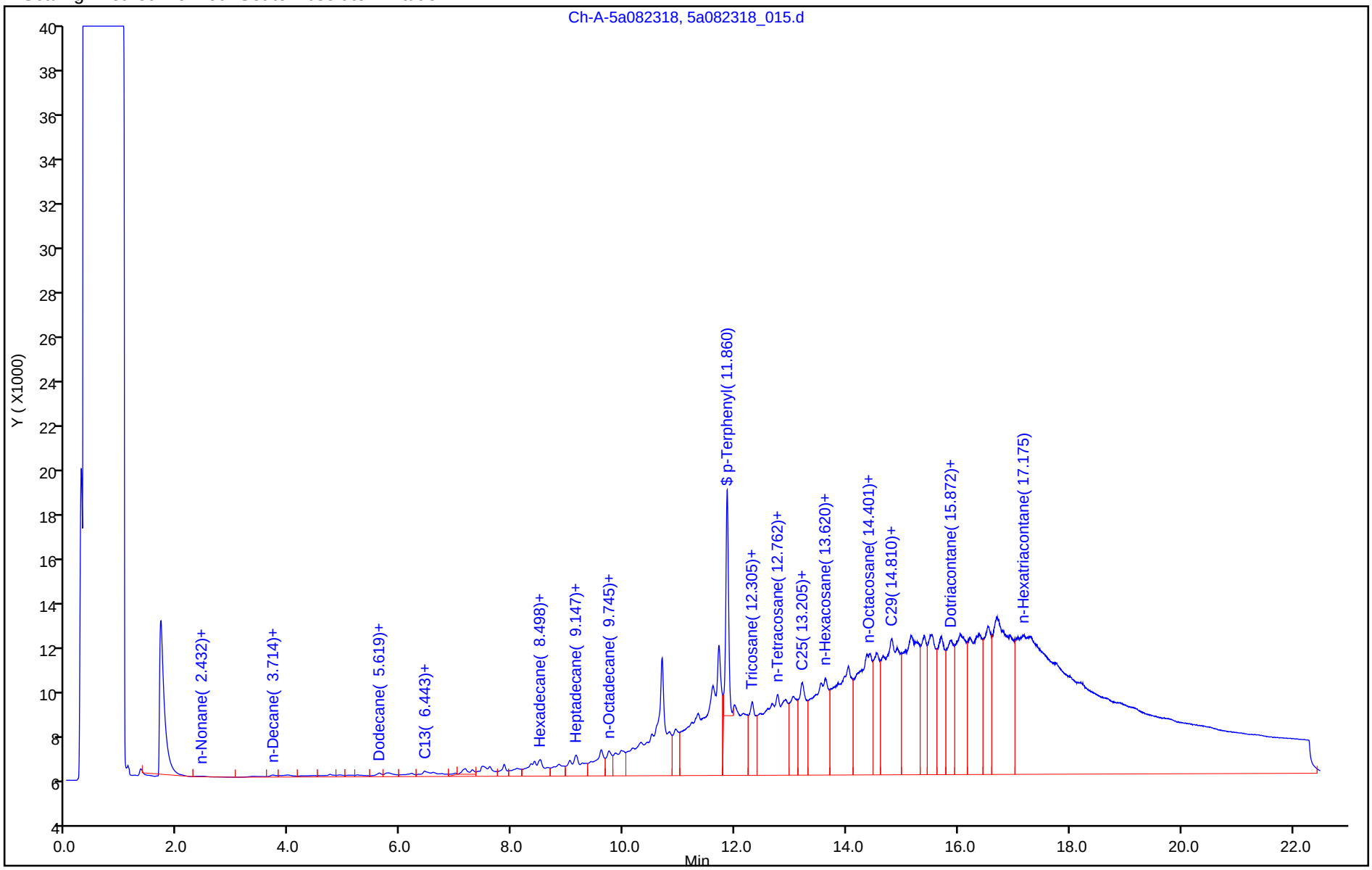
Report Date: 23-Aug-2018 16:27:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_015.d

Injection Date:	23-Aug-2018 15:46:46	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88164-D-13-A	Lab Sample ID:	720-88164-13	Worklist Smp#:	15
Client ID:	DG-C3S-3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_015.d				
Lims ID:	720-88164-D-13-A				
Client ID:	DG-C3S-3.5-4				
Sample Type:	Client				
Inject. Date:	23-Aug-2018 15:46:46	ALS Bottle#:	0	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 005 Name: 720-0053432-015				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\DRO5A.m				
Limit Group:	DRO				
Last Update:	23-Aug-2018 16:26:59	Calib Date:	23-Aug-2018 09:03:07		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK014				

First Level Reviewer: luj Date: 23-Aug-2018 16:26:59

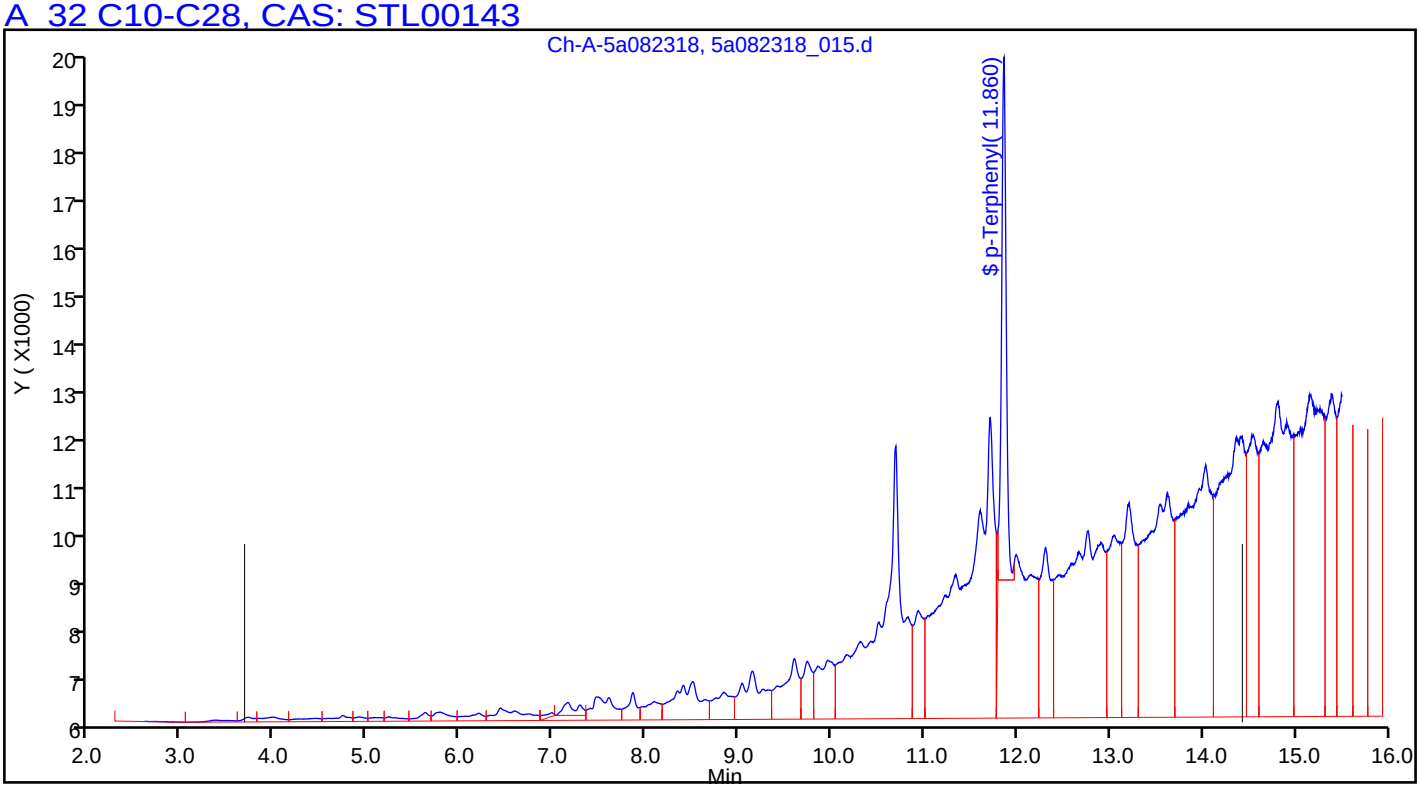
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	13.8	55.20

Report Date: 23-Aug-2018 16:27:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_015.d				
Injection Date:	23-Aug-2018 15:46:46	Instrument ID:	CHDRO5		
Lims ID:	720-88164-D-13-A	Lab Sample ID:	720-88164-13		
Client ID:	DG-C3S-3.5-4				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-C3S-9.5-10 Lab Sample ID: 720-88164-14

Matrix: Solid Lab File ID: 5b082318_018.d

Analysis Method: 8015B Date Collected: 08/21/2018 12:15

Extraction Method: 3546 Date Extracted: 08/22/2018 09:40

Sample wt/vol: 15.93(g) Date Analyzed: 08/23/2018 17:19

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250035 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	31000		1900	710

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	69		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_018.d
Lims ID: 720-88164-D-14-A
Client ID: DG-C3S-9.5-10
Sample Type: Client
Inject. Date: 23-Aug-2018 17:19:06 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 106 Name: 720-0053433-018
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\DRO5B.m
Limit Group: DRO
Last Update: 23-Aug-2018 18:01:38 Calib Date: 23-Aug-2018 09:03:07
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK014

First Level Reviewer: luj Date: 23-Aug-2018 18:01:38

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	2.703	2.688	0.015	5700	NC	M
	23 n-Decane		3.915			ND	
A	1 C9-C13	4.658	(2.688-6.629)		408803	32.3	M
A	21 Stoddard Solvent	4.658	(2.688-6.629)		408803	NC	M
A	57 C10-C12	4.869	(3.915-5.824)		313398	30.1	M
	24 Dodecane		5.824			ND	
A	3 C9 - C17	6.023	(2.688-9.359)		689145	58.2	M
A	60 C10-C16	6.318	(3.915-8.721)		550583	53.1	M
A	47 C9 - C18	6.320	(2.688-9.952)		851674	75.9	M
A	15 Kerosene	6.590	(2.688-10.492)		1094974	97.3	M
A	25 C9-C19	6.590	(2.688-10.492)		1094974	92.3	M
	26 C13		6.629			ND	
$	27 n-Decanoic Acid (Surr)		7.254			ND	
A	59 C12-C16	7.272	(5.824-8.721)		262469	25.2	M
A	62 C10-C20	7.472	(3.915-11.029)		1182216	113.7	M
A	28 C9-C24	7.825	(2.688-12.962)		1878732	180.6	M
A	29 C9-C25	8.044	(2.688-13.400)		2202343	211.7	M
A	54 C10-C23	8.212	(3.915-12.508)		1829361	175.9	M
A	4 C10-C24	8.439	(3.915-12.962)		1829361	175.9	M
A	16 C10-C25	8.658	(3.915-13.400)		2152972	207.0	M
	45 Hexadecane	8.780	8.721	0.059	56419	NC	M
A	14 C10-C26	8.868	(3.915-13.821)		2321222	223.2	M
A	67 C12-C22	8.930	(5.824-12.036)		1459871	140.4	M
A	5 Diesel	9.268	(3.915-14.620)		2555195	245.7	M
A	32 C10-C28	9.268	(3.915-14.620)		2555195	245.7	M
A	12 Unknown Hydrocarbons	9.268	(3.915-14.620)		2555195	NC	M
A	30 C13-C22	9.332	(6.629-12.036)		1388553	133.5	M
	44 Heptadecane	9.403	9.359	0.044	123604	NC	M
A	31 C12-C24	9.393	(5.824-12.962)		1541247	148.2	M
	49 n-Octadecane		9.952			ND	
A	52 Mineral oil	10.021	(2.688-17.353)		4194233	442.0	
A	9 Crude Oil Range Organics (	10.021	(2.688-17.353)		4194233	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 11 Bunker Range Organics (C9-	10.021	(2.688-17.353)		5044481	NC	M
33 C19		10.492			ND	
A 64 C13-C28	10.624	(6.629-14.620)		2195763	211.1	M
A 17 C10-C36	10.678	(4.003-17.353)		4982651	479.0	M
A 58 C16-C24	10.842	(8.721-12.962)		1278778	122.9	M
A 68 Crude Oil Range Organics (	10.843	(2.688-18.998)		4760682	NC	
A 13 C9-C40	10.843	(2.688-18.998)		4760682	520.4	
61 icosane		11.029			ND	
A 6 C10-C40	11.457	(3.915-18.998)		4725215	517.0	
$ 34 p-Terphenyl	12.020	12.030	-0.010	220723	17.3	M
35 n-Docosane		12.036			ND	
A 18 C12-C40	12.411	(5.824-18.998)		4460641	489.2	
36 Tricosane	12.503	12.508	-0.005	81376	NC	M
A 66 C13-C40	12.814	(6.629-18.998)		4006752	442.0	
37 n-Tetracosane		12.962			ND	
A 2 C16-C36 ORO	13.037	(8.721-17.353)		2480517	372.5	
38 C25	13.390	13.400	-0.010	128593	NC	M
46 n-Hexacosane		13.821			ND	
A 19 C16-C40	13.859	(8.721-18.998)		4227167	465.6	
A 20 C19-C36	13.923	(10.492-17.353)		2634762	323.3	
A 55 C23-C32	14.287	(12.508-16.066)		1465143	375.9	
39 n-Octacosane	14.637	14.620	0.017	232003	NC	M
65 C29	14.997	14.999	-0.002	221226	NC	M
A 40 C24-C36	15.158	(12.962-17.353)		2228901	381.6	M
A 7 Motor Oil	15.158	(12.962-17.353)		1959370	335.5	
A 50 C25-C36	15.377	(13.400-17.353)		1819215	327.8	
A 10 C22-C40	15.517	(12.036-18.998)		2463027	296.2	
A 41 C23-C40	15.753	(12.508-18.998)		2509488	308.5	
A 8 C24-C40	15.980	(12.962-18.998)		2388765	302.8	
56 Dotriacontane	16.007	16.066	-0.059	103426	NC	M
A 51 C28-C40	16.809	(14.620-18.998)		1784067	279.2	
A 63 C29-C40	16.999	(14.999-18.998)		1598370	271.4	
42 n-Hexatriacontane		17.353			ND	
43 C40		18.998			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

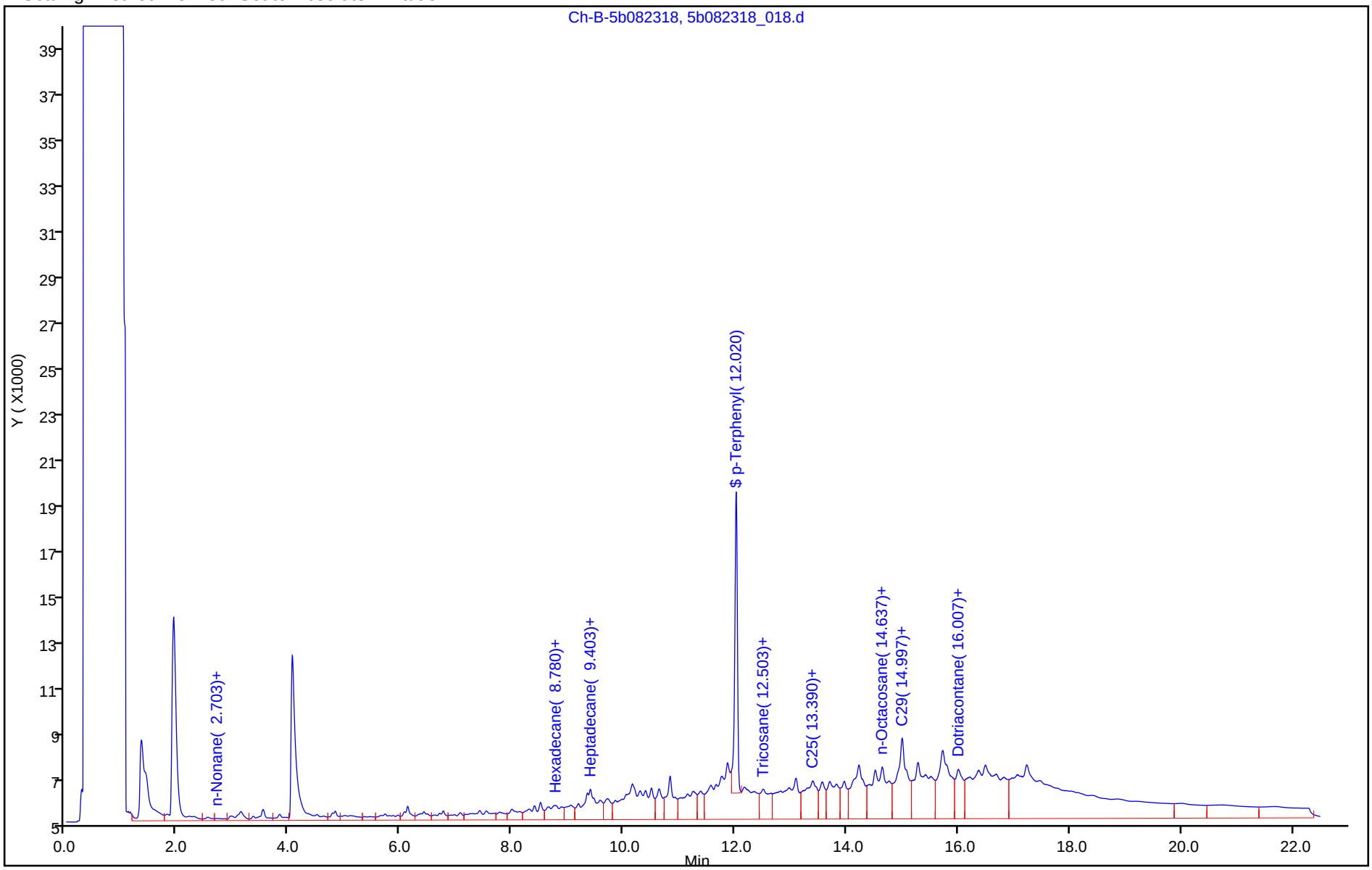
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 23-Aug-2018 18:01:39 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_018.d				
Injection Date:	23-Aug-2018 17:19:06	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88164-D-14-A	Lab Sample ID:	720-88164-14	Worklist Smp#:	18
Client ID:	DG-C3S-9.5-10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_018.d				
Lims ID:	720-88164-D-14-A				
Client ID:	DG-C3S-9.5-10				
Sample Type:	Client				
Inject. Date:	23-Aug-2018 17:19:06	ALS Bottle#:	0	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 106 Name: 720-0053433-018				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\DRO5B.m				
Limit Group:	DRO				
Last Update:	23-Aug-2018 18:01:38	Calib Date:	23-Aug-2018 09:03:07		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK014				

First Level Reviewer: luj Date: 23-Aug-2018 18:01:38

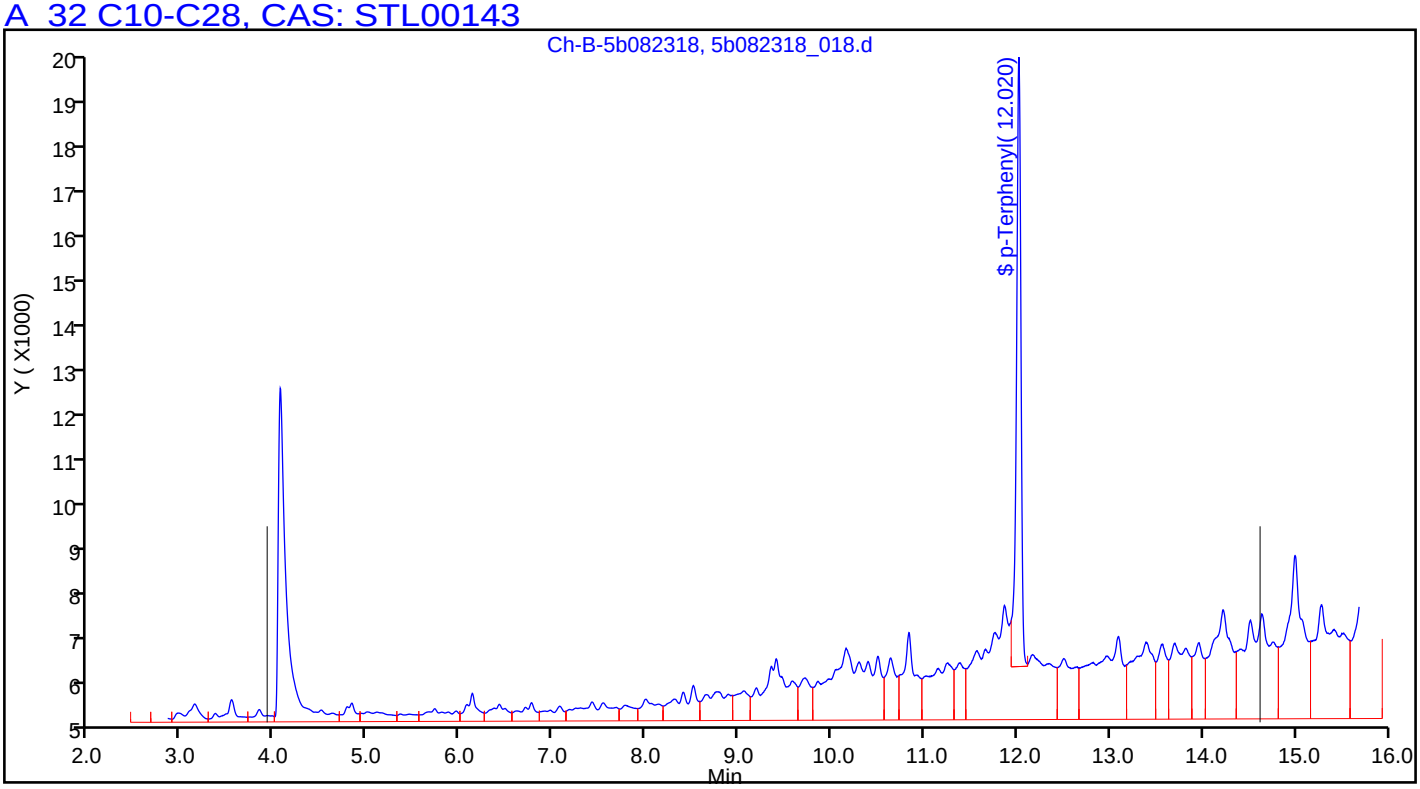
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	17.3	69.19

Report Date: 23-Aug-2018 18:01:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_018.d				
Injection Date:	23-Aug-2018 17:19:06	Instrument ID:	CHDRO5		
Lims ID:	720-88164-D-14-A	Lab Sample ID:	720-88164-14		
Client ID:	DG-C3S-9.5-10				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

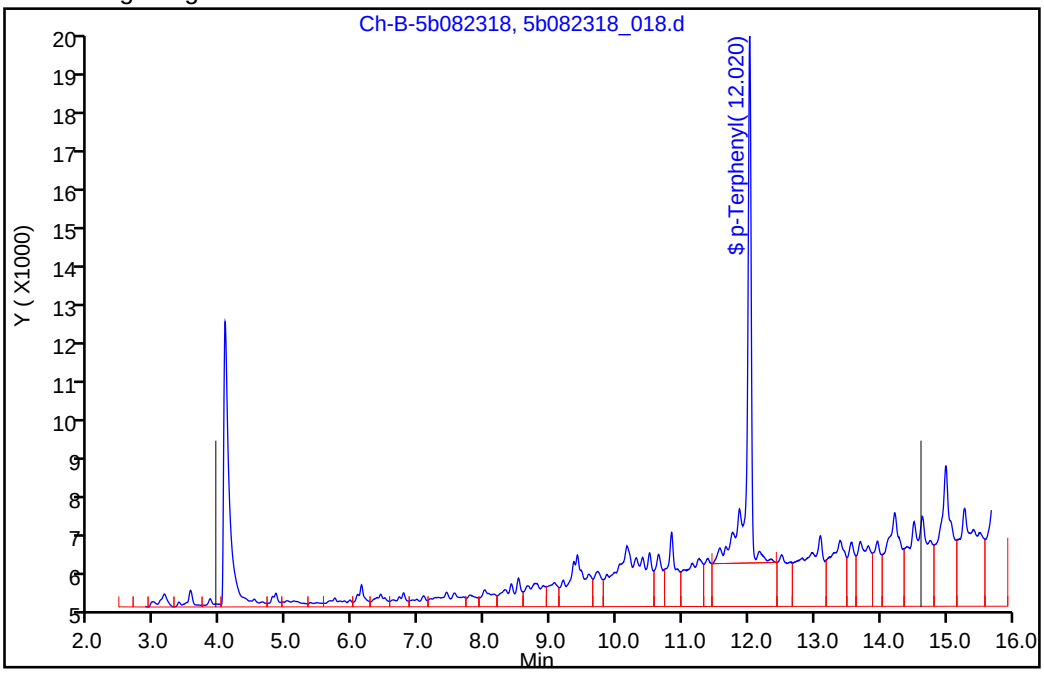
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_018.d				
Injection Date:	23-Aug-2018 17:19:06	Instrument ID:	CHDRO5		
Lims ID:	720-88164-D-14-A	Lab Sample ID:	720-88164-14		
Client ID:	DG-C3S-9.5-10				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 9.268, CAS: STL00143

Signal: 1

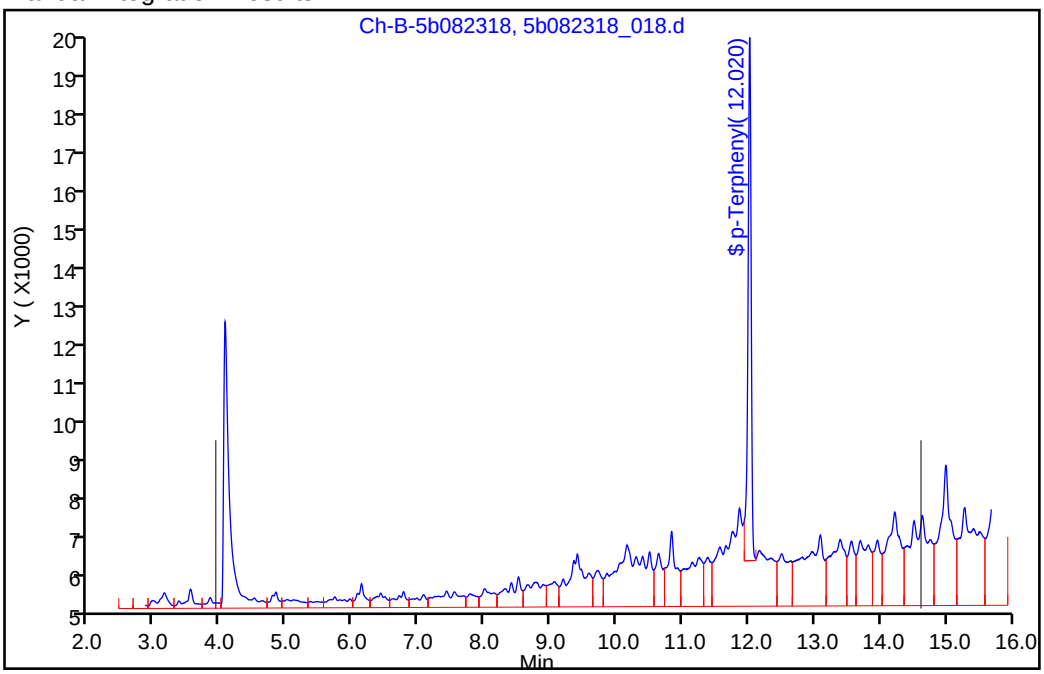
Processing Integration Results

RT: 9.27
Response: 2418222
Amount: 232.4944



Manual Integration Results

RT: 9.27
Response: 2555195
Amount: 245.6634



Reviewer: luj, 23-Aug-2018 18:01:27

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

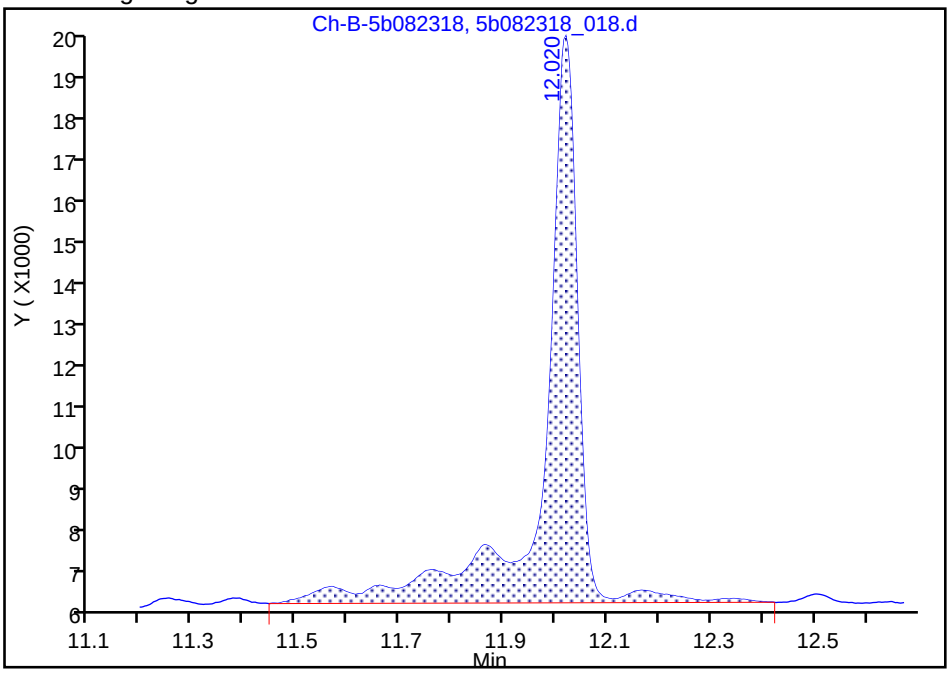
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_018.d				
Injection Date:	23-Aug-2018 17:19:06	Instrument ID:	CHDRO5		
Lims ID:	720-88164-D-14-A	Lab Sample ID:	720-88164-14		
Client ID:	DG-C3S-9.5-10				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

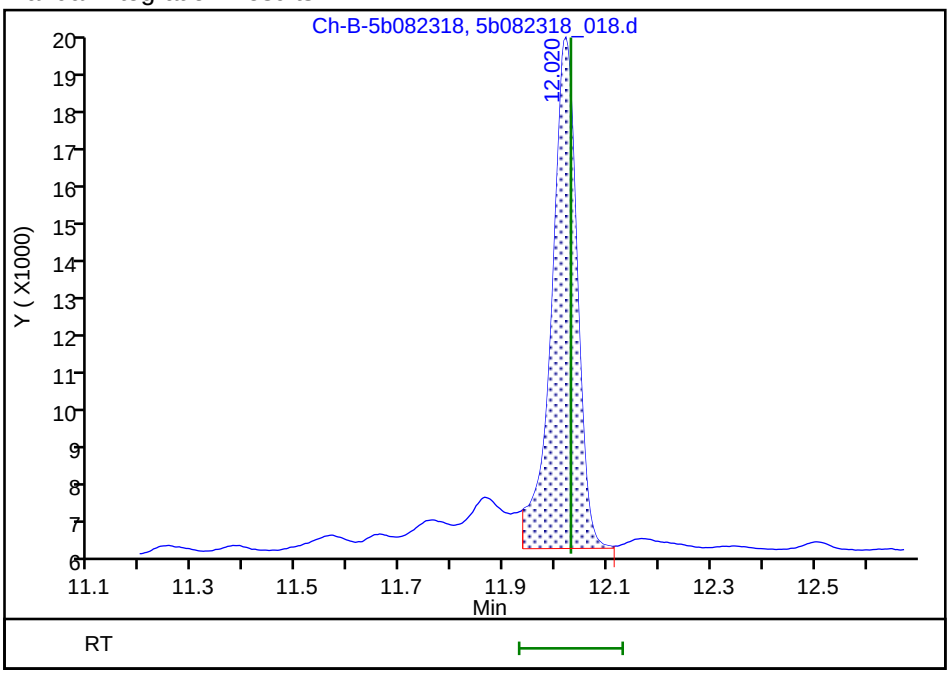
Processing Integration Results

RT: 12.02
Area: 310098
Amount: 24.302737
Amount Units: mg/L



Manual Integration Results

RT: 12.02
Area: 220723
Amount: 17.298315
Amount Units: mg/L



Reviewer: luj, 23-Aug-2018 18:01:09

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-B1S-0.5-1 Lab Sample ID: 720-88164-1

Matrix: Solid Lab File ID: 08271811.D

Analysis Method: 8260B Date Collected: 08/21/2018 10:30

Sample wt/vol: 6.46(g) Date Analyzed: 08/27/2018 14:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250267 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.9	0.93
67-64-1	Acetone	ND		39	29
71-43-2	Benzene	ND		3.9	0.50
75-27-4	Dichlorobromomethane	ND		3.9	0.56
108-86-1	Bromobenzene	ND		3.9	0.61
74-97-5	Chlorobromomethane	ND		15	0.56
75-25-2	Bromoform	ND		3.9	1.5
74-83-9	Bromomethane	ND		7.7	0.61
78-93-3	2-Butanone (MEK)	ND		39	16
104-51-8	n-Butylbenzene	ND		3.9	0.77
135-98-8	sec-Butylbenzene	ND		3.9	0.56
98-06-6	tert-Butylbenzene	ND		3.9	0.57
75-15-0	Carbon disulfide	ND		3.9	1.5
56-23-5	Carbon tetrachloride	ND		3.9	0.48
108-90-7	Chlorobenzene	ND		3.9	0.53
75-00-3	Chloroethane	ND		7.7	0.43
67-66-3	Chloroform	ND		3.9	0.51
74-87-3	Chloromethane	ND		7.7	0.61
95-49-8	2-Chlorotoluene	ND		3.9	0.50
106-43-4	4-Chlorotoluene	ND		3.9	0.53
124-48-1	Chlorodibromomethane	ND		3.9	0.55
95-50-1	1,2-Dichlorobenzene	ND		3.9	0.53
541-73-1	1,3-Dichlorobenzene	ND		3.9	0.56
106-46-7	1,4-Dichlorobenzene	ND		3.9	0.55
142-28-9	1,3-Dichloropropane	ND		3.9	0.57
563-58-6	1,1-Dichloropropene	ND		3.9	0.53
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.7	1.3
106-93-4	Ethylene Dibromide	ND		3.9	1.1
74-95-3	Dibromomethane	ND		7.7	0.67
75-71-8	Dichlorodifluoromethane	ND		7.7	0.61
75-34-3	1,1-Dichloroethane	ND		3.9	0.53
107-06-2	1,2-Dichloroethane	ND		3.9	0.59
75-35-4	1,1-Dichloroethene	ND		3.9	0.48
156-59-2	cis-1,2-Dichloroethene	ND		3.9	0.53
156-60-5	trans-1,2-Dichloroethene	ND		3.9	0.58
78-87-5	1,2-Dichloropropane	ND		3.9	0.49

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-B1S-0.5-1 Lab Sample ID: 720-88164-1

Matrix: Solid Lab File ID: 08271811.D

Analysis Method: 8260B Date Collected: 08/21/2018 10:30

Sample wt/vol: 6.46(g) Date Analyzed: 08/27/2018 14:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250267 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.9	0.53
10061-02-6	trans-1,3-Dichloropropene	ND		3.9	0.52
100-41-4	Ethylbenzene	ND		3.9	0.58
87-68-3	Hexachlorobutadiene	ND		3.9	0.70
591-78-6	2-Hexanone	ND		39	7.7
98-82-8	Isopropylbenzene	ND		3.9	0.53
99-87-6	4-Isopropyltoluene	ND		3.9	1.9
75-09-2	Methylene Chloride	ND		7.7	4.3
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		39	7.7
91-20-3	Naphthalene	ND		7.7	1.2
103-65-1	N-Propylbenzene	ND		3.9	0.51
100-42-5	Styrene	ND		3.9	0.49
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.9	0.59
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.9	0.58
127-18-4	Tetrachloroethene	ND		3.9	0.52
108-88-3	Toluene	ND		3.9	0.55
87-61-6	1,2,3-Trichlorobenzene	ND		3.9	0.57
120-82-1	1,2,4-Trichlorobenzene	ND		3.9	0.55
71-55-6	1,1,1-Trichloroethane	ND		3.9	0.47
79-00-5	1,1,2-Trichloroethane	ND		3.9	0.54
79-01-6	Trichloroethene	ND		3.9	0.49
75-69-4	Trichlorofluoromethane	ND		3.9	0.43
96-18-4	1,2,3-Trichloropropane	ND		3.9	0.60
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.9	1.6
95-63-6	1,2,4-Trimethylbenzene	ND		3.9	1.3
108-67-8	1,3,5-Trimethylbenzene	ND		3.9	0.50
108-05-4	Vinyl acetate	ND		15	3.9
75-01-4	Vinyl chloride	ND		3.9	0.57
1330-20-7	Xylenes, Total	ND		3.9	0.94
594-20-7	2,2-Dichloropropane	ND		3.9	1.5
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		190	77

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-B1S-0.5-1 Lab Sample ID: 720-88164-1

Matrix: Solid Lab File ID: 08271811.D

Analysis Method: 8260B Date Collected: 08/21/2018 10:30

Sample wt/vol: 6.46(g) Date Analyzed: 08/27/2018 14:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250267 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	97		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		60-140
2037-26-5	Toluene-d8 (Surr)	93		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271811.D
Lims ID: 720-88164-A-1-A
Client ID: DG-B1S-0.5-1
Sample Type: Client
Inject. Date: 27-Aug-2018 14:16:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88164-A-1
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 28-Aug-2018 09:51:42 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: chaijita Date: 28-Aug-2018 09:51:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.825	-0.006	0	375185	250.0	
* 2 Fluorobenzene	96	10.598	10.605	-0.007	99	1126177	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	86	849745	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	441090	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.185	0.000	94	89896	7.11	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.703	0.000	0	109063	6.89	
$ 10 Toluene-d8 (Surr)	98	12.708	12.701	0.000	93	318189	6.99	
$ 11 4-Bromofluorobenzene	95	15.933	15.932	-0.006	93	120544	7.29	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	0.000	84	100378	5.88	
28 Acetone	58	6.380	6.370	0.006	100	21648	16.4	
34 Methylene Chloride	84	7.093	7.071	0.018	95	1917	0.1573	
75 Toluene	92	12.793	12.788	0.000	98	4801	0.1719	
149 1-Chlorohexane	55	14.433	14.352	0.073	33	8803	0.6128	
85 m-Xylene & p-Xylene	91	14.933	14.933	-0.006	0	2479	0.0578	
29 Pentane	43	6.374	6.410	-0.036	69	68856	NR	
131 n-Octane	43	13.104	13.110	-0.006	81	1496	NR	
135 n-Nonane	57	15.055	15.055	0.000	88	620	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	785654	7.61	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	197992	1.92	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	295598	2.86	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	858122	8.31	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	353625	3.42	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	822617	7.97	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	426093	4.13	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	168376	1.63	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	305894	2.96	
S 122 Xylenes, Total	1				0		0.0578	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

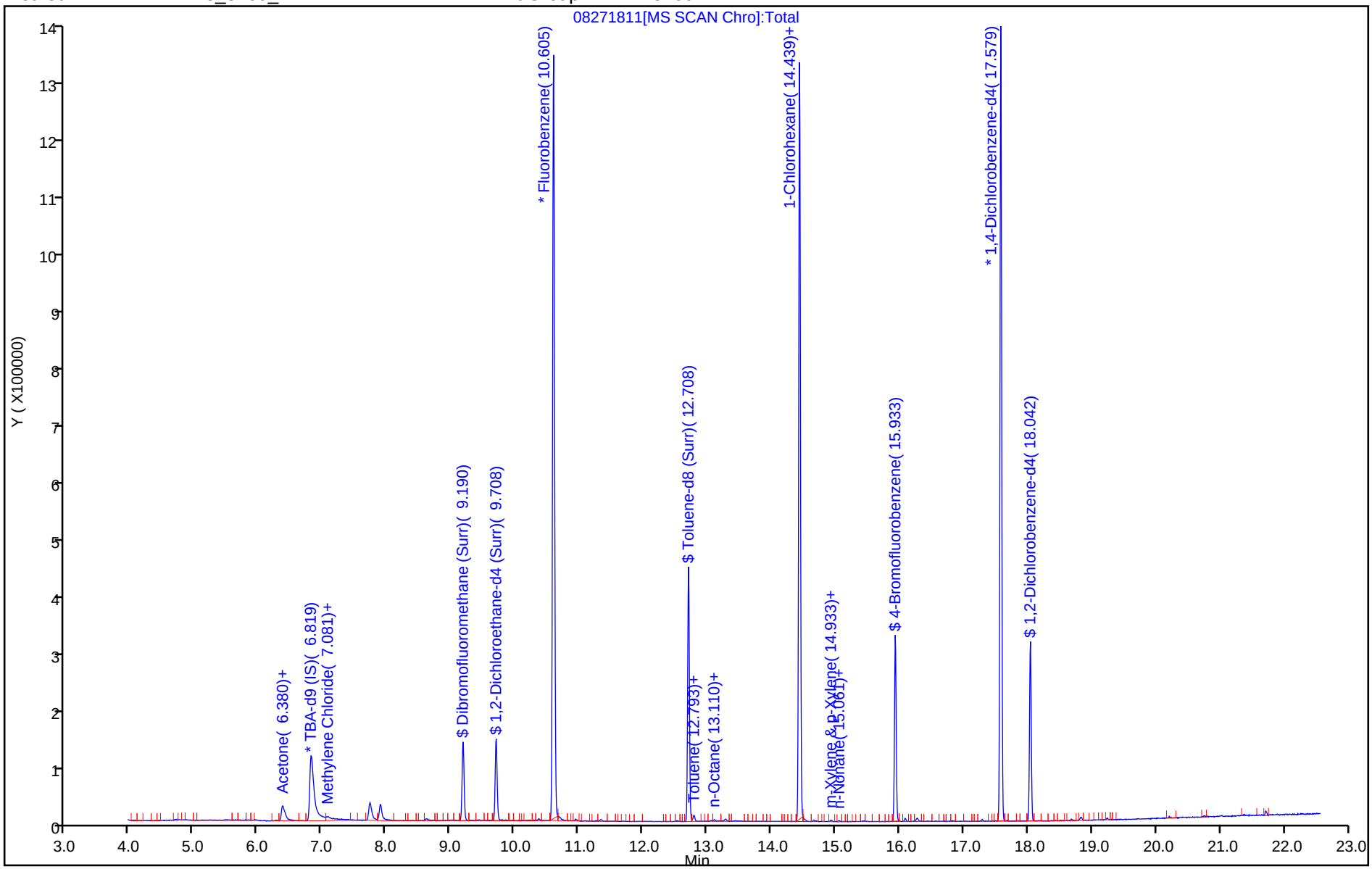
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 28-Aug-2018 09:51:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271811.D

Injection Date:	27-Aug-2018 14:16:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88164-A-1-A	Lab Sample ID:	720-88164-1	Worklist Smp#:	11
Client ID:	DG-B1S-0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271811.D
Lims ID: 720-88164-A-1-A
Client ID: DG-B1S-0.5-1
Sample Type: Client
Inject. Date: 27-Aug-2018 14:16:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88164-A-1
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 28-Aug-2018 09:51:42 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: chaijita Date: 28-Aug-2018 09:51:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	6.89	91.83
$ 10 Toluene-d8 (Surr)	7.50	6.99	93.15
$ 11 4-Bromofluorobenzene	7.50	7.29	97.26
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

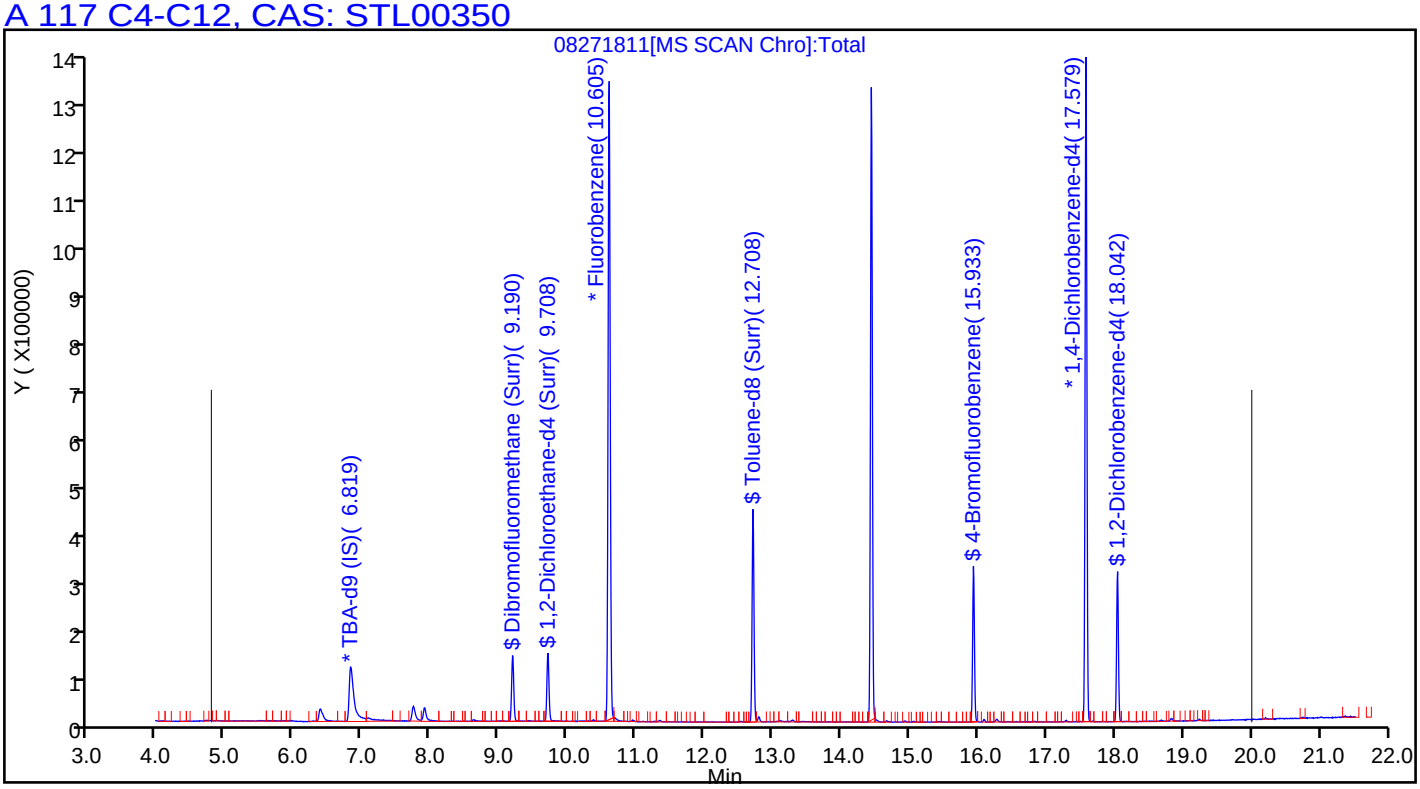
Report Date: 28-Aug-2018 09:51:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271811.D

Injection Date:	27-Aug-2018 14:16:30	Instrument ID:	HP13		
Lims ID:	720-88164-A-1-A	Lab Sample ID:	720-88164-1		
Client ID:	DG-B1S-0.5-1				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



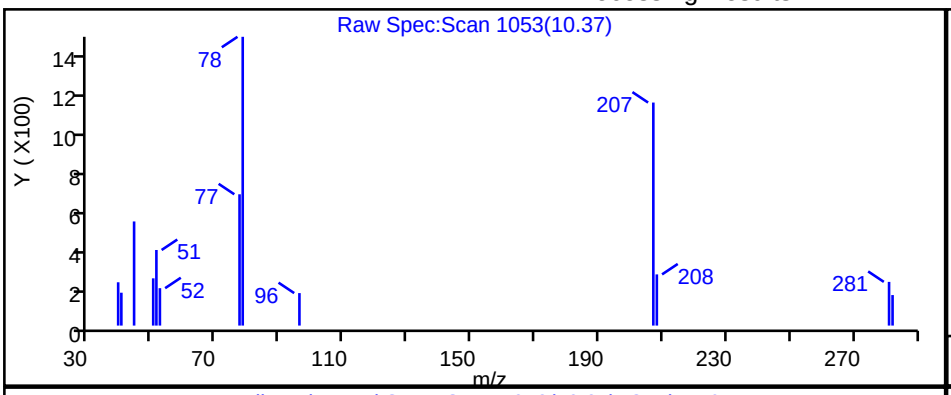
User Disabled Compound Report

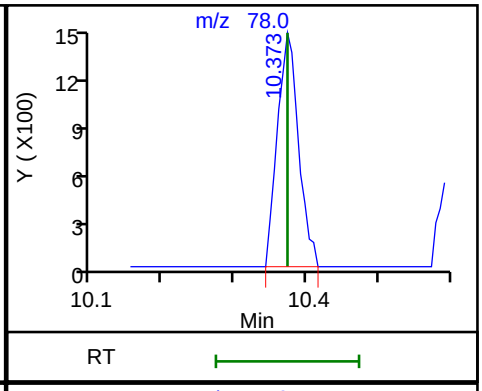
TestAmerica Pleasanton

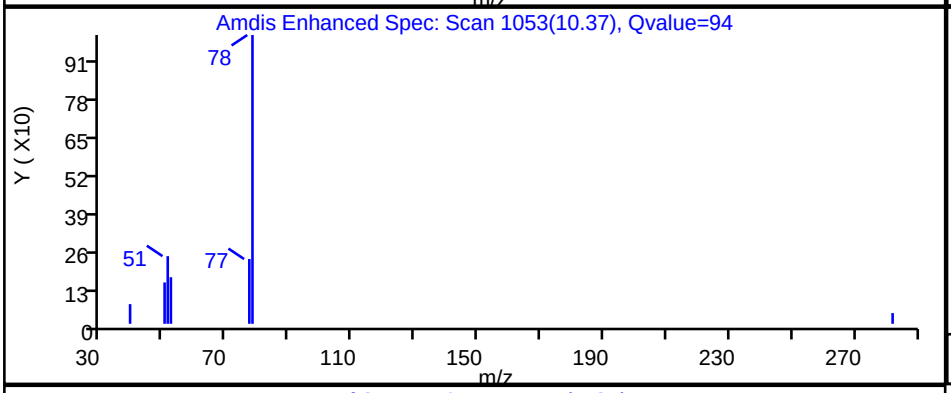
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271811.D				
Injection Date:	27-Aug-2018 14:16:30	Instrument ID:	HP13		
Lims ID:	720-88164-A-1-A	Lab Sample ID:	720-88164-1		
Client ID:	DG-B1S-0.5-1				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

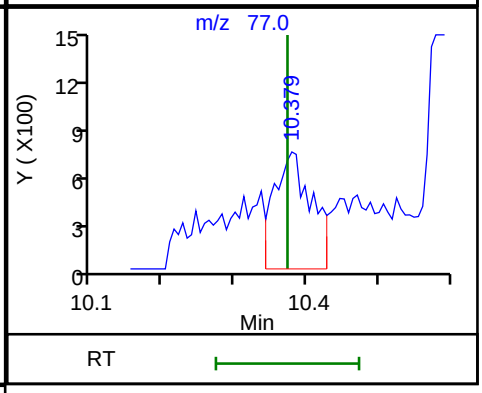
59 Benzene, CAS: 71-43-2

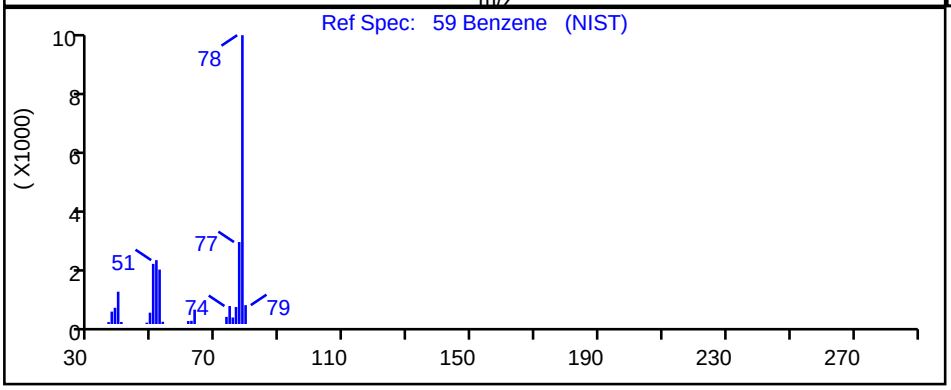
Processing Results











RT	Mass	Response	Amount
10.37	78.00	3000	0.062601
10.38	77.00	2648	

Reviewer: chaijita, 28-Aug-2018 09:50:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-B1S-3.5-4 Lab Sample ID: 720-88164-2

Matrix: Solid Lab File ID: 08271812.D

Analysis Method: 8260B Date Collected: 08/21/2018 10:30

Sample wt/vol: 5.328(g) Date Analyzed: 08/27/2018 14:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250267 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.7	1.1
67-64-1	Acetone	ND		47	36
71-43-2	Benzene	ND		4.7	0.61
75-27-4	Dichlorobromomethane	ND		4.7	0.68
108-86-1	Bromobenzene	ND		4.7	0.74
74-97-5	Chlorobromomethane	ND		19	0.68
75-25-2	Bromoform	ND		4.7	1.9
74-83-9	Bromomethane	ND		9.4	0.74
78-93-3	2-Butanone (MEK)	ND		47	20
104-51-8	n-Butylbenzene	ND		4.7	0.94
135-98-8	sec-Butylbenzene	ND		4.7	0.68
98-06-6	tert-Butylbenzene	ND		4.7	0.69
75-15-0	Carbon disulfide	ND		4.7	1.9
56-23-5	Carbon tetrachloride	ND		4.7	0.58
108-90-7	Chlorobenzene	ND		4.7	0.65
75-00-3	Chloroethane	ND		9.4	0.53
67-66-3	Chloroform	ND		4.7	0.62
74-87-3	Chloromethane	ND		9.4	0.74
95-49-8	2-Chlorotoluene	ND		4.7	0.61
106-43-4	4-Chlorotoluene	ND		4.7	0.64
124-48-1	Chlorodibromomethane	ND		4.7	0.67
95-50-1	1,2-Dichlorobenzene	ND		4.7	0.64
541-73-1	1,3-Dichlorobenzene	ND		4.7	0.68
106-46-7	1,4-Dichlorobenzene	ND		4.7	0.67
142-28-9	1,3-Dichloropropane	ND		4.7	0.69
563-58-6	1,1-Dichloropropene	ND		4.7	0.65
96-12-8	1,2-Dibromo-3-Chloropropane	ND		9.4	1.6
106-93-4	Ethylene Dibromide	ND		4.7	1.3
74-95-3	Dibromomethane	ND		9.4	0.81
75-71-8	Dichlorodifluoromethane	ND		9.4	0.74
75-34-3	1,1-Dichloroethane	ND		4.7	0.64
107-06-2	1,2-Dichloroethane	ND		4.7	0.71
75-35-4	1,1-Dichloroethene	ND		4.7	0.58
156-59-2	cis-1,2-Dichloroethene	ND		4.7	0.64
156-60-5	trans-1,2-Dichloroethene	ND		4.7	0.70
78-87-5	1,2-Dichloropropane	ND		4.7	0.59

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-B1S-3.5-4 Lab Sample ID: 720-88164-2

Matrix: Solid Lab File ID: 08271812.D

Analysis Method: 8260B Date Collected: 08/21/2018 10:30

Sample wt/vol: 5.328(g) Date Analyzed: 08/27/2018 14:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250267 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.7	0.65
10061-02-6	trans-1,3-Dichloropropene	ND		4.7	0.63
100-41-4	Ethylbenzene	ND		4.7	0.70
87-68-3	Hexachlorobutadiene	ND		4.7	0.84
591-78-6	2-Hexanone	ND		47	9.4
98-82-8	Isopropylbenzene	ND		4.7	0.64
99-87-6	4-Isopropyltoluene	ND		4.7	2.3
75-09-2	Methylene Chloride	ND		9.4	5.3
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		47	9.4
91-20-3	Naphthalene	ND		9.4	1.4
103-65-1	N-Propylbenzene	ND		4.7	0.62
100-42-5	Styrene	ND		4.7	0.59
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.7	0.71
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.7	0.70
127-18-4	Tetrachloroethene	ND		4.7	0.63
108-88-3	Toluene	ND		4.7	0.67
87-61-6	1,2,3-Trichlorobenzene	ND		4.7	0.69
120-82-1	1,2,4-Trichlorobenzene	ND		4.7	0.67
71-55-6	1,1,1-Trichloroethane	ND		4.7	0.57
79-00-5	1,1,2-Trichloroethane	ND		4.7	0.66
79-01-6	Trichloroethene	ND		4.7	0.59
75-69-4	Trichlorofluoromethane	ND		4.7	0.53
96-18-4	1,2,3-Trichloropropane	ND		4.7	0.72
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7	2.0
95-63-6	1,2,4-Trimethylbenzene	ND		4.7	1.5
108-67-8	1,3,5-Trimethylbenzene	ND		4.7	0.61
108-05-4	Vinyl acetate	ND		19	4.7
75-01-4	Vinyl chloride	ND		4.7	0.69
1330-20-7	Xylenes, Total	ND		4.7	1.1
594-20-7	2,2-Dichloropropane	ND		4.7	1.9
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		230	94

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-B1S-3.5-4 Lab Sample ID: 720-88164-2

Matrix: Solid Lab File ID: 08271812.D

Analysis Method: 8260B Date Collected: 08/21/2018 10:30

Sample wt/vol: 5.328(g) Date Analyzed: 08/27/2018 14:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250267 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	99		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		60-140
2037-26-5	Toluene-d8 (Surr)	95		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271812.D
Lims ID: 720-88164-A-2-A
Client ID: DG-B1S-3.5-4
Sample Type: Client
Inject. Date: 27-Aug-2018 14:45:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88164-A-2
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 28-Aug-2018 09:52:47 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: chaijita Date: 28-Aug-2018 09:52:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.825	-0.006	0	349355	250.0	
* 2 Fluorobenzene	96	10.599	10.605	-0.007	99	1149513	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	86	888978	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	485548	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.185	0.000	94	94264	7.31	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.703	0.000	0	112409	6.95	
$ 10 Toluene-d8 (Surr)	98	12.708	12.701	0.000	93	330289	7.10	
$ 11 4-Bromofluorobenzene	95	15.933	15.932	-0.006	94	128384	7.43	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	0.000	84	111633	5.94	
28 Acetone	58	6.374	6.370	0.000	100	19955	14.8	
34 Methylene Chloride	84	7.075	7.075	0.000	96	2267	0.1822	M
75 Toluene	92	12.793	12.788	0.000	98	7507	0.2569	
128 Butyl Ether	87	14.659	14.659	-0.006	94	1277	0.1444	
84 Ethylbenzene	91	14.707	14.701	0.000	91	1366	0.0240	
85 m-Xylene & p-Xylene	91	14.933	14.933	-0.006	0	3243	0.0723	
131 n-Octane	43	13.110	13.110	0.000	78	2222	NR	
135 n-Nonane	57	15.061	15.055	0.006	89	1119	NR	
99 n-Decane	57	16.829	16.829	0.000	94	1352	NR	
110 Dodecane	57	19.938	19.938	0.000	88	1113	NR	
115 C13	57	21.377	21.377	0.000	70	1066	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	1017694	9.66	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	233577	2.22	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	342622	3.25	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1137549	10.8	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	404742	3.84	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	1073678	10.2	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	524597	4.98	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	182102	1.73	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	400083	3.80	
S 122 Xylenes, Total	1				0		0.0723	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

M - Manually Integrated

Reagents:

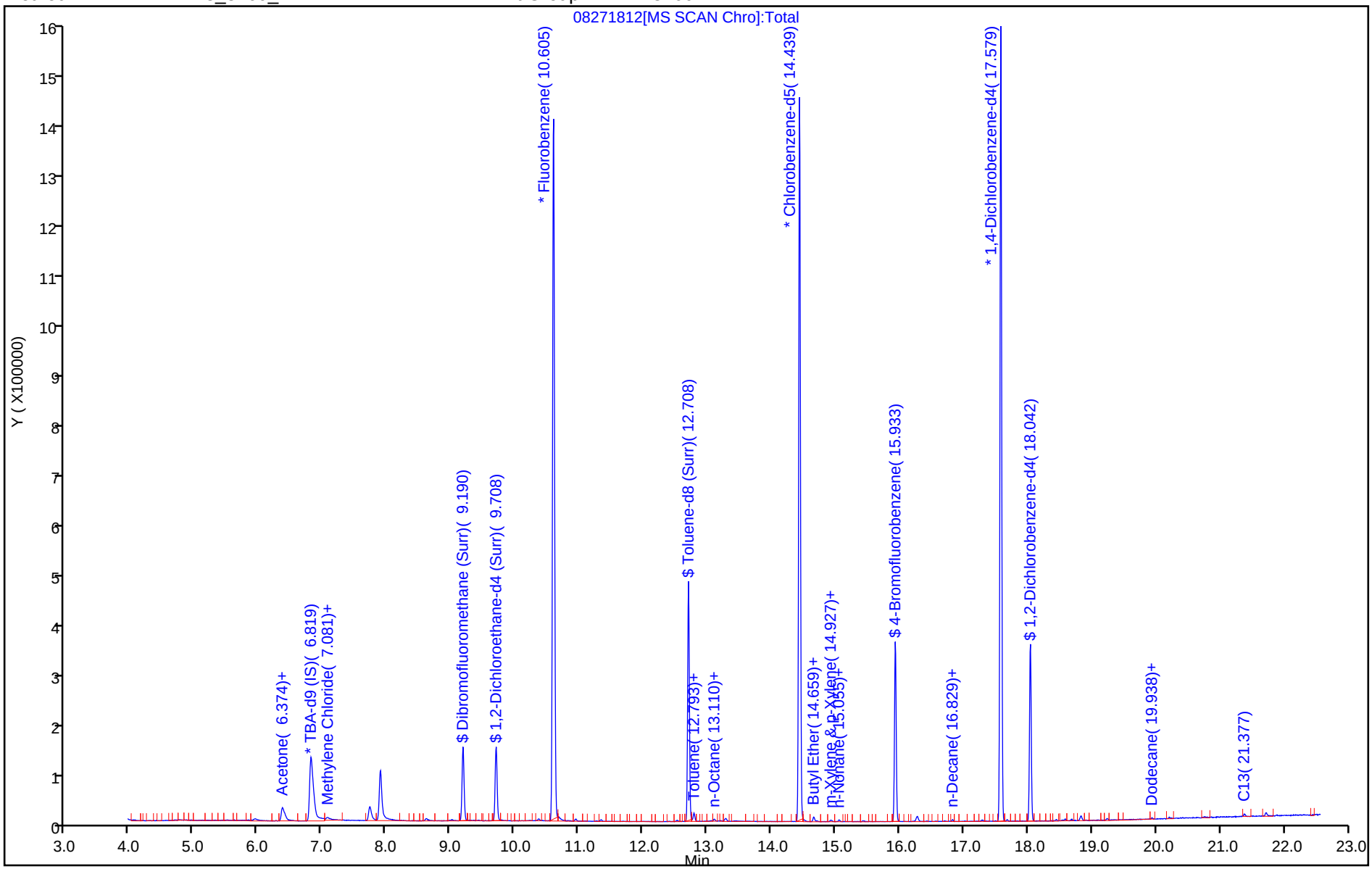
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 28-Aug-2018 09:52:48 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271812.D

Injection Date:	27-Aug-2018 14:45:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88164-A-2-A	Lab Sample ID:	720-88164-2	Worklist Smp#:	12
Client ID:	DG-B1S-3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271812.D
Lims ID: 720-88164-A-2-A
Client ID: DG-B1S-3.5-4
Sample Type: Client
Inject. Date: 27-Aug-2018 14:45:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88164-A-2
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 28-Aug-2018 09:52:47 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: chaijita Date: 28-Aug-2018 09:52:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	6.95	92.73
$ 10 Toluene-d8 (Surr)	7.50	7.10	94.73
$ 11 4-Bromofluorobenzene	7.50	7.43	99.01
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

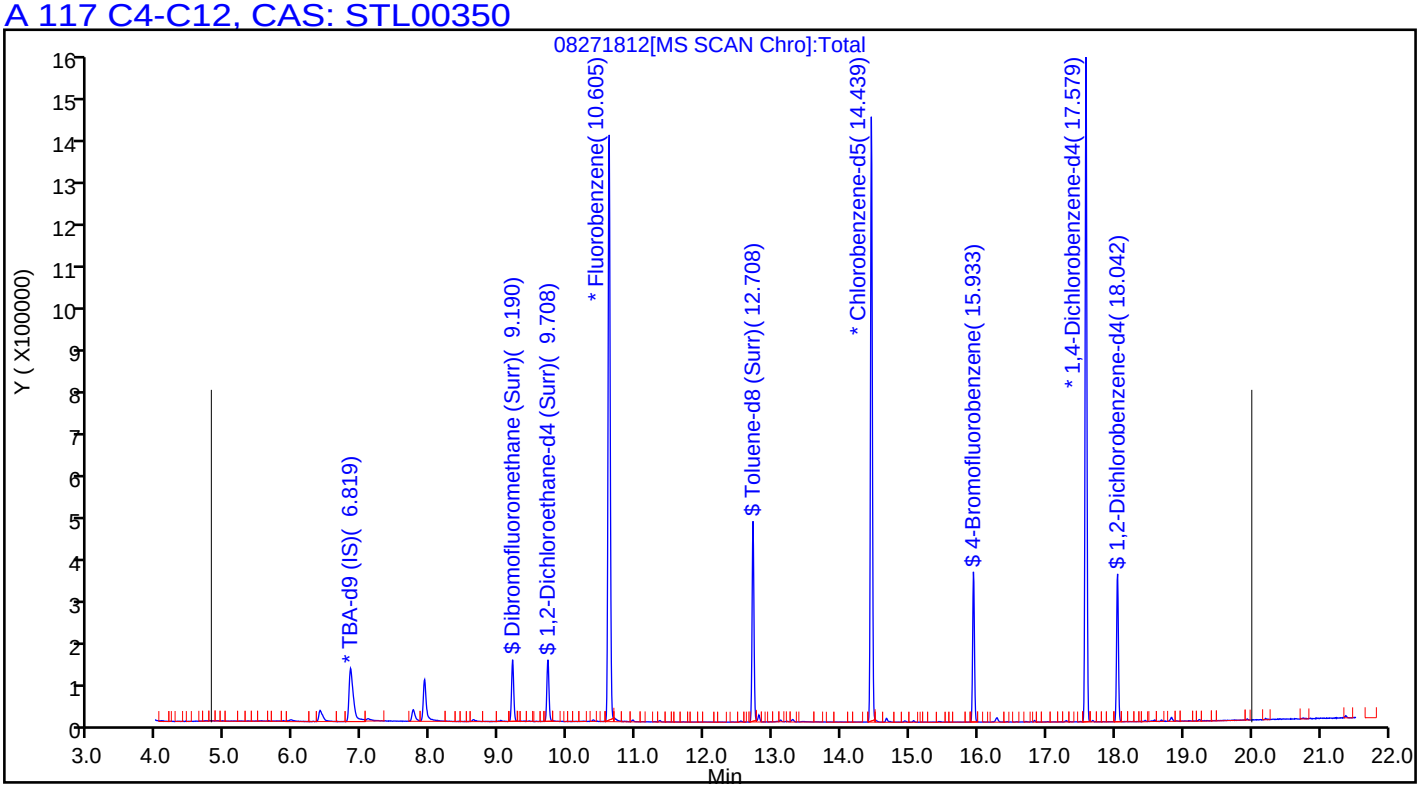
Report Date: 28-Aug-2018 09:52:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271812.D

Injection Date:	27-Aug-2018 14:45:30	Instrument ID:	HP13		
Lims ID:	720-88164-A-2-A	Lab Sample ID:	720-88164-2		
Client ID:	DG-B1S-3.5-4				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



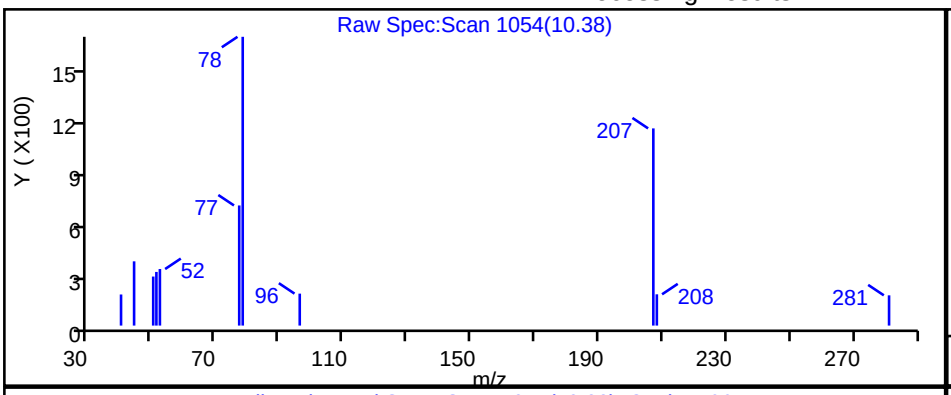
User Disabled Compound Report

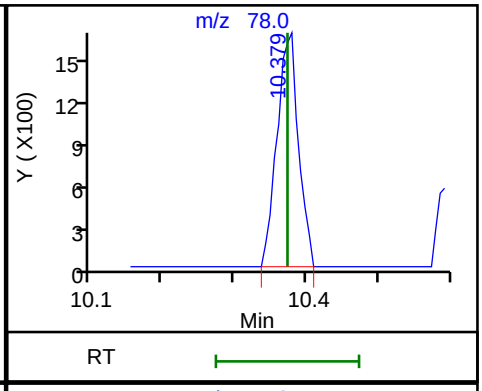
TestAmerica Pleasanton

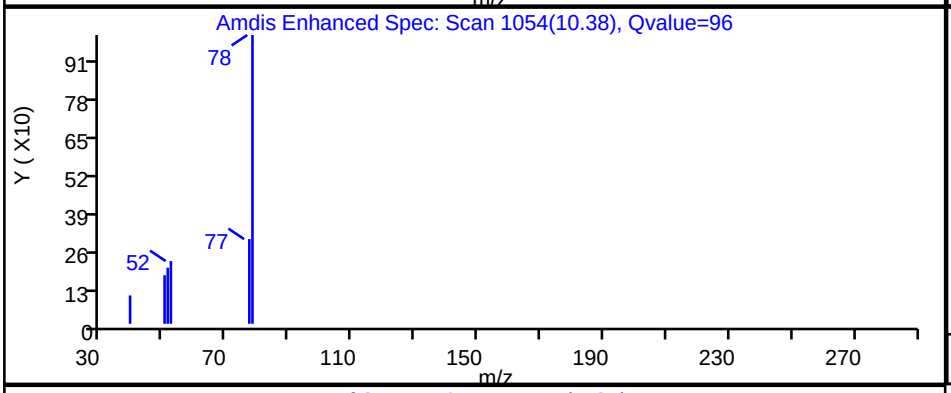
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271812.D				
Injection Date:	27-Aug-2018 14:45:30	Instrument ID:	HP13		
Lims ID:	720-88164-A-2-A	Lab Sample ID:	720-88164-2		
Client ID:	DG-B1S-3.5-4				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

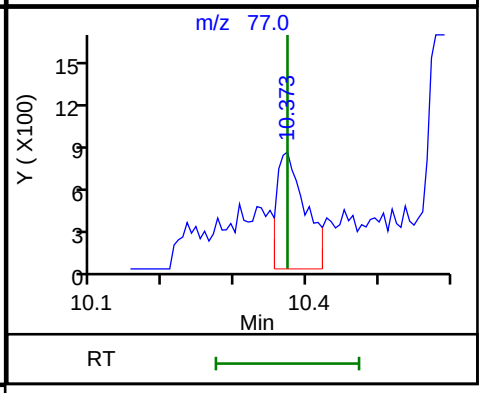
59 Benzene, CAS: 71-43-2

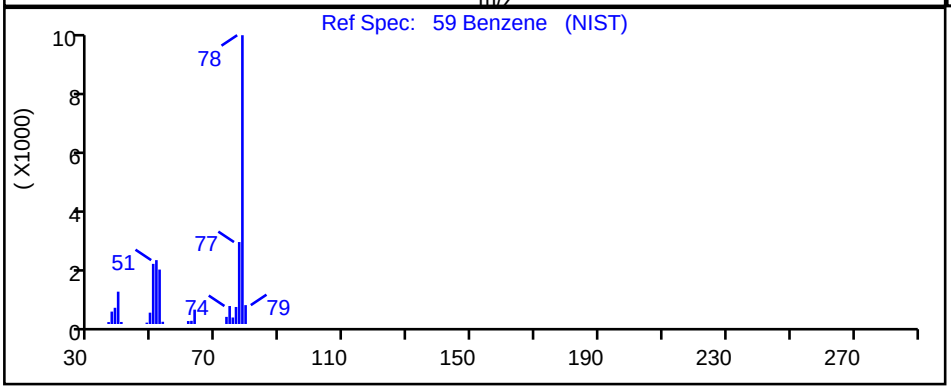
Processing Results











RT	Mass	Response	Amount
10.38	78.00	3507	0.071695
10.37	77.00	2309	

Reviewer: chaijita, 28-Aug-2018 09:52:22

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

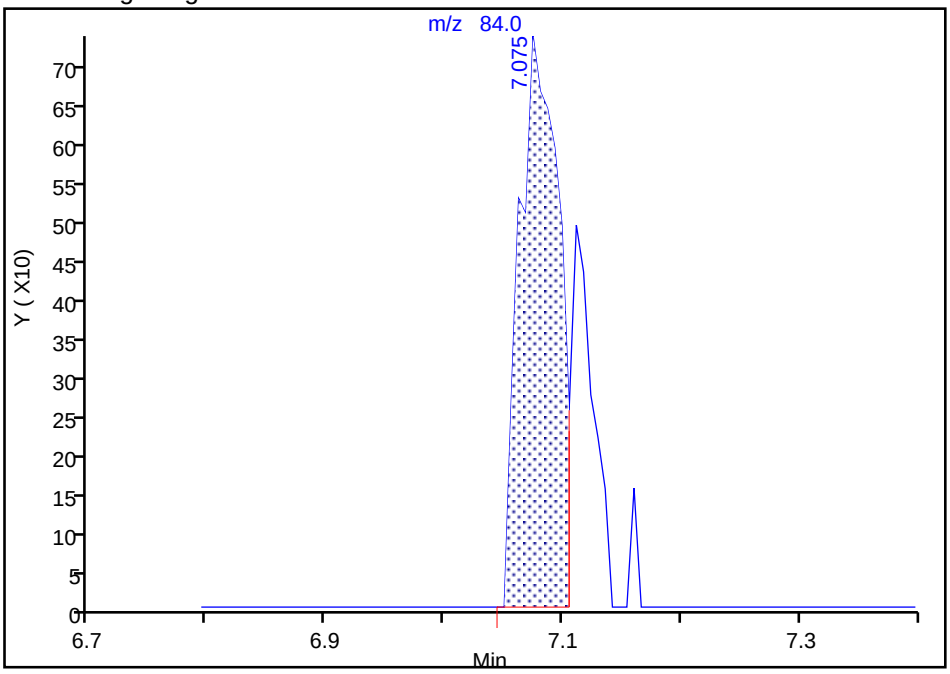
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271812.D				
Injection Date:	27-Aug-2018 14:45:30	Instrument ID:	HP13		
Lims ID:	720-88164-A-2-A	Lab Sample ID:	720-88164-2		
Client ID:	DG-B1S-3.5-4				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

34 Methylene Chloride, CAS: 75-09-2

Signal: 1

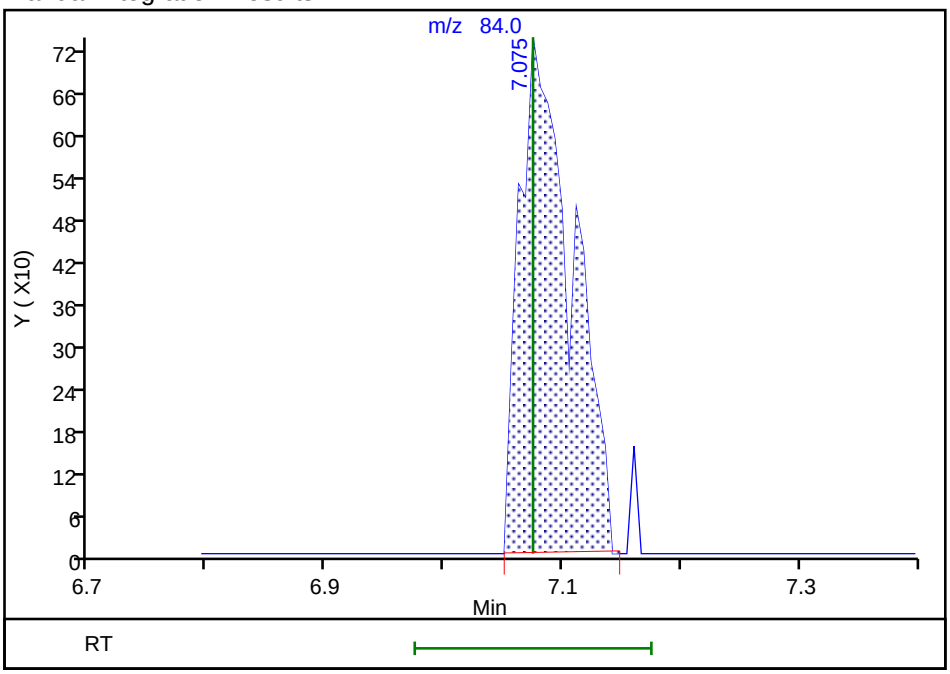
Processing Integration Results

RT: 7.07
Area: 1709
Amount: 0.137389
Amount Units: ug/L



Manual Integration Results

RT: 7.07
Area: 2267
Amount: 0.182247
Amount Units: ug/L



Reviewer: chaijita, 28-Aug-2018 09:52:10

Audit Action: Manually Integrated Audit Reason: Baseline

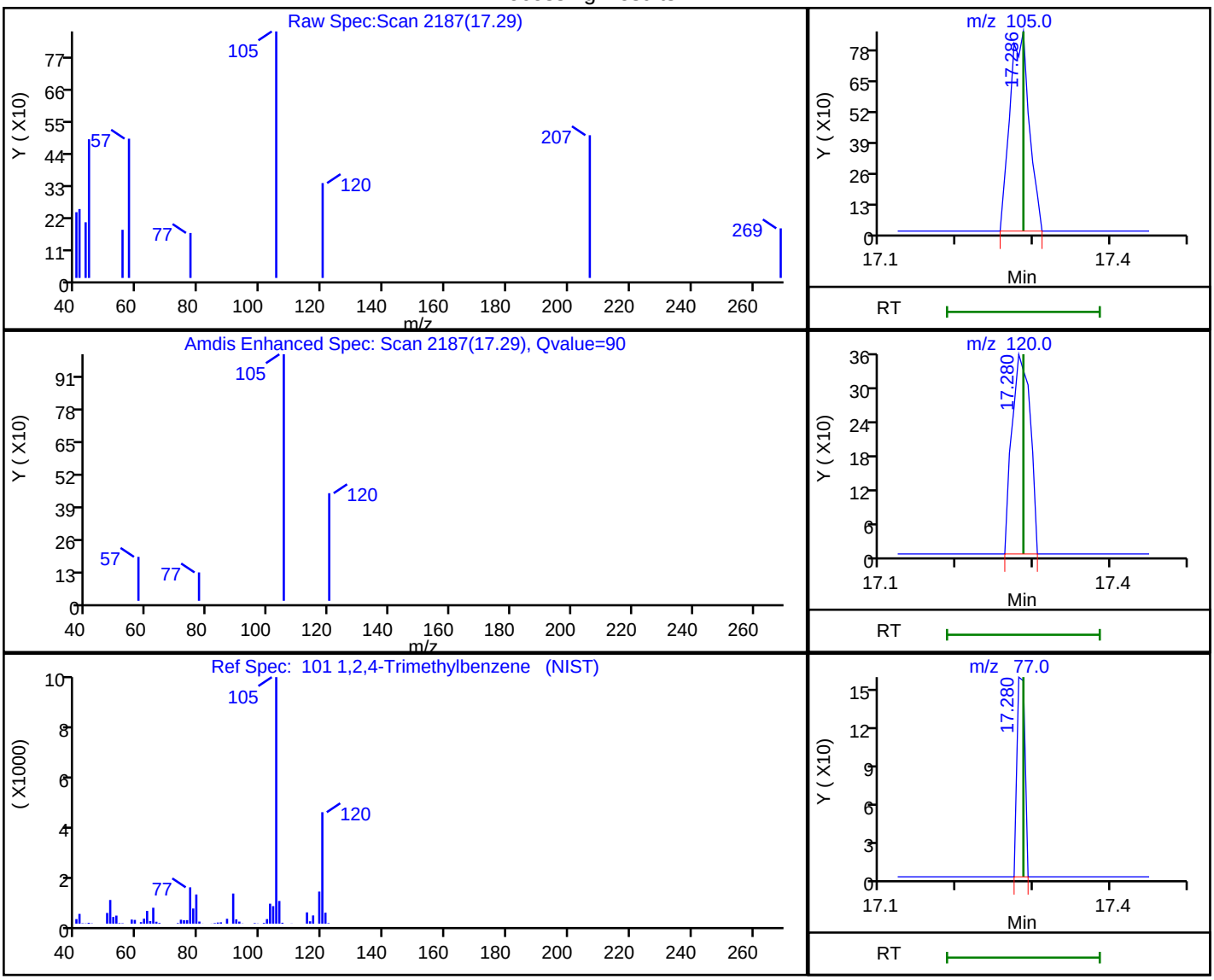
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271812.D				
Injection Date:	27-Aug-2018 14:45:30	Instrument ID:	HP13		
Lims ID:	720-88164-A-2-A	Lab Sample ID:	720-88164-2		
Client ID:	DG-B1S-3.5-4				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

101 1,2,4-Trimethylbenzene, CAS: 95-63-6

Processing Results



RT	Mass	Response	Amount
17.29	105.00	1492	0.028518
17.28	120.00	591	
17.28	77.00	115	

Reviewer: chaijita, 28-Aug-2018 09:51:52

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-A3S-0.5-1 Lab Sample ID: 720-88164-7

Matrix: Solid Lab File ID: 08271813.D

Analysis Method: 8260B Date Collected: 08/21/2018 11:10

Sample wt/vol: 5.648(g) Date Analyzed: 08/27/2018 15:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250267 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.4	1.1
67-64-1	Acetone	ND		44	34
71-43-2	Benzene	ND		4.4	0.58
75-27-4	Dichlorobromomethane	ND		4.4	0.64
108-86-1	Bromobenzene	ND		4.4	0.70
74-97-5	Chlorobromomethane	ND		18	0.64
75-25-2	Bromoform	ND		4.4	1.8
74-83-9	Bromomethane	ND		8.9	0.70
78-93-3	2-Butanone (MEK)	ND		44	19
104-51-8	n-Butylbenzene	ND		4.4	0.89
135-98-8	sec-Butylbenzene	ND		4.4	0.64
98-06-6	tert-Butylbenzene	ND		4.4	0.65
75-15-0	Carbon disulfide	ND		4.4	1.8
56-23-5	Carbon tetrachloride	ND		4.4	0.55
108-90-7	Chlorobenzene	ND		4.4	0.61
75-00-3	Chloroethane	ND		8.9	0.50
67-66-3	Chloroform	ND		4.4	0.58
74-87-3	Chloromethane	ND		8.9	0.70
95-49-8	2-Chlorotoluene	ND		4.4	0.58
106-43-4	4-Chlorotoluene	ND		4.4	0.60
124-48-1	Chlorodibromomethane	ND		4.4	0.63
95-50-1	1,2-Dichlorobenzene	ND		4.4	0.60
541-73-1	1,3-Dichlorobenzene	ND		4.4	0.64
106-46-7	1,4-Dichlorobenzene	ND		4.4	0.63
142-28-9	1,3-Dichloropropane	ND		4.4	0.65
563-58-6	1,1-Dichloropropene	ND		4.4	0.61
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.9	1.5
106-93-4	Ethylene Dibromide	ND		4.4	1.3
74-95-3	Dibromomethane	ND		8.9	0.76
75-71-8	Dichlorodifluoromethane	ND		8.9	0.70
75-34-3	1,1-Dichloroethane	ND		4.4	0.60
107-06-2	1,2-Dichloroethane	ND		4.4	0.67
75-35-4	1,1-Dichloroethene	ND		4.4	0.55
156-59-2	cis-1,2-Dichloroethene	ND		4.4	0.60
156-60-5	trans-1,2-Dichloroethene	ND		4.4	0.66
78-87-5	1,2-Dichloropropane	ND		4.4	0.56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-A3S-0.5-1 Lab Sample ID: 720-88164-7

Matrix: Solid Lab File ID: 08271813.D

Analysis Method: 8260B Date Collected: 08/21/2018 11:10

Sample wt/vol: 5.648(g) Date Analyzed: 08/27/2018 15:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250267 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.4	0.61
10061-02-6	trans-1,3-Dichloropropene	ND		4.4	0.59
100-41-4	Ethylbenzene	ND		4.4	0.66
87-68-3	Hexachlorobutadiene	ND		4.4	0.80
591-78-6	2-Hexanone	ND		44	8.9
98-82-8	Isopropylbenzene	ND		4.4	0.60
99-87-6	4-Isopropyltoluene	ND		4.4	2.2
75-09-2	Methylene Chloride	ND		8.9	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		44	8.9
91-20-3	Naphthalene	ND		8.9	1.3
103-65-1	N-Propylbenzene	ND		4.4	0.58
100-42-5	Styrene	ND		4.4	0.56
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.4	0.67
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.4	0.66
127-18-4	Tetrachloroethene	ND		4.4	0.59
108-88-3	Toluene	ND		4.4	0.63
87-61-6	1,2,3-Trichlorobenzene	ND		4.4	0.66
120-82-1	1,2,4-Trichlorobenzene	ND		4.4	0.63
71-55-6	1,1,1-Trichloroethane	ND		4.4	0.54
79-00-5	1,1,2-Trichloroethane	ND		4.4	0.62
79-01-6	Trichloroethene	ND		4.4	0.56
75-69-4	Trichlorofluoromethane	ND		4.4	0.50
96-18-4	1,2,3-Trichloropropane	ND		4.4	0.68
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.8
95-63-6	1,2,4-Trimethylbenzene	ND		4.4	1.5
108-67-8	1,3,5-Trimethylbenzene	ND		4.4	0.58
108-05-4	Vinyl acetate	ND		18	4.4
75-01-4	Vinyl chloride	ND		4.4	0.65
1330-20-7	Xylenes, Total	ND		4.4	1.1
594-20-7	2,2-Dichloropropane	ND		4.4	1.8
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		220	89

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-A3S-0.5-1 Lab Sample ID: 720-88164-7

Matrix: Solid Lab File ID: 08271813.D

Analysis Method: 8260B Date Collected: 08/21/2018 11:10

Sample wt/vol: 5.648(g) Date Analyzed: 08/27/2018 15:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250267 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	88		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		60-140
2037-26-5	Toluene-d8 (Surr)	91		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271813.D
Lims ID: 720-88164-A-7-A
Client ID: DG-A3S-0.5-1
Sample Type: Client
Inject. Date: 27-Aug-2018 15:15:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88164-A-7
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 28-Aug-2018 09:55:18 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: chaijita Date: 28-Aug-2018 09:55:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.825	-0.006	0	380437	250.0	
* 2 Fluorobenzene	96	10.599	10.605	-0.006	99	948007	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	86	639300	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	253168	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.185	0.000	94	77486	7.28	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.709	9.703	0.001	0	94978	7.13	
$ 10 Toluene-d8 (Surr)	98	12.708	12.701	0.000	93	261171	6.81	
$ 11 4-Bromofluorobenzene	95	15.933	15.932	-0.006	94	82310	6.62	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	0.000	84	67670	6.90	
28 Acetone	58	6.374	6.370	0.000	100	16048	14.4	
144 Methyl acetate	43	7.136	7.120	0.012	94	4228	0.5218	
140 Ethyl acetate	43	9.014	8.996	0.013	98	7325	0.5835	
59 Benzene	78	10.373	10.367	0.000	96	6385	0.1583	
62 n-Heptane	43	10.946	10.940	0.000	68	1494	0.0778	
145 Methylcyclohexane	83	11.690	11.689	-0.006	95	5402	0.3362	
75 Toluene	92	12.793	12.788	0.000	98	5739	0.2731	
85 m-Xylene & p-Xylene	91	14.933	14.933	-0.006	0	5640	0.1748	
20 Butane	58	4.868	4.862	0.006	1	196	NR	
131 n-Octane	43	13.110	13.110	0.000	74	1397	NR	
135 n-Nonane	57	15.055	15.055	0.000	82	458	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	919530	10.6	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	253558	2.92	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	337718	3.89	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1058731	12.2	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	411722	4.74	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	980181	11.3	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	550923	6.34	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	165015	1.90	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	414545	4.77	
S 122 Xylenes, Total	1				0		0.1748	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

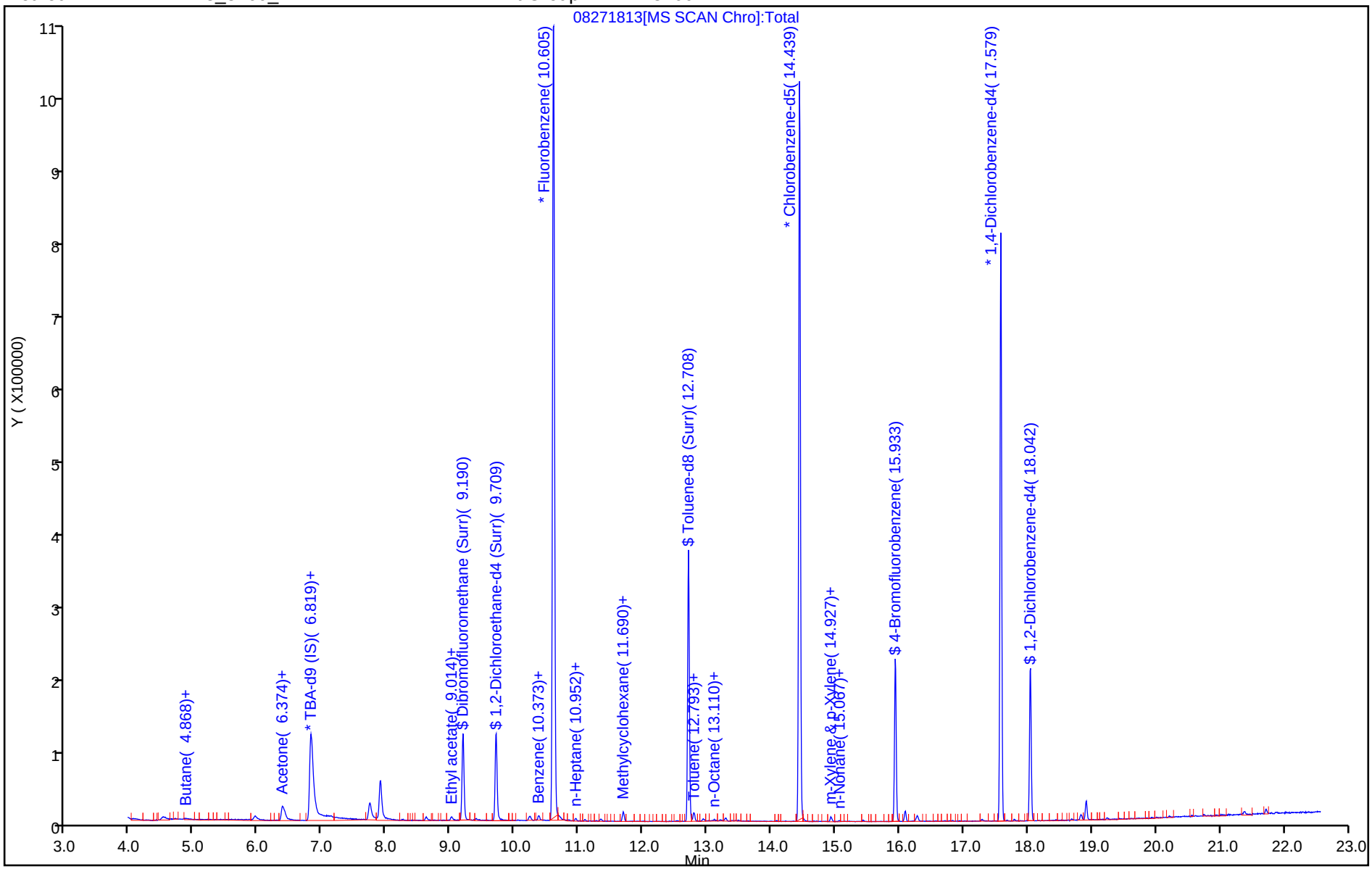
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 28-Aug-2018 09:55:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271813.D				
Injection Date:	27-Aug-2018 15:15:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88164-A-7-A	Lab Sample ID:	720-88164-7	Worklist Smp#:	13
Client ID:	DG-A3S-0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271813.D
Lims ID: 720-88164-A-7-A
Client ID: DG-A3S-0.5-1
Sample Type: Client
Inject. Date: 27-Aug-2018 15:15:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88164-A-7
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 28-Aug-2018 09:55:18 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: chaijita Date: 28-Aug-2018 09:55:18

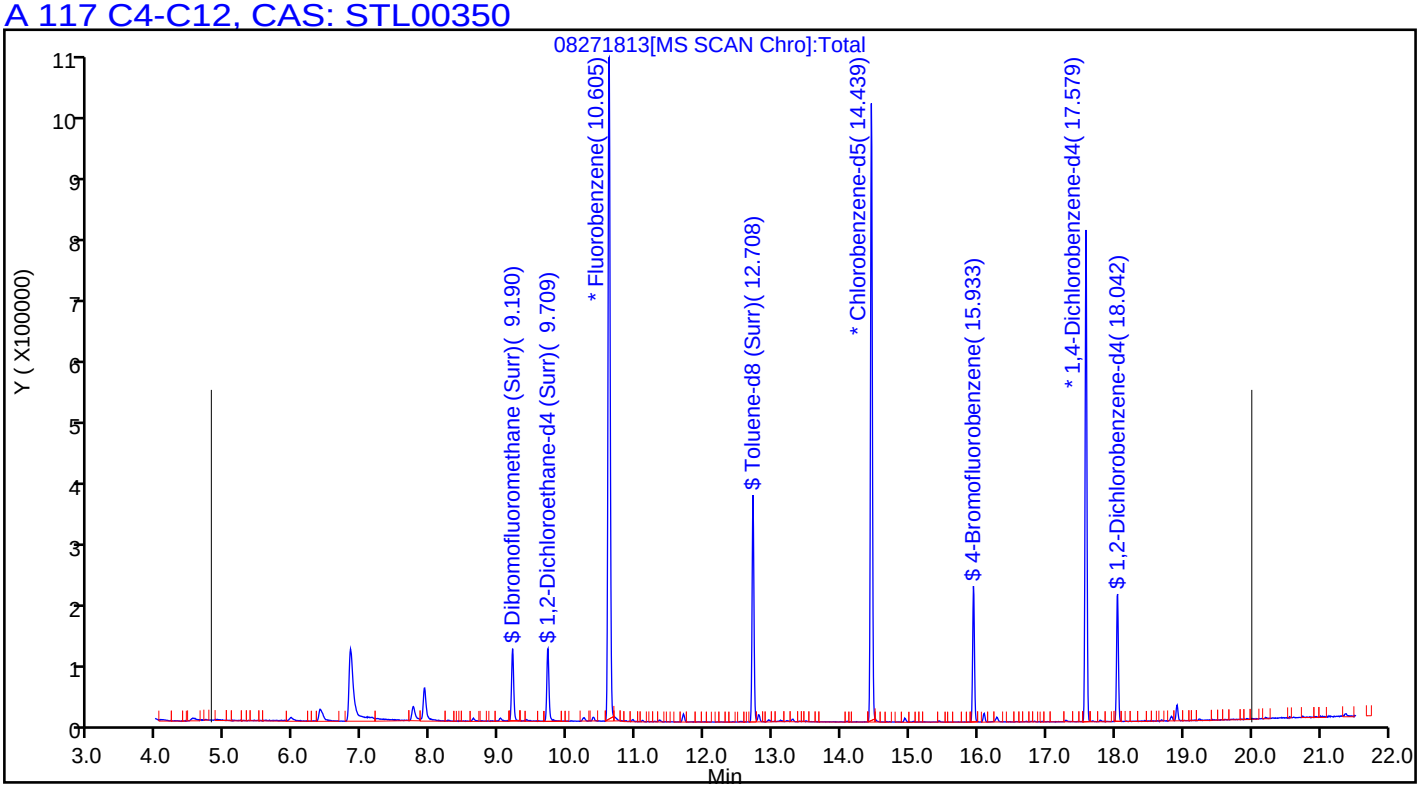
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.13	95.00
$ 10 Toluene-d8 (Surr)	7.50	6.81	90.83
$ 11 4-Bromofluorobenzene	7.50	6.62	88.27
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 28-Aug-2018 09:55:23 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271813.D				
Injection Date:	27-Aug-2018 15:15:30	Instrument ID:	HP13		
Lims ID:	720-88164-A-7-A	Lab Sample ID:	720-88164-7		
Client ID:	DG-A3S-0.5-1				
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-A3S-3.5-4 Lab Sample ID: 720-88164-8

Matrix: Solid Lab File ID: 08271816.D

Analysis Method: 8260B Date Collected: 08/21/2018 11:10

Sample wt/vol: 7.36(g) Date Analyzed: 08/27/2018 16:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250267 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.4	0.82
67-64-1	Acetone	ND		34	26
71-43-2	Benzene	ND		3.4	0.44
75-27-4	Dichlorobromomethane	ND		3.4	0.49
108-86-1	Bromobenzene	ND		3.4	0.54
74-97-5	Chlorobromomethane	ND		14	0.49
75-25-2	Bromoform	ND		3.4	1.4
74-83-9	Bromomethane	ND		6.8	0.54
78-93-3	2-Butanone (MEK)	ND		34	14
104-51-8	n-Butylbenzene	ND		3.4	0.68
135-98-8	sec-Butylbenzene	ND		3.4	0.49
98-06-6	tert-Butylbenzene	ND		3.4	0.50
75-15-0	Carbon disulfide	ND		3.4	1.4
56-23-5	Carbon tetrachloride	ND		3.4	0.42
108-90-7	Chlorobenzene	ND		3.4	0.47
75-00-3	Chloroethane	ND		6.8	0.38
67-66-3	Chloroform	ND		3.4	0.45
74-87-3	Chloromethane	ND		6.8	0.54
95-49-8	2-Chlorotoluene	ND		3.4	0.44
106-43-4	4-Chlorotoluene	ND		3.4	0.46
124-48-1	Chlorodibromomethane	ND		3.4	0.48
95-50-1	1,2-Dichlorobenzene	ND		3.4	0.46
541-73-1	1,3-Dichlorobenzene	ND		3.4	0.49
106-46-7	1,4-Dichlorobenzene	ND		3.4	0.48
142-28-9	1,3-Dichloropropane	ND		3.4	0.50
563-58-6	1,1-Dichloropropene	ND		3.4	0.47
96-12-8	1,2-Dibromo-3-Chloropropane	ND		6.8	1.2
106-93-4	Ethylene Dibromide	ND		3.4	0.97
74-95-3	Dibromomethane	ND		6.8	0.58
75-71-8	Dichlorodifluoromethane	ND		6.8	0.54
75-34-3	1,1-Dichloroethane	ND		3.4	0.46
107-06-2	1,2-Dichloroethane	ND		3.4	0.52
75-35-4	1,1-Dichloroethene	ND		3.4	0.42
156-59-2	cis-1,2-Dichloroethene	ND		3.4	0.46
156-60-5	trans-1,2-Dichloroethene	ND		3.4	0.51
78-87-5	1,2-Dichloropropane	ND		3.4	0.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-A3S-3.5-4 Lab Sample ID: 720-88164-8

Matrix: Solid Lab File ID: 08271816.D

Analysis Method: 8260B Date Collected: 08/21/2018 11:10

Sample wt/vol: 7.36(g) Date Analyzed: 08/27/2018 16:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250267 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.4	0.47
10061-02-6	trans-1,3-Dichloropropene	ND		3.4	0.46
100-41-4	Ethylbenzene	ND		3.4	0.51
87-68-3	Hexachlorobutadiene	ND		3.4	0.61
591-78-6	2-Hexanone	ND		34	6.8
98-82-8	Isopropylbenzene	ND		3.4	0.46
99-87-6	4-Isopropyltoluene	ND		3.4	1.7
75-09-2	Methylene Chloride	ND		6.8	3.8
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		34	6.8
91-20-3	Naphthalene	ND		6.8	1.0
103-65-1	N-Propylbenzene	ND		3.4	0.45
100-42-5	Styrene	ND		3.4	0.43
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.4	0.52
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.4	0.51
127-18-4	Tetrachloroethene	ND		3.4	0.46
108-88-3	Toluene	ND		3.4	0.48
87-61-6	1,2,3-Trichlorobenzene	ND		3.4	0.50
120-82-1	1,2,4-Trichlorobenzene	ND		3.4	0.48
71-55-6	1,1,1-Trichloroethane	ND		3.4	0.41
79-00-5	1,1,2-Trichloroethane	ND		3.4	0.48
79-01-6	Trichloroethene	ND		3.4	0.43
75-69-4	Trichlorofluoromethane	ND		3.4	0.38
96-18-4	1,2,3-Trichloropropane	ND		3.4	0.52
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.4	1.4
95-63-6	1,2,4-Trimethylbenzene	ND		3.4	1.1
108-67-8	1,3,5-Trimethylbenzene	ND		3.4	0.44
108-05-4	Vinyl acetate	ND		14	3.4
75-01-4	Vinyl chloride	ND		3.4	0.50
1330-20-7	Xylenes, Total	ND		3.4	0.83
594-20-7	2,2-Dichloropropane	ND		3.4	1.4
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		170	68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-A3S-3.5-4 Lab Sample ID: 720-88164-8

Matrix: Solid Lab File ID: 08271816.D

Analysis Method: 8260B Date Collected: 08/21/2018 11:10

Sample wt/vol: 7.36(g) Date Analyzed: 08/27/2018 16:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250267 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	99		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		60-140
2037-26-5	Toluene-d8 (Surr)	94		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271816.D
Lims ID: 720-88164-A-8-A
Client ID: DG-A3S-3.5-4
Sample Type: Client
Inject. Date: 27-Aug-2018 16:48:30 ALS Bottle#: 15 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88164-A-8
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 28-Aug-2018 10:11:09 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: chaijita Date: 28-Aug-2018 10:11:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.813	6.825	-0.012	0	371293	250.0	
* 2 Fluorobenzene	96	10.598	10.605	-0.007	98	941912	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	86	726911	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	386169	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.185	0.000	94	78586	7.44	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.703	0.000	0	99599	7.52	
$ 10 Toluene-d8 (Surr)	98	12.708	12.701	0.000	93	268559	7.05	
$ 11 4-Bromofluorobenzene	95	15.933	15.932	-0.006	93	104616	7.40	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	0.000	84	93693	6.27	
28 Acetone	58	6.368	6.370	-0.006	99	11303	10.2	
34 Methylene Chloride	84	7.081	7.075	0.006	96	2496	0.2449	
144 Methyl acetate	43	7.124	7.120	0.000	98	7168	0.8904	
140 Ethyl acetate	43	9.007	8.996	0.006	99	41396	3.32	
62 n-Heptane	43	10.952	10.940	0.006	89	1534	0.0804	
75 Toluene	92	12.793	12.788	0.000	97	2525	0.1057	
84 Ethylbenzene	91	14.707	14.701	0.000	89	1392	0.0299	
85 m-Xylene & p-Xylene	91	14.933	14.933	-0.006	0	3305	0.0901	
29 Pentane	43	6.374	6.410	-0.036	69	39196	NR	
131 n-Octane	43	13.110	13.110	0.000	84	1762	NR	
135 n-Nonane	57	15.067	15.055	0.012	85	925	NR	
99 n-Decane	57	16.829	16.829	0.000	92	908	NR	
110 Dodecane	57	19.944	19.938	0.006	83	757	NR	
115 C13	57	21.383	21.377	0.006	63	1012	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	572698	6.63	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	235003	2.72	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	313845	3.63	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	690108	7.99	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	362129	4.19	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	648324	7.51	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	479539	5.55	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	134938	1.56	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 121 C7-C12	1	15.451	(10.897-20.005)		0	310509	3.60	
S 122 Xylenes, Total	1				0		0.0901	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

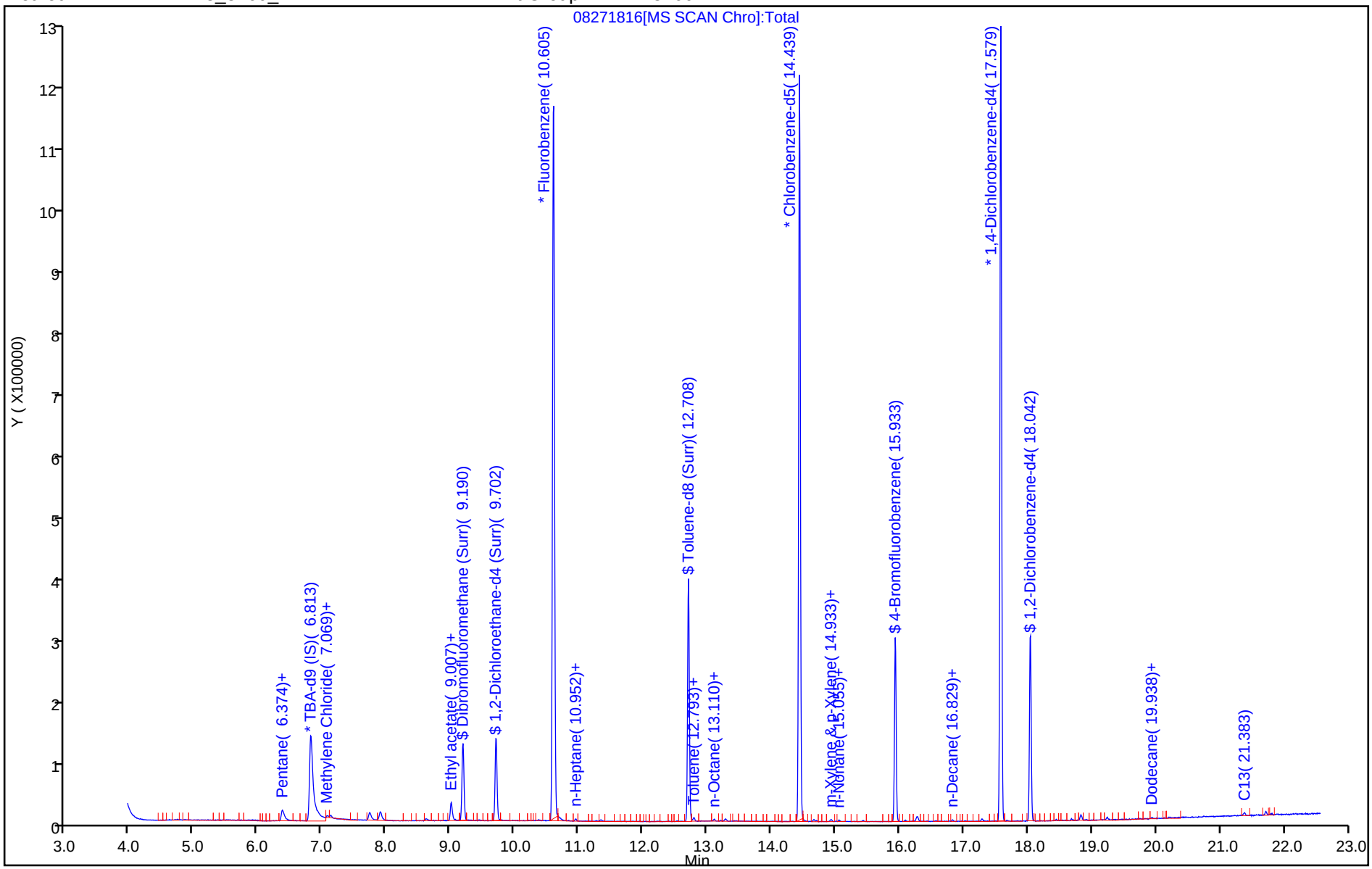
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 28-Aug-2018 10:11:11 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271816.D

Injection Date:	27-Aug-2018 16:48:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88164-A-8-A	Lab Sample ID:	720-88164-8	Worklist Smp#:	14
Client ID:	DG-A3S-3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271816.D
Lims ID: 720-88164-A-8-A
Client ID: DG-A3S-3.5-4
Sample Type: Client
Inject. Date: 27-Aug-2018 16:48:30 ALS Bottle#: 15 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88164-A-8
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 28-Aug-2018 10:11:09 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: chaijita Date: 28-Aug-2018 10:11:09

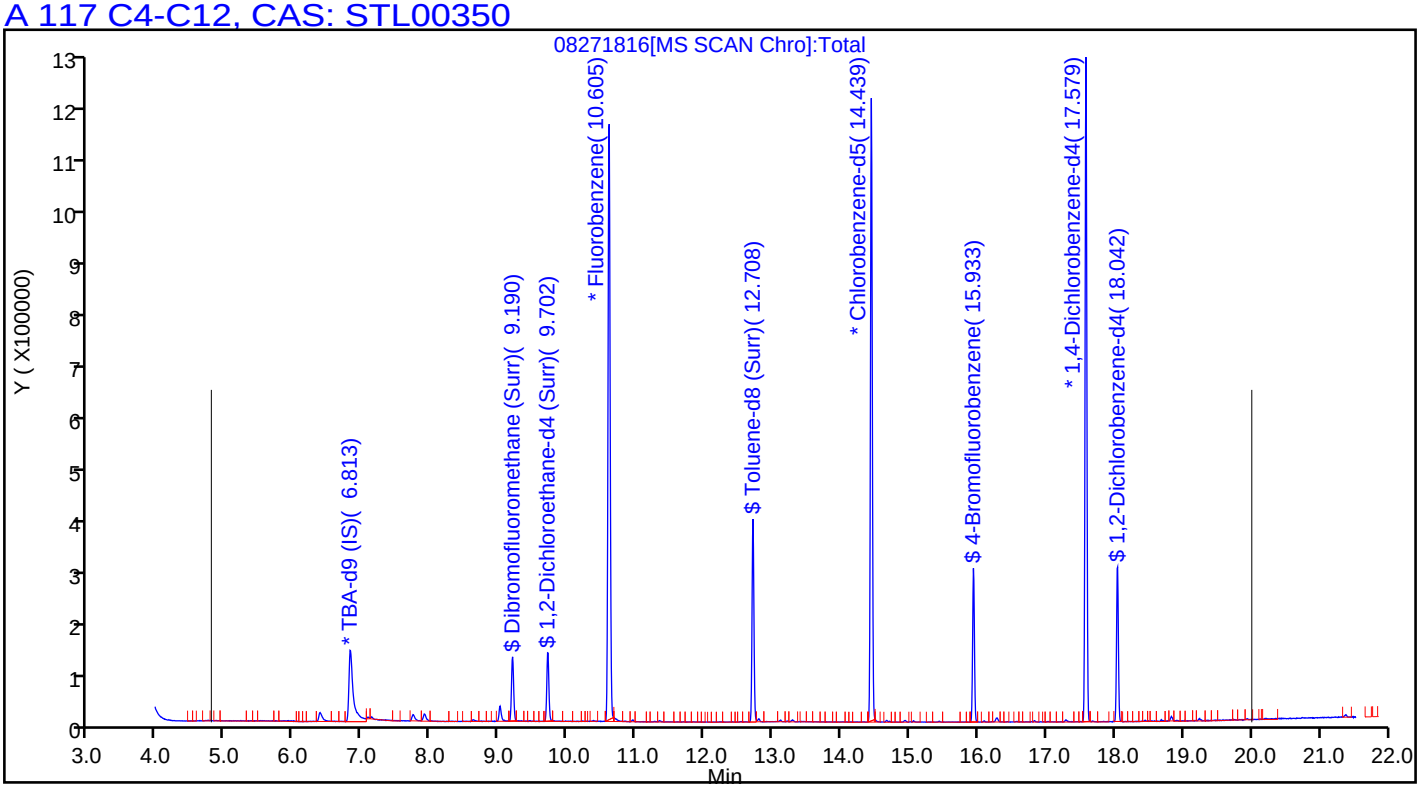
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.52	100.27
$ 10 Toluene-d8 (Surr)	7.50	7.05	94.00
$ 11 4-Bromofluorobenzene	7.50	7.40	98.67
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 28-Aug-2018 10:11:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271816.D				
Injection Date:	27-Aug-2018 16:48:30	Instrument ID:	HP13		
Lims ID:	720-88164-A-8-A	Lab Sample ID:	720-88164-8		
Client ID:	DG-A3S-3.5-4				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



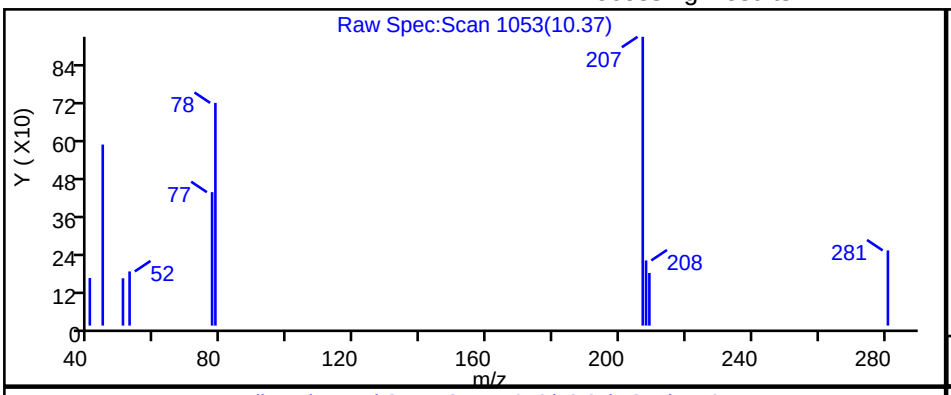
User Disabled Compound Report

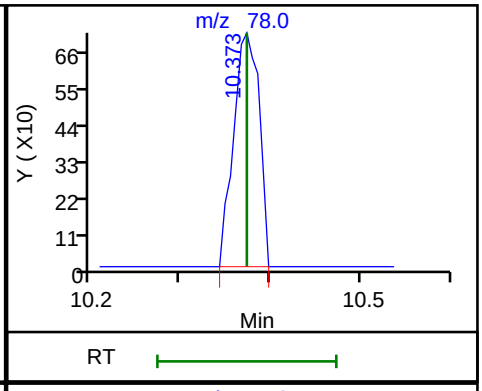
TestAmerica Pleasanton

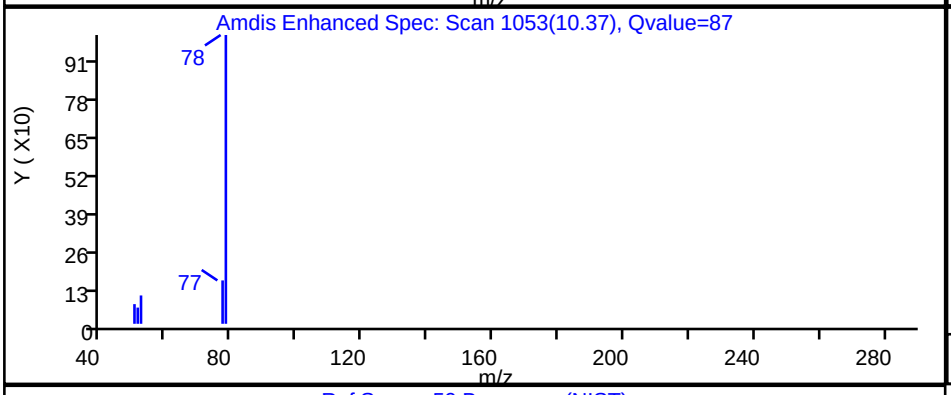
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271816.D				
Injection Date:	27-Aug-2018 16:48:30	Instrument ID:	HP13		
Lims ID:	720-88164-A-8-A	Lab Sample ID:	720-88164-8		
Client ID:	DG-A3S-3.5-4				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

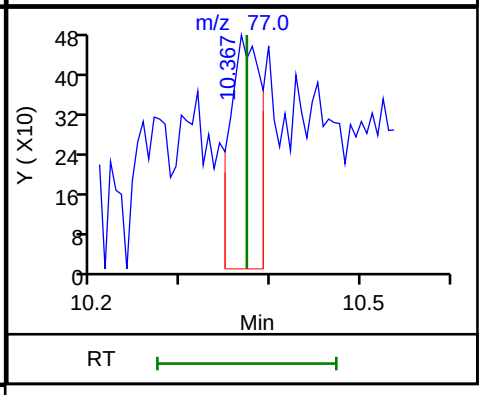
59 Benzene, CAS: 71-43-2

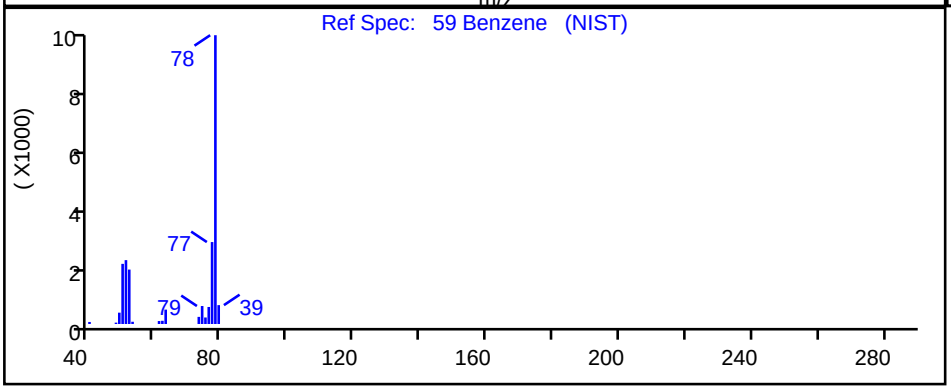
Processing Results











RT	Mass	Response	Amount
10.37	78.00	1410	0.035179
10.37	77.00	1115	

Reviewer: chaijita, 28-Aug-2018 10:10:47

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

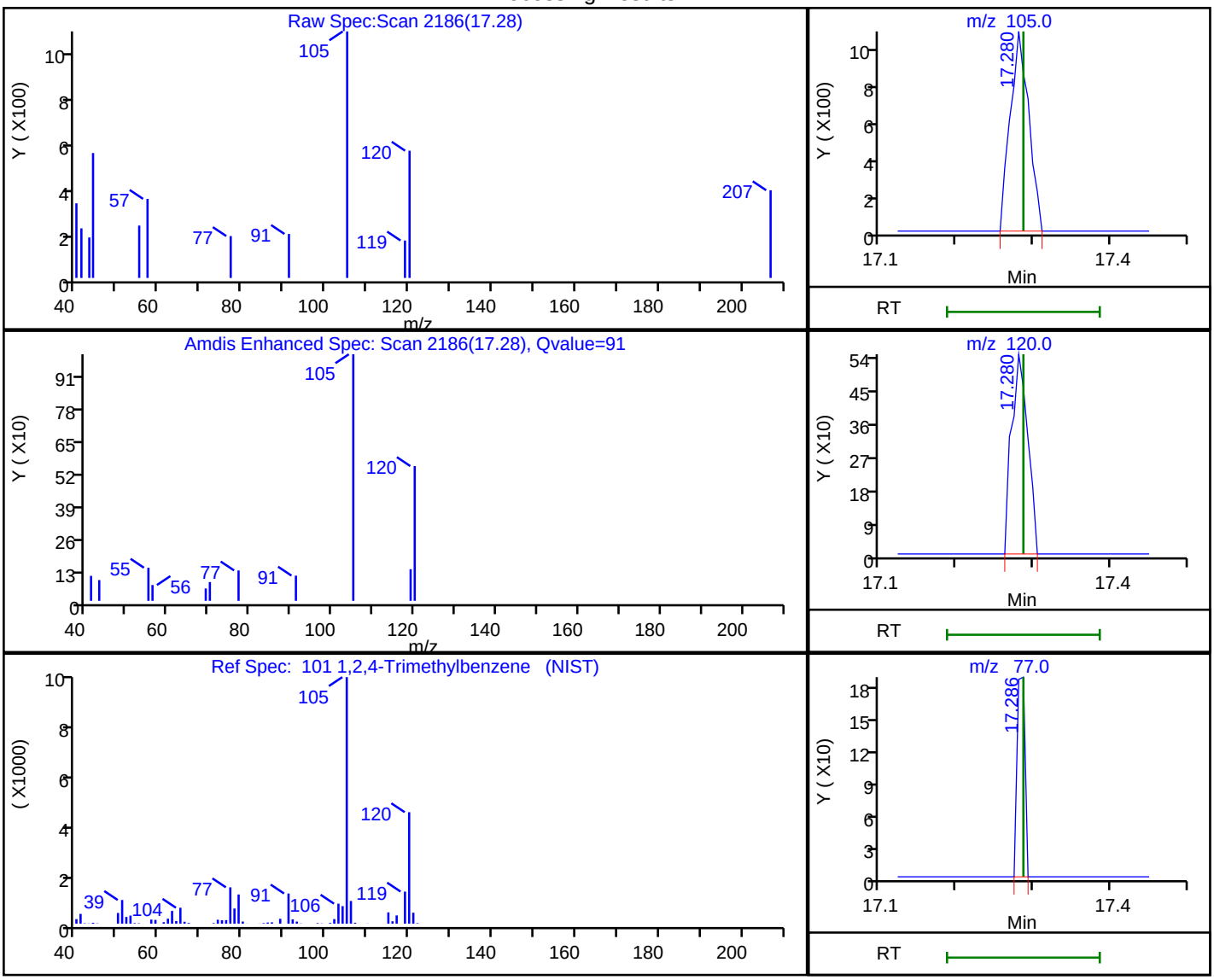
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271816.D				
Injection Date:	27-Aug-2018 16:48:30	Instrument ID:	HP13		
Lims ID:	720-88164-A-8-A	Lab Sample ID:	720-88164-8		
Client ID:	DG-A3S-3.5-4				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

101 1,2,4-Trimethylbenzene, CAS: 95-63-6

Processing Results



RT	Mass	Response	Amount
17.28	105.00	1771	0.042562
17.28	120.00	801	
17.29	77.00	132	

Reviewer: chaijita, 28-Aug-2018 10:00:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-A3S-9.5-10 Lab Sample ID: 720-88164-9

Matrix: Solid Lab File ID: 08271817.D

Analysis Method: 8260B Date Collected: 08/21/2018 11:30

Sample wt/vol: 6.905(g) Date Analyzed: 08/27/2018 17:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250267 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.6	0.87
67-64-1	Acetone	39		36	28
71-43-2	Benzene	ND		3.6	0.47
75-27-4	Dichlorobromomethane	ND		3.6	0.52
108-86-1	Bromobenzene	ND		3.6	0.57
74-97-5	Chlorobromomethane	ND		14	0.52
75-25-2	Bromoform	ND		3.6	1.4
74-83-9	Bromomethane	ND		7.2	0.57
78-93-3	2-Butanone (MEK)	ND		36	15
104-51-8	n-Butylbenzene	ND		3.6	0.72
135-98-8	sec-Butylbenzene	ND		3.6	0.52
98-06-6	tert-Butylbenzene	ND		3.6	0.53
75-15-0	Carbon disulfide	ND		3.6	1.4
56-23-5	Carbon tetrachloride	ND		3.6	0.45
108-90-7	Chlorobenzene	ND		3.6	0.50
75-00-3	Chloroethane	ND		7.2	0.41
67-66-3	Chloroform	ND		3.6	0.48
74-87-3	Chloromethane	ND		7.2	0.57
95-49-8	2-Chlorotoluene	ND		3.6	0.47
106-43-4	4-Chlorotoluene	ND		3.6	0.49
124-48-1	Chlorodibromomethane	ND		3.6	0.51
95-50-1	1,2-Dichlorobenzene	ND		3.6	0.49
541-73-1	1,3-Dichlorobenzene	ND		3.6	0.52
106-46-7	1,4-Dichlorobenzene	ND		3.6	0.51
142-28-9	1,3-Dichloropropane	ND		3.6	0.53
563-58-6	1,1-Dichloropropene	ND		3.6	0.50
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.2	1.2
106-93-4	Ethylene Dibromide	ND		3.6	1.0
74-95-3	Dibromomethane	ND		7.2	0.62
75-71-8	Dichlorodifluoromethane	ND		7.2	0.57
75-34-3	1,1-Dichloroethane	ND		3.6	0.49
107-06-2	1,2-Dichloroethane	ND		3.6	0.55
75-35-4	1,1-Dichloroethene	ND		3.6	0.45
156-59-2	cis-1,2-Dichloroethene	ND		3.6	0.49
156-60-5	trans-1,2-Dichloroethene	ND		3.6	0.54
78-87-5	1,2-Dichloropropane	ND		3.6	0.46

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-A3S-9.5-10 Lab Sample ID: 720-88164-9

Matrix: Solid Lab File ID: 08271817.D

Analysis Method: 8260B Date Collected: 08/21/2018 11:30

Sample wt/vol: 6.905(g) Date Analyzed: 08/27/2018 17:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250267 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.6	0.50
10061-02-6	trans-1,3-Dichloropropene	ND		3.6	0.49
100-41-4	Ethylbenzene	ND		3.6	0.54
87-68-3	Hexachlorobutadiene	ND		3.6	0.65
591-78-6	2-Hexanone	ND		36	7.2
98-82-8	Isopropylbenzene	ND		3.6	0.49
99-87-6	4-Isopropyltoluene	ND		3.6	1.8
75-09-2	Methylene Chloride	ND		7.2	4.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		36	7.2
91-20-3	Naphthalene	ND		7.2	1.1
103-65-1	N-Propylbenzene	ND		3.6	0.48
100-42-5	Styrene	ND		3.6	0.46
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.6	0.55
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.6	0.54
127-18-4	Tetrachloroethene	ND		3.6	0.49
108-88-3	Toluene	ND		3.6	0.51
87-61-6	1,2,3-Trichlorobenzene	ND		3.6	0.54
120-82-1	1,2,4-Trichlorobenzene	ND		3.6	0.51
71-55-6	1,1,1-Trichloroethane	ND		3.6	0.44
79-00-5	1,1,2-Trichloroethane	ND		3.6	0.51
79-01-6	Trichloroethene	ND		3.6	0.46
75-69-4	Trichlorofluoromethane	ND		3.6	0.41
96-18-4	1,2,3-Trichloropropane	ND		3.6	0.56
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.6	1.5
95-63-6	1,2,4-Trimethylbenzene	ND		3.6	1.2
108-67-8	1,3,5-Trimethylbenzene	ND		3.6	0.47
108-05-4	Vinyl acetate	ND		14	3.6
75-01-4	Vinyl chloride	ND		3.6	0.53
1330-20-7	Xylenes, Total	ND		3.6	0.88
594-20-7	2,2-Dichloropropane	ND		3.6	1.4
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		180	72

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-A3S-9.5-10 Lab Sample ID: 720-88164-9

Matrix: Solid Lab File ID: 08271817.D

Analysis Method: 8260B Date Collected: 08/21/2018 11:30

Sample wt/vol: 6.905(g) Date Analyzed: 08/27/2018 17:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250267 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	98		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		60-140
2037-26-5	Toluene-d8 (Surr)	95		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271817.D
Lims ID: 720-88164-A-9-A
Client ID: DG-A3S-9.5-10
Sample Type: Client
Inject. Date: 27-Aug-2018 17:19:30 ALS Bottle#: 16 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88164-A-9
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 28-Aug-2018 10:14:29 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK020

First Level Reviewer: chaijita Date: 28-Aug-2018 10:14:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.825	-0.006	0	304037	250.0	
* 2 Fluorobenzene	96	10.599	10.605	-0.006	99	767075	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	86	614867	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	335556	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.185	0.000	94	63265	7.35	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.709	9.703	0.000	0	80665	7.48	
$ 10 Toluene-d8 (Surr)	98	12.708	12.701	0.000	93	220180	7.10	
$ 11 4-Bromofluorobenzene	95	15.933	15.932	-0.006	94	87524	7.32	
$ 12 1,2-Dichlorobenzene-d4	152	18.036	18.036	-0.006	84	79613	6.13	
28 Acetone	58	6.374	6.370	0.000	99	24365	27.1	
34 Methylene Chloride	84	7.081	7.075	0.006	95	2119	0.2553	
45 2-Butanone (MEK)	72	8.648	8.630	0.013	99	3269	3.18	
140 Ethyl acetate	43	9.014	8.996	0.013	98	8105	0.7979	
62 n-Heptane	43	10.946	10.940	0.000	85	1458	0.0939	
75 Toluene	92	12.793	12.788	0.000	98	3597	0.1780	
128 Butyl Ether	87	14.659	14.659	-0.006	96	879	0.1437	
85 m-Xylene & p-Xylene	91	14.927	14.933	-0.012	0	1995	0.0643	
29 Pentane	43	6.380	6.410	-0.030	70	80657	NR	
131 n-Octane	43	13.104	13.110	-0.006	80	1304	NR	
135 n-Nonane	57	15.061	15.055	0.006	82	537	NR	
110 Dodecane	57	19.938	19.938	0.000	74	547	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	662852	9.42	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	214676	3.05	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	299294	4.26	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	783524	11.1	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	350569	4.98	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	707837	10.1	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	471241	6.70	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	144709	2.06	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	340201	4.84	
S 122 Xylenes, Total	1				0		0.0643	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 28-Aug-2018 10:14:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271817.D

Injection Date:	27-Aug-2018 17:19:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88164-A-9-A	Lab Sample ID:	720-88164-9	Worklist Smp#:	15
Client ID:	DG-A3S-9.5-10				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271817.D
Lims ID: 720-88164-A-9-A
Client ID: DG-A3S-9.5-10
Sample Type: Client
Inject. Date: 27-Aug-2018 17:19:30 ALS Bottle#: 16 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88164-A-9
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 28-Aug-2018 10:14:29 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK020

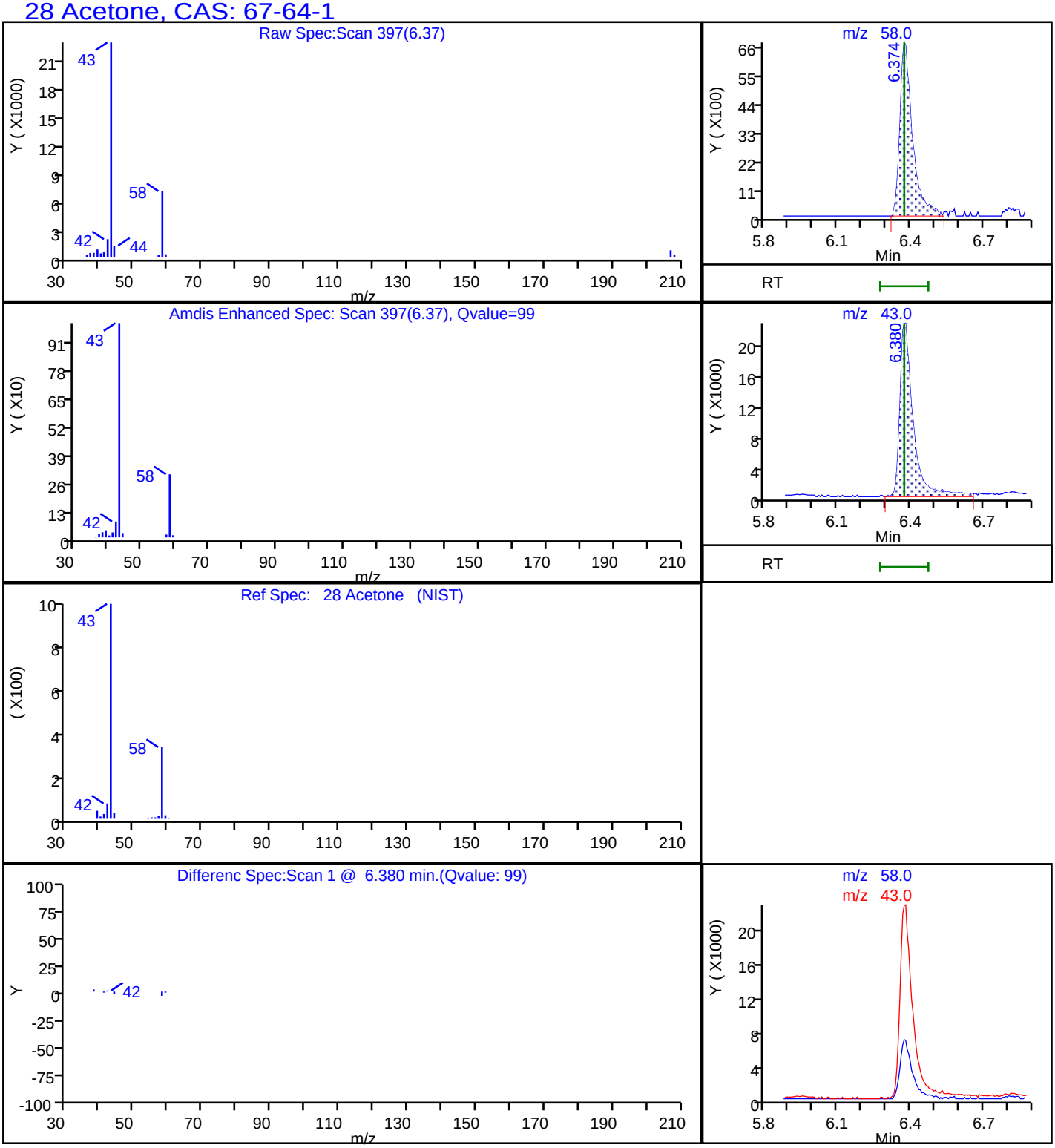
First Level Reviewer: chaijita Date: 28-Aug-2018 10:14:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.48	99.72
$ 10 Toluene-d8 (Surr)	7.50	7.10	94.63
$ 11 4-Bromofluorobenzene	7.50	7.32	97.59
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271817.D

Injection Date:	27-Aug-2018 17:19:30	Instrument ID:	HP13		
Lims ID:	720-88164-A-9-A	Lab Sample ID:	720-88164-9		
Client ID:	DG-A3S-9.5-10				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1

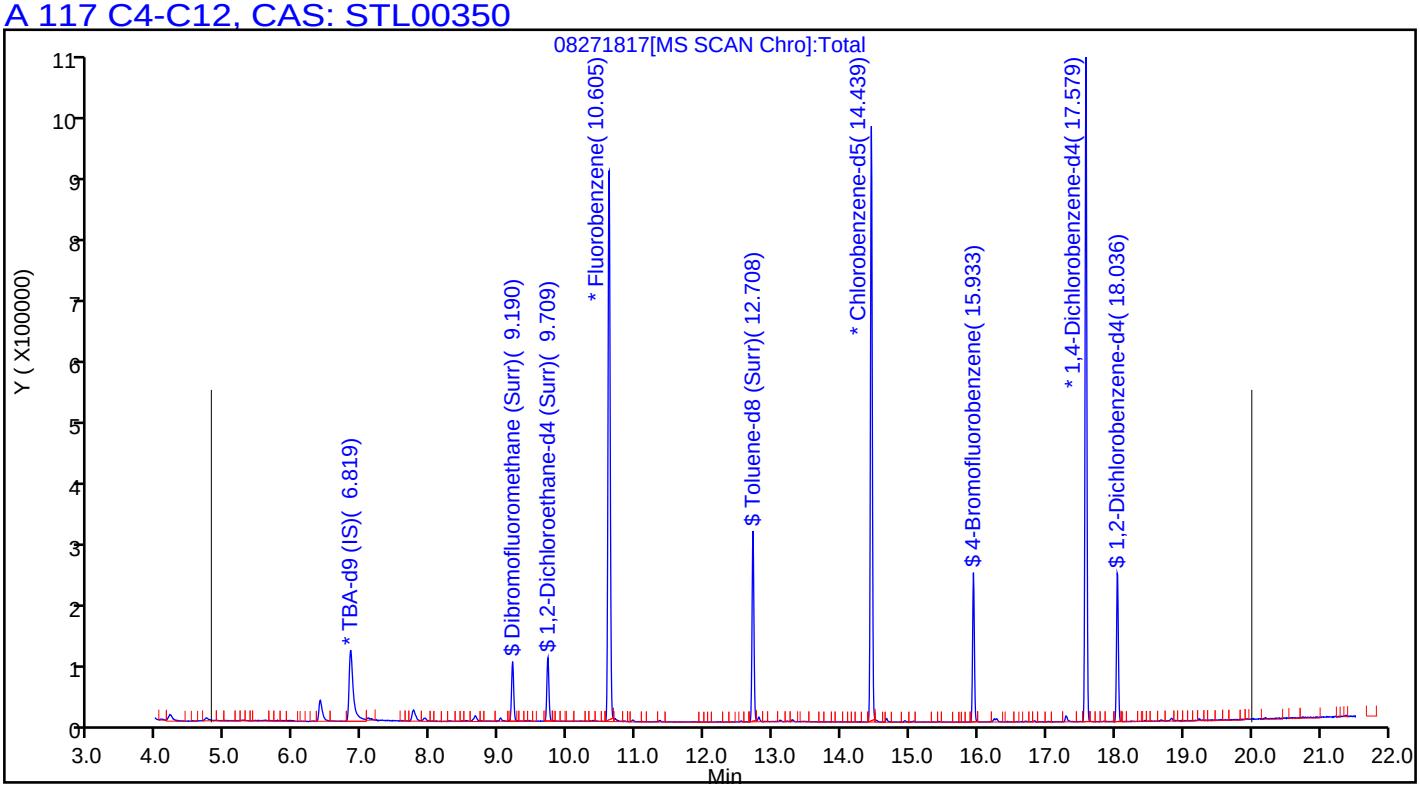


Report Date: 28-Aug-2018 10:14:31 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271817.D				
Injection Date:	27-Aug-2018 17:19:30	Instrument ID:	HP13		
Lims ID:	720-88164-A-9-A	Lab Sample ID:	720-88164-9		
Client ID:	DG-A3S-9.5-10				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



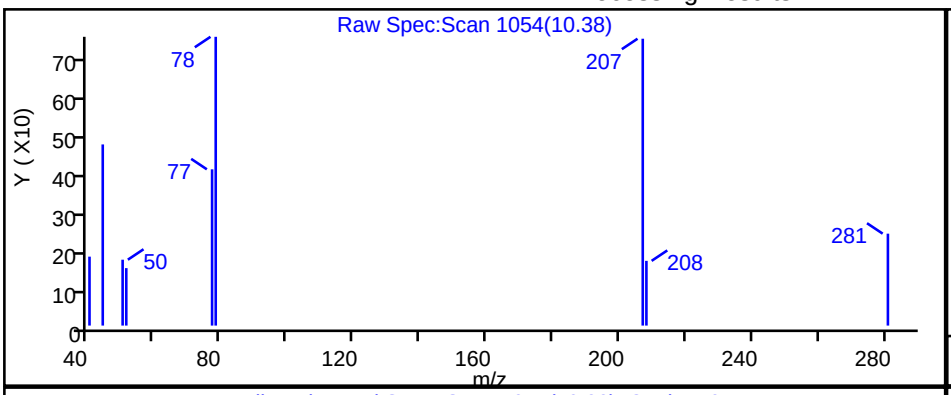
User Disabled Compound Report

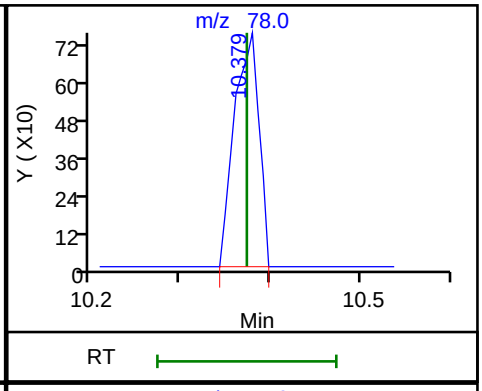
TestAmerica Pleasanton

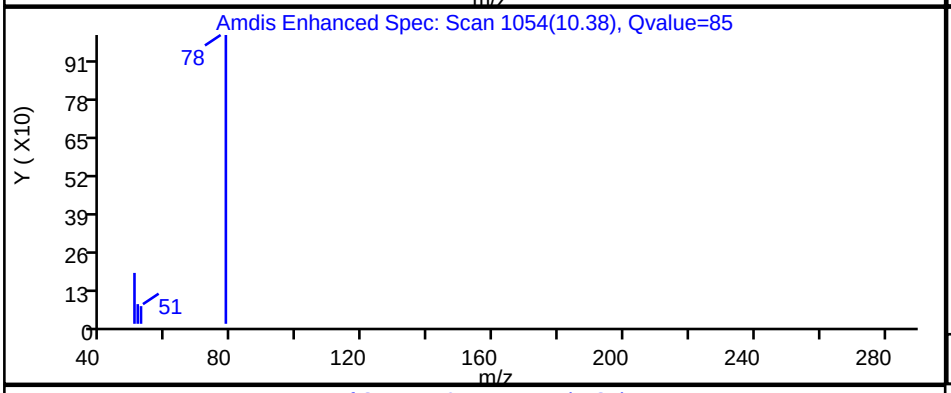
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271817.D				
Injection Date:	27-Aug-2018 17:19:30	Instrument ID:	HP13		
Lims ID:	720-88164-A-9-A	Lab Sample ID:	720-88164-9		
Client ID:	DG-A3S-9.5-10				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

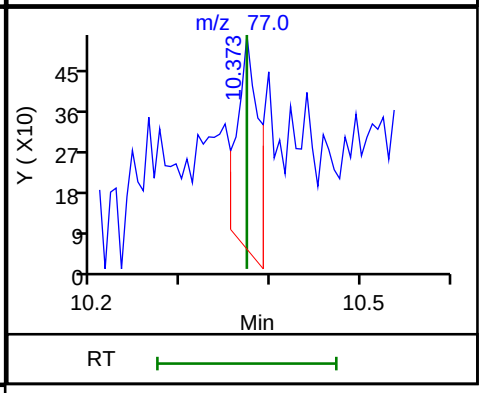
59 Benzene, CAS: 71-43-2

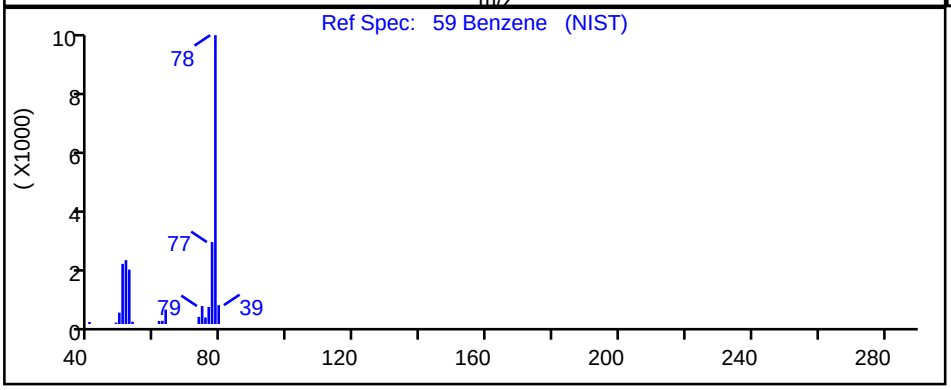
Processing Results











RT	Mass	Response	Amount
10.38	78.00	1437	0.044024
10.37	77.00	813	

Reviewer: chaijita, 28-Aug-2018 10:14:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

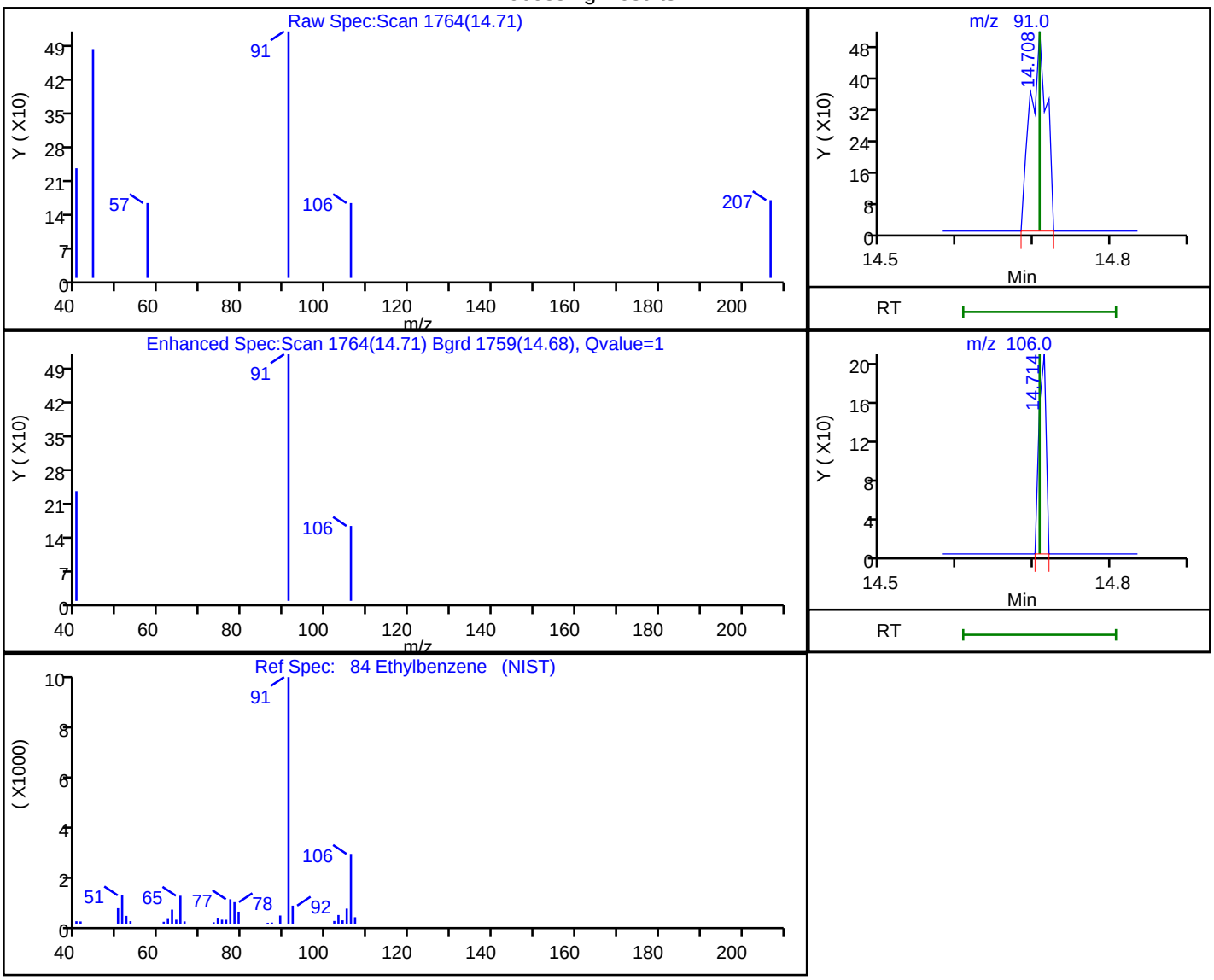
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180827-53498.b\08271817.D				
Injection Date:	27-Aug-2018 17:19:30	Instrument ID:	HP13		
Lims ID:	720-88164-A-9-A	Lab Sample ID:	720-88164-9		
Client ID:	DG-A3S-9.5-10				
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

84 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
14.71	91.00	745	0.018948
14.71	106.00	133	

Reviewer: chaijita, 28-Aug-2018 10:14:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-C3S-0.5-1 Lab Sample ID: 720-88164-12

Matrix: Solid Lab File ID: 08281816.D

Analysis Method: 8260B Date Collected: 08/21/2018 12:05

Sample wt/vol: 4.702(g) Date Analyzed: 08/28/2018 15:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250352 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND	*	5.3	1.3
67-64-1	Acetone	76	*	53	40
71-43-2	Benzene	0.86	J *	5.3	0.69
75-27-4	Dichlorobromomethane	ND	*	5.3	0.77
108-86-1	Bromobenzene	ND	*	5.3	0.84
74-97-5	Chlorobromomethane	ND	*	21	0.77
75-25-2	Bromoform	ND	*	5.3	2.1
74-83-9	Bromomethane	ND	*	11	0.84
78-93-3	2-Butanone (MEK)	ND	*	53	22
104-51-8	n-Butylbenzene	ND	*	5.3	1.1
135-98-8	sec-Butylbenzene	ND	*	5.3	0.77
98-06-6	tert-Butylbenzene	ND	*	5.3	0.78
75-15-0	Carbon disulfide	ND	*	5.3	2.1
56-23-5	Carbon tetrachloride	ND	*	5.3	0.66
108-90-7	Chlorobenzene	ND	*	5.3	0.73
75-00-3	Chloroethane	ND	*	11	0.60
67-66-3	Chloroform	ND	*	5.3	0.70
74-87-3	Chloromethane	ND	*	11	0.84
95-49-8	2-Chlorotoluene	ND	*	5.3	0.69
106-43-4	4-Chlorotoluene	ND	*	5.3	0.72
124-48-1	Chlorodibromomethane	ND	*	5.3	0.75
95-50-1	1,2-Dichlorobenzene	ND	*	5.3	0.72
541-73-1	1,3-Dichlorobenzene	ND	*	5.3	0.77
106-46-7	1,4-Dichlorobenzene	ND	*	5.3	0.75
142-28-9	1,3-Dichloropropane	ND	*	5.3	0.78
563-58-6	1,1-Dichloropropene	ND	*	5.3	0.73
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	11	1.8
106-93-4	Ethylene Dibromide	ND	*	5.3	1.5
74-95-3	Dibromomethane	ND	*	11	0.91
75-71-8	Dichlorodifluoromethane	ND	*	11	0.84
75-34-3	1,1-Dichloroethane	ND	*	5.3	0.72
107-06-2	1,2-Dichloroethane	ND	*	5.3	0.81
75-35-4	1,1-Dichloroethene	ND	*	5.3	0.66
156-59-2	cis-1,2-Dichloroethene	ND	*	5.3	0.72
156-60-5	trans-1,2-Dichloroethene	ND	*	5.3	0.80
78-87-5	1,2-Dichloropropane	ND	*	5.3	0.67

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-C3S-0.5-1 Lab Sample ID: 720-88164-12

Matrix: Solid Lab File ID: 08281816.D

Analysis Method: 8260B Date Collected: 08/21/2018 12:05

Sample wt/vol: 4.702(g) Date Analyzed: 08/28/2018 15:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250352 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND	*	5.3	0.73
10061-02-6	trans-1,3-Dichloropropene	ND	*	5.3	0.71
100-41-4	Ethylbenzene	ND	*	5.3	0.80
87-68-3	Hexachlorobutadiene	ND	*	5.3	0.96
591-78-6	2-Hexanone	ND	*	53	11
98-82-8	Isopropylbenzene	ND	*	5.3	0.72
99-87-6	4-Isopropyltoluene	ND	*	5.3	2.7
75-09-2	Methylene Chloride	ND	*	11	6.0
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	*	53	11
91-20-3	Naphthalene	ND	*	11	1.6
103-65-1	N-Propylbenzene	ND	*	5.3	0.70
100-42-5	Styrene	ND	*	5.3	0.67
630-20-6	1,1,1,2-Tetrachloroethane	ND	*	5.3	0.81
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	5.3	0.80
127-18-4	Tetrachloroethene	ND	*	5.3	0.71
108-88-3	Toluene	1.7	J *	5.3	0.75
87-61-6	1,2,3-Trichlorobenzene	ND	*	5.3	0.79
120-82-1	1,2,4-Trichlorobenzene	ND	*	5.3	0.75
71-55-6	1,1,1-Trichloroethane	ND	*	5.3	0.65
79-00-5	1,1,2-Trichloroethane	ND	*	5.3	0.74
79-01-6	Trichloroethene	18	*	5.3	0.67
75-69-4	Trichlorofluoromethane	ND	*	5.3	0.60
96-18-4	1,2,3-Trichloropropane	ND	*	5.3	0.82
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	5.3	2.2
95-63-6	1,2,4-Trimethylbenzene	ND	*	5.3	1.7
108-67-8	1,3,5-Trimethylbenzene	ND	*	5.3	0.69
108-05-4	Vinyl acetate	ND	*	21	5.3
75-01-4	Vinyl chloride	ND	*	5.3	0.78
1330-20-7	Xylenes, Total	ND		5.3	1.3
594-20-7	2,2-Dichloropropane	ND	*	5.3	2.1
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND	*	270	110

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-C3S-0.5-1 Lab Sample ID: 720-88164-12

Matrix: Solid Lab File ID: 08281816.D

Analysis Method: 8260B Date Collected: 08/21/2018 12:05

Sample wt/vol: 4.702(g) Date Analyzed: 08/28/2018 15:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250352 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	37	* X	45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	156	* X	60-140
2037-26-5	Toluene-d8 (Surr)	60	*	58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281816.D
Lims ID: 720-88164-B-12-A RR
Client ID:
Sample Type: Client
Inject. Date: 28-Aug-2018 15:57:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88164-B-12 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 29-Aug-2018 08:59:01 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 08:59:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	245412	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	524712	25.0	s
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	86	126314	25.0	s
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	12606	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.294	9.294	0.000	92	50901	11.5	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.812	9.812	0.000	0	55785	11.7	
$ 10 Toluene-d8 (Surr)	98	12.822	12.821	0.000	95	93870	4.51	
$ 11 4-Bromofluorobenzene	95	16.053	16.065	0.000	85	5397	2.74	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	80	2801	6.35	
28 Acetone	58	6.474	6.474	0.000	97	14431	35.8	
34 Methylene Chloride	84	7.171	7.192	-0.021	17	584	0.1474	
48 cis-1,2-Dichloroethene	61	8.924	8.933	0.000	80	2525	0.3001	
59 Benzene	78	10.487	10.487	-0.001	94	7624	0.4028	
65 Trichloroethene	132	11.206	11.217	0.000	93	49412	8.48	
75 Toluene	92	12.906	12.915	0.000	98	3162	0.7784	
81 Tetrachloroethene	164	13.783	13.807	-0.010	84	1117	0.2449	
124 Butane	43	5.006	4.996	0.010	1	1665	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	948285	23.4	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	411515	10.2	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	445293	11.0	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	1057532	26.1	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	511153	12.6	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	511153	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	999841	24.7	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	620289	15.3	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	184854	4.56	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	560386	13.8	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard
NC - Not Calibrated
s - Failed ISTD Recovery Test

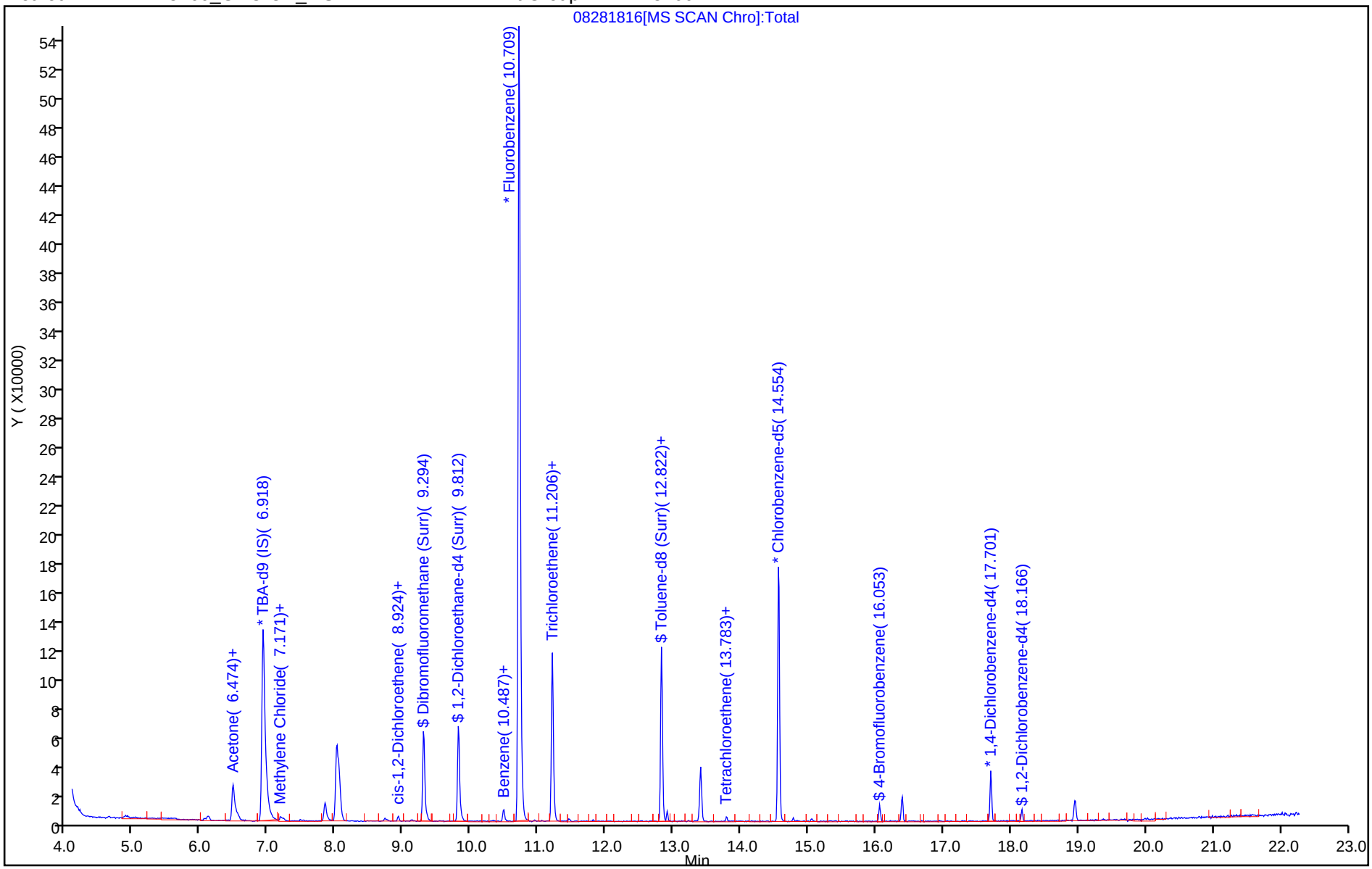
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 08:59:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281816.D				
Injection Date:	28-Aug-2018 15:57:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88164-B-12-A RR	Lab Sample ID:	Client 720-250352/16-A	Worklist Smp#:	16
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281816.D
Lims ID: 720-88164-B-12-A RR
Client ID:
Sample Type: Client
Inject. Date: 28-Aug-2018 15:57:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88164-B-12 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 29-Aug-2018 08:59:01 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 08:59:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	11.5	152.70
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	11.7	155.77
$ 10 Toluene-d8 (Surr)	7.50	4.51	60.07
$ 11 4-Bromofluorobenzene	7.50	2.74	36.59
$ 12 1,2-Dichlorobenzene-d4	6.00	6.35	105.84

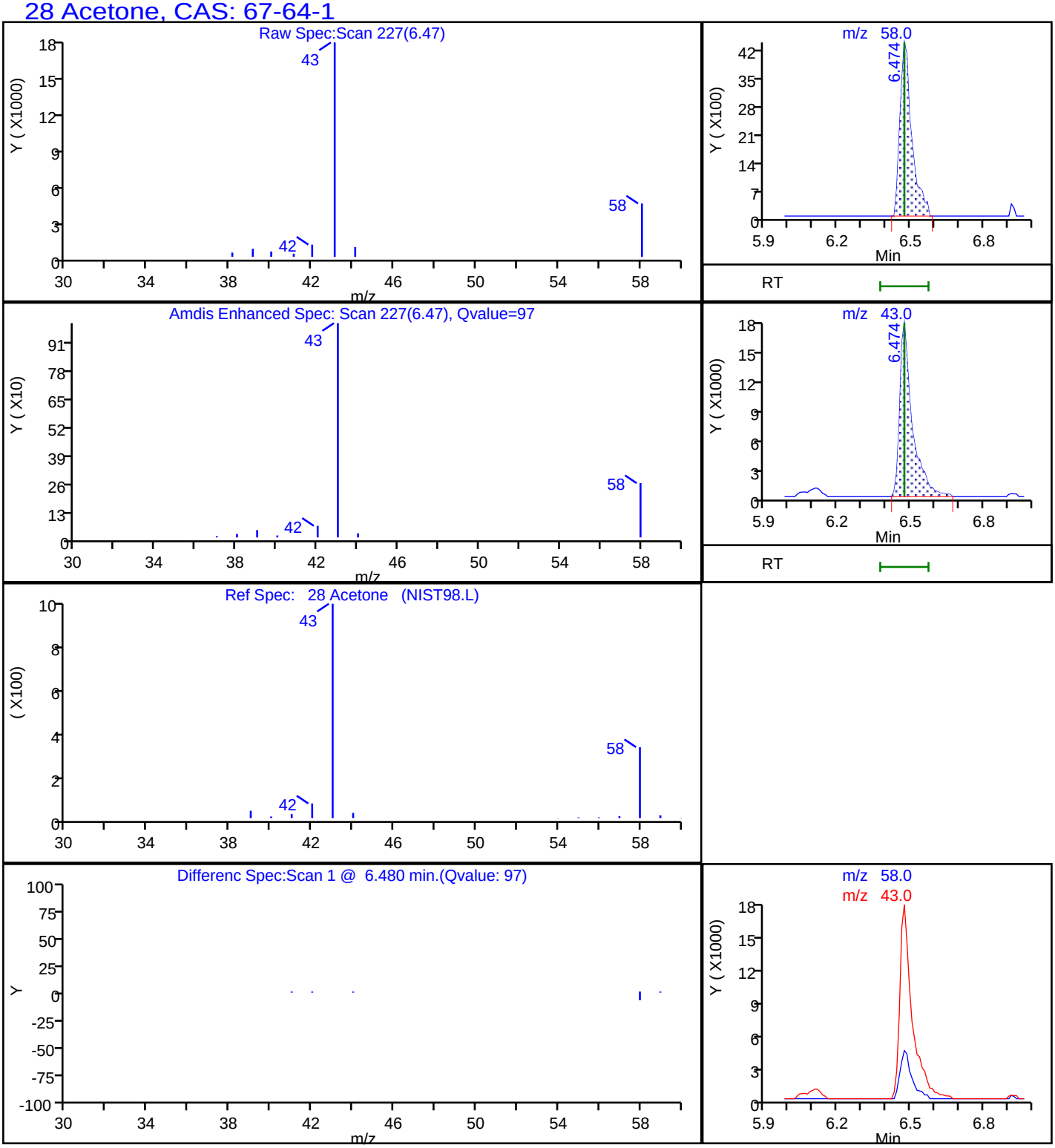
Report Date: 29-Aug-2018 08:59:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281816.D

Injection Date:	28-Aug-2018 15:57:30	Instrument ID:	CHMSV2		
Lims ID:	720-88164-B-12-A RR	Lab Sample ID:	Client 720-250352/16-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



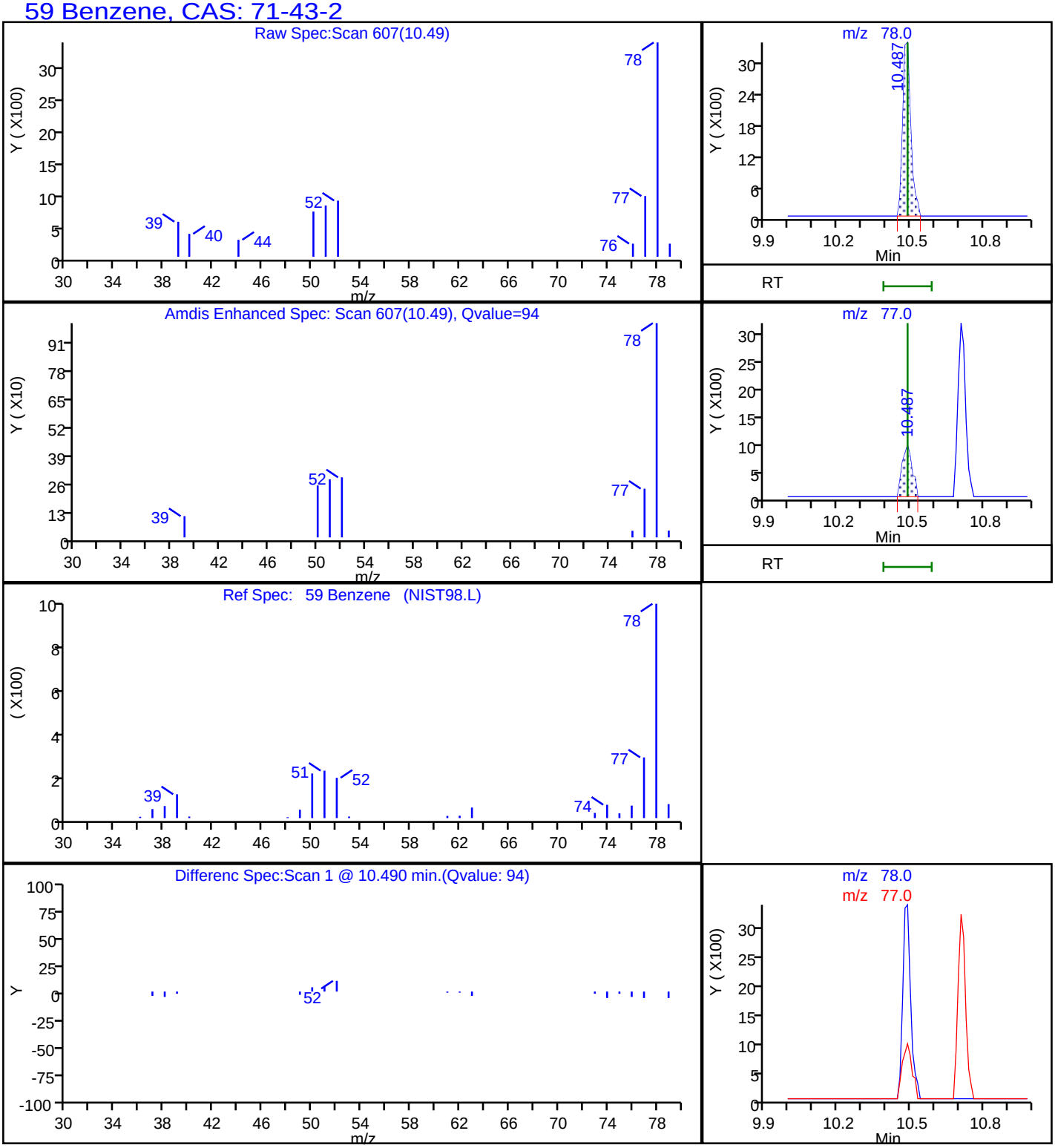
Report Date: 29-Aug-2018 08:59:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281816.D

Injection Date:	28-Aug-2018 15:57:30	Instrument ID:	CHMSV2		
Lims ID:	720-88164-B-12-A RR	Lab Sample ID:	Client 720-250352/16-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

59 Benzene, CAS: 71-43-2



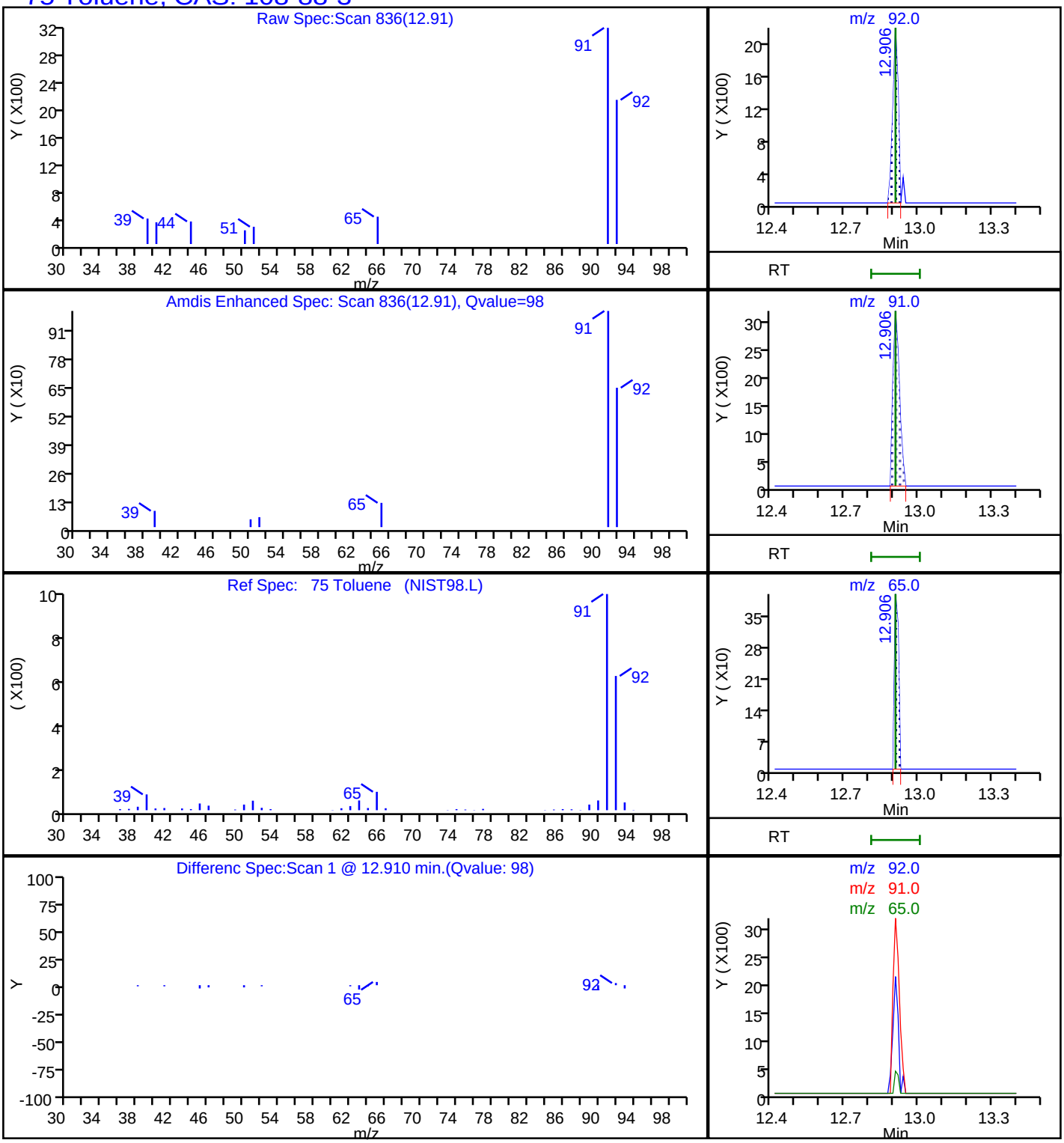
Report Date: 29-Aug-2018 08:59:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281816.D

Injection Date:	28-Aug-2018 15:57:30	Instrument ID:	CHMSV2		
Lims ID:	720-88164-B-12-A RR	Lab Sample ID:	Client 720-250352/16-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

75 Toluene, CAS: 108-88-3



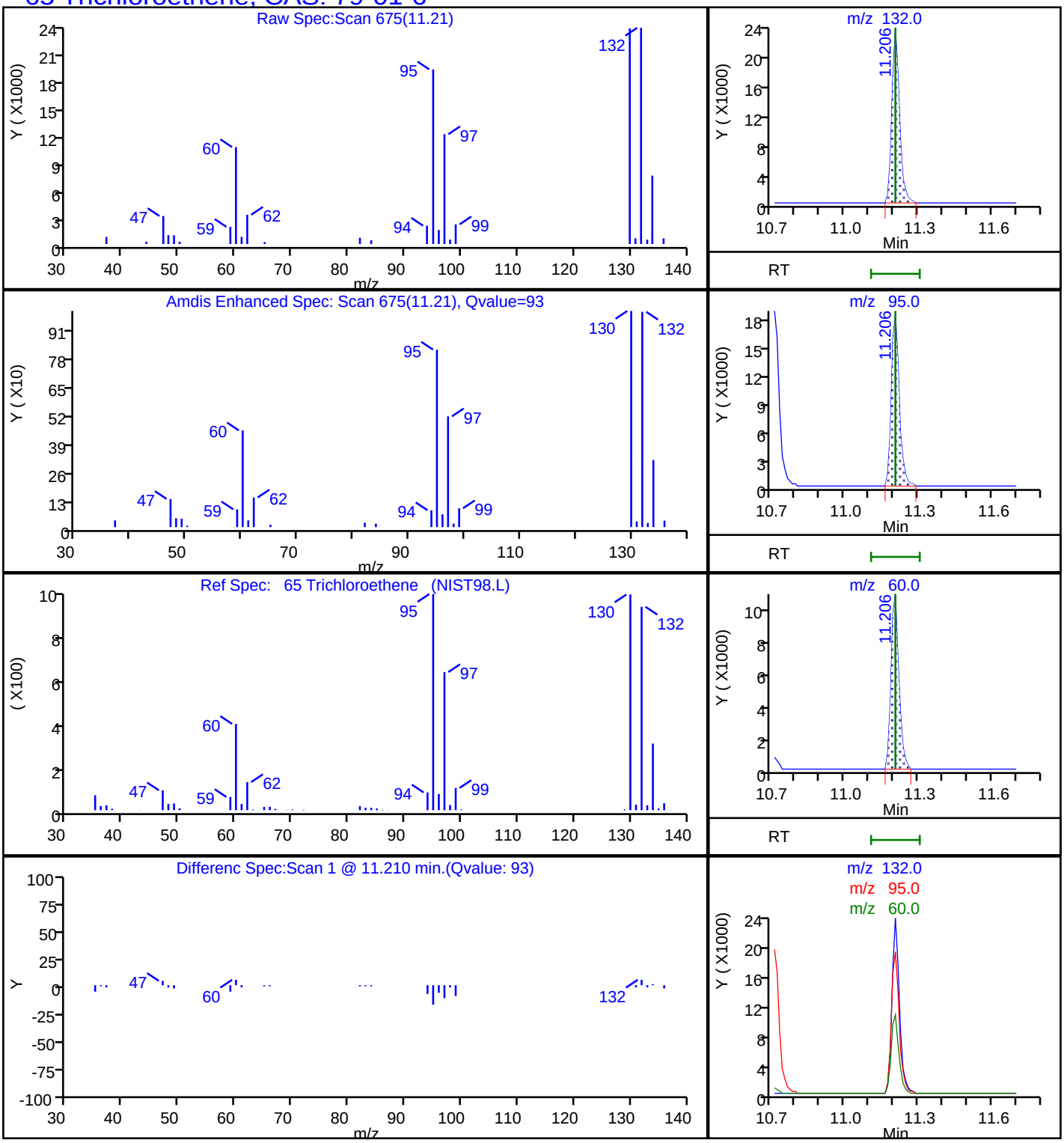
Report Date: 29-Aug-2018 08:59:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281816.D

Injection Date:	28-Aug-2018 15:57:30	Instrument ID:	CHMSV2		
Lims ID:	720-88164-B-12-A RR	Lab Sample ID:	Client 720-250352/16-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

65 Trichloroethene, CAS: 79-01-6



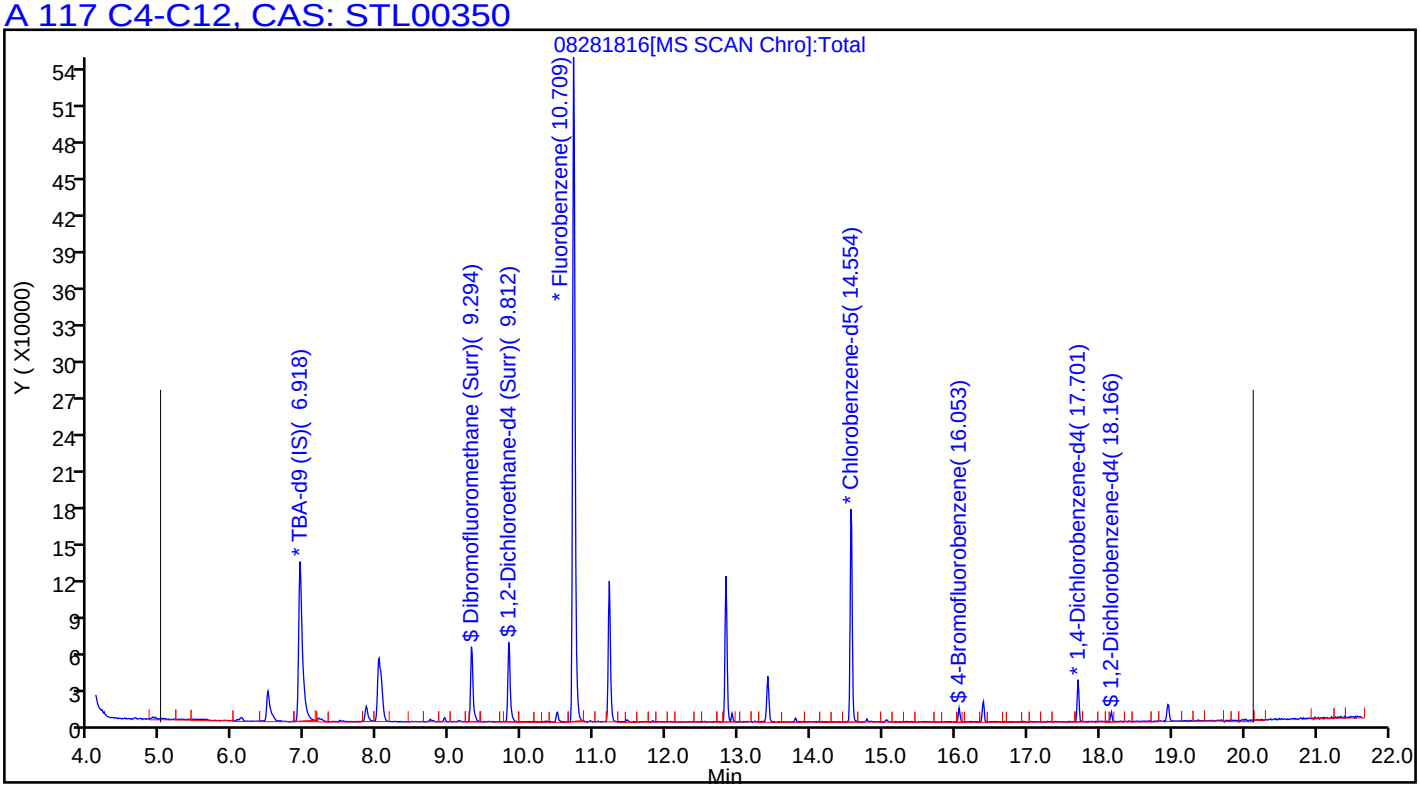
Report Date: 29-Aug-2018 08:59:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281816.D

Injection Date:	28-Aug-2018 15:57:30	Instrument ID:	CHMSV2		
Lims ID:	720-88164-B-12-A RR	Lab Sample ID:	Client 720-250352/16-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-C3S-3.5-4 Lab Sample ID: 720-88164-13

Matrix: Solid Lab File ID: 08281817.D

Analysis Method: 8260B Date Collected: 08/21/2018 12:05

Sample wt/vol: 4.601(g) Date Analyzed: 08/28/2018 16:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250352 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND	*	5.4	1.3
67-64-1	Acetone	44	J *	54	41
71-43-2	Benzene	1.6	J *	5.4	0.71
75-27-4	Dichlorobromomethane	ND	*	5.4	0.78
108-86-1	Bromobenzene	ND	*	5.4	0.86
74-97-5	Chlorobromomethane	ND	*	22	0.78
75-25-2	Bromoform	ND	*	5.4	2.2
74-83-9	Bromomethane	ND	*	11	0.86
78-93-3	2-Butanone (MEK)	ND	*	54	23
104-51-8	n-Butylbenzene	ND	*	5.4	1.1
135-98-8	sec-Butylbenzene	ND	*	5.4	0.78
98-06-6	tert-Butylbenzene	ND	*	5.4	0.79
75-15-0	Carbon disulfide	ND	*	5.4	2.2
56-23-5	Carbon tetrachloride	ND	*	5.4	0.67
108-90-7	Chlorobenzene	ND	*	5.4	0.75
75-00-3	Chloroethane	ND	*	11	0.61
67-66-3	Chloroform	ND	*	5.4	0.72
74-87-3	Chloromethane	ND	*	11	0.86
95-49-8	2-Chlorotoluene	ND	*	5.4	0.71
106-43-4	4-Chlorotoluene	ND	*	5.4	0.74
124-48-1	Chlorodibromomethane	ND	*	5.4	0.77
95-50-1	1,2-Dichlorobenzene	ND	*	5.4	0.74
541-73-1	1,3-Dichlorobenzene	ND	*	5.4	0.78
106-46-7	1,4-Dichlorobenzene	ND	*	5.4	0.77
142-28-9	1,3-Dichloropropane	ND	*	5.4	0.79
563-58-6	1,1-Dichloropropene	ND	*	5.4	0.75
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	11	1.8
106-93-4	Ethylene Dibromide	ND	*	5.4	1.6
74-95-3	Dibromomethane	ND	*	11	0.93
75-71-8	Dichlorodifluoromethane	ND	*	11	0.86
75-34-3	1,1-Dichloroethane	ND	*	5.4	0.74
107-06-2	1,2-Dichloroethane	ND	*	5.4	0.83
75-35-4	1,1-Dichloroethene	ND	*	5.4	0.67
156-59-2	cis-1,2-Dichloroethene	1.4	J *	5.4	0.74
156-60-5	trans-1,2-Dichloroethene	ND	*	5.4	0.82
78-87-5	1,2-Dichloropropane	ND	*	5.4	0.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-C3S-3.5-4 Lab Sample ID: 720-88164-13

Matrix: Solid Lab File ID: 08281817.D

Analysis Method: 8260B Date Collected: 08/21/2018 12:05

Sample wt/vol: 4.601(g) Date Analyzed: 08/28/2018 16:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250352 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND	*	5.4	0.75
10061-02-6	trans-1,3-Dichloropropene	ND	*	5.4	0.73
100-41-4	Ethylbenzene	ND	*	5.4	0.82
87-68-3	Hexachlorobutadiene	ND	*	5.4	0.98
591-78-6	2-Hexanone	ND	*	54	11
98-82-8	Isopropylbenzene	ND	*	5.4	0.74
99-87-6	4-Isopropyltoluene	ND	*	5.4	2.7
75-09-2	Methylene Chloride	ND	*	11	6.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	*	54	11
91-20-3	Naphthalene	ND	*	11	1.6
103-65-1	N-Propylbenzene	ND	*	5.4	0.72
100-42-5	Styrene	ND	*	5.4	0.68
630-20-6	1,1,1,2-Tetrachloroethane	ND	*	5.4	0.83
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	5.4	0.82
127-18-4	Tetrachloroethene	ND	*	5.4	0.73
108-88-3	Toluene	1.6	J *	5.4	0.77
87-61-6	1,2,3-Trichlorobenzene	ND	*	5.4	0.80
120-82-1	1,2,4-Trichlorobenzene	ND	*	5.4	0.77
71-55-6	1,1,1-Trichloroethane	ND	*	5.4	0.66
79-00-5	1,1,2-Trichloroethane	ND	*	5.4	0.76
79-01-6	Trichloroethene	22	*	5.4	0.68
75-69-4	Trichlorofluoromethane	ND	*	5.4	0.61
96-18-4	1,2,3-Trichloropropane	ND	*	5.4	0.84
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	5.4	2.3
95-63-6	1,2,4-Trimethylbenzene	ND	*	5.4	1.8
108-67-8	1,3,5-Trimethylbenzene	ND	*	5.4	0.71
108-05-4	Vinyl acetate	ND	*	22	5.4
75-01-4	Vinyl chloride	ND	*	5.4	0.79
1330-20-7	Xylenes, Total	ND		5.4	1.3
594-20-7	2,2-Dichloropropane	ND	*	5.4	2.2
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND	*	270	110

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-C3S-3.5-4 Lab Sample ID: 720-88164-13

Matrix: Solid Lab File ID: 08281817.D

Analysis Method: 8260B Date Collected: 08/21/2018 12:05

Sample wt/vol: 4.601(g) Date Analyzed: 08/28/2018 16:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250352 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	57	*	45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	126	*	60-140
2037-26-5	Toluene-d8 (Surr)	79	*	58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281817.D
Lims ID: 720-88164-B-13-A RR
Client ID:
Sample Type: Client
Inject. Date: 28-Aug-2018 16:26:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88164-B-13 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 29-Aug-2018 08:59:01 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:00:40

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	140971	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	577936	25.0	s
* 4 Chlorobenzene-d5	117	14.554	14.554	0.000	86	264864	25.0	s
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	51471	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.011	92	43403	8.87	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.812	9.812	0.000	0	49776	9.46	
$ 10 Toluene-d8 (Surr)	98	12.822	12.821	0.000	95	136308	5.94	
$ 11 4-Bromofluorobenzene	95	16.053	16.065	0.000	89	17683	4.29	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	10840	6.02	
28 Acetone	58	6.474	6.474	0.000	97	8948	20.1	
34 Methylene Chloride	84	7.182	7.192	-0.010	83	1044	0.2393	
48 cis-1,2-Dichloroethene	61	8.924	8.933	0.000	82	5794	0.6251	
59 Benzene	78	10.488	10.487	0.000	94	15201	0.7292	
65 Trichloroethene	132	11.206	11.217	0.000	93	65516	10.2	
75 Toluene	92	12.906	12.915	0.000	98	6200	0.7279	
81 Tetrachloroethene	164	13.793	13.807	0.000	82	1330	0.2647	
124 Butane	43	5.006	4.996	0.010	1	591	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	898266	20.1	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	538307	12.1	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	581697	13.0	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	1012302	22.7	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	627699	14.1	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	627699	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	983956	22.1	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	732207	16.4	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	179370	4.02	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	638241	14.3	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard
NC - Not Calibrated
s - Failed ISTD Recovery Test

Reagents:

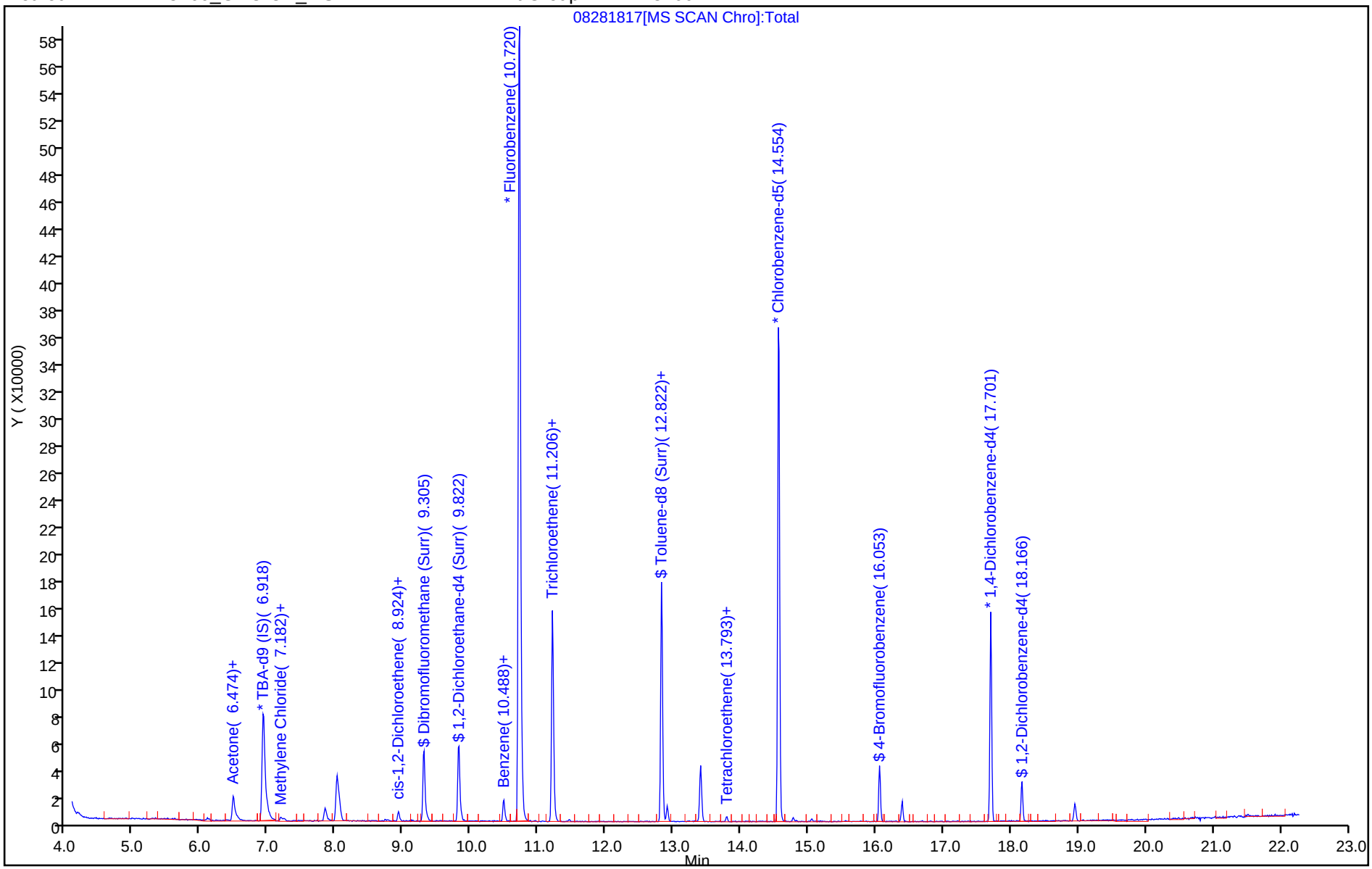
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:00:42 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281817.D

Injection Date:	28-Aug-2018 16:26:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88164-B-13-A RR	Lab Sample ID:	Client 720-250352/17-A	Worklist Smp#:	17
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281817.D
Lims ID: 720-88164-B-13-A RR
Client ID:
Sample Type: Client
Inject. Date: 28-Aug-2018 16:26:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88164-B-13 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 29-Aug-2018 08:59:01 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:00:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	8.87	118.21
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	9.46	126.19
$ 10 Toluene-d8 (Surr)	7.50	5.94	79.20
$ 11 4-Bromofluorobenzene	7.50	4.29	57.17
$ 12 1,2-Dichlorobenzene-d4	6.00	6.02	100.32

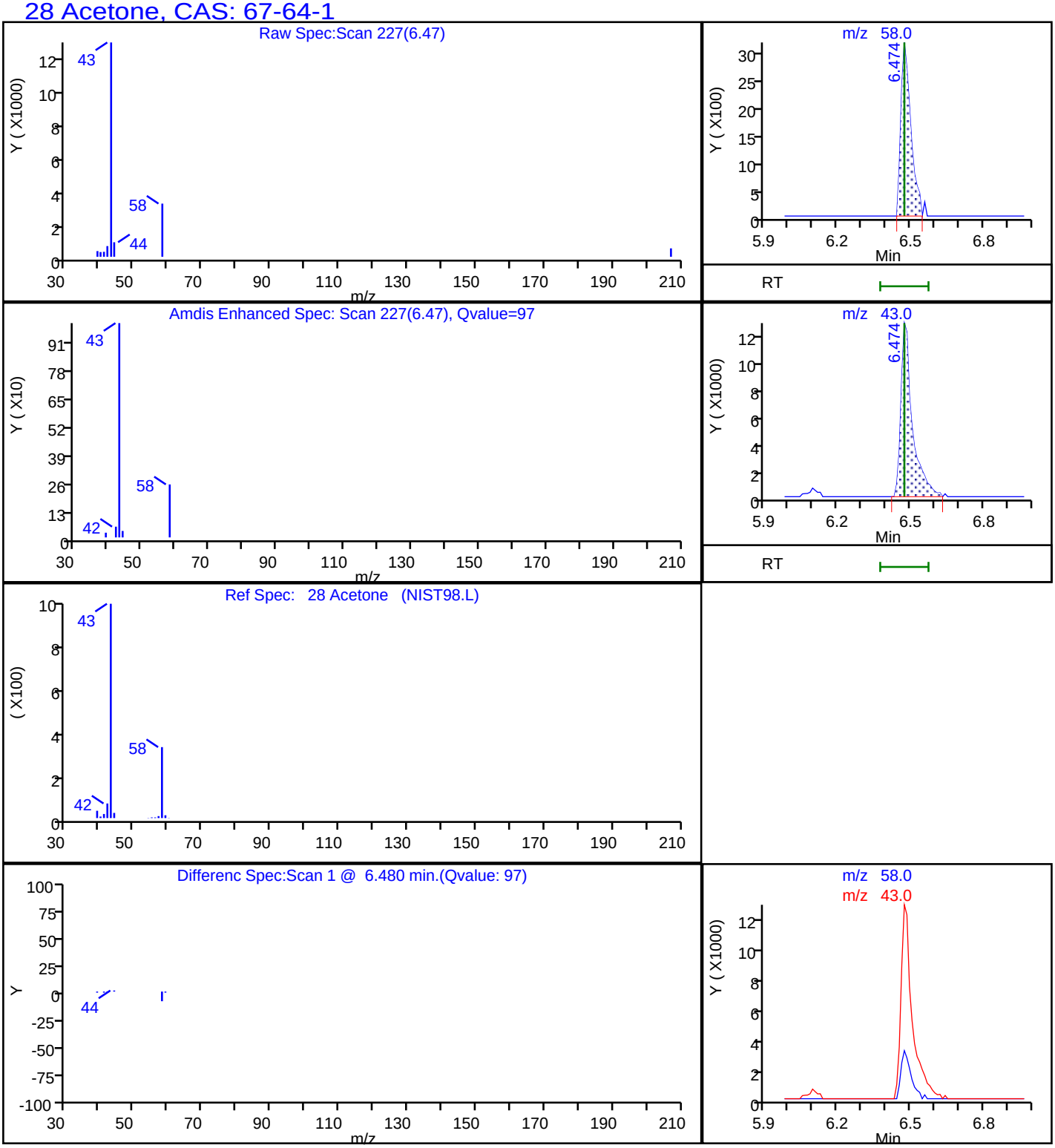
Report Date: 29-Aug-2018 09:00:42 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281817.D

Injection Date:	28-Aug-2018 16:26:30	Instrument ID:	CHMSV2		
Lims ID:	720-88164-B-13-A RR	Lab Sample ID:	Client 720-250352/17-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



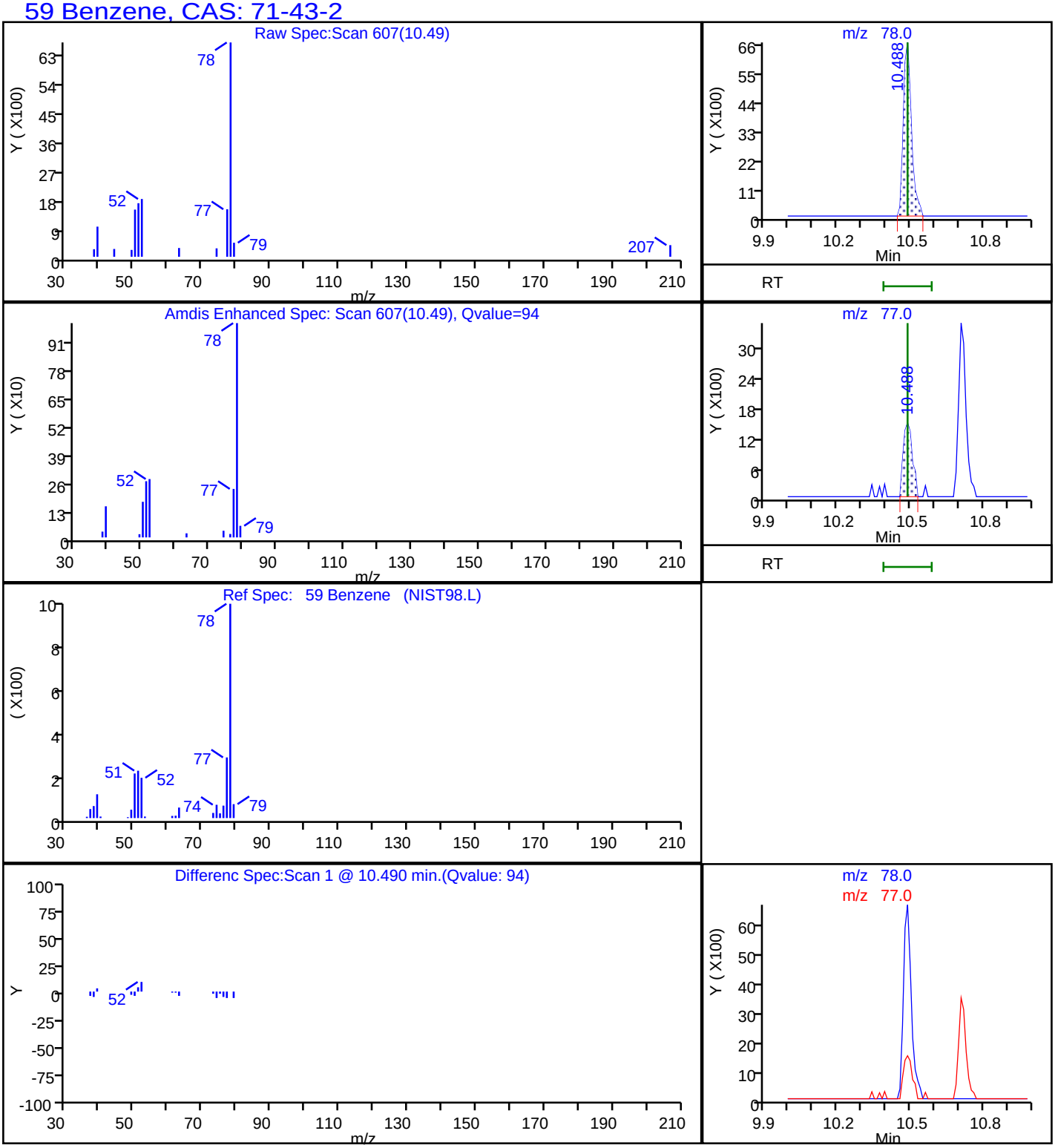
Report Date: 29-Aug-2018 09:00:42 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281817.D

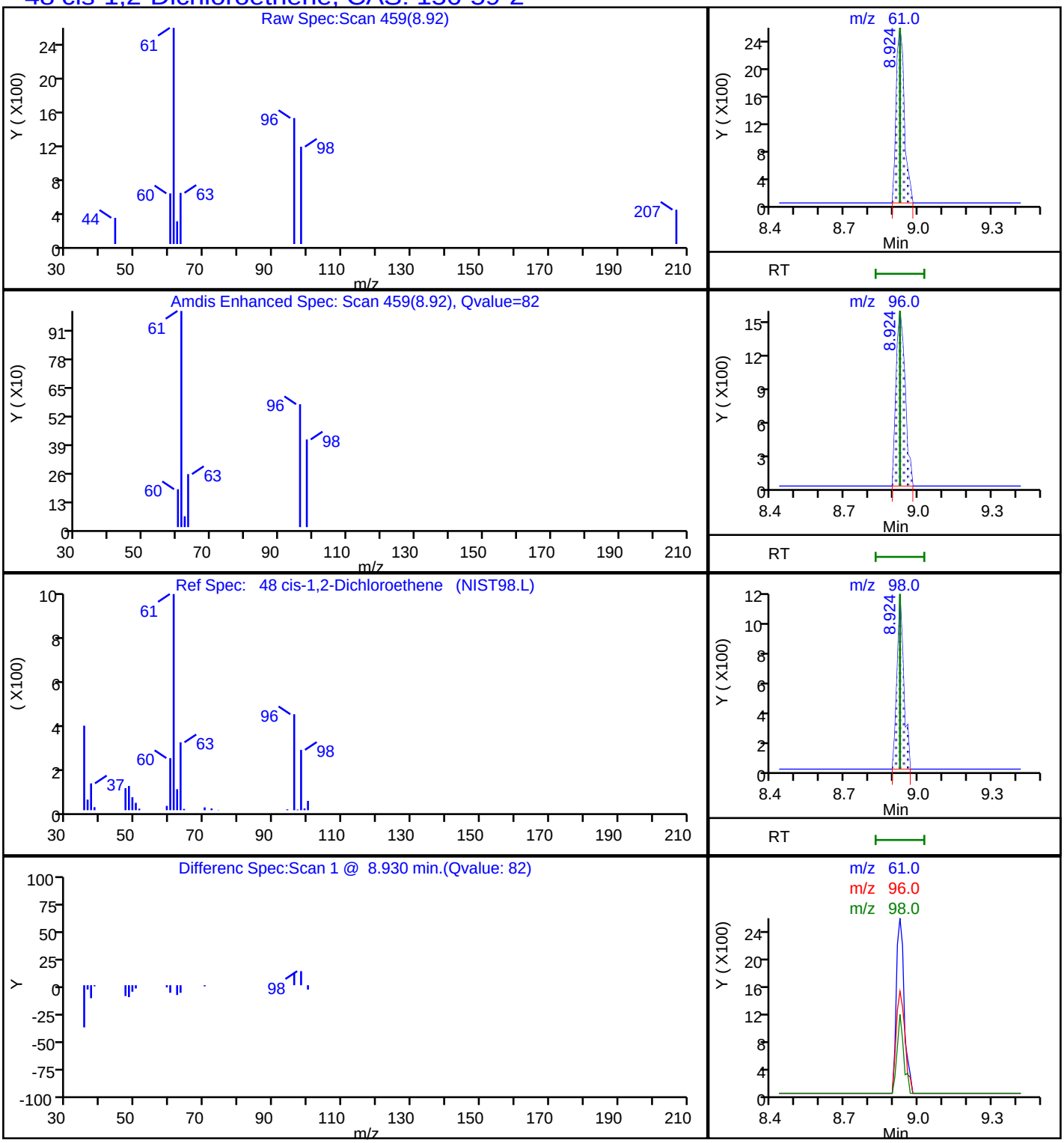
Injection Date:	28-Aug-2018 16:26:30	Instrument ID:	CHMSV2		
Lims ID:	720-88164-B-13-A RR	Lab Sample ID:	Client 720-250352/17-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

59 Benzene, CAS: 71-43-2



Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281817.D
Injection Date: 28-Aug-2018 16:26:30 Instrument ID: CHMSV2
Lims ID: 720-88164-B-13-A RR Lab Sample ID: Client 720-250352/17-A
Client ID:
Operator ID: VOA ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Method: 8260_GRO CH_MSV2 Limit Group: 8260B
Column: Detector MS SCAN

48 cis-1,2-Dichloroethene, CAS: 156-59-2



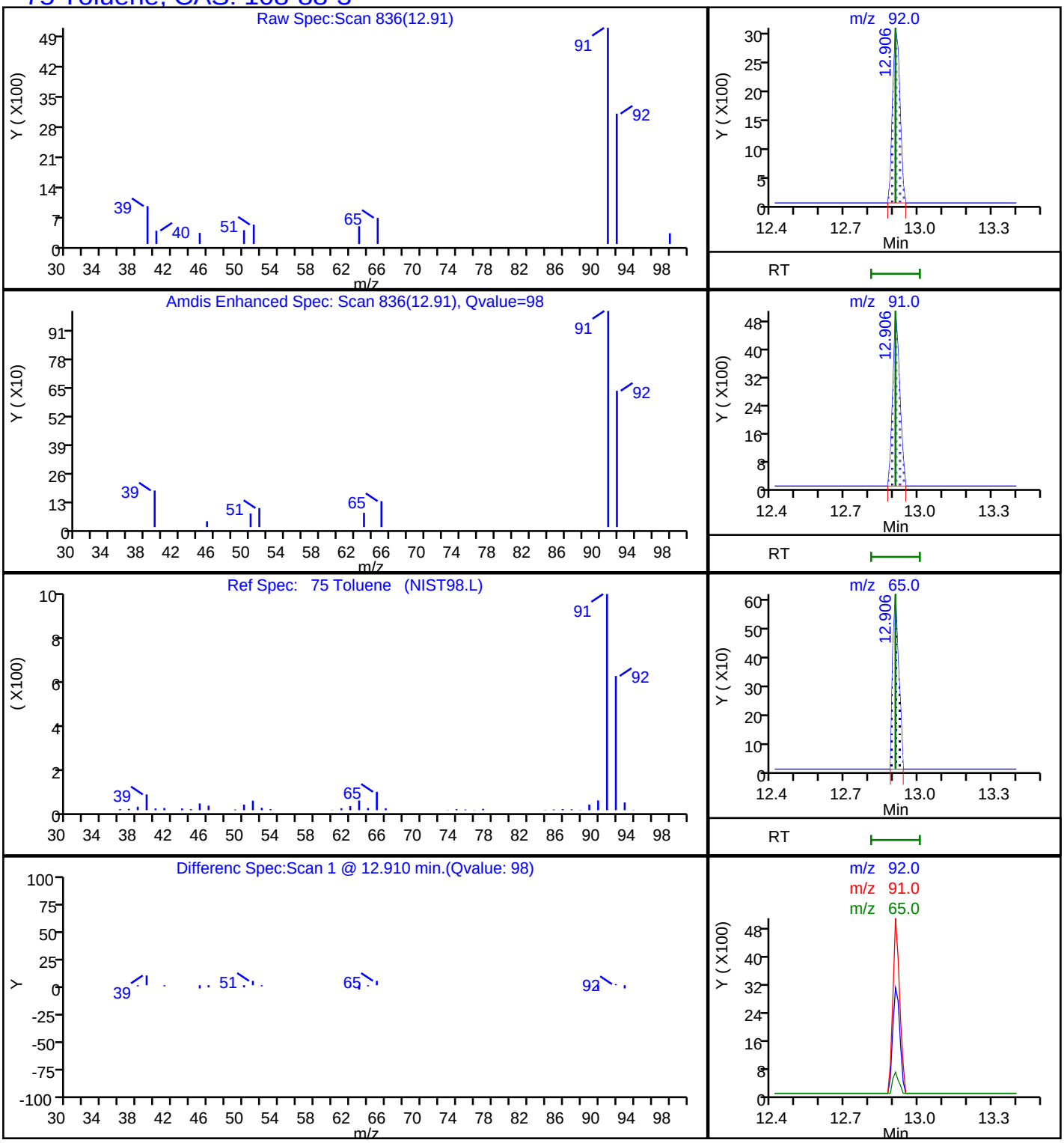
Report Date: 29-Aug-2018 09:00:42 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281817.D

Injection Date:	28-Aug-2018 16:26:30	Instrument ID:	CHMSV2		
Lims ID:	720-88164-B-13-A RR	Lab Sample ID:	Client 720-250352/17-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

75 Toluene, CAS: 108-88-3



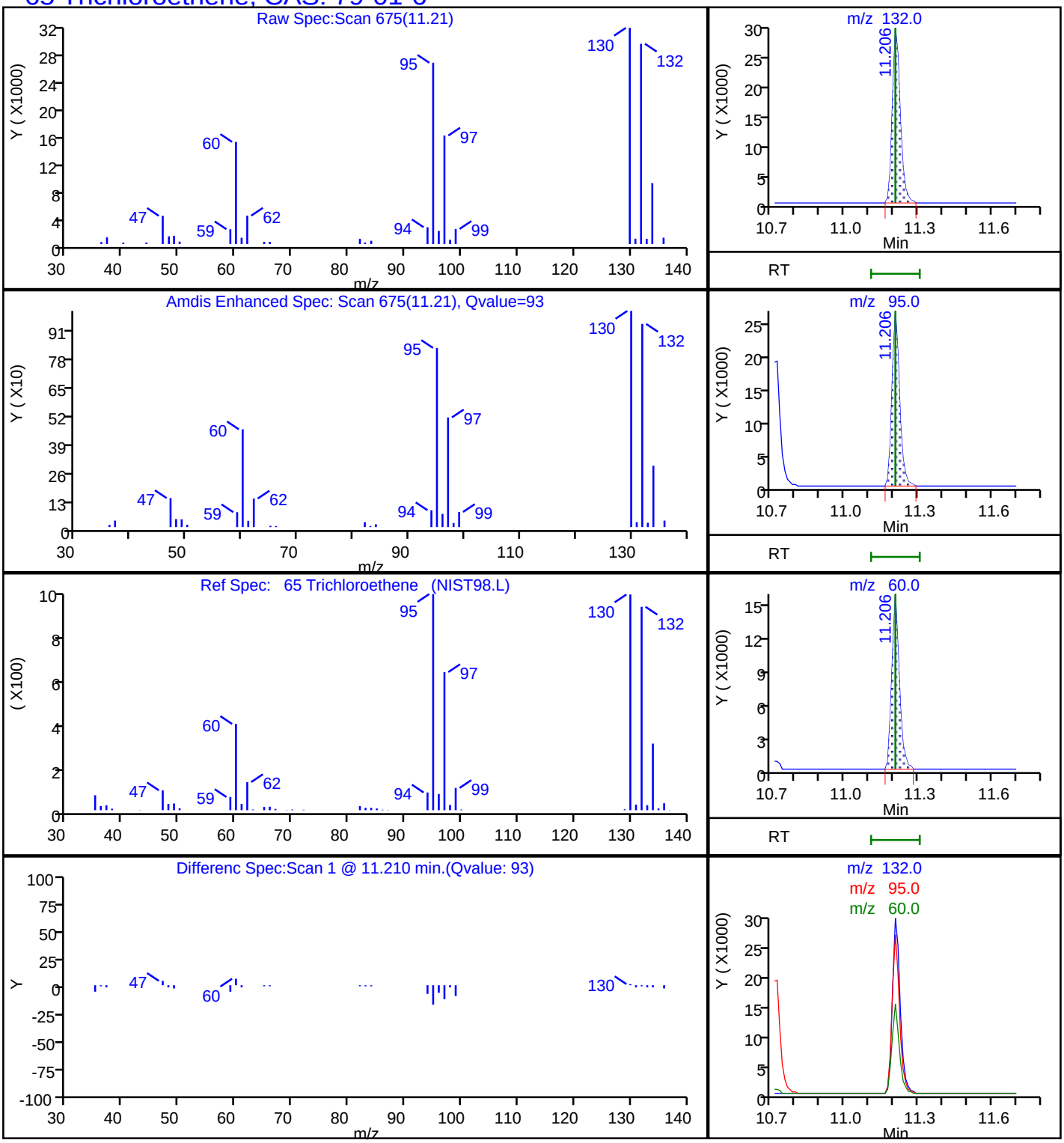
Report Date: 29-Aug-2018 09:00:42 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281817.D

Injection Date:	28-Aug-2018 16:26:30	Instrument ID:	CHMSV2		
Lims ID:	720-88164-B-13-A RR	Lab Sample ID:	Client 720-250352/17-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

65 Trichloroethene, CAS: 79-01-6



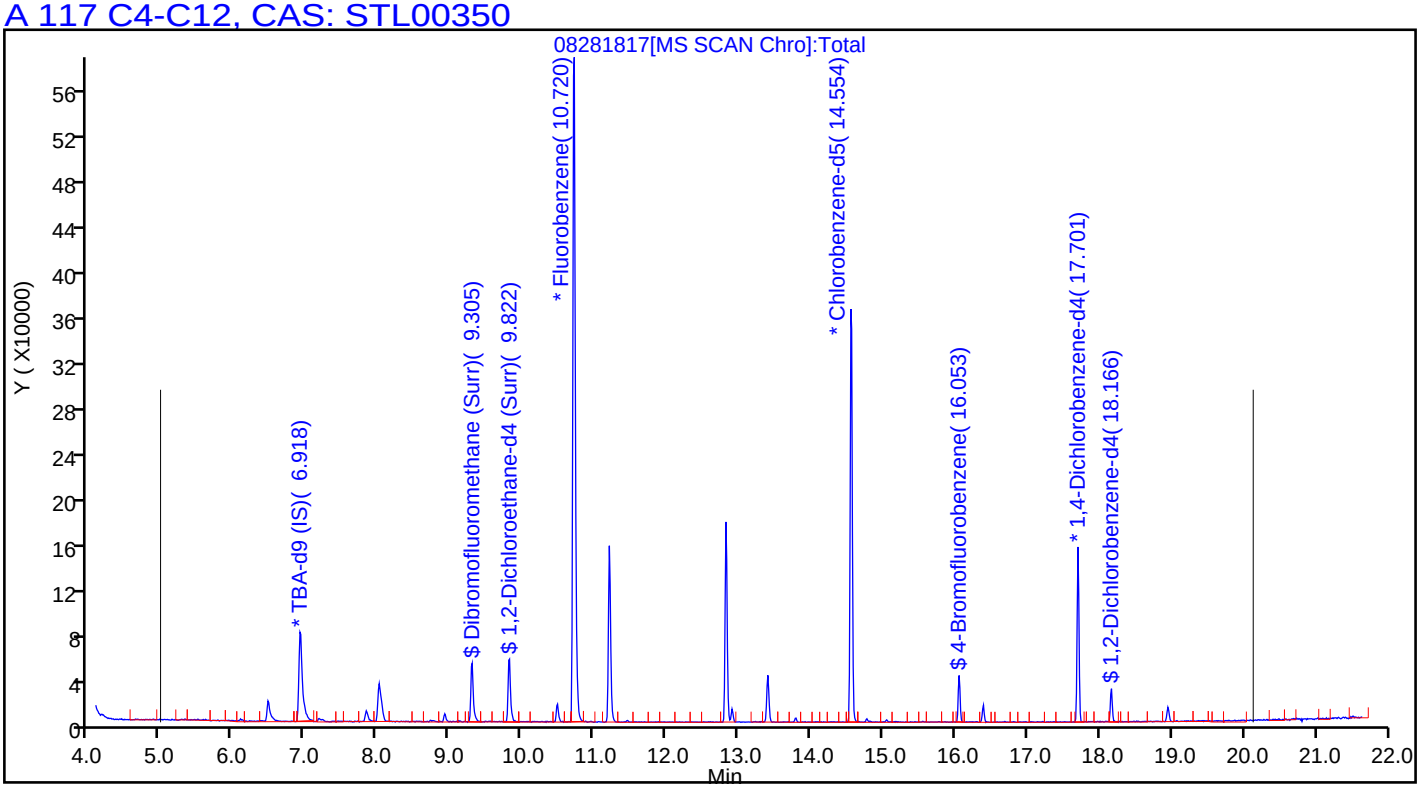
Report Date: 29-Aug-2018 09:00:42 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281817.D

Injection Date:	28-Aug-2018 16:26:30	Instrument ID:	CHMSV2		
Lims ID:	720-88164-B-13-A RR	Lab Sample ID:	Client 720-250352/17-A		
Client ID:					
Operator ID:	VOA	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-C3S-9.5-10 Lab Sample ID: 720-88164-14

Matrix: Solid Lab File ID: 08281809.D

Analysis Method: 8260B Date Collected: 08/21/2018 12:15

Sample wt/vol: 5.414(g) Date Analyzed: 08/28/2018 11:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-15-0	Carbon disulfide	5.7		4.6	1.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	86	*	45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		60-140
2037-26-5	Toluene-d8 (Surr)	83		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281809.D
Lims ID: 720-88164-A-14-A
Client ID: DG-C3S-9.5-10
Sample Type: Client
Inject. Date: 28-Aug-2018 11:50:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88164-A-14
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:05:02 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:05:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.825	0.000	0	245158	250.0	
* 2 Fluorobenzene	96	10.605	10.605	0.000	98	618641	25.0	
* 4 Chlorobenzene-d5	117	14.445	14.445	0.000	86	375015	25.0	s
* 5 1,4-Dichlorobenzene-d4	152	17.585	17.591	-0.006	94	149811	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.196	9.191	0.000	94	58503	8.43	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.714	9.709	-0.001	0	72249	8.31	
$ 10 Toluene-d8 (Surr)	98	12.714	12.707	0.000	93	155268	6.21	
$ 11 4-Bromofluorobenzene	95	15.939	15.932	0.000	95	47258	6.48	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	-0.006	84	40051	6.90	
24 Acrolein	56	6.227	6.221	0.006	44	1022	1.10	
28 Acetone	58	6.374	6.370	0.000	99	30403	41.9	
34 Methylene Chloride	84	7.087	7.077	0.006	92	2287	0.3416	
144 Methyl acetate	43	7.136	7.126	0.006	99	9202	1.74	
37 Carbon disulfide	76	7.373	7.369	-0.001	99	45022	3.10	
45 2-Butanone (MEK)	72	8.648	8.637	0.006	99	3917	4.73	
49 cis-1,2-Dichloroethene	61	8.818	8.813	-0.001	79	6206	0.6101	
140 Ethyl acetate	43	9.013	9.002	0.005	99	31456	3.84	
66 Trichloroethene	132	11.092	11.092	-0.007	94	1133	0.1661	
75 Toluene	92	12.793	12.794	-0.006	98	2600	0.2109	
128 Butyl Ether	87	14.665	14.659	0.000	95	601	0.1611	
85 m-Xylene & p-Xylene	91	14.933	14.933	-0.006	0	3975	0.2100	
88 o-Xylene	91	15.433	15.433	-0.006	92	1986	0.1010	
101 1,2,4-Trimethylbenzene	105	17.286	17.274	0.000	97	6680	0.4138	
136 1,2,3-Trimethylbenzene	105	17.829	17.829	-0.012	94	2231	0.1318	
107 n-Butylbenzene	91	18.164	18.164	-0.012	84	1868	0.1274	
111 1,2,4-Trichlorobenzene	180	20.414	20.406	-0.006	89	1173	0.1779	
112 Naphthalene	128	20.749	20.741	-0.006	97	10571	0.6854	
113 Hexachlorobutadiene	225	20.804	20.795	-0.006	69	954	0.2460	
114 1,2,3-Trichlorobenzene	180	21.023	21.009	0.000	87	1502	0.2415	
29 Pentane	43	6.380	6.410	-0.030	69	93444	NR	
135 n-Nonane	57	15.055	15.055	0.000	1	124	NR	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
115 C13	57	21.389	21.377	0.012	48	508	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	954565	16.8	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	256626	4.52	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	351586	6.20	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1162031	20.5	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	420699	7.42	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	1076196	19.0	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	628165	11.1	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	173331	3.06	
A 121 C7-C12	1	15.454	(10.903-20.005)		0	441235	7.78	
S 122 Xylenes, Total	1				0		0.3110	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

s - Failed ISTD Recovery Test

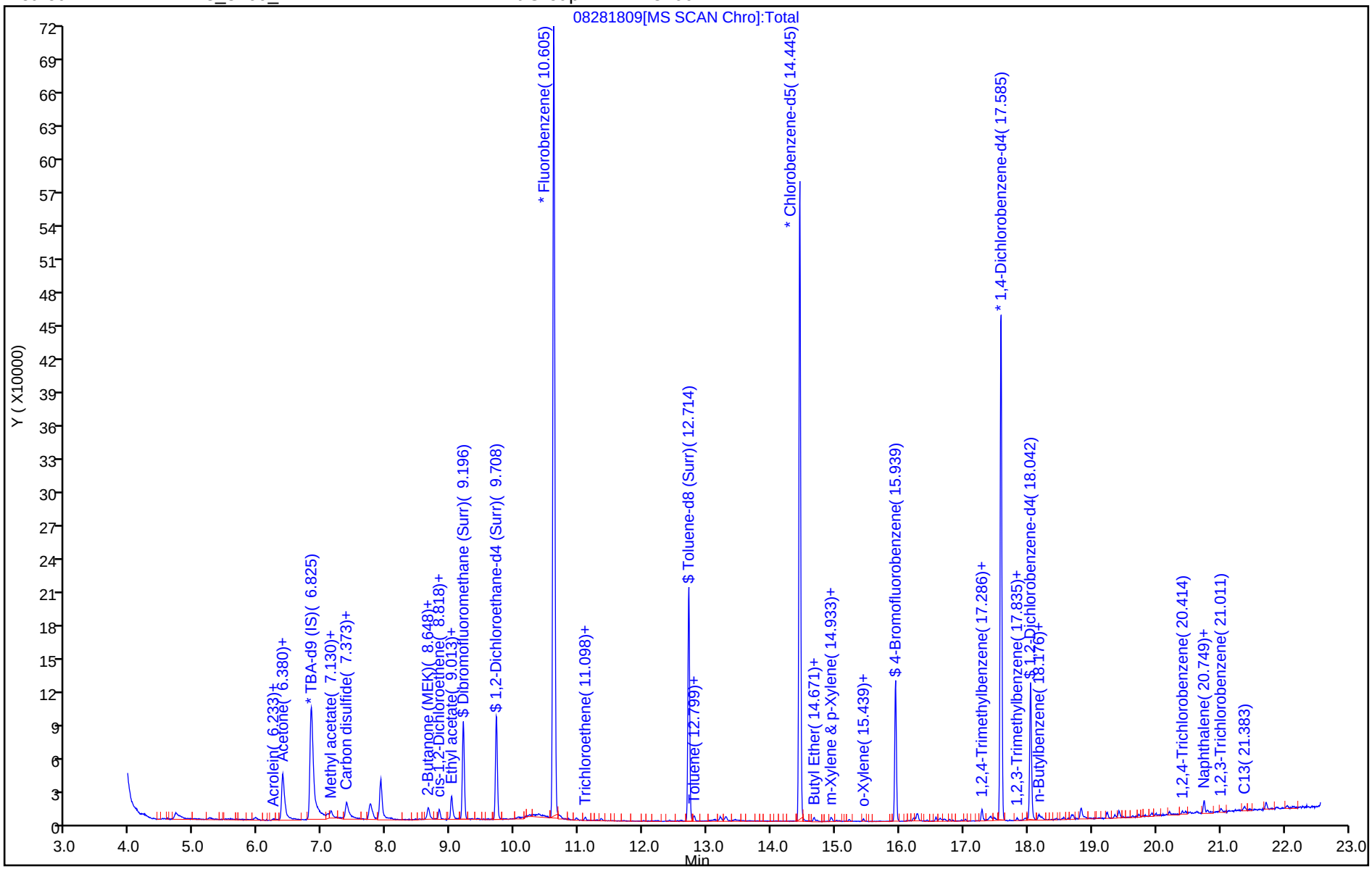
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:05:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281809.D				
Injection Date:	28-Aug-2018 11:50:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88164-A-14-A	Lab Sample ID:	720-88164-14	Worklist Smp#:	9
Client ID:	DG-C3S-9.5-10				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281809.D
Lims ID: 720-88164-A-14-A
Client ID: DG-C3S-9.5-10
Sample Type: Client
Inject. Date: 28-Aug-2018 11:50:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88164-A-14
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:05:02 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:05:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.31	110.75
$ 10 Toluene-d8 (Surr)	7.50	6.21	82.74
$ 11 4-Bromofluorobenzene	7.50	6.48	86.40
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

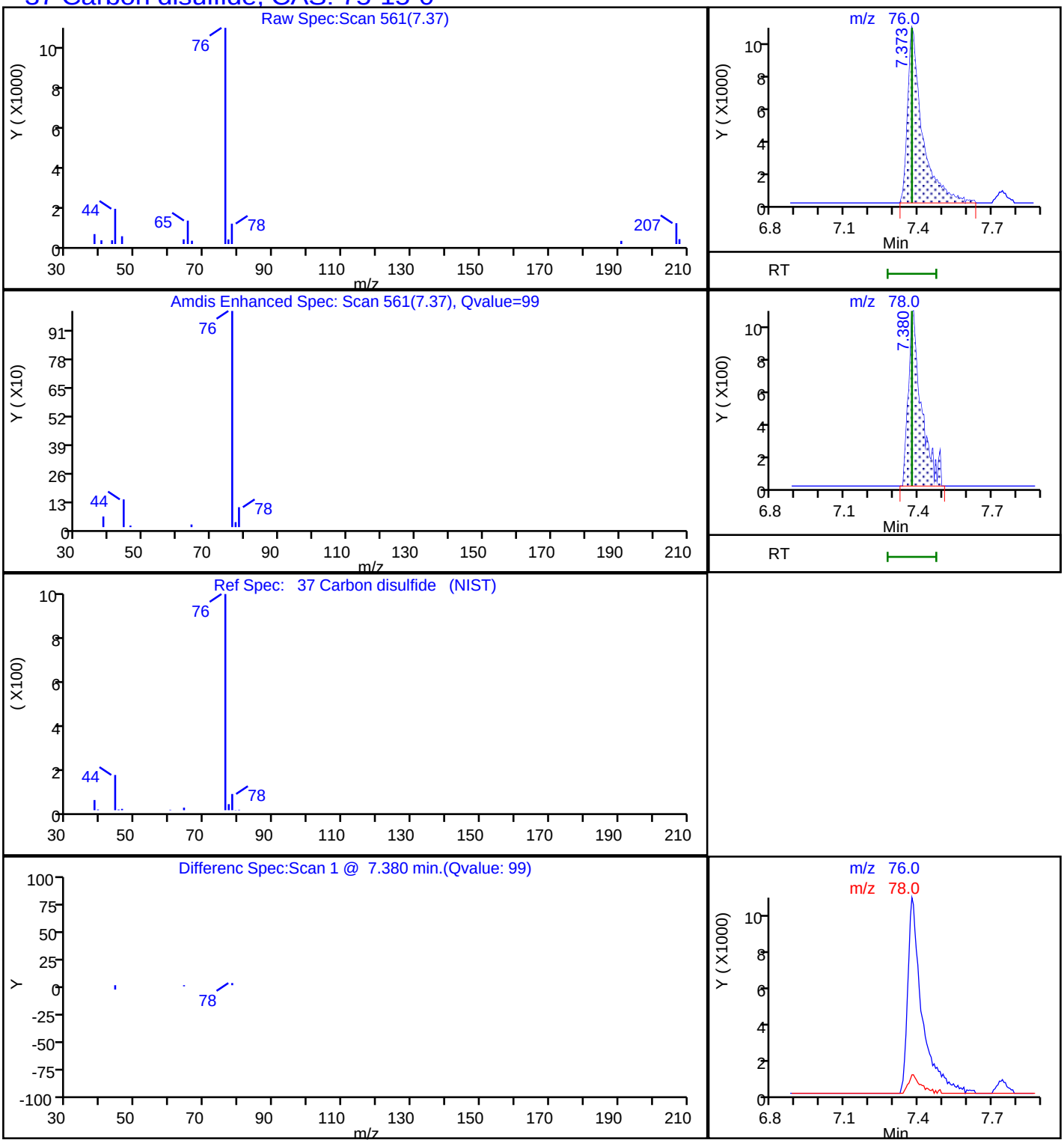
Report Date: 29-Aug-2018 09:05:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281809.D

Injection Date:	28-Aug-2018 11:50:30	Instrument ID:	HP13		
Lims ID:	720-88164-A-14-A	Lab Sample ID:	720-88164-14		
Client ID:	DG-C3S-9.5-10				
Operator ID:	VOA	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

37 Carbon disulfide, CAS: 75-15-0



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-C3S-9.5-10 Lab Sample ID: 720-88164-14

Matrix: Solid Lab File ID: 08281825.D

Analysis Method: 8260B Date Collected: 08/21/2018 12:15

Sample wt/vol: 6.721(g) Date Analyzed: 08/28/2018 20:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.7	0.89
67-64-1	Acetone	ND		37	28
71-43-2	Benzene	ND		3.7	0.48
75-27-4	Dichlorobromomethane	ND		3.7	0.54
108-86-1	Bromobenzene	ND		3.7	0.59
74-97-5	Chlorobromomethane	ND		15	0.54
75-25-2	Bromoform	ND		3.7	1.5
74-83-9	Bromomethane	ND		7.4	0.59
78-93-3	2-Butanone (MEK)	ND		37	16
104-51-8	n-Butylbenzene	ND		3.7	0.74
135-98-8	sec-Butylbenzene	ND		3.7	0.54
98-06-6	tert-Butylbenzene	ND		3.7	0.54
56-23-5	Carbon tetrachloride	ND		3.7	0.46
108-90-7	Chlorobenzene	ND		3.7	0.51
75-00-3	Chloroethane	ND		7.4	0.42
67-66-3	Chloroform	ND		3.7	0.49
74-87-3	Chloromethane	ND		7.4	0.59
95-49-8	2-Chlorotoluene	ND		3.7	0.48
106-43-4	4-Chlorotoluene	ND		3.7	0.51
124-48-1	Chlorodibromomethane	ND		3.7	0.53
95-50-1	1,2-Dichlorobenzene	ND		3.7	0.51
541-73-1	1,3-Dichlorobenzene	ND		3.7	0.54
106-46-7	1,4-Dichlorobenzene	ND		3.7	0.53
142-28-9	1,3-Dichloropropane	ND		3.7	0.54
563-58-6	1,1-Dichloropropene	ND		3.7	0.51
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.4	1.3
106-93-4	Ethylene Dibromide	ND		3.7	1.1
74-95-3	Dibromomethane	ND		7.4	0.64
75-71-8	Dichlorodifluoromethane	ND		7.4	0.59
75-34-3	1,1-Dichloroethane	ND		3.7	0.51
107-06-2	1,2-Dichloroethane	ND		3.7	0.57
75-35-4	1,1-Dichloroethene	ND	*	3.7	0.46
156-59-2	cis-1,2-Dichloroethene	ND		3.7	0.51
156-60-5	trans-1,2-Dichloroethene	ND		3.7	0.56
78-87-5	1,2-Dichloropropane	ND		3.7	0.47
10061-01-5	cis-1,3-Dichloropropene	ND		3.7	0.51

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-C3S-9.5-10 Lab Sample ID: 720-88164-14

Matrix: Solid Lab File ID: 08281825.D

Analysis Method: 8260B Date Collected: 08/21/2018 12:15

Sample wt/vol: 6.721(g) Date Analyzed: 08/28/2018 20:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-02-6	trans-1,3-Dichloropropene	ND		3.7	0.50
100-41-4	Ethylbenzene	ND		3.7	0.56
87-68-3	Hexachlorobutadiene	ND		3.7	0.67
591-78-6	2-Hexanone	ND		37	7.4
98-82-8	Isopropylbenzene	ND		3.7	0.51
99-87-6	4-Isopropyltoluene	ND		3.7	1.9
75-09-2	Methylene Chloride	ND		7.4	4.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		37	7.4
91-20-3	Naphthalene	ND		7.4	1.1
103-65-1	N-Propylbenzene	ND		3.7	0.49
100-42-5	Styrene	ND		3.7	0.47
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.7	0.57
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.7	0.56
127-18-4	Tetrachloroethene	ND		3.7	0.50
108-88-3	Toluene	ND		3.7	0.53
87-61-6	1,2,3-Trichlorobenzene	ND		3.7	0.55
120-82-1	1,2,4-Trichlorobenzene	ND		3.7	0.53
71-55-6	1,1,1-Trichloroethane	ND		3.7	0.45
79-00-5	1,1,2-Trichloroethane	ND		3.7	0.52
79-01-6	Trichloroethene	ND		3.7	0.47
75-69-4	Trichlorofluoromethane	ND		3.7	0.42
96-18-4	1,2,3-Trichloropropane	ND		3.7	0.57
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.7	1.5
95-63-6	1,2,4-Trimethylbenzene	ND		3.7	1.2
108-67-8	1,3,5-Trimethylbenzene	ND		3.7	0.48
108-05-4	Vinyl acetate	ND		15	3.7
75-01-4	Vinyl chloride	ND		3.7	0.54
1330-20-7	Xylenes, Total	ND		3.7	0.91
594-20-7	2,2-Dichloropropane	ND		3.7	1.5
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		190	74

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88164-1

SDG No.:

Client Sample ID: DG-C3S-9.5-10 Lab Sample ID: 720-88164-14

Matrix: Solid Lab File ID: 08281825.D

Analysis Method: 8260B Date Collected: 08/21/2018 12:15

Sample wt/vol: 6.721(g) Date Analyzed: 08/28/2018 20:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	96		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		60-140
2037-26-5	Toluene-d8 (Surr)	100		58-140

Report Date: 29-Aug-2018 09:14:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281825.D
Lims ID: 720-88164-B-14-A
Client ID: DG-C3S-9.5-10
Sample Type: Client
Inject. Date: 28-Aug-2018 20:17:30 ALS Bottle#: 4 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88164-B-14 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:25 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 09:14:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.093	7.101	-0.008	98	140585	250.0	
* 2 Fluorobenzene	96	10.901	10.899	0.002	98	949947	25.0	
* 4 Chlorobenzene-d5	117	14.748	14.747	0.001	86	649831	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.877	17.886	-0.009	96	312421	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.493	9.491	0.002	54	64710	7.50	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.009	10.008	0.001	98	67225	7.95	
$ 10 Toluene-d8 (Surr)	98	13.007	13.005	0.002	92	255251	7.47	
$ 11 4-Bromofluorobenzene	95	16.237	16.235	0.002	91	84815	7.18	
$ 12 1,2-Dichlorobenzene-d4	152	18.343	18.331	0.002	79	66711	5.78	
28 Acetone	58	6.648	6.646	0.002	84	4068	6.92	
37 Carbon disulfide	76	7.670	7.668	0.002	85	60276	2.80	
48 cis-1,2-Dichloroethene	61	9.108	9.116	-0.009	0	1971	0.1512	
59 Benzene	78	10.678	10.676	0.002	1	1071	0.0289	
148 1-Chlorohexane	55	14.738	14.655	0.082	0	6407	0.6130	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	576648	7.29	
A 153 C6-C8	1	11.156	(8.853-13.459)		0	138522	1.75	
A 154 C6-C9	1	12.113	(8.853-15.373)		0	175772	2.22	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	611079	7.73	
A 119 C6-C10	1	12.994	(8.853-17.135)		0	178286	2.25	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	561160	7.10	
A 120 C6-C12	1	14.554	(8.853-20.255)		0	207549	2.62	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	42038	0.5316	
A 121 C7-C12	1	15.724	(11.192-20.255)		0	117360	1.48	

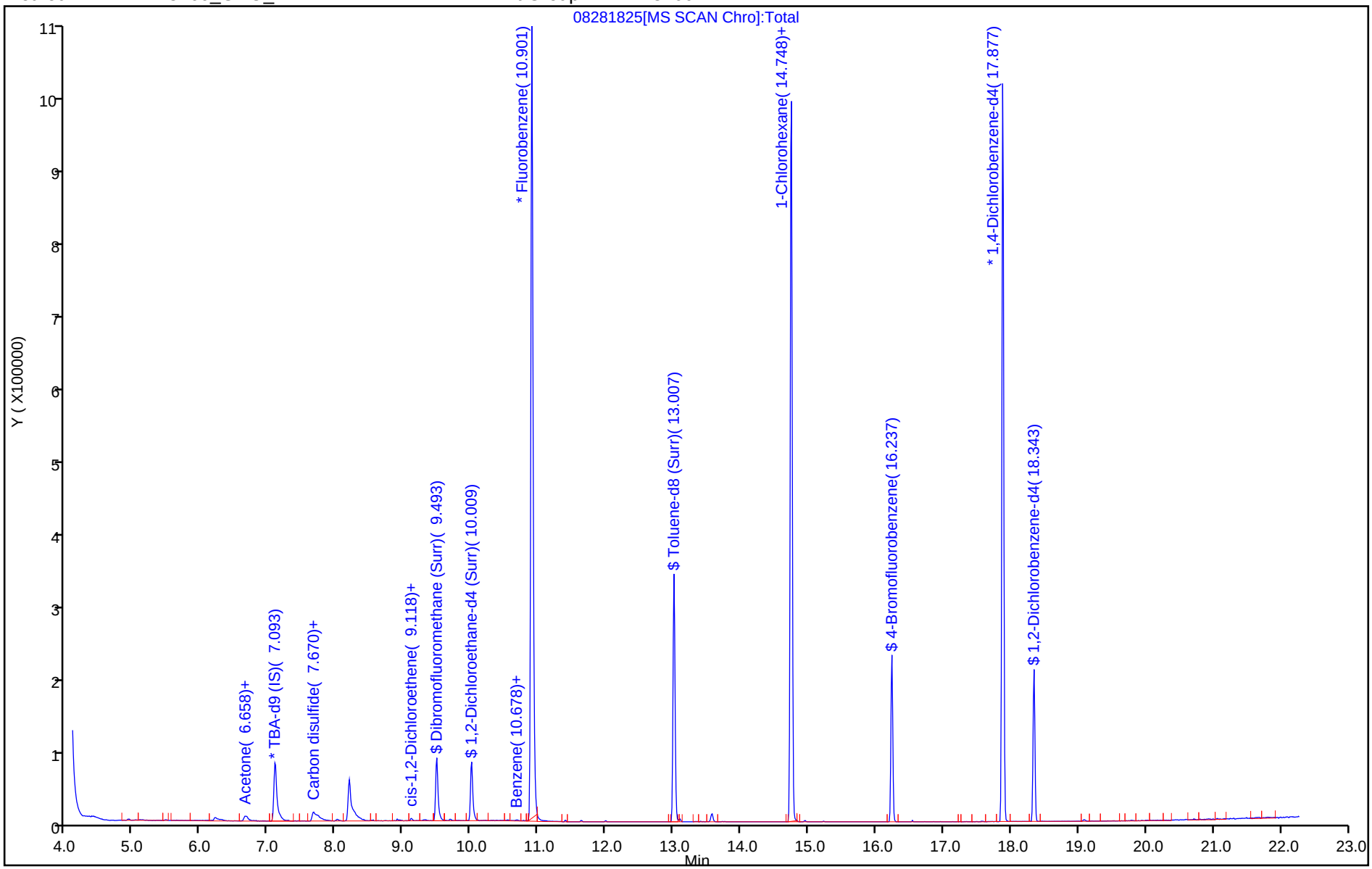
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:14:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281825.D				
Injection Date:	28-Aug-2018 20:17:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88164-B-14-A	Lab Sample ID:	720-88164-14	Worklist Smp#:	9
Client ID:	DG-C3S-9.5-10				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281825.D
Lims ID: 720-88164-B-14-A
Client ID: DG-C3S-9.5-10
Sample Type: Client
Inject. Date: 28-Aug-2018 20:17:30 ALS Bottle#: 4 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88164-B-14 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:25 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 09:14:52

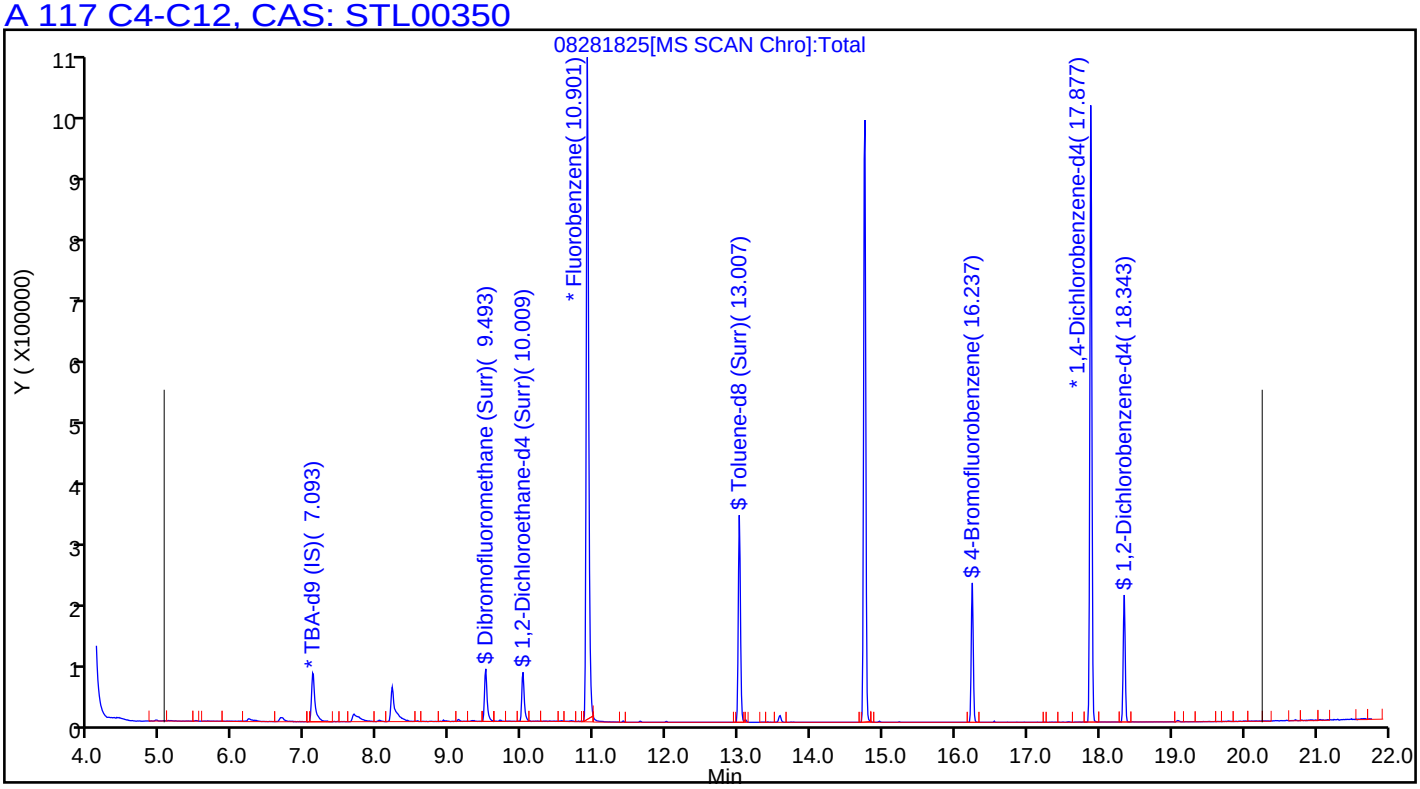
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.95	105.96
$ 10 Toluene-d8 (Surr)	7.50	7.47	99.55
$ 11 4-Bromofluorobenzene	7.50	7.18	95.72
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 29-Aug-2018 09:14:54 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281825.D				
Injection Date:	28-Aug-2018 20:17:30	Instrument ID:	HP7		
Lims ID:	720-88164-B-14-A	Lab Sample ID:	720-88164-14		
Client ID:	DG-C3S-9.5-10				
Operator ID:	SF	ALS Bottle#:	4	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(45-131)	(60-140)	(58-140)
720-88164-1	DG-B1S-0.5-1	97	92	93
720-88164-2	DG-B1S-3.5-4	99	93	95
720-88164-7	DG-A3S-0.5-1	88	95	91
720-88164-8	DG-A3S-3.5-4	99	100	94
720-88164-9	DG-A3S-9.5-10	98	100	95
720-88164-12	DG-C3S-0.5-1	37 * X	156 * X	60 *
720-88164-13	DG-C3S-3.5-4	57 *	126 *	79 *
720-88164-14	DG-C3S-9.5-10	86 *	111	83
720-88164-14	DG-C3S-9.5-10	96	106	100
LCS 720-250267/5	Lab Control Sample	95	86	96
LCS 720-250267/7	Lab Control Sample	99	84	95
LCS 720-250350/5	Lab Control Sample	99	95	99
LCS 720-250350/7	Lab Control Sample	99	94	96
LCS 720-250352/5	Lab Control Sample	96	88	91
LCS 720-250352/7	Lab Control Sample	99	93	96
LCS 720-250407/5	Lab Control Sample	99	94	100
LCS 720-250407/7	Lab Control Sample	100	103	102
LCSD 720-250267/6	Lab Control Sample Dup	97	86	96
LCSD 720-250267/8	Lab Control Sample Dup	98	86	94
LCSD 720-250350/6	Lab Control Sample Dup	99	94	97
LCSD 720-250350/8	Lab Control Sample Dup	100	95	97
LCSD 720-250352/6	Lab Control Sample Dup	95	94	97
LCSD 720-250352/8	Lab Control Sample Dup	96	93	101
LCSD 720-250407/6	Lab Control Sample Dup	101	97	101
LCSD 720-250407/8	Lab Control Sample Dup	100	103	102
MB 720-250267/4	Method Blank	99	84	94
MB 720-250350/4	Method Blank	102	94	95
MB 720-250352/4	Method Blank	96	89	95
MB 720-250407/4	Method Blank	99	103	102

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		FBP	TPHL
Lab Sample ID	Client Sample ID	(33-120)	(35-146)
720-88156-A-5-C MS	Matrix Spike	51	13 X
720-88156-A-5-D MSD	Matrix Spike Duplicate	41	5 X
720-88164-1	DG-B1S-0.5-1	66	79
720-88164-2	DG-B1S-3.5-4	67	94
720-88164-7	DG-A3S-0.5-1	63	76
720-88164-8	DG-A3S-3.5-4	78	98
720-88164-9	DG-A3S-9.5-10	75	93
720-88164-12	DG-C3S-0.5-1	75	98

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		FBP	TPHL								
Lab Sample ID	Client Sample ID	(33-120)	(35-146)								
720-88164-13	DG-C3S-3.5-4	74	85								
720-88164-14	DG-C3S-9.5-10	80	95								
720-88190-E-11-A MS	Matrix Spike	72	91								
720-88190-E-11-B MSD	Matrix Spike Duplicate	73	92								
LCS 720-249979/2-A	Lab Control Sample	75	94								
LCS 720-250048/2-A	Lab Control Sample	75	88								
MB 720-249979/1-A	Method Blank	84	102								
MB 720-250048/1-A	Method Blank	92	93								

Surrogate Legend

FBP = 2-Fluorobiphenyl
TPHL = Terphenyl-d14

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		TPH1									
Lab Sample ID	Client Sample ID	(40-130)									
720-88164-1	DG-B1S-0.5-1	70									
720-88164-1 MS	DG-B1S-0.5-1	98									
720-88164-1 MSD	DG-B1S-0.5-1	88									
720-88164-2	DG-B1S-3.5-4	91									
720-88164-7	DG-A3S-0.5-1	0 D X									
720-88164-8	DG-A3S-3.5-4	89									
720-88164-9	DG-A3S-9.5-10	86									
720-88164-12	DG-C3S-0.5-1	67									
720-88164-13	DG-C3S-3.5-4	55									
720-88164-14	DG-C3S-9.5-10	69									
LCS 720-249957/2-A	Lab Control Sample	108									
MB 720-249957/1-A	Method Blank	103									

Surrogate Legend

TPH = p-Terphenyl

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCBP1	TCX1								
Lab Sample ID	Client Sample ID	(21-136)	(21-145)								
720-88162-D-16-I MS	Matrix Spike	128	82								
720-88164-1	DG-B1S-0.5-1	99	75								
720-88164-7	DG-A3S-0.5-1	88	83								
720-88190-D-10-E MS	Matrix Spike	71	77								

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX2 (21-145)
720-88162-D-16-J MSD	Matrix Spike Duplicate	138 X	90
720-88164-12	DG-C3S-0.5-1	86	83
720-88164-14	DG-C3S-9.5-10	60	50
LCS 720-250053/2-A	Lab Control Sample	103	86
MB 720-250053/1-A	Method Blank	105	90

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP1 (21-136)	TCX2 (21-145)
720-88164-13	DG-C3S-3.5-4	78	87
LCS 720-250005/2-A	Lab Control Sample	95	78
MB 720-250005/1-A	Method Blank	94	74

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX1 (21-145)
720-88164-2	DG-B1S-3.5-4	80	80
720-88164-8	DG-A3S-3.5-4	83	84
720-88164-9	DG-A3S-9.5-10	86	84
720-88190-D-10-F MSD	Matrix Spike Duplicate	89	83

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX1 (14-128)	DCBP1 (10-132)
240-100238-A-6-C MS	Matrix Spike	52	64
240-100238-A-6-D MSD	Matrix Spike Duplicate	33	51
720-88164-1	DG-B1S-0.5-1	65	62
720-88164-2	DG-B1S-3.5-4	73	102
720-88164-7	DG-A3S-0.5-1	61	361 X

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	TCX1 (14-128)	DCBP1 (10-132)								
720-88164-8	DG-A3S-3.5-4	70	93								
720-88164-9	DG-A3S-9.5-10	66	96								
720-88164-12	DG-C3S-0.5-1	63	120								
720-88164-13	DG-C3S-3.5-4	63	92								
720-88164-14	DG-C3S-9.5-10	63	76								
LCS 240-342371/20-A	Lab Control Sample	73	78								
MB 240-342371/19-A	Method Blank	64	83								

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-250267/4
Matrix: Solid
Analysis Batch: 250267

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/27/18 11:05	1
Acetone	ND		50	38	ug/Kg			08/27/18 11:05	1
Benzene	ND		5.0	0.65	ug/Kg			08/27/18 11:05	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/27/18 11:05	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/27/18 11:05	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/27/18 11:05	1
Bromoform	ND		5.0	2.0	ug/Kg			08/27/18 11:05	1
Bromomethane	ND		10	0.79	ug/Kg			08/27/18 11:05	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/27/18 11:05	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/27/18 11:05	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/27/18 11:05	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/27/18 11:05	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/27/18 11:05	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/27/18 11:05	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/27/18 11:05	1
Chloroethane	ND		10	0.56	ug/Kg			08/27/18 11:05	1
Chloroform	ND		5.0	0.66	ug/Kg			08/27/18 11:05	1
Chloromethane	ND		10	0.79	ug/Kg			08/27/18 11:05	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/27/18 11:05	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/27/18 11:05	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/27/18 11:05	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/27/18 11:05	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/27/18 11:05	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/27/18 11:05	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/27/18 11:05	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/27/18 11:05	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/27/18 11:05	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/27/18 11:05	1
Dibromomethane	ND		10	0.86	ug/Kg			08/27/18 11:05	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/27/18 11:05	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/27/18 11:05	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/27/18 11:05	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/27/18 11:05	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/27/18 11:05	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/27/18 11:05	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/27/18 11:05	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/27/18 11:05	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/27/18 11:05	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/27/18 11:05	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/27/18 11:05	1
2-Hexanone	ND		50	10	ug/Kg			08/27/18 11:05	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/27/18 11:05	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/27/18 11:05	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/27/18 11:05	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/27/18 11:05	1
Naphthalene	ND		10	1.5	ug/Kg			08/27/18 11:05	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/27/18 11:05	1
Styrene	ND		5.0	0.63	ug/Kg			08/27/18 11:05	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250267/4
Matrix: Solid
Analysis Batch: 250267

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/27/18 11:05	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/27/18 11:05	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/27/18 11:05	1
Toluene	ND		5.0	0.71	ug/Kg			08/27/18 11:05	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/27/18 11:05	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/27/18 11:05	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/27/18 11:05	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/27/18 11:05	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/27/18 11:05	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/27/18 11:05	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/27/18 11:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/27/18 11:05	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/27/18 11:05	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/27/18 11:05	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/27/18 11:05	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/27/18 11:05	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/27/18 11:05	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/27/18 11:05	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/27/18 11:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*45 - 131*		*08/27/18 11:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*60 - 140*		*08/27/18 11:05*	*1*
Toluene-d8 (Surr)	*94*		*58 - 140*		*08/27/18 11:05*	*1*

Lab Sample ID: LCS 720-250267/5
Matrix: Solid
Analysis Batch: 250267

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	43.6		ug/Kg		87	70 - 144
Acetone	250	240		ug/Kg		96	30 - 162
Benzene	50.0	45.2		ug/Kg		90	70 - 130
Dichlorobromomethane	50.0	43.9		ug/Kg		88	70 - 140
Bromobenzene	50.0	44.6		ug/Kg		89	70 - 130
Chlorobromomethane	50.0	47.6		ug/Kg		95	70 - 130
Bromoform	50.0	42.5		ug/Kg		85	59 - 158
Bromomethane	50.0	56.1		ug/Kg		112	59 - 132
2-Butanone (MEK)	250	230		ug/Kg		92	59 - 159
n-Butylbenzene	50.0	47.4		ug/Kg		95	70 - 142
sec-Butylbenzene	50.0	45.8		ug/Kg		92	70 - 136
tert-Butylbenzene	50.0	45.7		ug/Kg		91	70 - 130
Carbon disulfide	50.0	59.4		ug/Kg		119	60 - 140
Carbon tetrachloride	50.0	47.5		ug/Kg		95	70 - 142
Chlorobenzene	50.0	46.4		ug/Kg		93	70 - 130
Chloroethane	50.0	53.2		ug/Kg		106	65 - 130
Chloroform	50.0	44.7		ug/Kg		89	77 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250267/5
Matrix: Solid
Analysis Batch: 250267

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	56.7		ug/Kg		113	55 - 140
2-Chlorotoluene	50.0	44.0		ug/Kg		88	70 - 138
4-Chlorotoluene	50.0	44.2		ug/Kg		88	70 - 136
Chlorodibromomethane	50.0	43.7		ug/Kg		87	70 - 146
1,2-Dichlorobenzene	50.0	45.5		ug/Kg		91	70 - 130
1,3-Dichlorobenzene	50.0	45.2		ug/Kg		90	70 - 131
1,4-Dichlorobenzene	50.0	45.4		ug/Kg		91	70 - 130
1,3-Dichloropropane	50.0	41.7		ug/Kg		83	70 - 140
1,1-Dichloropropene	50.0	46.6		ug/Kg		93	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	46.1		ug/Kg		92	60 - 145
Ethylene Dibromide	50.0	43.8		ug/Kg		88	70 - 140
Dibromomethane	50.0	42.5		ug/Kg		85	70 - 139
Dichlorodifluoromethane	50.0	61.4		ug/Kg		123	37 - 158
1,1-Dichloroethane	50.0	47.2		ug/Kg		94	70 - 130
1,2-Dichloroethane	50.0	41.8		ug/Kg		84	70 - 130
1,1-Dichloroethene	50.0	55.4		ug/Kg		111	74 - 122
cis-1,2-Dichloroethene	50.0	45.2		ug/Kg		90	70 - 138
trans-1,2-Dichloroethene	50.0	50.8		ug/Kg		102	67 - 130
1,2-Dichloropropane	50.0	44.6		ug/Kg		89	73 - 127
cis-1,3-Dichloropropene	50.0	45.9		ug/Kg		92	68 - 147
trans-1,3-Dichloropropene	50.0	42.1		ug/Kg		84	70 - 155
Ethylbenzene	50.0	45.3		ug/Kg		91	80 - 137
Hexachlorobutadiene	50.0	49.0		ug/Kg		98	70 - 132
2-Hexanone	250	218		ug/Kg		87	62 - 158
Isopropylbenzene	50.0	46.6		ug/Kg		93	70 - 130
4-Isopropyltoluene	50.0	46.8		ug/Kg		94	70 - 133
Methylene Chloride	50.0	47.3		ug/Kg		95	70 - 134
4-Methyl-2-pentanone (MIBK)	250	222		ug/Kg		89	60 - 160
Naphthalene	50.0	45.0		ug/Kg		90	60 - 147
N-Propylbenzene	50.0	45.1		ug/Kg		90	70 - 130
Styrene	50.0	44.5		ug/Kg		89	70 - 130
1,1,1,2-Tetrachloroethane	50.0	46.5		ug/Kg		93	70 - 130
1,1,2,2-Tetrachloroethane	50.0	43.2		ug/Kg		86	70 - 146
Tetrachloroethene	50.0	47.2		ug/Kg		94	70 - 132
Toluene	50.0	46.4		ug/Kg		93	75 - 120
1,2,3-Trichlorobenzene	50.0	47.0		ug/Kg		94	60 - 140
1,2,4-Trichlorobenzene	50.0	48.1		ug/Kg		96	60 - 140
1,1,1-Trichloroethane	50.0	47.4		ug/Kg		95	70 - 130
1,1,2-Trichloroethane	50.0	43.1		ug/Kg		86	70 - 130
Trichloroethene	50.0	47.2		ug/Kg		94	70 - 133
Trichlorofluoromethane	50.0	56.7		ug/Kg		113	60 - 140
1,2,3-Trichloropropane	50.0	43.1		ug/Kg		86	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	59.4		ug/Kg		119	60 - 140
1,2,4-Trimethylbenzene	50.0	44.2		ug/Kg		88	70 - 130
1,3,5-Trimethylbenzene	50.0	45.1		ug/Kg		90	70 - 131
Vinyl acetate	50.0	47.1		ug/Kg		94	38 - 176
Vinyl chloride	50.0	54.7		ug/Kg		109	58 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250267/5
Matrix: Solid
Analysis Batch: 250267

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	50.0	44.8		ug/Kg		90	70 - 146
o-Xylene	50.0	45.1		ug/Kg		90	70 - 140
2,2-Dichloropropane	50.0	48.1		ug/Kg		96	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*86*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCS 720-250267/7
Matrix: Solid
Analysis Batch: 250267

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	895		ug/Kg		89	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*84*		*60 - 140*
Toluene-d8 (Surr)	*95*		*58 - 140*

Lab Sample ID: LCSD 720-250267/6
Matrix: Solid
Analysis Batch: 250267

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	43.7		ug/Kg		87	70 - 144	0	20
Acetone	250	234		ug/Kg		94	30 - 162	3	30
Benzene	50.0	45.9		ug/Kg		92	70 - 130	1	20
Dichlorobromomethane	50.0	42.7		ug/Kg		85	70 - 140	3	20
Bromobenzene	50.0	45.7		ug/Kg		91	70 - 130	2	20
Chlorobromomethane	50.0	48.1		ug/Kg		96	70 - 130	1	20
Bromoform	50.0	42.6		ug/Kg		85	59 - 158	0	20
Bromomethane	50.0	55.3		ug/Kg		111	59 - 132	1	20
2-Butanone (MEK)	250	210		ug/Kg		84	59 - 159	9	20
n-Butylbenzene	50.0	48.9		ug/Kg		98	70 - 142	3	20
sec-Butylbenzene	50.0	47.2		ug/Kg		94	70 - 136	3	20
tert-Butylbenzene	50.0	47.3		ug/Kg		95	70 - 130	3	20
Carbon disulfide	50.0	58.6		ug/Kg		117	60 - 140	1	20
Carbon tetrachloride	50.0	46.9		ug/Kg		94	70 - 142	1	20
Chlorobenzene	50.0	47.0		ug/Kg		94	70 - 130	1	20
Chloroethane	50.0	51.9		ug/Kg		104	65 - 130	2	20
Chloroform	50.0	44.9		ug/Kg		90	77 - 127	0	20
Chloromethane	50.0	54.6		ug/Kg		109	55 - 140	4	20
2-Chlorotoluene	50.0	45.0		ug/Kg		90	70 - 138	2	20
4-Chlorotoluene	50.0	44.9		ug/Kg		90	70 - 136	2	20
Chlorodibromomethane	50.0	43.2		ug/Kg		86	70 - 146	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250267/6
Matrix: Solid
Analysis Batch: 250267

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene			50.0	47.0		ug/Kg		94	70 - 130	3	20
1,3-Dichlorobenzene			50.0	46.0		ug/Kg		92	70 - 131	2	20
1,4-Dichlorobenzene			50.0	46.3		ug/Kg		93	70 - 130	2	20
1,3-Dichloropropane			50.0	41.6		ug/Kg		83	70 - 140	0	20
1,1-Dichloropropene			50.0	46.2		ug/Kg		92	70 - 130	1	20
1,2-Dibromo-3-Chloropropane			50.0	46.4		ug/Kg		93	60 - 145	1	20
Ethylene Dibromide			50.0	43.5		ug/Kg		87	70 - 140	1	20
Dibromomethane			50.0	42.7		ug/Kg		85	70 - 139	0	20
Dichlorodifluoromethane			50.0	58.8		ug/Kg		118	37 - 158	4	20
1,1-Dichloroethane			50.0	47.1		ug/Kg		94	70 - 130	0	20
1,2-Dichloroethane			50.0	41.9		ug/Kg		84	70 - 130	0	20
1,1-Dichloroethene			50.0	55.6		ug/Kg		111	74 - 122	0	20
cis-1,2-Dichloroethene			50.0	45.2		ug/Kg		90	70 - 138	0	20
trans-1,2-Dichloroethene			50.0	49.7		ug/Kg		99	67 - 130	2	20
1,2-Dichloropropane			50.0	44.8		ug/Kg		90	73 - 127	0	20
cis-1,3-Dichloropropene			50.0	46.0		ug/Kg		92	68 - 147	0	20
trans-1,3-Dichloropropene			50.0	42.6		ug/Kg		85	70 - 155	1	20
Ethylbenzene			50.0	46.2		ug/Kg		92	80 - 137	2	20
Hexachlorobutadiene			50.0	52.3		ug/Kg		105	70 - 132	7	20
2-Hexanone			250	212		ug/Kg		85	62 - 158	3	20
Isopropylbenzene			50.0	47.7		ug/Kg		95	70 - 130	2	20
4-Isopropyltoluene			50.0	48.4		ug/Kg		97	70 - 133	3	20
Methylene Chloride			50.0	46.8		ug/Kg		94	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)			250	214		ug/Kg		86	60 - 160	4	20
Naphthalene			50.0	45.9		ug/Kg		92	60 - 147	2	20
N-Propylbenzene			50.0	46.1		ug/Kg		92	70 - 130	2	20
Styrene			50.0	45.0		ug/Kg		90	70 - 130	1	20
1,1,1,2-Tetrachloroethane			50.0	47.4		ug/Kg		95	70 - 130	2	20
1,1,2,2-Tetrachloroethane			50.0	43.4		ug/Kg		87	70 - 146	0	20
Tetrachloroethene			50.0	47.1		ug/Kg		94	70 - 132	0	20
Toluene			50.0	47.6		ug/Kg		95	75 - 120	3	20
1,2,3-Trichlorobenzene			50.0	48.8		ug/Kg		98	60 - 140	4	20
1,2,4-Trichlorobenzene			50.0	49.4		ug/Kg		99	60 - 140	3	20
1,1,1-Trichloroethane			50.0	47.4		ug/Kg		95	70 - 130	0	20
1,1,2-Trichloroethane			50.0	43.6		ug/Kg		87	70 - 130	1	20
Trichloroethene			50.0	48.0		ug/Kg		96	70 - 133	2	20
Trichlorofluoromethane			50.0	54.5		ug/Kg		109	60 - 140	4	20
1,2,3-Trichloropropane			50.0	43.8		ug/Kg		88	70 - 146	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	59.7		ug/Kg		119	60 - 140	1	20
1,2,4-Trimethylbenzene			50.0	45.3		ug/Kg		91	70 - 130	2	20
1,3,5-Trimethylbenzene			50.0	45.9		ug/Kg		92	70 - 131	2	20
Vinyl acetate			50.0	45.3		ug/Kg		91	38 - 176	4	20
Vinyl chloride			50.0	55.3		ug/Kg		111	58 - 125	1	20
m-Xylene & p-Xylene			50.0	45.7		ug/Kg		91	70 - 146	2	20
o-Xylene			50.0	45.7		ug/Kg		91	70 - 140	1	20
2,2-Dichloropropane			50.0	47.4		ug/Kg		95	70 - 162	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250267/6
Matrix: Solid
Analysis Batch: 250267

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*86*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250267/8
Matrix: Solid
Analysis Batch: 250267

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	913		ug/Kg		91	70 - 122	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*86*		*60 - 140*
Toluene-d8 (Surr)	*94*		*58 - 140*

Lab Sample ID: MB 720-250350/4
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 09:36	1
Acetone	ND		50	38	ug/Kg			08/28/18 09:36	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 09:36	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 09:36	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 09:36	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 09:36	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 09:36	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 09:36	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 09:36	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 09:36	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:36	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 09:36	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 09:36	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 09:36	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 09:36	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 09:36	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 09:36	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 09:36	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 09:36	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:36	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 09:36	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:36	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250350/4
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 09:36	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 09:36	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 09:36	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 09:36	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:36	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 09:36	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 09:36	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 09:36	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:36	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 09:36	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 09:36	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 09:36	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 09:36	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 09:36	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 09:36	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 09:36	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 09:36	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 09:36	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 09:36	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:36	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 09:36	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 09:36	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 09:36	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 09:36	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 09:36	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 09:36	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 09:36	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 09:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 09:36	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 09:36	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 09:36	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 09:36	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 09:36	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 09:36	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 09:36	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 09:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*45 - 131*		*08/28/18 09:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*		*08/28/18 09:36*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*		*08/28/18 09:36*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250350/5
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	45.9		ug/Kg		92	70 - 144
Acetone	250	264		ug/Kg		105	30 - 162
Benzene	50.0	44.9		ug/Kg		90	70 - 130
Dichlorobromomethane	50.0	45.7		ug/Kg		91	70 - 140
Bromobenzene	50.0	43.2		ug/Kg		86	70 - 130
Chlorobromomethane	50.0	48.5		ug/Kg		97	70 - 130
Bromoform	50.0	48.6		ug/Kg		97	59 - 158
Bromomethane	50.0	55.6		ug/Kg		111	59 - 132
2-Butanone (MEK)	250	246		ug/Kg		99	59 - 159
n-Butylbenzene	50.0	46.6		ug/Kg		93	70 - 142
sec-Butylbenzene	50.0	43.9		ug/Kg		88	70 - 136
tert-Butylbenzene	50.0	43.6		ug/Kg		87	70 - 130
Carbon disulfide	50.0	55.6		ug/Kg		111	60 - 140
Carbon tetrachloride	50.0	47.8		ug/Kg		96	70 - 142
Chlorobenzene	50.0	45.6		ug/Kg		91	70 - 130
Chloroethane	50.0	52.3		ug/Kg		105	65 - 130
Chloroform	50.0	45.1		ug/Kg		90	77 - 127
Chloromethane	50.0	57.1		ug/Kg		114	55 - 140
2-Chlorotoluene	50.0	41.6		ug/Kg		83	70 - 138
4-Chlorotoluene	50.0	42.0		ug/Kg		84	70 - 136
Chlorodibromomethane	50.0	48.6		ug/Kg		97	70 - 146
1,2-Dichlorobenzene	50.0	45.7		ug/Kg		91	70 - 130
1,3-Dichlorobenzene	50.0	44.2		ug/Kg		88	70 - 131
1,4-Dichlorobenzene	50.0	45.2		ug/Kg		90	70 - 130
1,3-Dichloropropane	50.0	46.3		ug/Kg		93	70 - 140
1,1-Dichloropropene	50.0	46.0		ug/Kg		92	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	50.7		ug/Kg		101	60 - 145
Ethylene Dibromide	50.0	48.1		ug/Kg		96	70 - 140
Dibromomethane	50.0	45.6		ug/Kg		91	70 - 139
Dichlorodifluoromethane	50.0	62.3		ug/Kg		125	37 - 158
1,1-Dichloroethane	50.0	45.7		ug/Kg		91	70 - 130
1,2-Dichloroethane	50.0	44.9		ug/Kg		90	70 - 130
1,1-Dichloroethene	50.0	51.9		ug/Kg		104	74 - 122
cis-1,2-Dichloroethene	50.0	45.3		ug/Kg		91	70 - 138
trans-1,2-Dichloroethene	50.0	49.1		ug/Kg		98	67 - 130
1,2-Dichloropropane	50.0	45.8		ug/Kg		92	73 - 127
cis-1,3-Dichloropropene	50.0	48.4		ug/Kg		97	68 - 147
trans-1,3-Dichloropropene	50.0	46.7		ug/Kg		93	70 - 155
Ethylbenzene	50.0	44.3		ug/Kg		89	80 - 137
Hexachlorobutadiene	50.0	50.4		ug/Kg		101	70 - 132
2-Hexanone	250	272		ug/Kg		109	62 - 158
Isopropylbenzene	50.0	46.2		ug/Kg		92	70 - 130
4-Isopropyltoluene	50.0	45.2		ug/Kg		90	70 - 133
Methylene Chloride	50.0	46.7		ug/Kg		93	70 - 134
4-Methyl-2-pentanone (MIBK)	250	272		ug/Kg		109	60 - 160
Naphthalene	50.0	48.2		ug/Kg		96	60 - 147
N-Propylbenzene	50.0	42.6		ug/Kg		85	70 - 130
Styrene	50.0	44.5		ug/Kg		89	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250350/5
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	47.1		ug/Kg		94	70 - 130
1,1,2,2-Tetrachloroethane	50.0	44.6		ug/Kg		89	70 - 146
Tetrachloroethene	50.0	48.2		ug/Kg		96	70 - 132
Toluene	50.0	44.7		ug/Kg		89	75 - 120
1,2,3-Trichlorobenzene	50.0	50.8		ug/Kg		102	60 - 140
1,2,4-Trichlorobenzene	50.0	49.8		ug/Kg		100	60 - 140
1,1,1-Trichloroethane	50.0	47.4		ug/Kg		95	70 - 130
1,1,2-Trichloroethane	50.0	48.0		ug/Kg		96	70 - 130
Trichloroethene	50.0	47.0		ug/Kg		94	70 - 133
Trichlorofluoromethane	50.0	57.5		ug/Kg		115	60 - 140
1,2,3-Trichloropropane	50.0	45.3		ug/Kg		91	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	59.8		ug/Kg		120	60 - 140
1,2,4-Trimethylbenzene	50.0	42.3		ug/Kg		85	70 - 130
1,3,5-Trimethylbenzene	50.0	42.3		ug/Kg		85	70 - 131
Vinyl acetate	50.0	51.9		ug/Kg		104	38 - 176
Vinyl chloride	50.0	53.8		ug/Kg		108	58 - 125
m-Xylene & p-Xylene	50.0	44.1		ug/Kg		88	70 - 146
o-Xylene	50.0	44.6		ug/Kg		89	70 - 140
2,2-Dichloropropane	50.0	47.6		ug/Kg		95	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Lab Sample ID: LCS 720-250350/7
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	985		ug/Kg		99	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250350/6
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	46.2		ug/Kg		92	70 - 144	1	20
Acetone	250	260		ug/Kg		104	30 - 162	2	30
Benzene	50.0	42.9		ug/Kg		86	70 - 130	5	20
Dichlorobromomethane	50.0	45.0		ug/Kg		90	70 - 140	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250350/6
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	50.0	43.3		ug/Kg		87	70 - 130	0	20
Chlorobromomethane	50.0	48.1		ug/Kg		96	70 - 130	1	20
Bromoform	50.0	47.8		ug/Kg		96	59 - 158	2	20
Bromomethane	50.0	54.0		ug/Kg		108	59 - 132	3	20
2-Butanone (MEK)	250	259		ug/Kg		103	59 - 159	5	20
n-Butylbenzene	50.0	45.2		ug/Kg		90	70 - 142	3	20
sec-Butylbenzene	50.0	42.7		ug/Kg		85	70 - 136	3	20
tert-Butylbenzene	50.0	42.5		ug/Kg		85	70 - 130	3	20
Carbon disulfide	50.0	51.7		ug/Kg		103	60 - 140	7	20
Carbon tetrachloride	50.0	44.8		ug/Kg		90	70 - 142	6	20
Chlorobenzene	50.0	44.8		ug/Kg		90	70 - 130	2	20
Chloroethane	50.0	50.5		ug/Kg		101	65 - 130	4	20
Chloroform	50.0	43.5		ug/Kg		87	77 - 127	4	20
Chloromethane	50.0	53.4		ug/Kg		107	55 - 140	7	20
2-Chlorotoluene	50.0	40.9		ug/Kg		82	70 - 138	2	20
4-Chlorotoluene	50.0	41.5		ug/Kg		83	70 - 136	1	20
Chlorodibromomethane	50.0	47.7		ug/Kg		95	70 - 146	2	20
1,2-Dichlorobenzene	50.0	45.5		ug/Kg		91	70 - 130	1	20
1,3-Dichlorobenzene	50.0	43.6		ug/Kg		87	70 - 131	1	20
1,4-Dichlorobenzene	50.0	44.2		ug/Kg		88	70 - 130	2	20
1,3-Dichloropropane	50.0	45.5		ug/Kg		91	70 - 140	2	20
1,1-Dichloropropene	50.0	43.8		ug/Kg		88	70 - 130	5	20
1,2-Dibromo-3-Chloropropane	50.0	50.9		ug/Kg		102	60 - 145	0	20
Ethylene Dibromide	50.0	47.2		ug/Kg		94	70 - 140	2	20
Dibromomethane	50.0	45.9		ug/Kg		92	70 - 139	1	20
Dichlorodifluoromethane	50.0	58.8		ug/Kg		118	37 - 158	6	20
1,1-Dichloroethane	50.0	45.0		ug/Kg		90	70 - 130	2	20
1,2-Dichloroethane	50.0	44.4		ug/Kg		89	70 - 130	1	20
1,1-Dichloroethene	50.0	50.3		ug/Kg		101	74 - 122	3	20
cis-1,2-Dichloroethene	50.0	43.6		ug/Kg		87	70 - 138	4	20
trans-1,2-Dichloroethene	50.0	45.9		ug/Kg		92	67 - 130	7	20
1,2-Dichloropropane	50.0	44.2		ug/Kg		88	73 - 127	4	20
cis-1,3-Dichloropropene	50.0	47.1		ug/Kg		94	68 - 147	3	20
trans-1,3-Dichloropropene	50.0	44.6		ug/Kg		89	70 - 155	5	20
Ethylbenzene	50.0	42.8		ug/Kg		86	80 - 137	4	20
Hexachlorobutadiene	50.0	47.8		ug/Kg		96	70 - 132	5	20
2-Hexanone	250	269		ug/Kg		108	62 - 158	1	20
Isopropylbenzene	50.0	44.7		ug/Kg		89	70 - 130	3	20
4-Isopropyltoluene	50.0	44.1		ug/Kg		88	70 - 133	2	20
Methylene Chloride	50.0	44.9		ug/Kg		90	70 - 134	4	20
4-Methyl-2-pentanone (MIBK)	250	269		ug/Kg		107	60 - 160	1	20
Naphthalene	50.0	49.1		ug/Kg		98	60 - 147	2	20
N-Propylbenzene	50.0	41.5		ug/Kg		83	70 - 130	3	20
Styrene	50.0	43.9		ug/Kg		88	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	46.4		ug/Kg		93	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	44.5		ug/Kg		89	70 - 146	0	20
Tetrachloroethene	50.0	46.0		ug/Kg		92	70 - 132	5	20
Toluene	50.0	43.0		ug/Kg		86	75 - 120	4	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250350/6
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene			50.0	50.8		ug/Kg		102	60 - 140	0	20
1,2,4-Trichlorobenzene			50.0	50.0		ug/Kg		100	60 - 140	0	20
1,1,1-Trichloroethane			50.0	44.9		ug/Kg		90	70 - 130	5	20
1,1,2-Trichloroethane			50.0	46.5		ug/Kg		93	70 - 130	3	20
Trichloroethene			50.0	45.6		ug/Kg		91	70 - 133	3	20
Trichlorofluoromethane			50.0	55.4		ug/Kg		111	60 - 140	4	20
1,2,3-Trichloropropane			50.0	45.8		ug/Kg		92	70 - 146	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	55.0		ug/Kg		110	60 - 140	8	20
1,2,4-Trimethylbenzene			50.0	42.1		ug/Kg		84	70 - 130	1	20
1,3,5-Trimethylbenzene			50.0	41.7		ug/Kg		83	70 - 131	1	20
Vinyl acetate			50.0	52.9		ug/Kg		106	38 - 176	2	20
Vinyl chloride			50.0	51.5		ug/Kg		103	58 - 125	4	20
m-Xylene & p-Xylene			50.0	42.6		ug/Kg		85	70 - 146	3	20
o-Xylene			50.0	43.4		ug/Kg		87	70 - 140	3	20
2,2-Dichloropropane			50.0	44.4		ug/Kg		89	70 - 162	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250350/8
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	976		ug/Kg		98	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: MB 720-250352/4
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 09:35	1
Acetone	ND		50	38	ug/Kg			08/28/18 09:35	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 09:35	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 09:35	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 09:35	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 09:35	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 09:35	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 09:35	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250352/4
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 09:35	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 09:35	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:35	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 09:35	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 09:35	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 09:35	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 09:35	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 09:35	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 09:35	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 09:35	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 09:35	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 09:35	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 09:35	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:35	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:35	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:35	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 09:35	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:35	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 09:35	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 09:35	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 09:35	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 09:35	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 09:35	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:35	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 09:35	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 09:35	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 09:35	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 09:35	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:35	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 09:35	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 09:35	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 09:35	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 09:35	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:35	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 09:35	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 09:35	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 09:35	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 09:35	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 09:35	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 09:35	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:35	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 09:35	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 09:35	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 09:35	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 09:35	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:35	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 09:35	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 09:35	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250352/4
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 09:35	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 09:35	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 09:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 09:35	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 09:35	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 09:35	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 09:35	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 09:35	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 09:35	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 09:35	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 09:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*45 - 131*		*08/28/18 09:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*60 - 140*		*08/28/18 09:35*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*		*08/28/18 09:35*	*1*

Lab Sample ID: LCS 720-250352/5
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	42.2		ug/Kg		84	70 - 144
Acetone	250	230		ug/Kg		92	30 - 162
Benzene	50.0	44.7		ug/Kg		89	70 - 130
Dichlorobromomethane	50.0	43.0		ug/Kg		86	70 - 140
Bromobenzene	50.0	42.8		ug/Kg		86	70 - 130
Chlorobromomethane	50.0	43.1		ug/Kg		86	70 - 130
Bromoform	50.0	40.2		ug/Kg		80	59 - 158
Bromomethane	50.0	56.9		ug/Kg		114	59 - 132
2-Butanone (MEK)	250	242		ug/Kg		97	59 - 159
n-Butylbenzene	50.0	42.4		ug/Kg		85	70 - 142
sec-Butylbenzene	50.0	46.0		ug/Kg		92	70 - 136
tert-Butylbenzene	50.0	45.1		ug/Kg		90	70 - 130
Carbon disulfide	50.0	52.1		ug/Kg		104	60 - 140
Carbon tetrachloride	50.0	47.1		ug/Kg		94	70 - 142
Chlorobenzene	50.0	45.1		ug/Kg		90	70 - 130
Chloroethane	50.0	53.3		ug/Kg		107	65 - 130
Chloroform	50.0	42.3		ug/Kg		85	77 - 127
Chloromethane	50.0	54.5		ug/Kg		109	55 - 140
2-Chlorotoluene	50.0	45.3		ug/Kg		91	70 - 138
4-Chlorotoluene	50.0	45.2		ug/Kg		90	70 - 136
Chlorodibromomethane	50.0	39.8		ug/Kg		80	70 - 146
1,2-Dichlorobenzene	50.0	43.6		ug/Kg		87	70 - 130
1,3-Dichlorobenzene	50.0	45.4		ug/Kg		91	70 - 131
1,4-Dichlorobenzene	50.0	44.1		ug/Kg		88	70 - 130
1,3-Dichloropropane	50.0	39.8		ug/Kg		80	70 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250352/5
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	50.0	47.0		ug/Kg		94	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	41.9		ug/Kg		84	60 - 145
Ethylene Dibromide	50.0	42.8		ug/Kg		86	70 - 140
Dibromomethane	50.0	44.0		ug/Kg		88	70 - 139
Dichlorodifluoromethane	50.0	67.2		ug/Kg		134	37 - 158
1,1-Dichloroethane	50.0	43.5		ug/Kg		87	70 - 130
1,2-Dichloroethane	50.0	42.5		ug/Kg		85	70 - 130
1,1-Dichloroethene	50.0	52.1		ug/Kg		104	74 - 122
cis-1,2-Dichloroethene	50.0	43.0		ug/Kg		86	70 - 138
trans-1,2-Dichloroethene	50.0	48.3		ug/Kg		97	67 - 130
1,2-Dichloropropane	50.0	43.3		ug/Kg		87	73 - 127
cis-1,3-Dichloropropene	50.0	41.9		ug/Kg		84	68 - 147
trans-1,3-Dichloropropene	50.0	39.0		ug/Kg		78	70 - 155
Ethylbenzene	50.0	46.0		ug/Kg		92	80 - 137
Hexachlorobutadiene	50.0	43.5		ug/Kg		87	70 - 132
2-Hexanone	250	230		ug/Kg		92	62 - 158
Isopropylbenzene	50.0	47.6		ug/Kg		95	70 - 130
4-Isopropyltoluene	50.0	46.2		ug/Kg		92	70 - 133
Methylene Chloride	50.0	41.0		ug/Kg		82	70 - 134
4-Methyl-2-pentanone (MIBK)	250	227		ug/Kg		91	60 - 160
Naphthalene	50.0	41.1		ug/Kg		82	60 - 147
N-Propylbenzene	50.0	46.0		ug/Kg		92	70 - 130
Styrene	50.0	42.4		ug/Kg		85	70 - 130
1,1,1,2-Tetrachloroethane	50.0	45.3		ug/Kg		91	70 - 130
1,1,2,2-Tetrachloroethane	50.0	45.0		ug/Kg		90	70 - 146
Tetrachloroethene	50.0	46.8		ug/Kg		94	70 - 132
Toluene	50.0	43.3		ug/Kg		87	75 - 120
1,2,3-Trichlorobenzene	50.0	40.9		ug/Kg		82	60 - 140
1,2,4-Trichlorobenzene	50.0	41.6		ug/Kg		83	60 - 140
1,1,1-Trichloroethane	50.0	47.5		ug/Kg		95	70 - 130
1,1,2-Trichloroethane	50.0	43.4		ug/Kg		87	70 - 130
Trichloroethene	50.0	45.5		ug/Kg		91	70 - 133
Trichlorofluoromethane	50.0	56.9		ug/Kg		114	60 - 140
1,2,3-Trichloropropane	50.0	43.9		ug/Kg		88	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	52.8		ug/Kg		106	60 - 140
1,2,4-Trimethylbenzene	50.0	45.6		ug/Kg		91	70 - 130
1,3,5-Trimethylbenzene	50.0	46.1		ug/Kg		92	70 - 131
Vinyl acetate	50.0	48.5		ug/Kg		97	38 - 176
Vinyl chloride	50.0	58.3		ug/Kg		117	58 - 125
m-Xylene & p-Xylene	50.0	46.5		ug/Kg		93	70 - 146
o-Xylene	50.0	46.7		ug/Kg		93	70 - 140
2,2-Dichloropropane	50.0	51.2		ug/Kg		102	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*88*		*60 - 140*
Toluene-d8 (Surr)	*91*		*58 - 140*

Lab Sample ID: LCS 720-250352/7
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C4-C12			1000	1090		ug/Kg		109	70 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*93*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250352/6
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether			50.0	46.5		ug/Kg		93	70 - 144	10	20
Acetone			250	243		ug/Kg		97	30 - 162	5	30
Benzene			50.0	44.3		ug/Kg		89	70 - 130	1	20
Dichlorobromomethane			50.0	44.3		ug/Kg		89	70 - 140	3	20
Bromobenzene			50.0	46.2		ug/Kg		92	70 - 130	8	20
Chlorobromomethane			50.0	47.7		ug/Kg		95	70 - 130	10	20
Bromoform			50.0	41.7		ug/Kg		83	59 - 158	4	20
Bromomethane			50.0	64.7		ug/Kg		129	59 - 132	13	20
2-Butanone (MEK)			250	262		ug/Kg		105	59 - 159	8	20
n-Butylbenzene			50.0	44.7		ug/Kg		89	70 - 142	5	20
sec-Butylbenzene			50.0	45.3		ug/Kg		91	70 - 136	2	20
tert-Butylbenzene			50.0	44.3		ug/Kg		89	70 - 130	2	20
Carbon disulfide			50.0	57.0		ug/Kg		114	60 - 140	9	20
Carbon tetrachloride			50.0	47.9		ug/Kg		96	70 - 142	2	20
Chlorobenzene			50.0	43.9		ug/Kg		88	70 - 130	3	20
Chloroethane			50.0	60.5		ug/Kg		121	65 - 130	13	20
Chloroform			50.0	44.9		ug/Kg		90	77 - 127	6	20
Chloromethane			50.0	61.3		ug/Kg		123	55 - 140	12	20
2-Chlorotoluene			50.0	47.8		ug/Kg		96	70 - 138	5	20
4-Chlorotoluene			50.0	47.2		ug/Kg		94	70 - 136	5	20
Chlorodibromomethane			50.0	43.3		ug/Kg		87	70 - 146	8	20
1,2-Dichlorobenzene			50.0	44.6		ug/Kg		89	70 - 130	2	20
1,3-Dichlorobenzene			50.0	45.5		ug/Kg		91	70 - 131	0	20
1,4-Dichlorobenzene			50.0	44.0		ug/Kg		88	70 - 130	0	20
1,3-Dichloropropane			50.0	43.9		ug/Kg		88	70 - 140	10	20
1,1-Dichloropropene			50.0	46.9		ug/Kg		94	70 - 130	0	20
1,2-Dibromo-3-Chloropropane			50.0	43.1		ug/Kg		86	60 - 145	3	20
Ethylene Dibromide			50.0	45.7		ug/Kg		91	70 - 140	6	20
Dibromomethane			50.0	43.9		ug/Kg		88	70 - 139	0	20
Dichlorodifluoromethane			50.0	72.9		ug/Kg		146	37 - 158	8	20
1,1-Dichloroethane			50.0	47.8		ug/Kg		96	70 - 130	9	20
1,2-Dichloroethane			50.0	43.7		ug/Kg		87	70 - 130	3	20
1,1-Dichloroethene			50.0	55.6		ug/Kg		111	74 - 122	7	20
cis-1,2-Dichloroethene			50.0	46.8		ug/Kg		94	70 - 138	8	20
trans-1,2-Dichloroethene			50.0	52.5		ug/Kg		105	67 - 130	8	20
1,2-Dichloropropane			50.0	44.1		ug/Kg		88	73 - 127	2	20
cis-1,3-Dichloropropene			50.0	44.5		ug/Kg		89	68 - 147	6	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250352/6
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	50.0	42.4		ug/Kg		85	70 - 155	8	20
Ethylbenzene	50.0	44.6		ug/Kg		89	80 - 137	3	20
Hexachlorobutadiene	50.0	47.8		ug/Kg		96	70 - 132	9	20
2-Hexanone	250	248		ug/Kg		99	62 - 158	8	20
Isopropylbenzene	50.0	47.7		ug/Kg		95	70 - 130	0	20
4-Isopropyltoluene	50.0	45.8		ug/Kg		92	70 - 133	1	20
Methylene Chloride	50.0	44.6		ug/Kg		89	70 - 134	8	20
4-Methyl-2-pentanone (MIBK)	250	241		ug/Kg		96	60 - 160	6	20
Naphthalene	50.0	44.9		ug/Kg		90	60 - 147	9	20
N-Propylbenzene	50.0	47.7		ug/Kg		95	70 - 130	4	20
Styrene	50.0	42.8		ug/Kg		86	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	44.6		ug/Kg		89	70 - 130	2	20
1,1,2,2-Tetrachloroethane	50.0	46.8		ug/Kg		94	70 - 146	4	20
Tetrachloroethene	50.0	48.2		ug/Kg		96	70 - 132	3	20
Toluene	50.0	42.9		ug/Kg		86	75 - 120	1	20
1,2,3-Trichlorobenzene	50.0	45.3		ug/Kg		91	60 - 140	10	20
1,2,4-Trichlorobenzene	50.0	45.8		ug/Kg		92	60 - 140	10	20
1,1,1-Trichloroethane	50.0	48.3		ug/Kg		97	70 - 130	2	20
1,1,2-Trichloroethane	50.0	45.2		ug/Kg		90	70 - 130	4	20
Trichloroethene	50.0	46.7		ug/Kg		93	70 - 133	2	20
Trichlorofluoromethane	50.0	61.7		ug/Kg		123	60 - 140	8	20
1,2,3-Trichloropropane	50.0	46.3		ug/Kg		93	70 - 146	5	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	55.1		ug/Kg		110	60 - 140	4	20
1,2,4-Trimethylbenzene	50.0	45.2		ug/Kg		90	70 - 130	1	20
1,3,5-Trimethylbenzene	50.0	45.1		ug/Kg		90	70 - 131	2	20
Vinyl acetate	50.0	51.3		ug/Kg		103	38 - 176	6	20
Vinyl chloride	50.0	65.3	*	ug/Kg		131	58 - 125	11	20
m-Xylene & p-Xylene	50.0	45.9		ug/Kg		92	70 - 146	1	20
o-Xylene	50.0	46.0		ug/Kg		92	70 - 140	1	20
2,2-Dichloropropane	50.0	55.2		ug/Kg		110	70 - 162	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250352/8
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12	1000	1080		ug/Kg		108	70 - 122	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*93*		*60 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250352/8
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	101		58 - 140

Lab Sample ID: MB 720-250407/4
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 19:46	1
Acetone	ND		50	38	ug/Kg			08/28/18 19:46	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 19:46	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 19:46	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 19:46	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 19:46	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 19:46	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 19:46	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 19:46	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 19:46	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:46	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 19:46	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 19:46	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 19:46	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 19:46	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 19:46	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 19:46	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 19:46	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 19:46	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:46	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 19:46	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:46	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 19:46	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 19:46	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 19:46	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 19:46	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:46	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 19:46	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 19:46	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 19:46	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:46	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 19:46	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 19:46	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 19:46	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 19:46	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250407/4
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 19:46	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 19:46	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 19:46	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 19:46	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 19:46	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 19:46	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:46	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 19:46	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 19:46	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 19:46	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 19:46	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 19:46	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 19:46	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 19:46	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 19:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 19:46	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 19:46	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 19:46	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 19:46	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 19:46	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 19:46	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 19:46	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 19:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*45 - 131*		*08/28/18 19:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*		*08/28/18 19:46*	*1*
Toluene-d8 (Surr)	*102*		*58 - 140*		*08/28/18 19:46*	*1*

Lab Sample ID: LCS 720-250407/5
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	52.3		ug/Kg		105	70 - 144
Acetone	250	219		ug/Kg		88	30 - 162
Benzene	50.0	55.2		ug/Kg		110	70 - 130
Dichlorobromomethane	50.0	53.5		ug/Kg		107	70 - 140
Bromobenzene	50.0	51.1		ug/Kg		102	70 - 130
Chlorobromomethane	50.0	53.8		ug/Kg		108	70 - 130
Bromoform	50.0	49.7		ug/Kg		99	59 - 158
Bromomethane	50.0	51.3		ug/Kg		103	59 - 132
2-Butanone (MEK)	250	231		ug/Kg		92	59 - 159
n-Butylbenzene	50.0	55.0		ug/Kg		110	70 - 142

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250407/5
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
sec-Butylbenzene	50.0	56.8		ug/Kg		114	70 - 136
tert-Butylbenzene	50.0	55.0		ug/Kg		110	70 - 130
Carbon disulfide	50.0	74.6	*	ug/Kg		149	60 - 140
Carbon tetrachloride	50.0	56.6		ug/Kg		113	70 - 142
Chlorobenzene	50.0	51.4		ug/Kg		103	70 - 130
Chloroethane	50.0	50.8		ug/Kg		102	65 - 130
Chloroform	50.0	54.3		ug/Kg		109	77 - 127
Chloromethane	50.0	55.7		ug/Kg		111	55 - 140
2-Chlorotoluene	50.0	54.5		ug/Kg		109	70 - 138
4-Chlorotoluene	50.0	54.9		ug/Kg		110	70 - 136
Chlorodibromomethane	50.0	52.1		ug/Kg		104	70 - 146
1,2-Dichlorobenzene	50.0	51.0		ug/Kg		102	70 - 130
1,3-Dichlorobenzene	50.0	51.6		ug/Kg		103	70 - 131
1,4-Dichlorobenzene	50.0	51.4		ug/Kg		103	70 - 130
1,3-Dichloropropane	50.0	50.8		ug/Kg		102	70 - 140
1,1-Dichloropropene	50.0	56.5		ug/Kg		113	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	50.5		ug/Kg		101	60 - 145
Ethylene Dibromide	50.0	51.9		ug/Kg		104	70 - 140
Dibromomethane	50.0	51.2		ug/Kg		102	70 - 139
Dichlorodifluoromethane	50.0	51.4		ug/Kg		103	37 - 158
1,1-Dichloroethane	50.0	58.1		ug/Kg		116	70 - 130
1,2-Dichloroethane	50.0	51.4		ug/Kg		103	70 - 130
1,1-Dichloroethene	50.0	63.4	*	ug/Kg		127	74 - 122
cis-1,2-Dichloroethene	50.0	56.6		ug/Kg		113	70 - 138
trans-1,2-Dichloroethene	50.0	59.4		ug/Kg		119	67 - 130
1,2-Dichloropropane	50.0	56.8		ug/Kg		114	73 - 127
cis-1,3-Dichloropropene	50.0	56.4		ug/Kg		113	68 - 147
trans-1,3-Dichloropropene	50.0	53.1		ug/Kg		106	70 - 155
Ethylbenzene	50.0	54.7		ug/Kg		109	80 - 137
Hexachlorobutadiene	50.0	49.1		ug/Kg		98	70 - 132
2-Hexanone	250	248		ug/Kg		99	62 - 158
Isopropylbenzene	50.0	53.0		ug/Kg		106	70 - 130
4-Isopropyltoluene	50.0	55.5		ug/Kg		111	70 - 133
Methylene Chloride	50.0	54.3		ug/Kg		109	70 - 134
4-Methyl-2-pentanone (MIBK)	250	255		ug/Kg		102	60 - 160
Naphthalene	50.0	48.2		ug/Kg		96	60 - 147
N-Propylbenzene	50.0	57.1		ug/Kg		114	70 - 130
Styrene	50.0	51.9		ug/Kg		104	70 - 130
1,1,1,2-Tetrachloroethane	50.0	52.8		ug/Kg		106	70 - 130
1,1,2,2-Tetrachloroethane	50.0	51.3		ug/Kg		103	70 - 146
Tetrachloroethene	50.0	52.1		ug/Kg		104	70 - 132
Toluene	50.0	52.2		ug/Kg		104	75 - 120
1,2,3-Trichlorobenzene	50.0	47.3		ug/Kg		95	60 - 140
1,2,4-Trichlorobenzene	50.0	48.6		ug/Kg		97	60 - 140
1,1,1-Trichloroethane	50.0	55.6		ug/Kg		111	70 - 130
1,1,2-Trichloroethane	50.0	52.4		ug/Kg		105	70 - 130
Trichloroethene	50.0	51.4		ug/Kg		103	70 - 133
Trichlorofluoromethane	50.0	54.5		ug/Kg		109	60 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250407/5
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	50.8		ug/Kg		102	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	66.9		ug/Kg		134	60 - 140
1,2,4-Trimethylbenzene	50.0	54.2		ug/Kg		108	70 - 130
1,3,5-Trimethylbenzene	50.0	55.2		ug/Kg		110	70 - 131
Vinyl acetate	50.0	53.1		ug/Kg		106	38 - 176
Vinyl chloride	50.0	53.9		ug/Kg		108	58 - 125
m-Xylene & p-Xylene	50.0	53.0		ug/Kg		106	70 - 146
o-Xylene	50.0	53.4		ug/Kg		107	70 - 140
2,2-Dichloropropane	50.0	57.7		ug/Kg		115	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCS 720-250407/7
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	937		ug/Kg		94	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: LCSD 720-250407/6
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	53.3		ug/Kg		107	70 - 144	2	20
Acetone	250	232		ug/Kg		93	30 - 162	6	30
Benzene	50.0	53.9		ug/Kg		108	70 - 130	2	20
Dichlorobromomethane	50.0	53.0		ug/Kg		106	70 - 140	1	20
Bromobenzene	50.0	49.7		ug/Kg		99	70 - 130	3	20
Chlorobromomethane	50.0	52.9		ug/Kg		106	70 - 130	2	20
Bromoform	50.0	51.5		ug/Kg		103	59 - 158	4	20
Bromomethane	50.0	51.5		ug/Kg		103	59 - 132	0	20
2-Butanone (MEK)	250	232		ug/Kg		93	59 - 159	1	20
n-Butylbenzene	50.0	54.6		ug/Kg		109	70 - 142	1	20
sec-Butylbenzene	50.0	55.2		ug/Kg		110	70 - 136	3	20
tert-Butylbenzene	50.0	53.7		ug/Kg		107	70 - 130	2	20
Carbon disulfide	50.0	72.7	*	ug/Kg		145	60 - 140	3	20
Carbon tetrachloride	50.0	54.8		ug/Kg		110	70 - 142	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250407/6
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene	50.0	51.6		ug/Kg		103	70 - 130	0	20
Chloroethane	50.0	51.0		ug/Kg		102	65 - 130	0	20
Chloroform	50.0	53.1		ug/Kg		106	77 - 127	2	20
Chloromethane	50.0	54.5		ug/Kg		109	55 - 140	2	20
2-Chlorotoluene	50.0	53.4		ug/Kg		107	70 - 138	2	20
4-Chlorotoluene	50.0	53.6		ug/Kg		107	70 - 136	2	20
Chlorodibromomethane	50.0	51.6		ug/Kg		103	70 - 146	1	20
1,2-Dichlorobenzene	50.0	50.3		ug/Kg		101	70 - 130	1	20
1,3-Dichlorobenzene	50.0	50.8		ug/Kg		102	70 - 131	2	20
1,4-Dichlorobenzene	50.0	50.4		ug/Kg		101	70 - 130	2	20
1,3-Dichloropropane	50.0	50.7		ug/Kg		101	70 - 140	0	20
1,1-Dichloropropene	50.0	55.3		ug/Kg		111	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	50.0	51.2		ug/Kg		102	60 - 145	1	20
Ethylene Dibromide	50.0	51.9		ug/Kg		104	70 - 140	0	20
Dibromomethane	50.0	51.2		ug/Kg		102	70 - 139	0	20
Dichlorodifluoromethane	50.0	51.9		ug/Kg		104	37 - 158	1	20
1,1-Dichloroethane	50.0	57.1		ug/Kg		114	70 - 130	2	20
1,2-Dichloroethane	50.0	51.5		ug/Kg		103	70 - 130	0	20
1,1-Dichloroethene	50.0	61.4	*	ug/Kg		123	74 - 122	3	20
cis-1,2-Dichloroethene	50.0	55.9		ug/Kg		112	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	58.3		ug/Kg		117	67 - 130	2	20
1,2-Dichloropropane	50.0	56.4		ug/Kg		113	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	56.8		ug/Kg		114	68 - 147	1	20
trans-1,3-Dichloropropene	50.0	53.6		ug/Kg		107	70 - 155	1	20
Ethylbenzene	50.0	54.4		ug/Kg		109	80 - 137	1	20
Hexachlorobutadiene	50.0	48.7		ug/Kg		97	70 - 132	1	20
2-Hexanone	250	257		ug/Kg		103	62 - 158	4	20
Isopropylbenzene	50.0	52.9		ug/Kg		106	70 - 130	0	20
4-Isopropyltoluene	50.0	54.5		ug/Kg		109	70 - 133	2	20
Methylene Chloride	50.0	54.0		ug/Kg		108	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	261		ug/Kg		105	60 - 160	2	20
Naphthalene	50.0	49.5		ug/Kg		99	60 - 147	3	20
N-Propylbenzene	50.0	55.8		ug/Kg		112	70 - 130	2	20
Styrene	50.0	52.2		ug/Kg		104	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	53.0		ug/Kg		106	70 - 130	0	20
1,1,2,2-Tetrachloroethane	50.0	51.0		ug/Kg		102	70 - 146	1	20
Tetrachloroethene	50.0	50.7		ug/Kg		101	70 - 132	3	20
Toluene	50.0	52.5		ug/Kg		105	75 - 120	1	20
1,2,3-Trichlorobenzene	50.0	49.0		ug/Kg		98	60 - 140	4	20
1,2,4-Trichlorobenzene	50.0	49.1		ug/Kg		98	60 - 140	1	20
1,1,1-Trichloroethane	50.0	53.8		ug/Kg		108	70 - 130	3	20
1,1,2-Trichloroethane	50.0	52.6		ug/Kg		105	70 - 130	1	20
Trichloroethene	50.0	50.3		ug/Kg		101	70 - 133	2	20
Trichlorofluoromethane	50.0	53.4		ug/Kg		107	60 - 140	2	20
1,2,3-Trichloropropane	50.0	51.0		ug/Kg		102	70 - 146	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	64.7		ug/Kg		129	60 - 140	3	20
1,2,4-Trimethylbenzene	50.0	53.1		ug/Kg		106	70 - 130	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250407/6
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trimethylbenzene			50.0	53.9		ug/Kg		108	70 - 131	2	20
Vinyl acetate			50.0	52.6		ug/Kg		105	38 - 176	1	20
Vinyl chloride			50.0	53.4		ug/Kg		107	58 - 125	1	20
m-Xylene & p-Xylene			50.0	53.0		ug/Kg		106	70 - 146	0	20
o-Xylene			50.0	53.6		ug/Kg		107	70 - 140	0	20
2,2-Dichloropropane			50.0	57.5		ug/Kg		115	70 - 162	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*97*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: LCSD 720-250407/8
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	943		ug/Kg		94	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 720-249979/1-A
Matrix: Solid
Analysis Batch: 250076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249979

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Anthracene	ND		5.0	2.0	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Chrysene	ND		5.0	1.4	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Fluorene	ND		5.0	2.2	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/22/18 12:41	08/23/18 15:59	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/22/18 12:41	08/23/18 15:59	1

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 720-249979/1-A
Matrix: Solid
Analysis Batch: 250076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249979

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		5.0	1.7	ug/Kg		08/22/18 12:41	08/23/18 15:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*33 - 120*	*08/22/18 12:41*	*08/23/18 15:59*	*1*
Terphenyl-d14	*102*		*35 - 146*	*08/22/18 12:41*	*08/23/18 15:59*	*1*

Lab Sample ID: LCS 720-249979/2-A
Matrix: Solid
Analysis Batch: 250076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249979

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	1330	1030		ug/Kg		77	46 - 110
Acenaphthene	667	527		ug/Kg		79	46 - 106
Acenaphthylene	667	494		ug/Kg		74	46 - 108
Anthracene	667	548		ug/Kg		82	55 - 103
Benzo[a]anthracene	667	597		ug/Kg		89	54 - 110
Benzo[a]pyrene	667	598		ug/Kg		90	62 - 111
Benzo[b]fluoranthene	667	618		ug/Kg		93	60 - 109
Benzo[g,h,i]perylene	667	624		ug/Kg		94	52 - 114
Benzo[k]fluoranthene	667	606		ug/Kg		91	58 - 109
Chrysene	667	560		ug/Kg		84	54 - 108
Dibenz(a,h)anthracene	667	631		ug/Kg		95	58 - 112
Fluoranthene	667	591		ug/Kg		89	59 - 109
Fluorene	667	547		ug/Kg		82	52 - 106
Indeno[1,2,3-cd]pyrene	667	677		ug/Kg		102	55 - 120
Naphthalene	667	499		ug/Kg		75	49 - 110
Phenanthrene	667	564		ug/Kg		85	57 - 110
Pyrene	667	595		ug/Kg		89	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*33 - 120*
Terphenyl-d14	*94*		*35 - 146*

Lab Sample ID: 720-88156-A-5-C MS
Matrix: Solid
Analysis Batch: 250076

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 249979

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	ND	F1	1310	567	F1	ug/Kg		43	46 - 110
Acenaphthene	ND	F1	655	386		ug/Kg		59	46 - 106
Acenaphthylene	34	F2 F1	655	257	F1	ug/Kg		34	46 - 108
Anthracene	ND	F2 F1	655	66.5	F1	ug/Kg		10	55 - 103
Benzo[a]anthracene	ND	F2 F1	655	16.8	J F1	ug/Kg		3	54 - 110
Benzo[a]pyrene	ND	F1	655	11.6	J F1	ug/Kg		2	62 - 111
Benzo[b]fluoranthene	ND	F2 F1	655	15.6	J F1	ug/Kg		2	60 - 109
Benzo[g,h,i]perylene	ND	F1	655	ND	F1	ug/Kg		0	52 - 114
Benzo[k]fluoranthene	ND	F2 F1	655	12.1	J F1	ug/Kg		2	58 - 109
Chrysene	ND	F1	655	11.3	J F1	ug/Kg		2	54 - 108

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88156-A-5-C MS
Matrix: Solid
Analysis Batch: 250076

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 249979

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenz(a,h)anthracene	ND	F1	655	ND	F1	ug/Kg		0	58 - 112
Fluoranthene	ND	F2 F1	655	65.7	F1	ug/Kg		10	59 - 109
Fluorene	ND	F2 F1	655	265	F1	ug/Kg		40	52 - 106
Indeno[1,2,3-cd]pyrene	ND	F1	655	ND	F1	ug/Kg		0	55 - 120
Naphthalene	ND	F1	655	370		ug/Kg		57	49 - 110
Phenanthrene	ND	F2 F1	655	107	F1	ug/Kg		16	57 - 110
Pyrene	ND	F2 F1	655	53.6	F1	ug/Kg		8	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*51*		*33 - 120*
Terphenyl-d14	*13*	*X*	*35 - 146*

Lab Sample ID: 720-88156-A-5-D MSD
Matrix: Solid
Analysis Batch: 250076

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 249979

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	ND	F1	1310	401	F1	ug/Kg		31	46 - 110	34	35
Acenaphthene	ND	F1	654	293	F1	ug/Kg		45	46 - 106	27	35
Acenaphthylene	34	F2 F1	654	164	F2 F1	ug/Kg		20	46 - 108	44	35
Anthracene	ND	F2 F1	654	26.6	F2 F1	ug/Kg		4	55 - 103	86	35
Benzo[a]anthracene	ND	F2 F1	654	9.21	J F2 F1	ug/Kg		1	54 - 110	58	35
Benzo[a]pyrene	ND	F1	654	8.44	J F1	ug/Kg		1	62 - 111	31	35
Benzo[b]fluoranthene	ND	F2 F1	654	9.69	J F2 F1	ug/Kg		1	60 - 109	47	35
Benzo[g,h,i]perylene	ND	F1	654	ND	F1	ug/Kg		0	52 - 114	NC	35
Benzo[k]fluoranthene	ND	F2 F1	654	8.21	J F2 F1	ug/Kg		1	58 - 109	39	35
Chrysene	ND	F1	654	ND	F1	ug/Kg		0	54 - 108	NC	35
Dibenz(a,h)anthracene	ND	F1	654	ND	F1	ug/Kg		0	58 - 112	NC	35
Fluoranthene	ND	F2 F1	654	26.7	F2 F1	ug/Kg		4	59 - 109	84	35
Fluorene	ND	F2 F1	654	140	F2 F1	ug/Kg		21	52 - 106	62	35
Indeno[1,2,3-cd]pyrene	ND	F1	654	ND	F1	ug/Kg		0	55 - 120	NC	35
Naphthalene	ND	F1	654	276	F1	ug/Kg		42	49 - 110	29	35
Phenanthrene	ND	F2 F1	654	43.9	F2 F1	ug/Kg		7	57 - 110	84	35
Pyrene	ND	F2 F1	654	22.6	F2 F1	ug/Kg		3	50 - 120	81	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*41*		*33 - 120*
Terphenyl-d14	*5*	*X*	*35 - 146*

Lab Sample ID: MB 720-250048/1-A
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250048

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Anthracene	ND		5.0	2.0	ug/Kg		08/23/18 09:43	08/24/18 23:03	1

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 720-250048/1-A
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250048

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Chrysene	ND		5.0	1.4	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Fluorene	ND		5.0	2.2	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Naphthalene	4.04	J	5.0	3.5	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Pyrene	ND		5.0	1.7	ug/Kg		08/23/18 09:43	08/24/18 23:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*92*		*33 - 120*	*08/23/18 09:43*	*08/24/18 23:03*	*1*
Terphenyl-d14	*93*		*35 - 146*	*08/23/18 09:43*	*08/24/18 23:03*	*1*

Lab Sample ID: LCS 720-250048/2-A
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250048

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	465		ug/Kg		70	46 - 110
Acenaphthene	667	468		ug/Kg		70	46 - 106
Acenaphthylene	667	458		ug/Kg		69	46 - 108
Anthracene	667	524		ug/Kg		79	55 - 103
Benzo[a]anthracene	667	577		ug/Kg		87	54 - 110
Benzo[a]pyrene	667	575		ug/Kg		86	62 - 111
Benzo[b]fluoranthene	667	582		ug/Kg		87	60 - 109
Benzo[g,h,i]perylene	667	666		ug/Kg		100	52 - 114
Benzo[k]fluoranthene	667	558		ug/Kg		84	58 - 109
Chrysene	667	540		ug/Kg		81	54 - 108
Dibenz(a,h)anthracene	667	632		ug/Kg		95	58 - 112
Fluoranthene	667	568		ug/Kg		85	59 - 109
Fluorene	667	494		ug/Kg		74	52 - 106
Indeno[1,2,3-cd]pyrene	667	686		ug/Kg		103	55 - 120
Naphthalene	667	511		ug/Kg		77	49 - 110
Phenanthrene	667	523		ug/Kg		78	57 - 110
Pyrene	667	553		ug/Kg		83	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*33 - 120*
Terphenyl-d14	*88*		*35 - 146*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88190-E-11-A MS
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250048

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	ND		655	448		ug/Kg		68	46 - 110
Acenaphthene	ND		655	447		ug/Kg		68	46 - 106
Acenaphthylene	ND		655	442		ug/Kg		67	46 - 108
Anthracene	ND		655	513		ug/Kg		78	55 - 103
Benzo[a]anthracene	ND		655	572		ug/Kg		87	54 - 110
Benzo[a]pyrene	2.3	J	655	562		ug/Kg		85	62 - 111
Benzo[b]fluoranthene	3.0	J	655	592		ug/Kg		90	60 - 109
Benzo[g,h,i]perylene	ND		655	505		ug/Kg		77	52 - 114
Benzo[k]fluoranthene	ND		655	527		ug/Kg		81	58 - 109
Chrysene	ND		655	542		ug/Kg		83	54 - 108
Dibenz(a,h)anthracene	ND		655	542		ug/Kg		83	58 - 112
Fluoranthene	1.9	J	655	563		ug/Kg		86	59 - 109
Fluorene	ND		655	476		ug/Kg		73	52 - 106
Indeno[1,2,3-cd]pyrene	ND		655	571		ug/Kg		87	55 - 120
Naphthalene	ND		655	435		ug/Kg		66	49 - 110
Phenanthrene	1.8	J	655	508		ug/Kg		78	57 - 110
Pyrene	2.3	J	655	565		ug/Kg		86	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*72*		*33 - 120*
Terphenyl-d14	*91*		*35 - 146*

Lab Sample ID: 720-88190-E-11-B MSD
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250048

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	ND		655	448		ug/Kg		68	46 - 110	0	35
Acenaphthene	ND		655	473		ug/Kg		72	46 - 106	6	35
Acenaphthylene	ND		655	457		ug/Kg		70	46 - 108	3	35
Anthracene	ND		655	525		ug/Kg		80	55 - 103	2	35
Benzo[a]anthracene	ND		655	579		ug/Kg		88	54 - 110	1	35
Benzo[a]pyrene	2.3	J	655	573		ug/Kg		87	62 - 111	2	35
Benzo[b]fluoranthene	3.0	J	655	585		ug/Kg		89	60 - 109	1	35
Benzo[g,h,i]perylene	ND		655	483		ug/Kg		74	52 - 114	4	35
Benzo[k]fluoranthene	ND		655	551		ug/Kg		84	58 - 109	4	35
Chrysene	ND		655	549		ug/Kg		84	54 - 108	1	35
Dibenz(a,h)anthracene	ND		655	525		ug/Kg		80	58 - 112	3	35
Fluoranthene	1.9	J	655	571		ug/Kg		87	59 - 109	1	35
Fluorene	ND		655	497		ug/Kg		76	52 - 106	4	35
Indeno[1,2,3-cd]pyrene	ND		655	551		ug/Kg		84	55 - 120	3	35
Naphthalene	ND		655	427		ug/Kg		65	49 - 110	2	35
Phenanthrene	1.8	J	655	515		ug/Kg		79	57 - 110	1	35
Pyrene	2.3	J	655	574		ug/Kg		87	50 - 120	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*33 - 120*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88190-E-11-B MSD
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250048

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Terphenyl-d14	92		35 - 146

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-249957/1-A
Matrix: Solid
Analysis Batch: 250036

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249957

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/22/18 09:40	08/23/18 11:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	103		40 - 130	08/22/18 09:40	08/23/18 11:34	1

Lab Sample ID: LCS 720-249957/2-A
Matrix: Solid
Analysis Batch: 250037

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	167000	161000		ug/Kg		97	50 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
p-Terphenyl	108		40 - 130

Lab Sample ID: 720-88164-1 MS
Matrix: Solid
Analysis Batch: 250037

Client Sample ID: DG-B1S-0.5-1
Prep Type: Total/NA
Prep Batch: 249957

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	160000		161000	293000		ug/Kg		85	50 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
p-Terphenyl	98		40 - 130

Lab Sample ID: 720-88164-1 MSD
Matrix: Solid
Analysis Batch: 250037

Client Sample ID: DG-B1S-0.5-1
Prep Type: Total/NA
Prep Batch: 249957

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	160000		161000	316000		ug/Kg		99	50 - 150	8	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
p-Terphenyl	88		40 - 130

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-250005/1-A
Matrix: Solid
Analysis Batch: 250125

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250005

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Aldrin	ND		2.0	0.50	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Endrin	ND		2.0	0.46	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
Toxaphene	ND		40	6.8	ug/Kg		08/22/18 15:45	08/24/18 04:02	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/22/18 15:45	08/24/18 04:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*94*		*21 - 136*	*08/22/18 15:45*	*08/24/18 04:02*	*1*
Tetrachloro-m-xylene	*74*		*21 - 145*	*08/22/18 15:45*	*08/24/18 04:02*	*1*

Lab Sample ID: LCS 720-250005/2-A
Matrix: Solid
Analysis Batch: 250125

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250005

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	15.8		ug/Kg		95	75 - 128
4,4'-DDE	16.7	15.5		ug/Kg		93	76 - 126
4,4'-DDT	16.7	15.3		ug/Kg		92	63 - 127
Aldrin	16.7	12.7		ug/Kg		76	65 - 120
alpha-BHC	16.7	9.99		ug/Kg		60	46 - 122
beta-BHC	16.7	15.4		ug/Kg		92	78 - 136
cis-Chlordane	16.7	14.9		ug/Kg		90	70 - 120
delta-BHC	16.7	13.1		ug/Kg		79	43 - 125
Dieldrin	16.7	15.1		ug/Kg		90	72 - 120
Endosulfan I	16.7	15.0		ug/Kg		90	62 - 120
Endosulfan II	16.7	16.3		ug/Kg		98	65 - 120
Endosulfan sulfate	16.7	15.0		ug/Kg		90	72 - 121
Endrin	16.7	16.5		ug/Kg		99	68 - 120
Endrin aldehyde	16.7	16.1		ug/Kg		97	68 - 120
Endrin ketone	16.7	16.4		ug/Kg		98	75 - 136
gamma-BHC (Lindane)	16.7	13.9		ug/Kg		83	72 - 120

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-250005/2-A
Matrix: Solid
Analysis Batch: 250125

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250005

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Heptachlor	16.7	14.7		ug/Kg		88	69 - 120
Heptachlor epoxide	16.7	15.0		ug/Kg		90	68 - 120
Methoxychlor	16.7	16.8		ug/Kg		101	71 - 132
trans-Chlordane	16.7	14.8		ug/Kg		89	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*95*		*21 - 136*
Tetrachloro-m-xylene	*78*		*21 - 145*

Lab Sample ID: 720-88162-D-16-I MS
Matrix: Solid
Analysis Batch: 250125

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250005

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND	F1	16.4	21.6	F1	ug/Kg		132	40 - 120
4,4'-DDE	ND		16.4	17.8		ug/Kg		109	40 - 120
4,4'-DDT	ND		16.4	19.4		ug/Kg		118	17 - 144
Aldrin	ND		16.4	15.9		ug/Kg		97	53 - 120
alpha-BHC	ND		16.4	12.5		ug/Kg		76	40 - 120
beta-BHC	ND		16.4	17.6		ug/Kg		107	40 - 120
cis-Chlordane	ND		16.4	17.9		ug/Kg		109	40 - 120
delta-BHC	ND		16.4	15.6		ug/Kg		95	40 - 120
Dieldrin	ND		16.4	18.2		ug/Kg		111	46 - 130
Endosulfan I	ND		16.4	19.1		ug/Kg		117	40 - 120
Endosulfan II	ND	F1	16.4	21.4	F1	ug/Kg		131	40 - 120
Endosulfan sulfate	ND	F1	16.4	22.1	F1	ug/Kg		135	40 - 120
Endrin	ND		16.4	20.1		ug/Kg		122	32 - 143
Endrin aldehyde	ND	F1	16.4	19.7		ug/Kg		120	40 - 120
Endrin ketone	ND	F1	16.4	22.5	F1	ug/Kg		137	40 - 120
gamma-BHC (Lindane)	ND		16.4	17.3		ug/Kg		106	58 - 120
Heptachlor	ND		16.4	17.1		ug/Kg		104	52 - 120
Heptachlor epoxide	ND		16.4	17.4		ug/Kg		106	40 - 120
Methoxychlor	ND	F1	16.4	21.9	F1	ug/Kg		133	40 - 120
trans-Chlordane	ND	F1	16.4	19.1		ug/Kg		117	40 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*128*		*21 - 136*
Tetrachloro-m-xylene	*82*		*21 - 145*

Lab Sample ID: 720-88162-D-16-J MSD
Matrix: Solid
Analysis Batch: 250125

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250005

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND	F1	16.5	21.3	F1	ug/Kg		129	40 - 120	2	20
4,4'-DDE	ND		16.5	18.5		ug/Kg		112	40 - 120	4	20
4,4'-DDT	ND		16.5	20.2		ug/Kg		122	17 - 144	4	20
Aldrin	ND		16.5	16.7		ug/Kg		101	53 - 120	5	20

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88162-D-16-J MSD
Matrix: Solid
Analysis Batch: 250125

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250005

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
alpha-BHC	ND		16.5	13.0		ug/Kg		79	40 - 120	4	20
beta-BHC	ND		16.5	18.2		ug/Kg		111	40 - 120	4	20
cis-Chlordane	ND		16.5	18.5		ug/Kg		112	40 - 120	3	20
delta-BHC	ND		16.5	16.4		ug/Kg		99	40 - 120	5	20
Dieldrin	ND		16.5	19.1		ug/Kg		115	46 - 130	4	20
Endosulfan I	ND		16.5	18.8		ug/Kg		114	40 - 120	2	20
Endosulfan II	ND	F1	16.5	21.8	F1	ug/Kg		132	40 - 120	2	30
Endosulfan sulfate	ND	F1	16.5	22.3	F1	ug/Kg		135	40 - 120	1	20
Endrin	ND		16.5	21.0		ug/Kg		127	32 - 143	4	20
Endrin aldehyde	ND	F1	16.5	20.4	F1	ug/Kg		123	40 - 120	3	20
Endrin ketone	ND	F1	16.5	21.4	F1	ug/Kg		130	40 - 120	5	20
gamma-BHC (Lindane)	ND		16.5	18.5		ug/Kg		112	58 - 120	7	20
Heptachlor	ND		16.5	18.0		ug/Kg		109	52 - 120	5	20
Heptachlor epoxide	ND		16.5	18.0		ug/Kg		109	40 - 120	4	20
Methoxychlor	ND	F1	16.5	24.2	F1	ug/Kg		147	40 - 120	10	20
trans-Chlordane	ND	F1	16.5	18.7	p	ug/Kg		114	40 - 120	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*138*	*X*	*21 - 136*
Tetrachloro-m-xylene	*90*		*21 - 145*

Lab Sample ID: MB 720-250053/1-A
Matrix: Solid
Analysis Batch: 250196

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250053

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Aldrin	ND		2.0	0.50	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endrin	ND		2.0	0.46	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Toxaphene	ND		40	6.8	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/23/18 10:51	08/24/18 21:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	105		21 - 136	08/23/18 10:51	08/24/18 21:13	1
Tetrachloro-m-xylene	90		21 - 145	08/23/18 10:51	08/24/18 21:13	1

Lab Sample ID: LCS 720-250053/2-A
Matrix: Solid
Analysis Batch: 250196

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250053

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	16.0		ug/Kg		96	75 - 128
4,4'-DDE	16.7	15.7		ug/Kg		94	76 - 126
4,4'-DDT	16.7	15.5		ug/Kg		93	63 - 127
Aldrin	16.7	13.4		ug/Kg		80	65 - 120
alpha-BHC	16.7	12.9		ug/Kg		77	46 - 122
beta-BHC	16.7	16.8		ug/Kg		101	78 - 136
cis-Chlordane	16.7	15.4		ug/Kg		93	70 - 120
delta-BHC	16.7	13.1		ug/Kg		79	43 - 125
Dieldrin	16.7	15.2		ug/Kg		91	72 - 120
Endosulfan I	16.7	16.1		ug/Kg		96	62 - 120
Endosulfan II	16.7	16.6		ug/Kg		100	65 - 120
Endosulfan sulfate	16.7	16.0		ug/Kg		96	72 - 121
Endrin	16.7	16.4		ug/Kg		98	68 - 120
Endrin aldehyde	16.7	15.8		ug/Kg		95	68 - 120
Endrin ketone	16.7	16.3		ug/Kg		98	75 - 136
gamma-BHC (Lindane)	16.7	14.5		ug/Kg		87	72 - 120
Heptachlor	16.7	15.1		ug/Kg		91	69 - 120
Heptachlor epoxide	16.7	15.7		ug/Kg		94	68 - 120
Methoxychlor	16.7	17.5		ug/Kg		105	71 - 132
trans-Chlordane	16.7	15.2		ug/Kg		91	68 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	103		21 - 136
Tetrachloro-m-xylene	86		21 - 145

Lab Sample ID: 720-88190-D-10-E MS
Matrix: Solid
Analysis Batch: 250248

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250053

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		16.4	13.4		ug/Kg		82	40 - 120
4,4'-DDE	ND		16.4	12.8		ug/Kg		78	40 - 120
4,4'-DDT	ND		16.4	11.6		ug/Kg		71	17 - 144
Aldrin	ND		16.4	12.6		ug/Kg		77	53 - 120
alpha-BHC	ND		16.4	12.5		ug/Kg		76	40 - 120
beta-BHC	ND		16.4	11.9		ug/Kg		72	40 - 120
cis-Chlordane	ND		16.4	12.7		ug/Kg		77	40 - 120
delta-BHC	ND		16.4	11.8		ug/Kg		72	40 - 120
Dieldrin	ND		16.4	14.1		ug/Kg		86	46 - 130
Endosulfan I	ND		16.4	13.2		ug/Kg		80	40 - 120
Endosulfan II	ND		16.4	13.9		ug/Kg		85	40 - 120
Endosulfan sulfate	ND		16.4	13.0		ug/Kg		79	40 - 120
Endrin	ND		16.4	14.0		ug/Kg		85	32 - 143
Endrin aldehyde	ND		16.4	10.6		ug/Kg		64	40 - 120
Endrin ketone	ND		16.4	11.5		ug/Kg		70	40 - 120

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88190-D-10-E MS
Matrix: Solid
Analysis Batch: 250248

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250053

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
gamma-BHC (Lindane)	ND		16.4	13.4		ug/Kg		82	58 - 120
Heptachlor	ND		16.4	13.6		ug/Kg		83	52 - 120
Heptachlor epoxide	ND		16.4	13.0		ug/Kg		79	40 - 120
Methoxychlor	ND		16.4	11.8		ug/Kg		72	40 - 120
trans-Chlordane	ND		16.4	12.7		ug/Kg		77	40 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*71*		*21 - 136*
Tetrachloro-m-xylene	*77*		*21 - 145*

Lab Sample ID: 720-88190-D-10-F MSD
Matrix: Solid
Analysis Batch: 250248

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250053

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		16.4	15.2		ug/Kg		92	40 - 120	12	20
4,4'-DDE	ND		16.4	14.4		ug/Kg		88	40 - 120	12	20
4,4'-DDT	ND		16.4	12.8		ug/Kg		78	17 - 144	10	20
Aldrin	ND		16.4	14.3		ug/Kg		87	53 - 120	13	20
alpha-BHC	ND		16.4	13.5		ug/Kg		82	40 - 120	8	20
beta-BHC	ND		16.4	13.8		ug/Kg		84	40 - 120	15	20
cis-Chlordane	ND		16.4	14.3		ug/Kg		87	40 - 120	12	20
delta-BHC	ND		16.4	13.6		ug/Kg		83	40 - 120	14	20
Dieldrin	ND		16.4	15.2		ug/Kg		93	46 - 130	7	20
Endosulfan I	ND		16.4	14.9		ug/Kg		91	40 - 120	12	20
Endosulfan II	ND		16.4	15.3		ug/Kg		93	40 - 120	9	30
Endosulfan sulfate	ND		16.4	14.3		ug/Kg		87	40 - 120	9	20
Endrin	ND		16.4	15.8		ug/Kg		96	32 - 143	12	20
Endrin aldehyde	ND		16.4	11.5		ug/Kg		70	40 - 120	9	20
Endrin ketone	ND		16.4	13.5		ug/Kg		82	40 - 120	16	20
gamma-BHC (Lindane)	ND		16.4	14.3		ug/Kg		87	58 - 120	6	20
Heptachlor	ND		16.4	15.2		ug/Kg		92	52 - 120	11	20
Heptachlor epoxide	ND		16.4	14.7		ug/Kg		89	40 - 120	12	20
Methoxychlor	ND		16.4	12.7		ug/Kg		77	40 - 120	7	20
trans-Chlordane	ND		16.4	14.3		ug/Kg		87	40 - 120	12	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*89*		*21 - 136*
Tetrachloro-m-xylene	*83*		*21 - 145*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-342371/19-A
Matrix: Solid
Analysis Batch: 342551

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 342371

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/24/18 08:44	08/27/18 20:42	1
Aroclor-1221	ND		50	24	ug/Kg		08/24/18 08:44	08/27/18 20:42	1
Aroclor-1232	ND		50	23	ug/Kg		08/24/18 08:44	08/27/18 20:42	1
Aroclor-1242	ND		50	19	ug/Kg		08/24/18 08:44	08/27/18 20:42	1
Aroclor-1248	ND		50	24	ug/Kg		08/24/18 08:44	08/27/18 20:42	1
Aroclor-1254	ND		50	23	ug/Kg		08/24/18 08:44	08/27/18 20:42	1
Aroclor-1260	ND		50	22	ug/Kg		08/24/18 08:44	08/27/18 20:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*64*		*14 - 128*	*08/24/18 08:44*	*08/27/18 20:42*	*1*
DCB Decachlorobiphenyl	*83*		*10 - 132*	*08/24/18 08:44*	*08/27/18 20:42*	*1*

Lab Sample ID: LCS 240-342371/20-A
Matrix: Solid
Analysis Batch: 342551

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 342371

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			1000	631		ug/Kg		63	47 - 120		
Aroclor-1260			1000	774		ug/Kg		77	46 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*73*		*14 - 128*
DCB Decachlorobiphenyl	*78*		*10 - 132*

Lab Sample ID: 240-100238-A-6-C MS
Matrix: Solid
Analysis Batch: 342551

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 342371

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016	ND	F2	8930	4860		ug/Kg		54	31 - 120		
Aroclor-1260	ND	F2	8930	5620		ug/Kg		63	21 - 122		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*52*		*14 - 128*
DCB Decachlorobiphenyl	*64*		*10 - 132*

Lab Sample ID: 240-100238-A-6-D MSD
Matrix: Solid
Analysis Batch: 342551

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 342371

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND	F2	8550	3070	F2	ug/Kg		36	31 - 120	45	30
Aroclor-1260	ND	F2	8550	3900	F2	ug/Kg		46	21 - 122	36	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*33*		*14 - 128*
DCB Decachlorobiphenyl	*51*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-249990/1-A
Matrix: Solid
Analysis Batch: 250078

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249990

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Arsenic	ND		1.0	0.085	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Barium	ND		0.50	0.071	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Beryllium	ND		0.10	0.033	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Cadmium	ND		0.13	0.012	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Chromium	ND		0.50	0.053	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Cobalt	ND		0.20	0.020	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Copper	ND		1.5	0.71	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Lead	ND		0.50	0.11	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Nickel	ND		0.50	0.051	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Selenium	ND		1.0	0.15	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Silver	ND		0.25	0.051	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Thallium	ND		0.50	0.15	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Vanadium	ND		0.50	0.068	mg/Kg		08/22/18 15:58	08/23/18 12:43	1
Zinc	ND		1.5	0.64	mg/Kg		08/22/18 15:58	08/23/18 12:43	1

Lab Sample ID: LCS 720-249990/2-A
Matrix: Solid
Analysis Batch: 250078

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249990

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	46.6		mg/Kg		93	80 - 120
Arsenic	50.0	46.5		mg/Kg		93	80 - 120
Barium	50.0	47.9		mg/Kg		96	80 - 120
Beryllium	50.0	48.6		mg/Kg		97	80 - 120
Cadmium	50.0	46.8		mg/Kg		94	80 - 120
Chromium	50.0	47.6		mg/Kg		95	80 - 120
Cobalt	50.0	47.7		mg/Kg		95	80 - 120
Copper	50.0	47.0		mg/Kg		94	80 - 120
Lead	50.0	47.7		mg/Kg		95	80 - 120
Molybdenum	50.0	47.2		mg/Kg		94	80 - 120
Nickel	50.0	47.5		mg/Kg		95	80 - 120
Selenium	50.0	45.8		mg/Kg		92	80 - 120
Silver	25.0	23.5		mg/Kg		94	80 - 120
Thallium	50.0	48.2		mg/Kg		96	80 - 120
Vanadium	50.0	47.3		mg/Kg		95	80 - 120
Zinc	50.0	46.8		mg/Kg		94	80 - 120

Lab Sample ID: 720-88164-1 MS
Matrix: Solid
Analysis Batch: 250078

Client Sample ID: DG-B1S-0.5-1
Prep Type: Total/NA
Prep Batch: 249990

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.89	J F1	41.7	10.8	F1	mg/Kg		24	75 - 125
Arsenic	110		41.7	153		mg/Kg		102	75 - 125
Barium	48		41.7	82.2		mg/Kg		82	75 - 125
Beryllium	ND		41.7	41.7		mg/Kg		100	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88164-1 MS
Matrix: Solid
Analysis Batch: 250078

Client Sample ID: DG-B1S-0.5-1
Prep Type: Total/NA
Prep Batch: 249990

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.26	J	41.7	40.3		mg/Kg		96	75 - 125
Chromium	23		41.7	63.2		mg/Kg		96	75 - 125
Cobalt	6.1		41.7	46.6		mg/Kg		97	75 - 125
Copper	56		41.7	92.7		mg/Kg		88	75 - 125
Lead	66		41.7	108		mg/Kg		101	75 - 125
Molybdenum	0.33	J	41.7	37.1		mg/Kg		88	75 - 125
Nickel	18		41.7	60.5		mg/Kg		102	75 - 125
Selenium	ND		41.7	38.5		mg/Kg		92	75 - 125
Silver	ND		20.8	20.3		mg/Kg		97	75 - 125
Thallium	ND		41.7	38.5		mg/Kg		92	75 - 125
Vanadium	36		41.7	72.2		mg/Kg		88	75 - 125
Zinc	73		41.7	110		mg/Kg		89	75 - 125

Lab Sample ID: 720-88164-1 MSD
Matrix: Solid
Analysis Batch: 250078

Client Sample ID: DG-B1S-0.5-1
Prep Type: Total/NA
Prep Batch: 249990

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.89	J F1	42.0	11.5	F1	mg/Kg		25	75 - 125	7	20
Arsenic	110		42.0	152		mg/Kg		98	75 - 125	1	20
Barium	48		42.0	80.5		mg/Kg		77	75 - 125	2	20
Beryllium	ND		42.0	40.9		mg/Kg		97	75 - 125	2	20
Cadmium	0.26	J	42.0	39.1		mg/Kg		92	75 - 125	3	20
Chromium	23		42.0	62.8		mg/Kg		95	75 - 125	1	20
Cobalt	6.1		42.0	44.5		mg/Kg		91	75 - 125	5	20
Copper	56		42.0	99.4		mg/Kg		103	75 - 125	7	20
Lead	66		42.0	108		mg/Kg		101	75 - 125	0	20
Molybdenum	0.33	J	42.0	37.0		mg/Kg		87	75 - 125	0	20
Nickel	18		42.0	55.8		mg/Kg		90	75 - 125	8	20
Selenium	ND		42.0	38.4		mg/Kg		91	75 - 125	0	20
Silver	ND		21.0	20.1		mg/Kg		96	75 - 125	1	20
Thallium	ND		42.0	36.7		mg/Kg		87	75 - 125	5	20
Vanadium	36		42.0	79.8		mg/Kg		105	75 - 125	10	20
Zinc	73		42.0	109		mg/Kg		86	75 - 125	1	20

Lab Sample ID: MB 720-250046/1-A
Matrix: Solid
Analysis Batch: 250164

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250046

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/23/18 10:47	08/24/18 09:22	1
Arsenic	ND		1.0	0.085	mg/Kg		08/23/18 10:47	08/24/18 09:22	1
Barium	ND		0.50	0.071	mg/Kg		08/23/18 10:47	08/24/18 09:22	1
Beryllium	ND		0.10	0.033	mg/Kg		08/23/18 10:47	08/24/18 09:22	1
Cadmium	ND		0.13	0.012	mg/Kg		08/23/18 10:47	08/24/18 09:22	1
Chromium	0.0532	J	0.50	0.053	mg/Kg		08/23/18 10:47	08/24/18 09:22	1
Cobalt	ND		0.20	0.020	mg/Kg		08/23/18 10:47	08/24/18 09:22	1
Copper	ND		1.5	0.71	mg/Kg		08/23/18 10:47	08/24/18 09:22	1
Lead	ND		0.50	0.11	mg/Kg		08/23/18 10:47	08/24/18 09:22	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250046/1-A
Matrix: Solid
Analysis Batch: 250164

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250046

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.50	0.064	mg/Kg		08/23/18 10:47	08/24/18 09:22	1
Nickel	ND		0.50	0.051	mg/Kg		08/23/18 10:47	08/24/18 09:22	1
Selenium	ND		1.0	0.15	mg/Kg		08/23/18 10:47	08/24/18 09:22	1
Silver	ND		0.25	0.051	mg/Kg		08/23/18 10:47	08/24/18 09:22	1
Thallium	ND		0.50	0.15	mg/Kg		08/23/18 10:47	08/24/18 09:22	1
Vanadium	ND		0.50	0.068	mg/Kg		08/23/18 10:47	08/24/18 09:22	1
Zinc	ND		1.5	0.64	mg/Kg		08/23/18 10:47	08/24/18 09:22	1

Lab Sample ID: LCS 720-250046/2-A
Matrix: Solid
Analysis Batch: 250164

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250046

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	45.9		mg/Kg		92	80 - 120
Arsenic	50.0	46.2		mg/Kg		92	80 - 120
Barium	50.0	48.2		mg/Kg		96	80 - 120
Beryllium	50.0	48.9		mg/Kg		98	80 - 120
Cadmium	50.0	47.0		mg/Kg		94	80 - 120
Chromium	50.0	47.3		mg/Kg		95	80 - 120
Cobalt	50.0	48.5		mg/Kg		97	80 - 120
Copper	50.0	47.3		mg/Kg		95	80 - 120
Lead	50.0	47.6		mg/Kg		95	80 - 120
Molybdenum	50.0	47.8		mg/Kg		96	80 - 120
Nickel	50.0	47.3		mg/Kg		95	80 - 120
Selenium	50.0	45.0		mg/Kg		90	80 - 120
Silver	25.0	22.9		mg/Kg		91	80 - 120
Thallium	50.0	47.4		mg/Kg		95	80 - 120
Vanadium	50.0	48.1		mg/Kg		96	80 - 120
Zinc	50.0	47.7		mg/Kg		95	80 - 120

Lab Sample ID: 720-88170-A-1-A MS
Matrix: Solid
Analysis Batch: 250164

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250046

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND	F1	50.0	9.79	F1	mg/Kg		20	75 - 125
Arsenic	3.2	J	50.0	52.9		mg/Kg		99	75 - 125
Barium	150	F1	50.0	215	F1	mg/Kg		138	75 - 125
Beryllium	ND		50.0	54.4		mg/Kg		109	75 - 125
Cadmium	0.24	J	50.0	48.3		mg/Kg		96	75 - 125
Chromium	97	B F1	50.0	122	F1	mg/Kg		50	75 - 125
Cobalt	11		50.0	60.0		mg/Kg		98	75 - 125
Copper	29		50.0	81.8		mg/Kg		106	75 - 125
Lead	150	F1 F2	50.0	127	F1	mg/Kg		-48	75 - 125
Molybdenum	0.29	J	50.0	47.0		mg/Kg		93	75 - 125
Nickel	61		50.0	107		mg/Kg		91	75 - 125
Selenium	ND		50.0	45.6		mg/Kg		91	75 - 125
Silver	ND		25.0	25.3		mg/Kg		101	75 - 125
Thallium	ND		50.0	41.6		mg/Kg		83	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88170-A-1-A MS
Matrix: Solid
Analysis Batch: 250164

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250046

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	46		50.0	101		mg/Kg		110	75 - 125
Zinc	180		50.0	235		mg/Kg		101	75 - 125

Lab Sample ID: 720-88170-A-1-B MSD
Matrix: Solid
Analysis Batch: 250164

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250046

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND	F1	49.0	8.95	F1	mg/Kg		18	75 - 125	9	20
Arsenic	3.2	J	49.0	55.1		mg/Kg		106	75 - 125	4	20
Barium	150	F1	49.0	212	F1	mg/Kg		133	75 - 125	2	20
Beryllium	ND		49.0	58.0		mg/Kg		118	75 - 125	6	20
Cadmium	0.24	J	49.0	50.5		mg/Kg		103	75 - 125	4	20
Chromium	97	B F1	49.0	150		mg/Kg		107	75 - 125	20	20
Cobalt	11		49.0	63.3		mg/Kg		106	75 - 125	5	20
Copper	29		49.0	86.7		mg/Kg		119	75 - 125	6	20
Lead	150	F1 F2	49.0	217	F1 F2	mg/Kg		134	75 - 125	52	20
Molybdenum	0.29	J	49.0	48.8		mg/Kg		99	75 - 125	4	20
Nickel	61		49.0	109		mg/Kg		99	75 - 125	3	20
Selenium	ND		49.0	48.2		mg/Kg		98	75 - 125	5	20
Silver	ND		24.5	26.8		mg/Kg		109	75 - 125	6	20
Thallium	ND		49.0	42.5		mg/Kg		87	75 - 125	2	20
Vanadium	46		49.0	107		mg/Kg		124	75 - 125	5	20
Zinc	180		49.0	234		mg/Kg		101	75 - 125	0	20

Lab Sample ID: MB 720-250071/1-A
Matrix: Solid
Analysis Batch: 250222

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250071

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.123	J	0.50	0.083	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Arsenic	ND		1.0	0.085	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Barium	ND		0.50	0.071	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Beryllium	ND		0.10	0.033	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Cadmium	ND		0.13	0.012	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Chromium	ND		0.50	0.053	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Cobalt	ND		0.20	0.020	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Copper	ND		1.5	0.71	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Lead	ND		0.50	0.11	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Nickel	ND		0.50	0.051	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Selenium	ND		1.0	0.15	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Silver	ND		0.25	0.051	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Thallium	ND		0.50	0.15	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Vanadium	ND		0.50	0.068	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Zinc	ND		1.5	0.64	mg/Kg		08/23/18 12:48	08/24/18 18:51	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-250071/2-A
Matrix: Solid
Analysis Batch: 250222

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250071

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	53.2		mg/Kg		106	80 - 120
Arsenic	50.0	49.2		mg/Kg		98	80 - 120
Barium	50.0	47.8		mg/Kg		96	80 - 120
Beryllium	50.0	47.2		mg/Kg		94	80 - 120
Cadmium	50.0	53.1		mg/Kg		106	80 - 120
Chromium	50.0	50.3		mg/Kg		101	80 - 120
Cobalt	50.0	55.1		mg/Kg		110	80 - 120
Copper	50.0	50.5		mg/Kg		101	80 - 120
Lead	50.0	53.5		mg/Kg		107	80 - 120
Molybdenum	50.0	49.5		mg/Kg		99	80 - 120
Nickel	50.0	53.6		mg/Kg		107	80 - 120
Selenium	50.0	47.1		mg/Kg		94	80 - 120
Silver	25.0	26.3		mg/Kg		105	80 - 120
Thallium	50.0	53.2		mg/Kg		106	80 - 120
Vanadium	50.0	51.9		mg/Kg		104	80 - 120
Zinc	50.0	53.8		mg/Kg		108	80 - 120

Lab Sample ID: 720-88189-A-1-B MS
Matrix: Solid
Analysis Batch: 250222

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250071

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.4	J B F1	48.5	15.1	F1	mg/Kg		28	75 - 125
Arsenic	120	F1	48.5	139	F1	mg/Kg		35	75 - 125
Barium	140	F1 F2	48.5	134	F1	mg/Kg		-5	75 - 125
Beryllium	0.21	J	48.5	44.4		mg/Kg		91	75 - 125
Cadmium	0.50		48.5	45.4		mg/Kg		92	75 - 125
Chromium	15		48.5	59.1		mg/Kg		90	75 - 125
Cobalt	8.5		48.5	54.1		mg/Kg		94	75 - 125
Copper	92	F1	48.5	122	F1	mg/Kg		61	75 - 125
Lead	160	F1 F2	48.5	145	F1	mg/Kg		-31	75 - 125
Molybdenum	0.78	J	48.5	44.5		mg/Kg		90	75 - 125
Nickel	13		48.5	54.4		mg/Kg		85	75 - 125
Selenium	0.87	J	48.5	44.5		mg/Kg		90	75 - 125
Silver	ND		24.3	24.0		mg/Kg		99	75 - 125
Thallium	ND		48.5	42.6		mg/Kg		88	75 - 125
Vanadium	59		48.5	104		mg/Kg		93	75 - 125
Zinc	170	F1 F2	48.5	171	F1	mg/Kg		-3	75 - 125

Lab Sample ID: 720-88189-A-1-C MSD
Matrix: Solid
Analysis Batch: 250222

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250071

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.4	J B F1	49.5	13.6	F1	mg/Kg		25	75 - 125	10	20
Arsenic	120	F1	49.5	159	F1	mg/Kg		74	75 - 125	13	20
Barium	140	F1 F2	49.5	174	F2	mg/Kg		76	75 - 125	26	20
Beryllium	0.21	J	49.5	46.5		mg/Kg		94	75 - 125	5	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88189-A-1-C MSD
Matrix: Solid
Analysis Batch: 250222

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250071

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	0.50		49.5	48.7		mg/Kg		97	75 - 125	7	20
Chromium	15		49.5	64.3		mg/Kg		99	75 - 125	8	20
Cobalt	8.5		49.5	59.8		mg/Kg		104	75 - 125	10	20
Copper	92	F1	49.5	144		mg/Kg		104	75 - 125	17	20
Lead	160	F1 F2	49.5	196	F1 F2	mg/Kg		71	75 - 125	30	20
Molybdenum	0.78	J	49.5	45.2		mg/Kg		90	75 - 125	2	20
Nickel	13		49.5	62.2		mg/Kg		99	75 - 125	13	20
Selenium	0.87	J	49.5	46.2		mg/Kg		92	75 - 125	4	20
Silver	ND		24.8	24.9		mg/Kg		100	75 - 125	3	20
Thallium	ND		49.5	45.1		mg/Kg		91	75 - 125	6	20
Vanadium	59		49.5	119		mg/Kg		122	75 - 125	14	20
Zinc	170	F1 F2	49.5	225	F2	mg/Kg		106	75 - 125	27	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250050/1-A
Matrix: Solid
Analysis Batch: 250200

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250050

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/23/18 10:11	08/24/18 16:08	1

Lab Sample ID: LCS 720-250050/2-A
Matrix: Solid
Analysis Batch: 250200

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250050

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.833	0.817		mg/Kg		98	80 - 120		

Lab Sample ID: 720-88164-1 MS
Matrix: Solid
Analysis Batch: 250200

Client Sample ID: DG-B1S-0.5-1
Prep Type: Total/NA
Prep Batch: 250050

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.045		0.806	0.861		mg/Kg		101	75 - 125		

Lab Sample ID: 720-88164-1 MSD
Matrix: Solid
Analysis Batch: 250200

Client Sample ID: DG-B1S-0.5-1
Prep Type: Total/NA
Prep Batch: 250050

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.045		0.806	0.876		mg/Kg		103	75 - 125	2	20

GC/MS VOA

Prep Batch: 250051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-14	DG-C3S-9.5-10	Total/NA	Solid	5035	

Prep Batch: 250069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-1	DG-B1S-0.5-1	Total/NA	Solid	5035	
720-88164-2	DG-B1S-3.5-4	Total/NA	Solid	5035	
720-88164-7	DG-A3S-0.5-1	Total/NA	Solid	5035	
720-88164-8	DG-A3S-3.5-4	Total/NA	Solid	5035	
720-88164-9	DG-A3S-9.5-10	Total/NA	Solid	5035	

Analysis Batch: 250267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-1	DG-B1S-0.5-1	Total/NA	Solid	8260B	250069
720-88164-2	DG-B1S-3.5-4	Total/NA	Solid	8260B	250069
720-88164-7	DG-A3S-0.5-1	Total/NA	Solid	8260B	250069
720-88164-8	DG-A3S-3.5-4	Total/NA	Solid	8260B	250069
720-88164-9	DG-A3S-9.5-10	Total/NA	Solid	8260B	250069
MB 720-250267/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250267/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250267/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250267/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250267/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-14	DG-C3S-9.5-10	Total/NA	Solid	5035	

Analysis Batch: 250350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-14	DG-C3S-9.5-10	Total/NA	Solid	8260B	250314
MB 720-250350/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250350/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250350/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250350/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250350/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-12	DG-C3S-0.5-1	Total/NA	Solid	8260B	250383
720-88164-13	DG-C3S-3.5-4	Total/NA	Solid	8260B	250383
MB 720-250352/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250352/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250352/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250352/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250352/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-12	DG-C3S-0.5-1	Total/NA	Solid	5035	
720-88164-13	DG-C3S-3.5-4	Total/NA	Solid	5035	

GC/MS VOA (Continued)

Analysis Batch: 250407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-14	DG-C3S-9.5-10	Total/NA	Solid	8260B	250051
MB 720-250407/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250407/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250407/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250407/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250407/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 249979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-1	DG-B1S-0.5-1	Total/NA	Solid	3546	
720-88164-2	DG-B1S-3.5-4	Total/NA	Solid	3546	
720-88164-7	DG-A3S-0.5-1	Total/NA	Solid	3546	
720-88164-8	DG-A3S-3.5-4	Total/NA	Solid	3546	
720-88164-9	DG-A3S-9.5-10	Total/NA	Solid	3546	
720-88164-12	DG-C3S-0.5-1	Total/NA	Solid	3546	
720-88164-13	DG-C3S-3.5-4	Total/NA	Solid	3546	
MB 720-249979/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-249979/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88156-A-5-C MS	Matrix Spike	Total/NA	Solid	3546	
720-88156-A-5-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-14	DG-C3S-9.5-10	Total/NA	Solid	3546	
MB 720-250048/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250048/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88190-E-11-A MS	Matrix Spike	Total/NA	Solid	3546	
720-88190-E-11-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-2	DG-B1S-3.5-4	Total/NA	Solid	8270C SIM	249979
720-88164-8	DG-A3S-3.5-4	Total/NA	Solid	8270C SIM	249979
720-88164-9	DG-A3S-9.5-10	Total/NA	Solid	8270C SIM	249979
720-88164-12	DG-C3S-0.5-1	Total/NA	Solid	8270C SIM	249979
720-88164-13	DG-C3S-3.5-4	Total/NA	Solid	8270C SIM	249979
MB 720-249979/1-A	Method Blank	Total/NA	Solid	8270C SIM	249979
LCS 720-249979/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	249979
720-88156-A-5-C MS	Matrix Spike	Total/NA	Solid	8270C SIM	249979
720-88156-A-5-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	249979

Analysis Batch: 250185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-1	DG-B1S-0.5-1	Total/NA	Solid	8270C SIM	249979
720-88164-7	DG-A3S-0.5-1	Total/NA	Solid	8270C SIM	249979

GC/MS Semi VOA (Continued)

Analysis Batch: 250212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-14	DG-C3S-9.5-10	Total/NA	Solid	8270C SIM	250048
MB 720-250048/1-A	Method Blank	Total/NA	Solid	8270C SIM	250048
LCS 720-250048/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250048
720-88190-E-11-A MS	Matrix Spike	Total/NA	Solid	8270C SIM	250048
720-88190-E-11-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250048

GC Semi VOA

Prep Batch: 249957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-1	DG-B1S-0.5-1	Total/NA	Solid	3546	
720-88164-2	DG-B1S-3.5-4	Total/NA	Solid	3546	
720-88164-7	DG-A3S-0.5-1	Total/NA	Solid	3546	
720-88164-8	DG-A3S-3.5-4	Total/NA	Solid	3546	
720-88164-9	DG-A3S-9.5-10	Total/NA	Solid	3546	
720-88164-12	DG-C3S-0.5-1	Total/NA	Solid	3546	
720-88164-13	DG-C3S-3.5-4	Total/NA	Solid	3546	
720-88164-14	DG-C3S-9.5-10	Total/NA	Solid	3546	
MB 720-249957/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-249957/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88164-1 MS	DG-B1S-0.5-1	Total/NA	Solid	3546	
720-88164-1 MSD	DG-B1S-0.5-1	Total/NA	Solid	3546	

Prep Batch: 250005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-1	DG-B1S-0.5-1	Total/NA	Solid	3546	
720-88164-2	DG-B1S-3.5-4	Total/NA	Solid	3546	
720-88164-7	DG-A3S-0.5-1	Total/NA	Solid	3546	
MB 720-250005/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250005/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88162-D-16-I MS	Matrix Spike	Total/NA	Solid	3546	
720-88162-D-16-J MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-7	DG-A3S-0.5-1	Total/NA	Solid	8015B	249957
720-88164-13	DG-C3S-3.5-4	Total/NA	Solid	8015B	249957

Analysis Batch: 250035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-2	DG-B1S-3.5-4	Total/NA	Solid	8015B	249957
720-88164-8	DG-A3S-3.5-4	Total/NA	Solid	8015B	249957
720-88164-9	DG-A3S-9.5-10	Total/NA	Solid	8015B	249957
720-88164-12	DG-C3S-0.5-1	Total/NA	Solid	8015B	249957
720-88164-14	DG-C3S-9.5-10	Total/NA	Solid	8015B	249957

Analysis Batch: 250036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-249957/1-A	Method Blank	Total/NA	Solid	8015B	249957

GC Semi VOA (Continued)

Analysis Batch: 250037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-1	DG-B1S-0.5-1	Total/NA	Solid	8015B	249957
LCS 720-249957/2-A	Lab Control Sample	Total/NA	Solid	8015B	249957
720-88164-1 MS	DG-B1S-0.5-1	Total/NA	Solid	8015B	249957
720-88164-1 MSD	DG-B1S-0.5-1	Total/NA	Solid	8015B	249957

Prep Batch: 250053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-8	DG-A3S-3.5-4	Total/NA	Solid	3546	
720-88164-9	DG-A3S-9.5-10	Total/NA	Solid	3546	
720-88164-12	DG-C3S-0.5-1	Total/NA	Solid	3546	
720-88164-13	DG-C3S-3.5-4	Total/NA	Solid	3546	
720-88164-14	DG-C3S-9.5-10	Total/NA	Solid	3546	
MB 720-250053/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250053/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88190-D-10-E MS	Matrix Spike	Total/NA	Solid	3546	
720-88190-D-10-F MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-7	DG-A3S-0.5-1	Total/NA	Solid	8081A	250005
MB 720-250005/1-A	Method Blank	Total/NA	Solid	8081A	250005
LCS 720-250005/2-A	Lab Control Sample	Total/NA	Solid	8081A	250005
720-88162-D-16-I MS	Matrix Spike	Total/NA	Solid	8081A	250005
720-88162-D-16-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	250005

Analysis Batch: 250196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250053/1-A	Method Blank	Total/NA	Solid	8081A	250053
LCS 720-250053/2-A	Lab Control Sample	Total/NA	Solid	8081A	250053

Analysis Batch: 250248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-1	DG-B1S-0.5-1	Total/NA	Solid	8081A	250005
720-88164-2	DG-B1S-3.5-4	Total/NA	Solid	8081A	250005
720-88164-8	DG-A3S-3.5-4	Total/NA	Solid	8081A	250053
720-88164-9	DG-A3S-9.5-10	Total/NA	Solid	8081A	250053
720-88164-12	DG-C3S-0.5-1	Total/NA	Solid	8081A	250053
720-88164-13	DG-C3S-3.5-4	Total/NA	Solid	8081A	250053
720-88164-14	DG-C3S-9.5-10	Total/NA	Solid	8081A	250053
720-88190-D-10-E MS	Matrix Spike	Total/NA	Solid	8081A	250053
720-88190-D-10-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	250053

Processed Batch: 342154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-100238-A-6-C MS	Matrix Spike	Total/NA	Solid	Part Size Red	
240-100238-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	Part Size Red	

Prep Batch: 342371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-1	DG-B1S-0.5-1	Total/NA	Solid	3540C	
720-88164-2	DG-B1S-3.5-4	Total/NA	Solid	3540C	

GC Semi VOA (Continued)

Prep Batch: 342371 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-7	DG-A3S-0.5-1	Total/NA	Solid	3540C	
720-88164-8	DG-A3S-3.5-4	Total/NA	Solid	3540C	
720-88164-9	DG-A3S-9.5-10	Total/NA	Solid	3540C	
720-88164-12	DG-C3S-0.5-1	Total/NA	Solid	3540C	
720-88164-13	DG-C3S-3.5-4	Total/NA	Solid	3540C	
720-88164-14	DG-C3S-9.5-10	Total/NA	Solid	3540C	
MB 240-342371/19-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-342371/20-A	Lab Control Sample	Total/NA	Solid	3540C	
240-100238-A-6-C MS	Matrix Spike	Total/NA	Solid	3540C	342154
240-100238-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3540C	342154

Analysis Batch: 342551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-1	DG-B1S-0.5-1	Total/NA	Solid	8082	342371
720-88164-2	DG-B1S-3.5-4	Total/NA	Solid	8082	342371
720-88164-7	DG-A3S-0.5-1	Total/NA	Solid	8082	342371
720-88164-8	DG-A3S-3.5-4	Total/NA	Solid	8082	342371
720-88164-9	DG-A3S-9.5-10	Total/NA	Solid	8082	342371
720-88164-12	DG-C3S-0.5-1	Total/NA	Solid	8082	342371
720-88164-13	DG-C3S-3.5-4	Total/NA	Solid	8082	342371
720-88164-14	DG-C3S-9.5-10	Total/NA	Solid	8082	342371
MB 240-342371/19-A	Method Blank	Total/NA	Solid	8082	342371
LCS 240-342371/20-A	Lab Control Sample	Total/NA	Solid	8082	342371
240-100238-A-6-C MS	Matrix Spike	Total/NA	Solid	8082	342371
240-100238-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8082	342371

Metals

Prep Batch: 249990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-1	DG-B1S-0.5-1	Total/NA	Solid	3050B	
720-88164-2	DG-B1S-3.5-4	Total/NA	Solid	3050B	
720-88164-3	DG-C1S-0.5-1	Total/NA	Solid	3050B	
720-88164-4	DG-C1S-3.5-4	Total/NA	Solid	3050B	
720-88164-5	DG-A1S-0.5-1	Total/NA	Solid	3050B	
720-88164-6	DG-A1S-3.5-4	Total/NA	Solid	3050B	
720-88164-7	DG-A3S-0.5-1	Total/NA	Solid	3050B	
720-88164-8	DG-A3S-3.5-4	Total/NA	Solid	3050B	
720-88164-9	DG-A3S-9.5-10	Total/NA	Solid	3050B	
720-88164-10	DG-B3S-0.5-1	Total/NA	Solid	3050B	
MB 720-249990/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-249990/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88164-1 MS	DG-B1S-0.5-1	Total/NA	Solid	3050B	
720-88164-1 MSD	DG-B1S-0.5-1	Total/NA	Solid	3050B	

Prep Batch: 250046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-11	DG-B3S-3.5-4	Total/NA	Solid	3050B	
720-88164-12	DG-C3S-0.5-1	Total/NA	Solid	3050B	
720-88164-13	DG-C3S-3.5-4	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 250046 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250046/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250046/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88170-A-1-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88170-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-1	DG-B1S-0.5-1	Total/NA	Solid	7471A	
720-88164-2	DG-B1S-3.5-4	Total/NA	Solid	7471A	
720-88164-3	DG-C1S-0.5-1	Total/NA	Solid	7471A	
720-88164-4	DG-C1S-3.5-4	Total/NA	Solid	7471A	
720-88164-5	DG-A1S-0.5-1	Total/NA	Solid	7471A	
720-88164-6	DG-A1S-3.5-4	Total/NA	Solid	7471A	
720-88164-7	DG-A3S-0.5-1	Total/NA	Solid	7471A	
720-88164-8	DG-A3S-3.5-4	Total/NA	Solid	7471A	
720-88164-9	DG-A3S-9.5-10	Total/NA	Solid	7471A	
720-88164-10	DG-B3S-0.5-1	Total/NA	Solid	7471A	
720-88164-11	DG-B3S-3.5-4	Total/NA	Solid	7471A	
720-88164-12	DG-C3S-0.5-1	Total/NA	Solid	7471A	
720-88164-13	DG-C3S-3.5-4	Total/NA	Solid	7471A	
720-88164-14	DG-C3S-9.5-10	Total/NA	Solid	7471A	
MB 720-250050/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250050/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88164-1 MS	DG-B1S-0.5-1	Total/NA	Solid	7471A	
720-88164-1 MSD	DG-B1S-0.5-1	Total/NA	Solid	7471A	

Prep Batch: 250071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-14	DG-C3S-9.5-10	Total/NA	Solid	3050B	
MB 720-250071/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250071/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88189-A-1-B MS	Matrix Spike	Total/NA	Solid	3050B	
720-88189-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 250078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-1	DG-B1S-0.5-1	Total/NA	Solid	6010B	249990
MB 720-249990/1-A	Method Blank	Total/NA	Solid	6010B	249990
LCS 720-249990/2-A	Lab Control Sample	Total/NA	Solid	6010B	249990
720-88164-1 MS	DG-B1S-0.5-1	Total/NA	Solid	6010B	249990
720-88164-1 MSD	DG-B1S-0.5-1	Total/NA	Solid	6010B	249990

Analysis Batch: 250137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-2	DG-B1S-3.5-4	Total/NA	Solid	6010B	249990
720-88164-3	DG-C1S-0.5-1	Total/NA	Solid	6010B	249990
720-88164-4	DG-C1S-3.5-4	Total/NA	Solid	6010B	249990
720-88164-5	DG-A1S-0.5-1	Total/NA	Solid	6010B	249990
720-88164-6	DG-A1S-3.5-4	Total/NA	Solid	6010B	249990
720-88164-7	DG-A3S-0.5-1	Total/NA	Solid	6010B	249990
720-88164-8	DG-A3S-3.5-4	Total/NA	Solid	6010B	249990

Metals (Continued)

Analysis Batch: 250137 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-9	DG-A3S-9.5-10	Total/NA	Solid	6010B	249990
720-88164-10	DG-B3S-0.5-1	Total/NA	Solid	6010B	249990

Analysis Batch: 250164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-11	DG-B3S-3.5-4	Total/NA	Solid	6010B	250046
720-88164-12	DG-C3S-0.5-1	Total/NA	Solid	6010B	250046
720-88164-13	DG-C3S-3.5-4	Total/NA	Solid	6010B	250046
MB 720-250046/1-A	Method Blank	Total/NA	Solid	6010B	250046
LCS 720-250046/2-A	Lab Control Sample	Total/NA	Solid	6010B	250046
720-88170-A-1-A MS	Matrix Spike	Total/NA	Solid	6010B	250046
720-88170-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250046

Analysis Batch: 250175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-13	DG-C3S-3.5-4	Total/NA	Solid	6010B	250046

Analysis Batch: 250200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-1	DG-B1S-0.5-1	Total/NA	Solid	7471A	250050
720-88164-2	DG-B1S-3.5-4	Total/NA	Solid	7471A	250050
720-88164-3	DG-C1S-0.5-1	Total/NA	Solid	7471A	250050
720-88164-4	DG-C1S-3.5-4	Total/NA	Solid	7471A	250050
720-88164-5	DG-A1S-0.5-1	Total/NA	Solid	7471A	250050
720-88164-6	DG-A1S-3.5-4	Total/NA	Solid	7471A	250050
720-88164-7	DG-A3S-0.5-1	Total/NA	Solid	7471A	250050
720-88164-8	DG-A3S-3.5-4	Total/NA	Solid	7471A	250050
720-88164-9	DG-A3S-9.5-10	Total/NA	Solid	7471A	250050
720-88164-10	DG-B3S-0.5-1	Total/NA	Solid	7471A	250050
720-88164-11	DG-B3S-3.5-4	Total/NA	Solid	7471A	250050
720-88164-12	DG-C3S-0.5-1	Total/NA	Solid	7471A	250050
720-88164-13	DG-C3S-3.5-4	Total/NA	Solid	7471A	250050
720-88164-14	DG-C3S-9.5-10	Total/NA	Solid	7471A	250050
MB 720-250050/1-A	Method Blank	Total/NA	Solid	7471A	250050
LCS 720-250050/2-A	Lab Control Sample	Total/NA	Solid	7471A	250050
720-88164-1 MS	DG-B1S-0.5-1	Total/NA	Solid	7471A	250050
720-88164-1 MSD	DG-B1S-0.5-1	Total/NA	Solid	7471A	250050

Analysis Batch: 250222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-14	DG-C3S-9.5-10	Total/NA	Solid	6010B	250071
MB 720-250071/1-A	Method Blank	Total/NA	Solid	6010B	250071
LCS 720-250071/2-A	Lab Control Sample	Total/NA	Solid	6010B	250071
720-88189-A-1-B MS	Matrix Spike	Total/NA	Solid	6010B	250071
720-88189-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250071

Analysis Batch: 250299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-10	DG-B3S-0.5-1	Total/NA	Solid	6010B	249990

Metals (Continued)

Analysis Batch: 250507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88164-10	DG-B3S-0.5-1	Total/NA	Solid	6010B	249990

Client Sample ID: DG-B1S-0.5-1

Lab Sample ID: 720-88164-1

Date Collected: 08/21/18 10:30

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250069	08/22/18 01:45	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250267	08/27/18 14:16	JRM	TAL PLS
Total/NA	Prep	3546			249979	08/22/18 12:41	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		8	250185	08/24/18 16:33	LPL	TAL PLS
Total/NA	Prep	3546			249957	08/22/18 09:40	MAB	TAL PLS
Total/NA	Analysis	8015B		2	250037	08/23/18 11:10	JXL	TAL PLS
Total/NA	Prep	3546			250005	08/22/18 15:45	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250248	08/26/18 07:20	MQL	TAL PLS
Total/NA	Prep	3540C			342371	08/24/18 08:44	AMT	TAL CAN
Total/NA	Analysis	8082		1	342551	08/27/18 17:46	KMG	TAL CAN
Total/NA	Prep	3050B			249990	08/22/18 15:58	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250078	08/23/18 13:11	OBI	TAL PLS
Total/NA	Prep	7471A			250050	08/23/18 10:11	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250200	08/24/18 16:18	MAG	TAL PLS

Client Sample ID: DG-B1S-3.5-4

Lab Sample ID: 720-88164-2

Date Collected: 08/21/18 10:30

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250069	08/22/18 01:45	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250267	08/27/18 14:45	JRM	TAL PLS
Total/NA	Prep	3546			249979	08/22/18 12:41	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250076	08/23/18 18:45	LPL	TAL PLS
Total/NA	Prep	3546			249957	08/22/18 09:40	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250035	08/23/18 15:17	JXL	TAL PLS
Total/NA	Prep	3546			250005	08/22/18 15:45	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250248	08/26/18 07:38	MQL	TAL PLS
Total/NA	Prep	3540C			342371	08/24/18 08:44	AMT	TAL CAN
Total/NA	Analysis	8082		1	342551	08/27/18 18:01	KMG	TAL CAN
Total/NA	Prep	3050B			249990	08/22/18 15:58	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250137	08/23/18 20:02	OBI	TAL PLS
Total/NA	Prep	7471A			250050	08/23/18 10:11	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250200	08/24/18 16:25	MAG	TAL PLS

Client Sample ID: DG-C1S-0.5-1

Lab Sample ID: 720-88164-3

Date Collected: 08/21/18 10:15

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249990	08/22/18 15:58	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250137	08/23/18 20:07	OBI	TAL PLS
Total/NA	Prep	7471A			250050	08/23/18 10:11	MAG	TAL PLS

Client Sample ID: DG-C1S-0.5-1

Lab Sample ID: 720-88164-3

Date Collected: 08/21/18 10:15

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	250200	08/24/18 16:27	MAG	TAL PLS

Client Sample ID: DG-C1S-3.5-4

Lab Sample ID: 720-88164-4

Date Collected: 08/21/18 10:15

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249990	08/22/18 15:58	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250137	08/23/18 20:12	OBI	TAL PLS
Total/NA	Prep	7471A			250050	08/23/18 10:11	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250200	08/24/18 16:29	MAG	TAL PLS

Client Sample ID: DG-A1S-0.5-1

Lab Sample ID: 720-88164-5

Date Collected: 08/21/18 10:40

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249990	08/22/18 15:58	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250137	08/23/18 20:17	OBI	TAL PLS
Total/NA	Prep	7471A			250050	08/23/18 10:11	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250200	08/24/18 16:37	MAG	TAL PLS

Client Sample ID: DG-A1S-3.5-4

Lab Sample ID: 720-88164-6

Date Collected: 08/21/18 10:40

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249990	08/22/18 15:58	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250137	08/23/18 20:31	OBI	TAL PLS
Total/NA	Prep	7471A			250050	08/23/18 10:11	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250200	08/24/18 16:39	MAG	TAL PLS

Client Sample ID: DG-A3S-0.5-1

Lab Sample ID: 720-88164-7

Date Collected: 08/21/18 11:10

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250069	08/22/18 01:45	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250267	08/27/18 15:15	JRM	TAL PLS
Total/NA	Prep	3546			249979	08/22/18 12:41	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		4	250185	08/24/18 16:56	LPL	TAL PLS
Total/NA	Prep	3546			249957	08/22/18 09:40	MAB	TAL PLS
Total/NA	Analysis	8015B		10	250034	08/23/18 15:17	JXL	TAL PLS

Client Sample ID: DG-A3S-0.5-1

Lab Sample ID: 720-88164-7

Date Collected: 08/21/18 11:10

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			250005	08/22/18 15:45	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250125	08/24/18 07:03	MQL	TAL PLS
Total/NA	Prep	3540C			342371	08/24/18 08:44	AMT	TAL CAN
Total/NA	Analysis	8082		1	342551	08/27/18 18:16	KMG	TAL CAN
Total/NA	Prep	3050B			249990	08/22/18 15:58	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250137	08/23/18 20:36	OBI	TAL PLS
Total/NA	Prep	7471A			250050	08/23/18 10:11	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250200	08/24/18 16:41	MAG	TAL PLS

Client Sample ID: DG-A3S-3.5-4

Lab Sample ID: 720-88164-8

Date Collected: 08/21/18 11:10

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250069	08/22/18 01:45	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250267	08/27/18 16:48	JRM	TAL PLS
Total/NA	Prep	3546			249979	08/22/18 12:41	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250076	08/23/18 19:09	LPL	TAL PLS
Total/NA	Prep	3546			249957	08/22/18 09:40	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250035	08/23/18 15:46	JXL	TAL PLS
Total/NA	Prep	3546			250053	08/23/18 10:51	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250248	08/26/18 08:50	MQL	TAL PLS
Total/NA	Prep	3540C			342371	08/24/18 08:44	AMT	TAL CAN
Total/NA	Analysis	8082		1	342551	08/27/18 18:29	KMG	TAL CAN
Total/NA	Prep	3050B			249990	08/22/18 15:58	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250137	08/23/18 20:40	OBI	TAL PLS
Total/NA	Prep	7471A			250050	08/23/18 10:11	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250200	08/24/18 16:44	MAG	TAL PLS

Client Sample ID: DG-A3S-9.5-10

Lab Sample ID: 720-88164-9

Date Collected: 08/21/18 11:30

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250069	08/22/18 01:45	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250267	08/27/18 17:19	JRM	TAL PLS
Total/NA	Prep	3546			249979	08/22/18 12:41	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250076	08/23/18 21:55	LPL	TAL PLS
Total/NA	Prep	3546			249957	08/22/18 09:40	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250035	08/23/18 16:19	JXL	TAL PLS
Total/NA	Prep	3546			250053	08/23/18 10:51	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250248	08/26/18 09:07	MQL	TAL PLS
Total/NA	Prep	3540C			342371	08/24/18 08:44	AMT	TAL CAN

Client Sample ID: DG-A3S-9.5-10

Lab Sample ID: 720-88164-9

Date Collected: 08/21/18 11:30

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		1	342551	08/27/18 18:44	KMG	TAL CAN
Total/NA	Prep	3050B			249990	08/22/18 15:58	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250137	08/23/18 20:45	OBI	TAL PLS
Total/NA	Prep	7471A			250050	08/23/18 10:11	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250200	08/24/18 16:46	MAG	TAL PLS

Client Sample ID: DG-B3S-0.5-1

Lab Sample ID: 720-88164-10

Date Collected: 08/21/18 11:45

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			249990	08/22/18 15:58	SUN	TAL PLS
Total/NA	Analysis	6010B		10	250507	08/29/18 13:56	OBI	TAL PLS
Total/NA	Prep	3050B			249990	08/22/18 15:58	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250137	08/23/18 20:50	OBI	TAL PLS
Total/NA	Prep	3050B			249990	08/22/18 15:58	SUN	TAL PLS
Total/NA	Analysis	6010B		10	250299	08/27/18 12:53	BKR	TAL PLS
Total/NA	Prep	7471A			250050	08/23/18 10:11	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250200	08/24/18 16:48	MAG	TAL PLS

Client Sample ID: DG-B3S-3.5-4

Lab Sample ID: 720-88164-11

Date Collected: 08/21/18 11:45

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250046	08/23/18 10:47	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250164	08/24/18 11:15	BKR	TAL PLS
Total/NA	Prep	7471A			250050	08/23/18 10:11	MAG	TAL PLS
Total/NA	Analysis	7471A		4	250200	08/24/18 16:50	MAG	TAL PLS

Client Sample ID: DG-C3S-0.5-1

Lab Sample ID: 720-88164-12

Date Collected: 08/21/18 12:05

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250383	08/22/18 01:45	AJS	TAL PLS
Total/NA	Analysis	8260B		1	250352	08/28/18 15:57	A1C	TAL PLS
Total/NA	Prep	3546			249979	08/22/18 12:41	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250076	08/23/18 20:20	LPL	TAL PLS
Total/NA	Prep	3546			249957	08/22/18 09:40	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250035	08/23/18 16:49	JXL	TAL PLS
Total/NA	Prep	3546			250053	08/23/18 10:51	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250248	08/26/18 09:25	MQL	TAL PLS

Client Sample ID: DG-C3S-0.5-1

Lab Sample ID: 720-88164-12

Date Collected: 08/21/18 12:05

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			342371	08/24/18 08:44	AMT	TAL CAN
Total/NA	Analysis	8082		1	342551	08/27/18 18:58	KMG	TAL CAN
Total/NA	Prep	3050B			250046	08/23/18 10:47	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250164	08/24/18 11:20	BKR	TAL PLS
Total/NA	Prep	7471A			250050	08/23/18 10:11	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250200	08/24/18 16:53	MAG	TAL PLS

Client Sample ID: DG-C3S-3.5-4

Lab Sample ID: 720-88164-13

Date Collected: 08/21/18 12:05

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250383	08/22/18 01:45	AJS	TAL PLS
Total/NA	Analysis	8260B		1	250352	08/28/18 16:26	A1C	TAL PLS
Total/NA	Prep	3546			249979	08/22/18 12:41	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250076	08/23/18 22:19	LPL	TAL PLS
Total/NA	Prep	3546			249957	08/22/18 09:40	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250034	08/23/18 15:46	JXL	TAL PLS
Total/NA	Prep	3546			250053	08/23/18 10:51	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250248	08/26/18 09:43	MQL	TAL PLS
Total/NA	Prep	3540C			342371	08/24/18 08:44	AMT	TAL CAN
Total/NA	Analysis	8082		1	342551	08/27/18 19:13	KMG	TAL CAN
Total/NA	Prep	3050B			250046	08/23/18 10:47	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250164	08/24/18 11:25	BKR	TAL PLS
Total/NA	Prep	3050B			250046	08/23/18 10:47	MAA	TAL PLS
Total/NA	Analysis	6010B		20	250175	08/24/18 13:30	OBI	TAL PLS
Total/NA	Prep	7471A			250050	08/23/18 10:11	MAG	TAL PLS
Total/NA	Analysis	7471A		10	250200	08/24/18 16:55	MAG	TAL PLS

Client Sample ID: DG-C3S-9.5-10

Lab Sample ID: 720-88164-14

Date Collected: 08/21/18 12:15

Matrix: Solid

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250314	08/22/18 01:45	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250350	08/28/18 11:50	A1C	TAL PLS
Total/NA	Prep	5035			250051	08/22/18 01:45	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250407	08/28/18 20:17	JRM	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250212	08/25/18 05:21	LPL	TAL PLS
Total/NA	Prep	3546			249957	08/22/18 09:40	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250035	08/23/18 17:19	JXL	TAL PLS
Total/NA	Prep	3546			250053	08/23/18 10:51	MAB	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Client Sample ID: DG-C3S-9.5-10
Date Collected: 08/21/18 12:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88164-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8081A		1	250248	08/26/18 10:01	MQL	TAL PLS
Total/NA	Prep	3540C			342371	08/24/18 08:44	AMT	TAL CAN
Total/NA	Analysis	8082		1	342551	08/27/18 19:28	KMG	TAL CAN
Total/NA	Prep	3050B			250071	08/23/18 12:48	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250222	08/24/18 20:36	OBI	TAL PLS
Total/NA	Prep	7471A			250050	08/23/18 10:11	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250200	08/24/18 16:57	MAG	TAL PLS

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-17-9	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
Subcontract	Asbestos - CARB 435	None	
3050B	Preparation, Metals	SW846	TAL PLS
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL PLS
5035	Closed System Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88164-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88164-1	DG-B1S-0.5-1	Solid	08/21/18 10:30	08/21/18 14:52
720-88164-2	DG-B1S-3.5-4	Solid	08/21/18 10:30	08/21/18 14:52
720-88164-3	DG-C1S-0.5-1	Solid	08/21/18 10:15	08/21/18 14:52
720-88164-4	DG-C1S-3.5-4	Solid	08/21/18 10:15	08/21/18 14:52
720-88164-5	DG-A1S-0.5-1	Solid	08/21/18 10:40	08/21/18 14:52
720-88164-6	DG-A1S-3.5-4	Solid	08/21/18 10:40	08/21/18 14:52
720-88164-7	DG-A3S-0.5-1	Solid	08/21/18 11:10	08/21/18 14:52
720-88164-8	DG-A3S-3.5-4	Solid	08/21/18 11:10	08/21/18 14:52
720-88164-9	DG-A3S-9.5-10	Solid	08/21/18 11:30	08/21/18 14:52
720-88164-10	DG-B3S-0.5-1	Solid	08/21/18 11:45	08/21/18 14:52
720-88164-11	DG-B3S-3.5-4	Solid	08/21/18 11:45	08/21/18 14:52
720-88164-12	DG-C3S-0.5-1	Solid	08/21/18 12:05	08/21/18 14:52
720-88164-13	DG-C3S-3.5-4	Solid	08/21/18 12:05	08/21/18 14:52
720-88164-14	DG-C3S-9.5-10	Solid	08/21/18 12:15	08/21/18 14:52

ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01192

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Aug/31/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01192
Polarized light microscopy analytical results for 8 bulk sample(s).
Job Site: 720-88164-1
Job No.: UPC-OU-SM

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 8

Samples Analyzed: 8

Job Site / No. UPC-OU-SM
720-88164-1

Report No. **359804**
Date Submitted: Aug-22-18
Date Reported: Aug-28-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DG-B1S-0.5-1		**<0.25%**	**None Detected**	720-88164-1
Lab ID # 1283-01192-001	**400** - Total Points			No Asbestos Detected
DG-B1S-3.5-4		**<0.25%**	**None Detected**	720-88164-2
Lab ID # 1283-01192-002	**400** - Total Points			No Asbestos Detected
DG-A3S-0.5-1		**<0.25%**	**None Detected**	720-88164-7
Lab ID # 1283-01192-003	**400** - Total Points			No Asbestos Detected
DG-A3S-3.5-4		**<0.25%**	**None Detected**	720-88164-8
Lab ID # 1283-01192-004	**400** - Total Points			No Asbestos Detected
DG-A3S-9.5-10		**<0.25%**	**None Detected**	720-88164-9
Lab ID # 1283-01192-005	**400** - Total Points			No Asbestos Detected
DG-C3S-0.5-1		**<0.25%**	**None Detected**	720-88164-12
Lab ID # 1283-01192-006	**400** - Total Points			No Asbestos Detected
DG-C3S-3.5-4		**<0.25%**	**None Detected**	720-88164-13
Lab ID # 1283-01192-007	**400** - Total Points			No Asbestos Detected
DG-C3S-9.5-10		**<0.25%**	**None Detected**	720-88164-14
Lab ID # 1283-01192-008	**400** - Total Points			No Asbestos Detected
Lab ID #	- Total Points			
Lab ID #	- Total Points			

QC Reviewer R mc Bain **Analys** Jo Ann Hewitt

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

#359804

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39376.1
Client Contact: Shipping/Receiving	Phone:	E Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88164-1
Address: 630 BANCROFT WAY, ,	Due Date Requested: 8/28/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC CU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
DG-B1S-0.5-1 (720-88164-1)	8/21/18	10:30 Pacific		Solid			X	1	
DG-B1S-3.5-4 (720-88164-2)	8/21/18	10:30 Pacific		Solid			X	1	
DG-A3S-0.5-1 (720-88164-7)	8/21/18	11:10 Pacific		Solid			X	1	
DG-A3S-3.5-4 (720-88164-8)	8/21/18	11:10 Pacific		Solid			X	1	
DG-A3S-9.5-10 (720-88164-9)	8/21/18	11:30 Pacific		Solid			X	1	
DG-C3S-0.5-1 (720-88164-12)	8/21/18	12:05 Pacific		Solid			X	1	
DG-C3S-3.5-4 (720-88164-13)	8/21/18	12:05 Pacific		Solid			X	1	
DG-C3S-9.5-10 (720-88164-14)	8/21/18	12:15 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time:	Company	Received by:	Date/Time:	Company
[signature] TA720	8/22/18 1315	TA720	MB	AUG22 '18 1:22PM	
Relinquished by	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88164

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185027

Date 8/21/18 Page 1 of 2

11/14/2018 (Rev. 1)

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: MKahrilas@geosyntec.com
Bill To: GEOSYNTEC
Sampled By: M. KAHRILAS
Attn: ANTHONY SMITH
Phone: 847-530-7602

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B + GRO	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease ☐ Petroleum (EPA 1664/9071) ☐ Total	Pesticides ☒ EPA 8081 PCBs ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)
DG-B1S-0.5-1	8/21	1030	S	Y	X			X		X		X	X									X
DG-B1S-3.5-4		1030		Y	X			X		X		X	X									
DG-C1S-0.5-1		1015		N									X									X
DG-C1S-3.5-4		1015											X									
DG-A1S-0.5-1		1040											X									
DG-A1S-3.5-4		1040											X									
DG-A3S-0.5-1		1110		Y	X			X		X		X	X									X
DG-A3S-3.5-4		1110			X			X		X		X	X									X
DG-A3S-9.5-10		1130		N	X			X		X		X	X									X
DG-B3S-0.5-1		1145		N									X									X

Project Info.

Project Name/ #: VRC OU-SM1
PO#: WG2445101
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers:
Head Space:
Temp: 3.4, 3.1, 1.7, 2.9 °C

TAT: 10 Day | (5 Day) | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID

See Terms and Conditions on reverse

	1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature	M.K		
Time	1311	1457	
Printed Name	MIRANDA KAHRILAS	Lacy	
Date	8/21/18	8/21/18	
Company	GEO	TA PLE	

	1) Received by:	2) Received by:	3) Received by:
Signature			
Time	1311	1452	
Printed Name	Lacy	L. BULLOCK	
Date	8/21/18	8/21/18	
Company	TA PLE	TA PLE	

720-88164 Chain of Custody

Company: 3.4/3.1/1.7/2.9

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88164

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: 185077

Date 3/21/13 Page 2 of 2

1/14/2018 (Rev. 1)

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: MKahrilas@geosyntec.com
Bill To: GEOSYNTEC
Sampled By: M. KAHRILAS
Attn: ANTHONY SMITH
Phone: 347-530-7602

Analysis Request

Sample ID	Date	Time	Mat rix	Preserv	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B ☐ 8260C	HVOCs by ☐ EPA 8260B	EPA 8260B ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease ☐ Petroleum (EPA 1664/9071) ☐ Total	Pesticides ☒ EPA 8081 PCBs ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions : ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB435)	Number of Containers
DG-B3S-3.5-4	3/21	1145	S	N								X	X											X	
DG-C3S-0.5-1		1205			X			X		X		X	X											X	
DG-C3S-3.5-4		1205			X			X		X		X	X											X	
DG-C3S-9.5-10		1215			X			X		X		X	X											X	

Project Info.

Project Name/ #: URC QV-SM
PO#: WG2445/01
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers:
Head Space:
Temp:

TAT: 10 Day | 5 Day (circled) | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID ___

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1311	Signature: [signature] Time: 1452	Signature: Time:
Printed Name: MIRANDA KAHRILAS Date: 3/21/13	Printed Name: [signature] Date: 3/21/13	Printed Name: Date:
Company: GEO	Company: TA	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 1311	Signature: [signature] Time: 1452	Signature: Time:
Printed Name: [signature] Date: 3/21/13	Printed Name: T. Bulloa Date: 3/21/13	Printed Name: Date:
Company: TA	Company: TA	Company: 3.4/3.1/1.7/2.9

Rev.10/201

Smith, Micah

From: Miranda Kahrilas <MKahrilas@Geosyntec.com>
Sent: Thursday, August 23, 2018 7:53 AM
To: Krzysztof Jesionek; Anthony Smith; Smith, Micah
Subject: Re: TestAmerica Sample Login Confirmation files from 720-88164 UPC OU-SM

-External Email-

See response below.

Get Outlook for Android

From: Smith, Micah
Sent: Wednesday, August 22, 6:46 PM
Subject: TestAmerica Sample Login Confirmation files from 720-88164 UPC OU-SM
To: Krzysztof Jesionek, Miranda Kahrilas, Anthony Smith

Hello,

The following samples were received in pre-weighed containers with a label that was added in the field, which would cause a slight low bias in the final results. DG-A3S-(0.5-1), (3.5-4) and (9.5-10); DG-C3S-(0.5-1), (3.5-4) and (9.5-10.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC):
DG-A3S-(0.5-1), One of two DI w/ stir bar vial label list DG-A3S-3.5-4, while the COC lists DG-A3S-(0.5-1), This one DI vial will not be used for testing. The sample color of all three vials are similar in color for DG-A3S-(0.5-1), The container label list sample time 11:43, while the COC lists sample time 11:45,

Can you confirm the appropriate sampled time?

Please use 11:45 as the sample time.

Attached, please find the Sample Confirmation files for job 720-88164; UPC OU-SM

Please feel free to contact me if you have any questions.

Thank you.

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: Project Feedback

MICAH SMITH
Project Manager

TestAmerica Pleasanton
THE LEADER IN ENVIRONMENTAL TESTING

Tel: 916.374.4302
www.testamericainc.com

Reference: [284910]
Attachments: 3

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

0.6|C0.6

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39378.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88164-1
Address: 4101 Shuffel Street NW,	Due Date Requested: 8/28/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

C195

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
DG-B1S-0.5-1 (720-88164-1)	8/21/18	10:30 Pacific		Solid			X	1	
DG-B1S-3.5-4 (720-88164-2)	8/21/18	10:30 Pacific		Solid			X	1	
DG-A3S-0.5-1 (720-88164-7)	8/21/18	11:10 Pacific		Solid			X	1	
DG-A3S-3.5-4 (720-88164-8)	8/21/18	11:10 Pacific		Solid			X	1	
DG-A3S-9.5-10 (720-88164-9)	8/21/18	11:30 Pacific		Solid			X	1	
DG-C3S-0.5-1 (720-88164-12)	8/21/18	12:05 Pacific		Solid			X	1	
DG-C3S-3.5-4 (720-88164-13)	8/21/18	12:05 Pacific		Solid			X	1	
DG-C3S-9.5-10 (720-88164-14)	8/21/18	12:15 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/22/18 1404	TAMES		8-23-18 920	TAL
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client TA PLEASANTON Site Name – Cooler unpacked by: BOB

Cooler Received on 8-23-18 Opened on 8-23-18

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 0.6 °C Corrected Cooler Temp. 0.6 °C
   IR GUN #36 (CF -0.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
16. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

pH Strip Lot# **HC849161**

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

_____

_____

_____

_____

_____

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____.

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88164-1

Login Number: 88164
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	False	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88165-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/6/2018 4:20:53 PM

Micah Smith, Project Manager II
(916)374-4302
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 7
Surrogate Summary 21
QC Sample Results 22
QC Association Summary 44
Lab Chronicle 47
Certification Summary 49
Method Summary 50
Sample Summary 51
Chain of Custody 52
Receipt Checklists 55

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88165-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88165-1

Comments
This report was revised on 11/6/18 to correct the method reference for the Volatile Organic Compounds by (GC/MS SIM) to reference method SRL 524M-TCP.

Receipt
The samples were received on 8/21/2018 2:52 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 1.7º C, 2.9º C, 3.1º C and 3.4º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250404 recovered outside control limits for the following analytes: Carbon disulfide, 1,1-Dichloroethene, 1,1,2-Trichloro-1,2,2-trifluoroethane and trans-1,2-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 720-250451 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250106 was outside of the 10% control limits: (720-88162-A-14-C SD): Barium - 40%.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88165-1

Client Sample ID: DG-H1W — Lab Sample ID: 720-88165-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.30	J	0.50	0.076	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	0.27	J	0.50	0.11	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	96		51	31	ug/L	1		8015B	Total/NA
Arsenic	0.019		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.097		0.010	0.0014	mg/L	1		6010B	Dissolved
Beryllium	0.00034	J	0.0020	0.00033	mg/L	1		6010B	Dissolved
Cobalt	0.0036		0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.0034	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.0049	J	0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.0045	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0028	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Zinc	0.030		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: DG-L1W — Lab Sample ID: 720-88165-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.26	J	0.50	0.076	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	0.49	J	0.50	0.11	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	220		51	31	ug/L	1		8015B	Total/NA
Arsenic	0.015		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.21		0.010	0.0014	mg/L	1		6010B	Dissolved
Beryllium	0.00050	J	0.0020	0.00033	mg/L	1		6010B	Dissolved
Cobalt	0.0095		0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.0090	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.0076		0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.0048	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0067	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Zinc	0.064		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: DG-F1W — Lab Sample ID: 720-88165-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.55		0.50	0.076	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	0.33	J	0.50	0.11	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	120		51	31	ug/L	1		8015B	Total/NA
Arsenic	0.020		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.079		0.010	0.0014	mg/L	1		6010B	Dissolved
Beryllium	0.00053	J	0.0020	0.00033	mg/L	1		6010B	Dissolved
Cobalt	0.0036		0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.0028	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.0062		0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.0045	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0024	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Zinc	0.026		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: DG-D1W — Lab Sample ID: 720-88165-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.0		0.50	0.076	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	0.16	J	0.50	0.11	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-D1W (Continued) — Lab Sample ID: 720-88165-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.25	J	0.50	0.20	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	73		51	31	ug/L	1		8015B	Total/NA
Arsenic	0.025		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.14		0.010	0.0014	mg/L	1		6010B	Dissolved
Beryllium	0.00034	J	0.0020	0.00033	mg/L	1		6010B	Dissolved
Cobalt	0.0024		0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.0045	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.0060		0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.0042	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0027	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Zinc	0.041		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: TRIP BLANK-1 — Lab Sample ID: 720-88165-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-H1W
Date Collected: 08/21/18 08:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88165-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/29/18 13:15	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/29/18 13:15	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/29/18 13:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/29/18 13:15	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/29/18 13:15	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/29/18 13:15	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/29/18 13:15	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/29/18 13:15	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/29/18 13:15	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/29/18 13:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/29/18 13:15	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/29/18 13:15	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/29/18 13:15	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/29/18 13:15	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/29/18 13:15	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/29/18 13:15	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/29/18 13:15	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/29/18 13:15	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/29/18 13:15	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/29/18 13:15	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/29/18 13:15	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/29/18 13:15	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/29/18 13:15	1
2-Hexanone	ND		50	3.0	ug/L			08/29/18 13:15	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/29/18 13:15	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/29/18 13:15	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/29/18 13:15	1
Acetone	ND		50	20	ug/L			08/29/18 13:15	1
Benzene	ND		0.50	0.25	ug/L			08/29/18 13:15	1
Bromobenzene	ND		1.0	0.20	ug/L			08/29/18 13:15	1
Bromoform	ND		1.0	0.50	ug/L			08/29/18 13:15	1
Bromomethane	ND		1.0	0.49	ug/L			08/29/18 13:15	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/29/18 13:15	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/29/18 13:15	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/29/18 13:15	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/29/18 13:15	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/29/18 13:15	1
Chloroethane	ND		1.0	0.17	ug/L			08/29/18 13:15	1
Chloroform	ND		1.0	0.40	ug/L			08/29/18 13:15	1
Chloromethane	ND		1.0	0.19	ug/L			08/29/18 13:15	1
cis-1,2-Dichloroethene	**0.30**	**J**	0.50	0.076	ug/L			08/29/18 13:15	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/29/18 13:15	1
Dibromomethane	ND		0.50	0.30	ug/L			08/29/18 13:15	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/29/18 13:15	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/29/18 13:15	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/29/18 13:15	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/29/18 13:15	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/29/18 13:15	1

Client Sample ID: DG-H1W

Date Collected: 08/21/18 08:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88165-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/29/18 13:15	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/29/18 13:15	1
Methyl tert-butyl ether	**0.27**	**J**	0.50	0.11	ug/L			08/29/18 13:15	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/29/18 13:15	1
Naphthalene	ND		1.0	0.22	ug/L			08/29/18 13:15	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/29/18 13:15	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/29/18 13:15	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/29/18 13:15	1
Styrene	ND		0.50	0.22	ug/L			08/29/18 13:15	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/29/18 13:15	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/29/18 13:15	1
Toluene	ND		0.50	0.17	ug/L			08/29/18 13:15	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/29/18 13:15	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/29/18 13:15	1
Trichloroethene	ND		0.50	0.20	ug/L			08/29/18 13:15	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/29/18 13:15	1
Vinyl acetate	ND		10	0.60	ug/L			08/29/18 13:15	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/29/18 13:15	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/29/18 13:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 130*		*08/29/18 13:15*	*1*
4-Bromofluorobenzene	*95*		*67 - 130*		*08/29/18 13:15*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/29/18 13:15*	*1*

Method: SRL 524M-TCP - Volatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0017	ug/L			08/29/18 17:43	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**96**		51	31	ug/L		08/23/18 13:54	08/23/18 21:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*80*		*23 - 156*	*08/23/18 13:54*	*08/23/18 21:38*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/22/18 14:55	08/23/18 15:24	1
Arsenic	**0.019**		0.010	0.0026	mg/L		08/22/18 14:55	08/23/18 15:24	1
Barium	**0.097**		0.010	0.0014	mg/L		08/22/18 14:55	08/23/18 15:24	1
Beryllium	**0.00034**	**J**	0.0020	0.00033	mg/L		08/22/18 14:55	08/23/18 15:24	1
Cadmium	ND		0.0025	0.0013	mg/L		08/22/18 14:55	08/23/18 15:24	1
Chromium	ND		0.010	0.0015	mg/L		08/22/18 14:55	08/23/18 15:24	1
Cobalt	**0.0036**		0.0020	0.0012	mg/L		08/22/18 14:55	08/23/18 15:24	1
Copper	**0.0034**	**J**	0.020	0.0015	mg/L		08/22/18 14:55	08/23/18 15:24	1
Lead	**0.0049**	**J**	0.0050	0.0023	mg/L		08/22/18 14:55	08/23/18 15:24	1
Molybdenum	**0.0045**	**J**	0.010	0.0023	mg/L		08/22/18 14:55	08/23/18 15:24	1
Nickel	**0.0028**	**J**	0.010	0.00080	mg/L		08/22/18 14:55	08/23/18 15:24	1
Selenium	ND		0.020	0.0071	mg/L		08/22/18 14:55	08/23/18 15:24	1
Silver	ND		0.0050	0.0012	mg/L		08/22/18 14:55	08/23/18 15:24	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88165-1

Client Sample ID: DG-H1W
Date Collected: 08/21/18 08:15
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88165-1
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		0.010	0.0035	mg/L		08/22/18 14:55	08/23/18 15:24	1
Vanadium	ND		0.010	0.00070	mg/L		08/22/18 14:55	08/23/18 15:24	1
Zinc	**0.030**		0.020	0.0096	mg/L		08/22/18 14:55	08/23/18 15:24	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/22/18 14:49	08/22/18 18:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0037	mg/L			08/21/18 19:24	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88165-1

Client Sample ID: DG-L1W
Date Collected: 08/21/18 08:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88165-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/29/18 13:45	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/29/18 13:45	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/29/18 13:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/29/18 13:45	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/29/18 13:45	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/29/18 13:45	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/29/18 13:45	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/29/18 13:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/29/18 13:45	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/29/18 13:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/29/18 13:45	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/29/18 13:45	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/29/18 13:45	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/29/18 13:45	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/29/18 13:45	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/29/18 13:45	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/29/18 13:45	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/29/18 13:45	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/29/18 13:45	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/29/18 13:45	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/29/18 13:45	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/29/18 13:45	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/29/18 13:45	1
2-Hexanone	ND		50	3.0	ug/L			08/29/18 13:45	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/29/18 13:45	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/29/18 13:45	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/29/18 13:45	1
Acetone	ND		50	20	ug/L			08/29/18 13:45	1
Benzene	ND		0.50	0.25	ug/L			08/29/18 13:45	1
Bromobenzene	ND		1.0	0.20	ug/L			08/29/18 13:45	1
Bromoform	ND		1.0	0.50	ug/L			08/29/18 13:45	1
Bromomethane	ND		1.0	0.49	ug/L			08/29/18 13:45	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/29/18 13:45	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/29/18 13:45	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/29/18 13:45	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/29/18 13:45	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/29/18 13:45	1
Chloroethane	ND		1.0	0.17	ug/L			08/29/18 13:45	1
Chloroform	ND		1.0	0.40	ug/L			08/29/18 13:45	1
Chloromethane	ND		1.0	0.19	ug/L			08/29/18 13:45	1
cis-1,2-Dichloroethene	**0.26**	**J**	0.50	0.076	ug/L			08/29/18 13:45	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/29/18 13:45	1
Dibromomethane	ND		0.50	0.30	ug/L			08/29/18 13:45	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/29/18 13:45	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/29/18 13:45	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/29/18 13:45	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/29/18 13:45	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/29/18 13:45	1

Client Sample ID: DG-L1W

Date Collected: 08/21/18 08:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88165-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/29/18 13:45	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/29/18 13:45	1
Methyl tert-butyl ether	**0.49**	**J**	0.50	0.11	ug/L			08/29/18 13:45	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/29/18 13:45	1
Naphthalene	ND		1.0	0.22	ug/L			08/29/18 13:45	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/29/18 13:45	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/29/18 13:45	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/29/18 13:45	1
Styrene	ND		0.50	0.22	ug/L			08/29/18 13:45	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/29/18 13:45	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/29/18 13:45	1
Toluene	ND		0.50	0.17	ug/L			08/29/18 13:45	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/29/18 13:45	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/29/18 13:45	1
Trichloroethene	ND		0.50	0.20	ug/L			08/29/18 13:45	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/29/18 13:45	1
Vinyl acetate	ND		10	0.60	ug/L			08/29/18 13:45	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/29/18 13:45	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/29/18 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*72 - 130*		*08/29/18 13:45*	*1*
4-Bromofluorobenzene	*95*		*67 - 130*		*08/29/18 13:45*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/29/18 13:45*	*1*

Method: SRL 524M-TCP - Volatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0017	ug/L			08/29/18 18:14	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**220**		51	31	ug/L		08/23/18 13:54	08/23/18 22:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*69*		*23 - 156*	*08/23/18 13:54*	*08/23/18 22:08*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/22/18 14:55	08/27/18 12:38	1
Arsenic	**0.015**		0.010	0.0026	mg/L		08/22/18 14:55	08/27/18 12:38	1
Barium	**0.21**		0.010	0.0014	mg/L		08/22/18 14:55	08/27/18 12:38	1
Beryllium	**0.00050**	**J**	0.0020	0.00033	mg/L		08/22/18 14:55	08/27/18 12:38	1
Cadmium	ND		0.0025	0.0013	mg/L		08/22/18 14:55	08/27/18 12:38	1
Chromium	ND		0.010	0.0015	mg/L		08/22/18 14:55	08/27/18 12:38	1
Cobalt	**0.0095**		0.0020	0.0012	mg/L		08/22/18 14:55	08/27/18 12:38	1
Copper	**0.0090**	**J**	0.020	0.0015	mg/L		08/22/18 14:55	08/27/18 12:38	1
Lead	**0.0076**		0.0050	0.0023	mg/L		08/22/18 14:55	08/27/18 12:38	1
Molybdenum	**0.0048**	**J**	0.010	0.0023	mg/L		08/22/18 14:55	08/27/18 12:38	1
Nickel	**0.0067**	**J**	0.010	0.00080	mg/L		08/22/18 14:55	08/27/18 12:38	1
Selenium	ND		0.020	0.0071	mg/L		08/22/18 14:55	08/27/18 12:38	1
Silver	ND		0.0050	0.0012	mg/L		08/22/18 14:55	08/27/18 12:38	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88165-1

Client Sample ID: DG-L1W
Date Collected: 08/21/18 08:30
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88165-2
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		0.010	0.0035	mg/L		08/22/18 14:55	08/27/18 12:38	1
Vanadium	ND		0.010	0.00070	mg/L		08/22/18 14:55	08/27/18 12:38	1
Zinc	**0.064**		0.020	0.0096	mg/L		08/22/18 14:55	08/27/18 12:38	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/22/18 14:49	08/22/18 18:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0037	mg/L			08/21/18 19:24	1

Client Sample ID: DG-F1W
Date Collected: 08/21/18 08:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88165-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/29/18 14:16	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/29/18 14:16	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/29/18 14:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/29/18 14:16	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/29/18 14:16	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/29/18 14:16	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/29/18 14:16	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/29/18 14:16	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/29/18 14:16	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/29/18 14:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/29/18 14:16	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/29/18 14:16	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/29/18 14:16	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/29/18 14:16	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/29/18 14:16	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/29/18 14:16	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/29/18 14:16	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/29/18 14:16	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/29/18 14:16	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/29/18 14:16	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/29/18 14:16	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/29/18 14:16	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/29/18 14:16	1
2-Hexanone	ND		50	3.0	ug/L			08/29/18 14:16	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/29/18 14:16	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/29/18 14:16	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/29/18 14:16	1
Acetone	ND		50	20	ug/L			08/29/18 14:16	1
Benzene	ND		0.50	0.25	ug/L			08/29/18 14:16	1
Bromobenzene	ND		1.0	0.20	ug/L			08/29/18 14:16	1
Bromoform	ND		1.0	0.50	ug/L			08/29/18 14:16	1
Bromomethane	ND		1.0	0.49	ug/L			08/29/18 14:16	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/29/18 14:16	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/29/18 14:16	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/29/18 14:16	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/29/18 14:16	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/29/18 14:16	1
Chloroethane	ND		1.0	0.17	ug/L			08/29/18 14:16	1
Chloroform	ND		1.0	0.40	ug/L			08/29/18 14:16	1
Chloromethane	ND		1.0	0.19	ug/L			08/29/18 14:16	1
cis-1,2-Dichloroethene	**0.55**		0.50	0.076	ug/L			08/29/18 14:16	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/29/18 14:16	1
Dibromomethane	ND		0.50	0.30	ug/L			08/29/18 14:16	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/29/18 14:16	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/29/18 14:16	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/29/18 14:16	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/29/18 14:16	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/29/18 14:16	1

Client Sample ID: DG-F1W

Date Collected: 08/21/18 08:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88165-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/29/18 14:16	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/29/18 14:16	1
Methyl tert-butyl ether	**0.33**	**J**	0.50	0.11	ug/L			08/29/18 14:16	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/29/18 14:16	1
Naphthalene	ND		1.0	0.22	ug/L			08/29/18 14:16	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/29/18 14:16	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/29/18 14:16	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/29/18 14:16	1
Styrene	ND		0.50	0.22	ug/L			08/29/18 14:16	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/29/18 14:16	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/29/18 14:16	1
Toluene	ND		0.50	0.17	ug/L			08/29/18 14:16	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/29/18 14:16	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/29/18 14:16	1
Trichloroethene	ND		0.50	0.20	ug/L			08/29/18 14:16	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/29/18 14:16	1
Vinyl acetate	ND		10	0.60	ug/L			08/29/18 14:16	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/29/18 14:16	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/29/18 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*72 - 130*		*08/29/18 14:16*	*1*
4-Bromofluorobenzene	*97*		*67 - 130*		*08/29/18 14:16*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*08/29/18 14:16*	*1*

Method: SRL 524M-TCP - Volatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0017	ug/L			08/29/18 18:45	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**120**		51	31	ug/L		08/23/18 13:54	08/23/18 22:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*77*		*23 - 156*	*08/23/18 13:54*	*08/23/18 22:37*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/22/18 14:55	08/23/18 15:43	1
Arsenic	**0.020**		0.010	0.0026	mg/L		08/22/18 14:55	08/23/18 15:43	1
Barium	**0.079**		0.010	0.0014	mg/L		08/22/18 14:55	08/23/18 15:43	1
Beryllium	**0.00053**	**J**	0.0020	0.00033	mg/L		08/22/18 14:55	08/23/18 15:43	1
Cadmium	ND		0.0025	0.0013	mg/L		08/22/18 14:55	08/23/18 15:43	1
Chromium	ND		0.010	0.0015	mg/L		08/22/18 14:55	08/23/18 15:43	1
Cobalt	**0.0036**		0.0020	0.0012	mg/L		08/22/18 14:55	08/23/18 15:43	1
Copper	**0.0028**	**J**	0.020	0.0015	mg/L		08/22/18 14:55	08/23/18 15:43	1
Lead	**0.0062**		0.0050	0.0023	mg/L		08/22/18 14:55	08/23/18 15:43	1
Molybdenum	**0.0045**	**J**	0.010	0.0023	mg/L		08/22/18 14:55	08/23/18 15:43	1
Nickel	**0.0024**	**J**	0.010	0.00080	mg/L		08/22/18 14:55	08/23/18 15:43	1
Selenium	ND		0.020	0.0071	mg/L		08/22/18 14:55	08/23/18 15:43	1
Silver	ND		0.0050	0.0012	mg/L		08/22/18 14:55	08/23/18 15:43	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88165-1

Client Sample ID: DG-F1W
Date Collected: 08/21/18 08:45
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88165-3
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		0.010	0.0035	mg/L		08/22/18 14:55	08/23/18 15:43	1
Vanadium	ND		0.010	0.00070	mg/L		08/22/18 14:55	08/23/18 15:43	1
Zinc	**0.026**		0.020	0.0096	mg/L		08/22/18 14:55	08/23/18 15:43	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/22/18 14:49	08/22/18 18:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0037	mg/L			08/21/18 19:24	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88165-1

Client Sample ID: DG-D1W
Date Collected: 08/21/18 09:20
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88165-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/29/18 14:48	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/29/18 14:48	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/29/18 14:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/29/18 14:48	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/29/18 14:48	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/29/18 14:48	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/29/18 14:48	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/29/18 14:48	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/29/18 14:48	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/29/18 14:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/29/18 14:48	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/29/18 14:48	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/29/18 14:48	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/29/18 14:48	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/29/18 14:48	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/29/18 14:48	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/29/18 14:48	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/29/18 14:48	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/29/18 14:48	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/29/18 14:48	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/29/18 14:48	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/29/18 14:48	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/29/18 14:48	1
2-Hexanone	ND		50	3.0	ug/L			08/29/18 14:48	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/29/18 14:48	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/29/18 14:48	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/29/18 14:48	1
Acetone	ND		50	20	ug/L			08/29/18 14:48	1
Benzene	ND		0.50	0.25	ug/L			08/29/18 14:48	1
Bromobenzene	ND		1.0	0.20	ug/L			08/29/18 14:48	1
Bromoform	ND		1.0	0.50	ug/L			08/29/18 14:48	1
Bromomethane	ND		1.0	0.49	ug/L			08/29/18 14:48	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/29/18 14:48	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/29/18 14:48	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/29/18 14:48	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/29/18 14:48	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/29/18 14:48	1
Chloroethane	ND		1.0	0.17	ug/L			08/29/18 14:48	1
Chloroform	ND		1.0	0.40	ug/L			08/29/18 14:48	1
Chloromethane	ND		1.0	0.19	ug/L			08/29/18 14:48	1
cis-1,2-Dichloroethene	**1.0**		0.50	0.076	ug/L			08/29/18 14:48	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/29/18 14:48	1
Dibromomethane	ND		0.50	0.30	ug/L			08/29/18 14:48	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/29/18 14:48	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/29/18 14:48	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/29/18 14:48	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/29/18 14:48	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/29/18 14:48	1

Client Sample ID: DG-D1W

Date Collected: 08/21/18 09:20
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88165-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/29/18 14:48	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/29/18 14:48	1
Methyl tert-butyl ether	**0.16**	**J**	0.50	0.11	ug/L			08/29/18 14:48	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/29/18 14:48	1
Naphthalene	ND		1.0	0.22	ug/L			08/29/18 14:48	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/29/18 14:48	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/29/18 14:48	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/29/18 14:48	1
Styrene	ND		0.50	0.22	ug/L			08/29/18 14:48	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/29/18 14:48	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/29/18 14:48	1
Toluene	ND		0.50	0.17	ug/L			08/29/18 14:48	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/29/18 14:48	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/29/18 14:48	1
Trichloroethene	**0.25**	**J**	0.50	0.20	ug/L			08/29/18 14:48	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/29/18 14:48	1
Vinyl acetate	ND		10	0.60	ug/L			08/29/18 14:48	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/29/18 14:48	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/29/18 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*72 - 130*		*08/29/18 14:48*	*1*
4-Bromofluorobenzene	*94*		*67 - 130*		*08/29/18 14:48*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/29/18 14:48*	*1*

Method: SRL 524M-TCP - Volatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0017	ug/L			08/30/18 20:15	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**73**		51	31	ug/L		08/23/18 13:54	08/23/18 23:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*82*		*23 - 156*	*08/23/18 13:54*	*08/23/18 23:06*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/22/18 14:55	08/23/18 15:48	1
Arsenic	**0.025**		0.010	0.0026	mg/L		08/22/18 14:55	08/23/18 15:48	1
Barium	**0.14**		0.010	0.0014	mg/L		08/22/18 14:55	08/23/18 15:48	1
Beryllium	**0.00034**	**J**	0.0020	0.00033	mg/L		08/22/18 14:55	08/23/18 15:48	1
Cadmium	ND		0.0025	0.0013	mg/L		08/22/18 14:55	08/23/18 15:48	1
Chromium	ND		0.010	0.0015	mg/L		08/22/18 14:55	08/23/18 15:48	1
Cobalt	**0.0024**		0.0020	0.0012	mg/L		08/22/18 14:55	08/23/18 15:48	1
Copper	**0.0045**	**J**	0.020	0.0015	mg/L		08/22/18 14:55	08/23/18 15:48	1
Lead	**0.0060**		0.0050	0.0023	mg/L		08/22/18 14:55	08/23/18 15:48	1
Molybdenum	**0.0042**	**J**	0.010	0.0023	mg/L		08/22/18 14:55	08/23/18 15:48	1
Nickel	**0.0027**	**J**	0.010	0.00080	mg/L		08/22/18 14:55	08/23/18 15:48	1
Selenium	ND		0.020	0.0071	mg/L		08/22/18 14:55	08/23/18 15:48	1
Silver	ND		0.0050	0.0012	mg/L		08/22/18 14:55	08/23/18 15:48	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88165-1

Client Sample ID: DG-D1W
Date Collected: 08/21/18 09:20
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88165-4
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		0.010	0.0035	mg/L		08/22/18 14:55	08/23/18 15:48	1
Vanadium	ND		0.010	0.00070	mg/L		08/22/18 14:55	08/23/18 15:48	1
Zinc	**0.041**		0.020	0.0096	mg/L		08/22/18 14:55	08/23/18 15:48	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/22/18 14:49	08/22/18 18:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0037	mg/L			08/21/18 19:24	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88165-1

Client Sample ID: TRIP BLANK-1
Date Collected: 08/21/18 00:00
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88165-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/28/18 23:58	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/28/18 23:58	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/28/18 23:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091	ug/L			08/28/18 23:58	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/28/18 23:58	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/28/18 23:58	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/28/18 23:58	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/28/18 23:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/28/18 23:58	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/28/18 23:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/28/18 23:58	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/28/18 23:58	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/28/18 23:58	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/28/18 23:58	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/28/18 23:58	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/28/18 23:58	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/28/18 23:58	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/28/18 23:58	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/28/18 23:58	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/28/18 23:58	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/28/18 23:58	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/28/18 23:58	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/28/18 23:58	1
2-Hexanone	ND		50	3.0	ug/L			08/28/18 23:58	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/28/18 23:58	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/28/18 23:58	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/28/18 23:58	1
Acetone	ND		50	20	ug/L			08/28/18 23:58	1
Benzene	ND		0.50	0.25	ug/L			08/28/18 23:58	1
Bromobenzene	ND		1.0	0.20	ug/L			08/28/18 23:58	1
Bromoform	ND		1.0	0.50	ug/L			08/28/18 23:58	1
Bromomethane	ND		1.0	0.49	ug/L			08/28/18 23:58	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/28/18 23:58	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/28/18 23:58	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/28/18 23:58	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/28/18 23:58	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/28/18 23:58	1
Chloroethane	ND		1.0	0.17	ug/L			08/28/18 23:58	1
Chloroform	ND		1.0	0.40	ug/L			08/28/18 23:58	1
Chloromethane	ND		1.0	0.19	ug/L			08/28/18 23:58	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/28/18 23:58	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/28/18 23:58	1
Dibromomethane	ND		0.50	0.30	ug/L			08/28/18 23:58	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/28/18 23:58	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/28/18 23:58	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/28/18 23:58	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/28/18 23:58	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/28/18 23:58	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88165-1

Client Sample ID: TRIP BLANK-1
Date Collected: 08/21/18 00:00
Date Received: 08/21/18 14:52

Lab Sample ID: 720-88165-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/28/18 23:58	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/28/18 23:58	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/28/18 23:58	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/28/18 23:58	1
Naphthalene	ND		1.0	0.22	ug/L			08/28/18 23:58	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/28/18 23:58	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/28/18 23:58	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/28/18 23:58	1
Styrene	ND		0.50	0.22	ug/L			08/28/18 23:58	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/28/18 23:58	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/28/18 23:58	1
Toluene	ND		0.50	0.17	ug/L			08/28/18 23:58	1
trans-1,2-Dichloroethene	ND	*	0.50	0.13	ug/L			08/28/18 23:58	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/28/18 23:58	1
Trichloroethene	ND		0.50	0.20	ug/L			08/28/18 23:58	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/28/18 23:58	1
Vinyl acetate	ND		10	0.60	ug/L			08/28/18 23:58	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/28/18 23:58	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/28/18 23:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*72 - 130*		*08/28/18 23:58*	*1*
4-Bromofluorobenzene	*97*		*67 - 130*		*08/28/18 23:58*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/28/18 23:58*	*1*

Method: SRL 524M-TCP - Volatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0017	ug/L			08/29/18 14:40	1

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88165-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(72-130)	(67-130)	(70-130)
720-88165-1	DG-H1W	97	95	99
720-88165-2	DG-L1W	102	95	100
720-88165-3	DG-F1W	104	97	102
720-88165-4	DG-D1W	105	94	100
720-88165-5	TRIP BLANK-1	100	97	92
720-88175-A-4 MS	Matrix Spike	106	96	97
720-88175-A-4 MSD	Matrix Spike Duplicate	101	95	96
720-88210-A-2 MS	Matrix Spike	103	97	101
720-88210-A-2 MSD	Matrix Spike Duplicate	101	96	101
LCS 720-250404/5	Lab Control Sample	96	98	96
LCS 720-250404/7	Lab Control Sample	97	95	97
LCS 720-250451/5	Lab Control Sample	95	94	100
LCS 720-250451/7	Lab Control Sample	97	98	100
LCSD 720-250404/6	Lab Control Sample Dup	93	98	95
LCSD 720-250404/8	Lab Control Sample Dup	94	96	103
LCSD 720-250451/6	Lab Control Sample Dup	91	94	100
LCSD 720-250451/8	Lab Control Sample Dup	94	96	101
MB 720-250404/4	Method Blank	97	95	93
MB 720-250451/4	Method Blank	94	98	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
TOL = Toluene-d8 (Surr)

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TPH1
Lab Sample ID	Client Sample ID	(23-156)
720-88165-1	DG-H1W	80
720-88165-2	DG-L1W	69
720-88165-3	DG-F1W	77
720-88165-4	DG-D1W	82
LCS 720-250079/2-A	Lab Control Sample	101
LCSD 720-250079/3-A	Lab Control Sample Dup	92
MB 720-250079/1-A	Method Blank	92

Surrogate Legend

TPH = p-Terphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-250404/4
Matrix: Water
Analysis Batch: 250404

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/28/18 19:13	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/28/18 19:13	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/28/18 19:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/28/18 19:13	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/28/18 19:13	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/28/18 19:13	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/28/18 19:13	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/28/18 19:13	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/28/18 19:13	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/28/18 19:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/28/18 19:13	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/28/18 19:13	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/28/18 19:13	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/28/18 19:13	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/28/18 19:13	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/28/18 19:13	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/28/18 19:13	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/28/18 19:13	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/28/18 19:13	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/28/18 19:13	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/28/18 19:13	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/28/18 19:13	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/28/18 19:13	1
2-Hexanone	ND		50	3.0	ug/L			08/28/18 19:13	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/28/18 19:13	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/28/18 19:13	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/28/18 19:13	1
Acetone	ND		50	20	ug/L			08/28/18 19:13	1
Benzene	ND		0.50	0.25	ug/L			08/28/18 19:13	1
Bromobenzene	ND		1.0	0.20	ug/L			08/28/18 19:13	1
Bromoform	ND		1.0	0.50	ug/L			08/28/18 19:13	1
Bromomethane	ND		1.0	0.49	ug/L			08/28/18 19:13	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/28/18 19:13	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/28/18 19:13	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/28/18 19:13	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/28/18 19:13	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/28/18 19:13	1
Chloroethane	ND		1.0	0.17	ug/L			08/28/18 19:13	1
Chloroform	ND		1.0	0.40	ug/L			08/28/18 19:13	1
Chloromethane	ND		1.0	0.19	ug/L			08/28/18 19:13	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/28/18 19:13	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/28/18 19:13	1
Dibromomethane	ND		0.50	0.30	ug/L			08/28/18 19:13	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/28/18 19:13	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/28/18 19:13	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/28/18 19:13	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/28/18 19:13	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250404/4
Matrix: Water
Analysis Batch: 250404

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/28/18 19:13	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/28/18 19:13	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/28/18 19:13	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/28/18 19:13	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/28/18 19:13	1
Naphthalene	ND		1.0	0.22	ug/L			08/28/18 19:13	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/28/18 19:13	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/28/18 19:13	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/28/18 19:13	1
Styrene	ND		0.50	0.22	ug/L			08/28/18 19:13	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/28/18 19:13	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/28/18 19:13	1
Toluene	ND		0.50	0.17	ug/L			08/28/18 19:13	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/28/18 19:13	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/28/18 19:13	1
Trichloroethene	ND		0.50	0.20	ug/L			08/28/18 19:13	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/28/18 19:13	1
Vinyl acetate	ND		10	0.60	ug/L			08/28/18 19:13	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/28/18 19:13	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/28/18 19:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 130*		*08/28/18 19:13*	*1*
4-Bromofluorobenzene	*95*		*67 - 130*		*08/28/18 19:13*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/28/18 19:13*	*1*

Lab Sample ID: LCS 720-250404/5
Matrix: Water
Analysis Batch: 250404

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	27.7		ug/L		111	81 - 121
1,1,1-Trichloroethane	25.0	29.0		ug/L		116	74 - 130
1,1,2,2-Tetrachloroethane	25.0	25.0		ug/L		100	70 - 115
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	34.5	*	ug/L		138	70 - 133
1,1,2-Trichloroethane	25.0	27.0		ug/L		108	80 - 117
1,1-Dichloroethane	25.0	27.8		ug/L		111	77 - 119
1,1-Dichloroethene	25.0	33.9	*	ug/L		136	69 - 119
1,1-Dichloropropene	25.0	27.9		ug/L		112	83 - 130
1,2,3-Trichlorobenzene	25.0	26.2		ug/L		105	87 - 123
1,2,3-Trichloropropane	25.0	26.2		ug/L		105	77 - 120
1,2,4-Trichlorobenzene	25.0	26.4		ug/L		105	78 - 120
1,2,4-Trimethylbenzene	25.0	26.3		ug/L		105	75 - 115
1,2-Dibromo-3-Chloropropane	25.0	25.1		ug/L		100	74 - 126
1,2-Dichlorobenzene	25.0	26.2		ug/L		105	77 - 117
1,2-Dichloroethane	25.0	27.3		ug/L		109	73 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250404/5
Matrix: Water
Analysis Batch: 250404

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	25.0	27.3		ug/L		109	79 - 119
1,3,5-Trimethylbenzene	25.0	26.4		ug/L		105	77 - 117
1,3-Dichlorobenzene	25.0	26.6		ug/L		107	76 - 116
1,3-Dichloropropane	25.0	26.2		ug/L		105	77 - 117
1,4-Dichlorobenzene	25.0	26.0		ug/L		104	76 - 116
2,2-Dichloropropane	25.0	30.9		ug/L		124	74 - 156
2-Butanone (MEK)	125	117		ug/L		93	66 - 133
2-Chlorotoluene	25.0	26.0		ug/L		104	75 - 115
2-Hexanone	125	115		ug/L		92	63 - 140
4-Chlorotoluene	25.0	26.0		ug/L		104	73 - 119
4-Isopropyltoluene	25.0	26.1		ug/L		104	80 - 120
4-Methyl-2-pentanone (MIBK)	125	116		ug/L		92	66 - 140
Acetone	125	100		ug/L		80	61 - 147
Benzene	25.0	26.6		ug/L		107	79 - 119
Bromobenzene	25.0	25.7		ug/L		103	77 - 117
Bromoform	25.0	25.7		ug/L		103	75 - 127
Bromomethane	25.0	29.9		ug/L		119	70 - 132
Carbon disulfide	25.0	36.8	*	ug/L		147	64 - 127
Carbon tetrachloride	25.0	28.6		ug/L		115	72 - 142
Chlorobenzene	25.0	26.1		ug/L		104	76 - 116
Chlorobromomethane	25.0	28.2		ug/L		113	81 - 122
Chlorodibromomethane	25.0	26.6		ug/L		106	77 - 133
Chloroethane	25.0	26.9		ug/L		108	70 - 131
Chloroform	25.0	27.2		ug/L		109	82 - 119
Chloromethane	25.0	28.4		ug/L		114	49 - 134
cis-1,2-Dichloroethene	25.0	27.7		ug/L		111	77 - 117
cis-1,3-Dichloropropene	25.0	27.0		ug/L		108	82 - 119
Dibromomethane	25.0	26.8		ug/L		107	79 - 117
Dichlorobromomethane	25.0	27.7		ug/L		111	81 - 130
Dichlorodifluoromethane	25.0	33.4		ug/L		134	21 - 150
Ethylbenzene	25.0	25.7		ug/L		103	77 - 117
Ethylene Dibromide	25.0	26.9		ug/L		108	80 - 121
Hexachlorobutadiene	25.0	26.7		ug/L		107	78 - 140
Isopropylbenzene	25.0	26.9		ug/L		108	77 - 130
Methyl tert-butyl ether	25.0	28.2		ug/L		113	70 - 130
Methylene Chloride	25.0	27.1		ug/L		108	75 - 117
m-Xylene & p-Xylene	25.0	26.6		ug/L		106	74 - 119
Naphthalene	25.0	25.6		ug/L		102	81 - 121
n-Butylbenzene	25.0	25.4		ug/L		102	78 - 119
N-Propylbenzene	25.0	25.8		ug/L		103	77 - 117
o-Xylene	25.0	26.8		ug/L		107	77 - 118
sec-Butylbenzene	25.0	25.7		ug/L		103	78 - 118
Styrene	25.0	24.9		ug/L		100	76 - 116
tert-Butylbenzene	25.0	25.5		ug/L		102	78 - 118
Tetrachloroethene	25.0	27.7		ug/L		111	81 - 130
Toluene	25.0	26.2		ug/L		105	75 - 120
trans-1,2-Dichloroethene	25.0	30.7	*	ug/L		123	79 - 117
trans-1,3-Dichloropropene	25.0	25.8		ug/L		103	76 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250404/5
Matrix: Water
Analysis Batch: 250404

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	25.0	27.7		ug/L		111	80 - 123
Trichlorofluoromethane	25.0	28.7		ug/L		115	75 - 141
Vinyl acetate	25.0	25.1		ug/L		100	50 - 126
Vinyl chloride	25.0	29.2		ug/L		117	58 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 130*
4-Bromofluorobenzene	*98*		*67 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Lab Sample ID: LCS 720-250404/7
Matrix: Water
Analysis Batch: 250404

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	500	516		ug/L		103	77 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 130*
4-Bromofluorobenzene	*95*		*67 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 720-250404/6
Matrix: Water
Analysis Batch: 250404

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	27.2		ug/L		109	81 - 121	2	20
1,1,1-Trichloroethane	25.0	27.7		ug/L		111	74 - 130	4	20
1,1,2,2-Tetrachloroethane	25.0	24.6		ug/L		99	70 - 115	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	34.0	*	ug/L		136	70 - 133	1	20
1,1,2-Trichloroethane	25.0	26.6		ug/L		107	80 - 117	1	20
1,1-Dichloroethane	25.0	26.9		ug/L		108	77 - 119	3	20
1,1-Dichloroethene	25.0	33.1	*	ug/L		132	69 - 119	2	20
1,1-Dichloropropene	25.0	27.5		ug/L		110	83 - 130	1	20
1,2,3-Trichlorobenzene	25.0	26.8		ug/L		107	87 - 123	2	20
1,2,3-Trichloropropane	25.0	24.2		ug/L		97	77 - 120	8	20
1,2,4-Trichlorobenzene	25.0	27.3		ug/L		109	78 - 120	3	20
1,2,4-Trimethylbenzene	25.0	25.9		ug/L		104	75 - 115	1	20
1,2-Dibromo-3-Chloropropane	25.0	23.9		ug/L		96	74 - 126	5	20
1,2-Dichlorobenzene	25.0	25.6		ug/L		103	77 - 117	2	20
1,2-Dichloroethane	25.0	26.3		ug/L		105	73 - 122	4	20
1,2-Dichloropropane	25.0	26.2		ug/L		105	79 - 119	4	20
1,3,5-Trimethylbenzene	25.0	26.0		ug/L		104	77 - 117	1	20
1,3-Dichlorobenzene	25.0	26.6		ug/L		106	76 - 116	0	20
1,3-Dichloropropane	25.0	25.3		ug/L		101	77 - 117	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250404/6
Matrix: Water
Analysis Batch: 250404

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene	25.0	25.7		ug/L		103	76 - 116	1	20
2,2-Dichloropropane	25.0	30.9		ug/L		124	74 - 156	0	20
2-Butanone (MEK)	125	116		ug/L		92	66 - 133	1	22
2-Chlorotoluene	25.0	25.7		ug/L		103	75 - 115	1	20
2-Hexanone	125	115		ug/L		92	63 - 140	0	24
4-Chlorotoluene	25.0	26.1		ug/L		104	73 - 119	0	20
4-Isopropyltoluene	25.0	25.8		ug/L		103	80 - 120	1	20
4-Methyl-2-pentanone (MIBK)	125	114		ug/L		91	66 - 140	1	21
Acetone	125	109		ug/L		87	61 - 147	8	30
Benzene	25.0	26.6		ug/L		106	79 - 119	0	20
Bromobenzene	25.0	25.6		ug/L		102	77 - 117	1	20
Bromoform	25.0	25.3		ug/L		101	75 - 127	2	20
Bromomethane	25.0	28.5		ug/L		114	70 - 132	5	20
Carbon disulfide	25.0	35.5	*	ug/L		142	64 - 127	3	20
Carbon tetrachloride	25.0	28.4		ug/L		113	72 - 142	1	20
Chlorobenzene	25.0	26.5		ug/L		106	76 - 116	2	20
Chlorobromomethane	25.0	27.6		ug/L		110	81 - 122	2	20
Chlorodibromomethane	25.0	25.7		ug/L		103	77 - 133	3	20
Chloroethane	25.0	26.3		ug/L		105	70 - 131	2	20
Chloroform	25.0	26.4		ug/L		106	82 - 119	3	20
Chloromethane	25.0	26.8		ug/L		107	49 - 134	6	20
cis-1,2-Dichloroethene	25.0	26.6		ug/L		106	77 - 117	4	20
cis-1,3-Dichloropropene	25.0	26.7		ug/L		107	82 - 119	1	20
Dibromomethane	25.0	26.2		ug/L		105	79 - 117	2	20
Dichlorobromomethane	25.0	26.4		ug/L		106	81 - 130	5	20
Dichlorodifluoromethane	25.0	32.8		ug/L		131	21 - 150	2	20
Ethylbenzene	25.0	26.0		ug/L		104	77 - 117	1	20
Ethylene Dibromide	25.0	26.6		ug/L		107	80 - 121	1	20
Hexachlorobutadiene	25.0	26.3		ug/L		105	78 - 140	2	20
Isopropylbenzene	25.0	27.2		ug/L		109	77 - 130	1	20
Methyl tert-butyl ether	25.0	27.7		ug/L		111	70 - 130	2	20
Methylene Chloride	25.0	25.8		ug/L		103	75 - 117	5	20
m-Xylene & p-Xylene	25.0	26.9		ug/L		108	74 - 119	1	20
Naphthalene	25.0	25.3		ug/L		101	81 - 121	1	20
n-Butylbenzene	25.0	25.6		ug/L		102	78 - 119	1	20
N-Propylbenzene	25.0	25.4		ug/L		101	77 - 117	1	20
o-Xylene	25.0	27.1		ug/L		108	77 - 118	1	20
sec-Butylbenzene	25.0	24.9		ug/L		100	78 - 118	3	20
Styrene	25.0	24.6		ug/L		99	76 - 116	1	20
tert-Butylbenzene	25.0	25.2		ug/L		101	78 - 118	1	20
Tetrachloroethene	25.0	27.7		ug/L		111	81 - 130	0	20
Toluene	25.0	25.8		ug/L		103	75 - 120	1	20
trans-1,2-Dichloroethene	25.0	30.0	*	ug/L		120	79 - 117	2	20
trans-1,3-Dichloropropene	25.0	25.4		ug/L		102	76 - 122	2	20
Trichloroethene	25.0	27.2		ug/L		109	80 - 123	2	20
Trichlorofluoromethane	25.0	27.5		ug/L		110	75 - 141	4	20
Vinyl acetate	25.0	24.6		ug/L		98	50 - 126	2	20
Vinyl chloride	25.0	27.9		ug/L		112	58 - 138	5	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250404/6
Matrix: Water
Analysis Batch: 250404

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*93*		*72 - 130*
4-Bromofluorobenzene	*98*		*67 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 720-250404/8
Matrix: Water
Analysis Batch: 250404

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			500	538		ug/L		108	77 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*94*		*72 - 130*
4-Bromofluorobenzene	*96*		*67 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: 720-88175-A-4 MS
Matrix: Water
Analysis Batch: 250404

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	24.3		ug/L		97	60 - 140
1,1,1-Trichloroethane	ND		25.0	23.8		ug/L		95	60 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	21.0		ug/L		84	60 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	25.0	25.4		ug/L		102	60 - 140
1,1,2-Trichloroethane	ND		25.0	23.6		ug/L		94	60 - 140
1,1-Dichloroethane	ND		25.0	22.1		ug/L		89	60 - 140
1,1-Dichloroethene	1.5	*	25.0	26.5		ug/L		100	60 - 140
1,1-Dichloropropene	ND		25.0	21.7		ug/L		87	60 - 140
1,2,3-Trichlorobenzene	ND		25.0	22.6		ug/L		90	60 - 140
1,2,3-Trichloropropane	ND		25.0	21.9		ug/L		87	60 - 140
1,2,4-Trichlorobenzene	ND		25.0	22.1		ug/L		88	60 - 140
1,2,4-Trimethylbenzene	ND		25.0	21.4		ug/L		86	60 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	21.9		ug/L		88	60 - 140
1,2-Dichlorobenzene	ND		25.0	22.3		ug/L		89	60 - 140
1,2-Dichloroethane	ND		25.0	24.5		ug/L		98	60 - 140
1,2-Dichloropropane	ND		25.0	21.9		ug/L		88	60 - 140
1,3,5-Trimethylbenzene	ND		25.0	21.2		ug/L		85	60 - 140
1,3-Dichlorobenzene	ND		25.0	22.1		ug/L		88	60 - 140
1,3-Dichloropropane	ND		25.0	22.4		ug/L		90	60 - 140
1,4-Dichlorobenzene	ND		25.0	21.2		ug/L		85	60 - 140
2,2-Dichloropropane	ND		25.0	24.5		ug/L		98	60 - 140
2-Butanone (MEK)	ND		125	118		ug/L		94	60 - 140
2-Chlorotoluene	ND		25.0	20.8		ug/L		83	60 - 140
2-Hexanone	ND		125	125		ug/L		100	60 - 140
4-Chlorotoluene	ND		25.0	20.9		ug/L		84	60 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88175-A-4 MS
Matrix: Water
Analysis Batch: 250404

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Isopropyltoluene	ND		25.0	21.1		ug/L		84	60 - 140
4-Methyl-2-pentanone (MIBK)	ND		125	125		ug/L		100	58 - 130
Acetone	ND		125	106		ug/L		84	60 - 140
Benzene	ND		25.0	21.3		ug/L		85	60 - 140
Bromobenzene	ND		25.0	21.6		ug/L		86	60 - 140
Bromoform	ND		25.0	23.0		ug/L		92	56 - 140
Bromomethane	ND		25.0	27.1		ug/L		109	23 - 140
Carbon disulfide	ND	*	25.0	23.6		ug/L		94	38 - 140
Carbon tetrachloride	ND		25.0	24.0		ug/L		96	60 - 140
Chlorobenzene	ND		25.0	22.2		ug/L		89	60 - 140
Chlorobromomethane	ND		25.0	24.1		ug/L		96	60 - 140
Chlorodibromomethane	ND		25.0	24.5		ug/L		98	60 - 140
Chloroethane	ND		25.0	24.4		ug/L		98	51 - 140
Chloroform	ND		25.0	22.7		ug/L		91	60 - 140
Chloromethane	ND		25.0	25.5		ug/L		102	52 - 140
cis-1,2-Dichloroethene	44		25.0	71.7		ug/L		113	60 - 140
cis-1,3-Dichloropropene	ND		25.0	22.6		ug/L		90	60 - 140
Dibromomethane	ND		25.0	23.0		ug/L		92	60 - 140
Dichlorobromomethane	ND		25.0	24.0		ug/L		96	60 - 140
Dichlorodifluoromethane	ND		25.0	31.2		ug/L		125	38 - 140
Ethylbenzene	ND		25.0	21.4		ug/L		85	60 - 140
Ethylene Dibromide	ND		25.0	24.1		ug/L		96	60 - 140
Hexachlorobutadiene	ND		25.0	21.7		ug/L		87	60 - 140
Isopropylbenzene	ND		25.0	22.9		ug/L		92	60 - 140
Methyl tert-butyl ether	0.58		25.0	25.0		ug/L		98	60 - 138
Methylene Chloride	ND		25.0	21.3		ug/L		85	40 - 140
m-Xylene & p-Xylene	ND		25.0	21.9		ug/L		88	60 - 140
Naphthalene	ND		25.0	22.8		ug/L		91	56 - 140
n-Butylbenzene	ND		25.0	19.9		ug/L		79	60 - 140
N-Propylbenzene	ND		25.0	20.0		ug/L		80	60 - 140
o-Xylene	ND		25.0	22.8		ug/L		91	60 - 140
sec-Butylbenzene	ND		25.0	20.6		ug/L		82	60 - 140
Styrene	ND		25.0	18.2		ug/L		73	60 - 140
tert-Butylbenzene	ND		25.0	21.0		ug/L		84	60 - 140
Tetrachloroethene	0.58		25.0	23.4		ug/L		91	60 - 140
Toluene	ND		25.0	20.9		ug/L		83	60 - 140
trans-1,2-Dichloroethene	1.2	*	25.0	24.8		ug/L		94	60 - 140
trans-1,3-Dichloropropene	ND		25.0	22.0		ug/L		88	60 - 140
Trichloroethene	42		25.0	66.9		ug/L		98	60 - 140
Trichlorofluoromethane	ND		25.0	28.0		ug/L		112	60 - 140
Vinyl acetate	ND		25.0	23.3		ug/L		93	40 - 140
Vinyl chloride	ND		25.0	25.9		ug/L		104	58 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*72 - 130*
4-Bromofluorobenzene	*96*		*67 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88175-A-4 MSD
Matrix: Water
Analysis Batch: 250404

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	23.9		ug/L		96	60 - 140	2	20
1,1,1-Trichloroethane	ND		25.0	23.1		ug/L		92	60 - 140	3	20
1,1,2,2-Tetrachloroethane	ND		25.0	21.9		ug/L		88	60 - 140	4	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	25.0	23.7		ug/L		95	60 - 140	7	20
1,1,2-Trichloroethane	ND		25.0	22.8		ug/L		91	60 - 140	3	20
1,1-Dichloroethane	ND		25.0	21.5		ug/L		86	60 - 140	3	20
1,1-Dichloroethene	1.5	*	25.0	25.0		ug/L		94	60 - 140	6	20
1,1-Dichloropropene	ND		25.0	21.2		ug/L		85	60 - 140	3	20
1,2,3-Trichlorobenzene	ND		25.0	22.6		ug/L		90	60 - 140	0	20
1,2,3-Trichloropropane	ND		25.0	23.2		ug/L		93	60 - 140	6	20
1,2,4-Trichlorobenzene	ND		25.0	21.6		ug/L		86	60 - 140	2	20
1,2,4-Trimethylbenzene	ND		25.0	21.6		ug/L		86	60 - 140	1	20
1,2-Dibromo-3-Chloropropane	ND		25.0	22.2		ug/L		89	60 - 140	1	20
1,2-Dichlorobenzene	ND		25.0	22.5		ug/L		90	60 - 140	1	20
1,2-Dichloroethane	ND		25.0	23.9		ug/L		95	60 - 140	3	20
1,2-Dichloropropane	ND		25.0	21.8		ug/L		87	60 - 140	0	20
1,3,5-Trimethylbenzene	ND		25.0	21.5		ug/L		86	60 - 140	1	20
1,3-Dichlorobenzene	ND		25.0	22.1		ug/L		89	60 - 140	0	20
1,3-Dichloropropane	ND		25.0	22.1		ug/L		88	60 - 140	2	20
1,4-Dichlorobenzene	ND		25.0	21.8		ug/L		87	60 - 140	3	20
2,2-Dichloropropane	ND		25.0	23.3		ug/L		93	60 - 140	5	20
2-Butanone (MEK)	ND		125	113		ug/L		91	60 - 140	4	20
2-Chlorotoluene	ND		25.0	21.3		ug/L		85	60 - 140	2	20
2-Hexanone	ND		125	120		ug/L		96	60 - 140	4	20
4-Chlorotoluene	ND		25.0	21.4		ug/L		86	60 - 140	2	20
4-Isopropyltoluene	ND		25.0	21.2		ug/L		85	60 - 140	1	20
4-Methyl-2-pentanone (MIBK)	ND		125	122		ug/L		98	58 - 130	2	20
Acetone	ND		125	101		ug/L		81	60 - 140	4	20
Benzene	ND		25.0	21.1		ug/L		84	60 - 140	1	20
Bromobenzene	ND		25.0	21.9		ug/L		88	60 - 140	2	20
Bromoform	ND		25.0	22.5		ug/L		90	56 - 140	3	20
Bromomethane	ND		25.0	27.0		ug/L		108	23 - 140	1	20
Carbon disulfide	ND	*	25.0	22.1		ug/L		88	38 - 140	7	20
Carbon tetrachloride	ND		25.0	23.1		ug/L		93	60 - 140	4	20
Chlorobenzene	ND		25.0	21.9		ug/L		88	60 - 140	1	20
Chlorobromomethane	ND		25.0	23.8		ug/L		95	60 - 140	1	20
Chlorodibromomethane	ND		25.0	23.5		ug/L		94	60 - 140	4	20
Chloroethane	ND		25.0	23.8		ug/L		95	51 - 140	3	20
Chloroform	ND		25.0	22.2		ug/L		89	60 - 140	2	20
Chloromethane	ND		25.0	25.0		ug/L		100	52 - 140	2	20
cis-1,2-Dichloroethene	44		25.0	69.4		ug/L		103	60 - 140	3	20
cis-1,3-Dichloropropene	ND		25.0	22.2		ug/L		89	60 - 140	2	20
Dibromomethane	ND		25.0	22.1		ug/L		88	60 - 140	4	20
Dichlorobromomethane	ND		25.0	23.6		ug/L		95	60 - 140	2	20
Dichlorodifluoromethane	ND		25.0	30.0		ug/L		120	38 - 140	4	20
Ethylbenzene	ND		25.0	21.0		ug/L		84	60 - 140	2	20
Ethylene Dibromide	ND		25.0	23.4		ug/L		94	60 - 140	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88175-A-4 MSD
Matrix: Water
Analysis Batch: 250404

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorobutadiene	ND		25.0	21.6		ug/L		86	60 - 140	0	20
Isopropylbenzene	ND		25.0	22.2		ug/L		89	60 - 140	3	20
Methyl tert-butyl ether	0.58		25.0	24.4		ug/L		95	60 - 138	2	20
Methylene Chloride	ND		25.0	20.5		ug/L		82	40 - 140	4	20
m-Xylene & p-Xylene	ND		25.0	21.6		ug/L		87	60 - 140	1	20
Naphthalene	ND		25.0	22.7		ug/L		91	56 - 140	0	20
n-Butylbenzene	ND		25.0	19.7		ug/L		79	60 - 140	1	20
N-Propylbenzene	ND		25.0	20.7		ug/L		83	60 - 140	3	20
o-Xylene	ND		25.0	22.0		ug/L		88	60 - 140	3	20
sec-Butylbenzene	ND		25.0	20.9		ug/L		83	60 - 140	1	20
Styrene	ND		25.0	17.7		ug/L		71	60 - 140	3	20
tert-Butylbenzene	ND		25.0	21.3		ug/L		85	60 - 140	1	20
Tetrachloroethene	0.58		25.0	22.3		ug/L		87	60 - 140	5	20
Toluene	ND		25.0	20.6		ug/L		82	60 - 140	1	20
trans-1,2-Dichloroethene	1.2	*	25.0	24.1		ug/L		91	60 - 140	3	20
trans-1,3-Dichloropropene	ND		25.0	22.0		ug/L		88	60 - 140	0	20
Trichloroethene	42		25.0	64.9		ug/L		90	60 - 140	3	20
Trichlorofluoromethane	ND		25.0	26.7		ug/L		107	60 - 140	5	20
Vinyl acetate	ND		25.0	22.7		ug/L		91	40 - 140	3	20
Vinyl chloride	ND		25.0	25.7		ug/L		103	58 - 140	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*72 - 130*
4-Bromofluorobenzene	*95*		*67 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Lab Sample ID: MB 720-250451/4
Matrix: Water
Analysis Batch: 250451

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/29/18 08:11	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/29/18 08:11	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/29/18 08:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/29/18 08:11	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/29/18 08:11	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/29/18 08:11	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/29/18 08:11	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/29/18 08:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/29/18 08:11	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/29/18 08:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/29/18 08:11	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/29/18 08:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/29/18 08:11	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/29/18 08:11	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/29/18 08:11	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/29/18 08:11	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/29/18 08:11	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250451/4
Matrix: Water
Analysis Batch: 250451

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/29/18 08:11	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/29/18 08:11	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/29/18 08:11	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/29/18 08:11	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/29/18 08:11	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/29/18 08:11	1
2-Hexanone	ND		50	3.0	ug/L			08/29/18 08:11	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/29/18 08:11	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/29/18 08:11	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/29/18 08:11	1
Acetone	ND		50	20	ug/L			08/29/18 08:11	1
Benzene	ND		0.50	0.25	ug/L			08/29/18 08:11	1
Bromobenzene	ND		1.0	0.20	ug/L			08/29/18 08:11	1
Bromoform	ND		1.0	0.50	ug/L			08/29/18 08:11	1
Bromomethane	ND		1.0	0.49	ug/L			08/29/18 08:11	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/29/18 08:11	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/29/18 08:11	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/29/18 08:11	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/29/18 08:11	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/29/18 08:11	1
Chloroethane	ND		1.0	0.17	ug/L			08/29/18 08:11	1
Chloroform	ND		1.0	0.40	ug/L			08/29/18 08:11	1
Chloromethane	ND		1.0	0.19	ug/L			08/29/18 08:11	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/29/18 08:11	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/29/18 08:11	1
Dibromomethane	ND		0.50	0.30	ug/L			08/29/18 08:11	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/29/18 08:11	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/29/18 08:11	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/29/18 08:11	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/29/18 08:11	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/29/18 08:11	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/29/18 08:11	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/29/18 08:11	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/29/18 08:11	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/29/18 08:11	1
Naphthalene	ND		1.0	0.22	ug/L			08/29/18 08:11	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/29/18 08:11	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/29/18 08:11	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/29/18 08:11	1
Styrene	ND		0.50	0.22	ug/L			08/29/18 08:11	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/29/18 08:11	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/29/18 08:11	1
Toluene	ND		0.50	0.17	ug/L			08/29/18 08:11	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/29/18 08:11	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/29/18 08:11	1
Trichloroethene	ND		0.50	0.20	ug/L			08/29/18 08:11	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/29/18 08:11	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250451/4
Matrix: Water
Analysis Batch: 250451

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl acetate	ND		10	0.60	ug/L			08/29/18 08:11	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/29/18 08:11	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/29/18 08:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*72 - 130*		*08/29/18 08:11*	*1*
4-Bromofluorobenzene	*98*		*67 - 130*		*08/29/18 08:11*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/29/18 08:11*	*1*

Lab Sample ID: LCS 720-250451/5
Matrix: Water
Analysis Batch: 250451

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	26.7		ug/L		107	81 - 121
1,1,1-Trichloroethane	25.0	29.3		ug/L		117	74 - 130
1,1,2,2-Tetrachloroethane	25.0	23.8		ug/L		95	70 - 115
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	29.0		ug/L		116	70 - 133
1,1,2-Trichloroethane	25.0	24.7		ug/L		99	80 - 117
1,1-Dichloroethane	25.0	23.8		ug/L		95	77 - 119
1,1-Dichloroethene	25.0	27.0		ug/L		108	69 - 119
1,1-Dichloropropene	25.0	26.5		ug/L		106	83 - 130
1,2,3-Trichlorobenzene	25.0	24.5		ug/L		98	87 - 123
1,2,3-Trichloropropane	25.0	26.9		ug/L		107	77 - 120
1,2,4-Trichlorobenzene	25.0	25.3		ug/L		101	78 - 120
1,2,4-Trimethylbenzene	25.0	26.7		ug/L		107	75 - 115
1,2-Dibromo-3-Chloropropane	25.0	25.0		ug/L		100	74 - 126
1,2-Dichlorobenzene	25.0	25.2		ug/L		101	77 - 117
1,2-Dichloroethane	25.0	24.5		ug/L		98	73 - 122
1,2-Dichloropropane	25.0	22.7		ug/L		91	79 - 119
1,3,5-Trimethylbenzene	25.0	27.0		ug/L		108	77 - 117
1,3-Dichlorobenzene	25.0	25.4		ug/L		102	76 - 116
1,3-Dichloropropane	25.0	24.8		ug/L		99	77 - 117
1,4-Dichlorobenzene	25.0	25.9		ug/L		104	76 - 116
2,2-Dichloropropane	25.0	35.0		ug/L		140	74 - 156
2-Butanone (MEK)	125	113		ug/L		90	66 - 133
2-Chlorotoluene	25.0	26.3		ug/L		105	75 - 115
2-Hexanone	125	102		ug/L		82	63 - 140
4-Chlorotoluene	25.0	26.5		ug/L		106	73 - 119
4-Isopropyltoluene	25.0	28.1		ug/L		112	80 - 120
4-Methyl-2-pentanone (MIBK)	125	105		ug/L		84	66 - 140
Acetone	125	87.7		ug/L		70	61 - 147
Benzene	25.0	25.5		ug/L		102	79 - 119
Bromobenzene	25.0	25.3		ug/L		101	77 - 117
Bromoform	25.0	23.6		ug/L		94	75 - 127
Bromomethane	25.0	25.9		ug/L		104	70 - 132
Carbon disulfide	25.0	30.1		ug/L		120	64 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250451/5
Matrix: Water
Analysis Batch: 250451

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon tetrachloride	25.0	29.9		ug/L		120	72 - 142
Chlorobenzene	25.0	26.0		ug/L		104	76 - 116
Chlorobromomethane	25.0	28.7		ug/L		115	81 - 122
Chlorodibromomethane	25.0	28.6		ug/L		115	77 - 133
Chloroethane	25.0	21.3		ug/L		85	70 - 131
Chloroform	25.0	27.1		ug/L		108	82 - 119
Chloromethane	25.0	22.8		ug/L		91	49 - 134
cis-1,2-Dichloroethene	25.0	22.7		ug/L		91	77 - 117
cis-1,3-Dichloropropene	25.0	26.6		ug/L		106	82 - 119
Dibromomethane	25.0	25.9		ug/L		104	79 - 117
Dichlorobromomethane	25.0	27.4		ug/L		110	81 - 130
Dichlorodifluoromethane	25.0	34.4		ug/L		137	21 - 150
Ethylbenzene	25.0	25.7		ug/L		103	77 - 117
Ethylene Dibromide	25.0	26.3		ug/L		105	80 - 121
Hexachlorobutadiene	25.0	22.4		ug/L		89	78 - 140
Isopropylbenzene	25.0	26.5		ug/L		106	77 - 130
Methyl tert-butyl ether	25.0	25.8		ug/L		103	70 - 130
Methylene Chloride	25.0	25.1		ug/L		100	75 - 117
m-Xylene & p-Xylene	25.0	25.7		ug/L		103	74 - 119
Naphthalene	25.0	26.4		ug/L		106	81 - 121
n-Butylbenzene	25.0	27.1		ug/L		108	78 - 119
N-Propylbenzene	25.0	27.1		ug/L		108	77 - 117
o-Xylene	25.0	25.4		ug/L		102	77 - 118
sec-Butylbenzene	25.0	26.9		ug/L		107	78 - 118
Styrene	25.0	24.7		ug/L		99	76 - 116
tert-Butylbenzene	25.0	27.0		ug/L		108	78 - 118
Tetrachloroethene	25.0	24.0		ug/L		96	81 - 130
Toluene	25.0	21.6		ug/L		86	75 - 120
trans-1,2-Dichloroethene	25.0	28.6		ug/L		114	79 - 117
trans-1,3-Dichloropropene	25.0	26.4		ug/L		106	76 - 122
Trichloroethene	25.0	25.3		ug/L		101	80 - 123
Trichlorofluoromethane	25.0	27.3		ug/L		109	75 - 141
Vinyl acetate	25.0	28.3		ug/L		113	50 - 126
Vinyl chloride	25.0	23.8		ug/L		95	58 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 130*
4-Bromofluorobenzene	*94*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCS 720-250451/7
Matrix: Water
Analysis Batch: 250451

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	500	475		ug/L		95	77 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250451/7
Matrix: Water
Analysis Batch: 250451

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 130*
4-Bromofluorobenzene	*98*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 720-250451/6
Matrix: Water
Analysis Batch: 250451

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			25.0	26.6		ug/L		106	81 - 121	1	20
1,1,1-Trichloroethane			25.0	28.9		ug/L		115	74 - 130	2	20
1,1,2,2-Tetrachloroethane			25.0	22.1		ug/L		89	70 - 115	7	20
1,1,2-Trichloro-1,2,2-trifluoroethane			25.0	30.2		ug/L		121	70 - 133	4	20
1,1,2-Trichloroethane			25.0	23.8		ug/L		95	80 - 117	4	20
1,1-Dichloroethane			25.0	23.8		ug/L		95	77 - 119	0	20
1,1-Dichloroethene			25.0	27.4		ug/L		110	69 - 119	1	20
1,1-Dichloropropene			25.0	26.2		ug/L		105	83 - 130	1	20
1,2,3-Trichlorobenzene			25.0	23.5		ug/L		94	87 - 123	4	20
1,2,3-Trichloropropane			25.0	24.3		ug/L		97	77 - 120	10	20
1,2,4-Trichlorobenzene			25.0	24.5		ug/L		98	78 - 120	3	20
1,2,4-Trimethylbenzene			25.0	26.8		ug/L		107	75 - 115	0	20
1,2-Dibromo-3-Chloropropane			25.0	22.8		ug/L		91	74 - 126	9	20
1,2-Dichlorobenzene			25.0	24.8		ug/L		99	77 - 117	2	20
1,2-Dichloroethane			25.0	23.5		ug/L		94	73 - 122	4	20
1,2-Dichloropropane			25.0	22.4		ug/L		90	79 - 119	1	20
1,3,5-Trimethylbenzene			25.0	27.4		ug/L		110	77 - 117	2	20
1,3-Dichlorobenzene			25.0	25.1		ug/L		101	76 - 116	1	20
1,3-Dichloropropane			25.0	23.5		ug/L		94	77 - 117	5	20
1,4-Dichlorobenzene			25.0	26.0		ug/L		104	76 - 116	0	20
2,2-Dichloropropane			25.0	33.8		ug/L		135	74 - 156	4	20
2-Butanone (MEK)			125	102		ug/L		82	66 - 133	10	22
2-Chlorotoluene			25.0	26.1		ug/L		105	75 - 115	0	20
2-Hexanone			125	90.1		ug/L		72	63 - 140	13	24
4-Chlorotoluene			25.0	26.2		ug/L		105	73 - 119	1	20
4-Isopropyltoluene			25.0	28.5		ug/L		114	80 - 120	1	20
4-Methyl-2-pentanone (MIBK)			125	92.3		ug/L		74	66 - 140	13	21
Acetone			125	86.2		ug/L		69	61 - 147	2	30
Benzene			25.0	25.5		ug/L		102	79 - 119	0	20
Bromobenzene			25.0	25.0		ug/L		100	77 - 117	1	20
Bromoform			25.0	22.3		ug/L		89	75 - 127	6	20
Bromomethane			25.0	26.9		ug/L		108	70 - 132	4	20
Carbon disulfide			25.0	30.4		ug/L		122	64 - 127	1	20
Carbon tetrachloride			25.0	29.8		ug/L		119	72 - 142	1	20
Chlorobenzene			25.0	25.7		ug/L		103	76 - 116	1	20
Chlorobromomethane			25.0	27.9		ug/L		112	81 - 122	3	20
Chlorodibromomethane			25.0	27.3		ug/L		109	77 - 133	5	20
Chloroethane			25.0	21.6		ug/L		86	70 - 131	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250451/6
Matrix: Water
Analysis Batch: 250451

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroform			25.0	26.5		ug/L		106	82 - 119	2	20
Chloromethane			25.0	22.9		ug/L		92	49 - 134	0	20
cis-1,2-Dichloroethene			25.0	22.6		ug/L		90	77 - 117	0	20
cis-1,3-Dichloropropene			25.0	26.0		ug/L		104	82 - 119	2	20
Dibromomethane			25.0	24.2		ug/L		97	79 - 117	7	20
Dichlorobromomethane			25.0	26.3		ug/L		105	81 - 130	4	20
Dichlorodifluoromethane			25.0	34.7		ug/L		139	21 - 150	1	20
Ethylbenzene			25.0	25.7		ug/L		103	77 - 117	0	20
Ethylene Dibromide			25.0	24.8		ug/L		99	80 - 121	6	20
Hexachlorobutadiene			25.0	22.7		ug/L		91	78 - 140	2	20
Isopropylbenzene			25.0	26.7		ug/L		107	77 - 130	1	20
Methyl tert-butyl ether			25.0	24.6		ug/L		98	70 - 130	5	20
Methylene Chloride			25.0	25.2		ug/L		101	75 - 117	1	20
m-Xylene & p-Xylene			25.0	25.7		ug/L		103	74 - 119	0	20
Naphthalene			25.0	24.9		ug/L		100	81 - 121	6	20
n-Butylbenzene			25.0	27.2		ug/L		109	78 - 119	0	20
N-Propylbenzene			25.0	27.0		ug/L		108	77 - 117	0	20
o-Xylene			25.0	25.3		ug/L		101	77 - 118	0	20
sec-Butylbenzene			25.0	27.3		ug/L		109	78 - 118	2	20
Styrene			25.0	24.7		ug/L		99	76 - 116	0	20
tert-Butylbenzene			25.0	27.5		ug/L		110	78 - 118	2	20
Tetrachloroethene			25.0	23.9		ug/L		96	81 - 130	0	20
Toluene			25.0	21.5		ug/L		86	75 - 120	0	20
trans-1,2-Dichloroethene			25.0	28.3		ug/L		113	79 - 117	1	20
trans-1,3-Dichloropropene			25.0	25.3		ug/L		101	76 - 122	4	20
Trichloroethene			25.0	25.4		ug/L		101	80 - 123	0	20
Trichlorofluoromethane			25.0	27.3		ug/L		109	75 - 141	0	20
Vinyl acetate			25.0	26.0		ug/L		104	50 - 126	8	20
Vinyl chloride			25.0	24.2		ug/L		97	58 - 138	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*72 - 130*
4-Bromofluorobenzene	*94*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 720-250451/8
Matrix: Water
Analysis Batch: 250451

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			500	453		ug/L		91	77 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*72 - 130*
4-Bromofluorobenzene	*96*		*67 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88210-A-2 MS
Matrix: Water
Analysis Batch: 250451

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	28.6		ug/L		115	60 - 140
1,1,1-Trichloroethane	ND		25.0	32.2		ug/L		129	60 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	22.2		ug/L		89	60 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	31.5		ug/L		126	60 - 140
1,1,2-Trichloroethane	ND		25.0	25.6		ug/L		102	60 - 140
1,1-Dichloroethane	ND		25.0	25.1		ug/L		101	60 - 140
1,1-Dichloroethene	ND		25.0	27.6		ug/L		110	60 - 140
1,1-Dichloropropene	ND		25.0	28.0		ug/L		112	60 - 140
1,2,3-Trichlorobenzene	0.35	J	25.0	24.5		ug/L		96	60 - 140
1,2,3-Trichloropropane	ND		25.0	25.9		ug/L		104	60 - 140
1,2,4-Trichlorobenzene	0.16	J	25.0	25.6		ug/L		102	60 - 140
1,2,4-Trimethylbenzene	ND		25.0	27.0		ug/L		108	60 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	23.6		ug/L		94	60 - 140
1,2-Dichlorobenzene	ND		25.0	25.6		ug/L		102	60 - 140
1,2-Dichloroethane	ND		25.0	27.7		ug/L		111	60 - 140
1,2-Dichloropropane	ND		25.0	23.9		ug/L		96	60 - 140
1,3,5-Trimethylbenzene	ND		25.0	27.1		ug/L		109	60 - 140
1,3-Dichlorobenzene	ND		25.0	25.6		ug/L		102	60 - 140
1,3-Dichloropropane	ND		25.0	26.0		ug/L		104	60 - 140
1,4-Dichlorobenzene	ND		25.0	26.3		ug/L		105	60 - 140
2,2-Dichloropropane	ND	F1	25.0	36.9	F1	ug/L		148	60 - 140
2-Butanone (MEK)	ND		125	110		ug/L		88	60 - 140
2-Chlorotoluene	ND		25.0	26.3		ug/L		105	60 - 140
2-Hexanone	ND		125	106		ug/L		85	60 - 140
4-Chlorotoluene	ND		25.0	26.4		ug/L		105	60 - 140
4-Isopropyltoluene	ND		25.0	28.7		ug/L		115	60 - 140
4-Methyl-2-pentanone (MIBK)	ND		125	110		ug/L		88	58 - 130
Acetone	ND		125	89.1		ug/L		71	60 - 140
Benzene	ND		25.0	26.6		ug/L		106	60 - 140
Bromobenzene	ND		25.0	25.1		ug/L		100	60 - 140
Bromoform	ND		25.0	24.4		ug/L		97	56 - 140
Bromomethane	ND		25.0	27.0		ug/L		108	23 - 140
Carbon disulfide	ND		25.0	30.6		ug/L		122	38 - 140
Carbon tetrachloride	ND		25.0	33.4		ug/L		134	60 - 140
Chlorobenzene	ND		25.0	26.9		ug/L		107	60 - 140
Chlorobromomethane	ND		25.0	30.0		ug/L		120	60 - 140
Chlorodibromomethane	ND		25.0	30.6		ug/L		122	60 - 140
Chloroethane	ND		25.0	21.9		ug/L		88	51 - 140
Chloroform	ND		25.0	29.3		ug/L		117	60 - 140
Chloromethane	ND		25.0	24.4		ug/L		98	52 - 140
cis-1,2-Dichloroethene	ND		25.0	24.6		ug/L		99	60 - 140
cis-1,3-Dichloropropene	ND		25.0	27.8		ug/L		111	60 - 140
Dibromomethane	ND		25.0	27.2		ug/L		109	60 - 140
Dichlorobromomethane	ND		25.0	29.3		ug/L		117	60 - 140
Dichlorodifluoromethane	ND	F1	25.0	37.1	F1	ug/L		149	38 - 140
Ethylbenzene	ND		25.0	26.9		ug/L		107	60 - 140
Ethylene Dibromide	ND		25.0	27.8		ug/L		111	60 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88210-A-2 MS
Matrix: Water
Analysis Batch: 250451

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobutadiene	ND		25.0	23.1		ug/L		92	60 - 140
Isopropylbenzene	ND		25.0	28.0		ug/L		112	60 - 140
Methyl tert-butyl ether	ND		25.0	26.8		ug/L		107	60 - 138
Methylene Chloride	ND		25.0	25.3		ug/L		101	40 - 140
m-Xylene & p-Xylene	ND		25.0	27.1		ug/L		108	60 - 140
Naphthalene	0.44	J	25.0	26.0		ug/L		102	56 - 140
n-Butylbenzene	ND		25.0	27.4		ug/L		110	60 - 140
N-Propylbenzene	ND		25.0	26.9		ug/L		107	60 - 140
o-Xylene	ND		25.0	26.9		ug/L		108	60 - 140
sec-Butylbenzene	ND		25.0	27.1		ug/L		108	60 - 140
Styrene	ND		25.0	25.9		ug/L		104	60 - 140
tert-Butylbenzene	ND		25.0	27.5		ug/L		110	60 - 140
Tetrachloroethene	ND		25.0	26.1		ug/L		104	60 - 140
Toluene	ND		25.0	22.0		ug/L		88	60 - 140
trans-1,2-Dichloroethene	ND		25.0	29.2		ug/L		117	60 - 140
trans-1,3-Dichloropropene	ND		25.0	28.1		ug/L		112	60 - 140
Trichloroethene	0.25	J	25.0	27.0		ug/L		107	60 - 140
Trichlorofluoromethane	ND		25.0	30.6		ug/L		123	60 - 140
Vinyl acetate	ND		25.0	29.6		ug/L		118	40 - 140
Vinyl chloride	ND		25.0	24.8		ug/L		99	58 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*72 - 130*
4-Bromofluorobenzene	*97*		*67 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: 720-88210-A-2 MSD
Matrix: Water
Analysis Batch: 250451

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	28.7		ug/L		115	60 - 140	0	20
1,1,1-Trichloroethane	ND		25.0	32.1		ug/L		129	60 - 140	0	20
1,1,2,2-Tetrachloroethane	ND		25.0	23.0		ug/L		92	60 - 140	4	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	31.9		ug/L		128	60 - 140	1	20
1,1,2-Trichloroethane	ND		25.0	25.9		ug/L		104	60 - 140	1	20
1,1-Dichloroethane	ND		25.0	25.4		ug/L		102	60 - 140	1	20
1,1-Dichloroethene	ND		25.0	28.5		ug/L		114	60 - 140	3	20
1,1-Dichloropropene	ND		25.0	28.2		ug/L		113	60 - 140	1	20
1,2,3-Trichlorobenzene	0.35	J	25.0	25.0		ug/L		99	60 - 140	2	20
1,2,3-Trichloropropane	ND		25.0	26.0		ug/L		104	60 - 140	0	20
1,2,4-Trichlorobenzene	0.16	J	25.0	25.3		ug/L		101	60 - 140	1	20
1,2,4-Trimethylbenzene	ND		25.0	27.2		ug/L		109	60 - 140	1	20
1,2-Dibromo-3-Chloropropane	ND		25.0	23.7		ug/L		95	60 - 140	1	20
1,2-Dichlorobenzene	ND		25.0	25.6		ug/L		102	60 - 140	0	20
1,2-Dichloroethane	ND		25.0	27.5		ug/L		110	60 - 140	1	20
1,2-Dichloropropane	ND		25.0	24.0		ug/L		96	60 - 140	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88210-A-2 MSD
Matrix: Water
Analysis Batch: 250451

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trimethylbenzene	ND		25.0	27.5		ug/L		110	60 - 140	1	20
1,3-Dichlorobenzene	ND		25.0	25.7		ug/L		103	60 - 140	1	20
1,3-Dichloropropane	ND		25.0	26.2		ug/L		105	60 - 140	1	20
1,4-Dichlorobenzene	ND		25.0	26.4		ug/L		106	60 - 140	1	20
2,2-Dichloropropane	ND	F1	25.0	36.2	F1	ug/L		145	60 - 140	2	20
2-Butanone (MEK)	ND		125	112		ug/L		90	60 - 140	2	20
2-Chlorotoluene	ND		25.0	26.5		ug/L		106	60 - 140	1	20
2-Hexanone	ND		125	105		ug/L		84	60 - 140	1	20
4-Chlorotoluene	ND		25.0	26.6		ug/L		106	60 - 140	1	20
4-Isopropyltoluene	ND		25.0	28.8		ug/L		115	60 - 140	0	20
4-Methyl-2-pentanone (MIBK)	ND		125	109		ug/L		87	58 - 130	1	20
Acetone	ND		125	86.5		ug/L		69	60 - 140	3	20
Benzene	ND		25.0	27.0		ug/L		108	60 - 140	2	20
Bromobenzene	ND		25.0	25.7		ug/L		103	60 - 140	2	20
Bromoform	ND		25.0	24.6		ug/L		98	56 - 140	1	20
Bromomethane	ND		25.0	28.1		ug/L		113	23 - 140	4	20
Carbon disulfide	ND		25.0	31.8		ug/L		127	38 - 140	4	20
Carbon tetrachloride	ND		25.0	33.1		ug/L		133	60 - 140	1	20
Chlorobenzene	ND		25.0	26.8		ug/L		107	60 - 140	0	20
Chlorobromomethane	ND		25.0	29.9		ug/L		120	60 - 140	0	20
Chlorodibromomethane	ND		25.0	31.2		ug/L		125	60 - 140	2	20
Chloroethane	ND		25.0	22.5		ug/L		90	51 - 140	3	20
Chloroform	ND		25.0	29.4		ug/L		118	60 - 140	0	20
Chloromethane	ND		25.0	25.3		ug/L		101	52 - 140	4	20
cis-1,2-Dichloroethene	ND		25.0	24.5		ug/L		98	60 - 140	1	20
cis-1,3-Dichloropropene	ND		25.0	28.3		ug/L		113	60 - 140	2	20
Dibromomethane	ND		25.0	26.9		ug/L		108	60 - 140	1	20
Dichlorobromomethane	ND		25.0	29.1		ug/L		117	60 - 140	0	20
Dichlorodifluoromethane	ND	F1	25.0	37.4	F1	ug/L		150	38 - 140	1	20
Ethylbenzene	ND		25.0	26.9		ug/L		107	60 - 140	0	20
Ethylene Dibromide	ND		25.0	27.6		ug/L		110	60 - 140	1	20
Hexachlorobutadiene	ND		25.0	23.0		ug/L		92	60 - 140	0	20
Isopropylbenzene	ND		25.0	27.9		ug/L		112	60 - 140	0	20
Methyl tert-butyl ether	ND		25.0	27.5		ug/L		110	60 - 138	2	20
Methylene Chloride	ND		25.0	26.4		ug/L		106	40 - 140	4	20
m-Xylene & p-Xylene	ND		25.0	26.8		ug/L		107	60 - 140	1	20
Naphthalene	0.44	J	25.0	26.5		ug/L		104	56 - 140	2	20
n-Butylbenzene	ND		25.0	27.3		ug/L		109	60 - 140	0	20
N-Propylbenzene	ND		25.0	27.2		ug/L		109	60 - 140	1	20
o-Xylene	ND		25.0	26.9		ug/L		107	60 - 140	0	20
sec-Butylbenzene	ND		25.0	27.3		ug/L		109	60 - 140	1	20
Styrene	ND		25.0	25.9		ug/L		104	60 - 140	0	20
tert-Butylbenzene	ND		25.0	27.7		ug/L		111	60 - 140	1	20
Tetrachloroethene	ND		25.0	25.9		ug/L		104	60 - 140	1	20
Toluene	ND		25.0	22.1		ug/L		88	60 - 140	0	20
trans-1,2-Dichloroethene	ND		25.0	29.7		ug/L		119	60 - 140	2	20
trans-1,3-Dichloropropene	ND		25.0	28.3		ug/L		113	60 - 140	1	20
Trichloroethene	0.25	J	25.0	26.9		ug/L		106	60 - 140	0	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88210-A-2 MSD
Matrix: Water
Analysis Batch: 250451

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichlorofluoromethane	ND		25.0	30.0		ug/L		120	60 - 140	2	20
Vinyl acetate	ND		25.0	29.4		ug/L		118	40 - 140	0	20
Vinyl chloride	ND		25.0	26.6		ug/L		106	58 - 140	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*72 - 130*
4-Bromofluorobenzene	*96*		*67 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Method: SRL 524M-TCP - Volatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 440-496340/5
Matrix: Water
Analysis Batch: 496340

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0017	ug/L			08/29/18 12:49	1

Lab Sample ID: LCS 440-496340/4
Matrix: Water
Analysis Batch: 496340

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.00500	0.00498	J	ug/L		100	80 - 120		

Lab Sample ID: 320-42553-E-2 DU
Matrix: Water
Analysis Batch: 496340

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
1,2,3-Trichloropropane	ND			ND		ug/L				NC	30

Lab Sample ID: MB 440-496647/4
Matrix: Water
Analysis Batch: 496647

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0017	ug/L			08/30/18 18:59	1

Lab Sample ID: LCS 440-496647/3
Matrix: Water
Analysis Batch: 496647

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.00500	0.00499	J	ug/L		100	80 - 120		

Method: SRL 524M-TCP - Volatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 320-42553-D-3 DU
Matrix: Water
Analysis Batch: 496647

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
1,2,3-Trichloropropane	ND			ND		ug/L				NC	30

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-250079/1-A
Matrix: Water
Analysis Batch: 250035

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250079

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50	30	ug/L		08/23/18 13:54	08/23/18 20:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*92*		*23 - 156*	*08/23/18 13:54*	*08/23/18 20:40*	*1*

Lab Sample ID: LCS 720-250079/2-A
Matrix: Water
Analysis Batch: 250035

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250079

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			2500	2360		ug/L		94	34 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*101*		*23 - 156*

Lab Sample ID: LCSD 720-250079/3-A
Matrix: Water
Analysis Batch: 250035

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 250079

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			2500	2400		ug/L		96	34 - 115	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*92*		*23 - 156*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-249997/1-A
Matrix: Water
Analysis Batch: 250106

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249997

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/22/18 14:55	08/23/18 14:56	1
Arsenic	ND		0.010	0.0026	mg/L		08/22/18 14:55	08/23/18 14:56	1
Barium	ND		0.010	0.0014	mg/L		08/22/18 14:55	08/23/18 14:56	1
Beryllium	ND		0.0020	0.00033	mg/L		08/22/18 14:55	08/23/18 14:56	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-249997/1-A
Matrix: Water
Analysis Batch: 250106

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249997

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0025	0.0013	mg/L		08/22/18 14:55	08/23/18 14:56	1
Chromium	ND		0.010	0.0015	mg/L		08/22/18 14:55	08/23/18 14:56	1
Cobalt	ND		0.0020	0.0012	mg/L		08/22/18 14:55	08/23/18 14:56	1
Copper	ND		0.020	0.0015	mg/L		08/22/18 14:55	08/23/18 14:56	1
Lead	ND		0.0050	0.0023	mg/L		08/22/18 14:55	08/23/18 14:56	1
Molybdenum	ND		0.010	0.0023	mg/L		08/22/18 14:55	08/23/18 14:56	1
Nickel	ND		0.010	0.00080	mg/L		08/22/18 14:55	08/23/18 14:56	1
Selenium	ND		0.020	0.0071	mg/L		08/22/18 14:55	08/23/18 14:56	1
Silver	ND		0.0050	0.0012	mg/L		08/22/18 14:55	08/23/18 14:56	1
Thallium	ND		0.010	0.0035	mg/L		08/22/18 14:55	08/23/18 14:56	1
Vanadium	ND		0.010	0.00070	mg/L		08/22/18 14:55	08/23/18 14:56	1
Zinc	ND		0.020	0.0096	mg/L		08/22/18 14:55	08/23/18 14:56	1

Lab Sample ID: LCS 720-249997/2-A
Matrix: Water
Analysis Batch: 250106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249997

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.00	0.940		mg/L		94	80 - 120
Arsenic	1.00	0.939		mg/L		94	80 - 120
Barium	1.00	0.973		mg/L		97	80 - 120
Beryllium	1.00	0.992		mg/L		99	80 - 120
Cadmium	1.00	0.951		mg/L		95	80 - 120
Chromium	1.00	0.983		mg/L		98	80 - 120
Cobalt	1.00	0.977		mg/L		98	80 - 120
Copper	1.00	0.968		mg/L		97	80 - 120
Lead	1.00	0.966		mg/L		97	80 - 120
Molybdenum	1.00	0.968		mg/L		97	80 - 120
Nickel	1.00	0.964		mg/L		96	80 - 120
Selenium	1.00	0.917		mg/L		92	80 - 120
Silver	0.500	0.471		mg/L		94	80 - 120
Thallium	1.00	0.968		mg/L		97	80 - 120
Vanadium	1.00	0.984		mg/L		98	80 - 120
Zinc	1.00	0.954		mg/L		95	80 - 120

Lab Sample ID: 720-88165-1 MS
Matrix: Water
Analysis Batch: 250106

Client Sample ID: DG-H1W
Prep Type: Dissolved
Prep Batch: 249997

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		1.00	0.964		mg/L		96	75 - 125
Arsenic	0.019		1.00	1.01		mg/L		99	75 - 125
Barium	0.097		1.00	1.07		mg/L		97	75 - 125
Beryllium	0.00034	J	1.00	1.01		mg/L		101	75 - 125
Cadmium	ND		1.00	0.956		mg/L		96	75 - 125
Chromium	ND		1.00	0.979		mg/L		98	75 - 125
Cobalt	0.0036		1.00	0.953		mg/L		95	75 - 125
Copper	0.0034	J	1.00	0.963		mg/L		96	75 - 125
Lead	0.0049	J	1.00	0.928		mg/L		92	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88165-1 MS
Matrix: Water
Analysis Batch: 250106

Client Sample ID: DG-H1W
Prep Type: Dissolved
Prep Batch: 249997

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	0.0045	J	1.00	0.982		mg/L		98	75 - 125
Nickel	0.0028	J	1.00	0.945		mg/L		94	75 - 125
Selenium	ND		1.00	0.961		mg/L		96	75 - 125
Silver	ND		0.500	0.480		mg/L		96	75 - 125
Thallium	ND		1.00	0.879		mg/L		88	75 - 125
Vanadium	ND		1.00	0.996		mg/L		100	75 - 125
Zinc	0.030		1.00	0.995		mg/L		96	75 - 125

Lab Sample ID: 720-88165-1 MSD
Matrix: Water
Analysis Batch: 250106

Client Sample ID: DG-H1W
Prep Type: Dissolved
Prep Batch: 249997

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		1.00	0.954		mg/L		95	75 - 125	1	20
Arsenic	0.019		1.00	1.00		mg/L		98	75 - 125	1	20
Barium	0.097		1.00	1.07		mg/L		97	75 - 125	0	20
Beryllium	0.00034	J	1.00	1.00		mg/L		100	75 - 125	0	20
Cadmium	ND		1.00	0.949		mg/L		95	75 - 125	1	20
Chromium	ND		1.00	0.974		mg/L		97	75 - 125	1	20
Cobalt	0.0036		1.00	0.948		mg/L		94	75 - 125	1	20
Copper	0.0034	J	1.00	0.962		mg/L		96	75 - 125	0	20
Lead	0.0049	J	1.00	0.925		mg/L		92	75 - 125	0	20
Molybdenum	0.0045	J	1.00	0.974		mg/L		97	75 - 125	1	20
Nickel	0.0028	J	1.00	0.936		mg/L		93	75 - 125	1	20
Selenium	ND		1.00	0.954		mg/L		95	75 - 125	1	20
Silver	ND		0.500	0.481		mg/L		96	75 - 125	0	20
Thallium	ND		1.00	0.874		mg/L		87	75 - 125	1	20
Vanadium	ND		1.00	0.995		mg/L		99	75 - 125	0	20
Zinc	0.030		1.00	0.985		mg/L		96	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 720-249995/1-A
Matrix: Water
Analysis Batch: 250020

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249995

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/22/18 14:49	08/22/18 18:04	1

Lab Sample ID: LCS 720-249995/2-A
Matrix: Water
Analysis Batch: 250020

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249995

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0100	0.00944		mg/L		94	85 - 115

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 720-88149-A-1-A MS
Matrix: Water
Analysis Batch: 250020

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 249995

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.0100	0.00949		mg/L		95	75 - 125

Lab Sample ID: 720-88149-A-1-B MSD
Matrix: Water
Analysis Batch: 250020

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 249995

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.0100	0.00978		mg/L		98	75 - 125	3	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 720-249929/9
Matrix: Water
Analysis Batch: 249929

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0037	mg/L			08/21/18 19:24	1

Lab Sample ID: LCS 720-249929/10
Matrix: Water
Analysis Batch: 249929

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.250	0.254		mg/L		102	90 - 110

Lab Sample ID: LCSD 720-249929/11
Matrix: Water
Analysis Batch: 249929

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cr (VI)	0.250	0.255		mg/L		102	90 - 110	0	20

Lab Sample ID: 720-88165-1 MS
Matrix: Water
Analysis Batch: 249929

Client Sample ID: DG-H1W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	ND		0.250	0.243		mg/L		97	85 - 115

Lab Sample ID: 720-88165-1 MSD
Matrix: Water
Analysis Batch: 249929

Client Sample ID: DG-H1W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cr (VI)	ND		0.250	0.244		mg/L		98	85 - 115	1	20

GC/MS VOA

Analysis Batch: 250404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88165-5	TRIP BLANK-1	Total/NA	Water	8260B	
MB 720-250404/4	Method Blank	Total/NA	Water	8260B	
LCS 720-250404/5	Lab Control Sample	Total/NA	Water	8260B	
LCS 720-250404/7	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-250404/6	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 720-250404/8	Lab Control Sample Dup	Total/NA	Water	8260B	
720-88175-A-4 MS	Matrix Spike	Total/NA	Water	8260B	
720-88175-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 250451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88165-1	DG-H1W	Total/NA	Water	8260B	
720-88165-2	DG-L1W	Total/NA	Water	8260B	
720-88165-3	DG-F1W	Total/NA	Water	8260B	
720-88165-4	DG-D1W	Total/NA	Water	8260B	
MB 720-250451/4	Method Blank	Total/NA	Water	8260B	
LCS 720-250451/5	Lab Control Sample	Total/NA	Water	8260B	
LCS 720-250451/7	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-250451/6	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 720-250451/8	Lab Control Sample Dup	Total/NA	Water	8260B	
720-88210-A-2 MS	Matrix Spike	Total/NA	Water	8260B	
720-88210-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 496340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88165-1	DG-H1W	Total/NA	Water	SRL 524M-TCP	
720-88165-2	DG-L1W	Total/NA	Water	SRL 524M-TCP	
720-88165-3	DG-F1W	Total/NA	Water	SRL 524M-TCP	
720-88165-5	TRIP BLANK-1	Total/NA	Water	SRL 524M-TCP	
MB 440-496340/5	Method Blank	Total/NA	Water	SRL 524M-TCP	
LCS 440-496340/4	Lab Control Sample	Total/NA	Water	SRL 524M-TCP	
320-42553-E-2 DU	Duplicate	Total/NA	Water	SRL 524M-TCP	

Analysis Batch: 496647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88165-4	DG-D1W	Total/NA	Water	SRL 524M-TCP	
MB 440-496647/4	Method Blank	Total/NA	Water	SRL 524M-TCP	
LCS 440-496647/3	Lab Control Sample	Total/NA	Water	SRL 524M-TCP	
320-42553-D-3 DU	Duplicate	Total/NA	Water	SRL 524M-TCP	

GC Semi VOA

Analysis Batch: 250035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88165-1	DG-H1W	Total/NA	Water	8015B	250079
720-88165-2	DG-L1W	Total/NA	Water	8015B	250079
720-88165-3	DG-F1W	Total/NA	Water	8015B	250079
720-88165-4	DG-D1W	Total/NA	Water	8015B	250079
MB 720-250079/1-A	Method Blank	Total/NA	Water	8015B	250079
LCS 720-250079/2-A	Lab Control Sample	Total/NA	Water	8015B	250079

GC Semi VOA (Continued)

Analysis Batch: 250035 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 720-250079/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	250079

Prep Batch: 250079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88165-1	DG-H1W	Total/NA	Water	3510C	
720-88165-2	DG-L1W	Total/NA	Water	3510C	
720-88165-3	DG-F1W	Total/NA	Water	3510C	
720-88165-4	DG-D1W	Total/NA	Water	3510C	
MB 720-250079/1-A	Method Blank	Total/NA	Water	3510C	
LCS 720-250079/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-250079/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Metals

Prep Batch: 249995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88165-1	DG-H1W	Dissolved	Water	7470A	
720-88165-2	DG-L1W	Dissolved	Water	7470A	
720-88165-3	DG-F1W	Dissolved	Water	7470A	
720-88165-4	DG-D1W	Dissolved	Water	7470A	
MB 720-249995/1-A	Method Blank	Total/NA	Water	7470A	
LCS 720-249995/2-A	Lab Control Sample	Total/NA	Water	7470A	
720-88149-A-1-A MS	Matrix Spike	Total/NA	Water	7470A	
720-88149-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Prep Batch: 249997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88165-1	DG-H1W	Dissolved	Water	3010A	
720-88165-2	DG-L1W	Dissolved	Water	3010A	
720-88165-3	DG-F1W	Dissolved	Water	3010A	
720-88165-4	DG-D1W	Dissolved	Water	3010A	
MB 720-249997/1-A	Method Blank	Total/NA	Water	3010A	
LCS 720-249997/2-A	Lab Control Sample	Total/NA	Water	3010A	
720-88165-1 MS	DG-H1W	Dissolved	Water	3010A	
720-88165-1 MSD	DG-H1W	Dissolved	Water	3010A	

Analysis Batch: 250020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88165-1	DG-H1W	Dissolved	Water	7470A	249995
720-88165-2	DG-L1W	Dissolved	Water	7470A	249995
720-88165-3	DG-F1W	Dissolved	Water	7470A	249995
720-88165-4	DG-D1W	Dissolved	Water	7470A	249995
MB 720-249995/1-A	Method Blank	Total/NA	Water	7470A	249995
LCS 720-249995/2-A	Lab Control Sample	Total/NA	Water	7470A	249995
720-88149-A-1-A MS	Matrix Spike	Total/NA	Water	7470A	249995
720-88149-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	249995

Analysis Batch: 250106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88165-1	DG-H1W	Dissolved	Water	6010B	249997

Metals (Continued)

Analysis Batch: 250106 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88165-3	DG-F1W	Dissolved	Water	6010B	249997
720-88165-4	DG-D1W	Dissolved	Water	6010B	249997
MB 720-249997/1-A	Method Blank	Total/NA	Water	6010B	249997
LCS 720-249997/2-A	Lab Control Sample	Total/NA	Water	6010B	249997
720-88165-1 MS	DG-H1W	Dissolved	Water	6010B	249997
720-88165-1 MSD	DG-H1W	Dissolved	Water	6010B	249997

Analysis Batch: 250297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88165-2	DG-L1W	Dissolved	Water	6010B	249997

General Chemistry

Analysis Batch: 249929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88165-1	DG-H1W	Total/NA	Water	7196A	
720-88165-2	DG-L1W	Total/NA	Water	7196A	
720-88165-3	DG-F1W	Total/NA	Water	7196A	
720-88165-4	DG-D1W	Total/NA	Water	7196A	
MB 720-249929/9	Method Blank	Total/NA	Water	7196A	
LCS 720-249929/10	Lab Control Sample	Total/NA	Water	7196A	
LCSD 720-249929/11	Lab Control Sample Dup	Total/NA	Water	7196A	
720-88165-1 MS	DG-H1W	Total/NA	Water	7196A	
720-88165-1 MSD	DG-H1W	Total/NA	Water	7196A	

Client Sample ID: DG-H1W

Lab Sample ID: 720-88165-1

Date Collected: 08/21/18 08:15

Matrix: Water

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250451	08/29/18 13:15	AJS	TAL PLS
Total/NA	Analysis	SRL 524M-TCP		1	496340	08/29/18 17:43	GK	TAL IRV
Total/NA	Prep	3510C			250079	08/23/18 13:54	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250035	08/23/18 21:38	JXL	TAL PLS
Dissolved	Prep	3010A			249997	08/22/18 14:55	MAA	TAL PLS
Dissolved	Analysis	6010B		1	250106	08/23/18 15:24	OBI	TAL PLS
Dissolved	Prep	7470A			249995	08/22/18 14:49	MAG	TAL PLS
Dissolved	Analysis	7470A		1	250020	08/22/18 18:25	OBI	TAL PLS
Total/NA	Analysis	7196A		1	249929	08/21/18 19:24	ECB	TAL PLS

Client Sample ID: DG-L1W

Lab Sample ID: 720-88165-2

Date Collected: 08/21/18 08:30

Matrix: Water

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250451	08/29/18 13:45	AJS	TAL PLS
Total/NA	Analysis	SRL 524M-TCP		1	496340	08/29/18 18:14	GK	TAL IRV
Total/NA	Prep	3510C			250079	08/23/18 13:54	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250035	08/23/18 22:08	JXL	TAL PLS
Dissolved	Prep	3010A			249997	08/22/18 14:55	MAA	TAL PLS
Dissolved	Analysis	6010B		1	250297	08/27/18 12:38	BKR	TAL PLS
Dissolved	Prep	7470A			249995	08/22/18 14:49	MAG	TAL PLS
Dissolved	Analysis	7470A		1	250020	08/22/18 18:32	OBI	TAL PLS
Total/NA	Analysis	7196A		1	249929	08/21/18 19:24	ECB	TAL PLS

Client Sample ID: DG-F1W

Lab Sample ID: 720-88165-3

Date Collected: 08/21/18 08:45

Matrix: Water

Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250451	08/29/18 14:16	AJS	TAL PLS
Total/NA	Analysis	SRL 524M-TCP		1	496340	08/29/18 18:45	GK	TAL IRV
Total/NA	Prep	3510C			250079	08/23/18 13:54	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250035	08/23/18 22:37	JXL	TAL PLS
Dissolved	Prep	3010A			249997	08/22/18 14:55	MAA	TAL PLS
Dissolved	Analysis	6010B		1	250106	08/23/18 15:43	OBI	TAL PLS
Dissolved	Prep	7470A			249995	08/22/18 14:49	MAG	TAL PLS
Dissolved	Analysis	7470A		1	250020	08/22/18 18:34	OBI	TAL PLS
Total/NA	Analysis	7196A		1	249929	08/21/18 19:24	ECB	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88165-1

Client Sample ID: DG-D1W

Lab Sample ID: 720-88165-4

Date Collected: 08/21/18 09:20
Matrix: Water
Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250451	08/29/18 14:48	AJS	TAL PLS
Total/NA	Analysis	SRL 524M-TCP		1	496647	08/30/18 20:15	WC	TAL IRV
Total/NA	Prep	3510C			250079	08/23/18 13:54	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250035	08/23/18 23:06	JXL	TAL PLS
Dissolved	Prep	3010A			249997	08/22/18 14:55	MAA	TAL PLS
Dissolved	Analysis	6010B		1	250106	08/23/18 15:48	OBI	TAL PLS
Dissolved	Prep	7470A			249995	08/22/18 14:49	MAG	TAL PLS
Dissolved	Analysis	7470A		1	250020	08/22/18 18:36	OBI	TAL PLS
Total/NA	Analysis	7196A		1	249929	08/21/18 19:24	ECB	TAL PLS

Client Sample ID: TRIP BLANK-1

Lab Sample ID: 720-88165-5

Date Collected: 08/21/18 00:00
Matrix: Water
Date Received: 08/21/18 14:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250404	08/28/18 23:58	JRM	TAL PLS
Total/NA	Analysis	SRL 524M-TCP		1	496340	08/29/18 14:40	GK	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc. TestAmerica Job ID: 720-88165-1
Project/Site: UPC OU-SM

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	CA ELAP 2706	06-30-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88165-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
SRL 524M-TCP	Volatile Organic Compounds (GC/MS SIM)	CADHS	TAL IRV
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7470A	Mercury (CVAA)	SW846	TAL PLS
7196A	Chromium, Hexavalent	SW846	TAL PLS
3010A	Preparation, Total Metals	SW846	TAL PLS
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL PLS
5030B	Purge and Trap	SW846	TAL PLS
7470A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

CADHS = California Department of Health Services

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88165-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88165-1	DG-H1W	Water	08/21/18 08:15	08/21/18 14:52
720-88165-2	DG-L1W	Water	08/21/18 08:30	08/21/18 14:52
720-88165-3	DG-F1W	Water	08/21/18 08:45	08/21/18 14:52
720-88165-4	DG-D1W	Water	08/21/18 09:20	08/21/18 14:52
720-88165-5	TRIP BLANK-1	Water	08/21/18 00:00	08/21/18 14:52

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

720-88165

Reference #: 185026

Date 8/21 Page 1 of 1

11/6/2018 (Rev. 1)

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: MKahrilas@geosyntec.com
Bill To: GEOSYNTEC
Sampled By: M. KAHRILAS
Attn: ANTHONY SMITH
Phone: 847-530-7602

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B + (-22)	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☒ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	1,2,3-TCP (524.2 SIM)
DG-HIW	8/21	815	GW	Y	X			X					X				X						X
DG-MW	↓	830	↓	↓	X			X					X				X						X
DG-FIW		845			X			X					X				X						X
DG-DIW	↓	920	↓	↓	X			X					X				X						X
TRIP BLANK-1	↓				X																		
FIELD BLANK-1	↓				X																		
MK																							

720-88165 Chain of Custody

Page 52 of 57

Project Info.

Project Name/ #: IRC OU-3M ;
PO#: WG2445|01
Credit Card Y/N:

Sample Receipt

of Containers:
Head Space:
Temp: 3.4, 3.1, 1.7, 2.9°C
If yes, please call with payment information ASAP

TAT: 10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____
*Metals samples are filtered

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1311	Signature: [signature] Time: 1452	Signature: Time:
Printed Name: MIRANDA KAHRILAS Date: 8/21	Printed Name: [signature] Date: 8/21/18	Printed Name: Date:
Company: GEO	Company: TA TX	Company:
1) Received by:	**2) Received by:**	**3) Received by:**
Signature: [signature] Time: 1311	Signature: [signature] Time: 1452	Signature: Time:
Printed Name: [signature] Date: 8/21/18	Printed Name: [signature] Date: 8/21/18	Printed Name: Date:
Company: TA TX	Company: TA TX	Company: 3.4/2.1/1.7/2.9 C

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s): 447 / 9852 5260	COC No.: 720-39379.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California		Job #: 720-88165-1
Address: 17461 Derian Ave, Suite 100,	Due Date Requested: 8/28/2018			
City: Irvine	TAT Requested (days):			
State, Zip: CA, 92614-5817				
Phone: 949-261-1022(Tel) 949-260-3297(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC-OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-H1W (720-88165-1)	8/21/18	08.15 Pacific		Water			X	3	
DG-L1W (720-88165-2)	8/21/18	08:30 Pacific		Water			X	3	
DG-F1W (720-88165-3)	8/21/18	08:45 Pacific		Water			X	3	
DG-D1W (720-88165-4)	8/21/18	09:20 Pacific		Water			X	3	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/22/18 15:14	TAPE		8/23/18 9:45	TAKU
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks.
		2.5/2.7 IR-89

Ver: 09/20/2016

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler	Lab PM: Smith, Micah	Carrier Tracking No(s)	COC No: 720-39454.1
Client Contact: Shipping/Receiving	Phone	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California		Job #: 720-88165-1
Address: 17461 Derian Ave, Suite 100,	Due Date Requested: 8/27/2018			
City: Irvine	TAT Requested (days):			
State, Zip: CA, 92614-5817				
Phone: 949-261-1022(Tel) 949-260-3297(Fax)	PO #			
Email	WO #			
Project Name: UPC-OU-SM	Project #: 72013717			
Site	SSOW#			

Analysis Requested

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
TRIP BLANK (720-88165-5)	8/21/18	Pacific		Water			X		

Geosyntec
5 HCL
VOAs
1 per sample
for job
88165

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ___ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	8/28/18 14:15	TAP			
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
				8/29/18 708	TA IRV

Custody Seals Intact:	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:
Δ Yes Δ No		.9 | 6 IR-5&6 4471 9852 5763 2.4/2.7

Ver. 09/20/2016

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88165-1

Login Number: 88165
List Number: 1
Creator: Mullen, Joan

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88165-1

Login Number: 88165
List Number: 2
Creator: Ornelas, Olga

List Source: TestAmerica Irvine
List Creation: 08/23/18 12:19 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88165-1

Login Number: 88165
List Number: 3
Creator: Avila, Stephanie 1

List Source: TestAmerica Irvine
List Creation: 08/29/18 07:45 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88174-1
Client Project/Site: UPC OU-SM

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
8/30/2018 6:31:51 PM

Micah Smith, Project Manager II
(916)374-4302
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 6
Surrogate Summary 13
QC Sample Results 14
QC Association Summary 15
Lab Chronicle 16
Certification Summary 18
Method Summary 19
Sample Summary 20
Chain of Custody 21
Receipt Checklists 24

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88174-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88174-1

Comments
As discussed with the client, samples will be analyzed by method 8260B for 1,2,3-Trichloropropane and 1,2-Dibromo-3-Chloropropane.

Receipt
The samples were received on 8/22/2018 2:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

Receipt Exceptions
All samples except DUP-2 were received in pre-weighed containers with a label that was added in the field. The label weight was approximately 0.15 g which does not significantly bias the final results.

GC/MS VOA
Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 490-538385.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88174-1

Client Sample ID: DG-F3S-0.5-1 — Lab Sample ID: 720-88174-1

No Detections.

Client Sample ID: DG-H3S-0.5-1 — Lab Sample ID: 720-88174-2

No Detections.

Client Sample ID: DG-K3S-0.5-1 — Lab Sample ID: 720-88174-3

No Detections.

Client Sample ID: DG-M3S-0.5-1 — Lab Sample ID: 720-88174-4

No Detections.

Client Sample ID: DG-I3S-0.5-1 — Lab Sample ID: 720-88174-5

No Detections.

Client Sample ID: DG-L5S-0.5-1 — Lab Sample ID: 720-88174-6

No Detections.

Client Sample ID: DUP-2 — Lab Sample ID: 720-88174-7

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88174-1

Client Sample ID: DG-F3S-0.5-1
Date Collected: 08/21/18 14:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88174-1
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0016	0.00044	mg/Kg		08/21/18 16:45	08/24/18 14:48	1
1,2-Dibromo-3-Chloropropane	ND		0.0040	0.00057	mg/Kg		08/21/18 16:45	08/24/18 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*	*08/21/18 16:45*	*08/24/18 14:48*	*1*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*08/21/18 16:45*	*08/24/18 14:48*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*	*08/21/18 16:45*	*08/24/18 14:48*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*	*08/21/18 16:45*	*08/24/18 14:48*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88174-1

Client Sample ID: DG-H3S-0.5-1
Date Collected: 08/21/18 16:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88174-2
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0019	0.00053	mg/Kg		08/21/18 18:45	08/24/18 15:16	1
1,2-Dibromo-3-Chloropropane	ND		0.0049	0.00068	mg/Kg		08/21/18 18:45	08/24/18 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*	*08/21/18 18:45*	*08/24/18 15:16*	*1*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*08/21/18 18:45*	*08/24/18 15:16*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*	*08/21/18 18:45*	*08/24/18 15:16*	*1*
Toluene-d8 (Surr)	*108*		*70 - 130*	*08/21/18 18:45*	*08/24/18 15:16*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88174-1

Client Sample ID: DG-K3S-0.5-1
Date Collected: 08/22/18 10:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88174-3
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0016	0.00044	mg/Kg		08/22/18 12:15	08/24/18 15:44	1
1,2-Dibromo-3-Chloropropane	ND		0.0040	0.00056	mg/Kg		08/22/18 12:15	08/24/18 15:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*	*08/22/18 12:15*	*08/24/18 15:44*	*1*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*08/22/18 12:15*	*08/24/18 15:44*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*	*08/22/18 12:15*	*08/24/18 15:44*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*	*08/22/18 12:15*	*08/24/18 15:44*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88174-1

Client Sample ID: DG-M3S-0.5-1
Date Collected: 08/22/18 10:40
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88174-4
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0017	0.00048	mg/Kg		08/22/18 12:40	08/24/18 16:12	1
1,2-Dibromo-3-Chloropropane	ND		0.0044	0.00061	mg/Kg		08/22/18 12:40	08/24/18 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*	*08/22/18 12:40*	*08/24/18 16:12*	*1*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*08/22/18 12:40*	*08/24/18 16:12*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*	*08/22/18 12:40*	*08/24/18 16:12*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*	*08/22/18 12:40*	*08/24/18 16:12*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88174-1

Client Sample ID: DG-I3S-0.5-1
Date Collected: 08/22/18 09:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88174-5
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0019	0.00052	mg/Kg		08/22/18 11:30	08/24/18 16:39	1
1,2-Dibromo-3-Chloropropane	ND		0.0047	0.00066	mg/Kg		08/22/18 11:30	08/24/18 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*	*08/22/18 11:30*	*08/24/18 16:39*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*08/22/18 11:30*	*08/24/18 16:39*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*	*08/22/18 11:30*	*08/24/18 16:39*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/22/18 11:30*	*08/24/18 16:39*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88174-1

Client Sample ID: DG-L5S-0.5-1
Date Collected: 08/22/18 11:20
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88174-6
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0017	0.00048	mg/Kg		08/22/18 13:20	08/24/18 20:23	1
1,2-Dibromo-3-Chloropropane	ND		0.0044	0.00061	mg/Kg		08/22/18 13:20	08/24/18 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*	*08/22/18 13:20*	*08/24/18 20:23*	*1*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*08/22/18 13:20*	*08/24/18 20:23*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*	*08/22/18 13:20*	*08/24/18 20:23*	*1*
Toluene-d8 (Surr)	*109*		*70 - 130*	*08/22/18 13:20*	*08/24/18 20:23*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88174-1

Client Sample ID: DUP-2
Date Collected: 08/22/18 00:00
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88174-7
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0016	0.00043	mg/Kg		08/22/18 02:00	08/24/18 17:35	1
1,2-Dibromo-3-Chloropropane	ND		0.0039	0.00055	mg/Kg		08/22/18 02:00	08/24/18 17:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*	*08/22/18 02:00*	*08/24/18 17:35*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*08/22/18 02:00*	*08/24/18 17:35*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*	*08/22/18 02:00*	*08/24/18 17:35*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*	*08/22/18 02:00*	*08/24/18 17:35*	*1*

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88174-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
720-88174-1	DG-F3S-0.5-1	87	116	98	106
720-88174-2	DG-H3S-0.5-1	87	111	98	108
720-88174-3	DG-K3S-0.5-1	85	108	96	104
720-88174-4	DG-M3S-0.5-1	85	111	96	107
720-88174-5	DG-I3S-0.5-1	86	100	94	101
720-88174-6	DG-L5S-0.5-1	87	123	97	109
720-88174-7	DUP-2	86	104	96	105
LCS 490-538385/3	Lab Control Sample	84	99	95	100
LCSD 490-538385/4	Lab Control Sample Dup	83	101	95	101
MB 490-538385/6	Method Blank	82	99	96	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-538385/6
Matrix: Solid
Analysis Batch: 538385

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0020	0.00055	mg/Kg			08/24/18 12:43	1
1,2-Dibromo-3-Chloropropane	ND		0.0050	0.00070	mg/Kg			08/24/18 12:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 130*		*08/24/18 12:43*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/24/18 12:43*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*08/24/18 12:43*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*08/24/18 12:43*	*1*

Lab Sample ID: LCS 490-538385/3
Matrix: Solid
Analysis Batch: 538385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.0500	0.0382		mg/Kg		76	60 - 139
1,2-Dibromo-3-Chloropropane	0.0500	0.0353		mg/Kg		71	47 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 490-538385/4
Matrix: Solid
Analysis Batch: 538385

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.0500	0.0423		mg/Kg		85	60 - 139	10	16
1,2-Dibromo-3-Chloropropane	0.0500	0.0389		mg/Kg		78	47 - 144	10	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88174-1

GC/MS VOA

Prep Batch: 538320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88174-1	DG-F3S-0.5-1	Total/NA	Solid	5035	
720-88174-2	DG-H3S-0.5-1	Total/NA	Solid	5035	
720-88174-3	DG-K3S-0.5-1	Total/NA	Solid	5035	
720-88174-4	DG-M3S-0.5-1	Total/NA	Solid	5035	
720-88174-5	DG-I3S-0.5-1	Total/NA	Solid	5035	
720-88174-6	DG-L5S-0.5-1	Total/NA	Solid	5035	
720-88174-7	DUP-2	Total/NA	Solid	5035	

Analysis Batch: 538385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88174-1	DG-F3S-0.5-1	Total/NA	Solid	8260B	538320
720-88174-2	DG-H3S-0.5-1	Total/NA	Solid	8260B	538320
720-88174-3	DG-K3S-0.5-1	Total/NA	Solid	8260B	538320
720-88174-4	DG-M3S-0.5-1	Total/NA	Solid	8260B	538320
720-88174-5	DG-I3S-0.5-1	Total/NA	Solid	8260B	538320
720-88174-6	DG-L5S-0.5-1	Total/NA	Solid	8260B	538320
720-88174-7	DUP-2	Total/NA	Solid	8260B	538320
MB 490-538385/6	Method Blank	Total/NA	Solid	8260B	
LCS 490-538385/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-538385/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Client Sample ID: DG-F3S-0.5-1

Lab Sample ID: 720-88174-1
Matrix: Solid
Date Collected: 08/21/18 14:45
Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			538320	08/21/18 16:45	DHC	TAL NSH
Total/NA	Analysis	8260B		1	538385	08/24/18 14:48	PN	TAL NSH

Client Sample ID: DG-H3S-0.5-1

Lab Sample ID: 720-88174-2
Matrix: Solid
Date Collected: 08/21/18 16:45
Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			538320	08/21/18 18:45	DHC	TAL NSH
Total/NA	Analysis	8260B		1	538385	08/24/18 15:16	PN	TAL NSH

Client Sample ID: DG-K3S-0.5-1

Lab Sample ID: 720-88174-3
Matrix: Solid
Date Collected: 08/22/18 10:15
Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			538320	08/22/18 12:15	DHC	TAL NSH
Total/NA	Analysis	8260B		1	538385	08/24/18 15:44	PN	TAL NSH

Client Sample ID: DG-M3S-0.5-1

Lab Sample ID: 720-88174-4
Matrix: Solid
Date Collected: 08/22/18 10:40
Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			538320	08/22/18 12:40	DHC	TAL NSH
Total/NA	Analysis	8260B		1	538385	08/24/18 16:12	PN	TAL NSH

Client Sample ID: DG-I3S-0.5-1

Lab Sample ID: 720-88174-5
Matrix: Solid
Date Collected: 08/22/18 09:30
Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			538320	08/22/18 11:30	DHC	TAL NSH
Total/NA	Analysis	8260B		1	538385	08/24/18 16:39	PN	TAL NSH

Client Sample ID: DG-L5S-0.5-1

Lab Sample ID: 720-88174-6
Matrix: Solid
Date Collected: 08/22/18 11:20
Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			538320	08/22/18 13:20	DHC	TAL NSH
Total/NA	Analysis	8260B		1	538385	08/24/18 20:23	PN	TAL NSH

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88174-1

Client Sample ID: DUP-2

Date Collected: 08/22/18 00:00
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88174-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			538320	08/22/18 02:00	DHC	TAL NSH
Total/NA	Analysis	8260B		1	538385	08/24/18 17:35	PN	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88174-1

Laboratory: TestAmerica Pleasanton

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-19
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-19
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-19
Georgia	State Program	4	NA: NELAP & A2LA	12-31-19
Illinois	NELAP	5	200010	12-09-18
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-18
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-18
Louisiana	NELAP	6	30613	06-30-19
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-19
Minnesota	NELAP	5	047-999-345	12-31-18
Mississippi	State Program	4	N/A	06-30-19
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-19
New Hampshire	NELAP	1	2963	10-09-18
New Jersey	NELAP	2	TN965	06-30-19
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-18
North Dakota	State Program	8	R-146	06-30-19
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-19
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	07-31-19
Rhode Island	State Program	1	LAO00268	12-30-18
South Carolina	State Program	4	84009 (001)	02-28-19
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-19
Washington	State Program	10	C789	07-19-19
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-19
Wyoming (UST)	A2LA	8	453.07	12-31-19

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88174-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
5035	Closed System Purge and Trap	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88174-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88174-1	DG-F3S-0.5-1	Solid	08/21/18 14:45	08/22/18 14:30
720-88174-2	DG-H3S-0.5-1	Solid	08/21/18 16:45	08/22/18 14:30
720-88174-3	DG-K3S-0.5-1	Solid	08/22/18 10:15	08/22/18 14:30
720-88174-4	DG-M3S-0.5-1	Solid	08/22/18 10:40	08/22/18 14:30
720-88174-5	DG-I3S-0.5-1	Solid	08/22/18 09:30	08/22/18 14:30
720-88174-6	DG-L5S-0.5-1	Solid	08/22/18 11:20	08/22/18 14:30
720-88174-7	DUP-2	Solid	08/22/18 00:00	08/22/18 14:30

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88174

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185049

Date 8/21/18 Page 1 of 1

8/30/2018

Report To

Attn: MIRANDA KAHELLAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
Bill To: GEOSYNTEC
Sampled By: M. KAHELLAS
Attn: ANTHONY SMITH
Phone: 847-550-7602

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GCMS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides PCBs ☐ EPA 8081 ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	1,2,3-TCP (8260B-SIM/5030)
DG-F35-0.5-1	8/21	1445	5	Meth.																			X
DG-H35-0.5-1	8/21	1645	5																				X
DG-K35-0.5-1	8/22	1015																					X
DG-M35-0.5-1		1040																					X
DG-I35-0.5-1		930																					X
DG-L35-0.5-1	↓	1120	↓	↓																			X
DUP-2	8/22	—	5	Meth.																			X

Project Info.

Project Name/ #: UPC ON-SM
PO#: WG2445/01
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers:
Head Space:
Temp:

TAT: 10 Day | (5 Day) | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID ___

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: Keaton Belli — Time: 1225	Signature: — Time: 1430	Signature: — Time:
Printed Name: Keaton Belli — Date: 8/22	Printed Name: — Date: 8/22/18	Printed Name: — Date:
Company: Geosyntec	Company: TA720	Company:
1) Received by:	**2) Received by:**	**3) Received by:**
Signature: — Time: 1225	Signature: — Time: 1430	Signature: — Time:
Printed Name: — Date: 8/22/18	Printed Name: T. Bullock — Date: 8/22/18	Printed Name: — Date:
Company: TA720	Company: TA-770	Company:

720-88174 Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

720-88174 Chain of Custody

Cooler Received/Opened On 8/23/2018 @ 0935

Time Samples Removed From Cooler 10:20 Time Samples Placed In Storage 10:03 (2 Hour Window)

1. Tracking # 5192 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 97310166 pH Strip Lot _____ Chlorine Strip Lot _____

2. Temperature of rep. sample or temp blank when opened: 0.0 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO (NA)

4. Were custody seals on outside of cooler? (YES)...NO...NA

If yes, how many and where: 1 (Front)

5. Were the seals intact, signed, and dated correctly? (YES)...NO...NA

6. Were custody papers inside cooler? (YES)...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) 2.2

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...(NA)

● ⬅ Larger than this.

14. Was there a Trip Blank in this cooler? YES...(NO)...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) 2.2

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES...NO...(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) 2.2

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) 2.2

I certify that I attached a label with the unique LIMS number to each container (intial) 2.2

21. Were there Non-Conformance issues at login? YES...(NO) Was a NCM generated? YES...(NO)...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

720-88174

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	COC No: 720-39387.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California	Job #: 720-88174-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 8/28/2018		
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: UPC-OU-SM	Project #: 72013717		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B/5035LP_Calc 1,2,3-TCP and 1,2-Dibromo-3-chloropane	8260B/5035A_M_Calc 1,2,3-TCP and 1,2-Dibromo-3-chloropane	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
DG-F3S-0.5-1 (720-88174-1)	8/21/18	14:45 Pacific		Solid			X	X	3	
DG-H3S-0.5-1 (720-88174-2)	8/21/18	16:45 Pacific		Solid			X	X	3	
DG-K3S-0.5-1 (720-88174-3)	8/22/18	10:15 Pacific		Solid			X	X	3	
DG-M3S-0.5-1 (720-88174-4)	8/22/18	10:40 Pacific		Solid			X	X	3	
DG-I3S-0.5-1 (720-88174-5)	8/22/18	09:30 Pacific		Solid			X	X	3	
DG-L5S-0.5-1 (720-88174-6)	8/22/18	11:20 Pacific		Solid			X	X	3	
DUP-2 (720-88174-7)	8/22/18	Pacific		Solid			X	X	3	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 8/22/18 1500	Company TA/TO	Received by: Jennifer Jordan	Date/Time: 08/23/18 09:35	Company TA-VAS	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 6.0			

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88174-1

Login Number: 88174
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	False	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88189-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/8/2018 6:24:17 PM

Micah Smith, Project Manager II
(916)374-4302
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 6
Client Sample Results 12
Surrogate Summary 68
QC Sample Results 70
QC Association Summary 94
Lab Chronicle 100
Certification Summary 104
Method Summary 105
Sample Summary 106
Subcontract Data 107
Chain of Custody 111
Receipt Checklists 115

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88189-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88189-1

Comments
This report was revised again on 11/8/18 to change the units for the metals data to report in mg/Kg, as requested.

Receipt
The samples were received on 8/22/2018 2:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.7º C, 1.9º C, 2.6º C and 2.6º C.

Receipt Exceptions
The container label for the following samples did not match the information listed on the Chain-of-Custody (COC):
1.) DG-F4S-0.5-1: The container label lists DG-F4S-0.1-1, while the COC lists DG-F4S-0.5-1. Sample was logged in with the ID listed on the COC.
2.) Received a field container/tube label lists DG-CS2- (no depth) date/time: 8/21/18 15:30. This sample was not listed on the COC and was not logged in for any analyses.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250407 recovered outside control limits for the following analytes: Carbon disulfide and 1,1-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: Internal standard (ISTD) response for the following sample was outside control limits: DG-B2S-19.5-20 (720-88189-4). The sample(s) was re-extracted and/or re-analyzed with concurring results, and the second set of data has been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270C_SIM: The method blank for preparation batch 720-250048 and analytical batch 720-250212 contained Naphthalene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: DG-B2S-19.5-20 (720-88189-4), (720-88190-F-15-A), (720-88190-F-15-B MS) and (720-88190-F-15-C MSD).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250071 and analytical batch 720-250222 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250222 was outside of the 10% control limits: (720-88189-A-1-D SD).

Analyte	Recovery
Arsenic	11%
Barium	25%
Cobalt	18%
Chromium	23%
Nickel	21%
Lead	17%
Vanadium	20%

Job ID: 720-88189-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Zinc 20%

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DG-K4S-0.5-1 (720-88189-1), DG-K4S-3.5-4 (720-88189-2), DG-A2S-19.5-20 (720-88189-3), DG-B2S-19.5-20 (720-88189-4), DG-C2S-0.5-1 (720-88189-5), DG-C2S-3.5-4 (720-88189-6), DG-G4S-0.5-1 (720-88189-7), DG-G4S-3.5-4 (720-88189-8), DG-F4S-3.5-4 (720-88189-10), DG-E4S-0.5-1 (720-88189-11), DG-E4S-3.5-4 (720-88189-12), DG-D4S-0.5-1 (720-88189-13), DG-D4S-3.5-4 (720-88189-14) and DUP-1 (720-88189-15). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The following sample was diluted to bring the concentration of target analyte Zinc within the calibration range: DG-F4S-0.5-1 (720-88189-9). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250096 and analytical batch 720-250219 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250219 was outside of the 10% control limits: (720-88189-A-11-C SD).

Analyte	Recovery
Barium	19%
Cobalt	17%
Lead	18%
Vanadium	15%

Method(s) 6010B: The method blank for preparation batch 720-250071 and analytical batch 720-250222 contained Antimony above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Client Sample ID: DG-K4(0.5-1) — Lab Sample ID: 720-88189-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.4	J B F1	1.7	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	120	F1	3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	140	F1 F2	1.7	0.25	mg/Kg	4		6010B	Total/NA
Beryllium	0.21	J	0.35	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	0.50		0.43	0.043	mg/Kg	4		6010B	Total/NA
Chromium	15		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	8.5		0.70	0.070	mg/Kg	4		6010B	Total/NA
Copper	92	F1	5.2	2.5	mg/Kg	4		6010B	Total/NA
Lead	160	F1 F2	1.7	0.37	mg/Kg	4		6010B	Total/NA
Molybdenum	0.78	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	13		1.7	0.18	mg/Kg	4		6010B	Total/NA
Selenium	0.87	J	3.5	0.52	mg/Kg	4		6010B	Total/NA
Vanadium	59		1.7	0.24	mg/Kg	4		6010B	Total/NA
Zinc	170	F1 F2	5.2	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.32		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K4(3.5-4) — Lab Sample ID: 720-88189-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	95		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	22		1.7	0.24	mg/Kg	4		6010B	Total/NA
Beryllium	0.18	J	0.34	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	0.091	J	0.43	0.043	mg/Kg	4		6010B	Total/NA
Chromium	18		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	3.1		0.69	0.069	mg/Kg	4		6010B	Total/NA
Copper	15		5.2	2.5	mg/Kg	4		6010B	Total/NA
Lead	6.8		1.7	0.36	mg/Kg	4		6010B	Total/NA
Molybdenum	0.22	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	14		1.7	0.18	mg/Kg	4		6010B	Total/NA
Selenium	0.64	J	3.4	0.52	mg/Kg	4		6010B	Total/NA
Vanadium	14		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	76		5.2	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.023		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-A2S-19.5-20 — Lab Sample ID: 720-88189-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	42		37	28	ug/Kg	1		8260B	Total/NA
Benzo[b]fluoranthene	2.3	J	4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	3500		2000	740	ug/Kg	1		8015B	Total/NA
Antimony	0.27	J B	1.3	0.22	mg/Kg	4		6010B	Total/NA
Barium	21		1.3	0.19	mg/Kg	4		6010B	Total/NA
Beryllium	0.29		0.26	0.085	mg/Kg	4		6010B	Total/NA
Chromium	59		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	3.7		0.52	0.052	mg/Kg	4		6010B	Total/NA
Copper	2.5	J	3.9	1.9	mg/Kg	4		6010B	Total/NA
Lead	2.0		1.3	0.27	mg/Kg	4		6010B	Total/NA
Nickel	15		1.3	0.13	mg/Kg	4		6010B	Total/NA
Vanadium	29		1.3	0.18	mg/Kg	4		6010B	Total/NA
Zinc	8.3		3.9	1.7	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-A2S-19.5-20 (Continued) — Lab Sample ID: 720-88189-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.0068	J	0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B2S-19.5-20 — Lab Sample ID: 720-88189-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	52		38	29	ug/Kg	1		8260B	Total/NA
Anthracene	3.7	J	4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	15		4.9	1.5	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	9.8		4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	27		4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	8.1		4.9	4.2	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	8.0		4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	19		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	23		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	5.2		4.9	4.1	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	6.5		4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	55		4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	44000		1900	720	ug/Kg	1		8015B	Total/NA
Antimony	0.31	J B	1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	5.0		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	31		1.7	0.24	mg/Kg	4		6010B	Total/NA
Beryllium	0.18	J	0.34	0.11	mg/Kg	4		6010B	Total/NA
Chromium	14		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	6.3		0.68	0.068	mg/Kg	4		6010B	Total/NA
Copper	4.8	J	5.1	2.4	mg/Kg	4		6010B	Total/NA
Lead	0.83	J	1.7	0.36	mg/Kg	4		6010B	Total/NA
Molybdenum	0.43	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	15		1.7	0.17	mg/Kg	4		6010B	Total/NA
Selenium	3.4		3.4	0.51	mg/Kg	4		6010B	Total/NA
Vanadium	72		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	3.0	J	5.1	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.011	J	0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-C2S-0.5-1 — Lab Sample ID: 720-88189-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.7	B	1.8	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	15		3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	110		1.8	0.25	mg/Kg	4		6010B	Total/NA
Beryllium	0.15	J	0.35	0.12	mg/Kg	4		6010B	Total/NA
Cadmium	1.9		0.44	0.044	mg/Kg	4		6010B	Total/NA
Chromium	52		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	9.2		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	100		5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	420		1.8	0.37	mg/Kg	4		6010B	Total/NA
Molybdenum	2.4		1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	49		1.8	0.18	mg/Kg	4		6010B	Total/NA
Selenium	0.64	J	3.5	0.53	mg/Kg	4		6010B	Total/NA
Vanadium	32		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	310		5.3	2.2	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-C2S-0.5-1 (Continued) — Lab Sample ID: 720-88189-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.45		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-C2S-3.5-4 — Lab Sample ID: 720-88189-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.6	B	1.3	0.21	mg/Kg	4		6010B	Total/NA
Arsenic	16		2.5	0.22	mg/Kg	4		6010B	Total/NA
Barium	180		1.3	0.18	mg/Kg	4		6010B	Total/NA
Beryllium	0.32		0.25	0.082	mg/Kg	4		6010B	Total/NA
Cadmium	0.33		0.32	0.031	mg/Kg	4		6010B	Total/NA
Chromium	29		1.3	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	6.0		0.51	0.051	mg/Kg	4		6010B	Total/NA
Copper	58		3.8	1.8	mg/Kg	4		6010B	Total/NA
Lead	300		1.3	0.27	mg/Kg	4		6010B	Total/NA
Molybdenum	0.68	J	1.3	0.16	mg/Kg	4		6010B	Total/NA
Nickel	29		1.3	0.13	mg/Kg	4		6010B	Total/NA
Silver	0.24	J	0.63	0.13	mg/Kg	4		6010B	Total/NA
Vanadium	28		1.3	0.17	mg/Kg	4		6010B	Total/NA
Zinc	320		3.8	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.13		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-G4S-0.5-1 — Lab Sample ID: 720-88189-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	22	B	1.8	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	20		3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	460		1.8	0.25	mg/Kg	4		6010B	Total/NA
Beryllium	0.20	J	0.35	0.12	mg/Kg	4		6010B	Total/NA
Cadmium	16		0.44	0.044	mg/Kg	4		6010B	Total/NA
Chromium	160		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	21		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	1200		5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	1500		1.8	0.37	mg/Kg	4		6010B	Total/NA
Molybdenum	22		1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	170		1.8	0.18	mg/Kg	4		6010B	Total/NA
Selenium	2.6	J	3.5	0.53	mg/Kg	4		6010B	Total/NA
Silver	1.0		0.88	0.18	mg/Kg	4		6010B	Total/NA
Thallium	2.3		1.8	0.51	mg/Kg	4		6010B	Total/NA
Vanadium	34		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	3800		5.3	2.2	mg/Kg	4		6010B	Total/NA
Mercury	10		1.5	0.21	mg/Kg	100		7471A	Total/NA

Client Sample ID: DG-G4S-3.5-4 — Lab Sample ID: 720-88189-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	4.4	B	1.1	0.19	mg/Kg	4		6010B	Total/NA
Arsenic	18		2.3	0.19	mg/Kg	4		6010B	Total/NA
Barium	300		1.1	0.16	mg/Kg	4		6010B	Total/NA
Beryllium	0.18	J	0.23	0.074	mg/Kg	4		6010B	Total/NA
Cadmium	6.0		0.28	0.028	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-G4S-3.5-4 (Continued) — Lab Sample ID: 720-88189-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	50		1.1	0.12	mg/Kg	4		6010B	Total/NA
Cobalt	6.2		0.45	0.045	mg/Kg	4		6010B	Total/NA
Copper	300		3.4	1.6	mg/Kg	4		6010B	Total/NA
Lead	590		1.1	0.24	mg/Kg	4		6010B	Total/NA
Molybdenum	2.3		1.1	0.15	mg/Kg	4		6010B	Total/NA
Nickel	37		1.1	0.12	mg/Kg	4		6010B	Total/NA
Selenium	0.48	J	2.3	0.34	mg/Kg	4		6010B	Total/NA
Silver	0.31	J	0.57	0.11	mg/Kg	4		6010B	Total/NA
Vanadium	25		1.1	0.15	mg/Kg	4		6010B	Total/NA
Zinc	630		3.4	1.4	mg/Kg	4		6010B	Total/NA
Mercury	0.71		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-F4S-0.5-1 — Lab Sample ID: 720-88189-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	27		2.8	0.24	mg/Kg	4		6010B	Total/NA
Barium	200		1.4	0.20	mg/Kg	4		6010B	Total/NA
Beryllium	0.16	J	0.28	0.092	mg/Kg	4		6010B	Total/NA
Cadmium	3.8		0.35	0.035	mg/Kg	4		6010B	Total/NA
Chromium	11		1.4	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	7.9		0.57	0.057	mg/Kg	4		6010B	Total/NA
Copper	130		4.3	2.0	mg/Kg	4		6010B	Total/NA
Lead	86		7.1	1.5	mg/Kg	20		6010B	Total/NA
Molybdenum	0.50	J	1.4	0.18	mg/Kg	4		6010B	Total/NA
Nickel	8.5		1.4	0.14	mg/Kg	4		6010B	Total/NA
Silver	1.9		0.71	0.14	mg/Kg	4		6010B	Total/NA
Vanadium	65		1.4	0.19	mg/Kg	4		6010B	Total/NA
Zinc	4400		4.3	1.8	mg/Kg	4		6010B	Total/NA
Mercury	0.88		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-F4S-3.5-4 — Lab Sample ID: 720-88189-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	280		18	1.5	mg/Kg	20		6010B	Total/NA
Barium	820		8.9	1.3	mg/Kg	20		6010B	Total/NA
Beryllium	0.64	J	1.8	0.58	mg/Kg	20		6010B	Total/NA
Cadmium	80		2.2	0.22	mg/Kg	20		6010B	Total/NA
Chromium	32		8.9	0.95	mg/Kg	20		6010B	Total/NA
Cobalt	11		3.6	0.36	mg/Kg	20		6010B	Total/NA
Copper	220		27	13	mg/Kg	20		6010B	Total/NA
Lead	1600		45	9.4	mg/Kg	100		6010B	Total/NA
Molybdenum	4.8	J	8.9	1.1	mg/Kg	20		6010B	Total/NA
Nickel	22		8.9	0.91	mg/Kg	20		6010B	Total/NA
Silver	1.8	J	4.5	0.90	mg/Kg	20		6010B	Total/NA
Vanadium	85		8.9	1.2	mg/Kg	20		6010B	Total/NA
Zinc	26000		27	11	mg/Kg	20		6010B	Total/NA
Mercury	36		1.7	0.25	mg/Kg	100		7471A	Total/NA

Client Sample ID: DG-E4S-0.5-1 — Lab Sample ID: 720-88189-11

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-E4S-0.5-1 (Continued) — Lab Sample ID: 720-88189-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.60	J F1	1.8	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	2.9	J	3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	36	F1	1.8	0.25	mg/Kg	4		6010B	Total/NA
Cadmium	0.063	J	0.44	0.044	mg/Kg	4		6010B	Total/NA
Chromium	8.2	F1	1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	110	F1	5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	45	F1	1.8	0.37	mg/Kg	4		6010B	Total/NA
Nickel	4.2		1.8	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	98	F1	1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	63	F1	5.3	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.068		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E4S-3.5-4 — Lab Sample ID: 720-88189-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.85	J	2.6	0.22	mg/Kg	4		6010B	Total/NA
Barium	39		1.3	0.19	mg/Kg	4		6010B	Total/NA
Chromium	8.9		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.52	0.052	mg/Kg	4		6010B	Total/NA
Copper	110		3.9	1.9	mg/Kg	4		6010B	Total/NA
Lead	13		1.3	0.27	mg/Kg	4		6010B	Total/NA
Molybdenum	0.17	J	1.3	0.17	mg/Kg	4		6010B	Total/NA
Nickel	2.9		1.3	0.13	mg/Kg	4		6010B	Total/NA
Silver	0.26	J	0.65	0.13	mg/Kg	4		6010B	Total/NA
Vanadium	120		1.3	0.18	mg/Kg	4		6010B	Total/NA
Zinc	41		3.9	1.7	mg/Kg	4		6010B	Total/NA
Mercury	0.032		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-D4S-0.5-1 — Lab Sample ID: 720-88189-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	6.8		1.7	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	6.2		3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	43		1.7	0.25	mg/Kg	4		6010B	Total/NA
Cadmium	0.23	J	0.43	0.043	mg/Kg	4		6010B	Total/NA
Chromium	22		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	8.9		0.70	0.070	mg/Kg	4		6010B	Total/NA
Copper	140		5.2	2.5	mg/Kg	4		6010B	Total/NA
Lead	890		1.7	0.37	mg/Kg	4		6010B	Total/NA
Molybdenum	0.24	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	9.3		1.7	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	64		1.7	0.24	mg/Kg	4		6010B	Total/NA
Zinc	110		5.2	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.22		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-D4S-3.5-4 — Lab Sample ID: 720-88189-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	3.5		1.8	0.29	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Client Sample ID: DG-D4S-3.5-4 (Continued) — Lab Sample ID: 720-88189-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	130		3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	110		1.8	0.25	mg/Kg	4		6010B	Total/NA
Cadmium	0.33	J	0.44	0.044	mg/Kg	4		6010B	Total/NA
Chromium	16		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.70	0.070	mg/Kg	4		6010B	Total/NA
Copper	150		5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	340		1.8	0.37	mg/Kg	4		6010B	Total/NA
Nickel	16		1.8	0.18	mg/Kg	4		6010B	Total/NA
Silver	0.27	J	0.88	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	95		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	130		5.3	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.17		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-1 — Lab Sample ID: 720-88189-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.4		1.1	0.18	mg/Kg	4		6010B	Total/NA
Arsenic	3.2		2.1	0.18	mg/Kg	4		6010B	Total/NA
Barium	44		1.1	0.15	mg/Kg	4		6010B	Total/NA
Cadmium	0.12	J	0.26	0.026	mg/Kg	4		6010B	Total/NA
Chromium	20		1.1	0.11	mg/Kg	4		6010B	Total/NA
Cobalt	8.7		0.42	0.042	mg/Kg	4		6010B	Total/NA
Copper	97		3.2	1.5	mg/Kg	4		6010B	Total/NA
Lead	450		1.1	0.22	mg/Kg	4		6010B	Total/NA
Molybdenum	0.47	J	1.1	0.14	mg/Kg	4		6010B	Total/NA
Nickel	9.5		1.1	0.11	mg/Kg	4		6010B	Total/NA
Silver	0.14	J	0.53	0.11	mg/Kg	4		6010B	Total/NA
Vanadium	64		1.1	0.14	mg/Kg	4		6010B	Total/NA
Zinc	71		3.2	1.3	mg/Kg	4		6010B	Total/NA
Mercury	0.11		0.014	0.0021	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-K4(0.5-1)

Date Collected: 08/21/18 11:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-1
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.4	J B F1	1.7	0.29	mg/Kg		08/23/18 12:48	08/24/18 19:29	4
Arsenic	120	F1	3.5	0.30	mg/Kg		08/23/18 12:48	08/24/18 19:29	4
Barium	140	F1 F2	1.7	0.25	mg/Kg		08/23/18 12:48	08/24/18 19:29	4
Beryllium	0.21	J	0.35	0.11	mg/Kg		08/23/18 12:48	08/24/18 19:29	4
Cadmium	0.50		0.43	0.043	mg/Kg		08/23/18 12:48	08/24/18 19:29	4
Chromium	15		1.7	0.18	mg/Kg		08/23/18 12:48	08/24/18 19:29	4
Cobalt	8.5		0.70	0.070	mg/Kg		08/23/18 12:48	08/24/18 19:29	4
Copper	92	F1	5.2	2.5	mg/Kg		08/23/18 12:48	08/24/18 19:29	4
Lead	160	F1 F2	1.7	0.37	mg/Kg		08/23/18 12:48	08/24/18 19:29	4
Molybdenum	0.78	J	1.7	0.22	mg/Kg		08/23/18 12:48	08/24/18 19:29	4
Nickel	13		1.7	0.18	mg/Kg		08/23/18 12:48	08/24/18 19:29	4
Selenium	0.87	J	3.5	0.52	mg/Kg		08/23/18 12:48	08/24/18 19:29	4
Silver	ND		0.87	0.18	mg/Kg		08/23/18 12:48	08/24/18 19:29	4
Thallium	ND		1.7	0.50	mg/Kg		08/23/18 12:48	08/24/18 19:29	4
Vanadium	59		1.7	0.24	mg/Kg		08/23/18 12:48	08/24/18 19:29	4
Zinc	170	F1 F2	5.2	2.2	mg/Kg		08/23/18 12:48	08/24/18 19:29	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.32		0.016	0.0023	mg/Kg		08/23/18 10:11	08/24/18 17:09	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Client Sample ID: DG-K4(3.5-4)
Date Collected: 08/21/18 11:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-2
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.7	0.29	mg/Kg		08/23/18 12:48	08/24/18 19:33	4
Arsenic	**95**		3.4	0.29	mg/Kg		08/23/18 12:48	08/24/18 19:33	4
Barium	**22**		1.7	0.24	mg/Kg		08/23/18 12:48	08/24/18 19:33	4
Beryllium	**0.18**	**J**	0.34	0.11	mg/Kg		08/23/18 12:48	08/24/18 19:33	4
Cadmium	**0.091**	**J**	0.43	0.043	mg/Kg		08/23/18 12:48	08/24/18 19:33	4
Chromium	**18**		1.7	0.18	mg/Kg		08/23/18 12:48	08/24/18 19:33	4
Cobalt	**3.1**		0.69	0.069	mg/Kg		08/23/18 12:48	08/24/18 19:33	4
Copper	**15**		5.2	2.5	mg/Kg		08/23/18 12:48	08/24/18 19:33	4
Lead	**6.8**		1.7	0.36	mg/Kg		08/23/18 12:48	08/24/18 19:33	4
Molybdenum	**0.22**	**J**	1.7	0.22	mg/Kg		08/23/18 12:48	08/24/18 19:33	4
Nickel	**14**		1.7	0.18	mg/Kg		08/23/18 12:48	08/24/18 19:33	4
Selenium	**0.64**	**J**	3.4	0.52	mg/Kg		08/23/18 12:48	08/24/18 19:33	4
Silver	ND		0.86	0.17	mg/Kg		08/23/18 12:48	08/24/18 19:33	4
Thallium	ND		1.7	0.50	mg/Kg		08/23/18 12:48	08/24/18 19:33	4
Vanadium	**14**		1.7	0.23	mg/Kg		08/23/18 12:48	08/24/18 19:33	4
Zinc	**76**		5.2	2.2	mg/Kg		08/23/18 12:48	08/24/18 19:33	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.023**		0.016	0.0024	mg/Kg		08/24/18 15:47	08/27/18 12:28	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Client Sample ID: DG-A2S-19.5-20
Date Collected: 08/21/18 14:25
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-3
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.7	0.90	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Acetone	**42**		37	28	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Benzene	ND		3.7	0.49	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Dichlorobromomethane	ND		3.7	0.54	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Bromobenzene	ND		3.7	0.59	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Chlorobromomethane	ND		15	0.54	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Bromoform	ND		3.7	1.5	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Bromomethane	ND		7.5	0.59	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
2-Butanone (MEK)	ND		37	16	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
n-Butylbenzene	ND		3.7	0.75	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
sec-Butylbenzene	ND		3.7	0.54	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
tert-Butylbenzene	ND		3.7	0.54	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Carbon disulfide	ND		3.7	1.5	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Carbon tetrachloride	ND		3.7	0.46	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Chlorobenzene	ND		3.7	0.52	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Chloroethane	ND		7.5	0.42	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Chloroform	ND		3.7	0.49	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Chloromethane	ND		7.5	0.59	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
2-Chlorotoluene	ND		3.7	0.49	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
4-Chlorotoluene	ND		3.7	0.51	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Chlorodibromomethane	ND		3.7	0.53	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
1,2-Dichlorobenzene	ND		3.7	0.51	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
1,3-Dichlorobenzene	ND		3.7	0.54	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
1,4-Dichlorobenzene	ND		3.7	0.53	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
1,3-Dichloropropane	ND		3.7	0.54	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
1,1-Dichloropropene	ND		3.7	0.52	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
1,2-Dibromo-3-Chloropropane	ND		7.5	1.3	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Ethylene Dibromide	ND		3.7	1.1	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Dibromomethane	ND		7.5	0.64	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Dichlorodifluoromethane	ND		7.5	0.59	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
1,1-Dichloroethane	ND		3.7	0.51	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
1,2-Dichloroethane	ND		3.7	0.57	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
1,1-Dichloroethene	ND		3.7	0.46	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
cis-1,2-Dichloroethene	ND		3.7	0.51	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
trans-1,2-Dichloroethene	ND		3.7	0.56	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
1,2-Dichloropropane	ND		3.7	0.47	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
cis-1,3-Dichloropropene	ND		3.7	0.52	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
trans-1,3-Dichloropropene	ND		3.7	0.50	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Ethylbenzene	ND		3.7	0.56	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Hexachlorobutadiene	ND		3.7	0.67	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
2-Hexanone	ND		37	7.5	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Isopropylbenzene	ND		3.7	0.51	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
4-Isopropyltoluene	ND		3.7	1.9	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Methylene Chloride	ND		7.5	4.2	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
4-Methyl-2-pentanone (MIBK)	ND		37	7.5	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Naphthalene	ND		7.5	1.1	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
N-Propylbenzene	ND		3.7	0.49	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Styrene	ND		3.7	0.47	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
1,1,1,2-Tetrachloroethane	ND		3.7	0.57	ug/Kg		08/23/18 02:50	08/28/18 12:18	1

Client Sample ID: DG-A2S-19.5-20
Date Collected: 08/21/18 14:25
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-3
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.7	0.56	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Tetrachloroethene	ND		3.7	0.50	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Toluene	ND		3.7	0.53	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
1,2,3-Trichlorobenzene	ND		3.7	0.55	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
1,2,4-Trichlorobenzene	ND		3.7	0.53	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
1,1,1-Trichloroethane	ND		3.7	0.46	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
1,1,2-Trichloroethane	ND		3.7	0.52	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Trichloroethene	ND		3.7	0.47	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Trichlorofluoromethane	ND		3.7	0.42	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
1,2,3-Trichloropropane	ND		3.7	0.57	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.7	1.6	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
1,2,4-Trimethylbenzene	ND		3.7	1.2	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
1,3,5-Trimethylbenzene	ND		3.7	0.49	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Vinyl acetate	ND		15	3.7	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Vinyl chloride	ND		3.7	0.54	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Xylenes, Total	ND		3.7	0.91	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
2,2-Dichloropropane	ND		3.7	1.5	ug/Kg		08/23/18 02:50	08/28/18 12:18	1
Gasoline Range Organics (GRO) -C4-C12	ND		190	75	ug/Kg		08/23/18 02:50	08/28/18 12:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*45 - 131*	*08/23/18 02:50*	*08/28/18 12:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*60 - 140*	*08/23/18 02:50*	*08/28/18 12:18*	*1*
Toluene-d8 (Surr)	*90*		*58 - 140*	*08/23/18 02:50*	*08/28/18 12:18*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.4	4.7	ug/Kg		08/23/18 09:43	08/25/18 03:23	1
Acenaphthene	ND		4.7	2.6	ug/Kg		08/23/18 09:43	08/25/18 03:23	1
Acenaphthylene	ND		4.7	2.3	ug/Kg		08/23/18 09:43	08/25/18 03:23	1
Anthracene	ND		4.7	1.9	ug/Kg		08/23/18 09:43	08/25/18 03:23	1
Benzo[a]anthracene	ND		4.7	1.4	ug/Kg		08/23/18 09:43	08/25/18 03:23	1
Benzo[a]pyrene	ND		4.7	1.8	ug/Kg		08/23/18 09:43	08/25/18 03:23	1
Benzo[b]fluoranthene	**2.3**	**J**	4.7	2.0	ug/Kg		08/23/18 09:43	08/25/18 03:23	1
Benzo[g,h,i]perylene	ND		4.7	4.1	ug/Kg		08/23/18 09:43	08/25/18 03:23	1
Benzo[k]fluoranthene	ND		4.7	2.0	ug/Kg		08/23/18 09:43	08/25/18 03:23	1
Chrysene	ND		4.7	1.3	ug/Kg		08/23/18 09:43	08/25/18 03:23	1
Dibenz(a,h)anthracene	ND		4.7	3.3	ug/Kg		08/23/18 09:43	08/25/18 03:23	1
Fluoranthene	ND		4.7	1.3	ug/Kg		08/23/18 09:43	08/25/18 03:23	1
Fluorene	ND		4.7	2.1	ug/Kg		08/23/18 09:43	08/25/18 03:23	1
Indeno[1,2,3-cd]pyrene	ND		4.7	4.0	ug/Kg		08/23/18 09:43	08/25/18 03:23	1
Naphthalene	ND		4.7	3.3	ug/Kg		08/23/18 09:43	08/25/18 03:23	1
Phenanthrene	ND		4.7	1.7	ug/Kg		08/23/18 09:43	08/25/18 03:23	1
Pyrene	ND		4.7	1.6	ug/Kg		08/23/18 09:43	08/25/18 03:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*33 - 120*	*08/23/18 09:43*	*08/25/18 03:23*	*1*
Terphenyl-d14	*85*		*35 - 146*	*08/23/18 09:43*	*08/25/18 03:23*	*1*

Client Sample ID: DG-A2S-19.5-20

Date Collected: 08/21/18 14:25
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-3

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3500		2000	740	ug/Kg		08/23/18 08:42	08/23/18 22:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*86*		*40 - 130*	*08/23/18 08:42*	*08/23/18 22:37*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
Aldrin	ND		1.9	0.48	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
Endrin	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
Toxaphene	ND		38	6.5	ug/Kg		08/23/18 10:51	08/29/18 20:22	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/29/18 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*111*		*21 - 136*	*08/23/18 10:51*	*08/29/18 20:22*	*1*
Tetrachloro-m-xylene	*85*		*21 - 145*	*08/23/18 10:51*	*08/29/18 20:22*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/26/18 10:34	08/28/18 07:24	1
Aroclor-1221	ND		50	24	ug/Kg		08/26/18 10:34	08/28/18 07:24	1
Aroclor-1232	ND		50	23	ug/Kg		08/26/18 10:34	08/28/18 07:24	1
Aroclor-1242	ND		50	19	ug/Kg		08/26/18 10:34	08/28/18 07:24	1
Aroclor-1248	ND		50	24	ug/Kg		08/26/18 10:34	08/28/18 07:24	1
Aroclor-1254	ND		50	23	ug/Kg		08/26/18 10:34	08/28/18 07:24	1
Aroclor-1260	ND		50	22	ug/Kg		08/26/18 10:34	08/28/18 07:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*33*		*14 - 128*	*08/26/18 10:34*	*08/28/18 07:24*	*1*
DCB Decachlorobiphenyl	*39*		*10 - 132*	*08/26/18 10:34*	*08/28/18 07:24*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.27	J B	1.3	0.22	mg/Kg		08/23/18 12:48	08/24/18 19:38	4

Client Sample ID: DG-A2S-19.5-20
Date Collected: 08/21/18 14:25
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-3
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.6	0.22	mg/Kg		08/23/18 12:48	08/24/18 19:38	4
Barium	**21**		1.3	0.19	mg/Kg		08/23/18 12:48	08/24/18 19:38	4
Beryllium	**0.29**		0.26	0.085	mg/Kg		08/23/18 12:48	08/24/18 19:38	4
Cadmium	ND		0.33	0.032	mg/Kg		08/23/18 12:48	08/24/18 19:38	4
Chromium	**59**		1.3	0.14	mg/Kg		08/23/18 12:48	08/24/18 19:38	4
Cobalt	**3.7**		0.52	0.052	mg/Kg		08/23/18 12:48	08/24/18 19:38	4
Copper	**2.5**	**J**	3.9	1.9	mg/Kg		08/23/18 12:48	08/24/18 19:38	4
Lead	**2.0**		1.3	0.27	mg/Kg		08/23/18 12:48	08/24/18 19:38	4
Molybdenum	ND		1.3	0.17	mg/Kg		08/23/18 12:48	08/24/18 19:38	4
Nickel	**15**		1.3	0.13	mg/Kg		08/23/18 12:48	08/24/18 19:38	4
Selenium	ND		2.6	0.39	mg/Kg		08/23/18 12:48	08/24/18 19:38	4
Silver	ND		0.65	0.13	mg/Kg		08/23/18 12:48	08/24/18 19:38	4
Thallium	ND		1.3	0.38	mg/Kg		08/23/18 12:48	08/24/18 19:38	4
Vanadium	**29**		1.3	0.18	mg/Kg		08/23/18 12:48	08/24/18 19:38	4
Zinc	**8.3**		3.9	1.7	mg/Kg		08/23/18 12:48	08/24/18 19:38	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0068**	**J**	0.017	0.0025	mg/Kg		08/24/18 15:47	08/27/18 12:30	1

Client Sample ID: DG-B2S-19.5-20

Date Collected: 08/21/18 15:10
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-4

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.8	0.92	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Acetone	**52**		38	29	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Benzene	ND		3.8	0.50	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Dichlorobromomethane	ND		3.8	0.55	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Bromobenzene	ND	*	3.8	0.61	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Chlorobromomethane	ND		15	0.55	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Bromoform	ND		3.8	1.5	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Bromomethane	ND		7.7	0.61	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
2-Butanone (MEK)	ND		38	16	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
n-Butylbenzene	ND	*	3.8	0.77	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
sec-Butylbenzene	ND	*	3.8	0.55	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
tert-Butylbenzene	ND	*	3.8	0.56	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Carbon disulfide	ND	*	3.8	1.5	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Carbon tetrachloride	ND		3.8	0.48	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Chlorobenzene	ND		3.8	0.53	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Chloroethane	ND		7.7	0.43	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Chloroform	ND		3.8	0.51	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Chloromethane	ND		7.7	0.61	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
2-Chlorotoluene	ND	*	3.8	0.50	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
4-Chlorotoluene	ND	*	3.8	0.52	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Chlorodibromomethane	ND		3.8	0.55	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
1,2-Dichlorobenzene	ND	*	3.8	0.52	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
1,3-Dichlorobenzene	ND	*	3.8	0.55	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
1,4-Dichlorobenzene	ND	*	3.8	0.55	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
1,3-Dichloropropane	ND		3.8	0.56	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
1,1-Dichloropropene	ND		3.8	0.53	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
1,2-Dibromo-3-Chloropropane	ND	*	7.7	1.3	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Ethylene Dibromide	ND		3.8	1.1	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Dibromomethane	ND		7.7	0.66	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Dichlorodifluoromethane	ND		7.7	0.61	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
1,1-Dichloroethane	ND		3.8	0.52	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
1,2-Dichloroethane	ND		3.8	0.58	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
1,1-Dichloroethene	ND	*	3.8	0.48	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
cis-1,2-Dichloroethene	ND		3.8	0.52	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
trans-1,2-Dichloroethene	ND		3.8	0.58	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
1,2-Dichloropropane	ND		3.8	0.48	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
cis-1,3-Dichloropropene	ND		3.8	0.53	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
trans-1,3-Dichloropropene	ND		3.8	0.51	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Ethylbenzene	ND		3.8	0.58	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Hexachlorobutadiene	ND	*	3.8	0.69	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
2-Hexanone	ND		38	7.7	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Isopropylbenzene	ND		3.8	0.52	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
4-Isopropyltoluene	ND	*	3.8	1.9	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Methylene Chloride	ND		7.7	4.3	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
4-Methyl-2-pentanone (MIBK)	ND		38	7.7	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Naphthalene	ND	*	7.7	1.2	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
N-Propylbenzene	ND	*	3.8	0.51	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Styrene	ND		3.8	0.48	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
1,1,1,2-Tetrachloroethane	ND		3.8	0.58	ug/Kg		08/23/18 02:50	08/28/18 20:48	1

Client Sample ID: DG-B2S-19.5-20

Date Collected: 08/21/18 15:10
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-4

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	3.8	0.58	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Tetrachloroethene	ND		3.8	0.51	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Toluene	ND		3.8	0.55	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
1,2,3-Trichlorobenzene	ND	*	3.8	0.57	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
1,2,4-Trichlorobenzene	ND	*	3.8	0.55	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
1,1,1-Trichloroethane	ND		3.8	0.47	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
1,1,2-Trichloroethane	ND		3.8	0.54	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Trichloroethene	ND		3.8	0.48	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Trichlorofluoromethane	ND		3.8	0.43	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
1,2,3-Trichloropropane	ND	*	3.8	0.59	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.8	1.6	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
1,2,4-Trimethylbenzene	ND	*	3.8	1.3	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
1,3,5-Trimethylbenzene	ND	*	3.8	0.50	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Vinyl acetate	ND		15	3.8	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Vinyl chloride	ND		3.8	0.56	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Xylenes, Total	ND		3.8	0.94	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
2,2-Dichloropropane	ND		3.8	1.5	ug/Kg		08/23/18 02:50	08/28/18 20:48	1
Gasoline Range Organics (GRO) -C4-C12	ND		190	77	ug/Kg		08/23/18 02:50	08/28/18 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*74*		*45 - 131*	*08/23/18 02:50*	*08/28/18 20:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*60 - 140*	*08/23/18 02:50*	*08/28/18 20:48*	*1*
Toluene-d8 (Surr)	*93*		*58 - 140*	*08/23/18 02:50*	*08/28/18 20:48*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.8	4.9	ug/Kg		08/23/18 09:43	08/27/18 21:10	1
Acenaphthene	ND		4.9	2.7	ug/Kg		08/23/18 09:43	08/27/18 21:10	1
Acenaphthylene	ND		4.9	2.4	ug/Kg		08/23/18 09:43	08/27/18 21:10	1
Anthracene	**3.7**	**J**	4.9	2.0	ug/Kg		08/23/18 09:43	08/27/18 21:10	1
Benzo[a]anthracene	**15**		4.9	1.5	ug/Kg		08/23/18 09:43	08/27/18 21:10	1
Benzo[a]pyrene	**9.8**		4.9	1.9	ug/Kg		08/23/18 09:43	08/27/18 21:10	1
Benzo[b]fluoranthene	**27**		4.9	2.1	ug/Kg		08/23/18 09:43	08/27/18 21:10	1
Benzo[g,h,i]perylene	**8.1**		4.9	4.2	ug/Kg		08/23/18 09:43	08/27/18 21:10	1
Benzo[k]fluoranthene	**8.0**		4.9	2.1	ug/Kg		08/23/18 09:43	08/27/18 21:10	1
Chrysene	**19**		4.9	1.4	ug/Kg		08/23/18 09:43	08/27/18 21:10	1
Dibenz(a,h)anthracene	ND		4.9	3.4	ug/Kg		08/23/18 09:43	08/27/18 21:10	1
Fluoranthene	**23**		4.9	1.4	ug/Kg		08/23/18 09:43	08/27/18 21:10	1
Fluorene	ND		4.9	2.2	ug/Kg		08/23/18 09:43	08/27/18 21:10	1
Indeno[1,2,3-cd]pyrene	**5.2**		4.9	4.1	ug/Kg		08/23/18 09:43	08/27/18 21:10	1
Naphthalene	ND		4.9	3.4	ug/Kg		08/23/18 09:43	08/27/18 21:10	1
Phenanthrene	**6.5**		4.9	1.8	ug/Kg		08/23/18 09:43	08/27/18 21:10	1
Pyrene	**55**		4.9	1.7	ug/Kg		08/23/18 09:43	08/27/18 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*33 - 120*	*08/23/18 09:43*	*08/27/18 21:10*	*1*
Terphenyl-d14	*90*		*35 - 146*	*08/23/18 09:43*	*08/27/18 21:10*	*1*

Client Sample ID: DG-B2S-19.5-20

Date Collected: 08/21/18 15:10
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-4

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	44000		1900	720	ug/Kg		08/23/18 08:42	08/24/18 02:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*89*		*40 - 130*	*08/23/18 08:42*	*08/24/18 02:15*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.59	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
4,4'-DDE	ND		2.0	0.41	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
4,4'-DDT	ND		2.0	0.40	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
Aldrin	ND		2.0	0.49	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
beta-BHC	ND		2.0	0.35	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
cis-Chlordane	ND		2.0	0.39	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
Endosulfan I	ND		2.0	0.31	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
Endosulfan sulfate	ND		2.0	0.37	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
Endrin	ND		2.0	0.45	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
Endrin aldehyde	ND		2.0	0.61	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
Endrin ketone	ND		2.0	0.32	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
gamma-BHC (Lindane)	ND		2.0	0.61	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
Heptachlor epoxide	ND		2.0	0.34	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
Methoxychlor	ND		2.0	0.66	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
Toxaphene	ND		39	6.6	ug/Kg		08/23/18 10:51	08/29/18 20:38	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		08/23/18 10:51	08/29/18 20:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*107*		*21 - 136*	*08/23/18 10:51*	*08/29/18 20:38*	*1*
Tetrachloro-m-xylene	*91*		*21 - 145*	*08/23/18 10:51*	*08/29/18 20:38*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		48	21	ug/Kg		08/26/18 10:34	08/28/18 07:39	1
Aroclor-1221	ND		48	23	ug/Kg		08/26/18 10:34	08/28/18 07:39	1
Aroclor-1232	ND		48	22	ug/Kg		08/26/18 10:34	08/28/18 07:39	1
Aroclor-1242	ND		48	18	ug/Kg		08/26/18 10:34	08/28/18 07:39	1
Aroclor-1248	ND		48	23	ug/Kg		08/26/18 10:34	08/28/18 07:39	1
Aroclor-1254	ND		48	22	ug/Kg		08/26/18 10:34	08/28/18 07:39	1
Aroclor-1260	ND		48	21	ug/Kg		08/26/18 10:34	08/28/18 07:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*14 - 128*	*08/26/18 10:34*	*08/28/18 07:39*	*1*
DCB Decachlorobiphenyl	*99*		*10 - 132*	*08/26/18 10:34*	*08/28/18 07:39*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.31	J B	1.7	0.28	mg/Kg		08/23/18 12:48	08/24/18 19:43	4

Client Sample ID: DG-B2S-19.5-20
Date Collected: 08/21/18 15:10
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-4
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.0		3.4	0.29	mg/Kg		08/23/18 12:48	08/24/18 19:43	4
Barium	31		1.7	0.24	mg/Kg		08/23/18 12:48	08/24/18 19:43	4
Beryllium	0.18	J	0.34	0.11	mg/Kg		08/23/18 12:48	08/24/18 19:43	4
Cadmium	ND		0.43	0.042	mg/Kg		08/23/18 12:48	08/24/18 19:43	4
Chromium	14		1.7	0.18	mg/Kg		08/23/18 12:48	08/24/18 19:43	4
Cobalt	6.3		0.68	0.068	mg/Kg		08/23/18 12:48	08/24/18 19:43	4
Copper	4.8	J	5.1	2.4	mg/Kg		08/23/18 12:48	08/24/18 19:43	4
Lead	0.83	J	1.7	0.36	mg/Kg		08/23/18 12:48	08/24/18 19:43	4
Molybdenum	0.43	J	1.7	0.22	mg/Kg		08/23/18 12:48	08/24/18 19:43	4
Nickel	15		1.7	0.17	mg/Kg		08/23/18 12:48	08/24/18 19:43	4
Selenium	3.4		3.4	0.51	mg/Kg		08/23/18 12:48	08/24/18 19:43	4
Silver	ND		0.85	0.17	mg/Kg		08/23/18 12:48	08/24/18 19:43	4
Thallium	ND		1.7	0.50	mg/Kg		08/23/18 12:48	08/24/18 19:43	4
Vanadium	72		1.7	0.23	mg/Kg		08/23/18 12:48	08/24/18 19:43	4
Zinc	3.0	J	5.1	2.2	mg/Kg		08/23/18 12:48	08/24/18 19:43	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.011	J	0.016	0.0023	mg/Kg		08/24/18 15:47	08/27/18 12:33	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Client Sample ID: DG-C2S-0.5-1
Date Collected: 08/21/18 15:40
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-5
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.7	B	1.8	0.29	mg/Kg		08/23/18 12:48	08/24/18 19:48	4
Arsenic	15		3.5	0.30	mg/Kg		08/23/18 12:48	08/24/18 19:48	4
Barium	110		1.8	0.25	mg/Kg		08/23/18 12:48	08/24/18 19:48	4
Beryllium	0.15	J	0.35	0.12	mg/Kg		08/23/18 12:48	08/24/18 19:48	4
Cadmium	1.9		0.44	0.044	mg/Kg		08/23/18 12:48	08/24/18 19:48	4
Chromium	52		1.8	0.19	mg/Kg		08/23/18 12:48	08/24/18 19:48	4
Cobalt	9.2		0.71	0.071	mg/Kg		08/23/18 12:48	08/24/18 19:48	4
Copper	100		5.3	2.5	mg/Kg		08/23/18 12:48	08/24/18 19:48	4
Lead	420		1.8	0.37	mg/Kg		08/23/18 12:48	08/24/18 19:48	4
Molybdenum	2.4		1.8	0.23	mg/Kg		08/23/18 12:48	08/24/18 19:48	4
Nickel	49		1.8	0.18	mg/Kg		08/23/18 12:48	08/24/18 19:48	4
Selenium	0.64	J	3.5	0.53	mg/Kg		08/23/18 12:48	08/24/18 19:48	4
Silver	ND		0.88	0.18	mg/Kg		08/23/18 12:48	08/24/18 19:48	4
Thallium	ND		1.8	0.51	mg/Kg		08/23/18 12:48	08/24/18 19:48	4
Vanadium	32		1.8	0.24	mg/Kg		08/23/18 12:48	08/24/18 19:48	4
Zinc	310		5.3	2.2	mg/Kg		08/23/18 12:48	08/24/18 19:48	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.45		0.016	0.0023	mg/Kg		08/24/18 15:47	08/27/18 12:35	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Client Sample ID: DG-C2S-3.5-4
Date Collected: 08/21/18 15:40
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-6
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.6	B	1.3	0.21	mg/Kg		08/23/18 12:48	08/24/18 20:02	4
Arsenic	16		2.5	0.22	mg/Kg		08/23/18 12:48	08/24/18 20:02	4
Barium	180		1.3	0.18	mg/Kg		08/23/18 12:48	08/24/18 20:02	4
Beryllium	0.32		0.25	0.082	mg/Kg		08/23/18 12:48	08/24/18 20:02	4
Cadmium	0.33		0.32	0.031	mg/Kg		08/23/18 12:48	08/24/18 20:02	4
Chromium	29		1.3	0.13	mg/Kg		08/23/18 12:48	08/24/18 20:02	4
Cobalt	6.0		0.51	0.051	mg/Kg		08/23/18 12:48	08/24/18 20:02	4
Copper	58		3.8	1.8	mg/Kg		08/23/18 12:48	08/24/18 20:02	4
Lead	300		1.3	0.27	mg/Kg		08/23/18 12:48	08/24/18 20:02	4
Molybdenum	0.68	J	1.3	0.16	mg/Kg		08/23/18 12:48	08/24/18 20:02	4
Nickel	29		1.3	0.13	mg/Kg		08/23/18 12:48	08/24/18 20:02	4
Selenium	ND		2.5	0.38	mg/Kg		08/23/18 12:48	08/24/18 20:02	4
Silver	0.24	J	0.63	0.13	mg/Kg		08/23/18 12:48	08/24/18 20:02	4
Thallium	ND		1.3	0.37	mg/Kg		08/23/18 12:48	08/24/18 20:02	4
Vanadium	28		1.3	0.17	mg/Kg		08/23/18 12:48	08/24/18 20:02	4
Zinc	320		3.8	1.6	mg/Kg		08/23/18 12:48	08/24/18 20:02	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13		0.016	0.0024	mg/Kg		08/24/18 15:47	08/27/18 12:37	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Client Sample ID: DG-G4S-0.5-1
Date Collected: 08/21/18 16:10
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-7
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	22	B	1.8	0.29	mg/Kg		08/23/18 12:48	08/24/18 20:07	4
Arsenic	20		3.5	0.30	mg/Kg		08/23/18 12:48	08/24/18 20:07	4
Barium	460		1.8	0.25	mg/Kg		08/23/18 12:48	08/24/18 20:07	4
Beryllium	0.20	J	0.35	0.12	mg/Kg		08/23/18 12:48	08/24/18 20:07	4
Cadmium	16		0.44	0.044	mg/Kg		08/23/18 12:48	08/24/18 20:07	4
Chromium	160		1.8	0.19	mg/Kg		08/23/18 12:48	08/24/18 20:07	4
Cobalt	21		0.71	0.071	mg/Kg		08/23/18 12:48	08/24/18 20:07	4
Copper	1200		5.3	2.5	mg/Kg		08/23/18 12:48	08/24/18 20:07	4
Lead	1500		1.8	0.37	mg/Kg		08/23/18 12:48	08/24/18 20:07	4
Molybdenum	22		1.8	0.23	mg/Kg		08/23/18 12:48	08/24/18 20:07	4
Nickel	170		1.8	0.18	mg/Kg		08/23/18 12:48	08/24/18 20:07	4
Selenium	2.6	J	3.5	0.53	mg/Kg		08/23/18 12:48	08/24/18 20:07	4
Silver	1.0		0.88	0.18	mg/Kg		08/23/18 12:48	08/24/18 20:07	4
Thallium	2.3		1.8	0.51	mg/Kg		08/23/18 12:48	08/24/18 20:07	4
Vanadium	34		1.8	0.24	mg/Kg		08/23/18 12:48	08/24/18 20:07	4
Zinc	3800		5.3	2.2	mg/Kg		08/23/18 12:48	08/24/18 20:07	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	10		1.5	0.21	mg/Kg		08/24/18 15:47	08/27/18 13:51	100

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Client Sample ID: DG-G4S-3.5-4
Date Collected: 08/21/18 16:10
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-8
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.4	B	1.1	0.19	mg/Kg		08/23/18 12:48	08/24/18 20:12	4
Arsenic	18		2.3	0.19	mg/Kg		08/23/18 12:48	08/24/18 20:12	4
Barium	300		1.1	0.16	mg/Kg		08/23/18 12:48	08/24/18 20:12	4
Beryllium	0.18	J	0.23	0.074	mg/Kg		08/23/18 12:48	08/24/18 20:12	4
Cadmium	6.0		0.28	0.028	mg/Kg		08/23/18 12:48	08/24/18 20:12	4
Chromium	50		1.1	0.12	mg/Kg		08/23/18 12:48	08/24/18 20:12	4
Cobalt	6.2		0.45	0.045	mg/Kg		08/23/18 12:48	08/24/18 20:12	4
Copper	300		3.4	1.6	mg/Kg		08/23/18 12:48	08/24/18 20:12	4
Lead	590		1.1	0.24	mg/Kg		08/23/18 12:48	08/24/18 20:12	4
Molybdenum	2.3		1.1	0.15	mg/Kg		08/23/18 12:48	08/24/18 20:12	4
Nickel	37		1.1	0.12	mg/Kg		08/23/18 12:48	08/24/18 20:12	4
Selenium	0.48	J	2.3	0.34	mg/Kg		08/23/18 12:48	08/24/18 20:12	4
Silver	0.31	J	0.57	0.11	mg/Kg		08/23/18 12:48	08/24/18 20:12	4
Thallium	ND		1.1	0.33	mg/Kg		08/23/18 12:48	08/24/18 20:12	4
Vanadium	25		1.1	0.15	mg/Kg		08/23/18 12:48	08/24/18 20:12	4
Zinc	630		3.4	1.4	mg/Kg		08/23/18 12:48	08/24/18 20:12	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.71		0.015	0.0022	mg/Kg		08/25/18 12:29	08/27/18 21:17	1

Client Sample ID: DG-F4S-0.5-1

Date Collected: 08/21/18 16:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-9

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.4	0.24	mg/Kg		08/23/18 12:48	08/24/18 20:16	4
Arsenic	**27**		2.8	0.24	mg/Kg		08/23/18 12:48	08/24/18 20:16	4
Barium	**200**		1.4	0.20	mg/Kg		08/23/18 12:48	08/24/18 20:16	4
Beryllium	**0.16**	**J**	0.28	0.092	mg/Kg		08/23/18 12:48	08/24/18 20:16	4
Cadmium	**3.8**		0.35	0.035	mg/Kg		08/23/18 12:48	08/24/18 20:16	4
Chromium	**11**		1.4	0.15	mg/Kg		08/23/18 12:48	08/24/18 20:16	4
Cobalt	**7.9**		0.57	0.057	mg/Kg		08/23/18 12:48	08/24/18 20:16	4
Copper	**130**		4.3	2.0	mg/Kg		08/23/18 12:48	08/24/18 20:16	4
Lead	**86**		7.1	1.5	mg/Kg		08/23/18 12:48	08/27/18 17:27	20
Molybdenum	**0.50**	**J**	1.4	0.18	mg/Kg		08/23/18 12:48	08/24/18 20:16	4
Nickel	**8.5**		1.4	0.14	mg/Kg		08/23/18 12:48	08/24/18 20:16	4
Selenium	ND		14	2.1	mg/Kg		08/23/18 12:48	08/27/18 17:27	20
Silver	**1.9**		0.71	0.14	mg/Kg		08/23/18 12:48	08/24/18 20:16	4
Thallium	ND		7.1	2.1	mg/Kg		08/23/18 12:48	08/27/18 17:27	20
Vanadium	**65**		1.4	0.19	mg/Kg		08/23/18 12:48	08/24/18 20:16	4
Zinc	**4400**		4.3	1.8	mg/Kg		08/23/18 12:48	08/24/18 20:16	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.88**		0.014	0.0021	mg/Kg		08/25/18 12:29	08/27/18 21:19	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Client Sample ID: DG-F4S-3.5-4
Date Collected: 08/21/18 16:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-10
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		45	7.4	mg/Kg		08/23/18 15:12	08/28/18 15:10	100
Arsenic	**280**		18	1.5	mg/Kg		08/23/18 15:12	08/27/18 17:36	20
Barium	**820**		8.9	1.3	mg/Kg		08/23/18 15:12	08/27/18 17:36	20
Beryllium	**0.64**	**J**	1.8	0.58	mg/Kg		08/23/18 15:12	08/27/18 17:36	20
Cadmium	**80**		2.2	0.22	mg/Kg		08/23/18 15:12	08/27/18 17:36	20
Chromium	**32**		8.9	0.95	mg/Kg		08/23/18 15:12	08/27/18 17:36	20
Cobalt	**11**		3.6	0.36	mg/Kg		08/23/18 15:12	08/27/18 17:36	20
Copper	**220**		27	13	mg/Kg		08/23/18 15:12	08/27/18 17:36	20
Lead	**1600**		45	9.4	mg/Kg		08/23/18 15:12	08/28/18 15:10	100
Molybdenum	**4.8**	**J**	8.9	1.1	mg/Kg		08/23/18 15:12	08/27/18 17:36	20
Nickel	**22**		8.9	0.91	mg/Kg		08/23/18 15:12	08/27/18 17:36	20
Selenium	ND		89	13	mg/Kg		08/23/18 15:12	08/28/18 15:10	100
Silver	**1.8**	**J**	4.5	0.90	mg/Kg		08/23/18 15:12	08/27/18 17:36	20
Thallium	ND		45	13	mg/Kg		08/23/18 15:12	08/28/18 15:10	100
Vanadium	**85**		8.9	1.2	mg/Kg		08/23/18 15:12	08/27/18 17:36	20
Zinc	**26000**		27	11	mg/Kg		08/23/18 15:12	08/27/18 17:36	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**36**		1.7	0.25	mg/Kg		08/23/18 15:59	08/28/18 21:39	100

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Client Sample ID: DG-E4S-0.5-1
Date Collected: 08/21/18 16:50
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-11
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.60	J F1	1.8	0.29	mg/Kg		08/23/18 15:12	08/24/18 18:11	4
Arsenic	2.9	J	3.5	0.30	mg/Kg		08/23/18 15:12	08/24/18 18:11	4
Barium	36	F1	1.8	0.25	mg/Kg		08/23/18 15:12	08/24/18 18:11	4
Beryllium	ND	F1	0.35	0.12	mg/Kg		08/23/18 15:12	08/24/18 18:11	4
Cadmium	0.063	J	0.44	0.044	mg/Kg		08/23/18 15:12	08/24/18 18:11	4
Chromium	8.2	F1	1.8	0.19	mg/Kg		08/23/18 15:12	08/24/18 18:11	4
Cobalt	13		0.71	0.071	mg/Kg		08/23/18 15:12	08/24/18 18:11	4
Copper	110	F1	5.3	2.5	mg/Kg		08/23/18 15:12	08/24/18 18:11	4
Lead	45	F1	1.8	0.37	mg/Kg		08/23/18 15:12	08/24/18 18:11	4
Molybdenum	ND		1.8	0.23	mg/Kg		08/23/18 15:12	08/24/18 18:11	4
Nickel	4.2		1.8	0.18	mg/Kg		08/23/18 15:12	08/24/18 18:11	4
Selenium	ND		3.5	0.53	mg/Kg		08/23/18 15:12	08/24/18 18:11	4
Silver	ND	F1	0.88	0.18	mg/Kg		08/23/18 15:12	08/24/18 18:11	4
Thallium	ND		1.8	0.51	mg/Kg		08/23/18 15:12	08/24/18 18:11	4
Vanadium	98	F1	1.8	0.24	mg/Kg		08/23/18 15:12	08/24/18 18:11	4
Zinc	63	F1	5.3	2.2	mg/Kg		08/23/18 15:12	08/24/18 18:11	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.068		0.016	0.0024	mg/Kg		08/23/18 15:59	08/28/18 21:37	1

Client Sample ID: DG-E4S-3.5-4

Date Collected: 08/21/18 16:50
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-12

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.3	0.22	mg/Kg		08/23/18 15:12	08/24/18 18:21	4
Arsenic	**0.85**	**J**	2.6	0.22	mg/Kg		08/23/18 15:12	08/24/18 18:21	4
Barium	**39**		1.3	0.19	mg/Kg		08/23/18 15:12	08/24/18 18:21	4
Beryllium	ND		0.26	0.085	mg/Kg		08/23/18 15:12	08/24/18 18:21	4
Cadmium	ND		0.33	0.032	mg/Kg		08/23/18 15:12	08/24/18 18:21	4
Chromium	**8.9**		1.3	0.14	mg/Kg		08/23/18 15:12	08/24/18 18:21	4
Cobalt	**11**		0.52	0.052	mg/Kg		08/23/18 15:12	08/24/18 18:21	4
Copper	**110**		3.9	1.9	mg/Kg		08/23/18 15:12	08/24/18 18:21	4
Lead	**13**		1.3	0.27	mg/Kg		08/23/18 15:12	08/24/18 18:21	4
Molybdenum	**0.17**	**J**	1.3	0.17	mg/Kg		08/23/18 15:12	08/24/18 18:21	4
Nickel	**2.9**		1.3	0.13	mg/Kg		08/23/18 15:12	08/24/18 18:21	4
Selenium	ND		2.6	0.39	mg/Kg		08/23/18 15:12	08/24/18 18:21	4
Silver	**0.26**	**J**	0.65	0.13	mg/Kg		08/23/18 15:12	08/24/18 18:21	4
Thallium	ND		1.3	0.38	mg/Kg		08/23/18 15:12	08/24/18 18:21	4
Vanadium	**120**		1.3	0.18	mg/Kg		08/23/18 15:12	08/24/18 18:21	4
Zinc	**41**		3.9	1.7	mg/Kg		08/23/18 15:12	08/24/18 18:21	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.032**		0.016	0.0023	mg/Kg		08/23/18 15:59	08/28/18 21:41	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Client Sample ID: DG-D4S-0.5-1
Date Collected: 08/21/18 17:00
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-13
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	6.8		1.7	0.29	mg/Kg		08/23/18 15:12	08/24/18 18:25	4
Arsenic	6.2		3.5	0.30	mg/Kg		08/23/18 15:12	08/24/18 18:25	4
Barium	43		1.7	0.25	mg/Kg		08/23/18 15:12	08/24/18 18:25	4
Beryllium	ND		0.35	0.11	mg/Kg		08/23/18 15:12	08/24/18 18:25	4
Cadmium	0.23	J	0.43	0.043	mg/Kg		08/23/18 15:12	08/24/18 18:25	4
Chromium	22		1.7	0.18	mg/Kg		08/23/18 15:12	08/24/18 18:25	4
Cobalt	8.9		0.70	0.070	mg/Kg		08/23/18 15:12	08/24/18 18:25	4
Copper	140		5.2	2.5	mg/Kg		08/23/18 15:12	08/24/18 18:25	4
Lead	890		1.7	0.37	mg/Kg		08/23/18 15:12	08/24/18 18:25	4
Molybdenum	0.24	J	1.7	0.22	mg/Kg		08/23/18 15:12	08/24/18 18:25	4
Nickel	9.3		1.7	0.18	mg/Kg		08/23/18 15:12	08/24/18 18:25	4
Selenium	ND		3.5	0.52	mg/Kg		08/23/18 15:12	08/24/18 18:25	4
Silver	ND		0.87	0.18	mg/Kg		08/23/18 15:12	08/24/18 18:25	4
Thallium	ND		1.7	0.50	mg/Kg		08/23/18 15:12	08/24/18 18:25	4
Vanadium	64		1.7	0.24	mg/Kg		08/23/18 15:12	08/24/18 18:25	4
Zinc	110		5.2	2.2	mg/Kg		08/23/18 15:12	08/24/18 18:25	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.22		0.015	0.0023	mg/Kg		08/23/18 15:59	08/28/18 21:44	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Client Sample ID: DG-D4S-3.5-4
Date Collected: 08/21/18 17:00
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-14
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.5		1.8	0.29	mg/Kg		08/23/18 15:12	08/24/18 18:39	4
Arsenic	130		3.5	0.30	mg/Kg		08/23/18 15:12	08/24/18 18:39	4
Barium	110		1.8	0.25	mg/Kg		08/23/18 15:12	08/24/18 18:39	4
Beryllium	ND		0.35	0.11	mg/Kg		08/23/18 15:12	08/24/18 18:39	4
Cadmium	0.33	J	0.44	0.044	mg/Kg		08/23/18 15:12	08/24/18 18:39	4
Chromium	16		1.8	0.19	mg/Kg		08/23/18 15:12	08/24/18 18:39	4
Cobalt	12		0.70	0.070	mg/Kg		08/23/18 15:12	08/24/18 18:39	4
Copper	150		5.3	2.5	mg/Kg		08/23/18 15:12	08/24/18 18:39	4
Lead	340		1.8	0.37	mg/Kg		08/23/18 15:12	08/24/18 18:39	4
Molybdenum	ND		1.8	0.22	mg/Kg		08/23/18 15:12	08/24/18 18:39	4
Nickel	16		1.8	0.18	mg/Kg		08/23/18 15:12	08/24/18 18:39	4
Selenium	ND		3.5	0.53	mg/Kg		08/23/18 15:12	08/24/18 18:39	4
Silver	0.27	J	0.88	0.18	mg/Kg		08/23/18 15:12	08/24/18 18:39	4
Thallium	ND		1.8	0.51	mg/Kg		08/23/18 15:12	08/24/18 18:39	4
Vanadium	95		1.8	0.24	mg/Kg		08/23/18 15:12	08/24/18 18:39	4
Zinc	130		5.3	2.2	mg/Kg		08/23/18 15:12	08/24/18 18:39	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17		0.015	0.0022	mg/Kg		08/23/18 15:59	08/28/18 21:46	1

Client Sample ID: DUP-1

Date Collected: 08/21/18 00:00
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88189-15

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.4		1.1	0.18	mg/Kg		08/23/18 15:12	08/24/18 18:44	4
Arsenic	3.2		2.1	0.18	mg/Kg		08/23/18 15:12	08/24/18 18:44	4
Barium	44		1.1	0.15	mg/Kg		08/23/18 15:12	08/24/18 18:44	4
Beryllium	ND		0.21	0.069	mg/Kg		08/23/18 15:12	08/24/18 18:44	4
Cadmium	0.12	J	0.26	0.026	mg/Kg		08/23/18 15:12	08/24/18 18:44	4
Chromium	20		1.1	0.11	mg/Kg		08/23/18 15:12	08/24/18 18:44	4
Cobalt	8.7		0.42	0.042	mg/Kg		08/23/18 15:12	08/24/18 18:44	4
Copper	97		3.2	1.5	mg/Kg		08/23/18 15:12	08/24/18 18:44	4
Lead	450		1.1	0.22	mg/Kg		08/23/18 15:12	08/24/18 18:44	4
Molybdenum	0.47	J	1.1	0.14	mg/Kg		08/23/18 15:12	08/24/18 18:44	4
Nickel	9.5		1.1	0.11	mg/Kg		08/23/18 15:12	08/24/18 18:44	4
Selenium	ND		2.1	0.32	mg/Kg		08/23/18 15:12	08/24/18 18:44	4
Silver	0.14	J	0.53	0.11	mg/Kg		08/23/18 15:12	08/24/18 18:44	4
Thallium	ND		1.1	0.31	mg/Kg		08/23/18 15:12	08/24/18 18:44	4
Vanadium	64		1.1	0.14	mg/Kg		08/23/18 15:12	08/24/18 18:44	4
Zinc	71		3.2	1.3	mg/Kg		08/23/18 15:12	08/24/18 18:44	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11		0.014	0.0021	mg/Kg		08/23/18 15:59	08/28/18 21:48	1

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88189-1

SDG No.:

Client Sample ID: DG-A2S-19.5-20 Lab Sample ID: 720-88189-3

Matrix: Solid Lab File ID: FID2000026.D

Analysis Method: 8015B Date Collected: 08/21/2018 14:25

Extraction Method: 3546 Date Extracted: 08/23/2018 08:42

Sample wt/vol: 15.24(g) Date Analyzed: 08/23/2018 22:37

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250037 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	3500		2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	86		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000026.D
Lims ID: 720-88189-E-3-A
Client ID: DG-A2S-19.5-20
Sample Type: Client
Inject. Date: 23-Aug-2018 22:37:41 ALS Bottle#: 76 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053435-026
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m
Limit Group: DRO
Last Update: 24-Aug-2018 14:20:17 Calib Date: 23-Aug-2018 08:54:15
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 14:20:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.334			ND	
23 n-Decane	2.201	2.190	0.011	39501	NC	
A 1 C9-C13	2.799	(1.334-4.263)		1492946	0.6844	
A 21 Stoddard Solvent	2.799	(1.334-4.263)		1492946	NC	
A 57 C10-C12	2.919	(2.190-3.648)		1077345	7.91	
24 Dodecane	3.666	3.648	0.018	11337	NC	
A 3 C9 - C17	3.828	(1.334-6.322)		2487776	1.18	
A 60 C10-C16	4.019	(2.190-5.847)		2042417	1.10	
A 47 C9 - C18	4.049	(1.334-6.765)		3013748	1.59	M
A 15 Kerosene	4.261	(1.334-7.188)		4008350	2.11	M
A 25 C9-C19	4.261	(1.334-7.188)		4008350	1.90	M
26 C13	4.230	4.263	-0.033	45532	NC	
$ 27 n-Decanoic Acid (Surr)		4.640			ND	U
A 59 C12-C16	4.747	(3.648-5.847)		965072	7.85	
A 61 C10-C20	4.893	(2.190-7.596)		7271845	11.4	M
A 28 C9-C24	5.199	(1.334-9.064)		17547338	17.2	M
A 29 C9-C25	5.365	(1.334-9.396)		21952680	19.7	M
A 54 C10-C23	5.454	(2.190-8.719)		15800857	16.2	M
A 4 C10-C24	5.627	(2.190-9.064)		17311796	17.1	M
A 16 C10-C25	5.793	(2.190-9.396)		21717138	19.6	M
45 Hexadecane	5.888	5.847	0.041	75593	NC	
A 14 C10-C26	5.953	(2.190-9.717)		25569461	21.8	M
A 67 C12-C22	6.004	(3.648-8.360)		14154553	15.3	M
A 32 C10-C28	6.258	(2.190-10.325)		34464832	26.8	M
A 5 Diesel	6.258	(2.190-10.325)		34464832	26.8	M
A 12 Unknown Hydrocarbons	6.258	(2.190-10.325)		34464832	NC	M
A 30 C13-C22	6.311	(4.263-8.360)		13974494	15.2	M
44 Heptadecane	6.338	6.322	0.016	244281	NC	
A 31 C12-C24	6.356	(3.648-9.064)		16234451	16.5	M
49 n-Octadecane	6.786	6.765	0.021	479191	NC	M
A 9 Crude Oil Range Organics (	6.873	(1.334-12.411)		134346414	NC	M
A 11 Bunker Range Organics (C9-	6.873	(1.334-12.411)		134346414	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.873	(1.334-12.411)		134346414	63.6	M
33 C19	7.194	7.188	0.006	592952	NC	M
A 64 C13-C28	7.294	(4.263-10.325)		33207428	26.1	M
A 17 C10-C36	7.301	(2.190-12.411)		134110872	83.2	M
A 13 C9-C40	7.364	(1.334-13.393)		208702718	133.6	M
A 68 Crude Oil Range Organics (	7.364	(1.334-13.393)		208702718	NC	M
A 58 C16-C24	7.455	(5.847-9.064)		15269379	15.9	M
62 icosane	7.608	7.596	0.012	702663	NC	M
A 6 C10-C40	7.792	(2.190-13.393)		208467176	133.6	M
$ 34 p-Terphenyl	8.079	8.083	-0.004	43485293	21.4	M
35 n-Docosane		8.360			ND	
A 18 C12-C40	8.520	(3.648-13.393)		207389831	133.3	M
36 Tricosane	8.741	8.719	0.022	1510939	NC	M
A 66 C13-C40	8.828	(4.263-13.393)		207209772	133.3	M
37 n-Tetracosane	9.097	9.064	0.033	1915240	NC	M
A 2 C16-C36 ORO	9.129	(5.847-12.411)		132068455	111.7	M
38 C25	9.397	9.396	0.001	3451215	NC	M
A 19 C16-C40	9.620	(5.847-13.393)		206424759	133.2	M
46 n-Hexacosane	9.773	9.717	0.056	1647633	NC	M
A 20 C19-C36	9.800	(7.188-12.411)		24831892	18.2	
A 55 C23-C32	10.074	(8.719-11.430)		50380711	65.1	M
39 n-Octacosane	10.335	10.325	0.010	2865817	NC	M
65 C29	10.627	10.614	0.013	5489000	NC	M
A 40 C24-C36	10.737	(9.064-12.411)		77444707	79.0	M
A 7 Motor Oil	10.737	(9.064-12.411)		62714719	64.0	
A 10 C22-C40	10.876	(8.360-13.393)		56231461	40.5	
A 50 C25-C36	10.904	(9.396-12.411)		63541740	69.0	
A 41 C23-C40	11.056	(8.719-13.393)		111213174	81.4	
A 8 C24-C40	11.228	(9.064-13.393)		117524749	87.6	
56 Dotriacontane	11.517	11.430	0.087	10188726	NC	M
A 51 C28-C40	11.859	(10.325-13.393)		126651205	116.8	
A 63 C29-C40	12.004	(10.614-13.393)		126321839	126.4	
42 n-Hexatriacontane		12.411			ND	
43 C40		13.393			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 24-Aug-2018 14:20:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000026.D

Injection Date:	23-Aug-2018 22:37:41	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88189-E-3-A	Lab Sample ID:	720-88189-3	Worklist Smp#:	26
Client ID:	DG-A2S-19.5-20				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	76
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000026.D				
Lims ID:	720-88189-E-3-A				
Client ID:	DG-A2S-19.5-20				
Sample Type:	Client				
Inject. Date:	23-Aug-2018 22:37:41	ALS Bottle#:	76	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053435-026				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 14:20:17	Calib Date:	23-Aug-2018 08:54:15		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				
First Level Reviewer: luj		Date:	24-Aug-2018 14:20:17		

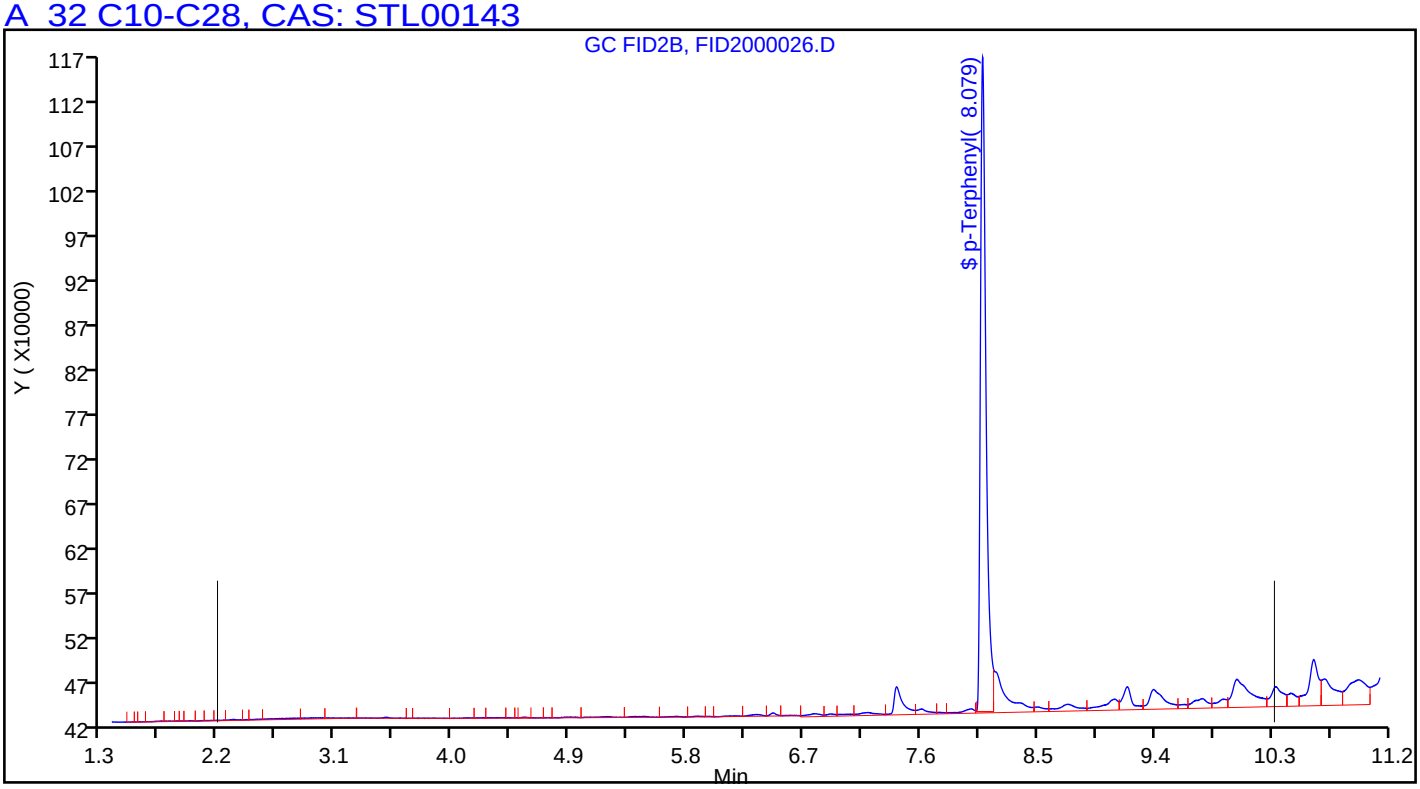
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	21.4	85.54

Report Date: 24-Aug-2018 14:20:20 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000026.D				
Injection Date:	23-Aug-2018 22:37:41	Instrument ID:	CHDRO6		
Lims ID:	720-88189-E-3-A	Lab Sample ID:	720-88189-3		
Client ID:	DG-A2S-19.5-20				
Operator ID:	DCH	ALS Bottle#:	76	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

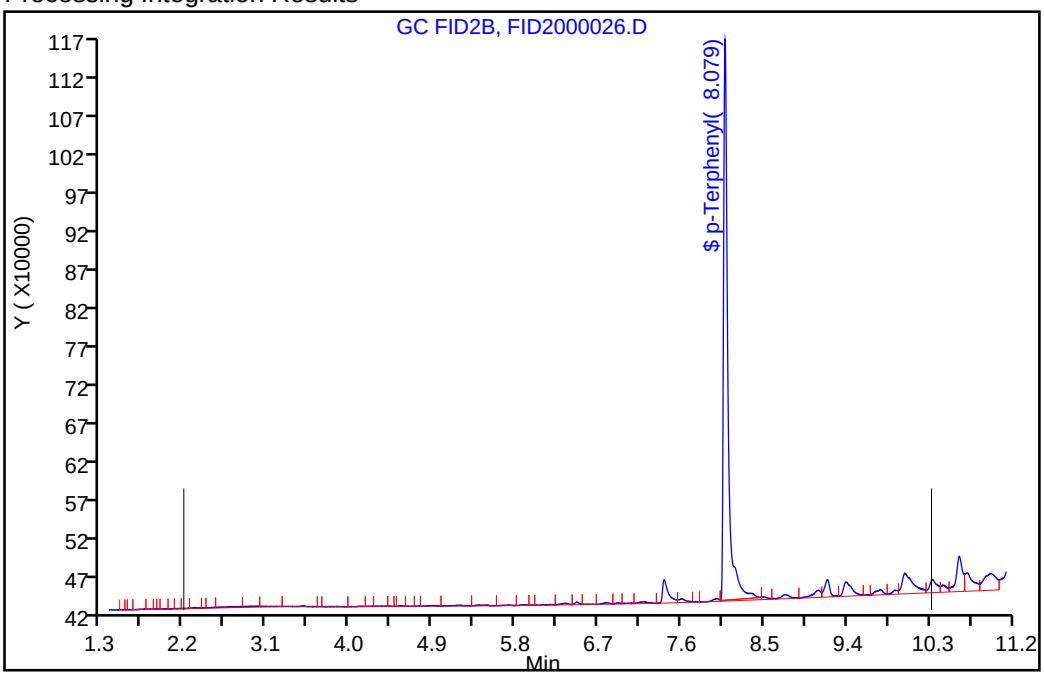
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000026.D				
Injection Date:	23-Aug-2018 22:37:41	Instrument ID:	CHDRO6		
Lims ID:	720-88189-E-3-A	Lab Sample ID:	720-88189-3		
Client ID:	DG-A2S-19.5-20				
Operator ID:	DCH	ALS Bottle#:	76	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.258, CAS: STL00143

Signal: 1

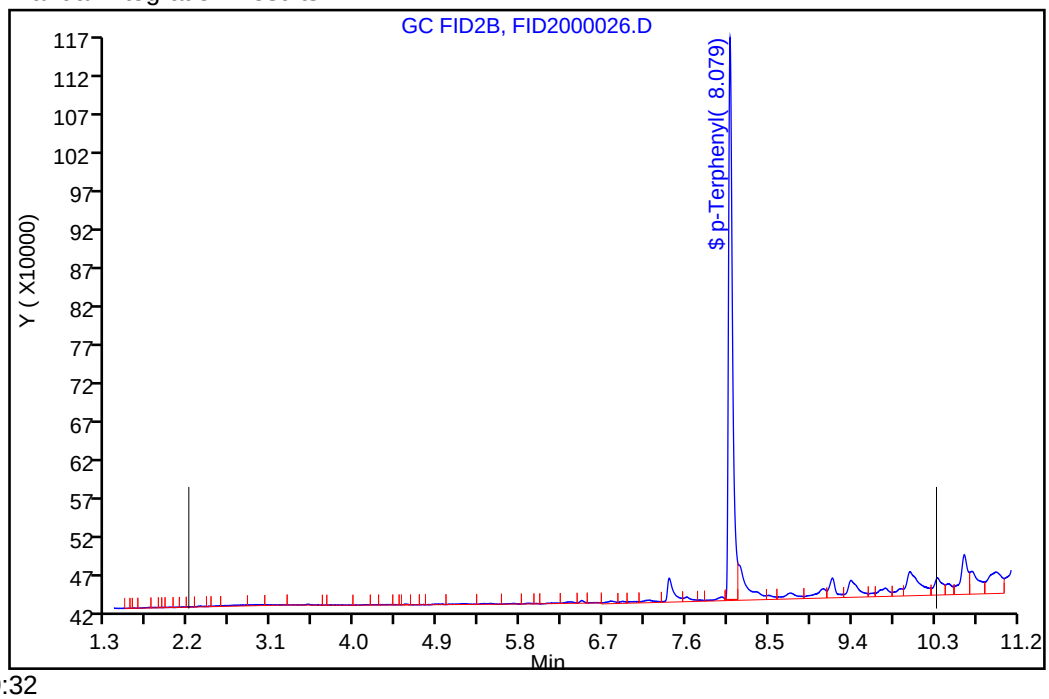
Processing Integration Results

RT: 6.26
Response: 19995020
Amount: 18.620888



Manual Integration Results

RT: 6.26
Response: 34464832
Amount: 26.813992



Reviewer: luj, 24-Aug-2018 14:19:32

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

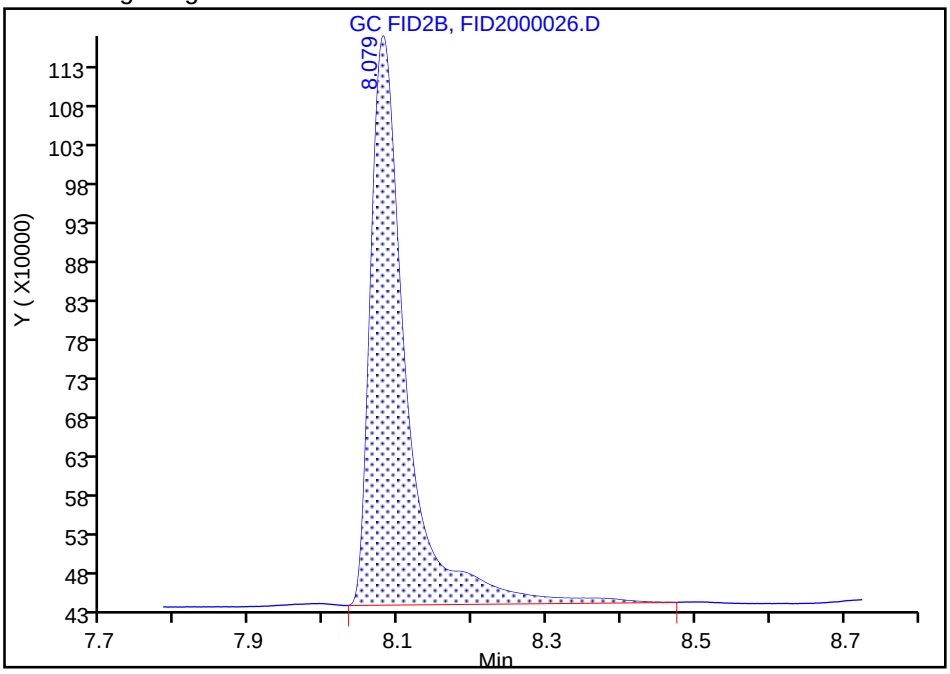
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000026.D				
Injection Date:	23-Aug-2018 22:37:41	Instrument ID:	CHDRO6		
Lims ID:	720-88189-E-3-A	Lab Sample ID:	720-88189-3		
Client ID:	DG-A2S-19.5-20				
Operator ID:	DCH	ALS Bottle#:	76	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

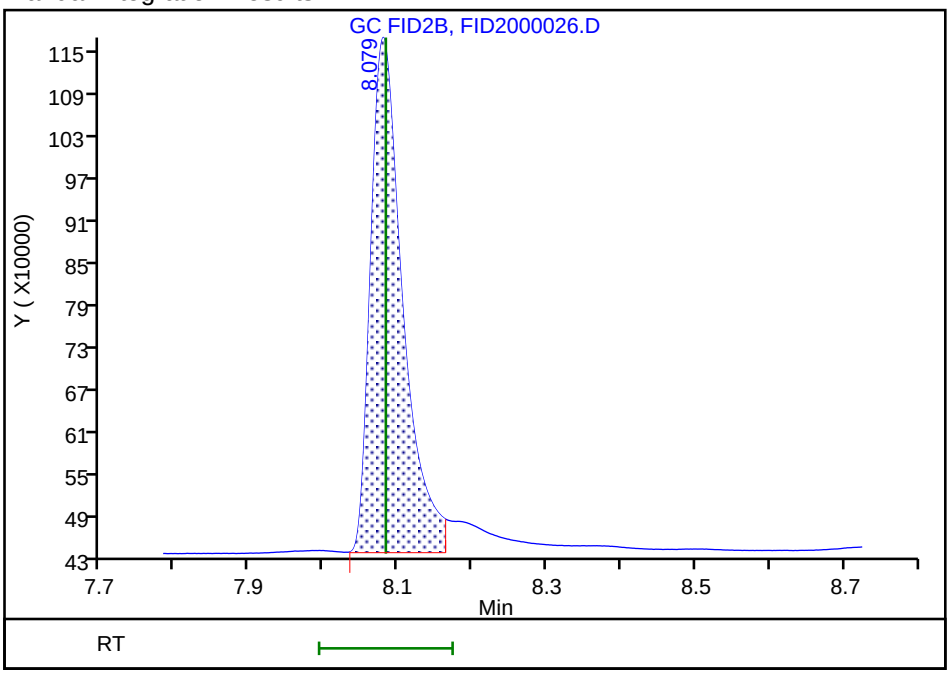
Processing Integration Results

RT: 8.08
Area: 48148600
Amount: 23.679010
Amount Units: mg/L



Manual Integration Results

RT: 8.08
Area: 43485293
Amount: 21.385641
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 14:19:55

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88189-1

SDG No.:

Client Sample ID: DG-B2S-19.5-20 Lab Sample ID: 720-88189-4

Matrix: Solid Lab File ID: FID1000035.D

Analysis Method: 8015B Date Collected: 08/21/2018 15:10

Extraction Method: 3546 Date Extracted: 08/23/2018 08:42

Sample wt/vol: 15.54(g) Date Analyzed: 08/24/2018 02:15

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250036 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	44000		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	89		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000035.D
Lims ID: 720-88189-D-4-A
Client ID: DG-B2S-19.5-20
Sample Type: Client
Inject. Date: 24-Aug-2018 02:15:56 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053434-035
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\DRO6_A.m
Limit Group: DRO
Last Update: 24-Aug-2018 12:15:52 Calib Date: 23-Aug-2018 11:10:00
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000007.D

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 12:15:52

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	1.261	1.240	0.021	106195	NC	
	23 n-Decane	2.109	2.115	-0.006	97102	NC	
A	21 Stoddard Solvent	2.726	(1.240-4.213)		14049910	7.89	M
A	1 C9-C13	2.726	(1.240-4.213)		14049910	7.91	M
A	57 C10-C12	2.853	(2.115-3.591)		9116485	5.91	M
	24 Dodecane	3.632	3.591	0.041	525233	NC	M
A	3 C9 - C17	3.765	(1.240-6.290)		33520853	17.2	M
A	60 C10-C16	3.964	(2.115-5.813)		20424778	11.7	M
A	47 C9 - C18	3.989	(1.240-6.739)		41560257	25.7	M
A	25 C9-C19	4.203	(1.240-7.167)		52581036	26.8	M
A	15 Kerosene	4.203	(1.240-7.167)		52581036	32.6	M
	26 C13	4.283	4.213	0.070	6984	NC	M
$	27 n-Decanoic Acid (Surr)		4.583			ND	U
A	59 C12-C16	4.702	(3.591-5.813)		11308293	7.33	M
A	62 C10-C20	4.846	(2.115-7.578)		74802414	48.5	M
A	28 C9-C24	5.150	(1.240-9.060)		200245018	129.8	M
A	29 C9-C25	5.318	(1.240-9.397)		307447316	199.3	M
A	54 C10-C23	5.413	(2.115-8.711)		177026771	114.8	M
A	4 C10-C24	5.588	(2.115-9.060)		196852463	127.6	M
A	16 C10-C25	5.756	(2.115-9.397)		304054761	197.1	M
	45 Hexadecane	5.768	5.813	-0.045	1375285	NC	M
A	14 C10-C26	5.918	(2.115-9.721)		347024740	225.0	M
A	67 C12-C22	5.970	(3.591-8.348)		134613874	87.3	M
A	12 Unknown Hydrocarbons	6.226	(2.115-10.338)		531259727	NC	M
A	5 Diesel	6.226	(2.115-10.338)		531259727	344.4	M
A	32 C10-C28	6.226	(2.115-10.338)		531259727	344.4	M
A	30 C13-C22	6.281	(4.213-8.348)		133073004	86.3	M
	44 Heptadecane	6.229	6.290	-0.061	4075645	NC	M
A	31 C12-C24	6.326	(3.591-9.060)		187735978	121.7	M
	51 n-Octadecane	6.716	6.739	-0.023	2167220	NC	M
A	9 Crude Oil Range Organics (	6.847	(1.240-12.455)		1799914182	NC	M
A	11 Bunker Range Organics (C9-	6.847	(1.240-12.455)		1799914182	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.847	(1.240-12.455)		1799914182	1016.6	M
33 C19	7.167	7.167	0.000	1440549	NC	M
A 64 C13-C28	7.275	(4.213-10.338)		520602372	337.5	M
A 17 C10-C36	7.285	(2.115-12.455)		1796521627	1164.8	M
A 13 C9-C40	7.346	(1.240-13.451)		2153273414	1596.9	M
A 68 Crude Oil Range Organics (	7.346	(1.240-13.451)		2153273414	NC	M
A 58 C16-C24	7.436	(5.813-9.060)		177802970	115.3	M
61 icosane	7.573	7.578	-0.005	8129421	NC	M
A 6 C10-C40	7.783	(2.115-13.451)		2149880859	1595.5	M
$ 34 p-Terphenyl	8.042	8.044	-0.002	42586442	22.2	M
35 n-Docosane	8.354	8.348	0.006	6558848	NC	M
A 18 C12-C40	8.521	(3.591-13.451)		2140764374	1593.1	M
36 Tricosane	8.710	8.711	-0.001	17196641	NC	M
A 66 C13-C40	8.832	(4.213-13.451)		2139223504	1593.7	M
37 n-Tetracosane	9.080	9.060	0.020	20329990	NC	M
A 2 C16-C36 ORO	9.134	(5.813-12.455)		1841940799	1614.8	
38 C25	9.363	9.397	-0.034	43326870	NC	M
A 19 C16-C40	9.632	(5.813-13.451)		2130831366	1593.7	M
46 n-Hexacosane	9.694	9.721	-0.027	22883330	NC	M
A 20 C19-C36	9.811	(7.167-12.455)		1802072507	1355.8	
A 55 C23-C32	10.085	(8.711-11.458)		977432460	1407.9	M
39 n-Octacosane	10.326	10.338	-0.012	34185757	NC	M
65 C29	10.625	10.631	-0.006	72624174	NC	M
A 7 Motor Oil	10.757	(9.060-12.455)		1407877052	1581.0	
A 40 C24-C36	10.757	(9.060-12.455)		1574664765	1768.3	M
A 10 C22-C40	10.900	(8.348-13.451)		1762832741	1417.6	
A 49 C25-C36	10.926	(9.397-12.455)		1535793736	1715.6	M
A 41 C23-C40	11.081	(8.711-13.451)		1990050729	1557.0	M
A 8 C24-C40	11.256	(9.060-13.451)		1953028396	1604.3	M
56 Dotriacontane	11.468	11.458	0.010	34571340	NC	M
A 50 C28-C40	11.895	(10.338-13.451)		1652806889	1741.3	M
A 63 C29-C40	12.041	(10.631-13.451)		1569688255	1811.3	M
42 n-Hexatriacontane	12.425	12.455	-0.030	40694197	NC	M
43 C40	13.486	13.451	0.035	105241376	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

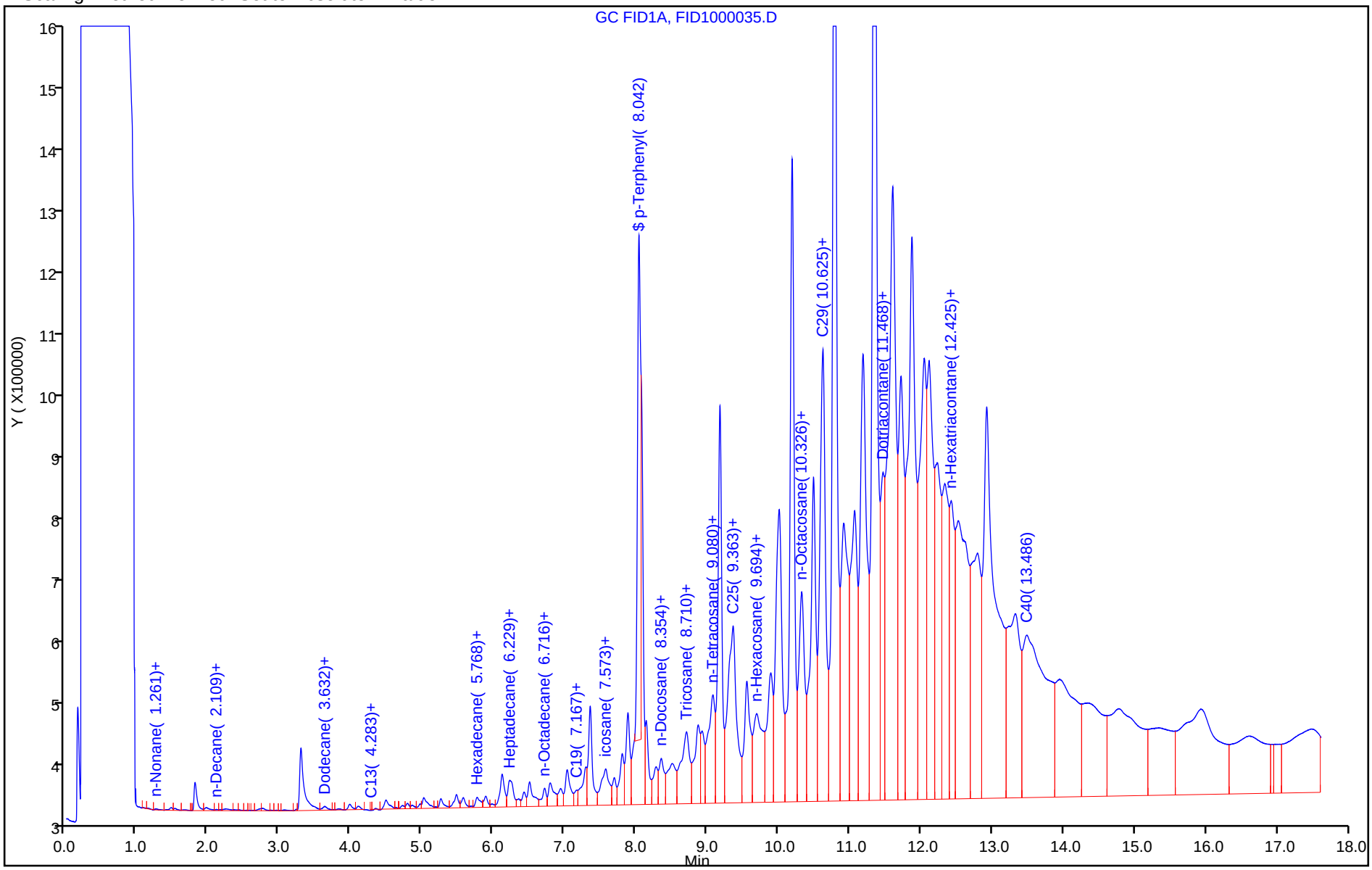
Report Date: 24-Aug-2018 12:15:54 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000035.D

Injection Date:	24-Aug-2018 02:15:56	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88189-D-4-A	Lab Sample ID:	720-88189-4	Worklist Smp#:	35
Client ID:	DG-B2S-19.5-20				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000035.D				
Lims ID:	720-88189-D-4-A				
Client ID:	DG-B2S-19.5-20				
Sample Type:	Client				
Inject. Date:	24-Aug-2018 02:15:56	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053434-035				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\DRO6_A.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 12:15:52	Calib Date:	23-Aug-2018 11:10:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000007.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				
First Level Reviewer: luj		Date:	24-Aug-2018 12:15:52		

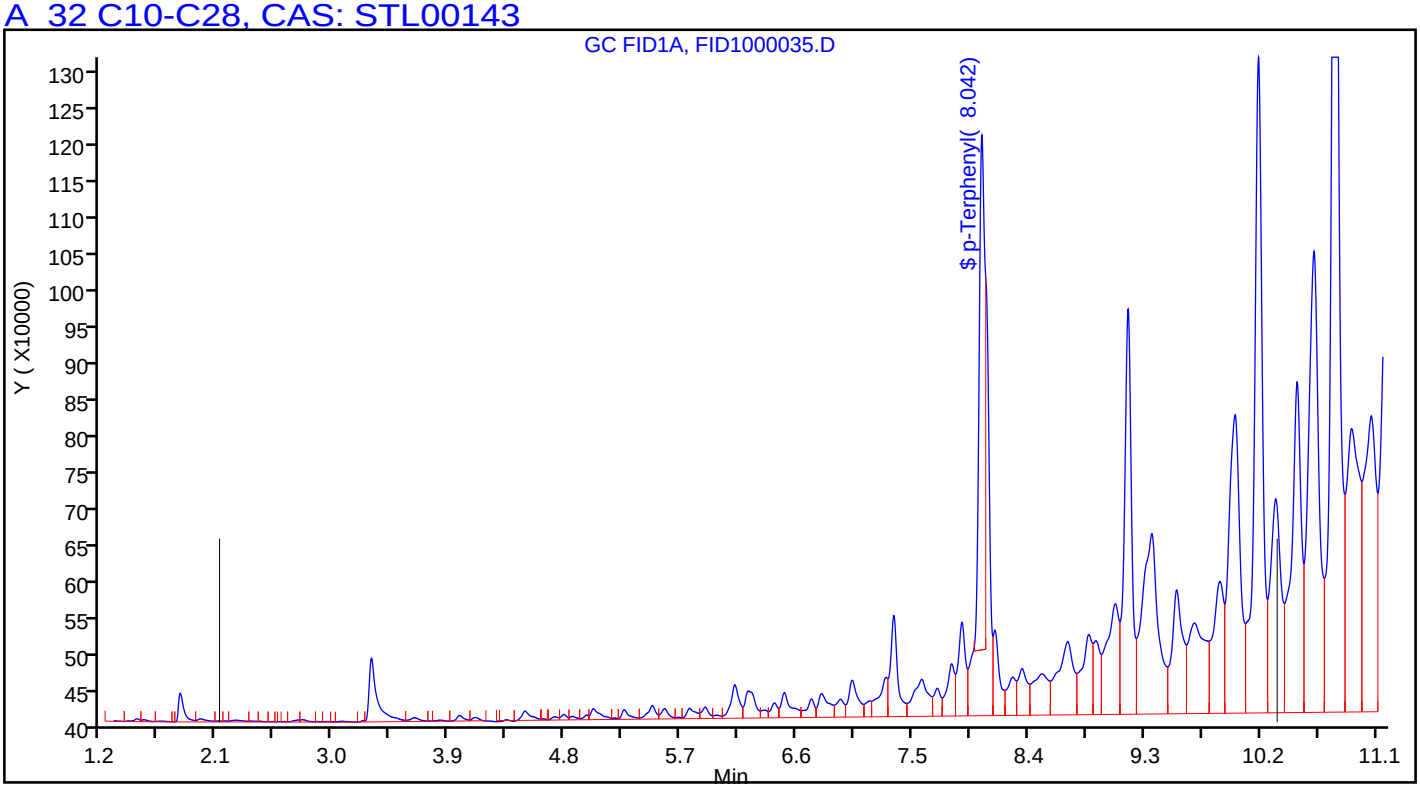
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	22.2	88.71

Report Date: 24-Aug-2018 12:16:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000035.D				
Injection Date:	24-Aug-2018 02:15:56	Instrument ID:	CHDRO6		
Lims ID:	720-88189-D-4-A	Lab Sample ID:	720-88189-4		
Client ID:	DG-B2S-19.5-20				
Operator ID:	DCH	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A_32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

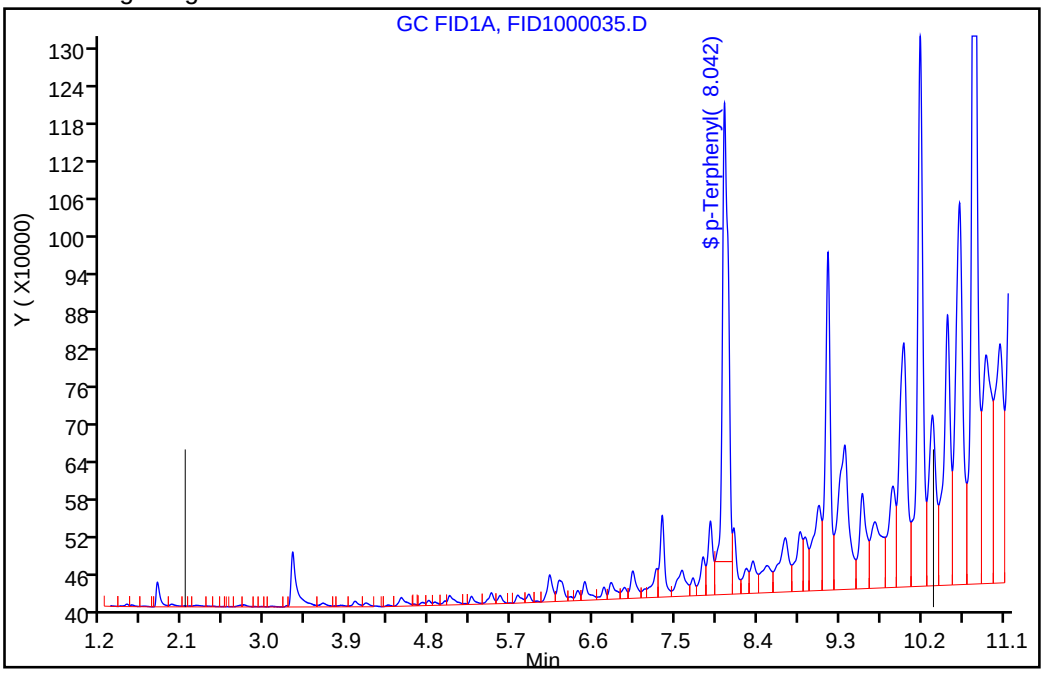
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000035.D				
Injection Date:	24-Aug-2018 02:15:56	Instrument ID:	CHDRO6		
Lims ID:	720-88189-D-4-A	Lab Sample ID:	720-88189-4		
Client ID:	DG-B2S-19.5-20				
Operator ID:	DCH	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.226, CAS: STL00143

Signal: 1

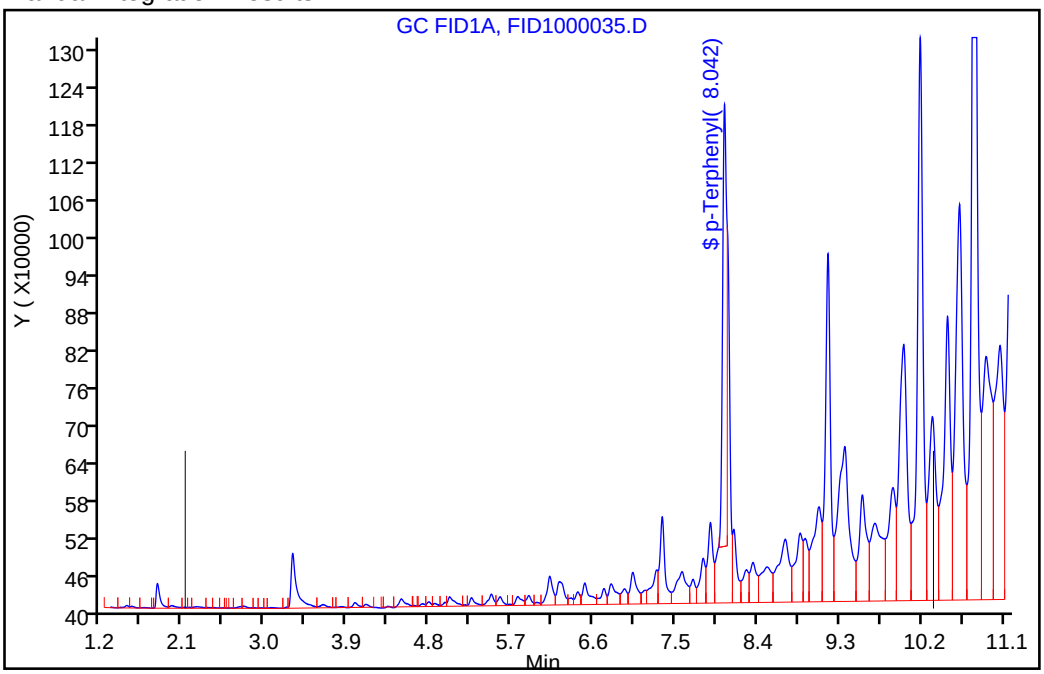
Processing Integration Results

RT: 6.23
Response: 445256046
Amount: 288.6758



Manual Integration Results

RT: 6.23
Response: 531259727
Amount: 344.4352



Reviewer: luj, 24-Aug-2018 12:15:37

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

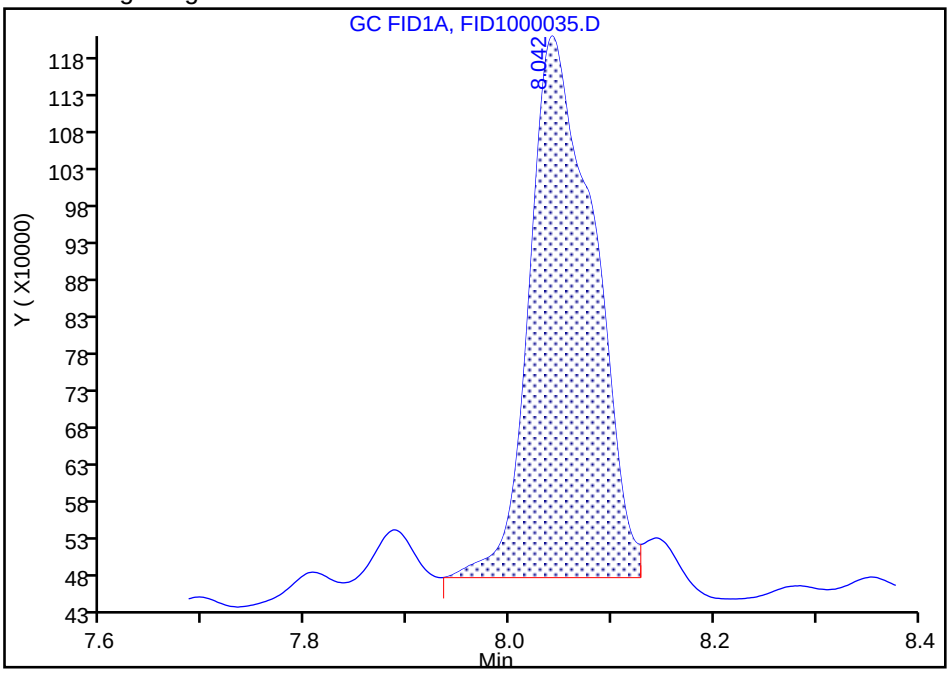
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000035.D				
Injection Date:	24-Aug-2018 02:15:56	Instrument ID:	CHDRO6		
Lims ID:	720-88189-D-4-A	Lab Sample ID:	720-88189-4		
Client ID:	DG-B2S-19.5-20				
Operator ID:	DCH	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

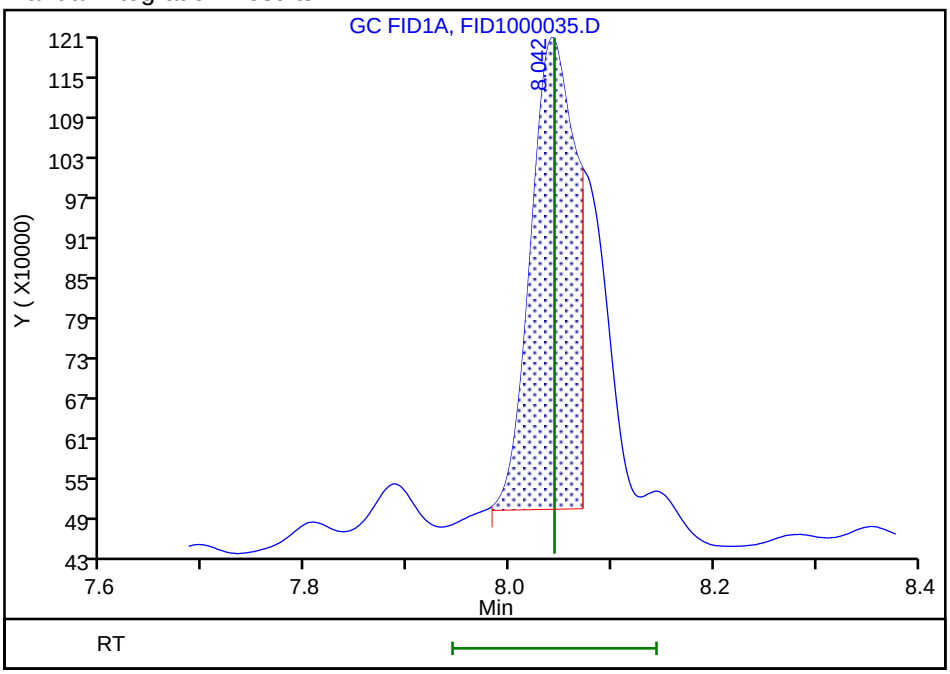
Processing Integration Results

RT: 8.04
Area: 64347062
Amount: 33.507811
Amount Units: mg/L



Manual Integration Results

RT: 8.04
Area: 42586442
Amount: 22.176279
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 12:15:09

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88189-1

SDG No.:

Client Sample ID: DG-A2S-19.5-20 Lab Sample ID: 720-88189-3

Matrix: Solid Lab File ID: 08281810.D

Analysis Method: 8260B Date Collected: 08/21/2018 14:25

Sample wt/vol: 6.699(g) Date Analyzed: 08/28/2018 12:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.7	0.90
67-64-1	Acetone	42		37	28
71-43-2	Benzene	ND		3.7	0.49
75-27-4	Dichlorobromomethane	ND		3.7	0.54
108-86-1	Bromobenzene	ND		3.7	0.59
74-97-5	Chlorobromomethane	ND		15	0.54
75-25-2	Bromoform	ND		3.7	1.5
74-83-9	Bromomethane	ND		7.5	0.59
78-93-3	2-Butanone (MEK)	ND		37	16
104-51-8	n-Butylbenzene	ND		3.7	0.75
135-98-8	sec-Butylbenzene	ND		3.7	0.54
98-06-6	tert-Butylbenzene	ND		3.7	0.54
75-15-0	Carbon disulfide	ND		3.7	1.5
56-23-5	Carbon tetrachloride	ND		3.7	0.46
108-90-7	Chlorobenzene	ND		3.7	0.52
75-00-3	Chloroethane	ND		7.5	0.42
67-66-3	Chloroform	ND		3.7	0.49
74-87-3	Chloromethane	ND		7.5	0.59
95-49-8	2-Chlorotoluene	ND		3.7	0.49
106-43-4	4-Chlorotoluene	ND		3.7	0.51
124-48-1	Chlorodibromomethane	ND		3.7	0.53
95-50-1	1,2-Dichlorobenzene	ND		3.7	0.51
541-73-1	1,3-Dichlorobenzene	ND		3.7	0.54
106-46-7	1,4-Dichlorobenzene	ND		3.7	0.53
142-28-9	1,3-Dichloropropane	ND		3.7	0.54
563-58-6	1,1-Dichloropropene	ND		3.7	0.52
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.5	1.3
106-93-4	Ethylene Dibromide	ND		3.7	1.1
74-95-3	Dibromomethane	ND		7.5	0.64
75-71-8	Dichlorodifluoromethane	ND		7.5	0.59
75-34-3	1,1-Dichloroethane	ND		3.7	0.51
107-06-2	1,2-Dichloroethane	ND		3.7	0.57
75-35-4	1,1-Dichloroethene	ND		3.7	0.46
156-59-2	cis-1,2-Dichloroethene	ND		3.7	0.51
156-60-5	trans-1,2-Dichloroethene	ND		3.7	0.56
78-87-5	1,2-Dichloropropane	ND		3.7	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88189-1

SDG No.:

Client Sample ID: DG-A2S-19.5-20 Lab Sample ID: 720-88189-3

Matrix: Solid Lab File ID: 08281810.D

Analysis Method: 8260B Date Collected: 08/21/2018 14:25

Sample wt/vol: 6.699(g) Date Analyzed: 08/28/2018 12:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.7	0.52
10061-02-6	trans-1,3-Dichloropropene	ND		3.7	0.50
100-41-4	Ethylbenzene	ND		3.7	0.56
87-68-3	Hexachlorobutadiene	ND		3.7	0.67
591-78-6	2-Hexanone	ND		37	7.5
98-82-8	Isopropylbenzene	ND		3.7	0.51
99-87-6	4-Isopropyltoluene	ND		3.7	1.9
75-09-2	Methylene Chloride	ND		7.5	4.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		37	7.5
91-20-3	Naphthalene	ND		7.5	1.1
103-65-1	N-Propylbenzene	ND		3.7	0.49
100-42-5	Styrene	ND		3.7	0.47
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.7	0.57
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.7	0.56
127-18-4	Tetrachloroethene	ND		3.7	0.50
108-88-3	Toluene	ND		3.7	0.53
87-61-6	1,2,3-Trichlorobenzene	ND		3.7	0.55
120-82-1	1,2,4-Trichlorobenzene	ND		3.7	0.53
71-55-6	1,1,1-Trichloroethane	ND		3.7	0.46
79-00-5	1,1,2-Trichloroethane	ND		3.7	0.52
79-01-6	Trichloroethene	ND		3.7	0.47
75-69-4	Trichlorofluoromethane	ND		3.7	0.42
96-18-4	1,2,3-Trichloropropane	ND		3.7	0.57
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.7	1.6
95-63-6	1,2,4-Trimethylbenzene	ND		3.7	1.2
108-67-8	1,3,5-Trimethylbenzene	ND		3.7	0.49
108-05-4	Vinyl acetate	ND		15	3.7
75-01-4	Vinyl chloride	ND		3.7	0.54
1330-20-7	Xylenes, Total	ND		3.7	0.91
594-20-7	2,2-Dichloropropane	ND		3.7	1.5
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		190	75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88189-1

SDG No.:

Client Sample ID: DG-A2S-19.5-20 Lab Sample ID: 720-88189-3

Matrix: Solid Lab File ID: 08281810.D

Analysis Method: 8260B Date Collected: 08/21/2018 14:25

Sample wt/vol: 6.699(g) Date Analyzed: 08/28/2018 12:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	92		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		60-140
2037-26-5	Toluene-d8 (Surr)	90		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281810.D
Lims ID: 720-88189-A-3-A
Client ID: DG-A2S-19.5-20
Sample Type: Client
Inject. Date: 28-Aug-2018 12:18:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88189-A-3
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:06:05 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:06:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.825	-0.006	0	254288	250.0	
* 2 Fluorobenzene	96	10.605	10.605	0.000	98	839939	25.0	
* 4 Chlorobenzene-d5	117	14.445	14.445	0.000	86	603280	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.585	17.591	-0.006	95	275776	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.191	-0.006	94	73728	7.82	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.709	-0.007	0	89989	7.62	
$ 10 Toluene-d8 (Surr)	98	12.708	12.707	-0.006	93	229245	6.75	
$ 11 4-Bromofluorobenzene	95	15.933	15.932	-0.006	94	81085	6.91	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	-0.006	84	68734	6.44	
28 Acetone	58	6.374	6.370	0.000	100	27539	27.9	
34 Methylene Chloride	84	7.081	7.077	0.000	95	2494	0.2744	
144 Methyl acetate	43	7.136	7.126	0.006	98	5337	0.7435	
45 2-Butanone (MEK)	72	8.648	8.637	0.006	98	1740	1.55	
140 Ethyl acetate	43	9.007	9.002	-0.001	99	199179	17.9	
59 Benzene	78	10.373	10.373	-0.006	93	2073	0.0580	
75 Toluene	92	12.793	12.794	-0.006	98	4928	0.2485	
128 Butyl Ether	87	14.665	14.659	0.000	94	1317	0.2194	
112 Naphthalene	128	20.749	20.741	-0.006	93	4205	0.1481	
29 Pentane	43	6.374	6.410	-0.036	69	90525	NR	
135 n-Nonane	57	15.061	15.055	0.006	1	116	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	1317557	17.1	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	528502	6.86	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	629972	8.18	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1437677	18.7	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	687208	8.92	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	1341306	17.4	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	807328	10.5	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	161077	2.09	
A 121 C7-C12	1	15.454	(10.903-20.005)		0	344001	4.47	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

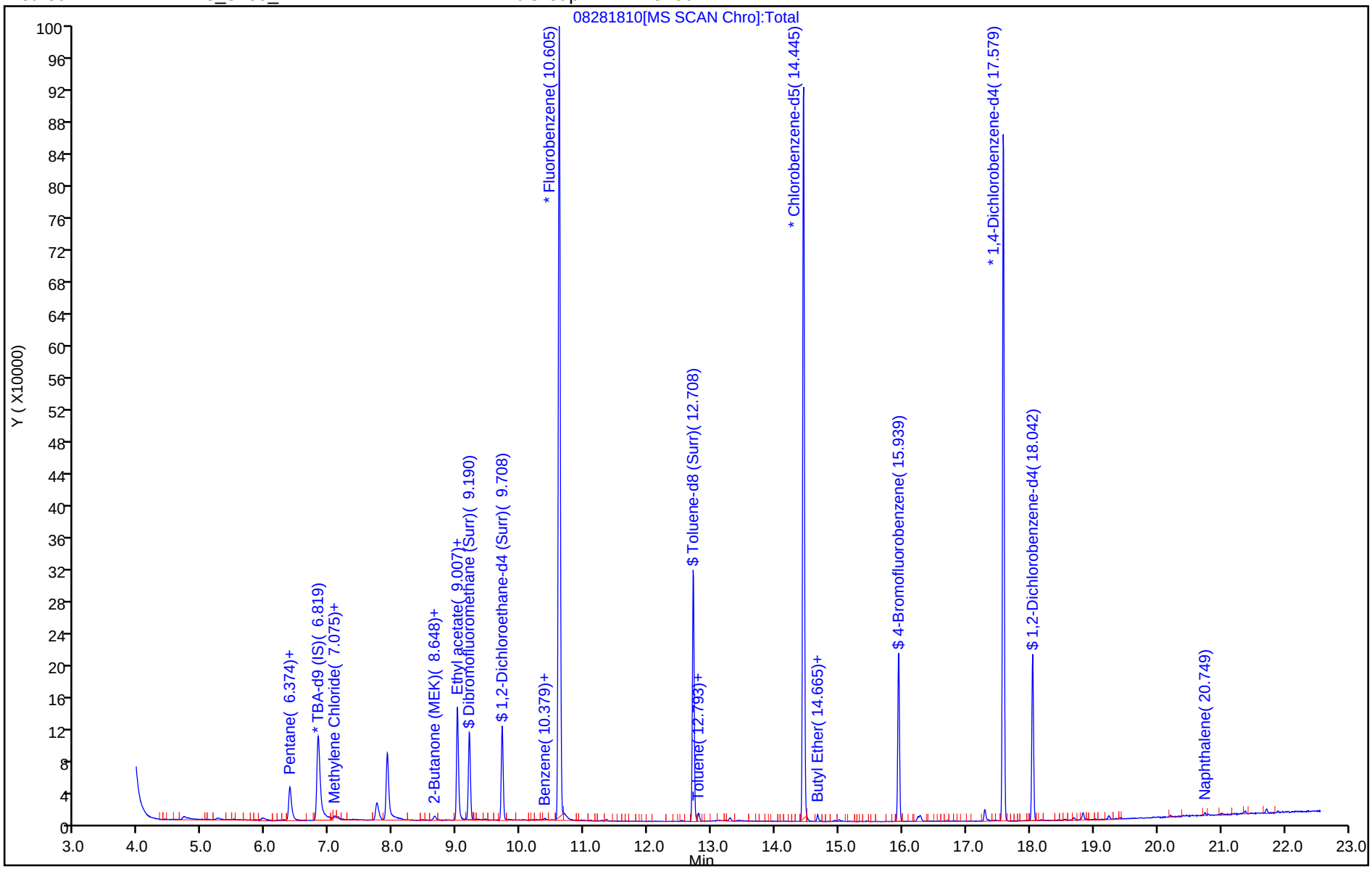
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:06:06 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281810.D				
Injection Date:	28-Aug-2018 12:18:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88189-A-3-A	Lab Sample ID:	720-88189-3	Worklist Smp#:	10
Client ID:	DG-A2S-19.5-20				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281810.D
Lims ID: 720-88189-A-3-A
Client ID: DG-A2S-19.5-20
Sample Type: Client
Inject. Date: 28-Aug-2018 12:18:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88189-A-3
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:06:05 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:06:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.62	101.60
$ 10 Toluene-d8 (Surr)	7.50	6.75	89.98
$ 11 4-Bromofluorobenzene	7.50	6.91	92.15
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

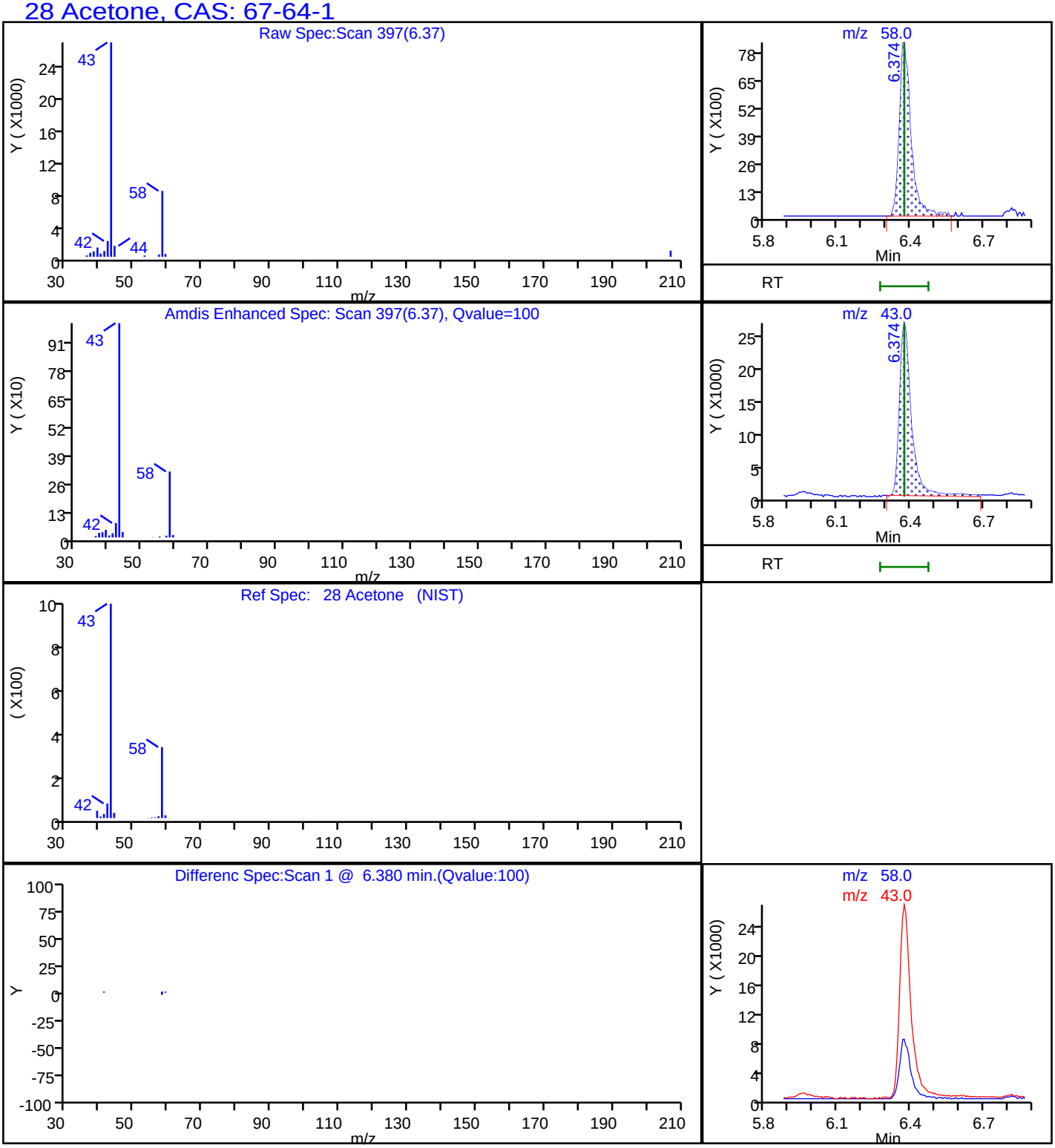
Report Date: 29-Aug-2018 09:06:06 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281810.D

Injection Date:	28-Aug-2018 12:18:30	Instrument ID:	HP13		
Lims ID:	720-88189-A-3-A	Lab Sample ID:	720-88189-3		
Client ID:	DG-A2S-19.5-20				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



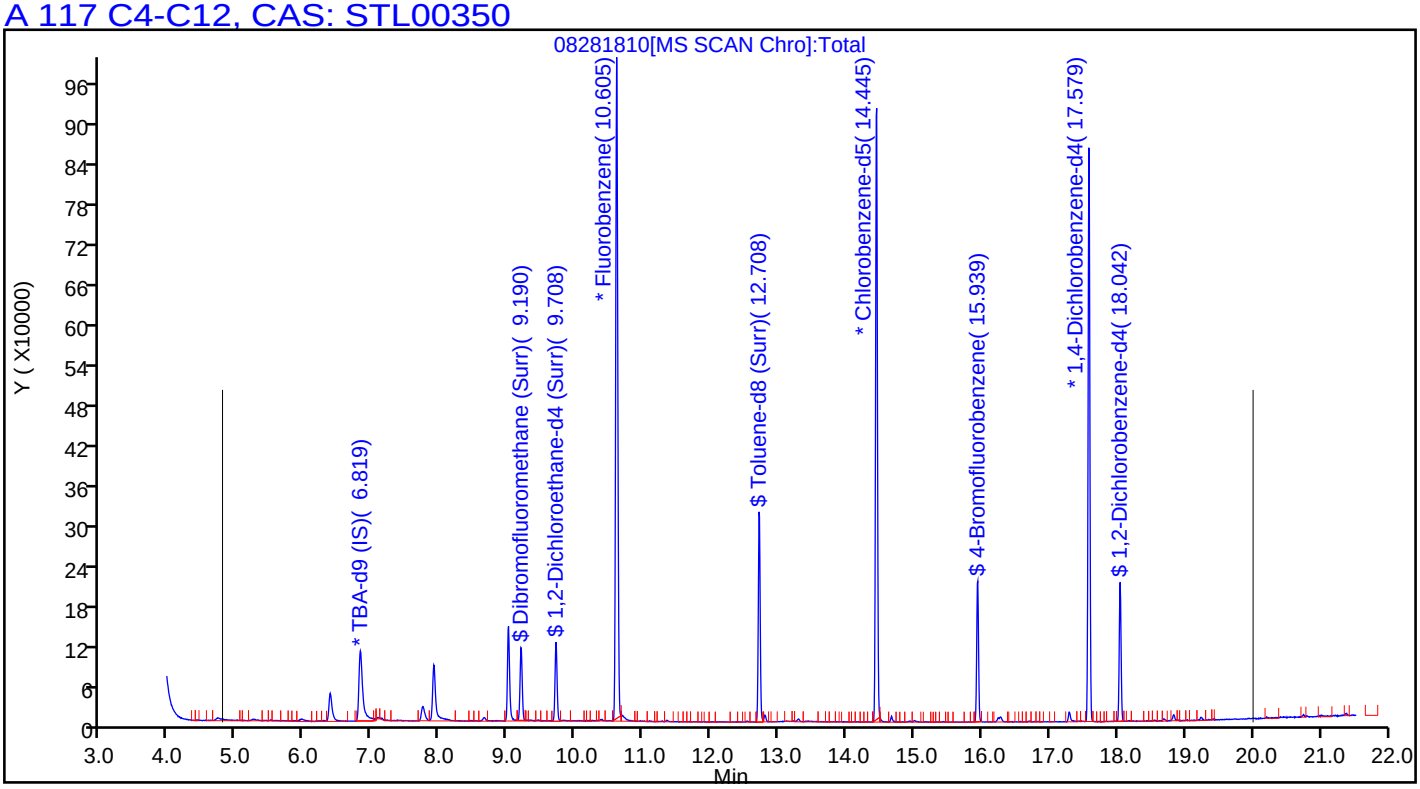
Report Date: 29-Aug-2018 09:06:06 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281810.D

Injection Date:	28-Aug-2018 12:18:30	Instrument ID:	HP13		
Lims ID:	720-88189-A-3-A	Lab Sample ID:	720-88189-3		
Client ID:	DG-A2S-19.5-20				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



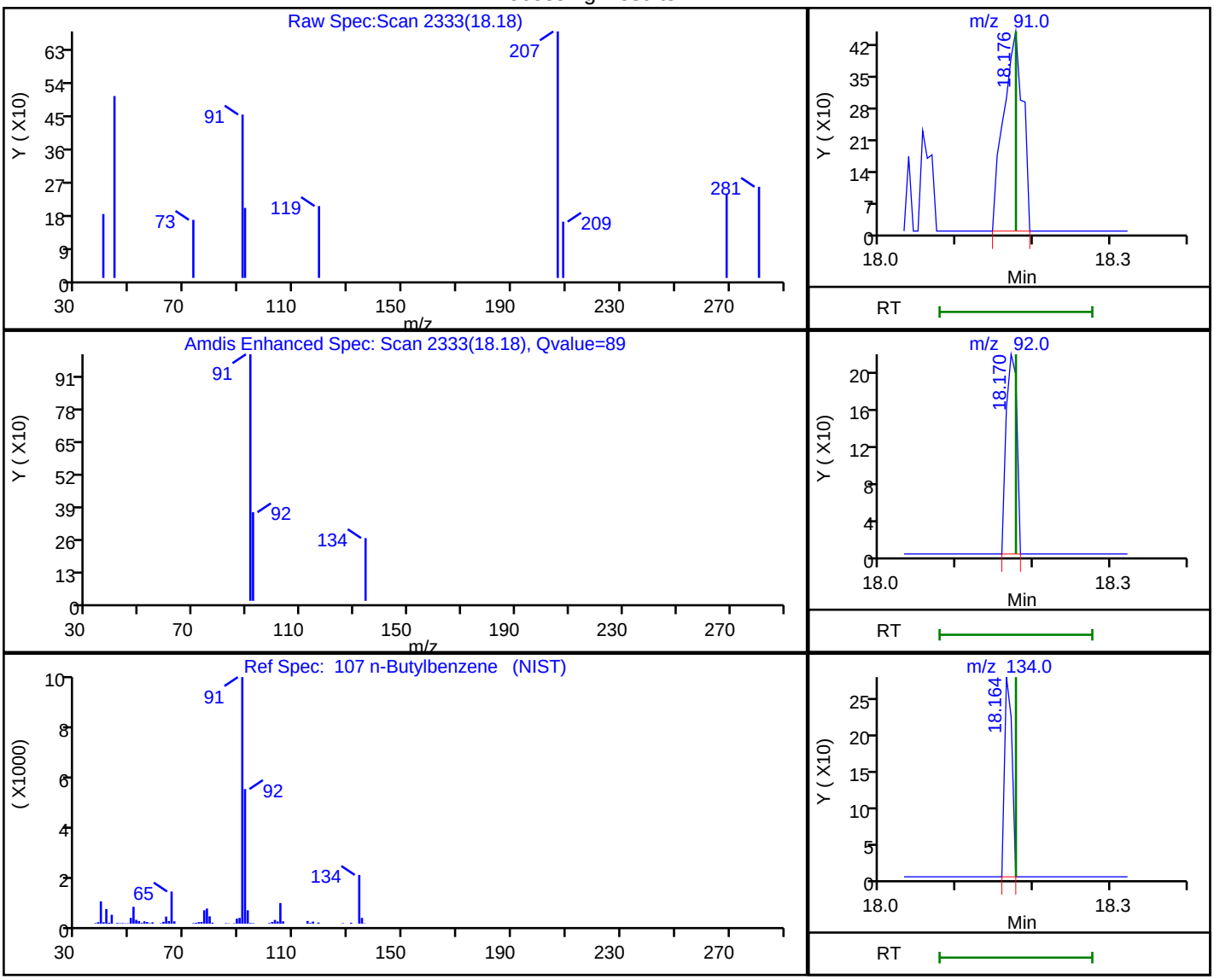
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281810.D				
Injection Date:	28-Aug-2018 12:18:30	Instrument ID:	HP13		
Lims ID:	720-88189-A-3-A	Lab Sample ID:	720-88189-3		
Client ID:	DG-A2S-19.5-20				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

107 n-Butylbenzene, CAS: 104-51-8

Processing Results



RT	Mass	Response	Amount
18.18	91.00	781	0.028938
18.17	92.00	207	
18.16	134.00	178	

Reviewer: chaijita, 29-Aug-2018 09:05:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88189-1

SDG No.:

Client Sample ID: DG-B2S-19.5-20 Lab Sample ID: 720-88189-4

Matrix: Solid Lab File ID: 08281826.D

Analysis Method: 8260B Date Collected: 08/21/2018 15:10

Sample wt/vol: 6.506(g) Date Analyzed: 08/28/2018 20:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.8	0.92
67-64-1	Acetone	52		38	29
71-43-2	Benzene	ND		3.8	0.50
75-27-4	Dichlorobromomethane	ND		3.8	0.55
108-86-1	Bromobenzene	ND	*	3.8	0.61
74-97-5	Chlorobromomethane	ND		15	0.55
75-25-2	Bromoform	ND		3.8	1.5
74-83-9	Bromomethane	ND		7.7	0.61
78-93-3	2-Butanone (MEK)	ND		38	16
104-51-8	n-Butylbenzene	ND	*	3.8	0.77
135-98-8	sec-Butylbenzene	ND	*	3.8	0.55
98-06-6	tert-Butylbenzene	ND	*	3.8	0.56
75-15-0	Carbon disulfide	ND	*	3.8	1.5
56-23-5	Carbon tetrachloride	ND		3.8	0.48
108-90-7	Chlorobenzene	ND		3.8	0.53
75-00-3	Chloroethane	ND		7.7	0.43
67-66-3	Chloroform	ND		3.8	0.51
74-87-3	Chloromethane	ND		7.7	0.61
95-49-8	2-Chlorotoluene	ND	*	3.8	0.50
106-43-4	4-Chlorotoluene	ND	*	3.8	0.52
124-48-1	Chlorodibromomethane	ND		3.8	0.55
95-50-1	1,2-Dichlorobenzene	ND	*	3.8	0.52
541-73-1	1,3-Dichlorobenzene	ND	*	3.8	0.55
106-46-7	1,4-Dichlorobenzene	ND	*	3.8	0.55
142-28-9	1,3-Dichloropropane	ND		3.8	0.56
563-58-6	1,1-Dichloropropene	ND		3.8	0.53
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	7.7	1.3
106-93-4	Ethylene Dibromide	ND		3.8	1.1
74-95-3	Dibromomethane	ND		7.7	0.66
75-71-8	Dichlorodifluoromethane	ND		7.7	0.61
75-34-3	1,1-Dichloroethane	ND		3.8	0.52
107-06-2	1,2-Dichloroethane	ND		3.8	0.58
75-35-4	1,1-Dichloroethene	ND	*	3.8	0.48
156-59-2	cis-1,2-Dichloroethene	ND		3.8	0.52
156-60-5	trans-1,2-Dichloroethene	ND		3.8	0.58
78-87-5	1,2-Dichloropropane	ND		3.8	0.48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88189-1

SDG No.:

Client Sample ID: DG-B2S-19.5-20 Lab Sample ID: 720-88189-4

Matrix: Solid Lab File ID: 08281826.D

Analysis Method: 8260B Date Collected: 08/21/2018 15:10

Sample wt/vol: 6.506(g) Date Analyzed: 08/28/2018 20:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.8	0.53
10061-02-6	trans-1,3-Dichloropropene	ND		3.8	0.51
100-41-4	Ethylbenzene	ND		3.8	0.58
87-68-3	Hexachlorobutadiene	ND	*	3.8	0.69
591-78-6	2-Hexanone	ND		38	7.7
98-82-8	Isopropylbenzene	ND		3.8	0.52
99-87-6	4-Isopropyltoluene	ND	*	3.8	1.9
75-09-2	Methylene Chloride	ND		7.7	4.3
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		38	7.7
91-20-3	Naphthalene	ND	*	7.7	1.2
103-65-1	N-Propylbenzene	ND	*	3.8	0.51
100-42-5	Styrene	ND		3.8	0.48
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.8	0.58
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	3.8	0.58
127-18-4	Tetrachloroethene	ND		3.8	0.51
108-88-3	Toluene	ND		3.8	0.55
87-61-6	1,2,3-Trichlorobenzene	ND	*	3.8	0.57
120-82-1	1,2,4-Trichlorobenzene	ND	*	3.8	0.55
71-55-6	1,1,1-Trichloroethane	ND		3.8	0.47
79-00-5	1,1,2-Trichloroethane	ND		3.8	0.54
79-01-6	Trichloroethene	ND		3.8	0.48
75-69-4	Trichlorofluoromethane	ND		3.8	0.43
96-18-4	1,2,3-Trichloropropane	ND	*	3.8	0.59
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.8	1.6
95-63-6	1,2,4-Trimethylbenzene	ND	*	3.8	1.3
108-67-8	1,3,5-Trimethylbenzene	ND	*	3.8	0.50
108-05-4	Vinyl acetate	ND		15	3.8
75-01-4	Vinyl chloride	ND		3.8	0.56
1330-20-7	Xylenes, Total	ND		3.8	0.94
594-20-7	2,2-Dichloropropane	ND		3.8	1.5
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		190	77

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88189-1

SDG No.:

Client Sample ID: DG-B2S-19.5-20 Lab Sample ID: 720-88189-4

Matrix: Solid Lab File ID: 08281826.D

Analysis Method: 8260B Date Collected: 08/21/2018 15:10

Sample wt/vol: 6.506(g) Date Analyzed: 08/28/2018 20:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	74		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		60-140
2037-26-5	Toluene-d8 (Surr)	93		58-140

Report Date: 29-Aug-2018 09:15:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281826.D
Lims ID: 720-88189-B-4-A
Client ID: DG-B2S-19.5-20
Sample Type: Client
Inject. Date: 28-Aug-2018 20:48:30 ALS Bottle#: 5 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88189-B-4 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:25 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 09:14:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.091	7.101	-0.010	98	152533	250.0	
* 2 Fluorobenzene	96	10.898	10.899	-0.001	97	835860	25.0	
* 4 Chlorobenzene-d5	117	14.746	14.747	-0.001	86	445803	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.886	17.886	0.000	93	127605	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.491	9.491	0.000	53	58366	7.69	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.007	10.008	-0.001	98	62276	8.37	
$ 10 Toluene-d8 (Surr)	98	13.005	13.005	0.000	93	210454	7.00	
$ 11 4-Bromofluorobenzene	95	16.235	16.235	0.000	87	45036	5.56	
$ 12 1,2-Dichlorobenzene-d4	152	18.341	18.331	0.000	62	25693	5.45	
28 Acetone	58	6.646	6.646	0.000	94	17539	33.9	
34 Methylene Chloride	84	7.375	7.365	0.010	1	409	0.0545	
44 2-Butanone (MEK)	72	8.934	8.924	0.010	75	3328	5.10	
48 cis-1,2-Dichloroethene	61	9.116	9.116	-0.001	1	847	0.0739	
59 Benzene	78	10.676	10.676	0.000	1	2123	0.0652	
148 1-Chlorohexane	55	14.736	14.655	0.080	1	4722	0.5135	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	382013	5.49	
A 153 C6-C8	1	11.156	(8.853-13.459)		0	129015	1.85	
A 154 C6-C9	1	12.113	(8.853-15.373)		0	152715	2.19	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	406760	5.85	
A 119 C6-C10	1	12.994	(8.853-17.135)		0	155919	2.24	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	343992	4.94	
A 120 C6-C12	1	14.554	(8.853-20.255)		0	177201	2.55	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	27718	0.3983	
A 121 C7-C12	1	15.724	(11.192-20.255)		0	85535	1.23	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

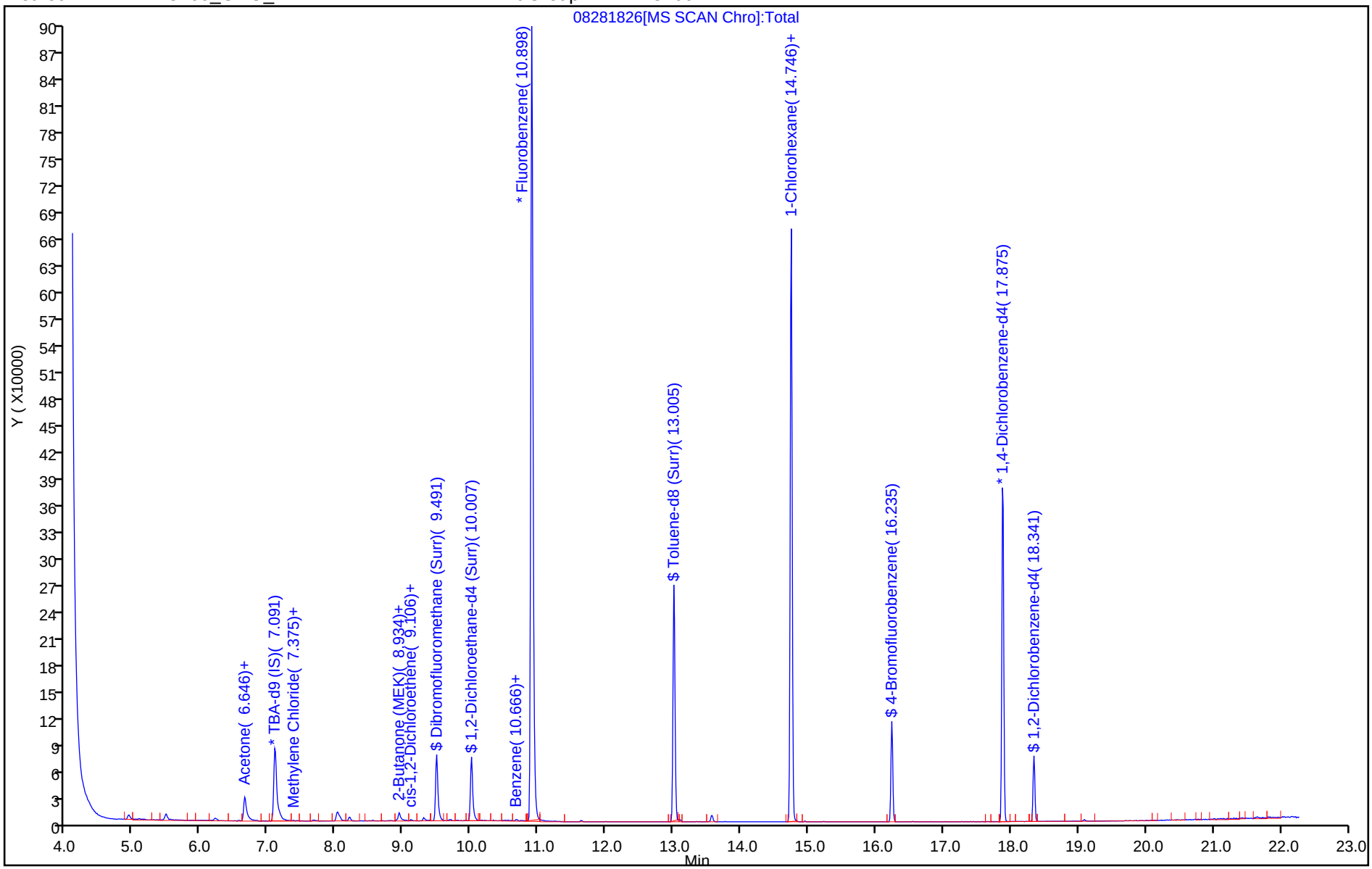
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:15:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281826.D				
Injection Date:	28-Aug-2018 20:48:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88189-B-4-A	Lab Sample ID:	720-88189-4	Worklist Smp#:	10
Client ID:	DG-B2S-19.5-20				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281826.D
Lims ID: 720-88189-B-4-A
Client ID: DG-B2S-19.5-20
Sample Type: Client
Inject. Date: 28-Aug-2018 20:48:30 ALS Bottle#: 5 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88189-B-4 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:25 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 09:14:59

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.37	111.55
$ 10 Toluene-d8 (Surr)	7.50	7.00	93.28
$ 11 4-Bromofluorobenzene	7.50	5.56	74.09
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

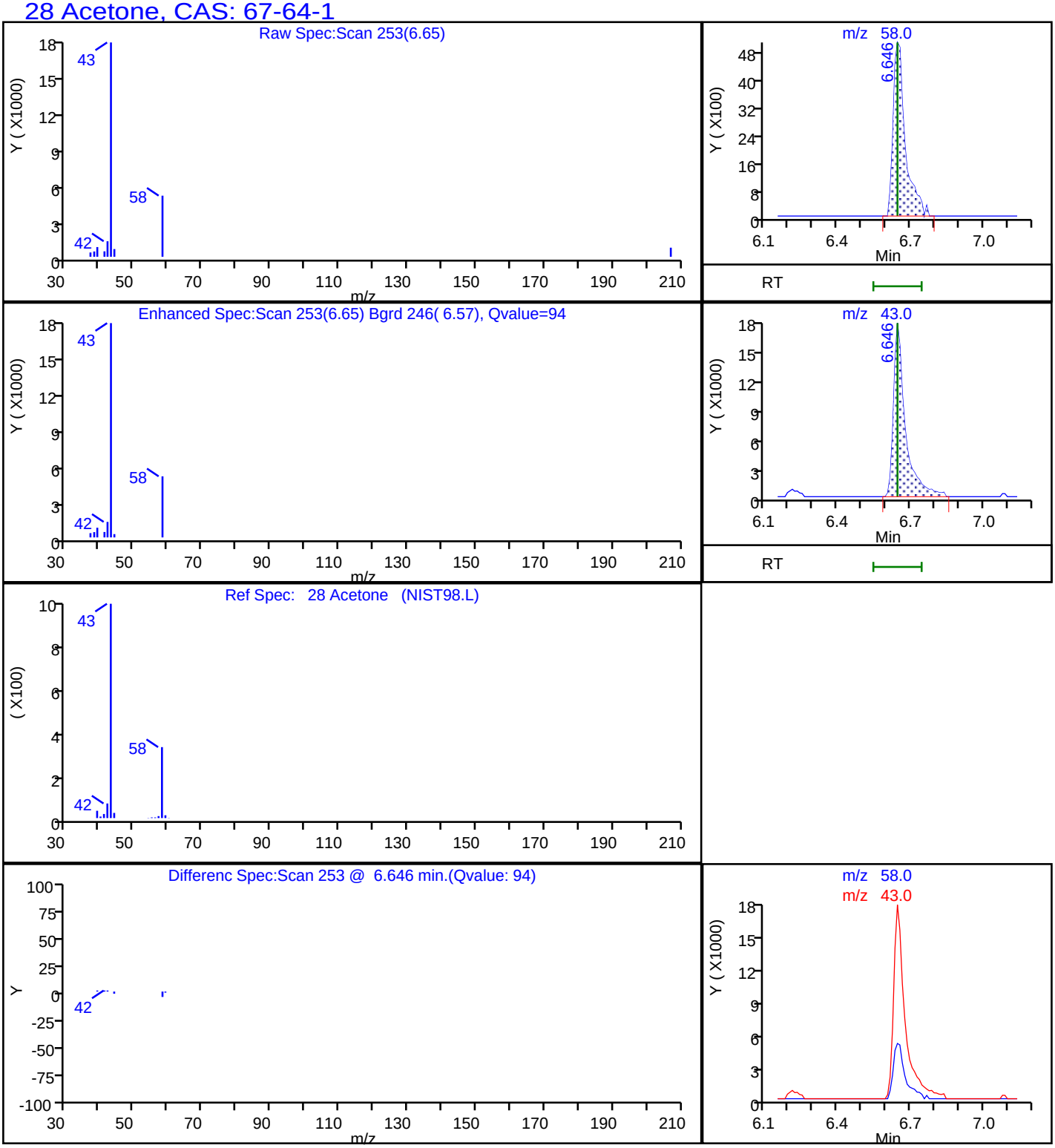
Report Date: 29-Aug-2018 09:15:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281826.D

Injection Date:	28-Aug-2018 20:48:30	Instrument ID:	HP7		
Lims ID:	720-88189-B-4-A	Lab Sample ID:	720-88189-4		
Client ID:	DG-B2S-19.5-20				
Operator ID:	SF	ALS Bottle#:	5	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



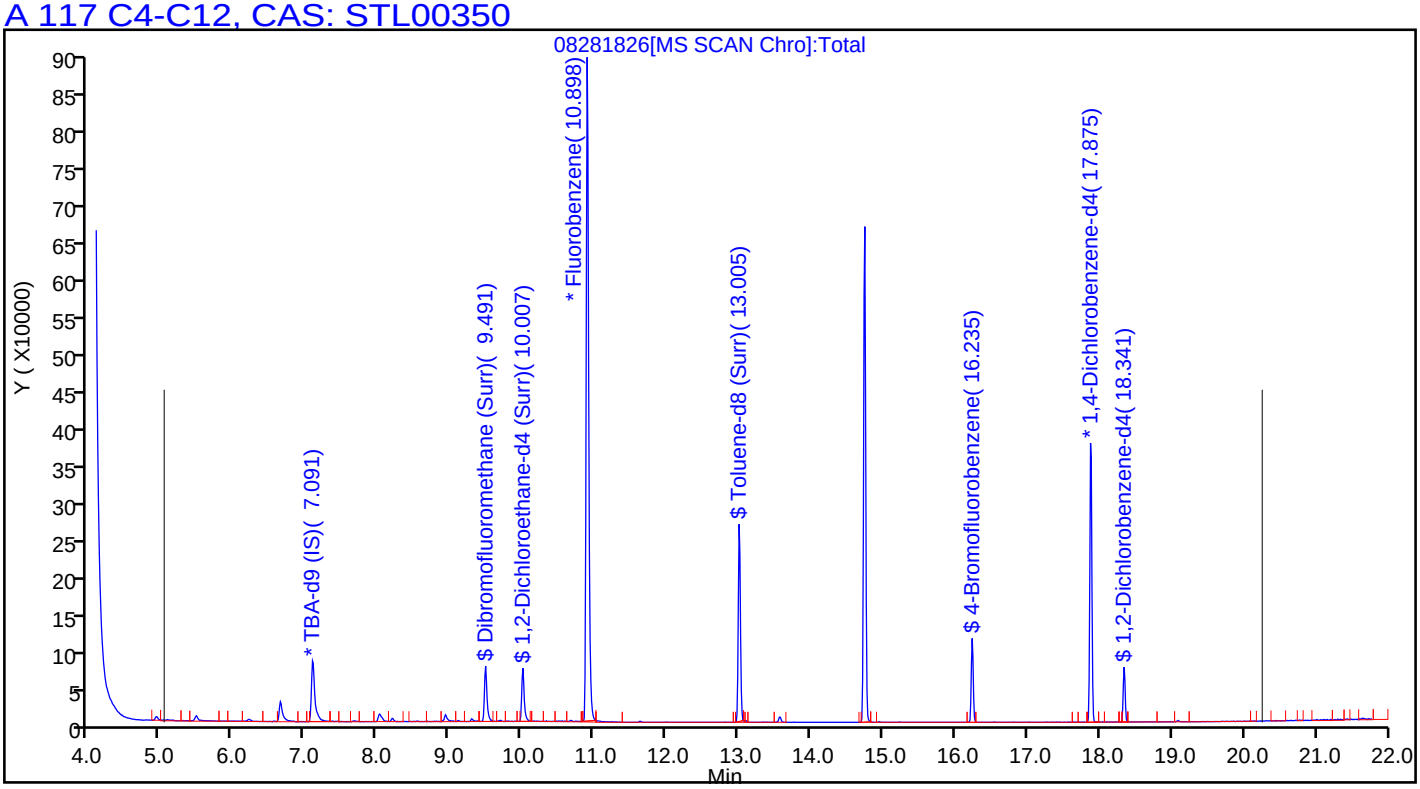
Report Date: 29-Aug-2018 09:15:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281826.D

Injection Date:	28-Aug-2018 20:48:30	Instrument ID:	HP7		
Lims ID:	720-88189-B-4-A	Lab Sample ID:	720-88189-4		
Client ID:	DG-B2S-19.5-20				
Operator ID:	SF	ALS Bottle#:	5	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(45-131)	(60-140)	(58-140)
720-88189-3	DG-A2S-19.5-20	92	102	90
720-88189-4	DG-B2S-19.5-20	74	112	93
LCS 720-250350/5	Lab Control Sample	99	95	99
LCS 720-250350/7	Lab Control Sample	99	94	96
LCS 720-250407/5	Lab Control Sample	99	94	100
LCS 720-250407/7	Lab Control Sample	100	103	102
LCSD 720-250350/6	Lab Control Sample Dup	99	94	97
LCSD 720-250350/8	Lab Control Sample Dup	100	95	97
LCSD 720-250407/6	Lab Control Sample Dup	101	97	101
LCSD 720-250407/8	Lab Control Sample Dup	100	103	102
MB 720-250350/4	Method Blank	102	94	95
MB 720-250407/4	Method Blank	99	103	102

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		FBP	TPHL
Lab Sample ID	Client Sample ID	(33-120)	(35-146)
720-88189-3	DG-A2S-19.5-20	69	85
720-88189-4	DG-B2S-19.5-20	73	90
720-88190-E-11-A MS	Matrix Spike	72	91
720-88190-E-11-B MSD	Matrix Spike Duplicate	73	92
LCS 720-250048/2-A	Lab Control Sample	75	88
MB 720-250048/1-A	Method Blank	92	93

Surrogate Legend

FBP = 2-Fluorobiphenyl
TPHL = Terphenyl-d14

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TPH1
Lab Sample ID	Client Sample ID	(40-130)
720-88189-3	DG-A2S-19.5-20	86
720-88189-4	DG-B2S-19.5-20	89
720-88190-D-10-A MS	Matrix Spike	88
720-88190-D-10-B MSD	Matrix Spike Duplicate	94
LCS 720-250044/2-A	Lab Control Sample	94
MB 720-250044/1-A	Method Blank	97

Surrogate Legend

TPH = p-Terphenyl

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP2	TCX1
Lab Sample ID	Client Sample ID	(21-136)	(21-145)
720-88189-3	DG-A2S-19.5-20	111	85
720-88189-4	DG-B2S-19.5-20	107	91
720-88190-D-10-F MSD	Matrix Spike Duplicate	89	83

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP1	TCX1
Lab Sample ID	Client Sample ID	(21-136)	(21-145)
720-88190-D-10-E MS	Matrix Spike	71	77

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP2	TCX2
Lab Sample ID	Client Sample ID	(21-136)	(21-145)
LCS 720-250053/2-A	Lab Control Sample	103	86
MB 720-250053/1-A	Method Blank	105	90

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCBP1
Lab Sample ID	Client Sample ID	(14-128)	(10-132)
720-88189-3	DG-A2S-19.5-20	33	39
720-88189-4	DG-B2S-19.5-20	80	99
720-88190-F-15-B MS	Matrix Spike	85	164 X
720-88190-F-15-C MSD	Matrix Spike Duplicate	86	108
LCS 240-342522/15-A	Lab Control Sample	85	92
MB 240-342522/14-A	Method Blank	63	62

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-250350/4
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 09:36	1
Acetone	ND		50	38	ug/Kg			08/28/18 09:36	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 09:36	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 09:36	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 09:36	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 09:36	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 09:36	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 09:36	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 09:36	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 09:36	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:36	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 09:36	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 09:36	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 09:36	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 09:36	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 09:36	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 09:36	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 09:36	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 09:36	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:36	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 09:36	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:36	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 09:36	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 09:36	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 09:36	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 09:36	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:36	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 09:36	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 09:36	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 09:36	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:36	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 09:36	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 09:36	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 09:36	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 09:36	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 09:36	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 09:36	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 09:36	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 09:36	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 09:36	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 09:36	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250350/4
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:36	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 09:36	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 09:36	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 09:36	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 09:36	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 09:36	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 09:36	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 09:36	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 09:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 09:36	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 09:36	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 09:36	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 09:36	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 09:36	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 09:36	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 09:36	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 09:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*45 - 131*		*08/28/18 09:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*		*08/28/18 09:36*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*		*08/28/18 09:36*	*1*

Lab Sample ID: LCS 720-250350/5
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	45.9		ug/Kg		92	70 - 144
Acetone	250	264		ug/Kg		105	30 - 162
Benzene	50.0	44.9		ug/Kg		90	70 - 130
Dichlorobromomethane	50.0	45.7		ug/Kg		91	70 - 140
Bromobenzene	50.0	43.2		ug/Kg		86	70 - 130
Chlorobromomethane	50.0	48.5		ug/Kg		97	70 - 130
Bromoform	50.0	48.6		ug/Kg		97	59 - 158
Bromomethane	50.0	55.6		ug/Kg		111	59 - 132
2-Butanone (MEK)	250	246		ug/Kg		99	59 - 159
n-Butylbenzene	50.0	46.6		ug/Kg		93	70 - 142
sec-Butylbenzene	50.0	43.9		ug/Kg		88	70 - 136
tert-Butylbenzene	50.0	43.6		ug/Kg		87	70 - 130
Carbon disulfide	50.0	55.6		ug/Kg		111	60 - 140
Carbon tetrachloride	50.0	47.8		ug/Kg		96	70 - 142
Chlorobenzene	50.0	45.6		ug/Kg		91	70 - 130
Chloroethane	50.0	52.3		ug/Kg		105	65 - 130
Chloroform	50.0	45.1		ug/Kg		90	77 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250350/5
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	57.1		ug/Kg		114	55 - 140
2-Chlorotoluene	50.0	41.6		ug/Kg		83	70 - 138
4-Chlorotoluene	50.0	42.0		ug/Kg		84	70 - 136
Chlorodibromomethane	50.0	48.6		ug/Kg		97	70 - 146
1,2-Dichlorobenzene	50.0	45.7		ug/Kg		91	70 - 130
1,3-Dichlorobenzene	50.0	44.2		ug/Kg		88	70 - 131
1,4-Dichlorobenzene	50.0	45.2		ug/Kg		90	70 - 130
1,3-Dichloropropane	50.0	46.3		ug/Kg		93	70 - 140
1,1-Dichloropropene	50.0	46.0		ug/Kg		92	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	50.7		ug/Kg		101	60 - 145
Ethylene Dibromide	50.0	48.1		ug/Kg		96	70 - 140
Dibromomethane	50.0	45.6		ug/Kg		91	70 - 139
Dichlorodifluoromethane	50.0	62.3		ug/Kg		125	37 - 158
1,1-Dichloroethane	50.0	45.7		ug/Kg		91	70 - 130
1,2-Dichloroethane	50.0	44.9		ug/Kg		90	70 - 130
1,1-Dichloroethene	50.0	51.9		ug/Kg		104	74 - 122
cis-1,2-Dichloroethene	50.0	45.3		ug/Kg		91	70 - 138
trans-1,2-Dichloroethene	50.0	49.1		ug/Kg		98	67 - 130
1,2-Dichloropropane	50.0	45.8		ug/Kg		92	73 - 127
cis-1,3-Dichloropropene	50.0	48.4		ug/Kg		97	68 - 147
trans-1,3-Dichloropropene	50.0	46.7		ug/Kg		93	70 - 155
Ethylbenzene	50.0	44.3		ug/Kg		89	80 - 137
Hexachlorobutadiene	50.0	50.4		ug/Kg		101	70 - 132
2-Hexanone	250	272		ug/Kg		109	62 - 158
Isopropylbenzene	50.0	46.2		ug/Kg		92	70 - 130
4-Isopropyltoluene	50.0	45.2		ug/Kg		90	70 - 133
Methylene Chloride	50.0	46.7		ug/Kg		93	70 - 134
4-Methyl-2-pentanone (MIBK)	250	272		ug/Kg		109	60 - 160
Naphthalene	50.0	48.2		ug/Kg		96	60 - 147
N-Propylbenzene	50.0	42.6		ug/Kg		85	70 - 130
Styrene	50.0	44.5		ug/Kg		89	70 - 130
1,1,1,2-Tetrachloroethane	50.0	47.1		ug/Kg		94	70 - 130
1,1,2,2-Tetrachloroethane	50.0	44.6		ug/Kg		89	70 - 146
Tetrachloroethene	50.0	48.2		ug/Kg		96	70 - 132
Toluene	50.0	44.7		ug/Kg		89	75 - 120
1,2,3-Trichlorobenzene	50.0	50.8		ug/Kg		102	60 - 140
1,2,4-Trichlorobenzene	50.0	49.8		ug/Kg		100	60 - 140
1,1,1-Trichloroethane	50.0	47.4		ug/Kg		95	70 - 130
1,1,2-Trichloroethane	50.0	48.0		ug/Kg		96	70 - 130
Trichloroethene	50.0	47.0		ug/Kg		94	70 - 133
Trichlorofluoromethane	50.0	57.5		ug/Kg		115	60 - 140
1,2,3-Trichloropropane	50.0	45.3		ug/Kg		91	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	59.8		ug/Kg		120	60 - 140
1,2,4-Trimethylbenzene	50.0	42.3		ug/Kg		85	70 - 130
1,3,5-Trimethylbenzene	50.0	42.3		ug/Kg		85	70 - 131
Vinyl acetate	50.0	51.9		ug/Kg		104	38 - 176
Vinyl chloride	50.0	53.8		ug/Kg		108	58 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250350/5
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	50.0	44.1		ug/Kg		88	70 - 146
o-Xylene	50.0	44.6		ug/Kg		89	70 - 140
2,2-Dichloropropane	50.0	47.6		ug/Kg		95	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Lab Sample ID: LCS 720-250350/7
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	985		ug/Kg		99	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250350/6
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	46.2		ug/Kg		92	70 - 144	1	20
Acetone	250	260		ug/Kg		104	30 - 162	2	30
Benzene	50.0	42.9		ug/Kg		86	70 - 130	5	20
Dichlorobromomethane	50.0	45.0		ug/Kg		90	70 - 140	2	20
Bromobenzene	50.0	43.3		ug/Kg		87	70 - 130	0	20
Chlorobromomethane	50.0	48.1		ug/Kg		96	70 - 130	1	20
Bromoform	50.0	47.8		ug/Kg		96	59 - 158	2	20
Bromomethane	50.0	54.0		ug/Kg		108	59 - 132	3	20
2-Butanone (MEK)	250	259		ug/Kg		103	59 - 159	5	20
n-Butylbenzene	50.0	45.2		ug/Kg		90	70 - 142	3	20
sec-Butylbenzene	50.0	42.7		ug/Kg		85	70 - 136	3	20
tert-Butylbenzene	50.0	42.5		ug/Kg		85	70 - 130	3	20
Carbon disulfide	50.0	51.7		ug/Kg		103	60 - 140	7	20
Carbon tetrachloride	50.0	44.8		ug/Kg		90	70 - 142	6	20
Chlorobenzene	50.0	44.8		ug/Kg		90	70 - 130	2	20
Chloroethane	50.0	50.5		ug/Kg		101	65 - 130	4	20
Chloroform	50.0	43.5		ug/Kg		87	77 - 127	4	20
Chloromethane	50.0	53.4		ug/Kg		107	55 - 140	7	20
2-Chlorotoluene	50.0	40.9		ug/Kg		82	70 - 138	2	20
4-Chlorotoluene	50.0	41.5		ug/Kg		83	70 - 136	1	20
Chlorodibromomethane	50.0	47.7		ug/Kg		95	70 - 146	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250350/6
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	50.0	45.5		ug/Kg		91	70 - 130	1	20
1,3-Dichlorobenzene	50.0	43.6		ug/Kg		87	70 - 131	1	20
1,4-Dichlorobenzene	50.0	44.2		ug/Kg		88	70 - 130	2	20
1,3-Dichloropropane	50.0	45.5		ug/Kg		91	70 - 140	2	20
1,1-Dichloropropene	50.0	43.8		ug/Kg		88	70 - 130	5	20
1,2-Dibromo-3-Chloropropane	50.0	50.9		ug/Kg		102	60 - 145	0	20
Ethylene Dibromide	50.0	47.2		ug/Kg		94	70 - 140	2	20
Dibromomethane	50.0	45.9		ug/Kg		92	70 - 139	1	20
Dichlorodifluoromethane	50.0	58.8		ug/Kg		118	37 - 158	6	20
1,1-Dichloroethane	50.0	45.0		ug/Kg		90	70 - 130	2	20
1,2-Dichloroethane	50.0	44.4		ug/Kg		89	70 - 130	1	20
1,1-Dichloroethene	50.0	50.3		ug/Kg		101	74 - 122	3	20
cis-1,2-Dichloroethene	50.0	43.6		ug/Kg		87	70 - 138	4	20
trans-1,2-Dichloroethene	50.0	45.9		ug/Kg		92	67 - 130	7	20
1,2-Dichloropropane	50.0	44.2		ug/Kg		88	73 - 127	4	20
cis-1,3-Dichloropropene	50.0	47.1		ug/Kg		94	68 - 147	3	20
trans-1,3-Dichloropropene	50.0	44.6		ug/Kg		89	70 - 155	5	20
Ethylbenzene	50.0	42.8		ug/Kg		86	80 - 137	4	20
Hexachlorobutadiene	50.0	47.8		ug/Kg		96	70 - 132	5	20
2-Hexanone	250	269		ug/Kg		108	62 - 158	1	20
Isopropylbenzene	50.0	44.7		ug/Kg		89	70 - 130	3	20
4-Isopropyltoluene	50.0	44.1		ug/Kg		88	70 - 133	2	20
Methylene Chloride	50.0	44.9		ug/Kg		90	70 - 134	4	20
4-Methyl-2-pentanone (MIBK)	250	269		ug/Kg		107	60 - 160	1	20
Naphthalene	50.0	49.1		ug/Kg		98	60 - 147	2	20
N-Propylbenzene	50.0	41.5		ug/Kg		83	70 - 130	3	20
Styrene	50.0	43.9		ug/Kg		88	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	46.4		ug/Kg		93	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	44.5		ug/Kg		89	70 - 146	0	20
Tetrachloroethene	50.0	46.0		ug/Kg		92	70 - 132	5	20
Toluene	50.0	43.0		ug/Kg		86	75 - 120	4	20
1,2,3-Trichlorobenzene	50.0	50.8		ug/Kg		102	60 - 140	0	20
1,2,4-Trichlorobenzene	50.0	50.0		ug/Kg		100	60 - 140	0	20
1,1,1-Trichloroethane	50.0	44.9		ug/Kg		90	70 - 130	5	20
1,1,2-Trichloroethane	50.0	46.5		ug/Kg		93	70 - 130	3	20
Trichloroethene	50.0	45.6		ug/Kg		91	70 - 133	3	20
Trichlorofluoromethane	50.0	55.4		ug/Kg		111	60 - 140	4	20
1,2,3-Trichloropropane	50.0	45.8		ug/Kg		92	70 - 146	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	55.0		ug/Kg		110	60 - 140	8	20
1,2,4-Trimethylbenzene	50.0	42.1		ug/Kg		84	70 - 130	1	20
1,3,5-Trimethylbenzene	50.0	41.7		ug/Kg		83	70 - 131	1	20
Vinyl acetate	50.0	52.9		ug/Kg		106	38 - 176	2	20
Vinyl chloride	50.0	51.5		ug/Kg		103	58 - 125	4	20
m-Xylene & p-Xylene	50.0	42.6		ug/Kg		85	70 - 146	3	20
o-Xylene	50.0	43.4		ug/Kg		87	70 - 140	3	20
2,2-Dichloropropane	50.0	44.4		ug/Kg		89	70 - 162	7	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250350/6
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250350/8
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	976		ug/Kg		98	70 - 122	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: MB 720-250407/4
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 19:46	1
Acetone	ND		50	38	ug/Kg			08/28/18 19:46	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 19:46	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 19:46	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 19:46	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 19:46	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 19:46	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 19:46	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 19:46	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 19:46	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:46	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 19:46	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 19:46	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 19:46	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 19:46	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 19:46	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 19:46	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 19:46	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 19:46	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:46	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 19:46	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:46	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250407/4
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 19:46	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 19:46	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 19:46	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 19:46	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:46	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 19:46	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 19:46	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 19:46	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:46	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 19:46	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 19:46	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 19:46	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 19:46	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 19:46	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 19:46	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 19:46	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 19:46	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 19:46	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 19:46	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:46	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 19:46	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 19:46	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 19:46	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 19:46	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 19:46	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 19:46	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 19:46	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 19:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 19:46	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 19:46	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 19:46	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 19:46	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 19:46	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 19:46	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 19:46	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 19:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*45 - 131*		*08/28/18 19:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*		*08/28/18 19:46*	*1*
Toluene-d8 (Surr)	*102*		*58 - 140*		*08/28/18 19:46*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250407/5
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	52.3		ug/Kg		105	70 - 144
Acetone	250	219		ug/Kg		88	30 - 162
Benzene	50.0	55.2		ug/Kg		110	70 - 130
Dichlorobromomethane	50.0	53.5		ug/Kg		107	70 - 140
Bromobenzene	50.0	51.1		ug/Kg		102	70 - 130
Chlorobromomethane	50.0	53.8		ug/Kg		108	70 - 130
Bromoform	50.0	49.7		ug/Kg		99	59 - 158
Bromomethane	50.0	51.3		ug/Kg		103	59 - 132
2-Butanone (MEK)	250	231		ug/Kg		92	59 - 159
n-Butylbenzene	50.0	55.0		ug/Kg		110	70 - 142
sec-Butylbenzene	50.0	56.8		ug/Kg		114	70 - 136
tert-Butylbenzene	50.0	55.0		ug/Kg		110	70 - 130
Carbon disulfide	50.0	74.6	*	ug/Kg		149	60 - 140
Carbon tetrachloride	50.0	56.6		ug/Kg		113	70 - 142
Chlorobenzene	50.0	51.4		ug/Kg		103	70 - 130
Chloroethane	50.0	50.8		ug/Kg		102	65 - 130
Chloroform	50.0	54.3		ug/Kg		109	77 - 127
Chloromethane	50.0	55.7		ug/Kg		111	55 - 140
2-Chlorotoluene	50.0	54.5		ug/Kg		109	70 - 138
4-Chlorotoluene	50.0	54.9		ug/Kg		110	70 - 136
Chlorodibromomethane	50.0	52.1		ug/Kg		104	70 - 146
1,2-Dichlorobenzene	50.0	51.0		ug/Kg		102	70 - 130
1,3-Dichlorobenzene	50.0	51.6		ug/Kg		103	70 - 131
1,4-Dichlorobenzene	50.0	51.4		ug/Kg		103	70 - 130
1,3-Dichloropropane	50.0	50.8		ug/Kg		102	70 - 140
1,1-Dichloropropene	50.0	56.5		ug/Kg		113	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	50.5		ug/Kg		101	60 - 145
Ethylene Dibromide	50.0	51.9		ug/Kg		104	70 - 140
Dibromomethane	50.0	51.2		ug/Kg		102	70 - 139
Dichlorodifluoromethane	50.0	51.4		ug/Kg		103	37 - 158
1,1-Dichloroethane	50.0	58.1		ug/Kg		116	70 - 130
1,2-Dichloroethane	50.0	51.4		ug/Kg		103	70 - 130
1,1-Dichloroethene	50.0	63.4	*	ug/Kg		127	74 - 122
cis-1,2-Dichloroethene	50.0	56.6		ug/Kg		113	70 - 138
trans-1,2-Dichloroethene	50.0	59.4		ug/Kg		119	67 - 130
1,2-Dichloropropane	50.0	56.8		ug/Kg		114	73 - 127
cis-1,3-Dichloropropene	50.0	56.4		ug/Kg		113	68 - 147
trans-1,3-Dichloropropene	50.0	53.1		ug/Kg		106	70 - 155
Ethylbenzene	50.0	54.7		ug/Kg		109	80 - 137
Hexachlorobutadiene	50.0	49.1		ug/Kg		98	70 - 132
2-Hexanone	250	248		ug/Kg		99	62 - 158
Isopropylbenzene	50.0	53.0		ug/Kg		106	70 - 130
4-Isopropyltoluene	50.0	55.5		ug/Kg		111	70 - 133
Methylene Chloride	50.0	54.3		ug/Kg		109	70 - 134
4-Methyl-2-pentanone (MIBK)	250	255		ug/Kg		102	60 - 160
Naphthalene	50.0	48.2		ug/Kg		96	60 - 147
N-Propylbenzene	50.0	57.1		ug/Kg		114	70 - 130
Styrene	50.0	51.9		ug/Kg		104	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250407/5
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	52.8		ug/Kg		106	70 - 130
1,1,2,2-Tetrachloroethane	50.0	51.3		ug/Kg		103	70 - 146
Tetrachloroethene	50.0	52.1		ug/Kg		104	70 - 132
Toluene	50.0	52.2		ug/Kg		104	75 - 120
1,2,3-Trichlorobenzene	50.0	47.3		ug/Kg		95	60 - 140
1,2,4-Trichlorobenzene	50.0	48.6		ug/Kg		97	60 - 140
1,1,1-Trichloroethane	50.0	55.6		ug/Kg		111	70 - 130
1,1,2-Trichloroethane	50.0	52.4		ug/Kg		105	70 - 130
Trichloroethene	50.0	51.4		ug/Kg		103	70 - 133
Trichlorofluoromethane	50.0	54.5		ug/Kg		109	60 - 140
1,2,3-Trichloropropane	50.0	50.8		ug/Kg		102	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	66.9		ug/Kg		134	60 - 140
1,2,4-Trimethylbenzene	50.0	54.2		ug/Kg		108	70 - 130
1,3,5-Trimethylbenzene	50.0	55.2		ug/Kg		110	70 - 131
Vinyl acetate	50.0	53.1		ug/Kg		106	38 - 176
Vinyl chloride	50.0	53.9		ug/Kg		108	58 - 125
m-Xylene & p-Xylene	50.0	53.0		ug/Kg		106	70 - 146
o-Xylene	50.0	53.4		ug/Kg		107	70 - 140
2,2-Dichloropropane	50.0	57.7		ug/Kg		115	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCS 720-250407/7
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	937		ug/Kg		94	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: LCSD 720-250407/6
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	53.3		ug/Kg		107	70 - 144	2	20
Acetone	250	232		ug/Kg		93	30 - 162	6	30
Benzene	50.0	53.9		ug/Kg		108	70 - 130	2	20
Dichlorobromomethane	50.0	53.0		ug/Kg		106	70 - 140	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250407/6
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	50.0	49.7		ug/Kg		99	70 - 130	3	20
Chlorobromomethane	50.0	52.9		ug/Kg		106	70 - 130	2	20
Bromoform	50.0	51.5		ug/Kg		103	59 - 158	4	20
Bromomethane	50.0	51.5		ug/Kg		103	59 - 132	0	20
2-Butanone (MEK)	250	232		ug/Kg		93	59 - 159	1	20
n-Butylbenzene	50.0	54.6		ug/Kg		109	70 - 142	1	20
sec-Butylbenzene	50.0	55.2		ug/Kg		110	70 - 136	3	20
tert-Butylbenzene	50.0	53.7		ug/Kg		107	70 - 130	2	20
Carbon disulfide	50.0	72.7	*	ug/Kg		145	60 - 140	3	20
Carbon tetrachloride	50.0	54.8		ug/Kg		110	70 - 142	3	20
Chlorobenzene	50.0	51.6		ug/Kg		103	70 - 130	0	20
Chloroethane	50.0	51.0		ug/Kg		102	65 - 130	0	20
Chloroform	50.0	53.1		ug/Kg		106	77 - 127	2	20
Chloromethane	50.0	54.5		ug/Kg		109	55 - 140	2	20
2-Chlorotoluene	50.0	53.4		ug/Kg		107	70 - 138	2	20
4-Chlorotoluene	50.0	53.6		ug/Kg		107	70 - 136	2	20
Chlorodibromomethane	50.0	51.6		ug/Kg		103	70 - 146	1	20
1,2-Dichlorobenzene	50.0	50.3		ug/Kg		101	70 - 130	1	20
1,3-Dichlorobenzene	50.0	50.8		ug/Kg		102	70 - 131	2	20
1,4-Dichlorobenzene	50.0	50.4		ug/Kg		101	70 - 130	2	20
1,3-Dichloropropane	50.0	50.7		ug/Kg		101	70 - 140	0	20
1,1-Dichloropropene	50.0	55.3		ug/Kg		111	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	50.0	51.2		ug/Kg		102	60 - 145	1	20
Ethylene Dibromide	50.0	51.9		ug/Kg		104	70 - 140	0	20
Dibromomethane	50.0	51.2		ug/Kg		102	70 - 139	0	20
Dichlorodifluoromethane	50.0	51.9		ug/Kg		104	37 - 158	1	20
1,1-Dichloroethane	50.0	57.1		ug/Kg		114	70 - 130	2	20
1,2-Dichloroethane	50.0	51.5		ug/Kg		103	70 - 130	0	20
1,1-Dichloroethene	50.0	61.4	*	ug/Kg		123	74 - 122	3	20
cis-1,2-Dichloroethene	50.0	55.9		ug/Kg		112	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	58.3		ug/Kg		117	67 - 130	2	20
1,2-Dichloropropane	50.0	56.4		ug/Kg		113	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	56.8		ug/Kg		114	68 - 147	1	20
trans-1,3-Dichloropropene	50.0	53.6		ug/Kg		107	70 - 155	1	20
Ethylbenzene	50.0	54.4		ug/Kg		109	80 - 137	1	20
Hexachlorobutadiene	50.0	48.7		ug/Kg		97	70 - 132	1	20
2-Hexanone	250	257		ug/Kg		103	62 - 158	4	20
Isopropylbenzene	50.0	52.9		ug/Kg		106	70 - 130	0	20
4-Isopropyltoluene	50.0	54.5		ug/Kg		109	70 - 133	2	20
Methylene Chloride	50.0	54.0		ug/Kg		108	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	261		ug/Kg		105	60 - 160	2	20
Naphthalene	50.0	49.5		ug/Kg		99	60 - 147	3	20
N-Propylbenzene	50.0	55.8		ug/Kg		112	70 - 130	2	20
Styrene	50.0	52.2		ug/Kg		104	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	53.0		ug/Kg		106	70 - 130	0	20
1,1,2,2-Tetrachloroethane	50.0	51.0		ug/Kg		102	70 - 146	1	20
Tetrachloroethene	50.0	50.7		ug/Kg		101	70 - 132	3	20
Toluene	50.0	52.5		ug/Kg		105	75 - 120	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250407/6
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene			50.0	49.0		ug/Kg		98	60 - 140	4	20
1,2,4-Trichlorobenzene			50.0	49.1		ug/Kg		98	60 - 140	1	20
1,1,1-Trichloroethane			50.0	53.8		ug/Kg		108	70 - 130	3	20
1,1,2-Trichloroethane			50.0	52.6		ug/Kg		105	70 - 130	1	20
Trichloroethene			50.0	50.3		ug/Kg		101	70 - 133	2	20
Trichlorofluoromethane			50.0	53.4		ug/Kg		107	60 - 140	2	20
1,2,3-Trichloropropane			50.0	51.0		ug/Kg		102	70 - 146	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	64.7		ug/Kg		129	60 - 140	3	20
1,2,4-Trimethylbenzene			50.0	53.1		ug/Kg		106	70 - 130	2	20
1,3,5-Trimethylbenzene			50.0	53.9		ug/Kg		108	70 - 131	2	20
Vinyl acetate			50.0	52.6		ug/Kg		105	38 - 176	1	20
Vinyl chloride			50.0	53.4		ug/Kg		107	58 - 125	1	20
m-Xylene & p-Xylene			50.0	53.0		ug/Kg		106	70 - 146	0	20
o-Xylene			50.0	53.6		ug/Kg		107	70 - 140	0	20
2,2-Dichloropropane			50.0	57.5		ug/Kg		115	70 - 162	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*97*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: LCSD 720-250407/8
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	943		ug/Kg		94	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 720-250048/1-A
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250048

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Anthracene	ND		5.0	2.0	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/23/18 09:43	08/24/18 23:03	1

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 720-250048/1-A
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250048

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Chrysene	ND		5.0	1.4	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Fluorene	ND		5.0	2.2	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Naphthalene	4.04	J	5.0	3.5	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Pyrene	ND		5.0	1.7	ug/Kg		08/23/18 09:43	08/24/18 23:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*92*		*33 - 120*	*08/23/18 09:43*	*08/24/18 23:03*	*1*
Terphenyl-d14	*93*		*35 - 146*	*08/23/18 09:43*	*08/24/18 23:03*	*1*

Lab Sample ID: LCS 720-250048/2-A
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250048

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	465		ug/Kg		70	46 - 110
Acenaphthene	667	468		ug/Kg		70	46 - 106
Acenaphthylene	667	458		ug/Kg		69	46 - 108
Anthracene	667	524		ug/Kg		79	55 - 103
Benzo[a]anthracene	667	577		ug/Kg		87	54 - 110
Benzo[a]pyrene	667	575		ug/Kg		86	62 - 111
Benzo[b]fluoranthene	667	582		ug/Kg		87	60 - 109
Benzo[g,h,i]perylene	667	666		ug/Kg		100	52 - 114
Benzo[k]fluoranthene	667	558		ug/Kg		84	58 - 109
Chrysene	667	540		ug/Kg		81	54 - 108
Dibenz(a,h)anthracene	667	632		ug/Kg		95	58 - 112
Fluoranthene	667	568		ug/Kg		85	59 - 109
Fluorene	667	494		ug/Kg		74	52 - 106
Indeno[1,2,3-cd]pyrene	667	686		ug/Kg		103	55 - 120
Naphthalene	667	511		ug/Kg		77	49 - 110
Phenanthrene	667	523		ug/Kg		78	57 - 110
Pyrene	667	553		ug/Kg		83	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*33 - 120*
Terphenyl-d14	*88*		*35 - 146*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88190-E-11-A MS
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250048

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	ND		655	448		ug/Kg		68	46 - 110
Acenaphthene	ND		655	447		ug/Kg		68	46 - 106
Acenaphthylene	ND		655	442		ug/Kg		67	46 - 108
Anthracene	ND		655	513		ug/Kg		78	55 - 103
Benzo[a]anthracene	ND		655	572		ug/Kg		87	54 - 110
Benzo[a]pyrene	2.3	J	655	562		ug/Kg		85	62 - 111
Benzo[b]fluoranthene	3.0	J	655	592		ug/Kg		90	60 - 109
Benzo[g,h,i]perylene	ND		655	505		ug/Kg		77	52 - 114
Benzo[k]fluoranthene	ND		655	527		ug/Kg		81	58 - 109
Chrysene	ND		655	542		ug/Kg		83	54 - 108
Dibenz(a,h)anthracene	ND		655	542		ug/Kg		83	58 - 112
Fluoranthene	1.9	J	655	563		ug/Kg		86	59 - 109
Fluorene	ND		655	476		ug/Kg		73	52 - 106
Indeno[1,2,3-cd]pyrene	ND		655	571		ug/Kg		87	55 - 120
Naphthalene	ND		655	435		ug/Kg		66	49 - 110
Phenanthrene	1.8	J	655	508		ug/Kg		78	57 - 110
Pyrene	2.3	J	655	565		ug/Kg		86	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*72*		*33 - 120*
Terphenyl-d14	*91*		*35 - 146*

Lab Sample ID: 720-88190-E-11-B MSD
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250048

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	ND		655	448		ug/Kg		68	46 - 110	0	35
Acenaphthene	ND		655	473		ug/Kg		72	46 - 106	6	35
Acenaphthylene	ND		655	457		ug/Kg		70	46 - 108	3	35
Anthracene	ND		655	525		ug/Kg		80	55 - 103	2	35
Benzo[a]anthracene	ND		655	579		ug/Kg		88	54 - 110	1	35
Benzo[a]pyrene	2.3	J	655	573		ug/Kg		87	62 - 111	2	35
Benzo[b]fluoranthene	3.0	J	655	585		ug/Kg		89	60 - 109	1	35
Benzo[g,h,i]perylene	ND		655	483		ug/Kg		74	52 - 114	4	35
Benzo[k]fluoranthene	ND		655	551		ug/Kg		84	58 - 109	4	35
Chrysene	ND		655	549		ug/Kg		84	54 - 108	1	35
Dibenz(a,h)anthracene	ND		655	525		ug/Kg		80	58 - 112	3	35
Fluoranthene	1.9	J	655	571		ug/Kg		87	59 - 109	1	35
Fluorene	ND		655	497		ug/Kg		76	52 - 106	4	35
Indeno[1,2,3-cd]pyrene	ND		655	551		ug/Kg		84	55 - 120	3	35
Naphthalene	ND		655	427		ug/Kg		65	49 - 110	2	35
Phenanthrene	1.8	J	655	515		ug/Kg		79	57 - 110	1	35
Pyrene	2.3	J	655	574		ug/Kg		87	50 - 120	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*33 - 120*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88190-E-11-B MSD
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250048

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*92*		*35 - 146*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-250044/1-A
Matrix: Solid
Analysis Batch: 250133

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250044

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/23/18 08:42	08/24/18 13:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*97*		*40 - 130*	*08/23/18 08:42*	*08/24/18 13:30*	*1*

Lab Sample ID: LCS 720-250044/2-A
Matrix: Solid
Analysis Batch: 250037

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250044

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			167000	141000		ug/Kg		85	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*94*		*40 - 130*

Lab Sample ID: 720-88190-D-10-A MS
Matrix: Solid
Analysis Batch: 250037

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250044

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	31000		160000	169000		ug/Kg		87	50 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*88*		*40 - 130*

Lab Sample ID: 720-88190-D-10-B MSD
Matrix: Solid
Analysis Batch: 250037

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250044

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	31000		160000	160000		ug/Kg		81	50 - 150	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*94*		*40 - 130*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-250053/1-A
Matrix: Solid
Analysis Batch: 250196

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250053

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Aldrin	ND		2.0	0.50	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endrin	ND		2.0	0.46	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Toxaphene	ND		40	6.8	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/23/18 10:51	08/24/18 21:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*105*		*21 - 136*	*08/23/18 10:51*	*08/24/18 21:13*	*1*
Tetrachloro-m-xylene	*90*		*21 - 145*	*08/23/18 10:51*	*08/24/18 21:13*	*1*

Lab Sample ID: LCS 720-250053/2-A
Matrix: Solid
Analysis Batch: 250196

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250053

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	16.0		ug/Kg		96	75 - 128
4,4'-DDE	16.7	15.7		ug/Kg		94	76 - 126
4,4'-DDT	16.7	15.5		ug/Kg		93	63 - 127
Aldrin	16.7	13.4		ug/Kg		80	65 - 120
alpha-BHC	16.7	12.9		ug/Kg		77	46 - 122
beta-BHC	16.7	16.8		ug/Kg		101	78 - 136
cis-Chlordane	16.7	15.4		ug/Kg		93	70 - 120
delta-BHC	16.7	13.1		ug/Kg		79	43 - 125
Dieldrin	16.7	15.2		ug/Kg		91	72 - 120
Endosulfan I	16.7	16.1		ug/Kg		96	62 - 120
Endosulfan II	16.7	16.6		ug/Kg		100	65 - 120
Endosulfan sulfate	16.7	16.0		ug/Kg		96	72 - 121
Endrin	16.7	16.4		ug/Kg		98	68 - 120
Endrin aldehyde	16.7	15.8		ug/Kg		95	68 - 120
Endrin ketone	16.7	16.3		ug/Kg		98	75 - 136
gamma-BHC (Lindane)	16.7	14.5		ug/Kg		87	72 - 120

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-250053/2-A
Matrix: Solid
Analysis Batch: 250196

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250053

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Heptachlor	16.7	15.1		ug/Kg		91	69 - 120
Heptachlor epoxide	16.7	15.7		ug/Kg		94	68 - 120
Methoxychlor	16.7	17.5		ug/Kg		105	71 - 132
trans-Chlordane	16.7	15.2		ug/Kg		91	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*103*		*21 - 136*
Tetrachloro-m-xylene	*86*		*21 - 145*

Lab Sample ID: 720-88190-D-10-E MS
Matrix: Solid
Analysis Batch: 250248

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250053

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		16.4	13.4		ug/Kg		82	40 - 120
4,4'-DDE	ND		16.4	12.8		ug/Kg		78	40 - 120
4,4'-DDT	ND		16.4	11.6		ug/Kg		71	17 - 144
Aldrin	ND		16.4	12.6		ug/Kg		77	53 - 120
alpha-BHC	ND		16.4	12.5		ug/Kg		76	40 - 120
beta-BHC	ND		16.4	11.9		ug/Kg		72	40 - 120
cis-Chlordane	ND		16.4	12.7		ug/Kg		77	40 - 120
delta-BHC	ND		16.4	11.8		ug/Kg		72	40 - 120
Dieldrin	ND		16.4	14.1		ug/Kg		86	46 - 130
Endosulfan I	ND		16.4	13.2		ug/Kg		80	40 - 120
Endosulfan II	ND		16.4	13.9		ug/Kg		85	40 - 120
Endosulfan sulfate	ND		16.4	13.0		ug/Kg		79	40 - 120
Endrin	ND		16.4	14.0		ug/Kg		85	32 - 143
Endrin aldehyde	ND		16.4	10.6		ug/Kg		64	40 - 120
Endrin ketone	ND		16.4	11.5		ug/Kg		70	40 - 120
gamma-BHC (Lindane)	ND		16.4	13.4		ug/Kg		82	58 - 120
Heptachlor	ND		16.4	13.6		ug/Kg		83	52 - 120
Heptachlor epoxide	ND		16.4	13.0		ug/Kg		79	40 - 120
Methoxychlor	ND		16.4	11.8		ug/Kg		72	40 - 120
trans-Chlordane	ND		16.4	12.7		ug/Kg		77	40 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*71*		*21 - 136*
Tetrachloro-m-xylene	*77*		*21 - 145*

Lab Sample ID: 720-88190-D-10-F MSD
Matrix: Solid
Analysis Batch: 250248

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250053

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		16.4	15.2		ug/Kg		92	40 - 120	12	20
4,4'-DDE	ND		16.4	14.4		ug/Kg		88	40 - 120	12	20
4,4'-DDT	ND		16.4	12.8		ug/Kg		78	17 - 144	10	20
Aldrin	ND		16.4	14.3		ug/Kg		87	53 - 120	13	20

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88190-D-10-F MSD
Matrix: Solid
Analysis Batch: 250248

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250053

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
alpha-BHC	ND		16.4	13.5		ug/Kg		82	40 - 120	8	20
beta-BHC	ND		16.4	13.8		ug/Kg		84	40 - 120	15	20
cis-Chlordane	ND		16.4	14.3		ug/Kg		87	40 - 120	12	20
delta-BHC	ND		16.4	13.6		ug/Kg		83	40 - 120	14	20
Dieldrin	ND		16.4	15.2		ug/Kg		93	46 - 130	7	20
Endosulfan I	ND		16.4	14.9		ug/Kg		91	40 - 120	12	20
Endosulfan II	ND		16.4	15.3		ug/Kg		93	40 - 120	9	30
Endosulfan sulfate	ND		16.4	14.3		ug/Kg		87	40 - 120	9	20
Endrin	ND		16.4	15.8		ug/Kg		96	32 - 143	12	20
Endrin aldehyde	ND		16.4	11.5		ug/Kg		70	40 - 120	9	20
Endrin ketone	ND		16.4	13.5		ug/Kg		82	40 - 120	16	20
gamma-BHC (Lindane)	ND		16.4	14.3		ug/Kg		87	58 - 120	6	20
Heptachlor	ND		16.4	15.2		ug/Kg		92	52 - 120	11	20
Heptachlor epoxide	ND		16.4	14.7		ug/Kg		89	40 - 120	12	20
Methoxychlor	ND		16.4	12.7		ug/Kg		77	40 - 120	7	20
trans-Chlordane	ND		16.4	14.3		ug/Kg		87	40 - 120	12	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*89*		*21 - 136*
Tetrachloro-m-xylene	*83*		*21 - 145*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-342522/14-A
Matrix: Solid
Analysis Batch: 342750

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 342522

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/26/18 10:34	08/28/18 06:55	1
Aroclor-1221	ND		50	24	ug/Kg		08/26/18 10:34	08/28/18 06:55	1
Aroclor-1232	ND		50	23	ug/Kg		08/26/18 10:34	08/28/18 06:55	1
Aroclor-1242	ND		50	19	ug/Kg		08/26/18 10:34	08/28/18 06:55	1
Aroclor-1248	ND		50	24	ug/Kg		08/26/18 10:34	08/28/18 06:55	1
Aroclor-1254	ND		50	23	ug/Kg		08/26/18 10:34	08/28/18 06:55	1
Aroclor-1260	ND		50	22	ug/Kg		08/26/18 10:34	08/28/18 06:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*63*		*14 - 128*	*08/26/18 10:34*	*08/28/18 06:55*	*1*
DCB Decachlorobiphenyl	*62*		*10 - 132*	*08/26/18 10:34*	*08/28/18 06:55*	*1*

Lab Sample ID: LCS 240-342522/15-A
Matrix: Solid
Analysis Batch: 342750

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 342522

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	698		ug/Kg		70	47 - 120
Aroclor-1260	1000	831		ug/Kg		83	46 - 120

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 240-342522/15-A
Matrix: Solid
Analysis Batch: 342750

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 342522

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*85*		*14 - 128*
DCB Decachlorobiphenyl	*92*		*10 - 132*

Lab Sample ID: 720-88190-F-15-B MS
Matrix: Solid
Analysis Batch: 342750

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 342522

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	ND		1010	769		ug/Kg		76	31 - 120
Aroclor-1260	ND	F2	1010	876		ug/Kg		87	21 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*85*		*14 - 128*
DCB Decachlorobiphenyl	*164*	*X*	*10 - 132*

Lab Sample ID: 720-88190-F-15-C MSD
Matrix: Solid
Analysis Batch: 342750

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 342522

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		967	704		ug/Kg		73	31 - 120	9	30
Aroclor-1260	ND	F2	967	745	p	ug/Kg		77	21 - 122	16	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*86*		*14 - 128*
DCB Decachlorobiphenyl	*108*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250071/1-A
Matrix: Solid
Analysis Batch: 250222

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250071

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.123	J	0.50	0.083	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Arsenic	ND		1.0	0.085	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Barium	ND		0.50	0.071	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Beryllium	ND		0.10	0.033	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Cadmium	ND		0.13	0.012	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Chromium	ND		0.50	0.053	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Cobalt	ND		0.20	0.020	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Copper	ND		1.5	0.71	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Lead	ND		0.50	0.11	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Nickel	ND		0.50	0.051	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Selenium	ND		1.0	0.15	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Silver	ND		0.25	0.051	mg/Kg		08/23/18 12:48	08/24/18 18:51	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250071/1-A
Matrix: Solid
Analysis Batch: 250222

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250071

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		0.50	0.15	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Vanadium	ND		0.50	0.068	mg/Kg		08/23/18 12:48	08/24/18 18:51	1
Zinc	ND		1.5	0.64	mg/Kg		08/23/18 12:48	08/24/18 18:51	1

Lab Sample ID: LCS 720-250071/2-A
Matrix: Solid
Analysis Batch: 250222

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250071

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	53.2		mg/Kg		106	80 - 120
Arsenic	50.0	49.2		mg/Kg		98	80 - 120
Barium	50.0	47.8		mg/Kg		96	80 - 120
Beryllium	50.0	47.2		mg/Kg		94	80 - 120
Cadmium	50.0	53.1		mg/Kg		106	80 - 120
Chromium	50.0	50.3		mg/Kg		101	80 - 120
Cobalt	50.0	55.1		mg/Kg		110	80 - 120
Copper	50.0	50.5		mg/Kg		101	80 - 120
Lead	50.0	53.5		mg/Kg		107	80 - 120
Molybdenum	50.0	49.5		mg/Kg		99	80 - 120
Nickel	50.0	53.6		mg/Kg		107	80 - 120
Selenium	50.0	47.1		mg/Kg		94	80 - 120
Silver	25.0	26.3		mg/Kg		105	80 - 120
Thallium	50.0	53.2		mg/Kg		106	80 - 120
Vanadium	50.0	51.9		mg/Kg		104	80 - 120
Zinc	50.0	53.8		mg/Kg		108	80 - 120

Lab Sample ID: 720-88189-1 MS
Matrix: Solid
Analysis Batch: 250222

Client Sample ID: DG-K4(0.5-1)
Prep Type: Total/NA
Prep Batch: 250071

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.4	J B F1	48.5	15.1	F1	mg/Kg		28	75 - 125
Arsenic	120	F1	48.5	139	F1	mg/Kg		35	75 - 125
Barium	140	F1 F2	48.5	134	F1	mg/Kg		-5	75 - 125
Beryllium	0.21	J	48.5	44.4		mg/Kg		91	75 - 125
Cadmium	0.50		48.5	45.4		mg/Kg		92	75 - 125
Chromium	15		48.5	59.1		mg/Kg		90	75 - 125
Cobalt	8.5		48.5	54.1		mg/Kg		94	75 - 125
Copper	92	F1	48.5	122	F1	mg/Kg		61	75 - 125
Lead	160	F1 F2	48.5	145	F1	mg/Kg		-31	75 - 125
Molybdenum	0.78	J	48.5	44.5		mg/Kg		90	75 - 125
Nickel	13		48.5	54.4		mg/Kg		85	75 - 125
Selenium	0.87	J	48.5	44.5		mg/Kg		90	75 - 125
Silver	ND		24.3	24.0		mg/Kg		99	75 - 125
Thallium	ND		48.5	42.6		mg/Kg		88	75 - 125
Vanadium	59		48.5	104		mg/Kg		93	75 - 125
Zinc	170	F1 F2	48.5	171	F1	mg/Kg		-3	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88189-1 MSD
Matrix: Solid
Analysis Batch: 250222

Client Sample ID: DG-K4(0.5-1)
Prep Type: Total/NA
Prep Batch: 250071

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.4	J B F1	49.5	13.6	F1	mg/Kg		25	75 - 125	10	20
Arsenic	120	F1	49.5	159	F1	mg/Kg		74	75 - 125	13	20
Barium	140	F1 F2	49.5	174	F2	mg/Kg		76	75 - 125	26	20
Beryllium	0.21	J	49.5	46.5		mg/Kg		94	75 - 125	5	20
Cadmium	0.50		49.5	48.7		mg/Kg		97	75 - 125	7	20
Chromium	15		49.5	64.3		mg/Kg		99	75 - 125	8	20
Cobalt	8.5		49.5	59.8		mg/Kg		104	75 - 125	10	20
Copper	92	F1	49.5	144		mg/Kg		104	75 - 125	17	20
Lead	160	F1 F2	49.5	196	F1 F2	mg/Kg		71	75 - 125	30	20
Molybdenum	0.78	J	49.5	45.2		mg/Kg		90	75 - 125	2	20
Nickel	13		49.5	62.2		mg/Kg		99	75 - 125	13	20
Selenium	0.87	J	49.5	46.2		mg/Kg		92	75 - 125	4	20
Silver	ND		24.8	24.9		mg/Kg		100	75 - 125	3	20
Thallium	ND		49.5	45.1		mg/Kg		91	75 - 125	6	20
Vanadium	59		49.5	119		mg/Kg		122	75 - 125	14	20
Zinc	170	F1 F2	49.5	225	F2	mg/Kg		106	75 - 125	27	20

Lab Sample ID: MB 720-250096/1-A
Matrix: Solid
Analysis Batch: 250219

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250096

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Arsenic	ND		1.0	0.085	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Barium	ND		0.50	0.071	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Beryllium	ND		0.10	0.033	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Cadmium	ND		0.13	0.012	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Chromium	ND		0.50	0.053	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Cobalt	ND		0.20	0.020	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Copper	ND		1.5	0.71	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Lead	ND		0.50	0.11	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Nickel	ND		0.50	0.051	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Selenium	ND		1.0	0.15	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Silver	ND		0.25	0.051	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Thallium	ND		0.50	0.15	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Vanadium	ND		0.50	0.068	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Zinc	ND		1.5	0.64	mg/Kg		08/23/18 15:12	08/24/18 17:42	1

Lab Sample ID: LCS 720-250096/2-A
Matrix: Solid
Analysis Batch: 250219

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250096

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	46.6		mg/Kg		93	80 - 120
Arsenic	50.0	46.5		mg/Kg		93	80 - 120
Barium	50.0	47.0		mg/Kg		94	80 - 120
Beryllium	50.0	47.7		mg/Kg		95	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-250096/2-A
Matrix: Solid
Analysis Batch: 250219

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250096

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	50.0	47.0		mg/Kg		94	80 - 120
Chromium	50.0	47.4		mg/Kg		95	80 - 120
Cobalt	50.0	48.3		mg/Kg		97	80 - 120
Copper	50.0	47.4		mg/Kg		95	80 - 120
Lead	50.0	47.9		mg/Kg		96	80 - 120
Molybdenum	50.0	47.8		mg/Kg		96	80 - 120
Nickel	50.0	47.5		mg/Kg		95	80 - 120
Selenium	50.0	45.1		mg/Kg		90	80 - 120
Silver	25.0	23.5		mg/Kg		94	80 - 120
Thallium	50.0	48.1		mg/Kg		96	80 - 120
Vanadium	50.0	47.4		mg/Kg		95	80 - 120
Zinc	50.0	47.2		mg/Kg		94	80 - 120

Lab Sample ID: 720-88189-11 MS
Matrix: Solid
Analysis Batch: 250219

Client Sample ID: DG-E4S-0.5-1
Prep Type: Total/NA
Prep Batch: 250096

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.60	J F1	47.2	13.6	F1	mg/Kg		28	75 - 125
Arsenic	2.9	J	47.2	54.9		mg/Kg		110	75 - 125
Barium	36	F1	47.2	95.4		mg/Kg		125	75 - 125
Beryllium	ND	F1	47.2	56.6		mg/Kg		120	75 - 125
Cadmium	0.063	J	47.2	51.6		mg/Kg		109	75 - 125
Chromium	8.2	F1	47.2	64.6		mg/Kg		120	75 - 125
Cobalt	13		47.2	67.4		mg/Kg		116	75 - 125
Copper	110	F1	47.2	193	F1	mg/Kg		181	75 - 125
Lead	45	F1	47.2	106	F1	mg/Kg		129	75 - 125
Molybdenum	ND		47.2	49.7		mg/Kg		105	75 - 125
Nickel	4.2		47.2	57.3		mg/Kg		113	75 - 125
Selenium	ND		47.2	49.7		mg/Kg		105	75 - 125
Silver	ND	F1	23.6	29.6	F1	mg/Kg		126	75 - 125
Thallium	ND		47.2	47.0		mg/Kg		100	75 - 125
Vanadium	98	F1	47.2	183	F1	mg/Kg		181	75 - 125
Zinc	63	F1	47.2	131	F1	mg/Kg		145	75 - 125

Lab Sample ID: 720-88189-11 MSD
Matrix: Solid
Analysis Batch: 250219

Client Sample ID: DG-E4S-0.5-1
Prep Type: Total/NA
Prep Batch: 250096

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.60	J F1	47.6	14.8	F1	mg/Kg		30	75 - 125	8	20
Arsenic	2.9	J	47.6	58.8		mg/Kg		118	75 - 125	7	20
Barium	36	F1	47.6	98.4	F1	mg/Kg		130	75 - 125	3	20
Beryllium	ND	F1	47.6	60.4	F1	mg/Kg		127	75 - 125	6	20
Cadmium	0.063	J	47.6	54.1		mg/Kg		113	75 - 125	5	20
Chromium	8.2	F1	47.6	71.5	F1	mg/Kg		133	75 - 125	10	20
Cobalt	13		47.6	69.9		mg/Kg		120	75 - 125	4	20
Copper	110	F1	47.6	192	F1	mg/Kg		176	75 - 125	1	20
Lead	45	F1	47.6	111	F1	mg/Kg		139	75 - 125	5	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88189-11 MSD — **Client Sample ID: DG-E4S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250219 — **Prep Batch: 250096**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Molybdenum	ND		47.6	52.8		mg/Kg		111	75 - 125	6	20
Nickel	4.2		47.6	59.4		mg/Kg		116	75 - 125	4	20
Selenium	ND		47.6	53.3		mg/Kg		112	75 - 125	7	20
Silver	ND	F1	23.8	29.8		mg/Kg		125	75 - 125	1	20
Thallium	ND		47.6	50.0		mg/Kg		105	75 - 125	6	20
Vanadium	98	F1	47.6	194	F1	mg/Kg		203	75 - 125	6	20
Zinc	63	F1	47.6	132	F1	mg/Kg		146	75 - 125	1	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250050/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250200 — **Prep Batch: 250050**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/23/18 10:11	08/24/18 16:08	1

Lab Sample ID: LCS 720-250050/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250200 — **Prep Batch: 250050**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.817		mg/Kg		98	80 - 120

Lab Sample ID: 720-88164-D-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250200 — **Prep Batch: 250050**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.045		0.806	0.861		mg/Kg		101	75 - 125

Lab Sample ID: 720-88164-D-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250200 — **Prep Batch: 250050**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.045		0.806	0.876		mg/Kg		103	75 - 125	2	20

Lab Sample ID: MB 720-250103/1-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250466 — **Prep Batch: 250103**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/23/18 15:59	08/28/18 21:27	1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 720-250103/2-B
Matrix: Solid
Analysis Batch: 250466

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250103

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.833	0.747		mg/Kg		90	80 - 120		

Lab Sample ID: 720-88189-11 MS
Matrix: Solid
Analysis Batch: 250466

Client Sample ID: DG-E4S-0.5-1
Prep Type: Total/NA
Prep Batch: 250103

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.068		0.806	0.787		mg/Kg		89	75 - 125		

Lab Sample ID: 720-88189-11 MSD
Matrix: Solid
Analysis Batch: 250466

Client Sample ID: DG-E4S-0.5-1
Prep Type: Total/NA
Prep Batch: 250103

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.068		0.833	0.816		mg/Kg		90	75 - 125	4	20

Lab Sample ID: MB 720-250192/1-A
Matrix: Solid
Analysis Batch: 250311

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250192

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/24/18 15:47	08/27/18 12:18	1

Lab Sample ID: LCS 720-250192/2-A
Matrix: Solid
Analysis Batch: 250311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250192

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.833	0.869		mg/Kg		104	80 - 120		

Lab Sample ID: 720-88189-2 MS
Matrix: Solid
Analysis Batch: 250311

Client Sample ID: DG-K4(3.5-4)
Prep Type: Total/NA
Prep Batch: 250192

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.023		0.794	0.827		mg/Kg		101	75 - 125		

Lab Sample ID: 720-88189-2 MSD
Matrix: Solid
Analysis Batch: 250311

Client Sample ID: DG-K4(3.5-4)
Prep Type: Total/NA
Prep Batch: 250192

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.023		0.794	0.849		mg/Kg		104	75 - 125	3	20

Lab Sample ID: MB 720-250231/1-A
Matrix: Solid
Analysis Batch: 250363

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250231

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/25/18 12:29	08/27/18 20:49	1

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Lab Sample ID: LCS 720-250231/2-A
Matrix: Solid
Analysis Batch: 250363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250231

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.833	0.830		mg/Kg		100	80 - 120		

Lab Sample ID: 720-88212-A-26-C MS
Matrix: Solid
Analysis Batch: 250363

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250231

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.11		0.806	0.922		mg/Kg		101	75 - 125		

Lab Sample ID: 720-88212-A-26-D MSD
Matrix: Solid
Analysis Batch: 250363

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250231

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.11		0.781	0.901		mg/Kg		102	75 - 125	2	20

GC/MS VOA

Prep Batch: 250051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-4	DG-B2S-19.5-20	Total/NA	Solid	5035	

Prep Batch: 250314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-3	DG-A2S-19.5-20	Total/NA	Solid	5035	

Analysis Batch: 250350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-3	DG-A2S-19.5-20	Total/NA	Solid	8260B	250314
MB 720-250350/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250350/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250350/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250350/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250350/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-4	DG-B2S-19.5-20	Total/NA	Solid	8260B	250051
MB 720-250407/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250407/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250407/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250407/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250407/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 250048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-3	DG-A2S-19.5-20	Total/NA	Solid	3546	
720-88189-4	DG-B2S-19.5-20	Total/NA	Solid	3546	
MB 720-250048/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250048/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88190-E-11-A MS	Matrix Spike	Total/NA	Solid	3546	
720-88190-E-11-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-3	DG-A2S-19.5-20	Total/NA	Solid	8270C SIM	250048
MB 720-250048/1-A	Method Blank	Total/NA	Solid	8270C SIM	250048
LCS 720-250048/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250048
720-88190-E-11-A MS	Matrix Spike	Total/NA	Solid	8270C SIM	250048
720-88190-E-11-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250048

Analysis Batch: 250333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-4	DG-B2S-19.5-20	Total/NA	Solid	8270C SIM	250048

GC Semi VOA

Analysis Batch: 250036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-4	DG-B2S-19.5-20	Total/NA	Solid	8015B	250044

Analysis Batch: 250037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-3	DG-A2S-19.5-20	Total/NA	Solid	8015B	250044
LCS 720-250044/2-A	Lab Control Sample	Total/NA	Solid	8015B	250044
720-88190-D-10-A MS	Matrix Spike	Total/NA	Solid	8015B	250044
720-88190-D-10-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	250044

Prep Batch: 250044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-3	DG-A2S-19.5-20	Total/NA	Solid	3546	
720-88189-4	DG-B2S-19.5-20	Total/NA	Solid	3546	
MB 720-250044/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250044/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88190-D-10-A MS	Matrix Spike	Total/NA	Solid	3546	
720-88190-D-10-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-3	DG-A2S-19.5-20	Total/NA	Solid	3546	
720-88189-4	DG-B2S-19.5-20	Total/NA	Solid	3546	
MB 720-250053/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250053/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88190-D-10-E MS	Matrix Spike	Total/NA	Solid	3546	
720-88190-D-10-F MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250044/1-A	Method Blank	Total/NA	Solid	8015B	250044

Analysis Batch: 250196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250053/1-A	Method Blank	Total/NA	Solid	8081A	250053
LCS 720-250053/2-A	Lab Control Sample	Total/NA	Solid	8081A	250053

Analysis Batch: 250248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-D-10-E MS	Matrix Spike	Total/NA	Solid	8081A	250053
720-88190-D-10-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	250053

Analysis Batch: 250496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-3	DG-A2S-19.5-20	Total/NA	Solid	8081A	250053
720-88189-4	DG-B2S-19.5-20	Total/NA	Solid	8081A	250053

Prep Batch: 342522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-3	DG-A2S-19.5-20	Total/NA	Solid	3540C	
720-88189-4	DG-B2S-19.5-20	Total/NA	Solid	3540C	
MB 240-342522/14-A	Method Blank	Total/NA	Solid	3540C	

GC Semi VOA (Continued)

Prep Batch: 342522 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-342522/15-A	Lab Control Sample	Total/NA	Solid	3540C	
720-88190-F-15-B MS	Matrix Spike	Total/NA	Solid	3540C	
720-88190-F-15-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3540C	

Analysis Batch: 342750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-3	DG-A2S-19.5-20	Total/NA	Solid	8082	342522
720-88189-4	DG-B2S-19.5-20	Total/NA	Solid	8082	342522
MB 240-342522/14-A	Method Blank	Total/NA	Solid	8082	342522
LCS 240-342522/15-A	Lab Control Sample	Total/NA	Solid	8082	342522
720-88190-F-15-B MS	Matrix Spike	Total/NA	Solid	8082	342522
720-88190-F-15-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8082	342522

Metals

Prep Batch: 250050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-1	DG-K4(0.5-1)	Total/NA	Solid	7471A	
MB 720-250050/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250050/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88164-D-1-A MS	Matrix Spike	Total/NA	Solid	7471A	
720-88164-D-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Prep Batch: 250071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-1	DG-K4(0.5-1)	Total/NA	Solid	3050B	
720-88189-2	DG-K4(3.5-4)	Total/NA	Solid	3050B	
720-88189-3	DG-A2S-19.5-20	Total/NA	Solid	3050B	
720-88189-4	DG-B2S-19.5-20	Total/NA	Solid	3050B	
720-88189-5	DG-C2S-0.5-1	Total/NA	Solid	3050B	
720-88189-6	DG-C2S-3.5-4	Total/NA	Solid	3050B	
720-88189-7	DG-G4S-0.5-1	Total/NA	Solid	3050B	
720-88189-8	DG-G4S-3.5-4	Total/NA	Solid	3050B	
720-88189-9	DG-F4S-0.5-1	Total/NA	Solid	3050B	
MB 720-250071/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250071/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88189-1 MS	DG-K4(0.5-1)	Total/NA	Solid	3050B	
720-88189-1 MSD	DG-K4(0.5-1)	Total/NA	Solid	3050B	

Prep Batch: 250096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-10	DG-F4S-3.5-4	Total/NA	Solid	3050B	
720-88189-11	DG-E4S-0.5-1	Total/NA	Solid	3050B	
720-88189-12	DG-E4S-3.5-4	Total/NA	Solid	3050B	
720-88189-13	DG-D4S-0.5-1	Total/NA	Solid	3050B	
720-88189-14	DG-D4S-3.5-4	Total/NA	Solid	3050B	
720-88189-15	DUP-1	Total/NA	Solid	3050B	
MB 720-250096/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250096/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88189-11 MS	DG-E4S-0.5-1	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 250096 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-11 MSD	DG-E4S-0.5-1	Total/NA	Solid	3050B	

Prep Batch: 250103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-10	DG-F4S-3.5-4	Total/NA	Solid	7471A	
720-88189-11	DG-E4S-0.5-1	Total/NA	Solid	7471A	
720-88189-12	DG-E4S-3.5-4	Total/NA	Solid	7471A	
720-88189-13	DG-D4S-0.5-1	Total/NA	Solid	7471A	
720-88189-14	DG-D4S-3.5-4	Total/NA	Solid	7471A	
720-88189-15	DUP-1	Total/NA	Solid	7471A	
MB 720-250103/1-B	Method Blank	Total/NA	Solid	7471A	
LCS 720-250103/2-B	Lab Control Sample	Total/NA	Solid	7471A	
720-88189-11 MS	DG-E4S-0.5-1	Total/NA	Solid	7471A	
720-88189-11 MSD	DG-E4S-0.5-1	Total/NA	Solid	7471A	

Prep Batch: 250192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-2	DG-K4(3.5-4)	Total/NA	Solid	7471A	
720-88189-3	DG-A2S-19.5-20	Total/NA	Solid	7471A	
720-88189-4	DG-B2S-19.5-20	Total/NA	Solid	7471A	
720-88189-5	DG-C2S-0.5-1	Total/NA	Solid	7471A	
720-88189-6	DG-C2S-3.5-4	Total/NA	Solid	7471A	
720-88189-7	DG-G4S-0.5-1	Total/NA	Solid	7471A	
MB 720-250192/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250192/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88189-2 MS	DG-K4(3.5-4)	Total/NA	Solid	7471A	
720-88189-2 MSD	DG-K4(3.5-4)	Total/NA	Solid	7471A	

Analysis Batch: 250200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-1	DG-K4(0.5-1)	Total/NA	Solid	7471A	250050
MB 720-250050/1-A	Method Blank	Total/NA	Solid	7471A	250050
LCS 720-250050/2-A	Lab Control Sample	Total/NA	Solid	7471A	250050
720-88164-D-1-A MS	Matrix Spike	Total/NA	Solid	7471A	250050
720-88164-D-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250050

Analysis Batch: 250219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-11	DG-E4S-0.5-1	Total/NA	Solid	6010B	250096
720-88189-12	DG-E4S-3.5-4	Total/NA	Solid	6010B	250096
720-88189-13	DG-D4S-0.5-1	Total/NA	Solid	6010B	250096
720-88189-14	DG-D4S-3.5-4	Total/NA	Solid	6010B	250096
720-88189-15	DUP-1	Total/NA	Solid	6010B	250096
MB 720-250096/1-A	Method Blank	Total/NA	Solid	6010B	250096
LCS 720-250096/2-A	Lab Control Sample	Total/NA	Solid	6010B	250096
720-88189-11 MS	DG-E4S-0.5-1	Total/NA	Solid	6010B	250096
720-88189-11 MSD	DG-E4S-0.5-1	Total/NA	Solid	6010B	250096

Analysis Batch: 250222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-1	DG-K4(0.5-1)	Total/NA	Solid	6010B	250071

Metals (Continued)

Analysis Batch: 250222 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-2	DG-K4(3.5-4)	Total/NA	Solid	6010B	250071
720-88189-3	DG-A2S-19.5-20	Total/NA	Solid	6010B	250071
720-88189-4	DG-B2S-19.5-20	Total/NA	Solid	6010B	250071
720-88189-5	DG-C2S-0.5-1	Total/NA	Solid	6010B	250071
720-88189-6	DG-C2S-3.5-4	Total/NA	Solid	6010B	250071
720-88189-7	DG-G4S-0.5-1	Total/NA	Solid	6010B	250071
720-88189-8	DG-G4S-3.5-4	Total/NA	Solid	6010B	250071
720-88189-9	DG-F4S-0.5-1	Total/NA	Solid	6010B	250071
MB 720-250071/1-A	Method Blank	Total/NA	Solid	6010B	250071
LCS 720-250071/2-A	Lab Control Sample	Total/NA	Solid	6010B	250071
720-88189-1 MS	DG-K4(0.5-1)	Total/NA	Solid	6010B	250071
720-88189-1 MSD	DG-K4(0.5-1)	Total/NA	Solid	6010B	250071

Prep Batch: 250231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-8	DG-G4S-3.5-4	Total/NA	Solid	7471A	
720-88189-9	DG-F4S-0.5-1	Total/NA	Solid	7471A	
MB 720-250231/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250231/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88212-A-26-C MS	Matrix Spike	Total/NA	Solid	7471A	
720-88212-A-26-D MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 250311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-2	DG-K4(3.5-4)	Total/NA	Solid	7471A	250192
720-88189-3	DG-A2S-19.5-20	Total/NA	Solid	7471A	250192
720-88189-4	DG-B2S-19.5-20	Total/NA	Solid	7471A	250192
720-88189-5	DG-C2S-0.5-1	Total/NA	Solid	7471A	250192
720-88189-6	DG-C2S-3.5-4	Total/NA	Solid	7471A	250192
720-88189-7	DG-G4S-0.5-1	Total/NA	Solid	7471A	250192
MB 720-250192/1-A	Method Blank	Total/NA	Solid	7471A	250192
LCS 720-250192/2-A	Lab Control Sample	Total/NA	Solid	7471A	250192
720-88189-2 MS	DG-K4(3.5-4)	Total/NA	Solid	7471A	250192
720-88189-2 MSD	DG-K4(3.5-4)	Total/NA	Solid	7471A	250192

Analysis Batch: 250330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-9	DG-F4S-0.5-1	Total/NA	Solid	6010B	250071

Analysis Batch: 250331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-10	DG-F4S-3.5-4	Total/NA	Solid	6010B	250096

Analysis Batch: 250363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-8	DG-G4S-3.5-4	Total/NA	Solid	7471A	250231
720-88189-9	DG-F4S-0.5-1	Total/NA	Solid	7471A	250231
MB 720-250231/1-A	Method Blank	Total/NA	Solid	7471A	250231
LCS 720-250231/2-A	Lab Control Sample	Total/NA	Solid	7471A	250231
720-88212-A-26-C MS	Matrix Spike	Total/NA	Solid	7471A	250231
720-88212-A-26-D MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250231

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Analysis Batch: 250433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-10	DG-F4S-3.5-4	Total/NA	Solid	6010B	250096

Analysis Batch: 250466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88189-10	DG-F4S-3.5-4	Total/NA	Solid	7471A	250103
720-88189-11	DG-E4S-0.5-1	Total/NA	Solid	7471A	250103
720-88189-12	DG-E4S-3.5-4	Total/NA	Solid	7471A	250103
720-88189-13	DG-D4S-0.5-1	Total/NA	Solid	7471A	250103
720-88189-14	DG-D4S-3.5-4	Total/NA	Solid	7471A	250103
720-88189-15	DUP-1	Total/NA	Solid	7471A	250103
MB 720-250103/1-B	Method Blank	Total/NA	Solid	7471A	250103
LCS 720-250103/2-B	Lab Control Sample	Total/NA	Solid	7471A	250103
720-88189-11 MS	DG-E4S-0.5-1	Total/NA	Solid	7471A	250103
720-88189-11 MSD	DG-E4S-0.5-1	Total/NA	Solid	7471A	250103

Client Sample ID: DG-K4(0.5-1)

Lab Sample ID: 720-88189-1

Date Collected: 08/21/18 11:45

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250071	08/23/18 12:48	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250222	08/24/18 19:29	OBI	TAL PLS
Total/NA	Prep	7471A			250050	08/23/18 10:11	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250200	08/24/18 17:09	MAG	TAL PLS

Client Sample ID: DG-K4(3.5-4)

Lab Sample ID: 720-88189-2

Date Collected: 08/21/18 11:45

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250071	08/23/18 12:48	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250222	08/24/18 19:33	OBI	TAL PLS
Total/NA	Prep	7471A			250192	08/24/18 15:47	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250311	08/27/18 12:28	OBI	TAL PLS

Client Sample ID: DG-A2S-19.5-20

Lab Sample ID: 720-88189-3

Date Collected: 08/21/18 14:25

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250314	08/23/18 02:50	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250350	08/28/18 12:18	A1C	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250212	08/25/18 03:23	LPL	TAL PLS
Total/NA	Prep	3546			250044	08/23/18 08:42	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250037	08/23/18 22:37	JXL	TAL PLS
Total/NA	Prep	3546			250053	08/23/18 10:51	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250496	08/29/18 20:22	JZT	TAL PLS
Total/NA	Prep	3540C			342522	08/26/18 10:34	SDE	TAL CAN
Total/NA	Analysis	8082		1	342750	08/28/18 07:24	KMG	TAL CAN
Total/NA	Prep	3050B			250071	08/23/18 12:48	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250222	08/24/18 19:38	OBI	TAL PLS
Total/NA	Prep	7471A			250192	08/24/18 15:47	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250311	08/27/18 12:30	OBI	TAL PLS

Client Sample ID: DG-B2S-19.5-20

Lab Sample ID: 720-88189-4

Date Collected: 08/21/18 15:10

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250051	08/23/18 02:50	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250407	08/28/18 20:48	JRM	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS

Client Sample ID: DG-B2S-19.5-20

Lab Sample ID: 720-88189-4

Date Collected: 08/21/18 15:10

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C SIM		1	250333	08/27/18 21:10	LPL	TAL PLS
Total/NA	Prep	3546			250044	08/23/18 08:42	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250036	08/24/18 02:15	JXL	TAL PLS
Total/NA	Prep	3546			250053	08/23/18 10:51	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250496	08/29/18 20:38	JZT	TAL PLS
Total/NA	Prep	3540C			342522	08/26/18 10:34	SDE	TAL CAN
Total/NA	Analysis	8082		1	342750	08/28/18 07:39	KMG	TAL CAN
Total/NA	Prep	3050B			250071	08/23/18 12:48	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250222	08/24/18 19:43	OBI	TAL PLS
Total/NA	Prep	7471A			250192	08/24/18 15:47	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250311	08/27/18 12:33	OBI	TAL PLS

Client Sample ID: DG-C2S-0.5-1

Lab Sample ID: 720-88189-5

Date Collected: 08/21/18 15:40

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250071	08/23/18 12:48	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250222	08/24/18 19:48	OBI	TAL PLS
Total/NA	Prep	7471A			250192	08/24/18 15:47	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250311	08/27/18 12:35	OBI	TAL PLS

Client Sample ID: DG-C2S-3.5-4

Lab Sample ID: 720-88189-6

Date Collected: 08/21/18 15:40

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250071	08/23/18 12:48	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250222	08/24/18 20:02	OBI	TAL PLS
Total/NA	Prep	7471A			250192	08/24/18 15:47	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250311	08/27/18 12:37	OBI	TAL PLS

Client Sample ID: DG-G4S-0.5-1

Lab Sample ID: 720-88189-7

Date Collected: 08/21/18 16:10

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250071	08/23/18 12:48	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250222	08/24/18 20:07	OBI	TAL PLS
Total/NA	Prep	7471A			250192	08/24/18 15:47	MAG	TAL PLS
Total/NA	Analysis	7471A		100	250311	08/27/18 13:51	OBI	TAL PLS

Client Sample ID: DG-G4S-3.5-4

Lab Sample ID: 720-88189-8

Date Collected: 08/21/18 16:10

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250071	08/23/18 12:48	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250222	08/24/18 20:12	OBI	TAL PLS
Total/NA	Prep	7471A			250231	08/25/18 12:29	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250363	08/27/18 21:17	OBI	TAL PLS

Client Sample ID: DG-F4S-0.5-1

Lab Sample ID: 720-88189-9

Date Collected: 08/21/18 16:30

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250071	08/23/18 12:48	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250222	08/24/18 20:16	OBI	TAL PLS
Total/NA	Prep	3050B			250071	08/23/18 12:48	MAA	TAL PLS
Total/NA	Analysis	6010B		20	250330	08/27/18 17:27	OBI	TAL PLS
Total/NA	Prep	7471A			250231	08/25/18 12:29	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250363	08/27/18 21:19	OBI	TAL PLS

Client Sample ID: DG-F4S-3.5-4

Lab Sample ID: 720-88189-10

Date Collected: 08/21/18 16:30

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		20	250331	08/27/18 17:36	OBI	TAL PLS
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		100	250433	08/28/18 15:10	OBI	TAL PLS
Total/NA	Prep	7471A			250103	08/23/18 15:59	GLL	TAL PLS
Total/NA	Analysis	7471A		100	250466	08/28/18 21:39	OBI	TAL PLS

Client Sample ID: DG-E4S-0.5-1

Lab Sample ID: 720-88189-11

Date Collected: 08/21/18 16:50

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250219	08/24/18 18:11	OBI	TAL PLS
Total/NA	Prep	7471A			250103	08/23/18 15:59	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250466	08/28/18 21:37	OBI	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Client Sample ID: DG-E4S-3.5-4

Lab Sample ID: 720-88189-12

Date Collected: 08/21/18 16:50
Matrix: Solid
Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250219	08/24/18 18:21	OBI	TAL PLS
Total/NA	Prep	7471A			250103	08/23/18 15:59	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250466	08/28/18 21:41	OBI	TAL PLS

Client Sample ID: DG-D4S-0.5-1

Lab Sample ID: 720-88189-13

Date Collected: 08/21/18 17:00
Matrix: Solid
Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250219	08/24/18 18:25	OBI	TAL PLS
Total/NA	Prep	7471A			250103	08/23/18 15:59	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250466	08/28/18 21:44	OBI	TAL PLS

Client Sample ID: DG-D4S-3.5-4

Lab Sample ID: 720-88189-14

Date Collected: 08/21/18 17:00
Matrix: Solid
Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250219	08/24/18 18:39	OBI	TAL PLS
Total/NA	Prep	7471A			250103	08/23/18 15:59	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250466	08/28/18 21:46	OBI	TAL PLS

Client Sample ID: DUP-1

Lab Sample ID: 720-88189-15

Date Collected: 08/21/18 00:00
Matrix: Solid
Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250219	08/24/18 18:44	OBI	TAL PLS
Total/NA	Prep	7471A			250103	08/23/18 15:59	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250466	08/28/18 21:48	OBI	TAL PLS

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-17-9	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
Subcontract	Asbestos - CARB 435	None	
3050B	Preparation, Metals	SW846	TAL PLS
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL PLS
5035	Closed System Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

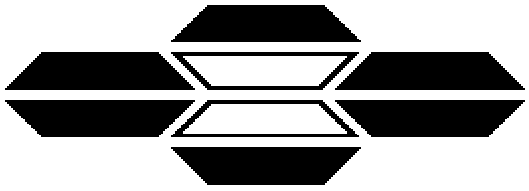
TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88189-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88189-1	DG-K4(0.5-1)	Solid	08/21/18 11:45	08/22/18 14:30
720-88189-2	DG-K4(3.5-4)	Solid	08/21/18 11:45	08/22/18 14:30
720-88189-3	DG-A2S-19.5-20	Solid	08/21/18 14:25	08/22/18 14:30
720-88189-4	DG-B2S-19.5-20	Solid	08/21/18 15:10	08/22/18 14:30
720-88189-5	DG-C2S-0.5-1	Solid	08/21/18 15:40	08/22/18 14:30
720-88189-6	DG-C2S-3.5-4	Solid	08/21/18 15:40	08/22/18 14:30
720-88189-7	DG-G4S-0.5-1	Solid	08/21/18 16:10	08/22/18 14:30
720-88189-8	DG-G4S-3.5-4	Solid	08/21/18 16:10	08/22/18 14:30
720-88189-9	DG-F4S-0.5-1	Solid	08/21/18 16:30	08/22/18 14:30
720-88189-10	DG-F4S-3.5-4	Solid	08/21/18 16:30	08/22/18 14:30
720-88189-11	DG-E4S-0.5-1	Solid	08/21/18 16:50	08/22/18 14:30
720-88189-12	DG-E4S-3.5-4	Solid	08/21/18 16:50	08/22/18 14:30
720-88189-13	DG-D4S-0.5-1	Solid	08/21/18 17:00	08/22/18 14:30
720-88189-14	DG-D4S-3.5-4	Solid	08/21/18 17:00	08/22/18 14:30
720-88189-15	DUP-1	Solid	08/21/18 00:00	08/22/18 14:30



ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01193

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Aug/31/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01193
Polarized light microscopy analytical results for 2 bulk sample(s).
Job Site: 720-88189-1
Job No.: UPC-OU-SM

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 2

Samples Analyzed: 2

Job Site / No. UPC-OU-SM
720-88189-1

Report No. **359822**
Date Submitted: Aug-23-18
Date Reported: Aug-29-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DG-A2S-19.5-20		**<0.25%**	**None Detected**	720-88189-3
Lab ID # 1283-01193-001	**400** - Total Points			No Asbestos Detected
DG-B2S-19.5-20		**<0.25%**	**None Detected**	720-88189-4
Lab ID # 1283-01193-002	**400** - Total Points			No Asbestos Detected
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			

QC Reviewer _____ **Analys** _____

#359822

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39392.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88189-1
Address: 630 BANCROFT WAY,	Due Date Requested: 8/29/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCl
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Oil/waste, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
DG-A2S-19.5-20 (720-88189-3)	8/21/18	14:25 Pacific		Solid			X	1	
DG-B2S-19.5-20 (720-88189-4)	8/21/18	15:10 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature] TA720	8/23/18 1405		MB		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88189

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: 185052

Date 8/21/18 Page 1 of 2

11/8/2018 (Rev. 1)

Report To

Attn: Keaton Belli
Company: Geosyntec
Address: 1111 Broadway 6th Floor
Email: kbelli@geosyntec.com
Bill To: Geosyntec (KB)
Sampled By: K Belli
Attn: Anthony Smith
Phone: 4708810525

Analysis Request

Sample ID	Date	Time	Mat'l	Preserv	Volatile Organics GC/MS (VOCs) EPA 8260B + GRO	HVOCs by EPA 8260B	EPA 8260B: Gas BTEX 5 Oxygenates DCA, EDB Ethanol	TEPH EPA 8015B Silica Gel Diesel Motor Oil Other	SemiVolatile Organics GC/MS EPA 8270C	PNA/PAH's by 8270C 8270C SIM	Oil and Grease Petroleum (EPA 1664/9071) Total	Pesticides EPA 8081 PCBs EPA 8082	CAM17 Metals EPA 6010/7470/7471	Metals: 6010B 200.7 Lead LUFT RCRA Other:	Metals: 6020 200.8 (ICP-MS):	W.E.T (STLC) W.E.T (DI) TCLP	Hex. Chrom by EPA 7196 or EPA 7199	pH 9040 SM4500	Spec. Cond. Alkalinity TSS SS TDS	Anions: Cl SO_4 NO_3 F Br NO_2 PO_4	Perchlorate by EPA 314.0	COD EPA 410.4 SM5220D Turbidity	Asbestos (CARB 435)
DG-K4 (0.5-1)	8/21	1145	S	N									X										
DG-K4 (3.5-4)		1145 (KB)		N									X										
DG-A2S-19.5-20		1425		Y	X			X		X		X	X										X
DG-B2S-19.5-20		1510		Y	X			X		X		X	X										X
DG-C2S-0.5-1		1540 (KB)		N									X										
DG-C2S-3.5-4		1540											X										
DG-G4S-0.5-1		1610											X										
DG-G4S-3.5-4		1610											X										
DG-F4S-0.5-1		1630											X										
DG-F4S-3.5-4		1630											X										

Project Info.

Project Name/ #: UPC 00-SM
PO#: WG2445/01
Credit Card Y/N:

Sample Receipt

of Containers:
Head Space:
Temp:
If yes, please call with payment information ASAP

TAT: 10 Day | (5 Day) | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID
1-9/26/26/4C°
0.7

See Terms and Conditions on reverse

	1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature	Kate Belli (KB)		
Time	1225	1430	
Printed Name	Keaton Belli		
Date	8/22/18	8/22/18	
Company	Geosyntec	TA720	720-88189 Chain of Custody

	1) Received by:	2) Received by:	3) Received by:
Signature			
Time	1230	1430	
Printed Name			
Date	8/22/18	8/22/18	
Company	TA720	TA720	

Page 111 of 115

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88189

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: 185052
8/22/18

Date 8/21/18 Page 2 of 2

11/8/2018 (Rev. 1)

Report To

Attn: Keaton Belli
Company: Geosyntec
Address: 1111 Broadway 6th floor
Email: kbelli@geosyntec.com
Bill To: Geosyntec
Sampled By: K. Belli
Attn: Anthony Smith
Phone: 4708810525

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other ___	Semi-Volatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals EPA 6010/7470/7471	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity		
DG-E4S-0.5-1	8/21	1650	S	N									X											
DG-E4S-3.5-4		1650											X											
DG-D4S-0.5-1		1700											X											
DG-D4S-3.5-4		1700											X											
DUP1 (FB)													X											

Project Info.

Project Name/ #: UPC OU-SM
PO#: WG2445/01
Credit Card Y/N:

Sample Receipt

of Containers:
Head Space:
Temp:
If yes, please call with payment information ASAP

TAT: 10 Day | (5 Day) | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID ___
1-8/26/26-4C 0.7°C
5/22/18

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: K. Belli Time: 1225	Signature: Time: 1430	Signature: Time:
Printed Name: Keaton Belli Date: 8/22/18	Printed Name: Date: 8/22/18	Printed Name: Date:
Company: Geosyntec	Company: TA720	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: Time: 1230	Signature: Time: 1430	Signature: Time:
Printed Name: Date: 8/22/18	Printed Name: Date: 8/22/18	Printed Name: Date:
Company: TA720	Company: TA720	Company:

Rev 10/2014

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39393.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88189-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 8/29/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

C202

Special Instructions/Note:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers
			Preservation Code:					
DG-A2S-19.5-20 (720-88189-3)	8/21/18	14:25 Pacific		Solid			X	1
DG-B2S-19.5-20 (720-88189-4)	8/21/18	15:10 Pacific		Solid			X	1

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/23/18 12:40	TAP		8/24/18 915	TAL
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client TH Plasmation Site Name _____ Cooler unpacked by:

Cooler Received on 8/24/18 Opened on 8/24/18

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **+0** °C) Observed Cooler Temp. 2.4 °C Corrected Cooler Temp. 2.4 °C
   IR GUN #36 (CF **-0.3**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# **HC849161**
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
16. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

_____

_____

_____

_____

_____

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____.

WI-NC-099

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88189-1

Login Number: 88189
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88190-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/21/2018 5:12:01 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 5
Detection Summary 8
Client Sample Results 16
Surrogate Summary 202
QC Sample Results 206
QC Association Summary 257
Lab Chronicle 264
Certification Summary 270
Method Summary 271
Sample Summary 272
Subcontract Data 273
Chain of Custody 277
Receipt Checklists 281

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
F2	MS/MSD RPD exceeds control limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88190-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88190-1

Comments
This report was revised again on 11/21/18 to change the units for the metals data to report in mg/Kg, as requested.

Receipt
The samples were received on 8/22/2018 2:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.7º C, 1.9º C, 2.6º C and 2.6º C.

Receipt Exceptions
Samples DG-F3S (all 3 depths) and DG-H3S (all 3 depths) were received in pre-weighed containers with a label that was added in the field. The label weight was approximately 0.15 g which does not significantly bias the final results.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): DG-H3S-9.5-10. One of two 8 oz. jar label lists DG-H3S (no depth) time: 1645, while the COC lists DG-H3S-9.5-10. One of two 4 oz. jar label got wet and the label smeared. The only identification the can be seen is the depth of 9.5-10 and time: 1645, while the COC lists DG-H3S-9.5-10. Sample containers were identified and logged in based on the time.

GC/MS VOA
Method(s) 8260B: Internal standard (ISTD) response for the following samples were outside control limits: DG-H3S-0.5-1 (720-88190-10) and DG-H3S-9.5-10 (720-88190-12). The sample(s) was re-extracted and/or re-analyzed with concurring results, and the second set of data has been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250407 recovered outside control limits for the following analytes: Carbon disulfide and 1,1-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250408 recovered outside control limits for the following analytes: 1,1-Dichloroethene and Carbon disulfide. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250440 and analytical batch 720-250408 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8260B: Internal standard (ISTD) response for the following sample was outside control limits: DG-G3S-9.5-10 (720-88190-9). The sample(s) was re-extracted and/or re-analyzed, using the sample collected in the field container, with concurring results, and the original set of data has been reported. Data was not available in the analysis of the second terracore.

Method(s) 8260B: Reportable data was not available in the analysis of low level terracores due to sample matrix and issues with sample container causing loss of sample at the time of purging; therefore, the following samples were analyzed and reported using the samples collected in the field containers: DG-F3S-9.5-10 (720-88190-6) and DG-D3S-9.5-10 (720-88190-15).

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250450 recovered outside control limits for the following analytes: 1,1-Dichloroethene and Carbon disulfide. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250488 and analytical batch 720-250450 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Job ID: 720-88190-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Method(s) 8270C SIM: The following samples were diluted due to the abundance of non-target analytes: DG-F3S-0.5-1 (720-88190-4) and DG-D3S-9.5-10 (720-88190-15). Elevated reporting limits (RLs) are provided.

Method(s) 8270C SIM: The method blank for preparation batch 720-250048 and analytical batch 720-250212 contained Naphthalene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method(s) 8082: Surrogate Decachlorobiphenyl recovery for the following samples were outside control limits: DG-H3S-0.5-1 (720-88190-10), DG-H3S-3.5-4 (720-88190-11) and (720-88190-F-15-B MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8082: Surrogate Decachlorobiphenyl recovery for the following samples were outside the upper control limit: DG-H3S-0.5-1 (720-88190-10), DG-H3S-3.5-4 (720-88190-11) and (720-88190-F-15-B MS). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: DG-E3S-9.5-10 (720-88190-3), DG-F3S-0.5-1 (720-88190-4), DG-F3S-3.5-4 (720-88190-5), DG-F3S-9.5-10 (720-88190-6), DG-G3S-9.5-10 (720-88190-9), DG-H3S-0.5-1 (720-88190-10), DG-H3S-3.5-4 (720-88190-11), DG-H3S-9.5-10 (720-88190-12), DG-D3S-9.5-10 (720-88190-15), (720-88190-F-15-B MS) and (720-88190-F-15-C MSD).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250096 and analytical batch 720-250219 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DG-E3S-0.5-1 (720-88190-1), DG-E3S-3.5-4 (720-88190-2), DG-E3S-9.5-10 (720-88190-3), DG-F3S-0.5-1 (720-88190-4), DG-F3S-3.5-4 (720-88190-5), DG-F3S-9.5-10 (720-88190-6), DG-G3S-0.5-1 (720-88190-7), DG-G3S-3.5-4 (720-88190-8), DG-G3S-9.5-10 (720-88190-9), DG-H3S-0.5-1 (720-88190-10), DG-H3S-3.5-4 (720-88190-11), DG-H3S-9.5-10 (720-88190-12), DG-D3S-0.5-1 (720-88190-13), DG-D3S-3.5-4 (720-88190-14) and DG-D3S-9.5-10 (720-88190-15). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250108 and analytical batch 720-250220 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method(s) 3546 / 8270C-SIM: Due to the viscosity of the sample extract the following sample was brought to a final volume of 2 ml: DG-F3S-0.5-1 (720-88190-4), DG-H3S-9.5-10 (720-88190-12), and DG-D3S-9.5-10 (720-88190-15).

No additional analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Subcontract Work

Method Asbestos - CARB 435: This method was subcontracted to ASBESTOS TEM LABORATORIES, INC. The subcontract laboratory certification is different from that of the facility issuing the final report.

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analyte Fe: DG-E3S-9.5-10 (720-88190-3),

Job ID: 720-88190-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

DG-F3S-3.5-4 (720-88190-5), DG-G3S-0.5-1 (720-88190-7), DG-G3S-3.5-4 (720-88190-8), DG-G3S-9.5-10 (720-88190-9), DG-H3S-0.5-1 (720-88190-10), DG-H3S-3.5-4 (720-88190-11) and DG-H3S-9.5-10 (720-88190-12). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-E3S-0.5-1 — Lab Sample ID: 720-88190-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	4.7		2.0	0.33	mg/Kg	4		6010B	Total/NA
Arsenic	14		4.0	0.34	mg/Kg	4		6010B	Total/NA
Barium	120		2.0	0.28	mg/Kg	4		6010B	Total/NA
Cadmium	6.8		0.50	0.050	mg/Kg	4		6010B	Total/NA
Chromium	340		2.0	0.21	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.80	0.080	mg/Kg	4		6010B	Total/NA
Copper	190		6.0	2.8	mg/Kg	4		6010B	Total/NA
Lead	200		2.0	0.42	mg/Kg	4		6010B	Total/NA
Molybdenum	2.5		2.0	0.26	mg/Kg	4		6010B	Total/NA
Nickel	130		2.0	0.20	mg/Kg	4		6010B	Total/NA
Silver	0.22	J	1.0	0.20	mg/Kg	4		6010B	Total/NA
Vanadium	56		2.0	0.27	mg/Kg	4		6010B	Total/NA
Zinc	260		6.0	2.5	mg/Kg	4		6010B	Total/NA
Mercury	0.28		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E3S-3.5-4 — Lab Sample ID: 720-88190-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	9.7		1.8	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	44		3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	240		1.8	0.25	mg/Kg	4		6010B	Total/NA
Cadmium	2.1		0.44	0.044	mg/Kg	4		6010B	Total/NA
Chromium	33		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	530		5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	1800		1.8	0.37	mg/Kg	4		6010B	Total/NA
Molybdenum	0.71	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	49		1.8	0.18	mg/Kg	4		6010B	Total/NA
Silver	1.1		0.88	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	48		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	730		5.3	2.2	mg/Kg	4		6010B	Total/NA
Mercury	1.0		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E3S-9.5-10 — Lab Sample ID: 720-88190-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.9	J	4.0	0.54	ug/Kg	1		8260B	Total/NA
Trichloroethene	0.52	J	4.0	0.50	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	6.4	J	9.6	4.8	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	2.5	J	4.8	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	3.3	J	4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	21		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	16		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	33		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	12		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	7.2		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	54		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	5.3		4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	22		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	7.5		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-E3S-9.5-10 (Continued) — Lab Sample ID: 720-88190-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	13	B	4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	44		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	36		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	58000		1900	720	ug/Kg	1		8015B	Total/NA
Antimony	20		4.6	0.77	mg/Kg	10		6010B	Total/NA
Arsenic	50		9.3	0.79	mg/Kg	10		6010B	Total/NA
Barium	700		1.9	0.26	mg/Kg	4		6010B	Total/NA
Beryllium	0.17	J	0.37	0.12	mg/Kg	4		6010B	Total/NA
Chromium	110		4.6	0.49	mg/Kg	10		6010B	Total/NA
Cobalt	24		1.9	0.19	mg/Kg	10		6010B	Total/NA
Copper	330		14	6.6	mg/Kg	10		6010B	Total/NA
Lead	160		4.6	0.97	mg/Kg	10		6010B	Total/NA
Molybdenum	2.0		1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	76		4.6	0.47	mg/Kg	10		6010B	Total/NA
Thallium	2.3	J	4.6	1.3	mg/Kg	10		6010B	Total/NA
Vanadium	80		4.6	0.63	mg/Kg	10		6010B	Total/NA
Zinc	230		14	5.9	mg/Kg	10		6010B	Total/NA
Mercury	0.060		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-F3S-0.5-1 — Lab Sample ID: 720-88190-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	28	J	39	20	ug/Kg	2		8270C SIM	Total/NA
Acenaphthylene	75		20	9.4	ug/Kg	2		8270C SIM	Total/NA
Anthracene	45		20	7.8	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	140		20	5.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	270		20	7.4	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	320		20	8.2	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	190		20	17	ug/Kg	2		8270C SIM	Total/NA
Benzo[k]fluoranthene	110		20	8.2	ug/Kg	2		8270C SIM	Total/NA
Chrysene	160		20	5.5	ug/Kg	2		8270C SIM	Total/NA
Dibenz(a,h)anthracene	44		20	14	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	210		20	5.5	ug/Kg	2		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	140		20	16	ug/Kg	2		8270C SIM	Total/NA
Naphthalene	38	B	20	14	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	120		20	7.1	ug/Kg	2		8270C SIM	Total/NA
Pyrene	270		20	6.7	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	79000		2000	730	ug/Kg	1		8015B	Total/NA
4,4'-DDE	0.72	J	1.9	0.41	ug/Kg	1		8081A	Total/NA
Antimony	2.4		1.7	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	170		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	290		1.7	0.23	mg/Kg	4		6010B	Total/NA
Cadmium	1.0		0.41	0.041	mg/Kg	4		6010B	Total/NA
Chromium	25		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.66	0.066	mg/Kg	4		6010B	Total/NA
Copper	150		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	370		1.7	0.35	mg/Kg	4		6010B	Total/NA
Molybdenum	0.84	J	1.7	0.21	mg/Kg	4		6010B	Total/NA
Nickel	25		1.7	0.17	mg/Kg	4		6010B	Total/NA
Silver	0.53	J	0.83	0.17	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-F3S-0.5-1 (Continued) — Lab Sample ID: 720-88190-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	72		1.7	0.22	mg/Kg	4		6010B	Total/NA
Zinc	260		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.24		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-F3S-3.5-4 — Lab Sample ID: 720-88190-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	2.5	J	4.7	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	2.0	J	4.7	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	4.7		4.7	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	6.1		4.7	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	7.5		4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	6.3		4.7	4.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	3.4	J	4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	3.4	J	4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	5.0		4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	4.2	J	4.7	3.9	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	3.6	J	4.7	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	6.6		4.7	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	5700		1900	710	ug/Kg	1		8015B	Total/NA
Antimony	2.1		1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	140		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	140		1.6	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.11	J	0.33	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	0.27	J	0.41	0.041	mg/Kg	4		6010B	Total/NA
Chromium	33		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	5.5		0.66	0.066	mg/Kg	4		6010B	Total/NA
Copper	48		4.9	2.3	mg/Kg	4		6010B	Total/NA
Lead	320		1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	0.34	J	1.6	0.21	mg/Kg	4		6010B	Total/NA
Nickel	26		1.6	0.17	mg/Kg	4		6010B	Total/NA
Silver	0.63	J	0.82	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	26		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	260		4.9	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.050		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-F3S-9.5-10 — Lab Sample ID: 720-88190-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	3.0	J	4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	4.0	J	4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	2.3	J	4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	1.7	J	4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	2.9	J	4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	4.4	J B	4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	2.7	J	4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	3.5	J	4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	8700		1900	730	ug/Kg	1		8015B	Total/NA
Antimony	3.1		1.3	0.21	mg/Kg	4		6010B	Total/NA
Arsenic	140		2.5	0.22	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-F3S-9.5-10 (Continued) — Lab Sample ID: 720-88190-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	130		1.3	0.18	mg/Kg	4		6010B	Total/NA
Beryllium	0.12	J	0.25	0.083	mg/Kg	4		6010B	Total/NA
Cadmium	0.31	J	0.32	0.032	mg/Kg	4		6010B	Total/NA
Chromium	33		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	6.0		0.51	0.051	mg/Kg	4		6010B	Total/NA
Copper	59		3.8	1.8	mg/Kg	4		6010B	Total/NA
Lead	300		1.3	0.27	mg/Kg	4		6010B	Total/NA
Molybdenum	0.46	J	1.3	0.16	mg/Kg	4		6010B	Total/NA
Nickel	28		1.3	0.13	mg/Kg	4		6010B	Total/NA
Silver	0.26	J	0.64	0.13	mg/Kg	4		6010B	Total/NA
Vanadium	27		1.3	0.17	mg/Kg	4		6010B	Total/NA
Zinc	210		3.8	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.070		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-G3S-0.5-1 — Lab Sample ID: 720-88190-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.4	J	2.0	0.33	mg/Kg	4		6010B	Total/NA
Arsenic	230		4.0	0.34	mg/Kg	4		6010B	Total/NA
Barium	76		2.0	0.28	mg/Kg	4		6010B	Total/NA
Cadmium	0.16	J	0.50	0.049	mg/Kg	4		6010B	Total/NA
Chromium	35		2.0	0.21	mg/Kg	4		6010B	Total/NA
Cobalt	4.9		0.79	0.079	mg/Kg	4		6010B	Total/NA
Copper	21		5.9	2.8	mg/Kg	4		6010B	Total/NA
Lead	73		2.0	0.42	mg/Kg	4		6010B	Total/NA
Nickel	25		2.0	0.20	mg/Kg	4		6010B	Total/NA
Vanadium	27		2.0	0.27	mg/Kg	4		6010B	Total/NA
Zinc	84		5.9	2.5	mg/Kg	4		6010B	Total/NA
Mercury	0.069		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-G3S-3.5-4 — Lab Sample ID: 720-88190-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.0		1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	340		3.6	0.30	mg/Kg	4		6010B	Total/NA
Barium	110		1.8	0.25	mg/Kg	4		6010B	Total/NA
Beryllium	0.26	J	0.36	0.12	mg/Kg	4		6010B	Total/NA
Cadmium	0.13	J	0.45	0.044	mg/Kg	4		6010B	Total/NA
Chromium	45		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	7.9		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	11		5.4	2.5	mg/Kg	4		6010B	Total/NA
Lead	14		1.8	0.38	mg/Kg	4		6010B	Total/NA
Nickel	37		1.8	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	32		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	43		5.4	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.036		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-G3S-9.5-10 — Lab Sample ID: 720-88190-9

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-G3S-9.5-10 (Continued) — Lab Sample ID: 720-88190-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	61		44	34	ug/Kg	1		8260B	Total/NA
cis-1,2-Dichloroethene	3.0	J	4.4	0.60	ug/Kg	1		8260B	Total/NA
Anthracene	2.0	J	5.0	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	3.3	J	5.0	1.5	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	4.5	J	5.0	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	35		5.0	2.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	5.9		5.0	4.3	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	3.3	J	5.0	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	32		5.0	1.4	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	3.8	J	5.0	3.5	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	15		5.0	1.4	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	16	B	5.0	3.5	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	85		5.0	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	12		5.0	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	3900		1900	720	ug/Kg	1		8015B	Total/NA
Antimony	1.5		1.4	0.23	mg/Kg	4		6010B	Total/NA
Arsenic	67		2.8	0.24	mg/Kg	4		6010B	Total/NA
Barium	52		1.4	0.20	mg/Kg	4		6010B	Total/NA
Beryllium	0.73		0.28	0.092	mg/Kg	4		6010B	Total/NA
Chromium	39		1.4	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	16		0.56	0.056	mg/Kg	4		6010B	Total/NA
Copper	51		4.2	2.0	mg/Kg	4		6010B	Total/NA
Lead	10		1.4	0.30	mg/Kg	4		6010B	Total/NA
Molybdenum	0.36	J	1.4	0.18	mg/Kg	4		6010B	Total/NA
Nickel	42		1.4	0.14	mg/Kg	4		6010B	Total/NA
Silver	0.14	J	0.70	0.14	mg/Kg	4		6010B	Total/NA
Vanadium	46		1.4	0.19	mg/Kg	4		6010B	Total/NA
Zinc	96		4.2	1.8	mg/Kg	4		6010B	Total/NA
Mercury	0.053		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H3S-0.5-1 — Lab Sample ID: 720-88190-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	57		43	33	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	22		9.9	5.0	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	10		5.0	2.4	ug/Kg	1		8270C SIM	Total/NA
Anthracene	9.6		5.0	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	18		5.0	1.5	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	27		5.0	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	44		5.0	2.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	20		5.0	4.3	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	14		5.0	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	27		5.0	1.4	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	5.8		5.0	3.5	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	27		5.0	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluorene	3.8	J	5.0	2.2	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	17		5.0	4.2	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	23	B	5.0	3.5	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	24		5.0	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	31		5.0	1.7	ug/Kg	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-H3S-0.5-1 (Continued) — Lab Sample ID: 720-88190-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	31000		1900	720	ug/Kg	1		8015B	Total/NA
Antimony	0.99	J	1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	200		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	66		1.7	0.24	mg/Kg	4		6010B	Total/NA
Cadmium	0.15	J	0.42	0.042	mg/Kg	4		6010B	Total/NA
Chromium	31		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	5.0		0.67	0.067	mg/Kg	4		6010B	Total/NA
Copper	24		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	69		1.7	0.35	mg/Kg	4		6010B	Total/NA
Nickel	23		1.7	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	24		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	78		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.066		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H3S-3.5-4 — Lab Sample ID: 720-88190-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	2.3	J	4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	3.0	J	4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	1.9	J	4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	1.8	J	4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	2.3	J	4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	31000		1900	720	ug/Kg	1		8015B	Total/NA
Antimony	1.3	J	1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	220		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	110		1.7	0.24	mg/Kg	4		6010B	Total/NA
Cadmium	0.18	J	0.43	0.042	mg/Kg	4		6010B	Total/NA
Chromium	33		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	5.2		0.68	0.068	mg/Kg	4		6010B	Total/NA
Copper	36		5.1	2.4	mg/Kg	4		6010B	Total/NA
Lead	130		1.7	0.36	mg/Kg	4		6010B	Total/NA
Molybdenum	0.25	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	26		1.7	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	24		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	150		5.1	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.039		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H3S-9.5-10 — Lab Sample ID: 720-88190-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	66		35	27	ug/Kg	1		8260B	Total/NA
Carbon disulfide	14		3.5	1.4	ug/Kg	1		8260B	Total/NA
Benzo[a]pyrene	6.0	J	9.8	3.7	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	9.2	J	9.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	4.2	J	9.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	3.3	J	9.8	2.8	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	6.6	J	9.8	2.8	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	6.8	J	9.8	3.5	ug/Kg	1		8270C SIM	Total/NA
Pyrene	9.9		9.8	3.3	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	24000		1900	720	ug/Kg	1		8015B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-H3S-9.5-10 (Continued) — Lab Sample ID: 720-88190-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.44	J	1.4	0.24	mg/Kg	4		6010B	Total/NA
Arsenic	8.2		2.9	0.24	mg/Kg	4		6010B	Total/NA
Barium	24		1.4	0.20	mg/Kg	4		6010B	Total/NA
Beryllium	0.24	J	0.29	0.094	mg/Kg	4		6010B	Total/NA
Cadmium	0.23	J	0.36	0.036	mg/Kg	4		6010B	Total/NA
Chromium	51		1.4	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	10		0.58	0.058	mg/Kg	4		6010B	Total/NA
Copper	21		4.3	2.0	mg/Kg	4		6010B	Total/NA
Lead	4.1		1.4	0.30	mg/Kg	4		6010B	Total/NA
Molybdenum	1.1	J	1.4	0.18	mg/Kg	4		6010B	Total/NA
Nickel	49		1.4	0.15	mg/Kg	4		6010B	Total/NA
Selenium	0.60	J	2.9	0.43	mg/Kg	4		6010B	Total/NA
Vanadium	40		1.4	0.20	mg/Kg	4		6010B	Total/NA
Zinc	50		4.3	1.8	mg/Kg	4		6010B	Total/NA
Mercury	0.058		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-D3S-0.5-1 — Lab Sample ID: 720-88190-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	3.9		1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	210		3.6	0.31	mg/Kg	4		6010B	Total/NA
Barium	44		1.8	0.26	mg/Kg	4		6010B	Total/NA
Cadmium	0.74		0.45	0.045	mg/Kg	4		6010B	Total/NA
Chromium	15		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.73	0.073	mg/Kg	4		6010B	Total/NA
Copper	180		5.5	2.6	mg/Kg	4		6010B	Total/NA
Lead	190		1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	0.34	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	33		1.8	0.19	mg/Kg	4		6010B	Total/NA
Silver	0.35	J	0.91	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	56		1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	160		5.5	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.11		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-D3S-3.5-4 — Lab Sample ID: 720-88190-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	3.5		1.1	0.18	mg/Kg	4		6010B	Total/NA
Arsenic	300		2.1	0.18	mg/Kg	4		6010B	Total/NA
Barium	86		1.1	0.15	mg/Kg	4		6010B	Total/NA
Beryllium	0.080	J	0.21	0.070	mg/Kg	4		6010B	Total/NA
Cadmium	0.38		0.27	0.027	mg/Kg	4		6010B	Total/NA
Chromium	40		1.1	0.11	mg/Kg	4		6010B	Total/NA
Cobalt	10		0.43	0.043	mg/Kg	4		6010B	Total/NA
Copper	440		3.2	1.5	mg/Kg	4		6010B	Total/NA
Lead	230		1.1	0.22	mg/Kg	4		6010B	Total/NA
Molybdenum	0.29	J	1.1	0.14	mg/Kg	4		6010B	Total/NA
Nickel	40		1.1	0.11	mg/Kg	4		6010B	Total/NA
Silver	0.22	J	0.53	0.11	mg/Kg	4		6010B	Total/NA
Vanadium	44		1.1	0.15	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-D3S-3.5-4 (Continued) — Lab Sample ID: 720-88190-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	350		3.2	1.4	mg/Kg	4		6010B	Total/NA
Mercury	0.10		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-D3S-9.5-10 — Lab Sample ID: 720-88190-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	22	J	38	19	ug/Kg	2		8270C SIM	Total/NA
Acenaphthene	26		19	11	ug/Kg	2		8270C SIM	Total/NA
Acenaphthylene	45		19	9.2	ug/Kg	2		8270C SIM	Total/NA
Anthracene	190		19	7.7	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	260		19	5.8	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	270		19	7.3	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	350		19	8.1	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	100		19	16	ug/Kg	2		8270C SIM	Total/NA
Benzo[k]fluoranthene	140		19	8.1	ug/Kg	2		8270C SIM	Total/NA
Chrysene	270		19	5.4	ug/Kg	2		8270C SIM	Total/NA
Dibenz(a,h)anthracene	35		19	13	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	440		19	5.4	ug/Kg	2		8270C SIM	Total/NA
Fluorene	25		19	8.4	ug/Kg	2		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	87		19	16	ug/Kg	2		8270C SIM	Total/NA
Naphthalene	24	B	19	13	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	300		19	6.9	ug/Kg	2		8270C SIM	Total/NA
Pyrene	560		19	6.5	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	64000		4000	1500	ug/Kg	2		8015B	Total/NA
Antimony	0.86	J	1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	29		3.2	0.27	mg/Kg	4		6010B	Total/NA
Barium	67		1.6	0.23	mg/Kg	4		6010B	Total/NA
Cadmium	0.19	J	0.40	0.040	mg/Kg	4		6010B	Total/NA
Chromium	35		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	9.1		0.65	0.065	mg/Kg	4		6010B	Total/NA
Copper	56		4.8	2.3	mg/Kg	4		6010B	Total/NA
Lead	270		1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	0.34	J	1.6	0.21	mg/Kg	4		6010B	Total/NA
Nickel	33		1.6	0.16	mg/Kg	4		6010B	Total/NA
Vanadium	32		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	160		4.8	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.76		0.016	0.0023	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-E3S-0.5-1
Date Collected: 08/21/18 13:40
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-1
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.7		2.0	0.33	mg/Kg		08/23/18 15:12	08/24/18 18:49	4
Arsenic	14		4.0	0.34	mg/Kg		08/23/18 15:12	08/24/18 18:49	4
Barium	120		2.0	0.28	mg/Kg		08/23/18 15:12	08/24/18 18:49	4
Beryllium	ND		0.40	0.13	mg/Kg		08/23/18 15:12	08/24/18 18:49	4
Cadmium	6.8		0.50	0.050	mg/Kg		08/23/18 15:12	08/24/18 18:49	4
Chromium	340		2.0	0.21	mg/Kg		08/23/18 15:12	08/24/18 18:49	4
Cobalt	15		0.80	0.080	mg/Kg		08/23/18 15:12	08/24/18 18:49	4
Copper	190		6.0	2.8	mg/Kg		08/23/18 15:12	08/24/18 18:49	4
Lead	200		2.0	0.42	mg/Kg		08/23/18 15:12	08/24/18 18:49	4
Molybdenum	2.5		2.0	0.26	mg/Kg		08/23/18 15:12	08/24/18 18:49	4
Nickel	130		2.0	0.20	mg/Kg		08/23/18 15:12	08/24/18 18:49	4
Selenium	ND		4.0	0.60	mg/Kg		08/23/18 15:12	08/24/18 18:49	4
Silver	0.22	J	1.0	0.20	mg/Kg		08/23/18 15:12	08/24/18 18:49	4
Thallium	ND		2.0	0.58	mg/Kg		08/23/18 15:12	08/24/18 18:49	4
Vanadium	56		2.0	0.27	mg/Kg		08/23/18 15:12	08/24/18 18:49	4
Zinc	260		6.0	2.5	mg/Kg		08/23/18 15:12	08/24/18 18:49	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.28		0.016	0.0023	mg/Kg		08/23/18 15:59	08/28/18 21:55	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-E3S-3.5-4
Date Collected: 08/21/18 13:40
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-2
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	9.7		1.8	0.29	mg/Kg		08/23/18 15:12	08/24/18 18:53	4
Arsenic	44		3.5	0.30	mg/Kg		08/23/18 15:12	08/24/18 18:53	4
Barium	240		1.8	0.25	mg/Kg		08/23/18 15:12	08/24/18 18:53	4
Beryllium	ND		0.35	0.12	mg/Kg		08/23/18 15:12	08/24/18 18:53	4
Cadmium	2.1		0.44	0.044	mg/Kg		08/23/18 15:12	08/24/18 18:53	4
Chromium	33		1.8	0.19	mg/Kg		08/23/18 15:12	08/24/18 18:53	4
Cobalt	11		0.71	0.071	mg/Kg		08/23/18 15:12	08/24/18 18:53	4
Copper	530		5.3	2.5	mg/Kg		08/23/18 15:12	08/24/18 18:53	4
Lead	1800		1.8	0.37	mg/Kg		08/23/18 15:12	08/24/18 18:53	4
Molybdenum	0.71	J	1.8	0.23	mg/Kg		08/23/18 15:12	08/24/18 18:53	4
Nickel	49		1.8	0.18	mg/Kg		08/23/18 15:12	08/24/18 18:53	4
Selenium	ND		3.5	0.53	mg/Kg		08/23/18 15:12	08/24/18 18:53	4
Silver	1.1		0.88	0.18	mg/Kg		08/23/18 15:12	08/24/18 18:53	4
Thallium	ND		1.8	0.51	mg/Kg		08/23/18 15:12	08/24/18 18:53	4
Vanadium	48		1.8	0.24	mg/Kg		08/23/18 15:12	08/24/18 18:53	4
Zinc	730		5.3	2.2	mg/Kg		08/23/18 15:12	08/24/18 18:53	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.0		0.014	0.0021	mg/Kg		08/23/18 15:59	08/28/18 21:58	1

Client Sample ID: DG-E3S-9.5-10
Date Collected: 08/21/18 14:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-3
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.0	0.96	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Acetone	ND		40	30	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Benzene	ND		4.0	0.52	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Dichlorobromomethane	ND		4.0	0.58	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Bromobenzene	ND		4.0	0.63	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Chlorobromomethane	ND		16	0.58	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Bromoform	ND		4.0	1.6	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Bromomethane	ND		8.0	0.63	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
2-Butanone (MEK)	ND		40	17	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
n-Butylbenzene	ND		4.0	0.80	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
sec-Butylbenzene	ND		4.0	0.58	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
tert-Butylbenzene	ND		4.0	0.58	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Carbon disulfide	ND		4.0	1.6	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Carbon tetrachloride	ND		4.0	0.50	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Chlorobenzene	ND		4.0	0.55	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Chloroethane	ND		8.0	0.45	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Chloroform	ND		4.0	0.53	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Chloromethane	ND		8.0	0.63	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
2-Chlorotoluene	ND		4.0	0.52	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
4-Chlorotoluene	ND		4.0	0.54	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Chlorodibromomethane	ND		4.0	0.57	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
1,2-Dichlorobenzene	ND		4.0	0.54	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
1,3-Dichlorobenzene	ND		4.0	0.58	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
1,4-Dichlorobenzene	ND		4.0	0.57	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
1,3-Dichloropropane	ND		4.0	0.58	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
1,1-Dichloropropene	ND		4.0	0.55	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
1,2-Dibromo-3-Chloropropane	ND		8.0	1.4	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Ethylene Dibromide	ND		4.0	1.1	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Dibromomethane	ND		8.0	0.69	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Dichlorodifluoromethane	ND		8.0	0.63	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
1,1-Dichloroethane	ND		4.0	0.54	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
1,2-Dichloroethane	ND		4.0	0.61	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
1,1-Dichloroethene	ND		4.0	0.50	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
cis-1,2-Dichloroethene	**1.9**	**J**	4.0	0.54	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
trans-1,2-Dichloroethene	ND		4.0	0.60	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
1,2-Dichloropropane	ND		4.0	0.50	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
cis-1,3-Dichloropropene	ND		4.0	0.55	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
trans-1,3-Dichloropropene	ND		4.0	0.54	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Ethylbenzene	ND		4.0	0.60	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Hexachlorobutadiene	ND		4.0	0.72	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
2-Hexanone	ND		40	8.0	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Isopropylbenzene	ND		4.0	0.54	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
4-Isopropyltoluene	ND		4.0	2.0	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Methylene Chloride	ND		8.0	4.5	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
4-Methyl-2-pentanone (MIBK)	ND		40	8.0	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Naphthalene	ND		8.0	1.2	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
N-Propylbenzene	ND		4.0	0.53	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Styrene	ND		4.0	0.50	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
1,1,1,2-Tetrachloroethane	ND		4.0	0.61	ug/Kg		08/23/18 02:50	08/28/18 13:16	1

Client Sample ID: DG-E3S-9.5-10
Date Collected: 08/21/18 14:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-3
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.0	0.60	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Tetrachloroethene	ND		4.0	0.54	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Toluene	ND		4.0	0.57	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
1,2,3-Trichlorobenzene	ND		4.0	0.59	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
1,2,4-Trichlorobenzene	ND		4.0	0.57	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
1,1,1-Trichloroethane	ND		4.0	0.49	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
1,1,2-Trichloroethane	ND		4.0	0.56	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Trichloroethene	**0.52**	**J**	4.0	0.50	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Trichlorofluoromethane	ND		4.0	0.45	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
1,2,3-Trichloropropane	ND		4.0	0.62	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.7	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
1,2,4-Trimethylbenzene	ND		4.0	1.3	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
1,3,5-Trimethylbenzene	ND		4.0	0.52	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Vinyl acetate	ND		16	4.0	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Vinyl chloride	ND		4.0	0.58	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Xylenes, Total	ND		4.0	0.98	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
2,2-Dichloropropane	ND		4.0	1.6	ug/Kg		08/23/18 02:50	08/28/18 13:16	1
Gasoline Range Organics (GRO) -C4-C12	ND		200	80	ug/Kg		08/23/18 02:50	08/28/18 13:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*45 - 131*	*08/23/18 02:50*	*08/28/18 13:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*60 - 140*	*08/23/18 02:50*	*08/28/18 13:16*	*1*
Toluene-d8 (Surr)	*87*		*58 - 140*	*08/23/18 02:50*	*08/28/18 13:16*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**6.4**	**J**	9.6	4.8	ug/Kg		08/23/18 09:43	08/25/18 04:57	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/23/18 09:43	08/25/18 04:57	1
Acenaphthylene	**2.5**	**J**	4.8	2.3	ug/Kg		08/23/18 09:43	08/25/18 04:57	1
Anthracene	**3.3**	**J**	4.8	1.9	ug/Kg		08/23/18 09:43	08/25/18 04:57	1
Benzo[a]anthracene	**21**		4.8	1.4	ug/Kg		08/23/18 09:43	08/25/18 04:57	1
Benzo[a]pyrene	**16**		4.8	1.8	ug/Kg		08/23/18 09:43	08/25/18 04:57	1
Benzo[b]fluoranthene	**33**		4.8	2.0	ug/Kg		08/23/18 09:43	08/25/18 04:57	1
Benzo[g,h,i]perylene	**12**		4.8	4.1	ug/Kg		08/23/18 09:43	08/25/18 04:57	1
Benzo[k]fluoranthene	**7.2**		4.8	2.0	ug/Kg		08/23/18 09:43	08/25/18 04:57	1
Chrysene	**54**		4.8	1.4	ug/Kg		08/23/18 09:43	08/25/18 04:57	1
Dibenz(a,h)anthracene	**5.3**		4.8	3.4	ug/Kg		08/23/18 09:43	08/25/18 04:57	1
Fluoranthene	**22**		4.8	1.4	ug/Kg		08/23/18 09:43	08/25/18 04:57	1
Fluorene	ND		4.8	2.1	ug/Kg		08/23/18 09:43	08/25/18 04:57	1
Indeno[1,2,3-cd]pyrene	**7.5**		4.8	4.1	ug/Kg		08/23/18 09:43	08/25/18 04:57	1
Naphthalene	**13**	**B**	4.8	3.4	ug/Kg		08/23/18 09:43	08/25/18 04:57	1
Phenanthrene	**44**		4.8	1.7	ug/Kg		08/23/18 09:43	08/25/18 04:57	1
Pyrene	**36**		4.8	1.6	ug/Kg		08/23/18 09:43	08/25/18 04:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*33 - 120*	*08/23/18 09:43*	*08/25/18 04:57*	*1*
Terphenyl-d14	*96*		*35 - 146*	*08/23/18 09:43*	*08/25/18 04:57*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-E3S-9.5-10
Date Collected: 08/21/18 14:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-3
Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	58000		1900	720	ug/Kg		08/23/18 08:42	08/24/18 03:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*101*		*40 - 130*	*08/23/18 08:42*	*08/24/18 03:04*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
Aldrin	ND		1.9	0.48	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
Endrin	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
Toxaphene	ND		38	6.5	ug/Kg		08/23/18 10:51	08/29/18 20:55	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/29/18 20:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*105*		*21 - 136*	*08/23/18 10:51*	*08/29/18 20:55*	*1*
Tetrachloro-m-xylene	*88*		*21 - 145*	*08/23/18 10:51*	*08/29/18 20:55*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	22	ug/Kg		08/26/18 10:34	08/28/18 07:53	1
Aroclor-1221	ND		49	24	ug/Kg		08/26/18 10:34	08/28/18 07:53	1
Aroclor-1232	ND		49	23	ug/Kg		08/26/18 10:34	08/28/18 07:53	1
Aroclor-1242	ND		49	19	ug/Kg		08/26/18 10:34	08/28/18 07:53	1
Aroclor-1248	ND		49	24	ug/Kg		08/26/18 10:34	08/28/18 07:53	1
Aroclor-1254	ND		49	23	ug/Kg		08/26/18 10:34	08/28/18 07:53	1
Aroclor-1260	ND		49	22	ug/Kg		08/26/18 10:34	08/28/18 07:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*14 - 128*	*08/26/18 10:34*	*08/28/18 07:53*	*1*
DCB Decachlorobiphenyl	*116*		*10 - 132*	*08/26/18 10:34*	*08/28/18 07:53*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	20		4.6	0.77	mg/Kg		08/23/18 15:12	08/27/18 17:41	10

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-E3S-9.5-10
Date Collected: 08/21/18 14:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-3
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	50		9.3	0.79	mg/Kg		08/23/18 15:12	08/27/18 17:41	10
Barium	700		1.9	0.26	mg/Kg		08/23/18 15:12	08/24/18 18:58	4
Beryllium	0.17	J	0.37	0.12	mg/Kg		08/23/18 15:12	08/24/18 18:58	4
Cadmium	ND		1.2	0.11	mg/Kg		08/23/18 15:12	08/27/18 17:41	10
Chromium	110		4.6	0.49	mg/Kg		08/23/18 15:12	08/27/18 17:41	10
Cobalt	24		1.9	0.19	mg/Kg		08/23/18 15:12	08/27/18 17:41	10
Copper	330		14	6.6	mg/Kg		08/23/18 15:12	08/27/18 17:41	10
Lead	160		4.6	0.97	mg/Kg		08/23/18 15:12	08/27/18 17:41	10
Molybdenum	2.0		1.9	0.24	mg/Kg		08/23/18 15:12	08/24/18 18:58	4
Nickel	76		4.6	0.47	mg/Kg		08/23/18 15:12	08/27/18 17:41	10
Selenium	ND		9.3	1.4	mg/Kg		08/23/18 15:12	08/27/18 17:41	10
Silver	ND		2.3	0.47	mg/Kg		08/23/18 15:12	08/27/18 17:41	10
Thallium	2.3	J	4.6	1.3	mg/Kg		08/23/18 15:12	08/27/18 17:41	10
Vanadium	80		4.6	0.63	mg/Kg		08/23/18 15:12	08/27/18 17:41	10
Zinc	230		14	5.9	mg/Kg		08/23/18 15:12	08/27/18 17:41	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.060		0.016	0.0024	mg/Kg		08/23/18 15:59	08/28/18 22:00	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-F3S-0.5-1
Date Collected: 08/21/18 14:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-4
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.7	0.88	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Acetone	ND		37	28	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Benzene	ND		3.7	0.48	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Dichlorobromomethane	ND		3.7	0.53	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Bromobenzene	ND		3.7	0.58	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Chlorobromomethane	ND		15	0.53	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Bromoform	ND		3.7	1.5	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Bromomethane	ND		7.3	0.58	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
2-Butanone (MEK)	ND		37	15	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
n-Butylbenzene	ND		3.7	0.73	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
sec-Butylbenzene	ND		3.7	0.53	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
tert-Butylbenzene	ND		3.7	0.53	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Carbon disulfide	ND	*	3.7	1.5	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Carbon tetrachloride	ND		3.7	0.45	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Chlorobenzene	ND		3.7	0.51	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Chloroethane	ND		7.3	0.41	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Chloroform	ND		3.7	0.48	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Chloromethane	ND		7.3	0.58	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
2-Chlorotoluene	ND		3.7	0.48	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
4-Chlorotoluene	ND		3.7	0.50	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Chlorodibromomethane	ND		3.7	0.52	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
1,2-Dichlorobenzene	ND		3.7	0.50	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
1,3-Dichlorobenzene	ND		3.7	0.53	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
1,4-Dichlorobenzene	ND		3.7	0.52	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
1,3-Dichloropropane	ND		3.7	0.53	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
1,1-Dichloropropene	ND		3.7	0.51	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
1,2-Dibromo-3-Chloropropane	ND		7.3	1.2	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Ethylene Dibromide	ND		3.7	1.0	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Dibromomethane	ND		7.3	0.63	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Dichlorodifluoromethane	ND		7.3	0.58	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
1,1-Dichloroethane	ND		3.7	0.50	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
1,2-Dichloroethane	ND		3.7	0.56	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
1,1-Dichloroethene	ND	*	3.7	0.45	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
cis-1,2-Dichloroethene	ND		3.7	0.50	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
trans-1,2-Dichloroethene	ND		3.7	0.55	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
1,2-Dichloropropane	ND		3.7	0.46	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
cis-1,3-Dichloropropene	ND		3.7	0.51	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
trans-1,3-Dichloropropene	ND		3.7	0.49	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Ethylbenzene	ND		3.7	0.55	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Hexachlorobutadiene	ND		3.7	0.66	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
2-Hexanone	ND		37	7.3	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Isopropylbenzene	ND		3.7	0.50	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
4-Isopropyltoluene	ND		3.7	1.8	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Methylene Chloride	ND		7.3	4.1	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
4-Methyl-2-pentanone (MIBK)	ND		37	7.3	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Naphthalene	ND		7.3	1.1	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
N-Propylbenzene	ND		3.7	0.48	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Styrene	ND		3.7	0.46	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
1,1,1,2-Tetrachloroethane	ND		3.7	0.56	ug/Kg		08/23/18 02:50	08/28/18 21:19	1

Client Sample ID: DG-F3S-0.5-1

Date Collected: 08/21/18 14:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-4

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.7	0.55	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Tetrachloroethene	ND		3.7	0.49	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Toluene	ND		3.7	0.52	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
1,2,3-Trichlorobenzene	ND		3.7	0.54	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
1,2,4-Trichlorobenzene	ND		3.7	0.52	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
1,1,1-Trichloroethane	ND		3.7	0.45	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
1,1,2-Trichloroethane	ND		3.7	0.51	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Trichloroethene	ND		3.7	0.46	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Trichlorofluoromethane	ND		3.7	0.41	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
1,2,3-Trichloropropane	ND		3.7	0.56	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.7	1.5	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
1,2,4-Trimethylbenzene	ND		3.7	1.2	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
1,3,5-Trimethylbenzene	ND		3.7	0.48	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Vinyl acetate	ND		15	3.7	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Vinyl chloride	ND		3.7	0.53	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Xylenes, Total	ND		3.7	0.89	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
2,2-Dichloropropane	ND		3.7	1.5	ug/Kg		08/23/18 02:50	08/28/18 21:19	1
Gasoline Range Organics (GRO) -C4-C12	ND		180	73	ug/Kg		08/23/18 02:50	08/28/18 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*45 - 131*	*08/23/18 02:50*	*08/28/18 21:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*60 - 140*	*08/23/18 02:50*	*08/28/18 21:19*	*1*
Toluene-d8 (Surr)	*98*		*58 - 140*	*08/23/18 02:50*	*08/28/18 21:19*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**28**	**J**	39	20	ug/Kg		08/23/18 09:43	08/25/18 05:44	2
Acenaphthene	ND		20	11	ug/Kg		08/23/18 09:43	08/25/18 05:44	2
Acenaphthylene	**75**		20	9.4	ug/Kg		08/23/18 09:43	08/25/18 05:44	2
Anthracene	**45**		20	7.8	ug/Kg		08/23/18 09:43	08/25/18 05:44	2
Benzo[a]anthracene	**140**		20	5.9	ug/Kg		08/23/18 09:43	08/25/18 05:44	2
Benzo[a]pyrene	**270**		20	7.4	ug/Kg		08/23/18 09:43	08/25/18 05:44	2
Benzo[b]fluoranthene	**320**		20	8.2	ug/Kg		08/23/18 09:43	08/25/18 05:44	2
Benzo[g,h,i]perylene	**190**		20	17	ug/Kg		08/23/18 09:43	08/25/18 05:44	2
Benzo[k]fluoranthene	**110**		20	8.2	ug/Kg		08/23/18 09:43	08/25/18 05:44	2
Chrysene	**160**		20	5.5	ug/Kg		08/23/18 09:43	08/25/18 05:44	2
Dibenz(a,h)anthracene	**44**		20	14	ug/Kg		08/23/18 09:43	08/25/18 05:44	2
Fluoranthene	**210**		20	5.5	ug/Kg		08/23/18 09:43	08/25/18 05:44	2
Fluorene	ND		20	8.6	ug/Kg		08/23/18 09:43	08/25/18 05:44	2
Indeno[1,2,3-cd]pyrene	**140**		20	16	ug/Kg		08/23/18 09:43	08/25/18 05:44	2
Naphthalene	**38**	**B**	20	14	ug/Kg		08/23/18 09:43	08/25/18 05:44	2
Phenanthrene	**120**		20	7.1	ug/Kg		08/23/18 09:43	08/25/18 05:44	2
Pyrene	**270**		20	6.7	ug/Kg		08/23/18 09:43	08/25/18 05:44	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*33 - 120*	*08/23/18 09:43*	*08/25/18 05:44*	*2*
Terphenyl-d14	*97*		*35 - 146*	*08/23/18 09:43*	*08/25/18 05:44*	*2*

Client Sample ID: DG-F3S-0.5-1

Date Collected: 08/21/18 14:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-4

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**79000**		2000	730	ug/Kg		08/23/18 08:42	08/24/18 03:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*123*		*40 - 130*	*08/23/18 08:42*	*08/24/18 03:28*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
4,4'-DDE	**0.72**	**J**	1.9	0.41	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
Aldrin	ND		1.9	0.48	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
delta-BHC	ND		1.9	0.43	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
Endrin	ND		1.9	0.45	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
Heptachlor	ND		1.9	0.45	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
Toxaphene	ND		39	6.6	ug/Kg		08/23/18 10:51	08/29/18 21:11	1
trans-Chlordane	ND		1.9	0.45	ug/Kg		08/23/18 10:51	08/29/18 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*70*	*p*	*21 - 136*	*08/23/18 10:51*	*08/29/18 21:11*	*1*
Tetrachloro-m-xylene	*95*		*21 - 145*	*08/23/18 10:51*	*08/29/18 21:11*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		48	21	ug/Kg		08/26/18 10:34	08/28/18 10:49	1
Aroclor-1221	ND		48	23	ug/Kg		08/26/18 10:34	08/28/18 10:49	1
Aroclor-1232	ND		48	22	ug/Kg		08/26/18 10:34	08/28/18 10:49	1
Aroclor-1242	ND		48	18	ug/Kg		08/26/18 10:34	08/28/18 10:49	1
Aroclor-1248	ND		48	23	ug/Kg		08/26/18 10:34	08/28/18 10:49	1
Aroclor-1254	ND		48	22	ug/Kg		08/26/18 10:34	08/28/18 10:49	1
Aroclor-1260	ND		48	21	ug/Kg		08/26/18 10:34	08/28/18 10:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*94*		*14 - 128*	*08/26/18 10:34*	*08/28/18 10:49*	*1*
DCB Decachlorobiphenyl	*103*		*10 - 132*	*08/26/18 10:34*	*08/28/18 10:49*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**2.4**		1.7	0.27	mg/Kg		08/23/18 15:12	08/24/18 19:03	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-F3S-0.5-1
Date Collected: 08/21/18 14:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-4
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	170		3.3	0.28	mg/Kg		08/23/18 15:12	08/24/18 19:03	4
Barium	290		1.7	0.23	mg/Kg		08/23/18 15:12	08/24/18 19:03	4
Beryllium	ND		0.33	0.11	mg/Kg		08/23/18 15:12	08/24/18 19:03	4
Cadmium	1.0		0.41	0.041	mg/Kg		08/23/18 15:12	08/24/18 19:03	4
Chromium	25		1.7	0.18	mg/Kg		08/23/18 15:12	08/24/18 19:03	4
Cobalt	11		0.66	0.066	mg/Kg		08/23/18 15:12	08/24/18 19:03	4
Copper	150		5.0	2.4	mg/Kg		08/23/18 15:12	08/24/18 19:03	4
Lead	370		1.7	0.35	mg/Kg		08/23/18 15:12	08/24/18 19:03	4
Molybdenum	0.84	J	1.7	0.21	mg/Kg		08/23/18 15:12	08/24/18 19:03	4
Nickel	25		1.7	0.17	mg/Kg		08/23/18 15:12	08/24/18 19:03	4
Selenium	ND		3.3	0.50	mg/Kg		08/23/18 15:12	08/24/18 19:03	4
Silver	0.53	J	0.83	0.17	mg/Kg		08/23/18 15:12	08/24/18 19:03	4
Thallium	ND		1.7	0.48	mg/Kg		08/23/18 15:12	08/24/18 19:03	4
Vanadium	72		1.7	0.22	mg/Kg		08/23/18 15:12	08/24/18 19:03	4
Zinc	260		5.0	2.1	mg/Kg		08/23/18 15:12	08/24/18 19:03	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.24		0.016	0.0023	mg/Kg		08/23/18 15:59	08/28/18 22:03	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-F3S-3.5-4
Date Collected: 08/21/18 14:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-5
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.1	0.99	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Acetone	ND		41	31	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Benzene	ND		4.1	0.53	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Dichlorobromomethane	ND		4.1	0.59	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Bromobenzene	ND		4.1	0.65	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Chlorobromomethane	ND		16	0.59	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Bromoform	ND		4.1	1.6	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Bromomethane	ND		8.2	0.65	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
2-Butanone (MEK)	ND		41	17	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
n-Butylbenzene	ND		4.1	0.82	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
sec-Butylbenzene	ND		4.1	0.59	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
tert-Butylbenzene	ND		4.1	0.60	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Carbon disulfide	ND	*	4.1	1.6	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Carbon tetrachloride	ND		4.1	0.51	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Chlorobenzene	ND		4.1	0.57	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Chloroethane	ND		8.2	0.46	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Chloroform	ND		4.1	0.54	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Chloromethane	ND		8.2	0.65	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
2-Chlorotoluene	ND		4.1	0.53	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
4-Chlorotoluene	ND		4.1	0.56	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Chlorodibromomethane	ND		4.1	0.58	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
1,2-Dichlorobenzene	ND		4.1	0.56	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
1,3-Dichlorobenzene	ND		4.1	0.59	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
1,4-Dichlorobenzene	ND		4.1	0.58	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
1,3-Dichloropropane	ND		4.1	0.60	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
1,1-Dichloropropene	ND		4.1	0.57	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
1,2-Dibromo-3-Chloropropane	ND		8.2	1.4	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Ethylene Dibromide	ND		4.1	1.2	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Dibromomethane	ND		8.2	0.71	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Dichlorodifluoromethane	ND		8.2	0.65	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
1,1-Dichloroethane	ND		4.1	0.56	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
1,2-Dichloroethane	ND		4.1	0.62	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
1,1-Dichloroethene	ND	*	4.1	0.51	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
cis-1,2-Dichloroethene	ND		4.1	0.56	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
trans-1,2-Dichloroethene	ND		4.1	0.62	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
1,2-Dichloropropane	ND		4.1	0.52	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
cis-1,3-Dichloropropene	ND		4.1	0.57	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
trans-1,3-Dichloropropene	ND		4.1	0.55	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Ethylbenzene	ND		4.1	0.62	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Hexachlorobutadiene	ND		4.1	0.74	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
2-Hexanone	ND		41	8.2	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Isopropylbenzene	ND		4.1	0.56	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
4-Isopropyltoluene	ND		4.1	2.1	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Methylene Chloride	ND		8.2	4.6	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
4-Methyl-2-pentanone (MIBK)	ND		41	8.2	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Naphthalene	ND		8.2	1.2	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
N-Propylbenzene	ND		4.1	0.54	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Styrene	ND		4.1	0.52	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
1,1,1,2-Tetrachloroethane	ND		4.1	0.62	ug/Kg		08/23/18 02:50	08/28/18 21:49	1

Client Sample ID: DG-F3S-3.5-4
Date Collected: 08/21/18 14:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-5
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.1	0.62	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Tetrachloroethene	ND		4.1	0.55	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Toluene	ND		4.1	0.58	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
1,2,3-Trichlorobenzene	ND		4.1	0.61	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
1,2,4-Trichlorobenzene	ND		4.1	0.58	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
1,1,1-Trichloroethane	ND		4.1	0.50	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
1,1,2-Trichloroethane	ND		4.1	0.58	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Trichloroethene	ND		4.1	0.52	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Trichlorofluoromethane	ND		4.1	0.46	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
1,2,3-Trichloropropane	ND		4.1	0.63	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.1	1.7	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
1,2,4-Trimethylbenzene	ND		4.1	1.3	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
1,3,5-Trimethylbenzene	ND		4.1	0.53	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Vinyl acetate	ND		16	4.1	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Vinyl chloride	ND		4.1	0.60	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Xylenes, Total	ND		4.1	1.0	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
2,2-Dichloropropane	ND		4.1	1.6	ug/Kg		08/23/18 02:50	08/28/18 21:49	1
Gasoline Range Organics (GRO) -C4-C12	ND		210	82	ug/Kg		08/23/18 02:50	08/28/18 21:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*45 - 131*	*08/23/18 02:50*	*08/28/18 21:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*60 - 140*	*08/23/18 02:50*	*08/28/18 21:49*	*1*
Toluene-d8 (Surr)	*97*		*58 - 140*	*08/23/18 02:50*	*08/28/18 21:49*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.4	4.7	ug/Kg		08/23/18 09:43	08/25/18 01:01	1
Acenaphthene	ND		4.7	2.6	ug/Kg		08/23/18 09:43	08/25/18 01:01	1
Acenaphthylene	**2.5**	**J**	4.7	2.3	ug/Kg		08/23/18 09:43	08/25/18 01:01	1
Anthracene	**2.0**	**J**	4.7	1.9	ug/Kg		08/23/18 09:43	08/25/18 01:01	1
Benzo[a]anthracene	**4.7**		4.7	1.4	ug/Kg		08/23/18 09:43	08/25/18 01:01	1
Benzo[a]pyrene	**6.1**		4.7	1.8	ug/Kg		08/23/18 09:43	08/25/18 01:01	1
Benzo[b]fluoranthene	**7.5**		4.7	2.0	ug/Kg		08/23/18 09:43	08/25/18 01:01	1
Benzo[g,h,i]perylene	**6.3**		4.7	4.0	ug/Kg		08/23/18 09:43	08/25/18 01:01	1
Benzo[k]fluoranthene	**3.4**	**J**	4.7	2.0	ug/Kg		08/23/18 09:43	08/25/18 01:01	1
Chrysene	**3.4**	**J**	4.7	1.3	ug/Kg		08/23/18 09:43	08/25/18 01:01	1
Dibenz(a,h)anthracene	ND		4.7	3.3	ug/Kg		08/23/18 09:43	08/25/18 01:01	1
Fluoranthene	**5.0**		4.7	1.3	ug/Kg		08/23/18 09:43	08/25/18 01:01	1
Fluorene	ND		4.7	2.1	ug/Kg		08/23/18 09:43	08/25/18 01:01	1
Indeno[1,2,3-cd]pyrene	**4.2**	**J**	4.7	3.9	ug/Kg		08/23/18 09:43	08/25/18 01:01	1
Naphthalene	ND		4.7	3.3	ug/Kg		08/23/18 09:43	08/25/18 01:01	1
Phenanthrene	**3.6**	**J**	4.7	1.7	ug/Kg		08/23/18 09:43	08/25/18 01:01	1
Pyrene	**6.6**		4.7	1.6	ug/Kg		08/23/18 09:43	08/25/18 01:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*49*		*33 - 120*	*08/23/18 09:43*	*08/25/18 01:01*	*1*
Terphenyl-d14	*81*		*35 - 146*	*08/23/18 09:43*	*08/25/18 01:01*	*1*

Client Sample ID: DG-F3S-3.5-4

Date Collected: 08/21/18 14:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-5

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	5700		1900	710	ug/Kg		08/23/18 08:42	08/23/18 23:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*83*		*40 - 130*	*08/23/18 08:42*	*08/23/18 23:50*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
4,4'-DDE	ND		2.0	0.41	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
4,4'-DDT	ND		2.0	0.40	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
Aldrin	ND		2.0	0.49	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
beta-BHC	ND		2.0	0.35	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
cis-Chlordane	ND		2.0	0.39	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
Endosulfan I	ND		2.0	0.31	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
Endosulfan sulfate	ND		2.0	0.37	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
Endrin	ND		2.0	0.45	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
Endrin ketone	ND		2.0	0.32	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
Heptachlor epoxide	ND		2.0	0.34	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
Toxaphene	ND		39	6.7	ug/Kg		08/23/18 10:51	08/29/18 21:28	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		08/23/18 10:51	08/29/18 21:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*100*	*p*	*21 - 136*	*08/23/18 10:51*	*08/29/18 21:28*	*1*
Tetrachloro-m-xylene	*90*		*21 - 145*	*08/23/18 10:51*	*08/29/18 21:28*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	22	ug/Kg		08/26/18 10:34	08/28/18 08:08	1
Aroclor-1221	ND		49	23	ug/Kg		08/26/18 10:34	08/28/18 08:08	1
Aroclor-1232	ND		49	23	ug/Kg		08/26/18 10:34	08/28/18 08:08	1
Aroclor-1242	ND		49	19	ug/Kg		08/26/18 10:34	08/28/18 08:08	1
Aroclor-1248	ND		49	23	ug/Kg		08/26/18 10:34	08/28/18 08:08	1
Aroclor-1254	ND		49	23	ug/Kg		08/26/18 10:34	08/28/18 08:08	1
Aroclor-1260	ND		49	22	ug/Kg		08/26/18 10:34	08/28/18 08:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*47*		*14 - 128*	*08/26/18 10:34*	*08/28/18 08:08*	*1*
DCB Decachlorobiphenyl	*42*		*10 - 132*	*08/26/18 10:34*	*08/28/18 08:08*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.1		1.6	0.27	mg/Kg		08/23/18 15:12	08/24/18 19:08	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-F3S-3.5-4
Date Collected: 08/21/18 14:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-5
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	140		3.3	0.28	mg/Kg		08/23/18 15:12	08/24/18 19:08	4
Barium	140		1.6	0.23	mg/Kg		08/23/18 15:12	08/24/18 19:08	4
Beryllium	0.11	J	0.33	0.11	mg/Kg		08/23/18 15:12	08/24/18 19:08	4
Cadmium	0.27	J	0.41	0.041	mg/Kg		08/23/18 15:12	08/24/18 19:08	4
Chromium	33		1.6	0.17	mg/Kg		08/23/18 15:12	08/24/18 19:08	4
Cobalt	5.5		0.66	0.066	mg/Kg		08/23/18 15:12	08/24/18 19:08	4
Copper	48		4.9	2.3	mg/Kg		08/23/18 15:12	08/24/18 19:08	4
Lead	320		1.6	0.34	mg/Kg		08/23/18 15:12	08/24/18 19:08	4
Molybdenum	0.34	J	1.6	0.21	mg/Kg		08/23/18 15:12	08/24/18 19:08	4
Nickel	26		1.6	0.17	mg/Kg		08/23/18 15:12	08/24/18 19:08	4
Selenium	ND		3.3	0.49	mg/Kg		08/23/18 15:12	08/24/18 19:08	4
Silver	0.63	J	0.82	0.17	mg/Kg		08/23/18 15:12	08/24/18 19:08	4
Thallium	ND		1.6	0.48	mg/Kg		08/23/18 15:12	08/24/18 19:08	4
Vanadium	26		1.6	0.22	mg/Kg		08/23/18 15:12	08/24/18 19:08	4
Zinc	260		4.9	2.1	mg/Kg		08/23/18 15:12	08/24/18 19:08	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.050		0.015	0.0022	mg/Kg		08/23/18 15:59	08/28/18 22:05	1

Client Sample ID: DG-F3S-9.5-10

Date Collected: 08/21/18 15:00
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-6

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Acetone	ND		50	38	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Benzene	ND		5.0	0.65	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Bromobenzene	ND		5.0	0.79	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Chlorobromomethane	ND		20	0.72	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Bromoform	ND		5.0	2.0	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Bromomethane	ND		10	0.79	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
2-Butanone (MEK)	ND		50	21	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Carbon disulfide	ND	*	5.0	2.0	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Chlorobenzene	ND		5.0	0.69	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Chloroethane	ND		10	0.56	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Chloroform	ND		5.0	0.66	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Chloromethane	ND		10	0.79	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Dibromomethane	ND		10	0.86	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
1,1-Dichloroethene	ND	*	5.0	0.62	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Ethylbenzene	ND		5.0	0.75	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
2-Hexanone	ND		50	10	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Methylene Chloride	ND		10	5.6	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Naphthalene	ND		10	1.5	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Styrene	ND		5.0	0.63	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg		08/28/18 21:21	08/29/18 01:56	1

Client Sample ID: DG-F3S-9.5-10
Date Collected: 08/21/18 15:00
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-6
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Toluene	ND		5.0	0.71	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Trichloroethene	ND		5.0	0.63	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Vinyl acetate	ND		20	5.0	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Vinyl chloride	ND		5.0	0.73	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Xylenes, Total	ND		5.0	1.2	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg		08/28/18 21:21	08/29/18 01:56	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg		08/28/18 21:21	08/29/18 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*45 - 131*	*08/28/18 21:21*	*08/29/18 01:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*60 - 140*	*08/28/18 21:21*	*08/29/18 01:56*	*1*
Toluene-d8 (Surr)	*96*		*58 - 140*	*08/28/18 21:21*	*08/29/18 01:56*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.7	4.8	ug/Kg		08/23/18 09:43	08/25/18 01:25	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/23/18 09:43	08/25/18 01:25	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		08/23/18 09:43	08/25/18 01:25	1
Anthracene	ND		4.8	1.9	ug/Kg		08/23/18 09:43	08/25/18 01:25	1
Benzo[a]anthracene	ND		4.8	1.5	ug/Kg		08/23/18 09:43	08/25/18 01:25	1
Benzo[a]pyrene	**3.0**	**J**	4.8	1.8	ug/Kg		08/23/18 09:43	08/25/18 01:25	1
Benzo[b]fluoranthene	**4.0**	**J**	4.8	2.0	ug/Kg		08/23/18 09:43	08/25/18 01:25	1
Benzo[g,h,i]perylene	ND		4.8	4.2	ug/Kg		08/23/18 09:43	08/25/18 01:25	1
Benzo[k]fluoranthene	**2.3**	**J**	4.8	2.0	ug/Kg		08/23/18 09:43	08/25/18 01:25	1
Chrysene	**1.7**	**J**	4.8	1.4	ug/Kg		08/23/18 09:43	08/25/18 01:25	1
Dibenz(a,h)anthracene	ND		4.8	3.4	ug/Kg		08/23/18 09:43	08/25/18 01:25	1
Fluoranthene	**2.9**	**J**	4.8	1.4	ug/Kg		08/23/18 09:43	08/25/18 01:25	1
Fluorene	ND		4.8	2.1	ug/Kg		08/23/18 09:43	08/25/18 01:25	1
Indeno[1,2,3-cd]pyrene	ND		4.8	4.1	ug/Kg		08/23/18 09:43	08/25/18 01:25	1
Naphthalene	**4.4**	**J B**	4.8	3.4	ug/Kg		08/23/18 09:43	08/25/18 01:25	1
Phenanthrene	**2.7**	**J**	4.8	1.7	ug/Kg		08/23/18 09:43	08/25/18 01:25	1
Pyrene	**3.5**	**J**	4.8	1.6	ug/Kg		08/23/18 09:43	08/25/18 01:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*33 - 120*	*08/23/18 09:43*	*08/25/18 01:25*	*1*
Terphenyl-d14	*80*		*35 - 146*	*08/23/18 09:43*	*08/25/18 01:25*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-F3S-9.5-10
Date Collected: 08/21/18 15:00
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-6
Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	8700		1900	730	ug/Kg		08/23/18 08:42	08/23/18 23:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*95*		*40 - 130*	*08/23/18 08:42*	*08/23/18 23:26*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
Aldrin	ND		1.9	0.48	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
Endrin	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
Toxaphene	ND		38	6.5	ug/Kg		08/23/18 10:51	08/29/18 21:44	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/29/18 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*112*		*21 - 136*	*08/23/18 10:51*	*08/29/18 21:44*	*1*
Tetrachloro-m-xylene	*94*		*21 - 145*	*08/23/18 10:51*	*08/29/18 21:44*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	22	ug/Kg		08/26/18 10:34	08/28/18 08:23	1
Aroclor-1221	ND		49	24	ug/Kg		08/26/18 10:34	08/28/18 08:23	1
Aroclor-1232	ND		49	23	ug/Kg		08/26/18 10:34	08/28/18 08:23	1
Aroclor-1242	ND		49	19	ug/Kg		08/26/18 10:34	08/28/18 08:23	1
Aroclor-1248	ND		49	24	ug/Kg		08/26/18 10:34	08/28/18 08:23	1
Aroclor-1254	ND		49	23	ug/Kg		08/26/18 10:34	08/28/18 08:23	1
Aroclor-1260	ND		49	22	ug/Kg		08/26/18 10:34	08/28/18 08:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*51*		*14 - 128*	*08/26/18 10:34*	*08/28/18 08:23*	*1*
DCB Decachlorobiphenyl	*67*		*10 - 132*	*08/26/18 10:34*	*08/28/18 08:23*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.1		1.3	0.21	mg/Kg		08/23/18 15:12	08/24/18 19:12	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-F3S-9.5-10
Date Collected: 08/21/18 15:00
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-6
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	140		2.5	0.22	mg/Kg		08/23/18 15:12	08/24/18 19:12	4
Barium	130		1.3	0.18	mg/Kg		08/23/18 15:12	08/24/18 19:12	4
Beryllium	0.12	J	0.25	0.083	mg/Kg		08/23/18 15:12	08/24/18 19:12	4
Cadmium	0.31	J	0.32	0.032	mg/Kg		08/23/18 15:12	08/24/18 19:12	4
Chromium	33		1.3	0.14	mg/Kg		08/23/18 15:12	08/24/18 19:12	4
Cobalt	6.0		0.51	0.051	mg/Kg		08/23/18 15:12	08/24/18 19:12	4
Copper	59		3.8	1.8	mg/Kg		08/23/18 15:12	08/24/18 19:12	4
Lead	300		1.3	0.27	mg/Kg		08/23/18 15:12	08/24/18 19:12	4
Molybdenum	0.46	J	1.3	0.16	mg/Kg		08/23/18 15:12	08/24/18 19:12	4
Nickel	28		1.3	0.13	mg/Kg		08/23/18 15:12	08/24/18 19:12	4
Selenium	ND		2.5	0.38	mg/Kg		08/23/18 15:12	08/24/18 19:12	4
Silver	0.26	J	0.64	0.13	mg/Kg		08/23/18 15:12	08/24/18 19:12	4
Thallium	ND		1.3	0.37	mg/Kg		08/23/18 15:12	08/24/18 19:12	4
Vanadium	27		1.3	0.17	mg/Kg		08/23/18 15:12	08/24/18 19:12	4
Zinc	210		3.8	1.6	mg/Kg		08/23/18 15:12	08/24/18 19:12	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.070		0.015	0.0023	mg/Kg		08/23/18 15:59	08/28/18 22:07	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-G3S-0.5-1
Date Collected: 08/21/18 15:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-7
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.4	J	2.0	0.33	mg/Kg		08/23/18 15:12	08/24/18 19:17	4
Arsenic	230		4.0	0.34	mg/Kg		08/23/18 15:12	08/24/18 19:17	4
Barium	76		2.0	0.28	mg/Kg		08/23/18 15:12	08/24/18 19:17	4
Beryllium	ND		0.40	0.13	mg/Kg		08/23/18 15:12	08/24/18 19:17	4
Cadmium	0.16	J	0.50	0.049	mg/Kg		08/23/18 15:12	08/24/18 19:17	4
Chromium	35		2.0	0.21	mg/Kg		08/23/18 15:12	08/24/18 19:17	4
Cobalt	4.9		0.79	0.079	mg/Kg		08/23/18 15:12	08/24/18 19:17	4
Copper	21		5.9	2.8	mg/Kg		08/23/18 15:12	08/24/18 19:17	4
Lead	73		2.0	0.42	mg/Kg		08/23/18 15:12	08/24/18 19:17	4
Molybdenum	ND		2.0	0.25	mg/Kg		08/23/18 15:12	08/24/18 19:17	4
Nickel	25		2.0	0.20	mg/Kg		08/23/18 15:12	08/24/18 19:17	4
Selenium	ND		4.0	0.59	mg/Kg		08/23/18 15:12	08/24/18 19:17	4
Silver	ND		0.99	0.20	mg/Kg		08/23/18 15:12	08/24/18 19:17	4
Thallium	ND		2.0	0.57	mg/Kg		08/23/18 15:12	08/24/18 19:17	4
Vanadium	27		2.0	0.27	mg/Kg		08/23/18 15:12	08/24/18 19:17	4
Zinc	84		5.9	2.5	mg/Kg		08/23/18 15:12	08/24/18 19:17	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.069		0.015	0.0022	mg/Kg		08/23/18 15:59	08/28/18 22:09	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-G3S-3.5-4
Date Collected: 08/21/18 15:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-8
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.0		1.8	0.30	mg/Kg		08/23/18 15:12	08/24/18 19:22	4
Arsenic	340		3.6	0.30	mg/Kg		08/23/18 15:12	08/24/18 19:22	4
Barium	110		1.8	0.25	mg/Kg		08/23/18 15:12	08/24/18 19:22	4
Beryllium	0.26	J	0.36	0.12	mg/Kg		08/23/18 15:12	08/24/18 19:22	4
Cadmium	0.13	J	0.45	0.044	mg/Kg		08/23/18 15:12	08/24/18 19:22	4
Chromium	45		1.8	0.19	mg/Kg		08/23/18 15:12	08/24/18 19:22	4
Cobalt	7.9		0.71	0.071	mg/Kg		08/23/18 15:12	08/24/18 19:22	4
Copper	11		5.4	2.5	mg/Kg		08/23/18 15:12	08/24/18 19:22	4
Lead	14		1.8	0.38	mg/Kg		08/23/18 15:12	08/24/18 19:22	4
Molybdenum	ND		1.8	0.23	mg/Kg		08/23/18 15:12	08/24/18 19:22	4
Nickel	37		1.8	0.18	mg/Kg		08/23/18 15:12	08/24/18 19:22	4
Selenium	ND		3.6	0.54	mg/Kg		08/23/18 15:12	08/24/18 19:22	4
Silver	ND		0.89	0.18	mg/Kg		08/23/18 15:12	08/24/18 19:22	4
Thallium	ND		1.8	0.52	mg/Kg		08/23/18 15:12	08/24/18 19:22	4
Vanadium	32		1.8	0.24	mg/Kg		08/23/18 15:12	08/24/18 19:22	4
Zinc	43		5.4	2.3	mg/Kg		08/23/18 15:12	08/24/18 19:22	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.036		0.015	0.0023	mg/Kg		08/23/18 15:59	08/28/18 22:12	1

Client Sample ID: DG-G3S-9.5-10
Date Collected: 08/21/18 15:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-9
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.4	1.1	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Acetone	**61**		44	34	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Benzene	ND		4.4	0.58	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Dichlorobromomethane	ND		4.4	0.64	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Bromobenzene	ND	*	4.4	0.70	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Chlorobromomethane	ND		18	0.64	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Bromoform	ND		4.4	1.8	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Bromomethane	ND		8.9	0.70	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
2-Butanone (MEK)	ND		44	19	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
n-Butylbenzene	ND	*	4.4	0.89	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
sec-Butylbenzene	ND	*	4.4	0.64	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
tert-Butylbenzene	ND	*	4.4	0.65	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Carbon disulfide	ND		4.4	1.8	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Carbon tetrachloride	ND		4.4	0.55	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Chlorobenzene	ND		4.4	0.61	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Chloroethane	ND		8.9	0.50	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Chloroform	ND		4.4	0.59	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Chloromethane	ND		8.9	0.70	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
2-Chlorotoluene	ND	*	4.4	0.58	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
4-Chlorotoluene	ND	*	4.4	0.60	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Chlorodibromomethane	ND		4.4	0.63	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
1,2-Dichlorobenzene	ND	*	4.4	0.60	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
1,3-Dichlorobenzene	ND	*	4.4	0.64	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
1,4-Dichlorobenzene	ND	*	4.4	0.63	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
1,3-Dichloropropane	ND		4.4	0.65	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
1,1-Dichloropropene	ND		4.4	0.61	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
1,2-Dibromo-3-Chloropropane	ND	*	8.9	1.5	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Ethylene Dibromide	ND		4.4	1.3	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Dibromomethane	ND		8.9	0.76	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Dichlorodifluoromethane	ND		8.9	0.70	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
1,1-Dichloroethane	ND		4.4	0.60	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
1,2-Dichloroethane	ND		4.4	0.68	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
1,1-Dichloroethene	ND		4.4	0.55	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
cis-1,2-Dichloroethene	**3.0**	**J**	4.4	0.60	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
trans-1,2-Dichloroethene	ND		4.4	0.67	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
1,2-Dichloropropane	ND		4.4	0.56	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
cis-1,3-Dichloropropene	ND		4.4	0.61	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
trans-1,3-Dichloropropene	ND		4.4	0.60	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Ethylbenzene	ND		4.4	0.67	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Hexachlorobutadiene	ND	*	4.4	0.80	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
2-Hexanone	ND		44	8.9	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Isopropylbenzene	ND		4.4	0.60	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
4-Isopropyltoluene	ND	*	4.4	2.2	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Methylene Chloride	ND		8.9	5.0	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
4-Methyl-2-pentanone (MIBK)	ND		44	8.9	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Naphthalene	ND	*	8.9	1.3	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
N-Propylbenzene	ND	*	4.4	0.59	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Styrene	ND		4.4	0.56	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
1,1,1,2-Tetrachloroethane	ND		4.4	0.68	ug/Kg		08/23/18 02:50	08/27/18 22:03	1

Client Sample ID: DG-G3S-9.5-10

Date Collected: 08/21/18 15:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-9

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.4	0.67	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Tetrachloroethene	ND		4.4	0.60	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Toluene	ND		4.4	0.63	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
1,2,3-Trichlorobenzene	ND	*	4.4	0.66	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
1,2,4-Trichlorobenzene	ND	*	4.4	0.63	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
1,1,1-Trichloroethane	ND		4.4	0.54	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
1,1,2-Trichloroethane	ND		4.4	0.62	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Trichloroethene	ND		4.4	0.56	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Trichlorofluoromethane	ND		4.4	0.50	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
1,2,3-Trichloropropane	ND	*	4.4	0.68	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.8	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
1,2,4-Trimethylbenzene	ND	*	4.4	1.5	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
1,3,5-Trimethylbenzene	ND	*	4.4	0.58	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Vinyl acetate	ND		18	4.4	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Vinyl chloride	ND		4.4	0.65	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Xylenes, Total	ND		4.4	1.1	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
2,2-Dichloropropane	ND		4.4	1.8	ug/Kg		08/23/18 02:50	08/27/18 22:03	1
Gasoline Range Organics (GRO) -C4-C12	ND		220	89	ug/Kg		08/23/18 02:50	08/27/18 22:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*45 - 131*	*08/23/18 02:50*	*08/27/18 22:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*60 - 140*	*08/23/18 02:50*	*08/27/18 22:03*	*1*
Toluene-d8 (Surr)	*93*		*58 - 140*	*08/23/18 02:50*	*08/27/18 22:03*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.9	5.0	ug/Kg		08/23/18 09:43	08/25/18 01:48	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/23/18 09:43	08/25/18 01:48	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/23/18 09:43	08/25/18 01:48	1
Anthracene	**2.0**	**J**	5.0	2.0	ug/Kg		08/23/18 09:43	08/25/18 01:48	1
Benzo[a]anthracene	**3.3**	**J**	5.0	1.5	ug/Kg		08/23/18 09:43	08/25/18 01:48	1
Benzo[a]pyrene	**4.5**	**J**	5.0	1.9	ug/Kg		08/23/18 09:43	08/25/18 01:48	1
Benzo[b]fluoranthene	**35**		5.0	2.1	ug/Kg		08/23/18 09:43	08/25/18 01:48	1
Benzo[g,h,i]perylene	**5.9**		5.0	4.3	ug/Kg		08/23/18 09:43	08/25/18 01:48	1
Benzo[k]fluoranthene	**3.3**	**J**	5.0	2.1	ug/Kg		08/23/18 09:43	08/25/18 01:48	1
Chrysene	**32**		5.0	1.4	ug/Kg		08/23/18 09:43	08/25/18 01:48	1
Dibenz(a,h)anthracene	**3.8**	**J**	5.0	3.5	ug/Kg		08/23/18 09:43	08/25/18 01:48	1
Fluoranthene	**15**		5.0	1.4	ug/Kg		08/23/18 09:43	08/25/18 01:48	1
Fluorene	ND		5.0	2.2	ug/Kg		08/23/18 09:43	08/25/18 01:48	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/23/18 09:43	08/25/18 01:48	1
Naphthalene	**16**	**B**	5.0	3.5	ug/Kg		08/23/18 09:43	08/25/18 01:48	1
Phenanthrene	**85**		5.0	1.8	ug/Kg		08/23/18 09:43	08/25/18 01:48	1
Pyrene	**12**		5.0	1.7	ug/Kg		08/23/18 09:43	08/25/18 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*33 - 120*	*08/23/18 09:43*	*08/25/18 01:48*	*1*
Terphenyl-d14	*86*		*35 - 146*	*08/23/18 09:43*	*08/25/18 01:48*	*1*

Client Sample ID: DG-G3S-9.5-10
Date Collected: 08/21/18 15:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-9
Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3900		1900	720	ug/Kg		08/23/18 08:42	08/23/18 23:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*94*		*40 - 130*	*08/23/18 08:42*	*08/23/18 23:01*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
Aldrin	ND		2.0	0.50	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
Endrin	ND		2.0	0.46	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
Toxaphene	ND		40	6.8	ug/Kg		08/23/18 10:51	08/29/18 22:00	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/23/18 10:51	08/29/18 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*104*		*21 - 136*	*08/23/18 10:51*	*08/29/18 22:00*	*1*
Tetrachloro-m-xylene	*91*		*21 - 145*	*08/23/18 10:51*	*08/29/18 22:00*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	22	ug/Kg		08/26/18 10:34	08/28/18 08:37	1
Aroclor-1221	ND		49	24	ug/Kg		08/26/18 10:34	08/28/18 08:37	1
Aroclor-1232	ND		49	23	ug/Kg		08/26/18 10:34	08/28/18 08:37	1
Aroclor-1242	ND		49	19	ug/Kg		08/26/18 10:34	08/28/18 08:37	1
Aroclor-1248	ND		49	24	ug/Kg		08/26/18 10:34	08/28/18 08:37	1
Aroclor-1254	ND		49	23	ug/Kg		08/26/18 10:34	08/28/18 08:37	1
Aroclor-1260	ND		49	22	ug/Kg		08/26/18 10:34	08/28/18 08:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*14 - 128*	*08/26/18 10:34*	*08/28/18 08:37*	*1*
DCB Decachlorobiphenyl	*119*		*10 - 132*	*08/26/18 10:34*	*08/28/18 08:37*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.5		1.4	0.23	mg/Kg		08/23/18 15:12	08/24/18 19:36	4

Client Sample ID: DG-G3S-9.5-10
Date Collected: 08/21/18 15:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-9
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	67		2.8	0.24	mg/Kg		08/23/18 15:12	08/24/18 19:36	4
Barium	52		1.4	0.20	mg/Kg		08/23/18 15:12	08/24/18 19:36	4
Beryllium	0.73		0.28	0.092	mg/Kg		08/23/18 15:12	08/24/18 19:36	4
Cadmium	ND		0.35	0.035	mg/Kg		08/23/18 15:12	08/24/18 19:36	4
Chromium	39		1.4	0.15	mg/Kg		08/23/18 15:12	08/24/18 19:36	4
Cobalt	16		0.56	0.056	mg/Kg		08/23/18 15:12	08/24/18 19:36	4
Copper	51		4.2	2.0	mg/Kg		08/23/18 15:12	08/24/18 19:36	4
Lead	10		1.4	0.30	mg/Kg		08/23/18 15:12	08/24/18 19:36	4
Molybdenum	0.36	J	1.4	0.18	mg/Kg		08/23/18 15:12	08/24/18 19:36	4
Nickel	42		1.4	0.14	mg/Kg		08/23/18 15:12	08/24/18 19:36	4
Selenium	ND		2.8	0.42	mg/Kg		08/23/18 15:12	08/24/18 19:36	4
Silver	0.14	J	0.70	0.14	mg/Kg		08/23/18 15:12	08/24/18 19:36	4
Thallium	ND		1.4	0.41	mg/Kg		08/23/18 15:12	08/24/18 19:36	4
Vanadium	46		1.4	0.19	mg/Kg		08/23/18 15:12	08/24/18 19:36	4
Zinc	96		4.2	1.8	mg/Kg		08/23/18 15:12	08/24/18 19:36	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.053		0.014	0.0021	mg/Kg		08/23/18 15:59	08/28/18 22:14	1

Client Sample ID: DG-H3S-0.5-1

Date Collected: 08/21/18 16:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-10

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.3	1.0	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Acetone	**57**		43	33	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Benzene	ND		4.3	0.56	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Dichlorobromomethane	ND		4.3	0.62	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Bromobenzene	ND	*	4.3	0.68	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Chlorobromomethane	ND		17	0.62	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Bromoform	ND		4.3	1.7	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Bromomethane	ND		8.6	0.68	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
2-Butanone (MEK)	ND		43	18	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
n-Butylbenzene	ND	*	4.3	0.86	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
sec-Butylbenzene	ND	*	4.3	0.62	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
tert-Butylbenzene	ND	*	4.3	0.63	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Carbon disulfide	ND		4.3	1.7	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Carbon tetrachloride	ND		4.3	0.53	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Chlorobenzene	ND		4.3	0.59	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Chloroethane	ND		8.6	0.48	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Chloroform	ND		4.3	0.57	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Chloromethane	ND		8.6	0.68	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
2-Chlorotoluene	ND	*	4.3	0.56	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
4-Chlorotoluene	ND	*	4.3	0.58	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Chlorodibromomethane	ND		4.3	0.61	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
1,2-Dichlorobenzene	ND	*	4.3	0.58	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
1,3-Dichlorobenzene	ND	*	4.3	0.62	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
1,4-Dichlorobenzene	ND	*	4.3	0.61	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
1,3-Dichloropropane	ND		4.3	0.63	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
1,1-Dichloropropene	ND		4.3	0.59	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
1,2-Dibromo-3-Chloropropane	ND	*	8.6	1.5	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Ethylene Dibromide	ND		4.3	1.2	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Dibromomethane	ND		8.6	0.74	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Dichlorodifluoromethane	ND		8.6	0.68	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
1,1-Dichloroethane	ND		4.3	0.58	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
1,2-Dichloroethane	ND		4.3	0.65	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
1,1-Dichloroethene	ND		4.3	0.53	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
cis-1,2-Dichloroethene	ND		4.3	0.58	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
trans-1,2-Dichloroethene	ND		4.3	0.64	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
1,2-Dichloropropane	ND		4.3	0.54	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
cis-1,3-Dichloropropene	ND		4.3	0.59	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
trans-1,3-Dichloropropene	ND		4.3	0.58	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Ethylbenzene	ND		4.3	0.64	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Hexachlorobutadiene	ND	*	4.3	0.77	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
2-Hexanone	ND		43	8.6	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Isopropylbenzene	ND		4.3	0.58	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
4-Isopropyltoluene	ND	*	4.3	2.1	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Methylene Chloride	ND		8.6	4.8	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
4-Methyl-2-pentanone (MIBK)	ND		43	8.6	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Naphthalene	ND	*	8.6	1.3	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
N-Propylbenzene	ND	*	4.3	0.57	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Styrene	ND		4.3	0.54	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
1,1,1,2-Tetrachloroethane	ND		4.3	0.65	ug/Kg		08/23/18 02:50	08/28/18 14:46	1

Client Sample ID: DG-H3S-0.5-1
Date Collected: 08/21/18 16:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-10
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.3	0.64	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Tetrachloroethene	ND		4.3	0.58	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Toluene	ND		4.3	0.61	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
1,2,3-Trichlorobenzene	ND	*	4.3	0.64	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
1,2,4-Trichlorobenzene	ND	*	4.3	0.61	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
1,1,1-Trichloroethane	ND		4.3	0.52	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
1,1,2-Trichloroethane	ND		4.3	0.60	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Trichloroethene	ND		4.3	0.54	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Trichlorofluoromethane	ND		4.3	0.48	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
1,2,3-Trichloropropane	ND	*	4.3	0.66	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.3	1.8	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
1,2,4-Trimethylbenzene	ND	*	4.3	1.4	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
1,3,5-Trimethylbenzene	ND	*	4.3	0.56	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Vinyl acetate	ND		17	4.3	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Vinyl chloride	ND		4.3	0.63	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Xylenes, Total	ND		4.3	1.0	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
2,2-Dichloropropane	ND		4.3	1.7	ug/Kg		08/23/18 02:50	08/28/18 14:46	1
Gasoline Range Organics (GRO) -C4-C12	ND		210	86	ug/Kg		08/23/18 02:50	08/28/18 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*45 - 131*	*08/23/18 02:50*	*08/28/18 14:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*60 - 140*	*08/23/18 02:50*	*08/28/18 14:46*	*1*
Toluene-d8 (Surr)	*96*		*58 - 140*	*08/23/18 02:50*	*08/28/18 14:46*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**22**		9.9	5.0	ug/Kg		08/23/18 09:43	08/27/18 21:34	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/23/18 09:43	08/27/18 21:34	1
Acenaphthylene	**10**		5.0	2.4	ug/Kg		08/23/18 09:43	08/27/18 21:34	1
Anthracene	**9.6**		5.0	2.0	ug/Kg		08/23/18 09:43	08/27/18 21:34	1
Benzo[a]anthracene	**18**		5.0	1.5	ug/Kg		08/23/18 09:43	08/27/18 21:34	1
Benzo[a]pyrene	**27**		5.0	1.9	ug/Kg		08/23/18 09:43	08/27/18 21:34	1
Benzo[b]fluoranthene	**44**		5.0	2.1	ug/Kg		08/23/18 09:43	08/27/18 21:34	1
Benzo[g,h,i]perylene	**20**		5.0	4.3	ug/Kg		08/23/18 09:43	08/27/18 21:34	1
Benzo[k]fluoranthene	**14**		5.0	2.1	ug/Kg		08/23/18 09:43	08/27/18 21:34	1
Chrysene	**27**		5.0	1.4	ug/Kg		08/23/18 09:43	08/27/18 21:34	1
Dibenz(a,h)anthracene	**5.8**		5.0	3.5	ug/Kg		08/23/18 09:43	08/27/18 21:34	1
Fluoranthene	**27**		5.0	1.4	ug/Kg		08/23/18 09:43	08/27/18 21:34	1
Fluorene	**3.8**	**J**	5.0	2.2	ug/Kg		08/23/18 09:43	08/27/18 21:34	1
Indeno[1,2,3-cd]pyrene	**17**		5.0	4.2	ug/Kg		08/23/18 09:43	08/27/18 21:34	1
Naphthalene	**23**	**B**	5.0	3.5	ug/Kg		08/23/18 09:43	08/27/18 21:34	1
Phenanthrene	**24**		5.0	1.8	ug/Kg		08/23/18 09:43	08/27/18 21:34	1
Pyrene	**31**		5.0	1.7	ug/Kg		08/23/18 09:43	08/27/18 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*33 - 120*	*08/23/18 09:43*	*08/27/18 21:34*	*1*
Terphenyl-d14	*90*		*35 - 146*	*08/23/18 09:43*	*08/27/18 21:34*	*1*

Client Sample ID: DG-H3S-0.5-1

Date Collected: 08/21/18 16:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-10

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	31000		1900	720	ug/Kg		08/23/18 08:42	08/23/18 20:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*79*		*40 - 130*	*08/23/18 08:42*	*08/23/18 20:09*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
4,4'-DDE	ND		2.0	0.41	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
4,4'-DDT	ND		2.0	0.40	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
Aldrin	ND		2.0	0.49	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
beta-BHC	ND		2.0	0.35	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
Chlordane (technical)	ND		39	3.2	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
cis-Chlordane	ND		2.0	0.39	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
Endosulfan sulfate	ND		2.0	0.37	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
Endrin	ND		2.0	0.45	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
Heptachlor epoxide	ND		2.0	0.34	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
Toxaphene	ND		39	6.7	ug/Kg		08/23/18 10:51	08/26/18 08:32	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		08/23/18 10:51	08/26/18 08:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*81*		*21 - 136*	*08/23/18 10:51*	*08/26/18 08:32*	*1*
Tetrachloro-m-xylene	*80*		*21 - 145*	*08/23/18 10:51*	*08/26/18 08:32*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/26/18 10:34	08/28/18 08:52	1
Aroclor-1221	ND		51	24	ug/Kg		08/26/18 10:34	08/28/18 08:52	1
Aroclor-1232	ND		51	23	ug/Kg		08/26/18 10:34	08/28/18 08:52	1
Aroclor-1242	ND		51	19	ug/Kg		08/26/18 10:34	08/28/18 08:52	1
Aroclor-1248	ND		51	24	ug/Kg		08/26/18 10:34	08/28/18 08:52	1
Aroclor-1254	ND		51	23	ug/Kg		08/26/18 10:34	08/28/18 08:52	1
Aroclor-1260	ND		51	22	ug/Kg		08/26/18 10:34	08/28/18 08:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*70*		*14 - 128*	*08/26/18 10:34*	*08/28/18 08:52*	*1*
DCB Decachlorobiphenyl	*144*	*X*	*10 - 132*	*08/26/18 10:34*	*08/28/18 08:52*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.99	J	1.7	0.28	mg/Kg		08/23/18 15:12	08/24/18 19:41	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-H3S-0.5-1
Date Collected: 08/21/18 16:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-10
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	200		3.4	0.29	mg/Kg		08/23/18 15:12	08/24/18 19:41	4
Barium	66		1.7	0.24	mg/Kg		08/23/18 15:12	08/24/18 19:41	4
Beryllium	ND		0.34	0.11	mg/Kg		08/23/18 15:12	08/24/18 19:41	4
Cadmium	0.15	J	0.42	0.042	mg/Kg		08/23/18 15:12	08/24/18 19:41	4
Chromium	31		1.7	0.18	mg/Kg		08/23/18 15:12	08/24/18 19:41	4
Cobalt	5.0		0.67	0.067	mg/Kg		08/23/18 15:12	08/24/18 19:41	4
Copper	24		5.0	2.4	mg/Kg		08/23/18 15:12	08/24/18 19:41	4
Lead	69		1.7	0.35	mg/Kg		08/23/18 15:12	08/24/18 19:41	4
Molybdenum	ND		1.7	0.22	mg/Kg		08/23/18 15:12	08/24/18 19:41	4
Nickel	23		1.7	0.17	mg/Kg		08/23/18 15:12	08/24/18 19:41	4
Selenium	ND		3.4	0.50	mg/Kg		08/23/18 15:12	08/24/18 19:41	4
Silver	ND		0.84	0.17	mg/Kg		08/23/18 15:12	08/24/18 19:41	4
Thallium	ND		1.7	0.49	mg/Kg		08/23/18 15:12	08/24/18 19:41	4
Vanadium	24		1.7	0.23	mg/Kg		08/23/18 15:12	08/24/18 19:41	4
Zinc	78		5.0	2.1	mg/Kg		08/23/18 15:12	08/24/18 19:41	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.066		0.016	0.0023	mg/Kg		08/23/18 15:59	08/28/18 22:16	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-H3S-3.5-4
Date Collected: 08/21/18 16:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-11
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.0	0.96	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Acetone	ND		40	31	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Benzene	ND		4.0	0.52	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Dichlorobromomethane	ND		4.0	0.58	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Bromobenzene	ND		4.0	0.63	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Chlorobromomethane	ND		16	0.58	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Bromoform	ND		4.0	1.6	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Bromomethane	ND		8.0	0.63	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
2-Butanone (MEK)	ND		40	17	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
n-Butylbenzene	ND		4.0	0.80	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
sec-Butylbenzene	ND		4.0	0.58	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
tert-Butylbenzene	ND		4.0	0.59	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Carbon disulfide	ND		4.0	1.6	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Carbon tetrachloride	ND		4.0	0.50	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Chlorobenzene	ND		4.0	0.55	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Chloroethane	ND		8.0	0.45	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Chloroform	ND		4.0	0.53	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Chloromethane	ND		8.0	0.63	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
2-Chlorotoluene	ND		4.0	0.52	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
4-Chlorotoluene	ND		4.0	0.55	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Chlorodibromomethane	ND		4.0	0.57	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
1,2-Dichlorobenzene	ND		4.0	0.55	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
1,3-Dichlorobenzene	ND		4.0	0.58	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
1,4-Dichlorobenzene	ND		4.0	0.57	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
1,3-Dichloropropane	ND		4.0	0.59	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
1,1-Dichloropropene	ND		4.0	0.55	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
1,2-Dibromo-3-Chloropropane	ND		8.0	1.4	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Ethylene Dibromide	ND		4.0	1.1	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Dibromomethane	ND		8.0	0.69	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Dichlorodifluoromethane	ND		8.0	0.63	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
1,1-Dichloroethane	ND		4.0	0.55	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
1,2-Dichloroethane	ND		4.0	0.61	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
1,1-Dichloroethene	ND		4.0	0.50	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
cis-1,2-Dichloroethene	ND		4.0	0.55	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
trans-1,2-Dichloroethene	ND		4.0	0.60	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
1,2-Dichloropropane	ND		4.0	0.51	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
cis-1,3-Dichloropropene	ND		4.0	0.55	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
trans-1,3-Dichloropropene	ND		4.0	0.54	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Ethylbenzene	ND		4.0	0.60	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Hexachlorobutadiene	ND		4.0	0.72	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
2-Hexanone	ND		40	8.0	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Isopropylbenzene	ND		4.0	0.55	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
4-Isopropyltoluene	ND		4.0	2.0	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Methylene Chloride	ND		8.0	4.5	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
4-Methyl-2-pentanone (MIBK)	ND		40	8.0	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Naphthalene	ND		8.0	1.2	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
N-Propylbenzene	ND		4.0	0.53	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Styrene	ND		4.0	0.51	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
1,1,1,2-Tetrachloroethane	ND		4.0	0.61	ug/Kg		08/23/18 02:50	08/28/18 15:16	1

Client Sample ID: DG-H3S-3.5-4

Date Collected: 08/21/18 16:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-11

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.0	0.60	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Tetrachloroethene	ND		4.0	0.54	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Toluene	ND		4.0	0.57	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
1,2,3-Trichlorobenzene	ND		4.0	0.59	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
1,2,4-Trichlorobenzene	ND		4.0	0.57	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
1,1,1-Trichloroethane	ND		4.0	0.49	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
1,1,2-Trichloroethane	ND		4.0	0.56	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Trichloroethene	ND		4.0	0.51	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Trichlorofluoromethane	ND		4.0	0.45	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
1,2,3-Trichloropropane	ND		4.0	0.62	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.7	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
1,2,4-Trimethylbenzene	ND		4.0	1.3	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
1,3,5-Trimethylbenzene	ND		4.0	0.52	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Vinyl acetate	ND		16	4.0	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Vinyl chloride	ND		4.0	0.59	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Xylenes, Total	ND		4.0	0.98	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
2,2-Dichloropropane	ND		4.0	1.6	ug/Kg		08/23/18 02:50	08/28/18 15:16	1
Gasoline Range Organics (GRO) -C4-C12	ND		200	80	ug/Kg		08/23/18 02:50	08/28/18 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*45 - 131*	*08/23/18 02:50*	*08/28/18 15:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*60 - 140*	*08/23/18 02:50*	*08/28/18 15:16*	*1*
Toluene-d8 (Surr)	*99*		*58 - 140*	*08/23/18 02:50*	*08/28/18 15:16*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.8	4.9	ug/Kg		08/23/18 09:43	08/25/18 02:59	1
Acenaphthene	ND		4.9	2.7	ug/Kg		08/23/18 09:43	08/25/18 02:59	1
Acenaphthylene	ND		4.9	2.4	ug/Kg		08/23/18 09:43	08/25/18 02:59	1
Anthracene	ND		4.9	2.0	ug/Kg		08/23/18 09:43	08/25/18 02:59	1
Benzo[a]anthracene	ND		4.9	1.5	ug/Kg		08/23/18 09:43	08/25/18 02:59	1
Benzo[a]pyrene	**2.3**	**J**	4.9	1.9	ug/Kg		08/23/18 09:43	08/25/18 02:59	1
Benzo[b]fluoranthene	**3.0**	**J**	4.9	2.1	ug/Kg		08/23/18 09:43	08/25/18 02:59	1
Benzo[g,h,i]perylene	ND		4.9	4.2	ug/Kg		08/23/18 09:43	08/25/18 02:59	1
Benzo[k]fluoranthene	ND		4.9	2.1	ug/Kg		08/23/18 09:43	08/25/18 02:59	1
Chrysene	ND		4.9	1.4	ug/Kg		08/23/18 09:43	08/25/18 02:59	1
Dibenz(a,h)anthracene	ND		4.9	3.4	ug/Kg		08/23/18 09:43	08/25/18 02:59	1
Fluoranthene	**1.9**	**J**	4.9	1.4	ug/Kg		08/23/18 09:43	08/25/18 02:59	1
Fluorene	ND		4.9	2.2	ug/Kg		08/23/18 09:43	08/25/18 02:59	1
Indeno[1,2,3-cd]pyrene	ND		4.9	4.1	ug/Kg		08/23/18 09:43	08/25/18 02:59	1
Naphthalene	ND		4.9	3.4	ug/Kg		08/23/18 09:43	08/25/18 02:59	1
Phenanthrene	**1.8**	**J**	4.9	1.8	ug/Kg		08/23/18 09:43	08/25/18 02:59	1
Pyrene	**2.3**	**J**	4.9	1.7	ug/Kg		08/23/18 09:43	08/25/18 02:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*33 - 120*	*08/23/18 09:43*	*08/25/18 02:59*	*1*
Terphenyl-d14	*81*		*35 - 146*	*08/23/18 09:43*	*08/25/18 02:59*	*1*

Client Sample ID: DG-H3S-3.5-4
Date Collected: 08/21/18 16:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-11
Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	31000		1900	720	ug/Kg		08/23/18 08:42	08/24/18 02:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*101*		*40 - 130*	*08/23/18 08:42*	*08/24/18 02:40*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
Aldrin	ND		1.9	0.48	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
Endrin	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
Toxaphene	ND		38	6.5	ug/Kg		08/23/18 10:51	08/29/18 22:17	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/23/18 10:51	08/29/18 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*95*		*21 - 136*	*08/23/18 10:51*	*08/29/18 22:17*	*1*
Tetrachloro-m-xylene	*83*		*21 - 145*	*08/23/18 10:51*	*08/29/18 22:17*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/26/18 10:34	08/28/18 09:07	1
Aroclor-1221	ND		50	24	ug/Kg		08/26/18 10:34	08/28/18 09:07	1
Aroclor-1232	ND		50	23	ug/Kg		08/26/18 10:34	08/28/18 09:07	1
Aroclor-1242	ND		50	19	ug/Kg		08/26/18 10:34	08/28/18 09:07	1
Aroclor-1248	ND		50	24	ug/Kg		08/26/18 10:34	08/28/18 09:07	1
Aroclor-1254	ND		50	23	ug/Kg		08/26/18 10:34	08/28/18 09:07	1
Aroclor-1260	ND		50	22	ug/Kg		08/26/18 10:34	08/28/18 09:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*14 - 128*	*08/26/18 10:34*	*08/28/18 09:07*	*1*
DCB Decachlorobiphenyl	*134*	*X*	*10 - 132*	*08/26/18 10:34*	*08/28/18 09:07*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.3	J	1.7	0.28	mg/Kg		08/23/18 15:12	08/24/18 19:45	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-H3S-3.5-4
Date Collected: 08/21/18 16:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-11
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	220		3.4	0.29	mg/Kg		08/23/18 15:12	08/24/18 19:45	4
Barium	110		1.7	0.24	mg/Kg		08/23/18 15:12	08/24/18 19:45	4
Beryllium	ND		0.34	0.11	mg/Kg		08/23/18 15:12	08/24/18 19:45	4
Cadmium	0.18	J	0.43	0.042	mg/Kg		08/23/18 15:12	08/24/18 19:45	4
Chromium	33		1.7	0.18	mg/Kg		08/23/18 15:12	08/24/18 19:45	4
Cobalt	5.2		0.68	0.068	mg/Kg		08/23/18 15:12	08/24/18 19:45	4
Copper	36		5.1	2.4	mg/Kg		08/23/18 15:12	08/24/18 19:45	4
Lead	130		1.7	0.36	mg/Kg		08/23/18 15:12	08/24/18 19:45	4
Molybdenum	0.25	J	1.7	0.22	mg/Kg		08/23/18 15:12	08/24/18 19:45	4
Nickel	26		1.7	0.17	mg/Kg		08/23/18 15:12	08/24/18 19:45	4
Selenium	ND		3.4	0.51	mg/Kg		08/23/18 15:12	08/24/18 19:45	4
Silver	ND		0.85	0.17	mg/Kg		08/23/18 15:12	08/24/18 19:45	4
Thallium	ND		1.7	0.50	mg/Kg		08/23/18 15:12	08/24/18 19:45	4
Vanadium	24		1.7	0.23	mg/Kg		08/23/18 15:12	08/24/18 19:45	4
Zinc	150		5.1	2.2	mg/Kg		08/23/18 15:12	08/24/18 19:45	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.017	0.0025	mg/Kg		08/23/18 15:59	08/28/18 22:23	1

Client Sample ID: DG-H3S-9.5-10

Date Collected: 08/21/18 16:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-12

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.5	0.85	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Acetone	**66**		35	27	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Benzene	ND		3.5	0.46	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Dichlorobromomethane	ND		3.5	0.51	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Bromobenzene	ND	*	3.5	0.56	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Chlorobromomethane	ND		14	0.51	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Bromoform	ND	*	3.5	1.4	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Bromomethane	ND		7.1	0.56	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
2-Butanone (MEK)	ND		35	15	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
n-Butylbenzene	ND	*	3.5	0.71	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
sec-Butylbenzene	ND	*	3.5	0.51	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
tert-Butylbenzene	ND	*	3.5	0.51	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Carbon disulfide	**14**		3.5	1.4	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Carbon tetrachloride	ND		3.5	0.44	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Chlorobenzene	ND	*	3.5	0.49	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Chloroethane	ND		7.1	0.39	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Chloroform	ND		3.5	0.47	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Chloromethane	ND		7.1	0.56	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
2-Chlorotoluene	ND	*	3.5	0.46	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
4-Chlorotoluene	ND	*	3.5	0.48	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Chlorodibromomethane	ND		3.5	0.50	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
1,2-Dichlorobenzene	ND	*	3.5	0.48	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
1,3-Dichlorobenzene	ND	*	3.5	0.51	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
1,4-Dichlorobenzene	ND	*	3.5	0.50	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
1,3-Dichloropropane	ND		3.5	0.51	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
1,1-Dichloropropene	ND		3.5	0.49	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
1,2-Dibromo-3-Chloropropane	ND	*	7.1	1.2	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Ethylene Dibromide	ND		3.5	1.0	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Dibromomethane	ND		7.1	0.61	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Dichlorodifluoromethane	ND		7.1	0.56	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
1,1-Dichloroethane	ND		3.5	0.48	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
1,2-Dichloroethane	ND		3.5	0.54	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
1,1-Dichloroethene	ND		3.5	0.44	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
cis-1,2-Dichloroethene	ND		3.5	0.48	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
trans-1,2-Dichloroethene	ND		3.5	0.53	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
1,2-Dichloropropane	ND		3.5	0.44	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
cis-1,3-Dichloropropene	ND		3.5	0.49	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
trans-1,3-Dichloropropene	ND		3.5	0.47	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Ethylbenzene	ND	*	3.5	0.53	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Hexachlorobutadiene	ND	*	3.5	0.63	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
2-Hexanone	ND		35	7.1	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Isopropylbenzene	ND	*	3.5	0.48	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
4-Isopropyltoluene	ND	*	3.5	1.8	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Methylene Chloride	ND		7.1	3.9	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
4-Methyl-2-pentanone (MIBK)	ND		35	7.1	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Naphthalene	ND	*	7.1	1.1	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
N-Propylbenzene	ND	*	3.5	0.47	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Styrene	ND	*	3.5	0.44	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
1,1,1,2-Tetrachloroethane	ND	*	3.5	0.54	ug/Kg		08/23/18 02:50	08/28/18 15:47	1

Client Sample ID: DG-H3S-9.5-10

Date Collected: 08/21/18 16:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-12

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	3.5	0.53	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Tetrachloroethene	ND		3.5	0.47	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Toluene	ND	*	3.5	0.50	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
1,2,3-Trichlorobenzene	ND	*	3.5	0.52	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
1,2,4-Trichlorobenzene	ND	*	3.5	0.50	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
1,1,1-Trichloroethane	ND		3.5	0.43	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
1,1,2-Trichloroethane	ND		3.5	0.49	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Trichloroethene	ND		3.5	0.44	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Trichlorofluoromethane	ND		3.5	0.39	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
1,2,3-Trichloropropane	ND	*	3.5	0.54	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.5	1.5	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
1,2,4-Trimethylbenzene	ND	*	3.5	1.2	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
1,3,5-Trimethylbenzene	ND	*	3.5	0.46	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Vinyl acetate	ND		14	3.5	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Vinyl chloride	ND		3.5	0.51	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Xylenes, Total	ND		3.5	0.86	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
2,2-Dichloropropane	ND		3.5	1.4	ug/Kg		08/23/18 02:50	08/28/18 15:47	1
Gasoline Range Organics (GRO) -C4-C12	ND		180	71	ug/Kg		08/23/18 02:50	08/28/18 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*	*	*45 - 131*	*08/23/18 02:50*	*08/28/18 15:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*120*		*60 - 140*	*08/23/18 02:50*	*08/28/18 15:47*	*1*
Toluene-d8 (Surr)	*93*		*58 - 140*	*08/23/18 02:50*	*08/28/18 15:47*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		20	9.8	ug/Kg		08/23/18 09:43	08/25/18 06:08	1
Acenaphthene	ND		9.8	5.5	ug/Kg		08/23/18 09:43	08/25/18 06:08	1
Acenaphthylene	ND		9.8	4.7	ug/Kg		08/23/18 09:43	08/25/18 06:08	1
Anthracene	ND		9.8	3.9	ug/Kg		08/23/18 09:43	08/25/18 06:08	1
Benzo[a]anthracene	ND		9.8	2.9	ug/Kg		08/23/18 09:43	08/25/18 06:08	1
Benzo[a]pyrene	**6.0**	**J**	9.8	3.7	ug/Kg		08/23/18 09:43	08/25/18 06:08	1
Benzo[b]fluoranthene	**9.2**	**J**	9.8	4.1	ug/Kg		08/23/18 09:43	08/25/18 06:08	1
Benzo[g,h,i]perylene	ND		9.8	8.5	ug/Kg		08/23/18 09:43	08/25/18 06:08	1
Benzo[k]fluoranthene	**4.2**	**J**	9.8	4.1	ug/Kg		08/23/18 09:43	08/25/18 06:08	1
Chrysene	**3.3**	**J**	9.8	2.8	ug/Kg		08/23/18 09:43	08/25/18 06:08	1
Dibenz(a,h)anthracene	ND		9.8	6.9	ug/Kg		08/23/18 09:43	08/25/18 06:08	1
Fluoranthene	**6.6**	**J**	9.8	2.8	ug/Kg		08/23/18 09:43	08/25/18 06:08	1
Fluorene	ND		9.8	4.3	ug/Kg		08/23/18 09:43	08/25/18 06:08	1
Indeno[1,2,3-cd]pyrene	ND		9.8	8.3	ug/Kg		08/23/18 09:43	08/25/18 06:08	1
Naphthalene	ND		9.8	6.9	ug/Kg		08/23/18 09:43	08/25/18 06:08	1
Phenanthrene	**6.8**	**J**	9.8	3.5	ug/Kg		08/23/18 09:43	08/25/18 06:08	1
Pyrene	**9.9**		9.8	3.3	ug/Kg		08/23/18 09:43	08/25/18 06:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*33 - 120*	*08/23/18 09:43*	*08/25/18 06:08*	*1*
Terphenyl-d14	*91*		*35 - 146*	*08/23/18 09:43*	*08/25/18 06:08*	*1*

Client Sample ID: DG-H3S-9.5-10

Date Collected: 08/21/18 16:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-12

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	24000		1900	720	ug/Kg		08/23/18 08:42	08/24/18 01:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*81*		*40 - 130*	*08/23/18 08:42*	*08/24/18 01:03*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
4,4'-DDE	ND		2.0	0.41	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
4,4'-DDT	ND		2.0	0.40	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
Aldrin	ND		2.0	0.49	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
Chlordane (technical)	ND		39	3.2	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
cis-Chlordane	ND		2.0	0.39	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
Endrin	ND		2.0	0.45	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
Toxaphene	ND		39	6.7	ug/Kg		08/23/18 10:51	08/29/18 22:33	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		08/23/18 10:51	08/29/18 22:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*88*		*21 - 136*	*08/23/18 10:51*	*08/29/18 22:33*	*1*
Tetrachloro-m-xylene	*88*		*21 - 145*	*08/23/18 10:51*	*08/29/18 22:33*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/26/18 10:34	08/28/18 09:21	1
Aroclor-1221	ND		50	24	ug/Kg		08/26/18 10:34	08/28/18 09:21	1
Aroclor-1232	ND		50	23	ug/Kg		08/26/18 10:34	08/28/18 09:21	1
Aroclor-1242	ND		50	19	ug/Kg		08/26/18 10:34	08/28/18 09:21	1
Aroclor-1248	ND		50	24	ug/Kg		08/26/18 10:34	08/28/18 09:21	1
Aroclor-1254	ND		50	23	ug/Kg		08/26/18 10:34	08/28/18 09:21	1
Aroclor-1260	ND		50	22	ug/Kg		08/26/18 10:34	08/28/18 09:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*66*		*14 - 128*	*08/26/18 10:34*	*08/28/18 09:21*	*1*
DCB Decachlorobiphenyl	*94*		*10 - 132*	*08/26/18 10:34*	*08/28/18 09:21*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.44	J	1.4	0.24	mg/Kg		08/23/18 15:12	08/24/18 19:50	4

Client Sample ID: DG-H3S-9.5-10
Date Collected: 08/21/18 16:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-12
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.2		2.9	0.24	mg/Kg		08/23/18 15:12	08/24/18 19:50	4
Barium	24		1.4	0.20	mg/Kg		08/23/18 15:12	08/24/18 19:50	4
Beryllium	0.24	J	0.29	0.094	mg/Kg		08/23/18 15:12	08/24/18 19:50	4
Cadmium	0.23	J	0.36	0.036	mg/Kg		08/23/18 15:12	08/24/18 19:50	4
Chromium	51		1.4	0.15	mg/Kg		08/23/18 15:12	08/24/18 19:50	4
Cobalt	10		0.58	0.058	mg/Kg		08/23/18 15:12	08/24/18 19:50	4
Copper	21		4.3	2.0	mg/Kg		08/23/18 15:12	08/24/18 19:50	4
Lead	4.1		1.4	0.30	mg/Kg		08/23/18 15:12	08/24/18 19:50	4
Molybdenum	1.1	J	1.4	0.18	mg/Kg		08/23/18 15:12	08/24/18 19:50	4
Nickel	49		1.4	0.15	mg/Kg		08/23/18 15:12	08/24/18 19:50	4
Selenium	0.60	J	2.9	0.43	mg/Kg		08/23/18 15:12	08/24/18 19:50	4
Silver	ND		0.72	0.15	mg/Kg		08/23/18 15:12	08/24/18 19:50	4
Thallium	ND		1.4	0.42	mg/Kg		08/23/18 15:12	08/24/18 19:50	4
Vanadium	40		1.4	0.20	mg/Kg		08/23/18 15:12	08/24/18 19:50	4
Zinc	50		4.3	1.8	mg/Kg		08/23/18 15:12	08/24/18 19:50	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.058		0.015	0.0022	mg/Kg		08/23/18 15:59	08/28/18 22:26	1

Client Sample ID: DG-D3S-0.5-1

Date Collected: 08/21/18 17:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-13

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**3.9**		1.8	0.30	mg/Kg		08/23/18 16:49	08/24/18 22:12	4
Arsenic	**210**		3.6	0.31	mg/Kg		08/23/18 16:49	08/24/18 22:12	4
Barium	**44**		1.8	0.26	mg/Kg		08/23/18 16:49	08/24/18 22:12	4
Beryllium	ND		0.36	0.12	mg/Kg		08/23/18 16:49	08/24/18 22:12	4
Cadmium	**0.74**		0.45	0.045	mg/Kg		08/23/18 16:49	08/24/18 22:12	4
Chromium	**15**		1.8	0.19	mg/Kg		08/23/18 16:49	08/24/18 22:12	4
Cobalt	**13**		0.73	0.073	mg/Kg		08/23/18 16:49	08/24/18 22:12	4
Copper	**180**		5.5	2.6	mg/Kg		08/23/18 16:49	08/24/18 22:12	4
Lead	**190**		1.8	0.38	mg/Kg		08/23/18 16:49	08/24/18 22:12	4
Molybdenum	**0.34**	**J**	1.8	0.23	mg/Kg		08/23/18 16:49	08/24/18 22:12	4
Nickel	**33**		1.8	0.19	mg/Kg		08/23/18 16:49	08/24/18 22:12	4
Selenium	ND		3.6	0.55	mg/Kg		08/23/18 16:49	08/24/18 22:12	4
Silver	**0.35**	**J**	0.91	0.18	mg/Kg		08/23/18 16:49	08/24/18 22:12	4
Thallium	ND		1.8	0.53	mg/Kg		08/23/18 16:49	08/24/18 22:12	4
Vanadium	**56**		1.8	0.25	mg/Kg		08/23/18 16:49	08/24/18 22:12	4
Zinc	**160**		5.5	2.3	mg/Kg		08/23/18 16:49	08/24/18 22:12	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.11**		0.016	0.0023	mg/Kg		08/23/18 15:59	08/28/18 22:28	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-D3S-3.5-4
Date Collected: 08/21/18 17:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-14
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.5		1.1	0.18	mg/Kg		08/23/18 16:49	08/24/18 22:27	4
Arsenic	300		2.1	0.18	mg/Kg		08/23/18 16:49	08/24/18 22:27	4
Barium	86		1.1	0.15	mg/Kg		08/23/18 16:49	08/24/18 22:27	4
Beryllium	0.080	J	0.21	0.070	mg/Kg		08/23/18 16:49	08/24/18 22:27	4
Cadmium	0.38		0.27	0.027	mg/Kg		08/23/18 16:49	08/24/18 22:27	4
Chromium	40		1.1	0.11	mg/Kg		08/23/18 16:49	08/24/18 22:27	4
Cobalt	10		0.43	0.043	mg/Kg		08/23/18 16:49	08/24/18 22:27	4
Copper	440		3.2	1.5	mg/Kg		08/23/18 16:49	08/24/18 22:27	4
Lead	230		1.1	0.22	mg/Kg		08/23/18 16:49	08/24/18 22:27	4
Molybdenum	0.29	J	1.1	0.14	mg/Kg		08/23/18 16:49	08/24/18 22:27	4
Nickel	40		1.1	0.11	mg/Kg		08/23/18 16:49	08/24/18 22:27	4
Selenium	ND		2.1	0.32	mg/Kg		08/23/18 16:49	08/24/18 22:27	4
Silver	0.22	J	0.53	0.11	mg/Kg		08/23/18 16:49	08/24/18 22:27	4
Thallium	ND		1.1	0.31	mg/Kg		08/23/18 16:49	08/24/18 22:27	4
Vanadium	44		1.1	0.15	mg/Kg		08/23/18 16:49	08/24/18 22:27	4
Zinc	350		3.2	1.4	mg/Kg		08/23/18 16:49	08/24/18 22:27	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10		0.016	0.0024	mg/Kg		08/25/18 12:29	08/27/18 21:22	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-D3S-9.5-10
Date Collected: 08/21/18 17:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-15
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.8	1.1	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Acetone	ND		48	36	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Benzene	ND		4.8	0.62	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Dichlorobromomethane	ND		4.8	0.69	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Bromobenzene	ND		4.8	0.75	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Chlorobromomethane	ND		19	0.69	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Bromoform	ND		4.8	1.9	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Bromomethane	ND		9.5	0.75	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
2-Butanone (MEK)	ND		48	20	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
n-Butylbenzene	ND		4.8	0.95	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
sec-Butylbenzene	ND		4.8	0.69	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
tert-Butylbenzene	ND		4.8	0.70	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Carbon disulfide	ND	*	4.8	1.9	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Carbon tetrachloride	ND		4.8	0.59	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Chlorobenzene	ND		4.8	0.66	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Chloroethane	ND		9.5	0.53	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Chloroform	ND		4.8	0.63	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Chloromethane	ND		9.5	0.75	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
2-Chlorotoluene	ND		4.8	0.62	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
4-Chlorotoluene	ND		4.8	0.65	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Chlorodibromomethane	ND		4.8	0.68	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
1,2-Dichlorobenzene	ND		4.8	0.65	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
1,3-Dichlorobenzene	ND		4.8	0.69	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
1,4-Dichlorobenzene	ND		4.8	0.68	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
1,3-Dichloropropane	ND		4.8	0.70	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
1,1-Dichloropropene	ND		4.8	0.66	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
1,2-Dibromo-3-Chloropropane	ND		9.5	1.6	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Ethylene Dibromide	ND		4.8	1.4	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Dibromomethane	ND		9.5	0.82	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Dichlorodifluoromethane	ND		9.5	0.75	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
1,1-Dichloroethane	ND		4.8	0.65	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
1,2-Dichloroethane	ND		4.8	0.73	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
1,1-Dichloroethene	ND	*	4.8	0.59	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
cis-1,2-Dichloroethene	ND		4.8	0.65	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
trans-1,2-Dichloroethene	ND		4.8	0.72	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
1,2-Dichloropropane	ND		4.8	0.60	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
cis-1,3-Dichloropropene	ND		4.8	0.66	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
trans-1,3-Dichloropropene	ND		4.8	0.64	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Ethylbenzene	ND		4.8	0.72	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Hexachlorobutadiene	ND		4.8	0.86	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
2-Hexanone	ND		48	9.5	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Isopropylbenzene	ND		4.8	0.65	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
4-Isopropyltoluene	ND		4.8	2.4	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Methylene Chloride	ND		9.5	5.3	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
4-Methyl-2-pentanone (MIBK)	ND		48	9.5	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Naphthalene	ND		9.5	1.4	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
N-Propylbenzene	ND		4.8	0.63	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Styrene	ND		4.8	0.60	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
1,1,1,2-Tetrachloroethane	ND		4.8	0.73	ug/Kg		08/29/18 13:13	08/29/18 13:33	1

Client Sample ID: DG-D3S-9.5-10
Date Collected: 08/21/18 17:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-15
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.8	0.72	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Tetrachloroethene	ND		4.8	0.64	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Toluene	ND		4.8	0.68	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
1,2,3-Trichlorobenzene	ND		4.8	0.71	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
1,2,4-Trichlorobenzene	ND		4.8	0.68	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
1,1,1-Trichloroethane	ND		4.8	0.58	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
1,1,2-Trichloroethane	ND		4.8	0.67	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Trichloroethene	ND		4.8	0.60	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Trichlorofluoromethane	ND		4.8	0.53	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
1,2,3-Trichloropropane	ND		4.8	0.73	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.8	2.0	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
1,2,4-Trimethylbenzene	ND		4.8	1.6	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
1,3,5-Trimethylbenzene	ND		4.8	0.62	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Vinyl acetate	ND		19	4.8	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Vinyl chloride	ND		4.8	0.70	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Xylenes, Total	ND		4.8	1.2	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
2,2-Dichloropropane	ND		4.8	1.9	ug/Kg		08/29/18 13:13	08/29/18 13:33	1
Gasoline Range Organics (GRO) -C4-C12	ND		240	95	ug/Kg		08/29/18 13:13	08/29/18 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*45 - 131*	*08/29/18 13:13*	*08/29/18 13:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*60 - 140*	*08/29/18 13:13*	*08/29/18 13:33*	*1*
Toluene-d8 (Surr)	*102*		*58 - 140*	*08/29/18 13:13*	*08/29/18 13:33*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**22**	**J**	38	19	ug/Kg		08/23/18 09:43	08/25/18 07:42	2
Acenaphthene	**26**		19	11	ug/Kg		08/23/18 09:43	08/25/18 07:42	2
Acenaphthylene	**45**		19	9.2	ug/Kg		08/23/18 09:43	08/25/18 07:42	2
Anthracene	**190**		19	7.7	ug/Kg		08/23/18 09:43	08/25/18 07:42	2
Benzo[a]anthracene	**260**		19	5.8	ug/Kg		08/23/18 09:43	08/25/18 07:42	2
Benzo[a]pyrene	**270**		19	7.3	ug/Kg		08/23/18 09:43	08/25/18 07:42	2
Benzo[b]fluoranthene	**350**		19	8.1	ug/Kg		08/23/18 09:43	08/25/18 07:42	2
Benzo[g,h,i]perylene	**100**		19	16	ug/Kg		08/23/18 09:43	08/25/18 07:42	2
Benzo[k]fluoranthene	**140**		19	8.1	ug/Kg		08/23/18 09:43	08/25/18 07:42	2
Chrysene	**270**		19	5.4	ug/Kg		08/23/18 09:43	08/25/18 07:42	2
Dibenz(a,h)anthracene	**35**		19	13	ug/Kg		08/23/18 09:43	08/25/18 07:42	2
Fluoranthene	**440**		19	5.4	ug/Kg		08/23/18 09:43	08/25/18 07:42	2
Fluorene	**25**		19	8.4	ug/Kg		08/23/18 09:43	08/25/18 07:42	2
Indeno[1,2,3-cd]pyrene	**87**		19	16	ug/Kg		08/23/18 09:43	08/25/18 07:42	2
Naphthalene	**24**	**B**	19	13	ug/Kg		08/23/18 09:43	08/25/18 07:42	2
Phenanthrene	**300**		19	6.9	ug/Kg		08/23/18 09:43	08/25/18 07:42	2
Pyrene	**560**		19	6.5	ug/Kg		08/23/18 09:43	08/25/18 07:42	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*33 - 120*	*08/23/18 09:43*	*08/25/18 07:42*	*2*
Terphenyl-d14	*95*		*35 - 146*	*08/23/18 09:43*	*08/25/18 07:42*	*2*

Client Sample ID: DG-D3S-9.5-10
Date Collected: 08/21/18 17:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-15
Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	64000		4000	1500	ug/Kg		08/23/18 08:42	08/24/18 01:27	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*83*		*40 - 130*	*08/23/18 08:42*	*08/24/18 01:27*	*2*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
Aldrin	ND		1.9	0.49	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
alpha-BHC	ND		1.9	0.54	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
delta-BHC	ND		1.9	0.43	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
Endosulfan II	ND		1.9	0.48	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
Endrin	ND		1.9	0.45	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
Heptachlor	ND		1.9	0.45	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
Toxaphene	ND		39	6.6	ug/Kg		08/23/18 10:51	08/29/18 22:50	1
trans-Chlordane	ND		1.9	0.45	ug/Kg		08/23/18 10:51	08/29/18 22:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*79*	*p*	*21 - 136*	*08/23/18 10:51*	*08/29/18 22:50*	*1*
Tetrachloro-m-xylene	*69*		*21 - 145*	*08/23/18 10:51*	*08/29/18 22:50*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	21	ug/Kg		08/26/18 10:34	08/28/18 09:36	1
Aroclor-1221	ND		49	23	ug/Kg		08/26/18 10:34	08/28/18 09:36	1
Aroclor-1232	ND		49	22	ug/Kg		08/26/18 10:34	08/28/18 09:36	1
Aroclor-1242	ND		49	19	ug/Kg		08/26/18 10:34	08/28/18 09:36	1
Aroclor-1248	ND		49	23	ug/Kg		08/26/18 10:34	08/28/18 09:36	1
Aroclor-1254	ND		49	22	ug/Kg		08/26/18 10:34	08/28/18 09:36	1
Aroclor-1260	ND	F2	49	21	ug/Kg		08/26/18 10:34	08/28/18 09:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*87*		*14 - 128*	*08/26/18 10:34*	*08/28/18 09:36*	*1*
DCB Decachlorobiphenyl	*132*		*10 - 132*	*08/26/18 10:34*	*08/28/18 09:36*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.86	J	1.6	0.27	mg/Kg		08/23/18 16:49	08/24/18 22:31	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-D3S-9.5-10
Date Collected: 08/21/18 17:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88190-15
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	29		3.2	0.27	mg/Kg		08/23/18 16:49	08/24/18 22:31	4
Barium	67		1.6	0.23	mg/Kg		08/23/18 16:49	08/24/18 22:31	4
Beryllium	ND		0.32	0.10	mg/Kg		08/23/18 16:49	08/24/18 22:31	4
Cadmium	0.19	J	0.40	0.040	mg/Kg		08/23/18 16:49	08/24/18 22:31	4
Chromium	35		1.6	0.17	mg/Kg		08/23/18 16:49	08/24/18 22:31	4
Cobalt	9.1		0.65	0.065	mg/Kg		08/23/18 16:49	08/24/18 22:31	4
Copper	56		4.8	2.3	mg/Kg		08/23/18 16:49	08/24/18 22:31	4
Lead	270		1.6	0.34	mg/Kg		08/23/18 16:49	08/24/18 22:31	4
Molybdenum	0.34	J	1.6	0.21	mg/Kg		08/23/18 16:49	08/24/18 22:31	4
Nickel	33		1.6	0.16	mg/Kg		08/23/18 16:49	08/24/18 22:31	4
Selenium	ND		3.2	0.48	mg/Kg		08/23/18 16:49	08/24/18 22:31	4
Silver	ND		0.81	0.16	mg/Kg		08/23/18 16:49	08/24/18 22:31	4
Thallium	ND		1.6	0.47	mg/Kg		08/23/18 16:49	08/24/18 22:31	4
Vanadium	32		1.6	0.22	mg/Kg		08/23/18 16:49	08/24/18 22:31	4
Zinc	160		4.8	2.0	mg/Kg		08/23/18 16:49	08/24/18 22:31	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.76		0.016	0.0023	mg/Kg		08/25/18 12:29	08/27/18 21:24	1

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-E3S-9.5-10 Lab Sample ID: 720-88190-3

Matrix: Solid Lab File ID: FID1000037.D

Analysis Method: 8015B Date Collected: 08/21/2018 14:30

Extraction Method: 3546 Date Extracted: 08/23/2018 08:42

Sample wt/vol: 15.55(g) Date Analyzed: 08/24/2018 03:04

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250036 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	58000		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	101		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000037.D
Lims ID: 720-88190-D-3-A
Client ID: DG-E3S--9.5-10
Sample Type: Client
Inject. Date: 24-Aug-2018 03:04:25 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053434-037
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\DRO6_A.m
Limit Group: DRO
Last Update: 24-Aug-2018 12:19:14 Calib Date: 23-Aug-2018 11:10:00
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000007.D

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 12:19:14

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	1.292	1.240	0.052	21166	NC	
	23 n-Decane	2.115	2.115	0.000	74635	NC	
A	21 Stoddard Solvent	2.726	(1.240-4.213)		10160789	5.71	M
A	1 C9-C13	2.726	(1.240-4.213)		10160789	5.72	M
A	57 C10-C12	2.853	(2.115-3.591)		5234236	3.39	
	24 Dodecane	3.596	3.591	0.005	91606	NC	M
A	3 C9 - C17	3.765	(1.240-6.290)		28693685	14.7	M
A	60 C10-C16	3.964	(2.115-5.813)		21460222	12.3	M
A	47 C9 - C18	3.989	(1.240-6.739)		40728584	25.2	M
A	25 C9-C19	4.203	(1.240-7.167)		56262829	28.7	M
A	15 Kerosene	4.203	(1.240-7.167)		56262829	34.8	M
	26 C13	4.212	4.213	-0.001	381081	NC	M
$	27 n-Decanoic Acid (Surr)		4.583			ND	U
A	59 C12-C16	4.702	(3.591-5.813)		16225986	10.5	M
A	62 C10-C20	4.846	(2.115-7.578)		88573267	57.4	M
A	28 C9-C24	5.150	(1.240-9.060)		309504478	200.7	M
A	29 C9-C25	5.318	(1.240-9.397)		364337807	236.2	M
A	54 C10-C23	5.413	(2.115-8.711)		259120739	168.0	M
A	4 C10-C24	5.588	(2.115-9.060)		307333330	199.3	M
A	16 C10-C25	5.756	(2.115-9.397)		362166659	234.8	M
	45 Hexadecane	5.812	5.813	-0.001	1405386	NC	M
A	14 C10-C26	5.918	(2.115-9.721)		462746361	300.0	M
A	67 C12-C22	5.970	(3.591-8.348)		182846133	118.5	M
A	12 Unknown Hydrocarbons	6.226	(2.115-10.338)		691617882	NC	M
A	5 Diesel	6.226	(2.115-10.338)		691617882	448.4	M
A	32 C10-C28	6.226	(2.115-10.338)		691617882	448.4	M
A	30 C13-C22	6.281	(4.213-8.348)		180471809	117.0	M
	44 Heptadecane	6.291	6.290	0.001	2334664	NC	M
A	31 C12-C24	6.326	(3.591-9.060)		302099094	195.9	M
	51 n-Octadecane	6.801	6.739	0.062	5932423	NC	M
A	9 Crude Oil Range Organics (	6.847	(1.240-12.455)		1558797112	NC	M
A	11 Bunker Range Organics (C9-	6.847	(1.240-12.455)		1558797112	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.847	(1.240-12.455)		1558797112	880.4	M
33 C19	7.211	7.167	0.044	10656480	NC	M
A 64 C13-C28	7.275	(4.213-10.338)		684009322	443.5	M
A 17 C10-C36	7.285	(2.115-12.455)		1556625964	1009.2	M
A 13 C9-C40	7.346	(1.240-13.451)		2156399878	1599.2	M
A 68 Crude Oil Range Organics (	7.346	(1.240-13.451)		2156399878	NC	M
A 58 C16-C24	7.436	(5.813-9.060)		287278494	186.3	M
61 icosane	7.579	7.578	0.001	3818189	NC	M
A 6 C10-C40	7.783	(2.115-13.451)		2154228730	1598.7	M
$ 34 p-Terphenyl	8.040	8.044	-0.004	48471455	25.2	M
35 n-Docosane	8.354	8.348	0.006	8064145	NC	M
A 18 C12-C40	8.521	(3.591-13.451)		2148994494	1599.2	M
36 Tricosane	8.710	8.711	-0.001	27685781	NC	M
A 66 C13-C40	8.832	(4.213-13.451)		2146620170	1599.2	M
37 n-Tetracosane	9.061	9.060	0.001	22712874	NC	M
A 2 C16-C36 ORO	9.134	(5.813-12.455)		1612658268	1413.8	
38 C25	9.402	9.397	0.005	64481544	NC	M
A 19 C16-C40	9.632	(5.813-13.451)		2134173894	1596.2	M
46 n-Hexacosane	9.740	9.721	0.019	43193612	NC	M
A 20 C19-C36	9.811	(7.167-12.455)		1566406401	1178.5	
A 55 C23-C32	10.085	(8.711-11.458)		920334692	1325.6	M
39 n-Octacosane	10.346	10.338	0.008	32312815	NC	M
65 C29	10.636	10.631	0.005	77956541	NC	M
A 7 Motor Oil	10.757	(9.060-12.455)		1036814079	1164.3	
A 40 C24-C36	10.757	(9.060-12.455)		1230745366	1382.1	M
A 10 C22-C40	10.900	(8.348-13.451)		1415586834	1138.4	
A 49 C25-C36	10.926	(9.397-12.455)		1194459305	1334.3	M
A 41 C23-C40	11.081	(8.711-13.451)		1922793772	1504.4	M
A 8 C24-C40	11.256	(9.060-13.451)		1846895400	1517.1	M
56 Dotriacontane	11.461	11.458	0.003	49974488	NC	M
A 50 C28-C40	11.895	(10.338-13.451)		1462610848	1540.9	M
A 63 C29-C40	12.041	(10.631-13.451)		1368513556	1579.2	M
42 n-Hexatriacontane	12.476	12.455	0.021	37133731	NC	M
43 C40	13.380	13.451	-0.071	259297447	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

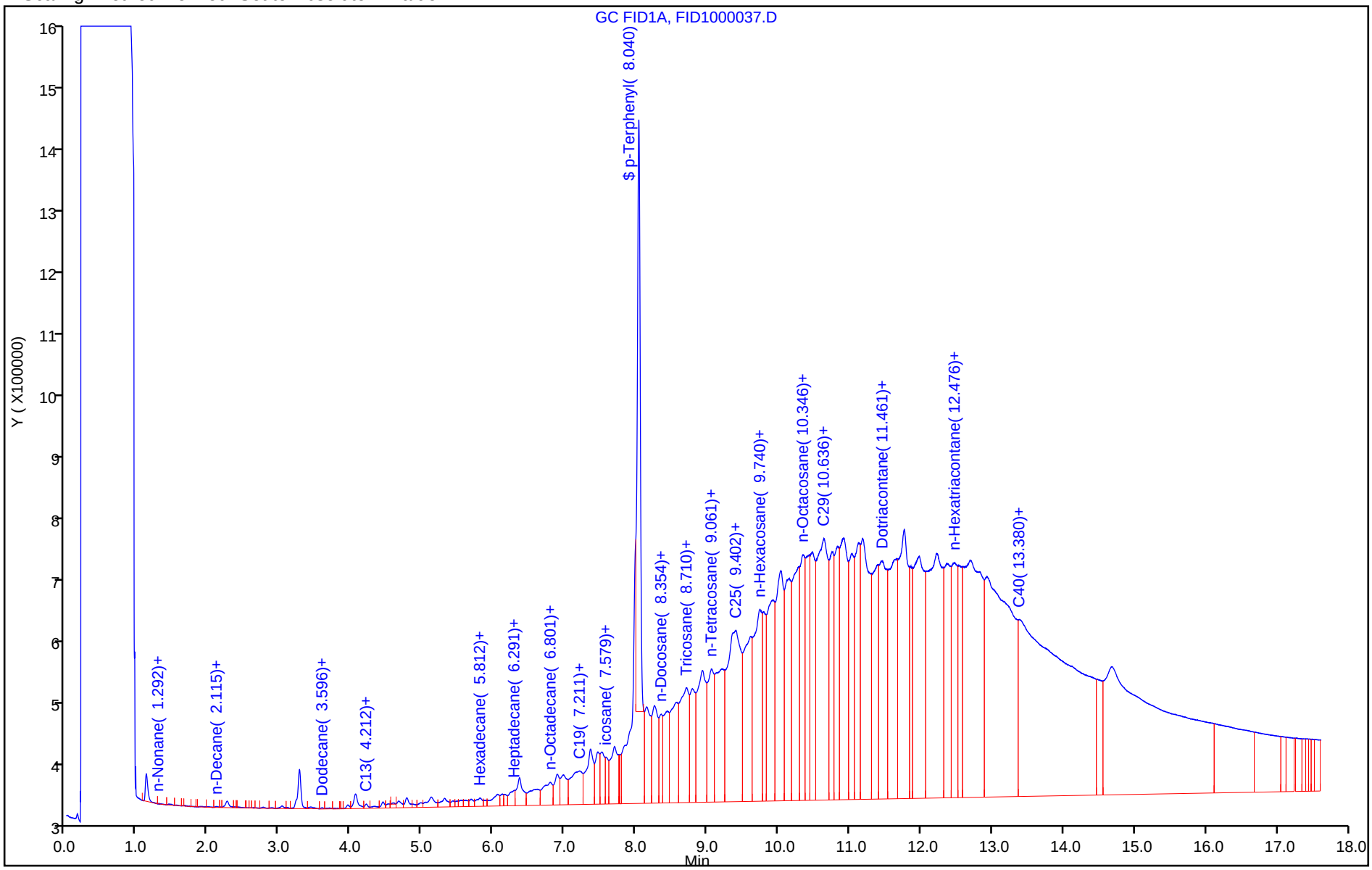
Report Date: 24-Aug-2018 12:19:15 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000037.D

Injection Date:	24-Aug-2018 03:04:25	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88190-D-3-A	Lab Sample ID:	720-88190-3	Worklist Smp#:	37
Client ID:	DG-E3S--9.5-10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000037.D				
Lims ID:	720-88190-D-3-A				
Client ID:	DG-E3S--9.5-10				
Sample Type:	Client				
Inject. Date:	24-Aug-2018 03:04:25	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053434-037				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\DRO6_A.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 12:19:14	Calib Date:	23-Aug-2018 11:10:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000007.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				
First Level Reviewer: luj		Date:	24-Aug-2018 12:19:14		

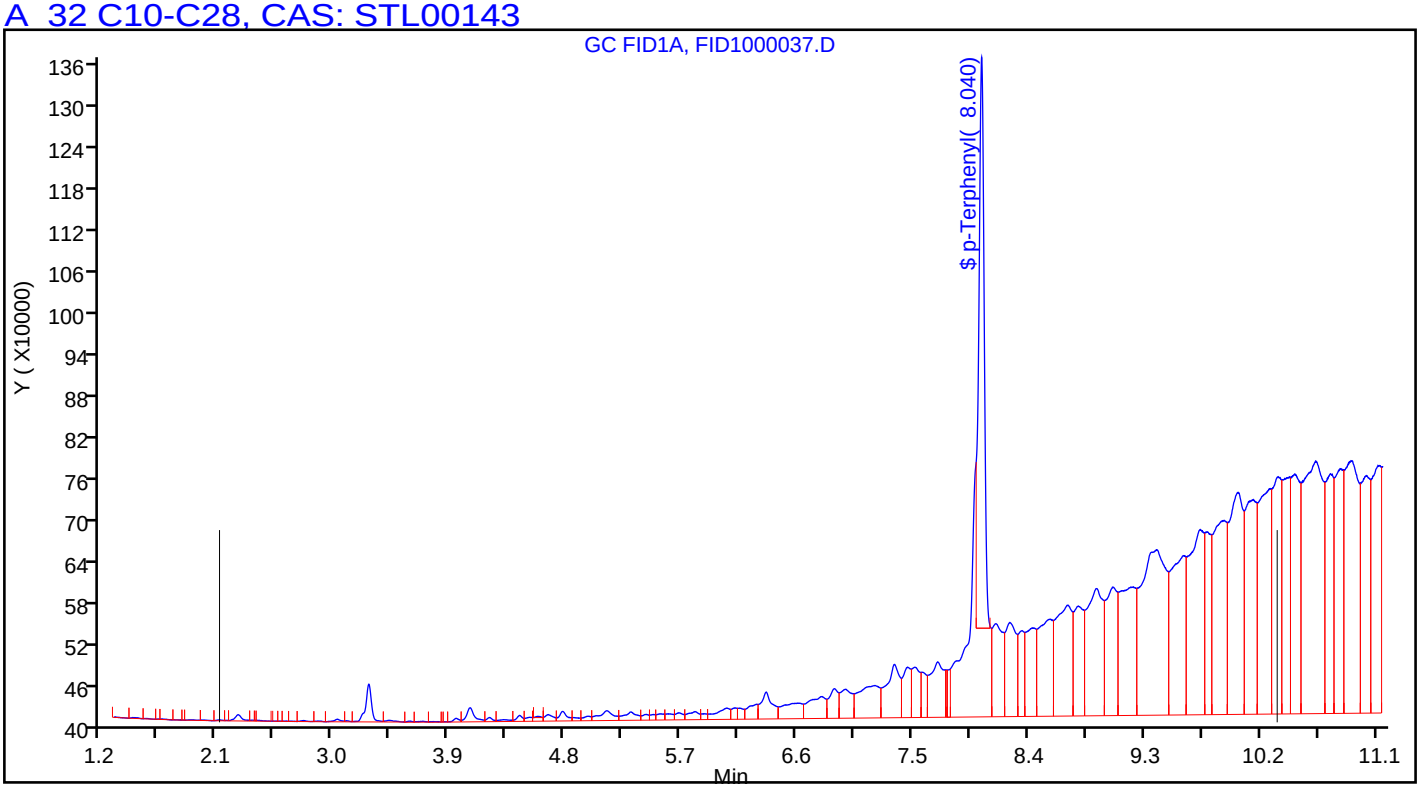
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	25.2	100.96

Report Date: 24-Aug-2018 12:19:20 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000037.D				
Injection Date:	24-Aug-2018 03:04:25	Instrument ID:	CHDRO6		
Lims ID:	720-88190-D-3-A	Lab Sample ID:	720-88190-3		
Client ID:	DG-E3S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

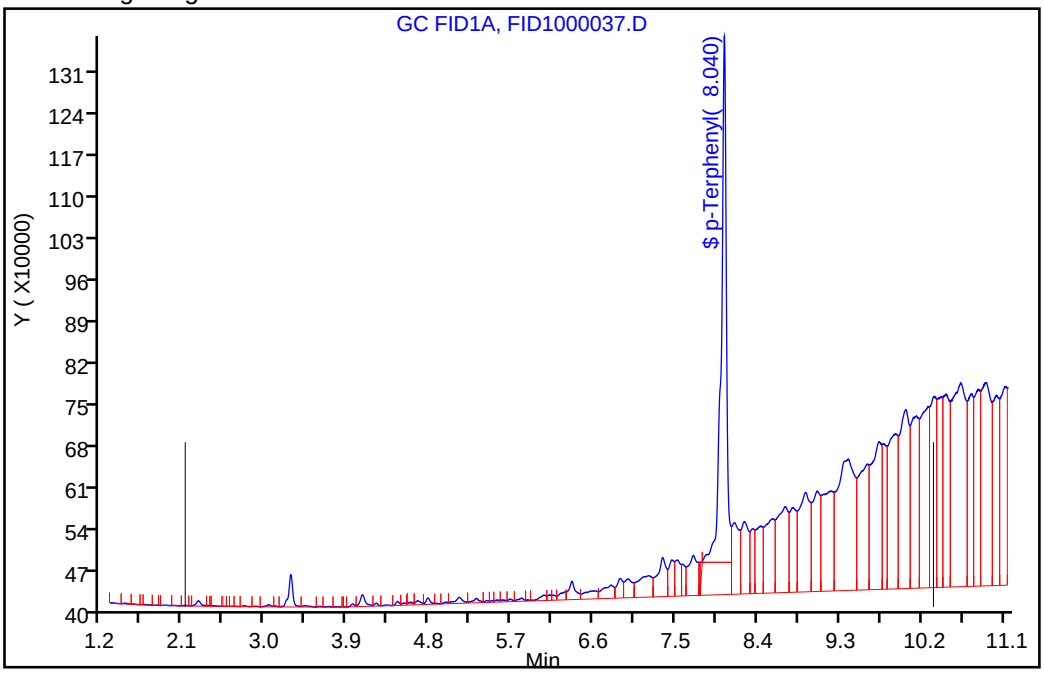
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000037.D				
Injection Date:	24-Aug-2018 03:04:25	Instrument ID:	CHDRO6		
Lims ID:	720-88190-D-3-A	Lab Sample ID:	720-88190-3		
Client ID:	DG-E3S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.226, CAS: STL00143

Signal: 1

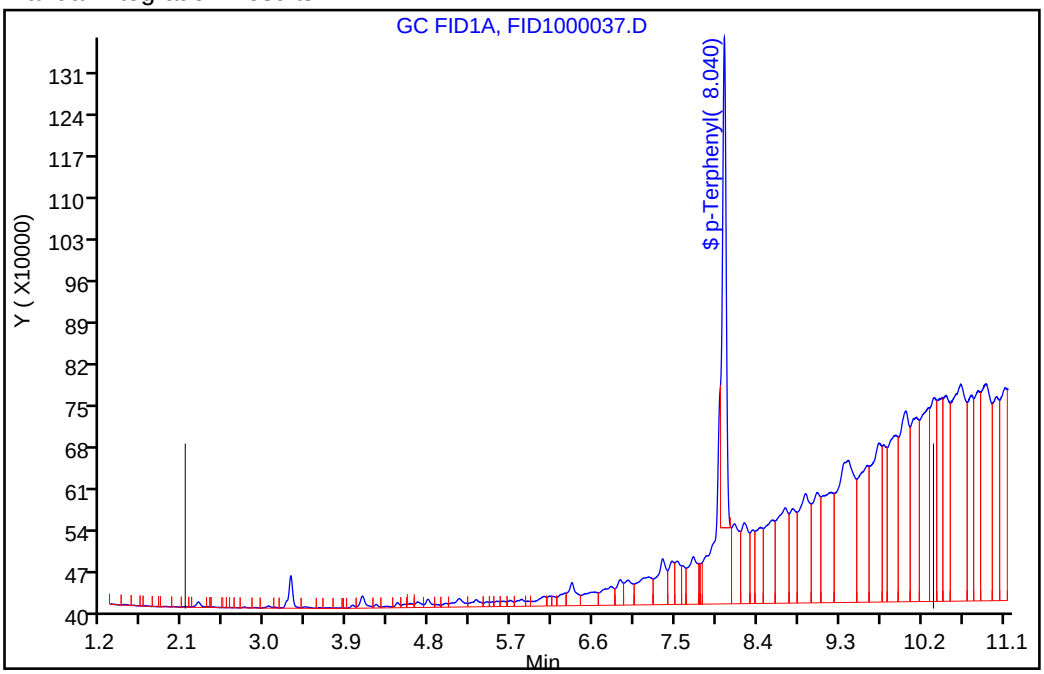
Processing Integration Results

RT: 6.23
Response: 584183699
Amount: 378.7477



Manual Integration Results

RT: 6.23
Response: 691617882
Amount: 448.4012



Reviewer: luj, 24-Aug-2018 12:17:57

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

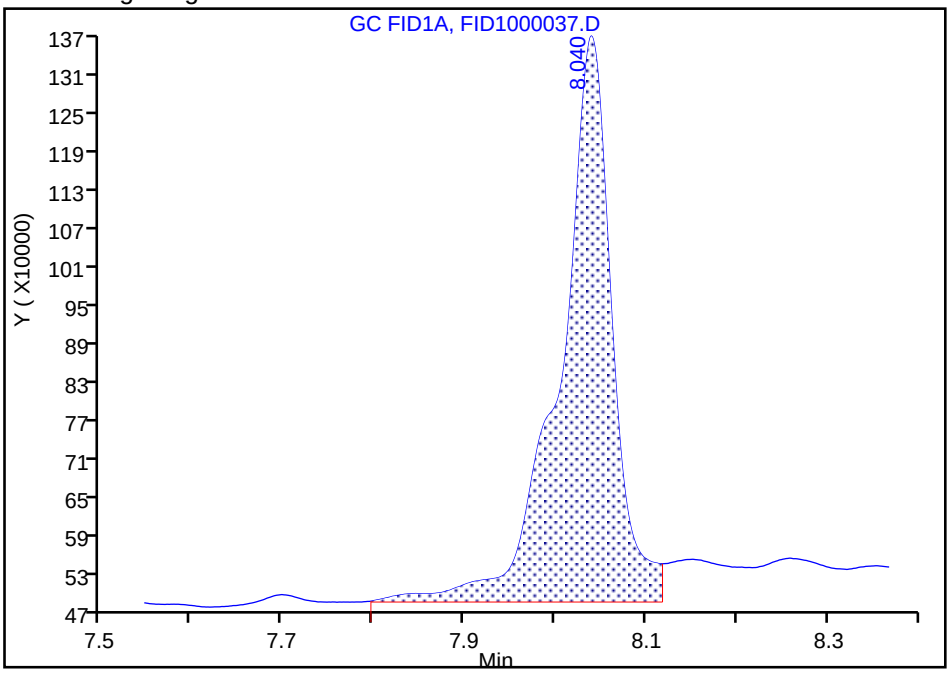
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000037.D				
Injection Date:	24-Aug-2018 03:04:25	Instrument ID:	CHDRO6		
Lims ID:	720-88190-D-3-A	Lab Sample ID:	720-88190-3		
Client ID:	DG-E3S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

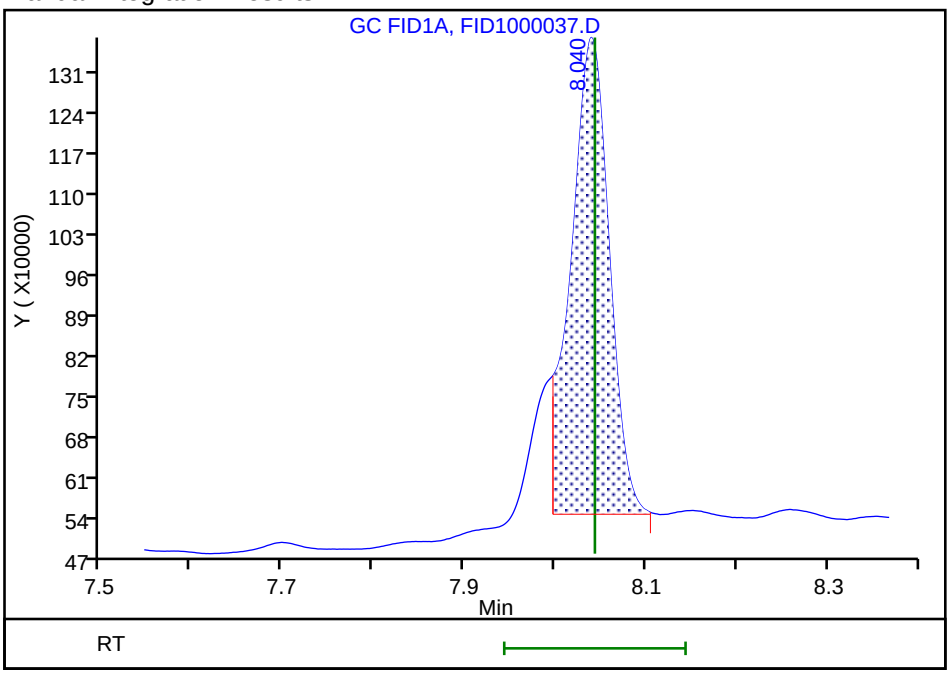
Processing Integration Results

RT: 8.04
Area: 71452016
Amount: 37.207614
Amount Units: mg/L



Manual Integration Results

RT: 8.04
Area: 48471455
Amount: 25.240816
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 12:18:36

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-F3S-0.5-1 Lab Sample ID: 720-88190-4

Matrix: Solid Lab File ID: FID1000038.D

Analysis Method: 8015B Date Collected: 08/21/2018 14:45

Extraction Method: 3546 Date Extracted: 08/23/2018 08:42

Sample wt/vol: 15.37(g) Date Analyzed: 08/24/2018 03:28

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250036 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	79000		2000	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	123		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000038.D
Lims ID: 720-88190-E-4-A
Client ID: DG-F3S--0.5-1
Sample Type: Client
Inject. Date: 24-Aug-2018 03:28:43 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053434-038
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\DRO6_A.m
Limit Group: DRO
Last Update: 24-Aug-2018 12:21:03 Calib Date: 23-Aug-2018 11:10:00
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000007.D

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 12:21:03

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	1.237	1.240	-0.003	44147	NC	
	23 n-Decane	2.115	2.115	0.000	179717	NC	
A	21 Stoddard Solvent	2.726	(1.240-4.213)		7946259	4.46	M
A	1 C9-C13	2.726	(1.240-4.213)		7946259	4.47	M
A	57 C10-C12	2.853	(2.115-3.591)		3454022	2.24	
	24 Dodecane	3.593	3.591	0.002	270102	NC	
A	3 C9 - C17	3.765	(1.240-6.290)		43374693	22.2	M
A	60 C10-C16	3.964	(2.115-5.813)		27651139	15.8	M
A	47 C9 - C18	3.989	(1.240-6.739)		72584743	44.9	M
A	25 C9-C19	4.203	(1.240-7.167)		124164317	63.3	M
A	15 Kerosene	4.203	(1.240-7.167)		124164317	76.9	M
	26 C13	4.214	4.213	0.001	458309	NC	M
$	27 n-Decanoic Acid (Surr)		4.583			ND	U
A	59 C12-C16	4.702	(3.591-5.813)		24197117	15.7	M
A	62 C10-C20	4.846	(2.115-7.578)		191405832	124.1	M
A	28 C9-C24	5.150	(1.240-9.060)		528767666	342.8	M
A	29 C9-C25	5.318	(1.240-9.397)		615480656	399.0	M
A	54 C10-C23	5.413	(2.115-8.711)		378328480	245.3	M
A	4 C10-C24	5.588	(2.115-9.060)		527748577	342.2	M
A	16 C10-C25	5.756	(2.115-9.397)		614461567	398.4	M
	45 Hexadecane	5.815	5.813	0.002	6490613	NC	M
A	14 C10-C26	5.918	(2.115-9.721)		696648213	451.7	M
A	67 C12-C22	5.970	(3.591-8.348)		354396736	229.8	M
A	12 Unknown Hydrocarbons	6.226	(2.115-10.338)		936796455	NC	M
A	5 Diesel	6.226	(2.115-10.338)		936796455	607.4	M
A	32 C10-C28	6.226	(2.115-10.338)		936796455	607.4	M
A	30 C13-C22	6.281	(4.213-8.348)		350923588	227.5	M
	44 Heptadecane	6.355	6.290	0.065	14350507	NC	M
A	31 C12-C24	6.326	(3.591-9.060)		524294555	339.9	M
	51 n-Octadecane	6.735	6.739	-0.004	5592297	NC	M
A	9 Crude Oil Range Organics (	6.847	(1.240-12.455)		2255160428	NC	M
A	11 Bunker Range Organics (C9-	6.847	(1.240-12.455)		2255160428	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.847	(1.240-12.455)		2255160428	1273.7	M
33 C19	7.167	7.167	0.000	18551527	NC	M
A 64 C13-C28	7.275	(4.213-10.338)		929869285	602.9	M
A 17 C10-C36	7.285	(2.115-12.455)		2254141339	1461.4	M
A 13 C9-C40	7.346	(1.240-13.451)		2858493861	2119.9	M
A 68 Crude Oil Range Organics (	7.346	(1.240-13.451)		2858493861	NC	M
A 58 C16-C24	7.436	(5.813-9.060)		500097438	324.2	M
61 icosane	7.575	7.578	-0.003	9296043	NC	M
A 6 C10-C40	7.783	(2.115-13.451)		2857474772	2120.6	M
$ 34 p-Terphenyl	8.038	8.044	-0.006	59065585	30.8	M
35 n-Docosane	8.354	8.348	0.006	20477722	NC	M
A 18 C12-C40	8.521	(3.591-13.451)		2854020750	2123.9	M
36 Tricosane	8.714	8.711	0.003	65721745	NC	M
A 66 C13-C40	8.832	(4.213-13.451)		2850547602	2123.6	M
37 n-Tetracosane	9.064	9.060	0.004	32360697	NC	M
A 2 C16-C36 ORO	9.134	(5.813-12.455)		2295470004	2012.4	
38 C25	9.402	9.397	0.005	35928594	NC	M
A 19 C16-C40	9.632	(5.813-13.451)		2829823633	2116.5	M
46 n-Hexacosane	9.736	9.721	0.015	47568478	NC	M
A 20 C19-C36	9.811	(7.167-12.455)		2201689985	1656.5	
A 55 C23-C32	10.085	(8.711-11.458)		1202670003	1732.3	M
39 n-Octacosane	10.349	10.338	0.011	87210280	NC	M
65 C29	10.627	10.631	-0.004	104346199	NC	M
A 7 Motor Oil	10.757	(9.060-12.455)		1390699713	1561.7	
A 40 C24-C36	10.757	(9.060-12.455)		1707357776	1917.3	M
A 10 C22-C40	10.900	(8.348-13.451)		1922646622	1546.1	
A 49 C25-C36	10.926	(9.397-12.455)		1639679772	1831.7	M
A 41 C23-C40	11.081	(8.711-13.451)		2479146292	1939.6	M
A 8 C24-C40	11.256	(9.060-13.451)		2329726195	1913.7	M
56 Dotriacontane	11.462	11.458	0.004	72690230	NC	M
A 50 C28-C40	11.895	(10.338-13.451)		1920678317	2023.5	M
A 63 C29-C40	12.041	(10.631-13.451)		1795865530	2072.3	M
42 n-Hexatriacontane	12.536	12.455	0.081	76161477	NC	M
43 C40		13.451			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

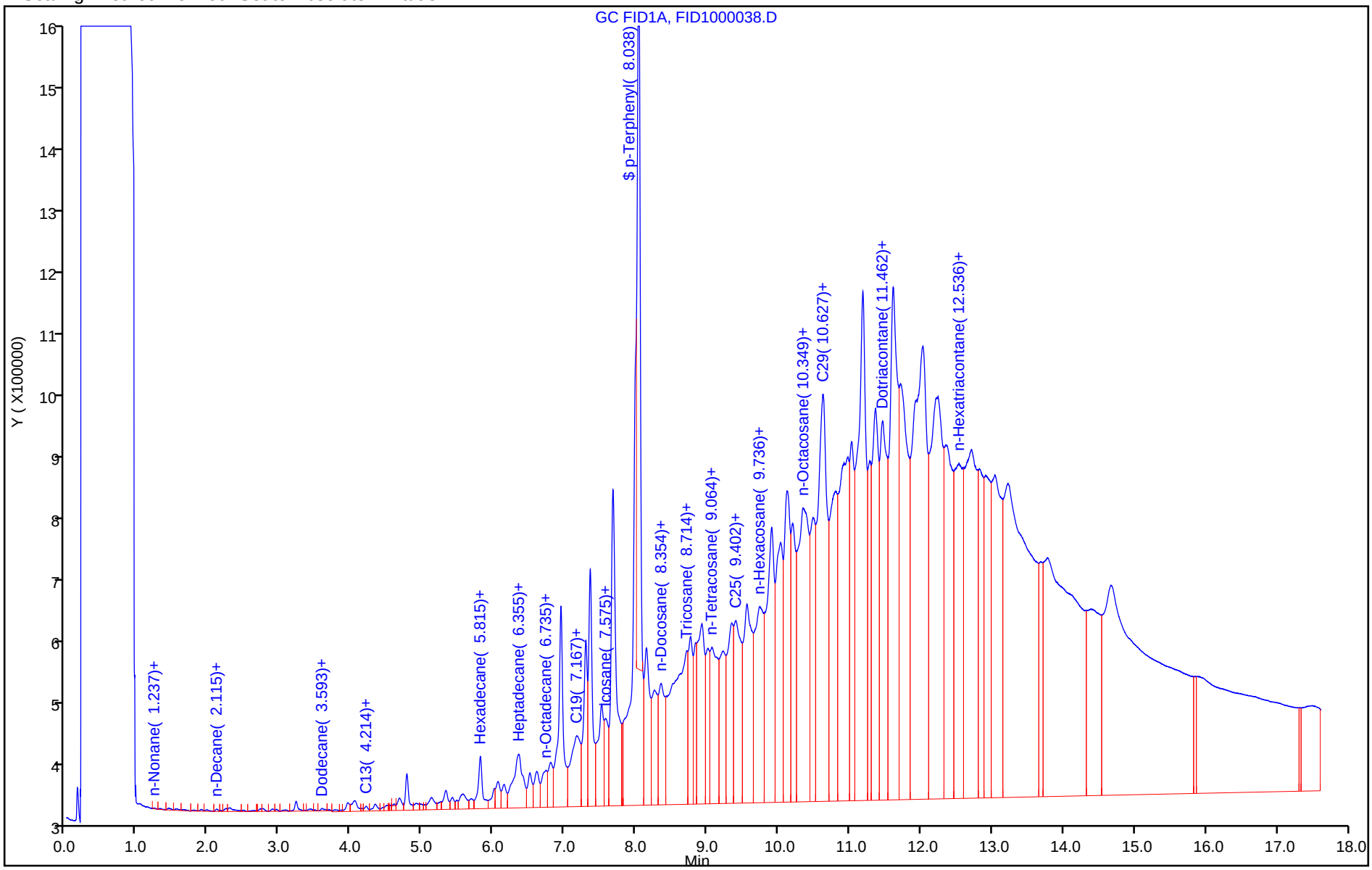
Report Date: 24-Aug-2018 12:21:04 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000038.D

Injection Date:	24-Aug-2018 03:28:43	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88190-E-4-A	Lab Sample ID:	720-88190-4	Worklist Smp#:	38
Client ID:	DG-F3S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000038.D				
Lims ID:	720-88190-E-4-A				
Client ID:	DG-F3S--0.5-1				
Sample Type:	Client				
Inject. Date:	24-Aug-2018 03:28:43	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053434-038				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\DRO6_A.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 12:21:03	Calib Date:	23-Aug-2018 11:10:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000007.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				
First Level Reviewer: luj		Date:	24-Aug-2018 12:21:03		

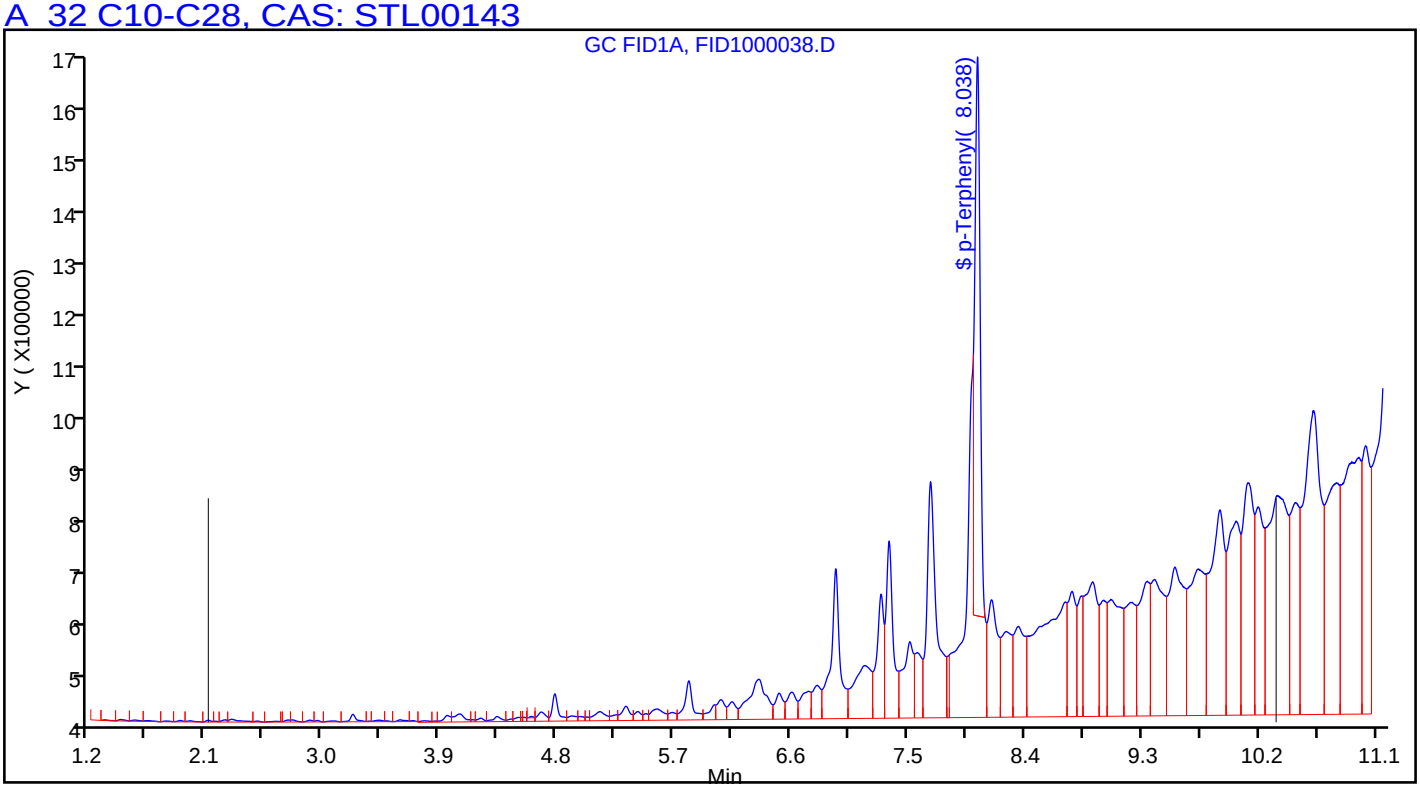
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	30.8	123.03

Report Date: 24-Aug-2018 12:21:08 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000038.D				
Injection Date:	24-Aug-2018 03:28:43	Instrument ID:	CHDRO6		
Lims ID:	720-88190-E-4-A	Lab Sample ID:	720-88190-4		
Client ID:	DG-F3S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

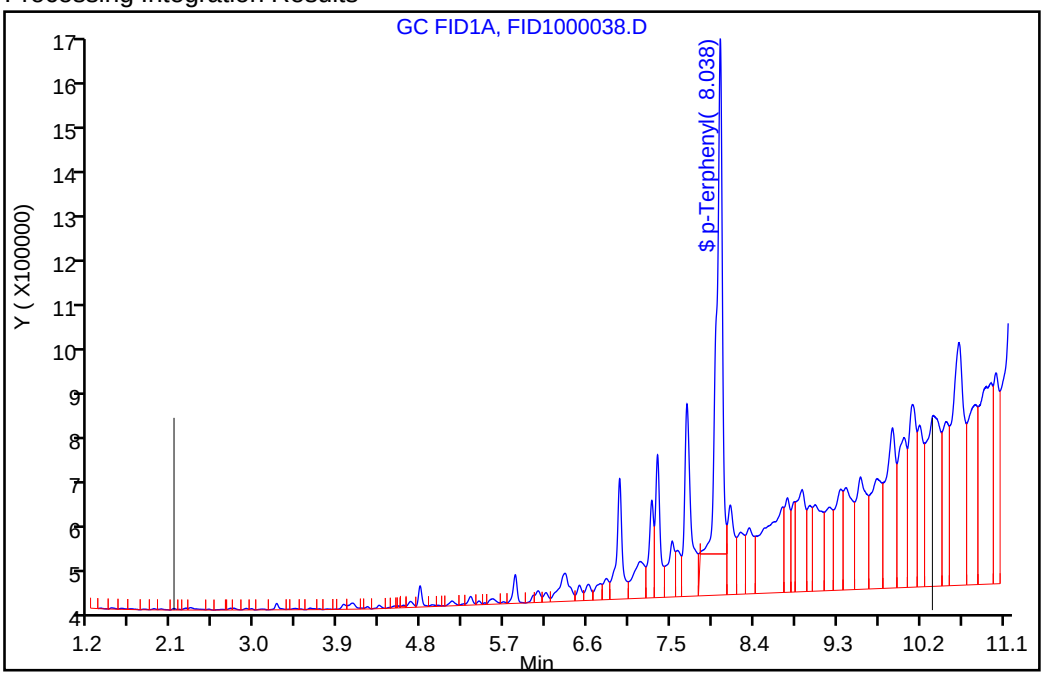
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000038.D				
Injection Date:	24-Aug-2018 03:28:43	Instrument ID:	CHDRO6		
Lims ID:	720-88190-E-4-A	Lab Sample ID:	720-88190-4		
Client ID:	DG-F3S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.226, CAS: STL00143

Signal: 1

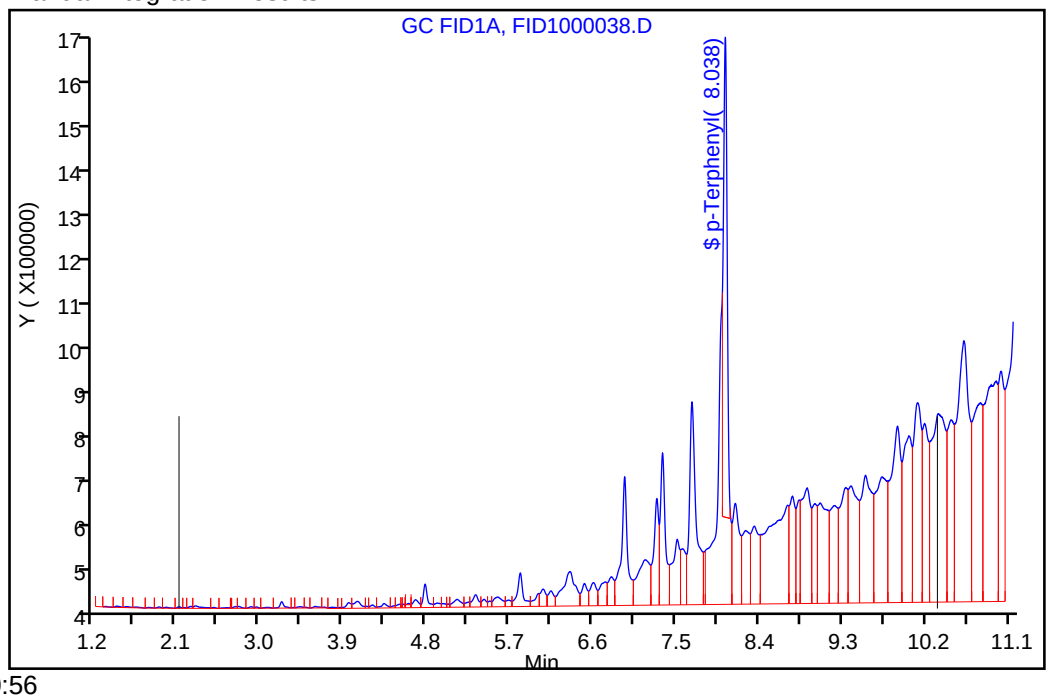
Processing Integration Results

RT: 6.23
Response: 756625597
Amount: 490.5481



Manual Integration Results

RT: 6.23
Response: 936796455
Amount: 607.3595



Reviewer: luj, 24-Aug-2018 12:20:56

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

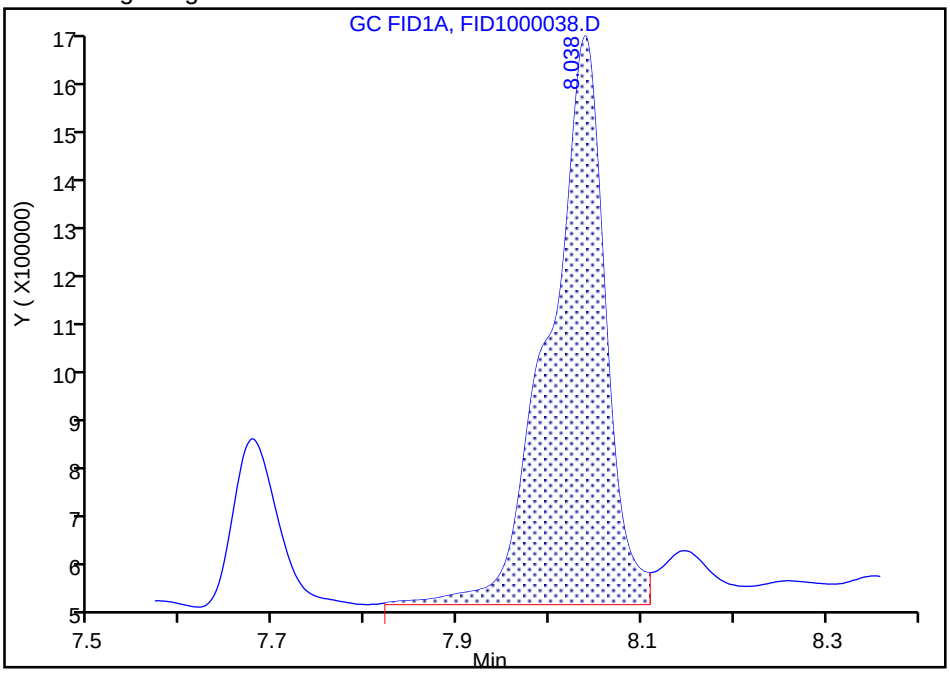
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000038.D				
Injection Date:	24-Aug-2018 03:28:43	Instrument ID:	CHDRO6		
Lims ID:	720-88190-E-4-A	Lab Sample ID:	720-88190-4		
Client ID:	DG-F3S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

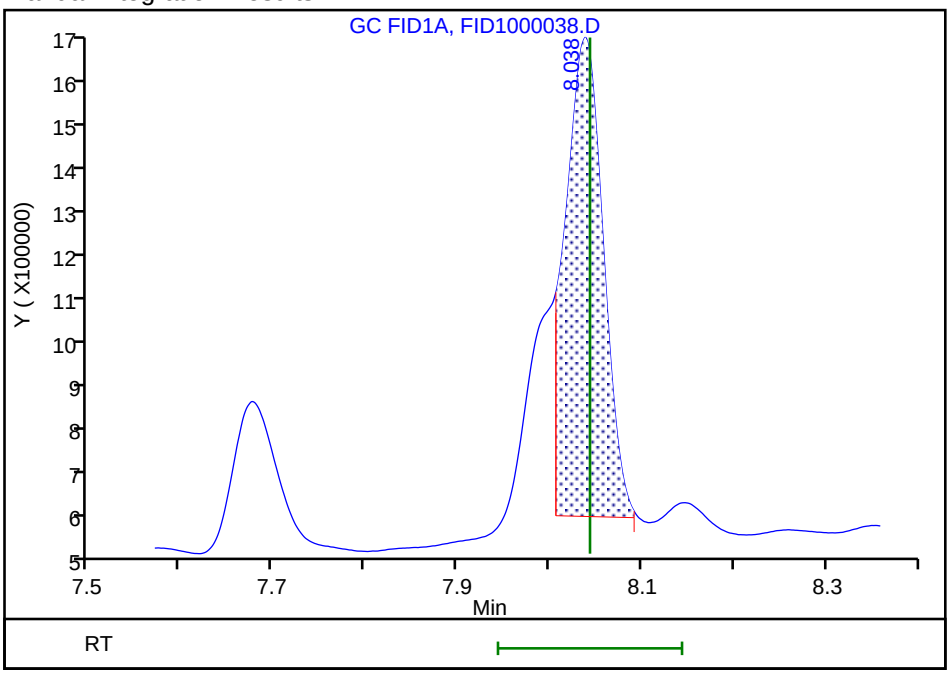
Processing Integration Results

RT: 8.04
Area: 94999147
Amount: 49.469445
Amount Units: mg/L



Manual Integration Results

RT: 8.04
Area: 59065585
Amount: 30.757557
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 12:20:12

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-F3S-3.5-4 Lab Sample ID: 720-88190-5

Matrix: Solid Lab File ID: FID2000029.D

Analysis Method: 8015B Date Collected: 08/21/2018 14:45

Extraction Method: 3546 Date Extracted: 08/23/2018 08:42

Sample wt/vol: 15.91(g) Date Analyzed: 08/23/2018 23:50

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250037 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	5700		1900	710

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	83		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000029.D
Lims ID: 720-88190-E-5-A
Client ID: DG-F3S--3.5-4
Sample Type: Client
Inject. Date: 23-Aug-2018 23:50:14 ALS Bottle#: 79 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053435-029
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m
Limit Group: DRO
Last Update: 24-Aug-2018 11:28:45 Calib Date: 23-Aug-2018 08:54:15
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 11:28:45

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.334			ND	
23 n-Decane	2.228	2.190	0.038	64803	NC	
A 1 C9-C13	2.799	(1.334-4.263)		1431941	0.6564	M
A 21 Stoddard Solvent	2.799	(1.334-4.263)		1431941	NC	M
A 57 C10-C12	2.919	(2.190-3.648)		781972	7.74	M
24 Dodecane	3.643	3.648	-0.005	45391	NC	M
A 3 C9 - C17	3.828	(1.334-6.322)		8589600	4.09	M
A 60 C10-C16	4.019	(2.190-5.847)		7115317	3.82	M
A 47 C9 - C18	4.049	(1.334-6.765)		10419786	5.50	M
A 15 Kerosene	4.261	(1.334-7.188)		14359596	7.57	M
A 25 C9-C19	4.261	(1.334-7.188)		14359596	6.79	M
26 C13	4.279	4.263	0.016	73375	NC	M
$ 27 n-Decanoic Acid (Surr)		4.640			ND	U
A 59 C12-C16	4.747	(3.648-5.847)		6378736	10.9	M
A 61 C10-C20	4.893	(2.190-7.596)		18338909	17.7	M
A 28 C9-C24	5.199	(1.334-9.064)		39267176	29.5	M
A 29 C9-C25	5.365	(1.334-9.396)		43902087	32.2	M
A 54 C10-C23	5.454	(2.190-8.719)		34316123	26.7	M
A 4 C10-C24	5.627	(2.190-9.064)		38990091	29.4	M
A 16 C10-C25	5.793	(2.190-9.396)		43625002	32.0	M
45 Hexadecane	5.868	5.847	0.021	385242	NC	M
A 14 C10-C26	5.953	(2.190-9.717)		51822431	36.6	M
A 67 C12-C22	6.004	(3.648-8.360)		31263392	25.0	M
A 32 C10-C28	6.258	(2.190-10.325)		67000651	45.2	M
A 5 Diesel	6.258	(2.190-10.325)		67000651	45.2	M
A 12 Unknown Hydrocarbons	6.258	(2.190-10.325)		67000651	NC	M
A 30 C13-C22	6.311	(4.263-8.360)		30845117	24.8	M
44 Heptadecane	6.363	6.322	0.041	947688	NC	M
A 31 C12-C24	6.356	(3.648-9.064)		38253510	29.0	M
49 n-Octadecane	6.783	6.765	0.018	609817	NC	M
A 9 Crude Oil Range Organics (	6.873	(1.334-12.411)		192875039	NC	M
A 11 Bunker Range Organics (C9-	6.873	(1.334-12.411)		192875039	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.873	(1.334-12.411)		192875039	91.4	M
33 C19	7.145	7.188	-0.043	1706956	NC	M
A 64 C13-C28	7.294	(4.263-10.325)		65845795	44.6	M
A 17 C10-C36	7.301	(2.190-12.411)		192597954	116.4	M
A 13 C9-C40	7.364	(1.334-13.393)		291529490	186.6	M
A 68 Crude Oil Range Organics (	7.364	(1.334-13.393)		291529490	NC	M
A 58 C16-C24	7.455	(5.847-9.064)		31874774	25.3	M
62 icosane	7.599	7.596	0.003	2497559	NC	M
A 6 C10-C40	7.792	(2.190-13.393)		291252405	186.6	M
$ 34 p-Terphenyl	8.075	8.083	-0.008	42049700	20.7	
35 n-Docosane	8.353	8.360	-0.007	2471692	NC	M
A 18 C12-C40	8.520	(3.648-13.393)		290515824	186.7	M
36 Tricosane	8.723	8.719	0.004	2375639	NC	M
A 66 C13-C40	8.828	(4.263-13.393)		290097549	186.6	M
37 n-Tetracosane	9.076	9.064	0.012	2762783	NC	M
A 2 C16-C36 ORO	9.129	(5.847-12.411)		185482637	156.9	M
38 C25	9.403	9.396	0.007	6558295	NC	M
A 19 C16-C40	9.620	(5.847-13.393)		284137088	183.4	M
46 n-Hexacosane	9.722	9.717	0.005	4010947	NC	M
A 20 C19-C36	9.800	(7.188-12.411)		66131213	48.6	
A 55 C23-C32	10.074	(8.719-11.430)		88848186	114.8	M
39 n-Octacosane	10.336	10.325	0.011	7645981	NC	M
65 C29	10.622	10.614	0.008	15619959	NC	M
A 40 C24-C36	10.737	(9.064-12.411)		148934765	151.9	M
A 7 Motor Oil	10.737	(9.064-12.411)		90987169	92.8	
A 10 C22-C40	10.876	(8.360-13.393)		141099895	101.5	
A 50 C25-C36	10.904	(9.396-12.411)		89360475	97.0	
A 41 C23-C40	11.056	(8.719-13.393)		145022488	106.1	
A 8 C24-C40	11.228	(9.064-13.393)		148019760	110.4	
56 Dotriacontane	11.441	11.430	0.011	9797689	NC	M
A 51 C28-C40	11.859	(10.325-13.393)		145143700	133.8	
A 63 C29-C40	12.004	(10.614-13.393)		139949140	140.0	
42 n-Hexatriacontane	12.413	12.411	0.002	4276723	NC	M
43 C40		13.393			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

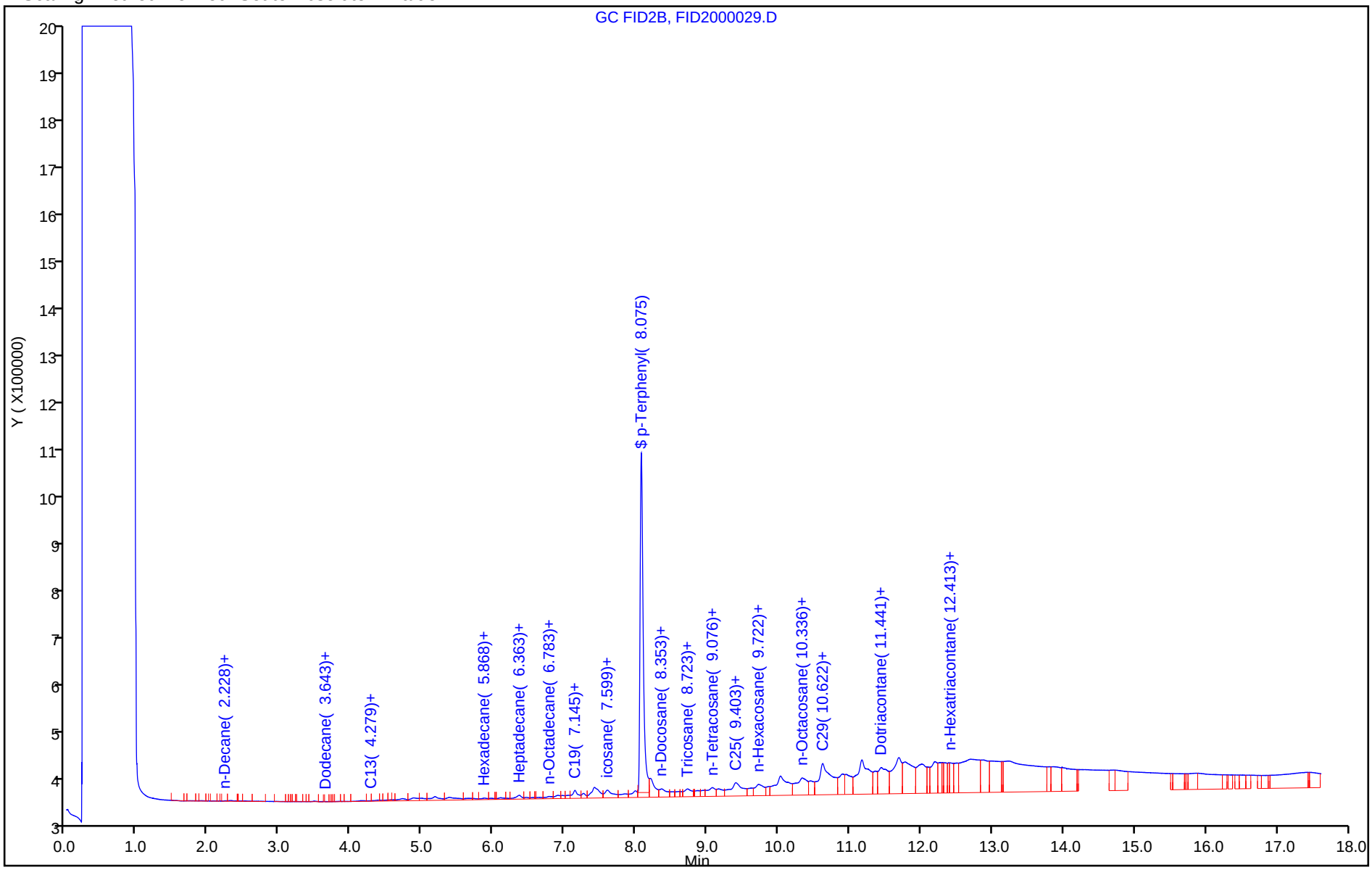
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 24-Aug-2018 11:28:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000029.D				
Injection Date:	23-Aug-2018 23:50:14	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88190-E-5-A	Lab Sample ID:	720-88190-5	Worklist Smp#:	29
Client ID:	DG-F3S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	79
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000029.D				
Lims ID:	720-88190-E-5-A				
Client ID:	DG-F3S--3.5-4				
Sample Type:	Client				
Inject. Date:	23-Aug-2018 23:50:14	ALS Bottle#:	79	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053435-029				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 11:28:45	Calib Date:	23-Aug-2018 08:54:15		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				
First Level Reviewer: luj		Date:	24-Aug-2018 11:28:45		

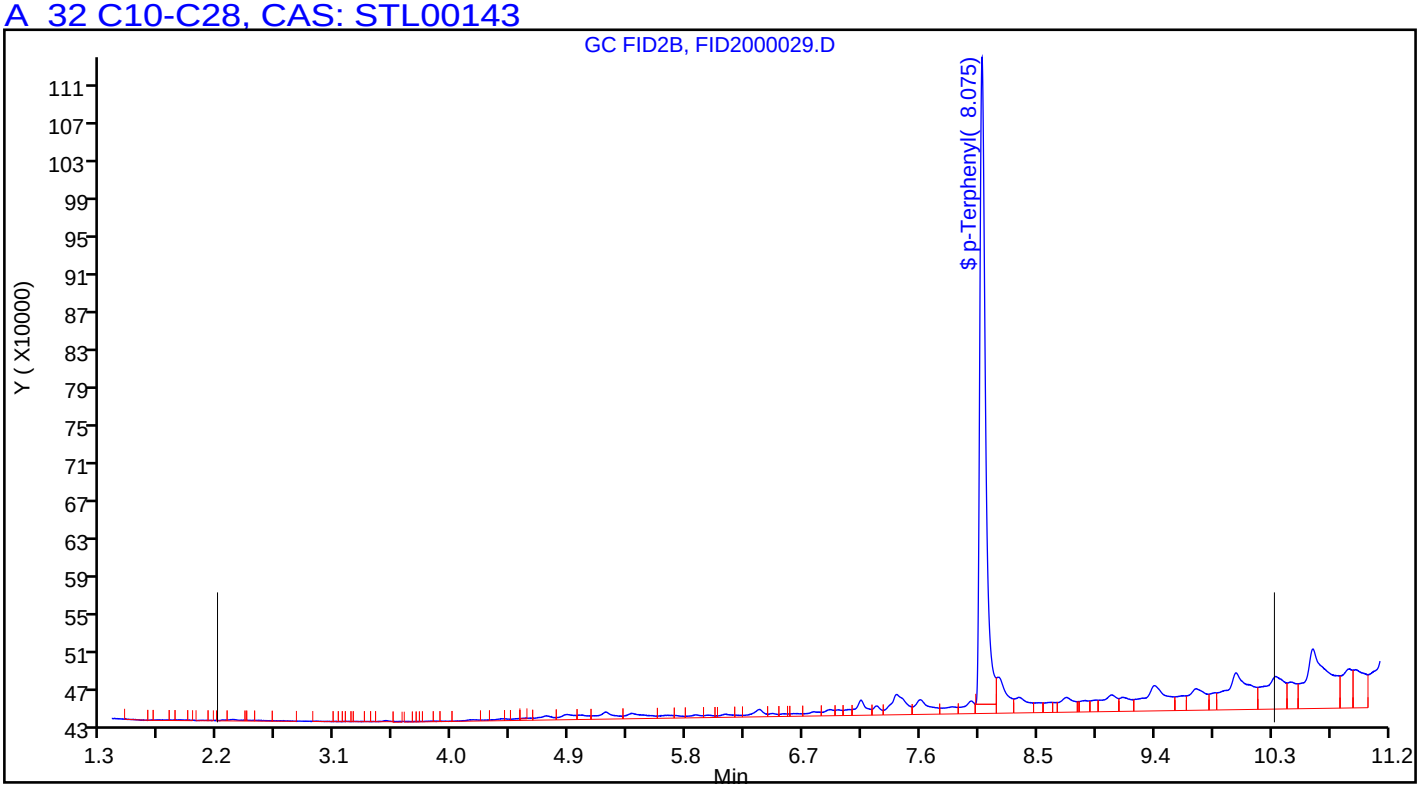
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	20.7	82.72

Report Date: 24-Aug-2018 11:28:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000029.D				
Injection Date:	23-Aug-2018 23:50:14	Instrument ID:	CHDRO6		
Lims ID:	720-88190-E-5-A	Lab Sample ID:	720-88190-5		
Client ID:	DG-F3S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	79	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

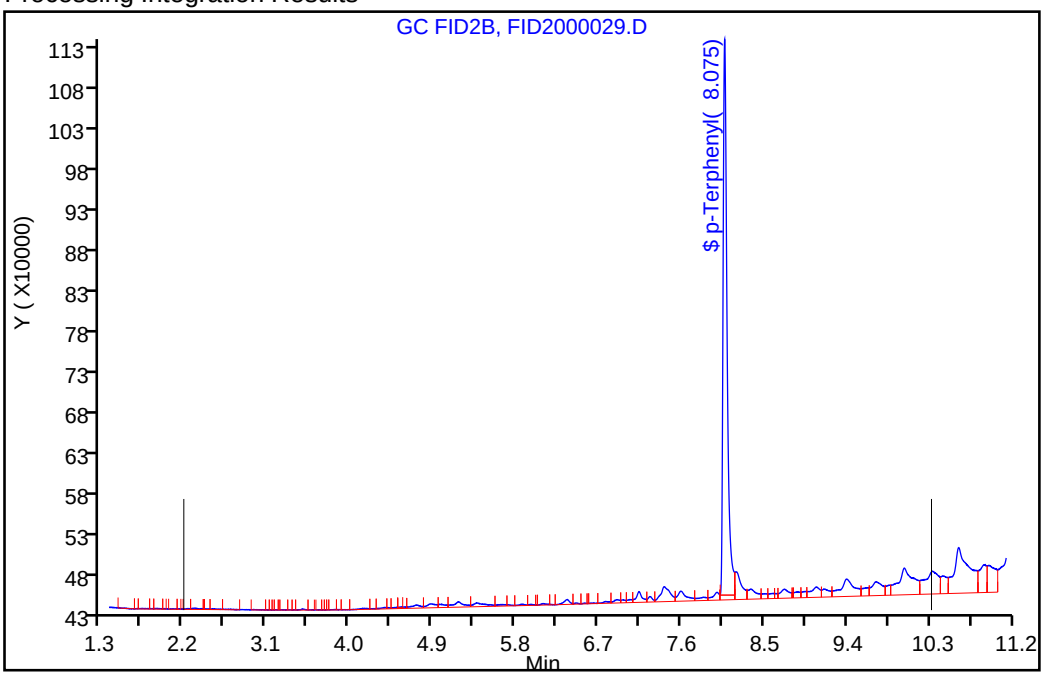
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000029.D				
Injection Date:	23-Aug-2018 23:50:14	Instrument ID:	CHDRO6		
Lims ID:	720-88190-E-5-A	Lab Sample ID:	720-88190-5		
Client ID:	DG-F3S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	79	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.258, CAS: STL00143

Signal: 1

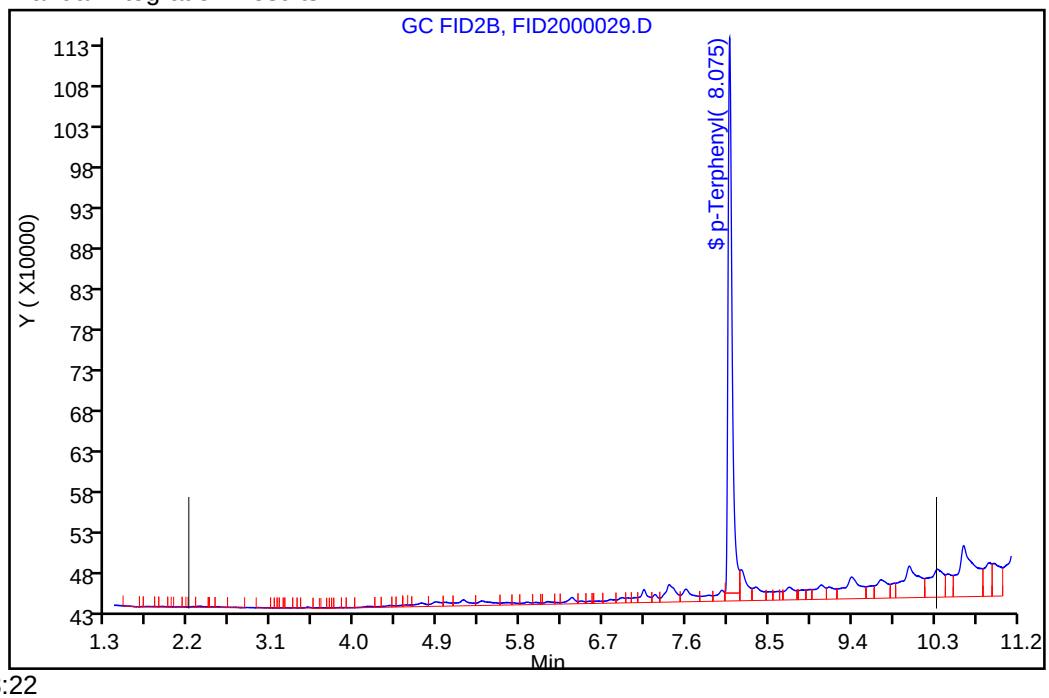
Processing Integration Results

RT: 6.26
Response: 45152055
Amount: 32.865316



Manual Integration Results

RT: 6.26
Response: 67000651
Amount: 45.236439



Reviewer: luj, 24-Aug-2018 11:28:22

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-F3S-9.5-10 Lab Sample ID: 720-88190-6

Matrix: Solid Lab File ID: FID2000028.D

Analysis Method: 8015B Date Collected: 08/21/2018 15:00

Extraction Method: 3546 Date Extracted: 08/23/2018 08:42

Sample wt/vol: 15.47(g) Date Analyzed: 08/23/2018 23:26

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250037 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	8700		1900	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	95		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000028.D
Lims ID: 720-88190-D-6-A
Client ID: DG-F3S--9.5-10
Sample Type: Client
Inject. Date: 23-Aug-2018 23:26:00 ALS Bottle#: 78 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053435-028
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m
Limit Group: DRO
Last Update: 24-Aug-2018 11:27:43 Calib Date: 23-Aug-2018 08:54:15
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 11:27:43

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.334			ND	
	23 n-Decane	2.193	2.190	0.003	16430	NC	
A	1 C9-C13	2.799	(1.334-4.263)		2565957	1.18	M
A	21 Stoddard Solvent	2.799	(1.334-4.263)		2565957	NC	M
A	57 C10-C12	2.919	(2.190-3.648)		2027051	8.45	
	24 Dodecane	3.630	3.648	-0.018	27063	NC	
A	3 C9 - C17	3.828	(1.334-6.322)		10296859	4.90	M
A	60 C10-C16	4.019	(2.190-5.847)		6355555	3.42	M
A	47 C9 - C18	4.049	(1.334-6.765)		16952544	8.95	M
A	15 Kerosene	4.261	(1.334-7.188)		26917448	14.2	M
A	25 C9-C19	4.261	(1.334-7.188)		26917448	12.7	M
	26 C13	4.246	4.263	-0.017	28226	NC	M
$	27 n-Decanoic Acid (Surr)		4.640			ND	U
A	59 C12-C16	4.747	(3.648-5.847)		4355567	9.77	M
A	61 C10-C20	4.893	(2.190-7.596)		38414021	29.1	M
A	28 C9-C24	5.199	(1.334-9.064)		71827238	48.0	M
A	29 C9-C25	5.365	(1.334-9.396)		78797554	51.9	M
A	54 C10-C23	5.454	(2.190-8.719)		61466274	42.1	M
A	4 C10-C24	5.627	(2.190-9.064)		71714123	47.9	M
A	16 C10-C25	5.793	(2.190-9.396)		78684439	51.9	M
	45 Hexadecane	5.856	5.847	0.009	350715	NC	M
A	14 C10-C26	5.953	(2.190-9.717)		86632267	56.4	M
A	67 C12-C22	6.004	(3.648-8.360)		57378496	39.8	M
A	32 C10-C28	6.258	(2.190-10.325)		105801602	67.2	M
A	5 Diesel	6.258	(2.190-10.325)		105801602	67.2	M
A	12 Unknown Hydrocarbons	6.258	(2.190-10.325)		105801602	NC	M
A	30 C13-C22	6.311	(4.263-8.360)		56953868	39.5	M
	44 Heptadecane	6.360	6.322	0.038	1665720	NC	M
A	31 C12-C24	6.356	(3.648-9.064)		69714135	46.8	M
	49 n-Octadecane		6.765			ND	
A	9 Crude Oil Range Organics (	6.873	(1.334-12.411)		258930278	NC	M
A	11 Bunker Range Organics (C9-	6.873	(1.334-12.411)		258930278	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.873	(1.334-12.411)		258930278	122.7	M
33 C19	7.143	7.188	-0.045	2001782	NC	M
A 64 C13-C28	7.294	(4.263-10.325)		103376986	65.8	M
A 17 C10-C36	7.301	(2.190-12.411)		258817163	153.8	M
A 13 C9-C40	7.364	(1.334-13.393)		379462711	242.9	M
A 68 Crude Oil Range Organics (	7.364	(1.334-13.393)		379462711	NC	M
A 58 C16-C24	7.455	(5.847-9.064)		65358568	44.3	M
62 icosane	7.600	7.596	0.004	2403366	NC	M
A 6 C10-C40	7.792	(2.190-13.393)		379349596	243.1	M
$ 34 p-Terphenyl	8.072	8.083	-0.011	48246051	23.7	M
35 n-Docosane	8.348	8.360	-0.012	2152691	NC	M
A 18 C12-C40	8.520	(3.648-13.393)		377349608	242.5	M
36 Tricosane	8.722	8.719	0.003	7240433	NC	M
A 66 C13-C40	8.828	(4.263-13.393)		376924980	242.5	M
37 n-Tetracosane	9.072	9.064	0.008	2131922	NC	M
A 2 C16-C36 ORO	9.129	(5.847-12.411)		252461608	213.5	M
38 C25	9.398	9.396	0.002	6428698	NC	M
A 19 C16-C40	9.620	(5.847-13.393)		372994041	240.7	M
46 n-Hexacosane	9.717	9.717	0.000	4935691	NC	M
A 20 C19-C36	9.800	(7.188-12.411)		102854927	75.6	
A 55 C23-C32	10.074	(8.719-11.430)		115781549	149.6	M
39 n-Octacosane	10.340	10.325	0.015	8986141	NC	M
65 C29	10.621	10.614	0.007	15103694	NC	M
A 40 C24-C36	10.737	(9.064-12.411)		188290353	192.1	M
A 7 Motor Oil	10.737	(9.064-12.411)		119857786	122.3	
A 10 C22-C40	10.876	(8.360-13.393)		176127219	126.7	
A 50 C25-C36	10.904	(9.396-12.411)		110738023	120.2	
A 41 C23-C40	11.056	(8.719-13.393)		178637475	130.7	
A 8 C24-C40	11.228	(9.064-13.393)		180927648	134.9	
56 Dotriacontane	11.443	11.430	0.013	8095846	NC	M
A 51 C28-C40	11.859	(10.325-13.393)		175490100	161.8	
A 63 C29-C40	12.004	(10.614-13.393)		168403204	168.5	
42 n-Hexatriacontane	12.423	12.411	0.012	5886487	NC	M
43 C40		13.393			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

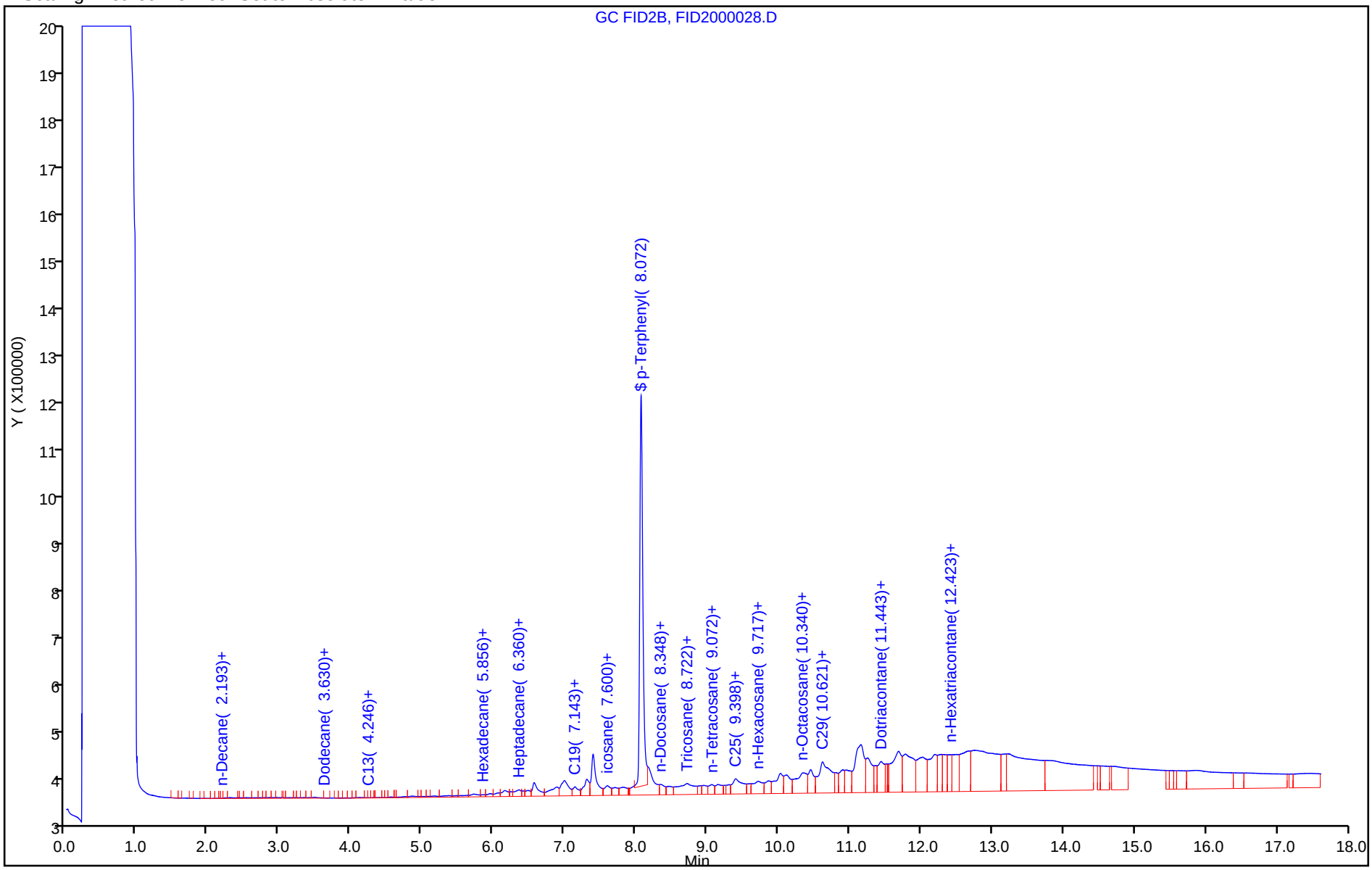
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 24-Aug-2018 11:27:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000028.D				
Injection Date:	23-Aug-2018 23:26:00	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88190-D-6-A	Lab Sample ID:	720-88190-6	Worklist Smp#:	28
Client ID:	DG-F3S--9.5-10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	78
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000028.D				
Lims ID:	720-88190-D-6-A				
Client ID:	DG-F3S--9.5-10				
Sample Type:	Client				
Inject. Date:	23-Aug-2018 23:26:00	ALS Bottle#:	78	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053435-028				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 11:27:43	Calib Date:	23-Aug-2018 08:54:15		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				
First Level Reviewer: luj		Date:	24-Aug-2018 11:27:43		

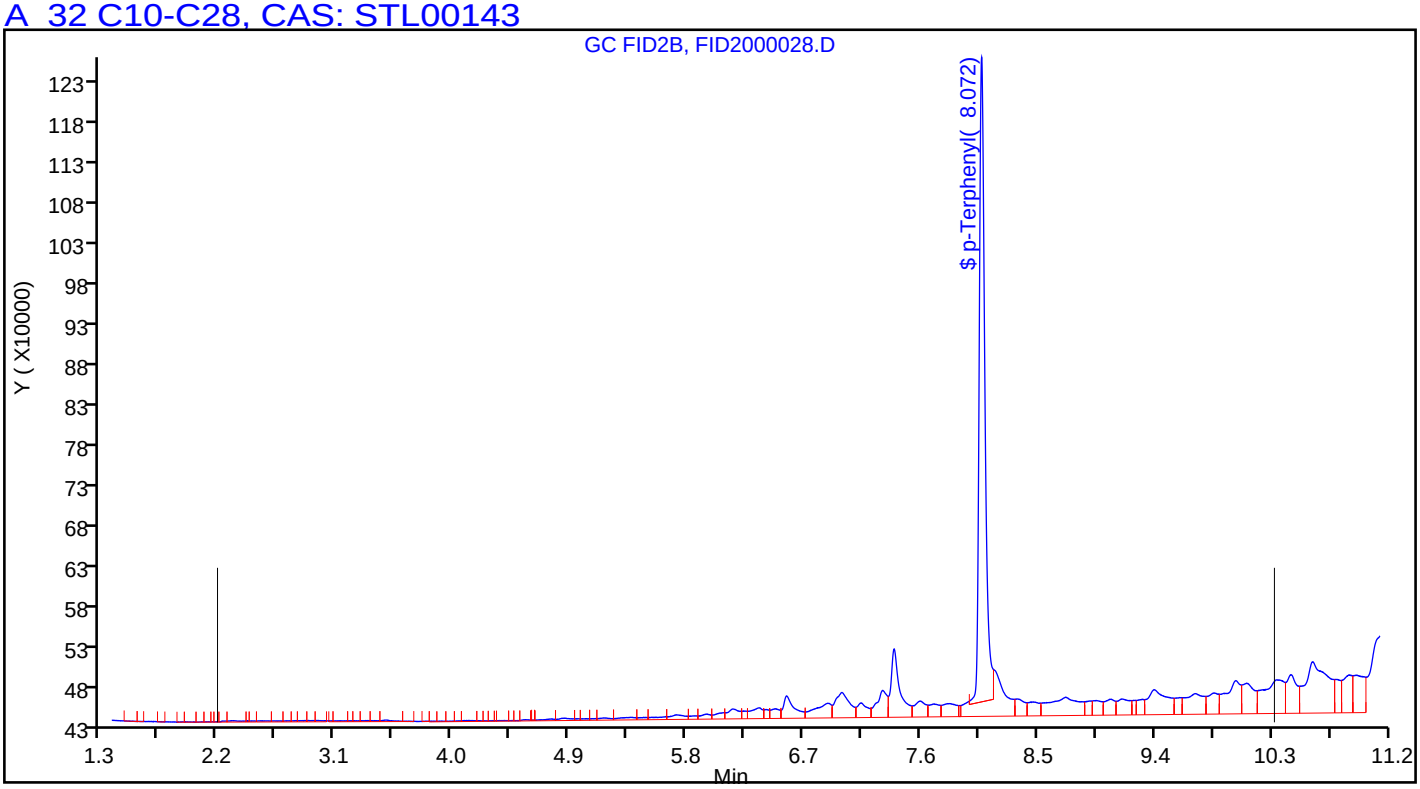
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	23.7	94.91

Report Date: 24-Aug-2018 11:27:48 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000028.D				
Injection Date:	23-Aug-2018 23:26:00	Instrument ID:	CHDRO6		
Lims ID:	720-88190-D-6-A	Lab Sample ID:	720-88190-6		
Client ID:	DG-F3S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	78	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

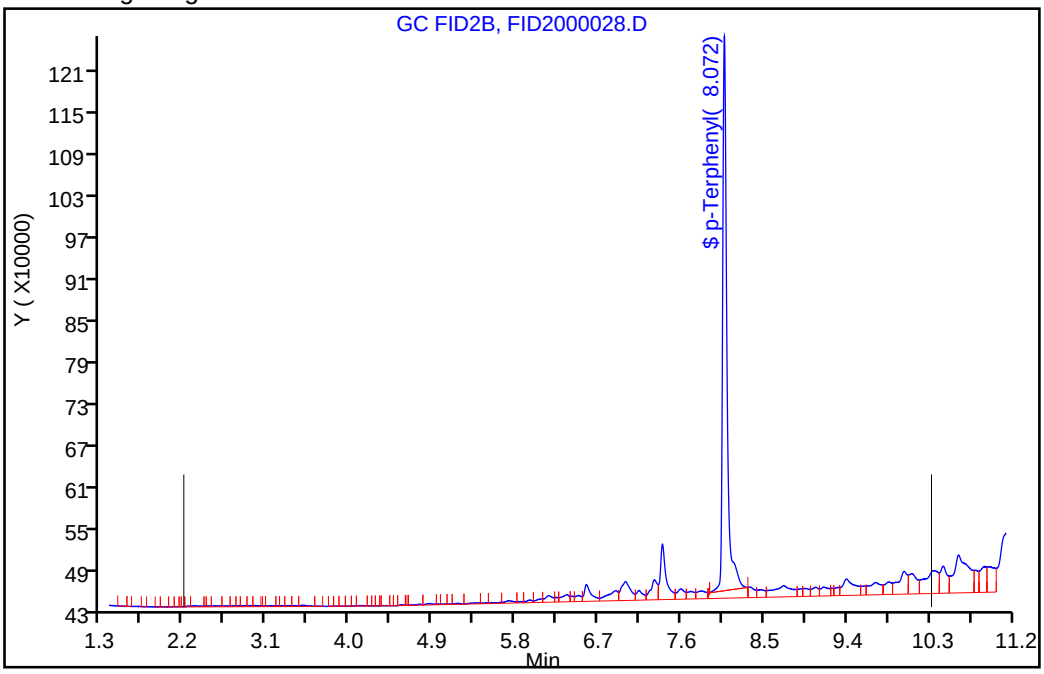
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000028.D				
Injection Date:	23-Aug-2018 23:26:00	Instrument ID:	CHDRO6		
Lims ID:	720-88190-D-6-A	Lab Sample ID:	720-88190-6		
Client ID:	DG-F3S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	78	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.258, CAS: STL00143

Signal: 1

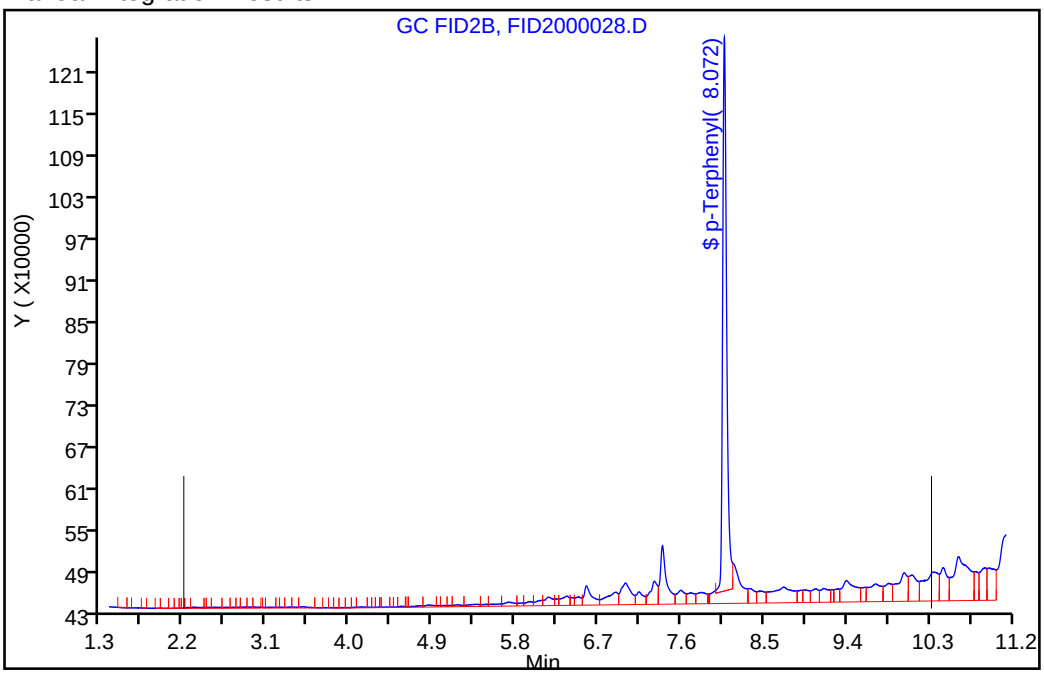
Processing Integration Results

RT: 6.26
Response: 71477483
Amount: 47.771313



Manual Integration Results

RT: 6.26
Response: 105801602
Amount: 67.206332



Reviewer: luj, 24-Aug-2018 11:24:54

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

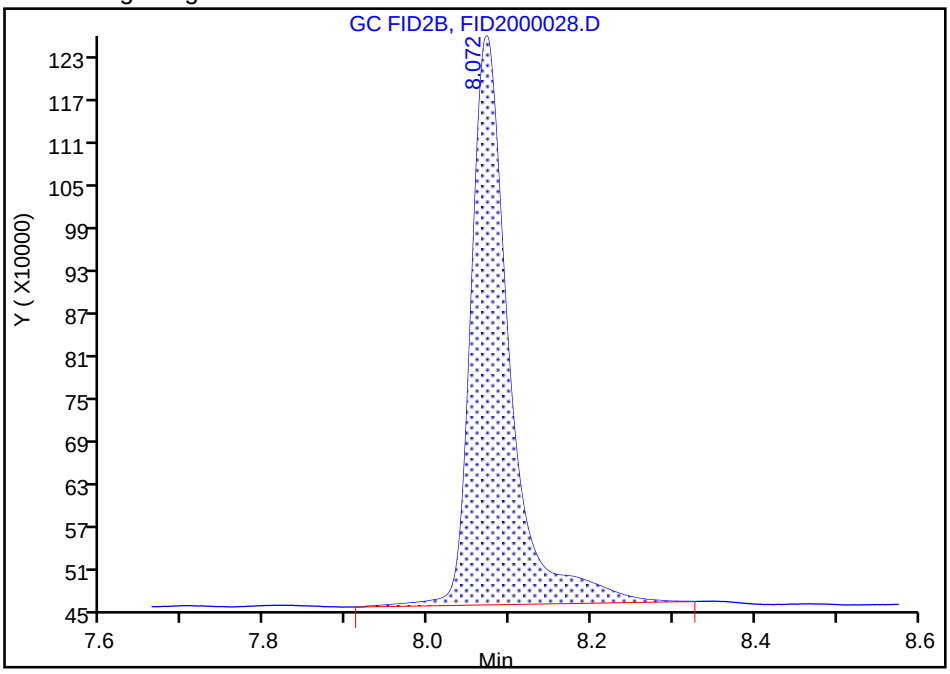
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000028.D				
Injection Date:	23-Aug-2018 23:26:00	Instrument ID:	CHDRO6		
Lims ID:	720-88190-D-6-A	Lab Sample ID:	720-88190-6		
Client ID:	DG-F3S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	78	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

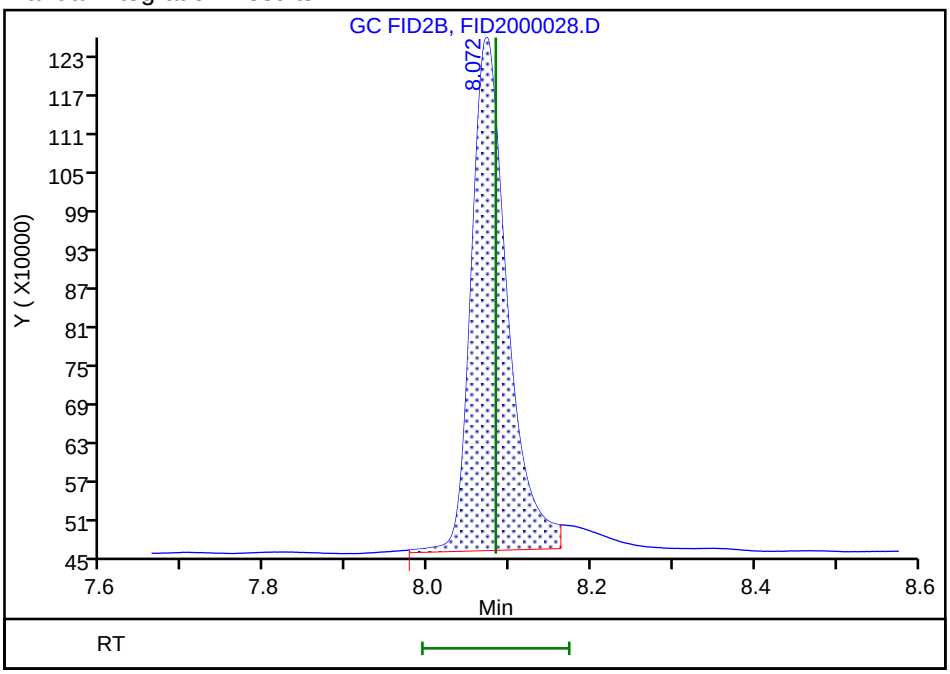
Processing Integration Results

RT: 8.07
Area: 51622617
Amount: 25.387497
Amount Units: mg/L



Manual Integration Results

RT: 8.07
Area: 48246051
Amount: 23.726935
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 11:25:18

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-G3S-9.5-10 Lab Sample ID: 720-88190-9

Matrix: Solid Lab File ID: FID2000027.D

Analysis Method: 8015B Date Collected: 08/21/2018 15:30

Extraction Method: 3546 Date Extracted: 08/23/2018 08:42

Sample wt/vol: 15.61(g) Date Analyzed: 08/23/2018 23:01

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250037 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	3900		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	94		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000027.D
Lims ID: 720-88190-D-9-A
Client ID: DG-G3S--9.5-10
Sample Type: Client
Inject. Date: 23-Aug-2018 23:01:47 ALS Bottle#: 77 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053435-027
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m
Limit Group: DRO
Last Update: 24-Aug-2018 14:21:27 Calib Date: 23-Aug-2018 08:54:15
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 14:21:27

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.334			ND	
23 n-Decane	2.152	2.190	-0.038	96281	NC	
A 1 C9-C13	2.799	(1.334-4.263)		2273361	1.04	
A 21 Stoddard Solvent	2.799	(1.334-4.263)		2273361	NC	
A 57 C10-C12	2.919	(2.190-3.648)		1624465	8.22	
24 Dodecane	3.675	3.648	0.027	151042	NC	
A 3 C9 - C17	3.828	(1.334-6.322)		3287816	1.57	M
A 60 C10-C16	4.019	(2.190-5.847)		3001899	1.61	M
A 47 C9 - C18	4.049	(1.334-6.765)		4667074	2.46	M
A 15 Kerosene	4.261	(1.334-7.188)		5427196	2.86	M
A 25 C9-C19	4.261	(1.334-7.188)		5427196	2.57	M
26 C13	4.285	4.263	0.022	118428	NC	
$ 27 n-Decanoic Acid (Surr)		4.640			ND	U
A 59 C12-C16	4.747	(3.648-5.847)		1377434	8.08	M
A 61 C10-C20	4.893	(2.190-7.596)		7195948	11.4	M
A 28 C9-C24	5.199	(1.334-9.064)		20536032	18.9	M
A 29 C9-C25	5.365	(1.334-9.396)		25213348	21.6	M
A 54 C10-C23	5.454	(2.190-8.719)		17139285	17.0	M
A 4 C10-C24	5.627	(2.190-9.064)		20295286	18.8	M
A 16 C10-C25	5.793	(2.190-9.396)		24972602	21.4	M
45 Hexadecane		5.847			ND	
A 14 C10-C26	5.953	(2.190-9.717)		30160660	24.4	M
A 67 C12-C22	6.004	(3.648-8.360)		11755287	14.0	M
A 32 C10-C28	6.258	(2.190-10.325)		40282368	30.1	M
A 5 Diesel	6.258	(2.190-10.325)		40282368	30.1	M
A 12 Unknown Hydrocarbons	6.258	(2.190-10.325)		40282368	NC	M
A 30 C13-C22	6.311	(4.263-8.360)		11347137	13.7	M
44 Heptadecane	6.374	6.322	0.052	199754	NC	M
A 31 C12-C24	6.356	(3.648-9.064)		18670821	17.9	M
49 n-Octadecane	6.823	6.765	0.058	570068	NC	M
A 9 Crude Oil Range Organics (	6.873	(1.334-12.411)		101214305	NC	M
A 11 Bunker Range Organics (C9-	6.873	(1.334-12.411)		101214305	NC	M

Report Date: 24-Aug-2018 14:21:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000027.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.873	(1.334-12.411)		101214305	47.9	M
33 C19	7.200	7.188	0.012	1039524	NC	M
A 64 C13-C28	7.294	(4.263-10.325)		38249753	29.0	M
A 17 C10-C36	7.301	(2.190-12.411)		100973559	64.5	M
A 13 C9-C40	7.364	(1.334-13.393)		170766558	109.3	M
A 68 Crude Oil Range Organics (	7.364	(1.334-13.393)		170766558	NC	M
A 58 C16-C24	7.455	(5.847-9.064)		17293387	17.1	M
62 icosane	7.606	7.596	0.010	1314642	NC	M
A 6 C10-C40	7.792	(2.190-13.393)		170525812	109.3	M
$ 34 p-Terphenyl	8.075	8.083	-0.008	47661928	23.4	M
35 n-Docosane	8.365	8.360	0.005	3189300	NC	M
A 18 C12-C40	8.520	(3.648-13.393)		168901347	108.5	M
36 Tricosane	8.721	8.719	0.002	3156001	NC	M
A 66 C13-C40	8.828	(4.263-13.393)		168493197	108.4	M
37 n-Tetracosane	9.070	9.064	0.006	4677316	NC	M
A 2 C16-C36 ORO	9.129	(5.847-12.411)		97971660	82.9	M
38 C25	9.401	9.396	0.005	3763954	NC	M
A 19 C16-C40	9.620	(5.847-13.393)		167523913	108.1	M
46 n-Hexacosane	9.717	9.717	0.000	2692507	NC	M
A 20 C19-C36	9.800	(7.188-12.411)		15616832	11.5	
A 55 C23-C32	10.074	(8.719-11.430)		48272047	62.4	M
39 n-Octacosane	10.331	10.325	0.006	2933947	NC	M
65 C29	10.622	10.614	0.008	5430381	NC	M
A 40 C24-C36	10.737	(9.064-12.411)		68751064	70.1	M
A 7 Motor Oil	10.737	(9.064-12.411)		42599911	43.5	
A 10 C22-C40	10.876	(8.360-13.393)		75969345	54.7	
A 50 C25-C36	10.904	(9.396-12.411)		39300143	42.7	
A 41 C23-C40	11.056	(8.719-13.393)		78864205	57.7	
A 8 C24-C40	11.228	(9.064-13.393)		76738171	57.2	
56 Dotriacontane	11.445	11.430	0.015	5275306	NC	M
A 51 C28-C40	11.859	(10.325-13.393)		78462506	72.3	
A 63 C29-C40	12.004	(10.614-13.393)		77127345	77.2	
42 n-Hexatriacontane	12.342	12.411	-0.069	17973295	NC	M
43 C40	13.351	13.393	-0.042	23928279	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

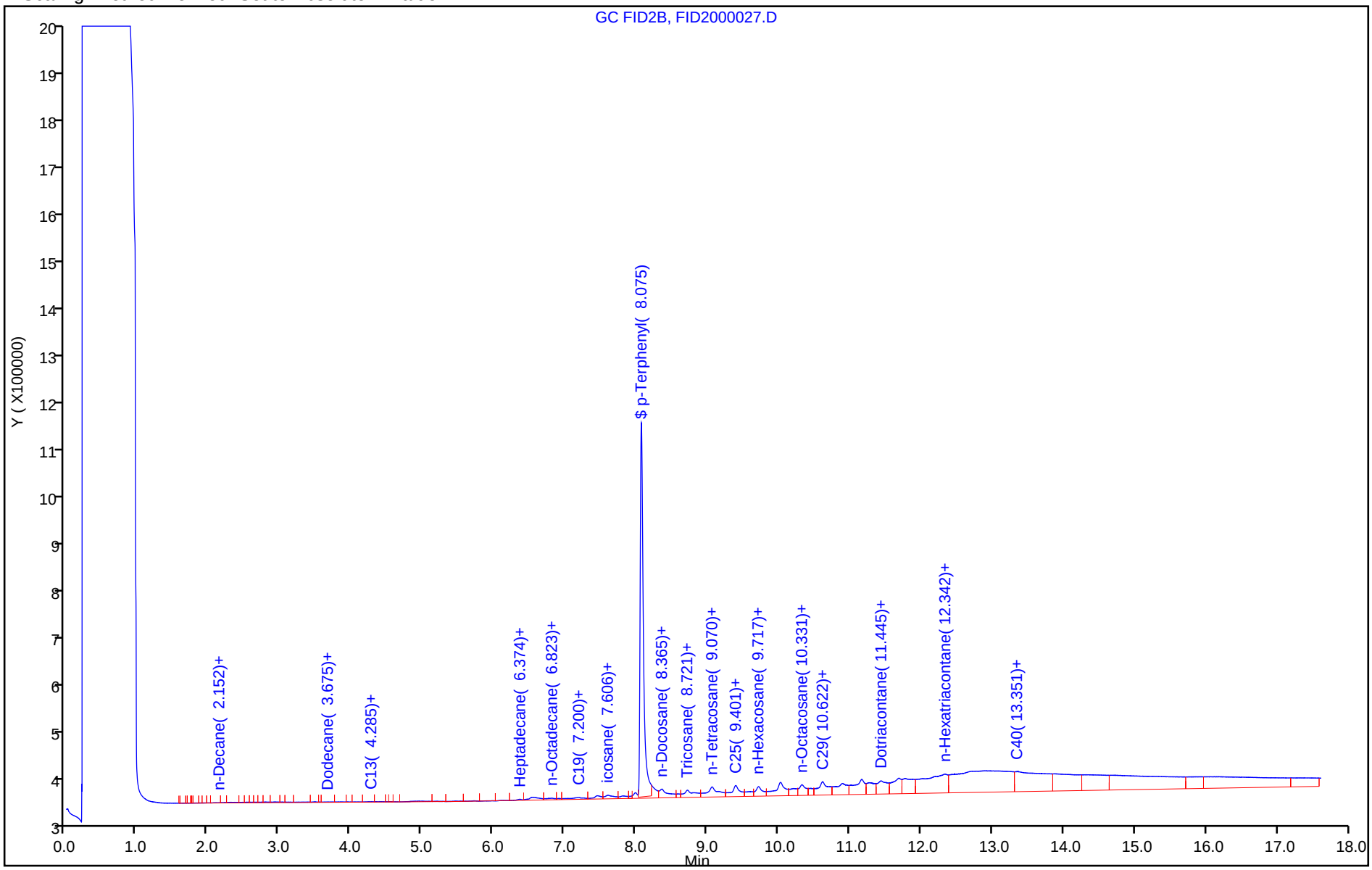
Report Date: 24-Aug-2018 14:21:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000027.D

Injection Date:	23-Aug-2018 23:01:47	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88190-D-9-A	Lab Sample ID:	720-88190-9	Worklist Smp#:	27
Client ID:	DG-G3S--9.5-10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	77
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000027.D				
Lims ID:	720-88190-D-9-A				
Client ID:	DG-G3S--9.5-10				
Sample Type:	Client				
Inject. Date:	23-Aug-2018 23:01:47	ALS Bottle#:	77	Worklist Smp#:	27
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053435-027				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 14:21:27	Calib Date:	23-Aug-2018 08:54:15		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				
First Level Reviewer: luj		Date:	24-Aug-2018 14:21:27		

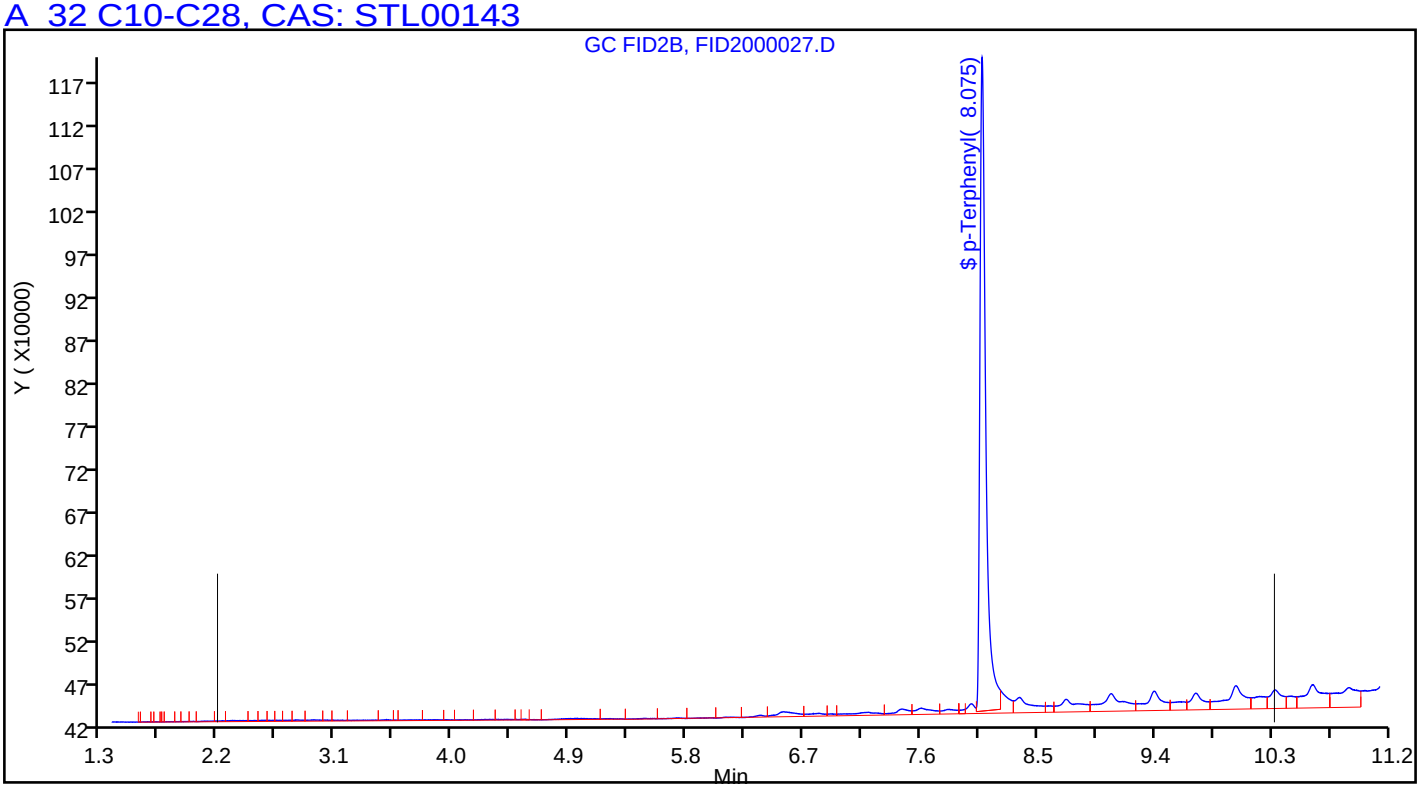
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	23.4	93.76

Report Date: 24-Aug-2018 14:21:32 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000027.D				
Injection Date:	23-Aug-2018 23:01:47	Instrument ID:	CHDRO6		
Lims ID:	720-88190-D-9-A	Lab Sample ID:	720-88190-9		
Client ID:	DG-G3S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	77	Worklist Smp#:	27
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

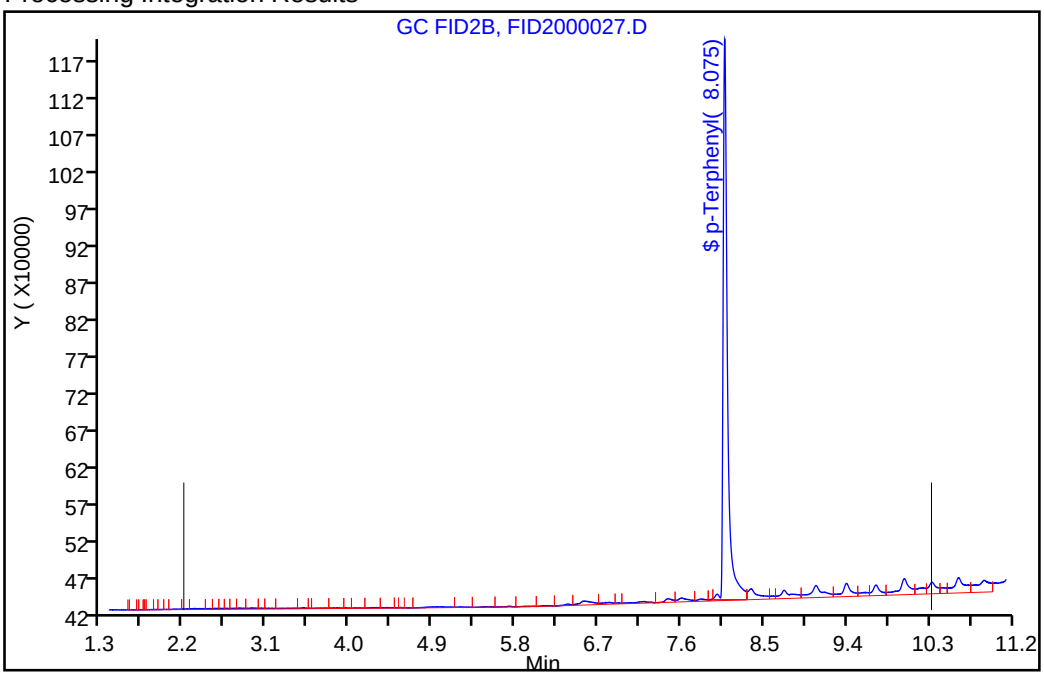
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000027.D				
Injection Date:	23-Aug-2018 23:01:47	Instrument ID:	CHDRO6		
Lims ID:	720-88190-D-9-A	Lab Sample ID:	720-88190-9		
Client ID:	DG-G3S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	77	Worklist Smp#:	27
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.258, CAS: STL00143

Signal: 1

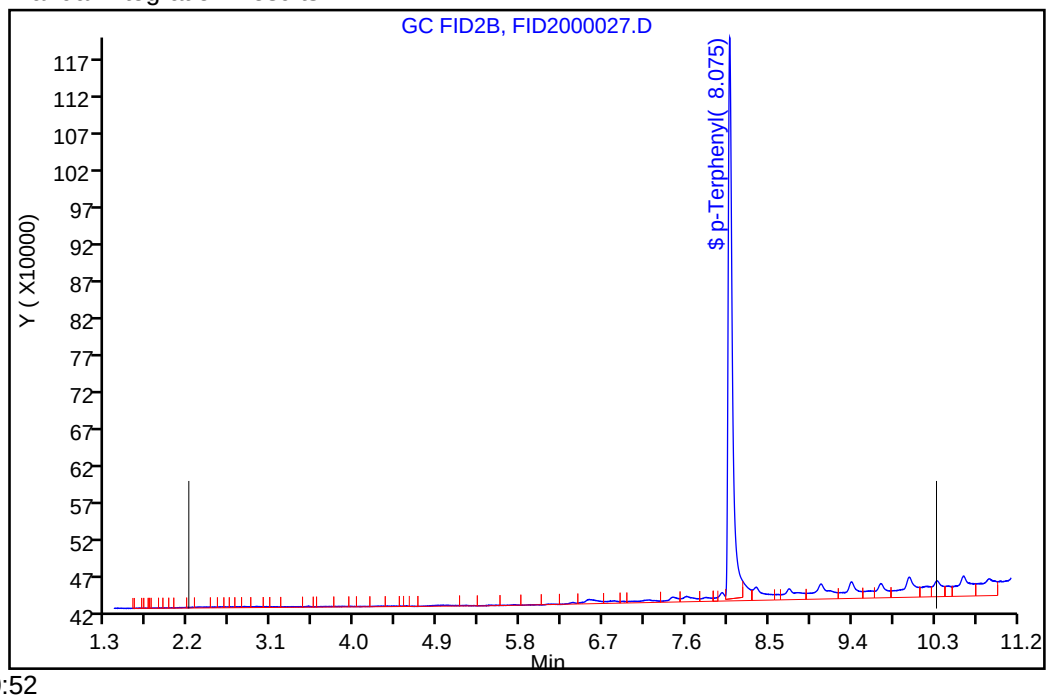
Processing Integration Results

RT: 6.26
Response: 23928456
Amount: 20.848080



Manual Integration Results

RT: 6.26
Response: 40282368
Amount: 30.108000



Reviewer: luj, 24-Aug-2018 14:20:52

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

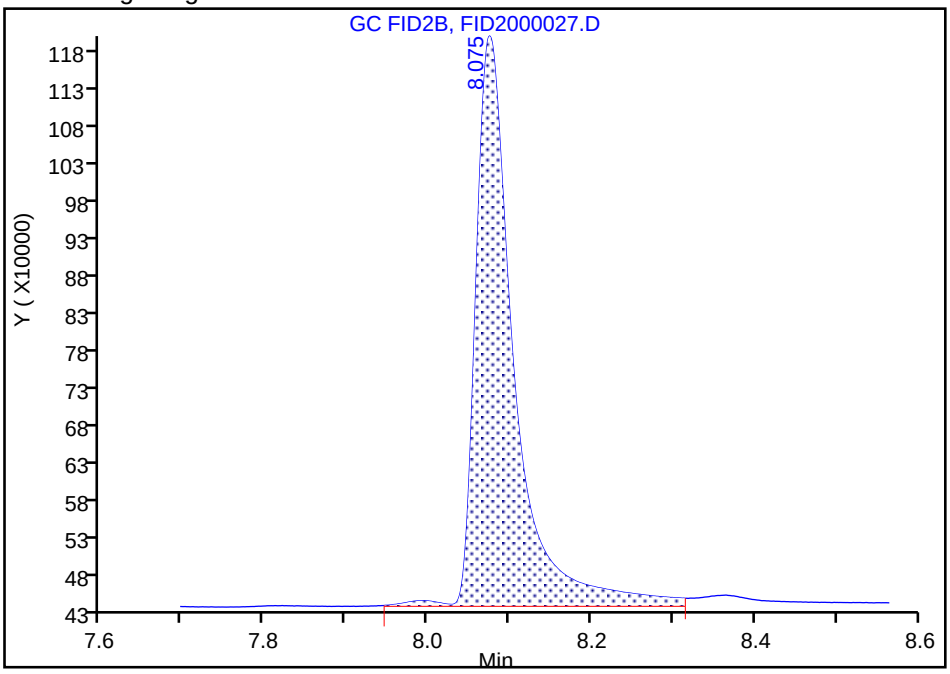
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000027.D				
Injection Date:	23-Aug-2018 23:01:47	Instrument ID:	CHDRO6		
Lims ID:	720-88190-D-9-A	Lab Sample ID:	720-88190-9		
Client ID:	DG-G3S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	77	Worklist Smp#:	27
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

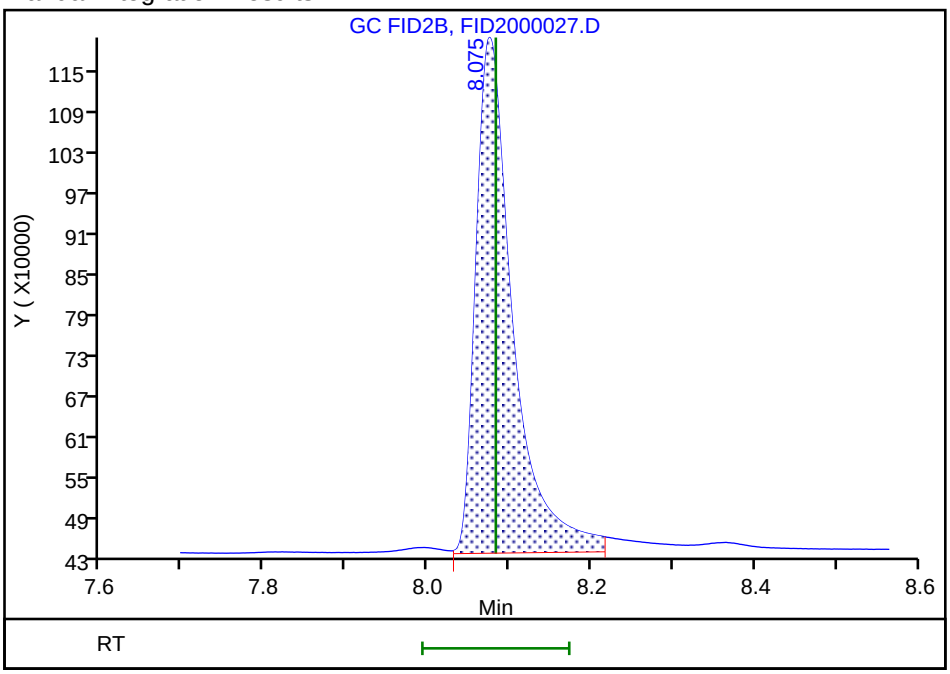
Processing Integration Results

RT: 8.08
Area: 49883364
Amount: 24.532149
Amount Units: mg/L



Manual Integration Results

RT: 8.08
Area: 47661928
Amount: 23.439669
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 14:21:10

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-H3S-0.5-1 Lab Sample ID: 720-88190-10

Matrix: Solid Lab File ID: FID2000021.D

Analysis Method: 8015B Date Collected: 08/21/2018 16:45

Extraction Method: 3546 Date Extracted: 08/23/2018 08:42

Sample wt/vol: 15.61(g) Date Analyzed: 08/23/2018 20:09

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250037 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	31000		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	79		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000021.D
Lims ID: 720-88190-D-10-C
Client ID: DG-H3S--0.5-1
Sample Type: Client
Inject. Date: 23-Aug-2018 20:09:22 ALS Bottle#: 71 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053435-021
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m
Limit Group: DRO
Last Update: 24-Aug-2018 11:17:45 Calib Date: 23-Aug-2018 08:54:15
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 11:17:45

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.334			ND	
	23 n-Decane	2.129	2.190	-0.061	98063	NC	M
A	1 C9-C13	2.799	(1.334-4.263)		8360299	3.83	M
A	21 Stoddard Solvent	2.799	(1.334-4.263)		8360299	NC	M
A	57 C10-C12	2.919	(2.190-3.648)		4390337	9.79	M
	24 Dodecane	3.656	3.648	0.008	192349	NC	M
A	3 C9 - C17	3.828	(1.334-6.322)		52475747	25.0	M
A	60 C10-C16	4.019	(2.190-5.847)		35935358	19.3	M
A	47 C9 - C18	4.049	(1.334-6.765)		71887033	38.0	M
A	15 Kerosene	4.261	(1.334-7.188)		90937654	47.9	M
A	25 C9-C19	4.261	(1.334-7.188)		90937654	43.0	M
	26 C13	4.219	4.263	-0.044	512812	NC	M
$	27 n-Decanoic Acid (Surr)		4.640			ND	U
A	59 C12-C16	4.747	(3.648-5.847)		31545021	25.2	M
A	61 C10-C20	4.893	(2.190-7.596)		116060175	73.0	M
A	28 C9-C24	5.199	(1.334-9.064)		231439061	138.3	M
A	29 C9-C25	5.365	(1.334-9.396)		264293581	156.9	M
A	54 C10-C23	5.454	(2.190-8.719)		197717244	119.3	M
A	4 C10-C24	5.627	(2.190-9.064)		230581443	137.9	M
A	16 C10-C25	5.793	(2.190-9.396)		263435963	156.5	M
	45 Hexadecane	5.866	5.847	0.019	4286119	NC	M
A	14 C10-C26	5.953	(2.190-9.717)		311049888	183.4	M
A	67 C12-C22	6.004	(3.648-8.360)		172761906	105.1	M
A	32 C10-C28	6.258	(2.190-10.325)		411094613	240.1	M
A	5 Diesel	6.258	(2.190-10.325)		411094613	240.1	M
A	12 Unknown Hydrocarbons	6.258	(2.190-10.325)		411094613	NC	M
A	30 C13-C22	6.311	(4.263-8.360)		169649562	103.4	M
	44 Heptadecane	6.358	6.322	0.036	9062005	NC	M
A	31 C12-C24	6.356	(3.648-9.064)		226191106	135.4	M
	49 n-Octadecane	6.771	6.765	0.006	4918393	NC	M
A	9 Crude Oil Range Organics (	6.873	(1.334-12.411)		941059476	NC	M
A	11 Bunker Range Organics (C9-	6.873	(1.334-12.411)		941059476	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.873	(1.334-12.411)		941059476	445.8	M
33 C19	7.191	7.188	0.003	6905124	NC	M
A 64 C13-C28	7.294	(4.263-10.325)		403591932	235.8	M
A 17 C10-C36	7.301	(2.190-12.411)		940201858	539.7	M
A 13 C9-C40	7.364	(1.334-13.393)		1289649075	825.5	M
A 68 Crude Oil Range Organics (	7.364	(1.334-13.393)		1289649075	NC	M
A 58 C16-C24	7.455	(5.847-9.064)		194646085	117.5	M
62 icosane	7.598	7.596	0.002	11721871	NC	M
A 6 C10-C40	7.792	(2.190-13.393)		1288791457	825.8	M
$ 34 p-Terphenyl	8.075	8.083	-0.008	40073297	19.7	
35 n-Docosane	8.366	8.360	0.006	13153552	NC	M
A 18 C12-C40	8.520	(3.648-13.393)		1284401120	825.3	M
36 Tricosane	8.726	8.719	0.007	32864199	NC	M
A 66 C13-C40	8.828	(4.263-13.393)		1281288776	824.2	M
37 n-Tetracosane	9.068	9.064	0.004	23566613	NC	M
A 2 C16-C36 ORO	9.129	(5.847-12.411)		904266500	764.7	M
38 C25	9.403	9.396	0.007	38942279	NC	M
A 19 C16-C40	9.620	(5.847-13.393)		1252856099	808.6	M
46 n-Hexacosane	9.727	9.717	0.010	21410245	NC	M
A 20 C19-C36	9.800	(7.188-12.411)		582067783	427.6	
A 55 C23-C32	10.074	(8.719-11.430)		467203287	603.7	M
39 n-Octacosane	10.386	10.325	0.061	31308815	NC	M
65 C29	10.629	10.614	0.015	63849934	NC	M
A 40 C24-C36	10.737	(9.064-12.411)		676219071	689.7	M
A 7 Motor Oil	10.737	(9.064-12.411)		542984200	553.8	
A 10 C22-C40	10.876	(8.360-13.393)		718571730	517.0	
A 50 C25-C36	10.904	(9.396-12.411)		506620149	550.0	
A 41 C23-C40	11.056	(8.719-13.393)		705827461	516.4	
A 8 C24-C40	11.228	(9.064-13.393)		693413802	517.0	
56 Dotriacontane	11.435	11.430	0.005	35249807	NC	M
A 51 C28-C40	11.859	(10.325-13.393)		580230497	534.9	
A 63 C29-C40	12.004	(10.614-13.393)		534371583	534.7	
42 n-Hexatriacontane	12.367	12.411	-0.044	39858932	NC	M
43 C40		13.393			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

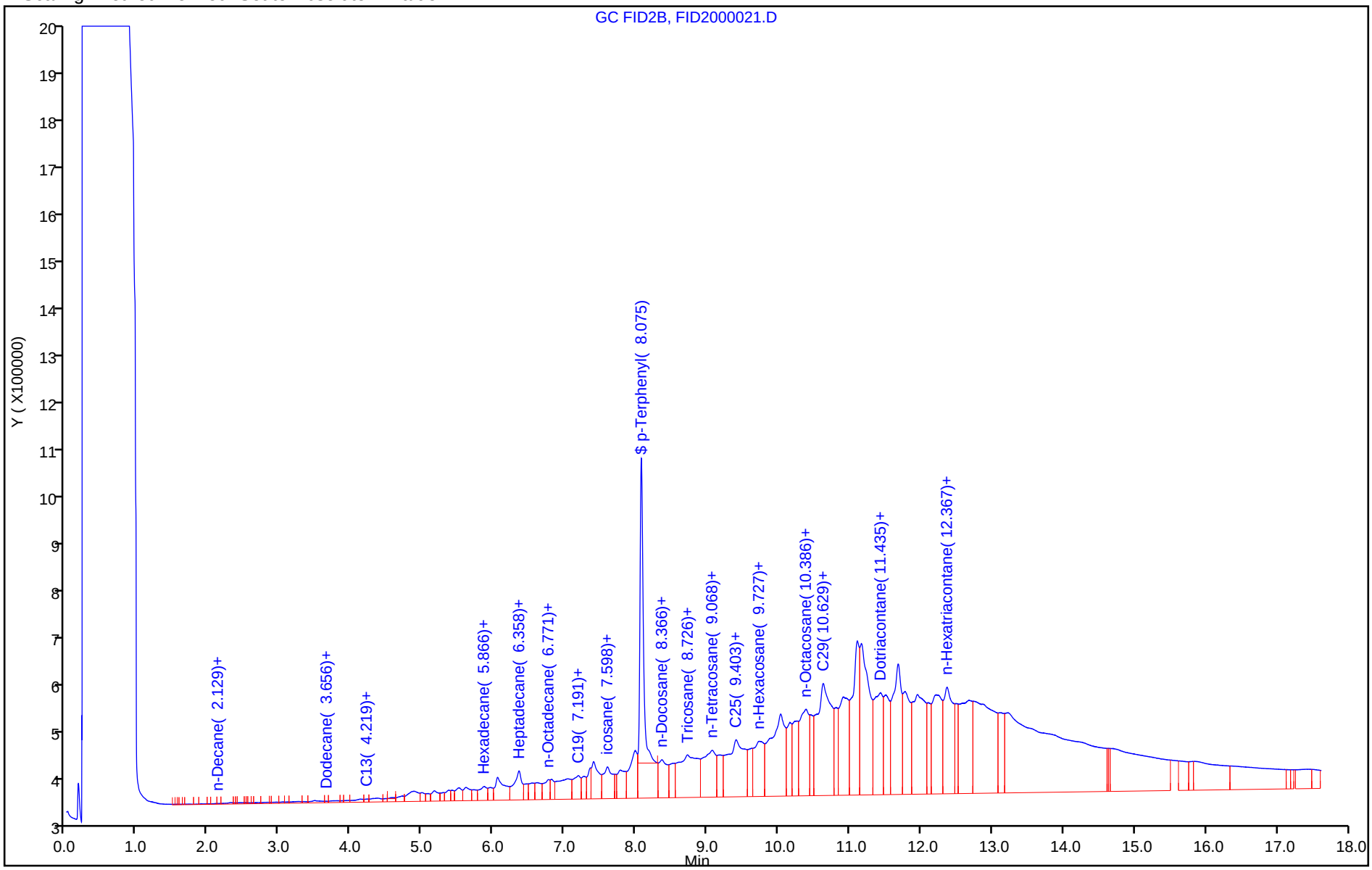
Report Date: 24-Aug-2018 11:17:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000021.D

Injection Date:	23-Aug-2018 20:09:22	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88190-D-10-C	Lab Sample ID:	720-88190-10	Worklist Smp#:	21
Client ID:	DG-H3S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	71
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000021.D				
Lims ID:	720-88190-D-10-C				
Client ID:	DG-H3S--0.5-1				
Sample Type:	Client				
Inject. Date:	23-Aug-2018 20:09:22	ALS Bottle#:	71	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053435-021				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 11:17:45	Calib Date:	23-Aug-2018 08:54:15		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				
First Level Reviewer: luj		Date:	24-Aug-2018 11:17:45		

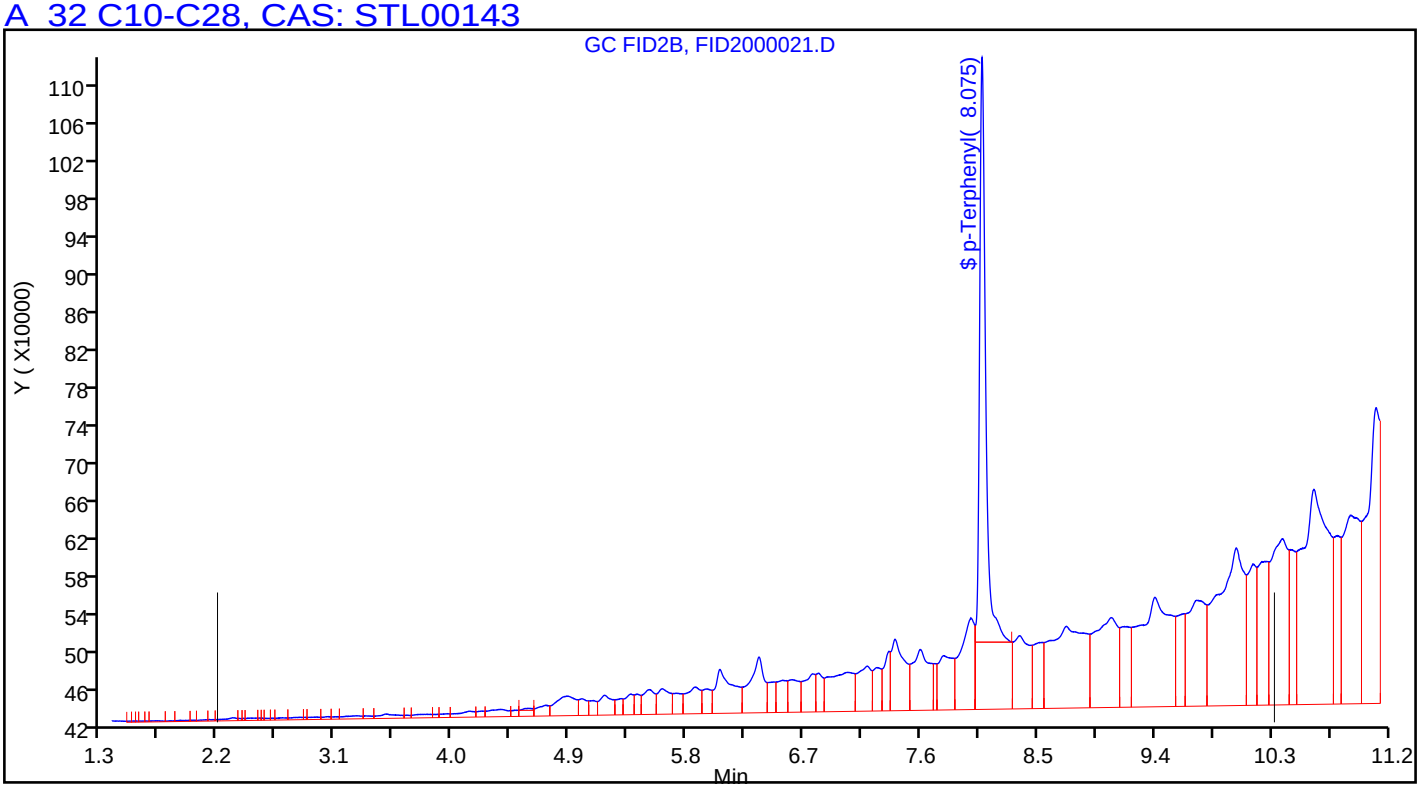
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	19.7	78.83

Report Date: 24-Aug-2018 11:17:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000021.D				
Injection Date:	23-Aug-2018 20:09:22	Instrument ID:	CHDRO6		
Lims ID:	720-88190-D-10-C	Lab Sample ID:	720-88190-10		
Client ID:	DG-H3S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	71	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

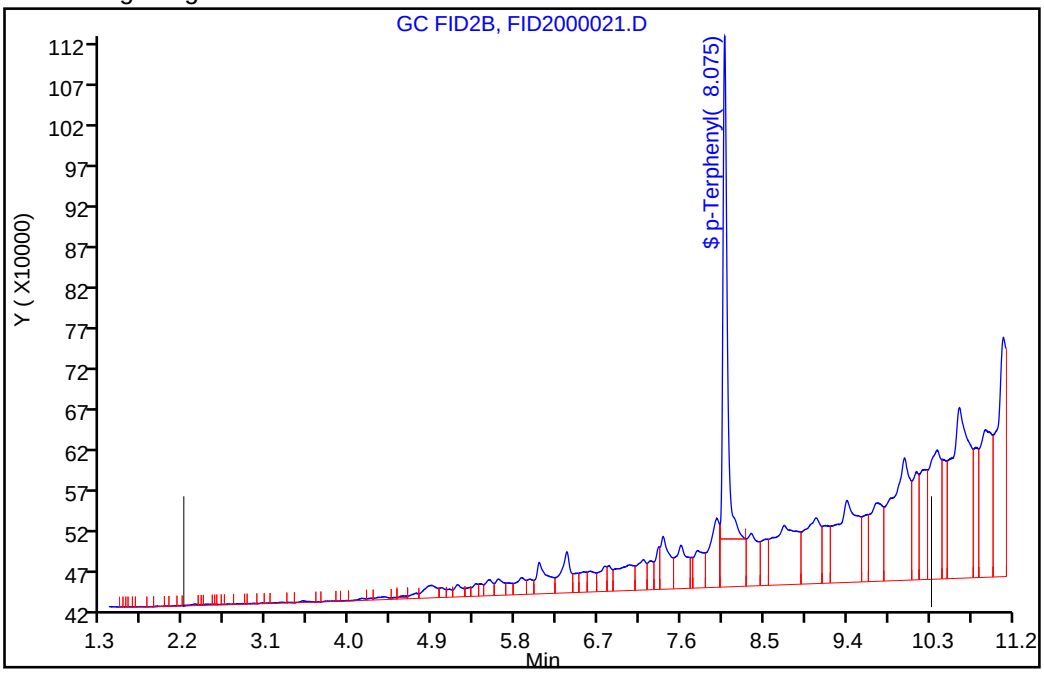
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000021.D				
Injection Date:	23-Aug-2018 20:09:22	Instrument ID:	CHDRO6		
Lims ID:	720-88190-D-10-C	Lab Sample ID:	720-88190-10		
Client ID:	DG-H3S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	71	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.258, CAS: STL00143

Signal: 1

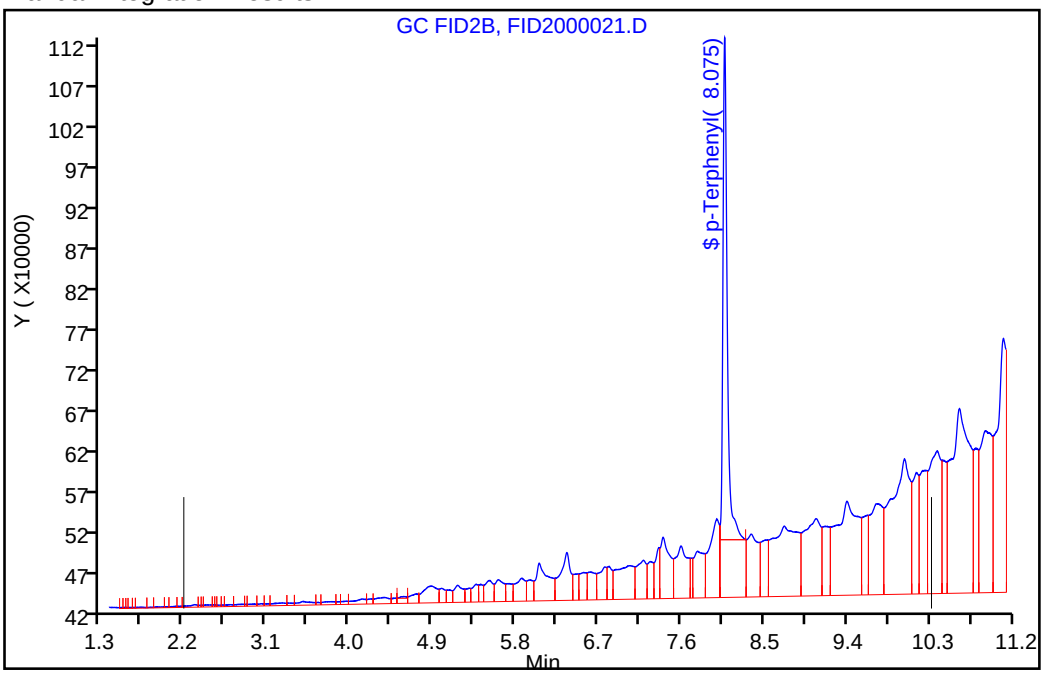
Processing Integration Results

RT: 6.26
Response: 328812536
Amount: 193.4797



Manual Integration Results

RT: 6.26
Response: 411094613
Amount: 240.0695



Reviewer: luj, 24-Aug-2018 11:17:17

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-H3S-3.5-4 Lab Sample ID: 720-88190-11

Matrix: Solid Lab File ID: FID1000036.D

Analysis Method: 8015B Date Collected: 08/21/2018 16:45

Extraction Method: 3546 Date Extracted: 08/23/2018 08:42

Sample wt/vol: 15.62(g) Date Analyzed: 08/24/2018 02:40

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250036 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	31000		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	101		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000036.D
Lims ID: 720-88190-E-11-D
Client ID: DG-H3S--3.5-4
Sample Type: Client
Inject. Date: 24-Aug-2018 02:40:08 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053434-036
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\DRO6_A.m
Limit Group: DRO
Last Update: 24-Aug-2018 12:17:11 Calib Date: 23-Aug-2018 11:10:00
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000007.D

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 12:17:11

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	1.287	1.240	0.047	14065	NC	
	23 n-Decane	2.113	2.115	-0.002	39853	NC	
A	21 Stoddard Solvent	2.726	(1.240-4.213)		5331699	2.99	M
A	1 C9-C13	2.726	(1.240-4.213)		5331699	3.00	M
A	57 C10-C12	2.853	(2.115-3.591)		1953127	1.27	M
	24 Dodecane	3.595	3.591	0.004	84483	NC	M
A	3 C9 - C17	3.765	(1.240-6.290)		32005365	16.4	M
A	60 C10-C16	3.964	(2.115-5.813)		23427375	13.4	M
A	47 C9 - C18	3.989	(1.240-6.739)		42176156	26.1	M
A	25 C9-C19	4.203	(1.240-7.167)		52509433	26.8	M
A	15 Kerosene	4.203	(1.240-7.167)		52509433	32.5	M
	26 C13	4.257	4.213	0.044	421728	NC	M
$	27 n-Decanoic Acid (Surr)		4.583			ND	U
A	59 C12-C16	4.702	(3.591-5.813)		21474248	13.9	M
A	62 C10-C20	4.846	(2.115-7.578)		65707678	42.6	M
A	28 C9-C24	5.150	(1.240-9.060)		206218978	133.7	M
A	29 C9-C25	5.318	(1.240-9.397)		243581531	157.9	M
A	54 C10-C23	5.413	(2.115-8.711)		124960422	81.0	M
A	4 C10-C24	5.588	(2.115-9.060)		205730850	133.4	M
A	16 C10-C25	5.756	(2.115-9.397)		243093403	157.6	M
	45 Hexadecane	5.817	5.813	0.004	1791856	NC	M
A	14 C10-C26	5.918	(2.115-9.721)		283973971	184.1	M
A	67 C12-C22	5.970	(3.591-8.348)		87955996	57.0	M
A	12 Unknown Hydrocarbons	6.226	(2.115-10.338)		376623796	NC	M
A	5 Diesel	6.226	(2.115-10.338)		376623796	244.2	M
A	32 C10-C28	6.226	(2.115-10.338)		376623796	244.2	M
A	30 C13-C22	6.281	(4.213-8.348)		85065552	55.2	M
	44 Heptadecane	6.332	6.290	0.042	4122089	NC	M
A	31 C12-C24	6.326	(3.591-9.060)		203777723	132.1	M
	51 n-Octadecane	6.688	6.739	-0.051	537491	NC	M
A	9 Crude Oil Range Organics (	6.847	(1.240-12.455)		616975705	NC	M
A	11 Bunker Range Organics (C9-	6.847	(1.240-12.455)		616975705	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.847	(1.240-12.455)		616975705	348.5	M
33 C19	7.158	7.167	-0.009	1842307	NC	M
A 64 C13-C28	7.275	(4.213-10.338)		371780225	241.0	M
A 17 C10-C36	7.285	(2.115-12.455)		616487577	399.7	M
A 13 C9-C40	7.346	(1.240-13.451)		824238378	611.3	M
A 68 Crude Oil Range Organics (	7.346	(1.240-13.451)		824238378	NC	M
A 58 C16-C24	7.436	(5.813-9.060)		182303475	118.2	M
61 icosane	7.553	7.578	-0.025	3406649	NC	M
A 6 C10-C40	7.783	(2.115-13.451)		823750250	611.3	M
$ 34 p-Terphenyl	8.040	8.044	-0.004	48608937	25.3	
35 n-Docosane	8.356	8.348	0.008	5835710	NC	M
A 18 C12-C40	8.521	(3.591-13.451)		821797123	611.6	M
36 Tricosane	8.714	8.711	0.003	8259093	NC	M
A 66 C13-C40	8.832	(4.213-13.451)		818906679	610.1	M
37 n-Tetracosane	9.127	9.060	0.067	9895378	NC	M
A 2 C16-C36 ORO	9.134	(5.813-12.455)		686177618	601.6	
38 C25	9.372	9.397	-0.025	15553127	NC	M
A 19 C16-C40	9.632	(5.813-13.451)		800322875	598.6	M
46 n-Hexacosane	9.775	9.721	0.054	32833907	NC	M
A 20 C19-C36	9.811	(7.167-12.455)		649319041	488.5	
A 55 C23-C32	10.085	(8.711-11.458)		384925128	554.4	M
39 n-Octacosane	10.331	10.338	-0.007	15266531	NC	M
65 C29	10.626	10.631	-0.005	19590792	NC	M
A 7 Motor Oil	10.757	(9.060-12.455)		270569203	303.8	
A 40 C24-C36	10.757	(9.060-12.455)		418135140	469.6	M
A 10 C22-C40	10.900	(8.348-13.451)		463406177	372.7	
A 49 C25-C36	10.926	(9.397-12.455)		388947301	434.5	M
A 41 C23-C40	11.081	(8.711-13.451)		698789828	546.7	M
A 8 C24-C40	11.256	(9.060-13.451)		673914012	553.6	M
56 Dotriacontane	11.456	11.458	-0.002	29546503	NC	M
A 50 C28-C40	11.895	(10.338-13.451)		462392985	487.1	M
A 63 C29-C40	12.041	(10.631-13.451)		431979271	498.5	M
42 n-Hexatriacontane	12.393	12.455	-0.062	17739878	NC	M
43 C40		13.451			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

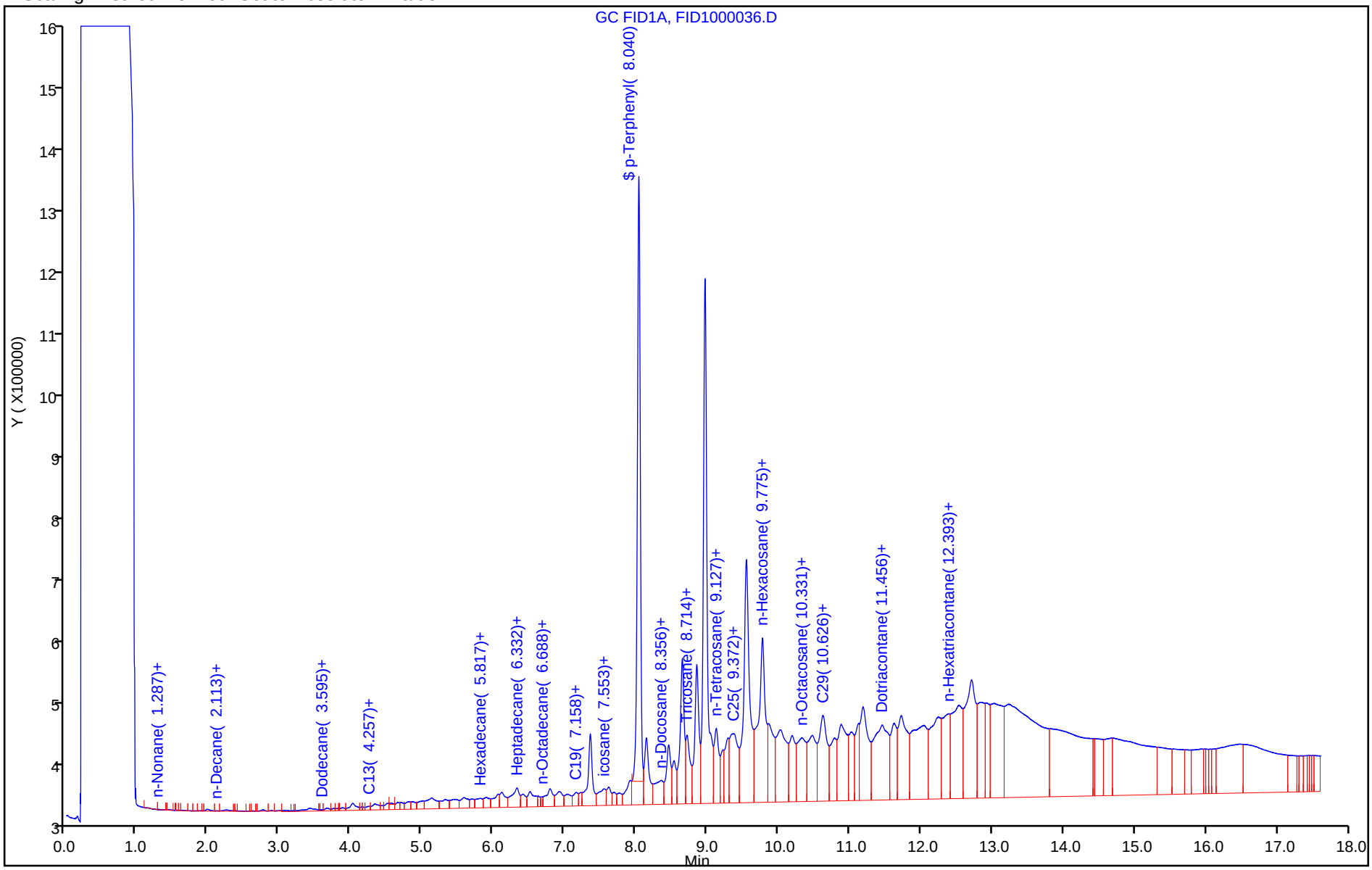
Report Date: 24-Aug-2018 12:17:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000036.D

Injection Date:	24-Aug-2018 02:40:08	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88190-E-11-D	Lab Sample ID:	720-88190-11	Worklist Smp#:	36
Client ID:	DG-H3S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000036.D
Lims ID: 720-88190-E-11-D
Client ID: DG-H3S--3.5-4
Sample Type: Client
Inject. Date: 24-Aug-2018 02:40:08 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053434-036
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\DRO6_A.m
Limit Group: DRO
Last Update: 24-Aug-2018 12:17:11 Calib Date: 23-Aug-2018 11:10:00
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000007.D

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 12:17:11

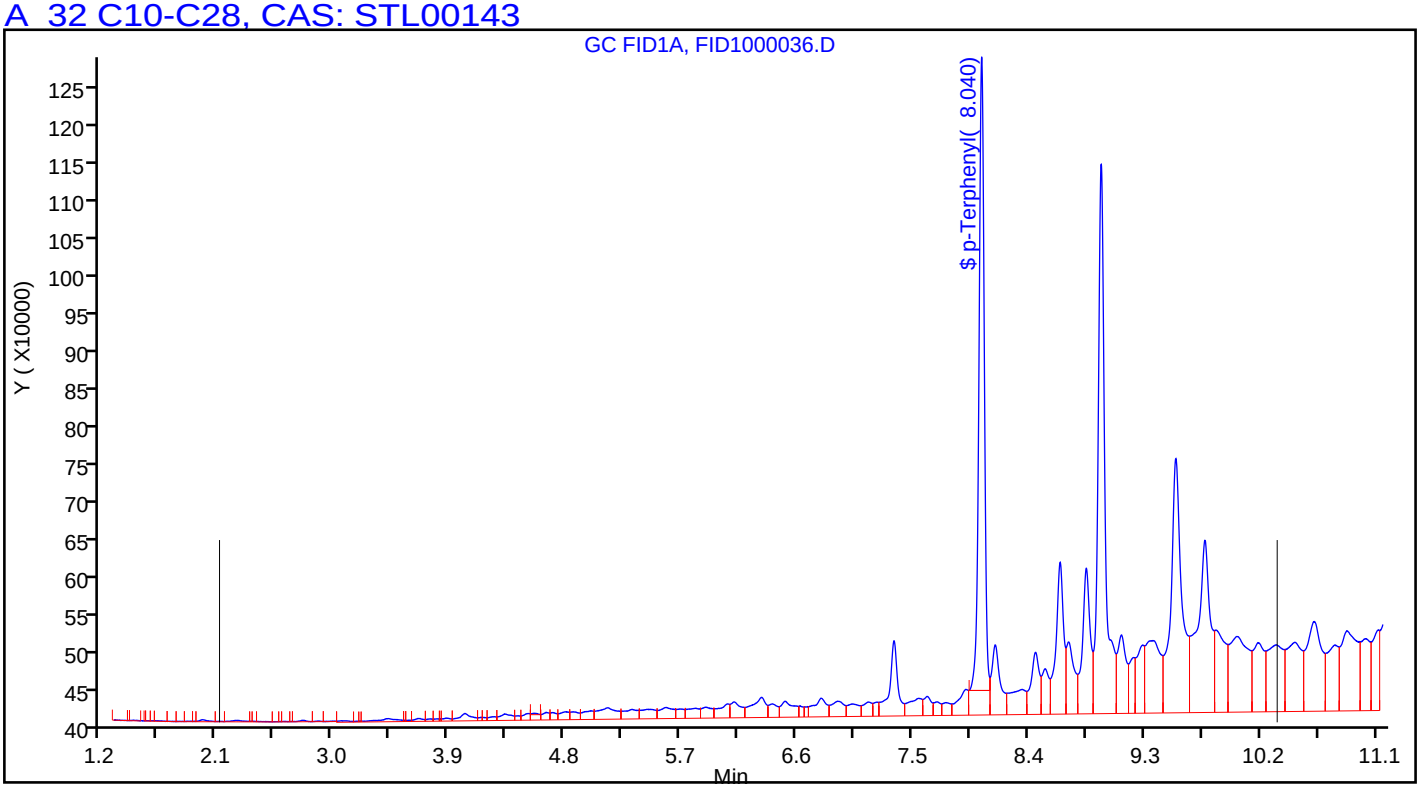
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	25.3	101.25

Report Date: 24-Aug-2018 12:17:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000036.D				
Injection Date:	24-Aug-2018 02:40:08	Instrument ID:	CHDRO6		
Lims ID:	720-88190-E-11-D	Lab Sample ID:	720-88190-11		
Client ID:	DG-H3S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

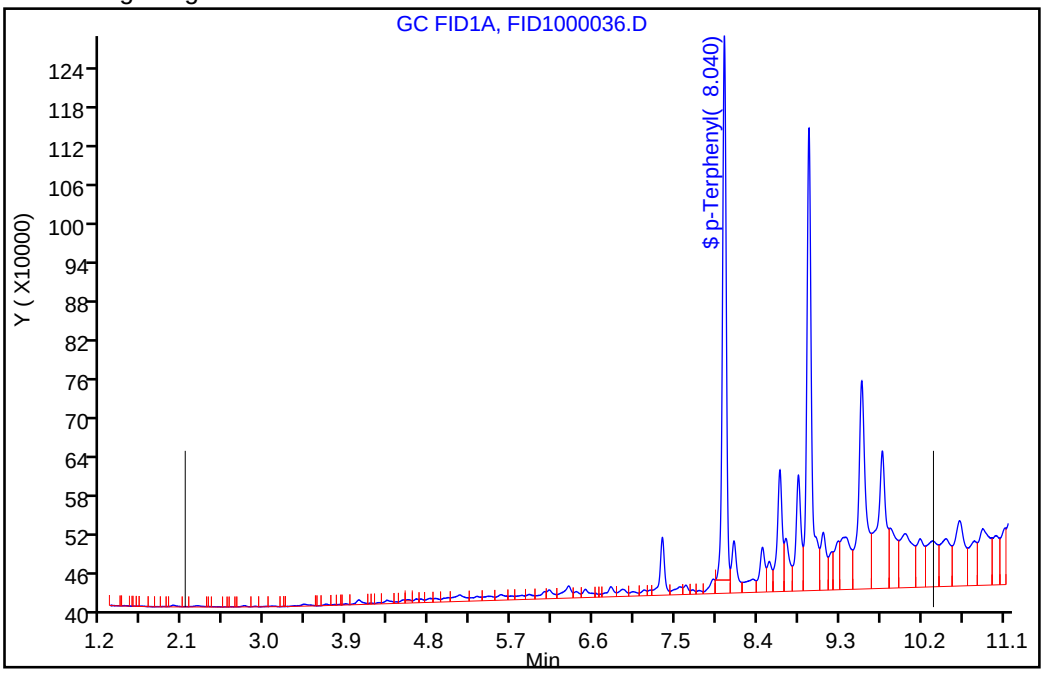
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000036.D				
Injection Date:	24-Aug-2018 02:40:08	Instrument ID:	CHDRO6		
Lims ID:	720-88190-E-11-D	Lab Sample ID:	720-88190-11		
Client ID:	DG-H3S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.226, CAS: STL00143

Signal: 1

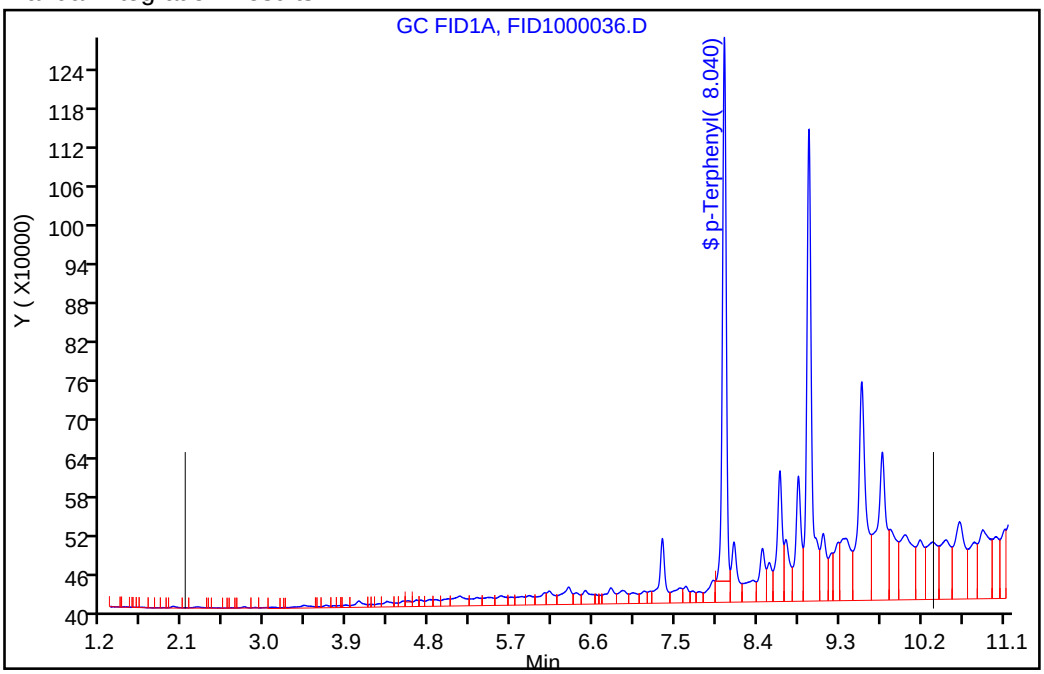
Processing Integration Results

RT: 6.23
Response: 294861882
Amount: 191.1698



Manual Integration Results

RT: 6.23
Response: 376623796
Amount: 244.1790



Reviewer: luj, 24-Aug-2018 12:16:43

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-H3S-9.5-10 Lab Sample ID: 720-88190-12

Matrix: Solid Lab File ID: FID2000032.D

Analysis Method: 8015B Date Collected: 08/21/2018 16:45

Extraction Method: 3546 Date Extracted: 08/23/2018 08:42

Sample wt/vol: 15.70(g) Date Analyzed: 08/24/2018 01:03

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250037 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	24000		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	81		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000032.D
Lims ID: 720-88190-D-12-A
Client ID: DG-H3S--9.5-10
Sample Type: Client
Inject. Date: 24-Aug-2018 01:03:06 ALS Bottle#: 82 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053435-032
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m
Limit Group: DRO
Last Update: 24-Aug-2018 13:58:06 Calib Date: 23-Aug-2018 08:54:15
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 13:58:06

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.334			ND	
23 n-Decane		2.190			ND	
A 1 C9-C13	2.799	(1.334-4.263)		47358666	21.7	M
A 21 Stoddard Solvent	2.799	(1.334-4.263)		47358666	NC	M
A 57 C10-C12	2.919	(2.190-3.648)		41573356	30.8	M
24 Dodecane	3.577	3.648	-0.071	307354	NC	M
A 3 C9 - C17	3.828	(1.334-6.322)		67694733	32.2	M
A 60 C10-C16	4.019	(2.190-5.847)		61273743	32.9	M
A 47 C9 - C18	4.049	(1.334-6.765)		79665404	42.1	M
A 15 Kerosene	4.261	(1.334-7.188)		95036821	50.1	M
A 25 C9-C19	4.261	(1.334-7.188)		95036821	45.0	M
26 C13	4.288	4.263	0.025	1046936	NC	M
$ 27 n-Decanoic Acid (Surr)		4.640			ND	U
A 59 C12-C16	4.747	(3.648-5.847)		19700387	18.5	M
A 61 C10-C20	4.893	(2.190-7.596)		109490359	69.3	M
A 28 C9-C24	5.199	(1.334-9.064)		180958662	109.8	M
A 29 C9-C25	5.365	(1.334-9.396)		230287286	137.7	M
A 54 C10-C23	5.454	(2.190-8.719)		171175109	104.2	M
A 4 C10-C24	5.627	(2.190-9.064)		180198090	109.3	M
A 16 C10-C25	5.793	(2.190-9.396)		229526714	137.3	M
45 Hexadecane	5.838	5.847	-0.009	1483494	NC	M
A 14 C10-C26	5.953	(2.190-9.717)		239876927	143.1	M
A 67 C12-C22	6.004	(3.648-8.360)		102124477	65.1	M
A 32 C10-C28	6.258	(2.190-10.325)		320025198	188.5	M
A 5 Diesel	6.258	(2.190-10.325)		320025198	188.5	M
A 12 Unknown Hydrocarbons	6.258	(2.190-10.325)		320025198	NC	M
A 30 C13-C22	6.311	(4.263-8.360)		97099739	62.3	M
44 Heptadecane	6.342	6.322	0.020	4273819	NC	M
A 31 C12-C24	6.356	(3.648-9.064)		138624734	85.8	M
49 n-Octadecane	6.759	6.765	-0.006	2801548	NC	M
A 9 Crude Oil Range Organics (	6.873	(1.334-12.411)		793285185	NC	M
A 11 Bunker Range Organics (C9-	6.873	(1.334-12.411)		793285185	NC	M

Report Date: 24-Aug-2018 13:58:07 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000032.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.873	(1.334-12.411)		793285185	375.8	M
33 C19	7.194	7.188	0.006	4439887	NC	M
A 64 C13-C28	7.294	(4.263-10.325)		273427104	162.1	M
A 17 C10-C36	7.301	(2.190-12.411)		792524613	456.0	M
A 13 C9-C40	7.364	(1.334-13.393)		1049888007	672.0	M
A 68 Crude Oil Range Organics (	7.364	(1.334-13.393)		1049888007	NC	M
A 58 C16-C24	7.455	(5.847-9.064)		120407841	75.5	M
62 icosane	7.597	7.596	0.001	6373490	NC	M
A 6 C10-C40	7.792	(2.190-13.393)		1049127435	672.2	M
$ 34 p-Terphenyl	8.072	8.083	-0.011	41256714	20.3	
35 n-Docosane	8.372	8.360	0.012	8298420	NC	M
A 18 C12-C40	8.520	(3.648-13.393)		1007554079	647.4	M
36 Tricosane	8.717	8.719	-0.002	19178856	NC	M
A 66 C13-C40	8.828	(4.263-13.393)		1002529341	644.9	M
37 n-Tetracosane	9.088	9.064	0.024	17765695	NC	M
A 2 C16-C36 ORO	9.129	(5.847-12.411)		732734364	619.7	M
38 C25	9.387	9.396	-0.009	31562929	NC	M
A 19 C16-C40	9.620	(5.847-13.393)		989337186	638.5	M
46 n-Hexacosane	9.751	9.717	0.034	18938283	NC	M
A 20 C19-C36	9.800	(7.188-12.411)		392004601	288.0	
A 55 C23-C32	10.074	(8.719-11.430)		365615395	472.4	M
39 n-Octacosane	10.363	10.325	0.038	18772662	NC	M
65 C29	10.625	10.614	0.011	62335809	NC	M
A 40 C24-C36	10.737	(9.064-12.411)		435054478	443.8	
A 7 Motor Oil	10.737	(9.064-12.411)		435054478	443.8	
A 10 C22-C40	10.876	(8.360-13.393)		600369698	431.9	
A 50 C25-C36	10.904	(9.396-12.411)		409366920	444.4	
A 41 C23-C40	11.056	(8.719-13.393)		605113771	442.7	
A 8 C24-C40	11.228	(9.064-13.393)		604179679	450.5	
56 Dotriacontane	11.504	11.430	0.074	48688219	NC	M
A 51 C28-C40	11.859	(10.325-13.393)		539680986	497.5	
A 63 C29-C40	12.004	(10.614-13.393)		514172223	514.5	
42 n-Hexatriacontane	12.421	12.411	0.010	17818484	NC	M
43 C40		13.393			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

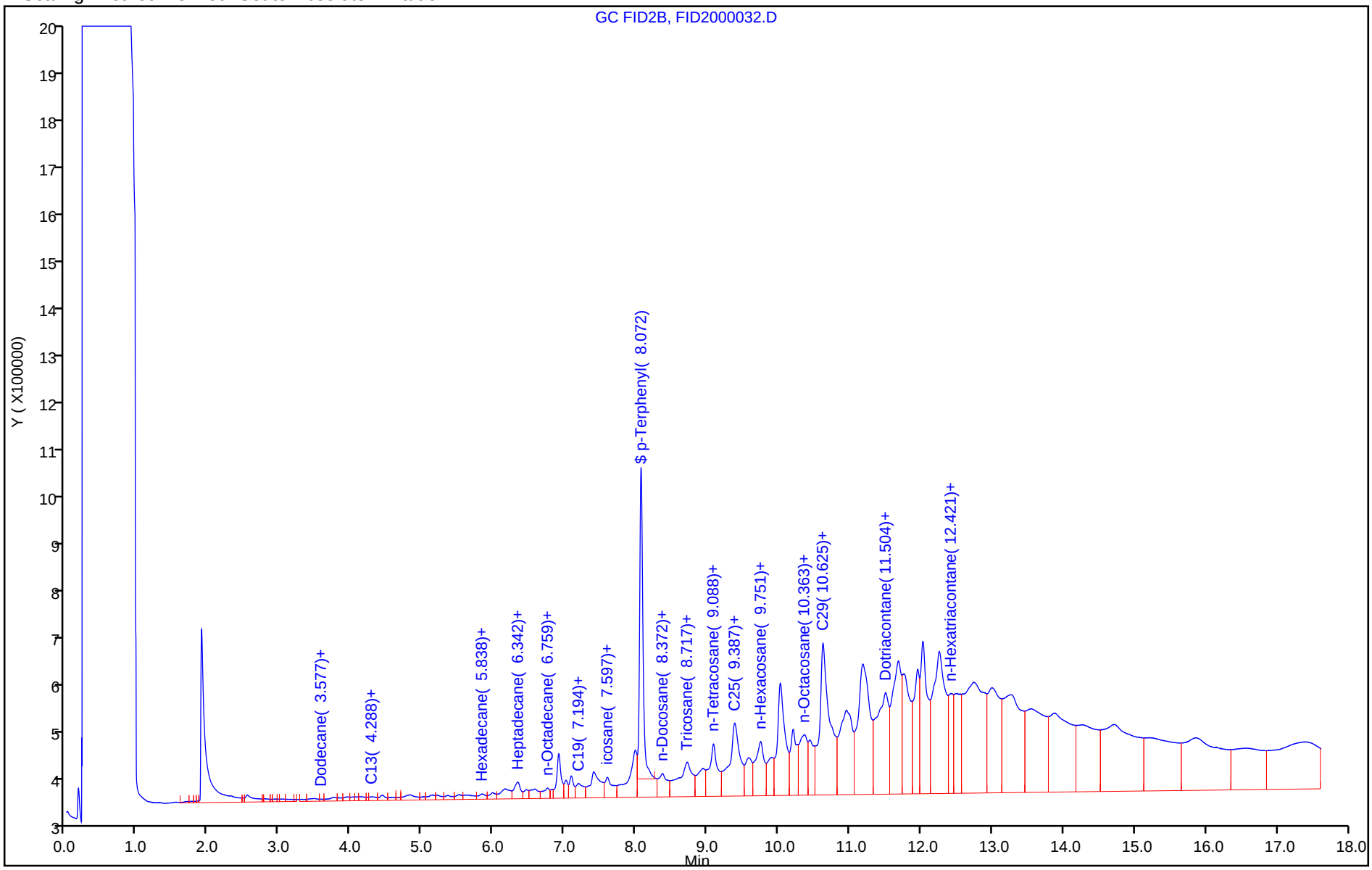
Report Date: 24-Aug-2018 13:58:07 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000032.D

Injection Date:	24-Aug-2018 01:03:06	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88190-D-12-A	Lab Sample ID:	720-88190-12	Worklist Smp#:	32
Client ID:	DG-H3S--9.5-10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	82
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000032.D				
Lims ID:	720-88190-D-12-A				
Client ID:	DG-H3S--9.5-10				
Sample Type:	Client				
Inject. Date:	24-Aug-2018 01:03:06	ALS Bottle#:	82	Worklist Smp#:	32
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053435-032				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 13:58:06	Calib Date:	23-Aug-2018 08:54:15		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				
First Level Reviewer: luj		Date:	24-Aug-2018 13:58:06		

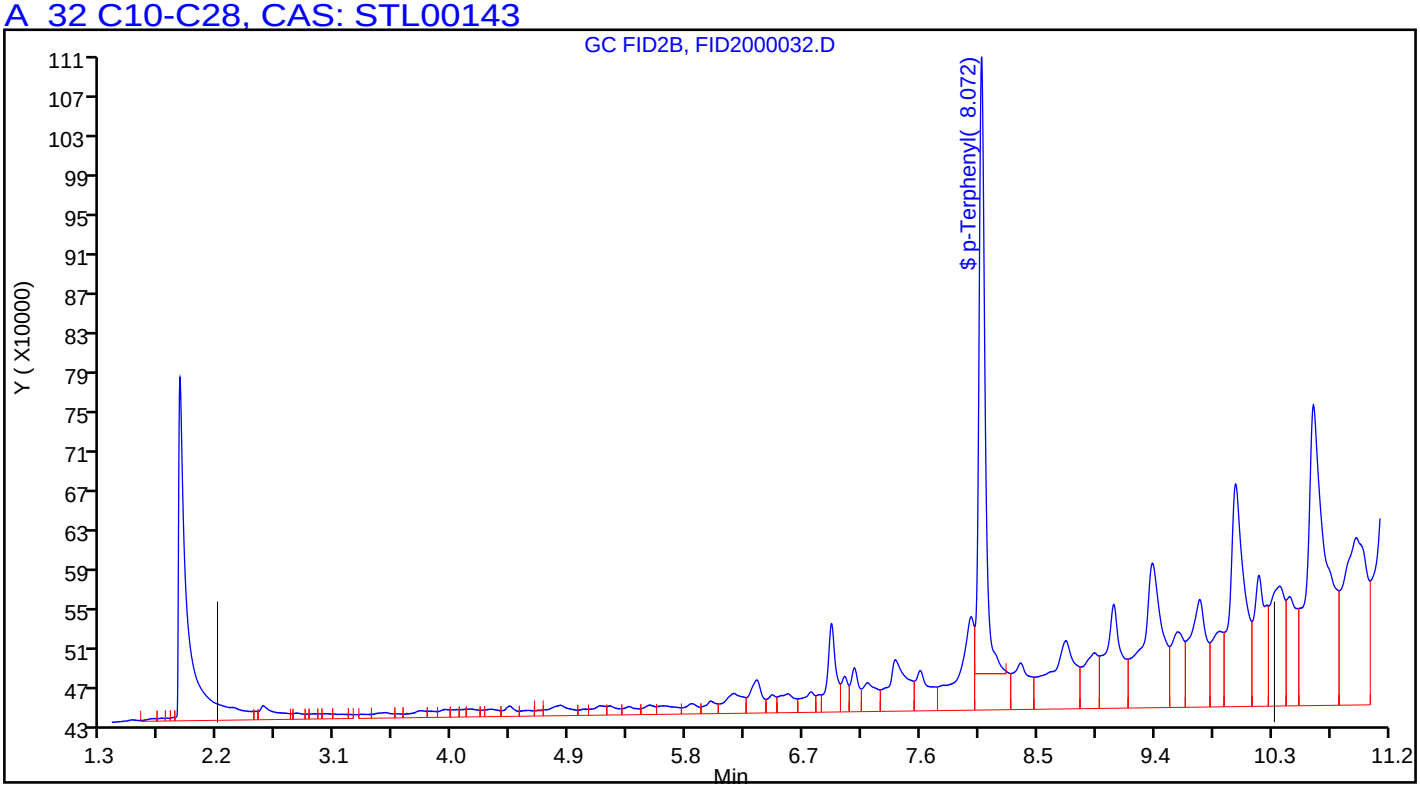
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	20.3	81.16

Report Date: 24-Aug-2018 13:58:10 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000032.D				
Injection Date:	24-Aug-2018 01:03:06	Instrument ID:	CHDRO6		
Lims ID:	720-88190-D-12-A	Lab Sample ID:	720-88190-12		
Client ID:	DG-H3S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	82	Worklist Smp#:	32
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

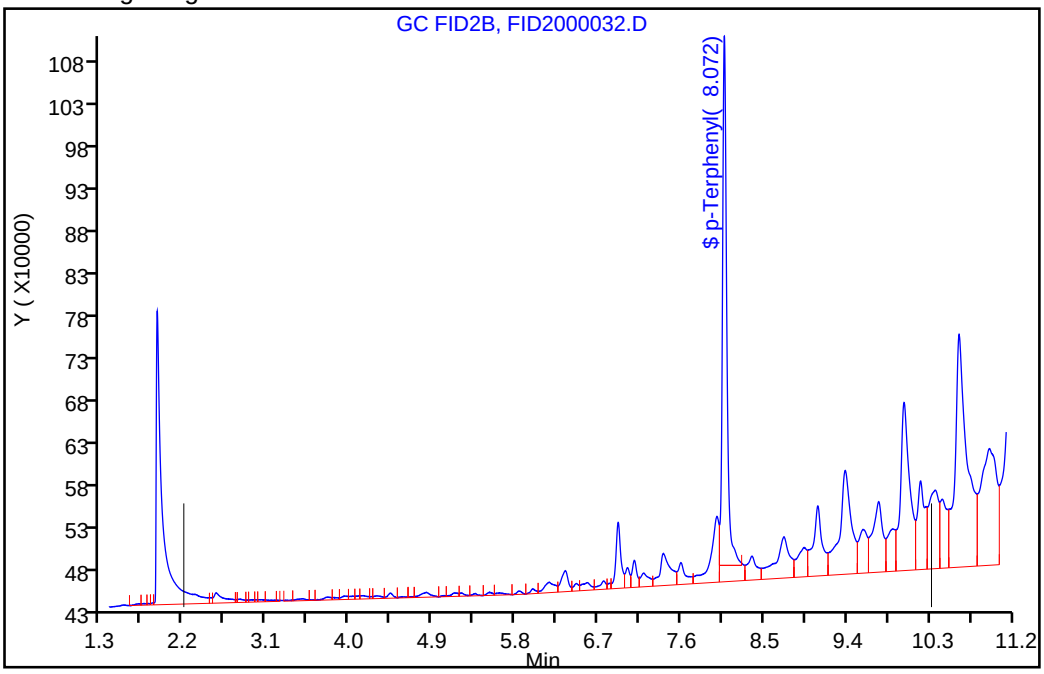
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000032.D				
Injection Date:	24-Aug-2018 01:03:06	Instrument ID:	CHDRO6		
Lims ID:	720-88190-D-12-A	Lab Sample ID:	720-88190-12		
Client ID:	DG-H3S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	82	Worklist Smp#:	32
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.258, CAS: STL00143

Signal: 1

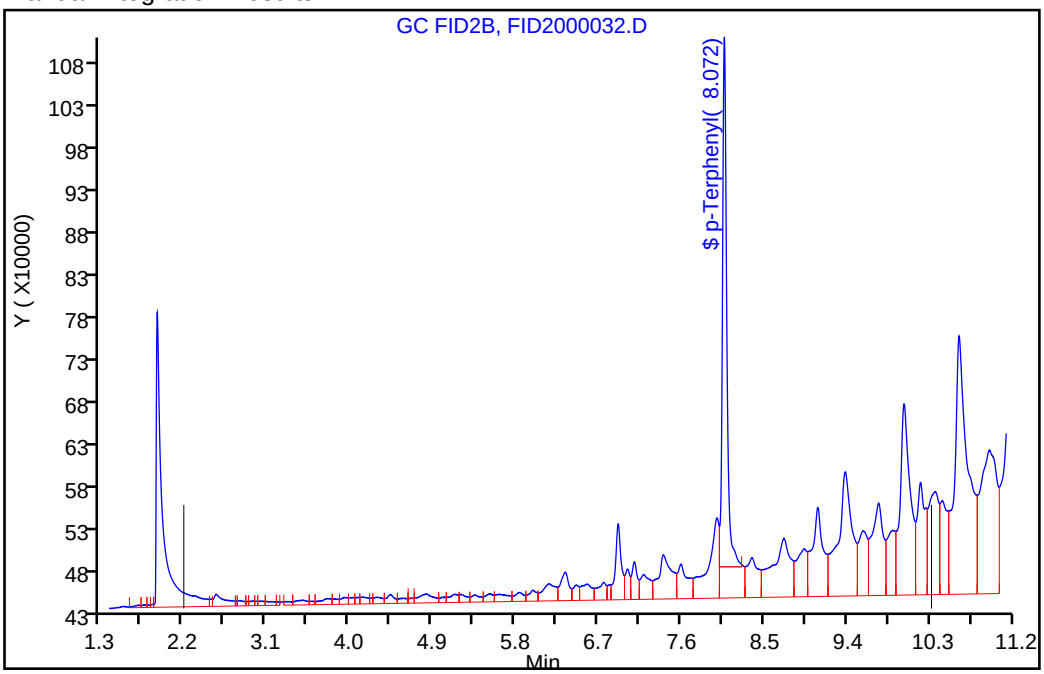
Processing Integration Results

RT: 6.26
Response: 207932317
Amount: 125.0348



Manual Integration Results

RT: 6.26
Response: 320025198
Amount: 188.5041



Reviewer: luj, 24-Aug-2018 13:57:25

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-D3S-9.5-10 Lab Sample ID: 720-88190-15

Matrix: Solid Lab File ID: FID2000033.D

Analysis Method: 8015B Date Collected: 08/21/2018 17:15

Extraction Method: 3546 Date Extracted: 08/23/2018 08:42

Sample wt/vol: 15.13(g) Date Analyzed: 08/24/2018 01:27

Con. Extract Vol.: 2(mL) Dilution Factor: 2

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250037 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	64000		4000	1500

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	83		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000033.D
Lims ID: 720-88190-D-15-A
Client ID: DG-D3S--9.5-10
Sample Type: Client
Inject. Date: 24-Aug-2018 01:27:14 ALS Bottle#: 83 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 2.0000
Sample Info: 720-0053435-033
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m
Limit Group: DRO
Last Update: 24-Aug-2018 13:59:17 Calib Date: 23-Aug-2018 08:54:15
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 13:59:17

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.334			ND	
	23 n-Decane		2.190			ND	
A	1 C9-C13	2.799	(1.334-4.263)		2195615	1.01	M
A	21 Stoddard Solvent	2.799	(1.334-4.263)		2195615	NC	M
A	57 C10-C12	2.919	(2.190-3.648)		1904665	8.38	
	24 Dodecane	3.655	3.648	0.007	29165	NC	
A	3 C9 - C17	3.828	(1.334-6.322)		15342447	7.31	M
A	60 C10-C16	4.019	(2.190-5.847)		10039973	5.40	M
A	47 C9 - C18	4.049	(1.334-6.765)		27081775	14.3	M
A	15 Kerosene	4.261	(1.334-7.188)		46217133	24.4	M
A	25 C9-C19	4.261	(1.334-7.188)		46217133	21.9	M
	26 C13		4.263			ND	
$	27 n-Decanoic Acid (Surr)		4.640			ND	U
A	59 C12-C16	4.747	(3.648-5.847)		8135308	11.9	M
A	61 C10-C20	4.893	(2.190-7.596)		65640604	44.5	M
A	28 C9-C24	5.199	(1.334-9.064)		196113791	118.3	M
A	29 C9-C25	5.365	(1.334-9.396)		222395835	133.2	M
A	54 C10-C23	5.454	(2.190-8.719)		154857917	95.0	M
A	4 C10-C24	5.627	(2.190-9.064)		195941950	118.2	M
A	16 C10-C25	5.793	(2.190-9.396)		222223994	133.1	M
	45 Hexadecane	5.902	5.847	0.055	1918918	NC	M
A	14 C10-C26	5.953	(2.190-9.717)		255896249	152.2	M
A	67 C12-C22	6.004	(3.648-8.360)		124512001	77.8	M
A	32 C10-C28	6.258	(2.190-10.325)		411382538	240.2	M
A	5 Diesel	6.258	(2.190-10.325)		411382538	240.2	M
A	12 Unknown Hydrocarbons	6.258	(2.190-10.325)		411382538	NC	M
A	30 C13-C22	6.311	(4.263-8.360)		124392892	77.7	M
	44 Heptadecane	6.347	6.322	0.025	7100478	NC	M
A	31 C12-C24	6.356	(3.648-9.064)		194037285	117.2	M
	49 n-Octadecane		6.765			ND	
A	9 Crude Oil Range Organics (	6.873	(1.334-12.411)		1055560918	NC	M
A	11 Bunker Range Organics (C9-	6.873	(1.334-12.411)		1055560918	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.873	(1.334-12.411)		1055560918	500.0	M
33 C19	7.193	7.188	0.005	5632162	NC	M
A 64 C13-C28	7.294	(4.263-10.325)		409358764	239.1	M
A 17 C10-C36	7.301	(2.190-12.411)		1055389077	604.9	M
A 13 C9-C40	7.364	(1.334-13.393)		2014352715	1289.3	M
A 68 Crude Oil Range Organics (	7.364	(1.334-13.393)		2014352715	NC	M
A 58 C16-C24	7.455	(5.847-9.064)		185901977	112.6	M
62 icosane	7.605	7.596	0.009	10887431	NC	M
A 6 C10-C40	7.792	(2.190-13.393)		2014180874	1290.6	M
$ 34 p-Terphenyl	8.079	8.083	-0.004	21008646	10.3	
35 n-Docosane	8.405	8.360	0.045	13335754	NC	M
A 18 C12-C40	8.520	(3.648-13.393)		2012276209	1293.0	M
36 Tricosane	8.719	8.719	0.000	12276979	NC	M
A 66 C13-C40	8.828	(4.263-13.393)		2012157100	1294.4	M
37 n-Tetracosane	9.077	9.064	0.013	14356352	NC	M
A 2 C16-C36 ORO	9.129	(5.847-12.411)		1045349104	884.1	M
38 C25	9.408	9.396	0.012	33672255	NC	M
A 19 C16-C40	9.620	(5.847-13.393)		2004140901	1293.5	M
46 n-Hexacosane		9.717			ND	
A 20 C19-C36	9.800	(7.188-12.411)		656225254	482.0	
A 55 C23-C32	10.074	(8.719-11.430)		557551794	720.5	M
39 n-Octacosane	10.277	10.325	-0.048	50266479	NC	M
65 C29	10.653	10.614	0.039	62716262	NC	M
A 40 C24-C36	10.737	(9.064-12.411)		844995679	861.9	M
A 7 Motor Oil	10.737	(9.064-12.411)		663327836	676.6	
A 10 C22-C40	10.876	(8.360-13.393)		925919732	666.1	
A 50 C25-C36	10.904	(9.396-12.411)		614561253	667.1	
A 41 C23-C40	11.056	(8.719-13.393)		915899896	670.1	
A 8 C24-C40	11.228	(9.064-13.393)		913405448	681.0	
56 Dotriacontane	11.430	11.430	0.000	52362914	NC	M
A 51 C28-C40	11.859	(10.325-13.393)		780931717	719.9	
A 63 C29-C40	12.004	(10.614-13.393)		717700615	718.2	
42 n-Hexatriacontane	12.381	12.411	-0.030	109363032	NC	M
43 C40		13.393			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

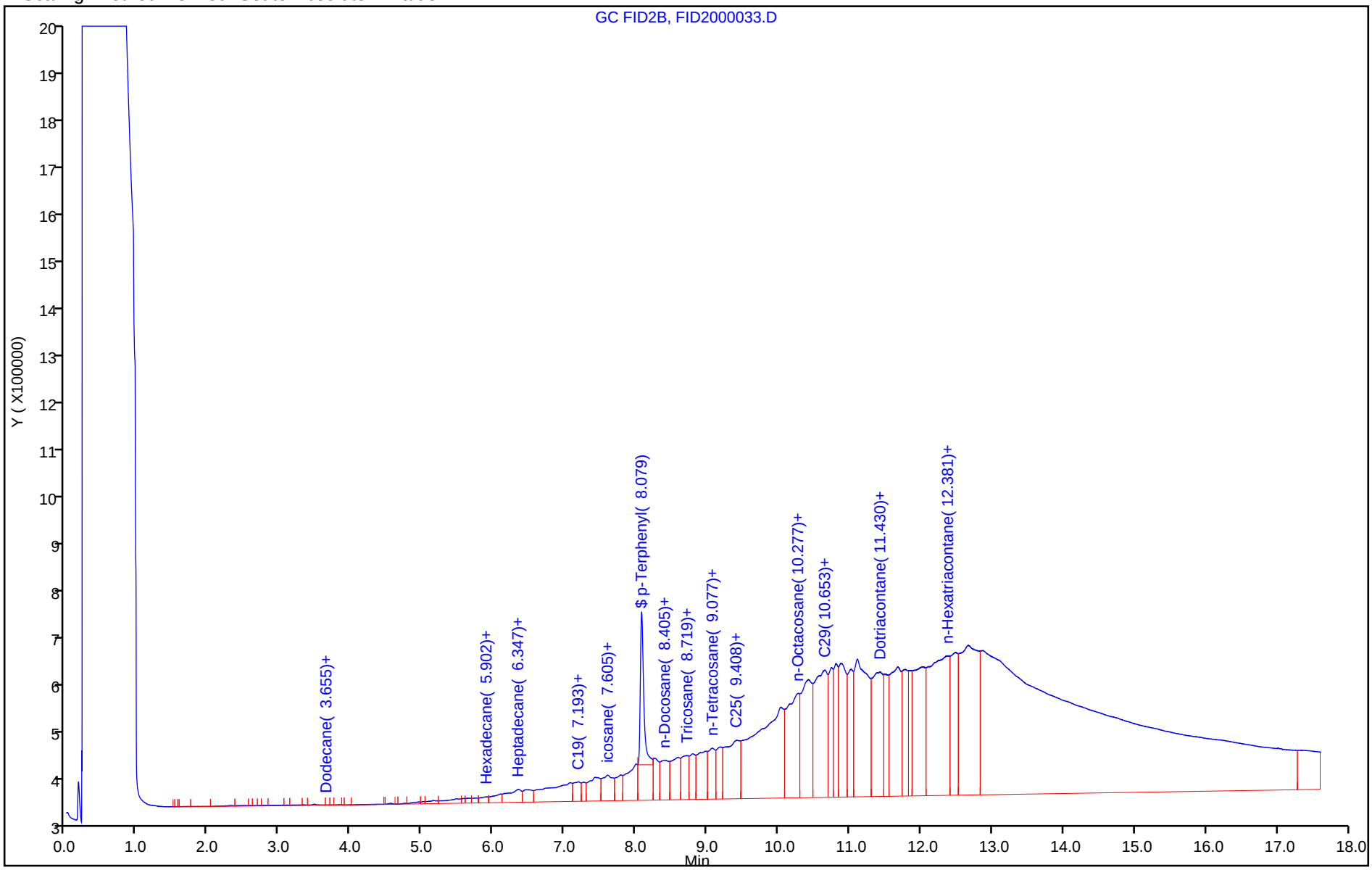
Report Date: 24-Aug-2018 13:59:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000033.D

Injection Date:	24-Aug-2018 01:27:14	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88190-D-15-A	Lab Sample ID:	720-88190-15	Worklist Smp#:	33
Client ID:	DG-D3S--9.5-10				
Injection Vol:	1.0 ul	Dil. Factor:	2.0000	ALS Bottle#:	83
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000033.D
Lims ID: 720-88190-D-15-A
Client ID: DG-D3S--9.5-10
Sample Type: Client
Inject. Date: 24-Aug-2018 01:27:14 ALS Bottle#: 83 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 2.0000
Sample Info: 720-0053435-033
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m
Limit Group: DRO
Last Update: 24-Aug-2018 13:59:17 Calib Date: 23-Aug-2018 08:54:15
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 13:59:17

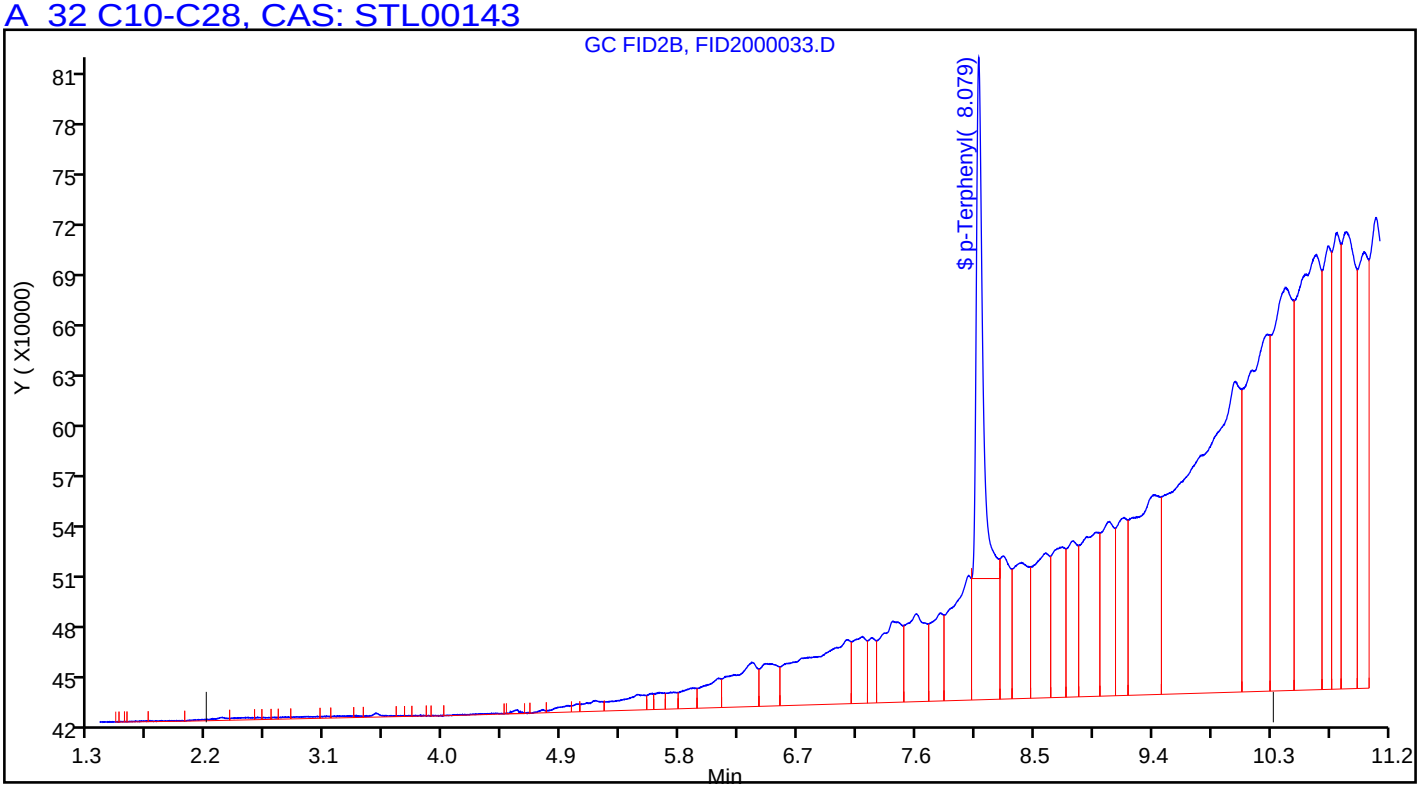
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	10.3	41.33

Report Date: 24-Aug-2018 13:59:21 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000033.D				
Injection Date:	24-Aug-2018 01:27:14	Instrument ID:	CHDRO6		
Lims ID:	720-88190-D-15-A	Lab Sample ID:	720-88190-15		
Client ID:	DG-D3S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	83	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

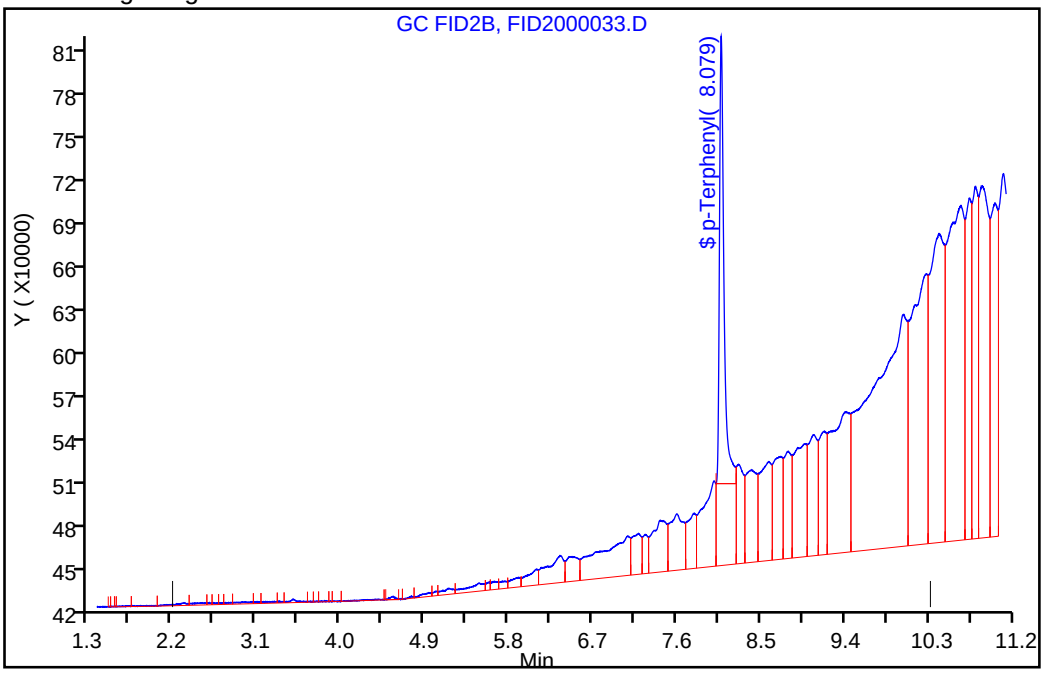
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000033.D				
Injection Date:	24-Aug-2018 01:27:14	Instrument ID:	CHDRO6		
Lims ID:	720-88190-D-15-A	Lab Sample ID:	720-88190-15		
Client ID:	DG-D3S--9.5-10				
Operator ID:	DCH	ALS Bottle#:	83	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.258, CAS: STL00143

Signal: 1

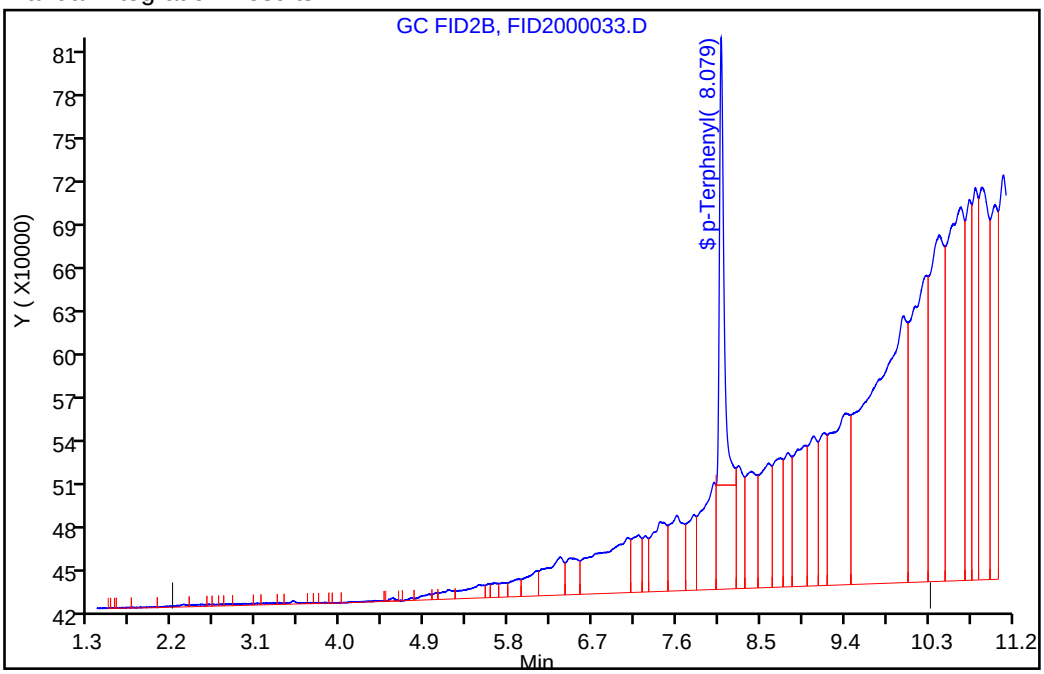
Processing Integration Results

RT: 6.26
Response: 324264871
Amount: 190.9047



Manual Integration Results

RT: 6.26
Response: 411382538
Amount: 240.2325



Reviewer: luj, 24-Aug-2018 13:58:47

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-E3S-9.5-10 Lab Sample ID: 720-88190-3

Matrix: Solid Lab File ID: 08281812.D

Analysis Method: 8260B Date Collected: 08/21/2018 14:30

Sample wt/vol: 6.242(g) Date Analyzed: 08/28/2018 13:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.0	0.96
67-64-1	Acetone	ND		40	30
71-43-2	Benzene	ND		4.0	0.52
75-27-4	Dichlorobromomethane	ND		4.0	0.58
108-86-1	Bromobenzene	ND		4.0	0.63
74-97-5	Chlorobromomethane	ND		16	0.58
75-25-2	Bromoform	ND		4.0	1.6
74-83-9	Bromomethane	ND		8.0	0.63
78-93-3	2-Butanone (MEK)	ND		40	17
104-51-8	n-Butylbenzene	ND		4.0	0.80
135-98-8	sec-Butylbenzene	ND		4.0	0.58
98-06-6	tert-Butylbenzene	ND		4.0	0.58
75-15-0	Carbon disulfide	ND		4.0	1.6
56-23-5	Carbon tetrachloride	ND		4.0	0.50
108-90-7	Chlorobenzene	ND		4.0	0.55
75-00-3	Chloroethane	ND		8.0	0.45
67-66-3	Chloroform	ND		4.0	0.53
74-87-3	Chloromethane	ND		8.0	0.63
95-49-8	2-Chlorotoluene	ND		4.0	0.52
106-43-4	4-Chlorotoluene	ND		4.0	0.54
124-48-1	Chlorodibromomethane	ND		4.0	0.57
95-50-1	1,2-Dichlorobenzene	ND		4.0	0.54
541-73-1	1,3-Dichlorobenzene	ND		4.0	0.58
106-46-7	1,4-Dichlorobenzene	ND		4.0	0.57
142-28-9	1,3-Dichloropropane	ND		4.0	0.58
563-58-6	1,1-Dichloropropene	ND		4.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.0	1.4
106-93-4	Ethylene Dibromide	ND		4.0	1.1
74-95-3	Dibromomethane	ND		8.0	0.69
75-71-8	Dichlorodifluoromethane	ND		8.0	0.63
75-34-3	1,1-Dichloroethane	ND		4.0	0.54
107-06-2	1,2-Dichloroethane	ND		4.0	0.61
75-35-4	1,1-Dichloroethene	ND		4.0	0.50
156-59-2	cis-1,2-Dichloroethene	1.9	J	4.0	0.54
156-60-5	trans-1,2-Dichloroethene	ND		4.0	0.60
78-87-5	1,2-Dichloropropane	ND		4.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-E3S-9.5-10 Lab Sample ID: 720-88190-3

Matrix: Solid Lab File ID: 08281812.D

Analysis Method: 8260B Date Collected: 08/21/2018 14:30

Sample wt/vol: 6.242(g) Date Analyzed: 08/28/2018 13:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.0	0.55
10061-02-6	trans-1,3-Dichloropropene	ND		4.0	0.54
100-41-4	Ethylbenzene	ND		4.0	0.60
87-68-3	Hexachlorobutadiene	ND		4.0	0.72
591-78-6	2-Hexanone	ND		40	8.0
98-82-8	Isopropylbenzene	ND		4.0	0.54
99-87-6	4-Isopropyltoluene	ND		4.0	2.0
75-09-2	Methylene Chloride	ND		8.0	4.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		40	8.0
91-20-3	Naphthalene	ND		8.0	1.2
103-65-1	N-Propylbenzene	ND		4.0	0.53
100-42-5	Styrene	ND		4.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.0	0.61
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.0	0.60
127-18-4	Tetrachloroethene	ND		4.0	0.54
108-88-3	Toluene	ND		4.0	0.57
87-61-6	1,2,3-Trichlorobenzene	ND		4.0	0.59
120-82-1	1,2,4-Trichlorobenzene	ND		4.0	0.57
71-55-6	1,1,1-Trichloroethane	ND		4.0	0.49
79-00-5	1,1,2-Trichloroethane	ND		4.0	0.56
79-01-6	Trichloroethene	0.52	J	4.0	0.50
75-69-4	Trichlorofluoromethane	ND		4.0	0.45
96-18-4	1,2,3-Trichloropropane	ND		4.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.7
95-63-6	1,2,4-Trimethylbenzene	ND		4.0	1.3
108-67-8	1,3,5-Trimethylbenzene	ND		4.0	0.52
108-05-4	Vinyl acetate	ND		16	4.0
75-01-4	Vinyl chloride	ND		4.0	0.58
1330-20-7	Xylenes, Total	ND		4.0	0.98
594-20-7	2,2-Dichloropropane	ND		4.0	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		200	80

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-E3S-9.5-10 Lab Sample ID: 720-88190-3

Matrix: Solid Lab File ID: 08281812.D

Analysis Method: 8260B Date Collected: 08/21/2018 14:30

Sample wt/vol: 6.242(g) Date Analyzed: 08/28/2018 13:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	88		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		60-140
2037-26-5	Toluene-d8 (Surr)	87		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281812.D
Lims ID: 720-88190-A-3-A
Client ID: DG-E3S--9.5-10
Sample Type: Client
Inject. Date: 28-Aug-2018 13:16:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88190-A-3
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:08:30 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:08:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.825	-0.006	0	288479	250.0	
* 2 Fluorobenzene	96	10.599	10.605	-0.006	99	847211	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	86	571583	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.591	-0.012	94	240574	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.191	-0.006	94	48992	5.15	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.709	9.709	-0.006	0	93205	7.82	
$ 10 Toluene-d8 (Surr)	98	12.708	12.707	-0.006	93	222327	6.49	
$ 11 4-Bromofluorobenzene	95	15.933	15.932	-0.006	94	73573	6.62	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	-0.006	84	63401	6.81	
28 Acetone	58	6.374	6.370	0.000	99	2579	2.59	
34 Methylene Chloride	84	7.081	7.077	0.000	96	2407	0.2625	
38 trans-1,2-Dichloroethene	96	7.867	7.880	-0.013	96	1447	0.1729	
49 cis-1,2-Dichloroethene	61	8.818	8.818	-0.001	80	16209	1.16	
59 Benzene	78	10.373	10.373	-0.006	98	9462	0.2625	
66 Trichloroethene	132	11.092	11.098	-0.007	94	3008	0.3221	
75 Toluene	92	12.793	12.794	-0.006	96	3181	0.1693	
29 Pentane	43	6.374	6.410	-0.036	72	9512	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	583612	7.51	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	252232	3.25	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	332527	4.28	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	682950	8.79	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	378017	4.87	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	649505	8.36	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	477355	6.15	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	133056	1.71	
A 121 C7-C12	1	15.454	(10.903-20.005)		0	308053	3.97	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

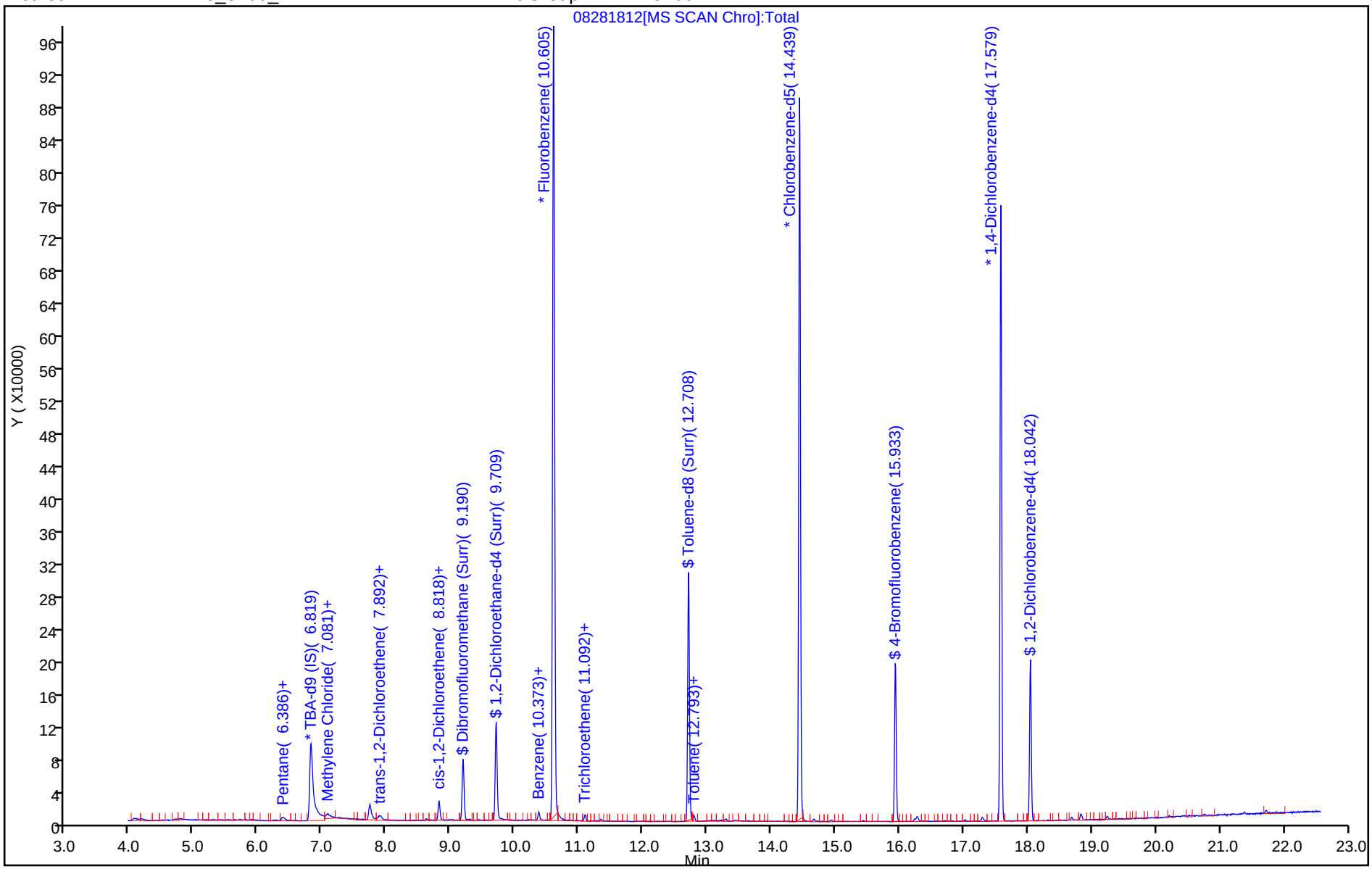
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:08:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281812.D

Injection Date:	28-Aug-2018 13:16:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88190-A-3-A	Lab Sample ID:	720-88190-3	Worklist Smp#:	12
Client ID:	DG-E3S--9.5-10				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281812.D
Lims ID: 720-88190-A-3-A
Client ID: DG-E3S--9.5-10
Sample Type: Client
Inject. Date: 28-Aug-2018 13:16:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88190-A-3
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:08:30 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:08:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.82	104.32
$ 10 Toluene-d8 (Surr)	7.50	6.49	86.52
$ 11 4-Bromofluorobenzene	7.50	6.62	88.25
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

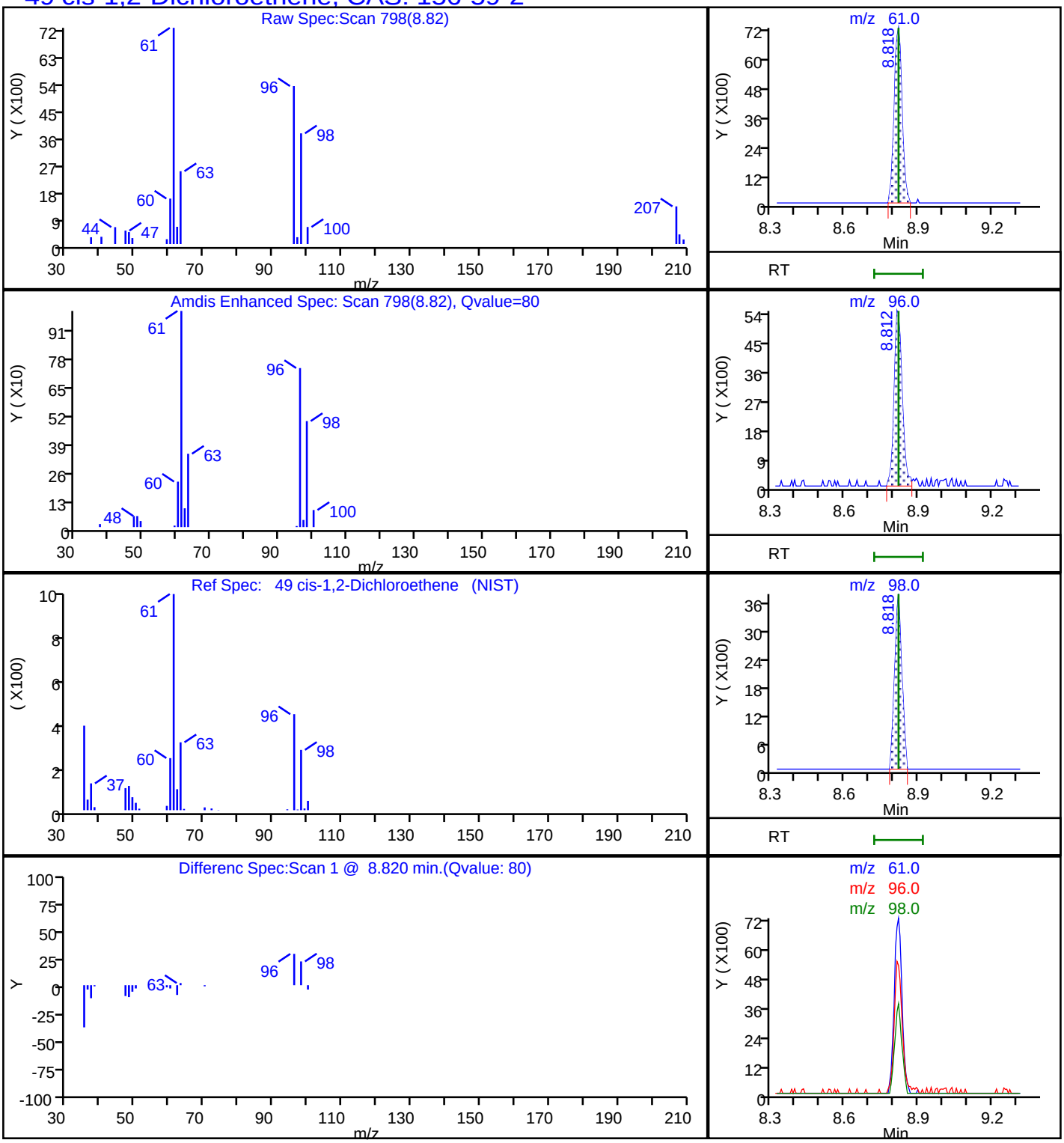
Report Date: 29-Aug-2018 09:08:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281812.D

Injection Date:	28-Aug-2018 13:16:30	Instrument ID:	HP13		
Lims ID:	720-88190-A-3-A	Lab Sample ID:	720-88190-3		
Client ID:	DG-E3S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

49 cis-1,2-Dichloroethene, CAS: 156-59-2



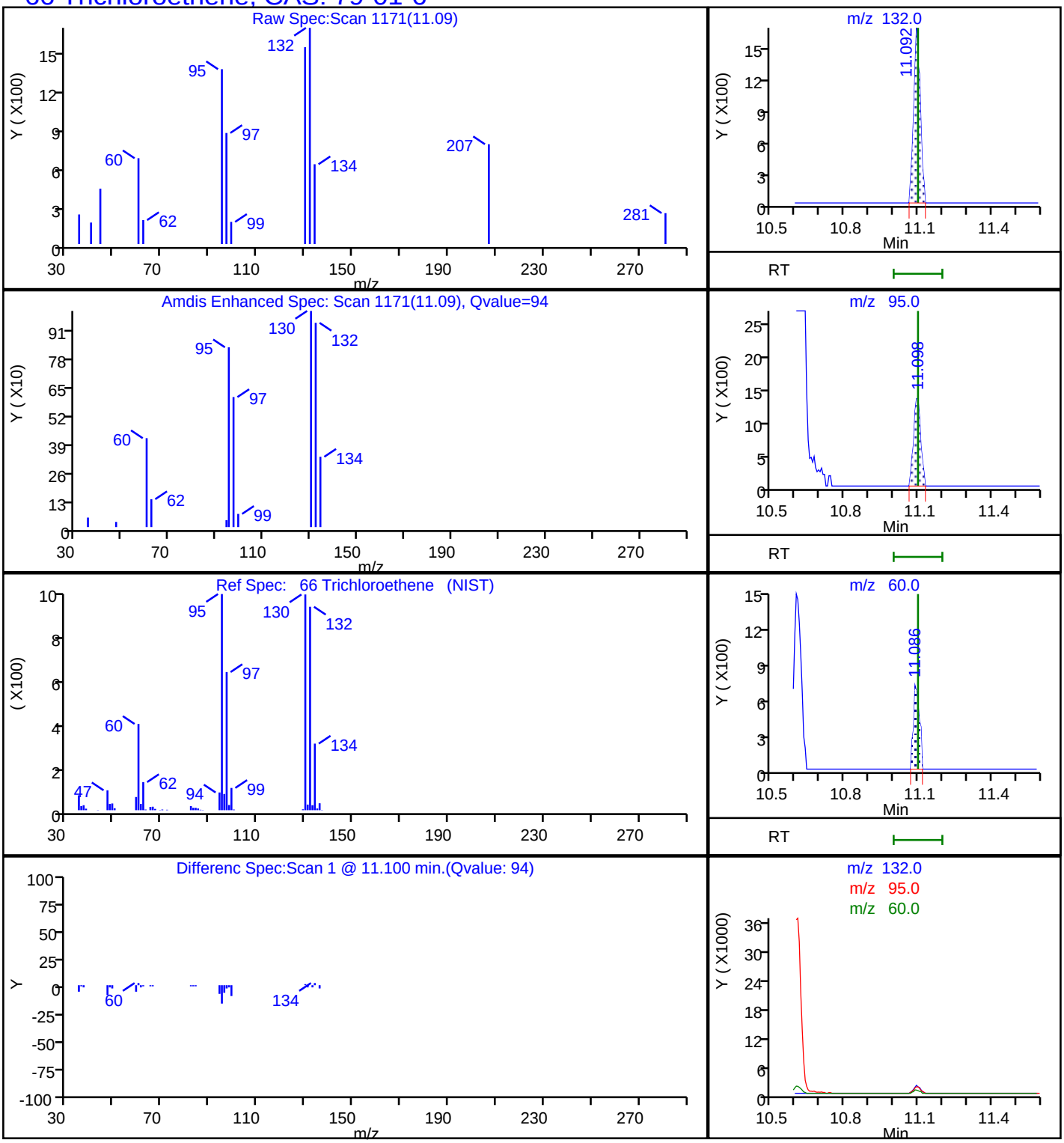
Report Date: 29-Aug-2018 09:08:31 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281812.D

Injection Date:	28-Aug-2018 13:16:30	Instrument ID:	HP13		
Lims ID:	720-88190-A-3-A	Lab Sample ID:	720-88190-3		
Client ID:	DG-E3S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

66 Trichloroethene, CAS: 79-01-6



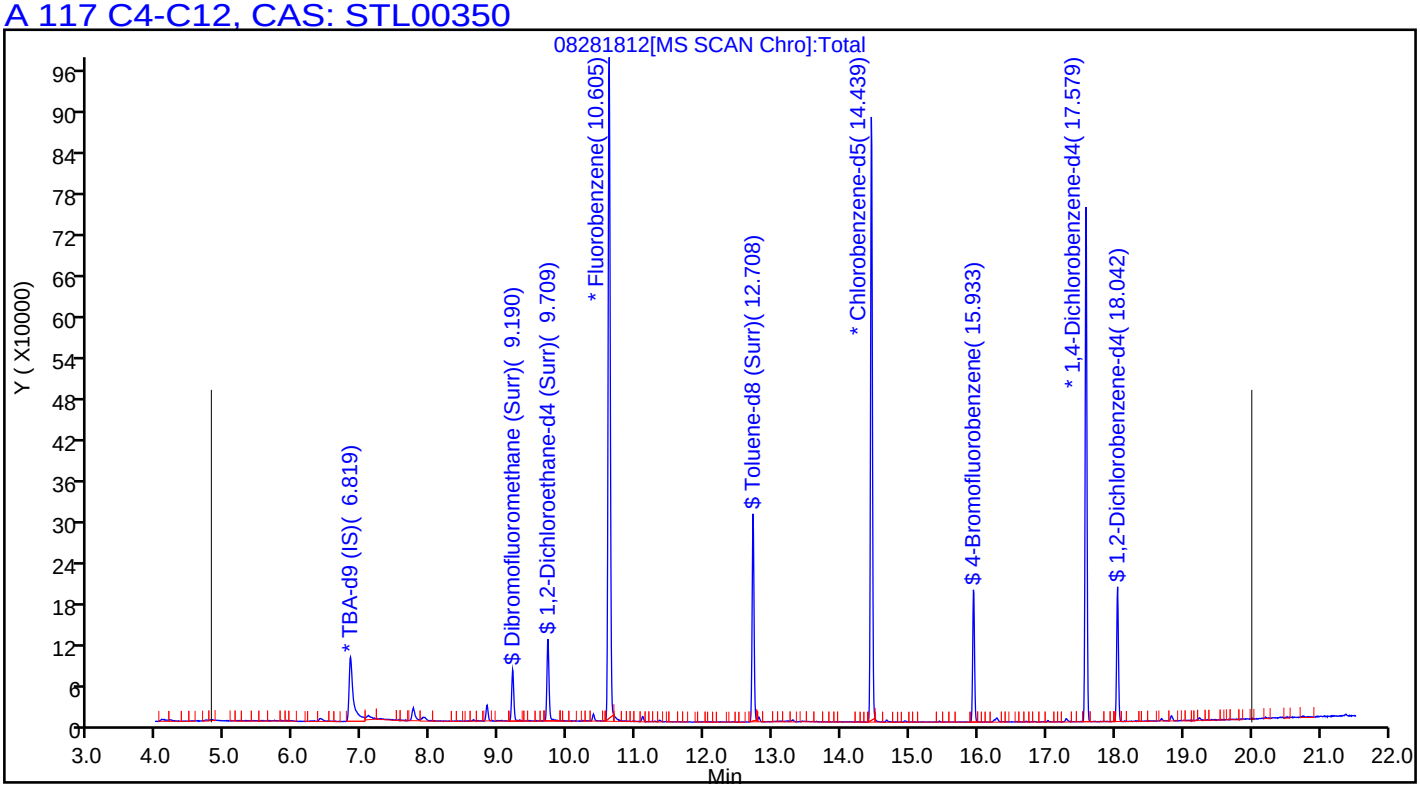
Report Date: 29-Aug-2018 09:08:31 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281812.D

Injection Date:	28-Aug-2018 13:16:30	Instrument ID:	HP13		
Lims ID:	720-88190-A-3-A	Lab Sample ID:	720-88190-3		
Client ID:	DG-E3S--9.5-10				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-F3S-0.5-1 Lab Sample ID: 720-88190-4

Matrix: Solid Lab File ID: 08281827.D

Analysis Method: 8260B Date Collected: 08/21/2018 14:45

Sample wt/vol: 6.827(g) Date Analyzed: 08/28/2018 21:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.7	0.88
67-64-1	Acetone	ND		37	28
71-43-2	Benzene	ND		3.7	0.48
75-27-4	Dichlorobromomethane	ND		3.7	0.53
108-86-1	Bromobenzene	ND		3.7	0.58
74-97-5	Chlorobromomethane	ND		15	0.53
75-25-2	Bromoform	ND		3.7	1.5
74-83-9	Bromomethane	ND		7.3	0.58
78-93-3	2-Butanone (MEK)	ND		37	15
104-51-8	n-Butylbenzene	ND		3.7	0.73
135-98-8	sec-Butylbenzene	ND		3.7	0.53
98-06-6	tert-Butylbenzene	ND		3.7	0.53
75-15-0	Carbon disulfide	ND	*	3.7	1.5
56-23-5	Carbon tetrachloride	ND		3.7	0.45
108-90-7	Chlorobenzene	ND		3.7	0.51
75-00-3	Chloroethane	ND		7.3	0.41
67-66-3	Chloroform	ND		3.7	0.48
74-87-3	Chloromethane	ND		7.3	0.58
95-49-8	2-Chlorotoluene	ND		3.7	0.48
106-43-4	4-Chlorotoluene	ND		3.7	0.50
124-48-1	Chlorodibromomethane	ND		3.7	0.52
95-50-1	1,2-Dichlorobenzene	ND		3.7	0.50
541-73-1	1,3-Dichlorobenzene	ND		3.7	0.53
106-46-7	1,4-Dichlorobenzene	ND		3.7	0.52
142-28-9	1,3-Dichloropropane	ND		3.7	0.53
563-58-6	1,1-Dichloropropene	ND		3.7	0.51
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.3	1.2
106-93-4	Ethylene Dibromide	ND		3.7	1.0
74-95-3	Dibromomethane	ND		7.3	0.63
75-71-8	Dichlorodifluoromethane	ND		7.3	0.58
75-34-3	1,1-Dichloroethane	ND		3.7	0.50
107-06-2	1,2-Dichloroethane	ND		3.7	0.56
75-35-4	1,1-Dichloroethene	ND	*	3.7	0.45
156-59-2	cis-1,2-Dichloroethene	ND		3.7	0.50
156-60-5	trans-1,2-Dichloroethene	ND		3.7	0.55
78-87-5	1,2-Dichloropropane	ND		3.7	0.46

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-F3S-0.5-1 Lab Sample ID: 720-88190-4

Matrix: Solid Lab File ID: 08281827.D

Analysis Method: 8260B Date Collected: 08/21/2018 14:45

Sample wt/vol: 6.827(g) Date Analyzed: 08/28/2018 21:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.7	0.51
10061-02-6	trans-1,3-Dichloropropene	ND		3.7	0.49
100-41-4	Ethylbenzene	ND		3.7	0.55
87-68-3	Hexachlorobutadiene	ND		3.7	0.66
591-78-6	2-Hexanone	ND		37	7.3
98-82-8	Isopropylbenzene	ND		3.7	0.50
99-87-6	4-Isopropyltoluene	ND		3.7	1.8
75-09-2	Methylene Chloride	ND		7.3	4.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		37	7.3
91-20-3	Naphthalene	ND		7.3	1.1
103-65-1	N-Propylbenzene	ND		3.7	0.48
100-42-5	Styrene	ND		3.7	0.46
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.7	0.56
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.7	0.55
127-18-4	Tetrachloroethene	ND		3.7	0.49
108-88-3	Toluene	ND		3.7	0.52
87-61-6	1,2,3-Trichlorobenzene	ND		3.7	0.54
120-82-1	1,2,4-Trichlorobenzene	ND		3.7	0.52
71-55-6	1,1,1-Trichloroethane	ND		3.7	0.45
79-00-5	1,1,2-Trichloroethane	ND		3.7	0.51
79-01-6	Trichloroethene	ND		3.7	0.46
75-69-4	Trichlorofluoromethane	ND		3.7	0.41
96-18-4	1,2,3-Trichloropropane	ND		3.7	0.56
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.7	1.5
95-63-6	1,2,4-Trimethylbenzene	ND		3.7	1.2
108-67-8	1,3,5-Trimethylbenzene	ND		3.7	0.48
108-05-4	Vinyl acetate	ND		15	3.7
75-01-4	Vinyl chloride	ND		3.7	0.53
1330-20-7	Xylenes, Total	ND		3.7	0.89
594-20-7	2,2-Dichloropropane	ND		3.7	1.5
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		180	73

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-F3S-0.5-1 Lab Sample ID: 720-88190-4

Matrix: Solid Lab File ID: 08281827.D

Analysis Method: 8260B Date Collected: 08/21/2018 14:45

Sample wt/vol: 6.827(g) Date Analyzed: 08/28/2018 21:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	91		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		60-140
2037-26-5	Toluene-d8 (Surr)	98		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281827.D
Lims ID: 720-88190-B-4-A
Client ID: DG-F3S--0.5-1
Sample Type: Client
Inject. Date: 28-Aug-2018 21:19:30 ALS Bottle#: 6 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88190-B-4 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:25 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 09:15:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.101	7.101	0.000	98	186115	250.0	
* 2 Fluorobenzene	96	10.898	10.899	-0.001	98	1030481	25.0	
* 4 Chlorobenzene-d5	117	14.746	14.747	-0.001	86	662359	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.885	17.886	-0.001	94	272077	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.490	9.491	-0.001	55	69520	7.43	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.007	10.008	-0.001	99	73847	8.05	
$ 10 Toluene-d8 (Surr)	98	13.004	13.005	-0.001	92	271270	7.31	
$ 11 4-Bromofluorobenzene	95	16.234	16.235	-0.001	89	82477	6.85	
$ 12 1,2-Dichlorobenzene-d4	152	18.341	18.331	0.000	81	60498	6.02	
28 Acetone	58	6.645	6.646	-0.001	95	11230	17.6	
34 Methylene Chloride	84	7.364	7.365	-0.001	47	907	0.0980	
143 Methyl acetate	43	7.415	7.405	0.010	74	10515	2.62	
59 Benzene	78	10.675	10.676	-0.001	1	2551	0.0635	
148 1-Chlorohexane	55	14.746	14.655	0.090	1	7078	0.6243	
126 Butyl Ether	87	14.938	14.949	-0.011	22	374	0.0519	
85 m-Xylene & p-Xylene	91	15.232	15.233	-0.001	0	3282	0.0951	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	477977	5.57	
A 153 C6-C8	1	11.156	(8.853-13.459)		0	171535	2.00	
A 154 C6-C9	1	12.113	(8.853-15.373)		0	239206	2.79	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	738338	8.61	
A 119 C6-C10	1	12.994	(8.853-17.135)		0	274255	3.20	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	701673	8.18	
A 120 C6-C12	1	14.554	(8.853-20.255)		0	551213	6.43	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	103535	1.21	
A 121 C7-C12	1	15.724	(11.192-20.255)		0	431327	5.03	
S 122 Xylenes, Total	1				0		0.0951	

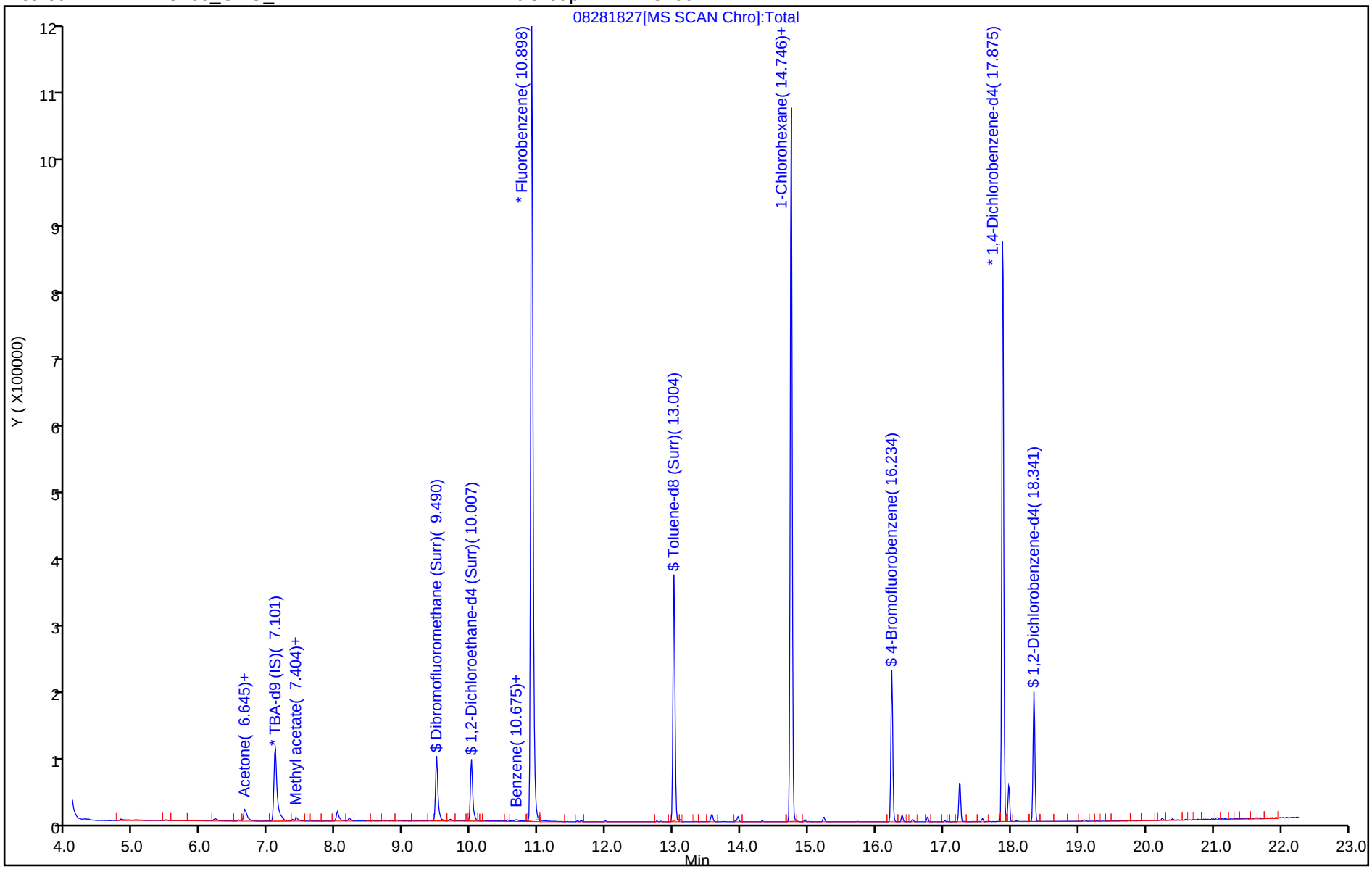
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:15:07 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281827.D				
Injection Date:	28-Aug-2018 21:19:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88190-B-4-A	Lab Sample ID:	720-88190-4	Worklist Smp#:	11
Client ID:	DG-F3S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281827.D
Lims ID: 720-88190-B-4-A
Client ID: DG-F3S--0.5-1
Sample Type: Client
Inject. Date: 28-Aug-2018 21:19:30 ALS Bottle#: 6 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88190-B-4 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:25 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 09:15:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.05	107.30
$ 10 Toluene-d8 (Surr)	7.50	7.31	97.53
$ 11 4-Bromofluorobenzene	7.50	6.85	91.32
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

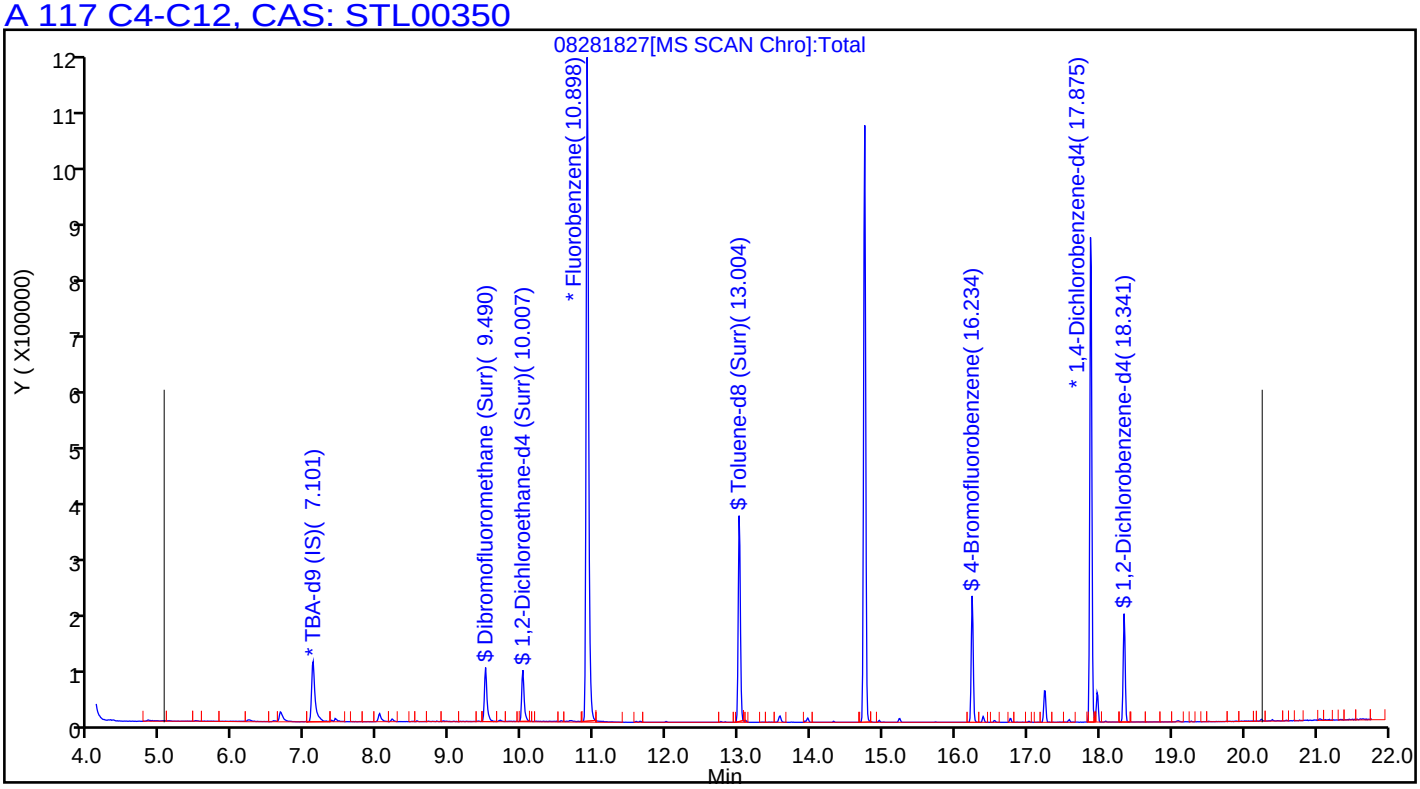
Report Date: 29-Aug-2018 09:15:08 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281827.D

Injection Date:	28-Aug-2018 21:19:30	Instrument ID:	HP7		
Lims ID:	720-88190-B-4-A	Lab Sample ID:	720-88190-4		
Client ID:	DG-F3S--0.5-1				
Operator ID:	SF	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-F3S-3.5-4 Lab Sample ID: 720-88190-5

Matrix: Solid Lab File ID: 08281828.D

Analysis Method: 8260B Date Collected: 08/21/2018 14:45

Sample wt/vol: 6.081(g) Date Analyzed: 08/28/2018 21:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.1	0.99
67-64-1	Acetone	ND		41	31
71-43-2	Benzene	ND		4.1	0.53
75-27-4	Dichlorobromomethane	ND		4.1	0.59
108-86-1	Bromobenzene	ND		4.1	0.65
74-97-5	Chlorobromomethane	ND		16	0.59
75-25-2	Bromoform	ND		4.1	1.6
74-83-9	Bromomethane	ND		8.2	0.65
78-93-3	2-Butanone (MEK)	ND		41	17
104-51-8	n-Butylbenzene	ND		4.1	0.82
135-98-8	sec-Butylbenzene	ND		4.1	0.59
98-06-6	tert-Butylbenzene	ND		4.1	0.60
75-15-0	Carbon disulfide	ND	*	4.1	1.6
56-23-5	Carbon tetrachloride	ND		4.1	0.51
108-90-7	Chlorobenzene	ND		4.1	0.57
75-00-3	Chloroethane	ND		8.2	0.46
67-66-3	Chloroform	ND		4.1	0.54
74-87-3	Chloromethane	ND		8.2	0.65
95-49-8	2-Chlorotoluene	ND		4.1	0.53
106-43-4	4-Chlorotoluene	ND		4.1	0.56
124-48-1	Chlorodibromomethane	ND		4.1	0.58
95-50-1	1,2-Dichlorobenzene	ND		4.1	0.56
541-73-1	1,3-Dichlorobenzene	ND		4.1	0.59
106-46-7	1,4-Dichlorobenzene	ND		4.1	0.58
142-28-9	1,3-Dichloropropane	ND		4.1	0.60
563-58-6	1,1-Dichloropropene	ND		4.1	0.57
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.2	1.4
106-93-4	Ethylene Dibromide	ND		4.1	1.2
74-95-3	Dibromomethane	ND		8.2	0.71
75-71-8	Dichlorodifluoromethane	ND		8.2	0.65
75-34-3	1,1-Dichloroethane	ND		4.1	0.56
107-06-2	1,2-Dichloroethane	ND		4.1	0.62
75-35-4	1,1-Dichloroethene	ND	*	4.1	0.51
156-59-2	cis-1,2-Dichloroethene	ND		4.1	0.56
156-60-5	trans-1,2-Dichloroethene	ND		4.1	0.62
78-87-5	1,2-Dichloropropane	ND		4.1	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-F3S-3.5-4 Lab Sample ID: 720-88190-5

Matrix: Solid Lab File ID: 08281828.D

Analysis Method: 8260B Date Collected: 08/21/2018 14:45

Sample wt/vol: 6.081(g) Date Analyzed: 08/28/2018 21:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.1	0.57
10061-02-6	trans-1,3-Dichloropropene	ND		4.1	0.55
100-41-4	Ethylbenzene	ND		4.1	0.62
87-68-3	Hexachlorobutadiene	ND		4.1	0.74
591-78-6	2-Hexanone	ND		41	8.2
98-82-8	Isopropylbenzene	ND		4.1	0.56
99-87-6	4-Isopropyltoluene	ND		4.1	2.1
75-09-2	Methylene Chloride	ND		8.2	4.6
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		41	8.2
91-20-3	Naphthalene	ND		8.2	1.2
103-65-1	N-Propylbenzene	ND		4.1	0.54
100-42-5	Styrene	ND		4.1	0.52
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.1	0.62
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.1	0.62
127-18-4	Tetrachloroethene	ND		4.1	0.55
108-88-3	Toluene	ND		4.1	0.58
87-61-6	1,2,3-Trichlorobenzene	ND		4.1	0.61
120-82-1	1,2,4-Trichlorobenzene	ND		4.1	0.58
71-55-6	1,1,1-Trichloroethane	ND		4.1	0.50
79-00-5	1,1,2-Trichloroethane	ND		4.1	0.58
79-01-6	Trichloroethene	ND		4.1	0.52
75-69-4	Trichlorofluoromethane	ND		4.1	0.46
96-18-4	1,2,3-Trichloropropane	ND		4.1	0.63
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.1	1.7
95-63-6	1,2,4-Trimethylbenzene	ND		4.1	1.3
108-67-8	1,3,5-Trimethylbenzene	ND		4.1	0.53
108-05-4	Vinyl acetate	ND		16	4.1
75-01-4	Vinyl chloride	ND		4.1	0.60
1330-20-7	Xylenes, Total	ND		4.1	1.0
594-20-7	2,2-Dichloropropane	ND		4.1	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		210	82

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-F3S-3.5-4 Lab Sample ID: 720-88190-5

Matrix: Solid Lab File ID: 08281828.D

Analysis Method: 8260B Date Collected: 08/21/2018 14:45

Sample wt/vol: 6.081(g) Date Analyzed: 08/28/2018 21:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	93		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		60-140
2037-26-5	Toluene-d8 (Surr)	97		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281828.D
Lims ID: 720-88190-B-5-A
Client ID: DG-F3S--3.5-4
Sample Type: Client
Inject. Date: 28-Aug-2018 21:49:30 ALS Bottle#: 7 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88190-B-5 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:25 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 09:15:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.091	7.101	-0.010	98	202992	250.0	
* 2 Fluorobenzene	96	10.899	10.899	0.000	98	964296	25.0	
* 4 Chlorobenzene-d5	117	14.747	14.747	0.000	86	613488	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.876	17.886	-0.010	96	272614	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.491	9.491	0.000	55	66718	7.62	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.008	10.008	0.000	98	71563	8.33	
$ 10 Toluene-d8 (Surr)	98	13.005	13.005	0.000	92	251786	7.26	
$ 11 4-Bromofluorobenzene	95	16.235	16.235	0.000	90	77873	6.98	
$ 12 1,2-Dichlorobenzene-d4	152	18.342	18.331	0.001	80	60521	6.01	
28 Acetone	58	6.656	6.646	0.010	88	5904	9.89	
34 Methylene Chloride	84	7.365	7.365	0.000	6	1050	0.1212	
59 Benzene	78	10.666	10.676	-0.010	1	3820	0.1016	
148 1-Chlorohexane	55	14.747	14.655	0.091	1	6228	0.5870	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	352068	4.39	
A 153 C6-C8	1	11.156	(8.853-13.459)		0	157023	1.96	
A 154 C6-C9	1	12.113	(8.853-15.373)		0	196979	2.45	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	377508	4.70	
A 119 C6-C10	1	12.994	(8.853-17.135)		0	203017	2.53	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	339603	4.23	
A 120 C6-C12	1	14.554	(8.853-20.255)		0	227372	2.83	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	47839	0.5959	
A 121 C7-C12	1	15.724	(11.192-20.255)		0	124982	1.56	

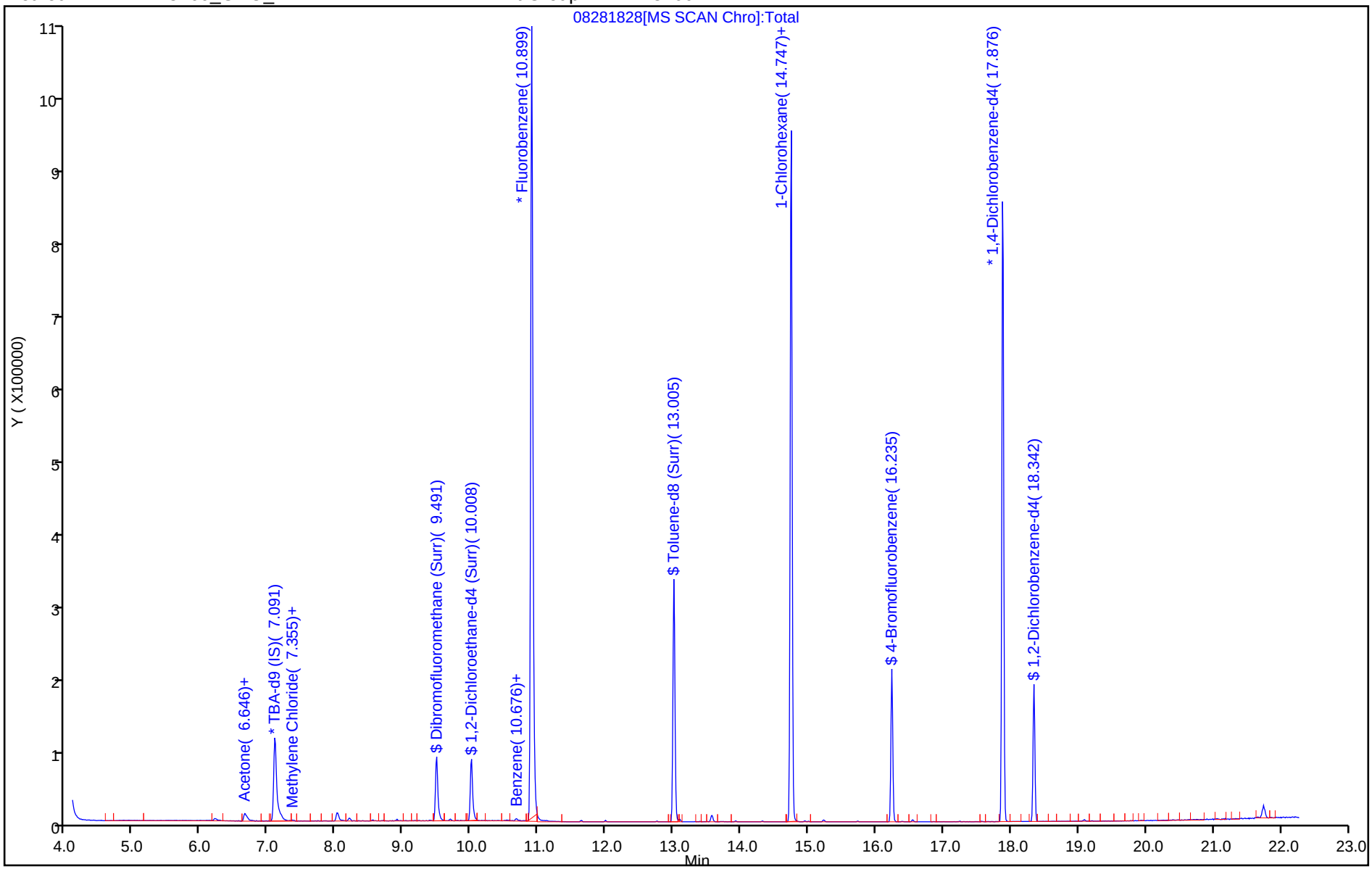
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:15:15 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281828.D				
Injection Date:	28-Aug-2018 21:49:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88190-B-5-A	Lab Sample ID:	720-88190-5	Worklist Smp#:	12
Client ID:	DG-F3S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281828.D
Lims ID: 720-88190-B-5-A
Client ID: DG-F3S--3.5-4
Sample Type: Client
Inject. Date: 28-Aug-2018 21:49:30 ALS Bottle#: 7 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88190-B-5 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:25 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 09:15:14

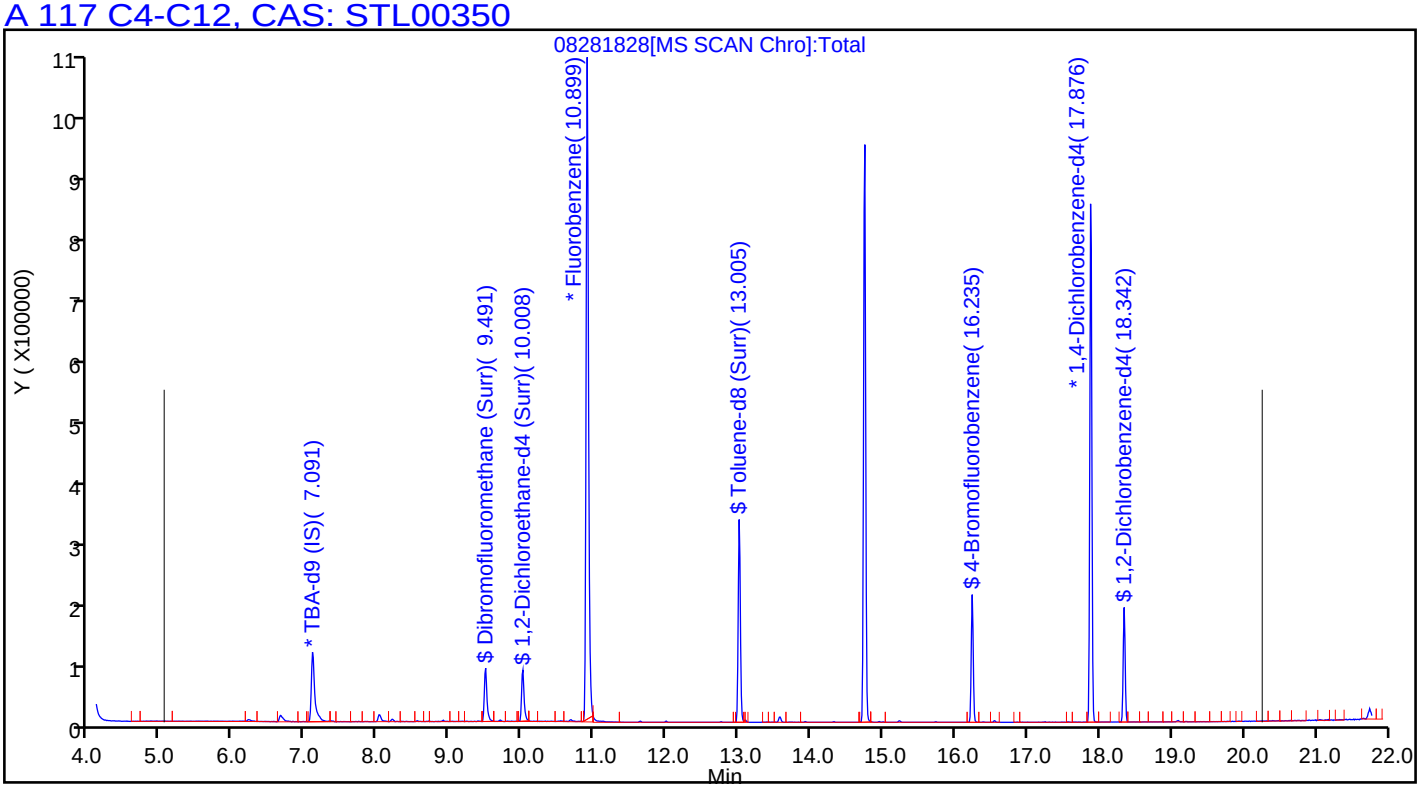
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.33	111.11
$ 10 Toluene-d8 (Surr)	7.50	7.26	96.74
$ 11 4-Bromofluorobenzene	7.50	6.98	93.09
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 29-Aug-2018 09:15:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281828.D				
Injection Date:	28-Aug-2018 21:49:30	Instrument ID:	HP7		
Lims ID:	720-88190-B-5-A	Lab Sample ID:	720-88190-5		
Client ID:	DG-F3S--3.5-4				
Operator ID:	SF	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-F3S-9.5-10 Lab Sample ID: 720-88190-6

Matrix: Solid Lab File ID: 08281838.D

Analysis Method: 8260B Date Collected: 08/21/2018 15:00

Sample wt/vol: 5.02(g) Date Analyzed: 08/29/2018 01:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250408 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		5.0	1.2
67-64-1	Acetone	ND		50	38
71-43-2	Benzene	ND		5.0	0.65
75-27-4	Dichlorobromomethane	ND		5.0	0.72
108-86-1	Bromobenzene	ND		5.0	0.79
74-97-5	Chlorobromomethane	ND		20	0.72
75-25-2	Bromoform	ND		5.0	2.0
74-83-9	Bromomethane	ND		10	0.79
78-93-3	2-Butanone (MEK)	ND		50	21
104-51-8	n-Butylbenzene	ND		5.0	1.0
135-98-8	sec-Butylbenzene	ND		5.0	0.72
98-06-6	tert-Butylbenzene	ND		5.0	0.73
75-15-0	Carbon disulfide	ND	*	5.0	2.0
56-23-5	Carbon tetrachloride	ND		5.0	0.62
108-90-7	Chlorobenzene	ND		5.0	0.69
75-00-3	Chloroethane	ND		10	0.56
67-66-3	Chloroform	ND		5.0	0.66
74-87-3	Chloromethane	ND		10	0.79
95-49-8	2-Chlorotoluene	ND		5.0	0.65
106-43-4	4-Chlorotoluene	ND		5.0	0.68
124-48-1	Chlorodibromomethane	ND		5.0	0.71
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.68
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.72
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.71
142-28-9	1,3-Dichloropropane	ND		5.0	0.73
563-58-6	1,1-Dichloropropene	ND		5.0	0.69
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	1.7
106-93-4	Ethylene Dibromide	ND		5.0	1.4
74-95-3	Dibromomethane	ND		10	0.86
75-71-8	Dichlorodifluoromethane	ND		10	0.79
75-34-3	1,1-Dichloroethane	ND		5.0	0.68
107-06-2	1,2-Dichloroethane	ND		5.0	0.76
75-35-4	1,1-Dichloroethene	ND	*	5.0	0.62
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.68
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.75
78-87-5	1,2-Dichloropropane	ND		5.0	0.63

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-F3S-9.5-10 Lab Sample ID: 720-88190-6

Matrix: Solid Lab File ID: 08281838.D

Analysis Method: 8260B Date Collected: 08/21/2018 15:00

Sample wt/vol: 5.02(g) Date Analyzed: 08/29/2018 01:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250408 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.69
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.67
100-41-4	Ethylbenzene	ND		5.0	0.75
87-68-3	Hexachlorobutadiene	ND		5.0	0.90
591-78-6	2-Hexanone	ND		50	10
98-82-8	Isopropylbenzene	ND		5.0	0.68
99-87-6	4-Isopropyltoluene	ND		5.0	2.5
75-09-2	Methylene Chloride	ND		10	5.6
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	10
91-20-3	Naphthalene	ND		10	1.5
103-65-1	N-Propylbenzene	ND		5.0	0.66
100-42-5	Styrene	ND		5.0	0.63
630-20-6	1,1,1,2-Tetrachloroethane	ND		5.0	0.76
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.75
127-18-4	Tetrachloroethene	ND		5.0	0.67
108-88-3	Toluene	ND		5.0	0.71
87-61-6	1,2,3-Trichlorobenzene	ND		5.0	0.74
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.71
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.61
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.70
79-01-6	Trichloroethene	ND		5.0	0.63
75-69-4	Trichlorofluoromethane	ND		5.0	0.56
96-18-4	1,2,3-Trichloropropane	ND		5.0	0.77
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1
95-63-6	1,2,4-Trimethylbenzene	ND		5.0	1.6
108-67-8	1,3,5-Trimethylbenzene	ND		5.0	0.65
108-05-4	Vinyl acetate	ND		20	5.0
75-01-4	Vinyl chloride	ND		5.0	0.73
1330-20-7	Xylenes, Total	ND		5.0	1.2
594-20-7	2,2-Dichloropropane	ND		5.0	2.0
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		250	100

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-F3S-9.5-10 Lab Sample ID: 720-88190-6

Matrix: Solid Lab File ID: 08281838.D

Analysis Method: 8260B Date Collected: 08/21/2018 15:00

Sample wt/vol: 5.02(g) Date Analyzed: 08/29/2018 01:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250408 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	86		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		60-140
2037-26-5	Toluene-d8 (Surr)	96		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180828-53531.b\08281838.D
Lims ID: 720-88190-D-6-G
Client ID: DG-F3S--9.5-10
Sample Type: Client
Inject. Date: 29-Aug-2018 01:56:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88190-D-6
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180828-53531.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:47:15 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 09:47:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.149	7.149	0.000	0	72360	250.0	
* 2 Fluorobenzene	96	10.936	10.936	0.000	99	762717	25.0	
* 4 Chlorobenzene-d5	117	14.764	14.764	0.000	81	567779	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.903	17.903	0.000	92	237778	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.528	9.528	0.000	57	55456	7.17	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.045	10.045	0.000	0	35536	6.66	
$ 10 Toluene-d8 (Surr)	98	13.032	13.032	0.000	90	200618	7.19	
$ 11 4-Bromofluorobenzene	95	16.252	16.252	0.000	88	59665	6.48	
$ 12 1,2-Dichlorobenzene-d4	152	18.358	18.358	0.000	74	51905	5.66	
28 Acetone	58	6.713	6.713	0.000	65	593	1.64	
34 Methylene Chloride	84	7.422	7.422	0.000	77	5205	0.6094	
148 1-Chlorohexane	55	14.764	14.672	0.092	0	5169	0.5555	
127 Butyl Ether	87	14.966	14.966	0.000	87	1639	0.2702	
A 116 C4-C10	1	11.189	(5.123-17.255)		0	725959	10.1	
A 153 C6-C8	1	11.194	(8.890-13.498)		0	223886	3.12	
A 154 C6-C9	1	12.161	(8.890-15.432)		0	337848	4.71	
A 117 C4-C12	1	12.738	(5.123-20.353)		0	931587	13.0	
A 123 Aviation Gas	1	12.991	(8.890-17.093)		0	441022	NC	
A 119 C6-C10	1	13.072	(8.890-17.255)		0	441022	6.15	
A 118 C5-C12	1	13.528	(6.703-20.353)		0	768168	10.7	
A 120 C6-C12	1	14.622	(8.890-20.353)		0	646650	9.02	
A 155 C8-C10	1	15.336	(13.417-17.255)		0	220773	3.08	
A 121 C7-C12	1	15.786	(11.219-20.353)		0	481642	6.72	
T 151 Paraldehyde TIC	45	13.032	12.961	0.071	1	331	0.5501	

QC Flag Legend

Processing Flags

NC - Not Calibrated

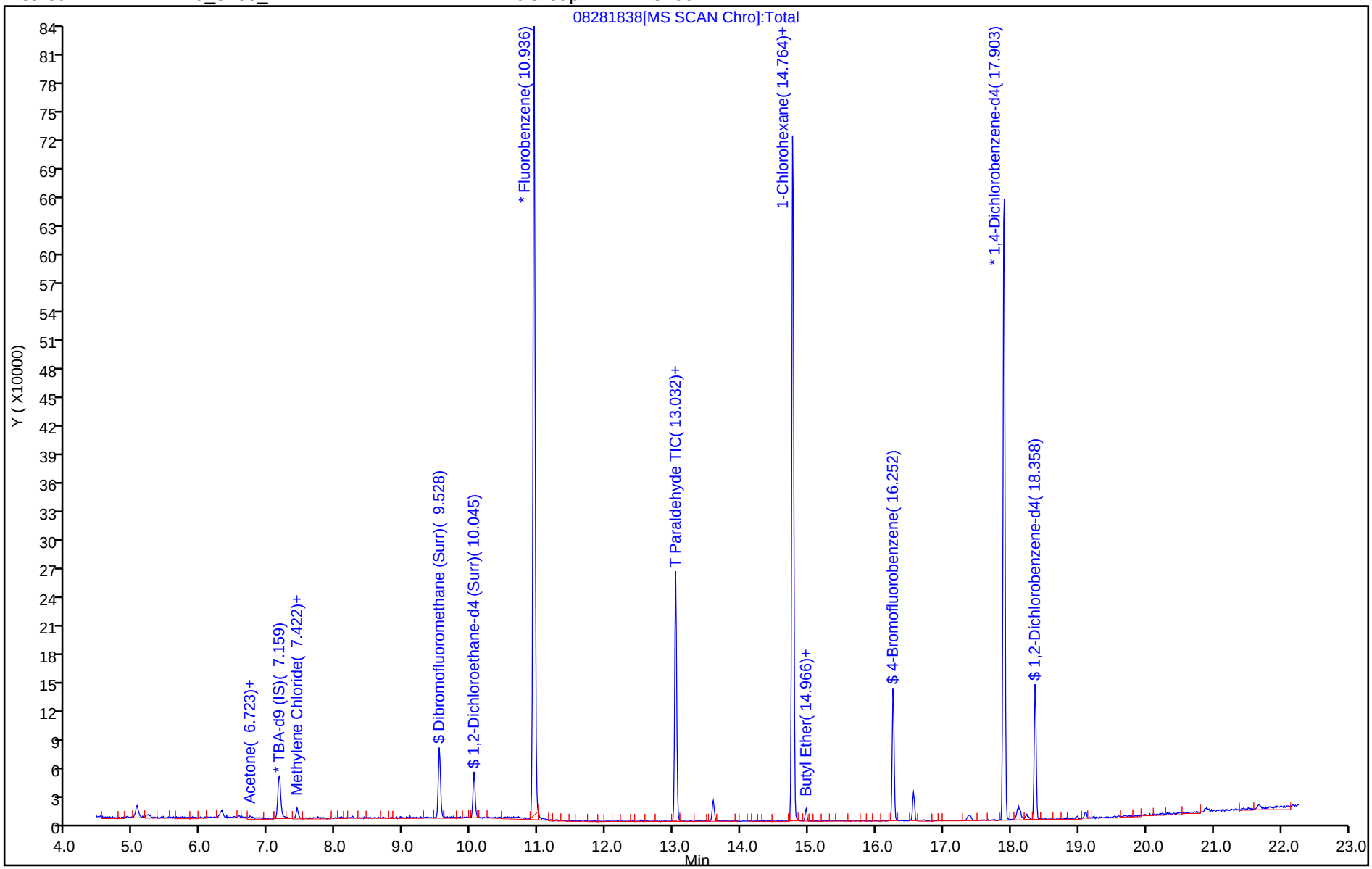
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:47:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180828-53531.b\08281838.D				
Injection Date:	29-Aug-2018 01:56:30	Instrument ID:	HP9	Operator ID:	SF
Lims ID:	720-88190-D-6-G	Lab Sample ID:	720-88190-6	Worklist Smp#:	17
Client ID:	DG-F3S--9.5-10				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	HP9_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180828-53531.b\08281838.D
Lims ID: 720-88190-D-6-G
Client ID: DG-F3S--9.5-10
Sample Type: Client
Inject. Date: 29-Aug-2018 01:56:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88190-D-6
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180828-53531.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:47:15 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 09:47:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	6.66	88.79
$ 10 Toluene-d8 (Surr)	7.50	7.19	95.87
$ 11 4-Bromofluorobenzene	7.50	6.48	86.45
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

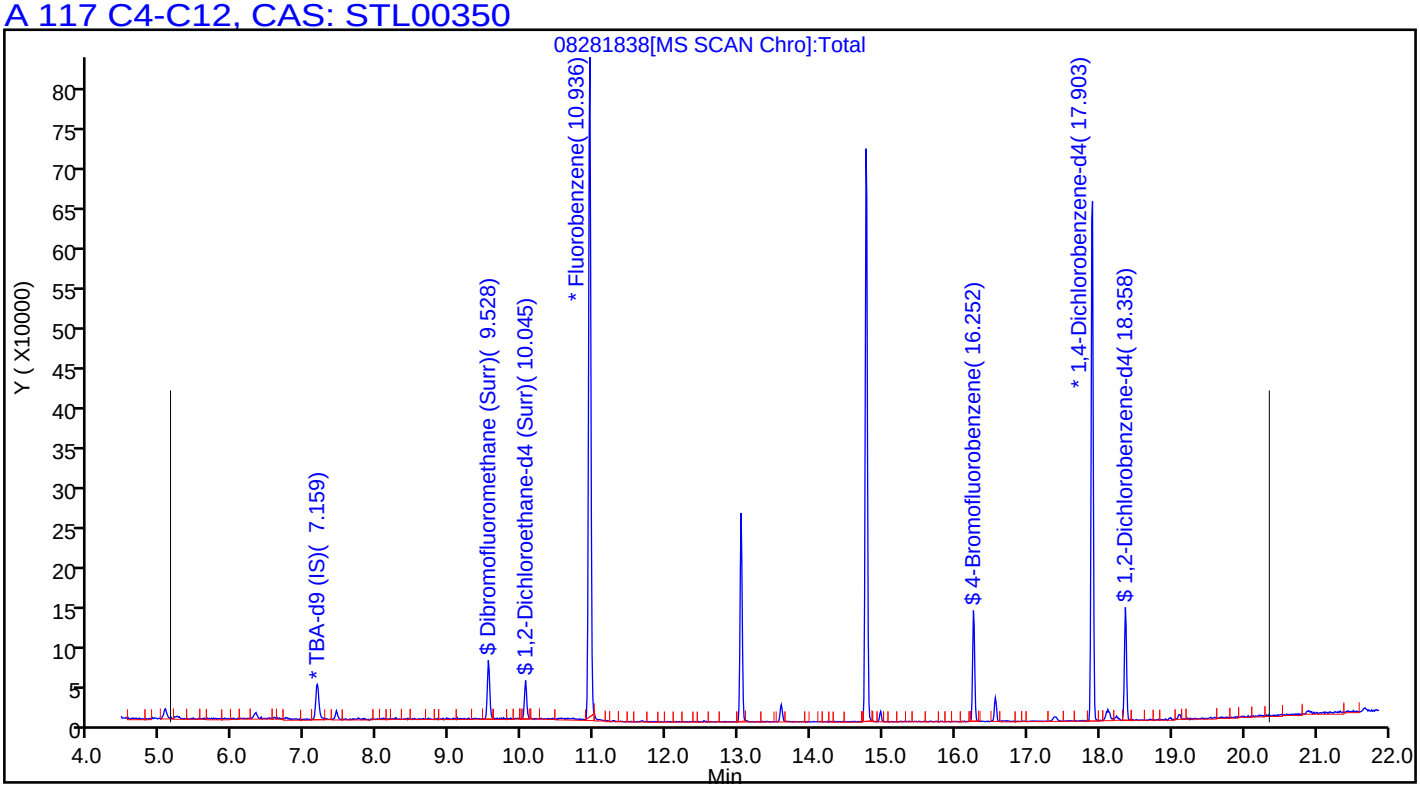
Report Date: 29-Aug-2018 09:47:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180828-53531.b\08281838.D

Injection Date:	29-Aug-2018 01:56:30	Instrument ID:	HP9		
Lims ID:	720-88190-D-6-G	Lab Sample ID:	720-88190-6		
Client ID:	DG-F3S--9.5-10				
Operator ID:	SF	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



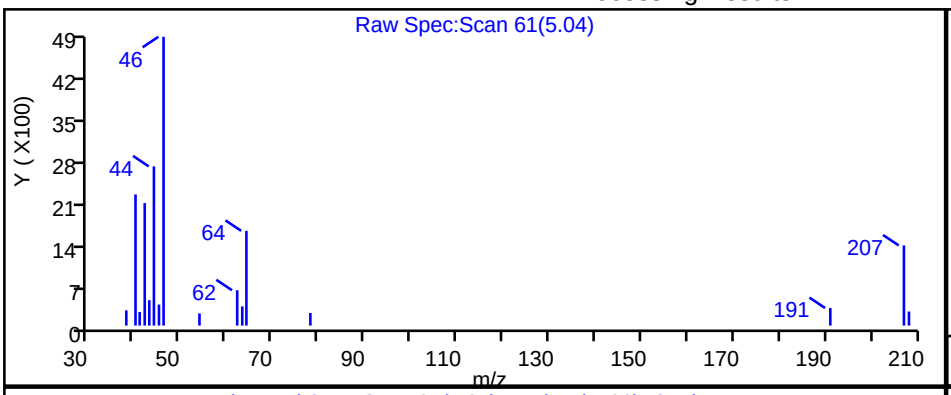
User Disabled Compound Report

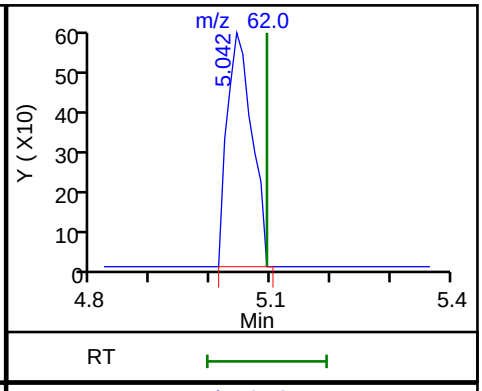
TestAmerica Pleasanton

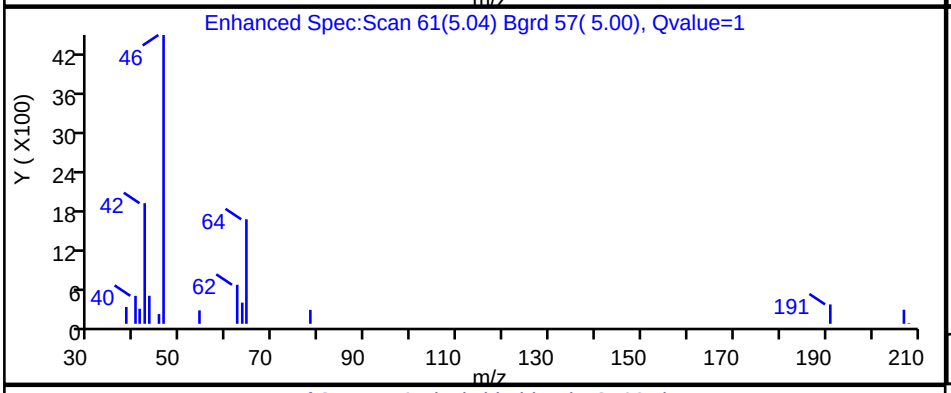
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180828-53531.b\08281838.D				
Injection Date:	29-Aug-2018 01:56:30	Instrument ID:	HP9		
Lims ID:	720-88190-D-6-G	Lab Sample ID:	720-88190-6		
Client ID:	DG-F3S--9.5-10				
Operator ID:	SF	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

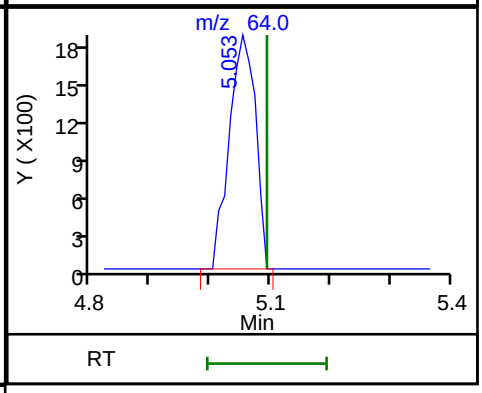
19 Vinyl chloride, CAS: 75-01-4

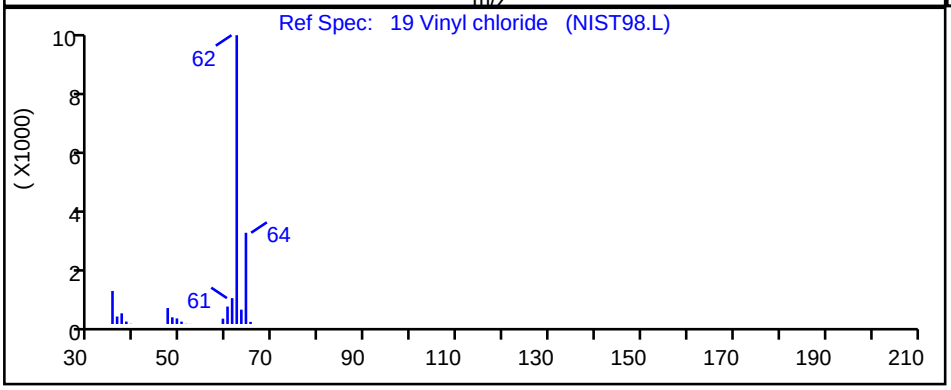
Processing Results











RT	Mass	Response	Amount
5.04	62.00	1717	0.072265
5.05	64.00	5657	

Reviewer: medinaj, 29-Aug-2018 09:47:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-G3S-9.5-10 Lab Sample ID: 720-88190-9

Matrix: Solid Lab File ID: 08271829.D

Analysis Method: 8260B Date Collected: 08/21/2018 15:30

Sample wt/vol: 5.625(g) Date Analyzed: 08/27/2018 22:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250279 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.4	1.1
67-64-1	Acetone	61		44	34
71-43-2	Benzene	ND		4.4	0.58
75-27-4	Dichlorobromomethane	ND		4.4	0.64
108-86-1	Bromobenzene	ND	*	4.4	0.70
74-97-5	Chlorobromomethane	ND		18	0.64
75-25-2	Bromoform	ND		4.4	1.8
74-83-9	Bromomethane	ND		8.9	0.70
78-93-3	2-Butanone (MEK)	ND		44	19
104-51-8	n-Butylbenzene	ND	*	4.4	0.89
135-98-8	sec-Butylbenzene	ND	*	4.4	0.64
98-06-6	tert-Butylbenzene	ND	*	4.4	0.65
75-15-0	Carbon disulfide	ND		4.4	1.8
56-23-5	Carbon tetrachloride	ND		4.4	0.55
108-90-7	Chlorobenzene	ND		4.4	0.61
75-00-3	Chloroethane	ND		8.9	0.50
67-66-3	Chloroform	ND		4.4	0.59
74-87-3	Chloromethane	ND		8.9	0.70
95-49-8	2-Chlorotoluene	ND	*	4.4	0.58
106-43-4	4-Chlorotoluene	ND	*	4.4	0.60
124-48-1	Chlorodibromomethane	ND		4.4	0.63
95-50-1	1,2-Dichlorobenzene	ND	*	4.4	0.60
541-73-1	1,3-Dichlorobenzene	ND	*	4.4	0.64
106-46-7	1,4-Dichlorobenzene	ND	*	4.4	0.63
142-28-9	1,3-Dichloropropane	ND		4.4	0.65
563-58-6	1,1-Dichloropropene	ND		4.4	0.61
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	8.9	1.5
106-93-4	Ethylene Dibromide	ND		4.4	1.3
74-95-3	Dibromomethane	ND		8.9	0.76
75-71-8	Dichlorodifluoromethane	ND		8.9	0.70
75-34-3	1,1-Dichloroethane	ND		4.4	0.60
107-06-2	1,2-Dichloroethane	ND		4.4	0.68
75-35-4	1,1-Dichloroethene	ND		4.4	0.55
156-59-2	cis-1,2-Dichloroethene	3.0	J	4.4	0.60
156-60-5	trans-1,2-Dichloroethene	ND		4.4	0.67
78-87-5	1,2-Dichloropropane	ND		4.4	0.56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-G3S-9.5-10 Lab Sample ID: 720-88190-9

Matrix: Solid Lab File ID: 08271829.D

Analysis Method: 8260B Date Collected: 08/21/2018 15:30

Sample wt/vol: 5.625(g) Date Analyzed: 08/27/2018 22:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250279 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.4	0.61
10061-02-6	trans-1,3-Dichloropropene	ND		4.4	0.60
100-41-4	Ethylbenzene	ND		4.4	0.67
87-68-3	Hexachlorobutadiene	ND	*	4.4	0.80
591-78-6	2-Hexanone	ND		44	8.9
98-82-8	Isopropylbenzene	ND		4.4	0.60
99-87-6	4-Isopropyltoluene	ND	*	4.4	2.2
75-09-2	Methylene Chloride	ND		8.9	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		44	8.9
91-20-3	Naphthalene	ND	*	8.9	1.3
103-65-1	N-Propylbenzene	ND	*	4.4	0.59
100-42-5	Styrene	ND		4.4	0.56
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.4	0.68
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.4	0.67
127-18-4	Tetrachloroethene	ND		4.4	0.60
108-88-3	Toluene	ND		4.4	0.63
87-61-6	1,2,3-Trichlorobenzene	ND	*	4.4	0.66
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.4	0.63
71-55-6	1,1,1-Trichloroethane	ND		4.4	0.54
79-00-5	1,1,2-Trichloroethane	ND		4.4	0.62
79-01-6	Trichloroethene	ND		4.4	0.56
75-69-4	Trichlorofluoromethane	ND		4.4	0.50
96-18-4	1,2,3-Trichloropropane	ND	*	4.4	0.68
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.8
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.4	1.5
108-67-8	1,3,5-Trimethylbenzene	ND	*	4.4	0.58
108-05-4	Vinyl acetate	ND		18	4.4
75-01-4	Vinyl chloride	ND		4.4	0.65
1330-20-7	Xylenes, Total	ND		4.4	1.1
594-20-7	2,2-Dichloropropane	ND		4.4	1.8
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		220	89

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-G3S-9.5-10 Lab Sample ID: 720-88190-9

Matrix: Solid Lab File ID: 08271829.D

Analysis Method: 8260B Date Collected: 08/21/2018 15:30

Sample wt/vol: 5.625(g) Date Analyzed: 08/27/2018 22:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250279 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	88		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		60-140
2037-26-5	Toluene-d8 (Surr)	93		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180827-53503.b\08271829.D
Lims ID: 720-88190-A-9-A
Client ID: DG-G3S--9.5-10
Sample Type: Client
Inject. Date: 27-Aug-2018 22:03:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88190-A-9
Misc. Info.: HP-4
Operator ID: SF Instrument ID: HP4

Method: \\ChromNA\Pleasanton\ChromData\HP4\20180827-53503.b\8260W_LL_GRO_HP4.m
Limit Group: 8260B
Last Update: 28-Aug-2018 07:14:06 Calib Date: 26-Jul-2018 01:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D

Column 1 : DB-VRX (250.00 mm) Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: medinaj Date: 28-Aug-2018 09:16:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.360	7.360	0.000	98	286937	250.0	
* 2 Fluorobenzene	96	11.167	11.177	-0.010	98	1138582	25.0	
* 3 Chlorobenzene-d5	117	15.035	15.035	0.000	88	741264	25.0	
* 4 1,4-Dichlorobenzene-d4	152	18.192	18.192	0.000	96	313038	25.0	s
$ 5 Dibromofluoromethane (Surr	113	9.756	9.747	0.000	93	84826	8.05	
$ 6 1,2-Dichloroethane-d4 (Sur	65	10.273	10.264	0.000	0	105608	8.16	
$ 8 Toluene-d8 (Surr)	98	13.288	13.276	0.000	94	306486	6.99	
$ 9 4-Bromofluorobenzene	95	16.537	16.537	0.000	88	97792	6.57	
$ 10 1,2-Dichlorobenzene-d4	152	18.659	18.659	0.000	86	73967	6.38	
24 Acetone	58	6.913	6.907	0.000	99	39460	34.4	
28 2-Methyl-2-propanol	59	7.461	7.461	0.000	97	5717	3.67	
31 Methylene Chloride	84	7.634	7.627	0.000	76	2611	0.2424	
37 trans-1,2-Dichloroethene	96	8.426	8.428	-0.010	10	972	0.0895	
44 2-Butanone (MEK)	72	9.197	9.179	0.010	97	2546	2.45	
47 cis-1,2-Dichloroethene	61	9.380	9.371	0.000	84	35371	1.67	
49 Ethyl acetate	43	9.553	9.544	0.000	99	21102	1.66	
51 Tert-butyl ethyl ether	59	9.644	9.645	-0.010	93	2452	0.0522	
62 Benzene	78	10.943	10.933	0.000	88	1993	0.0438	
65 Ethyl acrylate	55	11.512	11.481	0.020	1	571	0.0254	
66 n-Heptane	71	11.512	11.491	0.010	96	1937	0.1587	
80 Toluene	92	13.370	13.370	0.000	98	2959	0.0935	
82 Ethyl methacrylate	69	13.288	13.378	-0.102	34	956	0.0819	
92 Butyl Ether	87	15.227	15.213	0.000	94	1520	0.1576	
93 m-Xylene & p-Xylene	91	15.502	15.512	-0.010	91	3026	0.0743	
97 o-Xylene	91	16.009	16.019	-0.010	1	1420	0.0345	
107 1,2,4-Trimethylbenzene	105	17.867	17.867	0.000	86	1136	0.0313	
126 Butane	43	5.451	5.461	-0.010	1	706	NR	
128 n-Octane	43	13.664	13.745	-0.081	84	6705	NR	
129 n-Nonane	57	15.623	15.664	-0.041	0	3290	NR	
130 n-Decane	57	17.390	17.430	-0.040	90	2126	NR	
131 Dodecane	57	20.506	20.547	-0.041	89	2663	NR	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
132 C13	57	22.009	22.059	-0.050	90	1885	NR	
A 158 C6-C8	1	11.456	(9.106-13.806)		0	364579	3.17	
A 134 C4-C10	1	11.466	(5.451-17.481)		0	1321281	11.5	
A 159 C6-C9	1	12.400	(9.106-15.694)		0	531753	4.62	
A 136 C4-C12	1	13.024	(5.451-20.598)		0	1434398	12.5	
A 137 C6-C10	1	13.294	(9.106-17.481)		0	600933	5.22	
A 138 C5-C12	1	13.826	(7.055-20.598)		0	1373077	11.9	
A 139 C6-C12	1	14.852	(9.106-20.598)		0	712662	6.19	
A 160 C8-C10	1	15.598	(13.715-17.481)		0	260130	2.26	
A 141 C7-C12	1	16.029	(11.461-20.598)		0	460629	4.00	
S 142 Xylenes, Total	1				0		0.1088	
T 156 Paraldehyde TIC	45	13.288	13.266	0.010	0	304	0.4114	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

s - Failed ISTD Recovery Test

Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

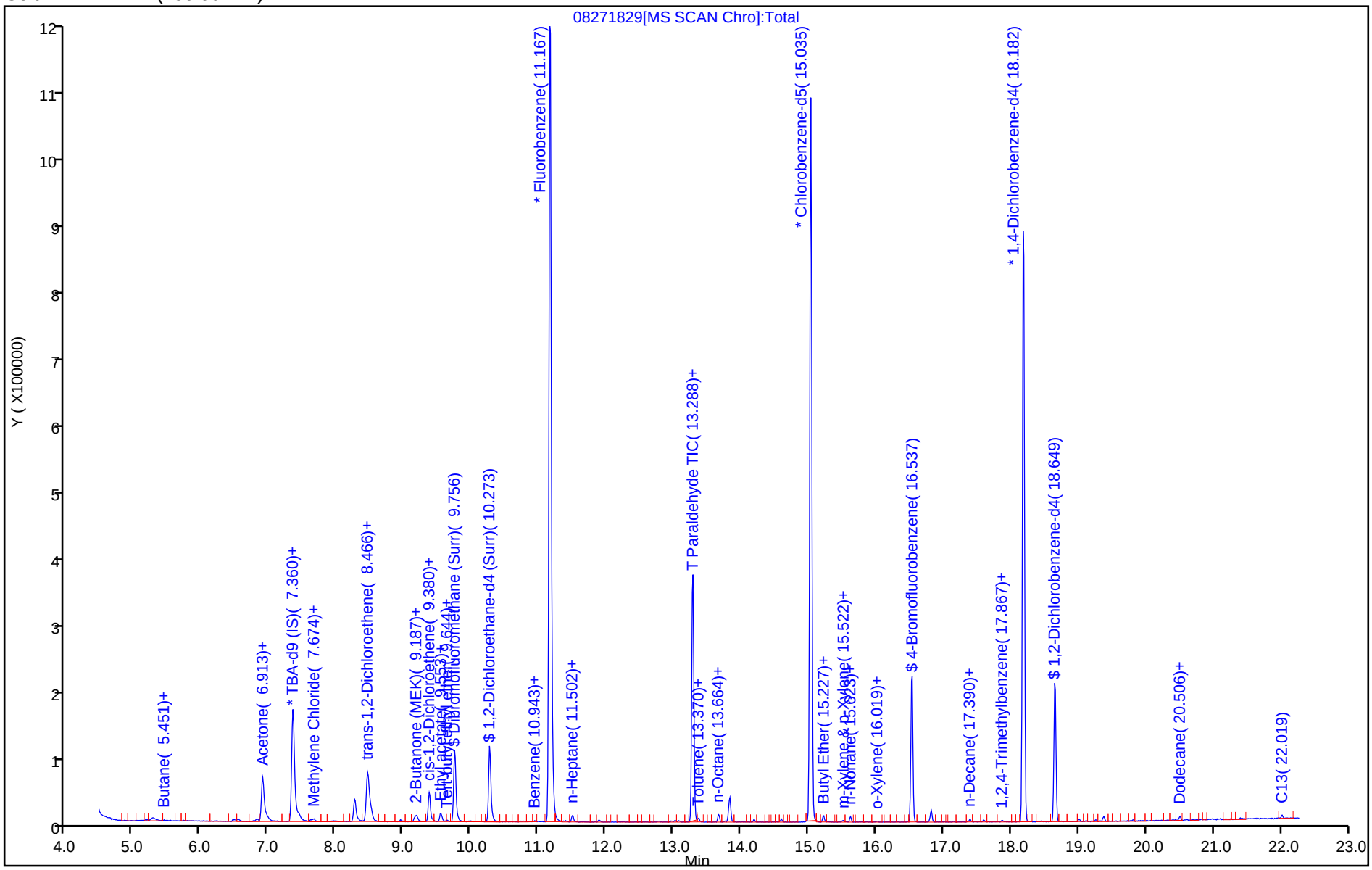
Report Date: 28-Aug-2018 09:16:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180827-53503.b\08271829.D

Injection Date:	27-Aug-2018 22:03:30	Instrument ID:	HP4	Operator ID:	SF
Lims ID:	720-88190-A-9-A	Lab Sample ID:	720-88190-9	Worklist Smp#:	22
Client ID:	DG-G3S--9.5-10				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		

Column: DB-VRX (250.00 mm)



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180827-53503.b\08271829.D
Lims ID: 720-88190-A-9-A
Client ID: DG-G3S--9.5-10
Sample Type: Client
Inject. Date: 27-Aug-2018 22:03:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88190-A-9
Misc. Info.: HP-4
Operator ID: SF Instrument ID: HP4

Method: \\ChromNA\Pleasanton\ChromData\HP4\20180827-53503.b\8260W_LL_GRO_HP4.m
Limit Group: 8260B
Last Update: 28-Aug-2018 07:14:06 Calib Date: 26-Jul-2018 01:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D

Column 1 : DB-VRX (250.00 mm) Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: medinaj Date: 28-Aug-2018 09:16:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 6 1,2-Dichloroethane-d4 (Surr)	7.50	8.16	108.85
$ 8 Toluene-d8 (Surr)	7.50	6.99	93.15
$ 9 4-Bromofluorobenzene	7.50	6.57	87.61
$ 10 1,2-Dichlorobenzene-d4	0.0	0	0.00

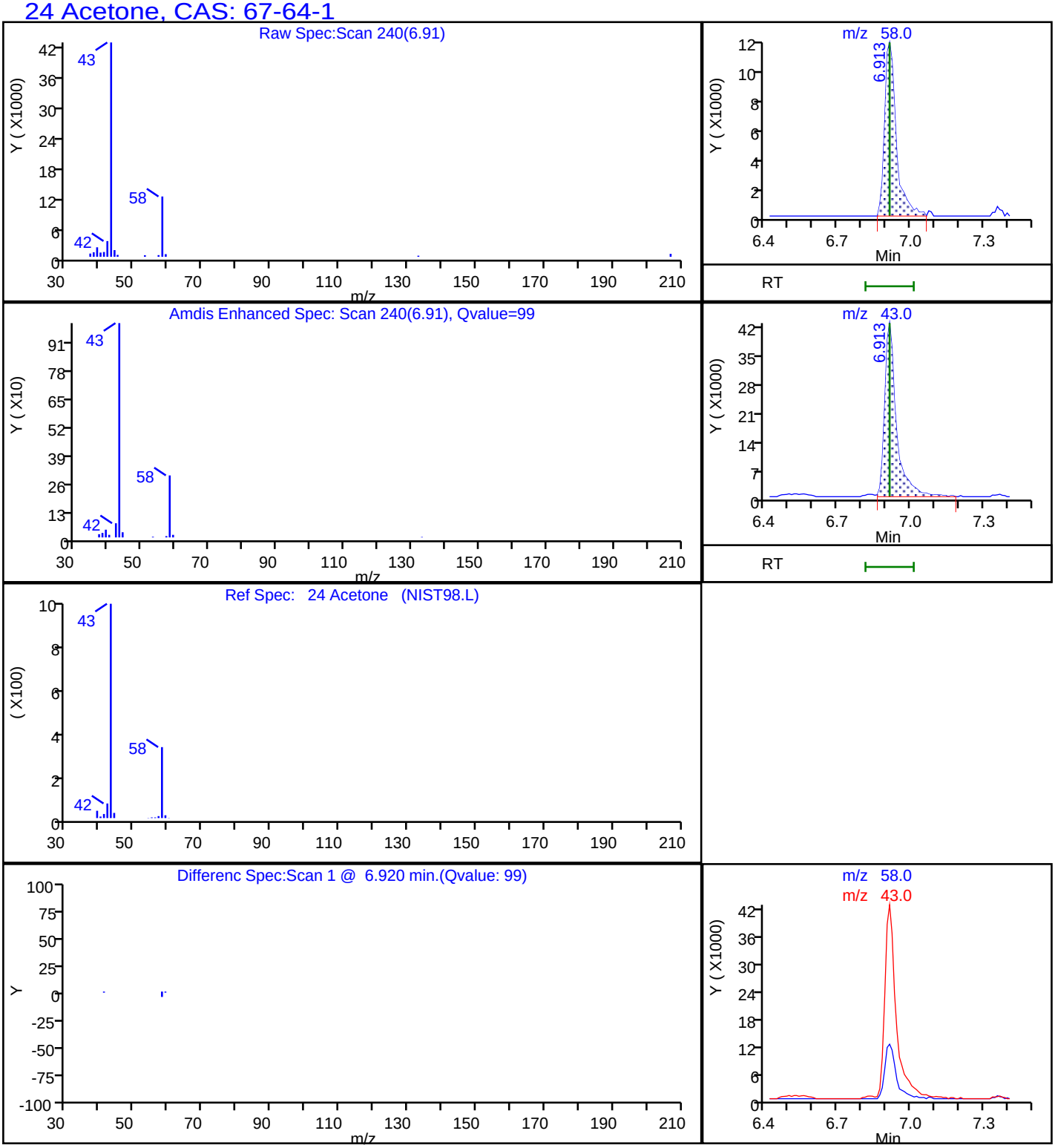
Report Date: 28-Aug-2018 09:16:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180827-53503.b\08271829.D

Injection Date:	27-Aug-2018 22:03:30	Instrument ID:	HP4		
Lims ID:	720-88190-A-9-A	Lab Sample ID:	720-88190-9		
Client ID:	DG-G3S--9.5-10				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1



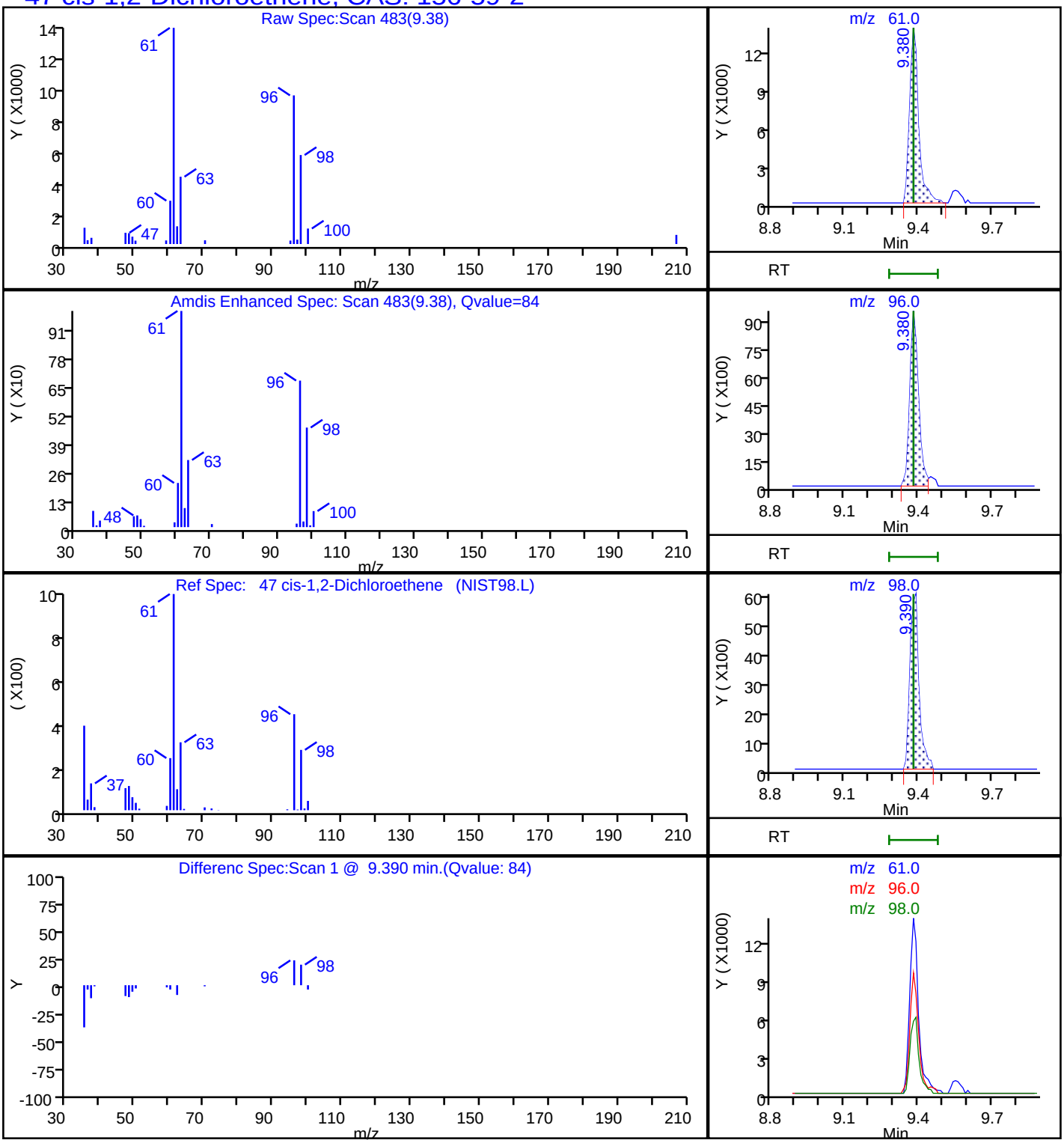
Report Date: 28-Aug-2018 09:16:34 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180827-53503.b\08271829.D

Injection Date:	27-Aug-2018 22:03:30	Instrument ID:	HP4		
Lims ID:	720-88190-A-9-A	Lab Sample ID:	720-88190-9		
Client ID:	DG-G3S--9.5-10				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

47 cis-1,2-Dichloroethene, CAS: 156-59-2

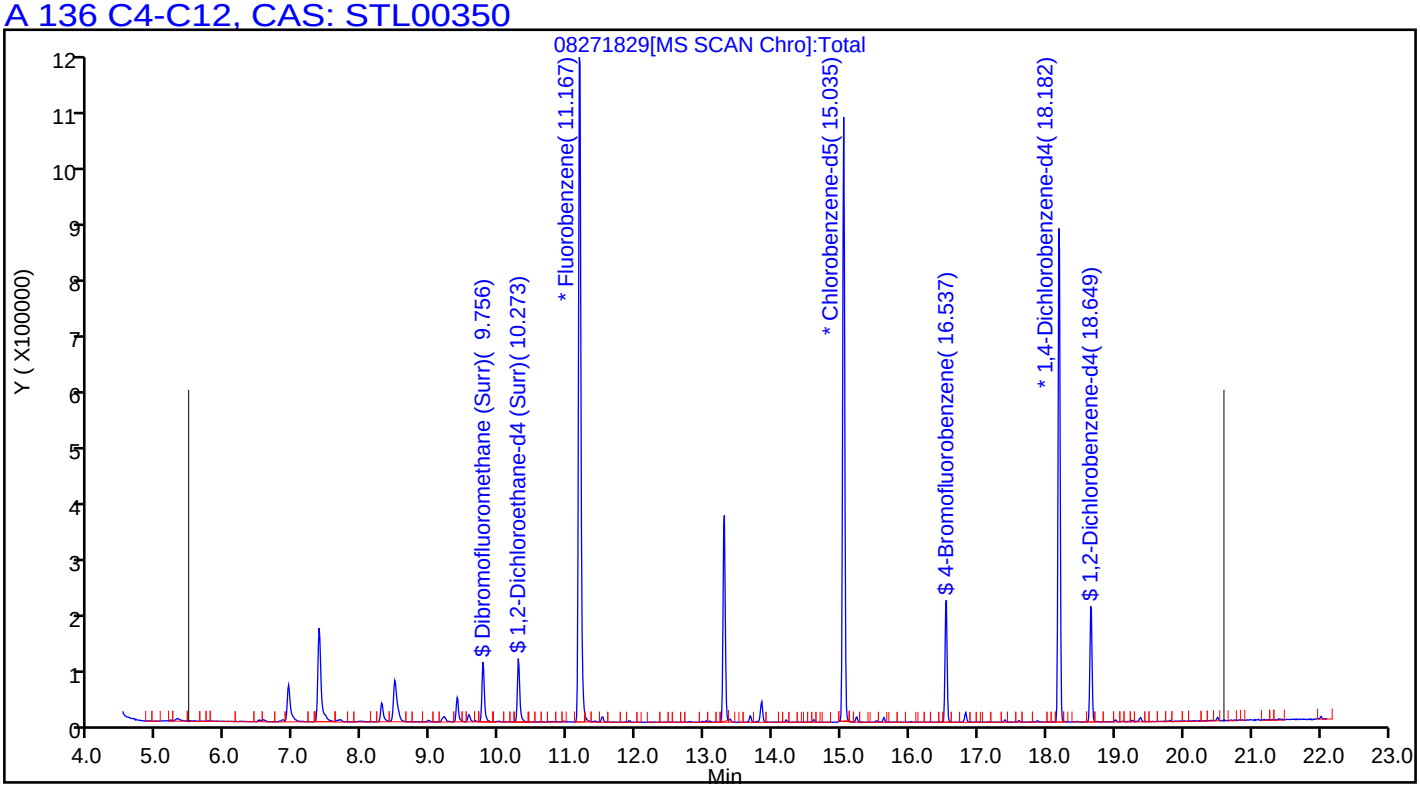


Report Date: 28-Aug-2018 09:16:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180827-53503.b\08271829.D				
Injection Date:	27-Aug-2018 22:03:30	Instrument ID:	HP4		
Lims ID:	720-88190-A-9-A	Lab Sample ID:	720-88190-9		
Client ID:	DG-G3S--9.5-10				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

A 136 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-H3S-0.5-1 Lab Sample ID: 720-88190-10

Matrix: Solid Lab File ID: 08281814.D

Analysis Method: 8260B Date Collected: 08/21/2018 16:45

Sample wt/vol: 5.825(g) Date Analyzed: 08/28/2018 14:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250345 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.3	1.0
67-64-1	Acetone	57		43	33
71-43-2	Benzene	ND		4.3	0.56
75-27-4	Dichlorobromomethane	ND		4.3	0.62
108-86-1	Bromobenzene	ND	*	4.3	0.68
74-97-5	Chlorobromomethane	ND		17	0.62
75-25-2	Bromoform	ND		4.3	1.7
74-83-9	Bromomethane	ND		8.6	0.68
78-93-3	2-Butanone (MEK)	ND		43	18
104-51-8	n-Butylbenzene	ND	*	4.3	0.86
135-98-8	sec-Butylbenzene	ND	*	4.3	0.62
98-06-6	tert-Butylbenzene	ND	*	4.3	0.63
75-15-0	Carbon disulfide	ND		4.3	1.7
56-23-5	Carbon tetrachloride	ND		4.3	0.53
108-90-7	Chlorobenzene	ND		4.3	0.59
75-00-3	Chloroethane	ND		8.6	0.48
67-66-3	Chloroform	ND		4.3	0.57
74-87-3	Chloromethane	ND		8.6	0.68
95-49-8	2-Chlorotoluene	ND	*	4.3	0.56
106-43-4	4-Chlorotoluene	ND	*	4.3	0.58
124-48-1	Chlorodibromomethane	ND		4.3	0.61
95-50-1	1,2-Dichlorobenzene	ND	*	4.3	0.58
541-73-1	1,3-Dichlorobenzene	ND	*	4.3	0.62
106-46-7	1,4-Dichlorobenzene	ND	*	4.3	0.61
142-28-9	1,3-Dichloropropane	ND		4.3	0.63
563-58-6	1,1-Dichloropropene	ND		4.3	0.59
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	8.6	1.5
106-93-4	Ethylene Dibromide	ND		4.3	1.2
74-95-3	Dibromomethane	ND		8.6	0.74
75-71-8	Dichlorodifluoromethane	ND		8.6	0.68
75-34-3	1,1-Dichloroethane	ND		4.3	0.58
107-06-2	1,2-Dichloroethane	ND		4.3	0.65
75-35-4	1,1-Dichloroethene	ND		4.3	0.53
156-59-2	cis-1,2-Dichloroethene	ND		4.3	0.58
156-60-5	trans-1,2-Dichloroethene	ND		4.3	0.64
78-87-5	1,2-Dichloropropane	ND		4.3	0.54

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-H3S-0.5-1 Lab Sample ID: 720-88190-10

Matrix: Solid Lab File ID: 08281814.D

Analysis Method: 8260B Date Collected: 08/21/2018 16:45

Sample wt/vol: 5.825(g) Date Analyzed: 08/28/2018 14:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250345 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.3	0.59
10061-02-6	trans-1,3-Dichloropropene	ND		4.3	0.58
100-41-4	Ethylbenzene	ND		4.3	0.64
87-68-3	Hexachlorobutadiene	ND	*	4.3	0.77
591-78-6	2-Hexanone	ND		43	8.6
98-82-8	Isopropylbenzene	ND		4.3	0.58
99-87-6	4-Isopropyltoluene	ND	*	4.3	2.1
75-09-2	Methylene Chloride	ND		8.6	4.8
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		43	8.6
91-20-3	Naphthalene	ND	*	8.6	1.3
103-65-1	N-Propylbenzene	ND	*	4.3	0.57
100-42-5	Styrene	ND		4.3	0.54
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.3	0.65
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.3	0.64
127-18-4	Tetrachloroethene	ND		4.3	0.58
108-88-3	Toluene	ND		4.3	0.61
87-61-6	1,2,3-Trichlorobenzene	ND	*	4.3	0.64
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.3	0.61
71-55-6	1,1,1-Trichloroethane	ND		4.3	0.52
79-00-5	1,1,2-Trichloroethane	ND		4.3	0.60
79-01-6	Trichloroethene	ND		4.3	0.54
75-69-4	Trichlorofluoromethane	ND		4.3	0.48
96-18-4	1,2,3-Trichloropropane	ND	*	4.3	0.66
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.3	1.8
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.3	1.4
108-67-8	1,3,5-Trimethylbenzene	ND	*	4.3	0.56
108-05-4	Vinyl acetate	ND		17	4.3
75-01-4	Vinyl chloride	ND		4.3	0.63
1330-20-7	Xylenes, Total	ND		4.3	1.0
594-20-7	2,2-Dichloropropane	ND		4.3	1.7
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		210	86

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-H3S-0.5-1 Lab Sample ID: 720-88190-10

Matrix: Solid Lab File ID: 08281814.D

Analysis Method: 8260B Date Collected: 08/21/2018 16:45

Sample wt/vol: 5.825(g) Date Analyzed: 08/28/2018 14:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250345 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	86		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		60-140
2037-26-5	Toluene-d8 (Surr)	96		58-140

Report Date: 29-Aug-2018 09:33:15 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281814.D
Lims ID: 720-88190-B-10-A RR
Client ID:
Sample Type: Client
Inject. Date: 28-Aug-2018 14:46:30 ALS Bottle#: 13 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88190-B-10 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 28-Aug-2018 18:13:46 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:33:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.090	7.093	-0.003	98	195845	250.0	
* 2 Fluorobenzene	96	10.897	10.901	-0.004	98	895759	25.0	
* 4 Chlorobenzene-d5	117	14.745	14.738	0.007	86	553249	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.884	17.878	0.006	94	208783	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.490	9.483	0.007	55	63480	7.80	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.006	10.000	0.007	98	67934	8.52	
$ 10 Toluene-d8 (Surr)	98	13.004	13.007	-0.003	92	231005	7.17	
$ 11 4-Bromofluorobenzene	95	16.234	16.238	0.007	87	64753	6.44	
$ 12 1,2-Dichlorobenzene-d4	152	18.340	18.354	-0.003	74	45747	5.94	
28 Acetone	58	6.644	6.638	0.006	95	18256	32.9	
34 Methylene Chloride	84	7.353	7.357	-0.003	29	1245	0.1547	
29 Pentane	43	6.644	6.675	-0.031	37	60962	NR	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	429185	5.76	
A 153 C6-C8	1	11.142	(8.825-13.459)		0	108630	1.46	
A 154 C6-C9	1	12.099	(8.825-15.373)		0	156154	2.09	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	469851	6.30	
A 119 C6-C10	1	12.980	(8.825-17.135)		0	161806	2.17	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	451512	6.05	
A 120 C6-C12	1	14.540	(8.825-20.255)		0	202472	2.72	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	54543	0.7314	
A 121 C7-C12	1	15.719	(11.184-20.255)		0	141132	1.89	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
s - Failed ISTD Recovery Test

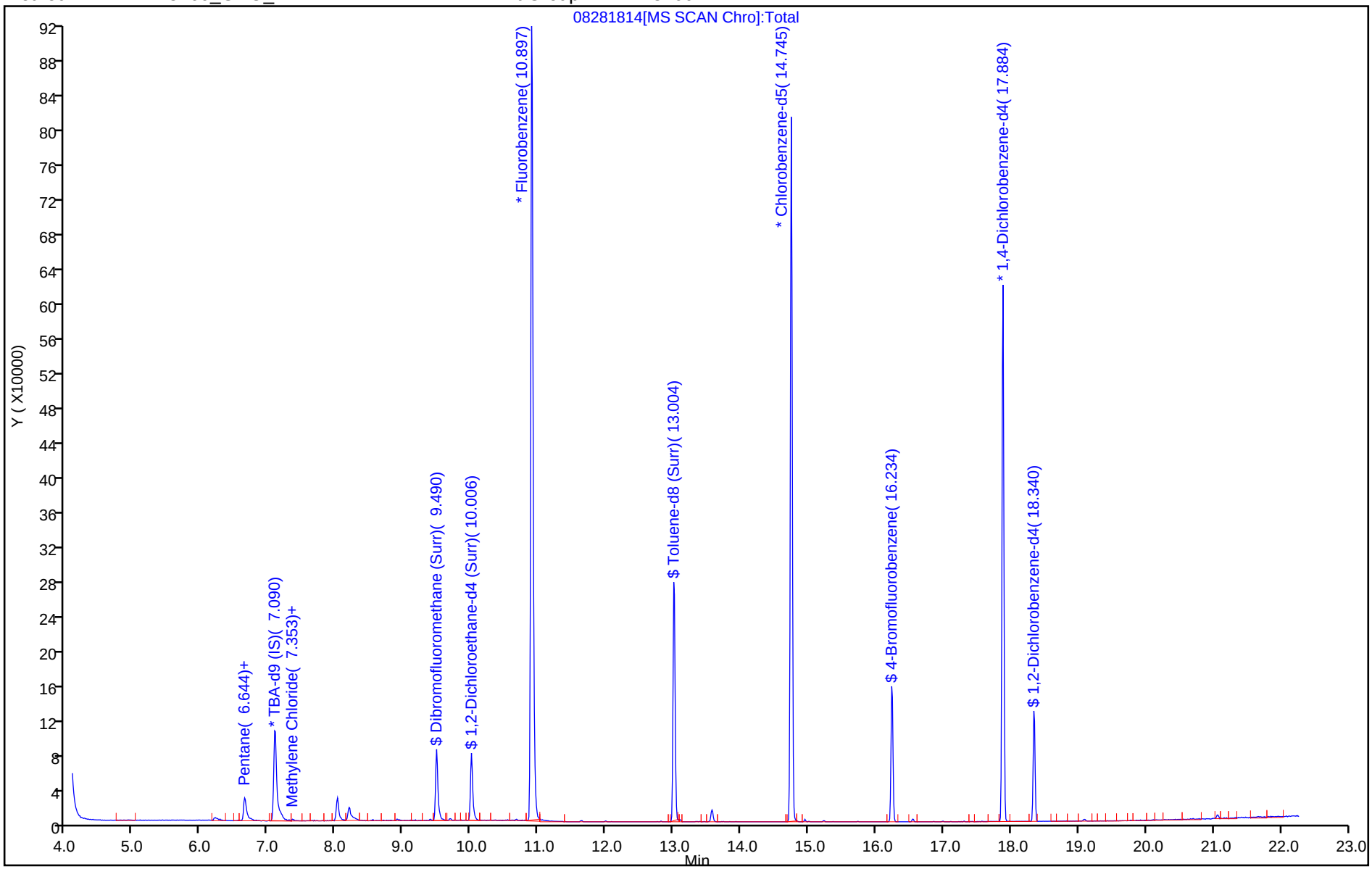
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:33:15 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281814.D				
Injection Date:	28-Aug-2018 14:46:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88190-B-10-A RR	Lab Sample ID:	Client 720-250345/16-A	Worklist Smp#:	16
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281814.D
Lims ID: 720-88190-B-10-A RR
Client ID:
Sample Type: Client
Inject. Date: 28-Aug-2018 14:46:30 ALS Bottle#: 13 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88190-B-10 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 28-Aug-2018 18:13:46 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:33:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	7.80	104.06
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.52	113.55
$ 10 Toluene-d8 (Surr)	7.50	7.17	95.54
$ 11 4-Bromofluorobenzene	7.50	6.44	85.84
$ 12 1,2-Dichlorobenzene-d4	6.00	5.94	98.93

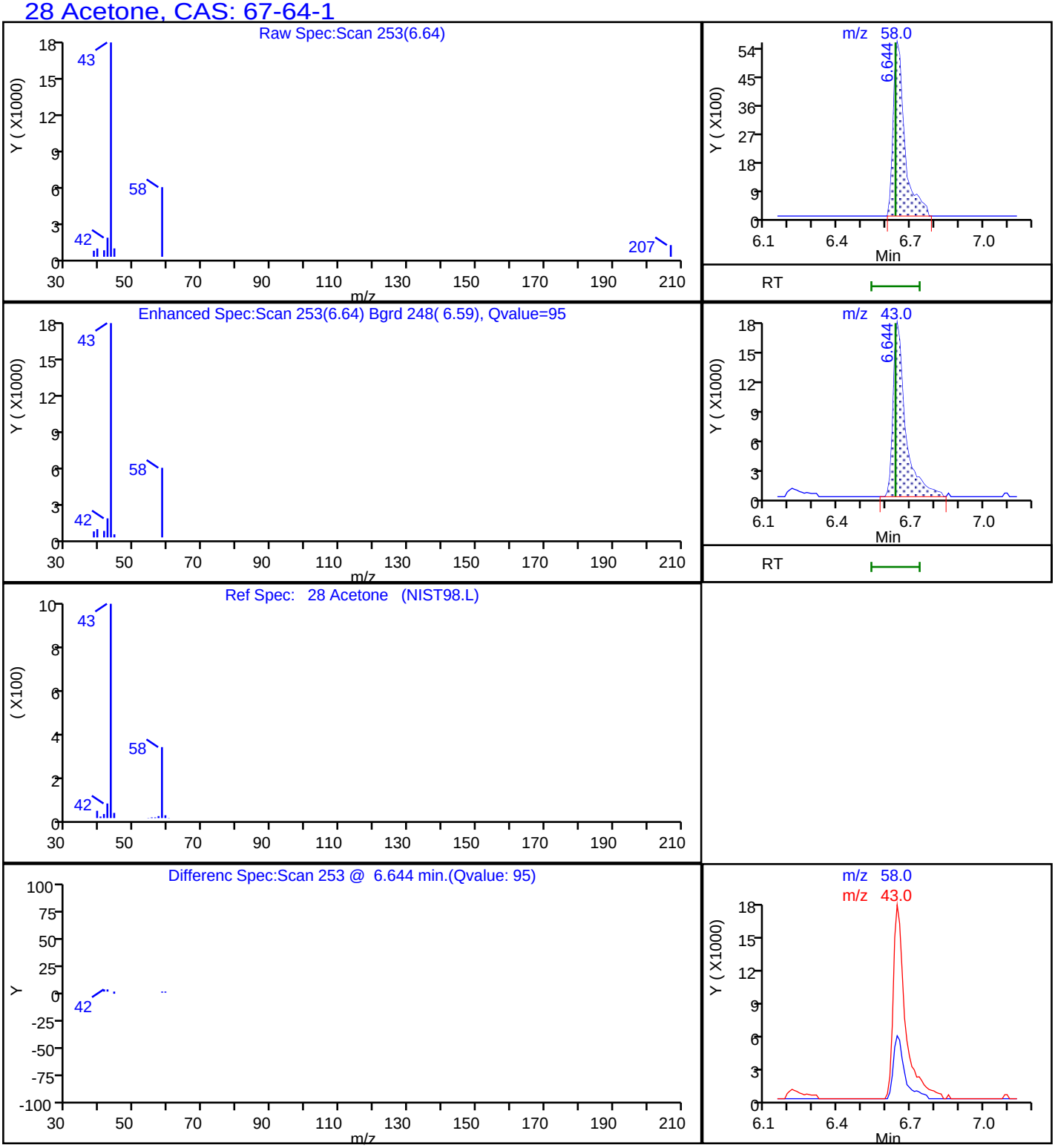
Report Date: 29-Aug-2018 09:33:15 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281814.D

Injection Date:	28-Aug-2018 14:46:30	Instrument ID:	HP7		
Lims ID:	720-88190-B-10-A RR	Lab Sample ID:	Client 720-250345/16-A		
Client ID:					
Operator ID:	SF	ALS Bottle#:	13	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



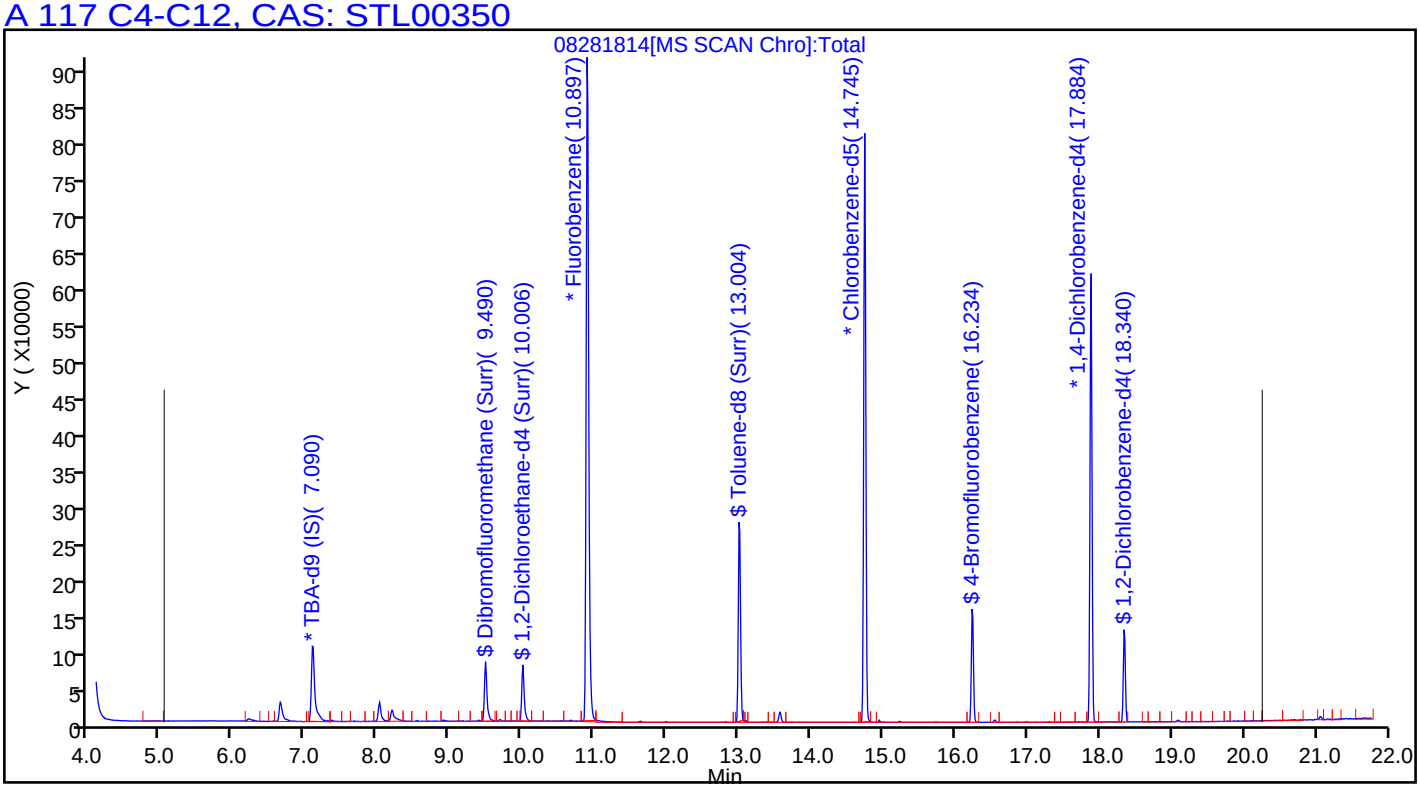
Report Date: 29-Aug-2018 09:33:15 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281814.D

Injection Date:	28-Aug-2018 14:46:30	Instrument ID:	HP7		
Lims ID:	720-88190-B-10-A RR	Lab Sample ID:	Client 720-250345/16-A		
Client ID:					
Operator ID:	SF	ALS Bottle#:	13	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-H3S-3.5-4 Lab Sample ID: 720-88190-11

Matrix: Solid Lab File ID: 08281815.D

Analysis Method: 8260B Date Collected: 08/21/2018 16:45

Sample wt/vol: 6.224(g) Date Analyzed: 08/28/2018 15:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250345 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.0	0.96
67-64-1	Acetone	ND		40	31
71-43-2	Benzene	ND		4.0	0.52
75-27-4	Dichlorobromomethane	ND		4.0	0.58
108-86-1	Bromobenzene	ND		4.0	0.63
74-97-5	Chlorobromomethane	ND		16	0.58
75-25-2	Bromoform	ND		4.0	1.6
74-83-9	Bromomethane	ND		8.0	0.63
78-93-3	2-Butanone (MEK)	ND		40	17
104-51-8	n-Butylbenzene	ND		4.0	0.80
135-98-8	sec-Butylbenzene	ND		4.0	0.58
98-06-6	tert-Butylbenzene	ND		4.0	0.59
75-15-0	Carbon disulfide	ND		4.0	1.6
56-23-5	Carbon tetrachloride	ND		4.0	0.50
108-90-7	Chlorobenzene	ND		4.0	0.55
75-00-3	Chloroethane	ND		8.0	0.45
67-66-3	Chloroform	ND		4.0	0.53
74-87-3	Chloromethane	ND		8.0	0.63
95-49-8	2-Chlorotoluene	ND		4.0	0.52
106-43-4	4-Chlorotoluene	ND		4.0	0.55
124-48-1	Chlorodibromomethane	ND		4.0	0.57
95-50-1	1,2-Dichlorobenzene	ND		4.0	0.55
541-73-1	1,3-Dichlorobenzene	ND		4.0	0.58
106-46-7	1,4-Dichlorobenzene	ND		4.0	0.57
142-28-9	1,3-Dichloropropane	ND		4.0	0.59
563-58-6	1,1-Dichloropropene	ND		4.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.0	1.4
106-93-4	Ethylene Dibromide	ND		4.0	1.1
74-95-3	Dibromomethane	ND		8.0	0.69
75-71-8	Dichlorodifluoromethane	ND		8.0	0.63
75-34-3	1,1-Dichloroethane	ND		4.0	0.55
107-06-2	1,2-Dichloroethane	ND		4.0	0.61
75-35-4	1,1-Dichloroethene	ND		4.0	0.50
156-59-2	cis-1,2-Dichloroethene	ND		4.0	0.55
156-60-5	trans-1,2-Dichloroethene	ND		4.0	0.60
78-87-5	1,2-Dichloropropane	ND		4.0	0.51

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-H3S-3.5-4 Lab Sample ID: 720-88190-11

Matrix: Solid Lab File ID: 08281815.D

Analysis Method: 8260B Date Collected: 08/21/2018 16:45

Sample wt/vol: 6.224(g) Date Analyzed: 08/28/2018 15:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250345 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.0	0.55
10061-02-6	trans-1,3-Dichloropropene	ND		4.0	0.54
100-41-4	Ethylbenzene	ND		4.0	0.60
87-68-3	Hexachlorobutadiene	ND		4.0	0.72
591-78-6	2-Hexanone	ND		40	8.0
98-82-8	Isopropylbenzene	ND		4.0	0.55
99-87-6	4-Isopropyltoluene	ND		4.0	2.0
75-09-2	Methylene Chloride	ND		8.0	4.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		40	8.0
91-20-3	Naphthalene	ND		8.0	1.2
103-65-1	N-Propylbenzene	ND		4.0	0.53
100-42-5	Styrene	ND		4.0	0.51
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.0	0.61
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.0	0.60
127-18-4	Tetrachloroethene	ND		4.0	0.54
108-88-3	Toluene	ND		4.0	0.57
87-61-6	1,2,3-Trichlorobenzene	ND		4.0	0.59
120-82-1	1,2,4-Trichlorobenzene	ND		4.0	0.57
71-55-6	1,1,1-Trichloroethane	ND		4.0	0.49
79-00-5	1,1,2-Trichloroethane	ND		4.0	0.56
79-01-6	Trichloroethene	ND		4.0	0.51
75-69-4	Trichlorofluoromethane	ND		4.0	0.45
96-18-4	1,2,3-Trichloropropane	ND		4.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.7
95-63-6	1,2,4-Trimethylbenzene	ND		4.0	1.3
108-67-8	1,3,5-Trimethylbenzene	ND		4.0	0.52
108-05-4	Vinyl acetate	ND		16	4.0
75-01-4	Vinyl chloride	ND		4.0	0.59
1330-20-7	Xylenes, Total	ND		4.0	0.98
594-20-7	2,2-Dichloropropane	ND		4.0	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		200	80

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-H3S-3.5-4 Lab Sample ID: 720-88190-11

Matrix: Solid Lab File ID: 08281815.D

Analysis Method: 8260B Date Collected: 08/21/2018 16:45

Sample wt/vol: 6.224(g) Date Analyzed: 08/28/2018 15:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250345 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	94		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		60-140
2037-26-5	Toluene-d8 (Surr)	99		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281815.D
Lims ID: 720-88190-B-11-A RR
Client ID:
Sample Type: Client
Inject. Date: 28-Aug-2018 15:16:30 ALS Bottle#: 14 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88190-B-11 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:34:00 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:34:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.093	7.093	0.000	98	179533	250.0	
* 2 Fluorobenzene	96	10.900	10.901	-0.001	98	911589	25.0	
* 4 Chlorobenzene-d5	117	14.748	14.738	0.010	86	607748	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.887	17.878	0.009	94	272524	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.492	9.483	0.009	54	65207	7.88	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.009	10.000	0.010	98	67485	8.31	
$ 10 Toluene-d8 (Surr)	98	13.006	13.007	-0.001	92	244610	7.46	
$ 11 4-Bromofluorobenzene	95	16.236	16.238	0.009	90	77625	7.03	
$ 12 1,2-Dichlorobenzene-d4	152	18.343	18.354	0.000	80	62604	6.22	
28 Acetone	58	6.657	6.638	0.019	83	1947	3.45	
34 Methylene Chloride	84	7.356	7.357	0.000	48	1481	0.1809	
59 Benzene	78	10.677	10.668	0.009	1	1245	0.0350	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	660944	8.71	
A 153 C6-C8	1	11.142	(8.825-13.459)		0	214640	2.83	
A 154 C6-C9	1	12.099	(8.825-15.373)		0	343944	4.53	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	982681	12.9	
A 119 C6-C10	1	12.980	(8.825-17.135)		0	496263	6.54	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	936876	12.3	
A 120 C6-C12	1	14.540	(8.825-20.255)		0	818000	10.8	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	288747	3.80	
A 121 C7-C12	1	15.719	(11.184-20.255)		0	724112	9.54	

Reagents:

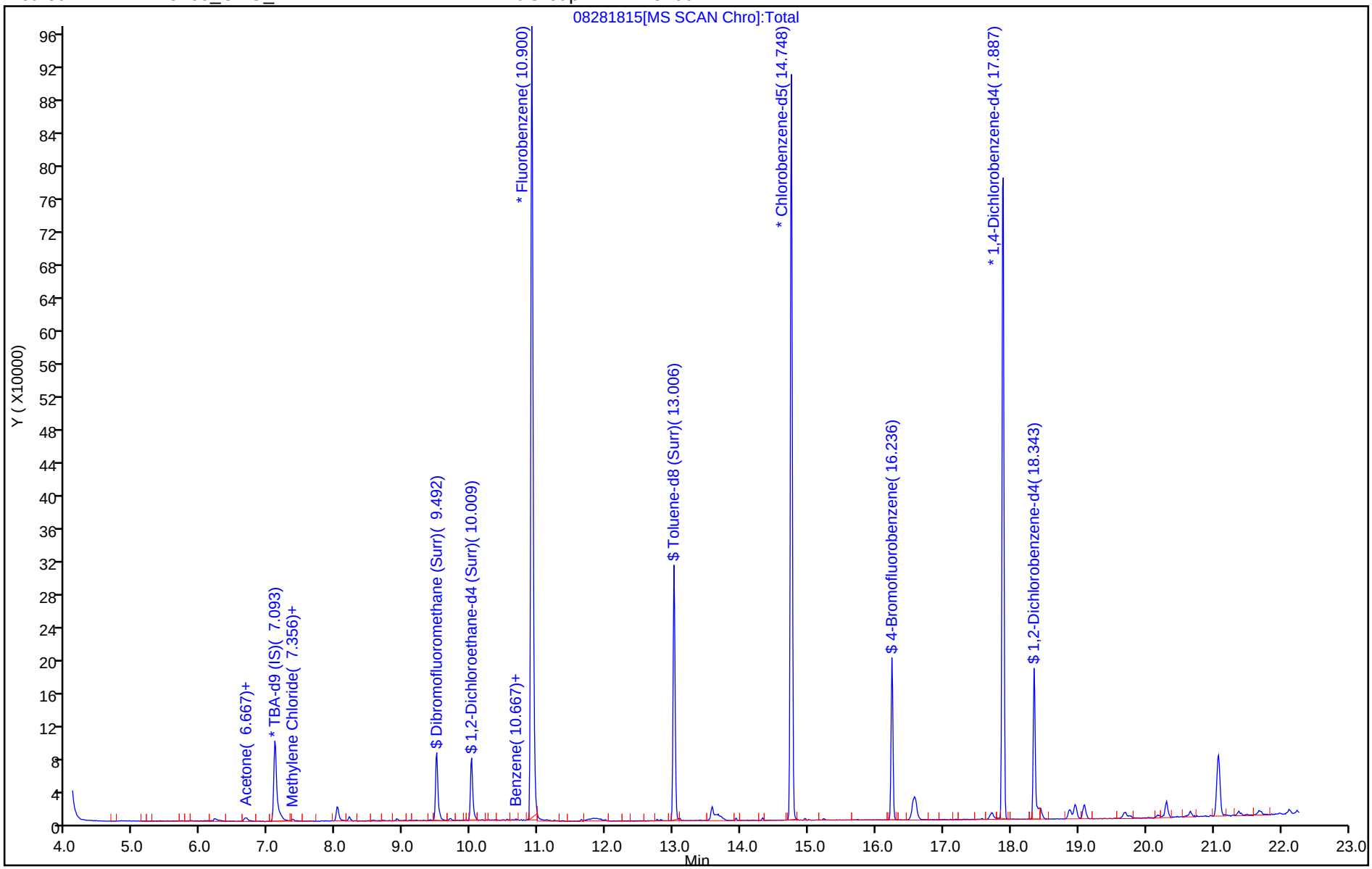
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:34:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281815.D

Injection Date:	28-Aug-2018 15:16:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88190-B-11-A RR	Lab Sample ID:	Client 720-250345/17-A	Worklist Smp#:	17
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281815.D
Lims ID: 720-88190-B-11-A RR
Client ID:
Sample Type: Client
Inject. Date: 28-Aug-2018 15:16:30 ALS Bottle#: 14 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88190-B-11 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:34:00 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:34:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	7.88	105.04
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.31	110.84
$ 10 Toluene-d8 (Surr)	7.50	7.46	99.41
$ 11 4-Bromofluorobenzene	7.50	7.03	93.67
$ 12 1,2-Dichlorobenzene-d4	6.00	6.22	103.72

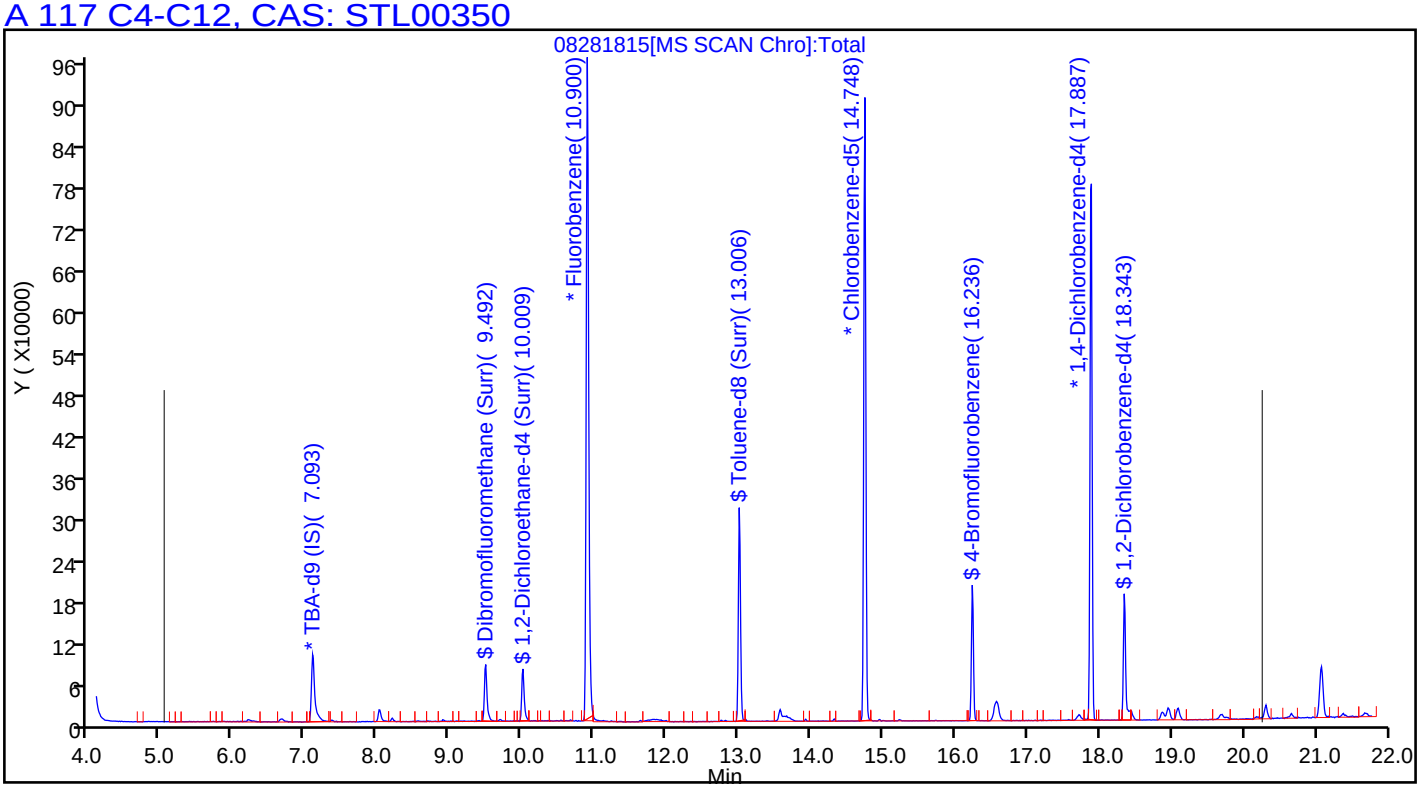
Report Date: 29-Aug-2018 09:34:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281815.D

Injection Date:	28-Aug-2018 15:16:30	Instrument ID:	HP7		
Lims ID:	720-88190-B-11-A RR	Lab Sample ID:	Client 720-250345/17-A		
Client ID:					
Operator ID:	SF	ALS Bottle#:	14	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



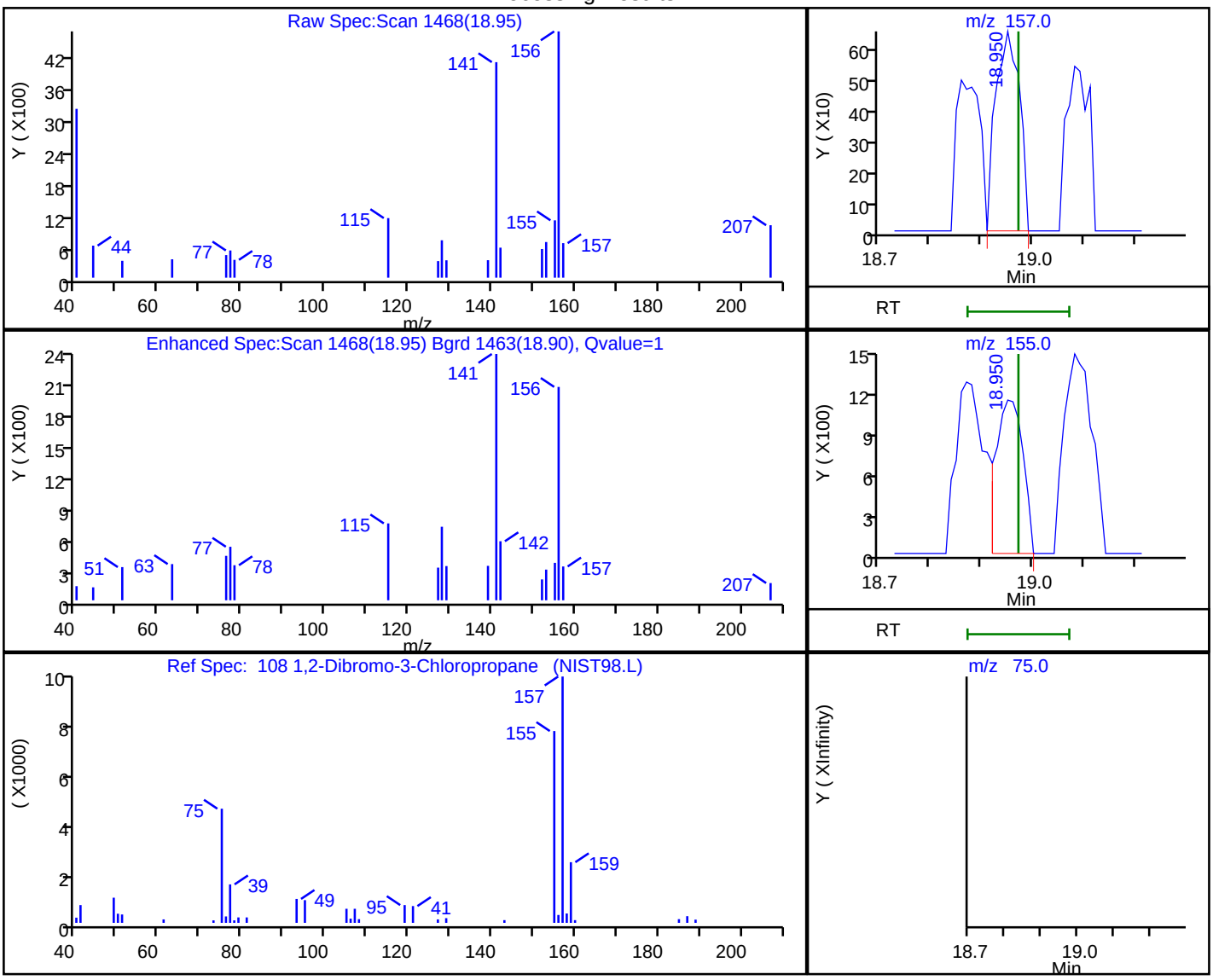
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281815.D				
Injection Date:	28-Aug-2018 15:16:30	Instrument ID:	HP7		
Lims ID:	720-88190-B-11-A RR	Lab Sample ID:	Client 720-250345/17-A		
Client ID:					
Operator ID:	SF	ALS Bottle#:	14	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

108 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Processing Results



RT	Mass	Response	Amount
18.95	157.00	2110	1.708430
18.95	155.00	3995	
18.97	75.00	0	

Reviewer: chaijita, 29-Aug-2018 09:33:23

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-H3S-9.5-10 Lab Sample ID: 720-88190-12

Matrix: Solid Lab File ID: 08281816.D

Analysis Method: 8260B Date Collected: 08/21/2018 16:45

Sample wt/vol: 7.089(g) Date Analyzed: 08/28/2018 15:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250345 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.5	0.85
67-64-1	Acetone	66		35	27
71-43-2	Benzene	ND		3.5	0.46
75-27-4	Dichlorobromomethane	ND		3.5	0.51
108-86-1	Bromobenzene	ND	*	3.5	0.56
74-97-5	Chlorobromomethane	ND		14	0.51
75-25-2	Bromoform	ND	*	3.5	1.4
74-83-9	Bromomethane	ND		7.1	0.56
78-93-3	2-Butanone (MEK)	ND		35	15
104-51-8	n-Butylbenzene	ND	*	3.5	0.71
135-98-8	sec-Butylbenzene	ND	*	3.5	0.51
98-06-6	tert-Butylbenzene	ND	*	3.5	0.51
75-15-0	Carbon disulfide	14		3.5	1.4
56-23-5	Carbon tetrachloride	ND		3.5	0.44
108-90-7	Chlorobenzene	ND	*	3.5	0.49
75-00-3	Chloroethane	ND		7.1	0.39
67-66-3	Chloroform	ND		3.5	0.47
74-87-3	Chloromethane	ND		7.1	0.56
95-49-8	2-Chlorotoluene	ND	*	3.5	0.46
106-43-4	4-Chlorotoluene	ND	*	3.5	0.48
124-48-1	Chlorodibromomethane	ND		3.5	0.50
95-50-1	1,2-Dichlorobenzene	ND	*	3.5	0.48
541-73-1	1,3-Dichlorobenzene	ND	*	3.5	0.51
106-46-7	1,4-Dichlorobenzene	ND	*	3.5	0.50
142-28-9	1,3-Dichloropropane	ND		3.5	0.51
563-58-6	1,1-Dichloropropene	ND		3.5	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	7.1	1.2
106-93-4	Ethylene Dibromide	ND		3.5	1.0
74-95-3	Dibromomethane	ND		7.1	0.61
75-71-8	Dichlorodifluoromethane	ND		7.1	0.56
75-34-3	1,1-Dichloroethane	ND		3.5	0.48
107-06-2	1,2-Dichloroethane	ND		3.5	0.54
75-35-4	1,1-Dichloroethene	ND		3.5	0.44
156-59-2	cis-1,2-Dichloroethene	ND		3.5	0.48
156-60-5	trans-1,2-Dichloroethene	ND		3.5	0.53
78-87-5	1,2-Dichloropropane	ND		3.5	0.44

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-H3S-9.5-10 Lab Sample ID: 720-88190-12

Matrix: Solid Lab File ID: 08281816.D

Analysis Method: 8260B Date Collected: 08/21/2018 16:45

Sample wt/vol: 7.089(g) Date Analyzed: 08/28/2018 15:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250345 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.5	0.49
10061-02-6	trans-1,3-Dichloropropene	ND		3.5	0.47
100-41-4	Ethylbenzene	ND	*	3.5	0.53
87-68-3	Hexachlorobutadiene	ND	*	3.5	0.63
591-78-6	2-Hexanone	ND		35	7.1
98-82-8	Isopropylbenzene	ND	*	3.5	0.48
99-87-6	4-Isopropyltoluene	ND	*	3.5	1.8
75-09-2	Methylene Chloride	ND		7.1	3.9
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		35	7.1
91-20-3	Naphthalene	ND	*	7.1	1.1
103-65-1	N-Propylbenzene	ND	*	3.5	0.47
100-42-5	Styrene	ND	*	3.5	0.44
630-20-6	1,1,1,2-Tetrachloroethane	ND	*	3.5	0.54
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	3.5	0.53
127-18-4	Tetrachloroethene	ND		3.5	0.47
108-88-3	Toluene	ND	*	3.5	0.50
87-61-6	1,2,3-Trichlorobenzene	ND	*	3.5	0.52
120-82-1	1,2,4-Trichlorobenzene	ND	*	3.5	0.50
71-55-6	1,1,1-Trichloroethane	ND		3.5	0.43
79-00-5	1,1,2-Trichloroethane	ND		3.5	0.49
79-01-6	Trichloroethene	ND		3.5	0.44
75-69-4	Trichlorofluoromethane	ND		3.5	0.39
96-18-4	1,2,3-Trichloropropane	ND	*	3.5	0.54
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.5	1.5
95-63-6	1,2,4-Trimethylbenzene	ND	*	3.5	1.2
108-67-8	1,3,5-Trimethylbenzene	ND	*	3.5	0.46
108-05-4	Vinyl acetate	ND		14	3.5
75-01-4	Vinyl chloride	ND		3.5	0.51
1330-20-7	Xylenes, Total	ND		3.5	0.86
594-20-7	2,2-Dichloropropane	ND		3.5	1.4
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		180	71

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-H3S-9.5-10 Lab Sample ID: 720-88190-12

Matrix: Solid Lab File ID: 08281816.D

Analysis Method: 8260B Date Collected: 08/21/2018 16:45

Sample wt/vol: 7.089(g) Date Analyzed: 08/28/2018 15:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250345 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	84	*	45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	120		60-140
2037-26-5	Toluene-d8 (Surr)	93		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281816.D
Lims ID: 720-88190-B-12-A RR
Client ID:
Sample Type: Client
Inject. Date: 28-Aug-2018 15:47:30 ALS Bottle#: 15 Worklist Smp#: 18
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88190-B-12 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:34:00 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:44:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.093	7.093	0.000	99	200067	250.0	
* 2 Fluorobenzene	96	10.901	10.901	0.000	98	699922	25.0	
* 4 Chlorobenzene-d5	117	14.749	14.738	0.011	85	398838	25.0	s
* 5 1,4-Dichlorobenzene-d4	152	17.888	17.878	0.010	93	140310	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.493	9.483	0.010	54	50550	7.95	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.010	10.000	0.011	98	56269	9.03	
$ 10 Toluene-d8 (Surr)	98	13.007	13.007	0.000	92	175179	6.95	
$ 11 4-Bromofluorobenzene	95	16.237	16.238	0.010	88	45428	6.27	
$ 12 1,2-Dichlorobenzene-d4	152	18.343	18.354	0.000	66	33224	6.41	
28 Acetone	58	6.648	6.638	0.010	98	20288	46.8	
34 Methylene Chloride	84	7.357	7.357	0.001	0	643	0.1023	
37 Carbon disulfide	76	7.660	7.660	0.000	97	157876	9.95	
44 2-Butanone (MEK)	72	8.936	8.926	0.010	65	1328	2.43	
29 Pentane	43	6.648	6.675	-0.027	40	65555	NR	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	693328	11.9	
A 153 C6-C8	1	11.142	(8.825-13.459)		0	153672	2.64	
A 154 C6-C9	1	12.099	(8.825-15.373)		0	207070	3.55	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	902791	15.5	
A 119 C6-C10	1	12.980	(8.825-17.135)		0	223881	3.84	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	857541	14.7	
A 120 C6-C12	1	14.540	(8.825-20.255)		0	440138	7.55	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	72902	1.25	
A 121 C7-C12	1	15.719	(11.184-20.255)		0	352560	6.05	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

s - Failed ISTD Recovery Test

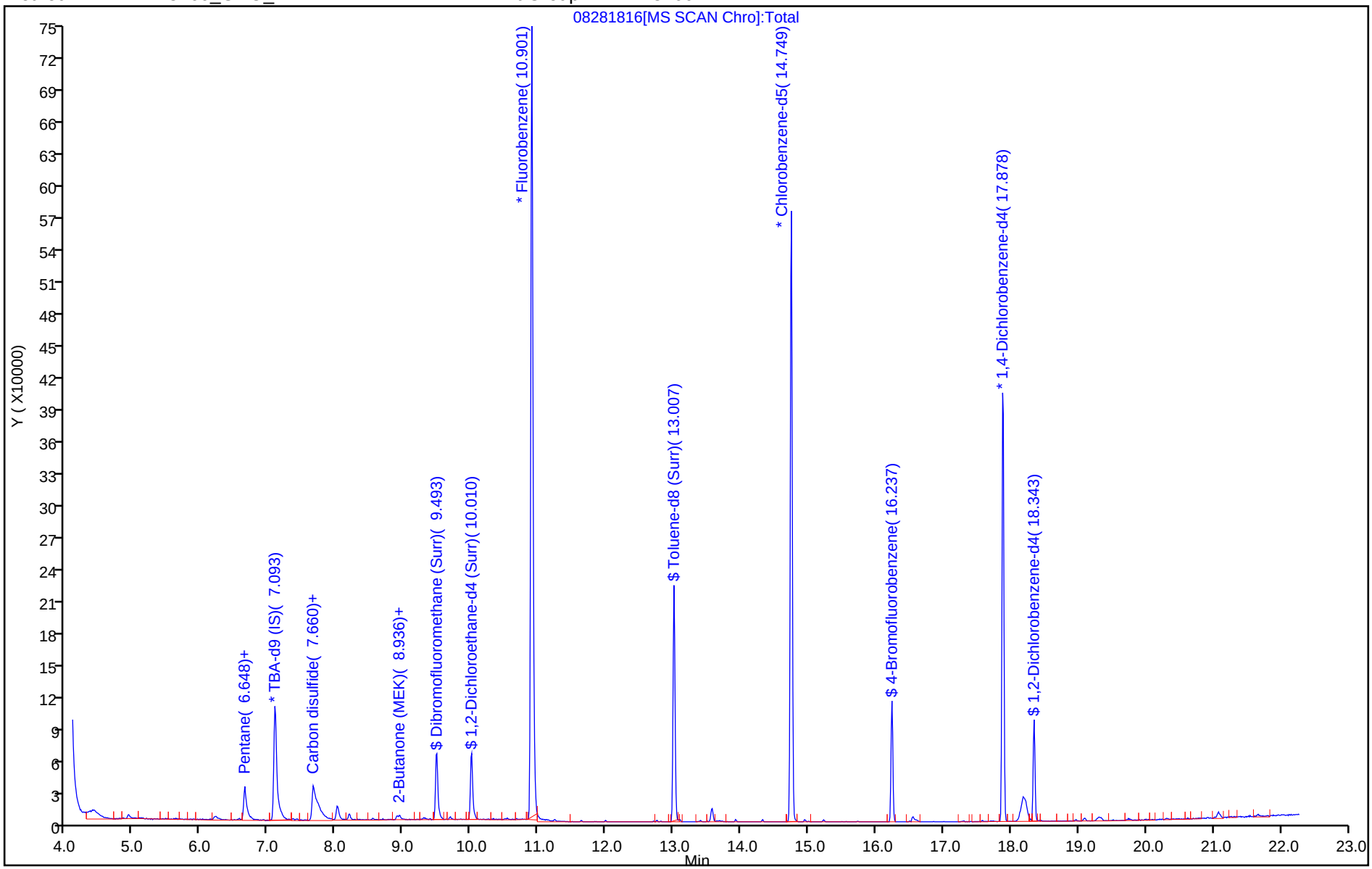
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:44:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281816.D				
Injection Date:	28-Aug-2018 15:47:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88190-B-12-A RR	Lab Sample ID:	Client 720-250345/18-A	Worklist Smp#:	18
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281816.D
Lims ID: 720-88190-B-12-A RR
Client ID:
Sample Type: Client
Inject. Date: 28-Aug-2018 15:47:30 ALS Bottle#: 15 Worklist Smp#: 18
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88190-B-12 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:34:00 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:44:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	7.95	106.05
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	9.03	120.37
$ 10 Toluene-d8 (Surr)	7.50	6.95	92.73
$ 11 4-Bromofluorobenzene	7.50	6.27	83.53
$ 12 1,2-Dichlorobenzene-d4	6.00	6.41	106.91

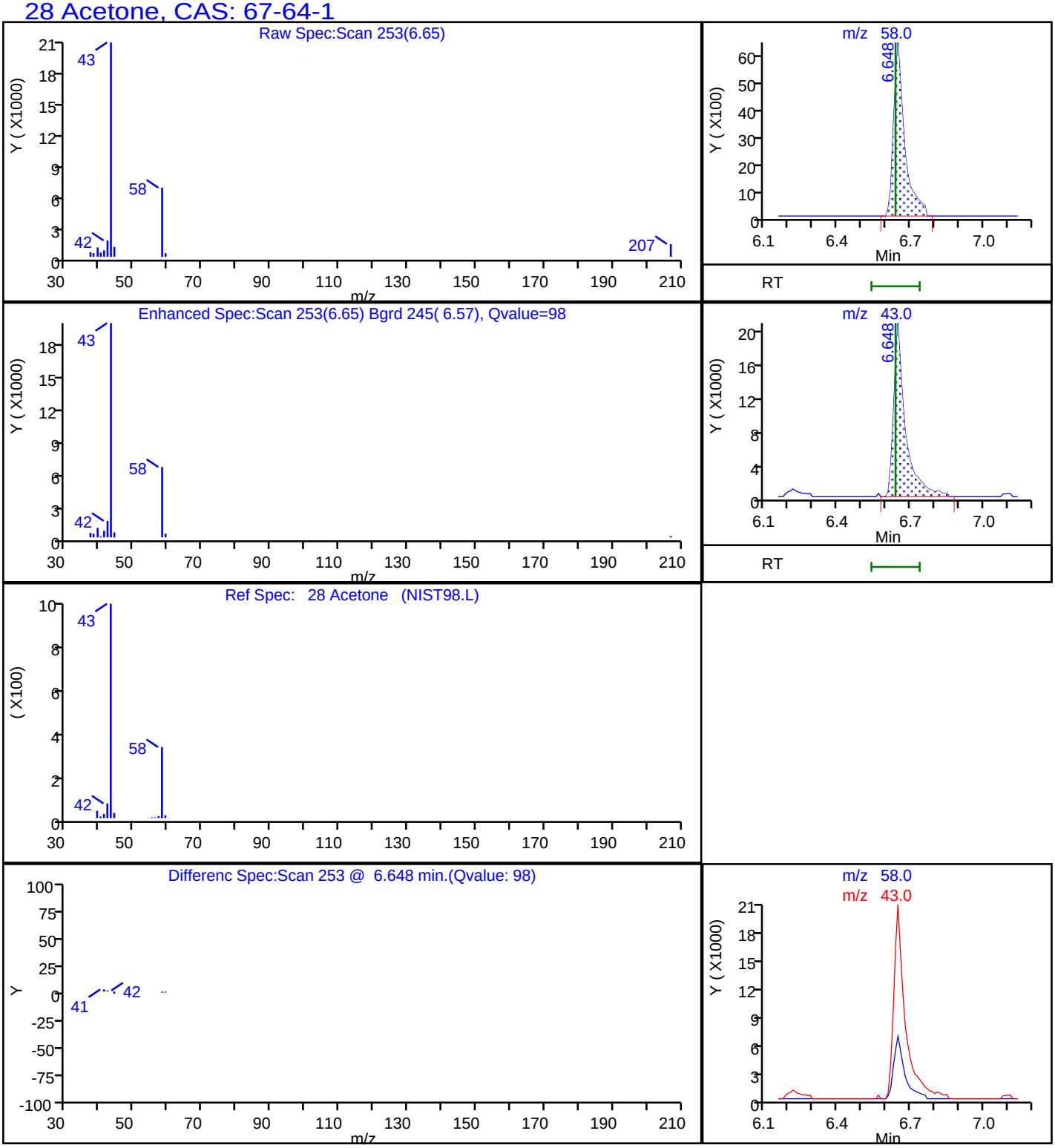
Report Date: 29-Aug-2018 09:44:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281816.D

Injection Date:	28-Aug-2018 15:47:30	Instrument ID:	HP7		
Lims ID:	720-88190-B-12-A RR	Lab Sample ID:	Client 720-250345/18-A		
Client ID:					
Operator ID:	SF	ALS Bottle#:	15	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



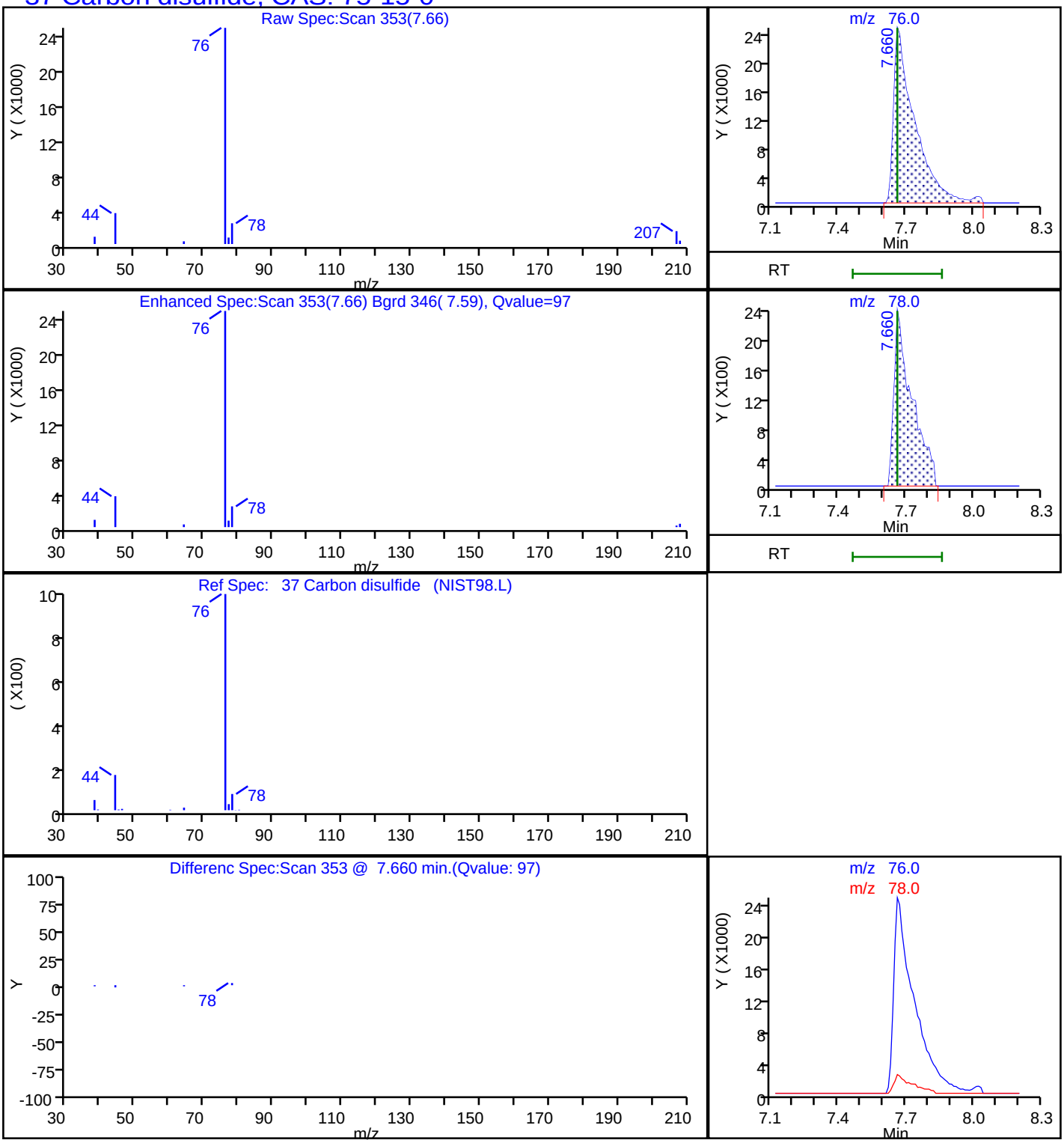
Report Date: 29-Aug-2018 09:44:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281816.D

Injection Date:	28-Aug-2018 15:47:30	Instrument ID:	HP7		
Lims ID:	720-88190-B-12-A RR	Lab Sample ID:	Client 720-250345/18-A		
Client ID:					
Operator ID:	SF	ALS Bottle#:	15	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

37 Carbon disulfide, CAS: 75-15-0



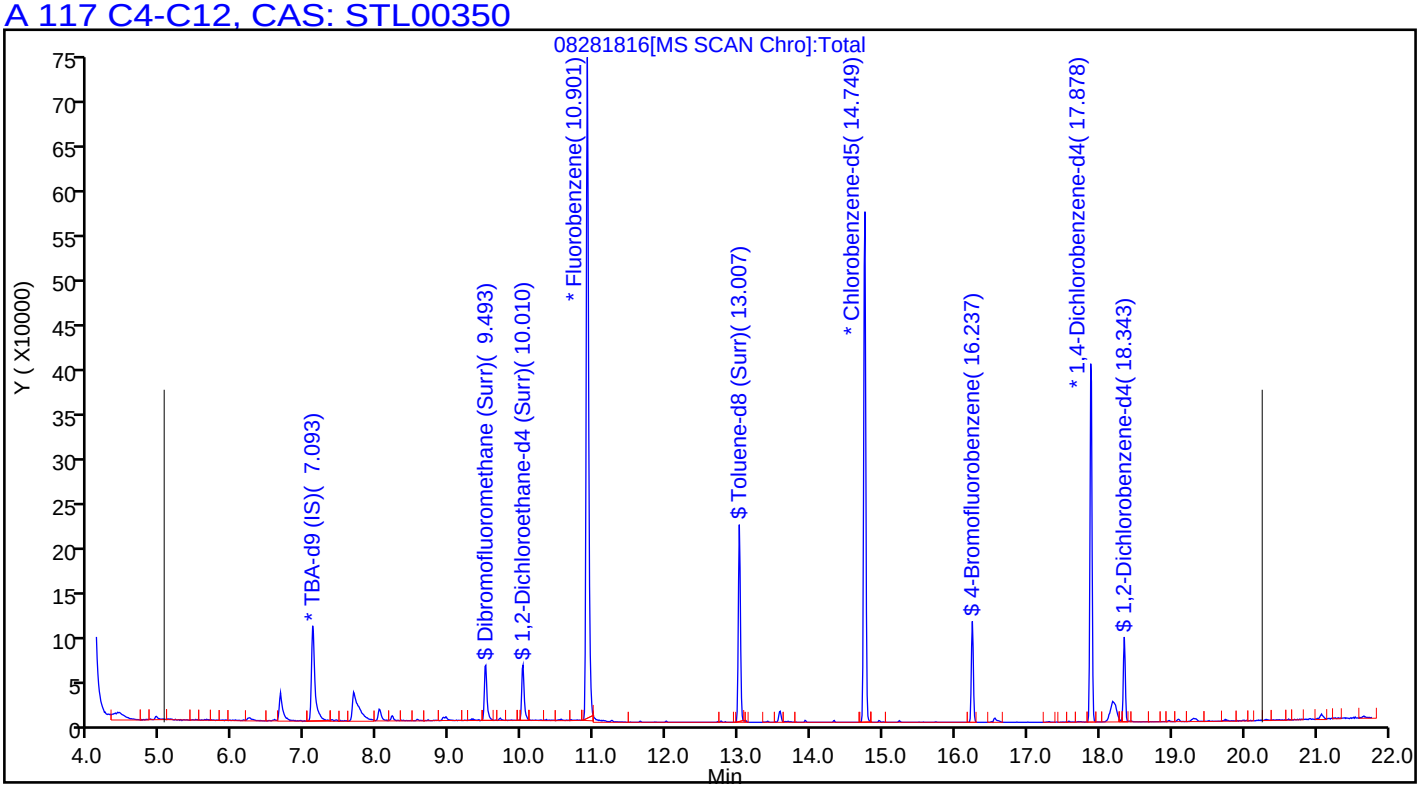
Report Date: 29-Aug-2018 09:44:42 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281816.D

Injection Date:	28-Aug-2018 15:47:30	Instrument ID:	HP7		
Lims ID:	720-88190-B-12-A RR	Lab Sample ID:	Client 720-250345/18-A		
Client ID:					
Operator ID:	SF	ALS Bottle#:	15	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-D3S-9.5-10 Lab Sample ID: 720-88190-15

Matrix: Solid Lab File ID: 08291814.D

Analysis Method: 8260B Date Collected: 08/21/2018 17:15

Sample wt/vol: 5.24(g) Date Analyzed: 08/29/2018 13:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250450 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.8	1.1
67-64-1	Acetone	ND		48	36
71-43-2	Benzene	ND		4.8	0.62
75-27-4	Dichlorobromomethane	ND		4.8	0.69
108-86-1	Bromobenzene	ND		4.8	0.75
74-97-5	Chlorobromomethane	ND		19	0.69
75-25-2	Bromoform	ND		4.8	1.9
74-83-9	Bromomethane	ND		9.5	0.75
78-93-3	2-Butanone (MEK)	ND		48	20
104-51-8	n-Butylbenzene	ND		4.8	0.95
135-98-8	sec-Butylbenzene	ND		4.8	0.69
98-06-6	tert-Butylbenzene	ND		4.8	0.70
75-15-0	Carbon disulfide	ND	*	4.8	1.9
56-23-5	Carbon tetrachloride	ND		4.8	0.59
108-90-7	Chlorobenzene	ND		4.8	0.66
75-00-3	Chloroethane	ND		9.5	0.53
67-66-3	Chloroform	ND		4.8	0.63
74-87-3	Chloromethane	ND		9.5	0.75
95-49-8	2-Chlorotoluene	ND		4.8	0.62
106-43-4	4-Chlorotoluene	ND		4.8	0.65
124-48-1	Chlorodibromomethane	ND		4.8	0.68
95-50-1	1,2-Dichlorobenzene	ND		4.8	0.65
541-73-1	1,3-Dichlorobenzene	ND		4.8	0.69
106-46-7	1,4-Dichlorobenzene	ND		4.8	0.68
142-28-9	1,3-Dichloropropane	ND		4.8	0.70
563-58-6	1,1-Dichloropropene	ND		4.8	0.66
96-12-8	1,2-Dibromo-3-Chloropropane	ND		9.5	1.6
106-93-4	Ethylene Dibromide	ND		4.8	1.4
74-95-3	Dibromomethane	ND		9.5	0.82
75-71-8	Dichlorodifluoromethane	ND		9.5	0.75
75-34-3	1,1-Dichloroethane	ND		4.8	0.65
107-06-2	1,2-Dichloroethane	ND		4.8	0.73
75-35-4	1,1-Dichloroethene	ND	*	4.8	0.59
156-59-2	cis-1,2-Dichloroethene	ND		4.8	0.65
156-60-5	trans-1,2-Dichloroethene	ND		4.8	0.72
78-87-5	1,2-Dichloropropane	ND		4.8	0.60

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-D3S-9.5-10 Lab Sample ID: 720-88190-15

Matrix: Solid Lab File ID: 08291814.D

Analysis Method: 8260B Date Collected: 08/21/2018 17:15

Sample wt/vol: 5.24(g) Date Analyzed: 08/29/2018 13:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250450 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.8	0.66
10061-02-6	trans-1,3-Dichloropropene	ND		4.8	0.64
100-41-4	Ethylbenzene	ND		4.8	0.72
87-68-3	Hexachlorobutadiene	ND		4.8	0.86
591-78-6	2-Hexanone	ND		48	9.5
98-82-8	Isopropylbenzene	ND		4.8	0.65
99-87-6	4-Isopropyltoluene	ND		4.8	2.4
75-09-2	Methylene Chloride	ND		9.5	5.3
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		48	9.5
91-20-3	Naphthalene	ND		9.5	1.4
103-65-1	N-Propylbenzene	ND		4.8	0.63
100-42-5	Styrene	ND		4.8	0.60
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.8	0.73
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.8	0.72
127-18-4	Tetrachloroethene	ND		4.8	0.64
108-88-3	Toluene	ND		4.8	0.68
87-61-6	1,2,3-Trichlorobenzene	ND		4.8	0.71
120-82-1	1,2,4-Trichlorobenzene	ND		4.8	0.68
71-55-6	1,1,1-Trichloroethane	ND		4.8	0.58
79-00-5	1,1,2-Trichloroethane	ND		4.8	0.67
79-01-6	Trichloroethene	ND		4.8	0.60
75-69-4	Trichlorofluoromethane	ND		4.8	0.53
96-18-4	1,2,3-Trichloropropane	ND		4.8	0.73
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.8	2.0
95-63-6	1,2,4-Trimethylbenzene	ND		4.8	1.6
108-67-8	1,3,5-Trimethylbenzene	ND		4.8	0.62
108-05-4	Vinyl acetate	ND		19	4.8
75-01-4	Vinyl chloride	ND		4.8	0.70
1330-20-7	Xylenes, Total	ND		4.8	1.2
594-20-7	2,2-Dichloropropane	ND		4.8	1.9
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		240	95

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88190-1

SDG No.:

Client Sample ID: DG-D3S-9.5-10 Lab Sample ID: 720-88190-15

Matrix: Solid Lab File ID: 08291814.D

Analysis Method: 8260B Date Collected: 08/21/2018 17:15

Sample wt/vol: 5.24(g) Date Analyzed: 08/29/2018 13:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250450 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	101		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		60-140
2037-26-5	Toluene-d8 (Surr)	102		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291814.D
Lims ID: 720-88190-D-15-J SLEEVE
Client ID:
Sample Type: Client
Inject. Date: 29-Aug-2018 13:33:30 ALS Bottle#: 13 Worklist Smp#: 18
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88190-D-15 SLEEVE
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 14:05:28 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 14:05:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.101	7.090	0.011	98	183052	250.0	
* 2 Fluorobenzene	96	10.898	10.898	0.000	98	1150825	25.0	
* 4 Chlorobenzene-d5	117	14.746	14.746	0.000	86	779726	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.885	17.885	0.000	94	375222	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.491	9.491	0.001	55	74830	7.16	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.007	10.007	0.000	97	75547	7.37	
$ 10 Toluene-d8 (Surr)	98	13.004	13.005	0.000	93	316019	7.63	
$ 11 4-Bromofluorobenzene	95	16.235	16.235	0.001	91	107626	7.59	
$ 12 1,2-Dichlorobenzene-d4	152	18.341	18.341	0.001	82	78993	5.70	
147 Ethyl acrylate	55	11.141	11.222	-0.081	1	1149	0.0885	
148 1-Chlorohexane	55	14.746	14.655	0.092	22	15657	1.24	
126 Butyl Ether	87	14.949	14.949	0.001	62	1202	0.1418	
84 Ethylbenzene	91	15.009	14.999	0.010	1	3278	0.0636	
85 m-Xylene & p-Xylene	91	15.222	15.232	-0.010	0	9804	0.2413	
98 1,3,5-Trimethylbenzene	105	17.065	17.065	0.001	1	3444	0.0837	
101 1,2,4-Trimethylbenzene	105	17.571	17.571	0.000	48	11052	0.2696	
136 1,2,3-Trimethylbenzene	105	18.118	18.128	-0.010	1	2742	0.0653	
107 n-Butylbenzene	91	18.462	18.452	0.010	1	2042	0.0489	
130 n-Octane	43	13.389	13.388	0.001	1	1668	NR	
132 n-Nonane	57	15.344	15.343	0.001	1	2085	NR	
99 n-Decane	57	17.106	17.105	0.001	46	3055	NR	
110 Dodecane	57	20.204	20.204	0.000	53	6865	NR	
115 C13	57	21.672	21.672	0.000	67	9254	NR	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	832350	8.69	
A 153 C6-C8	1	11.156	(8.852-13.459)		0	366757	3.83	
A 154 C6-C9	1	12.113	(8.852-15.373)		0	579412	6.05	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	1236085	12.9	
A 119 C6-C10	1	12.994	(8.852-17.135)		0	757029	7.90	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	1202488	12.6	
A 120 C6-C12	1	14.553	(8.852-20.255)		0	1158890	12.1	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	472228	4.93	
A 121 C7-C12	1	15.723	(11.191-20.255)		0	1052587	11.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
S 122 Xylenes, Total	1				0		0.2413	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

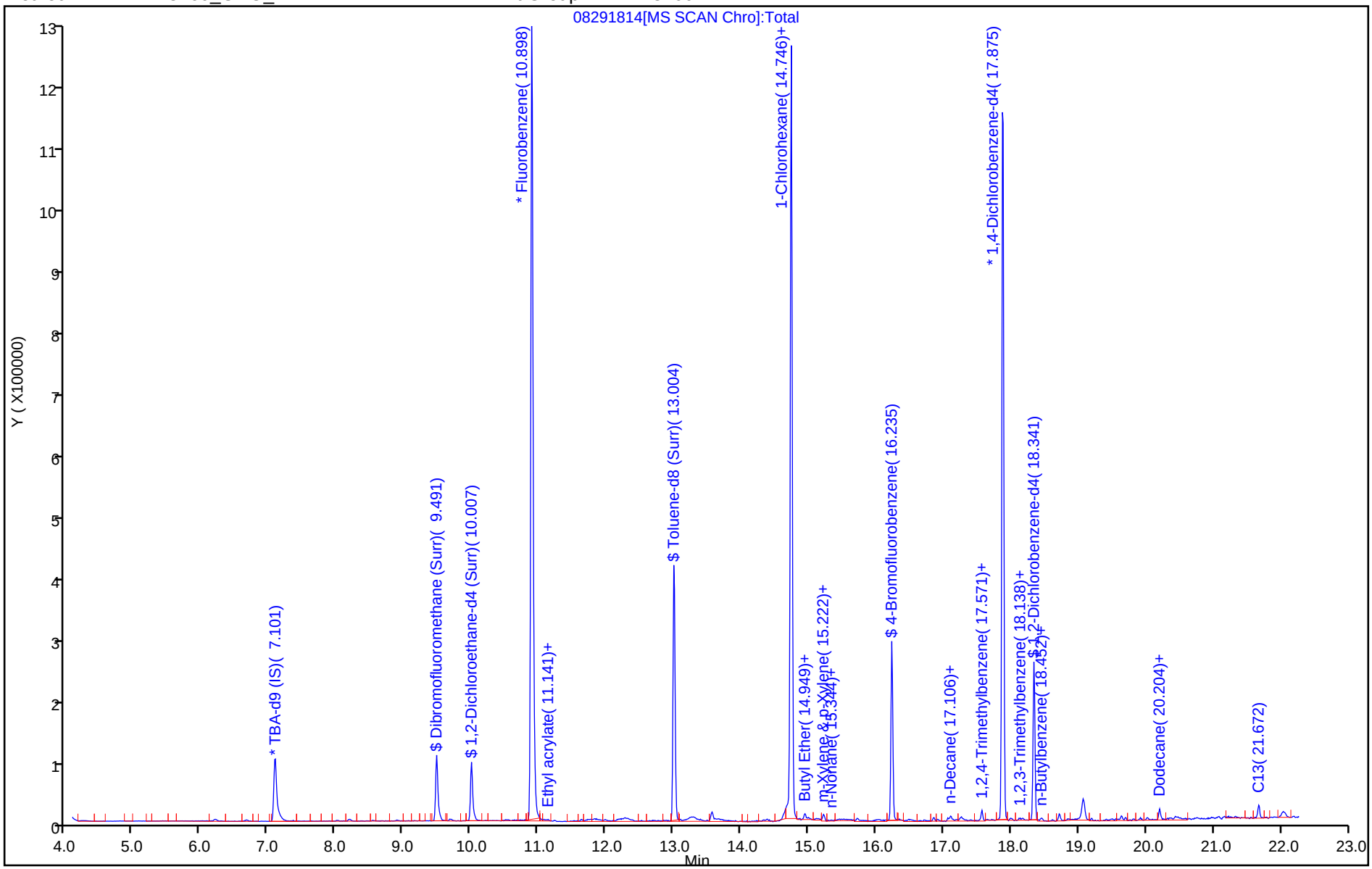
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 14:05:36 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291814.D				
Injection Date:	29-Aug-2018 13:33:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88190-D-15-J SLEEVE	Lab Sample ID:	Client 720-250450/18-A	Worklist Smp#:	18
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291814.D
Lims ID: 720-88190-D-15-J SLEEVE
Client ID:
Sample Type: Client
Inject. Date: 29-Aug-2018 13:33:30 ALS Bottle#: 13 Worklist Smp#: 18
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88190-D-15 SLEEVE
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 14:05:28 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 14:05:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	7.16	95.48
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.37	98.29
$ 10 Toluene-d8 (Surr)	7.50	7.63	101.74
$ 11 4-Bromofluorobenzene	7.50	7.59	101.23
$ 12 1,2-Dichlorobenzene-d4	6.00	5.70	95.05

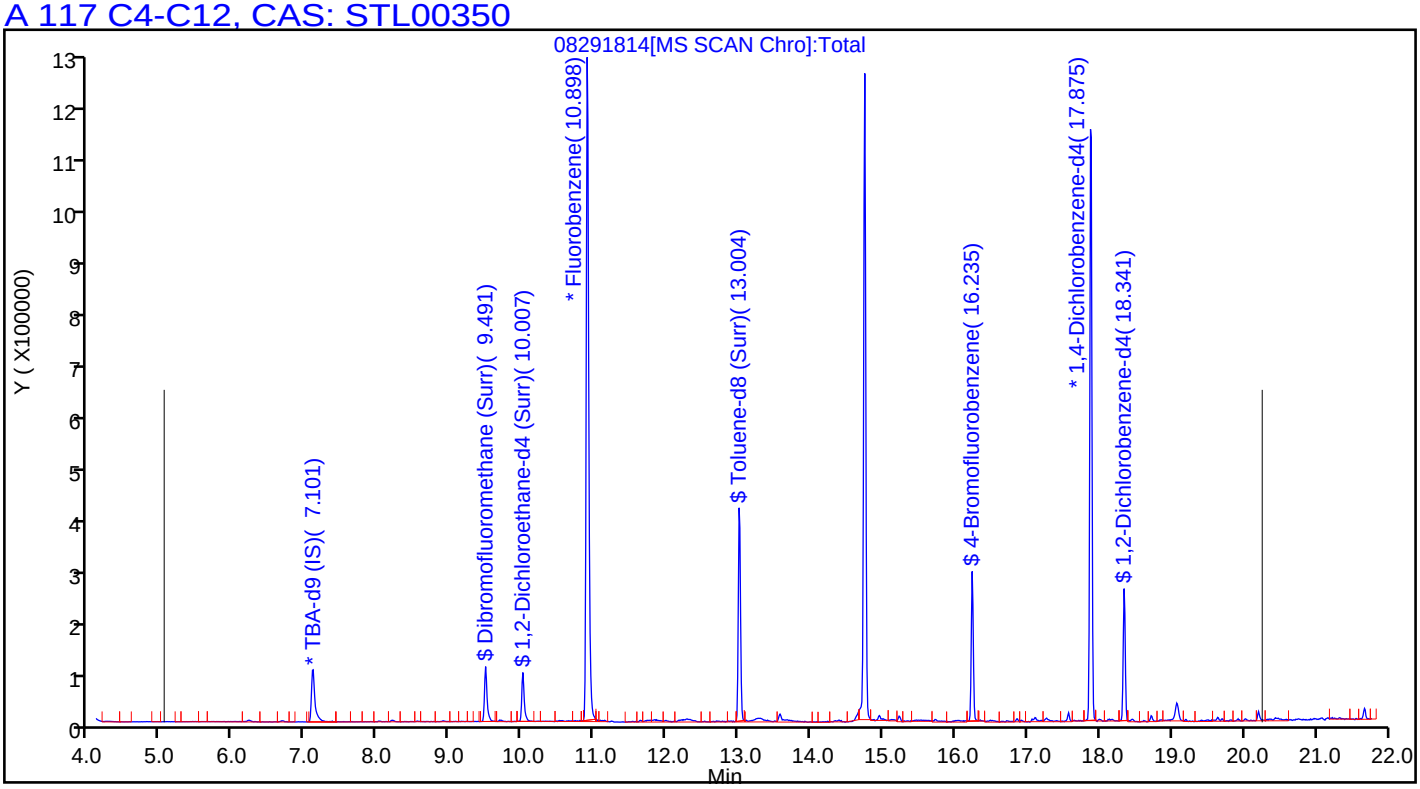
Report Date: 29-Aug-2018 14:05:36 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291814.D

Injection Date:	29-Aug-2018 13:33:30	Instrument ID:	HP7		
Lims ID:	720-88190-D-15-J SLEEVE	Lab Sample ID:	Client 720-250450/18-A		
Client ID:					
Operator ID:	SF	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(45-131)	(60-140)	(58-140)
720-88190-3	DG-E3S-9.5-10	88	104	87
720-88190-4	DG-F3S-0.5-1	91	107	98
720-88190-5	DG-F3S-3.5-4	93	111	97
720-88190-6	DG-F3S-9.5-10	86	89	96
720-88190-9	DG-G3S-9.5-10	88	109	93
720-88190-10	DG-H3S-0.5-1	86	114	96
720-88190-11	DG-H3S-3.5-4	94	111	99
720-88190-12	DG-H3S-9.5-10	84 *	120	93
720-88190-15	DG-D3S-9.5-10	101	98	102
720-88190-15 MS	DG-D3S-9.5-10	90	89	98
720-88190-15 MSD	DG-D3S-9.5-10	101	102	100
720-88200-B-4-D MS	Matrix Spike	84	96	92
720-88200-B-4-E MSD	Matrix Spike Duplicate	89	96	97
LCS 720-250279/5	Lab Control Sample	96	84	100
LCS 720-250279/7	Lab Control Sample	98	88	99
LCS 720-250345/5	Lab Control Sample	101	95	101
LCS 720-250345/7	Lab Control Sample	100	100	102
LCS 720-250350/5	Lab Control Sample	99	95	99
LCS 720-250350/7	Lab Control Sample	99	94	96
LCS 720-250407/5	Lab Control Sample	99	94	100
LCS 720-250407/7	Lab Control Sample	100	103	102
LCS 720-250408/5	Lab Control Sample	100	92	96
LCS 720-250408/7	Lab Control Sample	98	88	100
LCS 720-250450/5	Lab Control Sample	98	90	100
LCS 720-250450/7	Lab Control Sample	100	97	102
LCSD 720-250279/6	Lab Control Sample Dup	94	84	100
LCSD 720-250279/8	Lab Control Sample Dup	96	87	100
LCSD 720-250345/6	Lab Control Sample Dup	101	95	100
LCSD 720-250345/8	Lab Control Sample Dup	100	101	102
LCSD 720-250350/6	Lab Control Sample Dup	99	94	97
LCSD 720-250350/8	Lab Control Sample Dup	100	95	97
LCSD 720-250407/6	Lab Control Sample Dup	101	97	101
LCSD 720-250407/8	Lab Control Sample Dup	100	103	102
LCSD 720-250408/6	Lab Control Sample Dup	99	88	94
LCSD 720-250408/8	Lab Control Sample Dup	98	89	98
LCSD 720-250450/6	Lab Control Sample Dup	99	94	100
LCSD 720-250450/8	Lab Control Sample Dup	100	99	101
MB 720-250279/4	Method Blank	94	84	99
MB 720-250345/4	Method Blank	98	102	103
MB 720-250350/4	Method Blank	102	94	95
MB 720-250407/4	Method Blank	99	103	102
MB 720-250408/4	Method Blank	94	96	95
MB 720-250450/4	Method Blank	96	96	100

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	FBP (33-120)	TPHL (35-146)								
720-88190-3	DG-E3S-9.5-10	84	96								
720-88190-4	DG-F3S-0.5-1	81	97								
720-88190-5	DG-F3S-3.5-4	49	81								
720-88190-6	DG-F3S-9.5-10	68	80								
720-88190-9	DG-G3S-9.5-10	77	86								
720-88190-10	DG-H3S-0.5-1	65	90								
720-88190-11	DG-H3S-3.5-4	63	81								
720-88190-11 MS	DG-H3S-3.5-4	72	91								
720-88190-11 MSD	DG-H3S-3.5-4	73	92								
720-88190-12	DG-H3S-9.5-10	72	91								
720-88190-15	DG-D3S-9.5-10	81	95								
LCS 720-250048/2-A	Lab Control Sample	75	88								
MB 720-250048/1-A	Method Blank	92	93								

Surrogate Legend

FBP = 2-Fluorobiphenyl
TPHL = Terphenyl-d14

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	TPH1 (40-130)									
720-88190-3	DG-E3S-9.5-10	101									
720-88190-4	DG-F3S-0.5-1	123									
720-88190-5	DG-F3S-3.5-4	83									
720-88190-6	DG-F3S-9.5-10	95									
720-88190-9	DG-G3S-9.5-10	94									
720-88190-10	DG-H3S-0.5-1	79									
720-88190-10 MS	DG-H3S-0.5-1	88									
720-88190-10 MSD	DG-H3S-0.5-1	94									
720-88190-11	DG-H3S-3.5-4	101									
720-88190-12	DG-H3S-9.5-10	81									
720-88190-15	DG-D3S-9.5-10	83									
LCS 720-250044/2-A	Lab Control Sample	94									
MB 720-250044/1-A	Method Blank	97									

Surrogate Legend

TPH = p-Terphenyl

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX2 (21-145)								
720-88190-3	DG-E3S-9.5-10	105	88								
720-88190-5	DG-F3S-3.5-4	100 p	90								
720-88190-9	DG-G3S-9.5-10	104	91								

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP2	TCX2
Lab Sample ID	Client Sample ID	(21-136)	(21-145)
720-88190-10	DG-H3S-0.5-1	81	80
720-88190-11	DG-H3S-3.5-4	95	83
LCS 720-250053/2-A	Lab Control Sample	103	86
MB 720-250053/1-A	Method Blank	105	90

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP1	TCX1
Lab Sample ID	Client Sample ID	(21-136)	(21-145)
720-88190-4	DG-F3S-0.5-1	70 p	95
720-88190-6	DG-F3S-9.5-10	112	94
720-88190-10 MS	DG-H3S-0.5-1	71	77
720-88190-15	DG-D3S-9.5-10	79 p	69

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP2	TCX1
Lab Sample ID	Client Sample ID	(21-136)	(21-145)
720-88190-10 MSD	DG-H3S-0.5-1	89	83
720-88190-12	DG-H3S-9.5-10	88	88

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCBP1
Lab Sample ID	Client Sample ID	(14-128)	(10-132)
720-88190-3	DG-E3S-9.5-10	78	116
720-88190-4	DG-F3S-0.5-1	94	103
720-88190-5	DG-F3S-3.5-4	47	42
720-88190-6	DG-F3S-9.5-10	51	67
720-88190-9	DG-G3S-9.5-10	75	119
720-88190-10	DG-H3S-0.5-1	70	144 X
720-88190-11	DG-H3S-3.5-4	82	134 X

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	TCX1 (14-128)	DCBP1 (10-132)								
720-88190-12	DG-H3S-9.5-10	66	94								
720-88190-15	DG-D3S-9.5-10	87	132								
720-88190-15 MS	DG-D3S-9.5-10	85	164 X								
720-88190-15 MSD	DG-D3S-9.5-10	86	108								
LCS 240-342522/15-A	Lab Control Sample	85	92								
MB 240-342522/14-A	Method Blank	63	62								

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-250279/4
Matrix: Solid
Analysis Batch: 250279

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/27/18 12:58	1
Acetone	ND		50	38	ug/Kg			08/27/18 12:58	1
Benzene	ND		5.0	0.65	ug/Kg			08/27/18 12:58	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/27/18 12:58	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/27/18 12:58	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/27/18 12:58	1
Bromoform	ND		5.0	2.0	ug/Kg			08/27/18 12:58	1
Bromomethane	ND		10	0.79	ug/Kg			08/27/18 12:58	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/27/18 12:58	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/27/18 12:58	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/27/18 12:58	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/27/18 12:58	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/27/18 12:58	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/27/18 12:58	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/27/18 12:58	1
Chloroethane	ND		10	0.56	ug/Kg			08/27/18 12:58	1
Chloroform	ND		5.0	0.66	ug/Kg			08/27/18 12:58	1
Chloromethane	ND		10	0.79	ug/Kg			08/27/18 12:58	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/27/18 12:58	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/27/18 12:58	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/27/18 12:58	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/27/18 12:58	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/27/18 12:58	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/27/18 12:58	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/27/18 12:58	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/27/18 12:58	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/27/18 12:58	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/27/18 12:58	1
Dibromomethane	ND		10	0.86	ug/Kg			08/27/18 12:58	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/27/18 12:58	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/27/18 12:58	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/27/18 12:58	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/27/18 12:58	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/27/18 12:58	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/27/18 12:58	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/27/18 12:58	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/27/18 12:58	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/27/18 12:58	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/27/18 12:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/27/18 12:58	1
2-Hexanone	ND		50	10	ug/Kg			08/27/18 12:58	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/27/18 12:58	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/27/18 12:58	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/27/18 12:58	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/27/18 12:58	1
Naphthalene	ND		10	1.5	ug/Kg			08/27/18 12:58	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/27/18 12:58	1
Styrene	ND		5.0	0.63	ug/Kg			08/27/18 12:58	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250279/4
Matrix: Solid
Analysis Batch: 250279

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/27/18 12:58	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/27/18 12:58	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/27/18 12:58	1
Toluene	ND		5.0	0.71	ug/Kg			08/27/18 12:58	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/27/18 12:58	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/27/18 12:58	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/27/18 12:58	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/27/18 12:58	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/27/18 12:58	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/27/18 12:58	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/27/18 12:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/27/18 12:58	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/27/18 12:58	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/27/18 12:58	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/27/18 12:58	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/27/18 12:58	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/27/18 12:58	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/27/18 12:58	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/27/18 12:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*45 - 131*		*08/27/18 12:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*60 - 140*		*08/27/18 12:58*	*1*
Toluene-d8 (Surr)	*99*		*58 - 140*		*08/27/18 12:58*	*1*

Lab Sample ID: LCS 720-250279/5
Matrix: Solid
Analysis Batch: 250279

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	43.6		ug/Kg		87	70 - 144
Acetone	250	181		ug/Kg		72	30 - 162
Benzene	50.0	45.3		ug/Kg		91	70 - 130
Dichlorobromomethane	50.0	45.6		ug/Kg		91	70 - 140
Bromobenzene	50.0	44.6		ug/Kg		89	70 - 130
Chlorobromomethane	50.0	48.5		ug/Kg		97	70 - 130
Bromoform	50.0	40.3		ug/Kg		81	59 - 158
Bromomethane	50.0	56.5		ug/Kg		113	59 - 132
2-Butanone (MEK)	250	224		ug/Kg		89	59 - 159
n-Butylbenzene	50.0	48.7		ug/Kg		97	70 - 142
sec-Butylbenzene	50.0	48.7		ug/Kg		97	70 - 136
tert-Butylbenzene	50.0	48.8		ug/Kg		98	70 - 130
Carbon disulfide	50.0	51.0		ug/Kg		102	60 - 140
Carbon tetrachloride	50.0	48.2		ug/Kg		96	70 - 142
Chlorobenzene	50.0	46.3		ug/Kg		93	70 - 130
Chloroethane	50.0	47.4		ug/Kg		95	65 - 130
Chloroform	50.0	45.9		ug/Kg		92	77 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250279/5
Matrix: Solid
Analysis Batch: 250279

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	46.3		ug/Kg		93	55 - 140
2-Chlorotoluene	50.0	46.8		ug/Kg		94	70 - 138
4-Chlorotoluene	50.0	47.0		ug/Kg		94	70 - 136
Chlorodibromomethane	50.0	47.6		ug/Kg		95	70 - 146
1,2-Dichlorobenzene	50.0	44.6		ug/Kg		89	70 - 130
1,3-Dichlorobenzene	50.0	44.8		ug/Kg		90	70 - 131
1,4-Dichlorobenzene	50.0	45.9		ug/Kg		92	70 - 130
1,3-Dichloropropane	50.0	43.1		ug/Kg		86	70 - 140
1,1-Dichloropropene	50.0	45.8		ug/Kg		92	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	43.4		ug/Kg		87	60 - 145
Ethylene Dibromide	50.0	45.1		ug/Kg		90	70 - 140
Dibromomethane	50.0	42.9		ug/Kg		86	70 - 139
Dichlorodifluoromethane	50.0	71.2		ug/Kg		142	37 - 158
1,1-Dichloroethane	50.0	41.6		ug/Kg		83	70 - 130
1,2-Dichloroethane	50.0	39.3		ug/Kg		79	70 - 130
1,1-Dichloroethene	50.0	47.4		ug/Kg		95	74 - 122
cis-1,2-Dichloroethene	50.0	39.0		ug/Kg		78	70 - 138
trans-1,2-Dichloroethene	50.0	49.8		ug/Kg		100	67 - 130
1,2-Dichloropropane	50.0	40.4		ug/Kg		81	73 - 127
cis-1,3-Dichloropropene	50.0	46.3		ug/Kg		93	68 - 147
trans-1,3-Dichloropropene	50.0	44.3		ug/Kg		89	70 - 155
Ethylbenzene	50.0	46.3		ug/Kg		93	80 - 137
Hexachlorobutadiene	50.0	39.6		ug/Kg		79	70 - 132
2-Hexanone	250	184		ug/Kg		73	62 - 158
Isopropylbenzene	50.0	47.7		ug/Kg		95	70 - 130
4-Isopropyltoluene	50.0	50.1		ug/Kg		100	70 - 133
Methylene Chloride	50.0	46.1		ug/Kg		92	70 - 134
4-Methyl-2-pentanone (MIBK)	250	190		ug/Kg		76	60 - 160
Naphthalene	50.0	45.7		ug/Kg		91	60 - 147
N-Propylbenzene	50.0	49.0		ug/Kg		98	70 - 130
Styrene	50.0	44.5		ug/Kg		89	70 - 130
1,1,1,2-Tetrachloroethane	50.0	46.6		ug/Kg		93	70 - 130
1,1,2,2-Tetrachloroethane	50.0	42.9		ug/Kg		86	70 - 146
Tetrachloroethene	50.0	40.9		ug/Kg		82	70 - 132
Toluene	50.0	39.0		ug/Kg		78	75 - 120
1,2,3-Trichlorobenzene	50.0	42.1		ug/Kg		84	60 - 140
1,2,4-Trichlorobenzene	50.0	43.6		ug/Kg		87	60 - 140
1,1,1-Trichloroethane	50.0	48.3		ug/Kg		97	70 - 130
1,1,2-Trichloroethane	50.0	43.4		ug/Kg		87	70 - 130
Trichloroethene	50.0	44.0		ug/Kg		88	70 - 133
Trichlorofluoromethane	50.0	54.3		ug/Kg		109	60 - 140
1,2,3-Trichloropropane	50.0	45.8		ug/Kg		92	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.7		ug/Kg		101	60 - 140
1,2,4-Trimethylbenzene	50.0	47.6		ug/Kg		95	70 - 130
1,3,5-Trimethylbenzene	50.0	47.9		ug/Kg		96	70 - 131
Vinyl acetate	50.0	53.4		ug/Kg		107	38 - 176
Vinyl chloride	50.0	52.1		ug/Kg		104	58 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250279/5
Matrix: Solid
Analysis Batch: 250279

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	50.0	46.1		ug/Kg		92	70 - 146
o-Xylene	50.0	45.2		ug/Kg		90	70 - 140
2,2-Dichloropropane	50.0	55.9		ug/Kg		112	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*84*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCS 720-250279/7
Matrix: Solid
Analysis Batch: 250279

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	921		ug/Kg		92	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*88*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Lab Sample ID: LCSD 720-250279/6
Matrix: Solid
Analysis Batch: 250279

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	41.7		ug/Kg		83	70 - 144	5	20
Acetone	250	174		ug/Kg		70	30 - 162	4	30
Benzene	50.0	44.7		ug/Kg		89	70 - 130	1	20
Dichlorobromomethane	50.0	44.8		ug/Kg		90	70 - 140	2	20
Bromobenzene	50.0	44.1		ug/Kg		88	70 - 130	1	20
Chlorobromomethane	50.0	46.9		ug/Kg		94	70 - 130	3	20
Bromoform	50.0	38.9		ug/Kg		78	59 - 158	4	20
Bromomethane	50.0	54.6		ug/Kg		109	59 - 132	3	20
2-Butanone (MEK)	250	204		ug/Kg		82	59 - 159	9	20
n-Butylbenzene	50.0	48.8		ug/Kg		98	70 - 142	0	20
sec-Butylbenzene	50.0	48.3		ug/Kg		97	70 - 136	1	20
tert-Butylbenzene	50.0	48.1		ug/Kg		96	70 - 130	1	20
Carbon disulfide	50.0	48.9		ug/Kg		98	60 - 140	4	20
Carbon tetrachloride	50.0	47.7		ug/Kg		95	70 - 142	1	20
Chlorobenzene	50.0	45.9		ug/Kg		92	70 - 130	1	20
Chloroethane	50.0	46.4		ug/Kg		93	65 - 130	2	20
Chloroform	50.0	45.5		ug/Kg		91	77 - 127	1	20
Chloromethane	50.0	45.7		ug/Kg		91	55 - 140	1	20
2-Chlorotoluene	50.0	46.2		ug/Kg		92	70 - 138	1	20
4-Chlorotoluene	50.0	46.6		ug/Kg		93	70 - 136	1	20
Chlorodibromomethane	50.0	46.1		ug/Kg		92	70 - 146	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250279/6
Matrix: Solid
Analysis Batch: 250279

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene			50.0	44.0		ug/Kg		88	70 - 130	1	20
1,3-Dichlorobenzene			50.0	44.6		ug/Kg		89	70 - 131	0	20
1,4-Dichlorobenzene			50.0	45.5		ug/Kg		91	70 - 130	1	20
1,3-Dichloropropane			50.0	41.9		ug/Kg		84	70 - 140	3	20
1,1-Dichloropropene			50.0	45.1		ug/Kg		90	70 - 130	2	20
1,2-Dibromo-3-Chloropropane			50.0	39.2		ug/Kg		78	60 - 145	10	20
Ethylene Dibromide			50.0	43.1		ug/Kg		86	70 - 140	5	20
Dibromomethane			50.0	41.8		ug/Kg		84	70 - 139	3	20
Dichlorodifluoromethane			50.0	69.3		ug/Kg		139	37 - 158	3	20
1,1-Dichloroethane			50.0	40.9		ug/Kg		82	70 - 130	2	20
1,2-Dichloroethane			50.0	37.6		ug/Kg		75	70 - 130	4	20
1,1-Dichloroethene			50.0	46.1		ug/Kg		92	74 - 122	3	20
cis-1,2-Dichloroethene			50.0	38.4		ug/Kg		77	70 - 138	2	20
trans-1,2-Dichloroethene			50.0	48.3		ug/Kg		97	67 - 130	3	20
1,2-Dichloropropane			50.0	40.2		ug/Kg		80	73 - 127	1	20
cis-1,3-Dichloropropene			50.0	44.7		ug/Kg		89	68 - 147	3	20
trans-1,3-Dichloropropene			50.0	43.5		ug/Kg		87	70 - 155	2	20
Ethylbenzene			50.0	45.8		ug/Kg		92	80 - 137	1	20
Hexachlorobutadiene			50.0	39.6		ug/Kg		79	70 - 132	0	20
2-Hexanone			250	170		ug/Kg		68	62 - 158	8	20
Isopropylbenzene			50.0	47.1		ug/Kg		94	70 - 130	1	20
4-Isopropyltoluene			50.0	50.5		ug/Kg		101	70 - 133	1	20
Methylene Chloride			50.0	44.7		ug/Kg		89	70 - 134	3	20
4-Methyl-2-pentanone (MIBK)			250	177		ug/Kg		71	60 - 160	7	20
Naphthalene			50.0	44.5		ug/Kg		89	60 - 147	3	20
N-Propylbenzene			50.0	48.7		ug/Kg		97	70 - 130	1	20
Styrene			50.0	43.6		ug/Kg		87	70 - 130	2	20
1,1,1,2-Tetrachloroethane			50.0	46.4		ug/Kg		93	70 - 130	0	20
1,1,2,2-Tetrachloroethane			50.0	40.8		ug/Kg		82	70 - 146	5	20
Tetrachloroethene			50.0	40.7		ug/Kg		81	70 - 132	1	20
Toluene			50.0	38.9		ug/Kg		78	75 - 120	0	20
1,2,3-Trichlorobenzene			50.0	41.9		ug/Kg		84	60 - 140	1	20
1,2,4-Trichlorobenzene			50.0	42.8		ug/Kg		86	60 - 140	2	20
1,1,1-Trichloroethane			50.0	46.9		ug/Kg		94	70 - 130	3	20
1,1,2-Trichloroethane			50.0	41.7		ug/Kg		83	70 - 130	4	20
Trichloroethene			50.0	43.7		ug/Kg		87	70 - 133	1	20
Trichlorofluoromethane			50.0	52.5		ug/Kg		105	60 - 140	3	20
1,2,3-Trichloropropane			50.0	43.6		ug/Kg		87	70 - 146	5	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	49.2		ug/Kg		98	60 - 140	3	20
1,2,4-Trimethylbenzene			50.0	47.3		ug/Kg		95	70 - 130	1	20
1,3,5-Trimethylbenzene			50.0	47.9		ug/Kg		96	70 - 131	0	20
Vinyl acetate			50.0	50.8		ug/Kg		102	38 - 176	5	20
Vinyl chloride			50.0	51.3		ug/Kg		103	58 - 125	2	20
m-Xylene & p-Xylene			50.0	45.8		ug/Kg		92	70 - 146	1	20
o-Xylene			50.0	44.7		ug/Kg		89	70 - 140	1	20
2,2-Dichloropropane			50.0	53.2		ug/Kg		106	70 - 162	5	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250279/6
Matrix: Solid
Analysis Batch: 250279

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*94*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*84*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCSD 720-250279/8
Matrix: Solid
Analysis Batch: 250279

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	915		ug/Kg		92	70 - 122	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*96*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*87*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: MB 720-250345/4
Matrix: Solid
Analysis Batch: 250345

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 09:39	1
Acetone	ND		50	38	ug/Kg			08/28/18 09:39	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 09:39	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 09:39	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 09:39	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 09:39	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 09:39	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 09:39	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 09:39	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 09:39	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:39	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 09:39	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 09:39	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 09:39	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 09:39	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 09:39	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 09:39	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 09:39	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 09:39	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 09:39	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 09:39	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:39	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:39	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:39	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 09:39	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:39	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250345/4
Matrix: Solid
Analysis Batch: 250345

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 09:39	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 09:39	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 09:39	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 09:39	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 09:39	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:39	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 09:39	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 09:39	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 09:39	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 09:39	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:39	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 09:39	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 09:39	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 09:39	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 09:39	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:39	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 09:39	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 09:39	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 09:39	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 09:39	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 09:39	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 09:39	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:39	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 09:39	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 09:39	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 09:39	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 09:39	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:39	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 09:39	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 09:39	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 09:39	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 09:39	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 09:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 09:39	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 09:39	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 09:39	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 09:39	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 09:39	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 09:39	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 09:39	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 09:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*45 - 131*		*08/28/18 09:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*60 - 140*		*08/28/18 09:39*	*1*
Toluene-d8 (Surr)	*103*		*58 - 140*		*08/28/18 09:39*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250345/5
Matrix: Solid
Analysis Batch: 250345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	45.1		ug/Kg		90	70 - 144
Acetone	250	215		ug/Kg		86	30 - 162
Benzene	50.0	46.5		ug/Kg		93	70 - 130
Dichlorobromomethane	50.0	46.6		ug/Kg		93	70 - 140
Bromobenzene	50.0	44.3		ug/Kg		89	70 - 130
Chlorobromomethane	50.0	45.9		ug/Kg		92	70 - 130
Bromoform	50.0	44.4		ug/Kg		89	59 - 158
Bromomethane	50.0	54.5		ug/Kg		109	59 - 132
2-Butanone (MEK)	250	226		ug/Kg		90	59 - 159
n-Butylbenzene	50.0	48.8		ug/Kg		98	70 - 142
sec-Butylbenzene	50.0	49.2		ug/Kg		98	70 - 136
tert-Butylbenzene	50.0	47.5		ug/Kg		95	70 - 130
Carbon disulfide	50.0	54.7		ug/Kg		109	60 - 140
Carbon tetrachloride	50.0	47.7		ug/Kg		95	70 - 142
Chlorobenzene	50.0	45.6		ug/Kg		91	70 - 130
Chloroethane	50.0	52.6		ug/Kg		105	65 - 130
Chloroform	50.0	46.5		ug/Kg		93	77 - 127
Chloromethane	50.0	56.0		ug/Kg		112	55 - 140
2-Chlorotoluene	50.0	47.6		ug/Kg		95	70 - 138
4-Chlorotoluene	50.0	48.3		ug/Kg		97	70 - 136
Chlorodibromomethane	50.0	46.3		ug/Kg		93	70 - 146
1,2-Dichlorobenzene	50.0	44.9		ug/Kg		90	70 - 130
1,3-Dichlorobenzene	50.0	45.9		ug/Kg		92	70 - 131
1,4-Dichlorobenzene	50.0	45.6		ug/Kg		91	70 - 130
1,3-Dichloropropane	50.0	44.3		ug/Kg		89	70 - 140
1,1-Dichloropropene	50.0	47.3		ug/Kg		95	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	43.3		ug/Kg		87	60 - 145
Ethylene Dibromide	50.0	45.1		ug/Kg		90	70 - 140
Dibromomethane	50.0	44.0		ug/Kg		88	70 - 139
Dichlorodifluoromethane	50.0	54.8		ug/Kg		110	37 - 158
1,1-Dichloroethane	50.0	48.2		ug/Kg		96	70 - 130
1,2-Dichloroethane	50.0	44.5		ug/Kg		89	70 - 130
1,1-Dichloroethene	50.0	49.9		ug/Kg		100	74 - 122
cis-1,2-Dichloroethene	50.0	47.8		ug/Kg		96	70 - 138
trans-1,2-Dichloroethene	50.0	49.6		ug/Kg		99	67 - 130
1,2-Dichloropropane	50.0	48.4		ug/Kg		97	73 - 127
cis-1,3-Dichloropropene	50.0	49.6		ug/Kg		99	68 - 147
trans-1,3-Dichloropropene	50.0	47.0		ug/Kg		94	70 - 155
Ethylbenzene	50.0	47.9		ug/Kg		96	80 - 137
Hexachlorobutadiene	50.0	44.1		ug/Kg		88	70 - 132
2-Hexanone	250	243		ug/Kg		97	62 - 158
Isopropylbenzene	50.0	46.8		ug/Kg		94	70 - 130
4-Isopropyltoluene	50.0	48.7		ug/Kg		97	70 - 133
Methylene Chloride	50.0	45.5		ug/Kg		91	70 - 134
4-Methyl-2-pentanone (MIBK)	250	252		ug/Kg		101	60 - 160
Naphthalene	50.0	42.1		ug/Kg		84	60 - 147
N-Propylbenzene	50.0	49.6		ug/Kg		99	70 - 130
Styrene	50.0	46.2		ug/Kg		92	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250345/5
Matrix: Solid
Analysis Batch: 250345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	46.8		ug/Kg		94	70 - 130
1,1,2,2-Tetrachloroethane	50.0	43.9		ug/Kg		88	70 - 146
Tetrachloroethene	50.0	46.2		ug/Kg		92	70 - 132
Toluene	50.0	45.8		ug/Kg		92	75 - 120
1,2,3-Trichlorobenzene	50.0	43.0		ug/Kg		86	60 - 140
1,2,4-Trichlorobenzene	50.0	44.4		ug/Kg		89	60 - 140
1,1,1-Trichloroethane	50.0	47.3		ug/Kg		95	70 - 130
1,1,2-Trichloroethane	50.0	45.9		ug/Kg		92	70 - 130
Trichloroethene	50.0	44.3		ug/Kg		89	70 - 133
Trichlorofluoromethane	50.0	56.4		ug/Kg		113	60 - 140
1,2,3-Trichloropropane	50.0	44.0		ug/Kg		88	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	52.2		ug/Kg		104	60 - 140
1,2,4-Trimethylbenzene	50.0	47.9		ug/Kg		96	70 - 130
1,3,5-Trimethylbenzene	50.0	47.8		ug/Kg		96	70 - 131
Vinyl acetate	50.0	53.1		ug/Kg		106	38 - 176
Vinyl chloride	50.0	55.3		ug/Kg		111	58 - 125
m-Xylene & p-Xylene	50.0	47.1		ug/Kg		94	70 - 146
o-Xylene	50.0	47.2		ug/Kg		94	70 - 140
2,2-Dichloropropane	50.0	49.8		ug/Kg		100	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: LCS 720-250345/7
Matrix: Solid
Analysis Batch: 250345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	990		ug/Kg		99	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: LCSD 720-250345/6
Matrix: Solid
Analysis Batch: 250345

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	45.3		ug/Kg		91	70 - 144	1	20
Acetone	250	210		ug/Kg		84	30 - 162	2	30
Benzene	50.0	46.6		ug/Kg		93	70 - 130	0	20
Dichlorobromomethane	50.0	46.2		ug/Kg		92	70 - 140	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250345/6
Matrix: Solid
Analysis Batch: 250345

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	50.0	44.6		ug/Kg		89	70 - 130	1	20
Chlorobromomethane	50.0	46.1		ug/Kg		92	70 - 130	0	20
Bromoform	50.0	44.9		ug/Kg		90	59 - 158	1	20
Bromomethane	50.0	54.5		ug/Kg		109	59 - 132	0	20
2-Butanone (MEK)	250	216		ug/Kg		86	59 - 159	5	20
n-Butylbenzene	50.0	48.9		ug/Kg		98	70 - 142	0	20
sec-Butylbenzene	50.0	49.4		ug/Kg		99	70 - 136	1	20
tert-Butylbenzene	50.0	47.8		ug/Kg		96	70 - 130	1	20
Carbon disulfide	50.0	54.3		ug/Kg		109	60 - 140	1	20
Carbon tetrachloride	50.0	48.1		ug/Kg		96	70 - 142	1	20
Chlorobenzene	50.0	46.0		ug/Kg		92	70 - 130	1	20
Chloroethane	50.0	53.2		ug/Kg		106	65 - 130	1	20
Chloroform	50.0	46.8		ug/Kg		94	77 - 127	1	20
Chloromethane	50.0	56.1		ug/Kg		112	55 - 140	0	20
2-Chlorotoluene	50.0	47.9		ug/Kg		96	70 - 138	1	20
4-Chlorotoluene	50.0	48.1		ug/Kg		96	70 - 136	0	20
Chlorodibromomethane	50.0	46.0		ug/Kg		92	70 - 146	1	20
1,2-Dichlorobenzene	50.0	45.0		ug/Kg		90	70 - 130	0	20
1,3-Dichlorobenzene	50.0	45.6		ug/Kg		91	70 - 131	1	20
1,4-Dichlorobenzene	50.0	45.8		ug/Kg		92	70 - 130	1	20
1,3-Dichloropropane	50.0	44.3		ug/Kg		89	70 - 140	0	20
1,1-Dichloropropene	50.0	47.8		ug/Kg		96	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	42.6		ug/Kg		85	60 - 145	2	20
Ethylene Dibromide	50.0	45.2		ug/Kg		90	70 - 140	0	20
Dibromomethane	50.0	44.4		ug/Kg		89	70 - 139	1	20
Dichlorodifluoromethane	50.0	54.6		ug/Kg		109	37 - 158	0	20
1,1-Dichloroethane	50.0	48.8		ug/Kg		98	70 - 130	1	20
1,2-Dichloroethane	50.0	44.9		ug/Kg		90	70 - 130	1	20
1,1-Dichloroethene	50.0	50.3		ug/Kg		101	74 - 122	1	20
cis-1,2-Dichloroethene	50.0	48.0		ug/Kg		96	70 - 138	0	20
trans-1,2-Dichloroethene	50.0	50.2		ug/Kg		100	67 - 130	1	20
1,2-Dichloropropane	50.0	48.5		ug/Kg		97	73 - 127	0	20
cis-1,3-Dichloropropene	50.0	49.6		ug/Kg		99	68 - 147	0	20
trans-1,3-Dichloropropene	50.0	47.2		ug/Kg		94	70 - 155	0	20
Ethylbenzene	50.0	48.4		ug/Kg		97	80 - 137	1	20
Hexachlorobutadiene	50.0	44.7		ug/Kg		89	70 - 132	2	20
2-Hexanone	250	241		ug/Kg		97	62 - 158	1	20
Isopropylbenzene	50.0	47.5		ug/Kg		95	70 - 130	1	20
4-Isopropyltoluene	50.0	49.3		ug/Kg		99	70 - 133	1	20
Methylene Chloride	50.0	46.1		ug/Kg		92	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	249		ug/Kg		99	60 - 160	1	20
Naphthalene	50.0	42.9		ug/Kg		86	60 - 147	2	20
N-Propylbenzene	50.0	49.5		ug/Kg		99	70 - 130	0	20
Styrene	50.0	46.6		ug/Kg		93	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	47.3		ug/Kg		95	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	44.2		ug/Kg		88	70 - 146	1	20
Tetrachloroethene	50.0	45.2		ug/Kg		90	70 - 132	2	20
Toluene	50.0	46.2		ug/Kg		92	75 - 120	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250345/6
Matrix: Solid
Analysis Batch: 250345

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene			50.0	43.6		ug/Kg		87	60 - 140	1	20
1,2,4-Trichlorobenzene			50.0	44.6		ug/Kg		89	60 - 140	0	20
1,1,1-Trichloroethane			50.0	47.1		ug/Kg		94	70 - 130	0	20
1,1,2-Trichloroethane			50.0	46.3		ug/Kg		93	70 - 130	1	20
Trichloroethene			50.0	44.5		ug/Kg		89	70 - 133	0	20
Trichlorofluoromethane			50.0	57.0		ug/Kg		114	60 - 140	1	20
1,2,3-Trichloropropane			50.0	43.7		ug/Kg		87	70 - 146	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	51.8		ug/Kg		104	60 - 140	1	20
1,2,4-Trimethylbenzene			50.0	47.9		ug/Kg		96	70 - 130	0	20
1,3,5-Trimethylbenzene			50.0	47.8		ug/Kg		96	70 - 131	0	20
Vinyl acetate			50.0	53.4		ug/Kg		107	38 - 176	1	20
Vinyl chloride			50.0	54.9		ug/Kg		110	58 - 125	1	20
m-Xylene & p-Xylene			50.0	47.5		ug/Kg		95	70 - 146	1	20
o-Xylene			50.0	47.9		ug/Kg		96	70 - 140	1	20
2,2-Dichloropropane			50.0	50.0		ug/Kg		100	70 - 162	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCSD 720-250345/8
Matrix: Solid
Analysis Batch: 250345

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	980		ug/Kg		98	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: MB 720-250350/4
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 09:36	1
Acetone	ND		50	38	ug/Kg			08/28/18 09:36	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 09:36	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 09:36	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 09:36	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 09:36	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 09:36	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 09:36	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250350/4
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 09:36	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 09:36	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:36	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 09:36	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 09:36	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 09:36	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 09:36	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 09:36	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 09:36	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 09:36	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 09:36	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:36	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 09:36	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:36	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 09:36	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 09:36	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 09:36	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 09:36	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:36	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 09:36	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 09:36	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 09:36	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:36	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 09:36	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 09:36	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 09:36	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 09:36	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 09:36	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 09:36	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 09:36	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 09:36	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 09:36	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 09:36	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:36	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 09:36	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 09:36	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 09:36	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 09:36	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 09:36	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250350/4
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 09:36	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 09:36	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 09:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 09:36	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 09:36	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 09:36	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 09:36	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 09:36	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 09:36	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 09:36	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 09:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*45 - 131*		*08/28/18 09:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*		*08/28/18 09:36*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*		*08/28/18 09:36*	*1*

Lab Sample ID: LCS 720-250350/5
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	45.9		ug/Kg		92	70 - 144
Acetone	250	264		ug/Kg		105	30 - 162
Benzene	50.0	44.9		ug/Kg		90	70 - 130
Dichlorobromomethane	50.0	45.7		ug/Kg		91	70 - 140
Bromobenzene	50.0	43.2		ug/Kg		86	70 - 130
Chlorobromomethane	50.0	48.5		ug/Kg		97	70 - 130
Bromoform	50.0	48.6		ug/Kg		97	59 - 158
Bromomethane	50.0	55.6		ug/Kg		111	59 - 132
2-Butanone (MEK)	250	246		ug/Kg		99	59 - 159
n-Butylbenzene	50.0	46.6		ug/Kg		93	70 - 142
sec-Butylbenzene	50.0	43.9		ug/Kg		88	70 - 136
tert-Butylbenzene	50.0	43.6		ug/Kg		87	70 - 130
Carbon disulfide	50.0	55.6		ug/Kg		111	60 - 140
Carbon tetrachloride	50.0	47.8		ug/Kg		96	70 - 142
Chlorobenzene	50.0	45.6		ug/Kg		91	70 - 130
Chloroethane	50.0	52.3		ug/Kg		105	65 - 130
Chloroform	50.0	45.1		ug/Kg		90	77 - 127
Chloromethane	50.0	57.1		ug/Kg		114	55 - 140
2-Chlorotoluene	50.0	41.6		ug/Kg		83	70 - 138
4-Chlorotoluene	50.0	42.0		ug/Kg		84	70 - 136
Chlorodibromomethane	50.0	48.6		ug/Kg		97	70 - 146
1,2-Dichlorobenzene	50.0	45.7		ug/Kg		91	70 - 130
1,3-Dichlorobenzene	50.0	44.2		ug/Kg		88	70 - 131
1,4-Dichlorobenzene	50.0	45.2		ug/Kg		90	70 - 130
1,3-Dichloropropane	50.0	46.3		ug/Kg		93	70 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250350/5
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	50.0	46.0		ug/Kg		92	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	50.7		ug/Kg		101	60 - 145
Ethylene Dibromide	50.0	48.1		ug/Kg		96	70 - 140
Dibromomethane	50.0	45.6		ug/Kg		91	70 - 139
Dichlorodifluoromethane	50.0	62.3		ug/Kg		125	37 - 158
1,1-Dichloroethane	50.0	45.7		ug/Kg		91	70 - 130
1,2-Dichloroethane	50.0	44.9		ug/Kg		90	70 - 130
1,1-Dichloroethene	50.0	51.9		ug/Kg		104	74 - 122
cis-1,2-Dichloroethene	50.0	45.3		ug/Kg		91	70 - 138
trans-1,2-Dichloroethene	50.0	49.1		ug/Kg		98	67 - 130
1,2-Dichloropropane	50.0	45.8		ug/Kg		92	73 - 127
cis-1,3-Dichloropropene	50.0	48.4		ug/Kg		97	68 - 147
trans-1,3-Dichloropropene	50.0	46.7		ug/Kg		93	70 - 155
Ethylbenzene	50.0	44.3		ug/Kg		89	80 - 137
Hexachlorobutadiene	50.0	50.4		ug/Kg		101	70 - 132
2-Hexanone	250	272		ug/Kg		109	62 - 158
Isopropylbenzene	50.0	46.2		ug/Kg		92	70 - 130
4-Isopropyltoluene	50.0	45.2		ug/Kg		90	70 - 133
Methylene Chloride	50.0	46.7		ug/Kg		93	70 - 134
4-Methyl-2-pentanone (MIBK)	250	272		ug/Kg		109	60 - 160
Naphthalene	50.0	48.2		ug/Kg		96	60 - 147
N-Propylbenzene	50.0	42.6		ug/Kg		85	70 - 130
Styrene	50.0	44.5		ug/Kg		89	70 - 130
1,1,1,2-Tetrachloroethane	50.0	47.1		ug/Kg		94	70 - 130
1,1,2,2-Tetrachloroethane	50.0	44.6		ug/Kg		89	70 - 146
Tetrachloroethene	50.0	48.2		ug/Kg		96	70 - 132
Toluene	50.0	44.7		ug/Kg		89	75 - 120
1,2,3-Trichlorobenzene	50.0	50.8		ug/Kg		102	60 - 140
1,2,4-Trichlorobenzene	50.0	49.8		ug/Kg		100	60 - 140
1,1,1-Trichloroethane	50.0	47.4		ug/Kg		95	70 - 130
1,1,2-Trichloroethane	50.0	48.0		ug/Kg		96	70 - 130
Trichloroethene	50.0	47.0		ug/Kg		94	70 - 133
Trichlorofluoromethane	50.0	57.5		ug/Kg		115	60 - 140
1,2,3-Trichloropropane	50.0	45.3		ug/Kg		91	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	59.8		ug/Kg		120	60 - 140
1,2,4-Trimethylbenzene	50.0	42.3		ug/Kg		85	70 - 130
1,3,5-Trimethylbenzene	50.0	42.3		ug/Kg		85	70 - 131
Vinyl acetate	50.0	51.9		ug/Kg		104	38 - 176
Vinyl chloride	50.0	53.8		ug/Kg		108	58 - 125
m-Xylene & p-Xylene	50.0	44.1		ug/Kg		88	70 - 146
o-Xylene	50.0	44.6		ug/Kg		89	70 - 140
2,2-Dichloropropane	50.0	47.6		ug/Kg		95	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Lab Sample ID: LCS 720-250350/7
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C4-C12			1000	985		ug/Kg		99	70 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250350/6
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether			50.0	46.2		ug/Kg		92	70 - 144	1	20
Acetone			250	260		ug/Kg		104	30 - 162	2	30
Benzene			50.0	42.9		ug/Kg		86	70 - 130	5	20
Dichlorobromomethane			50.0	45.0		ug/Kg		90	70 - 140	2	20
Bromobenzene			50.0	43.3		ug/Kg		87	70 - 130	0	20
Chlorobromomethane			50.0	48.1		ug/Kg		96	70 - 130	1	20
Bromoform			50.0	47.8		ug/Kg		96	59 - 158	2	20
Bromomethane			50.0	54.0		ug/Kg		108	59 - 132	3	20
2-Butanone (MEK)			250	259		ug/Kg		103	59 - 159	5	20
n-Butylbenzene			50.0	45.2		ug/Kg		90	70 - 142	3	20
sec-Butylbenzene			50.0	42.7		ug/Kg		85	70 - 136	3	20
tert-Butylbenzene			50.0	42.5		ug/Kg		85	70 - 130	3	20
Carbon disulfide			50.0	51.7		ug/Kg		103	60 - 140	7	20
Carbon tetrachloride			50.0	44.8		ug/Kg		90	70 - 142	6	20
Chlorobenzene			50.0	44.8		ug/Kg		90	70 - 130	2	20
Chloroethane			50.0	50.5		ug/Kg		101	65 - 130	4	20
Chloroform			50.0	43.5		ug/Kg		87	77 - 127	4	20
Chloromethane			50.0	53.4		ug/Kg		107	55 - 140	7	20
2-Chlorotoluene			50.0	40.9		ug/Kg		82	70 - 138	2	20
4-Chlorotoluene			50.0	41.5		ug/Kg		83	70 - 136	1	20
Chlorodibromomethane			50.0	47.7		ug/Kg		95	70 - 146	2	20
1,2-Dichlorobenzene			50.0	45.5		ug/Kg		91	70 - 130	1	20
1,3-Dichlorobenzene			50.0	43.6		ug/Kg		87	70 - 131	1	20
1,4-Dichlorobenzene			50.0	44.2		ug/Kg		88	70 - 130	2	20
1,3-Dichloropropane			50.0	45.5		ug/Kg		91	70 - 140	2	20
1,1-Dichloropropene			50.0	43.8		ug/Kg		88	70 - 130	5	20
1,2-Dibromo-3-Chloropropane			50.0	50.9		ug/Kg		102	60 - 145	0	20
Ethylene Dibromide			50.0	47.2		ug/Kg		94	70 - 140	2	20
Dibromomethane			50.0	45.9		ug/Kg		92	70 - 139	1	20
Dichlorodifluoromethane			50.0	58.8		ug/Kg		118	37 - 158	6	20
1,1-Dichloroethane			50.0	45.0		ug/Kg		90	70 - 130	2	20
1,2-Dichloroethane			50.0	44.4		ug/Kg		89	70 - 130	1	20
1,1-Dichloroethene			50.0	50.3		ug/Kg		101	74 - 122	3	20
cis-1,2-Dichloroethene			50.0	43.6		ug/Kg		87	70 - 138	4	20
trans-1,2-Dichloroethene			50.0	45.9		ug/Kg		92	67 - 130	7	20
1,2-Dichloropropane			50.0	44.2		ug/Kg		88	73 - 127	4	20
cis-1,3-Dichloropropene			50.0	47.1		ug/Kg		94	68 - 147	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250350/6
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,3-Dichloropropene			50.0	44.6		ug/Kg		89	70 - 155	5	20
Ethylbenzene			50.0	42.8		ug/Kg		86	80 - 137	4	20
Hexachlorobutadiene			50.0	47.8		ug/Kg		96	70 - 132	5	20
2-Hexanone			250	269		ug/Kg		108	62 - 158	1	20
Isopropylbenzene			50.0	44.7		ug/Kg		89	70 - 130	3	20
4-Isopropyltoluene			50.0	44.1		ug/Kg		88	70 - 133	2	20
Methylene Chloride			50.0	44.9		ug/Kg		90	70 - 134	4	20
4-Methyl-2-pentanone (MIBK)			250	269		ug/Kg		107	60 - 160	1	20
Naphthalene			50.0	49.1		ug/Kg		98	60 - 147	2	20
N-Propylbenzene			50.0	41.5		ug/Kg		83	70 - 130	3	20
Styrene			50.0	43.9		ug/Kg		88	70 - 130	1	20
1,1,1,2-Tetrachloroethane			50.0	46.4		ug/Kg		93	70 - 130	1	20
1,1,2,2-Tetrachloroethane			50.0	44.5		ug/Kg		89	70 - 146	0	20
Tetrachloroethene			50.0	46.0		ug/Kg		92	70 - 132	5	20
Toluene			50.0	43.0		ug/Kg		86	75 - 120	4	20
1,2,3-Trichlorobenzene			50.0	50.8		ug/Kg		102	60 - 140	0	20
1,2,4-Trichlorobenzene			50.0	50.0		ug/Kg		100	60 - 140	0	20
1,1,1-Trichloroethane			50.0	44.9		ug/Kg		90	70 - 130	5	20
1,1,2-Trichloroethane			50.0	46.5		ug/Kg		93	70 - 130	3	20
Trichloroethene			50.0	45.6		ug/Kg		91	70 - 133	3	20
Trichlorofluoromethane			50.0	55.4		ug/Kg		111	60 - 140	4	20
1,2,3-Trichloropropane			50.0	45.8		ug/Kg		92	70 - 146	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	55.0		ug/Kg		110	60 - 140	8	20
1,2,4-Trimethylbenzene			50.0	42.1		ug/Kg		84	70 - 130	1	20
1,3,5-Trimethylbenzene			50.0	41.7		ug/Kg		83	70 - 131	1	20
Vinyl acetate			50.0	52.9		ug/Kg		106	38 - 176	2	20
Vinyl chloride			50.0	51.5		ug/Kg		103	58 - 125	4	20
m-Xylene & p-Xylene			50.0	42.6		ug/Kg		85	70 - 146	3	20
o-Xylene			50.0	43.4		ug/Kg		87	70 - 140	3	20
2,2-Dichloropropane			50.0	44.4		ug/Kg		89	70 - 162	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250350/8
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	976		ug/Kg		98	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250350/8
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	97		58 - 140

Lab Sample ID: MB 720-250407/4
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 19:46	1
Acetone	ND		50	38	ug/Kg			08/28/18 19:46	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 19:46	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 19:46	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 19:46	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 19:46	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 19:46	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 19:46	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 19:46	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 19:46	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:46	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 19:46	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 19:46	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 19:46	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 19:46	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 19:46	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 19:46	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 19:46	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 19:46	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:46	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 19:46	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:46	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 19:46	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 19:46	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 19:46	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 19:46	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:46	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 19:46	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 19:46	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 19:46	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:46	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 19:46	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 19:46	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 19:46	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 19:46	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250407/4
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 19:46	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 19:46	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 19:46	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 19:46	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 19:46	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 19:46	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:46	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 19:46	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 19:46	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 19:46	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 19:46	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 19:46	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 19:46	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 19:46	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 19:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 19:46	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 19:46	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 19:46	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 19:46	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 19:46	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 19:46	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 19:46	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 19:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*45 - 131*		*08/28/18 19:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*		*08/28/18 19:46*	*1*
Toluene-d8 (Surr)	*102*		*58 - 140*		*08/28/18 19:46*	*1*

Lab Sample ID: LCS 720-250407/5
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	52.3		ug/Kg		105	70 - 144
Acetone	250	219		ug/Kg		88	30 - 162
Benzene	50.0	55.2		ug/Kg		110	70 - 130
Dichlorobromomethane	50.0	53.5		ug/Kg		107	70 - 140
Bromobenzene	50.0	51.1		ug/Kg		102	70 - 130
Chlorobromomethane	50.0	53.8		ug/Kg		108	70 - 130
Bromoform	50.0	49.7		ug/Kg		99	59 - 158
Bromomethane	50.0	51.3		ug/Kg		103	59 - 132
2-Butanone (MEK)	250	231		ug/Kg		92	59 - 159
n-Butylbenzene	50.0	55.0		ug/Kg		110	70 - 142

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250407/5
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
sec-Butylbenzene	50.0	56.8		ug/Kg		114	70 - 136
tert-Butylbenzene	50.0	55.0		ug/Kg		110	70 - 130
Carbon disulfide	50.0	74.6	*	ug/Kg		149	60 - 140
Carbon tetrachloride	50.0	56.6		ug/Kg		113	70 - 142
Chlorobenzene	50.0	51.4		ug/Kg		103	70 - 130
Chloroethane	50.0	50.8		ug/Kg		102	65 - 130
Chloroform	50.0	54.3		ug/Kg		109	77 - 127
Chloromethane	50.0	55.7		ug/Kg		111	55 - 140
2-Chlorotoluene	50.0	54.5		ug/Kg		109	70 - 138
4-Chlorotoluene	50.0	54.9		ug/Kg		110	70 - 136
Chlorodibromomethane	50.0	52.1		ug/Kg		104	70 - 146
1,2-Dichlorobenzene	50.0	51.0		ug/Kg		102	70 - 130
1,3-Dichlorobenzene	50.0	51.6		ug/Kg		103	70 - 131
1,4-Dichlorobenzene	50.0	51.4		ug/Kg		103	70 - 130
1,3-Dichloropropane	50.0	50.8		ug/Kg		102	70 - 140
1,1-Dichloropropene	50.0	56.5		ug/Kg		113	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	50.5		ug/Kg		101	60 - 145
Ethylene Dibromide	50.0	51.9		ug/Kg		104	70 - 140
Dibromomethane	50.0	51.2		ug/Kg		102	70 - 139
Dichlorodifluoromethane	50.0	51.4		ug/Kg		103	37 - 158
1,1-Dichloroethane	50.0	58.1		ug/Kg		116	70 - 130
1,2-Dichloroethane	50.0	51.4		ug/Kg		103	70 - 130
1,1-Dichloroethene	50.0	63.4	*	ug/Kg		127	74 - 122
cis-1,2-Dichloroethene	50.0	56.6		ug/Kg		113	70 - 138
trans-1,2-Dichloroethene	50.0	59.4		ug/Kg		119	67 - 130
1,2-Dichloropropane	50.0	56.8		ug/Kg		114	73 - 127
cis-1,3-Dichloropropene	50.0	56.4		ug/Kg		113	68 - 147
trans-1,3-Dichloropropene	50.0	53.1		ug/Kg		106	70 - 155
Ethylbenzene	50.0	54.7		ug/Kg		109	80 - 137
Hexachlorobutadiene	50.0	49.1		ug/Kg		98	70 - 132
2-Hexanone	250	248		ug/Kg		99	62 - 158
Isopropylbenzene	50.0	53.0		ug/Kg		106	70 - 130
4-Isopropyltoluene	50.0	55.5		ug/Kg		111	70 - 133
Methylene Chloride	50.0	54.3		ug/Kg		109	70 - 134
4-Methyl-2-pentanone (MIBK)	250	255		ug/Kg		102	60 - 160
Naphthalene	50.0	48.2		ug/Kg		96	60 - 147
N-Propylbenzene	50.0	57.1		ug/Kg		114	70 - 130
Styrene	50.0	51.9		ug/Kg		104	70 - 130
1,1,1,2-Tetrachloroethane	50.0	52.8		ug/Kg		106	70 - 130
1,1,2,2-Tetrachloroethane	50.0	51.3		ug/Kg		103	70 - 146
Tetrachloroethene	50.0	52.1		ug/Kg		104	70 - 132
Toluene	50.0	52.2		ug/Kg		104	75 - 120
1,2,3-Trichlorobenzene	50.0	47.3		ug/Kg		95	60 - 140
1,2,4-Trichlorobenzene	50.0	48.6		ug/Kg		97	60 - 140
1,1,1-Trichloroethane	50.0	55.6		ug/Kg		111	70 - 130
1,1,2-Trichloroethane	50.0	52.4		ug/Kg		105	70 - 130
Trichloroethene	50.0	51.4		ug/Kg		103	70 - 133
Trichlorofluoromethane	50.0	54.5		ug/Kg		109	60 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250407/5
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	50.8		ug/Kg		102	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	66.9		ug/Kg		134	60 - 140
1,2,4-Trimethylbenzene	50.0	54.2		ug/Kg		108	70 - 130
1,3,5-Trimethylbenzene	50.0	55.2		ug/Kg		110	70 - 131
Vinyl acetate	50.0	53.1		ug/Kg		106	38 - 176
Vinyl chloride	50.0	53.9		ug/Kg		108	58 - 125
m-Xylene & p-Xylene	50.0	53.0		ug/Kg		106	70 - 146
o-Xylene	50.0	53.4		ug/Kg		107	70 - 140
2,2-Dichloropropane	50.0	57.7		ug/Kg		115	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCS 720-250407/7
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	937		ug/Kg		94	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: LCSD 720-250407/6
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	53.3		ug/Kg		107	70 - 144	2	20
Acetone	250	232		ug/Kg		93	30 - 162	6	30
Benzene	50.0	53.9		ug/Kg		108	70 - 130	2	20
Dichlorobromomethane	50.0	53.0		ug/Kg		106	70 - 140	1	20
Bromobenzene	50.0	49.7		ug/Kg		99	70 - 130	3	20
Chlorobromomethane	50.0	52.9		ug/Kg		106	70 - 130	2	20
Bromoform	50.0	51.5		ug/Kg		103	59 - 158	4	20
Bromomethane	50.0	51.5		ug/Kg		103	59 - 132	0	20
2-Butanone (MEK)	250	232		ug/Kg		93	59 - 159	1	20
n-Butylbenzene	50.0	54.6		ug/Kg		109	70 - 142	1	20
sec-Butylbenzene	50.0	55.2		ug/Kg		110	70 - 136	3	20
tert-Butylbenzene	50.0	53.7		ug/Kg		107	70 - 130	2	20
Carbon disulfide	50.0	72.7	*	ug/Kg		145	60 - 140	3	20
Carbon tetrachloride	50.0	54.8		ug/Kg		110	70 - 142	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250407/6
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene	50.0	51.6		ug/Kg		103	70 - 130	0	20
Chloroethane	50.0	51.0		ug/Kg		102	65 - 130	0	20
Chloroform	50.0	53.1		ug/Kg		106	77 - 127	2	20
Chloromethane	50.0	54.5		ug/Kg		109	55 - 140	2	20
2-Chlorotoluene	50.0	53.4		ug/Kg		107	70 - 138	2	20
4-Chlorotoluene	50.0	53.6		ug/Kg		107	70 - 136	2	20
Chlorodibromomethane	50.0	51.6		ug/Kg		103	70 - 146	1	20
1,2-Dichlorobenzene	50.0	50.3		ug/Kg		101	70 - 130	1	20
1,3-Dichlorobenzene	50.0	50.8		ug/Kg		102	70 - 131	2	20
1,4-Dichlorobenzene	50.0	50.4		ug/Kg		101	70 - 130	2	20
1,3-Dichloropropane	50.0	50.7		ug/Kg		101	70 - 140	0	20
1,1-Dichloropropene	50.0	55.3		ug/Kg		111	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	50.0	51.2		ug/Kg		102	60 - 145	1	20
Ethylene Dibromide	50.0	51.9		ug/Kg		104	70 - 140	0	20
Dibromomethane	50.0	51.2		ug/Kg		102	70 - 139	0	20
Dichlorodifluoromethane	50.0	51.9		ug/Kg		104	37 - 158	1	20
1,1-Dichloroethane	50.0	57.1		ug/Kg		114	70 - 130	2	20
1,2-Dichloroethane	50.0	51.5		ug/Kg		103	70 - 130	0	20
1,1-Dichloroethene	50.0	61.4	*	ug/Kg		123	74 - 122	3	20
cis-1,2-Dichloroethene	50.0	55.9		ug/Kg		112	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	58.3		ug/Kg		117	67 - 130	2	20
1,2-Dichloropropane	50.0	56.4		ug/Kg		113	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	56.8		ug/Kg		114	68 - 147	1	20
trans-1,3-Dichloropropene	50.0	53.6		ug/Kg		107	70 - 155	1	20
Ethylbenzene	50.0	54.4		ug/Kg		109	80 - 137	1	20
Hexachlorobutadiene	50.0	48.7		ug/Kg		97	70 - 132	1	20
2-Hexanone	250	257		ug/Kg		103	62 - 158	4	20
Isopropylbenzene	50.0	52.9		ug/Kg		106	70 - 130	0	20
4-Isopropyltoluene	50.0	54.5		ug/Kg		109	70 - 133	2	20
Methylene Chloride	50.0	54.0		ug/Kg		108	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	261		ug/Kg		105	60 - 160	2	20
Naphthalene	50.0	49.5		ug/Kg		99	60 - 147	3	20
N-Propylbenzene	50.0	55.8		ug/Kg		112	70 - 130	2	20
Styrene	50.0	52.2		ug/Kg		104	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	53.0		ug/Kg		106	70 - 130	0	20
1,1,2,2-Tetrachloroethane	50.0	51.0		ug/Kg		102	70 - 146	1	20
Tetrachloroethene	50.0	50.7		ug/Kg		101	70 - 132	3	20
Toluene	50.0	52.5		ug/Kg		105	75 - 120	1	20
1,2,3-Trichlorobenzene	50.0	49.0		ug/Kg		98	60 - 140	4	20
1,2,4-Trichlorobenzene	50.0	49.1		ug/Kg		98	60 - 140	1	20
1,1,1-Trichloroethane	50.0	53.8		ug/Kg		108	70 - 130	3	20
1,1,2-Trichloroethane	50.0	52.6		ug/Kg		105	70 - 130	1	20
Trichloroethene	50.0	50.3		ug/Kg		101	70 - 133	2	20
Trichlorofluoromethane	50.0	53.4		ug/Kg		107	60 - 140	2	20
1,2,3-Trichloropropane	50.0	51.0		ug/Kg		102	70 - 146	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	64.7		ug/Kg		129	60 - 140	3	20
1,2,4-Trimethylbenzene	50.0	53.1		ug/Kg		106	70 - 130	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250407/6
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trimethylbenzene			50.0	53.9		ug/Kg		108	70 - 131	2	20
Vinyl acetate			50.0	52.6		ug/Kg		105	38 - 176	1	20
Vinyl chloride			50.0	53.4		ug/Kg		107	58 - 125	1	20
m-Xylene & p-Xylene			50.0	53.0		ug/Kg		106	70 - 146	0	20
o-Xylene			50.0	53.6		ug/Kg		107	70 - 140	0	20
2,2-Dichloropropane			50.0	57.5		ug/Kg		115	70 - 162	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*97*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: LCSD 720-250407/8
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	943		ug/Kg		94	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: MB 720-250408/4
Matrix: Solid
Analysis Batch: 250408

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/29/18 00:02	1
Acetone	ND		50	38	ug/Kg			08/29/18 00:02	1
Benzene	ND		5.0	0.65	ug/Kg			08/29/18 00:02	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/29/18 00:02	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/29/18 00:02	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/29/18 00:02	1
Bromoform	ND		5.0	2.0	ug/Kg			08/29/18 00:02	1
Bromomethane	ND		10	0.79	ug/Kg			08/29/18 00:02	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/29/18 00:02	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/29/18 00:02	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/29/18 00:02	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/29/18 00:02	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/29/18 00:02	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/29/18 00:02	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/29/18 00:02	1
Chloroethane	ND		10	0.56	ug/Kg			08/29/18 00:02	1
Chloroform	ND		5.0	0.66	ug/Kg			08/29/18 00:02	1
Chloromethane	ND		10	0.79	ug/Kg			08/29/18 00:02	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250408/4
Matrix: Solid
Analysis Batch: 250408

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/29/18 00:02	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/29/18 00:02	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/29/18 00:02	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/29/18 00:02	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/29/18 00:02	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 00:02	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/29/18 00:02	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 00:02	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/29/18 00:02	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/29/18 00:02	1
Dibromomethane	ND		10	0.86	ug/Kg			08/29/18 00:02	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/29/18 00:02	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/29/18 00:02	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/29/18 00:02	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/29/18 00:02	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/29/18 00:02	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/29/18 00:02	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/29/18 00:02	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 00:02	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/29/18 00:02	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/29/18 00:02	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/29/18 00:02	1
2-Hexanone	ND		50	10	ug/Kg			08/29/18 00:02	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/29/18 00:02	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/29/18 00:02	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/29/18 00:02	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/29/18 00:02	1
Naphthalene	ND		10	1.5	ug/Kg			08/29/18 00:02	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/29/18 00:02	1
Styrene	ND		5.0	0.63	ug/Kg			08/29/18 00:02	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/29/18 00:02	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/29/18 00:02	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/29/18 00:02	1
Toluene	ND		5.0	0.71	ug/Kg			08/29/18 00:02	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/29/18 00:02	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 00:02	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/29/18 00:02	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/29/18 00:02	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/29/18 00:02	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/29/18 00:02	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/29/18 00:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/29/18 00:02	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/29/18 00:02	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/29/18 00:02	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/29/18 00:02	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/29/18 00:02	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/29/18 00:02	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/29/18 00:02	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250408/4
Matrix: Solid
Analysis Batch: 250408

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/29/18 00:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*45 - 131*		*08/29/18 00:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*		*08/29/18 00:02*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*		*08/29/18 00:02*	*1*

Lab Sample ID: LCS 720-250408/5
Matrix: Solid
Analysis Batch: 250408

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	55.3		ug/Kg		111	70 - 144
Acetone	250	293		ug/Kg		117	30 - 162
Benzene	50.0	51.4		ug/Kg		103	70 - 130
Dichlorobromomethane	50.0	47.4		ug/Kg		95	70 - 140
Bromobenzene	50.0	50.4		ug/Kg		101	70 - 130
Chlorobromomethane	50.0	54.2		ug/Kg		108	70 - 130
Bromoform	50.0	49.7		ug/Kg		99	59 - 158
Bromomethane	50.0	51.2		ug/Kg		102	59 - 132
2-Butanone (MEK)	250	260		ug/Kg		104	59 - 159
n-Butylbenzene	50.0	52.2		ug/Kg		104	70 - 142
sec-Butylbenzene	50.0	51.2		ug/Kg		102	70 - 136
tert-Butylbenzene	50.0	50.6		ug/Kg		101	70 - 130
Carbon disulfide	50.0	74.4	*	ug/Kg		149	60 - 140
Carbon tetrachloride	50.0	51.1		ug/Kg		102	70 - 142
Chlorobenzene	50.0	49.2		ug/Kg		98	70 - 130
Chloroethane	50.0	49.6		ug/Kg		99	65 - 130
Chloroform	50.0	48.6		ug/Kg		97	77 - 127
Chloromethane	50.0	50.2		ug/Kg		100	55 - 140
2-Chlorotoluene	50.0	51.7		ug/Kg		103	70 - 138
4-Chlorotoluene	50.0	51.9		ug/Kg		104	70 - 136
Chlorodibromomethane	50.0	49.3		ug/Kg		99	70 - 146
1,2-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130
1,3-Dichlorobenzene	50.0	49.8		ug/Kg		100	70 - 131
1,4-Dichlorobenzene	50.0	50.5		ug/Kg		101	70 - 130
1,3-Dichloropropane	50.0	47.8		ug/Kg		96	70 - 140
1,1-Dichloropropene	50.0	53.4		ug/Kg		107	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	54.2		ug/Kg		108	60 - 145
Ethylene Dibromide	50.0	48.5		ug/Kg		97	70 - 140
Dibromomethane	50.0	48.4		ug/Kg		97	70 - 139
Dichlorodifluoromethane	50.0	46.2		ug/Kg		92	37 - 158
1,1-Dichloroethane	50.0	55.2		ug/Kg		110	70 - 130
1,2-Dichloroethane	50.0	47.4		ug/Kg		95	70 - 130
1,1-Dichloroethene	50.0	64.5	*	ug/Kg		129	74 - 122
cis-1,2-Dichloroethene	50.0	54.2		ug/Kg		108	70 - 138
trans-1,2-Dichloroethene	50.0	62.7		ug/Kg		125	67 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250408/5
Matrix: Solid
Analysis Batch: 250408

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	50.0	51.5		ug/Kg		103	73 - 127
cis-1,3-Dichloropropene	50.0	53.3		ug/Kg		107	68 - 147
trans-1,3-Dichloropropene	50.0	49.8		ug/Kg		100	70 - 155
Ethylbenzene	50.0	50.8		ug/Kg		102	80 - 137
Hexachlorobutadiene	50.0	50.2		ug/Kg		100	70 - 132
2-Hexanone	250	275		ug/Kg		110	62 - 158
Isopropylbenzene	50.0	55.0		ug/Kg		110	70 - 130
4-Isopropyltoluene	50.0	51.3		ug/Kg		103	70 - 133
Methylene Chloride	50.0	57.2		ug/Kg		114	70 - 134
4-Methyl-2-pentanone (MIBK)	250	269		ug/Kg		108	60 - 160
Naphthalene	50.0	58.6		ug/Kg		117	60 - 147
N-Propylbenzene	50.0	52.1		ug/Kg		104	70 - 130
Styrene	50.0	52.0		ug/Kg		104	70 - 130
1,1,1,2-Tetrachloroethane	50.0	51.0		ug/Kg		102	70 - 130
1,1,2,2-Tetrachloroethane	50.0	46.8		ug/Kg		94	70 - 146
Tetrachloroethene	50.0	52.6		ug/Kg		105	70 - 132
Toluene	50.0	50.6		ug/Kg		101	75 - 120
1,2,3-Trichlorobenzene	50.0	55.8		ug/Kg		112	60 - 140
1,2,4-Trichlorobenzene	50.0	59.4		ug/Kg		119	60 - 140
1,1,1-Trichloroethane	50.0	52.4		ug/Kg		105	70 - 130
1,1,2-Trichloroethane	50.0	50.3		ug/Kg		101	70 - 130
Trichloroethene	50.0	50.7		ug/Kg		101	70 - 133
Trichlorofluoromethane	50.0	50.7		ug/Kg		101	60 - 140
1,2,3-Trichloropropane	50.0	49.0		ug/Kg		98	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	67.4		ug/Kg		135	60 - 140
1,2,4-Trimethylbenzene	50.0	52.9		ug/Kg		106	70 - 130
1,3,5-Trimethylbenzene	50.0	52.4		ug/Kg		105	70 - 131
Vinyl acetate	50.0	59.7		ug/Kg		119	38 - 176
Vinyl chloride	50.0	47.5		ug/Kg		95	58 - 125
m-Xylene & p-Xylene	50.0	52.3		ug/Kg		105	70 - 146
o-Xylene	50.0	52.5		ug/Kg		105	70 - 140
2,2-Dichloropropane	50.0	58.9		ug/Kg		118	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCS 720-250408/7
Matrix: Solid
Analysis Batch: 250408

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1140		ug/Kg		114	70 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250408/7
Matrix: Solid
Analysis Batch: 250408

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*88*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCSD 720-250408/6
Matrix: Solid
Analysis Batch: 250408

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	54.7		ug/Kg		109	70 - 144	1	20
Acetone	250	288		ug/Kg		115	30 - 162	2	30
Benzene	50.0	51.4		ug/Kg		103	70 - 130	0	20
Dichlorobromomethane	50.0	46.9		ug/Kg		94	70 - 140	1	20
Bromobenzene	50.0	50.8		ug/Kg		102	70 - 130	1	20
Chlorobromomethane	50.0	52.0		ug/Kg		104	70 - 130	4	20
Bromoform	50.0	49.8		ug/Kg		100	59 - 158	0	20
Bromomethane	50.0	48.9		ug/Kg		98	59 - 132	5	20
2-Butanone (MEK)	250	250		ug/Kg		100	59 - 159	4	20
n-Butylbenzene	50.0	53.4		ug/Kg		107	70 - 142	2	20
sec-Butylbenzene	50.0	53.6		ug/Kg		107	70 - 136	5	20
tert-Butylbenzene	50.0	53.3		ug/Kg		107	70 - 130	5	20
Carbon disulfide	50.0	73.2	*	ug/Kg		146	60 - 140	2	20
Carbon tetrachloride	50.0	51.0		ug/Kg		102	70 - 142	0	20
Chlorobenzene	50.0	49.4		ug/Kg		99	70 - 130	1	20
Chloroethane	50.0	47.4		ug/Kg		95	65 - 130	4	20
Chloroform	50.0	47.9		ug/Kg		96	77 - 127	2	20
Chloromethane	50.0	48.0		ug/Kg		96	55 - 140	5	20
2-Chlorotoluene	50.0	52.9		ug/Kg		106	70 - 138	2	20
4-Chlorotoluene	50.0	52.9		ug/Kg		106	70 - 136	2	20
Chlorodibromomethane	50.0	49.0		ug/Kg		98	70 - 146	1	20
1,2-Dichlorobenzene	50.0	51.8		ug/Kg		104	70 - 130	4	20
1,3-Dichlorobenzene	50.0	50.3		ug/Kg		101	70 - 131	1	20
1,4-Dichlorobenzene	50.0	48.6		ug/Kg		97	70 - 130	4	20
1,3-Dichloropropane	50.0	46.5		ug/Kg		93	70 - 140	3	20
1,1-Dichloropropene	50.0	53.1		ug/Kg		106	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	55.7		ug/Kg		111	60 - 145	3	20
Ethylene Dibromide	50.0	46.7		ug/Kg		93	70 - 140	4	20
Dibromomethane	50.0	49.2		ug/Kg		98	70 - 139	2	20
Dichlorodifluoromethane	50.0	43.7		ug/Kg		87	37 - 158	6	20
1,1-Dichloroethane	50.0	55.0		ug/Kg		110	70 - 130	1	20
1,2-Dichloroethane	50.0	48.0		ug/Kg		96	70 - 130	1	20
1,1-Dichloroethene	50.0	64.2	*	ug/Kg		128	74 - 122	1	20
cis-1,2-Dichloroethene	50.0	53.3		ug/Kg		107	70 - 138	2	20
trans-1,2-Dichloroethene	50.0	62.4		ug/Kg		125	67 - 130	0	20
1,2-Dichloropropane	50.0	51.5		ug/Kg		103	73 - 127	0	20
cis-1,3-Dichloropropene	50.0	52.8		ug/Kg		106	68 - 147	1	20
trans-1,3-Dichloropropene	50.0	49.5		ug/Kg		99	70 - 155	1	20
Ethylbenzene	50.0	50.5		ug/Kg		101	80 - 137	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250408/6
Matrix: Solid
Analysis Batch: 250408

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorobutadiene			50.0	50.9		ug/Kg		102	70 - 132	1	20
2-Hexanone			250	269		ug/Kg		107	62 - 158	2	20
Isopropylbenzene			50.0	55.6		ug/Kg		111	70 - 130	1	20
4-Isopropyltoluene			50.0	53.3		ug/Kg		107	70 - 133	4	20
Methylene Chloride			50.0	55.5		ug/Kg		111	70 - 134	3	20
4-Methyl-2-pentanone (MIBK)			250	262		ug/Kg		105	60 - 160	3	20
Naphthalene			50.0	59.5		ug/Kg		119	60 - 147	2	20
N-Propylbenzene			50.0	53.6		ug/Kg		107	70 - 130	3	20
Styrene			50.0	51.4		ug/Kg		103	70 - 130	1	20
1,1,1,2-Tetrachloroethane			50.0	50.8		ug/Kg		102	70 - 130	0	20
1,1,2,2-Tetrachloroethane			50.0	49.1		ug/Kg		98	70 - 146	5	20
Tetrachloroethene			50.0	51.5		ug/Kg		103	70 - 132	2	20
Toluene			50.0	50.4		ug/Kg		101	75 - 120	0	20
1,2,3-Trichlorobenzene			50.0	57.1		ug/Kg		114	60 - 140	2	20
1,2,4-Trichlorobenzene			50.0	57.7		ug/Kg		115	60 - 140	3	20
1,1,1-Trichloroethane			50.0	51.4		ug/Kg		103	70 - 130	2	20
1,1,2-Trichloroethane			50.0	50.1		ug/Kg		100	70 - 130	0	20
Trichloroethene			50.0	49.8		ug/Kg		100	70 - 133	2	20
Trichlorofluoromethane			50.0	49.3		ug/Kg		99	60 - 140	3	20
1,2,3-Trichloropropane			50.0	49.8		ug/Kg		100	70 - 146	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	67.4		ug/Kg		135	60 - 140	0	20
1,2,4-Trimethylbenzene			50.0	54.3		ug/Kg		109	70 - 130	3	20
1,3,5-Trimethylbenzene			50.0	53.3		ug/Kg		107	70 - 131	2	20
Vinyl acetate			50.0	56.9		ug/Kg		114	38 - 176	5	20
Vinyl chloride			50.0	45.3		ug/Kg		91	58 - 125	5	20
m-Xylene & p-Xylene			50.0	52.0		ug/Kg		104	70 - 146	1	20
o-Xylene			50.0	53.0		ug/Kg		106	70 - 140	1	20
2,2-Dichloropropane			50.0	56.8		ug/Kg		114	70 - 162	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*88*		*60 - 140*
Toluene-d8 (Surr)	*94*		*58 - 140*

Lab Sample ID: LCSD 720-250408/8
Matrix: Solid
Analysis Batch: 250408

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1100		ug/Kg		110	70 - 122	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*89*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88200-B-4-D MS
Matrix: Solid
Analysis Batch: 250408

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250440

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	ND		49.0	45.9		ug/Kg		94	69 - 130
Acetone	ND	F1	245	497	F1	ug/Kg		203	37 - 150
Benzene	ND		49.0	41.9		ug/Kg		85	70 - 130
Dichlorobromomethane	ND		49.0	40.9		ug/Kg		84	64 - 135
Bromobenzene	ND		49.0	53.0		ug/Kg		108	70 - 130
Chlorobromomethane	ND		49.0	46.1		ug/Kg		94	65 - 130
Bromoform	ND		49.0	43.1		ug/Kg		88	58 - 132
Bromomethane	ND		49.0	53.3		ug/Kg		109	56 - 130
2-Butanone (MEK)	ND		245	300		ug/Kg		122	41 - 150
n-Butylbenzene	ND		49.0	38.1		ug/Kg		78	60 - 145
sec-Butylbenzene	ND		49.0	44.8		ug/Kg		91	64 - 137
tert-Butylbenzene	ND		49.0	46.7		ug/Kg		95	63 - 134
Carbon disulfide	ND	*	49.0	47.5		ug/Kg		97	10 - 150
Carbon tetrachloride	ND		49.0	36.2		ug/Kg		74	54 - 130
Chlorobenzene	ND		49.0	40.5		ug/Kg		83	70 - 130
Chloroethane	ND		49.0	51.5		ug/Kg		105	61 - 130
Chloroform	ND		49.0	41.4		ug/Kg		85	67 - 130
Chloromethane	ND		49.0	51.1		ug/Kg		104	50 - 131
2-Chlorotoluene	ND		49.0	49.8		ug/Kg		102	70 - 130
4-Chlorotoluene	ND		49.0	49.0		ug/Kg		100	70 - 130
Chlorodibromomethane	ND		49.0	43.9		ug/Kg		90	60 - 141
1,2-Dichlorobenzene	ND		49.0	42.4		ug/Kg		86	70 - 130
1,3-Dichlorobenzene	ND		49.0	42.5		ug/Kg		87	70 - 130
1,4-Dichlorobenzene	ND		49.0	41.6		ug/Kg		85	70 - 130
1,3-Dichloropropane	ND		49.0	42.8		ug/Kg		87	70 - 130
1,1-Dichloropropene	ND		49.0	39.3		ug/Kg		80	67 - 130
1,2-Dibromo-3-Chloropropane	ND		49.0	59.8		ug/Kg		122	57 - 130
Ethylene Dibromide	ND		49.0	42.8		ug/Kg		87	66 - 135
Dibromomethane	ND		49.0	42.2		ug/Kg		86	65 - 131
Dichlorodifluoromethane	ND		49.0	44.0		ug/Kg		90	38 - 130
1,1-Dichloroethane	ND		49.0	45.7		ug/Kg		93	67 - 130
1,2-Dichloroethane	ND		49.0	42.6		ug/Kg		87	70 - 130
1,1-Dichloroethene	ND	*	49.0	45.4		ug/Kg		93	64 - 130
cis-1,2-Dichloroethene	ND		49.0	44.1		ug/Kg		90	68 - 131
trans-1,2-Dichloroethene	ND		49.0	48.5		ug/Kg		99	70 - 130
1,2-Dichloropropane	ND		49.0	44.2		ug/Kg		90	65 - 133
cis-1,3-Dichloropropene	ND		49.0	45.9		ug/Kg		94	46 - 139
trans-1,3-Dichloropropene	ND		49.0	43.5		ug/Kg		89	55 - 131
Ethylbenzene	ND		49.0	40.1		ug/Kg		82	65 - 130
Hexachlorobutadiene	ND	F1	49.0	27.9	F1	ug/Kg		57	58 - 132
2-Hexanone	ND		245	313		ug/Kg		128	44 - 150
Isopropylbenzene	ND		49.0	39.4		ug/Kg		80	65 - 130
4-Isopropyltoluene	ND		49.0	43.6		ug/Kg		89	69 - 134
Methylene Chloride	ND		49.0	46.7		ug/Kg		95	63 - 130
4-Methyl-2-pentanone (MIBK)	ND		245	316		ug/Kg		129	51 - 140
Naphthalene	ND		49.0	38.2		ug/Kg		78	45 - 146
N-Propylbenzene	ND		49.0	49.1		ug/Kg		100	70 - 130
Styrene	ND		49.0	40.3		ug/Kg		82	58 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88200-B-4-D MS
Matrix: Solid
Analysis Batch: 250408

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250440

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		49.0	43.5		ug/Kg		89	64 - 133
1,1,2,2-Tetrachloroethane	ND		49.0	52.8		ug/Kg		108	70 - 131
Tetrachloroethene	ND		49.0	35.7		ug/Kg		73	67 - 130
Toluene	ND		49.0	43.1		ug/Kg		88	70 - 130
1,2,3-Trichlorobenzene	ND	F1	49.0	26.3	F1	ug/Kg		54	58 - 138
1,2,4-Trichlorobenzene	ND		49.0	28.1		ug/Kg		57	49 - 144
1,1,1-Trichloroethane	ND		49.0	39.3		ug/Kg		80	57 - 133
1,1,2-Trichloroethane	ND		49.0	45.3		ug/Kg		92	68 - 132
Trichloroethene	ND		49.0	42.5		ug/Kg		87	66 - 130
Trichlorofluoromethane	ND		49.0	51.1		ug/Kg		104	61 - 130
1,2,3-Trichloropropane	ND		49.0	62.7		ug/Kg		128	62 - 150
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		49.0	44.2		ug/Kg		90	52 - 130
1,2,4-Trimethylbenzene	ND		49.0	48.5		ug/Kg		99	64 - 140
1,3,5-Trimethylbenzene	ND		49.0	48.9		ug/Kg		100	67 - 134
Vinyl acetate	ND	F1	49.0	ND	F1	ug/Kg		0	52 - 150
Vinyl chloride	ND		49.0	46.7		ug/Kg		95	62 - 130
m-Xylene & p-Xylene	ND		49.0	40.0		ug/Kg		82	70 - 130
o-Xylene	ND		49.0	41.8		ug/Kg		85	68 - 130
2,2-Dichloropropane	ND		49.0	41.4		ug/Kg		84	63 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*84*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*
Toluene-d8 (Surr)	*92*		*58 - 140*

Lab Sample ID: 720-88200-B-4-E MSD
Matrix: Solid
Analysis Batch: 250408

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250440

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		49.9	51.0		ug/Kg		102	69 - 130	10	20
Acetone	ND	F1	250	521	F1	ug/Kg		209	37 - 150	5	20
Benzene	ND		49.9	42.4		ug/Kg		85	70 - 130	1	20
Dichlorobromomethane	ND		49.9	41.6		ug/Kg		83	64 - 135	2	20
Bromobenzene	ND		49.9	52.3		ug/Kg		105	70 - 130	1	20
Chlorobromomethane	ND		49.9	47.5		ug/Kg		95	65 - 130	3	20
Bromoform	ND		49.9	44.7		ug/Kg		90	58 - 132	4	20
Bromomethane	ND		49.9	54.8		ug/Kg		110	56 - 130	3	20
2-Butanone (MEK)	ND		250	268		ug/Kg		108	41 - 150	11	20
n-Butylbenzene	ND		49.9	40.6		ug/Kg		81	60 - 145	6	20
sec-Butylbenzene	ND		49.9	45.3		ug/Kg		91	64 - 137	1	20
tert-Butylbenzene	ND		49.9	46.5		ug/Kg		93	63 - 134	0	20
Carbon disulfide	ND	*	49.9	48.8		ug/Kg		98	10 - 150	3	20
Carbon tetrachloride	ND		49.9	38.9		ug/Kg		78	54 - 130	7	20
Chlorobenzene	ND		49.9	40.7		ug/Kg		82	70 - 130	0	20
Chloroethane	ND		49.9	53.8		ug/Kg		108	61 - 130	4	20
Chloroform	ND		49.9	42.4		ug/Kg		85	67 - 130	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88200-B-4-E MSD
Matrix: Solid
Analysis Batch: 250408

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250440

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloromethane	ND		49.9	54.3		ug/Kg		109	50 - 131	6	20
2-Chlorotoluene	ND		49.9	49.4		ug/Kg		99	70 - 130	1	20
4-Chlorotoluene	ND		49.9	48.9		ug/Kg		98	70 - 130	0	20
Chlorodibromomethane	ND		49.9	43.6		ug/Kg		87	60 - 141	1	20
1,2-Dichlorobenzene	ND		49.9	42.7		ug/Kg		86	70 - 130	1	20
1,3-Dichlorobenzene	ND		49.9	41.9		ug/Kg		84	70 - 130	1	20
1,4-Dichlorobenzene	ND		49.9	41.0		ug/Kg		82	70 - 130	1	20
1,3-Dichloropropane	ND		49.9	42.5		ug/Kg		85	70 - 130	1	20
1,1-Dichloropropene	ND		49.9	38.8		ug/Kg		78	67 - 130	1	20
1,2-Dibromo-3-Chloropropane	ND		49.9	61.5		ug/Kg		123	57 - 130	3	20
Ethylene Dibromide	ND		49.9	44.7		ug/Kg		90	66 - 135	4	20
Dibromomethane	ND		49.9	41.5		ug/Kg		83	65 - 131	2	20
Dichlorodifluoromethane	ND		49.9	46.4		ug/Kg		93	38 - 130	5	20
1,1-Dichloroethane	ND		49.9	46.8		ug/Kg		94	67 - 130	2	20
1,2-Dichloroethane	ND		49.9	43.2		ug/Kg		87	70 - 130	1	20
1,1-Dichloroethene	ND	*	49.9	47.4		ug/Kg		95	64 - 130	4	20
cis-1,2-Dichloroethene	ND		49.9	44.9		ug/Kg		90	68 - 131	2	20
trans-1,2-Dichloroethene	ND		49.9	50.9		ug/Kg		102	70 - 130	5	20
1,2-Dichloropropane	ND		49.9	46.3		ug/Kg		93	65 - 133	5	20
cis-1,3-Dichloropropene	ND		49.9	45.2		ug/Kg		91	46 - 139	1	20
trans-1,3-Dichloropropene	ND		49.9	42.5		ug/Kg		85	55 - 131	2	20
Ethylbenzene	ND		49.9	41.2		ug/Kg		83	65 - 130	3	20
Hexachlorobutadiene	ND	F1	49.9	31.7		ug/Kg		64	58 - 132	13	20
2-Hexanone	ND		250	310		ug/Kg		124	44 - 150	1	20
Isopropylbenzene	ND		49.9	40.5		ug/Kg		81	65 - 130	3	20
4-Isopropyltoluene	ND		49.9	44.5		ug/Kg		89	69 - 134	2	20
Methylene Chloride	ND		49.9	49.6		ug/Kg		99	63 - 130	6	20
4-Methyl-2-pentanone (MIBK)	ND		250	315		ug/Kg		126	51 - 140	0	20
Naphthalene	ND		49.9	40.6		ug/Kg		81	45 - 146	6	20
N-Propylbenzene	ND		49.9	49.3		ug/Kg		99	70 - 130	0	20
Styrene	ND		49.9	40.9		ug/Kg		82	58 - 135	1	20
1,1,1,2-Tetrachloroethane	ND		49.9	44.1		ug/Kg		88	64 - 133	1	20
1,1,2,2-Tetrachloroethane	ND		49.9	54.4		ug/Kg		109	70 - 131	3	20
Tetrachloroethene	ND		49.9	37.3		ug/Kg		75	67 - 130	4	20
Toluene	ND		49.9	42.3		ug/Kg		85	70 - 130	2	20
1,2,3-Trichlorobenzene	ND	F1	49.9	28.8		ug/Kg		58	58 - 138	9	20
1,2,4-Trichlorobenzene	ND		49.9	30.8		ug/Kg		62	49 - 144	9	20
1,1,1-Trichloroethane	ND		49.9	41.5		ug/Kg		83	57 - 133	5	20
1,1,2-Trichloroethane	ND		49.9	47.3		ug/Kg		95	68 - 132	4	20
Trichloroethene	ND		49.9	40.7		ug/Kg		82	66 - 130	4	20
Trichlorofluoromethane	ND		49.9	51.8		ug/Kg		104	61 - 130	1	20
1,2,3-Trichloropropane	ND		49.9	62.6		ug/Kg		125	62 - 150	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		49.9	47.1		ug/Kg		94	52 - 130	6	20
1,2,4-Trimethylbenzene	ND		49.9	49.5		ug/Kg		99	64 - 140	2	20
1,3,5-Trimethylbenzene	ND		49.9	48.7		ug/Kg		98	67 - 134	0	20
Vinyl acetate	ND	F1	49.9	7.86	J F1	ug/Kg		16	52 - 150	NC	20
Vinyl chloride	ND		49.9	49.4		ug/Kg		99	62 - 130	6	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88200-B-4-E MSD
Matrix: Solid
Analysis Batch: 250408

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250440

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
m-Xylene & p-Xylene	ND		49.9	40.6		ug/Kg		81	70 - 130	1	20
o-Xylene	ND		49.9	42.4		ug/Kg		85	68 - 130	1	20
2,2-Dichloropropane	ND		49.9	44.8		ug/Kg		90	63 - 130	8	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*89*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: MB 720-250450/4
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/29/18 08:25	1
Acetone	ND		50	38	ug/Kg			08/29/18 08:25	1
Benzene	ND		5.0	0.65	ug/Kg			08/29/18 08:25	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/29/18 08:25	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/29/18 08:25	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/29/18 08:25	1
Bromoform	ND		5.0	2.0	ug/Kg			08/29/18 08:25	1
Bromomethane	ND		10	0.79	ug/Kg			08/29/18 08:25	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/29/18 08:25	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/29/18 08:25	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/29/18 08:25	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/29/18 08:25	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/29/18 08:25	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/29/18 08:25	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/29/18 08:25	1
Chloroethane	ND		10	0.56	ug/Kg			08/29/18 08:25	1
Chloroform	ND		5.0	0.66	ug/Kg			08/29/18 08:25	1
Chloromethane	ND		10	0.79	ug/Kg			08/29/18 08:25	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/29/18 08:25	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/29/18 08:25	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/29/18 08:25	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/29/18 08:25	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/29/18 08:25	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 08:25	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/29/18 08:25	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 08:25	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/29/18 08:25	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/29/18 08:25	1
Dibromomethane	ND		10	0.86	ug/Kg			08/29/18 08:25	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/29/18 08:25	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/29/18 08:25	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/29/18 08:25	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/29/18 08:25	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/29/18 08:25	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250450/4
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/29/18 08:25	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/29/18 08:25	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 08:25	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/29/18 08:25	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/29/18 08:25	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/29/18 08:25	1
2-Hexanone	ND		50	10	ug/Kg			08/29/18 08:25	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/29/18 08:25	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/29/18 08:25	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/29/18 08:25	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/29/18 08:25	1
Naphthalene	ND		10	1.5	ug/Kg			08/29/18 08:25	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/29/18 08:25	1
Styrene	ND		5.0	0.63	ug/Kg			08/29/18 08:25	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/29/18 08:25	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/29/18 08:25	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/29/18 08:25	1
Toluene	ND		5.0	0.71	ug/Kg			08/29/18 08:25	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/29/18 08:25	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 08:25	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/29/18 08:25	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/29/18 08:25	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/29/18 08:25	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/29/18 08:25	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/29/18 08:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/29/18 08:25	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/29/18 08:25	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/29/18 08:25	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/29/18 08:25	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/29/18 08:25	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/29/18 08:25	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/29/18 08:25	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/29/18 08:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*45 - 131*		*08/29/18 08:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*		*08/29/18 08:25*	*1*
Toluene-d8 (Surr)	*100*		*58 - 140*		*08/29/18 08:25*	*1*

Lab Sample ID: LCS 720-250450/5
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	49.8		ug/Kg		100	70 - 144
Acetone	250	200		ug/Kg		80	30 - 162
Benzene	50.0	54.2		ug/Kg		108	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250450/5
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorobromomethane	50.0	51.9		ug/Kg		104	70 - 140
Bromobenzene	50.0	49.0		ug/Kg		98	70 - 130
Chlorobromomethane	50.0	51.2		ug/Kg		102	70 - 130
Bromoform	50.0	46.3		ug/Kg		93	59 - 158
Bromomethane	50.0	50.1		ug/Kg		100	59 - 132
2-Butanone (MEK)	250	205		ug/Kg		82	59 - 159
n-Butylbenzene	50.0	56.5		ug/Kg		113	70 - 142
sec-Butylbenzene	50.0	56.3		ug/Kg		113	70 - 136
tert-Butylbenzene	50.0	54.2		ug/Kg		108	70 - 130
Carbon disulfide	50.0	73.9	*	ug/Kg		148	60 - 140
Carbon tetrachloride	50.0	56.7		ug/Kg		113	70 - 142
Chlorobenzene	50.0	51.2		ug/Kg		102	70 - 130
Chloroethane	50.0	50.2		ug/Kg		100	65 - 130
Chloroform	50.0	53.4		ug/Kg		107	77 - 127
Chloromethane	50.0	54.1		ug/Kg		108	55 - 140
2-Chlorotoluene	50.0	53.6		ug/Kg		107	70 - 138
4-Chlorotoluene	50.0	54.0		ug/Kg		108	70 - 136
Chlorodibromomethane	50.0	49.3		ug/Kg		99	70 - 146
1,2-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130
1,3-Dichlorobenzene	50.0	51.7		ug/Kg		103	70 - 131
1,4-Dichlorobenzene	50.0	50.8		ug/Kg		102	70 - 130
1,3-Dichloropropane	50.0	48.0		ug/Kg		96	70 - 140
1,1-Dichloropropene	50.0	56.6		ug/Kg		113	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	44.4		ug/Kg		89	60 - 145
Ethylene Dibromide	50.0	48.5		ug/Kg		97	70 - 140
Dibromomethane	50.0	48.2		ug/Kg		96	70 - 139
Dichlorodifluoromethane	50.0	47.9		ug/Kg		96	37 - 158
1,1-Dichloroethane	50.0	57.2		ug/Kg		114	70 - 130
1,2-Dichloroethane	50.0	49.3		ug/Kg		99	70 - 130
1,1-Dichloroethene	50.0	63.1	*	ug/Kg		126	74 - 122
cis-1,2-Dichloroethene	50.0	56.1		ug/Kg		112	70 - 138
trans-1,2-Dichloroethene	50.0	58.9		ug/Kg		118	67 - 130
1,2-Dichloropropane	50.0	55.9		ug/Kg		112	73 - 127
cis-1,3-Dichloropropene	50.0	55.5		ug/Kg		111	68 - 147
trans-1,3-Dichloropropene	50.0	52.1		ug/Kg		104	70 - 155
Ethylbenzene	50.0	54.8		ug/Kg		110	80 - 137
Hexachlorobutadiene	50.0	50.6		ug/Kg		101	70 - 132
2-Hexanone	250	226		ug/Kg		91	62 - 158
Isopropylbenzene	50.0	53.4		ug/Kg		107	70 - 130
4-Isopropyltoluene	50.0	56.0		ug/Kg		112	70 - 133
Methylene Chloride	50.0	53.3		ug/Kg		107	70 - 134
4-Methyl-2-pentanone (MIBK)	250	234		ug/Kg		93	60 - 160
Naphthalene	50.0	45.1		ug/Kg		90	60 - 147
N-Propylbenzene	50.0	56.7		ug/Kg		113	70 - 130
Styrene	50.0	51.4		ug/Kg		103	70 - 130
1,1,1,2-Tetrachloroethane	50.0	51.7		ug/Kg		103	70 - 130
1,1,2,2-Tetrachloroethane	50.0	46.5		ug/Kg		93	70 - 146
Tetrachloroethene	50.0	52.3		ug/Kg		105	70 - 132

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250450/5
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	50.0	52.7		ug/Kg		105	75 - 120
1,2,3-Trichlorobenzene	50.0	47.7		ug/Kg		95	60 - 140
1,2,4-Trichlorobenzene	50.0	50.2		ug/Kg		100	60 - 140
1,1,1-Trichloroethane	50.0	55.2		ug/Kg		110	70 - 130
1,1,2-Trichloroethane	50.0	50.2		ug/Kg		100	70 - 130
Trichloroethene	50.0	51.1		ug/Kg		102	70 - 133
Trichlorofluoromethane	50.0	53.0		ug/Kg		106	60 - 140
1,2,3-Trichloropropane	50.0	45.5		ug/Kg		91	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	66.6		ug/Kg		133	60 - 140
1,2,4-Trimethylbenzene	50.0	54.1		ug/Kg		108	70 - 130
1,3,5-Trimethylbenzene	50.0	54.3		ug/Kg		109	70 - 131
Vinyl acetate	50.0	50.0		ug/Kg		100	38 - 176
Vinyl chloride	50.0	52.5		ug/Kg		105	58 - 125
m-Xylene & p-Xylene	50.0	53.5		ug/Kg		107	70 - 146
o-Xylene	50.0	53.5		ug/Kg		107	70 - 140
2,2-Dichloropropane	50.0	60.8		ug/Kg		122	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*90*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCS 720-250450/7
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	959		ug/Kg		96	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*97*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: LCSD 720-250450/6
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	52.2		ug/Kg		104	70 - 144	5	20
Acetone	250	214		ug/Kg		86	30 - 162	7	30
Benzene	50.0	54.3		ug/Kg		109	70 - 130	0	20
Dichlorobromomethane	50.0	51.8		ug/Kg		104	70 - 140	0	20
Bromobenzene	50.0	49.5		ug/Kg		99	70 - 130	1	20
Chlorobromomethane	50.0	52.1		ug/Kg		104	70 - 130	2	20
Bromoform	50.0	48.9		ug/Kg		98	59 - 158	5	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250450/6
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromomethane	50.0	50.8		ug/Kg		102	59 - 132	2	20
2-Butanone (MEK)	250	223		ug/Kg		89	59 - 159	8	20
n-Butylbenzene	50.0	55.7		ug/Kg		111	70 - 142	1	20
sec-Butylbenzene	50.0	55.6		ug/Kg		111	70 - 136	1	20
tert-Butylbenzene	50.0	53.0		ug/Kg		106	70 - 130	2	20
Carbon disulfide	50.0	73.3	*	ug/Kg		147	60 - 140	1	20
Carbon tetrachloride	50.0	56.1		ug/Kg		112	70 - 142	1	20
Chlorobenzene	50.0	50.6		ug/Kg		101	70 - 130	1	20
Chloroethane	50.0	50.5		ug/Kg		101	65 - 130	1	20
Chloroform	50.0	53.2		ug/Kg		106	77 - 127	0	20
Chloromethane	50.0	54.3		ug/Kg		109	55 - 140	0	20
2-Chlorotoluene	50.0	53.6		ug/Kg		107	70 - 138	0	20
4-Chlorotoluene	50.0	54.2		ug/Kg		108	70 - 136	0	20
Chlorodibromomethane	50.0	51.1		ug/Kg		102	70 - 146	4	20
1,2-Dichlorobenzene	50.0	49.9		ug/Kg		100	70 - 130	0	20
1,3-Dichlorobenzene	50.0	51.5		ug/Kg		103	70 - 131	0	20
1,4-Dichlorobenzene	50.0	51.1		ug/Kg		102	70 - 130	0	20
1,3-Dichloropropane	50.0	50.2		ug/Kg		100	70 - 140	5	20
1,1-Dichloropropene	50.0	56.2		ug/Kg		112	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	47.9		ug/Kg		96	60 - 145	8	20
Ethylene Dibromide	50.0	50.8		ug/Kg		102	70 - 140	5	20
Dibromomethane	50.0	50.0		ug/Kg		100	70 - 139	4	20
Dichlorodifluoromethane	50.0	48.9		ug/Kg		98	37 - 158	2	20
1,1-Dichloroethane	50.0	57.1		ug/Kg		114	70 - 130	0	20
1,2-Dichloroethane	50.0	50.6		ug/Kg		101	70 - 130	2	20
1,1-Dichloroethene	50.0	62.4	*	ug/Kg		125	74 - 122	1	20
cis-1,2-Dichloroethene	50.0	56.0		ug/Kg		112	70 - 138	0	20
trans-1,2-Dichloroethene	50.0	58.4		ug/Kg		117	67 - 130	1	20
1,2-Dichloropropane	50.0	56.1		ug/Kg		112	73 - 127	0	20
cis-1,3-Dichloropropene	50.0	57.0		ug/Kg		114	68 - 147	3	20
trans-1,3-Dichloropropene	50.0	53.4		ug/Kg		107	70 - 155	3	20
Ethylbenzene	50.0	54.1		ug/Kg		108	80 - 137	1	20
Hexachlorobutadiene	50.0	49.2		ug/Kg		98	70 - 132	3	20
2-Hexanone	250	248		ug/Kg		99	62 - 158	9	20
Isopropylbenzene	50.0	51.9		ug/Kg		104	70 - 130	3	20
4-Isopropyltoluene	50.0	55.0		ug/Kg		110	70 - 133	2	20
Methylene Chloride	50.0	53.6		ug/Kg		107	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	255		ug/Kg		102	60 - 160	9	20
Naphthalene	50.0	47.8		ug/Kg		96	60 - 147	6	20
N-Propylbenzene	50.0	56.6		ug/Kg		113	70 - 130	0	20
Styrene	50.0	51.8		ug/Kg		104	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	51.8		ug/Kg		104	70 - 130	0	20
1,1,2,2-Tetrachloroethane	50.0	49.3		ug/Kg		99	70 - 146	6	20
Tetrachloroethene	50.0	51.6		ug/Kg		103	70 - 132	2	20
Toluene	50.0	51.9		ug/Kg		104	75 - 120	1	20
1,2,3-Trichlorobenzene	50.0	48.5		ug/Kg		97	60 - 140	2	20
1,2,4-Trichlorobenzene	50.0	50.2		ug/Kg		100	60 - 140	0	20
1,1,1-Trichloroethane	50.0	54.9		ug/Kg		110	70 - 130	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250450/6
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2-Trichloroethane			50.0	52.0		ug/Kg		104	70 - 130	4	20
Trichloroethene			50.0	50.5		ug/Kg		101	70 - 133	1	20
Trichlorofluoromethane			50.0	53.5		ug/Kg		107	60 - 140	1	20
1,2,3-Trichloropropane			50.0	48.3		ug/Kg		97	70 - 146	6	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	65.7		ug/Kg		131	60 - 140	1	20
1,2,4-Trimethylbenzene			50.0	53.8		ug/Kg		108	70 - 130	1	20
1,3,5-Trimethylbenzene			50.0	54.0		ug/Kg		108	70 - 131	1	20
Vinyl acetate			50.0	53.5		ug/Kg		107	38 - 176	7	20
Vinyl chloride			50.0	52.6		ug/Kg		105	58 - 125	0	20
m-Xylene & p-Xylene			50.0	52.9		ug/Kg		106	70 - 146	1	20
o-Xylene			50.0	53.2		ug/Kg		106	70 - 140	0	20
2,2-Dichloropropane			50.0	59.7		ug/Kg		119	70 - 162	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCSD 720-250450/8
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	959		ug/Kg		96	70 - 122	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*99*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: 720-88190-15 MS
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: DG-D3S-9.5-10
Prep Type: Total/NA
Prep Batch: 250488

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	ND		48.7	47.1		ug/Kg		97	69 - 130
Acetone	ND		244	182		ug/Kg		74	37 - 150
Benzene	ND		48.7	53.0		ug/Kg		109	70 - 130
Dichlorobromomethane	ND		48.7	48.9		ug/Kg		100	64 - 135
Bromobenzene	ND		48.7	55.7		ug/Kg		114	70 - 130
Chlorobromomethane	ND		48.7	47.3		ug/Kg		97	65 - 130
Bromoform	ND		48.7	42.4		ug/Kg		87	58 - 132
Bromomethane	ND		48.7	50.6		ug/Kg		104	56 - 130
2-Butanone (MEK)	ND		244	184		ug/Kg		76	41 - 150
n-Butylbenzene	ND		48.7	56.4		ug/Kg		116	60 - 145
sec-Butylbenzene	ND		48.7	64.6		ug/Kg		133	64 - 137

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88190-15 MS
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: DG-D3S-9.5-10
Prep Type: Total/NA
Prep Batch: 250488

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
tert-Butylbenzene	ND		48.7	65.5		ug/Kg		134	63 - 134
Carbon disulfide	ND	*	48.7	71.2		ug/Kg		146	10 - 150
Carbon tetrachloride	ND		48.7	57.6		ug/Kg		118	54 - 130
Chlorobenzene	ND		48.7	50.7		ug/Kg		104	70 - 130
Chloroethane	ND		48.7	50.1		ug/Kg		103	61 - 130
Chloroform	ND		48.7	52.6		ug/Kg		108	67 - 130
Chloromethane	ND		48.7	53.4		ug/Kg		109	50 - 131
2-Chlorotoluene	ND		48.7	64.1	F1	ug/Kg		131	70 - 130
4-Chlorotoluene	ND		48.7	61.6		ug/Kg		126	70 - 130
Chlorodibromomethane	ND		48.7	43.9		ug/Kg		90	60 - 141
1,2-Dichlorobenzene	ND		48.7	49.6		ug/Kg		102	70 - 130
1,3-Dichlorobenzene	ND		48.7	52.4		ug/Kg		108	70 - 130
1,4-Dichlorobenzene	ND		48.7	50.7		ug/Kg		104	70 - 130
1,3-Dichloropropane	ND		48.7	42.4		ug/Kg		87	70 - 130
1,1-Dichloropropene	ND		48.7	55.1		ug/Kg		113	67 - 130
1,2-Dibromo-3-Chloropropane	ND		48.7	46.1		ug/Kg		95	57 - 130
Ethylene Dibromide	ND		48.7	40.8		ug/Kg		84	66 - 135
Dibromomethane	ND		48.7	43.2		ug/Kg		89	65 - 131
Dichlorodifluoromethane	ND		48.7	49.3		ug/Kg		101	38 - 130
1,1-Dichloroethane	ND		48.7	56.6		ug/Kg		116	67 - 130
1,2-Dichloroethane	ND		48.7	46.1		ug/Kg		95	70 - 130
1,1-Dichloroethene	ND	*	48.7	61.9		ug/Kg		127	64 - 130
cis-1,2-Dichloroethene	ND		48.7	53.6		ug/Kg		110	68 - 131
trans-1,2-Dichloroethene	ND		48.7	57.6		ug/Kg		118	70 - 130
1,2-Dichloropropane	ND		48.7	53.3		ug/Kg		109	65 - 133
cis-1,3-Dichloropropene	ND		48.7	50.6		ug/Kg		104	46 - 139
trans-1,3-Dichloropropene	ND		48.7	44.2		ug/Kg		91	55 - 131
Ethylbenzene	ND		48.7	56.4		ug/Kg		116	65 - 130
Hexachlorobutadiene	ND		48.7	36.6		ug/Kg		75	58 - 132
2-Hexanone	ND		244	194		ug/Kg		80	44 - 150
Isopropylbenzene	ND		48.7	53.7		ug/Kg		110	65 - 130
4-Isopropyltoluene	ND		48.7	62.2		ug/Kg		128	69 - 134
Methylene Chloride	ND		48.7	51.7		ug/Kg		106	63 - 130
4-Methyl-2-pentanone (MIBK)	ND		244	199		ug/Kg		82	51 - 140
Naphthalene	ND		48.7	34.7		ug/Kg		71	45 - 146
N-Propylbenzene	ND		48.7	68.4	F1	ug/Kg		140	70 - 130
Styrene	ND		48.7	47.9		ug/Kg		98	58 - 135
1,1,1,2-Tetrachloroethane	ND		48.7	53.3		ug/Kg		109	64 - 133
1,1,2,2-Tetrachloroethane	ND		48.7	46.7		ug/Kg		96	70 - 131
Tetrachloroethene	ND		48.7	49.3		ug/Kg		101	67 - 130
Toluene	ND		48.7	55.4		ug/Kg		114	70 - 130
1,2,3-Trichlorobenzene	ND		48.7	29.7		ug/Kg		61	58 - 138
1,2,4-Trichlorobenzene	ND		48.7	32.7		ug/Kg		67	49 - 144
1,1,1-Trichloroethane	ND		48.7	56.3		ug/Kg		116	57 - 133
1,1,2-Trichloroethane	ND		48.7	44.2		ug/Kg		91	68 - 132
Trichloroethene	ND		48.7	53.9		ug/Kg		111	66 - 130
Trichlorofluoromethane	ND		48.7	54.6		ug/Kg		112	61 - 130
1,2,3-Trichloropropane	ND		48.7	51.9		ug/Kg		107	62 - 150

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88190-15 MS
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: DG-D3S-9.5-10
Prep Type: Total/NA
Prep Batch: 250488

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		48.7	69.1	F1	ug/Kg		142	52 - 130
1,2,4-Trimethylbenzene	ND		48.7	63.2		ug/Kg		130	64 - 140
1,3,5-Trimethylbenzene	ND		48.7	65.8	F1	ug/Kg		135	67 - 134
Vinyl acetate	ND		48.7	14.6	J F1	ug/Kg		30	52 - 150
Vinyl chloride	ND		48.7	51.3		ug/Kg		105	62 - 130
m-Xylene & p-Xylene	ND		48.7	54.5		ug/Kg		112	70 - 130
o-Xylene	ND		48.7	54.2		ug/Kg		111	68 - 130
2,2-Dichloropropane	ND		48.7	63.1		ug/Kg		129	63 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*89*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: 720-88190-15 MSD
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: DG-D3S-9.5-10
Prep Type: Total/NA
Prep Batch: 250488

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		47.6	53.7		ug/Kg		113	69 - 130	13	20
Acetone	ND		238	231	F2	ug/Kg		97	37 - 150	24	20
Benzene	ND		47.6	51.3		ug/Kg		108	70 - 130	3	20
Dichlorobromomethane	ND		47.6	52.1		ug/Kg		110	64 - 135	6	20
Bromobenzene	ND		47.6	48.6		ug/Kg		102	70 - 130	14	20
Chlorobromomethane	ND		47.6	52.2		ug/Kg		110	65 - 130	10	20
Bromoform	ND		47.6	49.6		ug/Kg		104	58 - 132	16	20
Bromomethane	ND		47.6	49.2		ug/Kg		103	56 - 130	3	20
2-Butanone (MEK)	ND		238	236	F2	ug/Kg		99	41 - 150	25	20
n-Butylbenzene	ND		47.6	49.9		ug/Kg		105	60 - 145	12	20
sec-Butylbenzene	ND		47.6	51.1	F2	ug/Kg		107	64 - 137	23	20
tert-Butylbenzene	ND		47.6	50.4	F2	ug/Kg		106	63 - 134	26	20
Carbon disulfide	ND	*	47.6	67.0		ug/Kg		141	10 - 150	6	20
Carbon tetrachloride	ND		47.6	52.9		ug/Kg		111	54 - 130	9	20
Chlorobenzene	ND		47.6	49.2		ug/Kg		103	70 - 130	3	20
Chloroethane	ND		47.6	46.6		ug/Kg		98	61 - 130	7	20
Chloroform	ND		47.6	51.4		ug/Kg		108	67 - 130	2	20
Chloromethane	ND		47.6	48.1		ug/Kg		101	50 - 131	10	20
2-Chlorotoluene	ND		47.6	51.0	F2	ug/Kg		107	70 - 130	23	20
4-Chlorotoluene	ND		47.6	51.7		ug/Kg		109	70 - 130	18	20
Chlorodibromomethane	ND		47.6	51.3		ug/Kg		108	60 - 141	16	20
1,2-Dichlorobenzene	ND		47.6	48.4		ug/Kg		102	70 - 130	2	20
1,3-Dichlorobenzene	ND		47.6	48.9		ug/Kg		103	70 - 130	7	20
1,4-Dichlorobenzene	ND		47.6	48.3		ug/Kg		102	70 - 130	5	20
1,3-Dichloropropane	ND		47.6	49.3		ug/Kg		104	70 - 130	15	20
1,1-Dichloropropene	ND		47.6	52.5		ug/Kg		110	67 - 130	5	20
1,2-Dibromo-3-Chloropropane	ND		47.6	48.7		ug/Kg		102	57 - 130	5	20
Ethylene Dibromide	ND		47.6	50.0		ug/Kg		105	66 - 135	20	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88190-15 MSD
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: DG-D3S-9.5-10
Prep Type: Total/NA
Prep Batch: 250488

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dibromomethane	ND		47.6	49.6		ug/Kg		104	65 - 131	14	20
Dichlorodifluoromethane	ND		47.6	46.1		ug/Kg		97	38 - 130	7	20
1,1-Dichloroethane	ND		47.6	54.0		ug/Kg		113	67 - 130	5	20
1,2-Dichloroethane	ND		47.6	50.9		ug/Kg		107	70 - 130	10	20
1,1-Dichloroethene	ND	*	47.6	58.4		ug/Kg		123	64 - 130	6	20
cis-1,2-Dichloroethene	ND		47.6	53.1		ug/Kg		112	68 - 131	1	20
trans-1,2-Dichloroethene	ND		47.6	55.3		ug/Kg		116	70 - 130	4	20
1,2-Dichloropropane	ND		47.6	54.5		ug/Kg		114	65 - 133	2	20
cis-1,3-Dichloropropene	ND		47.6	55.0		ug/Kg		116	46 - 139	8	20
trans-1,3-Dichloropropene	ND		47.6	51.8		ug/Kg		109	55 - 131	16	20
Ethylbenzene	ND		47.6	51.3		ug/Kg		108	65 - 130	9	20
Hexachlorobutadiene	ND		47.6	40.2		ug/Kg		84	58 - 132	10	20
2-Hexanone	ND		238	252	F2	ug/Kg		106	44 - 150	26	20
Isopropylbenzene	ND		47.6	49.6		ug/Kg		104	65 - 130	8	20
4-Isopropyltoluene	ND		47.6	51.4		ug/Kg		108	69 - 134	19	20
Methylene Chloride	ND		47.6	52.5		ug/Kg		110	63 - 130	2	20
4-Methyl-2-pentanone (MIBK)	ND		238	252	F2	ug/Kg		106	51 - 140	23	20
Naphthalene	ND		47.6	44.8	F2	ug/Kg		94	45 - 146	25	20
N-Propylbenzene	ND		47.6	52.6	F2	ug/Kg		111	70 - 130	26	20
Styrene	ND		47.6	49.7		ug/Kg		104	58 - 135	4	20
1,1,1,2-Tetrachloroethane	ND		47.6	52.1		ug/Kg		109	64 - 133	2	20
1,1,2,2-Tetrachloroethane	ND		47.6	43.8		ug/Kg		92	70 - 131	6	20
Tetrachloroethene	ND		47.6	49.3		ug/Kg		104	67 - 130	0	20
Toluene	ND		47.6	49.8		ug/Kg		104	70 - 130	11	20
1,2,3-Trichlorobenzene	ND		47.6	43.4	F2	ug/Kg		91	58 - 138	38	20
1,2,4-Trichlorobenzene	ND		47.6	44.7	F2	ug/Kg		94	49 - 144	31	20
1,1,1-Trichloroethane	ND		47.6	51.8		ug/Kg		109	57 - 133	8	20
1,1,2-Trichloroethane	ND		47.6	51.7		ug/Kg		109	68 - 132	16	20
Trichloroethene	ND		47.6	53.3		ug/Kg		112	66 - 130	1	20
Trichlorofluoromethane	ND		47.6	50.9		ug/Kg		107	61 - 130	7	20
1,2,3-Trichloropropane	ND		47.6	48.7		ug/Kg		102	62 - 150	6	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		47.6	62.9	F1	ug/Kg		132	52 - 130	9	20
1,2,4-Trimethylbenzene	ND		47.6	51.0	F2	ug/Kg		107	64 - 140	21	20
1,3,5-Trimethylbenzene	ND		47.6	51.3	F2	ug/Kg		108	67 - 134	25	20
Vinyl acetate	ND		47.6	20.7	F2 F1	ug/Kg		43	52 - 150	34	20
Vinyl chloride	ND		47.6	47.7		ug/Kg		100	62 - 130	7	20
m-Xylene & p-Xylene	ND		47.6	50.6		ug/Kg		106	70 - 130	7	20
o-Xylene	ND		47.6	51.4		ug/Kg		108	68 - 130	5	20
2,2-Dichloropropane	ND		47.6	55.1		ug/Kg		116	63 - 130	14	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*102*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 720-250048/1-A
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250048

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Anthracene	ND		5.0	2.0	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Chrysene	ND		5.0	1.4	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Fluorene	ND		5.0	2.2	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Naphthalene	4.04	J	5.0	3.5	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Pyrene	ND		5.0	1.7	ug/Kg		08/23/18 09:43	08/24/18 23:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*92*		*33 - 120*	*08/23/18 09:43*	*08/24/18 23:03*	*1*
Terphenyl-d14	*93*		*35 - 146*	*08/23/18 09:43*	*08/24/18 23:03*	*1*

Lab Sample ID: LCS 720-250048/2-A
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250048

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	465		ug/Kg		70	46 - 110
Acenaphthene	667	468		ug/Kg		70	46 - 106
Acenaphthylene	667	458		ug/Kg		69	46 - 108
Anthracene	667	524		ug/Kg		79	55 - 103
Benzo[a]anthracene	667	577		ug/Kg		87	54 - 110
Benzo[a]pyrene	667	575		ug/Kg		86	62 - 111
Benzo[b]fluoranthene	667	582		ug/Kg		87	60 - 109
Benzo[g,h,i]perylene	667	666		ug/Kg		100	52 - 114
Benzo[k]fluoranthene	667	558		ug/Kg		84	58 - 109
Chrysene	667	540		ug/Kg		81	54 - 108
Dibenz(a,h)anthracene	667	632		ug/Kg		95	58 - 112
Fluoranthene	667	568		ug/Kg		85	59 - 109
Fluorene	667	494		ug/Kg		74	52 - 106
Indeno[1,2,3-cd]pyrene	667	686		ug/Kg		103	55 - 120
Naphthalene	667	511		ug/Kg		77	49 - 110
Phenanthrene	667	523		ug/Kg		78	57 - 110
Pyrene	667	553		ug/Kg		83	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*33 - 120*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 720-250048/2-A
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250048

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	88		35 - 146

Lab Sample ID: 720-88190-11 MS
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: DG-H3S-3.5-4
Prep Type: Total/NA
Prep Batch: 250048

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	ND		655	448		ug/Kg		68	46 - 110
Acenaphthene	ND		655	447		ug/Kg		68	46 - 106
Acenaphthylene	ND		655	442		ug/Kg		67	46 - 108
Anthracene	ND		655	513		ug/Kg		78	55 - 103
Benzo[a]anthracene	ND		655	572		ug/Kg		87	54 - 110
Benzo[a]pyrene	2.3	J	655	562		ug/Kg		85	62 - 111
Benzo[b]fluoranthene	3.0	J	655	592		ug/Kg		90	60 - 109
Benzo[g,h,i]perylene	ND		655	505		ug/Kg		77	52 - 114
Benzo[k]fluoranthene	ND		655	527		ug/Kg		81	58 - 109
Chrysene	ND		655	542		ug/Kg		83	54 - 108
Dibenz(a,h)anthracene	ND		655	542		ug/Kg		83	58 - 112
Fluoranthene	1.9	J	655	563		ug/Kg		86	59 - 109
Fluorene	ND		655	476		ug/Kg		73	52 - 106
Indeno[1,2,3-cd]pyrene	ND		655	571		ug/Kg		87	55 - 120
Naphthalene	ND		655	435		ug/Kg		66	49 - 110
Phenanthrene	1.8	J	655	508		ug/Kg		78	57 - 110
Pyrene	2.3	J	655	565		ug/Kg		86	50 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl	72		33 - 120
Terphenyl-d14	91		35 - 146

Lab Sample ID: 720-88190-11 MSD
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: DG-H3S-3.5-4
Prep Type: Total/NA
Prep Batch: 250048

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	ND		655	448		ug/Kg		68	46 - 110	0	35
Acenaphthene	ND		655	473		ug/Kg		72	46 - 106	6	35
Acenaphthylene	ND		655	457		ug/Kg		70	46 - 108	3	35
Anthracene	ND		655	525		ug/Kg		80	55 - 103	2	35
Benzo[a]anthracene	ND		655	579		ug/Kg		88	54 - 110	1	35
Benzo[a]pyrene	2.3	J	655	573		ug/Kg		87	62 - 111	2	35
Benzo[b]fluoranthene	3.0	J	655	585		ug/Kg		89	60 - 109	1	35
Benzo[g,h,i]perylene	ND		655	483		ug/Kg		74	52 - 114	4	35
Benzo[k]fluoranthene	ND		655	551		ug/Kg		84	58 - 109	4	35
Chrysene	ND		655	549		ug/Kg		84	54 - 108	1	35
Dibenz(a,h)anthracene	ND		655	525		ug/Kg		80	58 - 112	3	35
Fluoranthene	1.9	J	655	571		ug/Kg		87	59 - 109	1	35
Fluorene	ND		655	497		ug/Kg		76	52 - 106	4	35
Indeno[1,2,3-cd]pyrene	ND		655	551		ug/Kg		84	55 - 120	3	35

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88190-11 MSD
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: DG-H3S-3.5-4
Prep Type: Total/NA
Prep Batch: 250048

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	ND		655	427		ug/Kg		65	49 - 110	2	35
Phenanthrene	1.8	J	655	515		ug/Kg		79	57 - 110	1	35
Pyrene	2.3	J	655	574		ug/Kg		87	50 - 120	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*33 - 120*
Terphenyl-d14	*92*		*35 - 146*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-250044/1-A
Matrix: Solid
Analysis Batch: 250133

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250044

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/23/18 08:42	08/24/18 13:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*97*		*40 - 130*	*08/23/18 08:42*	*08/24/18 13:30*	*1*

Lab Sample ID: LCS 720-250044/2-A
Matrix: Solid
Analysis Batch: 250037

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250044

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			167000	141000		ug/Kg		85	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*94*		*40 - 130*

Lab Sample ID: 720-88190-10 MS
Matrix: Solid
Analysis Batch: 250037

Client Sample ID: DG-H3S-0.5-1
Prep Type: Total/NA
Prep Batch: 250044

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	31000		160000	169000		ug/Kg		87	50 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*88*		*40 - 130*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 720-88190-10 MSD
Matrix: Solid
Analysis Batch: 250037

Client Sample ID: DG-H3S-0.5-1
Prep Type: Total/NA
Prep Batch: 250044

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	31000		160000	160000		ug/Kg		81	50 - 150	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*94*		*40 - 130*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-250053/1-A
Matrix: Solid
Analysis Batch: 250196

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250053

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Aldrin	ND		2.0	0.50	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endrin	ND		2.0	0.46	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Toxaphene	ND		40	6.8	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/23/18 10:51	08/24/18 21:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*105*		*21 - 136*	*08/23/18 10:51*	*08/24/18 21:13*	*1*
Tetrachloro-m-xylene	*90*		*21 - 145*	*08/23/18 10:51*	*08/24/18 21:13*	*1*

Lab Sample ID: LCS 720-250053/2-A
Matrix: Solid
Analysis Batch: 250196

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250053

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	16.0		ug/Kg		96	75 - 128
4,4'-DDE	16.7	15.7		ug/Kg		94	76 - 126

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-250053/2-A
Matrix: Solid
Analysis Batch: 250196

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250053

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDT	16.7	15.5		ug/Kg		93	63 - 127
Aldrin	16.7	13.4		ug/Kg		80	65 - 120
alpha-BHC	16.7	12.9		ug/Kg		77	46 - 122
beta-BHC	16.7	16.8		ug/Kg		101	78 - 136
cis-Chlordane	16.7	15.4		ug/Kg		93	70 - 120
delta-BHC	16.7	13.1		ug/Kg		79	43 - 125
Dieldrin	16.7	15.2		ug/Kg		91	72 - 120
Endosulfan I	16.7	16.1		ug/Kg		96	62 - 120
Endosulfan II	16.7	16.6		ug/Kg		100	65 - 120
Endosulfan sulfate	16.7	16.0		ug/Kg		96	72 - 121
Endrin	16.7	16.4		ug/Kg		98	68 - 120
Endrin aldehyde	16.7	15.8		ug/Kg		95	68 - 120
Endrin ketone	16.7	16.3		ug/Kg		98	75 - 136
gamma-BHC (Lindane)	16.7	14.5		ug/Kg		87	72 - 120
Heptachlor	16.7	15.1		ug/Kg		91	69 - 120
Heptachlor epoxide	16.7	15.7		ug/Kg		94	68 - 120
Methoxychlor	16.7	17.5		ug/Kg		105	71 - 132
trans-Chlordane	16.7	15.2		ug/Kg		91	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*103*		*21 - 136*
Tetrachloro-m-xylene	*86*		*21 - 145*

Lab Sample ID: 720-88190-10 MS
Matrix: Solid
Analysis Batch: 250248

Client Sample ID: DG-H3S-0.5-1
Prep Type: Total/NA
Prep Batch: 250053

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		16.4	13.4		ug/Kg		82	40 - 120
4,4'-DDE	ND		16.4	12.8		ug/Kg		78	40 - 120
4,4'-DDT	ND		16.4	11.6		ug/Kg		71	17 - 144
Aldrin	ND		16.4	12.6		ug/Kg		77	53 - 120
alpha-BHC	ND		16.4	12.5		ug/Kg		76	40 - 120
beta-BHC	ND		16.4	11.9		ug/Kg		72	40 - 120
cis-Chlordane	ND		16.4	12.7		ug/Kg		77	40 - 120
delta-BHC	ND		16.4	11.8		ug/Kg		72	40 - 120
Dieldrin	ND		16.4	14.1		ug/Kg		86	46 - 130
Endosulfan I	ND		16.4	13.2		ug/Kg		80	40 - 120
Endosulfan II	ND		16.4	13.9		ug/Kg		85	40 - 120
Endosulfan sulfate	ND		16.4	13.0		ug/Kg		79	40 - 120
Endrin	ND		16.4	14.0		ug/Kg		85	32 - 143
Endrin aldehyde	ND		16.4	10.6		ug/Kg		64	40 - 120
Endrin ketone	ND		16.4	11.5		ug/Kg		70	40 - 120
gamma-BHC (Lindane)	ND		16.4	13.4		ug/Kg		82	58 - 120
Heptachlor	ND		16.4	13.6		ug/Kg		83	52 - 120
Heptachlor epoxide	ND		16.4	13.0		ug/Kg		79	40 - 120
Methoxychlor	ND		16.4	11.8		ug/Kg		72	40 - 120
trans-Chlordane	ND		16.4	12.7		ug/Kg		77	40 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	71		21 - 136
Tetrachloro-m-xylene	77		21 - 145

Lab Sample ID: 720-88190-10 MSD — **Client Sample ID: DG-H3S-0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250248 — **Prep Batch: 250053**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		16.4	15.2		ug/Kg		92	40 - 120	12	20
4,4'-DDE	ND		16.4	14.4		ug/Kg		88	40 - 120	12	20
4,4'-DDT	ND		16.4	12.8		ug/Kg		78	17 - 144	10	20
Aldrin	ND		16.4	14.3		ug/Kg		87	53 - 120	13	20
alpha-BHC	ND		16.4	13.5		ug/Kg		82	40 - 120	8	20
beta-BHC	ND		16.4	13.8		ug/Kg		84	40 - 120	15	20
cis-Chlordane	ND		16.4	14.3		ug/Kg		87	40 - 120	12	20
delta-BHC	ND		16.4	13.6		ug/Kg		83	40 - 120	14	20
Dieldrin	ND		16.4	15.2		ug/Kg		93	46 - 130	7	20
Endosulfan I	ND		16.4	14.9		ug/Kg		91	40 - 120	12	20
Endosulfan II	ND		16.4	15.3		ug/Kg		93	40 - 120	9	30
Endosulfan sulfate	ND		16.4	14.3		ug/Kg		87	40 - 120	9	20
Endrin	ND		16.4	15.8		ug/Kg		96	32 - 143	12	20
Endrin aldehyde	ND		16.4	11.5		ug/Kg		70	40 - 120	9	20
Endrin ketone	ND		16.4	13.5		ug/Kg		82	40 - 120	16	20
gamma-BHC (Lindane)	ND		16.4	14.3		ug/Kg		87	58 - 120	6	20
Heptachlor	ND		16.4	15.2		ug/Kg		92	52 - 120	11	20
Heptachlor epoxide	ND		16.4	14.7		ug/Kg		89	40 - 120	12	20
Methoxychlor	ND		16.4	12.7		ug/Kg		77	40 - 120	7	20
trans-Chlordane	ND		16.4	14.3		ug/Kg		87	40 - 120	12	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	89		21 - 136
Tetrachloro-m-xylene	83		21 - 145

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-342522/14-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 342750 — **Prep Batch: 342522**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/26/18 10:34	08/28/18 06:55	1
Aroclor-1221	ND		50	24	ug/Kg		08/26/18 10:34	08/28/18 06:55	1
Aroclor-1232	ND		50	23	ug/Kg		08/26/18 10:34	08/28/18 06:55	1
Aroclor-1242	ND		50	19	ug/Kg		08/26/18 10:34	08/28/18 06:55	1
Aroclor-1248	ND		50	24	ug/Kg		08/26/18 10:34	08/28/18 06:55	1
Aroclor-1254	ND		50	23	ug/Kg		08/26/18 10:34	08/28/18 06:55	1
Aroclor-1260	ND		50	22	ug/Kg		08/26/18 10:34	08/28/18 06:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	63		14 - 128	08/26/18 10:34	08/28/18 06:55	1
DCB Decachlorobiphenyl	62		10 - 132	08/26/18 10:34	08/28/18 06:55	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 240-342522/15-A
Matrix: Solid
Analysis Batch: 342750

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 342522

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	698		ug/Kg		70	47 - 120
Aroclor-1260	1000	831		ug/Kg		83	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*85*		*14 - 128*
DCB Decachlorobiphenyl	*92*		*10 - 132*

Lab Sample ID: 720-88190-15 MS
Matrix: Solid
Analysis Batch: 342750

Client Sample ID: DG-D3S-9.5-10
Prep Type: Total/NA
Prep Batch: 342522

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	ND		1010	769		ug/Kg		76	31 - 120
Aroclor-1260	ND	F2	1010	876		ug/Kg		87	21 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*85*		*14 - 128*
DCB Decachlorobiphenyl	*164*	*X*	*10 - 132*

Lab Sample ID: 720-88190-15 MSD
Matrix: Solid
Analysis Batch: 342750

Client Sample ID: DG-D3S-9.5-10
Prep Type: Total/NA
Prep Batch: 342522

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		967	704		ug/Kg		73	31 - 120	9	30
Aroclor-1260	ND	F2	967	745	p	ug/Kg		77	21 - 122	16	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*86*		*14 - 128*
DCB Decachlorobiphenyl	*108*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250096/1-A
Matrix: Solid
Analysis Batch: 250219

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250096

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Arsenic	ND		1.0	0.085	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Barium	ND		0.50	0.071	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Beryllium	ND		0.10	0.033	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Cadmium	ND		0.13	0.012	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Chromium	ND		0.50	0.053	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Cobalt	ND		0.20	0.020	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Copper	ND		1.5	0.71	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Lead	ND		0.50	0.11	mg/Kg		08/23/18 15:12	08/24/18 17:42	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250096/1-A
Matrix: Solid
Analysis Batch: 250219

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250096

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.50	0.064	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Nickel	ND		0.50	0.051	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Selenium	ND		1.0	0.15	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Silver	ND		0.25	0.051	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Thallium	ND		0.50	0.15	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Vanadium	ND		0.50	0.068	mg/Kg		08/23/18 15:12	08/24/18 17:42	1
Zinc	ND		1.5	0.64	mg/Kg		08/23/18 15:12	08/24/18 17:42	1

Lab Sample ID: LCS 720-250096/2-A
Matrix: Solid
Analysis Batch: 250219

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250096

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	46.6		mg/Kg		93	80 - 120
Arsenic	50.0	46.5		mg/Kg		93	80 - 120
Barium	50.0	47.0		mg/Kg		94	80 - 120
Beryllium	50.0	47.7		mg/Kg		95	80 - 120
Cadmium	50.0	47.0		mg/Kg		94	80 - 120
Chromium	50.0	47.4		mg/Kg		95	80 - 120
Cobalt	50.0	48.3		mg/Kg		97	80 - 120
Copper	50.0	47.4		mg/Kg		95	80 - 120
Lead	50.0	47.9		mg/Kg		96	80 - 120
Molybdenum	50.0	47.8		mg/Kg		96	80 - 120
Nickel	50.0	47.5		mg/Kg		95	80 - 120
Selenium	50.0	45.1		mg/Kg		90	80 - 120
Silver	25.0	23.5		mg/Kg		94	80 - 120
Thallium	50.0	48.1		mg/Kg		96	80 - 120
Vanadium	50.0	47.4		mg/Kg		95	80 - 120
Zinc	50.0	47.2		mg/Kg		94	80 - 120

Lab Sample ID: 720-88189-A-11-D MS
Matrix: Solid
Analysis Batch: 250219

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250096

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.60	J F1	47.2	13.6	F1	mg/Kg		28	75 - 125
Arsenic	2.9	J	47.2	54.9		mg/Kg		110	75 - 125
Barium	36	F1	47.2	95.4		mg/Kg		125	75 - 125
Beryllium	ND	F1	47.2	56.6		mg/Kg		120	75 - 125
Cadmium	0.063	J	47.2	51.6		mg/Kg		109	75 - 125
Chromium	8.2	F1	47.2	64.6		mg/Kg		120	75 - 125
Cobalt	13		47.2	67.4		mg/Kg		116	75 - 125
Copper	110	F1	47.2	193	F1	mg/Kg		181	75 - 125
Lead	45	F1	47.2	106	F1	mg/Kg		129	75 - 125
Molybdenum	ND		47.2	49.7		mg/Kg		105	75 - 125
Nickel	4.2		47.2	57.3		mg/Kg		113	75 - 125
Selenium	ND		47.2	49.7		mg/Kg		105	75 - 125
Silver	ND	F1	23.6	29.6	F1	mg/Kg		126	75 - 125
Thallium	ND		47.2	47.0		mg/Kg		100	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88189-A-11-D MS
Matrix: Solid
Analysis Batch: 250219

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250096

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	98	F1	47.2	183	F1	mg/Kg		181	75 - 125
Zinc	63	F1	47.2	131	F1	mg/Kg		145	75 - 125

Lab Sample ID: 720-88189-A-11-E MSD
Matrix: Solid
Analysis Batch: 250219

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250096

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.60	J F1	47.6	14.8	F1	mg/Kg		30	75 - 125	8	20
Arsenic	2.9	J	47.6	58.8		mg/Kg		118	75 - 125	7	20
Barium	36	F1	47.6	98.4	F1	mg/Kg		130	75 - 125	3	20
Beryllium	ND	F1	47.6	60.4	F1	mg/Kg		127	75 - 125	6	20
Cadmium	0.063	J	47.6	54.1		mg/Kg		113	75 - 125	5	20
Chromium	8.2	F1	47.6	71.5	F1	mg/Kg		133	75 - 125	10	20
Cobalt	13		47.6	69.9		mg/Kg		120	75 - 125	4	20
Copper	110	F1	47.6	192	F1	mg/Kg		176	75 - 125	1	20
Lead	45	F1	47.6	111	F1	mg/Kg		139	75 - 125	5	20
Molybdenum	ND		47.6	52.8		mg/Kg		111	75 - 125	6	20
Nickel	4.2		47.6	59.4		mg/Kg		116	75 - 125	4	20
Selenium	ND		47.6	53.3		mg/Kg		112	75 - 125	7	20
Silver	ND	F1	23.8	29.8		mg/Kg		125	75 - 125	1	20
Thallium	ND		47.6	50.0		mg/Kg		105	75 - 125	6	20
Vanadium	98	F1	47.6	194	F1	mg/Kg		203	75 - 125	6	20
Zinc	63	F1	47.6	132	F1	mg/Kg		146	75 - 125	1	20

Lab Sample ID: MB 720-250108/1-A
Matrix: Solid
Analysis Batch: 250220

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250108

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Arsenic	ND		1.0	0.085	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Barium	ND		0.50	0.071	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Beryllium	ND		0.10	0.033	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Cadmium	ND		0.13	0.012	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Chromium	ND		0.50	0.053	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Cobalt	ND		0.20	0.020	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Copper	ND		1.5	0.71	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Lead	ND		0.50	0.11	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Nickel	ND		0.50	0.051	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Selenium	ND		1.0	0.15	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Silver	ND		0.25	0.051	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Thallium	ND		0.50	0.15	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Vanadium	ND		0.50	0.068	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Zinc	ND		1.5	0.64	mg/Kg		08/23/18 16:49	08/24/18 20:04	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-250108/2-A
Matrix: Solid
Analysis Batch: 250220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250108

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	48.0		mg/Kg		96	80 - 120
Arsenic	50.0	48.4		mg/Kg		97	80 - 120
Barium	50.0	46.2		mg/Kg		92	80 - 120
Beryllium	50.0	49.2		mg/Kg		98	80 - 120
Cadmium	50.0	48.8		mg/Kg		98	80 - 120
Chromium	50.0	48.1		mg/Kg		96	80 - 120
Cobalt	50.0	50.9		mg/Kg		102	80 - 120
Copper	50.0	47.9		mg/Kg		96	80 - 120
Lead	50.0	49.8		mg/Kg		100	80 - 120
Molybdenum	50.0	49.5		mg/Kg		99	80 - 120
Nickel	50.0	48.6		mg/Kg		97	80 - 120
Selenium	50.0	46.9		mg/Kg		94	80 - 120
Silver	25.0	23.2		mg/Kg		93	80 - 120
Thallium	50.0	49.5		mg/Kg		99	80 - 120
Vanadium	50.0	49.3		mg/Kg		99	80 - 120
Zinc	50.0	50.0		mg/Kg		100	80 - 120

Lab Sample ID: 720-88191-A-1-A MS
Matrix: Solid
Analysis Batch: 250220

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250108

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	2.6	F1	41.7	13.9	F1	mg/Kg		27	75 - 125
Arsenic	230		41.7	247	4	mg/Kg		39	75 - 125
Barium	210		41.7	240	4	mg/Kg		62	75 - 125
Beryllium	ND		41.7	40.7		mg/Kg		98	75 - 125
Cadmium	0.79		41.7	40.3		mg/Kg		95	75 - 125
Chromium	20		41.7	61.4		mg/Kg		100	75 - 125
Cobalt	9.5		41.7	50.5		mg/Kg		98	75 - 125
Copper	120	F1	41.7	144	F1	mg/Kg		66	75 - 125
Lead	2300		41.7	553	4	mg/Kg		-4193	75 - 125
Molybdenum	0.35	J	41.7	38.3		mg/Kg		91	75 - 125
Nickel	19		41.7	58.6		mg/Kg		95	75 - 125
Selenium	ND		41.7	37.6		mg/Kg		90	75 - 125
Silver	0.95	J	20.8	20.7		mg/Kg		95	75 - 125
Thallium	ND		41.7	36.7		mg/Kg		88	75 - 125
Vanadium	46	F1	41.7	103	F1	mg/Kg		138	75 - 125
Zinc	490	F2	41.7	395	4	mg/Kg		-230	75 - 125

Lab Sample ID: 720-88191-A-1-B MSD
Matrix: Solid
Analysis Batch: 250220

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250108

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	2.6	F1	41.7	14.7	F1	mg/Kg		29	75 - 125	6	20
Arsenic	230		41.7	284	4	mg/Kg		128	75 - 125	14	20
Barium	210		41.7	256	4	mg/Kg		100	75 - 125	6	20
Beryllium	ND		41.7	40.2		mg/Kg		96	75 - 125	1	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88191-A-1-B MSD
Matrix: Solid
Analysis Batch: 250220

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250108

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	0.79		41.7	40.4		mg/Kg		95	75 - 125	0	20
Chromium	20		41.7	71.1		mg/Kg		124	75 - 125	15	20
Cobalt	9.5		41.7	51.8		mg/Kg		101	75 - 125	3	20
Copper	120	F1	41.7	165		mg/Kg		117	75 - 125	14	20
Lead	2300		41.7	584	4	mg/Kg		-4120	75 - 125	5	20
Molybdenum	0.35	J	41.7	39.3		mg/Kg		94	75 - 125	3	20
Nickel	19		41.7	58.3		mg/Kg		94	75 - 125	1	20
Selenium	ND		41.7	38.0		mg/Kg		91	75 - 125	1	20
Silver	0.95	J	20.8	20.8		mg/Kg		95	75 - 125	0	20
Thallium	ND		41.7	36.6		mg/Kg		88	75 - 125	0	20
Vanadium	46	F1	41.7	104	F1	mg/Kg		139	75 - 125	0	20
Zinc	490	F2	41.7	486	4 F2	mg/Kg		-13	75 - 125	21	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250103/1-B
Matrix: Solid
Analysis Batch: 250466

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250103

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/23/18 15:59	08/28/18 21:27	1

Lab Sample ID: LCS 720-250103/2-B
Matrix: Solid
Analysis Batch: 250466

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250103

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.747		mg/Kg		90	80 - 120

Lab Sample ID: 720-88189-A-11-I MS
Matrix: Solid
Analysis Batch: 250466

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250103

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.068		0.806	0.787		mg/Kg		89	75 - 125

Lab Sample ID: 720-88189-A-11-J MSD
Matrix: Solid
Analysis Batch: 250466

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250103

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.068		0.833	0.816		mg/Kg		90	75 - 125	4	20

Lab Sample ID: MB 720-250231/1-A
Matrix: Solid
Analysis Batch: 250363

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250231

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/25/18 12:29	08/27/18 20:49	1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 720-250231/2-A
Matrix: Solid
Analysis Batch: 250363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250231

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.830		mg/Kg		100	80 - 120

Lab Sample ID: 720-88212-A-26-C MS
Matrix: Solid
Analysis Batch: 250363

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250231

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.11		0.806	0.922		mg/Kg		101	75 - 125

Lab Sample ID: 720-88212-A-26-D MSD
Matrix: Solid
Analysis Batch: 250363

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250231

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.11		0.781	0.901		mg/Kg		102	75 - 125	2	20

GC/MS VOA

Prep Batch: 250051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-4	DG-F3S-0.5-1	Total/NA	Solid	5035	
720-88190-5	DG-F3S-3.5-4	Total/NA	Solid	5035	

Analysis Batch: 250279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-9	DG-G3S-9.5-10	Total/NA	Solid	8260B	250314
MB 720-250279/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250279/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250279/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250279/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250279/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-3	DG-E3S-9.5-10	Total/NA	Solid	5035	
720-88190-9	DG-G3S-9.5-10	Total/NA	Solid	5035	

Analysis Batch: 250345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-10	DG-H3S-0.5-1	Total/NA	Solid	8260B	250383
720-88190-11	DG-H3S-3.5-4	Total/NA	Solid	8260B	250383
720-88190-12	DG-H3S-9.5-10	Total/NA	Solid	8260B	250383
MB 720-250345/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250345/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250345/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250345/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250345/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-3	DG-E3S-9.5-10	Total/NA	Solid	8260B	250314
MB 720-250350/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250350/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250350/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250350/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250350/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-10	DG-H3S-0.5-1	Total/NA	Solid	5035	
720-88190-11	DG-H3S-3.5-4	Total/NA	Solid	5035	
720-88190-12	DG-H3S-9.5-10	Total/NA	Solid	5035	

Analysis Batch: 250407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-4	DG-F3S-0.5-1	Total/NA	Solid	8260B	250051
720-88190-5	DG-F3S-3.5-4	Total/NA	Solid	8260B	250051
MB 720-250407/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250407/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250407/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250407/6	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS VOA (Continued)

Analysis Batch: 250407 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 720-250407/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-6	DG-F3S-9.5-10	Total/NA	Solid	8260B	250440
MB 720-250408/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250408/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250408/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250408/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250408/8	Lab Control Sample Dup	Total/NA	Solid	8260B	
720-88200-B-4-D MS	Matrix Spike	Total/NA	Solid	8260B	250440
720-88200-B-4-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	250440

Prep Batch: 250440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-6	DG-F3S-9.5-10	Total/NA	Solid	5030B	
720-88200-B-4-D MS	Matrix Spike	Total/NA	Solid	5030B	
720-88200-B-4-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

Analysis Batch: 250450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-15	DG-D3S-9.5-10	Total/NA	Solid	8260B	250488
MB 720-250450/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250450/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250450/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250450/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250450/8	Lab Control Sample Dup	Total/NA	Solid	8260B	
720-88190-15 MS	DG-D3S-9.5-10	Total/NA	Solid	8260B	250488
720-88190-15 MSD	DG-D3S-9.5-10	Total/NA	Solid	8260B	250488

Prep Batch: 250488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-15	DG-D3S-9.5-10	Total/NA	Solid	5030B	
720-88190-15 MS	DG-D3S-9.5-10	Total/NA	Solid	5030B	
720-88190-15 MSD	DG-D3S-9.5-10	Total/NA	Solid	5030B	

GC/MS Semi VOA

Prep Batch: 250048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-3	DG-E3S-9.5-10	Total/NA	Solid	3546	
720-88190-4	DG-F3S-0.5-1	Total/NA	Solid	3546	
720-88190-5	DG-F3S-3.5-4	Total/NA	Solid	3546	
720-88190-6	DG-F3S-9.5-10	Total/NA	Solid	3546	
720-88190-9	DG-G3S-9.5-10	Total/NA	Solid	3546	
720-88190-10	DG-H3S-0.5-1	Total/NA	Solid	3546	
720-88190-11	DG-H3S-3.5-4	Total/NA	Solid	3546	
720-88190-12	DG-H3S-9.5-10	Total/NA	Solid	3546	
720-88190-15	DG-D3S-9.5-10	Total/NA	Solid	3546	
MB 720-250048/1-A	Method Blank	Total/NA	Solid	3546	

GC/MS Semi VOA (Continued)

Prep Batch: 250048 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-250048/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88190-11 MS	DG-H3S-3.5-4	Total/NA	Solid	3546	
720-88190-11 MSD	DG-H3S-3.5-4	Total/NA	Solid	3546	

Analysis Batch: 250212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-3	DG-E3S-9.5-10	Total/NA	Solid	8270C SIM	250048
720-88190-4	DG-F3S-0.5-1	Total/NA	Solid	8270C SIM	250048
720-88190-5	DG-F3S-3.5-4	Total/NA	Solid	8270C SIM	250048
720-88190-6	DG-F3S-9.5-10	Total/NA	Solid	8270C SIM	250048
720-88190-9	DG-G3S-9.5-10	Total/NA	Solid	8270C SIM	250048
720-88190-11	DG-H3S-3.5-4	Total/NA	Solid	8270C SIM	250048
720-88190-12	DG-H3S-9.5-10	Total/NA	Solid	8270C SIM	250048
720-88190-15	DG-D3S-9.5-10	Total/NA	Solid	8270C SIM	250048
MB 720-250048/1-A	Method Blank	Total/NA	Solid	8270C SIM	250048
LCS 720-250048/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250048
720-88190-11 MS	DG-H3S-3.5-4	Total/NA	Solid	8270C SIM	250048
720-88190-11 MSD	DG-H3S-3.5-4	Total/NA	Solid	8270C SIM	250048

Analysis Batch: 250333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-10	DG-H3S-0.5-1	Total/NA	Solid	8270C SIM	250048

GC Semi VOA

Analysis Batch: 250036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-3	DG-E3S-9.5-10	Total/NA	Solid	8015B	250044
720-88190-4	DG-F3S-0.5-1	Total/NA	Solid	8015B	250044
720-88190-11	DG-H3S-3.5-4	Total/NA	Solid	8015B	250044

Analysis Batch: 250037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-5	DG-F3S-3.5-4	Total/NA	Solid	8015B	250044
720-88190-6	DG-F3S-9.5-10	Total/NA	Solid	8015B	250044
720-88190-9	DG-G3S-9.5-10	Total/NA	Solid	8015B	250044
720-88190-10	DG-H3S-0.5-1	Total/NA	Solid	8015B	250044
720-88190-12	DG-H3S-9.5-10	Total/NA	Solid	8015B	250044
720-88190-15	DG-D3S-9.5-10	Total/NA	Solid	8015B	250044
LCS 720-250044/2-A	Lab Control Sample	Total/NA	Solid	8015B	250044
720-88190-10 MS	DG-H3S-0.5-1	Total/NA	Solid	8015B	250044
720-88190-10 MSD	DG-H3S-0.5-1	Total/NA	Solid	8015B	250044

Prep Batch: 250044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-3	DG-E3S-9.5-10	Total/NA	Solid	3546	
720-88190-4	DG-F3S-0.5-1	Total/NA	Solid	3546	
720-88190-5	DG-F3S-3.5-4	Total/NA	Solid	3546	
720-88190-6	DG-F3S-9.5-10	Total/NA	Solid	3546	
720-88190-9	DG-G3S-9.5-10	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 250044 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-10	DG-H3S-0.5-1	Total/NA	Solid	3546	
720-88190-11	DG-H3S-3.5-4	Total/NA	Solid	3546	
720-88190-12	DG-H3S-9.5-10	Total/NA	Solid	3546	
720-88190-15	DG-D3S-9.5-10	Total/NA	Solid	3546	
MB 720-250044/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250044/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88190-10 MS	DG-H3S-0.5-1	Total/NA	Solid	3546	
720-88190-10 MSD	DG-H3S-0.5-1	Total/NA	Solid	3546	

Prep Batch: 250053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-3	DG-E3S-9.5-10	Total/NA	Solid	3546	
720-88190-4	DG-F3S-0.5-1	Total/NA	Solid	3546	
720-88190-5	DG-F3S-3.5-4	Total/NA	Solid	3546	
720-88190-6	DG-F3S-9.5-10	Total/NA	Solid	3546	
720-88190-9	DG-G3S-9.5-10	Total/NA	Solid	3546	
720-88190-10	DG-H3S-0.5-1	Total/NA	Solid	3546	
720-88190-11	DG-H3S-3.5-4	Total/NA	Solid	3546	
720-88190-12	DG-H3S-9.5-10	Total/NA	Solid	3546	
720-88190-15	DG-D3S-9.5-10	Total/NA	Solid	3546	
MB 720-250053/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250053/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88190-10 MS	DG-H3S-0.5-1	Total/NA	Solid	3546	
720-88190-10 MSD	DG-H3S-0.5-1	Total/NA	Solid	3546	

Analysis Batch: 250133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250044/1-A	Method Blank	Total/NA	Solid	8015B	250044

Analysis Batch: 250196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250053/1-A	Method Blank	Total/NA	Solid	8081A	250053
LCS 720-250053/2-A	Lab Control Sample	Total/NA	Solid	8081A	250053

Analysis Batch: 250248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-10	DG-H3S-0.5-1	Total/NA	Solid	8081A	250053
720-88190-10 MS	DG-H3S-0.5-1	Total/NA	Solid	8081A	250053
720-88190-10 MSD	DG-H3S-0.5-1	Total/NA	Solid	8081A	250053

Analysis Batch: 250496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-3	DG-E3S-9.5-10	Total/NA	Solid	8081A	250053
720-88190-4	DG-F3S-0.5-1	Total/NA	Solid	8081A	250053
720-88190-5	DG-F3S-3.5-4	Total/NA	Solid	8081A	250053
720-88190-6	DG-F3S-9.5-10	Total/NA	Solid	8081A	250053
720-88190-9	DG-G3S-9.5-10	Total/NA	Solid	8081A	250053
720-88190-11	DG-H3S-3.5-4	Total/NA	Solid	8081A	250053
720-88190-12	DG-H3S-9.5-10	Total/NA	Solid	8081A	250053
720-88190-15	DG-D3S-9.5-10	Total/NA	Solid	8081A	250053

GC Semi VOA (Continued)

Prep Batch: 342522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-3	DG-E3S-9.5-10	Total/NA	Solid	3540C	
720-88190-4	DG-F3S-0.5-1	Total/NA	Solid	3540C	
720-88190-5	DG-F3S-3.5-4	Total/NA	Solid	3540C	
720-88190-6	DG-F3S-9.5-10	Total/NA	Solid	3540C	
720-88190-9	DG-G3S-9.5-10	Total/NA	Solid	3540C	
720-88190-10	DG-H3S-0.5-1	Total/NA	Solid	3540C	
720-88190-11	DG-H3S-3.5-4	Total/NA	Solid	3540C	
720-88190-12	DG-H3S-9.5-10	Total/NA	Solid	3540C	
720-88190-15	DG-D3S-9.5-10	Total/NA	Solid	3540C	
MB 240-342522/14-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-342522/15-A	Lab Control Sample	Total/NA	Solid	3540C	
720-88190-15 MS	DG-D3S-9.5-10	Total/NA	Solid	3540C	
720-88190-15 MSD	DG-D3S-9.5-10	Total/NA	Solid	3540C	

Analysis Batch: 342750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-3	DG-E3S-9.5-10	Total/NA	Solid	8082	342522
720-88190-4	DG-F3S-0.5-1	Total/NA	Solid	8082	342522
720-88190-5	DG-F3S-3.5-4	Total/NA	Solid	8082	342522
720-88190-6	DG-F3S-9.5-10	Total/NA	Solid	8082	342522
720-88190-9	DG-G3S-9.5-10	Total/NA	Solid	8082	342522
720-88190-10	DG-H3S-0.5-1	Total/NA	Solid	8082	342522
720-88190-11	DG-H3S-3.5-4	Total/NA	Solid	8082	342522
720-88190-12	DG-H3S-9.5-10	Total/NA	Solid	8082	342522
720-88190-15	DG-D3S-9.5-10	Total/NA	Solid	8082	342522
MB 240-342522/14-A	Method Blank	Total/NA	Solid	8082	342522
LCS 240-342522/15-A	Lab Control Sample	Total/NA	Solid	8082	342522
720-88190-15 MS	DG-D3S-9.5-10	Total/NA	Solid	8082	342522
720-88190-15 MSD	DG-D3S-9.5-10	Total/NA	Solid	8082	342522

Metals

Prep Batch: 250096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-1	DG-E3S-0.5-1	Total/NA	Solid	3050B	
720-88190-2	DG-E3S-3.5-4	Total/NA	Solid	3050B	
720-88190-3	DG-E3S-9.5-10	Total/NA	Solid	3050B	
720-88190-4	DG-F3S-0.5-1	Total/NA	Solid	3050B	
720-88190-5	DG-F3S-3.5-4	Total/NA	Solid	3050B	
720-88190-6	DG-F3S-9.5-10	Total/NA	Solid	3050B	
720-88190-7	DG-G3S-0.5-1	Total/NA	Solid	3050B	
720-88190-8	DG-G3S-3.5-4	Total/NA	Solid	3050B	
720-88190-9	DG-G3S-9.5-10	Total/NA	Solid	3050B	
720-88190-10	DG-H3S-0.5-1	Total/NA	Solid	3050B	
720-88190-11	DG-H3S-3.5-4	Total/NA	Solid	3050B	
720-88190-12	DG-H3S-9.5-10	Total/NA	Solid	3050B	
MB 720-250096/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250096/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88189-A-11-D MS	Matrix Spike	Total/NA	Solid	3050B	
720-88189-A-11-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 250103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-1	DG-E3S-0.5-1	Total/NA	Solid	7471A	
720-88190-2	DG-E3S-3.5-4	Total/NA	Solid	7471A	
720-88190-3	DG-E3S-9.5-10	Total/NA	Solid	7471A	
720-88190-4	DG-F3S-0.5-1	Total/NA	Solid	7471A	
720-88190-5	DG-F3S-3.5-4	Total/NA	Solid	7471A	
720-88190-6	DG-F3S-9.5-10	Total/NA	Solid	7471A	
720-88190-7	DG-G3S-0.5-1	Total/NA	Solid	7471A	
720-88190-8	DG-G3S-3.5-4	Total/NA	Solid	7471A	
720-88190-9	DG-G3S-9.5-10	Total/NA	Solid	7471A	
720-88190-10	DG-H3S-0.5-1	Total/NA	Solid	7471A	
720-88190-11	DG-H3S-3.5-4	Total/NA	Solid	7471A	
720-88190-12	DG-H3S-9.5-10	Total/NA	Solid	7471A	
720-88190-13	DG-D3S-0.5-1	Total/NA	Solid	7471A	
MB 720-250103/1-B	Method Blank	Total/NA	Solid	7471A	
LCS 720-250103/2-B	Lab Control Sample	Total/NA	Solid	7471A	
720-88189-A-11-I MS	Matrix Spike	Total/NA	Solid	7471A	
720-88189-A-11-J MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Prep Batch: 250108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-13	DG-D3S-0.5-1	Total/NA	Solid	3050B	
720-88190-14	DG-D3S-3.5-4	Total/NA	Solid	3050B	
720-88190-15	DG-D3S-9.5-10	Total/NA	Solid	3050B	
MB 720-250108/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250108/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88191-A-1-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88191-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 250219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-1	DG-E3S-0.5-1	Total/NA	Solid	6010B	250096
720-88190-2	DG-E3S-3.5-4	Total/NA	Solid	6010B	250096
720-88190-3	DG-E3S-9.5-10	Total/NA	Solid	6010B	250096
720-88190-4	DG-F3S-0.5-1	Total/NA	Solid	6010B	250096
720-88190-5	DG-F3S-3.5-4	Total/NA	Solid	6010B	250096
720-88190-6	DG-F3S-9.5-10	Total/NA	Solid	6010B	250096
720-88190-7	DG-G3S-0.5-1	Total/NA	Solid	6010B	250096
720-88190-8	DG-G3S-3.5-4	Total/NA	Solid	6010B	250096
720-88190-9	DG-G3S-9.5-10	Total/NA	Solid	6010B	250096
720-88190-10	DG-H3S-0.5-1	Total/NA	Solid	6010B	250096
720-88190-11	DG-H3S-3.5-4	Total/NA	Solid	6010B	250096
720-88190-12	DG-H3S-9.5-10	Total/NA	Solid	6010B	250096
MB 720-250096/1-A	Method Blank	Total/NA	Solid	6010B	250096
LCS 720-250096/2-A	Lab Control Sample	Total/NA	Solid	6010B	250096
720-88189-A-11-D MS	Matrix Spike	Total/NA	Solid	6010B	250096
720-88189-A-11-E MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250096

Analysis Batch: 250220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-13	DG-D3S-0.5-1	Total/NA	Solid	6010B	250108
720-88190-14	DG-D3S-3.5-4	Total/NA	Solid	6010B	250108

Metals (Continued)

Analysis Batch: 250220 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-15	DG-D3S-9.5-10	Total/NA	Solid	6010B	250108
MB 720-250108/1-A	Method Blank	Total/NA	Solid	6010B	250108
LCS 720-250108/2-A	Lab Control Sample	Total/NA	Solid	6010B	250108
720-88191-A-1-A MS	Matrix Spike	Total/NA	Solid	6010B	250108
720-88191-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250108

Prep Batch: 250231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-14	DG-D3S-3.5-4	Total/NA	Solid	7471A	
720-88190-15	DG-D3S-9.5-10	Total/NA	Solid	7471A	
MB 720-250231/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250231/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88212-A-26-C MS	Matrix Spike	Total/NA	Solid	7471A	
720-88212-A-26-D MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 250331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-3	DG-E3S-9.5-10	Total/NA	Solid	6010B	250096

Analysis Batch: 250363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-14	DG-D3S-3.5-4	Total/NA	Solid	7471A	250231
720-88190-15	DG-D3S-9.5-10	Total/NA	Solid	7471A	250231
MB 720-250231/1-A	Method Blank	Total/NA	Solid	7471A	250231
LCS 720-250231/2-A	Lab Control Sample	Total/NA	Solid	7471A	250231
720-88212-A-26-C MS	Matrix Spike	Total/NA	Solid	7471A	250231
720-88212-A-26-D MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250231

Analysis Batch: 250466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-1	DG-E3S-0.5-1	Total/NA	Solid	7471A	250103
720-88190-2	DG-E3S-3.5-4	Total/NA	Solid	7471A	250103
720-88190-3	DG-E3S-9.5-10	Total/NA	Solid	7471A	250103
720-88190-4	DG-F3S-0.5-1	Total/NA	Solid	7471A	250103
720-88190-5	DG-F3S-3.5-4	Total/NA	Solid	7471A	250103
720-88190-6	DG-F3S-9.5-10	Total/NA	Solid	7471A	250103
720-88190-7	DG-G3S-0.5-1	Total/NA	Solid	7471A	250103
720-88190-8	DG-G3S-3.5-4	Total/NA	Solid	7471A	250103
720-88190-9	DG-G3S-9.5-10	Total/NA	Solid	7471A	250103
720-88190-10	DG-H3S-0.5-1	Total/NA	Solid	7471A	250103
720-88190-11	DG-H3S-3.5-4	Total/NA	Solid	7471A	250103
720-88190-12	DG-H3S-9.5-10	Total/NA	Solid	7471A	250103
720-88190-13	DG-D3S-0.5-1	Total/NA	Solid	7471A	250103
MB 720-250103/1-B	Method Blank	Total/NA	Solid	7471A	250103
LCS 720-250103/2-B	Lab Control Sample	Total/NA	Solid	7471A	250103
720-88189-A-11-I MS	Matrix Spike	Total/NA	Solid	7471A	250103
720-88189-A-11-J MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250103

Client Sample ID: DG-E3S-0.5-1

Lab Sample ID: 720-88190-1

Date Collected: 08/21/18 13:40

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250219	08/24/18 18:49	OBI	TAL PLS
Total/NA	Prep	7471A			250103	08/23/18 15:59	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250466	08/28/18 21:55	OBI	TAL PLS

Client Sample ID: DG-E3S-3.5-4

Lab Sample ID: 720-88190-2

Date Collected: 08/21/18 13:40

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250219	08/24/18 18:53	OBI	TAL PLS
Total/NA	Prep	7471A			250103	08/23/18 15:59	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250466	08/28/18 21:58	OBI	TAL PLS

Client Sample ID: DG-E3S-9.5-10

Lab Sample ID: 720-88190-3

Date Collected: 08/21/18 14:30

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250314	08/23/18 02:50	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250350	08/28/18 13:16	A1C	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250212	08/25/18 04:57	LPL	TAL PLS
Total/NA	Prep	3546			250044	08/23/18 08:42	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250036	08/24/18 03:04	JXL	TAL PLS
Total/NA	Prep	3546			250053	08/23/18 10:51	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250496	08/29/18 20:55	JZT	TAL PLS
Total/NA	Prep	3540C			342522	08/26/18 10:34	SDE	TAL CAN
Total/NA	Analysis	8082		1	342750	08/28/18 07:53	KMG	TAL CAN
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250219	08/24/18 18:58	OBI	TAL PLS
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		10	250331	08/27/18 17:41	OBI	TAL PLS
Total/NA	Prep	7471A			250103	08/23/18 15:59	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250466	08/28/18 22:00	OBI	TAL PLS

Client Sample ID: DG-F3S-0.5-1

Lab Sample ID: 720-88190-4

Date Collected: 08/21/18 14:45

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250051	08/23/18 02:50	LRC	TAL PLS

Client Sample ID: DG-F3S-0.5-1

Lab Sample ID: 720-88190-4

Date Collected: 08/21/18 14:45

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250407	08/28/18 21:19	JRM	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250212	08/25/18 05:44	LPL	TAL PLS
Total/NA	Prep	3546			250044	08/23/18 08:42	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250036	08/24/18 03:28	JXL	TAL PLS
Total/NA	Prep	3546			250053	08/23/18 10:51	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250496	08/29/18 21:11	JZT	TAL PLS
Total/NA	Prep	3540C			342522	08/26/18 10:34	SDE	TAL CAN
Total/NA	Analysis	8082		1	342750	08/28/18 10:49	KMG	TAL CAN
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250219	08/24/18 19:03	OBI	TAL PLS
Total/NA	Prep	7471A			250103	08/23/18 15:59	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250466	08/28/18 22:03	OBI	TAL PLS

Client Sample ID: DG-F3S-3.5-4

Lab Sample ID: 720-88190-5

Date Collected: 08/21/18 14:45

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250051	08/23/18 02:50	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250407	08/28/18 21:49	JRM	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250212	08/25/18 01:01	LPL	TAL PLS
Total/NA	Prep	3546			250044	08/23/18 08:42	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250037	08/23/18 23:50	JXL	TAL PLS
Total/NA	Prep	3546			250053	08/23/18 10:51	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250496	08/29/18 21:28	JZT	TAL PLS
Total/NA	Prep	3540C			342522	08/26/18 10:34	SDE	TAL CAN
Total/NA	Analysis	8082		1	342750	08/28/18 08:08	KMG	TAL CAN
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250219	08/24/18 19:08	OBI	TAL PLS
Total/NA	Prep	7471A			250103	08/23/18 15:59	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250466	08/28/18 22:05	OBI	TAL PLS

Client Sample ID: DG-F3S-9.5-10

Lab Sample ID: 720-88190-6

Date Collected: 08/21/18 15:00

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			250440	08/28/18 21:21	GLL	TAL PLS
Total/NA	Analysis	8260B		1	250408	08/29/18 01:56	JRM	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250212	08/25/18 01:25	LPL	TAL PLS

Client Sample ID: DG-F3S-9.5-10

Lab Sample ID: 720-88190-6

Date Collected: 08/21/18 15:00

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			250044	08/23/18 08:42	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250037	08/23/18 23:26	JXL	TAL PLS
Total/NA	Prep	3546			250053	08/23/18 10:51	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250496	08/29/18 21:44	JZT	TAL PLS
Total/NA	Prep	3540C			342522	08/26/18 10:34	SDE	TAL CAN
Total/NA	Analysis	8082		1	342750	08/28/18 08:23	KMG	TAL CAN
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250219	08/24/18 19:12	OBI	TAL PLS
Total/NA	Prep	7471A			250103	08/23/18 15:59	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250466	08/28/18 22:07	OBI	TAL PLS

Client Sample ID: DG-G3S-0.5-1

Lab Sample ID: 720-88190-7

Date Collected: 08/21/18 15:30

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250219	08/24/18 19:17	OBI	TAL PLS
Total/NA	Prep	7471A			250103	08/23/18 15:59	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250466	08/28/18 22:09	OBI	TAL PLS

Client Sample ID: DG-G3S-3.5-4

Lab Sample ID: 720-88190-8

Date Collected: 08/21/18 15:30

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250219	08/24/18 19:22	OBI	TAL PLS
Total/NA	Prep	7471A			250103	08/23/18 15:59	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250466	08/28/18 22:12	OBI	TAL PLS

Client Sample ID: DG-G3S-9.5-10

Lab Sample ID: 720-88190-9

Date Collected: 08/21/18 15:30

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250314	08/23/18 02:50	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250279	08/27/18 22:03	JRM	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250212	08/25/18 01:48	LPL	TAL PLS
Total/NA	Prep	3546			250044	08/23/18 08:42	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250037	08/23/18 23:01	JXL	TAL PLS
Total/NA	Prep	3546			250053	08/23/18 10:51	MAB	TAL PLS

Client Sample ID: DG-G3S-9.5-10

Lab Sample ID: 720-88190-9

Date Collected: 08/21/18 15:30

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8081A		1	250496	08/29/18 22:00	JZT	TAL PLS
Total/NA	Prep	3540C			342522	08/26/18 10:34	SDE	TAL CAN
Total/NA	Analysis	8082		1	342750	08/28/18 08:37	KMG	TAL CAN
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250219	08/24/18 19:36	OBI	TAL PLS
Total/NA	Prep	7471A			250103	08/23/18 15:59	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250466	08/28/18 22:14	OBI	TAL PLS

Client Sample ID: DG-H3S-0.5-1

Lab Sample ID: 720-88190-10

Date Collected: 08/21/18 16:45

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250383	08/23/18 02:50	AJS	TAL PLS
Total/NA	Analysis	8260B		1	250345	08/28/18 14:46	MJK	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250333	08/27/18 21:34	LPL	TAL PLS
Total/NA	Prep	3546			250044	08/23/18 08:42	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250037	08/23/18 20:09	JXL	TAL PLS
Total/NA	Prep	3546			250053	08/23/18 10:51	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250248	08/26/18 08:32	MQL	TAL PLS
Total/NA	Prep	3540C			342522	08/26/18 10:34	SDE	TAL CAN
Total/NA	Analysis	8082		1	342750	08/28/18 08:52	KMG	TAL CAN
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250219	08/24/18 19:41	OBI	TAL PLS
Total/NA	Prep	7471A			250103	08/23/18 15:59	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250466	08/28/18 22:16	OBI	TAL PLS

Client Sample ID: DG-H3S-3.5-4

Lab Sample ID: 720-88190-11

Date Collected: 08/21/18 16:45

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250383	08/23/18 02:50	AJS	TAL PLS
Total/NA	Analysis	8260B		1	250345	08/28/18 15:16	MJK	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250212	08/25/18 02:59	LPL	TAL PLS
Total/NA	Prep	3546			250044	08/23/18 08:42	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250036	08/24/18 02:40	JXL	TAL PLS
Total/NA	Prep	3546			250053	08/23/18 10:51	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250496	08/29/18 22:17	JZT	TAL PLS
Total/NA	Prep	3540C			342522	08/26/18 10:34	SDE	TAL CAN
Total/NA	Analysis	8082		1	342750	08/28/18 09:07	KMG	TAL CAN

Client Sample ID: DG-H3S-3.5-4

Lab Sample ID: 720-88190-11

Date Collected: 08/21/18 16:45

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250219	08/24/18 19:45	OBI	TAL PLS
Total/NA	Prep	7471A			250103	08/23/18 15:59	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250466	08/28/18 22:23	OBI	TAL PLS

Client Sample ID: DG-H3S-9.5-10

Lab Sample ID: 720-88190-12

Date Collected: 08/21/18 16:45

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250383	08/23/18 02:50	AJS	TAL PLS
Total/NA	Analysis	8260B		1	250345	08/28/18 15:47	MJK	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250212	08/25/18 06:08	LPL	TAL PLS
Total/NA	Prep	3546			250044	08/23/18 08:42	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250037	08/24/18 01:03	JXL	TAL PLS
Total/NA	Prep	3546			250053	08/23/18 10:51	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250496	08/29/18 22:33	JZT	TAL PLS
Total/NA	Prep	3540C			342522	08/26/18 10:34	SDE	TAL CAN
Total/NA	Analysis	8082		1	342750	08/28/18 09:21	KMG	TAL CAN
Total/NA	Prep	3050B			250096	08/23/18 15:12	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250219	08/24/18 19:50	OBI	TAL PLS
Total/NA	Prep	7471A			250103	08/23/18 15:59	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250466	08/28/18 22:26	OBI	TAL PLS

Client Sample ID: DG-D3S-0.5-1

Lab Sample ID: 720-88190-13

Date Collected: 08/21/18 17:15

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250220	08/24/18 22:12	OBI	TAL PLS
Total/NA	Prep	7471A			250103	08/23/18 15:59	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250466	08/28/18 22:28	OBI	TAL PLS

Client Sample ID: DG-D3S-3.5-4

Lab Sample ID: 720-88190-14

Date Collected: 08/21/18 17:15

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250220	08/24/18 22:27	OBI	TAL PLS
Total/NA	Prep	7471A			250231	08/25/18 12:29	GLL	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Client Sample ID: DG-D3S-3.5-4

Lab Sample ID: 720-88190-14

Date Collected: 08/21/18 17:15

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	250363	08/27/18 21:22	OBI	TAL PLS

Client Sample ID: DG-D3S-9.5-10

Lab Sample ID: 720-88190-15

Date Collected: 08/21/18 17:15

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			250488	08/29/18 13:13	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250450	08/29/18 13:33	JRM	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250212	08/25/18 07:42	LPL	TAL PLS
Total/NA	Prep	3546			250044	08/23/18 08:42	MAB	TAL PLS
Total/NA	Analysis	8015B		2	250037	08/24/18 01:27	JXL	TAL PLS
Total/NA	Prep	3546			250053	08/23/18 10:51	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250496	08/29/18 22:50	JZT	TAL PLS
Total/NA	Prep	3540C			342522	08/26/18 10:34	SDE	TAL CAN
Total/NA	Analysis	8082		1	342750	08/28/18 09:36	KMG	TAL CAN
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250220	08/24/18 22:31	OBI	TAL PLS
Total/NA	Prep	7471A			250231	08/25/18 12:29	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250363	08/27/18 21:24	OBI	TAL PLS

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
Subcontract	Asbestos - CARB 435	None	
3050B	Preparation, Metals	SW846	TAL PLS
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL PLS
5030B	Purge and Trap	SW846	TAL PLS
5035	Closed System Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88190-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88190-1	DG-E3S-0.5-1	Solid	08/21/18 13:40	08/22/18 14:30
720-88190-2	DG-E3S-3.5-4	Solid	08/21/18 13:40	08/22/18 14:30
720-88190-3	DG-E3S-9.5-10	Solid	08/21/18 14:30	08/22/18 14:30
720-88190-4	DG-F3S-0.5-1	Solid	08/21/18 14:45	08/22/18 14:30
720-88190-5	DG-F3S-3.5-4	Solid	08/21/18 14:45	08/22/18 14:30
720-88190-6	DG-F3S-9.5-10	Solid	08/21/18 15:00	08/22/18 14:30
720-88190-7	DG-G3S-0.5-1	Solid	08/21/18 15:30	08/22/18 14:30
720-88190-8	DG-G3S-3.5-4	Solid	08/21/18 15:30	08/22/18 14:30
720-88190-9	DG-G3S-9.5-10	Solid	08/21/18 15:30	08/22/18 14:30
720-88190-10	DG-H3S-0.5-1	Solid	08/21/18 16:45	08/22/18 14:30
720-88190-11	DG-H3S-3.5-4	Solid	08/21/18 16:45	08/22/18 14:30
720-88190-12	DG-H3S-9.5-10	Solid	08/21/18 16:45	08/22/18 14:30
720-88190-13	DG-D3S-0.5-1	Solid	08/21/18 17:15	08/22/18 14:30
720-88190-14	DG-D3S-3.5-4	Solid	08/21/18 17:15	08/22/18 14:30
720-88190-15	DG-D3S-9.5-10	Solid	08/21/18 17:15	08/22/18 14:30

ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01194

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Aug/31/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01194
Polarized light microscopy analytical results for 9 bulk sample(s).
Job Site: 720-88190-1
Job No.: UPC-OU-SM

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 9

Samples Analyzed: 9

Job Site / No. UPC-OU-SM
720-88190-1

Report No. **359823**
Date Submitted: Aug-23-18
Date Reported: Aug-29-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DG-E3S-9.5-10		**<0.25%**	**None Detected**	720-88190-3 No Asbestos Detected
Lab ID # 1283-01194-001	**400** - Total Points			
DG-F3S-0.5-1		**<0.25%**	**None Detected**	720-88190-4 No Asbestos Detected
Lab ID # 1283-01194-002	**400** - Total Points			
DG-F3S-3.5-4		**<0.25%**	**None Detected**	720-88190-5 No Asbestos Detected
Lab ID # 1283-01194-003	**400** - Total Points			
DG-F3S-9.5-10		**<0.25%**	**None Detected**	720-88190-6 No Asbestos Detected
Lab ID # 1283-01194-004	**400** - Total Points			
DG-G3S-9.5-10		**<0.25%**	**None Detected**	720-88190-9 No Asbestos Detected
Lab ID # 1283-01194-005	**400** - Total Points			
DG-H3S-0.5-1		**<0.25%**	**None Detected**	720-88190-10 No Asbestos Detected
Lab ID # 1283-01194-006	**400** - Total Points			
DG-H3S-3.5-4		**<0.25%**	**None Detected**	720-88190-11 No Asbestos Detected
Lab ID # 1283-01194-007	**400** - Total Points			
DG-H3S-9.5-10		**<0.25%**	**None Detected**	720-88190-12 No Asbestos Detected
Lab ID # 1283-01194-008	**400** - Total Points			
DG-D3S-9.5-10		**<0.25%**	**None Detected**	720-88190-15 No Asbestos Detected
Lab ID # 1283-01194-009	**400** - Total Points			
Lab ID #	- Total Points			

QC Reviewer _____ **Analys** _____

#359823

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39392.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88190-1
Address: 630 BANCROFT WAY, .	Due Date Requested: 8/29/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SU3 (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-E3S--9.5-10 (720-88190-3)	8/21/18	14:30 Pacific		Solid			X	1	
DG-F3S--0.5-1 (720-88190-4)	8/21/18	14:45 Pacific		Solid			X	1	
DG-F3S--3.5-4 (720-88190-5)	8/21/18	14:45 Pacific		Solid			X	1	
DG-F3S--9.5-10 (720-88190-6)	8/21/18	15:00 Pacific		Solid			X	1	
DG-G3S--9.5-10 (720-88190-9)	8/21/18	15:30 Pacific		Solid			X	1	
DG-H3S--0.5-1 (720-88190-10)	8/21/18	16:45 Pacific		Solid			X	1	
DG-H3S--3.5-4 (720-88190-11)	8/21/18	16:45 Pacific		Solid			X	1	
DG-H3S--9.5-10 (720-88190-12)	8/21/18	16:45 Pacific		Solid			X	1	
DG-D3S--9.5-10 (720-88190-15)	8/21/18	17:15 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature] TAFFY	8/23/18 1405		MB	AUG23 '18 2:09PM	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88190

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185052

Date 8/21/18 Page 1 of 2

1/21/2018 (Rev. 1)

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: MKahrilas@geosyntec.com
Bill To: GEOSYNTEC
Sampled By: M. KAHRILAS
Attn: ANTHONY SMITH
Phone: 347-530-7602

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B → G20	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☒ EPA 8081 PCBs ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)		Number of Containers
DG-E3S-0.5-1	8/21	1340	S	N									X													
DG-E3S-3.5-4		1340		N									X													
DG-E3S-9.5-10		1430		Y	X			X		X		X	X													
DG-F3S-0.5-1		1445			X			X		X		X	X													
DG-F3S-3.5-4		1445			X			X		X		X	X													
DG-F3S-9.5-10		1500		↓	X			X		X		X	X													
DG-G3S-0.5-1		1530		N									X													
DG-G3S-3.5-4		1530		N									X													
DG-G3S-9.5-10		1530		Y	X			X		X		X	X													
DG-H3S-0.5-1	↓	1645	↓	N	X			X		X		X	X													

Project Info.

Project Name/ #: LPC OU-SM
PO#: WG2445/01
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers:
Head Space:
Temp:

TAT	10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:
		☒					

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID ___

1-4 | 2-6 | 2-6 | 7 °C

See Terms and Conditions on reverse

	1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature			
Time	1230	1430	
Printed Name	MIRANDA KAHRILAS		
Date	8/22	8/22/18	
Company	GEO	TA720	

720-88190 Chain of Custody

	1) Received by:	2) Received by:	3) Received by:
Signature			
Time	1230	1430	
Printed Name		T Bullock	
Date	8/22/18	8/22/18	
Company	TA720	TA-720	

Rev.10/201

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88190

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: 185050

Date 8/21/18 Page 2 of 2

1/21/2018 (Rev. 1)

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
Bill To: GEOSYNTEC
Sampled By: M. KAHRILAS
Attn: ANTHONY SMITH
Phone: 347-530-7602

Analysis Request

Sample ID	Date	Time	Mat trx	Preserv	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B ☐ EPA 8260C	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other ___	Semi-Volatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease ☐ Petroleum ☐ Total (EPA 1664/9071)	Pesticides ☒ EPA 8081 ☐ PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	As & SDS (LUFT 435)	Number of Containers
DG-H35-3.5-4	8/21	1645	S	Y	X			X		X		X	X										X	
DG-H35-9.5-10	↓	1645	↓	Y	X			X		X		X	X										X	
DG-D35-0.5-1		1715		N									X											
DG-D35-3.5-4		1715		N									X											
DG-D35-9.5-10	↓	1715	↓	Y	X			X		X		X	X										X	

Project Info.

Project Name/ #: VRC OU-SW.
PO#: WG2445/01
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers:
Head Space:
Temp:

TAT: 10 Day | (5 Day) | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID ___
1-8/2.6/2.6 TC 0.7°C
8/22/18

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1230	Signature: [signature] Time: 1430	Signature: Time:
Printed Name: MIRANDA KAHRILAS Date: 8/22	Printed Name: Date: 8/22/18	Printed Name: Date:
Company: GEO	Company: TA 720	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 1236	Signature: [signature] Time: 1430	Signature: Time:
Printed Name: Date: 8/22/18	Printed Name: J Pillock Date: 8/22/18	Printed Name: Date:
Company: TA 720	Company: TA 720	Company:

Rev.10/201

Page 278 of 281

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39393.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88190-1
Address: 4101 Shuffel Street NW,	Due Date Requested: 8/29/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

~~CHAS~~ CDOD

Special Instructions/Note:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers
			Preservation Code:					
DG-E3S--9.5-10 (720-88190-3)	8/21/18	14:30 Pacific		Solid			X	1
DG-F3S--0.5-1 (720-88190-4)	8/21/18	14:45 Pacific		Solid			X	1
DG-F3S--3.5-4 (720-88190-5)	8/21/18	14:45 Pacific		Solid			X	1
DG-F3S--9.5-10 (720-88190-6)	8/21/18	15:00 Pacific		Solid			X	1
DG-G3S--9.5-10 (720-88190-9)	8/21/18	15:30 Pacific		Solid			X	1
DG-H3S--0.5-1 (720-88190-10)	8/21/18	16:45 Pacific		Solid			X	1
DG-H3S--3.5-4 (720-88190-11)	8/21/18	16:45 Pacific		Solid			X	1
DG-H3S--9.5-10 (720-88190-12)	8/21/18	16:45 Pacific		Solid			X	1
DG-D3S--9.5-10 (720-88190-15)	8/21/18	17:15 Pacific		Solid			X	1

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/23/18 12:43	TAL		8/24/18 915	TAL
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____

Canton Facility

Client TH Plasmation Site Name _____ Cooler unpacked by:

Cooler Received on 8/24/18 Opened on 8/24/18

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-8 (CF **+0** °C) Observed Cooler Temp. 2.4 °C Corrected Cooler Temp. 2.4 °C

IR GUN #36 (CF **-0.3**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# **HC849161**
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials? ⬅ Larger than this.	Yes	No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
16. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

WI-NC-099

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88190-1

Login Number: 88190
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	False	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88191-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/14/2018 8:00:12 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 12
QC Sample Results 32
QC Association Summary 39
Lab Chronicle 43
Certification Summary 48
Method Summary 49
Sample Summary 50
Chain of Custody 51
Receipt Checklists 55

Definitions/Glossary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88191-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88191-1

Comments
This report was revised on 11/14/18 to change the units for the metals data to report in mg/Kg, as requested. Also, the job was revised to correct the instrument MDL for the CCVs and CRI associated with the metals data.

Receipt
The samples were received on 8/22/2018 2:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.7º C, 1.9º C, 2.6º C and 2.6º C.

Metals
Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DG-I2S-0.5-1 (720-88191-1), DG-I2S-3.5-4 (720-88191-2), DG-J2S-0.5-1 (720-88191-3), DG-J2S-3.5-4 (720-88191-4), DG-K2S-0.5-1 (720-88191-5), DG-K2S-3.5-4 (720-88191-6), DG-L2S-0.5-1 (720-88191-7), DG-L2S-3.5-4 (720-88191-8), DG-M2S-0.5-1 (720-88191-9), DG-M2S-3.5-4 (720-88191-10), SG-L4S-0.5-1 (720-88191-11), DG-L4S-3.5-4 (720-88191-12), DG-M4S-0.5-1 (720-88191-13), DG-J4S-0.5-1 (720-88191-15), DG-H4S-0.5-1 (720-88191-17), DG-H4S-3.5-4 (720-88191-18) and DG-I4S-0.5-1 (720-88191-19). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250108 and analytical batch 720-250220 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recoveries was within acceptance limits.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batches 720-250194 and 720-250197 and analytical batches 720-250251 and 720-250325 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250220 was outside control limits: (720-88191-A-1-C SD). The serial dilution performed for the following sample associated with batch 720-250251 was outside control limits: (720-88214-D-2-C SD). The serial dilution performed for the following sample associated with batch 720-250325 was outside control limits: (720-88192-A-7-C SD)

Method(s) 6010B: The post digestion spike percent recoveries for Arsenic, Cadmium, Cobalt, Molybdenum, Nickel, Lead, Antimony, Selenium, and Thallium associated with batch 720-250325 were outside of control limits.

Method(s) 7471A: The following samples were diluted to bring the concentration of target analyte Hg within the calibration range: DG-I2S-3.5-4 (720-88191-2), DG-J2S-3.5-4 (720-88191-4), DG-L2S-3.5-4 (720-88191-8), and DG-H4S-3.5-4 (720-88191-18). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-I2S-0.5-1 — Lab Sample ID: 720-88191-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.6	F1	2.0	0.33	mg/Kg	4		6010B	Total/NA
Arsenic	230		3.9	0.33	mg/Kg	4		6010B	Total/NA
Barium	210		2.0	0.28	mg/Kg	4		6010B	Total/NA
Cadmium	0.79		0.49	0.049	mg/Kg	4		6010B	Total/NA
Chromium	20		2.0	0.21	mg/Kg	4		6010B	Total/NA
Cobalt	9.5		0.78	0.078	mg/Kg	4		6010B	Total/NA
Copper	120	F1	5.9	2.8	mg/Kg	4		6010B	Total/NA
Lead	2300		2.0	0.41	mg/Kg	4		6010B	Total/NA
Molybdenum	0.35	J	2.0	0.25	mg/Kg	4		6010B	Total/NA
Nickel	19		2.0	0.20	mg/Kg	4		6010B	Total/NA
Silver	0.95	J	0.98	0.20	mg/Kg	4		6010B	Total/NA
Vanadium	46	F1	2.0	0.27	mg/Kg	4		6010B	Total/NA
Zinc	490	F2	5.9	2.5	mg/Kg	4		6010B	Total/NA
Mercury	0.19		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I2S-3.5-4 — Lab Sample ID: 720-88191-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.4	J	1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	3.7		3.7	0.31	mg/Kg	4		6010B	Total/NA
Barium	82		1.8	0.26	mg/Kg	4		6010B	Total/NA
Cadmium	0.053	J	0.46	0.046	mg/Kg	4		6010B	Total/NA
Chromium	120		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	19		0.73	0.073	mg/Kg	4		6010B	Total/NA
Copper	24		5.5	2.6	mg/Kg	4		6010B	Total/NA
Lead	3.3		1.8	0.39	mg/Kg	4		6010B	Total/NA
Nickel	160		1.8	0.19	mg/Kg	4		6010B	Total/NA
Vanadium	66		1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	48		5.5	2.3	mg/Kg	4		6010B	Total/NA
Mercury	1.7		0.17	0.025	mg/Kg	10		7471A	Total/NA

Client Sample ID: DG-J2S-0.5-1 — Lab Sample ID: 720-88191-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.80	J	1.1	0.18	mg/Kg	4		6010B	Total/NA
Arsenic	57		2.2	0.19	mg/Kg	4		6010B	Total/NA
Barium	820		1.1	0.16	mg/Kg	4		6010B	Total/NA
Beryllium	0.087	J	0.22	0.071	mg/Kg	4		6010B	Total/NA
Cadmium	0.17	J	0.27	0.027	mg/Kg	4		6010B	Total/NA
Chromium	14		1.1	0.12	mg/Kg	4		6010B	Total/NA
Cobalt	20		0.44	0.044	mg/Kg	4		6010B	Total/NA
Copper	95		3.3	1.6	mg/Kg	4		6010B	Total/NA
Lead	49		5.5	1.1	mg/Kg	20		6010B	Total/NA
Molybdenum	1.7		1.1	0.14	mg/Kg	4		6010B	Total/NA
Nickel	64		1.1	0.11	mg/Kg	4		6010B	Total/NA
Silver	0.33	J	0.55	0.11	mg/Kg	4		6010B	Total/NA
Vanadium	52		1.1	0.15	mg/Kg	4		6010B	Total/NA
Zinc	63		3.3	1.4	mg/Kg	4		6010B	Total/NA
Mercury	0.14		0.017	0.0025	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-J2S-3.5-4 — Lab Sample ID: 720-88191-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.5	J	1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	65		3.6	0.30	mg/Kg	4		6010B	Total/NA
Barium	99		1.8	0.25	mg/Kg	4		6010B	Total/NA
Beryllium	0.13	J	0.36	0.12	mg/Kg	4		6010B	Total/NA
Cadmium	0.060	J	0.45	0.044	mg/Kg	4		6010B	Total/NA
Chromium	90		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	16		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	28		5.4	2.5	mg/Kg	4		6010B	Total/NA
Lead	12		1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	0.34	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	110		1.8	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	59		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	52		5.4	2.3	mg/Kg	4		6010B	Total/NA
Mercury	1.9		0.15	0.022	mg/Kg	10		7471A	Total/NA

Client Sample ID: DG-K2S-0.5-1 — Lab Sample ID: 720-88191-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.5		1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	150		3.6	0.31	mg/Kg	4		6010B	Total/NA
Barium	72		1.8	0.26	mg/Kg	4		6010B	Total/NA
Cadmium	1.3		0.45	0.045	mg/Kg	4		6010B	Total/NA
Chromium	25		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	14		0.73	0.073	mg/Kg	4		6010B	Total/NA
Copper	140		5.5	2.6	mg/Kg	4		6010B	Total/NA
Lead	200		1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	1.1	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	22		1.8	0.19	mg/Kg	4		6010B	Total/NA
Silver	0.26	J	0.91	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	77		1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	230		5.5	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.18		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K2S-3.5-4 — Lab Sample ID: 720-88191-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.73	J	1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	37		3.0	0.25	mg/Kg	4		6010B	Total/NA
Barium	73		1.5	0.21	mg/Kg	4		6010B	Total/NA
Chromium	26		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	7.9		0.60	0.060	mg/Kg	4		6010B	Total/NA
Copper	17		4.5	2.1	mg/Kg	4		6010B	Total/NA
Lead	5.2		1.5	0.31	mg/Kg	4		6010B	Total/NA
Nickel	42		1.5	0.15	mg/Kg	4		6010B	Total/NA
Vanadium	19		1.5	0.20	mg/Kg	4		6010B	Total/NA
Zinc	35		4.5	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.14		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L2S-0.5-1 — Lab Sample ID: 720-88191-7

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-L2S-0.5-1 (Continued) — Lab Sample ID: 720-88191-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.0		1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	190		3.6	0.30	mg/Kg	4		6010B	Total/NA
Barium	71		1.8	0.25	mg/Kg	4		6010B	Total/NA
Cadmium	0.34	J	0.45	0.044	mg/Kg	4		6010B	Total/NA
Chromium	25		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	86		5.4	2.5	mg/Kg	4		6010B	Total/NA
Lead	97		1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	0.23	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	26		1.8	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	61		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	95		5.4	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.074		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L2S-3.5-4 — Lab Sample ID: 720-88191-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.3	J	1.7	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	37		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	97		1.7	0.24	mg/Kg	4		6010B	Total/NA
Beryllium	0.22	J	0.34	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	0.047	J	0.43	0.043	mg/Kg	4		6010B	Total/NA
Chromium	89		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	18		0.69	0.069	mg/Kg	4		6010B	Total/NA
Copper	27		5.2	2.5	mg/Kg	4		6010B	Total/NA
Lead	3.3		1.7	0.36	mg/Kg	4		6010B	Total/NA
Nickel	170		1.7	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	62		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	52		5.2	2.2	mg/Kg	4		6010B	Total/NA
Mercury	17		0.71	0.10	mg/Kg	50		7471A	Total/NA

Client Sample ID: DG-M2S-0.5-1 — Lab Sample ID: 720-88191-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.94	J	1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	120		3.0	0.26	mg/Kg	4		6010B	Total/NA
Barium	61		1.5	0.21	mg/Kg	4		6010B	Total/NA
Cadmium	0.37	J	0.38	0.037	mg/Kg	4		6010B	Total/NA
Chromium	16		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.60	0.060	mg/Kg	4		6010B	Total/NA
Copper	80		4.5	2.1	mg/Kg	4		6010B	Total/NA
Lead	82		1.5	0.32	mg/Kg	4		6010B	Total/NA
Nickel	18		1.5	0.15	mg/Kg	4		6010B	Total/NA
Silver	0.18	J	0.75	0.15	mg/Kg	4		6010B	Total/NA
Vanadium	82		1.5	0.20	mg/Kg	4		6010B	Total/NA
Zinc	140		4.5	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.065		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M2S-3.5-4 — Lab Sample ID: 720-88191-10

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-M2S-3.5-4 (Continued) — Lab Sample ID: 720-88191-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.78	J	1.1	0.19	mg/Kg	4		6010B	Total/NA
Arsenic	50		2.2	0.19	mg/Kg	4		6010B	Total/NA
Barium	78		1.1	0.16	mg/Kg	4		6010B	Total/NA
Beryllium	0.23		0.22	0.073	mg/Kg	4		6010B	Total/NA
Cadmium	0.11	J	0.28	0.028	mg/Kg	4		6010B	Total/NA
Chromium	71		1.1	0.12	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.45	0.045	mg/Kg	4		6010B	Total/NA
Copper	27		3.4	1.6	mg/Kg	4		6010B	Total/NA
Lead	3.9		1.1	0.24	mg/Kg	4		6010B	Total/NA
Nickel	100		1.1	0.11	mg/Kg	4		6010B	Total/NA
Silver	0.17	J	0.56	0.11	mg/Kg	4		6010B	Total/NA
Vanadium	61		1.1	0.15	mg/Kg	4		6010B	Total/NA
Zinc	49		3.4	1.4	mg/Kg	4		6010B	Total/NA
Mercury	0.53		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L4S-0.5-1 — Lab Sample ID: 720-88191-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.45	J	1.5	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	100		3.1	0.26	mg/Kg	4		6010B	Total/NA
Barium	33		1.5	0.22	mg/Kg	4		6010B	Total/NA
Cadmium	0.32	J	0.38	0.038	mg/Kg	4		6010B	Total/NA
Chromium	18		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	7.7		0.62	0.062	mg/Kg	4		6010B	Total/NA
Copper	73		4.6	2.2	mg/Kg	4		6010B	Total/NA
Lead	30		1.5	0.32	mg/Kg	4		6010B	Total/NA
Nickel	11		1.5	0.16	mg/Kg	4		6010B	Total/NA
Selenium	0.55	J	3.1	0.46	mg/Kg	4		6010B	Total/NA
Vanadium	60		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	95		4.6	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.062		0.015	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L4S-3.5-4 — Lab Sample ID: 720-88191-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.7		1.4	0.23	mg/Kg	4		6010B	Total/NA
Arsenic	5.0		2.8	0.24	mg/Kg	4		6010B	Total/NA
Barium	68		1.4	0.20	mg/Kg	4		6010B	Total/NA
Beryllium	0.11	J	0.28	0.091	mg/Kg	4		6010B	Total/NA
Cadmium	0.19	J	0.35	0.035	mg/Kg	4		6010B	Total/NA
Chromium	33		1.4	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	5.4		0.56	0.056	mg/Kg	4		6010B	Total/NA
Copper	16		4.2	2.0	mg/Kg	4		6010B	Total/NA
Lead	310		1.4	0.29	mg/Kg	4		6010B	Total/NA
Molybdenum	0.70	J	1.4	0.18	mg/Kg	4		6010B	Total/NA
Nickel	28		1.4	0.14	mg/Kg	4		6010B	Total/NA
Vanadium	23		1.4	0.19	mg/Kg	4		6010B	Total/NA
Zinc	94		4.2	1.8	mg/Kg	4		6010B	Total/NA
Mercury	0.023		0.015	0.0022	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-M4S-0.5-1 — Lab Sample ID: 720-88191-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	4.3		1.4	0.23	mg/Kg	4		6010B	Total/NA
Arsenic	310		2.7	0.23	mg/Kg	4		6010B	Total/NA
Barium	170		1.4	0.19	mg/Kg	4		6010B	Total/NA
Cadmium	3.4		0.34	0.034	mg/Kg	4		6010B	Total/NA
Chromium	21		1.4	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	7.1		0.54	0.054	mg/Kg	4		6010B	Total/NA
Copper	120		4.1	1.9	mg/Kg	4		6010B	Total/NA
Lead	700		1.4	0.29	mg/Kg	4		6010B	Total/NA
Nickel	25		1.4	0.14	mg/Kg	4		6010B	Total/NA
Silver	0.29	J	0.68	0.14	mg/Kg	4		6010B	Total/NA
Vanadium	42		1.4	0.19	mg/Kg	4		6010B	Total/NA
Zinc	2800		4.1	1.7	mg/Kg	4		6010B	Total/NA
Mercury	0.24		0.015	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M4S-3.5-4 — Lab Sample ID: 720-88191-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.1		1.1	0.19	mg/Kg	4		6010B	Total/NA
Arsenic	58		2.3	0.19	mg/Kg	4		6010B	Total/NA
Barium	190		1.1	0.16	mg/Kg	4		6010B	Total/NA
Beryllium	0.092	J	0.23	0.073	mg/Kg	4		6010B	Total/NA
Cadmium	0.34		0.28	0.028	mg/Kg	4		6010B	Total/NA
Chromium	40		1.1	0.12	mg/Kg	4		6010B	Total/NA
Cobalt	5.5		0.45	0.045	mg/Kg	4		6010B	Total/NA
Copper	310		3.4	1.6	mg/Kg	4		6010B	Total/NA
Lead	340		1.1	0.24	mg/Kg	4		6010B	Total/NA
Nickel	29		1.1	0.12	mg/Kg	4		6010B	Total/NA
Silver	1.9		0.56	0.11	mg/Kg	4		6010B	Total/NA
Vanadium	22		1.1	0.15	mg/Kg	4		6010B	Total/NA
Zinc	220		3.4	1.4	mg/Kg	4		6010B	Total/NA
Mercury	0.043		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-J4S-0.5-1 — Lab Sample ID: 720-88191-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.7		1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	19		3.8	0.33	mg/Kg	4		6010B	Total/NA
Barium	110		1.9	0.27	mg/Kg	4		6010B	Total/NA
Cadmium	1.0		0.48	0.048	mg/Kg	4		6010B	Total/NA
Chromium	46		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	9.3		0.77	0.077	mg/Kg	4		6010B	Total/NA
Copper	120		5.8	2.7	mg/Kg	4		6010B	Total/NA
Lead	170		1.9	0.40	mg/Kg	4		6010B	Total/NA
Molybdenum	3.6		1.9	0.25	mg/Kg	4		6010B	Total/NA
Nickel	50		1.9	0.20	mg/Kg	4		6010B	Total/NA
Vanadium	39		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	180		5.8	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.14		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-J4S-3.5-4 — Lab Sample ID: 720-88191-16

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-J4S-3.5-4 (Continued) — Lab Sample ID: 720-88191-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.68	J	1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	83		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	26		1.6	0.23	mg/Kg	4		6010B	Total/NA
Cadmium	0.061	J	0.41	0.040	mg/Kg	4		6010B	Total/NA
Chromium	20		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	3.5		0.65	0.065	mg/Kg	4		6010B	Total/NA
Copper	3.6	J	4.9	2.3	mg/Kg	4		6010B	Total/NA
Lead	8.4		1.6	0.34	mg/Kg	4		6010B	Total/NA
Nickel	16		1.6	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	15		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	14		4.9	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.015	J	0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H4S-0.5-1 — Lab Sample ID: 720-88191-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	9.7		1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	11		3.8	0.32	mg/Kg	4		6010B	Total/NA
Barium	120		1.9	0.27	mg/Kg	4		6010B	Total/NA
Cadmium	4.2		0.48	0.047	mg/Kg	4		6010B	Total/NA
Chromium	49		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.76	0.076	mg/Kg	4		6010B	Total/NA
Copper	1000		5.7	2.7	mg/Kg	4		6010B	Total/NA
Lead	700		1.9	0.40	mg/Kg	4		6010B	Total/NA
Molybdenum	5.6		1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	43		1.9	0.19	mg/Kg	4		6010B	Total/NA
Silver	0.97		0.95	0.19	mg/Kg	4		6010B	Total/NA
Vanadium	48		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	870		5.7	2.4	mg/Kg	4		6010B	Total/NA
Mercury	1.3		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H4S-3.5-4 — Lab Sample ID: 720-88191-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	20		1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	86		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	1100		1.7	0.24	mg/Kg	4		6010B	Total/NA
Beryllium	0.22	J	0.34	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	3.5		0.43	0.042	mg/Kg	4		6010B	Total/NA
Chromium	46		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.68	0.068	mg/Kg	4		6010B	Total/NA
Copper	490		5.1	2.4	mg/Kg	4		6010B	Total/NA
Lead	1600		1.7	0.36	mg/Kg	4		6010B	Total/NA
Molybdenum	1.1	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	59		1.7	0.17	mg/Kg	4		6010B	Total/NA
Silver	2.1		0.85	0.17	mg/Kg	4		6010B	Total/NA
Thallium	1.3	J	1.7	0.50	mg/Kg	4		6010B	Total/NA
Vanadium	46		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	1300		5.1	2.2	mg/Kg	4		6010B	Total/NA
Mercury	1.6		0.15	0.022	mg/Kg	10		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-I4S-0.5-1 — Lab Sample ID: 720-88191-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	3.7		1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	15		3.1	0.26	mg/Kg	4		6010B	Total/NA
Barium	130		1.5	0.22	mg/Kg	4		6010B	Total/NA
Cadmium	2.8		0.38	0.038	mg/Kg	4		6010B	Total/NA
Chromium	37		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.61	0.061	mg/Kg	4		6010B	Total/NA
Copper	170		4.6	2.2	mg/Kg	4		6010B	Total/NA
Lead	250		1.5	0.32	mg/Kg	4		6010B	Total/NA
Molybdenum	3.3		1.5	0.20	mg/Kg	4		6010B	Total/NA
Nickel	33		1.5	0.16	mg/Kg	4		6010B	Total/NA
Selenium	0.64	J	3.1	0.46	mg/Kg	4		6010B	Total/NA
Vanadium	55		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	420		4.6	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.23		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I4S-3.5-4 — Lab Sample ID: 720-88191-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.1	J	1.2	0.20	mg/Kg	4		6010B	Total/NA
Arsenic	110		2.5	0.21	mg/Kg	4		6010B	Total/NA
Barium	100		1.2	0.17	mg/Kg	4		6010B	Total/NA
Beryllium	0.15	J	0.25	0.080	mg/Kg	4		6010B	Total/NA
Cadmium	0.24	J	0.31	0.030	mg/Kg	4		6010B	Total/NA
Chromium	22		1.2	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	3.6		0.49	0.049	mg/Kg	4		6010B	Total/NA
Copper	33		3.7	1.7	mg/Kg	4		6010B	Total/NA
Lead	140		1.2	0.26	mg/Kg	4		6010B	Total/NA
Molybdenum	0.26	J	1.2	0.16	mg/Kg	4		6010B	Total/NA
Nickel	20		1.2	0.13	mg/Kg	4		6010B	Total/NA
Silver	0.25	J B	0.61	0.12	mg/Kg	4		6010B	Total/NA
Vanadium	14		1.2	0.17	mg/Kg	4		6010B	Total/NA
Zinc	140		3.7	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.15		0.015	0.0021	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-I2S-0.5-1
Date Collected: 08/21/18 08:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-1
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.6	F1	2.0	0.33	mg/Kg		08/23/18 16:49	08/24/18 20:42	4
Arsenic	230		3.9	0.33	mg/Kg		08/23/18 16:49	08/24/18 20:42	4
Barium	210		2.0	0.28	mg/Kg		08/23/18 16:49	08/24/18 20:42	4
Beryllium	ND		0.39	0.13	mg/Kg		08/23/18 16:49	08/24/18 20:42	4
Cadmium	0.79		0.49	0.049	mg/Kg		08/23/18 16:49	08/24/18 20:42	4
Chromium	20		2.0	0.21	mg/Kg		08/23/18 16:49	08/24/18 20:42	4
Cobalt	9.5		0.78	0.078	mg/Kg		08/23/18 16:49	08/24/18 20:42	4
Copper	120	F1	5.9	2.8	mg/Kg		08/23/18 16:49	08/24/18 20:42	4
Lead	2300		2.0	0.41	mg/Kg		08/23/18 16:49	08/24/18 20:42	4
Molybdenum	0.35	J	2.0	0.25	mg/Kg		08/23/18 16:49	08/24/18 20:42	4
Nickel	19		2.0	0.20	mg/Kg		08/23/18 16:49	08/24/18 20:42	4
Selenium	ND		3.9	0.59	mg/Kg		08/23/18 16:49	08/24/18 20:42	4
Silver	0.95	J	0.98	0.20	mg/Kg		08/23/18 16:49	08/24/18 20:42	4
Thallium	ND		2.0	0.57	mg/Kg		08/23/18 16:49	08/24/18 20:42	4
Vanadium	46	F1	2.0	0.27	mg/Kg		08/23/18 16:49	08/24/18 20:42	4
Zinc	490	F2	5.9	2.5	mg/Kg		08/23/18 16:49	08/24/18 20:42	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19		0.014	0.0021	mg/Kg		08/25/18 12:29	08/27/18 21:26	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-I2S-3.5-4
Date Collected: 08/21/18 08:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-2
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.4	J	1.8	0.30	mg/Kg		08/23/18 16:49	08/24/18 20:47	4
Arsenic	3.7		3.7	0.31	mg/Kg		08/23/18 16:49	08/24/18 20:47	4
Barium	82		1.8	0.26	mg/Kg		08/23/18 16:49	08/24/18 20:47	4
Beryllium	ND		0.37	0.12	mg/Kg		08/23/18 16:49	08/24/18 20:47	4
Cadmium	0.053	J	0.46	0.046	mg/Kg		08/23/18 16:49	08/24/18 20:47	4
Chromium	120		1.8	0.19	mg/Kg		08/23/18 16:49	08/24/18 20:47	4
Cobalt	19		0.73	0.073	mg/Kg		08/23/18 16:49	08/24/18 20:47	4
Copper	24		5.5	2.6	mg/Kg		08/23/18 16:49	08/24/18 20:47	4
Lead	3.3		1.8	0.39	mg/Kg		08/23/18 16:49	08/24/18 20:47	4
Molybdenum	ND		1.8	0.23	mg/Kg		08/23/18 16:49	08/24/18 20:47	4
Nickel	160		1.8	0.19	mg/Kg		08/23/18 16:49	08/24/18 20:47	4
Selenium	ND		3.7	0.55	mg/Kg		08/23/18 16:49	08/24/18 20:47	4
Silver	ND		0.92	0.19	mg/Kg		08/23/18 16:49	08/24/18 20:47	4
Thallium	ND		1.8	0.53	mg/Kg		08/23/18 16:49	08/24/18 20:47	4
Vanadium	66		1.8	0.25	mg/Kg		08/23/18 16:49	08/24/18 20:47	4
Zinc	48		5.5	2.3	mg/Kg		08/23/18 16:49	08/24/18 20:47	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.7		0.17	0.025	mg/Kg		08/25/18 12:29	08/28/18 09:40	10

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-J2S-0.5-1
Date Collected: 08/21/18 08:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-3
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.80	J	1.1	0.18	mg/Kg		08/23/18 16:49	08/24/18 20:52	4
Arsenic	57		2.2	0.19	mg/Kg		08/23/18 16:49	08/24/18 20:52	4
Barium	820		1.1	0.16	mg/Kg		08/23/18 16:49	08/24/18 20:52	4
Beryllium	0.087	J	0.22	0.071	mg/Kg		08/23/18 16:49	08/24/18 20:52	4
Cadmium	0.17	J	0.27	0.027	mg/Kg		08/23/18 16:49	08/24/18 20:52	4
Chromium	14		1.1	0.12	mg/Kg		08/23/18 16:49	08/24/18 20:52	4
Cobalt	20		0.44	0.044	mg/Kg		08/23/18 16:49	08/24/18 20:52	4
Copper	95		3.3	1.6	mg/Kg		08/23/18 16:49	08/24/18 20:52	4
Lead	49		5.5	1.1	mg/Kg		08/23/18 16:49	08/28/18 15:15	20
Molybdenum	1.7		1.1	0.14	mg/Kg		08/23/18 16:49	08/24/18 20:52	4
Nickel	64		1.1	0.11	mg/Kg		08/23/18 16:49	08/24/18 20:52	4
Selenium	ND		11	1.6	mg/Kg		08/23/18 16:49	08/28/18 15:15	20
Silver	0.33	J	0.55	0.11	mg/Kg		08/23/18 16:49	08/24/18 20:52	4
Thallium	ND		5.5	1.6	mg/Kg		08/23/18 16:49	08/28/18 15:15	20
Vanadium	52		1.1	0.15	mg/Kg		08/23/18 16:49	08/24/18 20:52	4
Zinc	63		3.3	1.4	mg/Kg		08/23/18 16:49	08/24/18 20:52	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14		0.017	0.0025	mg/Kg		08/25/18 12:29	08/27/18 21:36	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-J2S-3.5-4
Date Collected: 08/21/18 08:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-4
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.5	J	1.8	0.30	mg/Kg		08/23/18 16:49	08/24/18 20:56	4
Arsenic	65		3.6	0.30	mg/Kg		08/23/18 16:49	08/24/18 20:56	4
Barium	99		1.8	0.25	mg/Kg		08/23/18 16:49	08/24/18 20:56	4
Beryllium	0.13	J	0.36	0.12	mg/Kg		08/23/18 16:49	08/24/18 20:56	4
Cadmium	0.060	J	0.45	0.044	mg/Kg		08/23/18 16:49	08/24/18 20:56	4
Chromium	90		1.8	0.19	mg/Kg		08/23/18 16:49	08/24/18 20:56	4
Cobalt	16		0.71	0.071	mg/Kg		08/23/18 16:49	08/24/18 20:56	4
Copper	28		5.4	2.5	mg/Kg		08/23/18 16:49	08/24/18 20:56	4
Lead	12		1.8	0.38	mg/Kg		08/23/18 16:49	08/24/18 20:56	4
Molybdenum	0.34	J	1.8	0.23	mg/Kg		08/23/18 16:49	08/24/18 20:56	4
Nickel	110		1.8	0.18	mg/Kg		08/23/18 16:49	08/24/18 20:56	4
Selenium	ND		3.6	0.54	mg/Kg		08/23/18 16:49	08/24/18 20:56	4
Silver	ND		0.89	0.18	mg/Kg		08/23/18 16:49	08/24/18 20:56	4
Thallium	ND		1.8	0.52	mg/Kg		08/23/18 16:49	08/24/18 20:56	4
Vanadium	59		1.8	0.24	mg/Kg		08/23/18 16:49	08/24/18 20:56	4
Zinc	52		5.4	2.3	mg/Kg		08/23/18 16:49	08/24/18 20:56	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.9		0.15	0.022	mg/Kg		08/25/18 12:29	08/28/18 09:42	10

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-K2S-0.5-1
Date Collected: 08/21/18 08:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-5
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.5		1.8	0.30	mg/Kg		08/23/18 16:49	08/24/18 21:01	4
Arsenic	150		3.6	0.31	mg/Kg		08/23/18 16:49	08/24/18 21:01	4
Barium	72		1.8	0.26	mg/Kg		08/23/18 16:49	08/24/18 21:01	4
Beryllium	ND		0.36	0.12	mg/Kg		08/23/18 16:49	08/24/18 21:01	4
Cadmium	1.3		0.45	0.045	mg/Kg		08/23/18 16:49	08/24/18 21:01	4
Chromium	25		1.8	0.19	mg/Kg		08/23/18 16:49	08/24/18 21:01	4
Cobalt	14		0.73	0.073	mg/Kg		08/23/18 16:49	08/24/18 21:01	4
Copper	140		5.5	2.6	mg/Kg		08/23/18 16:49	08/24/18 21:01	4
Lead	200		1.8	0.38	mg/Kg		08/23/18 16:49	08/24/18 21:01	4
Molybdenum	1.1	J	1.8	0.23	mg/Kg		08/23/18 16:49	08/24/18 21:01	4
Nickel	22		1.8	0.19	mg/Kg		08/23/18 16:49	08/24/18 21:01	4
Selenium	ND		3.6	0.55	mg/Kg		08/23/18 16:49	08/24/18 21:01	4
Silver	0.26	J	0.91	0.18	mg/Kg		08/23/18 16:49	08/24/18 21:01	4
Thallium	ND		1.8	0.53	mg/Kg		08/23/18 16:49	08/24/18 21:01	4
Vanadium	77		1.8	0.25	mg/Kg		08/23/18 16:49	08/24/18 21:01	4
Zinc	230		5.5	2.3	mg/Kg		08/23/18 16:49	08/24/18 21:01	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.18		0.017	0.0025	mg/Kg		08/25/18 12:29	08/27/18 21:41	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-K2S-3.5-4
Date Collected: 08/21/18 08:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-6
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.73	J	1.5	0.25	mg/Kg		08/23/18 16:49	08/24/18 21:06	4
Arsenic	37		3.0	0.25	mg/Kg		08/23/18 16:49	08/24/18 21:06	4
Barium	73		1.5	0.21	mg/Kg		08/23/18 16:49	08/24/18 21:06	4
Beryllium	ND		0.30	0.097	mg/Kg		08/23/18 16:49	08/24/18 21:06	4
Cadmium	ND		0.37	0.037	mg/Kg		08/23/18 16:49	08/24/18 21:06	4
Chromium	26		1.5	0.16	mg/Kg		08/23/18 16:49	08/24/18 21:06	4
Cobalt	7.9		0.60	0.060	mg/Kg		08/23/18 16:49	08/24/18 21:06	4
Copper	17		4.5	2.1	mg/Kg		08/23/18 16:49	08/24/18 21:06	4
Lead	5.2		1.5	0.31	mg/Kg		08/23/18 16:49	08/24/18 21:06	4
Molybdenum	ND		1.5	0.19	mg/Kg		08/23/18 16:49	08/24/18 21:06	4
Nickel	42		1.5	0.15	mg/Kg		08/23/18 16:49	08/24/18 21:06	4
Selenium	ND		3.0	0.45	mg/Kg		08/23/18 16:49	08/24/18 21:06	4
Silver	ND		0.75	0.15	mg/Kg		08/23/18 16:49	08/24/18 21:06	4
Thallium	ND		1.5	0.43	mg/Kg		08/23/18 16:49	08/24/18 21:06	4
Vanadium	19		1.5	0.20	mg/Kg		08/23/18 16:49	08/24/18 21:06	4
Zinc	35		4.5	1.9	mg/Kg		08/23/18 16:49	08/24/18 21:06	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14		0.014	0.0021	mg/Kg		08/25/18 12:29	08/27/18 21:43	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-L2S-0.5-1
Date Collected: 08/21/18 08:55
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-7
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.0		1.8	0.30	mg/Kg		08/23/18 16:49	08/24/18 21:11	4
Arsenic	190		3.6	0.30	mg/Kg		08/23/18 16:49	08/24/18 21:11	4
Barium	71		1.8	0.25	mg/Kg		08/23/18 16:49	08/24/18 21:11	4
Beryllium	ND		0.36	0.12	mg/Kg		08/23/18 16:49	08/24/18 21:11	4
Cadmium	0.34	J	0.45	0.044	mg/Kg		08/23/18 16:49	08/24/18 21:11	4
Chromium	25		1.8	0.19	mg/Kg		08/23/18 16:49	08/24/18 21:11	4
Cobalt	11		0.71	0.071	mg/Kg		08/23/18 16:49	08/24/18 21:11	4
Copper	86		5.4	2.5	mg/Kg		08/23/18 16:49	08/24/18 21:11	4
Lead	97		1.8	0.38	mg/Kg		08/23/18 16:49	08/24/18 21:11	4
Molybdenum	0.23	J	1.8	0.23	mg/Kg		08/23/18 16:49	08/24/18 21:11	4
Nickel	26		1.8	0.18	mg/Kg		08/23/18 16:49	08/24/18 21:11	4
Selenium	ND		3.6	0.54	mg/Kg		08/23/18 16:49	08/24/18 21:11	4
Silver	ND		0.89	0.18	mg/Kg		08/23/18 16:49	08/24/18 21:11	4
Thallium	ND		1.8	0.52	mg/Kg		08/23/18 16:49	08/24/18 21:11	4
Vanadium	61		1.8	0.24	mg/Kg		08/23/18 16:49	08/24/18 21:11	4
Zinc	95		5.4	2.3	mg/Kg		08/23/18 16:49	08/24/18 21:11	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.074		0.016	0.0024	mg/Kg		08/25/18 12:29	08/27/18 21:46	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-L2S-3.5-4

Date Collected: 08/21/18 08:55
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-8

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.3	J	1.7	0.29	mg/Kg		08/23/18 16:49	08/24/18 21:15	4
Arsenic	37		3.4	0.29	mg/Kg		08/23/18 16:49	08/24/18 21:15	4
Barium	97		1.7	0.24	mg/Kg		08/23/18 16:49	08/24/18 21:15	4
Beryllium	0.22	J	0.34	0.11	mg/Kg		08/23/18 16:49	08/24/18 21:15	4
Cadmium	0.047	J	0.43	0.043	mg/Kg		08/23/18 16:49	08/24/18 21:15	4
Chromium	89		1.7	0.18	mg/Kg		08/23/18 16:49	08/24/18 21:15	4
Cobalt	18		0.69	0.069	mg/Kg		08/23/18 16:49	08/24/18 21:15	4
Copper	27		5.2	2.5	mg/Kg		08/23/18 16:49	08/24/18 21:15	4
Lead	3.3		1.7	0.36	mg/Kg		08/23/18 16:49	08/24/18 21:15	4
Molybdenum	ND		1.7	0.22	mg/Kg		08/23/18 16:49	08/24/18 21:15	4
Nickel	170		1.7	0.18	mg/Kg		08/23/18 16:49	08/24/18 21:15	4
Selenium	ND		3.4	0.52	mg/Kg		08/23/18 16:49	08/24/18 21:15	4
Silver	ND		0.86	0.17	mg/Kg		08/23/18 16:49	08/24/18 21:15	4
Thallium	ND		1.7	0.50	mg/Kg		08/23/18 16:49	08/24/18 21:15	4
Vanadium	62		1.7	0.23	mg/Kg		08/23/18 16:49	08/24/18 21:15	4
Zinc	52		5.2	2.2	mg/Kg		08/23/18 16:49	08/24/18 21:15	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	17		0.71	0.10	mg/Kg		08/25/18 12:29	08/28/18 09:45	50

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-M2S-0.5-1
Date Collected: 08/21/18 09:10
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-9
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.94	J	1.5	0.25	mg/Kg		08/23/18 16:49	08/24/18 21:30	4
Arsenic	120		3.0	0.26	mg/Kg		08/23/18 16:49	08/24/18 21:30	4
Barium	61		1.5	0.21	mg/Kg		08/23/18 16:49	08/24/18 21:30	4
Beryllium	ND		0.30	0.098	mg/Kg		08/23/18 16:49	08/24/18 21:30	4
Cadmium	0.37	J	0.38	0.037	mg/Kg		08/23/18 16:49	08/24/18 21:30	4
Chromium	16		1.5	0.16	mg/Kg		08/23/18 16:49	08/24/18 21:30	4
Cobalt	12		0.60	0.060	mg/Kg		08/23/18 16:49	08/24/18 21:30	4
Copper	80		4.5	2.1	mg/Kg		08/23/18 16:49	08/24/18 21:30	4
Lead	82		1.5	0.32	mg/Kg		08/23/18 16:49	08/24/18 21:30	4
Molybdenum	ND		1.5	0.19	mg/Kg		08/23/18 16:49	08/24/18 21:30	4
Nickel	18		1.5	0.15	mg/Kg		08/23/18 16:49	08/24/18 21:30	4
Selenium	ND		3.0	0.45	mg/Kg		08/23/18 16:49	08/24/18 21:30	4
Silver	0.18	J	0.75	0.15	mg/Kg		08/23/18 16:49	08/24/18 21:30	4
Thallium	ND		1.5	0.44	mg/Kg		08/23/18 16:49	08/24/18 21:30	4
Vanadium	82		1.5	0.20	mg/Kg		08/23/18 16:49	08/24/18 21:30	4
Zinc	140		4.5	1.9	mg/Kg		08/23/18 16:49	08/24/18 21:30	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.065		0.014	0.0021	mg/Kg		08/25/18 12:29	08/27/18 21:50	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-M2S-3.5-4
Date Collected: 08/21/18 09:10
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-10
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.78	J	1.1	0.19	mg/Kg		08/23/18 16:49	08/24/18 21:34	4
Arsenic	50		2.2	0.19	mg/Kg		08/23/18 16:49	08/24/18 21:34	4
Barium	78		1.1	0.16	mg/Kg		08/23/18 16:49	08/24/18 21:34	4
Beryllium	0.23		0.22	0.073	mg/Kg		08/23/18 16:49	08/24/18 21:34	4
Cadmium	0.11	J	0.28	0.028	mg/Kg		08/23/18 16:49	08/24/18 21:34	4
Chromium	71		1.1	0.12	mg/Kg		08/23/18 16:49	08/24/18 21:34	4
Cobalt	15		0.45	0.045	mg/Kg		08/23/18 16:49	08/24/18 21:34	4
Copper	27		3.4	1.6	mg/Kg		08/23/18 16:49	08/24/18 21:34	4
Lead	3.9		1.1	0.24	mg/Kg		08/23/18 16:49	08/24/18 21:34	4
Molybdenum	ND		1.1	0.14	mg/Kg		08/23/18 16:49	08/24/18 21:34	4
Nickel	100		1.1	0.11	mg/Kg		08/23/18 16:49	08/24/18 21:34	4
Selenium	ND		2.2	0.34	mg/Kg		08/23/18 16:49	08/24/18 21:34	4
Silver	0.17	J	0.56	0.11	mg/Kg		08/23/18 16:49	08/24/18 21:34	4
Thallium	ND		1.1	0.33	mg/Kg		08/23/18 16:49	08/24/18 21:34	4
Vanadium	61		1.1	0.15	mg/Kg		08/23/18 16:49	08/24/18 21:34	4
Zinc	49		3.4	1.4	mg/Kg		08/23/18 16:49	08/24/18 21:34	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.53		0.015	0.0023	mg/Kg		08/25/18 12:29	08/27/18 21:52	1

Client Sample ID: DG-L4S-0.5-1

Date Collected: 08/21/18 09:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-11

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.45	J	1.5	0.26	mg/Kg		08/23/18 16:49	08/24/18 21:39	4
Arsenic	100		3.1	0.26	mg/Kg		08/23/18 16:49	08/24/18 21:39	4
Barium	33		1.5	0.22	mg/Kg		08/23/18 16:49	08/24/18 21:39	4
Beryllium	ND		0.31	0.10	mg/Kg		08/23/18 16:49	08/24/18 21:39	4
Cadmium	0.32	J	0.38	0.038	mg/Kg		08/23/18 16:49	08/24/18 21:39	4
Chromium	18		1.5	0.16	mg/Kg		08/23/18 16:49	08/24/18 21:39	4
Cobalt	7.7		0.62	0.062	mg/Kg		08/23/18 16:49	08/24/18 21:39	4
Copper	73		4.6	2.2	mg/Kg		08/23/18 16:49	08/24/18 21:39	4
Lead	30		1.5	0.32	mg/Kg		08/23/18 16:49	08/24/18 21:39	4
Molybdenum	ND		1.5	0.20	mg/Kg		08/23/18 16:49	08/24/18 21:39	4
Nickel	11		1.5	0.16	mg/Kg		08/23/18 16:49	08/24/18 21:39	4
Selenium	0.55	J	3.1	0.46	mg/Kg		08/23/18 16:49	08/24/18 21:39	4
Silver	ND		0.77	0.16	mg/Kg		08/23/18 16:49	08/24/18 21:39	4
Thallium	ND		1.5	0.45	mg/Kg		08/23/18 16:49	08/24/18 21:39	4
Vanadium	60		1.5	0.21	mg/Kg		08/23/18 16:49	08/24/18 21:39	4
Zinc	95		4.6	2.0	mg/Kg		08/23/18 16:49	08/24/18 21:39	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.062		0.015	0.0021	mg/Kg		08/27/18 20:30	08/28/18 22:42	1

Client Sample ID: DG-L4S-3.5-4

Date Collected: 08/21/18 09:45
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-12

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.7		1.4	0.23	mg/Kg		08/23/18 16:49	08/24/18 21:44	4
Arsenic	5.0		2.8	0.24	mg/Kg		08/23/18 16:49	08/24/18 21:44	4
Barium	68		1.4	0.20	mg/Kg		08/23/18 16:49	08/24/18 21:44	4
Beryllium	0.11	J	0.28	0.091	mg/Kg		08/23/18 16:49	08/24/18 21:44	4
Cadmium	0.19	J	0.35	0.035	mg/Kg		08/23/18 16:49	08/24/18 21:44	4
Chromium	33		1.4	0.15	mg/Kg		08/23/18 16:49	08/24/18 21:44	4
Cobalt	5.4		0.56	0.056	mg/Kg		08/23/18 16:49	08/24/18 21:44	4
Copper	16		4.2	2.0	mg/Kg		08/23/18 16:49	08/24/18 21:44	4
Lead	310		1.4	0.29	mg/Kg		08/23/18 16:49	08/24/18 21:44	4
Molybdenum	0.70	J	1.4	0.18	mg/Kg		08/23/18 16:49	08/24/18 21:44	4
Nickel	28		1.4	0.14	mg/Kg		08/23/18 16:49	08/24/18 21:44	4
Selenium	ND		2.8	0.42	mg/Kg		08/23/18 16:49	08/24/18 21:44	4
Silver	ND		0.70	0.14	mg/Kg		08/23/18 16:49	08/24/18 21:44	4
Thallium	ND		1.4	0.41	mg/Kg		08/23/18 16:49	08/24/18 21:44	4
Vanadium	23		1.4	0.19	mg/Kg		08/23/18 16:49	08/24/18 21:44	4
Zinc	94		4.2	1.8	mg/Kg		08/23/18 16:49	08/24/18 21:44	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023		0.015	0.0022	mg/Kg		08/27/18 20:30	08/28/18 22:45	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-M4S-0.5-1
Date Collected: 08/21/18 10:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-13
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.3		1.4	0.23	mg/Kg		08/23/18 16:49	08/24/18 21:49	4
Arsenic	310		2.7	0.23	mg/Kg		08/23/18 16:49	08/24/18 21:49	4
Barium	170		1.4	0.19	mg/Kg		08/23/18 16:49	08/24/18 21:49	4
Beryllium	ND		0.27	0.088	mg/Kg		08/23/18 16:49	08/24/18 21:49	4
Cadmium	3.4		0.34	0.034	mg/Kg		08/23/18 16:49	08/24/18 21:49	4
Chromium	21		1.4	0.14	mg/Kg		08/23/18 16:49	08/24/18 21:49	4
Cobalt	7.1		0.54	0.054	mg/Kg		08/23/18 16:49	08/24/18 21:49	4
Copper	120		4.1	1.9	mg/Kg		08/23/18 16:49	08/24/18 21:49	4
Lead	700		1.4	0.29	mg/Kg		08/23/18 16:49	08/24/18 21:49	4
Molybdenum	ND		1.4	0.17	mg/Kg		08/23/18 16:49	08/24/18 21:49	4
Nickel	25		1.4	0.14	mg/Kg		08/23/18 16:49	08/24/18 21:49	4
Selenium	ND		2.7	0.41	mg/Kg		08/23/18 16:49	08/24/18 21:49	4
Silver	0.29	J	0.68	0.14	mg/Kg		08/23/18 16:49	08/24/18 21:49	4
Thallium	ND		1.4	0.39	mg/Kg		08/23/18 16:49	08/24/18 21:49	4
Vanadium	42		1.4	0.19	mg/Kg		08/23/18 16:49	08/24/18 21:49	4
Zinc	2800		4.1	1.7	mg/Kg		08/23/18 16:49	08/24/18 21:49	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.24		0.015	0.0021	mg/Kg		08/27/18 20:30	08/28/18 22:52	1

Client Sample ID: DG-M4S-3.5-4

Date Collected: 08/21/18 10:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-14

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.1		1.1	0.19	mg/Kg		08/23/18 16:49	08/24/18 21:53	4
Arsenic	58		2.3	0.19	mg/Kg		08/23/18 16:49	08/24/18 21:53	4
Barium	190		1.1	0.16	mg/Kg		08/23/18 16:49	08/24/18 21:53	4
Beryllium	0.092	J	0.23	0.073	mg/Kg		08/23/18 16:49	08/24/18 21:53	4
Cadmium	0.34		0.28	0.028	mg/Kg		08/23/18 16:49	08/24/18 21:53	4
Chromium	40		1.1	0.12	mg/Kg		08/23/18 16:49	08/24/18 21:53	4
Cobalt	5.5		0.45	0.045	mg/Kg		08/23/18 16:49	08/24/18 21:53	4
Copper	310		3.4	1.6	mg/Kg		08/23/18 16:49	08/24/18 21:53	4
Lead	340		1.1	0.24	mg/Kg		08/23/18 16:49	08/24/18 21:53	4
Molybdenum	ND		1.1	0.14	mg/Kg		08/23/18 16:49	08/24/18 21:53	4
Nickel	29		1.1	0.12	mg/Kg		08/23/18 16:49	08/24/18 21:53	4
Selenium	ND		2.3	0.34	mg/Kg		08/23/18 16:49	08/24/18 21:53	4
Silver	1.9		0.56	0.11	mg/Kg		08/23/18 16:49	08/24/18 21:53	4
Thallium	ND		1.1	0.33	mg/Kg		08/23/18 16:49	08/24/18 21:53	4
Vanadium	22		1.1	0.15	mg/Kg		08/23/18 16:49	08/24/18 21:53	4
Zinc	220		3.4	1.4	mg/Kg		08/23/18 16:49	08/24/18 21:53	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.043		0.016	0.0023	mg/Kg		08/27/18 20:30	08/28/18 22:54	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-J4S-0.5-1
Date Collected: 08/21/18 10:40
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-15
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.7		1.9	0.32	mg/Kg		08/23/18 16:49	08/24/18 21:58	4
Arsenic	19		3.8	0.33	mg/Kg		08/23/18 16:49	08/24/18 21:58	4
Barium	110		1.9	0.27	mg/Kg		08/23/18 16:49	08/24/18 21:58	4
Beryllium	ND		0.38	0.13	mg/Kg		08/23/18 16:49	08/24/18 21:58	4
Cadmium	1.0		0.48	0.048	mg/Kg		08/23/18 16:49	08/24/18 21:58	4
Chromium	46		1.9	0.20	mg/Kg		08/23/18 16:49	08/24/18 21:58	4
Cobalt	9.3		0.77	0.077	mg/Kg		08/23/18 16:49	08/24/18 21:58	4
Copper	120		5.8	2.7	mg/Kg		08/23/18 16:49	08/24/18 21:58	4
Lead	170		1.9	0.40	mg/Kg		08/23/18 16:49	08/24/18 21:58	4
Molybdenum	3.6		1.9	0.25	mg/Kg		08/23/18 16:49	08/24/18 21:58	4
Nickel	50		1.9	0.20	mg/Kg		08/23/18 16:49	08/24/18 21:58	4
Selenium	ND		3.8	0.58	mg/Kg		08/23/18 16:49	08/24/18 21:58	4
Silver	ND		0.96	0.19	mg/Kg		08/23/18 16:49	08/24/18 21:58	4
Thallium	ND		1.9	0.56	mg/Kg		08/23/18 16:49	08/24/18 21:58	4
Vanadium	39		1.9	0.26	mg/Kg		08/23/18 16:49	08/24/18 21:58	4
Zinc	180		5.8	2.4	mg/Kg		08/23/18 16:49	08/24/18 21:58	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14		0.015	0.0022	mg/Kg		08/27/18 20:30	08/28/18 22:56	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-J4S-3.5-4
Date Collected: 08/21/18 10:40
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-16
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.68	J	1.6	0.27	mg/Kg		08/23/18 16:49	08/24/18 22:03	4
Arsenic	83		3.3	0.28	mg/Kg		08/23/18 16:49	08/24/18 22:03	4
Barium	26		1.6	0.23	mg/Kg		08/23/18 16:49	08/24/18 22:03	4
Beryllium	ND		0.33	0.11	mg/Kg		08/23/18 16:49	08/24/18 22:03	4
Cadmium	0.061	J	0.41	0.040	mg/Kg		08/23/18 16:49	08/24/18 22:03	4
Chromium	20		1.6	0.17	mg/Kg		08/23/18 16:49	08/24/18 22:03	4
Cobalt	3.5		0.65	0.065	mg/Kg		08/23/18 16:49	08/24/18 22:03	4
Copper	3.6	J	4.9	2.3	mg/Kg		08/23/18 16:49	08/24/18 22:03	4
Lead	8.4		1.6	0.34	mg/Kg		08/23/18 16:49	08/24/18 22:03	4
Molybdenum	ND		1.6	0.21	mg/Kg		08/23/18 16:49	08/24/18 22:03	4
Nickel	16		1.6	0.17	mg/Kg		08/23/18 16:49	08/24/18 22:03	4
Selenium	ND		3.3	0.49	mg/Kg		08/23/18 16:49	08/24/18 22:03	4
Silver	ND		0.81	0.16	mg/Kg		08/23/18 16:49	08/24/18 22:03	4
Thallium	ND		1.6	0.47	mg/Kg		08/23/18 16:49	08/24/18 22:03	4
Vanadium	15		1.6	0.22	mg/Kg		08/23/18 16:49	08/24/18 22:03	4
Zinc	14		4.9	2.1	mg/Kg		08/23/18 16:49	08/24/18 22:03	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.016	0.0023	mg/Kg		08/27/18 20:30	08/28/18 22:59	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-H4S-0.5-1
Date Collected: 08/21/18 11:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-17
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	9.7		1.9	0.32	mg/Kg		08/23/18 16:49	08/24/18 22:08	4
Arsenic	11		3.8	0.32	mg/Kg		08/23/18 16:49	08/24/18 22:08	4
Barium	120		1.9	0.27	mg/Kg		08/23/18 16:49	08/24/18 22:08	4
Beryllium	ND		0.38	0.12	mg/Kg		08/23/18 16:49	08/24/18 22:08	4
Cadmium	4.2		0.48	0.047	mg/Kg		08/23/18 16:49	08/24/18 22:08	4
Chromium	49		1.9	0.20	mg/Kg		08/23/18 16:49	08/24/18 22:08	4
Cobalt	11		0.76	0.076	mg/Kg		08/23/18 16:49	08/24/18 22:08	4
Copper	1000		5.7	2.7	mg/Kg		08/23/18 16:49	08/24/18 22:08	4
Lead	700		1.9	0.40	mg/Kg		08/23/18 16:49	08/24/18 22:08	4
Molybdenum	5.6		1.9	0.24	mg/Kg		08/23/18 16:49	08/24/18 22:08	4
Nickel	43		1.9	0.19	mg/Kg		08/23/18 16:49	08/24/18 22:08	4
Selenium	ND		3.8	0.57	mg/Kg		08/23/18 16:49	08/24/18 22:08	4
Silver	0.97		0.95	0.19	mg/Kg		08/23/18 16:49	08/24/18 22:08	4
Thallium	ND		1.9	0.55	mg/Kg		08/23/18 16:49	08/24/18 22:08	4
Vanadium	48		1.9	0.26	mg/Kg		08/23/18 16:49	08/24/18 22:08	4
Zinc	870		5.7	2.4	mg/Kg		08/23/18 16:49	08/24/18 22:08	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.3		0.015	0.0022	mg/Kg		08/27/18 20:30	08/28/18 23:01	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-H4S-3.5-4
Date Collected: 08/21/18 11:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-18
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	20		1.7	0.28	mg/Kg		08/24/18 16:33	08/27/18 15:12	4
Arsenic	86		3.4	0.29	mg/Kg		08/24/18 16:33	08/27/18 15:12	4
Barium	1100		1.7	0.24	mg/Kg		08/24/18 16:33	08/27/18 15:12	4
Beryllium	0.22	J	0.34	0.11	mg/Kg		08/24/18 16:33	08/27/18 15:12	4
Cadmium	3.5		0.43	0.042	mg/Kg		08/24/18 16:33	08/27/18 15:12	4
Chromium	46		1.7	0.18	mg/Kg		08/24/18 16:33	08/27/18 15:12	4
Cobalt	11		0.68	0.068	mg/Kg		08/24/18 16:33	08/27/18 15:12	4
Copper	490		5.1	2.4	mg/Kg		08/24/18 16:33	08/27/18 15:12	4
Lead	1600		1.7	0.36	mg/Kg		08/24/18 16:33	08/27/18 15:12	4
Molybdenum	1.1	J	1.7	0.22	mg/Kg		08/24/18 16:33	08/27/18 15:12	4
Nickel	59		1.7	0.17	mg/Kg		08/24/18 16:33	08/27/18 15:12	4
Selenium	ND		3.4	0.51	mg/Kg		08/24/18 16:33	08/27/18 15:12	4
Silver	2.1		0.85	0.17	mg/Kg		08/24/18 16:33	08/27/18 15:12	4
Thallium	1.3	J	1.7	0.50	mg/Kg		08/24/18 16:33	08/27/18 15:12	4
Vanadium	46		1.7	0.23	mg/Kg		08/24/18 16:33	08/27/18 15:12	4
Zinc	1300		5.1	2.2	mg/Kg		08/24/18 16:33	08/27/18 15:12	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.6		0.15	0.022	mg/Kg		08/27/18 20:30	08/29/18 11:39	10

Client Sample ID: DG-I4S-0.5-1

Date Collected: 08/21/18 11:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-19

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**3.7**		1.5	0.25	mg/Kg		08/24/18 16:34	08/25/18 15:50	4
Arsenic	**15**		3.1	0.26	mg/Kg		08/24/18 16:34	08/25/18 15:50	4
Barium	**130**		1.5	0.22	mg/Kg		08/24/18 16:34	08/25/18 15:50	4
Beryllium	ND		0.31	0.099	mg/Kg		08/24/18 16:34	08/25/18 15:50	4
Cadmium	**2.8**		0.38	0.038	mg/Kg		08/24/18 16:34	08/25/18 15:50	4
Chromium	**37**		1.5	0.16	mg/Kg		08/24/18 16:34	08/25/18 15:50	4
Cobalt	**11**		0.61	0.061	mg/Kg		08/24/18 16:34	08/25/18 15:50	4
Copper	**170**		4.6	2.2	mg/Kg		08/24/18 16:34	08/25/18 15:50	4
Lead	**250**		1.5	0.32	mg/Kg		08/24/18 16:34	08/25/18 15:50	4
Molybdenum	**3.3**		1.5	0.20	mg/Kg		08/24/18 16:34	08/25/18 15:50	4
Nickel	**33**		1.5	0.16	mg/Kg		08/24/18 16:34	08/25/18 15:50	4
Selenium	**0.64**	**J**	3.1	0.46	mg/Kg		08/24/18 16:34	08/25/18 15:50	4
Silver	ND		0.76	0.15	mg/Kg		08/24/18 16:34	08/25/18 15:50	4
Thallium	ND		1.5	0.44	mg/Kg		08/24/18 16:34	08/25/18 15:50	4
Vanadium	**55**		1.5	0.21	mg/Kg		08/24/18 16:34	08/25/18 15:50	4
Zinc	**420**		4.6	1.9	mg/Kg		08/24/18 16:34	08/25/18 15:50	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.23**		0.014	0.0021	mg/Kg		08/27/18 20:30	08/28/18 23:06	1

Client Sample ID: DG-I4S-3.5-4

Date Collected: 08/21/18 11:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88191-20

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.1	J	1.2	0.20	mg/Kg		08/24/18 16:34	08/25/18 16:05	4
Arsenic	110		2.5	0.21	mg/Kg		08/24/18 16:34	08/25/18 16:05	4
Barium	100		1.2	0.17	mg/Kg		08/24/18 16:34	08/25/18 16:05	4
Beryllium	0.15	J	0.25	0.080	mg/Kg		08/24/18 16:34	08/25/18 16:05	4
Cadmium	0.24	J	0.31	0.030	mg/Kg		08/24/18 16:34	08/25/18 16:05	4
Chromium	22		1.2	0.13	mg/Kg		08/24/18 16:34	08/25/18 16:05	4
Cobalt	3.6		0.49	0.049	mg/Kg		08/24/18 16:34	08/25/18 16:05	4
Copper	33		3.7	1.7	mg/Kg		08/24/18 16:34	08/25/18 16:05	4
Lead	140		1.2	0.26	mg/Kg		08/24/18 16:34	08/25/18 16:05	4
Molybdenum	0.26	J	1.2	0.16	mg/Kg		08/24/18 16:34	08/25/18 16:05	4
Nickel	20		1.2	0.13	mg/Kg		08/24/18 16:34	08/25/18 16:05	4
Selenium	ND		2.5	0.37	mg/Kg		08/24/18 16:34	08/25/18 16:05	4
Silver	0.25	J B	0.61	0.12	mg/Kg		08/24/18 16:34	08/25/18 16:05	4
Thallium	ND		1.2	0.36	mg/Kg		08/24/18 16:34	08/25/18 16:05	4
Vanadium	14		1.2	0.17	mg/Kg		08/24/18 16:34	08/25/18 16:05	4
Zinc	140		3.7	1.6	mg/Kg		08/24/18 16:34	08/25/18 16:05	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15		0.015	0.0021	mg/Kg		08/27/18 20:30	08/28/18 23:08	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250108/1-A
Matrix: Solid
Analysis Batch: 250220

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250108

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Arsenic	ND		1.0	0.085	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Barium	ND		0.50	0.071	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Beryllium	ND		0.10	0.033	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Cadmium	ND		0.13	0.012	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Chromium	ND		0.50	0.053	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Cobalt	ND		0.20	0.020	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Copper	ND		1.5	0.71	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Lead	ND		0.50	0.11	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Nickel	ND		0.50	0.051	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Selenium	ND		1.0	0.15	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Silver	ND		0.25	0.051	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Thallium	ND		0.50	0.15	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Vanadium	ND		0.50	0.068	mg/Kg		08/23/18 16:49	08/24/18 20:04	1
Zinc	ND		1.5	0.64	mg/Kg		08/23/18 16:49	08/24/18 20:04	1

Lab Sample ID: LCS 720-250108/2-A
Matrix: Solid
Analysis Batch: 250220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250108

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	48.0		mg/Kg		96	80 - 120
Arsenic	50.0	48.4		mg/Kg		97	80 - 120
Barium	50.0	46.2		mg/Kg		92	80 - 120
Beryllium	50.0	49.2		mg/Kg		98	80 - 120
Cadmium	50.0	48.8		mg/Kg		98	80 - 120
Chromium	50.0	48.1		mg/Kg		96	80 - 120
Cobalt	50.0	50.9		mg/Kg		102	80 - 120
Copper	50.0	47.9		mg/Kg		96	80 - 120
Lead	50.0	49.8		mg/Kg		100	80 - 120
Molybdenum	50.0	49.5		mg/Kg		99	80 - 120
Nickel	50.0	48.6		mg/Kg		97	80 - 120
Selenium	50.0	46.9		mg/Kg		94	80 - 120
Silver	25.0	23.2		mg/Kg		93	80 - 120
Thallium	50.0	49.5		mg/Kg		99	80 - 120
Vanadium	50.0	49.3		mg/Kg		99	80 - 120
Zinc	50.0	50.0		mg/Kg		100	80 - 120

Lab Sample ID: 720-88191-1 MS
Matrix: Solid
Analysis Batch: 250220

Client Sample ID: DG-I2S-0.5-1
Prep Type: Total/NA
Prep Batch: 250108

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	2.6	F1	41.7	13.9	F1	mg/Kg		27	75 - 125
Arsenic	230		41.7	247	4	mg/Kg		39	75 - 125
Barium	210		41.7	240	4	mg/Kg		62	75 - 125
Beryllium	ND		41.7	40.7		mg/Kg		98	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88191-1 MS
Matrix: Solid
Analysis Batch: 250220

Client Sample ID: DG-I2S-0.5-1
Prep Type: Total/NA
Prep Batch: 250108

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.79		41.7	40.3		mg/Kg		95	75 - 125
Chromium	20		41.7	61.4		mg/Kg		100	75 - 125
Cobalt	9.5		41.7	50.5		mg/Kg		98	75 - 125
Copper	120	F1	41.7	144	F1	mg/Kg		66	75 - 125
Lead	2300		41.7	553	4	mg/Kg		-4193	75 - 125
Molybdenum	0.35	J	41.7	38.3		mg/Kg		91	75 - 125
Nickel	19		41.7	58.6		mg/Kg		95	75 - 125
Selenium	ND		41.7	37.6		mg/Kg		90	75 - 125
Silver	0.95	J	20.8	20.7		mg/Kg		95	75 - 125
Thallium	ND		41.7	36.7		mg/Kg		88	75 - 125
Vanadium	46	F1	41.7	103	F1	mg/Kg		138	75 - 125
Zinc	490	F2	41.7	395	4	mg/Kg		-230	75 - 125

Lab Sample ID: 720-88191-1 MSD
Matrix: Solid
Analysis Batch: 250220

Client Sample ID: DG-I2S-0.5-1
Prep Type: Total/NA
Prep Batch: 250108

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	2.6	F1	41.7	14.7	F1	mg/Kg		29	75 - 125	6	20
Arsenic	230		41.7	284	4	mg/Kg		128	75 - 125	14	20
Barium	210		41.7	256	4	mg/Kg		100	75 - 125	6	20
Beryllium	ND		41.7	40.2		mg/Kg		96	75 - 125	1	20
Cadmium	0.79		41.7	40.4		mg/Kg		95	75 - 125	0	20
Chromium	20		41.7	71.1		mg/Kg		124	75 - 125	15	20
Cobalt	9.5		41.7	51.8		mg/Kg		101	75 - 125	3	20
Copper	120	F1	41.7	165		mg/Kg		117	75 - 125	14	20
Lead	2300		41.7	584	4	mg/Kg		-4120	75 - 125	5	20
Molybdenum	0.35	J	41.7	39.3		mg/Kg		94	75 - 125	3	20
Nickel	19		41.7	58.3		mg/Kg		94	75 - 125	1	20
Selenium	ND		41.7	38.0		mg/Kg		91	75 - 125	1	20
Silver	0.95	J	20.8	20.8		mg/Kg		95	75 - 125	0	20
Thallium	ND		41.7	36.6		mg/Kg		88	75 - 125	0	20
Vanadium	46	F1	41.7	104	F1	mg/Kg		139	75 - 125	0	20
Zinc	490	F2	41.7	486	4 F2	mg/Kg		-13	75 - 125	21	20

Lab Sample ID: MB 720-250194/1-A
Matrix: Solid
Analysis Batch: 250251

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250194

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Arsenic	ND		1.0	0.085	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Barium	ND		0.50	0.071	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Beryllium	ND		0.10	0.033	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Cadmium	ND		0.13	0.012	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Chromium	ND		0.50	0.053	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Cobalt	ND		0.20	0.020	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Copper	ND		1.5	0.71	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Lead	ND		0.50	0.11	mg/Kg		08/24/18 16:34	08/25/18 13:41	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250194/1-A
Matrix: Solid
Analysis Batch: 250251

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250194

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.50	0.064	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Nickel	ND		0.50	0.051	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Selenium	ND		1.0	0.15	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Silver	0.0600	J	0.25	0.051	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Thallium	ND		0.50	0.15	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Vanadium	ND		0.50	0.068	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Zinc	ND		1.5	0.64	mg/Kg		08/24/18 16:34	08/25/18 13:41	1

Lab Sample ID: LCS 720-250194/2-A
Matrix: Solid
Analysis Batch: 250251

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250194

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.8		mg/Kg		96	80 - 120
Arsenic	50.0	48.0		mg/Kg		96	80 - 120
Barium	50.0	49.6		mg/Kg		99	80 - 120
Beryllium	50.0	46.3		mg/Kg		93	80 - 120
Cadmium	50.0	48.5		mg/Kg		97	80 - 120
Chromium	50.0	49.3		mg/Kg		99	80 - 120
Cobalt	50.0	48.3		mg/Kg		97	80 - 120
Copper	50.0	49.7		mg/Kg		99	80 - 120
Lead	50.0	49.3		mg/Kg		99	80 - 120
Molybdenum	50.0	51.1		mg/Kg		102	80 - 120
Nickel	50.0	50.0		mg/Kg		100	80 - 120
Selenium	50.0	49.0		mg/Kg		98	80 - 120
Silver	25.0	25.0		mg/Kg		100	80 - 120
Thallium	50.0	51.3		mg/Kg		103	80 - 120
Vanadium	50.0	46.6		mg/Kg		93	80 - 120
Zinc	50.0	47.5		mg/Kg		95	80 - 120

Lab Sample ID: 720-88214-D-2-A MS
Matrix: Solid
Analysis Batch: 250251

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250194

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.36	J F1	39.1	13.3	F1	mg/Kg		33	75 - 125
Arsenic	12		39.1	48.5		mg/Kg		94	75 - 125
Barium	140	F1	39.1	182		mg/Kg		96	75 - 125
Beryllium	0.43		39.1	36.0		mg/Kg		91	75 - 125
Cadmium	0.48		39.1	40.0		mg/Kg		101	75 - 125
Chromium	32		39.1	77.0		mg/Kg		114	75 - 125
Cobalt	7.4		39.1	46.6		mg/Kg		100	75 - 125
Copper	47	F1	39.1	73.5	F1	mg/Kg		68	75 - 125
Lead	82	F1	39.1	128		mg/Kg		118	75 - 125
Molybdenum	0.85	J	39.1	37.8		mg/Kg		95	75 - 125
Nickel	42		39.1	82.4		mg/Kg		103	75 - 125
Selenium	0.91	J	39.1	39.0		mg/Kg		98	75 - 125
Silver	ND		19.5	19.8		mg/Kg		102	75 - 125
Thallium	ND		39.1	39.5		mg/Kg		101	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88214-D-2-A MS
Matrix: Solid
Analysis Batch: 250251

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250194

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	30		39.1	65.8		mg/Kg		93	75 - 125
Zinc	160	F1	39.1	182	F1	mg/Kg		65	75 - 125

Lab Sample ID: 720-88214-D-2-B MSD
Matrix: Solid
Analysis Batch: 250251

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250194

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.36	J F1	38.8	12.8	F1	mg/Kg		32	75 - 125	4	20
Arsenic	12		38.8	49.8		mg/Kg		98	75 - 125	3	20
Barium	140	F1	38.8	198	F1	mg/Kg		138	75 - 125	8	20
Beryllium	0.43		38.8	37.4		mg/Kg		95	75 - 125	4	20
Cadmium	0.48		38.8	40.6		mg/Kg		103	75 - 125	2	20
Chromium	32		38.8	77.4		mg/Kg		116	75 - 125	1	20
Cobalt	7.4		38.8	48.1		mg/Kg		105	75 - 125	3	20
Copper	47	F1	38.8	67.9	F1	mg/Kg		55	75 - 125	8	20
Lead	82	F1	38.8	139	F1	mg/Kg		149	75 - 125	9	20
Molybdenum	0.85	J	38.8	37.5		mg/Kg		94	75 - 125	1	20
Nickel	42		38.8	85.5		mg/Kg		112	75 - 125	4	20
Selenium	0.91	J	38.8	39.5		mg/Kg		100	75 - 125	1	20
Silver	ND		19.4	19.9		mg/Kg		103	75 - 125	0	20
Thallium	ND		38.8	39.8		mg/Kg		103	75 - 125	1	20
Vanadium	30		38.8	69.4		mg/Kg		102	75 - 125	5	20
Zinc	160	F1	38.8	187	4	mg/Kg		80	75 - 125	3	20

Lab Sample ID: MB 720-250197/1-A
Matrix: Solid
Analysis Batch: 250325

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250197

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Arsenic	ND		1.0	0.085	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Barium	ND		0.50	0.071	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Beryllium	ND		0.10	0.033	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Cadmium	ND		0.13	0.012	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Chromium	ND		0.50	0.053	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Cobalt	ND		0.20	0.020	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Copper	ND		1.5	0.71	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Lead	ND		0.50	0.11	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Nickel	ND		0.50	0.051	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Selenium	ND		1.0	0.15	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Silver	ND		0.25	0.051	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Thallium	ND		0.50	0.15	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Vanadium	ND		0.50	0.068	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Zinc	ND		1.5	0.64	mg/Kg		08/24/18 16:33	08/27/18 14:39	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-250197/2-A
Matrix: Solid
Analysis Batch: 250325

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250197

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.9		mg/Kg		96	80 - 120
Arsenic	50.0	47.3		mg/Kg		95	80 - 120
Barium	50.0	51.5		mg/Kg		103	80 - 120
Beryllium	50.0	50.6		mg/Kg		101	80 - 120
Cadmium	50.0	47.8		mg/Kg		96	80 - 120
Chromium	50.0	47.8		mg/Kg		96	80 - 120
Cobalt	50.0	48.7		mg/Kg		97	80 - 120
Copper	50.0	48.4		mg/Kg		97	80 - 120
Lead	50.0	48.6		mg/Kg		97	80 - 120
Molybdenum	50.0	48.6		mg/Kg		97	80 - 120
Nickel	50.0	48.5		mg/Kg		97	80 - 120
Selenium	50.0	46.6		mg/Kg		93	80 - 120
Silver	25.0	26.4		mg/Kg		105	80 - 120
Thallium	50.0	49.0		mg/Kg		98	80 - 120
Vanadium	50.0	48.9		mg/Kg		98	80 - 120
Zinc	50.0	47.9		mg/Kg		96	80 - 120

Lab Sample ID: 720-88192-A-7-A MS
Matrix: Solid
Analysis Batch: 250325

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250197

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	2.3	F1	45.0	15.2	F1	mg/Kg		29	75 - 125
Arsenic	12		45.0	65.2		mg/Kg		118	75 - 125
Barium	75	F1	45.0	134	F1	mg/Kg		129	75 - 125
Beryllium	0.14	J F1	45.0	56.7	F1	mg/Kg		126	75 - 125
Cadmium	1.0		45.0	52.0		mg/Kg		113	75 - 125
Chromium	26	F1	45.0	89.4	F1	mg/Kg		140	75 - 125
Cobalt	11		45.0	63.7		mg/Kg		117	75 - 125
Copper	140	F1	45.0	233	F1	mg/Kg		217	75 - 125
Lead	170	F1	45.0	216		mg/Kg		105	75 - 125
Molybdenum	1.4	J	45.0	54.9		mg/Kg		119	75 - 125
Nickel	20	F1	45.0	76.8	F1	mg/Kg		127	75 - 125
Selenium	ND		45.0	50.2		mg/Kg		111	75 - 125
Silver	ND	F1	22.5	30.0	F1	mg/Kg		133	75 - 125
Thallium	0.95	J	45.0	50.8		mg/Kg		111	75 - 125
Vanadium	76	F1	45.0	133	F1	mg/Kg		127	75 - 125
Zinc	290		45.0	324	4	mg/Kg		72	75 - 125

Lab Sample ID: 720-88192-A-7-B MSD
Matrix: Solid
Analysis Batch: 250325

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250197

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	2.3	F1	45.9	14.1	F1	mg/Kg		26	75 - 125	8	20
Arsenic	12		45.9	65.6		mg/Kg		117	75 - 125	1	20
Barium	75	F1	45.9	138	F1	mg/Kg		137	75 - 125	3	20
Beryllium	0.14	J F1	45.9	59.9	F1	mg/Kg		130	75 - 125	6	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88192-A-7-B MSD
Matrix: Solid
Analysis Batch: 250325

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250197

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	1.0		45.9	54.7		mg/Kg		117	75 - 125	5	20
Chromium	26	F1	45.9	77.3		mg/Kg		111	75 - 125	15	20
Cobalt	11		45.9	66.4		mg/Kg		121	75 - 125	4	20
Copper	140	F1	45.9	198	F1	mg/Kg		136	75 - 125	16	20
Lead	170	F1	45.9	260	F1	mg/Kg		198	75 - 125	18	20
Molybdenum	1.4	J	45.9	53.9		mg/Kg		114	75 - 125	2	20
Nickel	20	F1	45.9	71.5		mg/Kg		113	75 - 125	7	20
Selenium	ND		45.9	53.6		mg/Kg		117	75 - 125	7	20
Silver	ND	F1	22.9	31.8	F1	mg/Kg		139	75 - 125	6	20
Thallium	0.95	J	45.9	53.3		mg/Kg		114	75 - 125	5	20
Vanadium	76	F1	45.9	153	F1	mg/Kg		167	75 - 125	13	20
Zinc	290		45.9	342	4	mg/Kg		109	75 - 125	5	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250231/1-A
Matrix: Solid
Analysis Batch: 250363

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250231

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/25/18 12:29	08/27/18 20:49	1

Lab Sample ID: LCS 720-250231/2-A
Matrix: Solid
Analysis Batch: 250363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250231

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.830		mg/Kg		100	80 - 120

Lab Sample ID: 720-88212-A-26-C MS
Matrix: Solid
Analysis Batch: 250363

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250231

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.11		0.806	0.922		mg/Kg		101	75 - 125

Lab Sample ID: 720-88212-A-26-D MSD
Matrix: Solid
Analysis Batch: 250363

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250231

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.11		0.781	0.901		mg/Kg		102	75 - 125	2	20

Lab Sample ID: MB 720-250236/1-A
Matrix: Solid
Analysis Batch: 250467

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250236

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/27/18 20:30	08/28/18 22:33	1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 720-250236/2-A
Matrix: Solid
Analysis Batch: 250467

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250236

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.763		mg/Kg		92	80 - 120

Lab Sample ID: 720-88191-11 MS
Matrix: Solid
Analysis Batch: 250467

Client Sample ID: DG-L4S-0.5-1
Prep Type: Total/NA
Prep Batch: 250236

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.062		0.725	0.825		mg/Kg		105	75 - 125

Lab Sample ID: 720-88191-11 MSD
Matrix: Solid
Analysis Batch: 250467

Client Sample ID: DG-L4S-0.5-1
Prep Type: Total/NA
Prep Batch: 250236

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.062		0.725	0.838		mg/Kg		107	75 - 125	2	20

Metals

Prep Batch: 250108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88191-1	DG-I2S-0.5-1	Total/NA	Solid	3050B	
720-88191-2	DG-I2S-3.5-4	Total/NA	Solid	3050B	
720-88191-3	DG-J2S-0.5-1	Total/NA	Solid	3050B	
720-88191-4	DG-J2S-3.5-4	Total/NA	Solid	3050B	
720-88191-5	DG-K2S-0.5-1	Total/NA	Solid	3050B	
720-88191-6	DG-K2S-3.5-4	Total/NA	Solid	3050B	
720-88191-7	DG-L2S-0.5-1	Total/NA	Solid	3050B	
720-88191-8	DG-L2S-3.5-4	Total/NA	Solid	3050B	
720-88191-9	DG-M2S-0.5-1	Total/NA	Solid	3050B	
720-88191-10	DG-M2S-3.5-4	Total/NA	Solid	3050B	
720-88191-11	DG-L4S-0.5-1	Total/NA	Solid	3050B	
720-88191-12	DG-L4S-3.5-4	Total/NA	Solid	3050B	
720-88191-13	DG-M4S-0.5-1	Total/NA	Solid	3050B	
720-88191-14	DG-M4S-3.5-4	Total/NA	Solid	3050B	
720-88191-15	DG-J4S-0.5-1	Total/NA	Solid	3050B	
720-88191-16	DG-J4S-3.5-4	Total/NA	Solid	3050B	
720-88191-17	DG-H4S-0.5-1	Total/NA	Solid	3050B	
MB 720-250108/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250108/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88191-1 MS	DG-I2S-0.5-1	Total/NA	Solid	3050B	
720-88191-1 MSD	DG-I2S-0.5-1	Total/NA	Solid	3050B	

Prep Batch: 250194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88191-19	DG-I4S-0.5-1	Total/NA	Solid	3050B	
720-88191-20	DG-I4S-3.5-4	Total/NA	Solid	3050B	
MB 720-250194/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250194/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88214-D-2-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88214-D-2-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88191-18	DG-H4S-3.5-4	Total/NA	Solid	3050B	
MB 720-250197/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250197/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88192-A-7-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88192-A-7-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 250220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88191-1	DG-I2S-0.5-1	Total/NA	Solid	6010B	250108
720-88191-2	DG-I2S-3.5-4	Total/NA	Solid	6010B	250108
720-88191-3	DG-J2S-0.5-1	Total/NA	Solid	6010B	250108
720-88191-4	DG-J2S-3.5-4	Total/NA	Solid	6010B	250108
720-88191-5	DG-K2S-0.5-1	Total/NA	Solid	6010B	250108
720-88191-6	DG-K2S-3.5-4	Total/NA	Solid	6010B	250108
720-88191-7	DG-L2S-0.5-1	Total/NA	Solid	6010B	250108
720-88191-8	DG-L2S-3.5-4	Total/NA	Solid	6010B	250108
720-88191-9	DG-M2S-0.5-1	Total/NA	Solid	6010B	250108
720-88191-10	DG-M2S-3.5-4	Total/NA	Solid	6010B	250108

Metals (Continued)

Analysis Batch: 250220 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88191-11	DG-L4S-0.5-1	Total/NA	Solid	6010B	250108
720-88191-12	DG-L4S-3.5-4	Total/NA	Solid	6010B	250108
720-88191-13	DG-M4S-0.5-1	Total/NA	Solid	6010B	250108
720-88191-14	DG-M4S-3.5-4	Total/NA	Solid	6010B	250108
720-88191-15	DG-J4S-0.5-1	Total/NA	Solid	6010B	250108
720-88191-16	DG-J4S-3.5-4	Total/NA	Solid	6010B	250108
720-88191-17	DG-H4S-0.5-1	Total/NA	Solid	6010B	250108
MB 720-250108/1-A	Method Blank	Total/NA	Solid	6010B	250108
LCS 720-250108/2-A	Lab Control Sample	Total/NA	Solid	6010B	250108
720-88191-1 MS	DG-I2S-0.5-1	Total/NA	Solid	6010B	250108
720-88191-1 MSD	DG-I2S-0.5-1	Total/NA	Solid	6010B	250108

Prep Batch: 250231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88191-1	DG-I2S-0.5-1	Total/NA	Solid	7471A	
720-88191-2	DG-I2S-3.5-4	Total/NA	Solid	7471A	
720-88191-3	DG-J2S-0.5-1	Total/NA	Solid	7471A	
720-88191-4	DG-J2S-3.5-4	Total/NA	Solid	7471A	
720-88191-5	DG-K2S-0.5-1	Total/NA	Solid	7471A	
720-88191-6	DG-K2S-3.5-4	Total/NA	Solid	7471A	
720-88191-7	DG-L2S-0.5-1	Total/NA	Solid	7471A	
720-88191-8	DG-L2S-3.5-4	Total/NA	Solid	7471A	
720-88191-9	DG-M2S-0.5-1	Total/NA	Solid	7471A	
720-88191-10	DG-M2S-3.5-4	Total/NA	Solid	7471A	
MB 720-250231/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250231/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88212-A-26-C MS	Matrix Spike	Total/NA	Solid	7471A	
720-88212-A-26-D MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Prep Batch: 250236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88191-11	DG-L4S-0.5-1	Total/NA	Solid	7471A	
720-88191-12	DG-L4S-3.5-4	Total/NA	Solid	7471A	
720-88191-13	DG-M4S-0.5-1	Total/NA	Solid	7471A	
720-88191-14	DG-M4S-3.5-4	Total/NA	Solid	7471A	
720-88191-15	DG-J4S-0.5-1	Total/NA	Solid	7471A	
720-88191-16	DG-J4S-3.5-4	Total/NA	Solid	7471A	
720-88191-17	DG-H4S-0.5-1	Total/NA	Solid	7471A	
720-88191-18	DG-H4S-3.5-4	Total/NA	Solid	7471A	
720-88191-19	DG-I4S-0.5-1	Total/NA	Solid	7471A	
720-88191-20	DG-I4S-3.5-4	Total/NA	Solid	7471A	
MB 720-250236/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250236/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88191-11 MS	DG-L4S-0.5-1	Total/NA	Solid	7471A	
720-88191-11 MSD	DG-L4S-0.5-1	Total/NA	Solid	7471A	

Analysis Batch: 250251

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88191-19	DG-I4S-0.5-1	Total/NA	Solid	6010B	250194
720-88191-20	DG-I4S-3.5-4	Total/NA	Solid	6010B	250194
MB 720-250194/1-A	Method Blank	Total/NA	Solid	6010B	250194

Metals (Continued)

Analysis Batch: 250251 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-250194/2-A	Lab Control Sample	Total/NA	Solid	6010B	250194
720-88214-D-2-A MS	Matrix Spike	Total/NA	Solid	6010B	250194
720-88214-D-2-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250194

Analysis Batch: 250325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88191-18	DG-H4S-3.5-4	Total/NA	Solid	6010B	250197
MB 720-250197/1-A	Method Blank	Total/NA	Solid	6010B	250197
LCS 720-250197/2-A	Lab Control Sample	Total/NA	Solid	6010B	250197
720-88192-A-7-A MS	Matrix Spike	Total/NA	Solid	6010B	250197
720-88192-A-7-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250197

Analysis Batch: 250363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88191-1	DG-I2S-0.5-1	Total/NA	Solid	7471A	250231
720-88191-3	DG-J2S-0.5-1	Total/NA	Solid	7471A	250231
720-88191-5	DG-K2S-0.5-1	Total/NA	Solid	7471A	250231
720-88191-6	DG-K2S-3.5-4	Total/NA	Solid	7471A	250231
720-88191-7	DG-L2S-0.5-1	Total/NA	Solid	7471A	250231
720-88191-9	DG-M2S-0.5-1	Total/NA	Solid	7471A	250231
720-88191-10	DG-M2S-3.5-4	Total/NA	Solid	7471A	250231
MB 720-250231/1-A	Method Blank	Total/NA	Solid	7471A	250231
LCS 720-250231/2-A	Lab Control Sample	Total/NA	Solid	7471A	250231
720-88212-A-26-C MS	Matrix Spike	Total/NA	Solid	7471A	250231
720-88212-A-26-D MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250231

Analysis Batch: 250372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88191-2	DG-I2S-3.5-4	Total/NA	Solid	7471A	250231
720-88191-4	DG-J2S-3.5-4	Total/NA	Solid	7471A	250231
720-88191-8	DG-L2S-3.5-4	Total/NA	Solid	7471A	250231

Analysis Batch: 250434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88191-3	DG-J2S-0.5-1	Total/NA	Solid	6010B	250108

Analysis Batch: 250467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88191-11	DG-L4S-0.5-1	Total/NA	Solid	7471A	250236
720-88191-12	DG-L4S-3.5-4	Total/NA	Solid	7471A	250236
720-88191-13	DG-M4S-0.5-1	Total/NA	Solid	7471A	250236
720-88191-14	DG-M4S-3.5-4	Total/NA	Solid	7471A	250236
720-88191-15	DG-J4S-0.5-1	Total/NA	Solid	7471A	250236
720-88191-16	DG-J4S-3.5-4	Total/NA	Solid	7471A	250236
720-88191-17	DG-H4S-0.5-1	Total/NA	Solid	7471A	250236
720-88191-19	DG-I4S-0.5-1	Total/NA	Solid	7471A	250236
720-88191-20	DG-I4S-3.5-4	Total/NA	Solid	7471A	250236
MB 720-250236/1-A	Method Blank	Total/NA	Solid	7471A	250236
LCS 720-250236/2-A	Lab Control Sample	Total/NA	Solid	7471A	250236
720-88191-11 MS	DG-L4S-0.5-1	Total/NA	Solid	7471A	250236
720-88191-11 MSD	DG-L4S-0.5-1	Total/NA	Solid	7471A	250236

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Analysis Batch: 250492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88191-18	DG-H4S-3.5-4	Total/NA	Solid	7471A	250236

Client Sample ID: DG-I2S-0.5-1

Lab Sample ID: 720-88191-1

Date Collected: 08/21/18 08:15

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250220	08/24/18 20:42	OBI	TAL PLS
Total/NA	Prep	7471A			250231	08/25/18 12:29	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250363	08/27/18 21:26	OBI	TAL PLS

Client Sample ID: DG-I2S-3.5-4

Lab Sample ID: 720-88191-2

Date Collected: 08/21/18 08:15

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250220	08/24/18 20:47	OBI	TAL PLS
Total/NA	Prep	7471A			250231	08/25/18 12:29	GLL	TAL PLS
Total/NA	Analysis	7471A		10	250372	08/28/18 09:40	OBI	TAL PLS

Client Sample ID: DG-J2S-0.5-1

Lab Sample ID: 720-88191-3

Date Collected: 08/21/18 08:30

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250220	08/24/18 20:52	OBI	TAL PLS
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		20	250434	08/28/18 15:15	OBI	TAL PLS
Total/NA	Prep	7471A			250231	08/25/18 12:29	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250363	08/27/18 21:36	OBI	TAL PLS

Client Sample ID: DG-J2S-3.5-4

Lab Sample ID: 720-88191-4

Date Collected: 08/21/18 08:30

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250220	08/24/18 20:56	OBI	TAL PLS
Total/NA	Prep	7471A			250231	08/25/18 12:29	GLL	TAL PLS
Total/NA	Analysis	7471A		10	250372	08/28/18 09:42	OBI	TAL PLS

Client Sample ID: DG-K2S-0.5-1

Lab Sample ID: 720-88191-5

Date Collected: 08/21/18 08:45

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS

Client Sample ID: DG-K2S-0.5-1

Lab Sample ID: 720-88191-5

Date Collected: 08/21/18 08:45

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		4	250220	08/24/18 21:01	OBI	TAL PLS
Total/NA	Prep	7471A			250231	08/25/18 12:29	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250363	08/27/18 21:41	OBI	TAL PLS

Client Sample ID: DG-K2S-3.5-4

Lab Sample ID: 720-88191-6

Date Collected: 08/21/18 08:45

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250220	08/24/18 21:06	OBI	TAL PLS
Total/NA	Prep	7471A			250231	08/25/18 12:29	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250363	08/27/18 21:43	OBI	TAL PLS

Client Sample ID: DG-L2S-0.5-1

Lab Sample ID: 720-88191-7

Date Collected: 08/21/18 08:55

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250220	08/24/18 21:11	OBI	TAL PLS
Total/NA	Prep	7471A			250231	08/25/18 12:29	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250363	08/27/18 21:46	OBI	TAL PLS

Client Sample ID: DG-L2S-3.5-4

Lab Sample ID: 720-88191-8

Date Collected: 08/21/18 08:55

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250220	08/24/18 21:15	OBI	TAL PLS
Total/NA	Prep	7471A			250231	08/25/18 12:29	GLL	TAL PLS
Total/NA	Analysis	7471A		50	250372	08/28/18 09:45	OBI	TAL PLS

Client Sample ID: DG-M2S-0.5-1

Lab Sample ID: 720-88191-9

Date Collected: 08/21/18 09:10

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250220	08/24/18 21:30	OBI	TAL PLS
Total/NA	Prep	7471A			250231	08/25/18 12:29	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250363	08/27/18 21:50	OBI	TAL PLS

Client Sample ID: DG-M2S-3.5-4

Lab Sample ID: 720-88191-10

Date Collected: 08/21/18 09:10

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250220	08/24/18 21:34	OBI	TAL PLS
Total/NA	Prep	7471A			250231	08/25/18 12:29	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250363	08/27/18 21:52	OBI	TAL PLS

Client Sample ID: DG-L4S-0.5-1

Lab Sample ID: 720-88191-11

Date Collected: 08/21/18 09:45

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250220	08/24/18 21:39	OBI	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250467	08/28/18 22:42	OBI	TAL PLS

Client Sample ID: DG-L4S-3.5-4

Lab Sample ID: 720-88191-12

Date Collected: 08/21/18 09:45

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250220	08/24/18 21:44	OBI	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250467	08/28/18 22:45	OBI	TAL PLS

Client Sample ID: DG-M4S-0.5-1

Lab Sample ID: 720-88191-13

Date Collected: 08/21/18 10:15

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250220	08/24/18 21:49	OBI	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250467	08/28/18 22:52	OBI	TAL PLS

Client Sample ID: DG-M4S-3.5-4

Lab Sample ID: 720-88191-14

Date Collected: 08/21/18 10:15

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250220	08/24/18 21:53	OBI	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-M4S-3.5-4

Lab Sample ID: 720-88191-14
Matrix: Solid
Date Collected: 08/21/18 10:15
Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	250467	08/28/18 22:54	OBI	TAL PLS

Client Sample ID: DG-J4S-0.5-1

Lab Sample ID: 720-88191-15
Matrix: Solid
Date Collected: 08/21/18 10:40
Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250220	08/24/18 21:58	OBI	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250467	08/28/18 22:56	OBI	TAL PLS

Client Sample ID: DG-J4S-3.5-4

Lab Sample ID: 720-88191-16
Matrix: Solid
Date Collected: 08/21/18 10:40
Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250220	08/24/18 22:03	OBI	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250467	08/28/18 22:59	OBI	TAL PLS

Client Sample ID: DG-H4S-0.5-1

Lab Sample ID: 720-88191-17
Matrix: Solid
Date Collected: 08/21/18 11:15
Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250108	08/23/18 16:49	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250220	08/24/18 22:08	OBI	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250467	08/28/18 23:01	OBI	TAL PLS

Client Sample ID: DG-H4S-3.5-4

Lab Sample ID: 720-88191-18
Matrix: Solid
Date Collected: 08/21/18 11:15
Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 15:12	BKR	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS
Total/NA	Analysis	7471A		10	250492	08/29/18 11:39	OBI	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Client Sample ID: DG-I4S-0.5-1

Lab Sample ID: 720-88191-19

Date Collected: 08/21/18 11:30

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250194	08/24/18 16:34	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250251	08/25/18 15:50	OBI	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250467	08/28/18 23:06	OBI	TAL PLS

Client Sample ID: DG-I4S-3.5-4

Lab Sample ID: 720-88191-20

Date Collected: 08/21/18 11:30

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250194	08/24/18 16:34	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250251	08/25/18 16:05	OBI	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250467	08/28/18 23:08	OBI	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc. TestAmerica Job ID: 720-88191-1
Project/Site: UPC OU-SM

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
3050B	Preparation, Metals	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88191-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88191-1	DG-I2S-0.5-1	Solid	08/21/18 08:15	08/22/18 14:30
720-88191-2	DG-I2S-3.5-4	Solid	08/21/18 08:15	08/22/18 14:30
720-88191-3	DG-J2S-0.5-1	Solid	08/21/18 08:30	08/22/18 14:30
720-88191-4	DG-J2S-3.5-4	Solid	08/21/18 08:30	08/22/18 14:30
720-88191-5	DG-K2S-0.5-1	Solid	08/21/18 08:45	08/22/18 14:30
720-88191-6	DG-K2S-3.5-4	Solid	08/21/18 08:45	08/22/18 14:30
720-88191-7	DG-L2S-0.5-1	Solid	08/21/18 08:55	08/22/18 14:30
720-88191-8	DG-L2S-3.5-4	Solid	08/21/18 08:55	08/22/18 14:30
720-88191-9	DG-M2S-0.5-1	Solid	08/21/18 09:10	08/22/18 14:30
720-88191-10	DG-M2S-3.5-4	Solid	08/21/18 09:10	08/22/18 14:30
720-88191-11	DG-L4S-0.5-1	Solid	08/21/18 09:45	08/22/18 14:30
720-88191-12	DG-L4S-3.5-4	Solid	08/21/18 09:45	08/22/18 14:30
720-88191-13	DG-M4S-0.5-1	Solid	08/21/18 10:15	08/22/18 14:30
720-88191-14	DG-M4S-3.5-4	Solid	08/21/18 10:15	08/22/18 14:30
720-88191-15	DG-J4S-0.5-1	Solid	08/21/18 10:40	08/22/18 14:30
720-88191-16	DG-J4S-3.5-4	Solid	08/21/18 10:40	08/22/18 14:30
720-88191-17	DG-H4S-0.5-1	Solid	08/21/18 11:15	08/22/18 14:30
720-88191-18	DG-H4S-3.5-4	Solid	08/21/18 11:15	08/22/18 14:30
720-88191-19	DG-I4S-0.5-1	Solid	08/21/18 11:30	08/22/18 14:30
720-88191-20	DG-I4S-3.5-4	Solid	08/21/18 11:30	08/22/18 14:30

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88191

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: 185051

Date 8/21/18 Page 1 of 2

11/14/2018 (Rev. 1)

Report To

Attn: Keaton Belli
Company: Geosyntec
Address: 1111 Broadway 6th Floor
Email: Kbelli@geosyntec.com
Bill To: Geosyntec
Sampled By: K. Belli
Attn: Anthony Smith
Phone: 4708810525

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity
DG-I2 (0.5-1)	8/21	815	S	N									X									
DG-I2 (3.5-4)		815											X									
DG-J2 (0.5-1)		830											X									
DG-J2 (3.5-4)		830											X									
DG-K2 (0.5-1)		845											X									
DG-K2 (3.5-4)		845											X									
DG-L2 (0.5-1)		855											X									
DG-L2 (3.5-4)		855											X									
DG-M2 (0.5-1)		910											X									
DG-M2 (3.5-4)		910											X									

Project Info.

Project Name/ #: UPC OU-SM
PO#: WG2445/01
Credit Card Y/N:

Sample Receipt

of Containers:
Head Space:
Temp:
If yes, please call with payment information ASAP

TAT: 10 Day | (5 Day) | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID
1.9/2.6/2.6/0.7°C 0.7°C
See Terms and Conditions on reverse

8/22/18

1) Relinquished by: Signature: K Belli Time: 1228
Printed Name: Keaton Belli Date: 8/22/18
Company: Geosyntec

2) Relinquished by: Signature: Time: 1430
Printed Name: Date: 8/22/18
Company: TA720

3) Relinquished by:
720-88191 Chain of Custody
Signature: Time:
Printed Name: Date:
Company:

1) Received by: Signature: Time: 1236
Printed Name: Date: 8/22/18
Company: TA720

2) Received by: Signature: Time: 1430
Printed Name: T Bullock Date: 8/22/18
Company: TA720

3) Received by: Signature: Time:
Printed Name: Date:
Company:

Rev. 10/2001

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88191

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: 185052/1 & 8/22/18

Date 8/21/18 Page 2 of 2

11/14/2018 (Rev. 1)

Report To

Attn: Keaton Belli
Company: Geosyntec
Address: 1111 Broadway 6th Floor
Email: Kbelli@geosyntec.com
Bill To: Geosyntec
Sampled By: Keaton Belli
Attn: Anthony Smith
Phone: 470 881 0525

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides PCBs ☐ EPA 8081 ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity
DG-L4 (0.5-1)	8/21	945	S	N									X									
DG-L4 (3.5-4)		945											X									
DG-M4 (0.5-1)		1015											X									
DG-M4 (3.5-4)		1015											X									
DG-J4 (0.5-1)		1040											X									
DG-J4 (3.5-4)		1040											X									
DG-H4 (0.5-1)		1115											X									
DG-H4 (3.5-4)		1115											X									
DG-I4 (0.5-1)		1130											X									
DG-I4 (3.5-4)	↓	1130	↓	↓									X									

Project Info.

Project Name/ #: UPC OV-SM
PO#: WG2445/01
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers:
Head Space:
Temp:

TAT: 10 Day | (5 Day) | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID ___
1-9/26/26/TC & 8/22/18
0.7 C

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1228	Signature: [signature] Time: 1430	Signature: Time:
Printed Name: Keaton Belli Date: 8/22/18	Printed Name: Date: 8/22/18	Printed Name: Date:
Company: Geosyntec	Company: TA720	Company:

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 1230	Signature: [signature] Time: 1430	Signature: Time:
Printed Name: Date: 8/22/18	Printed Name: [signature] Date: 8/22/18	Printed Name: Date:
Company: TA720	Company: TA-720	Company:

Smith, Micah

From: Miranda Kahrilas <MKahrilas@Geosyntec.com>
Sent: Thursday, August 30, 2018 1:46 PM
To: Smith, Micah
Cc: Anthony Smith; Krzysztof Jesionek
Subject: Brisbane UPC-OU-SM Sample Name Changes
Attachments: change 88125.pdf

-External Email-

Hi Micah,

Below are the sample name changes by lab job number:

720-88191

- DG-I2S--0.5-1
- DG-I2S--3.5-4
- DG-J2S--0.5-1
- DG-J2S--3.5-4
- DG-K2S--0.5-1
- DG-K2S--3.5-4
- DG-L2S--0.5-1
- DG-L2S--3.5-4
- DG-M2S--0.5-1
- DG-M2S--3.5-4
- DG-L4S--0.5-1
- DG-L4S--3.5-4
- DG-M4S--0.5-1
- DG-J4S--0.5-1
- DG-J4S--3.5-4
- DG-H4S--0.5-1
- DG-H4S--3.5-4
- DG-I4S--0.5-1
- DG-I4S--3.5-4

Tony already requested these name changes, but I have included them for reference.

720-88125

- DG-L1S--3.5-4 (analysis canceled – see attached)
- DG-L1S--0.5-1
- DG-J1S--0.5-1
- DG-J1S--3.5-4 (analysis canceled – see attached)
- DG-H1S--0.5-1
- DG-H1S--3.5-4 (analysis canceled – see attached)

720-88148

- DG-F1S--0.5-1
- DG-D1S--0.5-1

- DG-B1S--0.5-1
- DG-A3S--0.5-1
- DG-C3S--0.5-1

Please let me know if you need anything else,

Miranda Kahrilas, EIT, GIT, CPESC
Staff Engineer

1111 Broadway, 6th Floor
Oakland, California 94607
Phone: 510.836.3034
Direct: 510.285.2685
Fax: 510.836.3036
Mobile: 847.530.7602
www.geosyntec.com



This electronic mail message contains information that (a) is or may be LEGALLY PRIVILEGED, CONFIDENTIAL, PROPRIETARY IN NATURE, OR OTHERWISE PROTECTED BY LAW FROM DISCLOSURE, and (b) is intended only for the use of the Addressee(s) named herein. If you are not the intended recipient, an addressee, or the person responsible for delivering this to an addressee, you are hereby notified that reading, using, copying, or distributing any part of this message is strictly prohibited. If you have received this electronic mail message in error, please contact us immediately and take the steps necessary to delete the message completely from your computer system.

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88191-1

Login Number: 88191
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88192-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/21/2018 5:46:36 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 5
Detection Summary 8
Client Sample Results 19
Surrogate Summary 249
QC Sample Results 254
QC Association Summary 314
Lab Chronicle 323
Certification Summary 331
Method Summary 332
Sample Summary 333
Subcontract Data 334
Chain of Custody 339
Receipt Checklists 344

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	ISTD response or retention time outside acceptable limits

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88192-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88192-1

Comments
This report was revised on 11/21/18 to change the units for the metals data to report in mg/Kg, as requested.

Receipt
The samples were received on 8/22/2018 2:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.7º C, 1.9º C, 2.6º C and 2.6º C.

Receipt Exceptions
Samples DG-I3S (0.5-1 and 3.5-4), DG-K3S (0.5-1 and 3.5-4), DG-M3S (0.5-1, 3.5-4 and 7.5-8), DG-L5S (0.5-1 and 3.5-4) were received in pre-weighed containers with a label that was added in the field. The label weight was approximately 0.15 g which does not significantly bias the final results.

The container label for the following samples did not match the information listed on the Chain-of-Custody (COC):
1) DG-M3S-7.5-8. The Methanol vial only label lists DG-M3S--3.5-4 (time10:40). The light brown color is consistent with the DI vials ' color. The COC lists DG-M3S--7.5-8. The methanol vial was not used.
2) DG-L5S-0.5-1. One of the two 4 oz. jars did not have a container label or ID. It was labeled by process of elimination and by the fact that the matrix color and consistency matched the other 4 oz. jar.
3) Received two Trip Blank vials not listed on the COC TB-02 8/22/18, sample logged in as requested for 8260B.

GC/MS VOA
Method(s) 8260B: The laboratory control sample duplicate (LCSD) for analytical batch 720-250352 recovered outside control limits for the following analytes: Vinyl chloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250407 recovered outside control limits for the following analytes: Carbon disulfide and 1,1-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 720-250405 recovered outside control limits for the following analyte: 1,1-Dichloroethene. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample duplicate (LCSD) for analytical batch 720-250405 recovered outside control limits for the following analytes: 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: Internal standard (ISTD) response for the following sample was outside control limits: DG-I3S-3.5-4 (720-88192-2). The sample was re-extracted and/or re-analyzed with concurring results, and the original set of data has been reported.

Method(s) 8260B: Internal standard (ISTD) response for the following samples were outside control limits: DG-K3S-3.5-4 (720-88192-6), DG-M3S-3.5-4 (720-88192-10), DG-L5S-0.5-1 (720-88192-14) and DUP-02 (720-88192-18). The samples were re-extracted and/or re-analyzed with concurring results, and the second set of data has been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250453 recovered outside control limits for the following analytes: Carbon disulfide, 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250529 recovered outside control limits for the following analytes: Carbon disulfide, 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Job ID: 720-88192-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Method(s) 8260B: Internal standard (ISTD) response for the following sample was outside control limits: DG-M3S-7.5-8 (720-88192-11). The sample was re-extracted and/or re-analyzed with concurring results, and the original set of data has been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method(s) 8270C SIM: The following samples were diluted due to the abundance of non-target analytes: DG-I3S-0.5-1 (720-88192-1), DG-I3S-3.5-4 (720-88192-2) and DG-L5S-0.5-1 (720-88192-14), and DUP-02 (720-88192-18). Elevated reporting limits (RLs) are provided.

Method(s) 8270C SIM: The method blank for preparation batch 720-250048 and analytical batch 720-250333 contained Naphthalene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed for samples associated with this batch.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method(s) 8015B: The following samples required a dilution due to the nature of the sample matrix: (720-88186-D-5-C), (720-88186-D-5-A MS) and (720-88186-D-5-B MSD). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8015B: Due to the high concentration of Diesel Range Organics [C10-C28], the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 720-250075 and analytical batch 720-250133 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 8081A: The following sample required a dilution due to the nature of the sample matrix: DG-L5S-0.5-1 (720-88192-14). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8081A: Surrogate recovery for the following sample was outside control limits: DUP-02 (720-88192-18). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8081A: The following sample was diluted due to the abundance of non-target analytes: DG-L5S-0.5-1 (720-88192-14). Elevated reporting limits (RLs) are provided.

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: DG-I3S-3.5-4 (720-88192-2), DG-K3S-3.5-4 (720-88192-6), DG-M3S-0.5-1 (720-88192-9), DG-M3S-3.5-4 (720-88192-10), DG-M3S-7.5-8 (720-88192-11), DG-L5S-3.5-4 (720-88192-15), DUP-02 (720-88192-18) and (720-88192-F-18-C MSD).

Method(s) 8082: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 240-342523 and analytical batch 240-342738 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

Method(s) 8082: The following samples were diluted due to the abundance of target analytes : (720-88192-F-18-B MS) and (720-88192-F-18-C MSD). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250194 and analytical batch 720-250251 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Job ID: 720-88192-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250197 and analytical batch 720-250325 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The post digestion spike % recovery associated with batch 720-250325 was outside of 75-125% control limits: (720-88192-A-7-C PDS).

Analyte	Recovery
Arsenic	74%
Cadmium	72%
Cobalt	72%
Molybdenum	73%
Nickel	71%
Lead	74%
Antimony	73%
Selenium	73%
Thallium	70%

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250325 was outside of the 10% control limits: (720-88192-A-7-C SD).

Analyte	Recovery
Barium	22%
Cobalt	20%
Chromium	23%
Copper	17%
Nickel	16%
Lead	20%
Vanadium	18%
Zinc	17%

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DG-I3S-3.5-4 (720-88192-2), DG-J3S-0.5-1 (720-88192-3), DG-L3S-0.5-1 (720-88192-7), DG-L3S-3.5-4 (720-88192-8), DG-M3S-0.5-1 (720-88192-9), DG-M3S-3.5-4 (720-88192-10), DG-M3S-7.5-8 (720-88192-11), DG-M5S-0.5-1 (720-88192-12), DG-M5S-3.5-4 (720-88192-13), DG-L5S-0.5-1 (720-88192-14), DG-L5S-3.5-4 (720-88192-15), DG-K5S-0.5-1 (720-88192-16), DG-K5S-3.5-4 (720-88192-17), DUP-02 (720-88192-18) and DUP-12 (720-88192-19). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The following samples were diluted to bring the concentration of target analyte Pb within the calibration range: DG-K3S-3.5-4 (720-88192-6) and DG-M5S-3.5-4 (720-88192-13). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Subcontract Work

Method Asbestos - CARB 435: This method was subcontracted to ASBESTOS TEM LABORATORIES, INC. The subcontract laboratory certification is different from that of the facility issuing the final report.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-I3S-0.5-1 — Lab Sample ID: 720-88192-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	70		47	36	ug/Kg	1		8260B	Total/NA
2-Butanone (MEK)	35	J	47	20	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	13	J	19	9.7	ug/Kg	2		8270C SIM	Total/NA
Acenaphthylene	9.3	J	9.7	4.6	ug/Kg	2		8270C SIM	Total/NA
Anthracene	7.1	J	9.7	3.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	21		9.7	2.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	26		9.7	3.7	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	45		9.7	4.1	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	16		9.7	8.3	ug/Kg	2		8270C SIM	Total/NA
Benzo[k]fluoranthene	16		9.7	4.1	ug/Kg	2		8270C SIM	Total/NA
Chrysene	26		9.7	2.7	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	33		9.7	2.7	ug/Kg	2		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	13		9.7	8.1	ug/Kg	2		8270C SIM	Total/NA
Naphthalene	78	B	9.7	6.8	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	22		9.7	3.5	ug/Kg	2		8270C SIM	Total/NA
Pyrene	33		9.7	3.3	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	13000		1900	730	ug/Kg	1		8015B	Total/NA
Antimony	1.3	J	1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	55		3.1	0.26	mg/Kg	4		6010B	Total/NA
Barium	68		1.5	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.14	J	0.31	0.099	mg/Kg	4		6010B	Total/NA
Cadmium	0.40		0.38	0.038	mg/Kg	4		6010B	Total/NA
Chromium	22		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.61	0.061	mg/Kg	4		6010B	Total/NA
Copper	98		4.6	2.2	mg/Kg	4		6010B	Total/NA
Lead	170		1.5	0.32	mg/Kg	4		6010B	Total/NA
Molybdenum	0.85	J	1.5	0.20	mg/Kg	4		6010B	Total/NA
Nickel	18		1.5	0.16	mg/Kg	4		6010B	Total/NA
Selenium	0.99	J	3.1	0.46	mg/Kg	4		6010B	Total/NA
Silver	0.18	J B	0.76	0.15	mg/Kg	4		6010B	Total/NA
Vanadium	73		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	150		4.6	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.088		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I3S-3.5-4 — Lab Sample ID: 720-88192-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	48		41	32	ug/Kg	1		8260B	Total/NA
Acenaphthylene	13	J	20	9.4	ug/Kg	2		8270C SIM	Total/NA
Anthracene	10	J	20	7.8	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	25		20	5.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	26		20	7.4	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	43		20	8.2	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	18	J	20	17	ug/Kg	2		8270C SIM	Total/NA
Benzo[k]fluoranthene	17	J	20	8.2	ug/Kg	2		8270C SIM	Total/NA
Chrysene	21		20	5.5	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	32		20	5.5	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	20		20	7.0	ug/Kg	2		8270C SIM	Total/NA
Pyrene	34		20	6.7	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	21000		1900	720	ug/Kg	1		8015B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-I3S-3.5-4 (Continued) — Lab Sample ID: 720-88192-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.9		1.3	0.21	mg/Kg	4		6010B	Total/NA
Arsenic	180		2.5	0.22	mg/Kg	4		6010B	Total/NA
Barium	140		1.3	0.18	mg/Kg	4		6010B	Total/NA
Beryllium	0.18	J	0.25	0.083	mg/Kg	4		6010B	Total/NA
Cadmium	0.39		0.32	0.032	mg/Kg	4		6010B	Total/NA
Chromium	27		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	7.1		0.51	0.051	mg/Kg	4		6010B	Total/NA
Copper	64		3.8	1.8	mg/Kg	4		6010B	Total/NA
Lead	290		1.3	0.27	mg/Kg	4		6010B	Total/NA
Molybdenum	1.2	J	1.3	0.16	mg/Kg	4		6010B	Total/NA
Nickel	24		1.3	0.13	mg/Kg	4		6010B	Total/NA
Selenium	0.59	J	2.5	0.38	mg/Kg	4		6010B	Total/NA
Vanadium	30		1.3	0.17	mg/Kg	4		6010B	Total/NA
Zinc	280		3.8	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.077		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-J3S-0.5-1 — Lab Sample ID: 720-88192-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.7		1.3	0.21	mg/Kg	4		6010B	Total/NA
Arsenic	58		2.5	0.21	mg/Kg	4		6010B	Total/NA
Barium	150		1.3	0.18	mg/Kg	4		6010B	Total/NA
Beryllium	0.26		0.25	0.081	mg/Kg	4		6010B	Total/NA
Cadmium	0.68		0.31	0.031	mg/Kg	4		6010B	Total/NA
Chromium	16		1.3	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	10		0.50	0.050	mg/Kg	4		6010B	Total/NA
Copper	110		3.8	1.8	mg/Kg	4		6010B	Total/NA
Lead	380		1.3	0.26	mg/Kg	4		6010B	Total/NA
Molybdenum	0.91	J	1.3	0.16	mg/Kg	4		6010B	Total/NA
Nickel	15		1.3	0.13	mg/Kg	4		6010B	Total/NA
Selenium	0.48	J	2.5	0.38	mg/Kg	4		6010B	Total/NA
Silver	0.21	J B	0.63	0.13	mg/Kg	4		6010B	Total/NA
Vanadium	67		1.3	0.17	mg/Kg	4		6010B	Total/NA
Zinc	200		3.8	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.10		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-J3S-3.5-4 — Lab Sample ID: 720-88192-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.6		1.6	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	46		3.2	0.27	mg/Kg	4		6010B	Total/NA
Barium	61		1.6	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.17	J	0.32	0.10	mg/Kg	4		6010B	Total/NA
Cadmium	0.27	J	0.40	0.039	mg/Kg	4		6010B	Total/NA
Chromium	27		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	4.8		0.63	0.063	mg/Kg	4		6010B	Total/NA
Copper	49		4.8	2.3	mg/Kg	4		6010B	Total/NA
Lead	790		1.6	0.33	mg/Kg	4		6010B	Total/NA
Molybdenum	0.21	J	1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	24		1.6	0.16	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-J3S-3.5-4 (Continued) — Lab Sample ID: 720-88192-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	0.23	J B	0.79	0.16	mg/Kg	4		6010B	Total/NA
Vanadium	19		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	84		4.8	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.031		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K3S-0.5-1 — Lab Sample ID: 720-88192-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	28	J	40	17	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	14		9.7	4.9	ug/Kg	1		8270C SIM	Total/NA
Acenaphthene	5.1		4.9	2.7	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	8.0		4.9	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	15		4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	43		4.9	1.5	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	60		4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	96		4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	30		4.9	4.2	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	36		4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	68		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	9.5		4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	100		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluorene	4.9		4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	25		4.9	4.1	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	16	B	4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	110		4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	110		4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	49000		1900	730	ug/Kg	1		8015B	Total/NA
Antimony	3.5		1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	28		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	46		1.7	0.24	mg/Kg	4		6010B	Total/NA
Beryllium	0.11	J	0.34	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	0.40	J	0.42	0.042	mg/Kg	4		6010B	Total/NA
Chromium	13		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.67	0.067	mg/Kg	4		6010B	Total/NA
Copper	88		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	110		1.7	0.35	mg/Kg	4		6010B	Total/NA
Molybdenum	0.59	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	12		1.7	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	74		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	130		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.059		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K3S-3.5-4 — Lab Sample ID: 720-88192-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	42	*	38	29	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	4.9	J	9.6	4.8	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	4.3	J	4.8	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	5.9		4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	21		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-K3S-3.5-4 (Continued) — Lab Sample ID: 720-88192-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	16		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	21		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	11		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	9.7		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	19		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	4.5	J	4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	28		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluorene	2.2	J	4.8	2.1	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	8.2		4.8	4.0	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	53	B	4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	17		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	31		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	3700		1900	730	ug/Kg	1		8015B	Total/NA
Antimony	54		1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	90		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	140		1.6	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.20	J	0.33	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	0.43		0.41	0.041	mg/Kg	4		6010B	Total/NA
Chromium	33		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	4.9		0.66	0.066	mg/Kg	4		6010B	Total/NA
Copper	64		4.9	2.3	mg/Kg	4		6010B	Total/NA
Lead	12000		8.2	1.7	mg/Kg	20		6010B	Total/NA
Molybdenum	0.24	J	1.6	0.21	mg/Kg	4		6010B	Total/NA
Nickel	26		1.6	0.17	mg/Kg	4		6010B	Total/NA
Silver	0.72	J	0.82	0.17	mg/Kg	4		6010B	Total/NA
Thallium	0.61	J	1.6	0.48	mg/Kg	4		6010B	Total/NA
Vanadium	25		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	140		25	10	mg/Kg	20		6010B	Total/NA
Mercury	0.030		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L3S-0.5-1 — Lab Sample ID: 720-88192-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.3	F1	1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	12		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	75	F1	1.6	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.14	J F1	0.33	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	1.0		0.41	0.041	mg/Kg	4		6010B	Total/NA
Chromium	26	F1	1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.66	0.066	mg/Kg	4		6010B	Total/NA
Copper	140	F1	4.9	2.3	mg/Kg	4		6010B	Total/NA
Lead	170	F1	1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	1.4	J	1.6	0.21	mg/Kg	4		6010B	Total/NA
Nickel	20	F1	1.6	0.17	mg/Kg	4		6010B	Total/NA
Thallium	0.95	J	1.6	0.48	mg/Kg	4		6010B	Total/NA
Vanadium	76	F1	1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	290		4.9	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.096		0.015	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L3S-3.5-4 — Lab Sample ID: 720-88192-8

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-L3S-3.5-4 (Continued) — Lab Sample ID: 720-88192-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	17		1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	150		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	720		1.7	0.24	mg/Kg	4		6010B	Total/NA
Beryllium	0.76		0.34	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	1.9		0.42	0.042	mg/Kg	4		6010B	Total/NA
Chromium	23		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	9.9		0.67	0.067	mg/Kg	4		6010B	Total/NA
Copper	450		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	1800		1.7	0.35	mg/Kg	4		6010B	Total/NA
Molybdenum	1.1	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	21		1.7	0.17	mg/Kg	4		6010B	Total/NA
Silver	3.1		0.84	0.17	mg/Kg	4		6010B	Total/NA
Thallium	1.2	J	1.7	0.49	mg/Kg	4		6010B	Total/NA
Vanadium	68		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	1300		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	1.2		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M3S-0.5-1 — Lab Sample ID: 720-88192-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	68		43	33	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	11		9.5	4.7	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	2.4	J	4.7	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	4.0	J	4.7	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	3.6	J	4.7	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	3.5	J	4.7	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	5.5		4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	5.0		4.7	4.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	2.8	J	4.7	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	3.1	J	4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	3.8	J	4.7	1.3	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	10	B	4.7	3.3	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	5.6		4.7	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	4.3	J	4.7	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	21000		2000	740	ug/Kg	1		8015B	Total/NA
Antimony	0.33	J	1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	21		3.2	0.27	mg/Kg	4		6010B	Total/NA
Barium	76		1.6	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.19	J	0.32	0.10	mg/Kg	4		6010B	Total/NA
Chromium	15		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.64	0.064	mg/Kg	4		6010B	Total/NA
Copper	110		4.8	2.3	mg/Kg	4		6010B	Total/NA
Lead	33		1.6	0.34	mg/Kg	4		6010B	Total/NA
Nickel	7.5		1.6	0.16	mg/Kg	4		6010B	Total/NA
Thallium	1.2	J	1.6	0.46	mg/Kg	4		6010B	Total/NA
Vanadium	120		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	71		4.8	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.035		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M3S-3.5-4 — Lab Sample ID: 720-88192-10

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-M3S-3.5-4 (Continued) — Lab Sample ID: 720-88192-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	63		59	45	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	15		9.8	4.9	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	2.7	J	4.9	2.4	ug/Kg	1		8270C SIM	Total/NA
Anthracene	3.1	J	4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	1.8	J	4.9	1.5	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	2.6	J	4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	8.3		4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	2.8	J	4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	7.0		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	8.5		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	60	B	4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	35		4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	5.9		4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	40000		1900	730	ug/Kg	1		8015B	Total/NA
Antimony	15		3.1	0.51	mg/Kg	10		6010B	Total/NA
Arsenic	140		6.1	0.52	mg/Kg	10		6010B	Total/NA
Barium	1200		1.2	0.17	mg/Kg	4		6010B	Total/NA
Beryllium	0.94		0.25	0.080	mg/Kg	4		6010B	Total/NA
Cadmium	1.3		0.77	0.076	mg/Kg	10		6010B	Total/NA
Chromium	46		3.1	0.33	mg/Kg	10		6010B	Total/NA
Cobalt	7.2		1.2	0.12	mg/Kg	10		6010B	Total/NA
Copper	590		9.2	4.4	mg/Kg	10		6010B	Total/NA
Lead	2300		3.1	0.64	mg/Kg	10		6010B	Total/NA
Molybdenum	1.8		1.2	0.16	mg/Kg	4		6010B	Total/NA
Nickel	33		3.1	0.31	mg/Kg	10		6010B	Total/NA
Selenium	1.7	J	6.1	0.92	mg/Kg	10		6010B	Total/NA
Silver	4.9		1.5	0.31	mg/Kg	10		6010B	Total/NA
Thallium	1.2	J	3.1	0.89	mg/Kg	10		6010B	Total/NA
Vanadium	41		3.1	0.42	mg/Kg	10		6010B	Total/NA
Zinc	1300		9.2	3.9	mg/Kg	10		6010B	Total/NA
Mercury	1.2		0.16	0.024	mg/Kg	10		7471A	Total/NA

Client Sample ID: DG-M3S-7.5-8 — Lab Sample ID: 720-88192-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	49		44	34	ug/Kg	1		8260B	Total/NA
cis-1,2-Dichloroethene	2.7	J	4.4	0.61	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	11		9.6	4.8	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	3.0	J	4.8	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	2.7	J	4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	2.7	J	4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	4.0	J	4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	48		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	7.1		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	3.5	J	4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	47		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	5.3		4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	19		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluorene	3.5	J	4.8	2.1	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	4.5	J	4.8	4.0	ug/Kg	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-M3S-7.5-8 (Continued) — Lab Sample ID: 720-88192-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	77	B	4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	130		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	12		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	5200		1900	720	ug/Kg	1		8015B	Total/NA
Antimony	0.98	J	1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	37		3.1	0.26	mg/Kg	4		6010B	Total/NA
Barium	82		1.5	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.70		0.31	0.099	mg/Kg	4		6010B	Total/NA
Cadmium	0.086	J	0.38	0.038	mg/Kg	4		6010B	Total/NA
Chromium	32		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	17		0.61	0.061	mg/Kg	4		6010B	Total/NA
Copper	25		4.6	2.2	mg/Kg	4		6010B	Total/NA
Lead	9.8		1.5	0.32	mg/Kg	4		6010B	Total/NA
Molybdenum	0.65	J	1.5	0.20	mg/Kg	4		6010B	Total/NA
Nickel	33		1.5	0.16	mg/Kg	4		6010B	Total/NA
Vanadium	48		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	68		4.6	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.020		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M5S-0.5-1 — Lab Sample ID: 720-88192-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.2	J	1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	28		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	100		1.7	0.24	mg/Kg	4		6010B	Total/NA
Beryllium	0.11	J	0.34	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	0.86		0.43	0.042	mg/Kg	4		6010B	Total/NA
Chromium	23		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.68	0.068	mg/Kg	4		6010B	Total/NA
Copper	170		5.1	2.4	mg/Kg	4		6010B	Total/NA
Lead	150		1.7	0.36	mg/Kg	4		6010B	Total/NA
Molybdenum	1.5	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	18		1.7	0.17	mg/Kg	4		6010B	Total/NA
Silver	0.27	J	0.85	0.17	mg/Kg	4		6010B	Total/NA
Thallium	1.3	J	1.7	0.50	mg/Kg	4		6010B	Total/NA
Vanadium	100		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	230		5.1	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.15		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M5S-3.5-4 — Lab Sample ID: 720-88192-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	16		1.2	0.20	mg/Kg	4		6010B	Total/NA
Arsenic	330		2.5	0.21	mg/Kg	4		6010B	Total/NA
Barium	1700		1.2	0.18	mg/Kg	4		6010B	Total/NA
Beryllium	0.70		0.25	0.080	mg/Kg	4		6010B	Total/NA
Cadmium	10		0.31	0.031	mg/Kg	4		6010B	Total/NA
Chromium	57		1.2	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	7.8		0.49	0.049	mg/Kg	4		6010B	Total/NA
Copper	1100		3.7	1.8	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-M5S-3.5-4 (Continued) — Lab Sample ID: 720-88192-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	8300		6.2	1.3	mg/Kg	20		6010B	Total/NA
Molybdenum	0.49	J	1.2	0.16	mg/Kg	4		6010B	Total/NA
Nickel	38		1.2	0.13	mg/Kg	4		6010B	Total/NA
Silver	9.5		0.62	0.12	mg/Kg	4		6010B	Total/NA
Thallium	0.84	J	1.2	0.36	mg/Kg	4		6010B	Total/NA
Vanadium	35		1.2	0.17	mg/Kg	4		6010B	Total/NA
Zinc	5600		19	7.8	mg/Kg	20		6010B	Total/NA
Mercury	0.69		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L5S-0.5-1 — Lab Sample ID: 720-88192-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	33	J	41	31	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	72		39	19	ug/Kg	2		8270C SIM	Total/NA
Acenaphthylene	40		19	9.3	ug/Kg	2		8270C SIM	Total/NA
Anthracene	76		19	7.7	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	81		19	5.8	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	120		19	7.3	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	200		19	8.1	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	150		19	17	ug/Kg	2		8270C SIM	Total/NA
Benzo[k]fluoranthene	74		19	8.1	ug/Kg	2		8270C SIM	Total/NA
Chrysene	130		19	5.4	ug/Kg	2		8270C SIM	Total/NA
Dibenz(a,h)anthracene	31		19	14	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	140		19	5.4	ug/Kg	2		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	95		19	16	ug/Kg	2		8270C SIM	Total/NA
Naphthalene	65	B	19	14	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	96		19	6.9	ug/Kg	2		8270C SIM	Total/NA
Pyrene	150		19	6.6	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	210000		5700	2100	ug/Kg	3		8015B	Total/NA
Aroclor-1260	13000		960	420	ug/Kg	20		8082	Total/NA
Antimony	4.7		1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	14		3.6	0.30	mg/Kg	4		6010B	Total/NA
Barium	150		1.8	0.25	mg/Kg	4		6010B	Total/NA
Beryllium	0.19	J	0.36	0.12	mg/Kg	4		6010B	Total/NA
Cadmium	1.6		0.45	0.044	mg/Kg	4		6010B	Total/NA
Chromium	49		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	9.4		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	170		5.4	2.5	mg/Kg	4		6010B	Total/NA
Lead	250		1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	3.5		1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	51		1.8	0.18	mg/Kg	4		6010B	Total/NA
Selenium	0.64	J	3.6	0.54	mg/Kg	4		6010B	Total/NA
Silver	0.50	J	0.89	0.18	mg/Kg	4		6010B	Total/NA
Thallium	0.99	J	1.8	0.52	mg/Kg	4		6010B	Total/NA
Vanadium	37		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	350		5.4	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.19		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L5S-3.5-4 — Lab Sample ID: 720-88192-15

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-L5S-3.5-4 (Continued) — Lab Sample ID: 720-88192-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	46		42	32	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	14		9.6	4.8	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	12		4.8	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	13		4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	33		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	37		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	84		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	22		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	59	B	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	9.7		4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	63		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluorene	3.0	J	4.8	2.1	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	21		4.8	4.0	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	38		4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	55		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	81		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	26000		2000	740	ug/Kg	1		8015B	Total/NA
Aroclor-1260	44	J	50	22	ug/Kg	1		8082	Total/NA
Antimony	13		4.0	0.66	mg/Kg	10		6010B	Total/NA
Arsenic	55		7.9	0.67	mg/Kg	10		6010B	Total/NA
Barium	850		1.6	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.48		0.32	0.10	mg/Kg	4		6010B	Total/NA
Cadmium	5.4		0.99	0.098	mg/Kg	10		6010B	Total/NA
Chromium	38		4.0	0.42	mg/Kg	10		6010B	Total/NA
Cobalt	11		1.6	0.16	mg/Kg	10		6010B	Total/NA
Copper	500		12	5.7	mg/Kg	10		6010B	Total/NA
Lead	1900		4.0	0.83	mg/Kg	10		6010B	Total/NA
Molybdenum	1.9		1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	35		4.0	0.40	mg/Kg	10		6010B	Total/NA
Selenium	2.1	J	7.9	1.2	mg/Kg	10		6010B	Total/NA
Silver	3.7		2.0	0.40	mg/Kg	10		6010B	Total/NA
Thallium	2.6	J	4.0	1.2	mg/Kg	10		6010B	Total/NA
Vanadium	59		4.0	0.54	mg/Kg	10		6010B	Total/NA
Zinc	2300		12	5.0	mg/Kg	10		6010B	Total/NA
Mercury	0.67		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K5S-0.5-1 — Lab Sample ID: 720-88192-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.7	J	3.8	0.32	mg/Kg	4		6010B	Total/NA
Barium	63		1.9	0.27	mg/Kg	4		6010B	Total/NA
Cadmium	0.43	J	0.48	0.047	mg/Kg	4		6010B	Total/NA
Chromium	14		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.76	0.076	mg/Kg	4		6010B	Total/NA
Copper	180		5.7	2.7	mg/Kg	4		6010B	Total/NA
Lead	90		1.9	0.40	mg/Kg	4		6010B	Total/NA
Molybdenum	1.1	J	1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	11		1.9	0.19	mg/Kg	4		6010B	Total/NA
Thallium	1.0	J	1.9	0.55	mg/Kg	4		6010B	Total/NA
Vanadium	99		1.9	0.26	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-K5S-0.5-1 (Continued) — Lab Sample ID: 720-88192-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	120		5.7	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.099		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K5S-3.5-4 — Lab Sample ID: 720-88192-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.49	J	3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	33		1.8	0.25	mg/Kg	4		6010B	Total/NA
Chromium	21		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.70	0.070	mg/Kg	4		6010B	Total/NA
Copper	130		5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	5.8		1.8	0.37	mg/Kg	4		6010B	Total/NA
Nickel	5.4		1.8	0.18	mg/Kg	4		6010B	Total/NA
Thallium	1.4	J	1.8	0.51	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	36		5.3	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.057		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-02 — Lab Sample ID: 720-88192-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	56		39	30	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	24		19	9.5	ug/Kg	2		8270C SIM	Total/NA
Acenaphthene	6.3	J	9.5	5.3	ug/Kg	2		8270C SIM	Total/NA
Acenaphthylene	18		9.5	4.6	ug/Kg	2		8270C SIM	Total/NA
Anthracene	34		9.5	3.8	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	88		9.5	2.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	120		9.5	3.6	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	210		9.5	4.0	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	110		9.5	8.2	ug/Kg	2		8270C SIM	Total/NA
Chrysene	120	B	9.5	2.7	ug/Kg	2		8270C SIM	Total/NA
Dibenz(a,h)anthracene	31		9.5	6.7	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	140		9.5	2.7	ug/Kg	2		8270C SIM	Total/NA
Fluorene	6.4	J	9.5	4.2	ug/Kg	2		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	86		9.5	8.0	ug/Kg	2		8270C SIM	Total/NA
Naphthalene	21		9.5	6.7	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	81		9.5	3.4	ug/Kg	2		8270C SIM	Total/NA
Pyrene	180		9.5	3.2	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	120000		1900	730	ug/Kg	1		8015B	Total/NA
Aroclor-1260	3000	F2 F1	240	110	ug/Kg	5		8082	Total/NA
Antimony	4.1		1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	9.5		3.1	0.26	mg/Kg	4		6010B	Total/NA
Barium	140		1.5	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.12	J	0.31	0.099	mg/Kg	4		6010B	Total/NA
Cadmium	1.7		0.38	0.038	mg/Kg	4		6010B	Total/NA
Chromium	37		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.61	0.061	mg/Kg	4		6010B	Total/NA
Copper	190		4.6	2.2	mg/Kg	4		6010B	Total/NA
Lead	260		1.5	0.32	mg/Kg	4		6010B	Total/NA
Molybdenum	3.5		1.5	0.20	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-02 (Continued) — Lab Sample ID: 720-88192-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	39		1.5	0.16	mg/Kg	4		6010B	Total/NA
Silver	0.22	J	0.76	0.15	mg/Kg	4		6010B	Total/NA
Thallium	1.2	J	1.5	0.44	mg/Kg	4		6010B	Total/NA
Vanadium	61		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	350		4.6	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.37		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-12 — Lab Sample ID: 720-88192-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.91	J	1.1	0.19	mg/Kg	4		6010B	Total/NA
Arsenic	39		2.2	0.19	mg/Kg	4		6010B	Total/NA
Barium	100		1.1	0.16	mg/Kg	4		6010B	Total/NA
Beryllium	0.11	J	0.22	0.073	mg/Kg	4		6010B	Total/NA
Cadmium	0.39		0.28	0.028	mg/Kg	4		6010B	Total/NA
Chromium	13		1.1	0.12	mg/Kg	4		6010B	Total/NA
Cobalt	9.0		0.45	0.045	mg/Kg	4		6010B	Total/NA
Copper	97		3.4	1.6	mg/Kg	4		6010B	Total/NA
Lead	130		1.1	0.24	mg/Kg	4		6010B	Total/NA
Molybdenum	0.23	J	1.1	0.14	mg/Kg	4		6010B	Total/NA
Nickel	11		1.1	0.11	mg/Kg	4		6010B	Total/NA
Silver	0.19	J	0.56	0.11	mg/Kg	4		6010B	Total/NA
Thallium	0.87	J	1.1	0.33	mg/Kg	4		6010B	Total/NA
Vanadium	78		1.1	0.15	mg/Kg	4		6010B	Total/NA
Zinc	180		3.4	1.4	mg/Kg	4		6010B	Total/NA
Mercury	0.10		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: TB-2 — Lab Sample ID: 720-88192-20

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-I3S-0.5-1
Date Collected: 08/22/18 09:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-1
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.7	1.1	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Acetone	**70**		47	36	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Benzene	ND		4.7	0.61	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Dichlorobromomethane	ND		4.7	0.67	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Bromobenzene	ND		4.7	0.74	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Chlorobromomethane	ND		19	0.67	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Bromoform	ND		4.7	1.9	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Bromomethane	ND		9.3	0.74	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
2-Butanone (MEK)	**35**	**J**	47	20	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
n-Butylbenzene	ND		4.7	0.93	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
sec-Butylbenzene	ND		4.7	0.67	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
tert-Butylbenzene	ND		4.7	0.68	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Carbon disulfide	ND	*	4.7	1.9	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Carbon tetrachloride	ND		4.7	0.58	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Chlorobenzene	ND		4.7	0.64	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Chloroethane	ND		9.3	0.52	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Chloroform	ND		4.7	0.62	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Chloromethane	ND		9.3	0.74	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
2-Chlorotoluene	ND		4.7	0.61	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
4-Chlorotoluene	ND		4.7	0.64	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Chlorodibromomethane	ND		4.7	0.66	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
1,2-Dichlorobenzene	ND		4.7	0.64	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
1,3-Dichlorobenzene	ND		4.7	0.67	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
1,4-Dichlorobenzene	ND		4.7	0.66	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
1,3-Dichloropropane	ND		4.7	0.68	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
1,1-Dichloropropene	ND		4.7	0.64	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
1,2-Dibromo-3-Chloropropane	ND		9.3	1.6	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Ethylene Dibromide	ND		4.7	1.3	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Dibromomethane	ND		9.3	0.80	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Dichlorodifluoromethane	ND		9.3	0.74	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
1,1-Dichloroethane	ND		4.7	0.64	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
1,2-Dichloroethane	ND		4.7	0.71	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
1,1-Dichloroethene	ND	*	4.7	0.58	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
cis-1,2-Dichloroethene	ND		4.7	0.64	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
trans-1,2-Dichloroethene	ND		4.7	0.70	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
1,2-Dichloropropane	ND		4.7	0.59	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
cis-1,3-Dichloropropene	ND		4.7	0.64	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
trans-1,3-Dichloropropene	ND		4.7	0.63	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Ethylbenzene	ND		4.7	0.70	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Hexachlorobutadiene	ND		4.7	0.84	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
2-Hexanone	ND		47	9.3	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Isopropylbenzene	ND		4.7	0.64	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
4-Isopropyltoluene	ND		4.7	2.3	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Methylene Chloride	ND		9.3	5.2	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
4-Methyl-2-pentanone (MIBK)	ND		47	9.3	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Naphthalene	ND		9.3	1.4	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
N-Propylbenzene	ND		4.7	0.62	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Styrene	ND		4.7	0.59	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
1,1,1,2-Tetrachloroethane	ND		4.7	0.71	ug/Kg		08/23/18 02:50	08/29/18 01:24	1

Client Sample ID: DG-I3S-0.5-1
Date Collected: 08/22/18 09:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-1
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.7	0.70	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Tetrachloroethene	ND		4.7	0.63	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Toluene	ND		4.7	0.66	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
1,2,3-Trichlorobenzene	ND		4.7	0.69	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
1,2,4-Trichlorobenzene	ND		4.7	0.66	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
1,1,1-Trichloroethane	ND		4.7	0.57	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
1,1,2-Trichloroethane	ND		4.7	0.65	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Trichloroethene	ND		4.7	0.59	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Trichlorofluoromethane	ND		4.7	0.52	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
1,2,3-Trichloropropane	ND		4.7	0.72	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7	1.9	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
1,2,4-Trimethylbenzene	ND		4.7	1.5	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
1,3,5-Trimethylbenzene	ND		4.7	0.61	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Vinyl acetate	ND		19	4.7	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Vinyl chloride	ND		4.7	0.68	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Xylenes, Total	ND		4.7	1.1	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
2,2-Dichloropropane	ND		4.7	1.9	ug/Kg		08/23/18 02:50	08/29/18 01:24	1
Gasoline Range Organics (GRO) -C4-C12	ND		230	93	ug/Kg		08/23/18 02:50	08/29/18 01:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*45 - 131*	*08/23/18 02:50*	*08/29/18 01:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*60 - 140*	*08/23/18 02:50*	*08/29/18 01:24*	*1*
Toluene-d8 (Surr)	*99*		*58 - 140*	*08/23/18 02:50*	*08/29/18 01:24*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**13**	**J**	19	9.7	ug/Kg		08/23/18 09:43	08/25/18 06:31	2
Acenaphthene	ND		9.7	5.4	ug/Kg		08/23/18 09:43	08/25/18 06:31	2
Acenaphthylene	**9.3**	**J**	9.7	4.6	ug/Kg		08/23/18 09:43	08/25/18 06:31	2
Anthracene	**7.1**	**J**	9.7	3.9	ug/Kg		08/23/18 09:43	08/25/18 06:31	2
Benzo[a]anthracene	**21**		9.7	2.9	ug/Kg		08/23/18 09:43	08/25/18 06:31	2
Benzo[a]pyrene	**26**		9.7	3.7	ug/Kg		08/23/18 09:43	08/25/18 06:31	2
Benzo[b]fluoranthene	**45**		9.7	4.1	ug/Kg		08/23/18 09:43	08/25/18 06:31	2
Benzo[g,h,i]perylene	**16**		9.7	8.3	ug/Kg		08/23/18 09:43	08/25/18 06:31	2
Benzo[k]fluoranthene	**16**		9.7	4.1	ug/Kg		08/23/18 09:43	08/25/18 06:31	2
Chrysene	**26**		9.7	2.7	ug/Kg		08/23/18 09:43	08/25/18 06:31	2
Dibenz(a,h)anthracene	ND		9.7	6.8	ug/Kg		08/23/18 09:43	08/25/18 06:31	2
Fluoranthene	**33**		9.7	2.7	ug/Kg		08/23/18 09:43	08/25/18 06:31	2
Fluorene	ND		9.7	4.3	ug/Kg		08/23/18 09:43	08/25/18 06:31	2
Indeno[1,2,3-cd]pyrene	**13**		9.7	8.1	ug/Kg		08/23/18 09:43	08/25/18 06:31	2
Naphthalene	**78**	**B**	9.7	6.8	ug/Kg		08/23/18 09:43	08/25/18 06:31	2
Phenanthrene	**22**		9.7	3.5	ug/Kg		08/23/18 09:43	08/25/18 06:31	2
Pyrene	**33**		9.7	3.3	ug/Kg		08/23/18 09:43	08/25/18 06:31	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*33 - 120*	*08/23/18 09:43*	*08/25/18 06:31*	*2*
Terphenyl-d14	*91*		*35 - 146*	*08/23/18 09:43*	*08/25/18 06:31*	*2*

Client Sample ID: DG-I3S-0.5-1

Date Collected: 08/22/18 09:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-1

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	13000		1900	730	ug/Kg		08/23/18 08:42	08/24/18 00:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*99*		*40 - 130*	*08/23/18 08:42*	*08/24/18 00:14*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
Aldrin	ND		1.9	0.48	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
delta-BHC	ND		1.9	0.43	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
Endrin	ND		1.9	0.44	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
Toxaphene	ND		39	6.6	ug/Kg		08/23/18 11:26	08/29/18 23:06	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/23/18 11:26	08/29/18 23:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*92*		*21 - 136*	*08/23/18 11:26*	*08/29/18 23:06*	*1*
Tetrachloro-m-xylene	*88*		*21 - 145*	*08/23/18 11:26*	*08/29/18 23:06*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/26/18 10:47	08/28/18 11:37	1
Aroclor-1221	ND		50	24	ug/Kg		08/26/18 10:47	08/28/18 11:37	1
Aroclor-1232	ND		50	23	ug/Kg		08/26/18 10:47	08/28/18 11:37	1
Aroclor-1242	ND		50	19	ug/Kg		08/26/18 10:47	08/28/18 11:37	1
Aroclor-1248	ND		50	24	ug/Kg		08/26/18 10:47	08/28/18 11:37	1
Aroclor-1254	ND		50	23	ug/Kg		08/26/18 10:47	08/28/18 11:37	1
Aroclor-1260	ND		50	22	ug/Kg		08/26/18 10:47	08/28/18 11:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*88*		*14 - 128*	*08/26/18 10:47*	*08/28/18 11:37*	*1*
DCB Decachlorobiphenyl	*89*		*10 - 132*	*08/26/18 10:47*	*08/28/18 11:37*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.3	J	1.5	0.25	mg/Kg		08/24/18 16:34	08/25/18 15:27	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-I3S-0.5-1
Date Collected: 08/22/18 09:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-1
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	55		3.1	0.26	mg/Kg		08/24/18 16:34	08/25/18 15:27	4
Barium	68		1.5	0.22	mg/Kg		08/24/18 16:34	08/25/18 15:27	4
Beryllium	0.14	J	0.31	0.099	mg/Kg		08/24/18 16:34	08/25/18 15:27	4
Cadmium	0.40		0.38	0.038	mg/Kg		08/24/18 16:34	08/25/18 15:27	4
Chromium	22		1.5	0.16	mg/Kg		08/24/18 16:34	08/25/18 15:27	4
Cobalt	13		0.61	0.061	mg/Kg		08/24/18 16:34	08/25/18 15:27	4
Copper	98		4.6	2.2	mg/Kg		08/24/18 16:34	08/25/18 15:27	4
Lead	170		1.5	0.32	mg/Kg		08/24/18 16:34	08/25/18 15:27	4
Molybdenum	0.85	J	1.5	0.20	mg/Kg		08/24/18 16:34	08/25/18 15:27	4
Nickel	18		1.5	0.16	mg/Kg		08/24/18 16:34	08/25/18 15:27	4
Selenium	0.99	J	3.1	0.46	mg/Kg		08/24/18 16:34	08/25/18 15:27	4
Silver	0.18	J B	0.76	0.15	mg/Kg		08/24/18 16:34	08/25/18 15:27	4
Thallium	ND		1.5	0.44	mg/Kg		08/24/18 16:34	08/25/18 15:27	4
Vanadium	73		1.5	0.21	mg/Kg		08/24/18 16:34	08/25/18 15:27	4
Zinc	150		4.6	1.9	mg/Kg		08/24/18 16:34	08/25/18 15:27	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.088		0.015	0.0022	mg/Kg		08/27/18 20:30	08/28/18 23:11	1

Client Sample ID: DG-I3S-3.5-4
Date Collected: 08/22/18 09:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-2
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.1	1.0	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Acetone	**48**		41	32	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Benzene	ND		4.1	0.54	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Dichlorobromomethane	ND		4.1	0.60	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Bromobenzene	ND	*	4.1	0.66	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Chlorobromomethane	ND		17	0.60	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Bromoform	ND		4.1	1.7	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Bromomethane	ND		8.3	0.66	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
2-Butanone (MEK)	ND		41	17	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
n-Butylbenzene	ND	*	4.1	0.83	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
sec-Butylbenzene	ND	*	4.1	0.60	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
tert-Butylbenzene	ND	*	4.1	0.61	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Carbon disulfide	ND		4.1	1.7	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Carbon tetrachloride	ND		4.1	0.51	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Chlorobenzene	ND		4.1	0.57	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Chloroethane	ND		8.3	0.46	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Chloroform	ND		4.1	0.55	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Chloromethane	ND		8.3	0.66	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
2-Chlorotoluene	ND	*	4.1	0.54	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
4-Chlorotoluene	ND	*	4.1	0.56	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Chlorodibromomethane	ND		4.1	0.59	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
1,2-Dichlorobenzene	ND	*	4.1	0.56	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
1,3-Dichlorobenzene	ND	*	4.1	0.60	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
1,4-Dichlorobenzene	ND	*	4.1	0.59	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
1,3-Dichloropropane	ND		4.1	0.61	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
1,1-Dichloropropene	ND		4.1	0.57	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
1,2-Dibromo-3-Chloropropane	ND	*	8.3	1.4	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Ethylene Dibromide	ND		4.1	1.2	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Dibromomethane	ND		8.3	0.71	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Dichlorodifluoromethane	ND		8.3	0.66	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
1,1-Dichloroethane	ND		4.1	0.56	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
1,2-Dichloroethane	ND		4.1	0.63	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
1,1-Dichloroethene	ND		4.1	0.51	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
cis-1,2-Dichloroethene	ND		4.1	0.56	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
trans-1,2-Dichloroethene	ND		4.1	0.62	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
1,2-Dichloropropane	ND		4.1	0.52	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
cis-1,3-Dichloropropene	ND		4.1	0.57	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
trans-1,3-Dichloropropene	ND		4.1	0.56	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Ethylbenzene	ND		4.1	0.62	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Hexachlorobutadiene	ND	*	4.1	0.75	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
2-Hexanone	ND		41	8.3	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Isopropylbenzene	ND		4.1	0.56	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
4-Isopropyltoluene	ND	*	4.1	2.1	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Methylene Chloride	ND		8.3	4.6	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
4-Methyl-2-pentanone (MIBK)	ND		41	8.3	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Naphthalene	ND	*	8.3	1.2	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
N-Propylbenzene	ND	*	4.1	0.55	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Styrene	ND		4.1	0.52	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
1,1,1,2-Tetrachloroethane	ND		4.1	0.63	ug/Kg		08/23/18 02:50	08/28/18 14:49	1

Client Sample ID: DG-I3S-3.5-4
Date Collected: 08/22/18 09:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-2
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.1	0.62	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Tetrachloroethene	ND		4.1	0.56	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Toluene	ND		4.1	0.59	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
1,2,3-Trichlorobenzene	ND	*	4.1	0.61	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
1,2,4-Trichlorobenzene	ND	*	4.1	0.59	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
1,1,1-Trichloroethane	ND		4.1	0.51	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
1,1,2-Trichloroethane	ND		4.1	0.58	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Trichloroethene	ND		4.1	0.52	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Trichlorofluoromethane	ND		4.1	0.46	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
1,2,3-Trichloropropane	ND	*	4.1	0.64	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.1	1.7	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
1,2,4-Trimethylbenzene	ND	*	4.1	1.4	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
1,3,5-Trimethylbenzene	ND	*	4.1	0.54	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Vinyl acetate	ND		17	4.1	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Vinyl chloride	ND	*	4.1	0.61	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Xylenes, Total	ND		4.1	1.0	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
2,2-Dichloropropane	ND		4.1	1.7	ug/Kg		08/23/18 02:50	08/28/18 14:49	1
Gasoline Range Organics (GRO) -C4-C12	ND		210	83	ug/Kg		08/23/18 02:50	08/28/18 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*		*45 - 131*	*08/23/18 02:50*	*08/28/18 14:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*60 - 140*	*08/23/18 02:50*	*08/28/18 14:49*	*1*
Toluene-d8 (Surr)	*91*		*58 - 140*	*08/23/18 02:50*	*08/28/18 14:49*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		39	20	ug/Kg		08/23/18 09:43	08/25/18 06:55	2
Acenaphthene	ND		20	11	ug/Kg		08/23/18 09:43	08/25/18 06:55	2
Acenaphthylene	**13**	**J**	20	9.4	ug/Kg		08/23/18 09:43	08/25/18 06:55	2
Anthracene	**10**	**J**	20	7.8	ug/Kg		08/23/18 09:43	08/25/18 06:55	2
Benzo[a]anthracene	**25**		20	5.9	ug/Kg		08/23/18 09:43	08/25/18 06:55	2
Benzo[a]pyrene	**26**		20	7.4	ug/Kg		08/23/18 09:43	08/25/18 06:55	2
Benzo[b]fluoranthene	**43**		20	8.2	ug/Kg		08/23/18 09:43	08/25/18 06:55	2
Benzo[g,h,i]perylene	**18**	**J**	20	17	ug/Kg		08/23/18 09:43	08/25/18 06:55	2
Benzo[k]fluoranthene	**17**	**J**	20	8.2	ug/Kg		08/23/18 09:43	08/25/18 06:55	2
Chrysene	**21**		20	5.5	ug/Kg		08/23/18 09:43	08/25/18 06:55	2
Dibenz(a,h)anthracene	ND		20	14	ug/Kg		08/23/18 09:43	08/25/18 06:55	2
Fluoranthene	**32**		20	5.5	ug/Kg		08/23/18 09:43	08/25/18 06:55	2
Fluorene	ND		20	8.6	ug/Kg		08/23/18 09:43	08/25/18 06:55	2
Indeno[1,2,3-cd]pyrene	ND		20	16	ug/Kg		08/23/18 09:43	08/25/18 06:55	2
Naphthalene	ND		20	14	ug/Kg		08/23/18 09:43	08/25/18 06:55	2
Phenanthrene	**20**		20	7.0	ug/Kg		08/23/18 09:43	08/25/18 06:55	2
Pyrene	**34**		20	6.7	ug/Kg		08/23/18 09:43	08/25/18 06:55	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*33 - 120*	*08/23/18 09:43*	*08/25/18 06:55*	*2*
Terphenyl-d14	*87*		*35 - 146*	*08/23/18 09:43*	*08/25/18 06:55*	*2*

Client Sample ID: DG-I3S-3.5-4
Date Collected: 08/22/18 09:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-2
Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	21000		1900	720	ug/Kg		08/23/18 08:42	08/24/18 00:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*87*		*40 - 130*	*08/23/18 08:42*	*08/24/18 00:38*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
Aldrin	ND		1.9	0.49	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
delta-BHC	ND		1.9	0.43	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
Endosulfan II	ND		1.9	0.48	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
Endrin	ND		1.9	0.45	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
Heptachlor	ND		1.9	0.45	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
Toxaphene	ND		39	6.6	ug/Kg		08/23/18 11:26	08/29/18 23:23	1
trans-Chlordane	ND		1.9	0.45	ug/Kg		08/23/18 11:26	08/29/18 23:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*92*		*21 - 136*	*08/23/18 11:26*	*08/29/18 23:23*	*1*
Tetrachloro-m-xylene	*96*		*21 - 145*	*08/23/18 11:26*	*08/29/18 23:23*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/26/18 10:47	08/28/18 12:00	1
Aroclor-1221	ND		50	24	ug/Kg		08/26/18 10:47	08/28/18 12:00	1
Aroclor-1232	ND		50	23	ug/Kg		08/26/18 10:47	08/28/18 12:00	1
Aroclor-1242	ND		50	19	ug/Kg		08/26/18 10:47	08/28/18 12:00	1
Aroclor-1248	ND		50	24	ug/Kg		08/26/18 10:47	08/28/18 12:00	1
Aroclor-1254	ND		50	23	ug/Kg		08/26/18 10:47	08/28/18 12:00	1
Aroclor-1260	ND		50	22	ug/Kg		08/26/18 10:47	08/28/18 12:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*64*		*14 - 128*	*08/26/18 10:47*	*08/28/18 12:00*	*1*
DCB Decachlorobiphenyl	*86*		*10 - 132*	*08/26/18 10:47*	*08/28/18 12:00*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.9		1.3	0.21	mg/Kg		08/24/18 16:34	08/25/18 15:31	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-I3S-3.5-4
Date Collected: 08/22/18 09:30
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-2
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	180		2.5	0.22	mg/Kg		08/24/18 16:34	08/25/18 15:31	4
Barium	140		1.3	0.18	mg/Kg		08/24/18 16:34	08/25/18 15:31	4
Beryllium	0.18	J	0.25	0.083	mg/Kg		08/24/18 16:34	08/25/18 15:31	4
Cadmium	0.39		0.32	0.032	mg/Kg		08/24/18 16:34	08/25/18 15:31	4
Chromium	27		1.3	0.14	mg/Kg		08/24/18 16:34	08/25/18 15:31	4
Cobalt	7.1		0.51	0.051	mg/Kg		08/24/18 16:34	08/25/18 15:31	4
Copper	64		3.8	1.8	mg/Kg		08/24/18 16:34	08/25/18 15:31	4
Lead	290		1.3	0.27	mg/Kg		08/24/18 16:34	08/25/18 15:31	4
Molybdenum	1.2	J	1.3	0.16	mg/Kg		08/24/18 16:34	08/25/18 15:31	4
Nickel	24		1.3	0.13	mg/Kg		08/24/18 16:34	08/25/18 15:31	4
Selenium	0.59	J	2.5	0.38	mg/Kg		08/24/18 16:34	08/25/18 15:31	4
Silver	ND		0.64	0.13	mg/Kg		08/24/18 16:34	08/25/18 15:31	4
Thallium	ND		1.3	0.37	mg/Kg		08/24/18 16:34	08/25/18 15:31	4
Vanadium	30		1.3	0.17	mg/Kg		08/24/18 16:34	08/25/18 15:31	4
Zinc	280		3.8	1.6	mg/Kg		08/24/18 16:34	08/25/18 15:31	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.077		0.015	0.0022	mg/Kg		08/27/18 20:30	08/28/18 23:13	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-J3S-0.5-1
Date Collected: 08/22/18 09:55
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-3
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.7		1.3	0.21	mg/Kg		08/24/18 16:34	08/25/18 15:36	4
Arsenic	58		2.5	0.21	mg/Kg		08/24/18 16:34	08/25/18 15:36	4
Barium	150		1.3	0.18	mg/Kg		08/24/18 16:34	08/25/18 15:36	4
Beryllium	0.26		0.25	0.081	mg/Kg		08/24/18 16:34	08/25/18 15:36	4
Cadmium	0.68		0.31	0.031	mg/Kg		08/24/18 16:34	08/25/18 15:36	4
Chromium	16		1.3	0.13	mg/Kg		08/24/18 16:34	08/25/18 15:36	4
Cobalt	10		0.50	0.050	mg/Kg		08/24/18 16:34	08/25/18 15:36	4
Copper	110		3.8	1.8	mg/Kg		08/24/18 16:34	08/25/18 15:36	4
Lead	380		1.3	0.26	mg/Kg		08/24/18 16:34	08/25/18 15:36	4
Molybdenum	0.91	J	1.3	0.16	mg/Kg		08/24/18 16:34	08/25/18 15:36	4
Nickel	15		1.3	0.13	mg/Kg		08/24/18 16:34	08/25/18 15:36	4
Selenium	0.48	J	2.5	0.38	mg/Kg		08/24/18 16:34	08/25/18 15:36	4
Silver	0.21	J B	0.63	0.13	mg/Kg		08/24/18 16:34	08/25/18 15:36	4
Thallium	ND		1.3	0.36	mg/Kg		08/24/18 16:34	08/25/18 15:36	4
Vanadium	67		1.3	0.17	mg/Kg		08/24/18 16:34	08/25/18 15:36	4
Zinc	200		3.8	1.6	mg/Kg		08/24/18 16:34	08/25/18 15:36	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10		0.014	0.0021	mg/Kg		08/27/18 20:30	08/28/18 23:20	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-J3S-3.5-4
Date Collected: 08/22/18 09:55
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-4
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.6		1.6	0.26	mg/Kg		08/24/18 16:34	08/25/18 15:41	4
Arsenic	46		3.2	0.27	mg/Kg		08/24/18 16:34	08/25/18 15:41	4
Barium	61		1.6	0.23	mg/Kg		08/24/18 16:34	08/25/18 15:41	4
Beryllium	0.17	J	0.32	0.10	mg/Kg		08/24/18 16:34	08/25/18 15:41	4
Cadmium	0.27	J	0.40	0.039	mg/Kg		08/24/18 16:34	08/25/18 15:41	4
Chromium	27		1.6	0.17	mg/Kg		08/24/18 16:34	08/25/18 15:41	4
Cobalt	4.8		0.63	0.063	mg/Kg		08/24/18 16:34	08/25/18 15:41	4
Copper	49		4.8	2.3	mg/Kg		08/24/18 16:34	08/25/18 15:41	4
Lead	790		1.6	0.33	mg/Kg		08/24/18 16:34	08/25/18 15:41	4
Molybdenum	0.21	J	1.6	0.20	mg/Kg		08/24/18 16:34	08/25/18 15:41	4
Nickel	24		1.6	0.16	mg/Kg		08/24/18 16:34	08/25/18 15:41	4
Selenium	ND		3.2	0.48	mg/Kg		08/24/18 16:34	08/25/18 15:41	4
Silver	0.23	J B	0.79	0.16	mg/Kg		08/24/18 16:34	08/25/18 15:41	4
Thallium	ND		1.6	0.46	mg/Kg		08/24/18 16:34	08/25/18 15:41	4
Vanadium	19		1.6	0.22	mg/Kg		08/24/18 16:34	08/25/18 15:41	4
Zinc	84		4.8	2.0	mg/Kg		08/24/18 16:34	08/25/18 15:41	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031		0.015	0.0023	mg/Kg		08/27/18 20:30	08/28/18 23:22	1

Client Sample ID: DG-K3S-0.5-1
Date Collected: 08/22/18 10:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-5
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.0	0.96	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Acetone	ND		40	30	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Benzene	ND		4.0	0.52	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Dichlorobromomethane	ND		4.0	0.57	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Bromobenzene	ND		4.0	0.63	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Chlorobromomethane	ND		16	0.57	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Bromoform	ND		4.0	1.6	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Bromomethane	ND		8.0	0.63	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
2-Butanone (MEK)	**28**	**J**	40	17	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
n-Butylbenzene	ND		4.0	0.80	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
sec-Butylbenzene	ND		4.0	0.57	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
tert-Butylbenzene	ND		4.0	0.58	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Carbon disulfide	ND	*	4.0	1.6	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Carbon tetrachloride	ND		4.0	0.49	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Chlorobenzene	ND		4.0	0.55	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Chloroethane	ND		8.0	0.45	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Chloroform	ND		4.0	0.53	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Chloromethane	ND		8.0	0.63	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
2-Chlorotoluene	ND		4.0	0.52	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
4-Chlorotoluene	ND		4.0	0.54	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Chlorodibromomethane	ND		4.0	0.57	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
1,2-Dichlorobenzene	ND		4.0	0.54	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
1,3-Dichlorobenzene	ND		4.0	0.57	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
1,4-Dichlorobenzene	ND		4.0	0.57	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
1,3-Dichloropropane	ND		4.0	0.58	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
1,1-Dichloropropene	ND		4.0	0.55	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
1,2-Dibromo-3-Chloropropane	ND		8.0	1.4	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Ethylene Dibromide	ND		4.0	1.1	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Dibromomethane	ND		8.0	0.69	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Dichlorodifluoromethane	ND		8.0	0.63	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
1,1-Dichloroethane	ND		4.0	0.54	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
1,2-Dichloroethane	ND		4.0	0.61	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
1,1-Dichloroethene	ND	*	4.0	0.49	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
cis-1,2-Dichloroethene	ND		4.0	0.54	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
trans-1,2-Dichloroethene	ND		4.0	0.60	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
1,2-Dichloropropane	ND		4.0	0.50	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
cis-1,3-Dichloropropene	ND		4.0	0.55	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
trans-1,3-Dichloropropene	ND		4.0	0.53	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Ethylbenzene	ND		4.0	0.60	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Hexachlorobutadiene	ND		4.0	0.72	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
2-Hexanone	ND		40	8.0	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Isopropylbenzene	ND		4.0	0.54	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
4-Isopropyltoluene	ND		4.0	2.0	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Methylene Chloride	ND		8.0	4.5	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
4-Methyl-2-pentanone (MIBK)	ND		40	8.0	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Naphthalene	ND		8.0	1.2	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
N-Propylbenzene	ND		4.0	0.53	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Styrene	ND		4.0	0.50	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
1,1,1,2-Tetrachloroethane	ND		4.0	0.61	ug/Kg		08/23/18 02:50	08/29/18 11:40	1

Client Sample ID: DG-K3S-0.5-1
Date Collected: 08/22/18 10:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-5
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.0	0.60	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Tetrachloroethene	ND		4.0	0.53	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Toluene	ND		4.0	0.57	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
1,2,3-Trichlorobenzene	ND		4.0	0.59	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
1,2,4-Trichlorobenzene	ND		4.0	0.57	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
1,1,1-Trichloroethane	ND		4.0	0.49	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
1,1,2-Trichloroethane	ND		4.0	0.56	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Trichloroethene	ND		4.0	0.50	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Trichlorofluoromethane	ND		4.0	0.45	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
1,2,3-Trichloropropane	ND		4.0	0.61	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.0	1.7	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
1,2,4-Trimethylbenzene	ND		4.0	1.3	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
1,3,5-Trimethylbenzene	ND		4.0	0.52	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Vinyl acetate	ND		16	4.0	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Vinyl chloride	ND		4.0	0.58	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Xylenes, Total	ND		4.0	0.97	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
2,2-Dichloropropane	ND		4.0	1.6	ug/Kg		08/23/18 02:50	08/29/18 11:40	1
Gasoline Range Organics (GRO) -C4-C12	ND		200	80	ug/Kg		08/23/18 02:50	08/29/18 11:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*45 - 131*	*08/23/18 02:50*	*08/29/18 11:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*		*60 - 140*	*08/23/18 02:50*	*08/29/18 11:40*	*1*
Toluene-d8 (Surr)	*92*		*58 - 140*	*08/23/18 02:50*	*08/29/18 11:40*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**14**		9.7	4.9	ug/Kg		08/23/18 09:43	08/27/18 21:58	1
Acenaphthene	**5.1**		4.9	2.7	ug/Kg		08/23/18 09:43	08/27/18 21:58	1
Acenaphthylene	**8.0**		4.9	2.3	ug/Kg		08/23/18 09:43	08/27/18 21:58	1
Anthracene	**15**		4.9	1.9	ug/Kg		08/23/18 09:43	08/27/18 21:58	1
Benzo[a]anthracene	**43**		4.9	1.5	ug/Kg		08/23/18 09:43	08/27/18 21:58	1
Benzo[a]pyrene	**60**		4.9	1.8	ug/Kg		08/23/18 09:43	08/27/18 21:58	1
Benzo[b]fluoranthene	**96**		4.9	2.0	ug/Kg		08/23/18 09:43	08/27/18 21:58	1
Benzo[g,h,i]perylene	**30**		4.9	4.2	ug/Kg		08/23/18 09:43	08/27/18 21:58	1
Benzo[k]fluoranthene	**36**		4.9	2.0	ug/Kg		08/23/18 09:43	08/27/18 21:58	1
Chrysene	**68**		4.9	1.4	ug/Kg		08/23/18 09:43	08/27/18 21:58	1
Dibenz(a,h)anthracene	**9.5**		4.9	3.4	ug/Kg		08/23/18 09:43	08/27/18 21:58	1
Fluoranthene	**100**		4.9	1.4	ug/Kg		08/23/18 09:43	08/27/18 21:58	1
Fluorene	**4.9**		4.9	2.1	ug/Kg		08/23/18 09:43	08/27/18 21:58	1
Indeno[1,2,3-cd]pyrene	**25**		4.9	4.1	ug/Kg		08/23/18 09:43	08/27/18 21:58	1
Naphthalene	**16**	**B**	4.9	3.4	ug/Kg		08/23/18 09:43	08/27/18 21:58	1
Phenanthrene	**110**		4.9	1.7	ug/Kg		08/23/18 09:43	08/27/18 21:58	1
Pyrene	**110**		4.9	1.7	ug/Kg		08/23/18 09:43	08/27/18 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*33 - 120*	*08/23/18 09:43*	*08/27/18 21:58*	*1*
Terphenyl-d14	*91*		*35 - 146*	*08/23/18 09:43*	*08/27/18 21:58*	*1*

Client Sample ID: DG-K3S-0.5-1
Date Collected: 08/22/18 10:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-5
Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	49000		1900	730	ug/Kg		08/23/18 08:42	08/23/18 23:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*119*		*40 - 130*	*08/23/18 08:42*	*08/23/18 23:50*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
Aldrin	ND		1.9	0.48	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
Endrin	ND		1.9	0.44	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
Toxaphene	ND		38	6.5	ug/Kg		08/23/18 11:26	08/29/18 23:39	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/23/18 11:26	08/29/18 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*105*		*21 - 136*	*08/23/18 11:26*	*08/29/18 23:39*	*1*
Tetrachloro-m-xylene	*96*		*21 - 145*	*08/23/18 11:26*	*08/29/18 23:39*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	22	ug/Kg		08/29/18 08:11	08/30/18 14:20	1
Aroclor-1221	ND		49	24	ug/Kg		08/29/18 08:11	08/30/18 14:20	1
Aroclor-1232	ND		49	23	ug/Kg		08/29/18 08:11	08/30/18 14:20	1
Aroclor-1242	ND		49	19	ug/Kg		08/29/18 08:11	08/30/18 14:20	1
Aroclor-1248	ND		49	24	ug/Kg		08/29/18 08:11	08/30/18 14:20	1
Aroclor-1254	ND		49	23	ug/Kg		08/29/18 08:11	08/30/18 14:20	1
Aroclor-1260	ND		49	22	ug/Kg		08/29/18 08:11	08/30/18 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*89*		*14 - 128*	*08/29/18 08:11*	*08/30/18 14:20*	*1*
DCB Decachlorobiphenyl	*88*		*10 - 132*	*08/29/18 08:11*	*08/30/18 14:20*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.5		1.7	0.28	mg/Kg		08/24/18 16:34	08/25/18 15:46	4

Client Sample ID: DG-K3S-0.5-1
Date Collected: 08/22/18 10:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-5
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	28		3.4	0.29	mg/Kg		08/24/18 16:34	08/25/18 15:46	4
Barium	46		1.7	0.24	mg/Kg		08/24/18 16:34	08/25/18 15:46	4
Beryllium	0.11	J	0.34	0.11	mg/Kg		08/24/18 16:34	08/25/18 15:46	4
Cadmium	0.40	J	0.42	0.042	mg/Kg		08/24/18 16:34	08/25/18 15:46	4
Chromium	13		1.7	0.18	mg/Kg		08/24/18 16:34	08/25/18 15:46	4
Cobalt	13		0.67	0.067	mg/Kg		08/24/18 16:34	08/25/18 15:46	4
Copper	88		5.0	2.4	mg/Kg		08/24/18 16:34	08/25/18 15:46	4
Lead	110		1.7	0.35	mg/Kg		08/24/18 16:34	08/25/18 15:46	4
Molybdenum	0.59	J	1.7	0.22	mg/Kg		08/24/18 16:34	08/25/18 15:46	4
Nickel	12		1.7	0.17	mg/Kg		08/24/18 16:34	08/25/18 15:46	4
Selenium	ND		3.4	0.50	mg/Kg		08/24/18 16:34	08/25/18 15:46	4
Silver	ND		0.84	0.17	mg/Kg		08/24/18 16:34	08/25/18 15:46	4
Thallium	ND		1.7	0.49	mg/Kg		08/24/18 16:34	08/25/18 15:46	4
Vanadium	74		1.7	0.23	mg/Kg		08/24/18 16:34	08/25/18 15:46	4
Zinc	130		5.0	2.1	mg/Kg		08/24/18 16:34	08/25/18 15:46	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.059		0.016	0.0023	mg/Kg		08/27/18 20:30	08/28/18 23:25	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-K3S-3.5-4
Date Collected: 08/22/18 10:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-6
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	*	3.8	0.91	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Acetone	42	*	38	29	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Benzene	ND	*	3.8	0.49	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Dichlorobromomethane	ND	*	3.8	0.55	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Bromobenzene	ND	*	3.8	0.60	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Chlorobromomethane	ND	*	15	0.55	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Bromoform	ND	*	3.8	1.5	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Bromomethane	ND	*	7.6	0.60	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
2-Butanone (MEK)	ND	*	38	16	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
n-Butylbenzene	ND	*	3.8	0.76	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
sec-Butylbenzene	ND	*	3.8	0.55	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
tert-Butylbenzene	ND	*	3.8	0.55	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Carbon disulfide	ND	*	3.8	1.5	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Carbon tetrachloride	ND	*	3.8	0.47	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Chlorobenzene	ND	*	3.8	0.52	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Chloroethane	ND	*	7.6	0.43	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Chloroform	ND	*	3.8	0.50	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Chloromethane	ND	*	7.6	0.60	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
2-Chlorotoluene	ND	*	3.8	0.49	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
4-Chlorotoluene	ND	*	3.8	0.52	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Chlorodibromomethane	ND	*	3.8	0.54	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
1,2-Dichlorobenzene	ND	*	3.8	0.52	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
1,3-Dichlorobenzene	ND	*	3.8	0.55	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
1,4-Dichlorobenzene	ND	*	3.8	0.54	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
1,3-Dichloropropane	ND	*	3.8	0.55	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
1,1-Dichloropropene	ND	*	3.8	0.52	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
1,2-Dibromo-3-Chloropropane	ND	*	7.6	1.3	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Ethylene Dibromide	ND	*	3.8	1.1	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Dibromomethane	ND	*	7.6	0.65	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Dichlorodifluoromethane	ND	*	7.6	0.60	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
1,1-Dichloroethane	ND	*	3.8	0.52	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
1,2-Dichloroethane	ND	*	3.8	0.58	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
1,1-Dichloroethene	ND	*	3.8	0.47	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
cis-1,2-Dichloroethene	ND	*	3.8	0.52	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
trans-1,2-Dichloroethene	ND	*	3.8	0.57	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
1,2-Dichloropropane	ND	*	3.8	0.48	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
cis-1,3-Dichloropropene	ND	*	3.8	0.52	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
trans-1,3-Dichloropropene	ND	*	3.8	0.51	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Ethylbenzene	ND	*	3.8	0.57	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Hexachlorobutadiene	ND	*	3.8	0.68	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
2-Hexanone	ND	*	38	7.6	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Isopropylbenzene	ND	*	3.8	0.52	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
4-Isopropyltoluene	ND	*	3.8	1.9	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Methylene Chloride	ND	*	7.6	4.3	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
4-Methyl-2-pentanone (MIBK)	ND	*	38	7.6	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Naphthalene	ND	*	7.6	1.1	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
N-Propylbenzene	ND	*	3.8	0.50	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Styrene	ND	*	3.8	0.48	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
1,1,1,2-Tetrachloroethane	ND	*	3.8	0.58	ug/Kg		08/23/18 02:50	08/29/18 12:23	1

Client Sample ID: DG-K3S-3.5-4
Date Collected: 08/22/18 10:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-6
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	3.8	0.57	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Tetrachloroethene	ND	*	3.8	0.51	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Toluene	ND	*	3.8	0.54	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
1,2,3-Trichlorobenzene	ND	*	3.8	0.56	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
1,2,4-Trichlorobenzene	ND	*	3.8	0.54	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
1,1,1-Trichloroethane	ND	*	3.8	0.46	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
1,1,2-Trichloroethane	ND	*	3.8	0.53	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Trichloroethene	ND	*	3.8	0.48	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Trichlorofluoromethane	ND	*	3.8	0.43	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
1,2,3-Trichloropropane	ND	*	3.8	0.58	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.8	1.6	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
1,2,4-Trimethylbenzene	ND	*	3.8	1.2	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
1,3,5-Trimethylbenzene	ND	*	3.8	0.49	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Vinyl acetate	ND	*	15	3.8	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Vinyl chloride	ND	*	3.8	0.55	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Xylenes, Total	ND		3.8	0.93	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
2,2-Dichloropropane	ND	*	3.8	1.5	ug/Kg		08/23/18 02:50	08/29/18 12:23	1
Gasoline Range Organics (GRO) -C4-C12	ND	*	190	76	ug/Kg		08/23/18 02:50	08/29/18 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*	*	*45 - 131*	*08/23/18 02:50*	*08/29/18 12:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*	*	*60 - 140*	*08/23/18 02:50*	*08/29/18 12:23*	*1*
Toluene-d8 (Surr)	*94*	*	*58 - 140*	*08/23/18 02:50*	*08/29/18 12:23*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**4.9**	**J**	9.6	4.8	ug/Kg		08/23/18 09:43	08/24/18 23:27	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/23/18 09:43	08/24/18 23:27	1
Acenaphthylene	**4.3**	**J**	4.8	2.3	ug/Kg		08/23/18 09:43	08/24/18 23:27	1
Anthracene	**5.9**		4.8	1.9	ug/Kg		08/23/18 09:43	08/24/18 23:27	1
Benzo[a]anthracene	**21**		4.8	1.4	ug/Kg		08/23/18 09:43	08/24/18 23:27	1
Benzo[a]pyrene	**16**		4.8	1.8	ug/Kg		08/23/18 09:43	08/24/18 23:27	1
Benzo[b]fluoranthene	**21**		4.8	2.0	ug/Kg		08/23/18 09:43	08/24/18 23:27	1
Benzo[g,h,i]perylene	**11**		4.8	4.1	ug/Kg		08/23/18 09:43	08/24/18 23:27	1
Benzo[k]fluoranthene	**9.7**		4.8	2.0	ug/Kg		08/23/18 09:43	08/24/18 23:27	1
Chrysene	**19**		4.8	1.3	ug/Kg		08/23/18 09:43	08/24/18 23:27	1
Dibenz(a,h)anthracene	**4.5**	**J**	4.8	3.4	ug/Kg		08/23/18 09:43	08/24/18 23:27	1
Fluoranthene	**28**		4.8	1.3	ug/Kg		08/23/18 09:43	08/24/18 23:27	1
Fluorene	**2.2**	**J**	4.8	2.1	ug/Kg		08/23/18 09:43	08/24/18 23:27	1
Indeno[1,2,3-cd]pyrene	**8.2**		4.8	4.0	ug/Kg		08/23/18 09:43	08/24/18 23:27	1
Naphthalene	**53**	**B**	4.8	3.4	ug/Kg		08/23/18 09:43	08/24/18 23:27	1
Phenanthrene	**17**		4.8	1.7	ug/Kg		08/23/18 09:43	08/24/18 23:27	1
Pyrene	**31**		4.8	1.6	ug/Kg		08/23/18 09:43	08/24/18 23:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*33 - 120*	*08/23/18 09:43*	*08/24/18 23:27*	*1*
Terphenyl-d14	*92*		*35 - 146*	*08/23/18 09:43*	*08/24/18 23:27*	*1*

Client Sample ID: DG-K3S-3.5-4

Date Collected: 08/22/18 10:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-6

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3700		1900	730	ug/Kg		08/23/18 08:42	08/23/18 23:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*101*		*40 - 130*	*08/23/18 08:42*	*08/23/18 23:26*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
Aldrin	ND		1.9	0.48	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
delta-BHC	ND		1.9	0.43	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
Endrin	ND		1.9	0.45	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
Heptachlor	ND		1.9	0.45	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
Toxaphene	ND		39	6.6	ug/Kg		08/23/18 11:26	08/29/18 23:55	1
trans-Chlordane	ND		1.9	0.45	ug/Kg		08/23/18 11:26	08/29/18 23:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*114*		*21 - 136*	*08/23/18 11:26*	*08/29/18 23:55*	*1*
Tetrachloro-m-xylene	*112*		*21 - 145*	*08/23/18 11:26*	*08/29/18 23:55*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/26/18 10:47	08/28/18 12:47	1
Aroclor-1221	ND		51	24	ug/Kg		08/26/18 10:47	08/28/18 12:47	1
Aroclor-1232	ND		51	23	ug/Kg		08/26/18 10:47	08/28/18 12:47	1
Aroclor-1242	ND		51	19	ug/Kg		08/26/18 10:47	08/28/18 12:47	1
Aroclor-1248	ND		51	24	ug/Kg		08/26/18 10:47	08/28/18 12:47	1
Aroclor-1254	ND		51	23	ug/Kg		08/26/18 10:47	08/28/18 12:47	1
Aroclor-1260	ND		51	22	ug/Kg		08/26/18 10:47	08/28/18 12:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*50*		*14 - 128*	*08/26/18 10:47*	*08/28/18 12:47*	*1*
DCB Decachlorobiphenyl	*40*		*10 - 132*	*08/26/18 10:47*	*08/28/18 12:47*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	54		1.6	0.27	mg/Kg		08/24/18 16:33	08/27/18 15:17	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-K3S-3.5-4
Date Collected: 08/22/18 10:15
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-6
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	90		3.3	0.28	mg/Kg		08/24/18 16:33	08/27/18 15:17	4
Barium	140		1.6	0.23	mg/Kg		08/24/18 16:33	08/27/18 15:17	4
Beryllium	0.20	J	0.33	0.11	mg/Kg		08/24/18 16:33	08/27/18 15:17	4
Cadmium	0.43		0.41	0.041	mg/Kg		08/24/18 16:33	08/27/18 15:17	4
Chromium	33		1.6	0.17	mg/Kg		08/24/18 16:33	08/27/18 15:17	4
Cobalt	4.9		0.66	0.066	mg/Kg		08/24/18 16:33	08/27/18 15:17	4
Copper	64		4.9	2.3	mg/Kg		08/24/18 16:33	08/27/18 15:17	4
Lead	12000		8.2	1.7	mg/Kg		08/24/18 16:33	08/28/18 14:51	20
Molybdenum	0.24	J	1.6	0.21	mg/Kg		08/24/18 16:33	08/27/18 15:17	4
Nickel	26		1.6	0.17	mg/Kg		08/24/18 16:33	08/27/18 15:17	4
Selenium	ND		3.3	0.49	mg/Kg		08/24/18 16:33	08/27/18 15:17	4
Silver	0.72	J	0.82	0.17	mg/Kg		08/24/18 16:33	08/27/18 15:17	4
Thallium	0.61	J	1.6	0.48	mg/Kg		08/24/18 16:33	08/27/18 15:17	4
Vanadium	25		1.6	0.22	mg/Kg		08/24/18 16:33	08/27/18 15:17	4
Zinc	140		25	10	mg/Kg		08/24/18 16:33	08/28/18 14:51	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.030		0.014	0.0021	mg/Kg		08/27/18 20:30	08/28/18 23:27	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-L3S-0.5-1
Date Collected: 08/22/18 10:25
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-7
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	F1	1.6	0.27	mg/Kg		08/24/18 16:33	08/27/18 15:08	4
Arsenic	12		3.3	0.28	mg/Kg		08/24/18 16:33	08/27/18 15:08	4
Barium	75	F1	1.6	0.23	mg/Kg		08/24/18 16:33	08/27/18 15:08	4
Beryllium	0.14	J F1	0.33	0.11	mg/Kg		08/24/18 16:33	08/27/18 15:08	4
Cadmium	1.0		0.41	0.041	mg/Kg		08/24/18 16:33	08/27/18 15:08	4
Chromium	26	F1	1.6	0.17	mg/Kg		08/24/18 16:33	08/27/18 15:08	4
Cobalt	11		0.66	0.066	mg/Kg		08/24/18 16:33	08/27/18 15:08	4
Copper	140	F1	4.9	2.3	mg/Kg		08/24/18 16:33	08/27/18 15:08	4
Lead	170	F1	1.6	0.34	mg/Kg		08/24/18 16:33	08/27/18 15:08	4
Molybdenum	1.4	J	1.6	0.21	mg/Kg		08/24/18 16:33	08/27/18 15:08	4
Nickel	20	F1	1.6	0.17	mg/Kg		08/24/18 16:33	08/27/18 15:08	4
Selenium	ND		3.3	0.49	mg/Kg		08/24/18 16:33	08/27/18 15:08	4
Silver	ND	F1	0.82	0.17	mg/Kg		08/24/18 16:33	08/27/18 15:08	4
Thallium	0.95	J	1.6	0.48	mg/Kg		08/24/18 16:33	08/27/18 15:08	4
Vanadium	76	F1	1.6	0.22	mg/Kg		08/24/18 16:33	08/27/18 15:08	4
Zinc	290		4.9	2.1	mg/Kg		08/24/18 16:33	08/27/18 15:08	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.096		0.015	0.0021	mg/Kg		08/27/18 20:30	08/28/18 23:29	1

Client Sample ID: DG-L3S-3.5-4

Date Collected: 08/22/18 10:25
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-8

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	17		1.7	0.28	mg/Kg		08/24/18 16:33	08/27/18 15:22	4
Arsenic	150		3.4	0.29	mg/Kg		08/24/18 16:33	08/27/18 15:22	4
Barium	720		1.7	0.24	mg/Kg		08/24/18 16:33	08/27/18 15:22	4
Beryllium	0.76		0.34	0.11	mg/Kg		08/24/18 16:33	08/27/18 15:22	4
Cadmium	1.9		0.42	0.042	mg/Kg		08/24/18 16:33	08/27/18 15:22	4
Chromium	23		1.7	0.18	mg/Kg		08/24/18 16:33	08/27/18 15:22	4
Cobalt	9.9		0.67	0.067	mg/Kg		08/24/18 16:33	08/27/18 15:22	4
Copper	450		5.0	2.4	mg/Kg		08/24/18 16:33	08/27/18 15:22	4
Lead	1800		1.7	0.35	mg/Kg		08/24/18 16:33	08/27/18 15:22	4
Molybdenum	1.1	J	1.7	0.22	mg/Kg		08/24/18 16:33	08/27/18 15:22	4
Nickel	21		1.7	0.17	mg/Kg		08/24/18 16:33	08/27/18 15:22	4
Selenium	ND		3.4	0.50	mg/Kg		08/24/18 16:33	08/27/18 15:22	4
Silver	3.1		0.84	0.17	mg/Kg		08/24/18 16:33	08/27/18 15:22	4
Thallium	1.2	J	1.7	0.49	mg/Kg		08/24/18 16:33	08/27/18 15:22	4
Vanadium	68		1.7	0.23	mg/Kg		08/24/18 16:33	08/27/18 15:22	4
Zinc	1300		5.0	2.1	mg/Kg		08/24/18 16:33	08/27/18 15:22	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.2		0.015	0.0022	mg/Kg		08/27/18 20:30	08/28/18 23:32	1

Client Sample ID: DG-M3S-0.5-1

Date Collected: 08/22/18 10:40
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-9

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.3	1.0	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Acetone	**68**		43	33	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Benzene	ND		4.3	0.56	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Dichlorobromomethane	ND		4.3	0.62	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Bromobenzene	ND		4.3	0.68	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Chlorobromomethane	ND		17	0.62	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Bromoform	ND		4.3	1.7	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Bromomethane	ND		8.6	0.68	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
2-Butanone (MEK)	ND		43	18	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
n-Butylbenzene	ND		4.3	0.86	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
sec-Butylbenzene	ND		4.3	0.62	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
tert-Butylbenzene	ND		4.3	0.63	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Carbon disulfide	ND		4.3	1.7	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Carbon tetrachloride	ND		4.3	0.53	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Chlorobenzene	ND		4.3	0.59	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Chloroethane	ND		8.6	0.48	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Chloroform	ND		4.3	0.57	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Chloromethane	ND		8.6	0.68	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
2-Chlorotoluene	ND		4.3	0.56	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
4-Chlorotoluene	ND		4.3	0.59	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Chlorodibromomethane	ND		4.3	0.61	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
1,2-Dichlorobenzene	ND		4.3	0.59	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
1,3-Dichlorobenzene	ND		4.3	0.62	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
1,4-Dichlorobenzene	ND		4.3	0.61	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
1,3-Dichloropropane	ND		4.3	0.63	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
1,1-Dichloropropene	ND		4.3	0.59	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
1,2-Dibromo-3-Chloropropane	ND		8.6	1.5	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Ethylene Dibromide	ND		4.3	1.2	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Dibromomethane	ND		8.6	0.74	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Dichlorodifluoromethane	ND		8.6	0.68	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
1,1-Dichloroethane	ND		4.3	0.59	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
1,2-Dichloroethane	ND		4.3	0.65	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
1,1-Dichloroethene	ND	*	4.3	0.53	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
cis-1,2-Dichloroethene	ND		4.3	0.59	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
trans-1,2-Dichloroethene	ND		4.3	0.65	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
1,2-Dichloropropane	ND		4.3	0.54	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
cis-1,3-Dichloropropene	ND		4.3	0.59	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
trans-1,3-Dichloropropene	ND		4.3	0.58	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Ethylbenzene	ND		4.3	0.65	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Hexachlorobutadiene	ND		4.3	0.77	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
2-Hexanone	ND		43	8.6	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Isopropylbenzene	ND		4.3	0.59	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
4-Isopropyltoluene	ND		4.3	2.2	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Methylene Chloride	ND		8.6	4.8	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
4-Methyl-2-pentanone (MIBK)	ND		43	8.6	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Naphthalene	ND		8.6	1.3	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
N-Propylbenzene	ND		4.3	0.57	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Styrene	ND		4.3	0.54	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
1,1,1,2-Tetrachloroethane	ND		4.3	0.65	ug/Kg		08/23/18 02:50	08/28/18 22:11	1

Client Sample ID: DG-M3S-0.5-1
Date Collected: 08/22/18 10:40
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-9
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.3	0.65	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Tetrachloroethene	ND		4.3	0.58	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Toluene	ND		4.3	0.61	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
1,2,3-Trichlorobenzene	ND		4.3	0.64	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
1,2,4-Trichlorobenzene	ND		4.3	0.61	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
1,1,1-Trichloroethane	ND		4.3	0.53	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
1,1,2-Trichloroethane	ND		4.3	0.60	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Trichloroethene	ND		4.3	0.54	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Trichlorofluoromethane	ND		4.3	0.48	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
1,2,3-Trichloropropane	ND		4.3	0.66	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.3	1.8	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
1,2,4-Trimethylbenzene	ND		4.3	1.4	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
1,3,5-Trimethylbenzene	ND		4.3	0.56	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Vinyl acetate	ND		17	4.3	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Vinyl chloride	ND		4.3	0.63	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Xylenes, Total	ND		4.3	1.1	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
2,2-Dichloropropane	ND		4.3	1.7	ug/Kg		08/23/18 02:50	08/28/18 22:11	1
Gasoline Range Organics (GRO) -C4-C12	ND		220	86	ug/Kg		08/23/18 02:50	08/28/18 22:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*45 - 131*	*08/23/18 02:50*	*08/28/18 22:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*60 - 140*	*08/23/18 02:50*	*08/28/18 22:11*	*1*
Toluene-d8 (Surr)	*88*		*58 - 140*	*08/23/18 02:50*	*08/28/18 22:11*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**11**		9.5	4.7	ug/Kg		08/23/18 09:43	08/24/18 23:50	1
Acenaphthene	ND		4.7	2.6	ug/Kg		08/23/18 09:43	08/24/18 23:50	1
Acenaphthylene	**2.4**	**J**	4.7	2.3	ug/Kg		08/23/18 09:43	08/24/18 23:50	1
Anthracene	**4.0**	**J**	4.7	1.9	ug/Kg		08/23/18 09:43	08/24/18 23:50	1
Benzo[a]anthracene	**3.6**	**J**	4.7	1.4	ug/Kg		08/23/18 09:43	08/24/18 23:50	1
Benzo[a]pyrene	**3.5**	**J**	4.7	1.8	ug/Kg		08/23/18 09:43	08/24/18 23:50	1
Benzo[b]fluoranthene	**5.5**		4.7	2.0	ug/Kg		08/23/18 09:43	08/24/18 23:50	1
Benzo[g,h,i]perylene	**5.0**		4.7	4.1	ug/Kg		08/23/18 09:43	08/24/18 23:50	1
Benzo[k]fluoranthene	**2.8**	**J**	4.7	2.0	ug/Kg		08/23/18 09:43	08/24/18 23:50	1
Chrysene	**3.1**	**J**	4.7	1.3	ug/Kg		08/23/18 09:43	08/24/18 23:50	1
Dibenz(a,h)anthracene	ND		4.7	3.3	ug/Kg		08/23/18 09:43	08/24/18 23:50	1
Fluoranthene	**3.8**	**J**	4.7	1.3	ug/Kg		08/23/18 09:43	08/24/18 23:50	1
Fluorene	ND		4.7	2.1	ug/Kg		08/23/18 09:43	08/24/18 23:50	1
Indeno[1,2,3-cd]pyrene	ND		4.7	4.0	ug/Kg		08/23/18 09:43	08/24/18 23:50	1
Naphthalene	**10**	**B**	4.7	3.3	ug/Kg		08/23/18 09:43	08/24/18 23:50	1
Phenanthrene	**5.6**		4.7	1.7	ug/Kg		08/23/18 09:43	08/24/18 23:50	1
Pyrene	**4.3**	**J**	4.7	1.6	ug/Kg		08/23/18 09:43	08/24/18 23:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*33 - 120*	*08/23/18 09:43*	*08/24/18 23:50*	*1*
Terphenyl-d14	*90*		*35 - 146*	*08/23/18 09:43*	*08/24/18 23:50*	*1*

Client Sample ID: DG-M3S-0.5-1
Date Collected: 08/22/18 10:40
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-9
Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	21000		2000	740	ug/Kg		08/23/18 08:42	08/24/18 02:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*84*		*40 - 130*	*08/23/18 08:42*	*08/24/18 02:31*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
4,4'-DDE	ND		2.0	0.41	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
4,4'-DDT	ND		2.0	0.40	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
Aldrin	ND		2.0	0.49	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
beta-BHC	ND		2.0	0.35	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
cis-Chlordane	ND		2.0	0.39	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
Endosulfan I	ND		2.0	0.31	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
Endosulfan sulfate	ND		2.0	0.37	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
Endrin	ND		2.0	0.45	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
Endrin ketone	ND		2.0	0.32	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
Heptachlor epoxide	ND		2.0	0.34	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
Toxaphene	ND		39	6.7	ug/Kg		08/23/18 14:52	08/30/18 00:12	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		08/23/18 14:52	08/30/18 00:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*92*		*21 - 136*	*08/23/18 14:52*	*08/30/18 00:12*	*1*
Tetrachloro-m-xylene	*87*		*21 - 145*	*08/23/18 14:52*	*08/30/18 00:12*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/26/18 10:47	08/28/18 13:10	1
Aroclor-1221	ND		50	24	ug/Kg		08/26/18 10:47	08/28/18 13:10	1
Aroclor-1232	ND		50	23	ug/Kg		08/26/18 10:47	08/28/18 13:10	1
Aroclor-1242	ND		50	19	ug/Kg		08/26/18 10:47	08/28/18 13:10	1
Aroclor-1248	ND		50	24	ug/Kg		08/26/18 10:47	08/28/18 13:10	1
Aroclor-1254	ND		50	23	ug/Kg		08/26/18 10:47	08/28/18 13:10	1
Aroclor-1260	ND		50	22	ug/Kg		08/26/18 10:47	08/28/18 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*	*p*	*14 - 128*	*08/26/18 10:47*	*08/28/18 13:10*	*1*
DCB Decachlorobiphenyl	*91*	*p*	*10 - 132*	*08/26/18 10:47*	*08/28/18 13:10*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.33	J	1.6	0.27	mg/Kg		08/24/18 16:33	08/27/18 16:57	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-M3S-0.5-1
Date Collected: 08/22/18 10:40
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-9
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	21		3.2	0.27	mg/Kg		08/24/18 16:33	08/27/18 16:57	4
Barium	76		1.6	0.23	mg/Kg		08/24/18 16:33	08/27/18 16:57	4
Beryllium	0.19	J	0.32	0.10	mg/Kg		08/24/18 16:33	08/27/18 16:57	4
Cadmium	ND		0.40	0.040	mg/Kg		08/24/18 16:33	08/27/18 16:57	4
Chromium	15		1.6	0.17	mg/Kg		08/24/18 16:33	08/27/18 16:57	4
Cobalt	12		0.64	0.064	mg/Kg		08/24/18 16:33	08/27/18 16:57	4
Copper	110		4.8	2.3	mg/Kg		08/24/18 16:33	08/27/18 16:57	4
Lead	33		1.6	0.34	mg/Kg		08/24/18 16:33	08/27/18 16:57	4
Molybdenum	ND		1.6	0.20	mg/Kg		08/24/18 16:33	08/27/18 16:57	4
Nickel	7.5		1.6	0.16	mg/Kg		08/24/18 16:33	08/27/18 16:57	4
Selenium	ND		3.2	0.48	mg/Kg		08/24/18 16:33	08/27/18 16:57	4
Silver	ND		0.80	0.16	mg/Kg		08/24/18 16:33	08/27/18 16:57	4
Thallium	1.2	J	1.6	0.46	mg/Kg		08/24/18 16:33	08/27/18 16:57	4
Vanadium	120		1.6	0.22	mg/Kg		08/24/18 16:33	08/27/18 16:57	4
Zinc	71		4.8	2.0	mg/Kg		08/24/18 16:33	08/27/18 16:57	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035		0.014	0.0021	mg/Kg		08/27/18 20:30	08/28/18 23:34	1

Client Sample ID: DG-M3S-3.5-4

Date Collected: 08/22/18 10:40
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-10

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.9	1.4	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Acetone	**63**		59	45	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Benzene	ND		5.9	0.76	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Dichlorobromomethane	ND		5.9	0.84	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Bromobenzene	ND	*	5.9	0.93	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Chlorobromomethane	ND		23	0.84	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Bromoform	ND	*	5.9	2.3	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Bromomethane	ND		12	0.93	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
2-Butanone (MEK)	ND		59	25	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
n-Butylbenzene	ND	*	5.9	1.2	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
sec-Butylbenzene	ND	*	5.9	0.84	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
tert-Butylbenzene	ND	*	5.9	0.86	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Carbon disulfide	ND	*	5.9	2.3	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Carbon tetrachloride	ND		5.9	0.73	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Chlorobenzene	ND	*	5.9	0.81	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Chloroethane	ND		12	0.66	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Chloroform	ND		5.9	0.77	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Chloromethane	ND		12	0.93	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
2-Chlorotoluene	ND	*	5.9	0.76	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
4-Chlorotoluene	ND	*	5.9	0.80	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Chlorodibromomethane	ND		5.9	0.83	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
1,2-Dichlorobenzene	ND	*	5.9	0.80	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
1,3-Dichlorobenzene	ND	*	5.9	0.84	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
1,4-Dichlorobenzene	ND	*	5.9	0.83	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
1,3-Dichloropropane	ND		5.9	0.86	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
1,1-Dichloropropene	ND		5.9	0.81	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
1,2-Dibromo-3-Chloropropane	ND	*	12	2.0	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Ethylene Dibromide	ND		5.9	1.7	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Dibromomethane	ND		12	1.0	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Dichlorodifluoromethane	ND		12	0.93	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
1,1-Dichloroethane	ND		5.9	0.80	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
1,2-Dichloroethane	ND		5.9	0.89	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
1,1-Dichloroethene	ND	*	5.9	0.73	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
cis-1,2-Dichloroethene	ND		5.9	0.80	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
trans-1,2-Dichloroethene	ND		5.9	0.88	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
1,2-Dichloropropane	ND		5.9	0.74	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
cis-1,3-Dichloropropene	ND		5.9	0.81	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
trans-1,3-Dichloropropene	ND		5.9	0.78	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Ethylbenzene	ND	*	5.9	0.88	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Hexachlorobutadiene	ND	*	5.9	1.1	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
2-Hexanone	ND		59	12	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Isopropylbenzene	ND	*	5.9	0.80	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
4-Isopropyltoluene	ND	*	5.9	2.9	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Methylene Chloride	ND		12	6.6	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
4-Methyl-2-pentanone (MIBK)	ND		59	12	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Naphthalene	ND	*	12	1.8	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
N-Propylbenzene	ND	*	5.9	0.77	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Styrene	ND	*	5.9	0.74	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
1,1,1,2-Tetrachloroethane	ND	*	5.9	0.89	ug/Kg		08/23/18 02:50	08/29/18 12:51	1

Client Sample ID: DG-M3S-3.5-4

Date Collected: 08/22/18 10:40
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-10

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	5.9	0.88	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Tetrachloroethene	ND		5.9	0.78	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Toluene	ND	*	5.9	0.83	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
1,2,3-Trichlorobenzene	ND	*	5.9	0.87	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
1,2,4-Trichlorobenzene	ND	*	5.9	0.83	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
1,1,1-Trichloroethane	ND		5.9	0.71	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
1,1,2-Trichloroethane	ND		5.9	0.82	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Trichloroethene	ND		5.9	0.74	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Trichlorofluoromethane	ND		5.9	0.66	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
1,2,3-Trichloropropane	ND	*	5.9	0.90	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	5.9	2.4	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
1,2,4-Trimethylbenzene	ND	*	5.9	1.9	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
1,3,5-Trimethylbenzene	ND	*	5.9	0.76	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Vinyl acetate	ND		23	5.9	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Vinyl chloride	ND		5.9	0.86	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Xylenes, Total	ND		5.9	1.4	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
2,2-Dichloropropane	ND		5.9	2.3	ug/Kg		08/23/18 02:50	08/29/18 12:51	1
Gasoline Range Organics (GRO) -C4-C12	ND		290	120	ug/Kg		08/23/18 02:50	08/29/18 12:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*75*	*	*45 - 131*	*08/23/18 02:50*	*08/29/18 12:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*129*		*60 - 140*	*08/23/18 02:50*	*08/29/18 12:51*	*1*
Toluene-d8 (Surr)	*93*		*58 - 140*	*08/23/18 02:50*	*08/29/18 12:51*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**15**		9.8	4.9	ug/Kg		08/23/18 09:43	08/25/18 00:14	1
Acenaphthene	ND		4.9	2.8	ug/Kg		08/23/18 09:43	08/25/18 00:14	1
Acenaphthylene	**2.7**	**J**	4.9	2.4	ug/Kg		08/23/18 09:43	08/25/18 00:14	1
Anthracene	**3.1**	**J**	4.9	2.0	ug/Kg		08/23/18 09:43	08/25/18 00:14	1
Benzo[a]anthracene	**1.8**	**J**	4.9	1.5	ug/Kg		08/23/18 09:43	08/25/18 00:14	1
Benzo[a]pyrene	**2.6**	**J**	4.9	1.9	ug/Kg		08/23/18 09:43	08/25/18 00:14	1
Benzo[b]fluoranthene	**8.3**		4.9	2.1	ug/Kg		08/23/18 09:43	08/25/18 00:14	1
Benzo[g,h,i]perylene	ND		4.9	4.2	ug/Kg		08/23/18 09:43	08/25/18 00:14	1
Benzo[k]fluoranthene	**2.8**	**J**	4.9	2.1	ug/Kg		08/23/18 09:43	08/25/18 00:14	1
Chrysene	**7.0**		4.9	1.4	ug/Kg		08/23/18 09:43	08/25/18 00:14	1
Dibenz(a,h)anthracene	ND		4.9	3.4	ug/Kg		08/23/18 09:43	08/25/18 00:14	1
Fluoranthene	**8.5**		4.9	1.4	ug/Kg		08/23/18 09:43	08/25/18 00:14	1
Fluorene	ND		4.9	2.2	ug/Kg		08/23/18 09:43	08/25/18 00:14	1
Indeno[1,2,3-cd]pyrene	ND		4.9	4.1	ug/Kg		08/23/18 09:43	08/25/18 00:14	1
Naphthalene	**60**	**B**	4.9	3.4	ug/Kg		08/23/18 09:43	08/25/18 00:14	1
Phenanthrene	**35**		4.9	1.8	ug/Kg		08/23/18 09:43	08/25/18 00:14	1
Pyrene	**5.9**		4.9	1.7	ug/Kg		08/23/18 09:43	08/25/18 00:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*33 - 120*	*08/23/18 09:43*	*08/25/18 00:14*	*1*
Terphenyl-d14	*81*		*35 - 146*	*08/23/18 09:43*	*08/25/18 00:14*	*1*

Client Sample ID: DG-M3S-3.5-4

Date Collected: 08/22/18 10:40
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-10

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	40000		1900	730	ug/Kg		08/23/18 08:42	08/24/18 03:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*70*		*40 - 130*	*08/23/18 08:42*	*08/24/18 03:00*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
Aldrin	ND		1.9	0.48	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
delta-BHC	ND		1.9	0.43	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
Endrin	ND		1.9	0.44	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
Methoxychlor	ND		1.9	0.66	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
Toxaphene	ND		39	6.6	ug/Kg		08/23/18 14:52	08/30/18 00:28	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/23/18 14:52	08/30/18 00:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*89*		*21 - 136*	*08/23/18 14:52*	*08/30/18 00:28*	*1*
Tetrachloro-m-xylene	*89*		*21 - 145*	*08/23/18 14:52*	*08/30/18 00:28*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/26/18 10:47	08/28/18 13:33	1
Aroclor-1221	ND		50	24	ug/Kg		08/26/18 10:47	08/28/18 13:33	1
Aroclor-1232	ND		50	23	ug/Kg		08/26/18 10:47	08/28/18 13:33	1
Aroclor-1242	ND		50	19	ug/Kg		08/26/18 10:47	08/28/18 13:33	1
Aroclor-1248	ND		50	24	ug/Kg		08/26/18 10:47	08/28/18 13:33	1
Aroclor-1254	ND		50	23	ug/Kg		08/26/18 10:47	08/28/18 13:33	1
Aroclor-1260	ND		50	22	ug/Kg		08/26/18 10:47	08/28/18 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*46*		*14 - 128*	*08/26/18 10:47*	*08/28/18 13:33*	*1*
DCB Decachlorobiphenyl	*64*		*10 - 132*	*08/26/18 10:47*	*08/28/18 13:33*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	15		3.1	0.51	mg/Kg		08/24/18 16:33	08/28/18 14:56	10

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-M3S-3.5-4
Date Collected: 08/22/18 10:40
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-10
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	140		6.1	0.52	mg/Kg		08/24/18 16:33	08/28/18 14:56	10
Barium	1200		1.2	0.17	mg/Kg		08/24/18 16:33	08/27/18 15:36	4
Beryllium	0.94		0.25	0.080	mg/Kg		08/24/18 16:33	08/27/18 15:36	4
Cadmium	1.3		0.77	0.076	mg/Kg		08/24/18 16:33	08/28/18 14:56	10
Chromium	46		3.1	0.33	mg/Kg		08/24/18 16:33	08/28/18 14:56	10
Cobalt	7.2		1.2	0.12	mg/Kg		08/24/18 16:33	08/28/18 14:56	10
Copper	590		9.2	4.4	mg/Kg		08/24/18 16:33	08/28/18 14:56	10
Lead	2300		3.1	0.64	mg/Kg		08/24/18 16:33	08/28/18 14:56	10
Molybdenum	1.8		1.2	0.16	mg/Kg		08/24/18 16:33	08/27/18 15:36	4
Nickel	33		3.1	0.31	mg/Kg		08/24/18 16:33	08/28/18 14:56	10
Selenium	1.7	J	6.1	0.92	mg/Kg		08/24/18 16:33	08/28/18 14:56	10
Silver	4.9		1.5	0.31	mg/Kg		08/24/18 16:33	08/28/18 14:56	10
Thallium	1.2	J	3.1	0.89	mg/Kg		08/24/18 16:33	08/28/18 14:56	10
Vanadium	41		3.1	0.42	mg/Kg		08/24/18 16:33	08/28/18 14:56	10
Zinc	1300		9.2	3.9	mg/Kg		08/24/18 16:33	08/28/18 14:56	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.2		0.16	0.024	mg/Kg		08/25/18 13:53	08/29/18 13:34	10

Client Sample ID: DG-M3S-7.5-8

Date Collected: 08/22/18 10:40
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-11

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.4	1.1	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Acetone	**49**		44	34	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Benzene	ND		4.4	0.58	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Dichlorobromomethane	ND		4.4	0.64	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Bromobenzene	ND	*	4.4	0.70	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Chlorobromomethane	ND		18	0.64	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Bromoform	ND		4.4	1.8	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Bromomethane	ND		8.9	0.70	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
2-Butanone (MEK)	ND		44	19	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
n-Butylbenzene	ND	*	4.4	0.89	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
sec-Butylbenzene	ND	*	4.4	0.64	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
tert-Butylbenzene	ND	*	4.4	0.65	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Carbon disulfide	ND		4.4	1.8	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Carbon tetrachloride	ND		4.4	0.55	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Chlorobenzene	ND		4.4	0.61	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Chloroethane	ND		8.9	0.50	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Chloroform	ND		4.4	0.59	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Chloromethane	ND		8.9	0.70	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
2-Chlorotoluene	ND	*	4.4	0.58	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
4-Chlorotoluene	ND	*	4.4	0.61	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Chlorodibromomethane	ND		4.4	0.63	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
1,2-Dichlorobenzene	ND	*	4.4	0.61	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
1,3-Dichlorobenzene	ND	*	4.4	0.64	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
1,4-Dichlorobenzene	ND	*	4.4	0.63	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
1,3-Dichloropropane	ND		4.4	0.65	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
1,1-Dichloropropene	ND		4.4	0.61	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
1,2-Dibromo-3-Chloropropane	ND	*	8.9	1.5	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Ethylene Dibromide	ND		4.4	1.3	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Dibromomethane	ND		8.9	0.77	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Dichlorodifluoromethane	ND		8.9	0.70	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
1,1-Dichloroethane	ND		4.4	0.61	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
1,2-Dichloroethane	ND		4.4	0.68	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
1,1-Dichloroethene	ND		4.4	0.55	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
cis-1,2-Dichloroethene	**2.7**	**J**	4.4	0.61	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
trans-1,2-Dichloroethene	ND		4.4	0.67	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
1,2-Dichloropropane	ND		4.4	0.56	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
cis-1,3-Dichloropropene	ND		4.4	0.61	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
trans-1,3-Dichloropropene	ND		4.4	0.60	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Ethylbenzene	ND		4.4	0.67	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Hexachlorobutadiene	ND	*	4.4	0.80	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
2-Hexanone	ND		44	8.9	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Isopropylbenzene	ND		4.4	0.61	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
4-Isopropyltoluene	ND	*	4.4	2.2	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Methylene Chloride	ND		8.9	5.0	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
4-Methyl-2-pentanone (MIBK)	ND		44	8.9	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Naphthalene	ND	*	8.9	1.3	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
N-Propylbenzene	ND	*	4.4	0.59	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Styrene	ND		4.4	0.56	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
1,1,1,2-Tetrachloroethane	ND		4.4	0.68	ug/Kg		08/23/18 02:50	08/28/18 18:01	1

Client Sample ID: DG-M3S-7.5-8
Date Collected: 08/22/18 10:40
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-11
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.4	0.67	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Tetrachloroethene	ND		4.4	0.60	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Toluene	ND		4.4	0.63	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
1,2,3-Trichlorobenzene	ND	*	4.4	0.66	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
1,2,4-Trichlorobenzene	ND	*	4.4	0.63	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
1,1,1-Trichloroethane	ND		4.4	0.54	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
1,1,2-Trichloroethane	ND		4.4	0.62	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Trichloroethene	ND		4.4	0.56	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Trichlorofluoromethane	ND		4.4	0.50	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
1,2,3-Trichloropropane	ND	*	4.4	0.69	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.9	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
1,2,4-Trimethylbenzene	ND	*	4.4	1.5	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
1,3,5-Trimethylbenzene	ND	*	4.4	0.58	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Vinyl acetate	ND		18	4.4	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Vinyl chloride	ND		4.4	0.65	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Xylenes, Total	ND		4.4	1.1	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
2,2-Dichloropropane	ND		4.4	1.8	ug/Kg		08/23/18 02:50	08/28/18 18:01	1
Gasoline Range Organics (GRO) -C4-C12	ND		220	89	ug/Kg		08/23/18 02:50	08/28/18 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*45 - 131*	*08/23/18 02:50*	*08/28/18 18:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*	*08/23/18 02:50*	*08/28/18 18:01*	*1*
Toluene-d8 (Surr)	*88*		*58 - 140*	*08/23/18 02:50*	*08/28/18 18:01*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**11**		9.6	4.8	ug/Kg		08/23/18 09:43	08/25/18 00:37	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/23/18 09:43	08/25/18 00:37	1
Acenaphthylene	**3.0**	**J**	4.8	2.3	ug/Kg		08/23/18 09:43	08/25/18 00:37	1
Anthracene	**2.7**	**J**	4.8	1.9	ug/Kg		08/23/18 09:43	08/25/18 00:37	1
Benzo[a]anthracene	**2.7**	**J**	4.8	1.4	ug/Kg		08/23/18 09:43	08/25/18 00:37	1
Benzo[a]pyrene	**4.0**	**J**	4.8	1.8	ug/Kg		08/23/18 09:43	08/25/18 00:37	1
Benzo[b]fluoranthene	**48**		4.8	2.0	ug/Kg		08/23/18 09:43	08/25/18 00:37	1
Benzo[g,h,i]perylene	**7.1**		4.8	4.1	ug/Kg		08/23/18 09:43	08/25/18 00:37	1
Benzo[k]fluoranthene	**3.5**	**J**	4.8	2.0	ug/Kg		08/23/18 09:43	08/25/18 00:37	1
Chrysene	**47**		4.8	1.3	ug/Kg		08/23/18 09:43	08/25/18 00:37	1
Dibenz(a,h)anthracene	**5.3**		4.8	3.4	ug/Kg		08/23/18 09:43	08/25/18 00:37	1
Fluoranthene	**19**		4.8	1.3	ug/Kg		08/23/18 09:43	08/25/18 00:37	1
Fluorene	**3.5**	**J**	4.8	2.1	ug/Kg		08/23/18 09:43	08/25/18 00:37	1
Indeno[1,2,3-cd]pyrene	**4.5**	**J**	4.8	4.0	ug/Kg		08/23/18 09:43	08/25/18 00:37	1
Naphthalene	**77**	**B**	4.8	3.4	ug/Kg		08/23/18 09:43	08/25/18 00:37	1
Phenanthrene	**130**		4.8	1.7	ug/Kg		08/23/18 09:43	08/25/18 00:37	1
Pyrene	**12**		4.8	1.6	ug/Kg		08/23/18 09:43	08/25/18 00:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*33 - 120*	*08/23/18 09:43*	*08/25/18 00:37*	*1*
Terphenyl-d14	*94*		*35 - 146*	*08/23/18 09:43*	*08/25/18 00:37*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-M3S-7.5-8
Date Collected: 08/22/18 10:40
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-11
Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	5200		1900	720	ug/Kg		08/23/18 13:06	08/24/18 01:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*92*		*40 - 130*	*08/23/18 13:06*	*08/24/18 01:03*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
Aldrin	ND		1.9	0.47	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
Endosulfan II	ND		1.9	0.46	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
Endrin	ND		1.9	0.44	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
Toxaphene	ND		38	6.5	ug/Kg		08/23/18 14:52	08/30/18 00:45	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/23/18 14:52	08/30/18 00:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*86*		*21 - 136*	*08/23/18 14:52*	*08/30/18 00:45*	*1*
Tetrachloro-m-xylene	*80*		*21 - 145*	*08/23/18 14:52*	*08/30/18 00:45*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		48	21	ug/Kg		08/26/18 10:47	08/28/18 13:56	1
Aroclor-1221	ND		48	23	ug/Kg		08/26/18 10:47	08/28/18 13:56	1
Aroclor-1232	ND		48	22	ug/Kg		08/26/18 10:47	08/28/18 13:56	1
Aroclor-1242	ND		48	18	ug/Kg		08/26/18 10:47	08/28/18 13:56	1
Aroclor-1248	ND		48	23	ug/Kg		08/26/18 10:47	08/28/18 13:56	1
Aroclor-1254	ND		48	22	ug/Kg		08/26/18 10:47	08/28/18 13:56	1
Aroclor-1260	ND		48	21	ug/Kg		08/26/18 10:47	08/28/18 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*14 - 128*	*08/26/18 10:47*	*08/28/18 13:56*	*1*
DCB Decachlorobiphenyl	*85*		*10 - 132*	*08/26/18 10:47*	*08/28/18 13:56*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.98	J	1.5	0.25	mg/Kg		08/24/18 16:33	08/27/18 15:41	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-M3S-7.5-8
Date Collected: 08/22/18 10:40
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-11
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	37		3.1	0.26	mg/Kg		08/24/18 16:33	08/27/18 15:41	4
Barium	82		1.5	0.22	mg/Kg		08/24/18 16:33	08/27/18 15:41	4
Beryllium	0.70		0.31	0.099	mg/Kg		08/24/18 16:33	08/27/18 15:41	4
Cadmium	0.086	J	0.38	0.038	mg/Kg		08/24/18 16:33	08/27/18 15:41	4
Chromium	32		1.5	0.16	mg/Kg		08/24/18 16:33	08/27/18 15:41	4
Cobalt	17		0.61	0.061	mg/Kg		08/24/18 16:33	08/27/18 15:41	4
Copper	25		4.6	2.2	mg/Kg		08/24/18 16:33	08/27/18 15:41	4
Lead	9.8		1.5	0.32	mg/Kg		08/24/18 16:33	08/27/18 15:41	4
Molybdenum	0.65	J	1.5	0.20	mg/Kg		08/24/18 16:33	08/27/18 15:41	4
Nickel	33		1.5	0.16	mg/Kg		08/24/18 16:33	08/27/18 15:41	4
Selenium	ND		3.1	0.46	mg/Kg		08/24/18 16:33	08/27/18 15:41	4
Silver	ND		0.76	0.15	mg/Kg		08/24/18 16:33	08/27/18 15:41	4
Thallium	ND		1.5	0.44	mg/Kg		08/24/18 16:33	08/27/18 15:41	4
Vanadium	48		1.5	0.21	mg/Kg		08/24/18 16:33	08/27/18 15:41	4
Zinc	68		4.6	1.9	mg/Kg		08/24/18 16:33	08/27/18 15:41	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.017	0.0025	mg/Kg		08/27/18 20:30	08/28/18 23:36	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-M5S-0.5-1
Date Collected: 08/22/18 11:05
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-12
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.2	J	1.7	0.28	mg/Kg		08/24/18 16:33	08/27/18 15:46	4
Arsenic	28		3.4	0.29	mg/Kg		08/24/18 16:33	08/27/18 15:46	4
Barium	100		1.7	0.24	mg/Kg		08/24/18 16:33	08/27/18 15:46	4
Beryllium	0.11	J	0.34	0.11	mg/Kg		08/24/18 16:33	08/27/18 15:46	4
Cadmium	0.86		0.43	0.042	mg/Kg		08/24/18 16:33	08/27/18 15:46	4
Chromium	23		1.7	0.18	mg/Kg		08/24/18 16:33	08/27/18 15:46	4
Cobalt	13		0.68	0.068	mg/Kg		08/24/18 16:33	08/27/18 15:46	4
Copper	170		5.1	2.4	mg/Kg		08/24/18 16:33	08/27/18 15:46	4
Lead	150		1.7	0.36	mg/Kg		08/24/18 16:33	08/27/18 15:46	4
Molybdenum	1.5	J	1.7	0.22	mg/Kg		08/24/18 16:33	08/27/18 15:46	4
Nickel	18		1.7	0.17	mg/Kg		08/24/18 16:33	08/27/18 15:46	4
Selenium	ND		3.4	0.51	mg/Kg		08/24/18 16:33	08/27/18 15:46	4
Silver	0.27	J	0.85	0.17	mg/Kg		08/24/18 16:33	08/27/18 15:46	4
Thallium	1.3	J	1.7	0.50	mg/Kg		08/24/18 16:33	08/27/18 15:46	4
Vanadium	100		1.7	0.23	mg/Kg		08/24/18 16:33	08/27/18 15:46	4
Zinc	230		5.1	2.2	mg/Kg		08/24/18 16:33	08/27/18 15:46	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15		0.016	0.0023	mg/Kg		08/25/18 13:53	08/29/18 13:08	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-M5S-3.5-4
Date Collected: 08/22/18 11:05
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-13
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	16		1.2	0.20	mg/Kg		08/24/18 16:33	08/27/18 15:50	4
Arsenic	330		2.5	0.21	mg/Kg		08/24/18 16:33	08/27/18 15:50	4
Barium	1700		1.2	0.18	mg/Kg		08/24/18 16:33	08/27/18 15:50	4
Beryllium	0.70		0.25	0.080	mg/Kg		08/24/18 16:33	08/27/18 15:50	4
Cadmium	10		0.31	0.031	mg/Kg		08/24/18 16:33	08/27/18 15:50	4
Chromium	57		1.2	0.13	mg/Kg		08/24/18 16:33	08/27/18 15:50	4
Cobalt	7.8		0.49	0.049	mg/Kg		08/24/18 16:33	08/27/18 15:50	4
Copper	1100		3.7	1.8	mg/Kg		08/24/18 16:33	08/27/18 15:50	4
Lead	8300		6.2	1.3	mg/Kg		08/24/18 16:33	08/28/18 15:01	20
Molybdenum	0.49	J	1.2	0.16	mg/Kg		08/24/18 16:33	08/27/18 15:50	4
Nickel	38		1.2	0.13	mg/Kg		08/24/18 16:33	08/27/18 15:50	4
Selenium	ND		2.5	0.37	mg/Kg		08/24/18 16:33	08/27/18 15:50	4
Silver	9.5		0.62	0.12	mg/Kg		08/24/18 16:33	08/27/18 15:50	4
Thallium	0.84	J	1.2	0.36	mg/Kg		08/24/18 16:33	08/27/18 15:50	4
Vanadium	35		1.2	0.17	mg/Kg		08/24/18 16:33	08/27/18 15:50	4
Zinc	5600		19	7.8	mg/Kg		08/24/18 16:33	08/28/18 15:01	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.69		0.017	0.0025	mg/Kg		08/25/18 13:53	08/29/18 13:11	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-L5S-0.5-1
Date Collected: 08/22/18 11:20
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-14
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.1	0.99	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Acetone	**33**	**J**	41	31	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Benzene	ND		4.1	0.53	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Dichlorobromomethane	ND		4.1	0.59	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Bromobenzene	ND	*	4.1	0.65	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Chlorobromomethane	ND		16	0.59	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Bromoform	ND		4.1	1.6	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Bromomethane	ND		8.2	0.65	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
2-Butanone (MEK)	ND		41	17	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
n-Butylbenzene	ND	*	4.1	0.82	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
sec-Butylbenzene	ND	*	4.1	0.59	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
tert-Butylbenzene	ND	*	4.1	0.60	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Carbon disulfide	ND	*	4.1	1.6	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Carbon tetrachloride	ND		4.1	0.51	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Chlorobenzene	ND		4.1	0.57	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Chloroethane	ND		8.2	0.46	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Chloroform	ND		4.1	0.54	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Chloromethane	ND		8.2	0.65	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
2-Chlorotoluene	ND	*	4.1	0.53	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
4-Chlorotoluene	ND	*	4.1	0.56	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Chlorodibromomethane	ND		4.1	0.58	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
1,2-Dichlorobenzene	ND	*	4.1	0.56	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
1,3-Dichlorobenzene	ND	*	4.1	0.59	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
1,4-Dichlorobenzene	ND	*	4.1	0.58	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
1,3-Dichloropropane	ND		4.1	0.60	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
1,1-Dichloropropene	ND		4.1	0.57	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
1,2-Dibromo-3-Chloropropane	ND	*	8.2	1.4	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Ethylene Dibromide	ND		4.1	1.2	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Dibromomethane	ND		8.2	0.71	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Dichlorodifluoromethane	ND		8.2	0.65	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
1,1-Dichloroethane	ND		4.1	0.56	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
1,2-Dichloroethane	ND		4.1	0.63	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
1,1-Dichloroethene	ND	*	4.1	0.51	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
cis-1,2-Dichloroethene	ND		4.1	0.56	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
trans-1,2-Dichloroethene	ND		4.1	0.62	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
1,2-Dichloropropane	ND		4.1	0.52	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
cis-1,3-Dichloropropene	ND		4.1	0.57	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
trans-1,3-Dichloropropene	ND		4.1	0.55	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Ethylbenzene	ND		4.1	0.62	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Hexachlorobutadiene	ND	*	4.1	0.74	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
2-Hexanone	ND		41	8.2	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Isopropylbenzene	ND		4.1	0.56	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
4-Isopropyltoluene	ND	*	4.1	2.1	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Methylene Chloride	ND		8.2	4.6	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
4-Methyl-2-pentanone (MIBK)	ND		41	8.2	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Naphthalene	ND	*	8.2	1.2	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
N-Propylbenzene	ND	*	4.1	0.54	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Styrene	ND		4.1	0.52	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
1,1,1,2-Tetrachloroethane	ND		4.1	0.63	ug/Kg		08/23/18 02:50	08/29/18 13:48	1

Client Sample ID: DG-L5S-0.5-1
Date Collected: 08/22/18 11:20
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-14
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.1	0.62	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Tetrachloroethene	ND		4.1	0.55	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Toluene	ND		4.1	0.58	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
1,2,3-Trichlorobenzene	ND	*	4.1	0.61	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
1,2,4-Trichlorobenzene	ND	*	4.1	0.58	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
1,1,1-Trichloroethane	ND		4.1	0.50	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
1,1,2-Trichloroethane	ND		4.1	0.58	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Trichloroethene	ND		4.1	0.52	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Trichlorofluoromethane	ND		4.1	0.46	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
1,2,3-Trichloropropane	ND	*	4.1	0.63	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.1	1.7	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
1,2,4-Trimethylbenzene	ND	*	4.1	1.3	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
1,3,5-Trimethylbenzene	ND	*	4.1	0.53	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Vinyl acetate	ND		16	4.1	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Vinyl chloride	ND		4.1	0.60	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Xylenes, Total	ND		4.1	1.0	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
2,2-Dichloropropane	ND		4.1	1.6	ug/Kg		08/23/18 02:50	08/29/18 13:48	1
Gasoline Range Organics (GRO) -C4-C12	ND		210	82	ug/Kg		08/23/18 02:50	08/29/18 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*45 - 131*	*08/23/18 02:50*	*08/29/18 13:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*121*		*60 - 140*	*08/23/18 02:50*	*08/29/18 13:48*	*1*
Toluene-d8 (Surr)	*89*		*58 - 140*	*08/23/18 02:50*	*08/29/18 13:48*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**72**		39	19	ug/Kg		08/23/18 09:43	08/25/18 07:19	2
Acenaphthene	ND		19	11	ug/Kg		08/23/18 09:43	08/25/18 07:19	2
Acenaphthylene	**40**		19	9.3	ug/Kg		08/23/18 09:43	08/25/18 07:19	2
Anthracene	**76**		19	7.7	ug/Kg		08/23/18 09:43	08/25/18 07:19	2
Benzo[a]anthracene	**81**		19	5.8	ug/Kg		08/23/18 09:43	08/25/18 07:19	2
Benzo[a]pyrene	**120**		19	7.3	ug/Kg		08/23/18 09:43	08/25/18 07:19	2
Benzo[b]fluoranthene	**200**		19	8.1	ug/Kg		08/23/18 09:43	08/25/18 07:19	2
Benzo[g,h,i]perylene	**150**		19	17	ug/Kg		08/23/18 09:43	08/25/18 07:19	2
Benzo[k]fluoranthene	**74**		19	8.1	ug/Kg		08/23/18 09:43	08/25/18 07:19	2
Chrysene	**130**		19	5.4	ug/Kg		08/23/18 09:43	08/25/18 07:19	2
Dibenz(a,h)anthracene	**31**		19	14	ug/Kg		08/23/18 09:43	08/25/18 07:19	2
Fluoranthene	**140**		19	5.4	ug/Kg		08/23/18 09:43	08/25/18 07:19	2
Fluorene	ND		19	8.5	ug/Kg		08/23/18 09:43	08/25/18 07:19	2
Indeno[1,2,3-cd]pyrene	**95**		19	16	ug/Kg		08/23/18 09:43	08/25/18 07:19	2
Naphthalene	**65**	**B**	19	14	ug/Kg		08/23/18 09:43	08/25/18 07:19	2
Phenanthrene	**96**		19	6.9	ug/Kg		08/23/18 09:43	08/25/18 07:19	2
Pyrene	**150**		19	6.6	ug/Kg		08/23/18 09:43	08/25/18 07:19	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*33 - 120*	*08/23/18 09:43*	*08/25/18 07:19*	*2*
Terphenyl-d14	*99*		*35 - 146*	*08/23/18 09:43*	*08/25/18 07:19*	*2*

Client Sample ID: DG-L5S-0.5-1

Date Collected: 08/22/18 11:20
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-14

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	210000		5700	2100	ug/Kg		08/23/18 13:06	08/24/18 11:43	3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*85*		*40 - 130*	*08/23/18 13:06*	*08/24/18 11:43*	*3*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		19	5.9	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
4,4'-DDE	ND		19	4.0	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
4,4'-DDT	ND		19	3.9	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
Aldrin	ND		19	4.8	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
alpha-BHC	ND		19	5.3	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
beta-BHC	ND		19	3.5	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
Chlordane (technical)	ND		380	31	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
cis-Chlordane	ND		19	3.8	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
delta-BHC	ND		19	4.2	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
Dieldrin	ND		19	5.7	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
Endosulfan I	ND		19	3.1	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
Endosulfan II	ND		19	4.7	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
Endosulfan sulfate	ND		19	3.6	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
Endrin	ND		19	4.4	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
Endrin aldehyde	ND		19	6.0	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
Endrin ketone	ND		19	3.2	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
gamma-BHC (Lindane)	ND		19	6.0	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
Heptachlor	ND		19	4.4	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
Heptachlor epoxide	ND		19	3.4	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
Methoxychlor	ND		19	6.5	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
Toxaphene	ND		380	65	ug/Kg		08/23/18 14:52	08/29/18 09:43	10
trans-Chlordane	ND		19	4.4	ug/Kg		08/23/18 14:52	08/29/18 09:43	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*X*	*21 - 136*	*08/23/18 14:52*	*08/29/18 09:43*	*10*
Tetrachloro-m-xylene	*0*	*X*	*21 - 145*	*08/23/18 14:52*	*08/29/18 09:43*	*10*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		960	420	ug/Kg		08/26/18 10:47	08/28/18 14:19	20
Aroclor-1221	ND		960	460	ug/Kg		08/26/18 10:47	08/28/18 14:19	20
Aroclor-1232	ND		960	440	ug/Kg		08/26/18 10:47	08/28/18 14:19	20
Aroclor-1242	ND		960	370	ug/Kg		08/26/18 10:47	08/28/18 14:19	20
Aroclor-1248	ND		960	460	ug/Kg		08/26/18 10:47	08/28/18 14:19	20
Aroclor-1254	ND		960	440	ug/Kg		08/26/18 10:47	08/28/18 14:19	20
Aroclor-1260	13000		960	420	ug/Kg		08/26/18 10:47	08/28/18 14:19	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*27*		*14 - 128*	*08/26/18 10:47*	*08/28/18 14:19*	*20*
DCB Decachlorobiphenyl	*15*	*p*	*10 - 132*	*08/26/18 10:47*	*08/28/18 14:19*	*20*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.7		1.8	0.30	mg/Kg		08/24/18 16:33	08/27/18 15:55	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-L5S-0.5-1
Date Collected: 08/22/18 11:20
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-14
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14		3.6	0.30	mg/Kg		08/24/18 16:33	08/27/18 15:55	4
Barium	150		1.8	0.25	mg/Kg		08/24/18 16:33	08/27/18 15:55	4
Beryllium	0.19	J	0.36	0.12	mg/Kg		08/24/18 16:33	08/27/18 15:55	4
Cadmium	1.6		0.45	0.044	mg/Kg		08/24/18 16:33	08/27/18 15:55	4
Chromium	49		1.8	0.19	mg/Kg		08/24/18 16:33	08/27/18 15:55	4
Cobalt	9.4		0.71	0.071	mg/Kg		08/24/18 16:33	08/27/18 15:55	4
Copper	170		5.4	2.5	mg/Kg		08/24/18 16:33	08/27/18 15:55	4
Lead	250		1.8	0.38	mg/Kg		08/24/18 16:33	08/27/18 15:55	4
Molybdenum	3.5		1.8	0.23	mg/Kg		08/24/18 16:33	08/27/18 15:55	4
Nickel	51		1.8	0.18	mg/Kg		08/24/18 16:33	08/27/18 15:55	4
Selenium	0.64	J	3.6	0.54	mg/Kg		08/24/18 16:33	08/27/18 15:55	4
Silver	0.50	J	0.89	0.18	mg/Kg		08/24/18 16:33	08/27/18 15:55	4
Thallium	0.99	J	1.8	0.52	mg/Kg		08/24/18 16:33	08/27/18 15:55	4
Vanadium	37		1.8	0.24	mg/Kg		08/24/18 16:33	08/27/18 15:55	4
Zinc	350		5.4	2.3	mg/Kg		08/24/18 16:33	08/27/18 15:55	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19		0.015	0.0022	mg/Kg		08/25/18 13:53	08/29/18 13:13	1

Client Sample ID: DG-L5S-3.5-4
Date Collected: 08/22/18 11:20
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-15
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.2	1.0	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Acetone	**46**		42	32	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Benzene	ND		4.2	0.55	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Dichlorobromomethane	ND		4.2	0.61	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Bromobenzene	ND		4.2	0.67	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Chlorobromomethane	ND		17	0.61	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Bromoform	ND		4.2	1.7	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Bromomethane	ND		8.5	0.67	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
2-Butanone (MEK)	ND		42	18	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
n-Butylbenzene	ND		4.2	0.85	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
sec-Butylbenzene	ND		4.2	0.61	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
tert-Butylbenzene	ND		4.2	0.62	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Carbon disulfide	ND		4.2	1.7	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Carbon tetrachloride	ND		4.2	0.53	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Chlorobenzene	ND		4.2	0.59	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Chloroethane	ND		8.5	0.47	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Chloroform	ND		4.2	0.56	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Chloromethane	ND		8.5	0.67	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
2-Chlorotoluene	ND		4.2	0.55	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
4-Chlorotoluene	ND		4.2	0.58	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Chlorodibromomethane	ND		4.2	0.60	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
1,2-Dichlorobenzene	ND		4.2	0.58	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
1,3-Dichlorobenzene	ND		4.2	0.61	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
1,4-Dichlorobenzene	ND		4.2	0.60	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
1,3-Dichloropropane	ND		4.2	0.62	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
1,1-Dichloropropene	ND		4.2	0.59	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
1,2-Dibromo-3-Chloropropane	ND		8.5	1.4	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Ethylene Dibromide	ND		4.2	1.2	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Dibromomethane	ND		8.5	0.73	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Dichlorodifluoromethane	ND		8.5	0.67	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
1,1-Dichloroethane	ND		4.2	0.58	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
1,2-Dichloroethane	ND		4.2	0.64	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
1,1-Dichloroethene	ND		4.2	0.53	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
cis-1,2-Dichloroethene	ND		4.2	0.58	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
trans-1,2-Dichloroethene	ND		4.2	0.64	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
1,2-Dichloropropane	ND		4.2	0.53	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
cis-1,3-Dichloropropene	ND		4.2	0.59	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
trans-1,3-Dichloropropene	ND		4.2	0.57	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Ethylbenzene	ND		4.2	0.64	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Hexachlorobutadiene	ND		4.2	0.76	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
2-Hexanone	ND		42	8.5	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Isopropylbenzene	ND		4.2	0.58	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
4-Isopropyltoluene	ND		4.2	2.1	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Methylene Chloride	ND		8.5	4.7	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
4-Methyl-2-pentanone (MIBK)	ND		42	8.5	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Naphthalene	ND		8.5	1.3	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
N-Propylbenzene	ND		4.2	0.56	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Styrene	ND		4.2	0.53	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
1,1,1,2-Tetrachloroethane	ND		4.2	0.64	ug/Kg		08/23/18 02:50	08/28/18 17:17	1

Client Sample ID: DG-L5S-3.5-4
Date Collected: 08/22/18 11:20
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-15
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.2	0.64	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Tetrachloroethene	ND		4.2	0.57	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Toluene	ND		4.2	0.60	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
1,2,3-Trichlorobenzene	ND		4.2	0.63	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
1,2,4-Trichlorobenzene	ND		4.2	0.60	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
1,1,1-Trichloroethane	ND		4.2	0.52	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
1,1,2-Trichloroethane	ND		4.2	0.59	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Trichloroethene	ND		4.2	0.53	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Trichlorofluoromethane	ND		4.2	0.47	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
1,2,3-Trichloropropane	ND		4.2	0.65	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	1.8	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
1,2,4-Trimethylbenzene	ND		4.2	1.4	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
1,3,5-Trimethylbenzene	ND		4.2	0.55	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Vinyl acetate	ND		17	4.2	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Vinyl chloride	ND		4.2	0.62	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Xylenes, Total	ND		4.2	1.0	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
2,2-Dichloropropane	ND		4.2	1.7	ug/Kg		08/23/18 02:50	08/28/18 17:17	1
Gasoline Range Organics (GRO) -C4-C12	ND		210	85	ug/Kg		08/23/18 02:50	08/28/18 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*45 - 131*	*08/23/18 02:50*	*08/28/18 17:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*60 - 140*	*08/23/18 02:50*	*08/28/18 17:17*	*1*
Toluene-d8 (Surr)	*98*		*58 - 140*	*08/23/18 02:50*	*08/28/18 17:17*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**14**		9.6	4.8	ug/Kg		08/24/18 15:31	08/29/18 19:55	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/24/18 15:31	08/29/18 19:55	1
Acenaphthylene	**12**		4.8	2.3	ug/Kg		08/24/18 15:31	08/29/18 19:55	1
Anthracene	**13**		4.8	1.9	ug/Kg		08/24/18 15:31	08/29/18 19:55	1
Benzo[a]anthracene	**33**		4.8	1.4	ug/Kg		08/24/18 15:31	08/29/18 19:55	1
Benzo[a]pyrene	**37**		4.8	1.8	ug/Kg		08/24/18 15:31	08/29/18 19:55	1
Benzo[b]fluoranthene	**84**		4.8	2.0	ug/Kg		08/24/18 15:31	08/29/18 19:55	1
Benzo[g,h,i]perylene	**22**		4.8	4.1	ug/Kg		08/24/18 15:31	08/29/18 19:55	1
Benzo[k]fluoranthene	ND		4.8	2.0	ug/Kg		08/24/18 15:31	08/29/18 19:55	1
Chrysene	**59**	**B**	4.8	1.3	ug/Kg		08/24/18 15:31	08/29/18 19:55	1
Dibenz(a,h)anthracene	**9.7**		4.8	3.4	ug/Kg		08/24/18 15:31	08/29/18 19:55	1
Fluoranthene	**63**		4.8	1.3	ug/Kg		08/24/18 15:31	08/29/18 19:55	1
Fluorene	**3.0**	**J**	4.8	2.1	ug/Kg		08/24/18 15:31	08/29/18 19:55	1
Indeno[1,2,3-cd]pyrene	**21**		4.8	4.0	ug/Kg		08/24/18 15:31	08/29/18 19:55	1
Naphthalene	**38**		4.8	3.4	ug/Kg		08/24/18 15:31	08/29/18 19:55	1
Phenanthrene	**55**		4.8	1.7	ug/Kg		08/24/18 15:31	08/29/18 19:55	1
Pyrene	**81**		4.8	1.6	ug/Kg		08/24/18 15:31	08/29/18 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*33 - 120*	*08/24/18 15:31*	*08/29/18 19:55*	*1*
Terphenyl-d14	*71*		*35 - 146*	*08/24/18 15:31*	*08/29/18 19:55*	*1*

Client Sample ID: DG-L5S-3.5-4
Date Collected: 08/22/18 11:20
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-15
Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	26000		2000	740	ug/Kg		08/23/18 13:06	08/24/18 01:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*69*		*40 - 130*	*08/23/18 13:06*	*08/24/18 01:33*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
4,4'-DDE	ND		2.0	0.41	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
4,4'-DDT	ND		2.0	0.40	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
Aldrin	ND		2.0	0.49	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
Chlordane (technical)	ND		39	3.2	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
cis-Chlordane	ND		2.0	0.39	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
Endosulfan sulfate	ND		2.0	0.37	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
Endrin	ND		2.0	0.45	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
Toxaphene	ND		39	6.7	ug/Kg		08/23/18 14:52	08/29/18 09:08	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		08/23/18 14:52	08/29/18 09:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*104*		*21 - 136*	*08/23/18 14:52*	*08/29/18 09:08*	*1*
Tetrachloro-m-xylene	*79*		*21 - 145*	*08/23/18 14:52*	*08/29/18 09:08*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 08:11	08/30/18 14:01	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 08:11	08/30/18 14:01	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 08:11	08/30/18 14:01	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 08:11	08/30/18 14:01	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 08:11	08/30/18 14:01	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 08:11	08/30/18 14:01	1
Aroclor-1260	44	J	50	22	ug/Kg		08/29/18 08:11	08/30/18 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*45*		*14 - 128*	*08/29/18 08:11*	*08/30/18 14:01*	*1*
DCB Decachlorobiphenyl	*34*		*10 - 132*	*08/29/18 08:11*	*08/30/18 14:01*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	13		4.0	0.66	mg/Kg		08/24/18 16:33	08/28/18 15:06	10

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-L5S-3.5-4
Date Collected: 08/22/18 11:20
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-15
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	55		7.9	0.67	mg/Kg		08/24/18 16:33	08/28/18 15:06	10
Barium	850		1.6	0.23	mg/Kg		08/24/18 16:33	08/27/18 16:00	4
Beryllium	0.48		0.32	0.10	mg/Kg		08/24/18 16:33	08/27/18 16:00	4
Cadmium	5.4		0.99	0.098	mg/Kg		08/24/18 16:33	08/28/18 15:06	10
Chromium	38		4.0	0.42	mg/Kg		08/24/18 16:33	08/28/18 15:06	10
Cobalt	11		1.6	0.16	mg/Kg		08/24/18 16:33	08/28/18 15:06	10
Copper	500		12	5.7	mg/Kg		08/24/18 16:33	08/28/18 15:06	10
Lead	1900		4.0	0.83	mg/Kg		08/24/18 16:33	08/28/18 15:06	10
Molybdenum	1.9		1.6	0.20	mg/Kg		08/24/18 16:33	08/27/18 16:00	4
Nickel	35		4.0	0.40	mg/Kg		08/24/18 16:33	08/28/18 15:06	10
Selenium	2.1	J	7.9	1.2	mg/Kg		08/24/18 16:33	08/28/18 15:06	10
Silver	3.7		2.0	0.40	mg/Kg		08/24/18 16:33	08/28/18 15:06	10
Thallium	2.6	J	4.0	1.2	mg/Kg		08/24/18 16:33	08/28/18 15:06	10
Vanadium	59		4.0	0.54	mg/Kg		08/24/18 16:33	08/28/18 15:06	10
Zinc	2300		12	5.0	mg/Kg		08/24/18 16:33	08/28/18 15:06	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.67		0.016	0.0024	mg/Kg		08/25/18 13:53	08/29/18 13:15	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DG-K5S-0.5-1
Date Collected: 08/22/18 11:50
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-16
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.9	0.32	mg/Kg		08/24/18 16:33	08/27/18 16:05	4
Arsenic	**2.7**	**J**	3.8	0.32	mg/Kg		08/24/18 16:33	08/27/18 16:05	4
Barium	**63**		1.9	0.27	mg/Kg		08/24/18 16:33	08/27/18 16:05	4
Beryllium	ND		0.38	0.12	mg/Kg		08/24/18 16:33	08/27/18 16:05	4
Cadmium	**0.43**	**J**	0.48	0.047	mg/Kg		08/24/18 16:33	08/27/18 16:05	4
Chromium	**14**		1.9	0.20	mg/Kg		08/24/18 16:33	08/27/18 16:05	4
Cobalt	**12**		0.76	0.076	mg/Kg		08/24/18 16:33	08/27/18 16:05	4
Copper	**180**		5.7	2.7	mg/Kg		08/24/18 16:33	08/27/18 16:05	4
Lead	**90**		1.9	0.40	mg/Kg		08/24/18 16:33	08/27/18 16:05	4
Molybdenum	**1.1**	**J**	1.9	0.24	mg/Kg		08/24/18 16:33	08/27/18 16:05	4
Nickel	**11**		1.9	0.19	mg/Kg		08/24/18 16:33	08/27/18 16:05	4
Selenium	ND		3.8	0.57	mg/Kg		08/24/18 16:33	08/27/18 16:05	4
Silver	ND		0.95	0.19	mg/Kg		08/24/18 16:33	08/27/18 16:05	4
Thallium	**1.0**	**J**	1.9	0.55	mg/Kg		08/24/18 16:33	08/27/18 16:05	4
Vanadium	**99**		1.9	0.26	mg/Kg		08/24/18 16:33	08/27/18 16:05	4
Zinc	**120**		5.7	2.4	mg/Kg		08/24/18 16:33	08/27/18 16:05	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.099**		0.014	0.0021	mg/Kg		08/25/18 13:53	08/29/18 13:23	1

Client Sample ID: DG-K5S-3.5-4
Date Collected: 08/22/18 11:50
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-17
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.8	0.29	mg/Kg		08/24/18 16:33	08/27/18 16:09	4
Arsenic	**0.49**	**J**	3.5	0.30	mg/Kg		08/24/18 16:33	08/27/18 16:09	4
Barium	**33**		1.8	0.25	mg/Kg		08/24/18 16:33	08/27/18 16:09	4
Beryllium	ND		0.35	0.11	mg/Kg		08/24/18 16:33	08/27/18 16:09	4
Cadmium	ND		0.44	0.044	mg/Kg		08/24/18 16:33	08/27/18 16:09	4
Chromium	**21**		1.8	0.19	mg/Kg		08/24/18 16:33	08/27/18 16:09	4
Cobalt	**12**		0.70	0.070	mg/Kg		08/24/18 16:33	08/27/18 16:09	4
Copper	**130**		5.3	2.5	mg/Kg		08/24/18 16:33	08/27/18 16:09	4
Lead	**5.8**		1.8	0.37	mg/Kg		08/24/18 16:33	08/27/18 16:09	4
Molybdenum	ND		1.8	0.22	mg/Kg		08/24/18 16:33	08/27/18 16:09	4
Nickel	**5.4**		1.8	0.18	mg/Kg		08/24/18 16:33	08/27/18 16:09	4
Selenium	ND		3.5	0.53	mg/Kg		08/24/18 16:33	08/27/18 16:09	4
Silver	ND		0.88	0.18	mg/Kg		08/24/18 16:33	08/27/18 16:09	4
Thallium	**1.4**	**J**	1.8	0.51	mg/Kg		08/24/18 16:33	08/27/18 16:09	4
Vanadium	**110**		1.8	0.24	mg/Kg		08/24/18 16:33	08/27/18 16:09	4
Zinc	**36**		5.3	2.2	mg/Kg		08/24/18 16:33	08/27/18 16:09	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.057**		0.017	0.0025	mg/Kg		08/25/18 13:53	08/29/18 13:25	1

Client Sample ID: DUP-02

Date Collected: 08/22/18 00:00
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-18

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.9	0.94	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Acetone	**56**		39	30	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Benzene	ND		3.9	0.51	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Dichlorobromomethane	ND		3.9	0.57	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Bromobenzene	ND	*	3.9	0.62	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Chlorobromomethane	ND		16	0.57	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Bromoform	ND		3.9	1.6	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Bromomethane	ND		7.9	0.62	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
2-Butanone (MEK)	ND		39	17	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
n-Butylbenzene	ND	*	3.9	0.79	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
sec-Butylbenzene	ND	*	3.9	0.57	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
tert-Butylbenzene	ND	*	3.9	0.57	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Carbon disulfide	ND	*	3.9	1.6	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Carbon tetrachloride	ND		3.9	0.49	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Chlorobenzene	ND		3.9	0.54	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Chloroethane	ND		7.9	0.44	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Chloroform	ND		3.9	0.52	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Chloromethane	ND		7.9	0.62	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
2-Chlorotoluene	ND	*	3.9	0.51	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
4-Chlorotoluene	ND	*	3.9	0.53	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Chlorodibromomethane	ND		3.9	0.56	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
1,2-Dichlorobenzene	ND	*	3.9	0.53	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
1,3-Dichlorobenzene	ND	*	3.9	0.57	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
1,4-Dichlorobenzene	ND	*	3.9	0.56	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
1,3-Dichloropropane	ND		3.9	0.57	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
1,1-Dichloropropene	ND		3.9	0.54	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
1,2-Dibromo-3-Chloropropane	ND	*	7.9	1.3	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Ethylene Dibromide	ND		3.9	1.1	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Dibromomethane	ND		7.9	0.68	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Dichlorodifluoromethane	ND		7.9	0.62	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
1,1-Dichloroethane	ND		3.9	0.53	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
1,2-Dichloroethane	ND		3.9	0.60	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
1,1-Dichloroethene	ND	*	3.9	0.49	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
cis-1,2-Dichloroethene	ND		3.9	0.53	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
trans-1,2-Dichloroethene	ND		3.9	0.59	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
1,2-Dichloropropane	ND		3.9	0.50	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
cis-1,3-Dichloropropene	ND		3.9	0.54	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
trans-1,3-Dichloropropene	ND		3.9	0.53	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Ethylbenzene	ND		3.9	0.59	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Hexachlorobutadiene	ND	*	3.9	0.71	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
2-Hexanone	ND		39	7.9	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Isopropylbenzene	ND		3.9	0.53	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
4-Isopropyltoluene	ND	*	3.9	2.0	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Methylene Chloride	ND		7.9	4.4	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
4-Methyl-2-pentanone (MIBK)	ND		39	7.9	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Naphthalene	ND	*	7.9	1.2	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
N-Propylbenzene	ND	*	3.9	0.52	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Styrene	ND		3.9	0.50	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
1,1,1,2-Tetrachloroethane	ND		3.9	0.60	ug/Kg		08/23/18 02:50	08/29/18 14:16	1

Client Sample ID: DUP-02

Date Collected: 08/22/18 00:00
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-18

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	3.9	0.59	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Tetrachloroethene	ND		3.9	0.53	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Toluene	ND		3.9	0.56	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
1,2,3-Trichlorobenzene	ND	*	3.9	0.58	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
1,2,4-Trichlorobenzene	ND	*	3.9	0.56	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
1,1,1-Trichloroethane	ND		3.9	0.48	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
1,1,2-Trichloroethane	ND		3.9	0.55	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Trichloroethene	ND		3.9	0.50	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Trichlorofluoromethane	ND		3.9	0.44	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
1,2,3-Trichloropropane	ND	*	3.9	0.61	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.9	1.6	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
1,2,4-Trimethylbenzene	ND	*	3.9	1.3	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
1,3,5-Trimethylbenzene	ND	*	3.9	0.51	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Vinyl acetate	ND		16	3.9	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Vinyl chloride	ND		3.9	0.57	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Xylenes, Total	ND		3.9	0.96	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
2,2-Dichloropropane	ND		3.9	1.6	ug/Kg		08/23/18 02:50	08/29/18 14:16	1
Gasoline Range Organics (GRO) -C4-C12	ND		200	79	ug/Kg		08/23/18 02:50	08/29/18 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*45 - 131*	*08/23/18 02:50*	*08/29/18 14:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*124*		*60 - 140*	*08/23/18 02:50*	*08/29/18 14:16*	*1*
Toluene-d8 (Surr)	*91*		*58 - 140*	*08/23/18 02:50*	*08/29/18 14:16*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**24**		19	9.5	ug/Kg		08/24/18 15:31	08/29/18 20:19	2
Acenaphthene	**6.3**	**J**	9.5	5.3	ug/Kg		08/24/18 15:31	08/29/18 20:19	2
Acenaphthylene	**18**		9.5	4.6	ug/Kg		08/24/18 15:31	08/29/18 20:19	2
Anthracene	**34**		9.5	3.8	ug/Kg		08/24/18 15:31	08/29/18 20:19	2
Benzo[a]anthracene	**88**		9.5	2.9	ug/Kg		08/24/18 15:31	08/29/18 20:19	2
Benzo[a]pyrene	**120**		9.5	3.6	ug/Kg		08/24/18 15:31	08/29/18 20:19	2
Benzo[b]fluoranthene	**210**		9.5	4.0	ug/Kg		08/24/18 15:31	08/29/18 20:19	2
Benzo[g,h,i]perylene	**110**		9.5	8.2	ug/Kg		08/24/18 15:31	08/29/18 20:19	2
Benzo[k]fluoranthene	ND		9.5	4.0	ug/Kg		08/24/18 15:31	08/29/18 20:19	2
Chrysene	**120**	**B**	9.5	2.7	ug/Kg		08/24/18 15:31	08/29/18 20:19	2
Dibenz(a,h)anthracene	**31**		9.5	6.7	ug/Kg		08/24/18 15:31	08/29/18 20:19	2
Fluoranthene	**140**		9.5	2.7	ug/Kg		08/24/18 15:31	08/29/18 20:19	2
Fluorene	**6.4**	**J**	9.5	4.2	ug/Kg		08/24/18 15:31	08/29/18 20:19	2
Indeno[1,2,3-cd]pyrene	**86**		9.5	8.0	ug/Kg		08/24/18 15:31	08/29/18 20:19	2
Naphthalene	**21**		9.5	6.7	ug/Kg		08/24/18 15:31	08/29/18 20:19	2
Phenanthrene	**81**		9.5	3.4	ug/Kg		08/24/18 15:31	08/29/18 20:19	2
Pyrene	**180**		9.5	3.2	ug/Kg		08/24/18 15:31	08/29/18 20:19	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*33 - 120*	*08/24/18 15:31*	*08/29/18 20:19*	*2*
Terphenyl-d14	*99*		*35 - 146*	*08/24/18 15:31*	*08/29/18 20:19*	*2*

Client Sample ID: DUP-02
Date Collected: 08/22/18 00:00
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-18
Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**120000**		1900	730	ug/Kg		08/23/18 13:06	08/24/18 02:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*60*		*40 - 130*	*08/23/18 13:06*	*08/24/18 02:31*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
Aldrin	ND		1.9	0.48	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
Endrin	ND		1.9	0.44	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
Toxaphene	ND		38	6.6	ug/Kg		08/23/18 14:52	08/29/18 09:26	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/23/18 14:52	08/29/18 09:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*137*	*X*	*21 - 136*	*08/23/18 14:52*	*08/29/18 09:26*	*1*
Tetrachloro-m-xylene	*88*		*21 - 145*	*08/23/18 14:52*	*08/29/18 09:26*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND	F2 F1	240	110	ug/Kg		08/26/18 10:47	08/28/18 15:03	5
Aroclor-1221	ND		240	120	ug/Kg		08/26/18 10:47	08/28/18 15:03	5
Aroclor-1232	ND		240	110	ug/Kg		08/26/18 10:47	08/28/18 15:03	5
Aroclor-1242	ND		240	93	ug/Kg		08/26/18 10:47	08/28/18 15:03	5
Aroclor-1248	ND		240	120	ug/Kg		08/26/18 10:47	08/28/18 15:03	5
Aroclor-1254	ND		240	110	ug/Kg		08/26/18 10:47	08/28/18 15:03	5
Aroclor-1260	**3000**	**F2 F1**	240	110	ug/Kg		08/26/18 10:47	08/28/18 15:03	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*85*		*14 - 128*	*08/26/18 10:47*	*08/28/18 15:03*	*5*
DCB Decachlorobiphenyl	*108*		*10 - 132*	*08/26/18 10:47*	*08/28/18 15:03*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**4.1**		1.5	0.25	mg/Kg		08/24/18 16:33	08/27/18 16:14	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DUP-02
Date Collected: 08/22/18 00:00
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-18
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.5		3.1	0.26	mg/Kg		08/24/18 16:33	08/27/18 16:14	4
Barium	140		1.5	0.22	mg/Kg		08/24/18 16:33	08/27/18 16:14	4
Beryllium	0.12	J	0.31	0.099	mg/Kg		08/24/18 16:33	08/27/18 16:14	4
Cadmium	1.7		0.38	0.038	mg/Kg		08/24/18 16:33	08/27/18 16:14	4
Chromium	37		1.5	0.16	mg/Kg		08/24/18 16:33	08/27/18 16:14	4
Cobalt	12		0.61	0.061	mg/Kg		08/24/18 16:33	08/27/18 16:14	4
Copper	190		4.6	2.2	mg/Kg		08/24/18 16:33	08/27/18 16:14	4
Lead	260		1.5	0.32	mg/Kg		08/24/18 16:33	08/27/18 16:14	4
Molybdenum	3.5		1.5	0.20	mg/Kg		08/24/18 16:33	08/27/18 16:14	4
Nickel	39		1.5	0.16	mg/Kg		08/24/18 16:33	08/27/18 16:14	4
Selenium	ND		3.1	0.46	mg/Kg		08/24/18 16:33	08/27/18 16:14	4
Silver	0.22	J	0.76	0.15	mg/Kg		08/24/18 16:33	08/27/18 16:14	4
Thallium	1.2	J	1.5	0.44	mg/Kg		08/24/18 16:33	08/27/18 16:14	4
Vanadium	61		1.5	0.21	mg/Kg		08/24/18 16:33	08/27/18 16:14	4
Zinc	350		4.6	1.9	mg/Kg		08/24/18 16:33	08/27/18 16:14	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.37		0.017	0.0025	mg/Kg		08/25/18 13:53	08/29/18 13:27	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: DUP-12
Date Collected: 08/22/18 00:00
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-19
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.91	J	1.1	0.19	mg/Kg		08/24/18 16:33	08/27/18 16:19	4
Arsenic	39		2.2	0.19	mg/Kg		08/24/18 16:33	08/27/18 16:19	4
Barium	100		1.1	0.16	mg/Kg		08/24/18 16:33	08/27/18 16:19	4
Beryllium	0.11	J	0.22	0.073	mg/Kg		08/24/18 16:33	08/27/18 16:19	4
Cadmium	0.39		0.28	0.028	mg/Kg		08/24/18 16:33	08/27/18 16:19	4
Chromium	13		1.1	0.12	mg/Kg		08/24/18 16:33	08/27/18 16:19	4
Cobalt	9.0		0.45	0.045	mg/Kg		08/24/18 16:33	08/27/18 16:19	4
Copper	97		3.4	1.6	mg/Kg		08/24/18 16:33	08/27/18 16:19	4
Lead	130		1.1	0.24	mg/Kg		08/24/18 16:33	08/27/18 16:19	4
Molybdenum	0.23	J	1.1	0.14	mg/Kg		08/24/18 16:33	08/27/18 16:19	4
Nickel	11		1.1	0.11	mg/Kg		08/24/18 16:33	08/27/18 16:19	4
Selenium	ND		2.2	0.34	mg/Kg		08/24/18 16:33	08/27/18 16:19	4
Silver	0.19	J	0.56	0.11	mg/Kg		08/24/18 16:33	08/27/18 16:19	4
Thallium	0.87	J	1.1	0.33	mg/Kg		08/24/18 16:33	08/27/18 16:19	4
Vanadium	78		1.1	0.15	mg/Kg		08/24/18 16:33	08/27/18 16:19	4
Zinc	180		3.4	1.4	mg/Kg		08/24/18 16:33	08/27/18 16:19	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10		0.014	0.0021	mg/Kg		08/25/18 13:53	08/29/18 13:30	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: TB-2
Date Collected: 08/22/18 00:00
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-20
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/30/18 00:18	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/30/18 00:18	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/30/18 00:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091	ug/L			08/30/18 00:18	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/30/18 00:18	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/30/18 00:18	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/30/18 00:18	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/30/18 00:18	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/30/18 00:18	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/30/18 00:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/30/18 00:18	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/30/18 00:18	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/30/18 00:18	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/30/18 00:18	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/30/18 00:18	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/30/18 00:18	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/30/18 00:18	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/30/18 00:18	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/30/18 00:18	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/30/18 00:18	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/30/18 00:18	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/30/18 00:18	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 00:18	1
2-Hexanone	ND		50	3.0	ug/L			08/30/18 00:18	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 00:18	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/30/18 00:18	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/30/18 00:18	1
Acetone	ND		50	20	ug/L			08/30/18 00:18	1
Benzene	ND		0.50	0.25	ug/L			08/30/18 00:18	1
Bromobenzene	ND		1.0	0.20	ug/L			08/30/18 00:18	1
Bromoform	ND		1.0	0.50	ug/L			08/30/18 00:18	1
Bromomethane	ND		1.0	0.49	ug/L			08/30/18 00:18	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/30/18 00:18	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/30/18 00:18	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/30/18 00:18	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/30/18 00:18	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/30/18 00:18	1
Chloroethane	ND		1.0	0.17	ug/L			08/30/18 00:18	1
Chloroform	ND		1.0	0.40	ug/L			08/30/18 00:18	1
Chloromethane	ND		1.0	0.19	ug/L			08/30/18 00:18	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/30/18 00:18	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/30/18 00:18	1
Dibromomethane	ND		0.50	0.30	ug/L			08/30/18 00:18	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/30/18 00:18	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/30/18 00:18	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/30/18 00:18	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/30/18 00:18	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/30/18 00:18	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Client Sample ID: TB-2
Date Collected: 08/22/18 00:00
Date Received: 08/22/18 14:30

Lab Sample ID: 720-88192-20
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/30/18 00:18	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/30/18 00:18	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/30/18 00:18	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/30/18 00:18	1
Naphthalene	ND		1.0	0.22	ug/L			08/30/18 00:18	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/30/18 00:18	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/30/18 00:18	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/30/18 00:18	1
Styrene	ND		0.50	0.22	ug/L			08/30/18 00:18	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/30/18 00:18	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/30/18 00:18	1
Toluene	ND		0.50	0.17	ug/L			08/30/18 00:18	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/30/18 00:18	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/30/18 00:18	1
Trichloroethene	ND		0.50	0.20	ug/L			08/30/18 00:18	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/30/18 00:18	1
Vinyl acetate	ND		10	0.60	ug/L			08/30/18 00:18	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/30/18 00:18	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/30/18 00:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 130*		*08/30/18 00:18*	*1*
4-Bromofluorobenzene	*98*		*67 - 130*		*08/30/18 00:18*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/30/18 00:18*	*1*

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-I3S-0.5-1 Lab Sample ID: 720-88192-1

Matrix: Solid Lab File ID: FID2000030.D

Analysis Method: 8015B Date Collected: 08/22/2018 09:30

Extraction Method: 3546 Date Extracted: 08/23/2018 08:42

Sample wt/vol: 15.41(g) Date Analyzed: 08/24/2018 00:14

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250037 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	13000		1900	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	99		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000030.D
Lims ID: 720-88192-D-1-A
Client ID: DG-I3S--0.5-1
Sample Type: Client
Inject. Date: 24-Aug-2018 00:14:28 ALS Bottle#: 80 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053435-030
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m
Limit Group: DRO
Last Update: 24-Aug-2018 11:30:17 Calib Date: 23-Aug-2018 08:54:15
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 11:30:17

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.334			ND	
	23 n-Decane	2.214	2.190	0.024	140415	NC	M
A	1 C9-C13	2.799	(1.334-4.263)		4913180	2.25	M
A	21 Stoddard Solvent	2.799	(1.334-4.263)		4913180	NC	M
A	57 C10-C12	2.919	(2.190-3.648)		3111761	9.06	M
	24 Dodecane	3.696	3.648	0.048	92361	NC	M
A	3 C9 - C17	3.828	(1.334-6.322)		12490514	5.95	M
A	60 C10-C16	4.019	(2.190-5.847)		9454888	5.08	M
A	47 C9 - C18	4.049	(1.334-6.765)		16123176	8.51	M
A	15 Kerosene	4.261	(1.334-7.188)		23005024	12.1	M
A	25 C9-C19	4.261	(1.334-7.188)		23005024	10.9	M
	26 C13	4.237	4.263	-0.026	220264	NC	M
$	27 n-Decanoic Acid (Surr)		4.640			ND	U
A	59 C12-C16	4.747	(3.648-5.847)		6343127	10.9	M
A	61 C10-C20	4.893	(2.190-7.596)		36946150	28.2	M
A	28 C9-C24	5.199	(1.334-9.064)		81203748	53.3	M
A	29 C9-C25	5.365	(1.334-9.396)		98077403	62.8	M
A	54 C10-C23	5.454	(2.190-8.719)		63153118	43.1	M
A	4 C10-C24	5.627	(2.190-9.064)		80252778	52.7	M
A	16 C10-C25	5.793	(2.190-9.396)		97126433	62.3	M
	45 Hexadecane	5.865	5.847	0.018	566197	NC	M
A	14 C10-C26	5.953	(2.190-9.717)		116284201	73.1	M
A	67 C12-C22	6.004	(3.648-8.360)		54404714	38.1	M
A	32 C10-C28	6.258	(2.190-10.325)		169752524	103.4	M
A	5 Diesel	6.258	(2.190-10.325)		169752524	103.4	M
A	12 Unknown Hydrocarbons	6.258	(2.190-10.325)		169752524	NC	M
A	30 C13-C22	6.311	(4.263-8.360)		53774529	37.7	M
	44 Heptadecane	6.360	6.322	0.038	1958246	NC	M
A	31 C12-C24	6.356	(3.648-9.064)		77141017	51.0	M
	49 n-Octadecane	6.772	6.765	0.007	1392906	NC	M
A	9 Crude Oil Range Organics (	6.873	(1.334-12.411)		551366719	NC	M
A	11 Bunker Range Organics (C9-	6.873	(1.334-12.411)		551366719	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.873	(1.334-12.411)		551366719	261.2	M
33 C19	7.139	7.188	-0.049	3985223	NC	M
A 64 C13-C28	7.294	(4.263-10.325)		166010578	101.3	M
A 17 C10-C36	7.301	(2.190-12.411)		550415749	319.0	M
A 13 C9-C40	7.364	(1.334-13.393)		878605732	562.4	M
A 68 Crude Oil Range Organics (	7.364	(1.334-13.393)		878605732	NC	M
A 58 C16-C24	7.455	(5.847-9.064)		70797890	47.4	M
62 icosane	7.592	7.596	-0.004	5107842	NC	M
A 6 C10-C40	7.792	(2.190-13.393)		877654762	562.4	M
$ 34 p-Terphenyl	8.072	8.083	-0.011	50518571	24.8	M
35 n-Docosane	8.361	8.360	0.001	5636643	NC	M
A 18 C12-C40	8.520	(3.648-13.393)		874543001	562.0	M
36 Tricosane	8.724	8.719	0.005	13902651	NC	M
A 66 C13-C40	8.828	(4.263-13.393)		873912816	562.2	M
37 n-Tetracosane	9.067	9.064	0.003	12065955	NC	M
A 2 C16-C36 ORO	9.129	(5.847-12.411)		540960861	457.5	M
38 C25	9.402	9.396	0.006	15175482	NC	M
A 19 C16-C40	9.620	(5.847-13.393)		868199874	560.4	M
46 n-Hexacosane	9.721	9.717	0.004	17169374	NC	M
A 20 C19-C36	9.800	(7.188-12.411)		331740578	243.7	
A 55 C23-C32	10.074	(8.719-11.430)		278472910	359.8	M
39 n-Octacosane	10.375	10.325	0.050	33691835	NC	M
65 C29	10.625	10.614	0.011	45825043	NC	M
A 40 C24-C36	10.737	(9.064-12.411)		449669848	458.7	M
A 7 Motor Oil	10.737	(9.064-12.411)		346348987	353.3	
A 10 C22-C40	10.876	(8.360-13.393)		493759108	355.2	
A 50 C25-C36	10.904	(9.396-12.411)		334285631	362.9	
A 41 C23-C40	11.056	(8.719-13.393)		494597322	361.9	
A 8 C24-C40	11.228	(9.064-13.393)		492516511	367.2	
56 Dotriacontane	11.433	11.430	0.003	21700186	NC	M
A 51 C28-C40	11.859	(10.325-13.393)		441843370	407.3	
A 63 C29-C40	12.004	(10.614-13.393)		414454261	414.7	
42 n-Hexatriacontane	12.369	12.411	-0.042	31706459	NC	M
43 C40		13.393			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

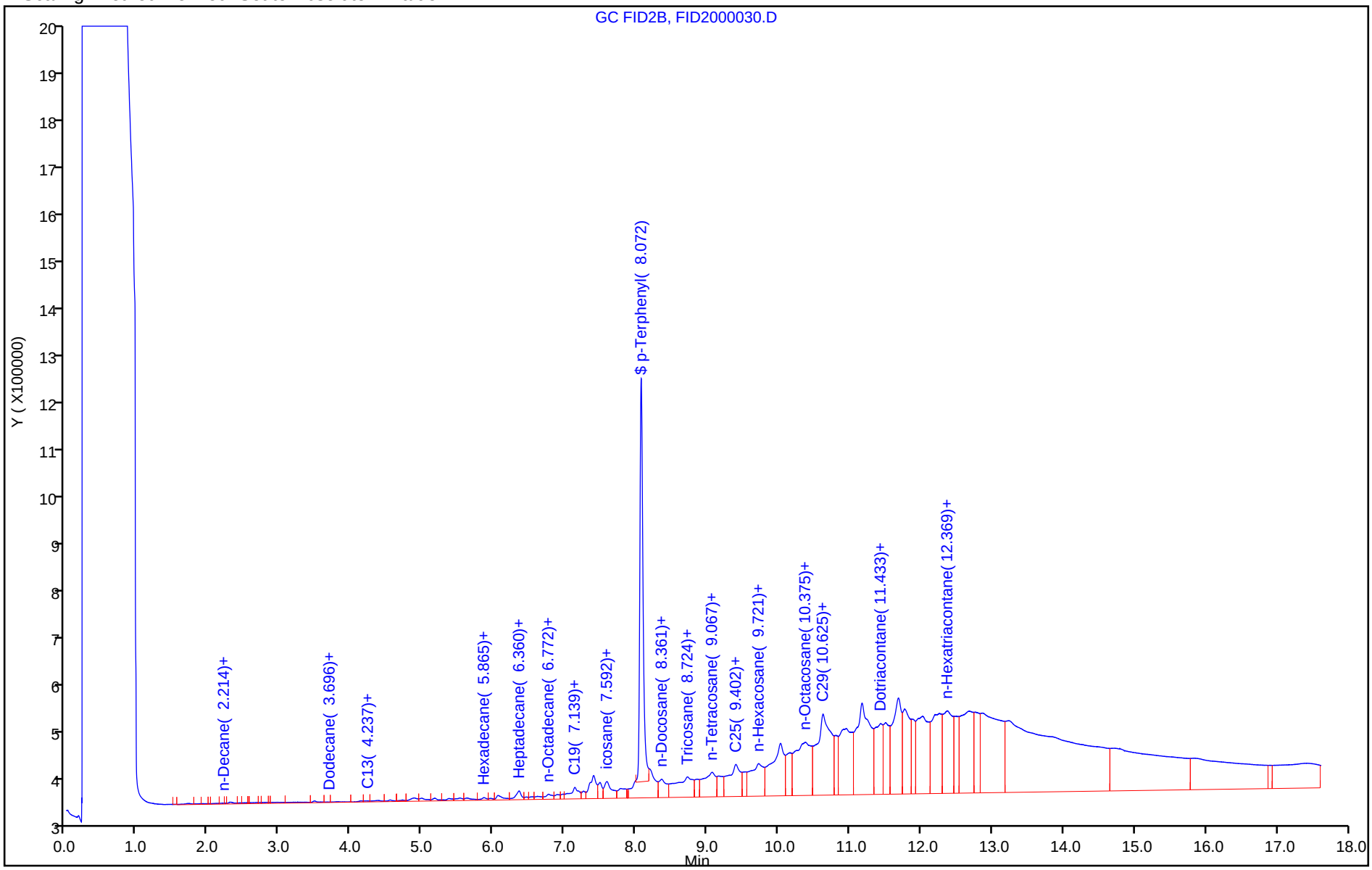
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 24-Aug-2018 11:30:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000030.D				
Injection Date:	24-Aug-2018 00:14:28	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88192-D-1-A	Lab Sample ID:	720-88192-1	Worklist Smp#:	30
Client ID:	DG-I3S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	80
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000030.D				
Lims ID:	720-88192-D-1-A				
Client ID:	DG-I3S--0.5-1				
Sample Type:	Client				
Inject. Date:	24-Aug-2018 00:14:28	ALS Bottle#:	80	Worklist Smp#:	30
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053435-030				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 11:30:17	Calib Date:	23-Aug-2018 08:54:15		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				
First Level Reviewer: luj		Date:	24-Aug-2018 11:30:17		

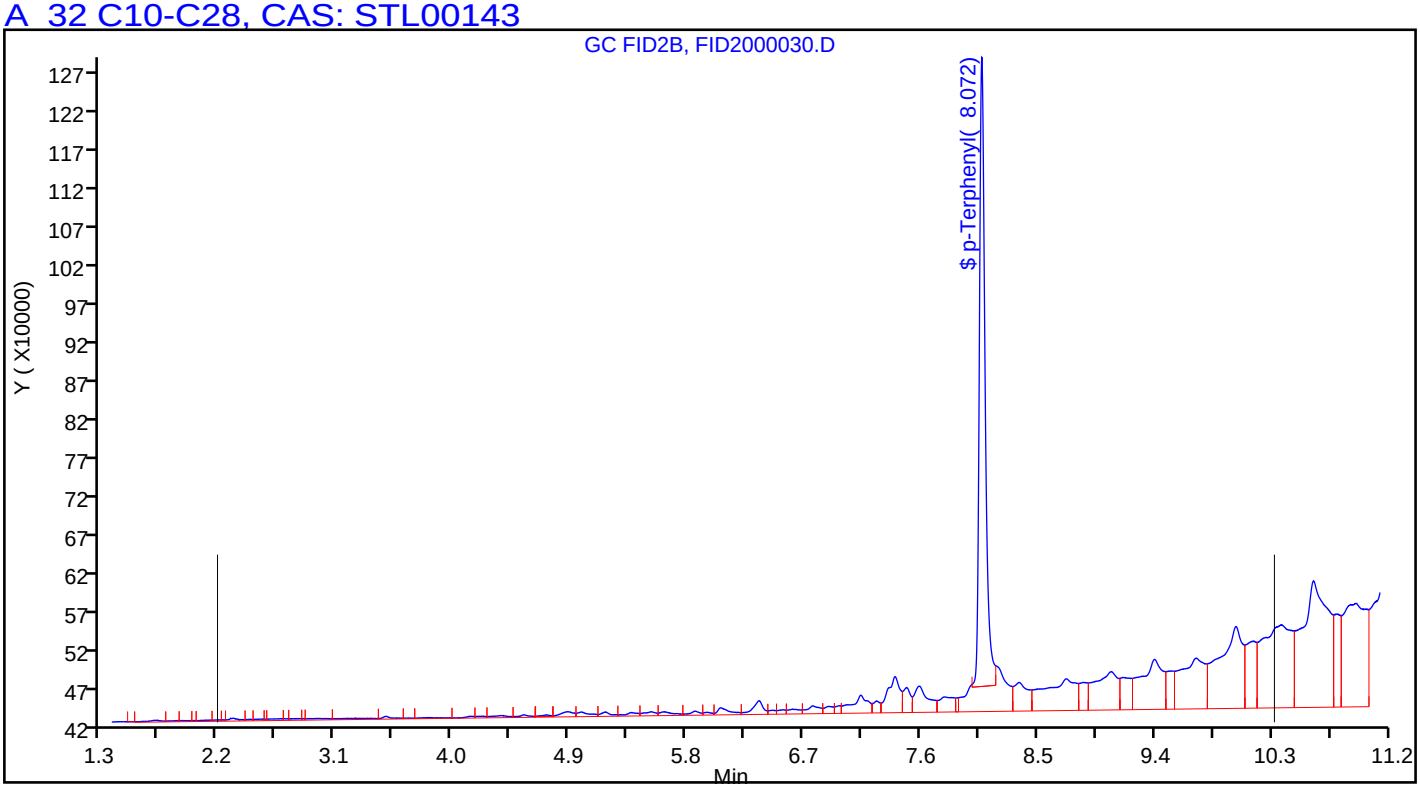
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	24.8	99.38

Report Date: 24-Aug-2018 11:30:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000030.D				
Injection Date:	24-Aug-2018 00:14:28	Instrument ID:	CHDRO6		
Lims ID:	720-88192-D-1-A	Lab Sample ID:	720-88192-1		
Client ID:	DG-I3S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	80	Worklist Smp#:	30
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

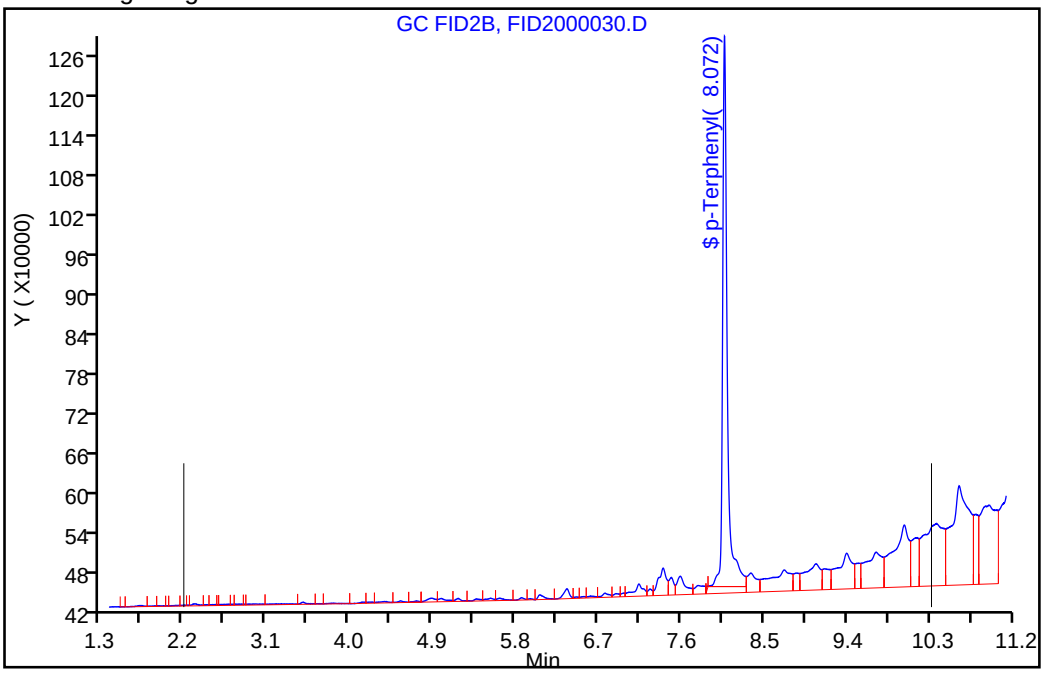
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000030.D				
Injection Date:	24-Aug-2018 00:14:28	Instrument ID:	CHDRO6		
Lims ID:	720-88192-D-1-A	Lab Sample ID:	720-88192-1		
Client ID:	DG-I3S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	80	Worklist Smp#:	30
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.258, CAS: STL00143

Signal: 1

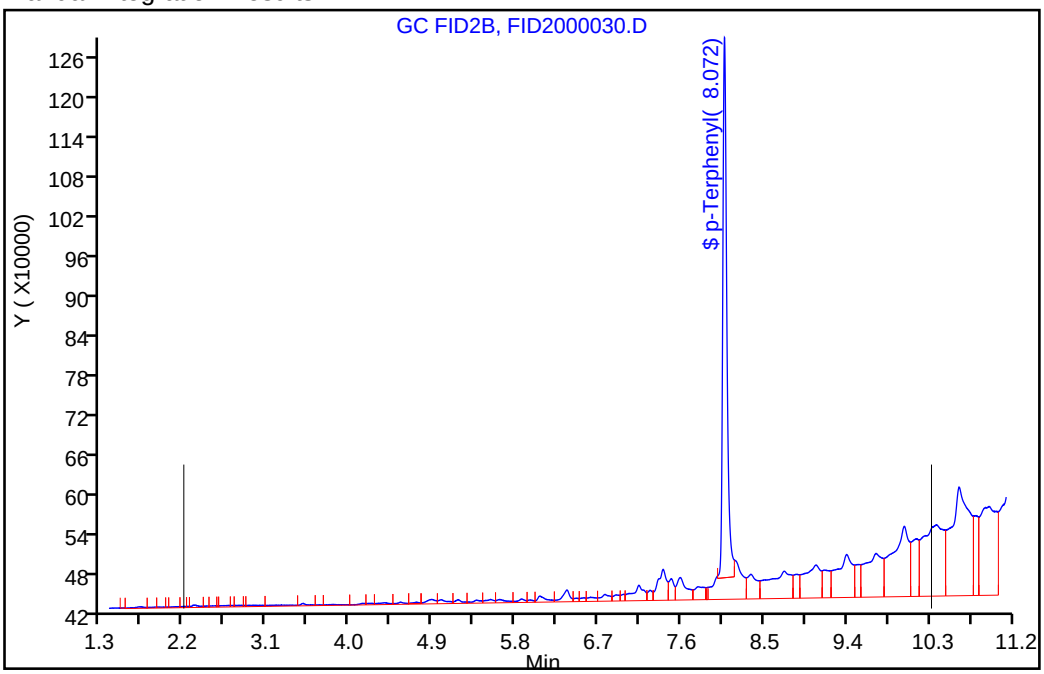
Processing Integration Results

RT: 6.26
Response: 119588573
Amount: 75.012797



Manual Integration Results

RT: 6.26
Response: 169752524
Amount: 103.4167



Reviewer: luj, 24-Aug-2018 11:30:09

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

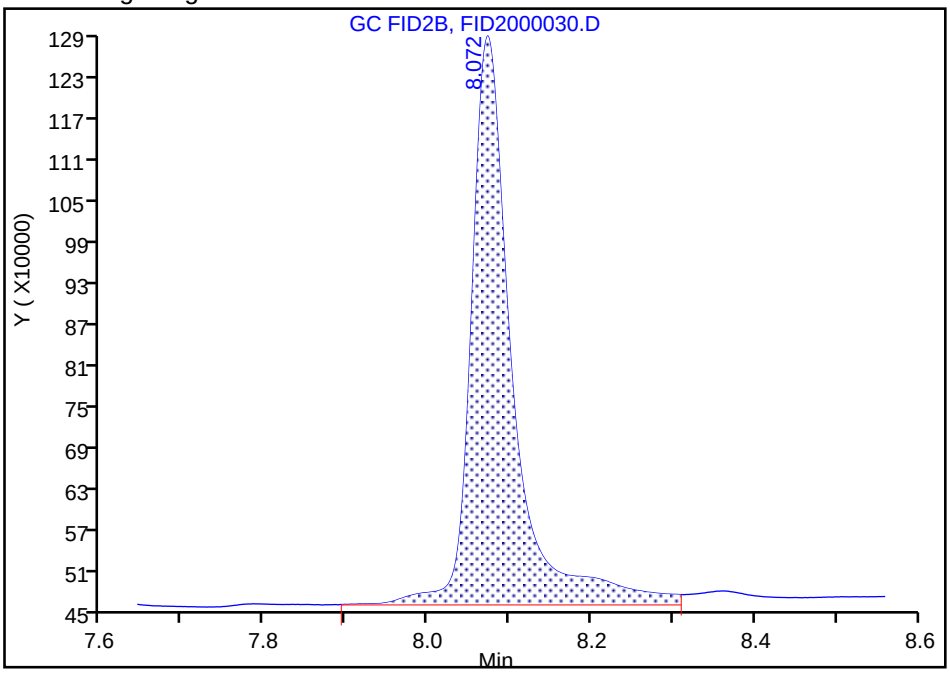
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000030.D				
Injection Date:	24-Aug-2018 00:14:28	Instrument ID:	CHDRO6		
Lims ID:	720-88192-D-1-A	Lab Sample ID:	720-88192-1		
Client ID:	DG-I3S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	80	Worklist Smp#:	30
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

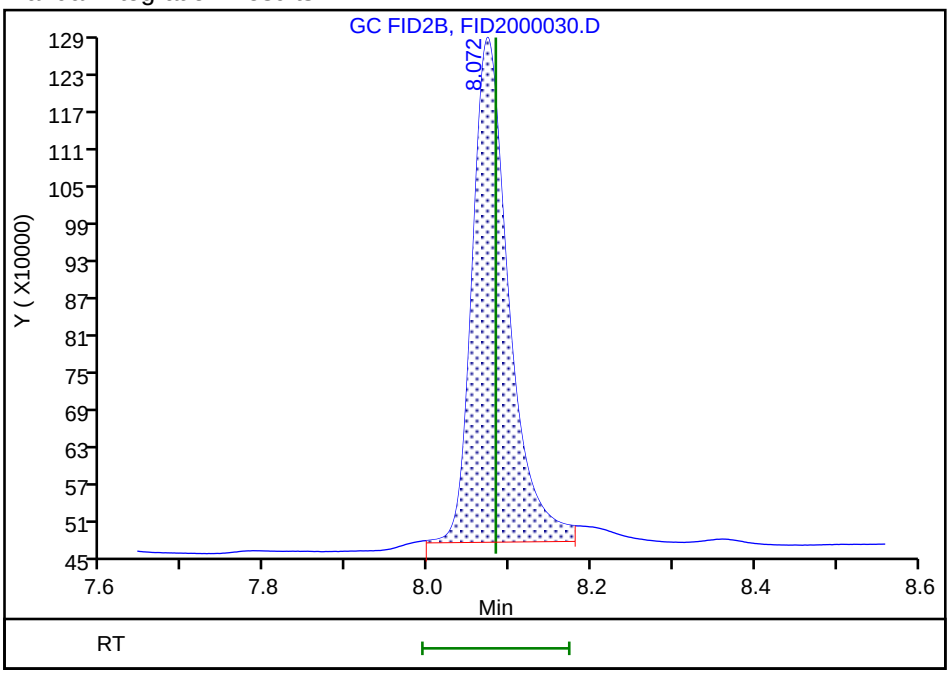
Processing Integration Results

RT: 8.07
Area: 58810934
Amount: 28.922641
Amount Units: mg/L



Manual Integration Results

RT: 8.07
Area: 50518571
Amount: 24.844538
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 11:29:39

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-I3S-3.5-4 Lab Sample ID: 720-88192-2

Matrix: Solid Lab File ID: FID2000031.D

Analysis Method: 8015B Date Collected: 08/22/2018 09:30

Extraction Method: 3546 Date Extracted: 08/23/2018 08:42

Sample wt/vol: 15.59(g) Date Analyzed: 08/24/2018 00:38

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250037 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	21000		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	87		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000031.D
Lims ID: 720-88192-D-2-A
Client ID: DG-I3S--3.5-4
Sample Type: Client
Inject. Date: 24-Aug-2018 00:38:45 ALS Bottle#: 81 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053435-031
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m
Limit Group: DRO
Last Update: 24-Aug-2018 13:56:46 Calib Date: 23-Aug-2018 08:54:15
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 13:56:46

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.334			ND	
	23 n-Decane	2.116	2.190	-0.074	94172	NC	M
A	1 C9-C13	2.799	(1.334-4.263)		3193865	1.46	M
A	21 Stoddard Solvent	2.799	(1.334-4.263)		3193865	NC	M
A	57 C10-C12	2.919	(2.190-3.648)		1435310	8.11	M
	24 Dodecane	3.633	3.648	-0.015	16613	NC	M
A	3 C9 - C17	3.828	(1.334-6.322)		15377627	7.32	M
A	60 C10-C16	4.019	(2.190-5.847)		10970477	5.90	M
A	47 C9 - C18	4.049	(1.334-6.765)		21404630	11.3	M
A	15 Kerosene	4.261	(1.334-7.188)		28656695	15.1	M
A	25 C9-C19	4.261	(1.334-7.188)		28656695	13.6	M
	26 C13	4.303	4.263	0.040	298161	NC	M
$	27 n-Decanoic Acid (Surr)		4.640			ND	U
A	59 C12-C16	4.747	(3.648-5.847)		9551780	12.7	M
A	61 C10-C20	4.893	(2.190-7.596)		44339115	32.4	M
A	28 C9-C24	5.199	(1.334-9.064)		122514525	76.7	M
A	29 C9-C25	5.365	(1.334-9.396)		151686146	93.2	M
A	54 C10-C23	5.454	(2.190-8.719)		97681182	62.6	M
A	4 C10-C24	5.627	(2.190-9.064)		121452876	76.1	M
A	16 C10-C25	5.793	(2.190-9.396)		150624497	92.6	M
	45 Hexadecane	5.858	5.847	0.011	1357011	NC	M
A	14 C10-C26	5.953	(2.190-9.717)		181053147	109.8	M
A	67 C12-C22	6.004	(3.648-8.360)		96262485	61.8	M
A	32 C10-C28	6.258	(2.190-10.325)		276677057	164.0	M
A	5 Diesel	6.258	(2.190-10.325)		276677057	164.0	M
A	12 Unknown Hydrocarbons	6.258	(2.190-10.325)		276677057	NC	M
A	30 C13-C22	6.311	(4.263-8.360)		95992777	61.7	M
	44 Heptadecane	6.355	6.322	0.033	3238885	NC	M
A	31 C12-C24	6.356	(3.648-9.064)		120034179	75.3	M
	49 n-Octadecane	6.768	6.765	0.003	2602392	NC	M
A	9 Crude Oil Range Organics (	6.873	(1.334-12.411)		975515693	NC	M
A	11 Bunker Range Organics (C9-	6.873	(1.334-12.411)		975515693	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.873	(1.334-12.411)		975515693	462.1	M
33 C19	7.192	7.188	0.004	3719483	NC	M
A 64 C13-C28	7.294	(4.263-10.325)		274988652	163.0	M
A 17 C10-C36	7.301	(2.190-12.411)		974454044	559.1	M
A 13 C9-C40	7.364	(1.334-13.393)		1634234223	1046.0	M
A 68 Crude Oil Range Organics (	7.364	(1.334-13.393)		1634234223	NC	M
A 58 C16-C24	7.455	(5.847-9.064)		110482399	69.9	M
62 icosane	7.598	7.596	0.002	5793709	NC	M
A 6 C10-C40	7.792	(2.190-13.393)		1633172574	1046.5	M
$ 34 p-Terphenyl	8.071	8.083	-0.012	44020757	21.6	M
35 n-Docosane	8.354	8.360	-0.006	7675498	NC	M
A 18 C12-C40	8.520	(3.648-13.393)		1631753877	1048.5	M
36 Tricosane	8.720	8.719	0.001	23771694	NC	M
A 66 C13-C40	8.828	(4.263-13.393)		1631484169	1049.5	M
37 n-Tetracosane	9.068	9.064	0.004	24585694	NC	M
A 2 C16-C36 ORO	9.129	(5.847-12.411)		963483567	814.8	M
38 C25	9.400	9.396	0.004	30428650	NC	M
A 19 C16-C40	9.620	(5.847-13.393)		1622202097	1047.0	M
46 n-Hexacosane	9.721	9.717	0.004	34841057	NC	M
A 20 C19-C36	9.800	(7.188-12.411)		594832978	436.9	
A 55 C23-C32	10.074	(8.719-11.430)		485719363	627.6	M
39 n-Octacosane	10.388	10.325	0.063	63028099	NC	M
65 C29	10.626	10.614	0.012	76852648	NC	M
A 40 C24-C36	10.737	(9.064-12.411)		827557412	844.1	M
A 7 Motor Oil	10.737	(9.064-12.411)		621498300	633.9	
A 10 C22-C40	10.876	(8.360-13.393)		913880110	657.5	
A 50 C25-C36	10.904	(9.396-12.411)		604831314	656.6	
A 41 C23-C40	11.056	(8.719-13.393)		916689910	670.7	
A 8 C24-C40	11.228	(9.064-13.393)		920045770	686.0	
56 Dotriacontane	11.432	11.430	0.002	41309507	NC	M
A 51 C28-C40	11.859	(10.325-13.393)		836366398	771.0	
A 63 C29-C40	12.004	(10.614-13.393)		787601055	788.1	
42 n-Hexatriacontane	12.361	12.411	-0.050	55143869	NC	M
43 C40		13.393			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

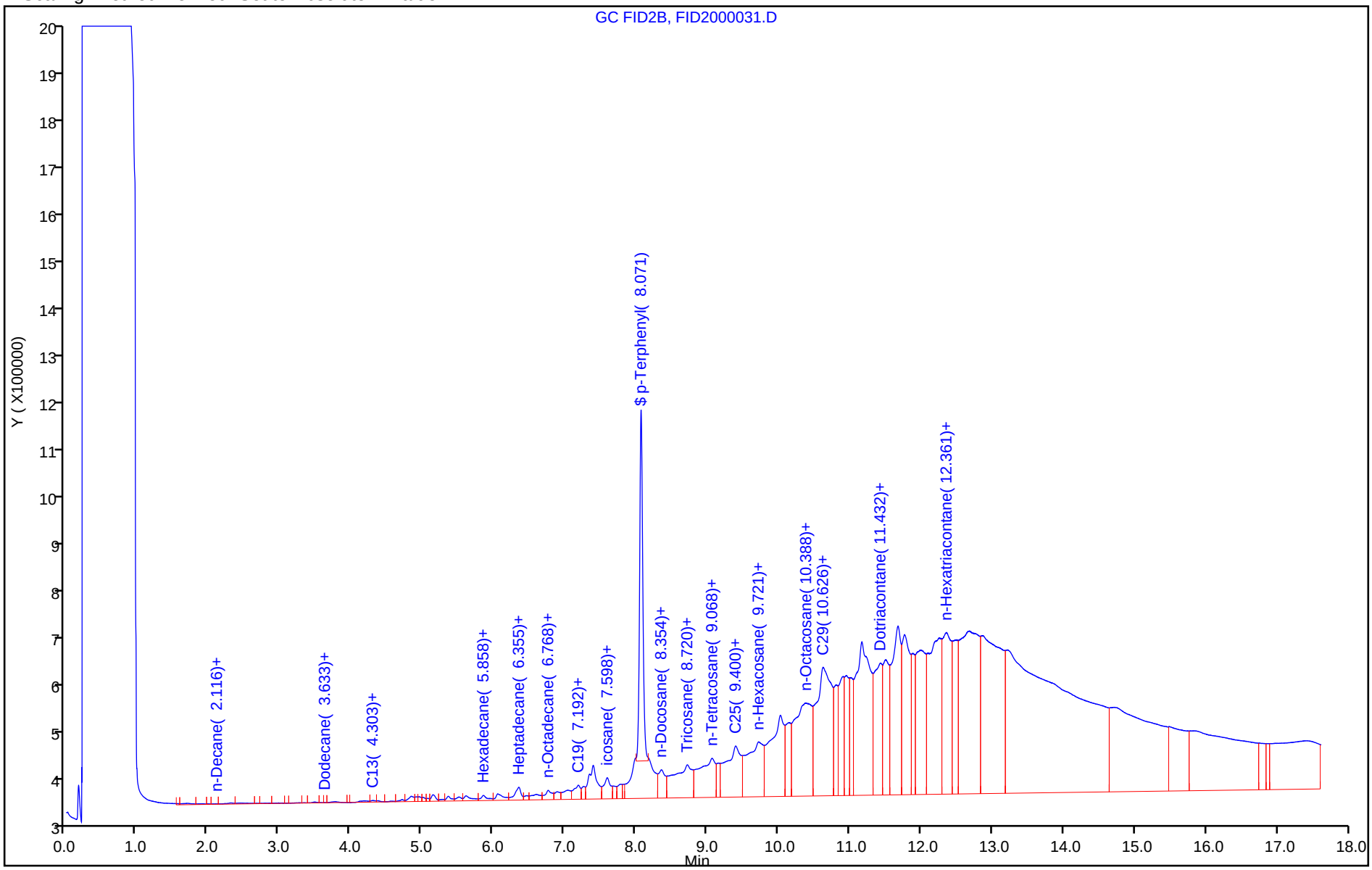
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 24-Aug-2018 13:56:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000031.D				
Injection Date:	24-Aug-2018 00:38:45	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88192-D-2-A	Lab Sample ID:	720-88192-2	Worklist Smp#:	31
Client ID:	DG-I3S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	81
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000031.D				
Lims ID:	720-88192-D-2-A				
Client ID:	DG-I3S--3.5-4				
Sample Type:	Client				
Inject. Date:	24-Aug-2018 00:38:45	ALS Bottle#:	81	Worklist Smp#:	31
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053435-031				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 13:56:46	Calib Date:	23-Aug-2018 08:54:15		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				
First Level Reviewer: luj		Date:	24-Aug-2018 13:56:46		

Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	21.6	86.60

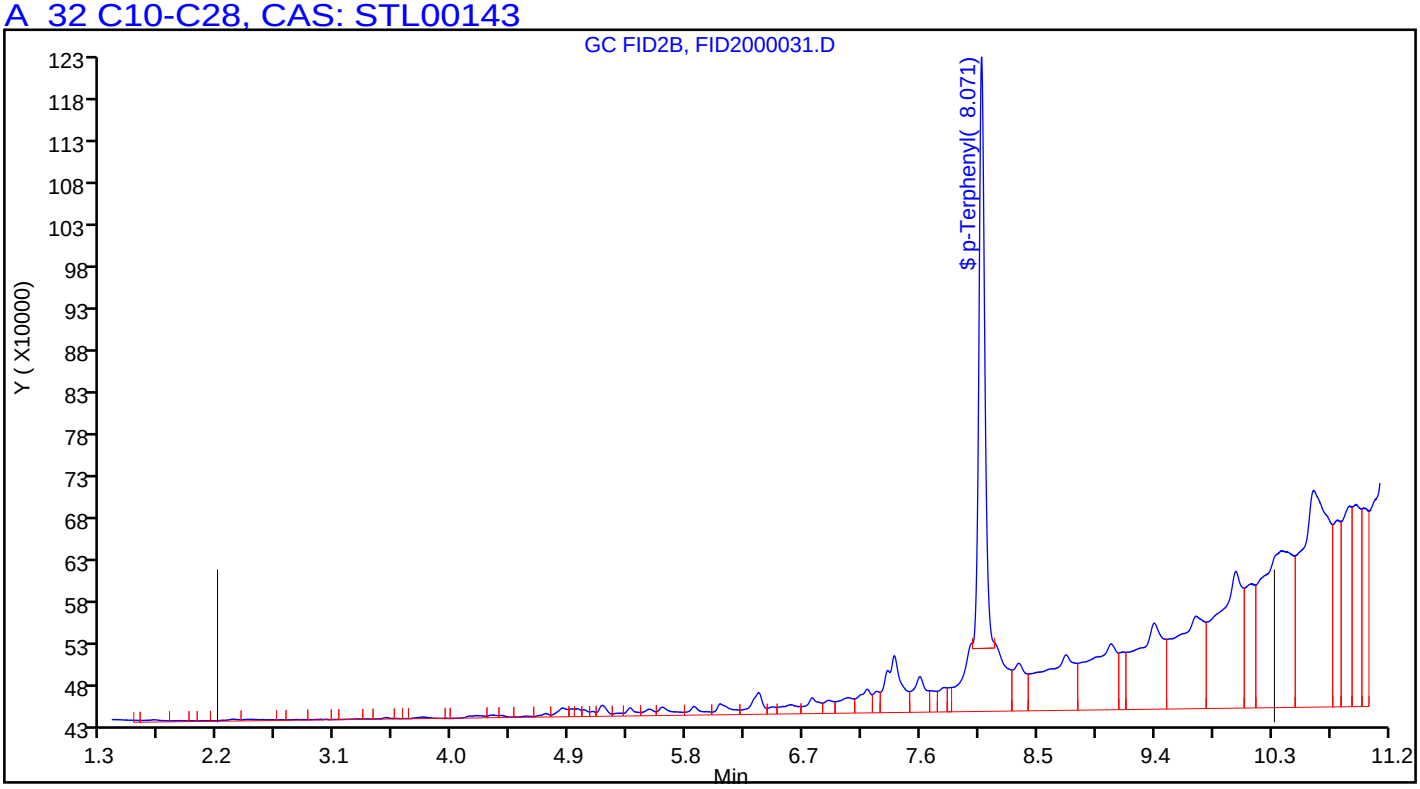
Report Date: 24-Aug-2018 13:56:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000031.D

Injection Date:	24-Aug-2018 00:38:45	Instrument ID:	CHDRO6		
Lims ID:	720-88192-D-2-A	Lab Sample ID:	720-88192-2		
Client ID:	DG-I3S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	81	Worklist Smp#:	31
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

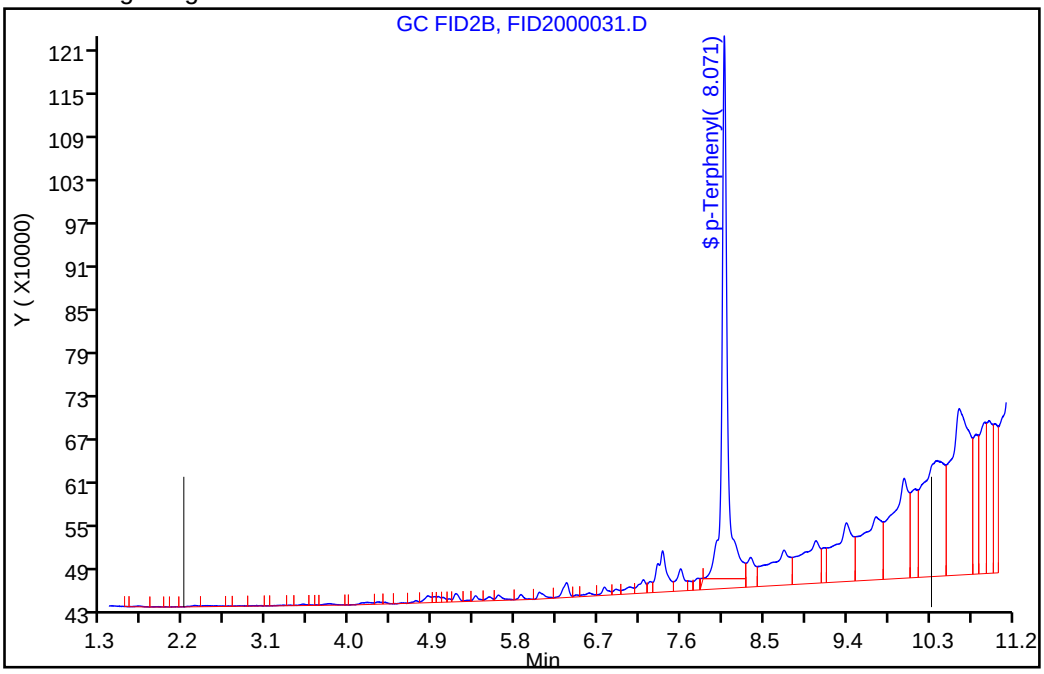
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000031.D				
Injection Date:	24-Aug-2018 00:38:45	Instrument ID:	CHDRO6		
Lims ID:	720-88192-D-2-A	Lab Sample ID:	720-88192-2		
Client ID:	DG-I3S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	81	Worklist Smp#:	31
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.258, CAS: STL00143

Signal: 1

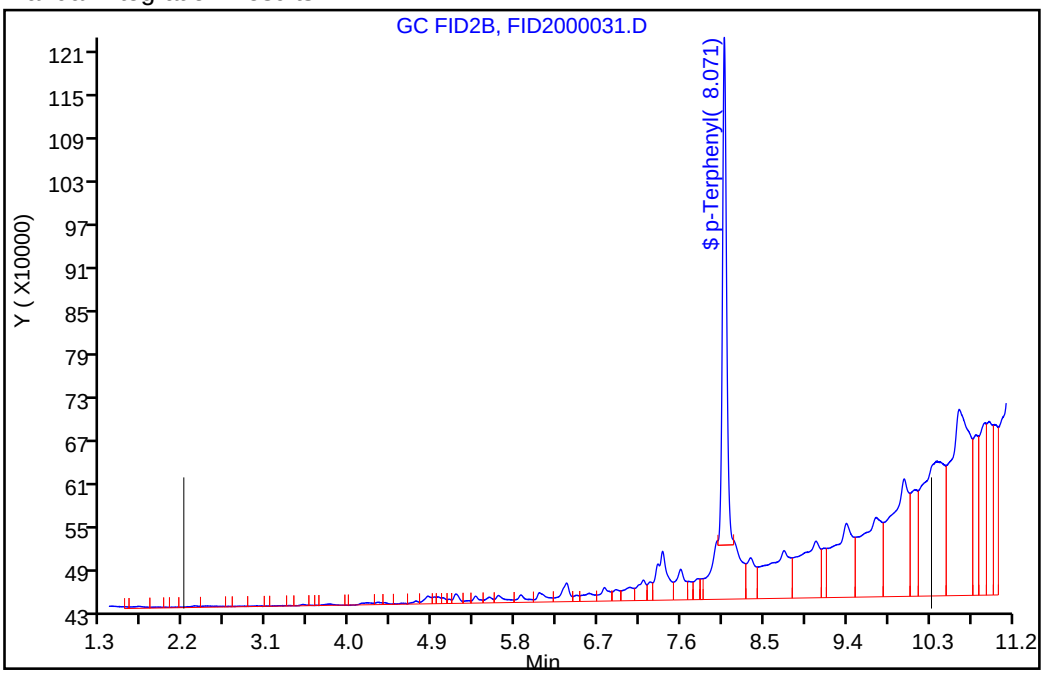
Processing Integration Results

RT: 6.26
Response: 180693046
Amount: 109.6114



Manual Integration Results

RT: 6.26
Response: 276677057
Amount: 163.9595



Reviewer: luj, 24-Aug-2018 13:56:33

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

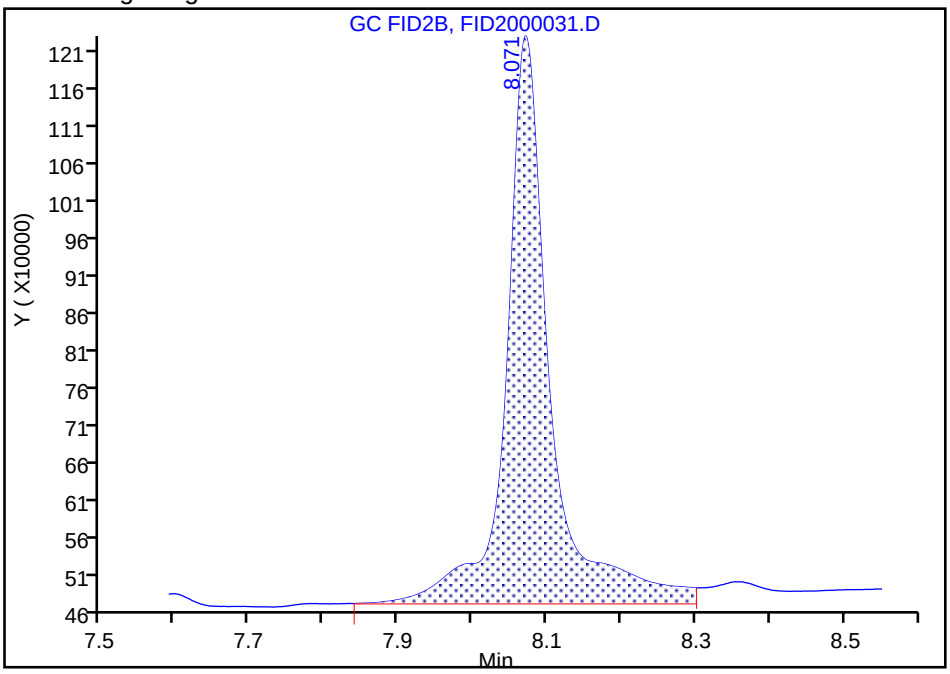
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53435.b\FID2000031.D				
Injection Date:	24-Aug-2018 00:38:45	Instrument ID:	CHDRO6		
Lims ID:	720-88192-D-2-A	Lab Sample ID:	720-88192-2		
Client ID:	DG-I3S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	81	Worklist Smp#:	31
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

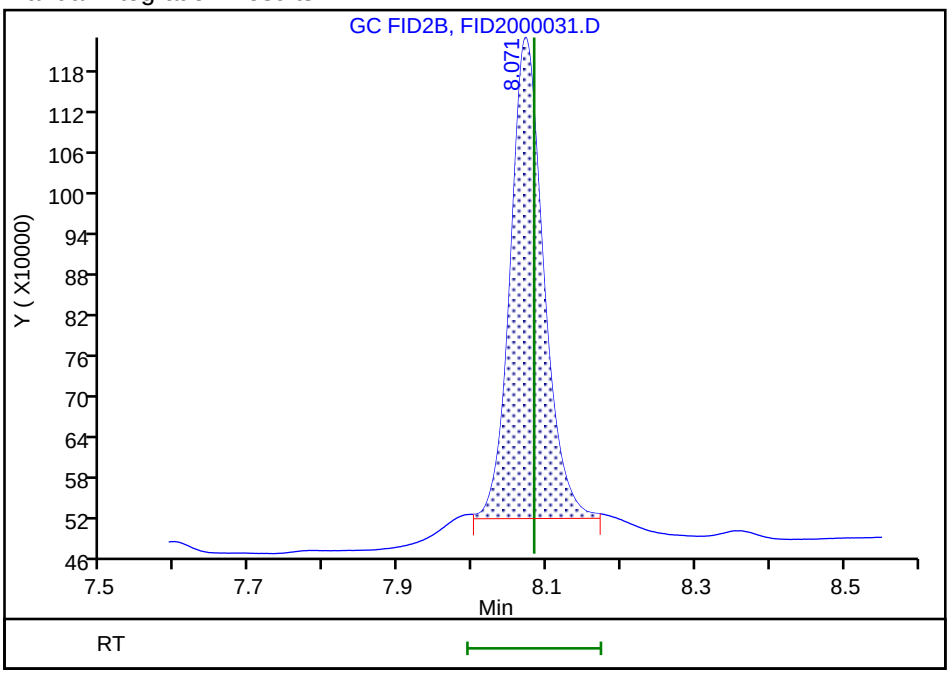
Processing Integration Results

RT: 8.07
Area: 62653881
Amount: 30.812565
Amount Units: mg/L



Manual Integration Results

RT: 8.07
Area: 44020757
Amount: 21.648977
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 13:56:01

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-K3S-0.5-1 Lab Sample ID: 720-88192-5

Matrix: Solid Lab File ID: FID1000029.D

Analysis Method: 8015B Date Collected: 08/22/2018 10:15

Extraction Method: 3546 Date Extracted: 08/23/2018 08:42

Sample wt/vol: 15.43(g) Date Analyzed: 08/23/2018 23:50

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250036 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	49000		1900	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	119		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000029.D
Lims ID: 720-88192-D-5-A
Client ID: DG-K3S--0.5-1
Sample Type: Client
Inject. Date: 23-Aug-2018 23:50:14 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053434-029
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\DRO6_A.m
Limit Group: DRO
Last Update: 24-Aug-2018 12:10:36 Calib Date: 23-Aug-2018 11:10:00
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000007.D

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 12:10:36

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	1.237	1.240	-0.003	31966	NC	
	23 n-Decane	2.112	2.115	-0.003	170697	NC	
A	21 Stoddard Solvent	2.726	(1.240-4.213)		4953103	2.78	M
A	1 C9-C13	2.726	(1.240-4.213)		4953103	2.79	M
A	57 C10-C12	2.853	(2.115-3.591)		2166950	1.40	M
	24 Dodecane	3.588	3.591	-0.003	221386	NC	M
A	3 C9 - C17	3.765	(1.240-6.290)		52811140	27.1	M
A	60 C10-C16	3.964	(2.115-5.813)		25115897	14.4	M
A	47 C9 - C18	3.989	(1.240-6.739)		108259698	67.0	M
A	25 C9-C19	4.203	(1.240-7.167)		187956814	95.8	M
A	15 Kerosene	4.203	(1.240-7.167)		187956814	116.4	M
	26 C13	4.210	4.213	-0.003	332222	NC	M
$	27 n-Decanoic Acid (Surr)		4.583			ND	U
A	59 C12-C16	4.702	(3.591-5.813)		23170333	15.0	M
A	62 C10-C20	4.846	(2.115-7.578)		262909052	170.5	M
A	28 C9-C24	5.150	(1.240-9.060)		421515799	273.3	M
A	29 C9-C25	5.318	(1.240-9.397)		458313361	297.1	M
A	54 C10-C23	5.413	(2.115-8.711)		379855218	246.3	M
A	4 C10-C24	5.588	(2.115-9.060)		420813920	272.8	M
A	16 C10-C25	5.756	(2.115-9.397)		457611482	296.7	M
	45 Hexadecane	5.813	5.813	0.000	6357203	NC	M
A	14 C10-C26	5.918	(2.115-9.721)		491925264	318.9	M
A	67 C12-C22	5.970	(3.591-8.348)		344287275	223.2	M
A	12 Unknown Hydrocarbons	6.226	(2.115-10.338)		583584845	NC	M
A	5 Diesel	6.226	(2.115-10.338)		583584845	378.4	M
A	32 C10-C28	6.226	(2.115-10.338)		583584845	378.4	M
A	30 C13-C22	6.281	(4.213-8.348)		342313837	221.9	M
	44 Heptadecane	6.332	6.290	0.042	32703070	NC	M
A	31 C12-C24	6.326	(3.591-9.060)		418868356	271.6	M
	51 n-Octadecane	6.740	6.739	0.001	12488347	NC	M
A	9 Crude Oil Range Organics (	6.847	(1.240-12.455)		1229063737	NC	M
A	11 Bunker Range Organics (C9-	6.847	(1.240-12.455)		1229063737	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.847	(1.240-12.455)		1229063737	694.2	M
33 C19	7.164	7.167	-0.003	23350818	NC	M
A 64 C13-C28	7.275	(4.213-10.338)		579665843	375.8	M
A 17 C10-C36	7.285	(2.115-12.455)		1228361858	796.4	M
A 13 C9-C40	7.346	(1.240-13.451)		1500279559	1112.6	M
A 68 Crude Oil Range Organics (	7.346	(1.240-13.451)		1500279559	NC	M
A 58 C16-C24	7.436	(5.813-9.060)		395698023	256.5	M
61 icosane	7.577	7.578	-0.001	11692177	NC	M
A 6 C10-C40	7.783	(2.115-13.451)		1499577680	1112.9	M
$ 34 p-Terphenyl	8.040	8.044	-0.004	57336665	29.9	M
35 n-Docosane	8.351	8.348	0.003	12725026	NC	M
A 18 C12-C40	8.521	(3.591-13.451)		1497632116	1114.5	M
36 Tricosane	8.713	8.711	0.002	19673592	NC	M
A 66 C13-C40	8.832	(4.213-13.451)		1495658678	1114.3	M
37 n-Tetracosane	9.069	9.060	0.009	16597216	NC	M
A 2 C16-C36 ORO	9.134	(5.813-12.455)		1260748630	1105.3	
38 C25	9.397	9.397	0.000	14931442	NC	M
A 19 C16-C40	9.632	(5.813-13.451)		1474461783	1102.8	M
46 n-Hexacosane	9.734	9.721	0.013	17931182	NC	M
A 20 C19-C36	9.811	(7.167-12.455)		1104642202	831.1	
A 55 C23-C32	10.085	(8.711-11.458)		507066208	730.4	M
39 n-Octacosane	10.388	10.338	0.050	35175475	NC	M
65 C29	10.616	10.631	-0.015	55427026	NC	M
A 7 Motor Oil	10.757	(9.060-12.455)		482215579	541.5	
A 40 C24-C36	10.757	(9.060-12.455)		780542254	876.5	M
A 10 C22-C40	10.900	(8.348-13.451)		644261847	518.1	
A 49 C25-C36	10.926	(9.397-12.455)		770750376	861.0	M
A 41 C23-C40	11.081	(8.711-13.451)		1119722462	876.1	M
A 8 C24-C40	11.256	(9.060-13.451)		1078763760	886.1	M
56 Dotriacontane	11.463	11.458	0.005	40163662	NC	M
A 50 C28-C40	11.895	(10.338-13.451)		915992835	965.0	M
A 63 C29-C40	12.041	(10.631-13.451)		866655772	1000.1	M
42 n-Hexatriacontane	12.532	12.455	0.077	28226396	NC	M
43 C40		13.451			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

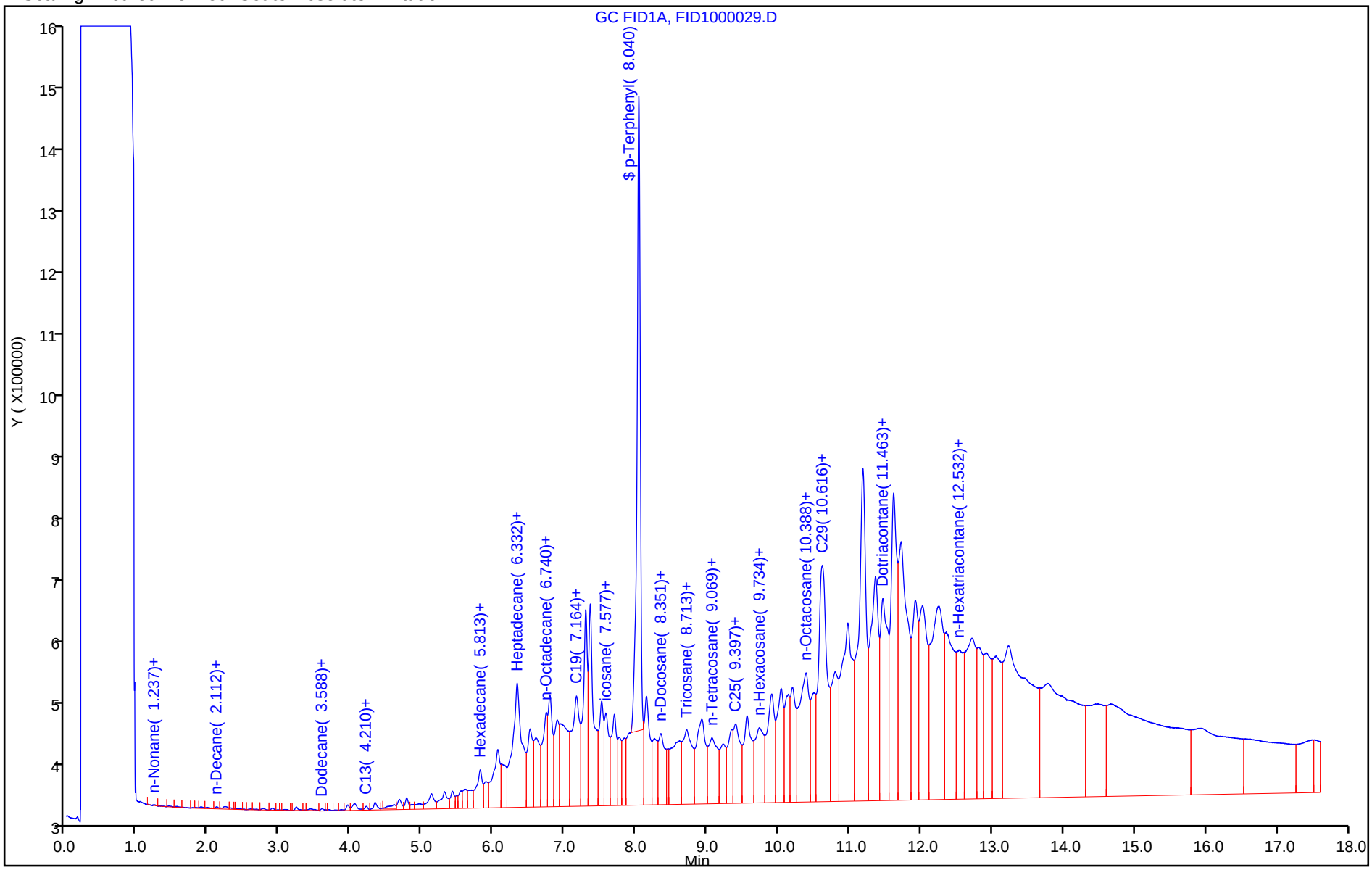
Report Date: 24-Aug-2018 12:10:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000029.D

Injection Date:	23-Aug-2018 23:50:14	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88192-D-5-A	Lab Sample ID:	720-88192-5	Worklist Smp#:	29
Client ID:	DG-K3S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000029.D				
Lims ID:	720-88192-D-5-A				
Client ID:	DG-K3S--0.5-1				
Sample Type:	Client				
Inject. Date:	23-Aug-2018 23:50:14	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053434-029				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\DRO6_A.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 12:10:36	Calib Date:	23-Aug-2018 11:10:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000007.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				
First Level Reviewer: luj		Date:	24-Aug-2018 12:10:36		

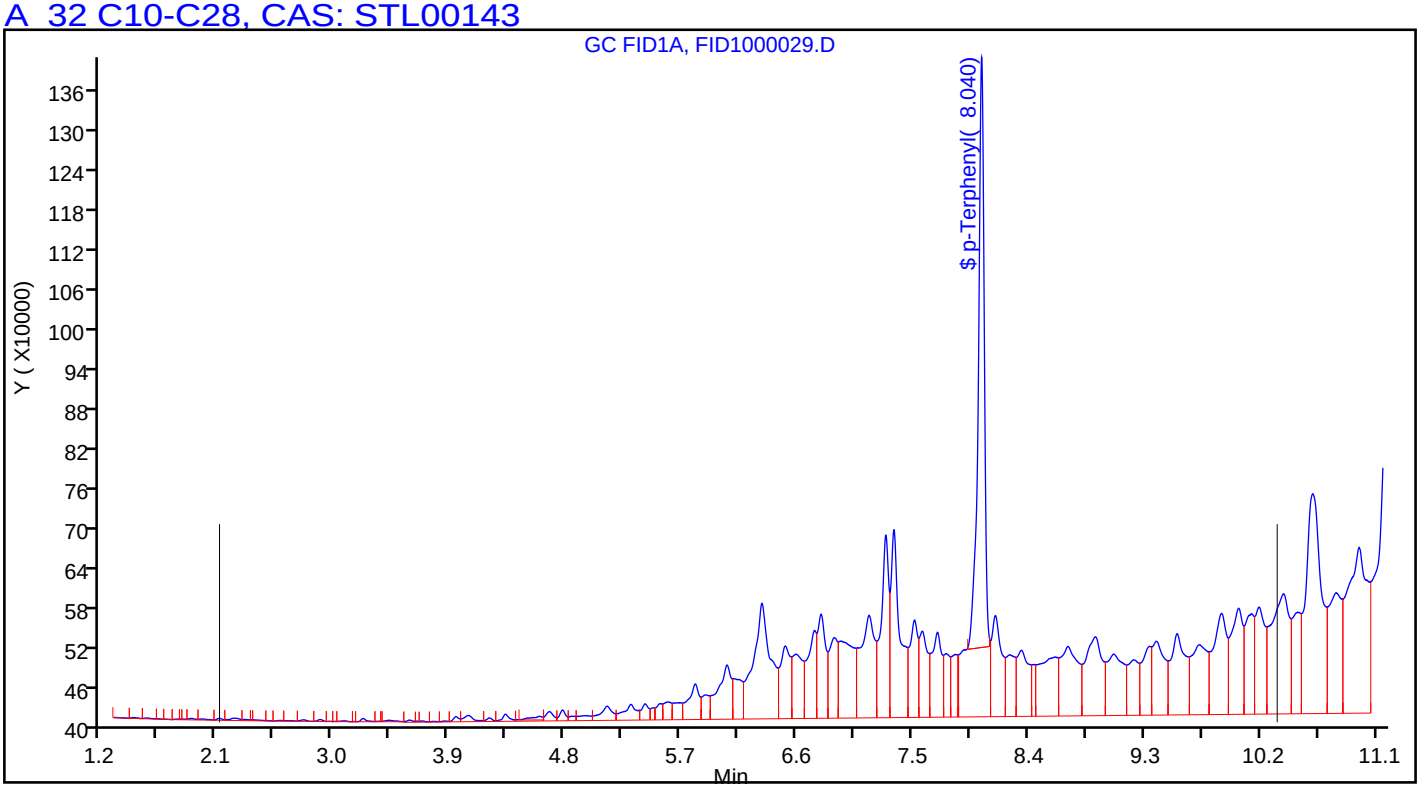
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	29.9	119.43

Report Date: 24-Aug-2018 12:10:43 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000029.D				
Injection Date:	23-Aug-2018 23:50:14	Instrument ID:	CHDRO6		
Lims ID:	720-88192-D-5-A	Lab Sample ID:	720-88192-5		
Client ID:	DG-K3S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

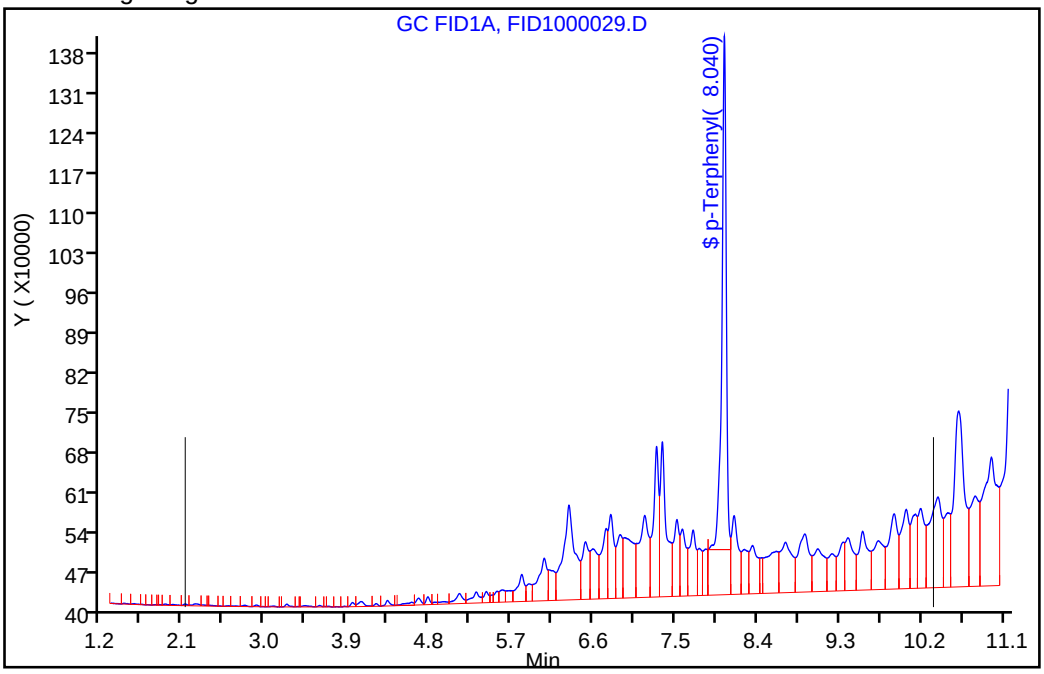
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000029.D				
Injection Date:	23-Aug-2018 23:50:14	Instrument ID:	CHDRO6		
Lims ID:	720-88192-D-5-A	Lab Sample ID:	720-88192-5		
Client ID:	DG-K3S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.226, CAS: STL00143

Signal: 1

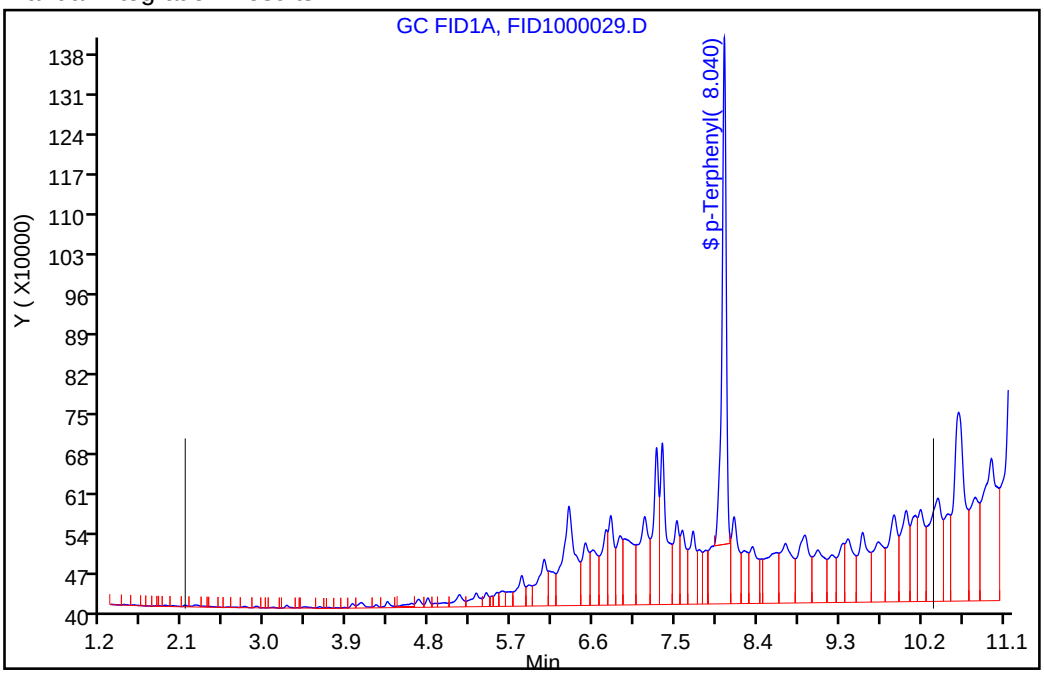
Processing Integration Results

RT: 6.23
Response: 495736226
Amount: 321.4040



Manual Integration Results

RT: 6.23
Response: 583584845
Amount: 378.3594



Reviewer: luj, 24-Aug-2018 12:09:51

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

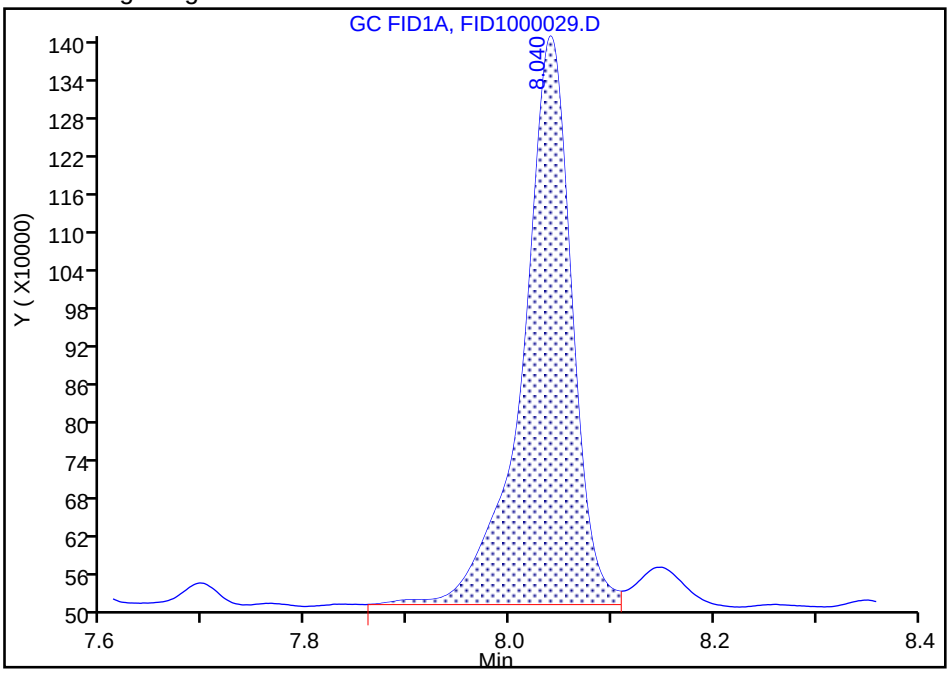
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000029.D				
Injection Date:	23-Aug-2018 23:50:14	Instrument ID:	CHDRO6		
Lims ID:	720-88192-D-5-A	Lab Sample ID:	720-88192-5		
Client ID:	DG-K3S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

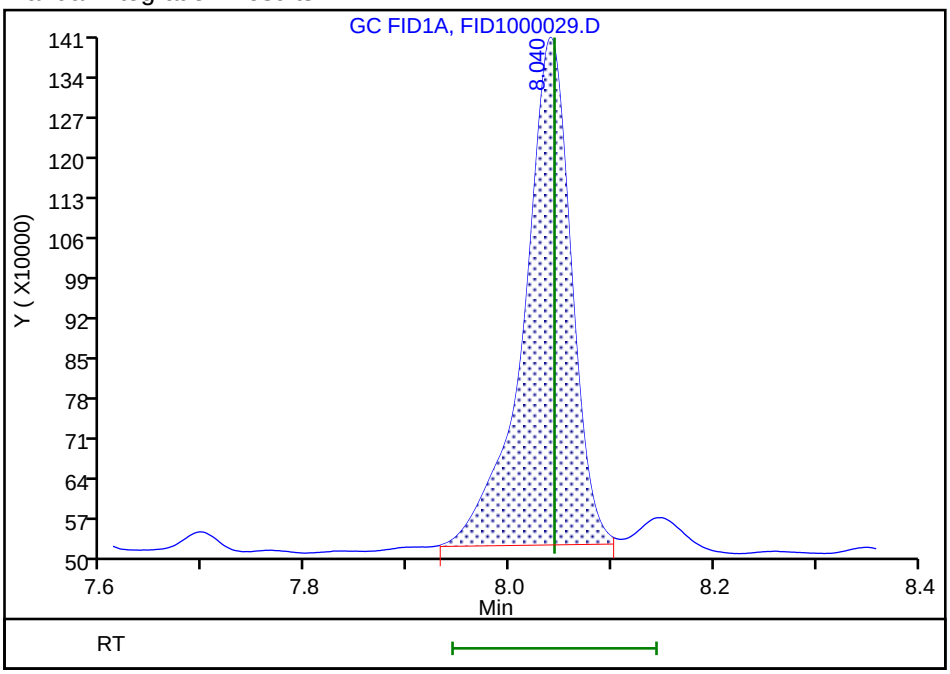
Processing Integration Results

RT: 8.04
Area: 60197221
Amount: 31.346840
Amount Units: mg/L



Manual Integration Results

RT: 8.04
Area: 57336665
Amount: 29.857247
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 12:10:12

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-K3S-3.5-4 Lab Sample ID: 720-88192-6

Matrix: Solid Lab File ID: FID1000028.D

Analysis Method: 8015B Date Collected: 08/22/2018 10:15

Extraction Method: 3546 Date Extracted: 08/23/2018 08:42

Sample wt/vol: 15.39(g) Date Analyzed: 08/23/2018 23:26

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250036 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	3700		1900	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	101		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000028.D
Lims ID: 720-88192-E-6-A
Client ID: DG-K3S--3.5-4
Sample Type: Client
Inject. Date: 23-Aug-2018 23:26:00 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053434-028
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\DRO6_A.m
Limit Group: DRO
Last Update: 24-Aug-2018 12:09:15 Calib Date: 23-Aug-2018 11:10:00
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000007.D

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 12:09:15

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	1.248	1.240	0.008	18039	NC	
	23 n-Decane	2.117	2.115	0.002	48695	NC	
A	21 Stoddard Solvent	2.726	(1.240-4.213)		1616564	0.9078	
A	1 C9-C13	2.726	(1.240-4.213)		1616564	0.9103	
A	57 C10-C12	2.853	(2.115-3.591)		900495	0.5838	
	24 Dodecane	3.601	3.591	0.010	24999	NC	
A	3 C9 - C17	3.765	(1.240-6.290)		4197159	2.15	M
A	60 C10-C16	3.964	(2.115-5.813)		3010441	1.72	M
A	47 C9 - C18	3.989	(1.240-6.739)		5244405	3.25	M
A	25 C9-C19	4.203	(1.240-7.167)		6978804	3.56	M
A	15 Kerosene	4.203	(1.240-7.167)		6978804	4.32	M
	26 C13	4.215	4.213	0.002	57356	NC	
$	27 n-Decanoic Acid (Surr)		4.583			ND	U
A	59 C12-C16	4.702	(3.591-5.813)		2109946	1.37	M
A	62 C10-C20	4.846	(2.115-7.578)		11531450	7.48	M
A	28 C9-C24	5.150	(1.240-9.060)		21466020	13.9	M
A	29 C9-C25	5.318	(1.240-9.397)		25941537	16.8	M
A	54 C10-C23	5.413	(2.115-8.711)		18953951	12.3	M
A	4 C10-C24	5.588	(2.115-9.060)		21077382	13.7	M
A	16 C10-C25	5.756	(2.115-9.397)		25552899	16.6	M
	45 Hexadecane	5.818	5.813	0.005	142251	NC	M
A	14 C10-C26	5.918	(2.115-9.721)		29354903	19.0	M
A	67 C12-C22	5.970	(3.591-8.348)		16595391	10.8	M
A	12 Unknown Hydrocarbons	6.226	(2.115-10.338)		44333225	NC	M
A	5 Diesel	6.226	(2.115-10.338)		44333225	28.7	M
A	32 C10-C28	6.226	(2.115-10.338)		44333225	28.7	M
A	30 C13-C22	6.281	(4.213-8.348)		16267960	10.5	M
	44 Heptadecane	6.283	6.290	-0.007	229116	NC	M
A	31 C12-C24	6.326	(3.591-9.060)		20176887	13.1	M
	51 n-Octadecane	6.735	6.739	-0.004	178297	NC	M
A	9 Crude Oil Range Organics (	6.847	(1.240-12.455)		179025392	NC	M
A	11 Bunker Range Organics (C9-	6.847	(1.240-12.455)		179025392	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.847	(1.240-12.455)		179025392	101.1	M
33 C19	7.154	7.167	-0.013	346986	NC	M
A 64 C13-C28	7.275	(4.213-10.338)		43105299	27.9	M
A 17 C10-C36	7.285	(2.115-12.455)		178636754	115.8	M
A 13 C9-C40	7.346	(1.240-13.451)		321484706	238.4	M
A 68 Crude Oil Range Organics (	7.346	(1.240-13.451)		321484706	NC	M
A 58 C16-C24	7.436	(5.813-9.060)		18066941	11.7	M
61 icosane	7.547	7.578	-0.031	1347778	NC	M
A 6 C10-C40	7.783	(2.115-13.451)		321096068	238.3	M
$ 34 p-Terphenyl	8.041	8.044	-0.003	48283278	25.1	M
35 n-Docosane	8.348	8.348	0.000	1027886	NC	M
A 18 C12-C40	8.521	(3.591-13.451)		320195573	238.3	M
36 Tricosane	8.723	8.711	0.012	1340593	NC	M
A 66 C13-C40	8.832	(4.213-13.451)		319868142	238.3	M
37 n-Tetracosane	9.070	9.060	0.010	2402227	NC	M
A 2 C16-C36 ORO	9.134	(5.813-12.455)		254562110	223.2	
38 C25	9.397	9.397	0.000	2455123	NC	M
A 19 C16-C40	9.632	(5.813-13.451)		318085627	237.9	M
46 n-Hexacosane	9.730	9.721	0.009	3239930	NC	M
A 20 C19-C36	9.811	(7.167-12.455)		244542857	184.0	
A 55 C23-C32	10.085	(8.711-11.458)		83394858	120.1	M
39 n-Octacosane	10.359	10.338	0.021	6180312	NC	M
65 C29	10.626	10.631	-0.005	11893997	NC	M
A 7 Motor Oil	10.757	(9.060-12.455)		62191823	69.8	
A 40 C24-C36	10.757	(9.060-12.455)		144121736	161.8	M
A 10 C22-C40	10.900	(8.348-13.451)		117840464	94.8	
A 49 C25-C36	10.926	(9.397-12.455)		153083855	171.0	M
A 41 C23-C40	11.081	(8.711-13.451)		302142117	236.4	M
A 8 C24-C40	11.256	(9.060-13.451)		300018686	246.4	M
56 Dotriacontane	11.472	11.458	0.014	6025556	NC	M
A 50 C28-C40	11.895	(10.338-13.451)		276762843	291.6	M
A 63 C29-C40	12.041	(10.631-13.451)		267971381	309.2	M
42 n-Hexatriacontane	12.456	12.455	0.001	7988065	NC	M
43 C40		13.451			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

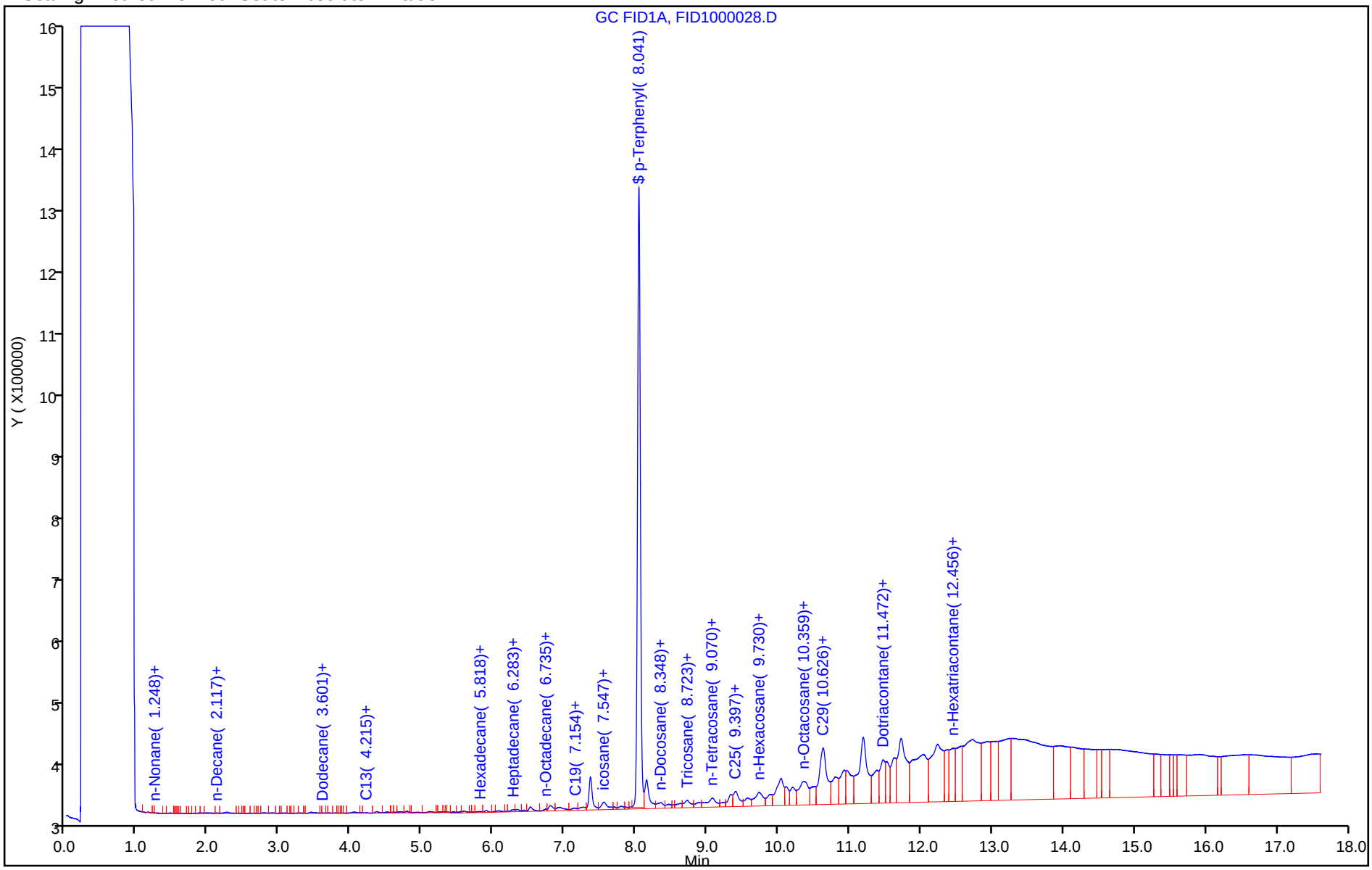
Report Date: 24-Aug-2018 12:09:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000028.D

Injection Date:	23-Aug-2018 23:26:00	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88192-E-6-A	Lab Sample ID:	720-88192-6	Worklist Smp#:	28
Client ID:	DG-K3S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000028.D				
Lims ID:	720-88192-E-6-A				
Client ID:	DG-K3S--3.5-4				
Sample Type:	Client				
Inject. Date:	23-Aug-2018 23:26:00	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053434-028				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\DRO6_A.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 12:09:15	Calib Date:	23-Aug-2018 11:10:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000007.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				
First Level Reviewer: luj		Date:	24-Aug-2018 12:09:15		

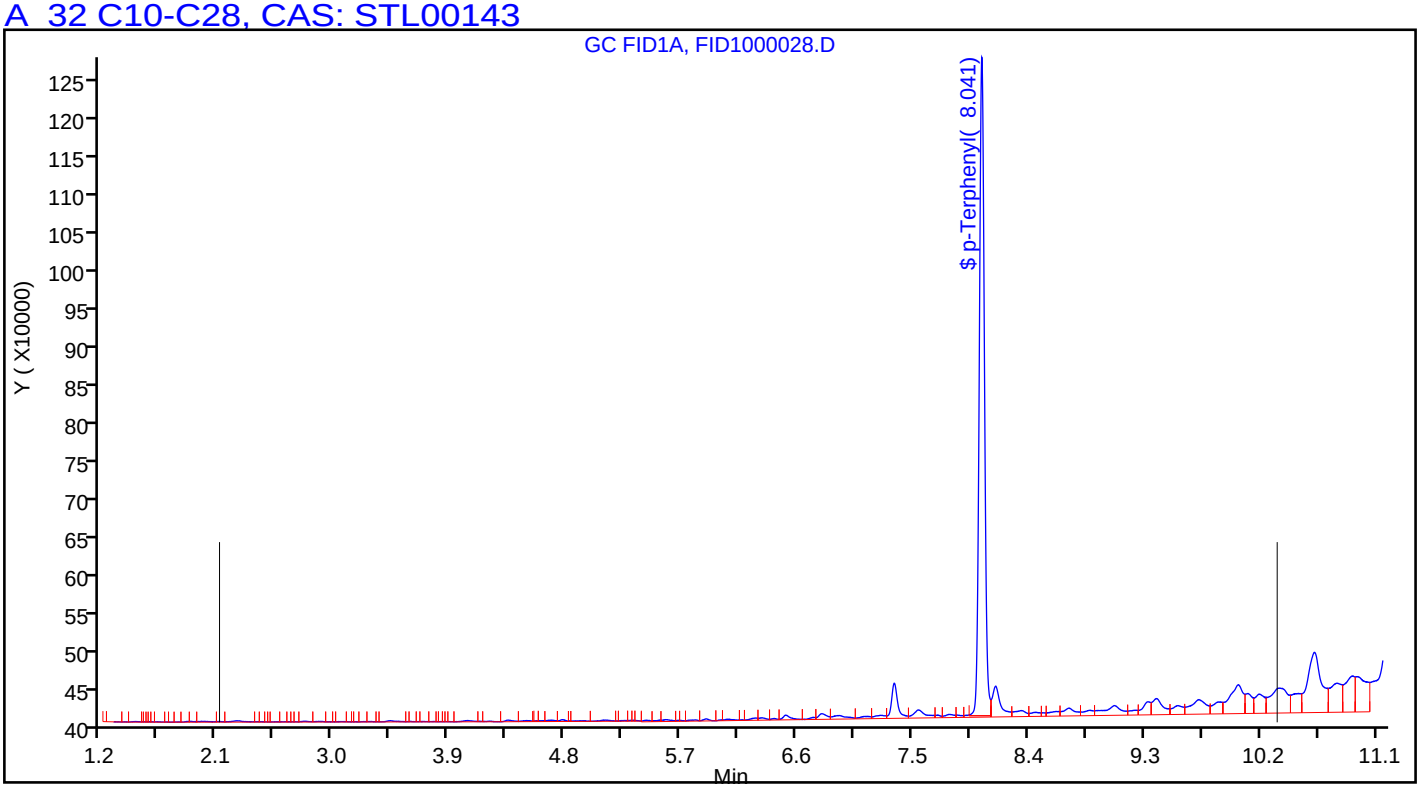
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	25.1	100.57

Report Date: 24-Aug-2018 12:09:21 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000028.D				
Injection Date:	23-Aug-2018 23:26:00	Instrument ID:	CHDRO6		
Lims ID:	720-88192-E-6-A	Lab Sample ID:	720-88192-6		
Client ID:	DG-K3S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

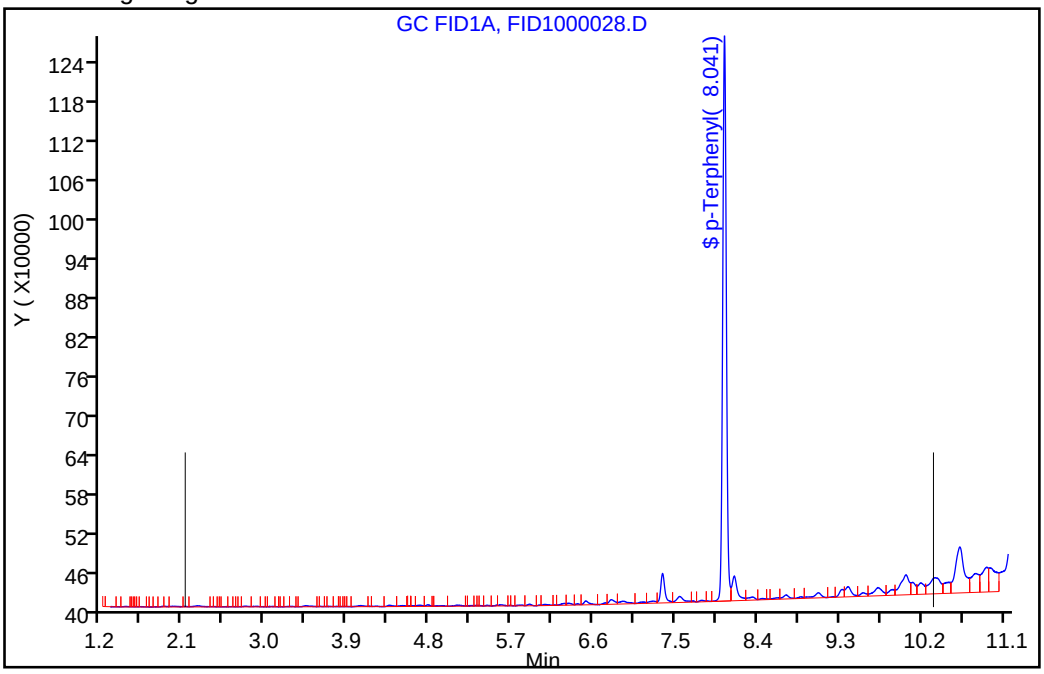
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000028.D				
Injection Date:	23-Aug-2018 23:26:00	Instrument ID:	CHDRO6		
Lims ID:	720-88192-E-6-A	Lab Sample ID:	720-88192-6		
Client ID:	DG-K3S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.226, CAS: STL00143

Signal: 1

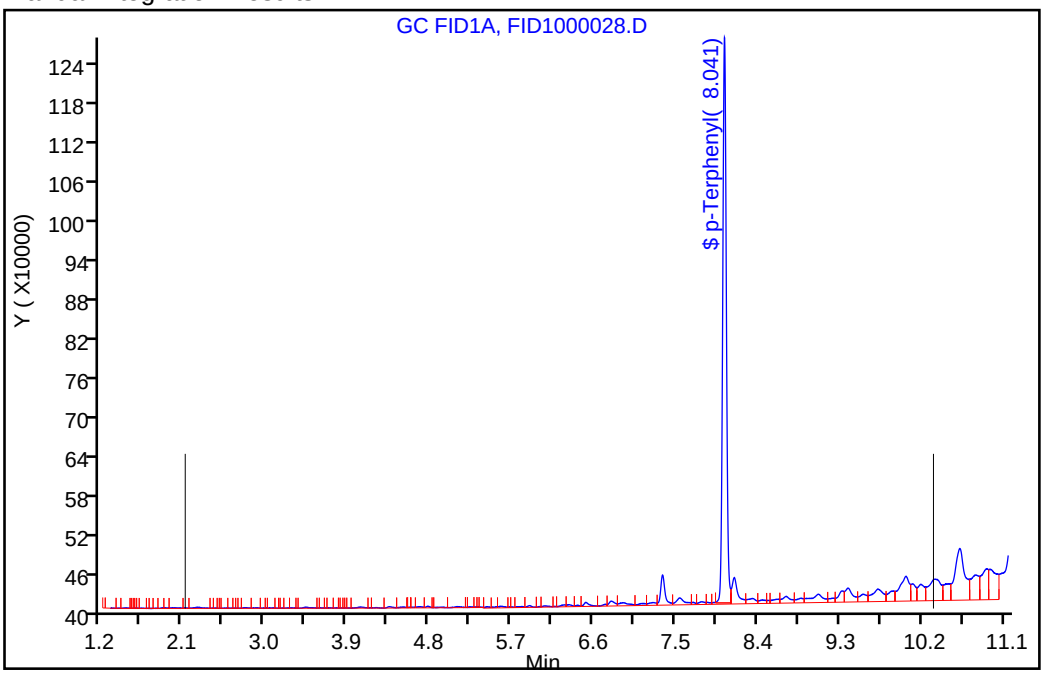
Processing Integration Results

RT: 6.23
Response: 28049228
Amount: 18.185343



Manual Integration Results

RT: 6.23
Response: 44333225
Amount: 28.742855



Reviewer: luj, 24-Aug-2018 12:08:43

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

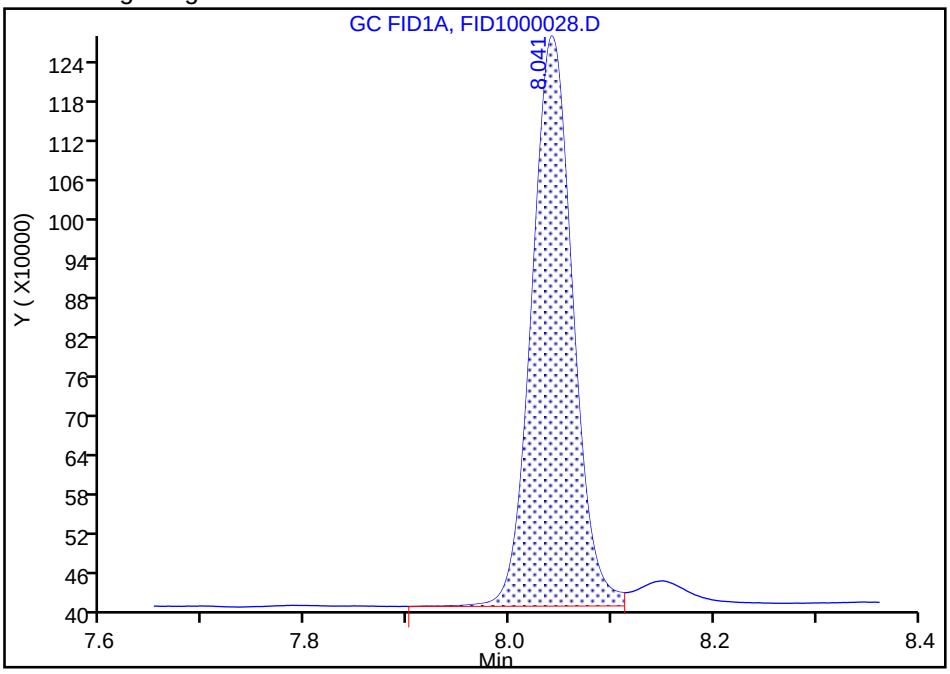
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180823-53434.b\FID1000028.D				
Injection Date:	23-Aug-2018 23:26:00	Instrument ID:	CHDRO6		
Lims ID:	720-88192-E-6-A	Lab Sample ID:	720-88192-6		
Client ID:	DG-K3S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

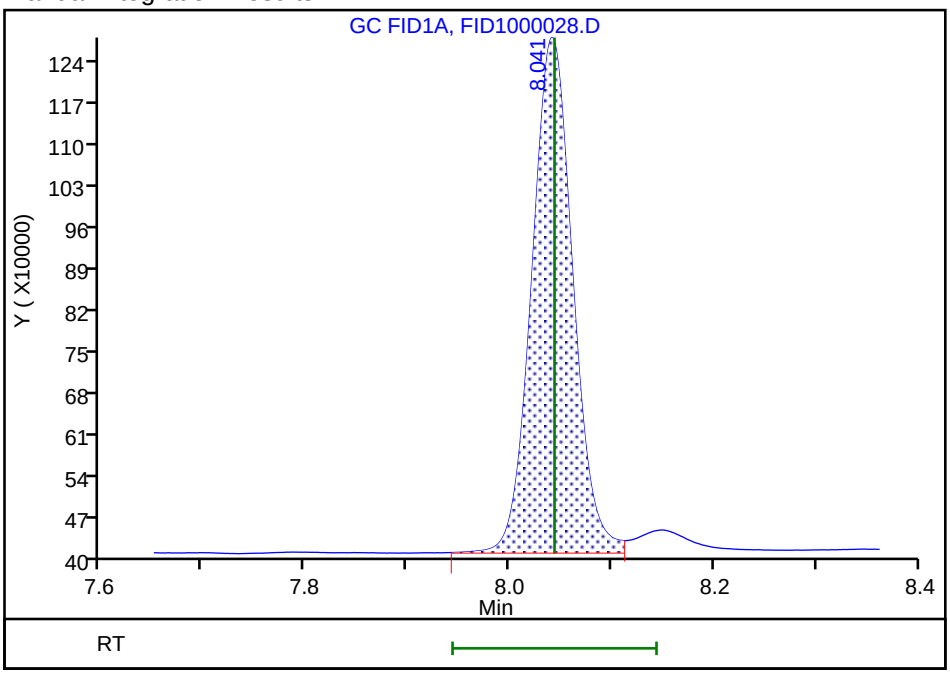
Processing Integration Results

RT: 8.04
Area: 48201829
Amount: 25.100412
Amount Units: mg/L



Manual Integration Results

RT: 8.04
Area: 48283278
Amount: 25.142825
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 12:08:43

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-M3S-0.5-1 Lab Sample ID: 720-88192-9

Matrix: Solid Lab File ID: 5b082318_034.d

Analysis Method: 8015B Date Collected: 08/22/2018 10:40

Extraction Method: 3546 Date Extracted: 08/23/2018 08:42

Sample wt/vol: 15.18(g) Date Analyzed: 08/24/2018 02:31

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250035 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	21000		2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	84		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_034.d
Lims ID: 720-88192-D-9-A
Client ID: DG-M3S--0.5-1
Sample Type: Client
Inject. Date: 24-Aug-2018 02:31:43 ALS Bottle#: 0 Worklist Smp#: 34
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 112 Name: 720-0053433-034
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\DRO5B.m
Limit Group: DRO
Last Update: 24-Aug-2018 13:09:00 Calib Date: 23-Aug-2018 09:03:07
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 13:09:00

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	2.629	2.688	-0.059	1150	NC	
	23 n-Decane	3.925	3.915	0.010	2168	NC	
A	1 C9-C13	4.658	(2.688-6.629)		31867	2.52	
A	21 Stoddard Solvent	4.658	(2.688-6.629)		31867	NC	
A	57 C10-C12	4.869	(3.915-5.824)		17805	1.71	
	24 Dodecane		5.824			ND	
A	3 C9 - C17	6.023	(2.688-9.359)		145073	12.2	
A	60 C10-C16	6.318	(3.915-8.721)		120031	11.6	
A	47 C9 - C18	6.320	(2.688-9.952)		242827	21.6	
A	15 Kerosene	6.590	(2.688-10.492)		242827	21.6	
A	25 C9-C19	6.590	(2.688-10.492)		242827	20.5	
	26 C13		6.629			ND	
$	27 n-Decanoic Acid (Surr)		7.254			ND	U
A	59 C12-C16	7.272	(5.824-8.721)		107167	10.3	
A	62 C10-C20	7.472	(3.915-11.029)		414044	39.8	
A	28 C9-C24	7.825	(2.688-12.962)		1111562	106.9	
A	29 C9-C25	8.044	(2.688-13.400)		1219363	117.2	
A	54 C10-C23	8.212	(3.915-12.508)		866440	83.3	
A	4 C10-C24	8.439	(3.915-12.962)		1106729	106.4	
A	16 C10-C25	8.658	(3.915-13.400)		1214530	116.8	
	45 Hexadecane	8.716	8.721	-0.005	14323	NC	
A	14 C10-C26	8.868	(3.915-13.821)		1362609	131.0	
A	67 C12-C22	8.930	(5.824-12.036)		757136	72.8	
A	5 Diesel	9.268	(3.915-14.620)		1638763	157.6	
A	32 C10-C28	9.268	(3.915-14.620)		1638763	157.6	
A	12 Unknown Hydrocarbons	9.268	(3.915-14.620)		1638763	NC	
A	30 C13-C22	9.332	(6.629-12.036)		742966	71.4	
	44 Heptadecane	9.367	9.359	0.008	33297	NC	
A	31 C12-C24	9.393	(5.824-12.962)		1093865	105.2	
	49 n-Octadecane	9.924	9.952	-0.028	35386	NC	
A	52 Mineral oil	10.021	(2.688-17.353)		2678683	282.3	
A	9 Crude Oil Range Organics (	10.115	(2.877-17.353)		2678042	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 11 Bunker Range Organics (C9-	10.021	(2.688-17.353)		3126547	NC	
33 C19	10.495	10.492	0.003	72745	NC	
A 64 C13-C28	10.624	(6.629-14.620)		1611729	155.0	
A 17 C10-C36	10.634	(3.915-17.353)		3121714	300.1	
A 58 C16-C24	10.842	(8.721-12.962)		1001021	96.2	
A 68 Crude Oil Range Organics (	10.843	(2.688-18.998)		3011965	NC	
A 13 C9-C40	10.843	(2.688-18.998)		3011965	329.3	
61 icosane	11.032	11.029	0.003	31176	NC	
A 6 C10-C40	11.457	(3.915-18.998)		3005159	328.8	
$ 34 p-Terphenyl	12.023	12.030	-0.007	267781	21.0	M
35 n-Docosane		12.036			ND	
A 18 C12-C40	12.411	(5.824-18.998)		2982925	327.1	
36 Tricosane	12.511	12.508	0.003	74331	NC	
A 66 C13-C40	12.814	(6.629-18.998)		2683725	296.0	
37 n-Tetracosane	12.961	12.962	-0.001	93673	NC	
A 2 C16-C36 ORO	13.037	(8.721-17.353)		1706029	256.2	
38 C25	13.398	13.400	-0.002	107801	NC	
46 n-Hexacosane	13.819	13.821	-0.002	50537	NC	
A 19 C16-C40	13.859	(8.721-18.998)		2867136	315.8	
A 20 C19-C36	13.923	(10.492-17.353)		1952523	239.6	
A 55 C23-C32	14.287	(12.508-16.066)		1136702	291.6	
39 n-Octacosane	14.606	14.620	-0.014	133560	NC	
65 C29	14.996	14.999	-0.003	153840	NC	
A 40 C24-C36	15.158	(12.962-17.353)		1499418	256.7	M
A 7 Motor Oil	15.158	(12.962-17.353)		1349825	231.1	
A 50 C25-C36	15.377	(13.400-17.353)		1219806	219.8	
A 10 C22-C40	15.517	(12.036-18.998)		1677323	201.7	
A 41 C23-C40	15.753	(12.508-18.998)		1737619	213.6	
A 8 C24-C40	15.980	(12.962-18.998)		1600776	202.9	
56 Dotriacontane	16.051	16.066	-0.015	238253	NC	
A 51 C28-C40	16.809	(14.620-18.998)		1082791	169.5	
A 63 C29-C40	16.999	(14.999-18.998)		950842	161.5	
42 n-Hexatriacontane		17.353			ND	
43 C40		18.998			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

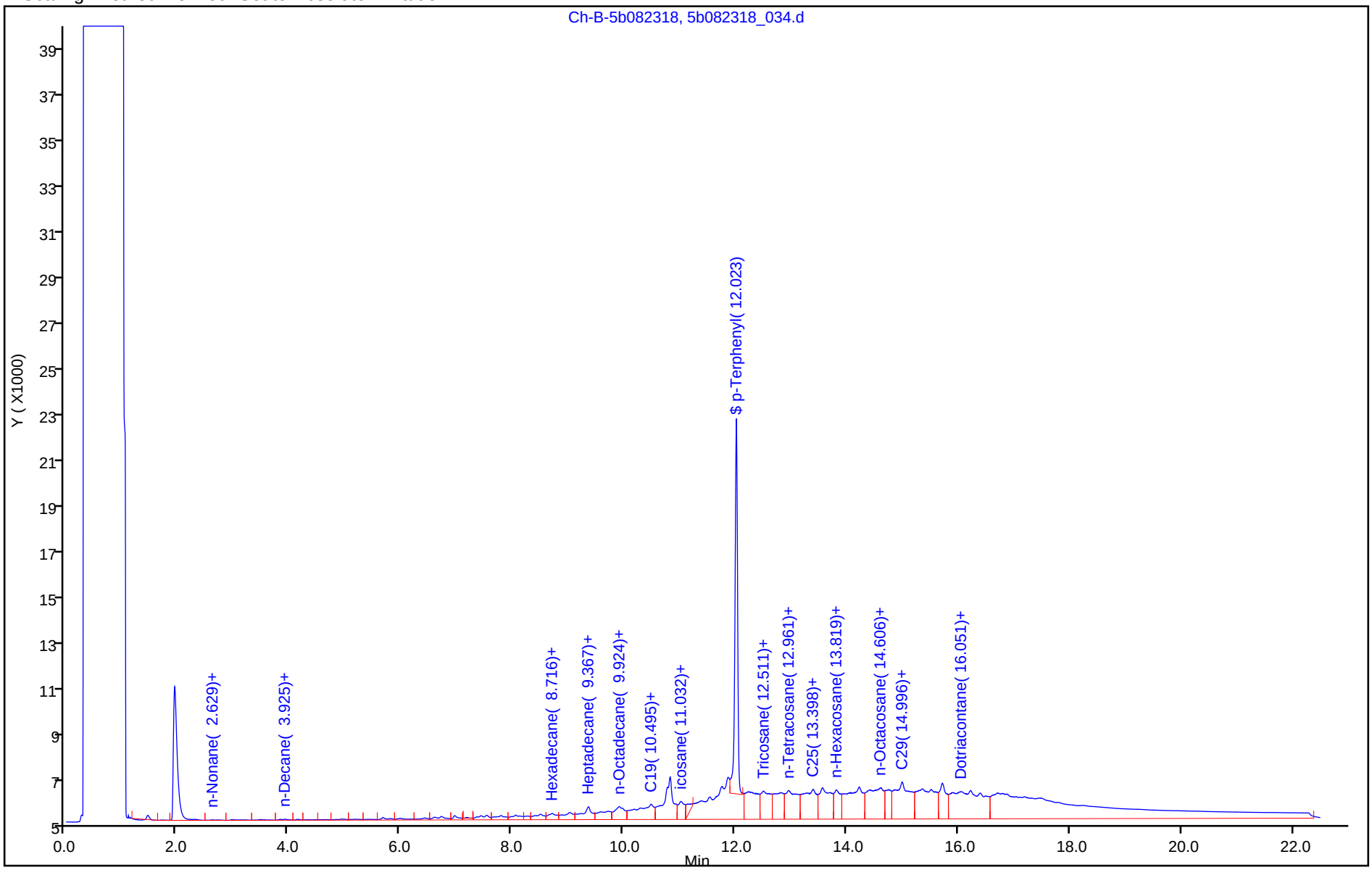
Report Date: 24-Aug-2018 13:09:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_034.d

Injection Date:	24-Aug-2018 02:31:43	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88192-D-9-A	Lab Sample ID:	720-88192-9	Worklist Smp#:	34
Client ID:	DG-M3S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_034.d				
Lims ID:	720-88192-D-9-A				
Client ID:	DG-M3S--0.5-1				
Sample Type:	Client				
Inject. Date:	24-Aug-2018 02:31:43	ALS Bottle#:	0	Worklist Smp#:	34
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 112 Name: 720-0053433-034				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\DRO5B.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 13:09:00	Calib Date:	23-Aug-2018 09:03:07		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				

First Level Reviewer: luj Date: 24-Aug-2018 13:09:00

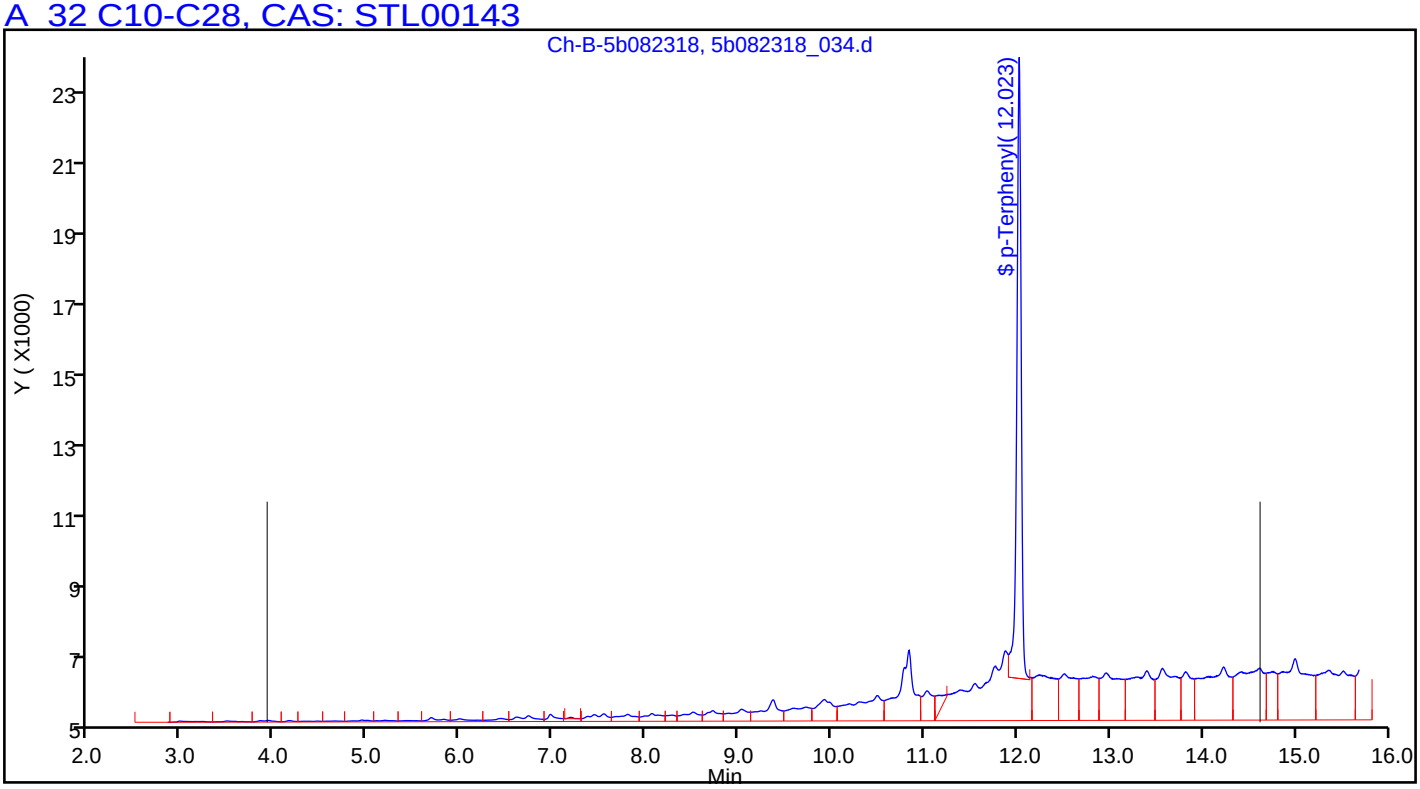
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	21.0	83.95

Report Date: 24-Aug-2018 13:09:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_034.d				
Injection Date:	24-Aug-2018 02:31:43	Instrument ID:	CHDRO5		
Lims ID:	720-88192-D-9-A	Lab Sample ID:	720-88192-9		
Client ID:	DG-M3S--0.5-1				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	34
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

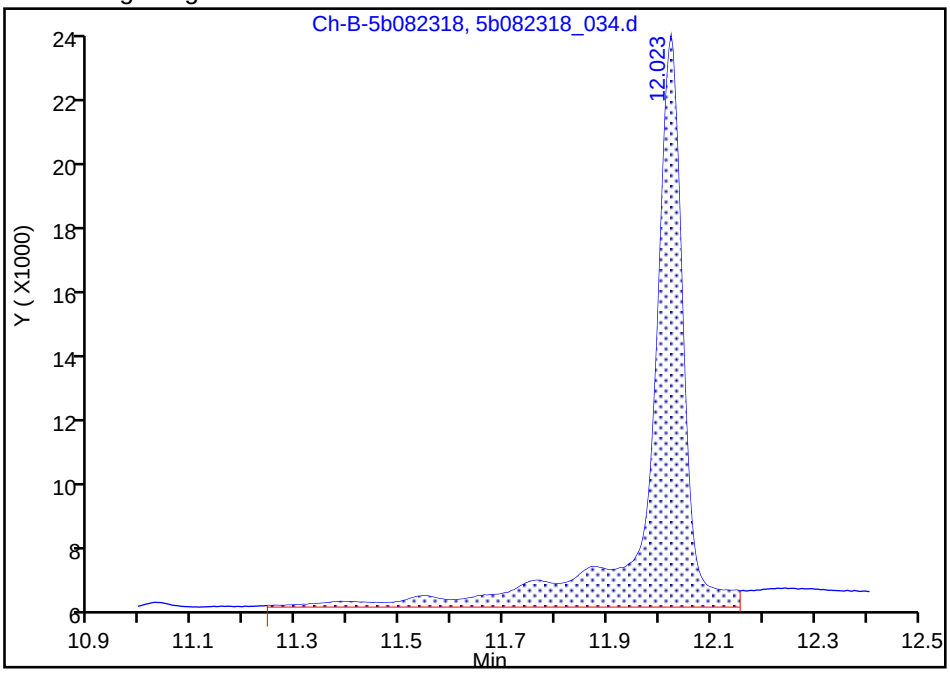
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_034.d				
Injection Date:	24-Aug-2018 02:31:43	Instrument ID:	CHDRO5		
Lims ID:	720-88192-D-9-A	Lab Sample ID:	720-88192-9		
Client ID:	DG-M3S--0.5-1				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	34
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

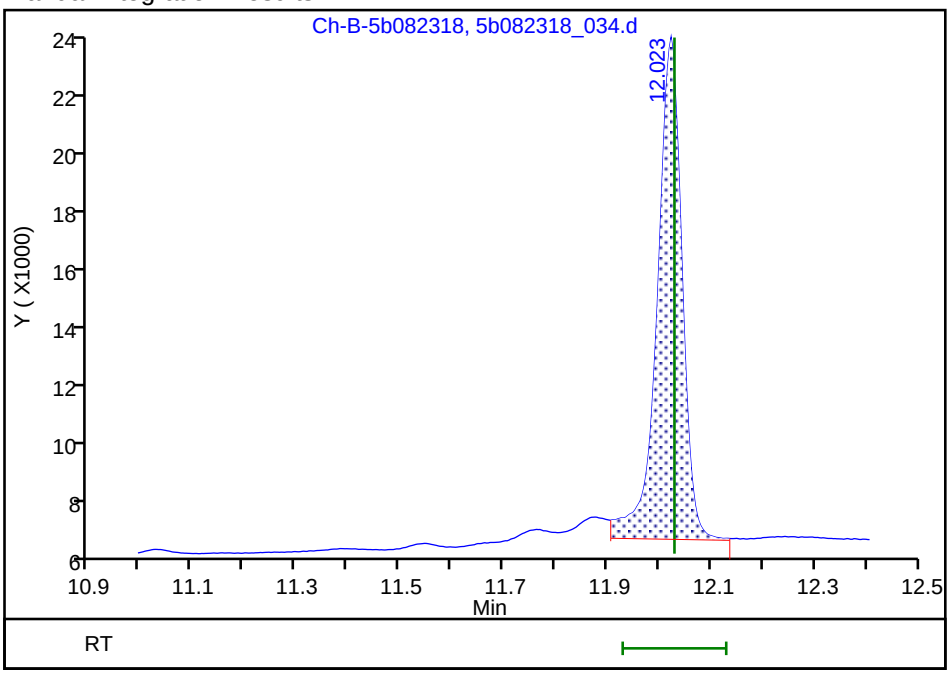
Processing Integration Results

RT: 12.02
Area: 377844
Amount: 29.612069
Amount Units: mg/L



Manual Integration Results

RT: 12.02
Area: 267781
Amount: 20.986305
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 13:08:33

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-M3S-3.5-4 Lab Sample ID: 720-88192-10

Matrix: Solid Lab File ID: 5b082318_035.d

Analysis Method: 8015B Date Collected: 08/22/2018 10:40

Extraction Method: 3546 Date Extracted: 08/23/2018 08:42

Sample wt/vol: 15.49(g) Date Analyzed: 08/24/2018 03:00

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250035 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	40000		1900	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	70		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_035.d
Lims ID: 720-88192-E-10-A
Client ID: DG-M3S--3.5-4
Sample Type: Client
Inject. Date: 24-Aug-2018 03:00:55 ALS Bottle#: 0 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 113 Name: 720-0053433-035
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\DRO5B.m
Limit Group: DRO
Last Update: 24-Aug-2018 13:10:04 Calib Date: 23-Aug-2018 09:03:07
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 13:10:04

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	2.658	2.688	-0.030	1412	NC	
	23 n-Decane		3.915			ND	
A	1 C9-C13	4.658	(2.688-6.629)		89853	7.09	
A	21 Stoddard Solvent	4.658	(2.688-6.629)		89853	NC	
A	57 C10-C12	4.869	(3.915-5.824)		37565	3.61	
	24 Dodecane		5.824			ND	
A	3 C9 - C17	6.023	(2.688-9.359)		363153	30.6	
A	60 C10-C16	6.318	(3.915-8.721)		306173	29.5	
A	47 C9 - C18	6.320	(2.688-9.952)		605226	53.9	
A	15 Kerosene	6.590	(2.688-10.492)		665483	59.1	
A	25 C9-C19	6.590	(2.688-10.492)		665483	56.1	
	26 C13	6.610	6.629	-0.019	21729	NC	
$	27 n-Decanoic Acid (Surr)		7.254			ND	U
A	59 C12-C16	7.272	(5.824-8.721)		280638	27.0	
A	62 C10-C20	7.472	(3.915-11.029)		1051541	101.1	
A	28 C9-C24	7.825	(2.688-12.962)		2283598	219.6	
A	29 C9-C25	8.044	(2.688-13.400)		2479125	238.3	
A	54 C10-C23	8.212	(3.915-12.508)		1999651	192.3	
A	4 C10-C24	8.439	(3.915-12.962)		2277482	219.0	
A	16 C10-C25	8.658	(3.915-13.400)		2473009	237.8	
	45 Hexadecane	8.715	8.721	-0.006	35843	NC	
A	14 C10-C26	8.868	(3.915-13.821)		2716562	261.2	
A	67 C12-C22	8.930	(5.824-12.036)		1856496	178.5	
A	5 Diesel	9.268	(3.915-14.620)		3260197	313.4	
A	32 C10-C28	9.268	(3.915-14.620)		3260197	313.4	
A	12 Unknown Hydrocarbons	9.268	(3.915-14.620)		3260197	NC	
A	30 C13-C22	9.332	(6.629-12.036)		1820023	175.0	
	44 Heptadecane	9.359	9.359	0.000	86231	NC	
A	31 C12-C24	9.393	(5.824-12.962)		2251947	216.5	
	49 n-Octadecane		9.952			ND	
A	52 Mineral oil	10.021	(2.688-17.353)		4805265	506.4	
A	9 Crude Oil Range Organics (	10.110	(2.867-17.353)		4804567	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 11 Bunker Range Organics (C9-	10.021	(2.688-17.353)		5390451	NC	
33 C19	10.509	10.492	0.017	144945	NC	
A 64 C13-C28	10.624	(6.629-14.620)		3198189	307.5	
A 17 C10-C36	10.703	(4.053-17.353)		5380776	517.3	
A 58 C16-C24	10.842	(8.721-12.962)		2007152	193.0	
A 68 Crude Oil Range Organics (	10.843	(2.688-18.998)		5256401	NC	
A 13 C9-C40	10.843	(2.688-18.998)		5256401	574.6	
61 icosane	11.068	11.029	0.039	94413	NC	
A 6 C10-C40	11.457	(3.915-18.998)		5247407	574.1	
$ 34 p-Terphenyl	12.020	12.030	-0.010	222968	17.5	M
35 n-Docosane		12.036			ND	
A 18 C12-C40	12.411	(5.824-18.998)		5206511	571.0	
36 Tricosane	12.505	12.508	-0.003	117620	NC	
A 66 C13-C40	12.814	(6.629-18.998)		4689136	517.3	
37 n-Tetracosane	12.959	12.962	-0.003	150484	NC	
A 2 C16-C36 ORO	13.037	(8.721-17.353)		2718947	408.3	
38 C25	13.396	13.400	-0.004	195527	NC	
46 n-Hexacosane	13.817	13.821	-0.004	166748	NC	
A 19 C16-C40	13.859	(8.721-18.998)		4929372	542.9	
A 20 C19-C36	13.923	(10.492-17.353)		3489827	428.2	
A 55 C23-C32	14.287	(12.508-16.066)		1808127	463.9	
39 n-Octacosane	14.614	14.620	-0.006	304580	NC	
65 C29	14.998	14.999	-0.001	257381	NC	
A 40 C24-C36	15.158	(12.962-17.353)		2430748	416.2	M
A 7 Motor Oil	15.158	(12.962-17.353)		2080160	356.2	
A 50 C25-C36	15.377	(13.400-17.353)		1875682	338.0	
A 10 C22-C40	15.517	(12.036-18.998)		2638300	317.3	
A 41 C23-C40	15.753	(12.508-18.998)		2574430	316.5	
A 8 C24-C40	15.980	(12.962-18.998)		2362197	299.4	
56 Dotriacontane	16.059	16.066	-0.007	257765	NC	
A 51 C28-C40	16.809	(14.620-18.998)		1523082	238.4	
A 63 C29-C40	16.999	(14.999-18.998)		1309340	222.4	
42 n-Hexatriacontane		17.353			ND	
43 C40		18.998			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

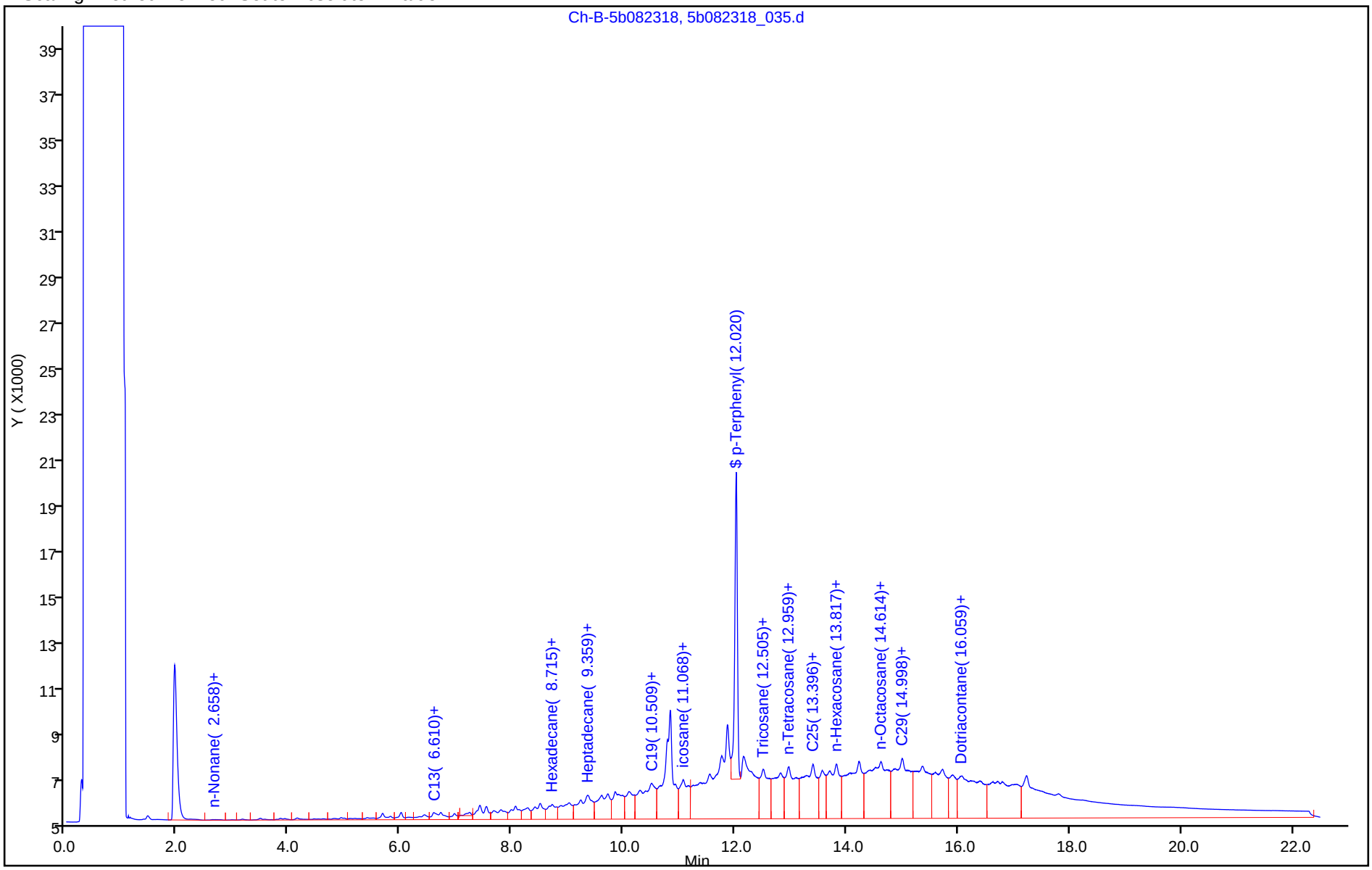
Report Date: 24-Aug-2018 13:10:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_035.d

Injection Date:	24-Aug-2018 03:00:55	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88192-E-10-A	Lab Sample ID:	720-88192-10	Worklist Smp#:	35
Client ID:	DG-M3S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_035.d
Lims ID: 720-88192-E-10-A
Client ID: DG-M3S--3.5-4
Sample Type: Client
Inject. Date: 24-Aug-2018 03:00:55 ALS Bottle#: 0 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 113 Name: 720-0053433-035
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\DRO5B.m
Limit Group: DRO
Last Update: 24-Aug-2018 13:10:04 Calib Date: 23-Aug-2018 09:03:07
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 13:10:04

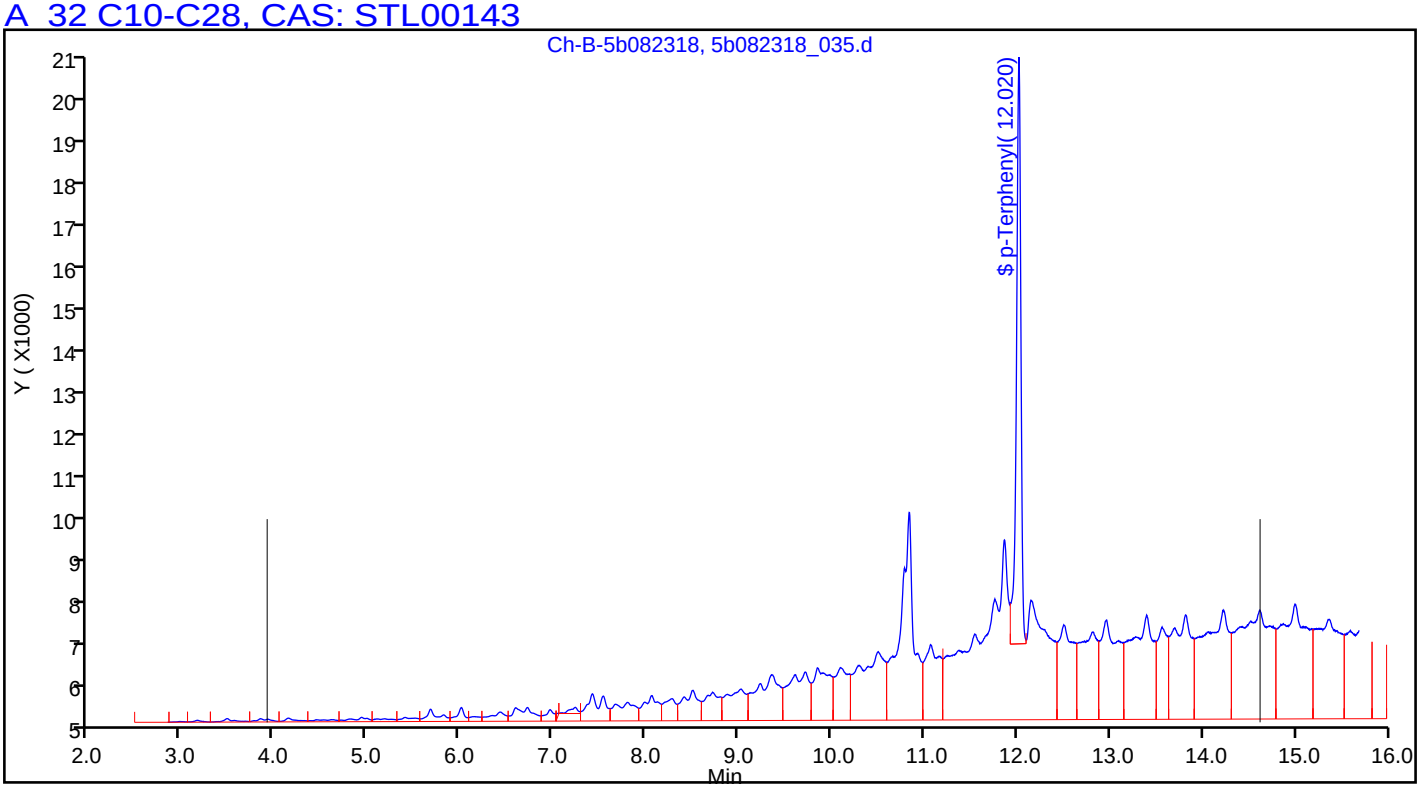
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	17.5	69.90

Report Date: 24-Aug-2018 13:10:06 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_035.d				
Injection Date:	24-Aug-2018 03:00:55	Instrument ID:	CHDRO5		
Lims ID:	720-88192-E-10-A	Lab Sample ID:	720-88192-10		
Client ID:	DG-M3S--3.5-4				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	35
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

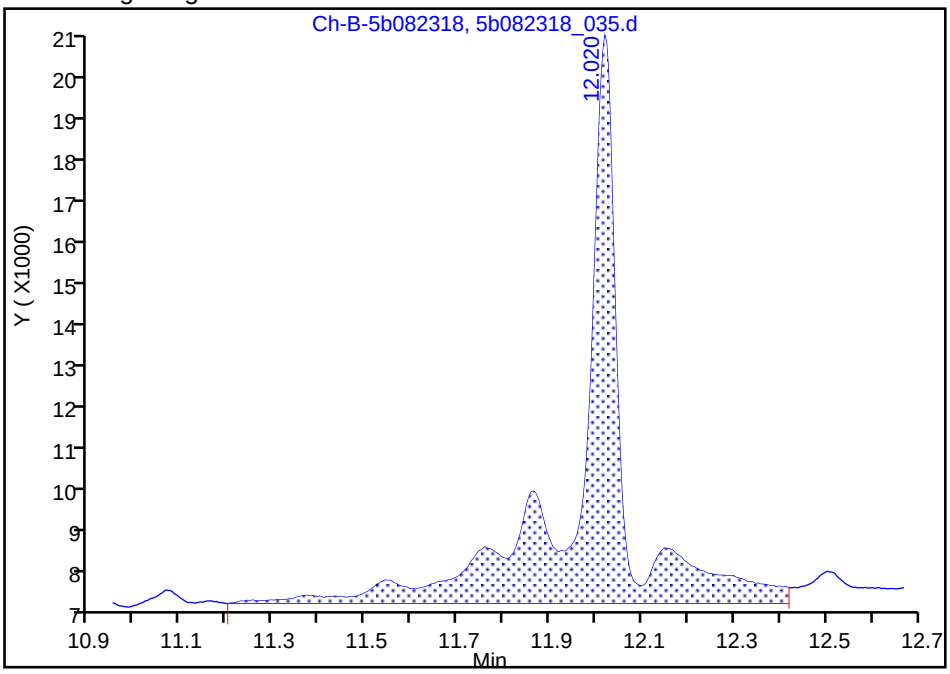
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53433.b\5b082318_035.d				
Injection Date:	24-Aug-2018 03:00:55	Instrument ID:	CHDRO5		
Lims ID:	720-88192-E-10-A	Lab Sample ID:	720-88192-10		
Client ID:	DG-M3S--3.5-4				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	35
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

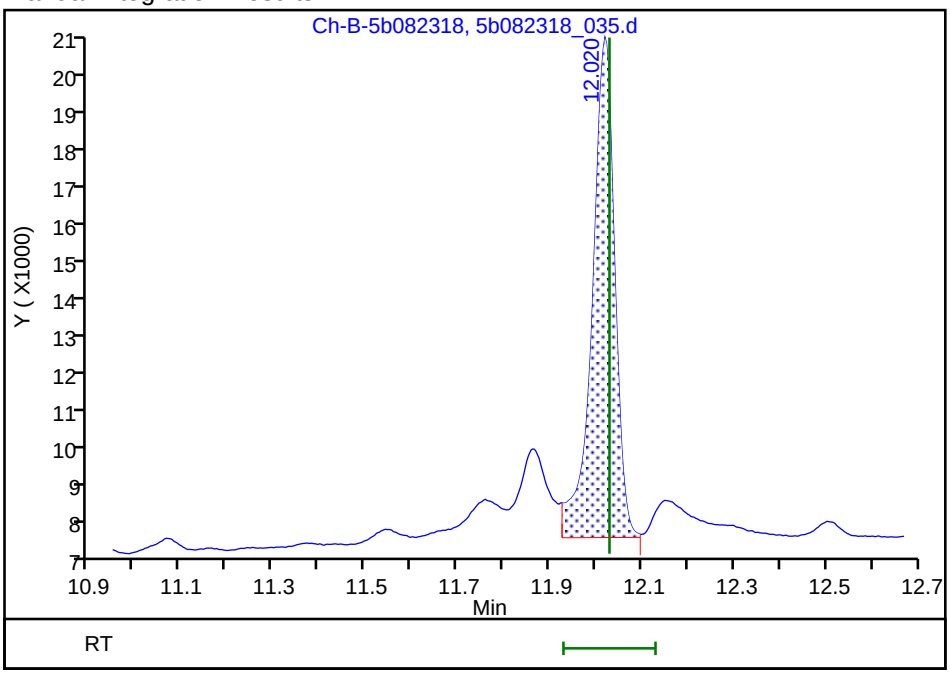
Processing Integration Results

RT: 12.02
Area: 448452
Amount: 35.145699
Amount Units: mg/L



Manual Integration Results

RT: 12.02
Area: 222968
Amount: 17.474259
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 13:09:47

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-M3S-7.5-8 Lab Sample ID: 720-88192-11

Matrix: Solid Lab File ID: 5a082318_031.d

Analysis Method: 8015B Date Collected: 08/22/2018 10:40

Extraction Method: 3546 Date Extracted: 08/23/2018 13:06

Sample wt/vol: 15.54(g) Date Analyzed: 08/24/2018 01:03

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250034 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	5200		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	92		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_031.d
Lims ID: 720-88192-E-11-B
Client ID: DG-M3S--7.5-8
Sample Type: Client
Inject. Date: 24-Aug-2018 01:03:56 ALS Bottle#: 0 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 009 Name: 720-0053432-031
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\DRO5A.m
Limit Group: DRO
Last Update: 24-Aug-2018 12:40:27 Calib Date: 23-Aug-2018 09:03:07
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 12:40:27

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		2.402			ND	
	23 n-Decane	3.698	3.672	0.026	333	NC	
A	21 Stoddard Solvent	4.416	(2.402-6.430)		67317	6.44	M
A	1 C9-C13	4.416	(2.402-6.430)		67317	6.01	M
A	57 C10-C12	4.646	(3.672-5.621)		3992	0.4077	M
	24 Dodecane		5.621			ND	
A	3 C9 - C17	5.779	(2.402-9.157)		103690	8.22	M
A	47 C9 - C18	6.077	(2.402-9.752)		103690	9.78	M
A	60 C10-C16	6.098	(3.672-8.523)		43477	3.86	M
A	25 C9-C19	6.349	(2.402-10.297)		155134	12.2	M
A	15 Kerosene	6.349	(2.402-10.297)		155134	14.6	M
	26 C13	6.470	6.430	0.040	4740	NC	M
A	59 C12-C16	7.072	(5.621-8.523)		40836	4.17	M
$	27 n-Decanoic Acid (Surr)		7.156			ND	
A	62 C10-C20	7.253	(3.672-10.834)		137962	14.1	M
A	28 C9-C24	7.586	(2.402-12.769)		332929	34.0	M
A	29 C9-C25	7.804	(2.402-13.207)		350313	35.8	M
A	54 C10-C23	7.993	(3.672-12.314)		259052	26.5	M
A	4 C10-C24	8.221	(3.672-12.769)		275628	28.2	M
A	16 C10-C25	8.439	(3.672-13.207)		293012	29.9	M
	45 Hexadecane	8.540	8.523	0.017	2912	NC	M
A	14 C10-C26	8.650	(3.672-13.629)		342956	35.0	M
A	67 C12-C22	8.731	(5.621-11.842)		194923	19.9	M
A	5 Diesel	9.050	(3.672-14.428)		399129	40.8	M
A	32 C10-C28	9.050	(3.672-14.428)		399129	40.8	M
A	12 Unknown Hydrocarbons	9.050	(3.672-14.428)		399129	NC	M
A	30 C13-C22	9.136	(6.430-11.842)		187548	19.2	M
	44 Heptadecane		9.157			ND	
A	31 C12-C24	9.195	(5.621-12.769)		272987	27.9	M
	49 n-Octadecane	9.827	9.752	0.075	45794	NC	M
A	11 Bunker Range Organics (C9-	9.784	(2.402-17.165)		768600	NC	M
A	52 Mineral oil	9.784	(2.402-17.165)		972070	86.4	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	9.784	(2.402-17.165)		972070	NC	
33 C19	10.293	10.297	-0.004	5650	NC	M
A 17 C10-C36	10.419	(3.672-17.165)		711299	72.6	M
A 64 C13-C28	10.429	(6.430-14.428)		389113	39.7	M
A 68 Crude Oil Range Organics (	10.537	(2.402-18.672)		1279785	NC	
A 13 C9-C40	10.537	(2.402-18.672)		1279785	110.0	
A 58 C16-C24	10.646	(8.523-12.769)		232151	23.7	M
61 icosane		10.834			ND	
A 6 C10-C40	11.172	(3.672-18.672)		1276552	109.8	
35 n-Docosane		11.842			ND	
$ 34 p-Terphenyl	11.863	11.903	-0.040	301262	23.1	M
A 18 C12-C40	12.146	(5.621-18.672)		1270058	109.3	
36 Tricosane		12.314			ND	
A 66 C13-C40	12.551	(6.430-18.672)		1257468	108.0	
37 n-Tetracosane	12.767	12.769	-0.002	16576	NC	M
A 2 C16-C36 ORO	12.844	(8.523-17.165)		897399	111.2	
38 C25		13.207			ND	
A 19 C16-C40	13.598	(8.523-18.672)		1205114	102.6	
46 n-Hexacosane	13.627	13.629	-0.002	16378	NC	M
A 20 C19-C36	13.731	(10.297-17.165)		573849	73.7	
A 55 C23-C32	14.096	(12.314-15.879)		419349	85.9	
39 n-Octacosane	14.430	14.428	0.002	23736	NC	M
65 C29	14.803	14.808	-0.005	27551	NC	M
A 40 C24-C36	14.967	(12.769-17.165)		435726	68.6	
A 7 Motor Oil	14.967	(12.769-17.165)		435726	68.6	
A 50 C25-C36	15.186	(13.207-17.165)		407342	67.9	
A 10 C22-C40	15.257	(11.842-18.672)		735160	80.2	
A 41 C23-C40	15.493	(12.314-18.672)		722469	80.7	
A 8 C24-C40	15.721	(12.769-18.672)		689427	79.7	
56 Dotriacontane		15.879			ND	
A 51 C28-C40	16.550	(14.428-18.672)		562631	81.6	
A 63 C29-C40	16.740	(14.808-18.672)		527962	83.3	
42 n-Hexatriacontane	17.230	17.165	0.065	50624	NC	M
43 C40		18.672			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

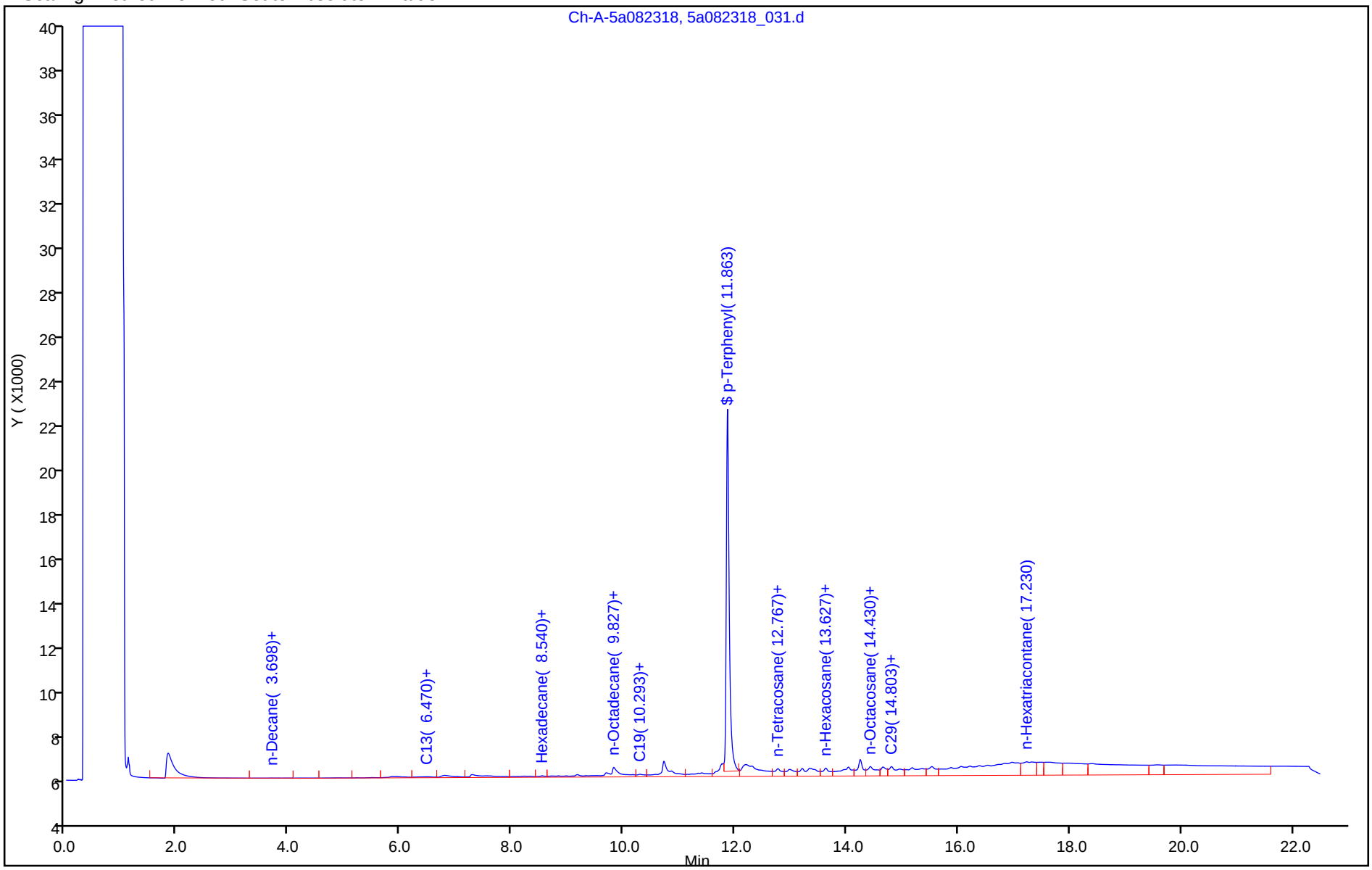
Report Date: 24-Aug-2018 12:40:28 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_031.d

Injection Date:	24-Aug-2018 01:03:56	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88192-E-11-B	Lab Sample ID:	720-88192-11	Worklist Smp#:	31
Client ID:	DG-M3S--7.5-8				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_031.d				
Lims ID:	720-88192-E-11-B				
Client ID:	DG-M3S--7.5-8				
Sample Type:	Client				
Inject. Date:	24-Aug-2018 01:03:56	ALS Bottle#:	0	Worklist Smp#:	31
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 009 Name: 720-0053432-031				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\DRO5A.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 12:40:27	Calib Date:	23-Aug-2018 09:03:07		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				

First Level Reviewer: luj Date: 24-Aug-2018 12:40:27

Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	23.1	92.38

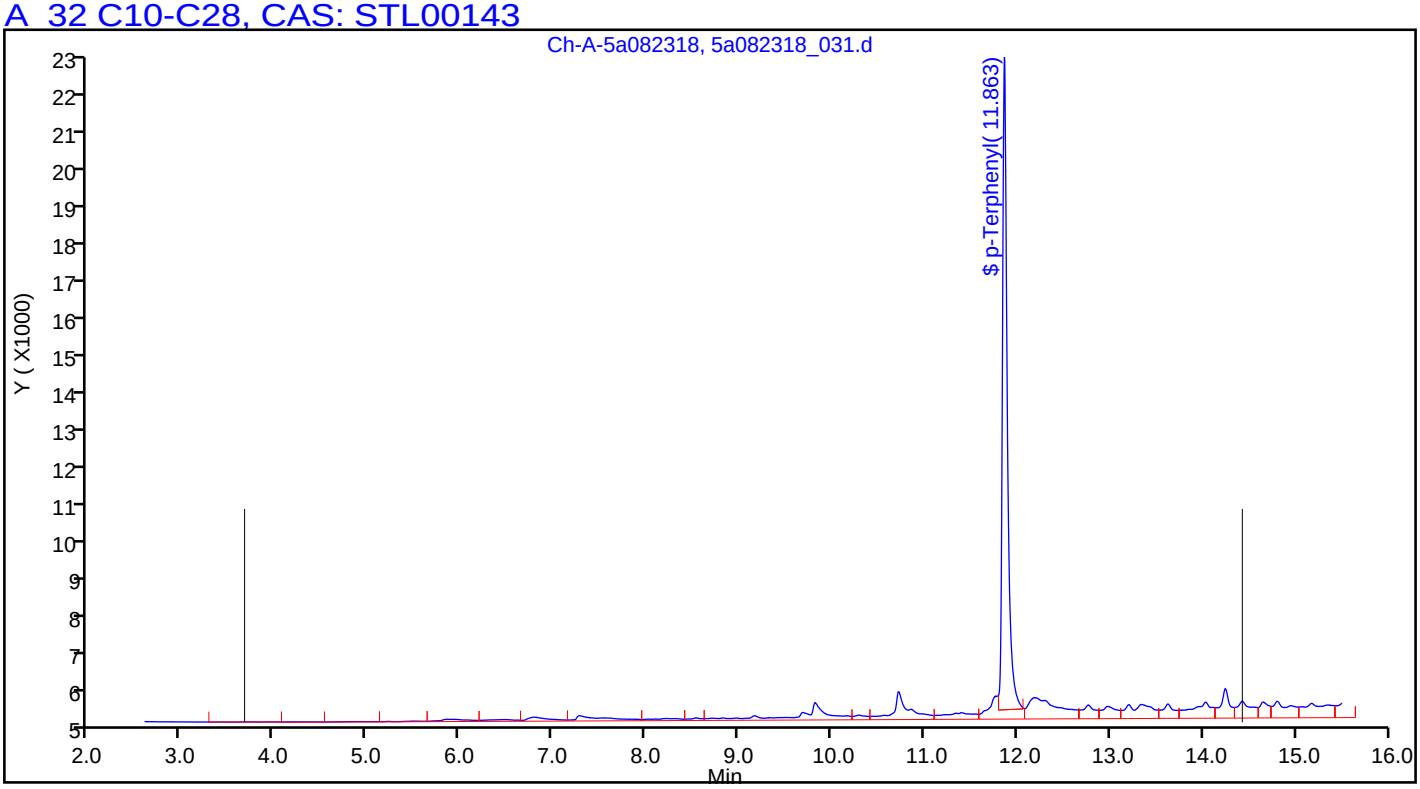
Report Date: 24-Aug-2018 12:40:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_031.d

Injection Date:	24-Aug-2018 01:03:56	Instrument ID:	CHDRO5		
Lims ID:	720-88192-E-11-B	Lab Sample ID:	720-88192-11		
Client ID:	DG-M3S--7.5-8				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	31
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

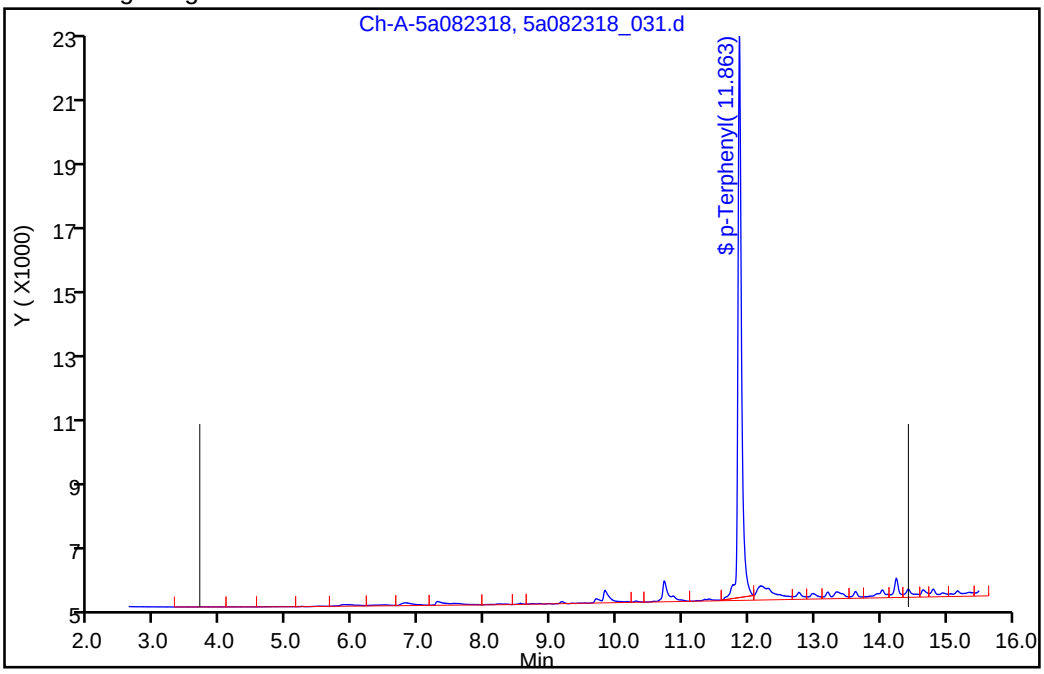
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_031.d				
Injection Date:	24-Aug-2018 01:03:56	Instrument ID:	CHDRO5		
Lims ID:	720-88192-E-11-B	Lab Sample ID:	720-88192-11		
Client ID:	DG-M3S--7.5-8				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	31
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 9.050, CAS: STL00143

Signal: 1

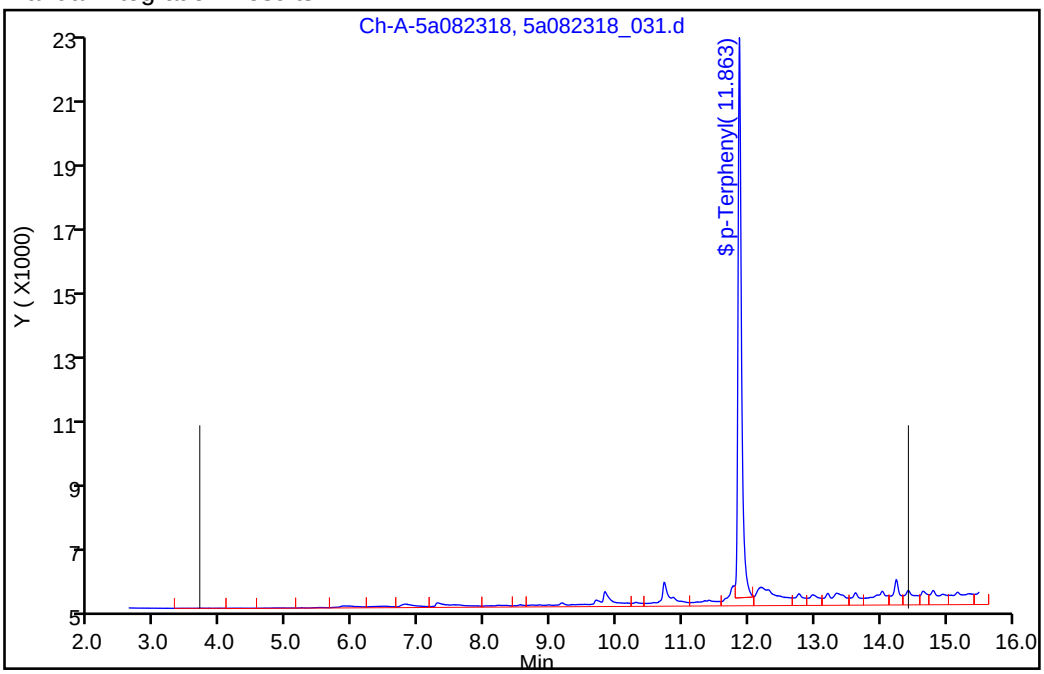
Processing Integration Results

RT: 9.05
Response: 175069
Amount: 17.880296



Manual Integration Results

RT: 9.05
Response: 399129
Amount: 40.764181



Reviewer: luj, 24-Aug-2018 12:39:58

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

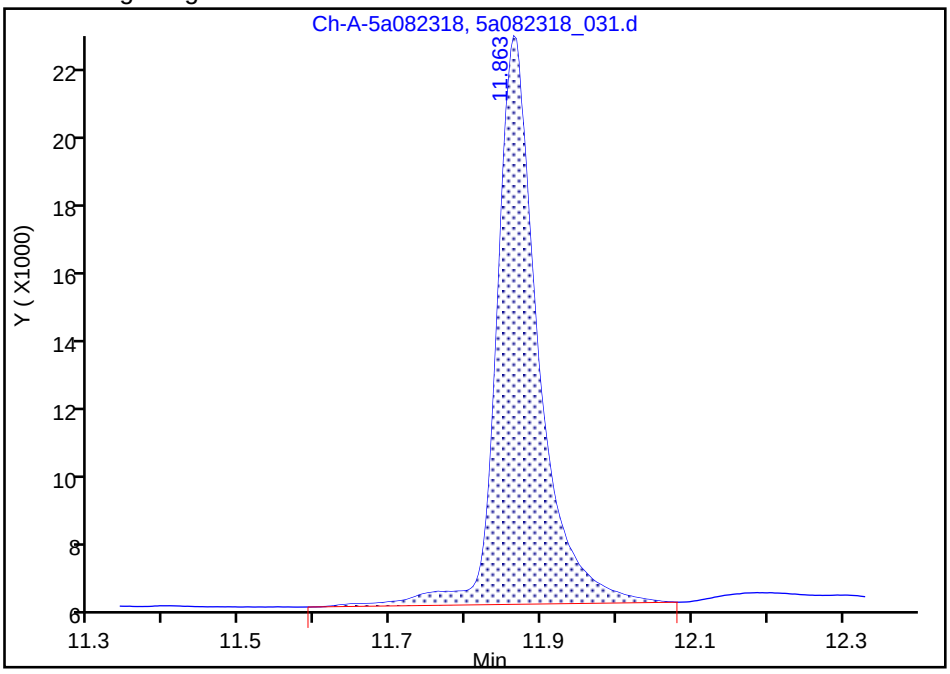
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_031.d				
Injection Date:	24-Aug-2018 01:03:56	Instrument ID:	CHDRO5		
Lims ID:	720-88192-E-11-B	Lab Sample ID:	720-88192-11		
Client ID:	DG-M3S--7.5-8				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	31
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

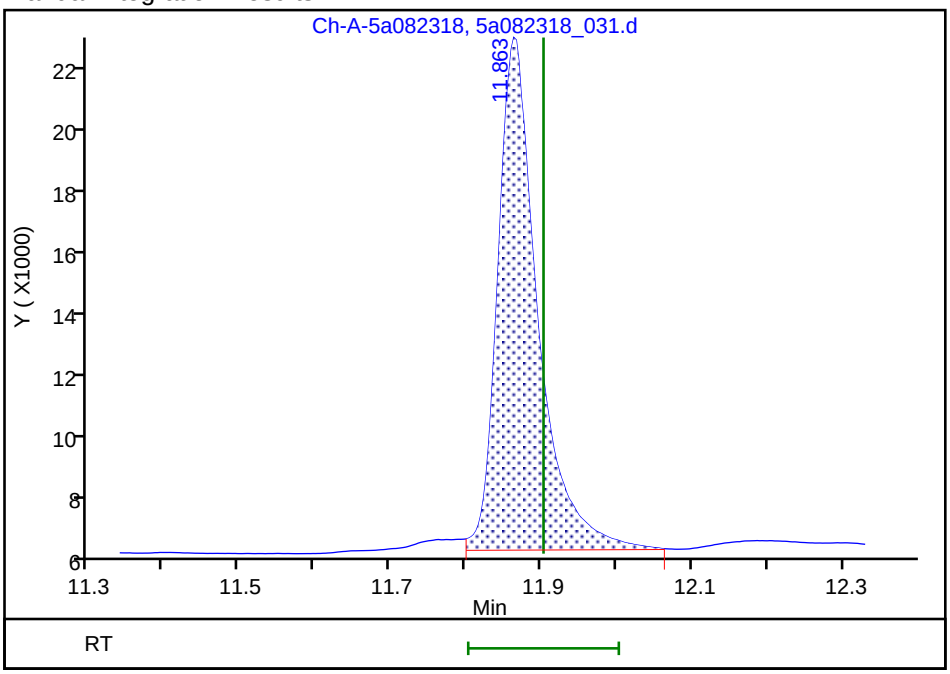
Processing Integration Results

RT: 11.86
Area: 313726
Amount: 24.050495
Amount Units: mg/L



Manual Integration Results

RT: 11.86
Area: 301262
Amount: 23.094994
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 12:40:15

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-L5S-0.5-1 Lab Sample ID: 720-88192-14

Matrix: Solid Lab File ID: FID1000009.D

Analysis Method: 8015B Date Collected: 08/22/2018 11:20

Extraction Method: 3546 Date Extracted: 08/23/2018 13:06

Sample wt/vol: 15.87(g) Date Analyzed: 08/24/2018 11:43

Con. Extract Vol.: 2(mL) Dilution Factor: 3

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250133 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	210000		5700	2100

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	85		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180824-53458.b\FID1000009.D
Lims ID: 720-88192-D-14-B
Client ID: DG-L5S--0.5-1
Sample Type: Client
Inject. Date: 24-Aug-2018 11:43:28 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 3.0000
Sample Info: 720-0053458-009
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180824-53458.b\DRO6_A.m
Limit Group: DRO
Last Update: 24-Aug-2018 12:13:24 Calib Date: 24-Aug-2018 08:30:18
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180824-53458.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 12:13:24

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.239			ND	
	23 n-Decane	2.117	2.115	0.002	156474	NC	
A	21 Stoddard Solvent	2.726	(1.239-4.213)		3898987	2.19	M
A	1 C9-C13	2.726	(1.239-4.213)		3898987	2.20	M
A	57 C10-C12	2.853	(2.115-3.592)		1779047	1.15	
	24 Dodecane	3.593	3.592	0.001	150646	NC	
A	3 C9 - C17	3.764	(1.239-6.290)		18232424	9.34	M
A	60 C10-C16	3.964	(2.115-5.813)		12144098	6.95	M
A	47 C9 - C18	3.989	(1.239-6.739)		38952700	24.1	M
A	25 C9-C19	4.203	(1.239-7.167)		87931872	44.8	M
A	15 Kerosene	4.203	(1.239-7.167)		87931872	54.4	M
	26 C13	4.209	4.213	-0.004	421250	NC	M
$	27 n-Decanoic Acid (Surr)		4.583			ND	U
A	59 C12-C16	4.702	(3.592-5.813)		10365051	6.72	M
A	62 C10-C20	4.847	(2.115-7.578)		113632293	73.7	M
A	28 C9-C24	5.150	(1.239-9.060)		509399008	330.3	M
A	29 C9-C25	5.318	(1.239-9.397)		598926977	388.3	M
A	54 C10-C23	5.413	(2.115-8.711)		412115043	267.2	M
A	4 C10-C24	5.588	(2.115-9.060)		509138280	330.1	M
A	16 C10-C25	5.756	(2.115-9.397)		598666249	388.1	M
	45 Hexadecane	5.814	5.813	0.001	2170805	NC	M
A	14 C10-C26	5.918	(2.115-9.722)		648461293	420.4	M
A	67 C12-C22	5.970	(3.592-8.349)		309765008	200.8	M
A	12 Unknown Hydrocarbons	6.226	(2.115-10.338)		841261927	NC	M
A	5 Diesel	6.226	(2.115-10.338)		841261927	545.4	M
A	32 C10-C28	6.226	(2.115-10.338)		841261927	545.4	M
A	30 C13-C22	6.281	(4.213-8.349)		308327046	199.9	M
	44 Heptadecane	6.329	6.290	0.039	9816989	NC	M
A	31 C12-C24	6.326	(3.592-9.060)		507359233	328.9	M
	51 n-Octadecane	6.794	6.739	0.055	12851911	NC	M
A	9 Crude Oil Range Organics (	6.845	(1.239-12.452)		1638376349	NC	M
A	11 Bunker Range Organics (C9-	6.845	(1.239-12.452)		1638376349	NC	M

Report Date: 24-Aug-2018 12:13:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180824-53458.b\FID1000009.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.845	(1.239-12.452)		1638376349	925.3	M
33 C19	7.166	7.167	-0.001	22878796	NC	M
A 64 C13-C28	7.276	(4.213-10.338)		838044918	543.3	M
A 17 C10-C36	7.283	(2.115-12.452)		1638115621	1062.1	M
A 13 C9-C40	7.343	(1.239-13.448)		2601949685	1929.6	M
A 68 Crude Oil Range Organics (	7.343	(1.239-13.448)		2601949685	NC	M
A 58 C16-C24	7.437	(5.813-9.060)		496994182	322.2	M
61 icosane	7.619	7.578	0.041	39138967	NC	M
A 6 C10-C40	7.781	(2.115-13.448)		2601688957	1930.8	M
$ 34 p-Terphenyl	8.042	8.045	-0.003	13587905	7.08	M
35 n-Docosane	8.286	8.349	-0.063	40492873	NC	M
A 18 C12-C40	8.520	(3.592-13.448)		2599909910	1934.8	M
36 Tricosane	8.670	8.711	-0.041	38928193	NC	M
A 66 C13-C40	8.830	(4.213-13.448)		2598471948	1935.8	M
37 n-Tetracosane	8.987	9.060	-0.073	52249451	NC	M
A 2 C16-C36 ORO	9.132	(5.813-12.452)		1697071364	1487.8	
38 C25	9.383	9.397	-0.014	42007249	NC	M
A 19 C16-C40	9.630	(5.813-13.448)		2589544859	1936.8	M
46 n-Hexacosane	9.756	9.722	0.034	41098637	NC	M
A 20 C19-C36	9.810	(7.167-12.452)		1623279997	1221.3	
A 55 C23-C32	10.084	(8.711-11.457)		902480314	1299.9	M
39 n-Octacosane	10.396	10.338	0.058	52158476	NC	M
65 C29	10.632	10.631	0.001	64095941	NC	M
A 7 Motor Oil	10.756	(9.060-12.452)		919460001	1032.5	
A 40 C24-C36	10.756	(9.060-12.452)		1135349081	1275.0	M
A 10 C22-C40	10.898	(8.349-13.448)		1352719397	1087.8	
A 49 C25-C36	10.924	(9.397-12.452)		1081456621	1208.1	M
A 41 C23-C40	11.080	(8.711-13.448)		2228502107	1743.5	M
A 8 C24-C40	11.254	(9.060-13.448)		2144800128	1761.8	M
56 Dotriacontane	11.465	11.457	0.008	38690046	NC	M
A 50 C28-C40	11.893	(10.338-13.448)		1760427030	1854.7	M
A 63 C29-C40	12.039	(10.631-13.448)		1677915668	1936.2	M
42 n-Hexatriacontane	12.474	12.452	0.022	38780258	NC	M
43 C40		13.448			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

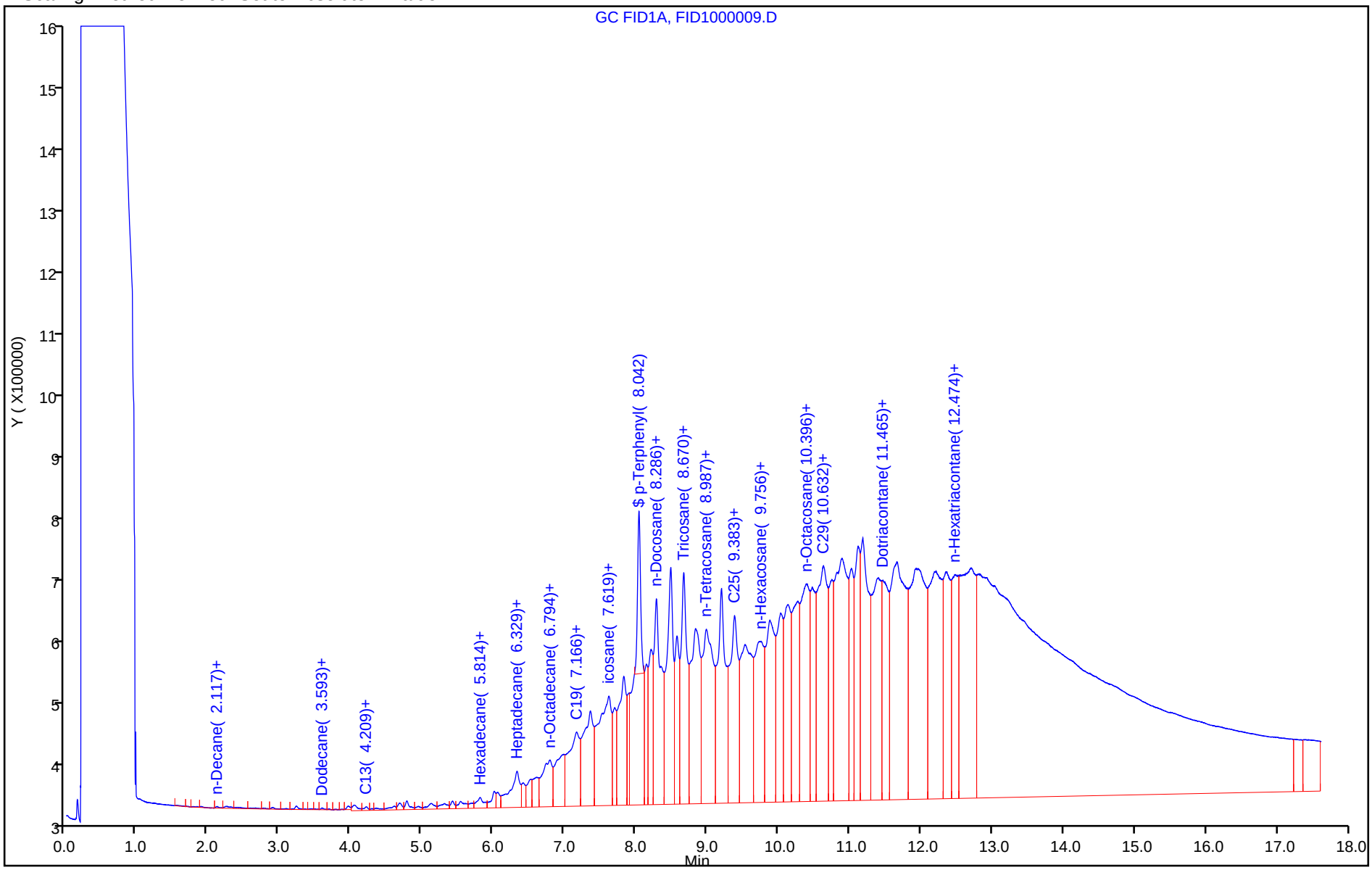
Report Date: 24-Aug-2018 12:13:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180824-53458.b\FID1000009.D

Injection Date:	24-Aug-2018 11:43:28	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88192-D-14-B	Lab Sample ID:	720-88192-14	Worklist Smp#:	9
Client ID:	DG-L5S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	3.0000	ALS Bottle#:	9
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180824-53458.b\FID1000009.D
Lims ID: 720-88192-D-14-B
Client ID: DG-L5S--0.5-1
Sample Type: Client
Inject. Date: 24-Aug-2018 11:43:28 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 3.0000
Sample Info: 720-0053458-009
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180824-53458.b\DRO6_A.m
Limit Group: DRO
Last Update: 24-Aug-2018 12:13:24 Calib Date: 24-Aug-2018 08:30:18
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180824-53458.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 12:13:24

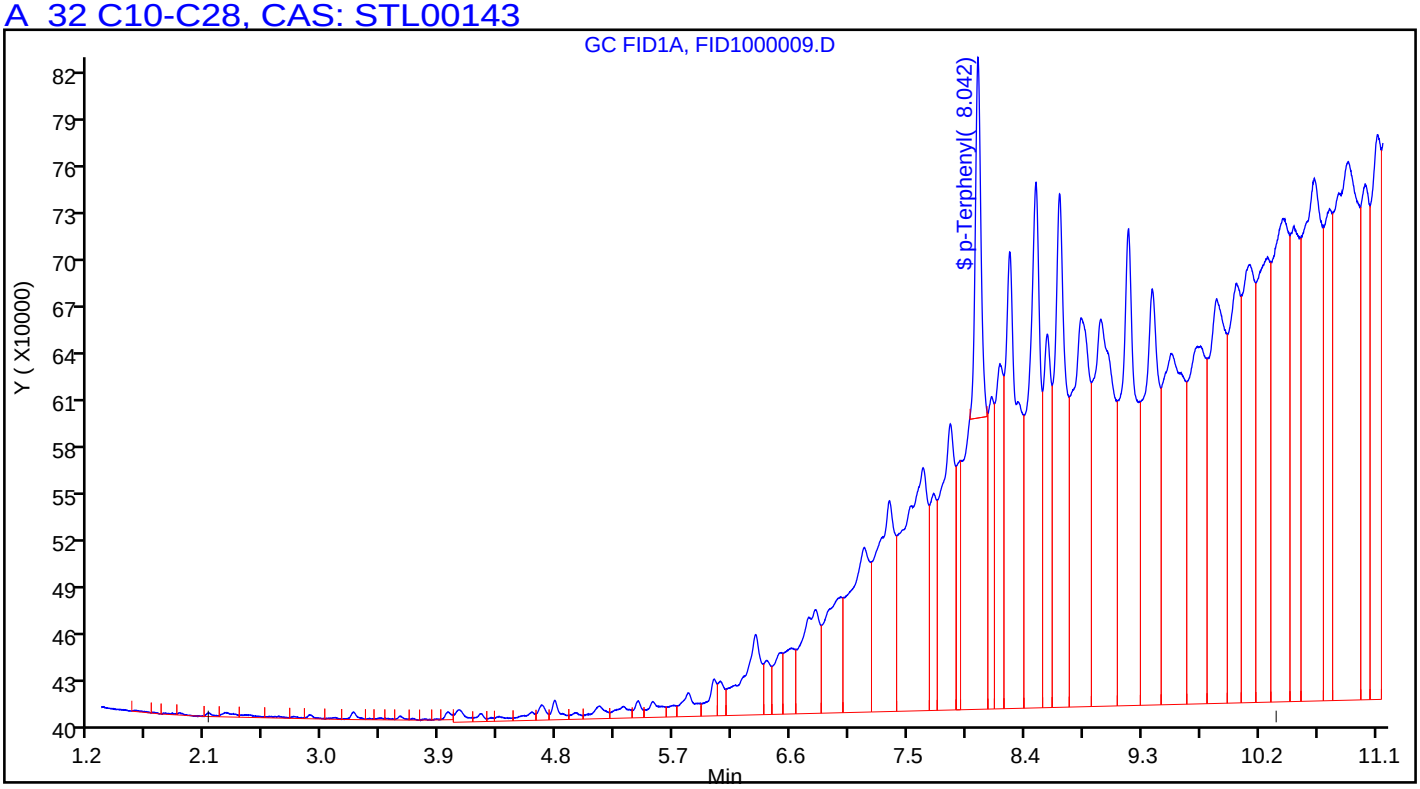
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	7.08	28.30

Report Date: 24-Aug-2018 12:13:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180824-53458.b\FID1000009.D				
Injection Date:	24-Aug-2018 11:43:28	Instrument ID:	CHDRO6		
Lims ID:	720-88192-D-14-B	Lab Sample ID:	720-88192-14		
Client ID:	DG-L5S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	3.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A_32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

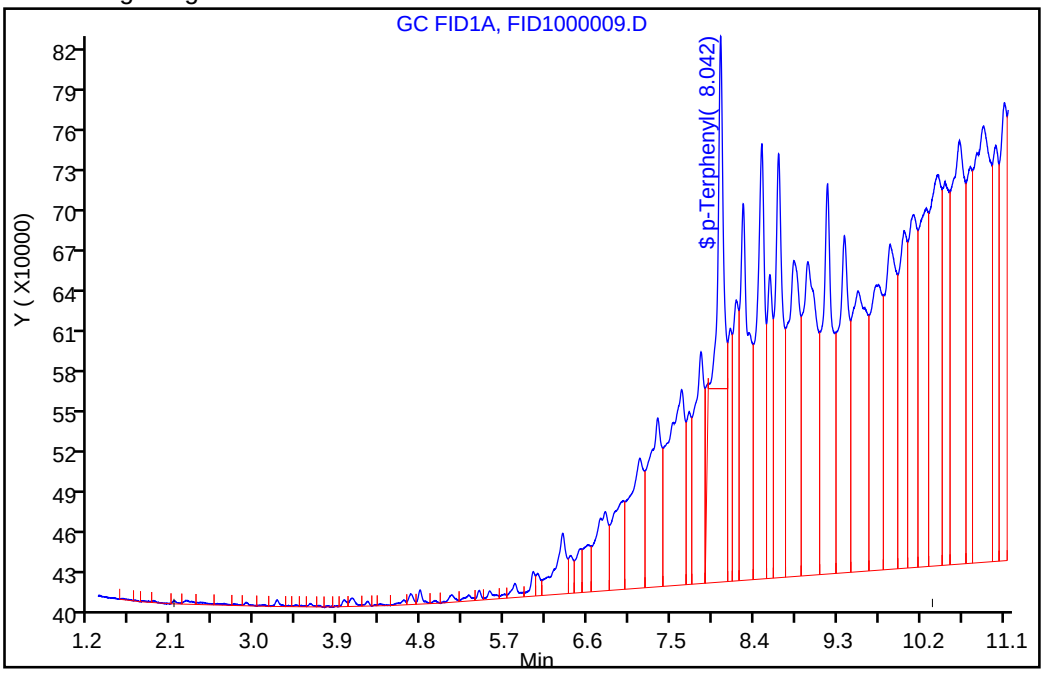
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180824-53458.b\FID1000009.D				
Injection Date:	24-Aug-2018 11:43:28	Instrument ID:	CHDRO6		
Lims ID:	720-88192-D-14-B	Lab Sample ID:	720-88192-14		
Client ID:	DG-L5S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	3.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.226, CAS: STL00143

Signal: 1

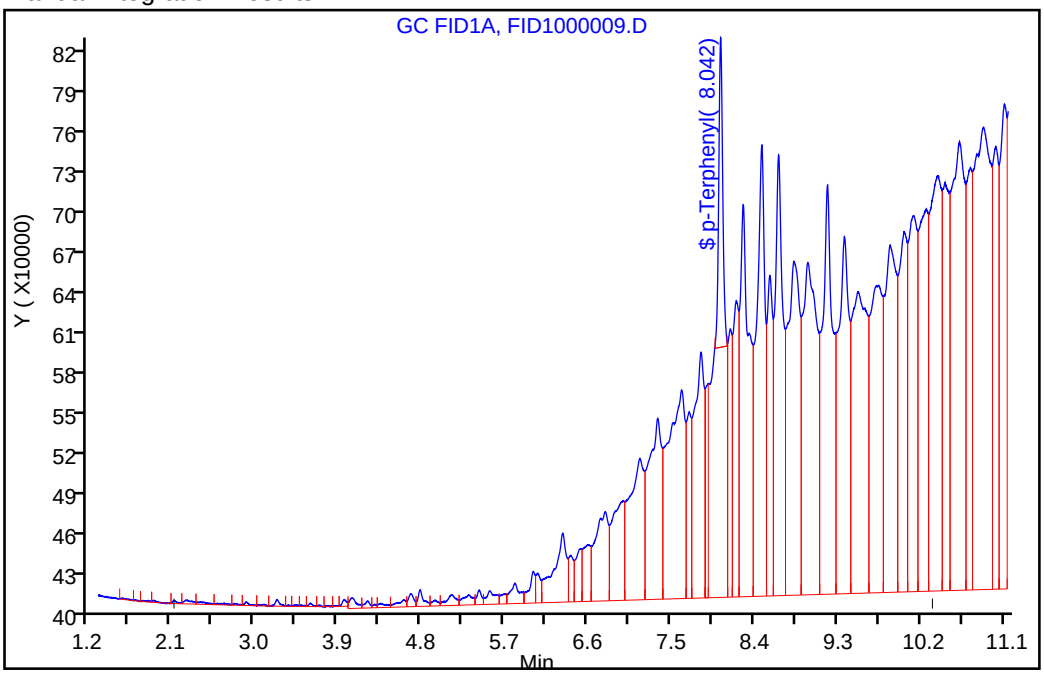
Processing Integration Results

RT: 6.23
Response: 772786183
Amount: 501.0256



Manual Integration Results

RT: 6.23
Response: 841261927
Amount: 545.4209



Reviewer: luj, 24-Aug-2018 12:13:17

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

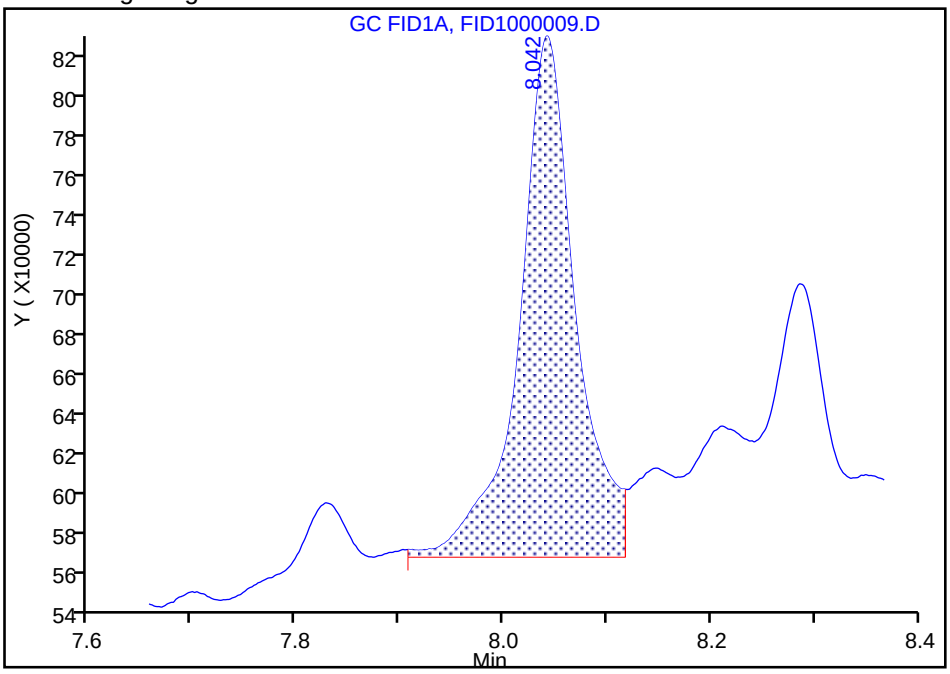
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180824-53458.b\FID1000009.D				
Injection Date:	24-Aug-2018 11:43:28	Instrument ID:	CHDRO6		
Lims ID:	720-88192-D-14-B	Lab Sample ID:	720-88192-14		
Client ID:	DG-L5S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	3.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

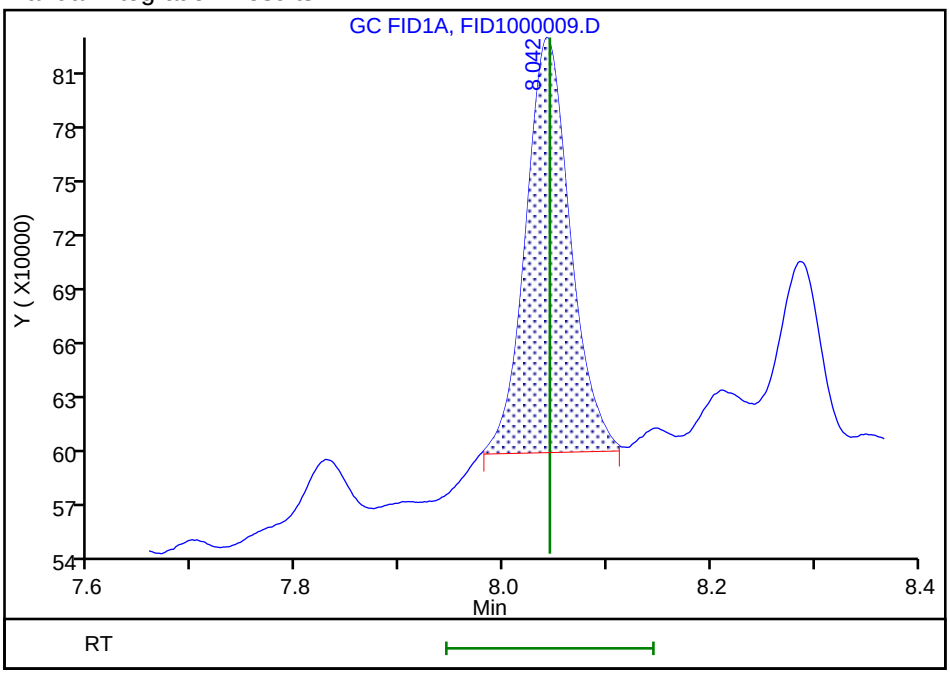
Processing Integration Results

RT: 8.04
Area: 19676641
Amount: 10.246329
Amount Units: mg/L



Manual Integration Results

RT: 8.04
Area: 13587905
Amount: 7.075707
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 12:12:37

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-L5S-3.5-4 Lab Sample ID: 720-88192-15

Matrix: Solid Lab File ID: 5a082318_032.d

Analysis Method: 8015B Date Collected: 08/22/2018 11:20

Extraction Method: 3546 Date Extracted: 08/23/2018 13:06

Sample wt/vol: 15.15(g) Date Analyzed: 08/24/2018 01:33

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250034 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	26000		2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	69		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_032.d
Lims ID: 720-88192-E-15-A
Client ID: DG-L5S--3.5-4
Sample Type: Client
Inject. Date: 24-Aug-2018 01:33:22 ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 010 Name: 720-0053432-032
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\DRO5A.m
Limit Group: DRO
Last Update: 24-Aug-2018 12:41:06 Calib Date: 23-Aug-2018 09:03:07
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 12:41:06

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	2.391	2.402	-0.011	60423	NC	
	23 n-Decane		3.672			ND	
A	21 Stoddard Solvent	4.416	(2.402-6.430)		76275	7.29	
A	1 C9-C13	4.416	(2.402-6.430)		76275	6.81	
A	57 C10-C12	4.646	(3.672-5.621)		7721	0.7886	
	24 Dodecane		5.621			ND	
A	3 C9 - C17	5.779	(2.402-9.157)		252406	20.0	
A	47 C9 - C18	6.077	(2.402-9.752)		268443	25.3	
A	60 C10-C16	6.098	(3.672-8.523)		127285	11.3	
A	25 C9-C19	6.349	(2.402-10.297)		377037	29.6	
A	15 Kerosene	6.349	(2.402-10.297)		377037	35.5	
	26 C13	6.438	6.430	0.008	4972	NC	
A	59 C12-C16	7.072	(5.621-8.523)		119564	12.2	
$	27 n-Decanoic Acid (Surr)		7.156			ND	U
A	62 C10-C20	7.253	(3.672-10.834)		421968	43.1	
A	28 C9-C24	7.586	(2.402-12.769)		1145652	117.0	
A	29 C9-C25	7.804	(2.402-13.207)		1339423	136.8	
A	54 C10-C23	7.993	(3.672-12.314)		956917	97.7	
A	4 C10-C24	8.221	(3.672-12.769)		1084752	110.8	
A	16 C10-C25	8.439	(3.672-13.207)		1278523	130.6	
	45 Hexadecane	8.521	8.523	-0.002	21289	NC	
A	14 C10-C26	8.650	(3.672-13.629)		1450816	148.2	
A	67 C12-C22	8.731	(5.621-11.842)		746929	76.3	
A	5 Diesel	9.050	(3.672-14.428)		1896923	193.7	
A	32 C10-C28	9.050	(3.672-14.428)		1896923	193.7	
A	12 Unknown Hydrocarbons	9.050	(3.672-14.428)		1896923	NC	
A	30 C13-C22	9.136	(6.430-11.842)		739275	75.5	
	44 Heptadecane	9.156	9.157	-0.001	50319	NC	
A	31 C12-C24	9.195	(5.621-12.769)		1077031	110.0	
	49 n-Octadecane	9.773	9.752	0.021	39189	NC	
A	11 Bunker Range Organics (C9-	9.784	(2.402-17.165)		3543154	NC	
A	52 Mineral oil	9.784	(2.402-17.165)		3890674	345.8	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	9.784	(2.402-17.165)		3890674	NC	
33 C19	10.289	10.297	-0.008	47751	NC	
A 17 C10-C36	10.419	(3.672-17.165)		3482254	355.7	
A 64 C13-C28	10.429	(6.430-14.428)		1881548	192.2	
A 68 Crude Oil Range Organics (	10.537	(2.402-18.672)		4529043	NC	
A 13 C9-C40	10.537	(2.402-18.672)		4529043	469.1	
A 58 C16-C24	10.646	(8.523-12.769)		978756	100.0	
61 icosane		10.834			ND	
A 6 C10-C40	11.172	(3.672-18.672)		4504733	466.6	
35 n-Docosane		11.842			ND	
$ 34 p-Terphenyl	11.857	11.903	-0.046	226576	17.4	M
A 18 C12-C40	12.146	(5.621-18.672)		4486545	464.9	
36 Tricosane	12.304	12.314	-0.010	104298	NC	
A 66 C13-C40	12.551	(6.430-18.672)		4468221	463.0	
37 n-Tetracosane	12.759	12.769	-0.010	127835	NC	
A 2 C16-C36 ORO	12.844	(8.523-17.165)		3701629	458.7	
38 C25	13.201	13.207	-0.006	193771	NC	
A 19 C16-C40	13.598	(8.523-18.672)		4339998	449.6	
46 n-Hexacosane	13.616	13.629	-0.013	172293	NC	
A 20 C19-C36	13.731	(10.297-17.165)		3190738	410.0	
A 55 C23-C32	14.096	(12.314-15.879)		2014266	412.8	
39 n-Octacosane	14.420	14.428	-0.008	145005	NC	
65 C29	14.805	14.808	-0.003	331685	NC	
A 40 C24-C36	14.967	(12.769-17.165)		2467988	388.7	
A 7 Motor Oil	14.967	(12.769-17.165)		2467988	388.7	
A 50 C25-C36	15.186	(13.207-17.165)		2300011	383.5	
A 10 C22-C40	15.257	(11.842-18.672)		3327207	363.0	
A 41 C23-C40	15.493	(12.314-18.672)		3202576	357.9	
A 8 C24-C40	15.721	(12.769-18.672)		3042851	351.8	
56 Dotriacontane	15.890	15.879	0.012	203973	NC	
A 51 C28-C40	16.550	(14.428-18.672)		2278205	330.3	
A 63 C29-C40	16.740	(14.808-18.672)		2049002	323.2	
42 n-Hexatriacontane	17.212	17.165	0.047	290805	NC	
43 C40		18.672			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

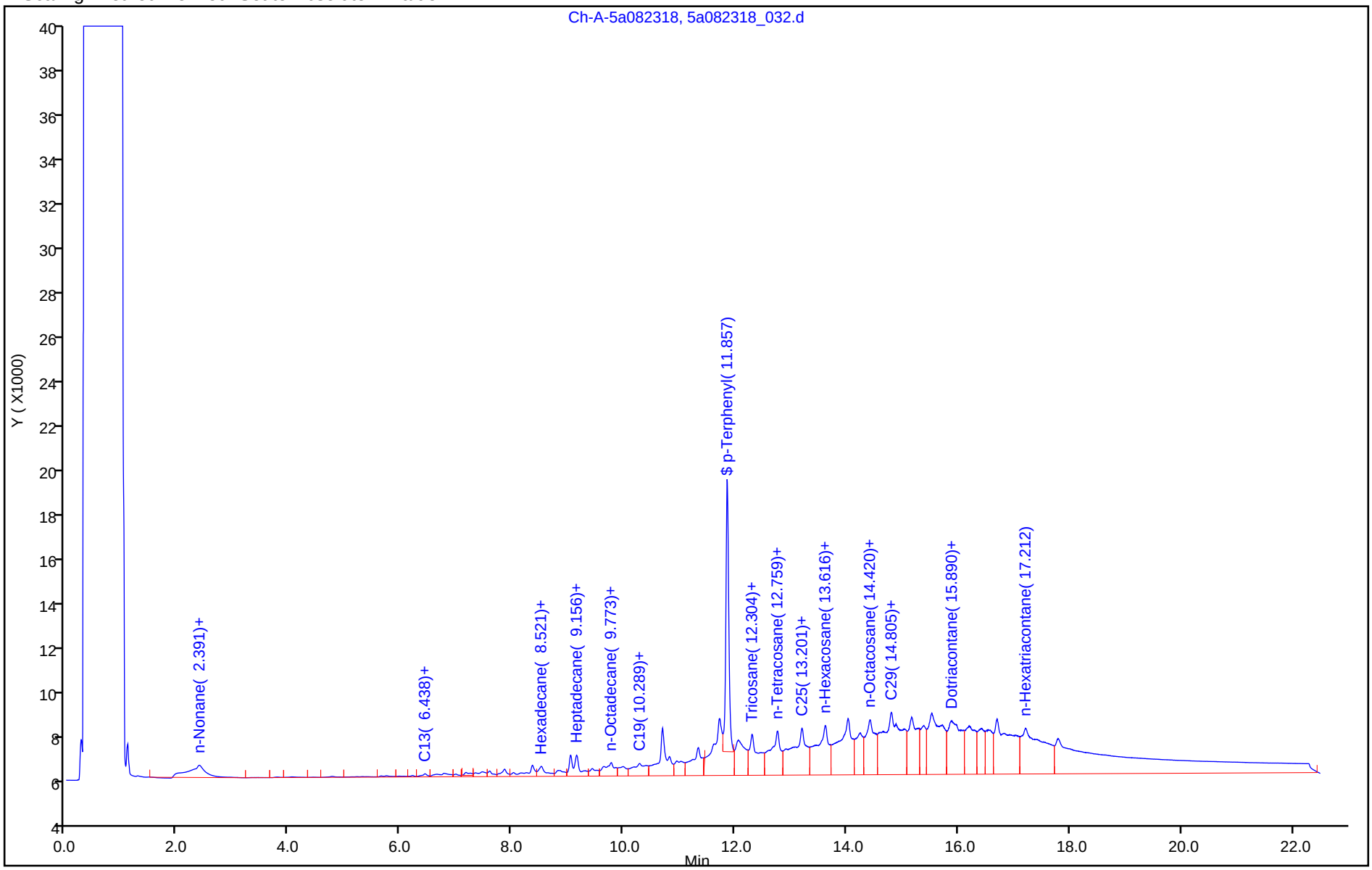
Report Date: 24-Aug-2018 12:41:07 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_032.d

Injection Date:	24-Aug-2018 01:33:22	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88192-E-15-A	Lab Sample ID:	720-88192-15	Worklist Smp#:	32
Client ID:	DG-L5S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_032.d				
Lims ID:	720-88192-E-15-A				
Client ID:	DG-L5S--3.5-4				
Sample Type:	Client				
Inject. Date:	24-Aug-2018 01:33:22	ALS Bottle#:	0	Worklist Smp#:	32
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 010 Name: 720-0053432-032				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\DRO5A.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 12:41:06	Calib Date:	23-Aug-2018 09:03:07		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				

First Level Reviewer: luj Date: 24-Aug-2018 12:41:06

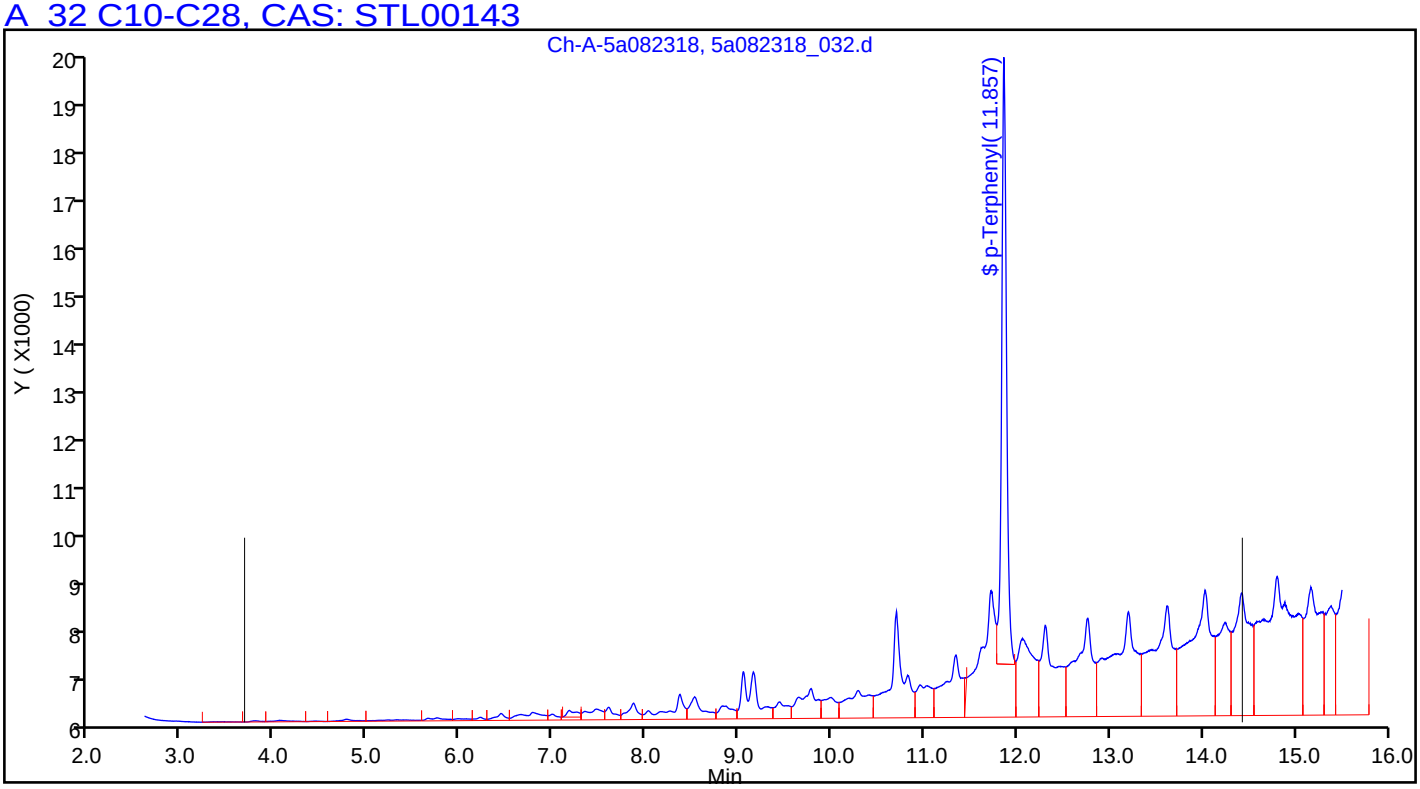
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	17.4	69.48

Report Date: 24-Aug-2018 12:41:08 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_032.d				
Injection Date:	24-Aug-2018 01:33:22	Instrument ID:	CHDRO5		
Lims ID:	720-88192-E-15-A	Lab Sample ID:	720-88192-15		
Client ID:	DG-L5S--3.5-4				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	32
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

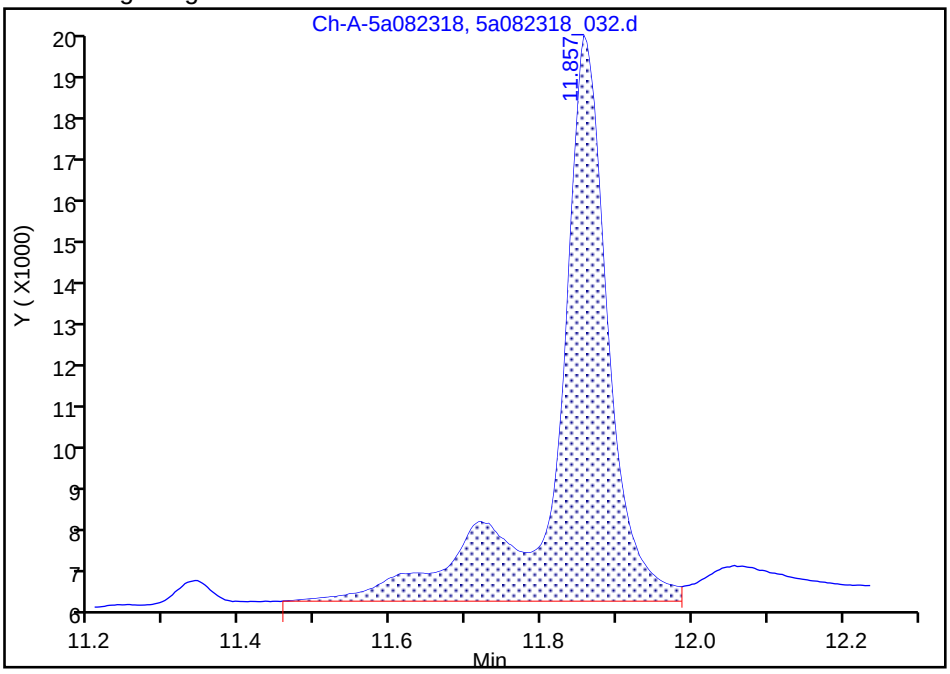
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_032.d				
Injection Date:	24-Aug-2018 01:33:22	Instrument ID:	CHDRO5		
Lims ID:	720-88192-E-15-A	Lab Sample ID:	720-88192-15		
Client ID:	DG-L5S--3.5-4				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	32
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

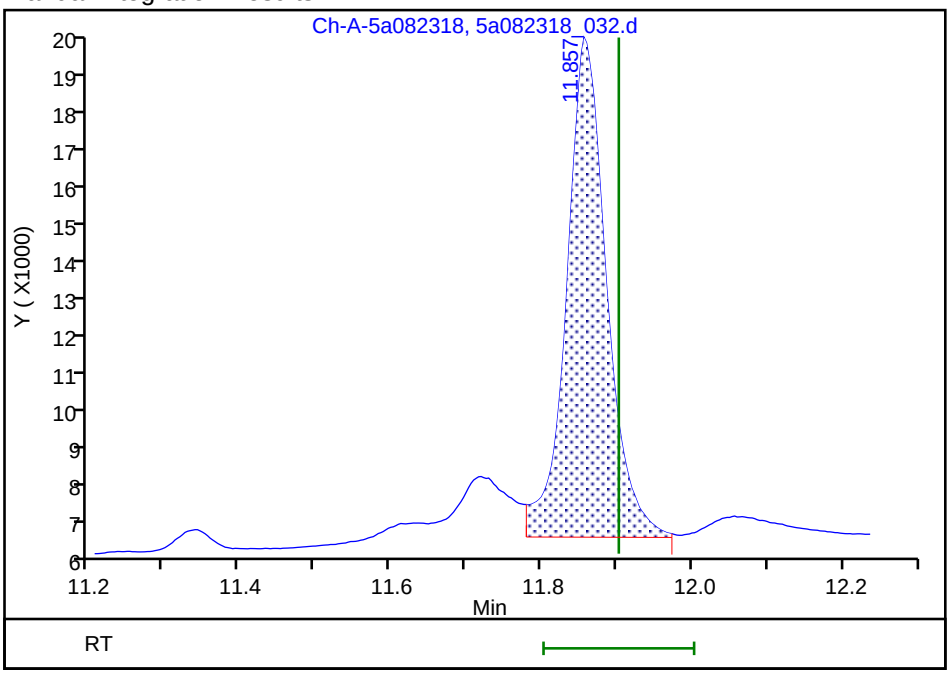
Processing Integration Results

RT: 11.86
Area: 306507
Amount: 23.497080
Amount Units: mg/L



Manual Integration Results

RT: 11.86
Area: 226576
Amount: 17.369504
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 12:40:54

Audit Action: Manually Integrated Audit Reason: Split Peak

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DUP-02 Lab Sample ID: 720-88192-18

Matrix: Solid Lab File ID: 5a082318_034.d

Analysis Method: 8015B Date Collected: 08/22/2018 00:00

Extraction Method: 3546 Date Extracted: 08/23/2018 13:06

Sample wt/vol: 15.47(g) Date Analyzed: 08/24/2018 02:31

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250034 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	120000		1900	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	60		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_034.d
Lims ID: 720-88192-D-18-A
Client ID: DUP-02
Sample Type: Client
Inject. Date: 24-Aug-2018 02:31:43 ALS Bottle#: 0 Worklist Smp#: 34
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 013 Name: 720-0053432-034
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\DRO5A.m
Limit Group: DRO
Last Update: 24-Aug-2018 12:42:37 Calib Date: 23-Aug-2018 09:03:07
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK025

First Level Reviewer: luj Date: 24-Aug-2018 12:42:37

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		2.402			ND	
	23 n-Decane	3.708	3.672	0.036	6425	NC	
A	21 Stoddard Solvent	4.416	(2.402-6.430)		117180	11.2	
A	1 C9-C13	4.416	(2.402-6.430)		117180	10.5	
A	57 C10-C12	4.646	(3.672-5.621)		96508	9.86	
	24 Dodecane	5.617	5.621	-0.004	29689	NC	
A	3 C9 - C17	5.779	(2.402-9.157)		604543	47.9	
A	47 C9 - C18	6.077	(2.402-9.752)		864541	81.5	
A	60 C10-C16	6.098	(3.672-8.523)		432176	38.4	
A	25 C9-C19	6.349	(2.402-10.297)		864541	68.0	
A	15 Kerosene	6.349	(2.402-10.297)		864541	81.4	
	26 C13	6.499	6.430	0.069	56444	NC	
A	59 C12-C16	7.072	(5.621-8.523)		365357	37.3	
$	27 n-Decanoic Acid (Surr)		7.156			ND	U
A	62 C10-C20	7.253	(3.672-10.834)		1705070	174.1	
A	28 C9-C24	7.586	(2.402-12.769)		4958847	506.5	
A	29 C9-C25	7.804	(2.402-13.207)		4958847	506.5	
A	54 C10-C23	7.993	(3.672-12.314)		3472706	354.7	
A	4 C10-C24	8.221	(3.672-12.769)		4955002	506.1	
A	16 C10-C25	8.439	(3.672-13.207)		4955002	506.1	
	45 Hexadecane	8.508	8.523	-0.015	54395	NC	
A	14 C10-C26	8.650	(3.672-13.629)		7267174	742.2	
A	67 C12-C22	8.731	(5.621-11.842)		3405887	347.9	
A	5 Diesel	9.050	(3.672-14.428)		9321555	952.0	M
A	32 C10-C28	9.050	(3.672-14.428)		9321555	952.0	M
A	12 Unknown Hydrocarbons	9.050	(3.672-14.428)		9321555	NC	M
A	30 C13-C22	9.136	(6.430-11.842)		3359371	343.1	
	44 Heptadecane	9.150	9.157	-0.007	98050	NC	
A	31 C12-C24	9.195	(5.621-12.769)		4888183	499.2	
	49 n-Octadecane	9.739	9.752	-0.013	259998	NC	
A	11 Bunker Range Organics (C9-	9.784	(2.402-17.165)		26700007	NC	M
A	52 Mineral oil	9.784	(2.402-17.165)		18338400	1629.8	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	9.784	(2.402-17.165)		18338400	NC	
33 C19		10.297			ND	
A 17 C10-C36	10.419	(3.672-17.165)		26696162	2726.6	M
A 64 C13-C28	10.429	(6.430-14.428)		9208220	940.5	M
A 68 Crude Oil Range Organics (	10.537	(2.402-18.672)		21572101	NC	
A 13 C9-C40	10.537	(2.402-18.672)		21572101	2352.9	
A 58 C16-C24	10.646	(8.523-12.769)		4577221	467.5	
61 icosane		10.834			ND	
A 6 C10-C40	11.172	(3.672-18.672)		21559465	2351.6	
35 n-Docosane		11.842			ND	
$ 34 p-Terphenyl	11.860	11.903	-0.043	194262	14.9	M
A 18 C12-C40	12.146	(5.621-18.672)		21517184	2347.4	
36 Tricosane	12.361	12.314	0.047	1073142	NC	
A 66 C13-C40	12.551	(6.430-18.672)		21488573	2344.6	
37 n-Tetracosane		12.769			ND	
A 2 C16-C36 ORO	12.844	(8.523-17.165)		18069653	2239.2	
38 C25	13.210	13.207	0.003	1507777	NC	
A 19 C16-C40	13.598	(8.523-18.672)		21303354	2327.3	
46 n-Hexacosane	13.613	13.629	-0.016	804395	NC	
A 20 C19-C36	13.731	(10.297-17.165)		17043284	2190.2	
A 55 C23-C32	14.096	(12.314-15.879)		10356164	2122.5	
39 n-Octacosane		14.428			ND	
65 C29	14.818	14.808	0.010	1119667	NC	
A 40 C24-C36	14.967	(12.769-17.165)		13449286	2118.5	
A 7 Motor Oil	14.967	(12.769-17.165)		13449286	2118.5	
A 50 C25-C36	15.186	(13.207-17.165)		12528307	2089.1	
A 10 C22-C40	15.257	(11.842-18.672)		18251645	1991.3	
A 41 C23-C40	15.493	(12.314-18.672)		17472620	1952.9	
A 8 C24-C40	15.721	(12.769-18.672)		16587389	1917.7	
56 Dotriacontane	15.875	15.879	-0.003	518928	NC	
A 51 C28-C40	16.550	(14.428-18.672)		12444720	1804.2	
A 63 C29-C40	16.740	(14.808-18.672)		11148113	1758.2	
42 n-Hexatriacontane		17.165			ND	
43 C40		18.672			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
- NC - Not Calibrated

Review Flags
- M - Manually Integrated
- U - Marked Undetected

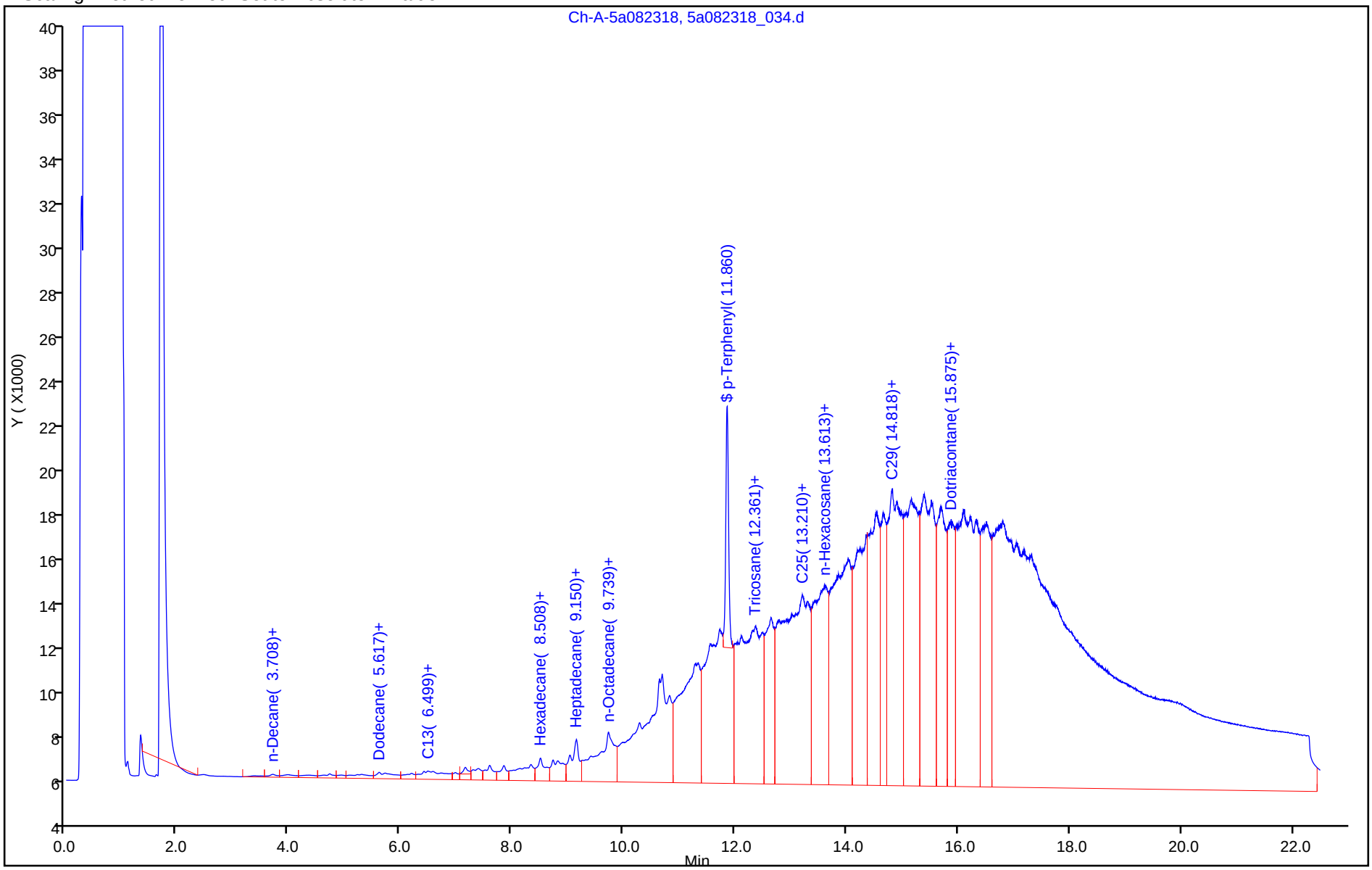
Report Date: 24-Aug-2018 12:42:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_034.d

Injection Date:	24-Aug-2018 02:31:43	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88192-D-18-A	Lab Sample ID:	720-88192-18	Worklist Smp#:	34
Client ID:	DUP-02				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_034.d				
Lims ID:	720-88192-D-18-A				
Client ID:	DUP-02				
Sample Type:	Client				
Inject. Date:	24-Aug-2018 02:31:43	ALS Bottle#:	0	Worklist Smp#:	34
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 013 Name: 720-0053432-034				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\DRO5A.m				
Limit Group:	DRO				
Last Update:	24-Aug-2018 12:42:37	Calib Date:	23-Aug-2018 09:03:07		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK025				

First Level Reviewer: luj Date: 24-Aug-2018 12:42:37

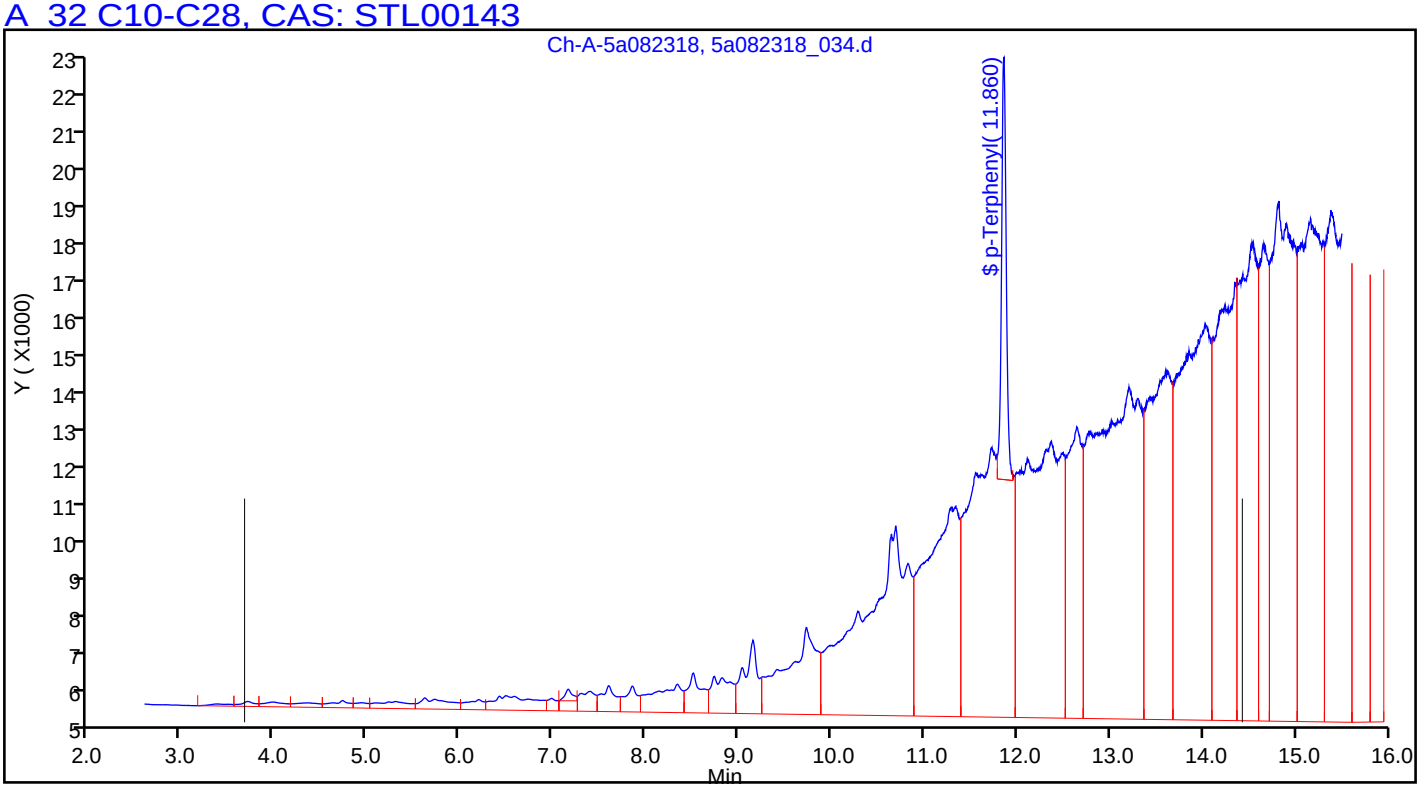
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	14.9	59.57

Report Date: 24-Aug-2018 12:42:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_034.d				
Injection Date:	24-Aug-2018 02:31:43	Instrument ID:	CHDRO5		
Lims ID:	720-88192-D-18-A	Lab Sample ID:	720-88192-18		
Client ID:	DUP-02				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	34
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

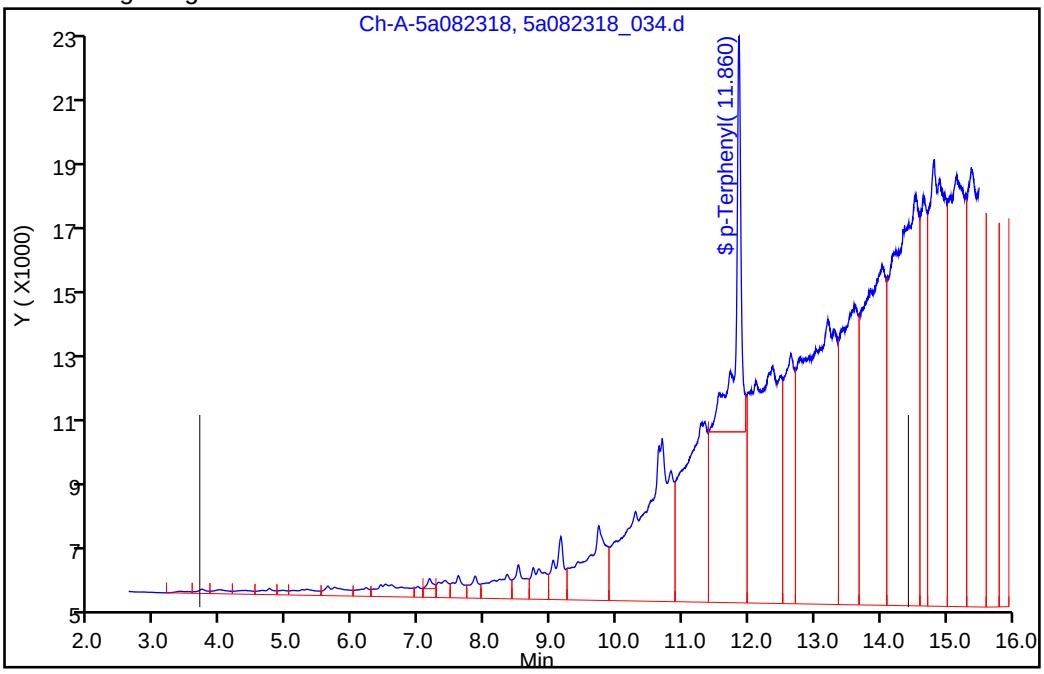
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_034.d				
Injection Date:	24-Aug-2018 02:31:43	Instrument ID:	CHDRO5		
Lims ID:	720-88192-D-18-A	Lab Sample ID:	720-88192-18		
Client ID:	DUP-02				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	34
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 9.050, CAS: STL00143

Signal: 1

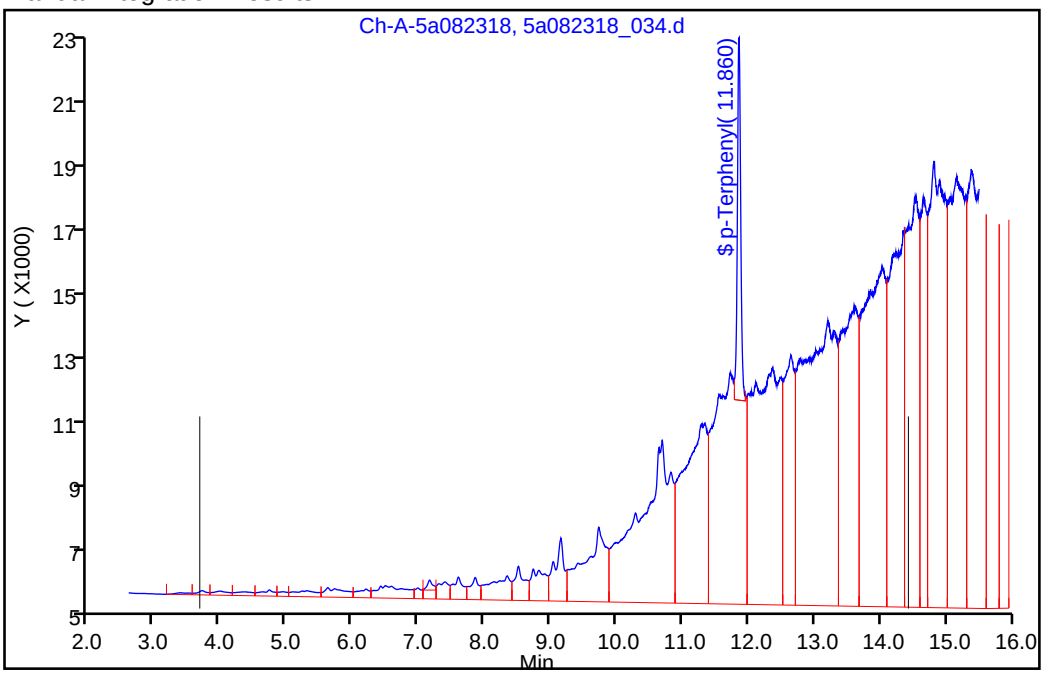
Processing Integration Results

RT: 9.05
Response: 8285943
Amount: 846.2670



Manual Integration Results

RT: 9.05
Response: 9321555
Amount: 952.0370



Reviewer: luj, 24-Aug-2018 12:42:25

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

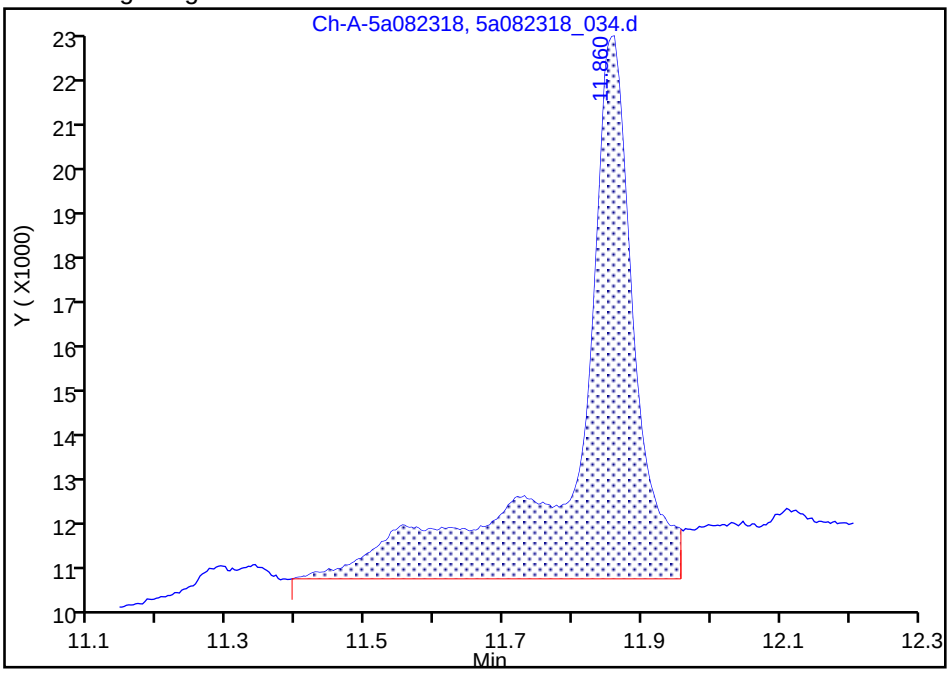
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180823-53432.b\5a082318_034.d				
Injection Date:	24-Aug-2018 02:31:43	Instrument ID:	CHDRO5		
Lims ID:	720-88192-D-18-A	Lab Sample ID:	720-88192-18		
Client ID:	DUP-02				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	34
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

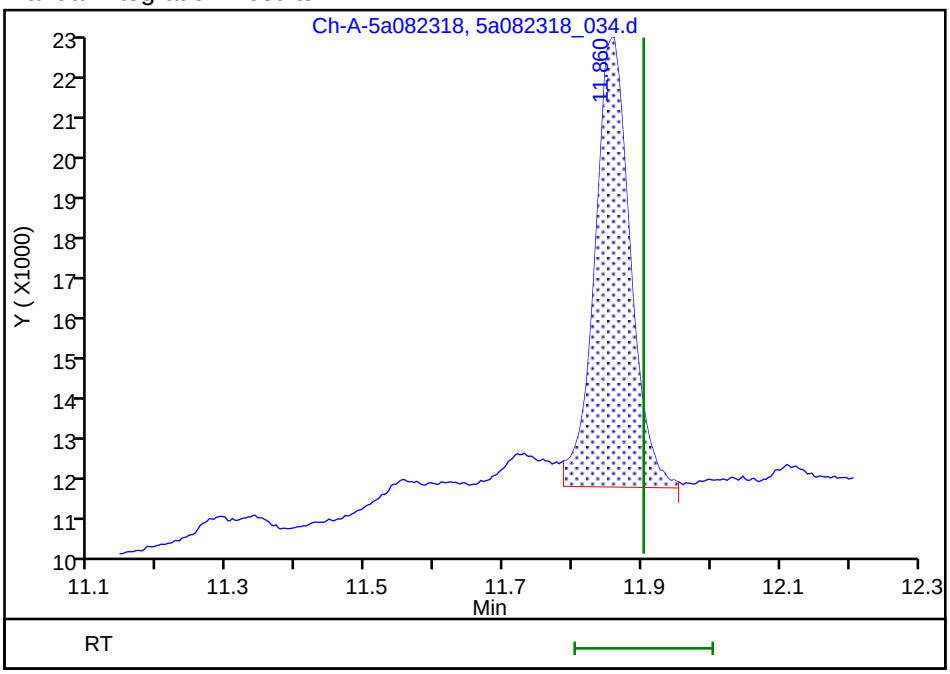
Processing Integration Results

RT: 11.86
Area: 358706
Amount: 27.498699
Amount Units: mg/L



Manual Integration Results

RT: 11.86
Area: 194262
Amount: 14.892286
Amount Units: mg/L



Reviewer: luj, 24-Aug-2018 12:42:11

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-I3S-0.5-1 Lab Sample ID: 720-88192-1

Matrix: Solid Lab File ID: 08281835.D

Analysis Method: 8260B Date Collected: 08/22/2018 09:30

Sample wt/vol: 5.351(g) Date Analyzed: 08/29/2018 01:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.7	1.1
67-64-1	Acetone	70		47	36
71-43-2	Benzene	ND		4.7	0.61
75-27-4	Dichlorobromomethane	ND		4.7	0.67
108-86-1	Bromobenzene	ND		4.7	0.74
74-97-5	Chlorobromomethane	ND		19	0.67
75-25-2	Bromoform	ND		4.7	1.9
74-83-9	Bromomethane	ND		9.3	0.74
78-93-3	2-Butanone (MEK)	35	J	47	20
104-51-8	n-Butylbenzene	ND		4.7	0.93
135-98-8	sec-Butylbenzene	ND		4.7	0.67
98-06-6	tert-Butylbenzene	ND		4.7	0.68
75-15-0	Carbon disulfide	ND	*	4.7	1.9
56-23-5	Carbon tetrachloride	ND		4.7	0.58
108-90-7	Chlorobenzene	ND		4.7	0.64
75-00-3	Chloroethane	ND		9.3	0.52
67-66-3	Chloroform	ND		4.7	0.62
74-87-3	Chloromethane	ND		9.3	0.74
95-49-8	2-Chlorotoluene	ND		4.7	0.61
106-43-4	4-Chlorotoluene	ND		4.7	0.64
124-48-1	Chlorodibromomethane	ND		4.7	0.66
95-50-1	1,2-Dichlorobenzene	ND		4.7	0.64
541-73-1	1,3-Dichlorobenzene	ND		4.7	0.67
106-46-7	1,4-Dichlorobenzene	ND		4.7	0.66
142-28-9	1,3-Dichloropropane	ND		4.7	0.68
563-58-6	1,1-Dichloropropene	ND		4.7	0.64
96-12-8	1,2-Dibromo-3-Chloropropane	ND		9.3	1.6
106-93-4	Ethylene Dibromide	ND		4.7	1.3
74-95-3	Dibromomethane	ND		9.3	0.80
75-71-8	Dichlorodifluoromethane	ND		9.3	0.74
75-34-3	1,1-Dichloroethane	ND		4.7	0.64
107-06-2	1,2-Dichloroethane	ND		4.7	0.71
75-35-4	1,1-Dichloroethene	ND	*	4.7	0.58
156-59-2	cis-1,2-Dichloroethene	ND		4.7	0.64
156-60-5	trans-1,2-Dichloroethene	ND		4.7	0.70
78-87-5	1,2-Dichloropropane	ND		4.7	0.59

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-I3S-0.5-1 Lab Sample ID: 720-88192-1

Matrix: Solid Lab File ID: 08281835.D

Analysis Method: 8260B Date Collected: 08/22/2018 09:30

Sample wt/vol: 5.351(g) Date Analyzed: 08/29/2018 01:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.7	0.64
10061-02-6	trans-1,3-Dichloropropene	ND		4.7	0.63
100-41-4	Ethylbenzene	ND		4.7	0.70
87-68-3	Hexachlorobutadiene	ND		4.7	0.84
591-78-6	2-Hexanone	ND		47	9.3
98-82-8	Isopropylbenzene	ND		4.7	0.64
99-87-6	4-Isopropyltoluene	ND		4.7	2.3
75-09-2	Methylene Chloride	ND		9.3	5.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		47	9.3
91-20-3	Naphthalene	ND		9.3	1.4
103-65-1	N-Propylbenzene	ND		4.7	0.62
100-42-5	Styrene	ND		4.7	0.59
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.7	0.71
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.7	0.70
127-18-4	Tetrachloroethene	ND		4.7	0.63
108-88-3	Toluene	ND		4.7	0.66
87-61-6	1,2,3-Trichlorobenzene	ND		4.7	0.69
120-82-1	1,2,4-Trichlorobenzene	ND		4.7	0.66
71-55-6	1,1,1-Trichloroethane	ND		4.7	0.57
79-00-5	1,1,2-Trichloroethane	ND		4.7	0.65
79-01-6	Trichloroethene	ND		4.7	0.59
75-69-4	Trichlorofluoromethane	ND		4.7	0.52
96-18-4	1,2,3-Trichloropropane	ND		4.7	0.72
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7	1.9
95-63-6	1,2,4-Trimethylbenzene	ND		4.7	1.5
108-67-8	1,3,5-Trimethylbenzene	ND		4.7	0.61
108-05-4	Vinyl acetate	ND		19	4.7
75-01-4	Vinyl chloride	ND		4.7	0.68
1330-20-7	Xylenes, Total	ND		4.7	1.1
594-20-7	2,2-Dichloropropane	ND		4.7	1.9
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		230	93

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-I3S-0.5-1 Lab Sample ID: 720-88192-1

Matrix: Solid Lab File ID: 08281835.D

Analysis Method: 8260B Date Collected: 08/22/2018 09:30

Sample wt/vol: 5.351(g) Date Analyzed: 08/29/2018 01:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	95		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		60-140
2037-26-5	Toluene-d8 (Surr)	99		58-140

Report Date: 29-Aug-2018 09:16:51 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281835.D
Lims ID: 720-88192-B-1-A
Client ID: DG-I3S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 01:24:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-B-1 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:15:45 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 09:16:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.100	7.101	-0.001	98	194696	250.0	
* 2 Fluorobenzene	96	10.898	10.899	-0.001	98	864148	25.0	
* 4 Chlorobenzene-d5	117	14.746	14.747	-0.001	86	578443	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.885	17.886	-0.001	94	256647	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.490	9.491	-0.001	53	61527	7.84	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.007	10.008	-0.001	97	67400	8.76	
$ 10 Toluene-d8 (Surr)	98	13.004	13.005	-0.001	93	229781	7.39	
$ 11 4-Bromofluorobenzene	95	16.234	16.235	-0.001	87	74634	7.10	
$ 12 1,2-Dichlorobenzene-d4	152	18.340	18.331	-0.001	79	59814	6.31	
28 Acetone	58	6.645	6.646	-0.001	95	20024	37.4	
34 Methylene Chloride	84	7.354	7.365	-0.011	28	754	0.0971	
143 Methyl acetate	43	7.414	7.405	0.009	92	12789	3.80	
44 2-Butanone (MEK)	72	8.933	8.924	0.009	96	12660	18.8	
59 Benzene	78	10.675	10.676	-0.001	1	1334	0.0396	
148 1-Chlorohexane	55	14.746	14.655	0.090	1	5823	0.6125	
126 Butyl Ether	87	14.948	14.949	-0.001	40	828	0.1317	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	729753	10.1	
A 153 C6-C8	1	11.156	(8.853-13.459)		0	163584	2.27	
A 154 C6-C9	1	12.113	(8.853-15.373)		0	211632	2.94	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	773305	10.7	
A 119 C6-C10	1	12.994	(8.853-17.135)		0	217625	3.03	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	732381	10.2	
A 120 C6-C12	1	14.554	(8.853-20.255)		0	254365	3.54	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	54839	0.7623	
A 121 C7-C12	1	15.724	(11.192-20.255)		0	117128	1.63	

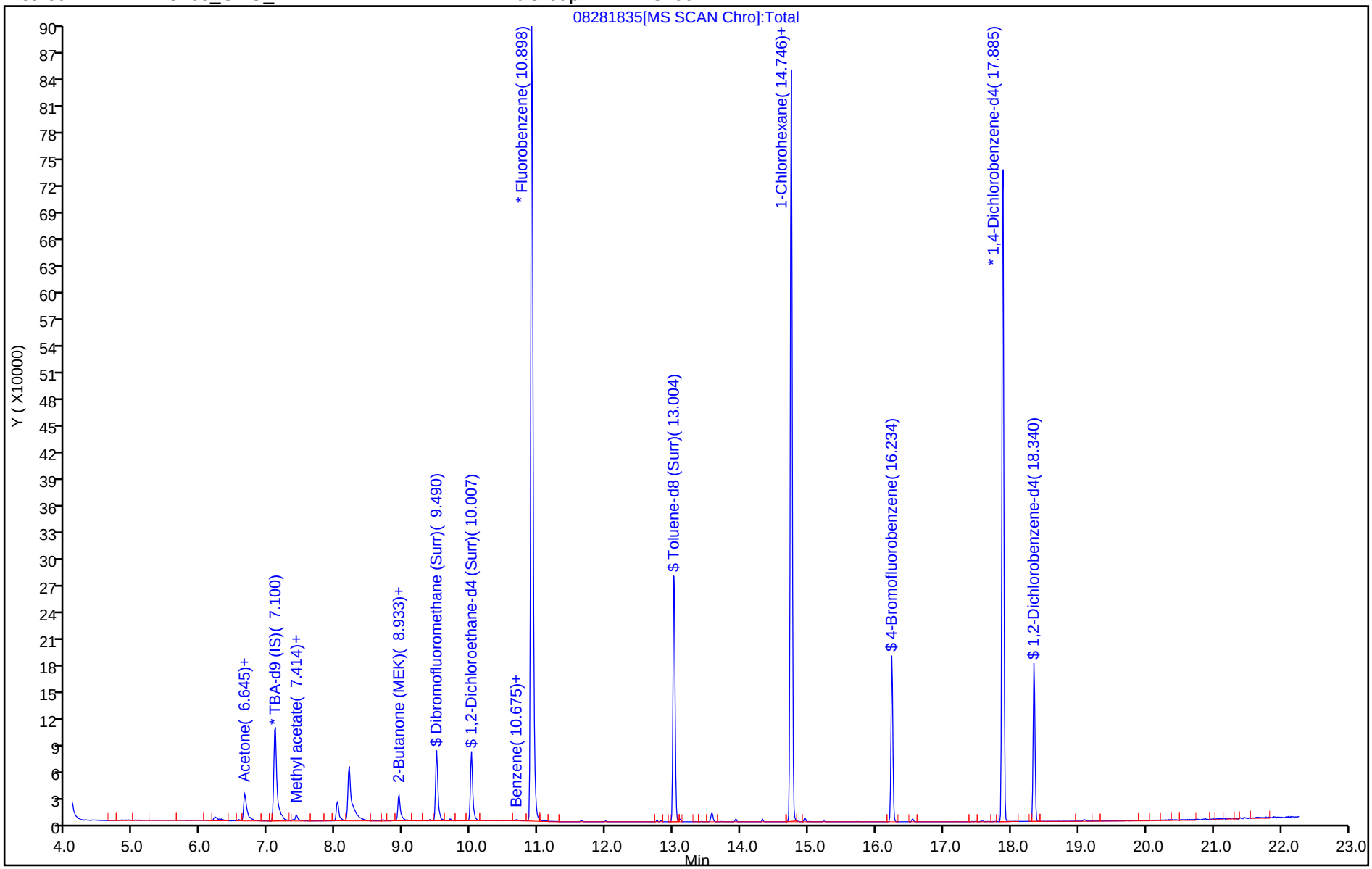
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:16:51 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281835.D				
Injection Date:	29-Aug-2018 01:24:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88192-B-1-A	Lab Sample ID:	720-88192-1	Worklist Smp#:	15
Client ID:	DG-I3S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281835.D
Lims ID: 720-88192-B-1-A
Client ID: DG-I3S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 01:24:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-B-1 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:15:45 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 09:16:50

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.76	116.78
$ 10 Toluene-d8 (Surr)	7.50	7.39	98.51
$ 11 4-Bromofluorobenzene	7.50	7.10	94.63
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

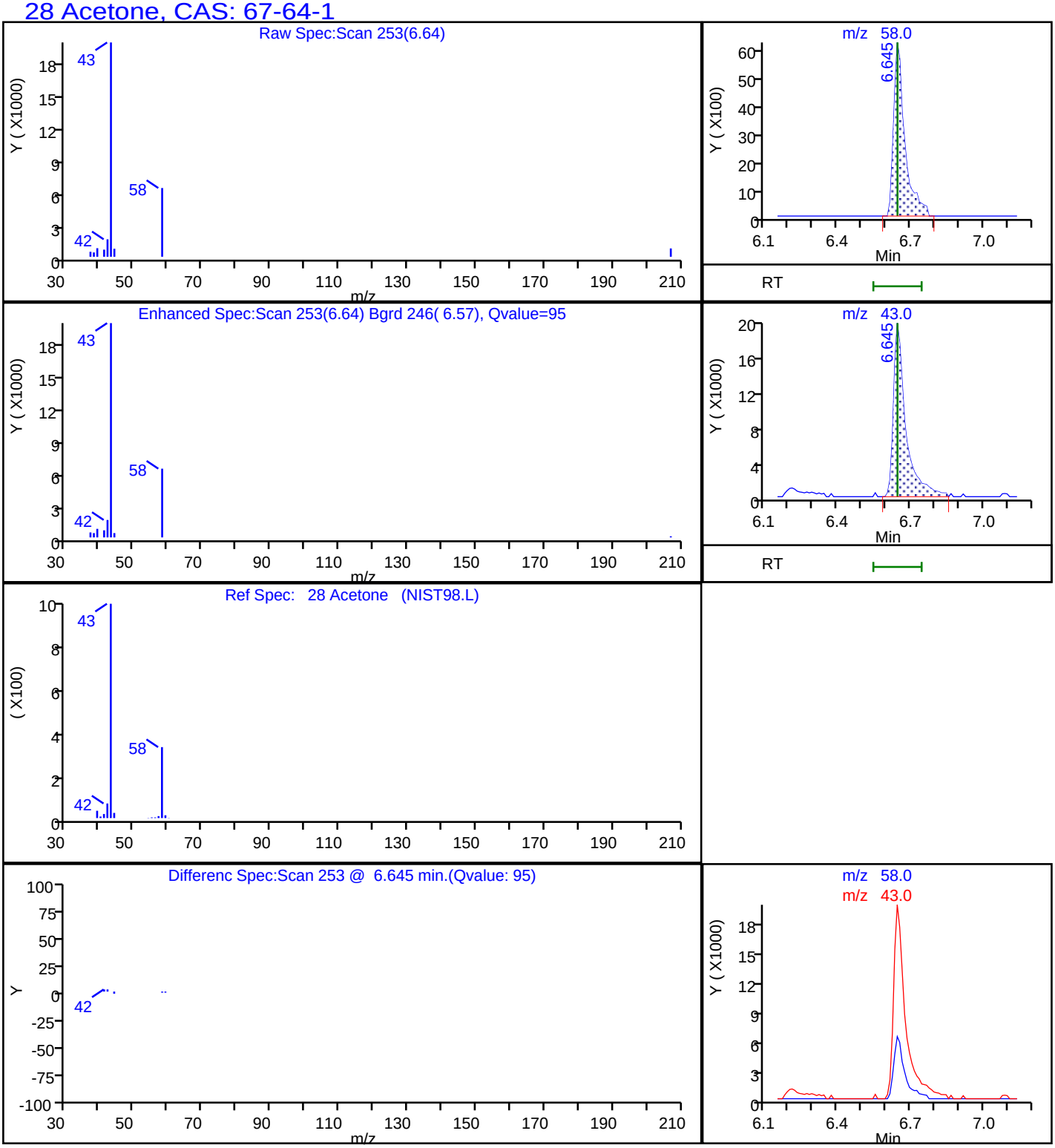
Report Date: 29-Aug-2018 09:16:51 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281835.D

Injection Date:	29-Aug-2018 01:24:30	Instrument ID:	HP7		
Lims ID:	720-88192-B-1-A	Lab Sample ID:	720-88192-1		
Client ID:	DG-I3S--0.5-1				
Operator ID:	SF	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



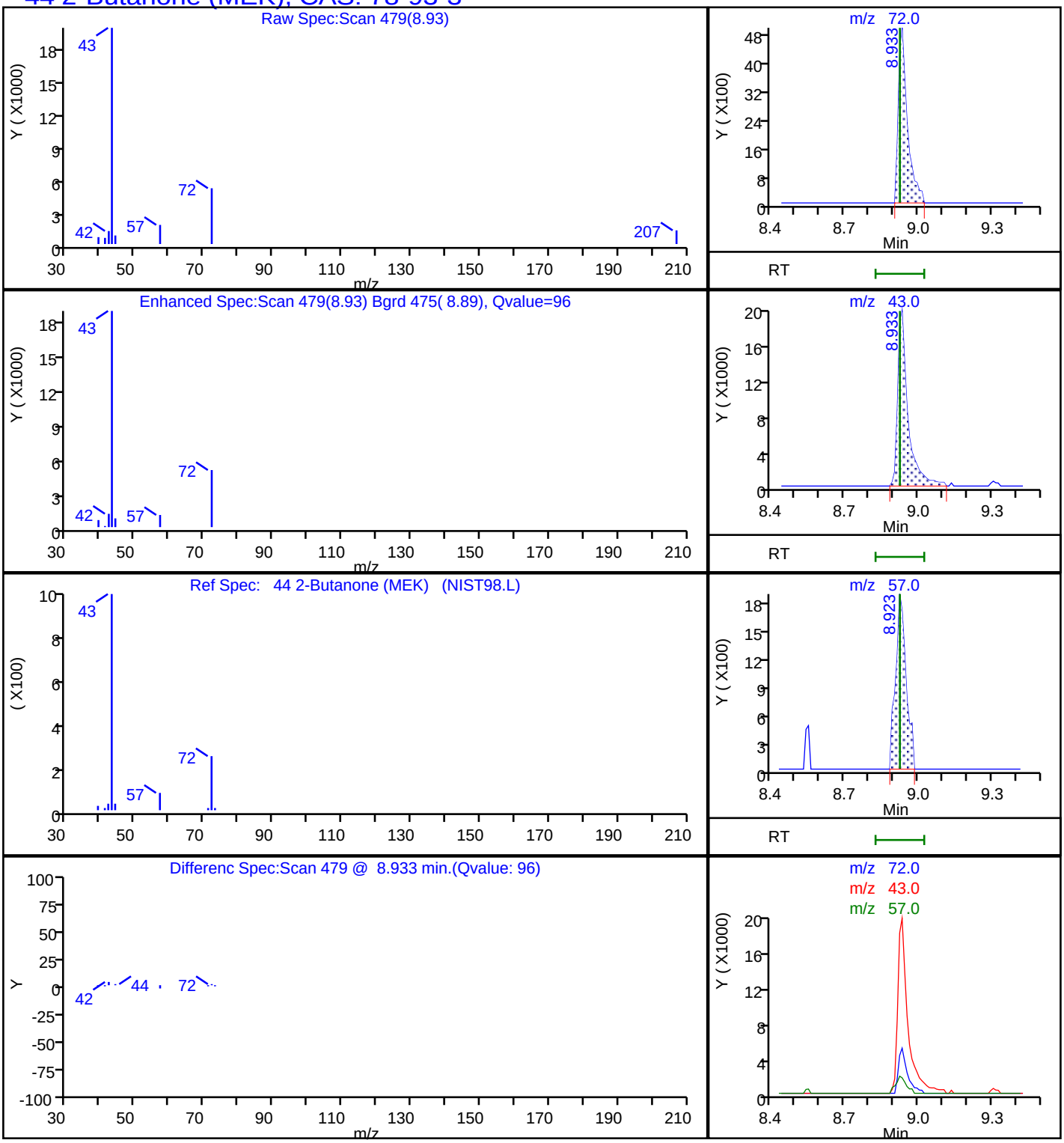
Report Date: 29-Aug-2018 09:16:51 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281835.D

Injection Date:	29-Aug-2018 01:24:30	Instrument ID:	HP7		
Lims ID:	720-88192-B-1-A	Lab Sample ID:	720-88192-1		
Client ID:	DG-I3S--0.5-1				
Operator ID:	SF	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

44 2-Butanone (MEK), CAS: 78-93-3



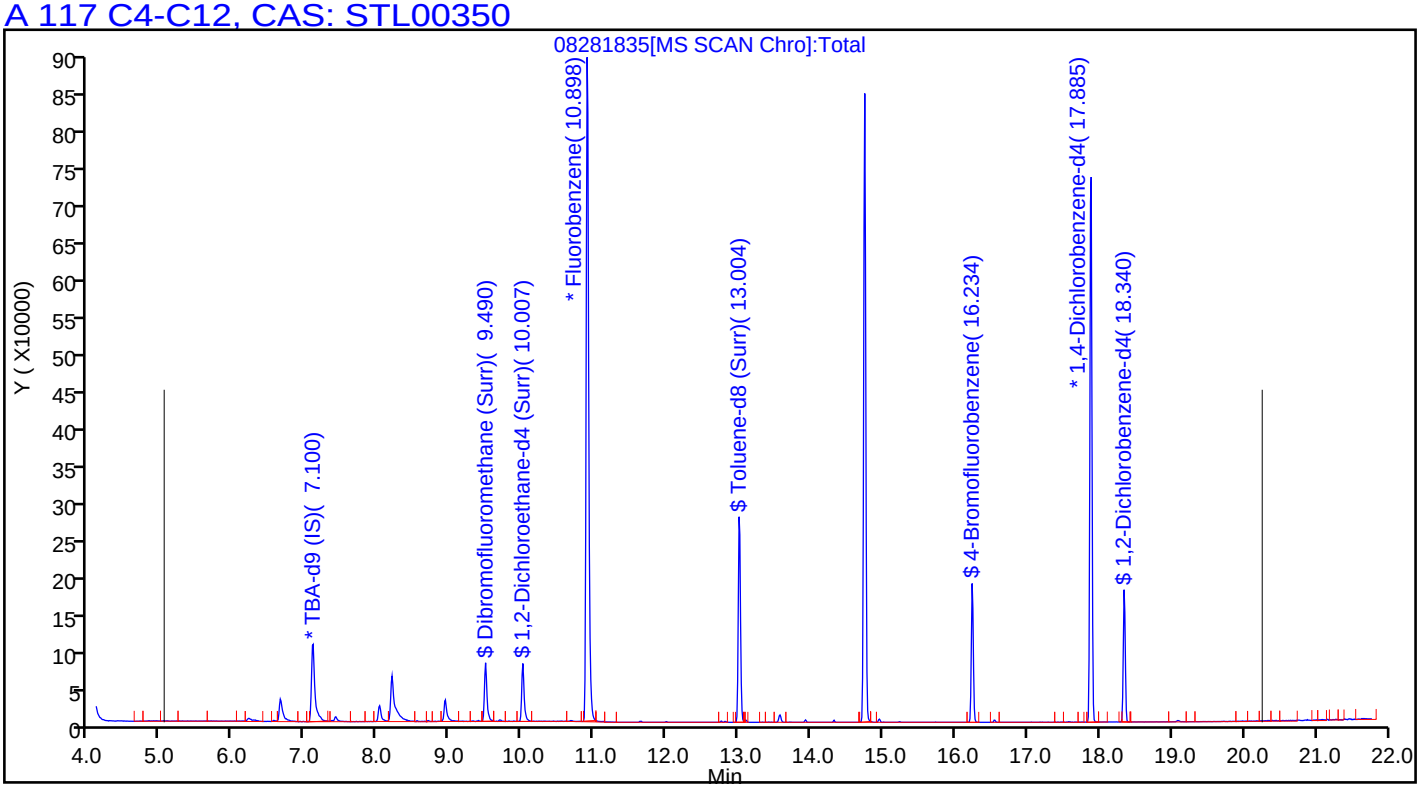
Report Date: 29-Aug-2018 09:16:52 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281835.D

Injection Date:	29-Aug-2018 01:24:30	Instrument ID:	HP7		
Lims ID:	720-88192-B-1-A	Lab Sample ID:	720-88192-1		
Client ID:	DG-I3S--0.5-1				
Operator ID:	SF	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-I3S-3.5-4 Lab Sample ID: 720-88192-2

Matrix: Solid Lab File ID: 08281815.D

Analysis Method: 8260B Date Collected: 08/22/2018 09:30

Sample wt/vol: 6.025(g) Date Analyzed: 08/28/2018 14:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250352 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.1	1.0
67-64-1	Acetone	48		41	32
71-43-2	Benzene	ND		4.1	0.54
75-27-4	Dichlorobromomethane	ND		4.1	0.60
108-86-1	Bromobenzene	ND	*	4.1	0.66
74-97-5	Chlorobromomethane	ND		17	0.60
75-25-2	Bromoform	ND		4.1	1.7
74-83-9	Bromomethane	ND		8.3	0.66
78-93-3	2-Butanone (MEK)	ND		41	17
104-51-8	n-Butylbenzene	ND	*	4.1	0.83
135-98-8	sec-Butylbenzene	ND	*	4.1	0.60
98-06-6	tert-Butylbenzene	ND	*	4.1	0.61
75-15-0	Carbon disulfide	ND		4.1	1.7
56-23-5	Carbon tetrachloride	ND		4.1	0.51
108-90-7	Chlorobenzene	ND		4.1	0.57
75-00-3	Chloroethane	ND		8.3	0.46
67-66-3	Chloroform	ND		4.1	0.55
74-87-3	Chloromethane	ND		8.3	0.66
95-49-8	2-Chlorotoluene	ND	*	4.1	0.54
106-43-4	4-Chlorotoluene	ND	*	4.1	0.56
124-48-1	Chlorodibromomethane	ND		4.1	0.59
95-50-1	1,2-Dichlorobenzene	ND	*	4.1	0.56
541-73-1	1,3-Dichlorobenzene	ND	*	4.1	0.60
106-46-7	1,4-Dichlorobenzene	ND	*	4.1	0.59
142-28-9	1,3-Dichloropropane	ND		4.1	0.61
563-58-6	1,1-Dichloropropene	ND		4.1	0.57
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	8.3	1.4
106-93-4	Ethylene Dibromide	ND		4.1	1.2
74-95-3	Dibromomethane	ND		8.3	0.71
75-71-8	Dichlorodifluoromethane	ND		8.3	0.66
75-34-3	1,1-Dichloroethane	ND		4.1	0.56
107-06-2	1,2-Dichloroethane	ND		4.1	0.63
75-35-4	1,1-Dichloroethene	ND		4.1	0.51
156-59-2	cis-1,2-Dichloroethene	ND		4.1	0.56
156-60-5	trans-1,2-Dichloroethene	ND		4.1	0.62
78-87-5	1,2-Dichloropropane	ND		4.1	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-I3S-3.5-4 Lab Sample ID: 720-88192-2

Matrix: Solid Lab File ID: 08281815.D

Analysis Method: 8260B Date Collected: 08/22/2018 09:30

Sample wt/vol: 6.025(g) Date Analyzed: 08/28/2018 14:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250352 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.1	0.57
10061-02-6	trans-1,3-Dichloropropene	ND		4.1	0.56
100-41-4	Ethylbenzene	ND		4.1	0.62
87-68-3	Hexachlorobutadiene	ND	*	4.1	0.75
591-78-6	2-Hexanone	ND		41	8.3
98-82-8	Isopropylbenzene	ND		4.1	0.56
99-87-6	4-Isopropyltoluene	ND	*	4.1	2.1
75-09-2	Methylene Chloride	ND		8.3	4.6
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		41	8.3
91-20-3	Naphthalene	ND	*	8.3	1.2
103-65-1	N-Propylbenzene	ND	*	4.1	0.55
100-42-5	Styrene	ND		4.1	0.52
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.1	0.63
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.1	0.62
127-18-4	Tetrachloroethene	ND		4.1	0.56
108-88-3	Toluene	ND		4.1	0.59
87-61-6	1,2,3-Trichlorobenzene	ND	*	4.1	0.61
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.1	0.59
71-55-6	1,1,1-Trichloroethane	ND		4.1	0.51
79-00-5	1,1,2-Trichloroethane	ND		4.1	0.58
79-01-6	Trichloroethene	ND		4.1	0.52
75-69-4	Trichlorofluoromethane	ND		4.1	0.46
96-18-4	1,2,3-Trichloropropane	ND	*	4.1	0.64
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.1	1.7
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.1	1.4
108-67-8	1,3,5-Trimethylbenzene	ND	*	4.1	0.54
108-05-4	Vinyl acetate	ND		17	4.1
75-01-4	Vinyl chloride	ND	*	4.1	0.61
1330-20-7	Xylenes, Total	ND		4.1	1.0
594-20-7	2,2-Dichloropropane	ND		4.1	1.7
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		210	83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-I3S-3.5-4 Lab Sample ID: 720-88192-2

Matrix: Solid Lab File ID: 08281815.D

Analysis Method: 8260B Date Collected: 08/22/2018 09:30

Sample wt/vol: 6.025(g) Date Analyzed: 08/28/2018 14:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250352 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	84		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		60-140
2037-26-5	Toluene-d8 (Surr)	91		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281815.D
Lims ID: 720-88192-A-2-A
Client ID: DG-I3S--3.5-4
Sample Type: Client
Inject. Date: 28-Aug-2018 14:49:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-A-2
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 29-Aug-2018 08:59:01 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 08:59:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.928	6.918	0.010	0	170561	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	971195	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.554	0.010	86	703734	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	95	258734	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.305	9.294	0.011	91	65750	7.99	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.812	9.812	0.000	0	74991	8.48	
$ 10 Toluene-d8 (Surr)	98	12.822	12.821	0.000	95	263818	6.84	
$ 11 4-Bromofluorobenzene	95	16.053	16.065	0.000	90	68741	6.27	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	53892	5.95	
28 Acetone	58	6.474	6.474	0.000	98	21386	28.7	
34 Methylene Chloride	84	7.182	7.192	-0.010	89	2212	0.3017	
131 Butyl Ether	87	14.765	14.786	-0.010	51	553	0.0926	
105 4-Isopropyltoluene	119	17.764	17.764	0.000	95	10178	0.2649	
124 Butane	43	4.996	4.996	0.000	1	899	NR	
138 n-Nonane	43	15.177	15.198	-0.021	73	1047	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	526905	7.03	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	173621	2.32	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	218259	2.91	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	603010	8.05	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	271339	3.62	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	271339	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	578729	7.72	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	347444	4.64	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	186389	2.49	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	296972	3.96	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard
NC - Not Calibrated
s - Failed ISTD Recovery Test

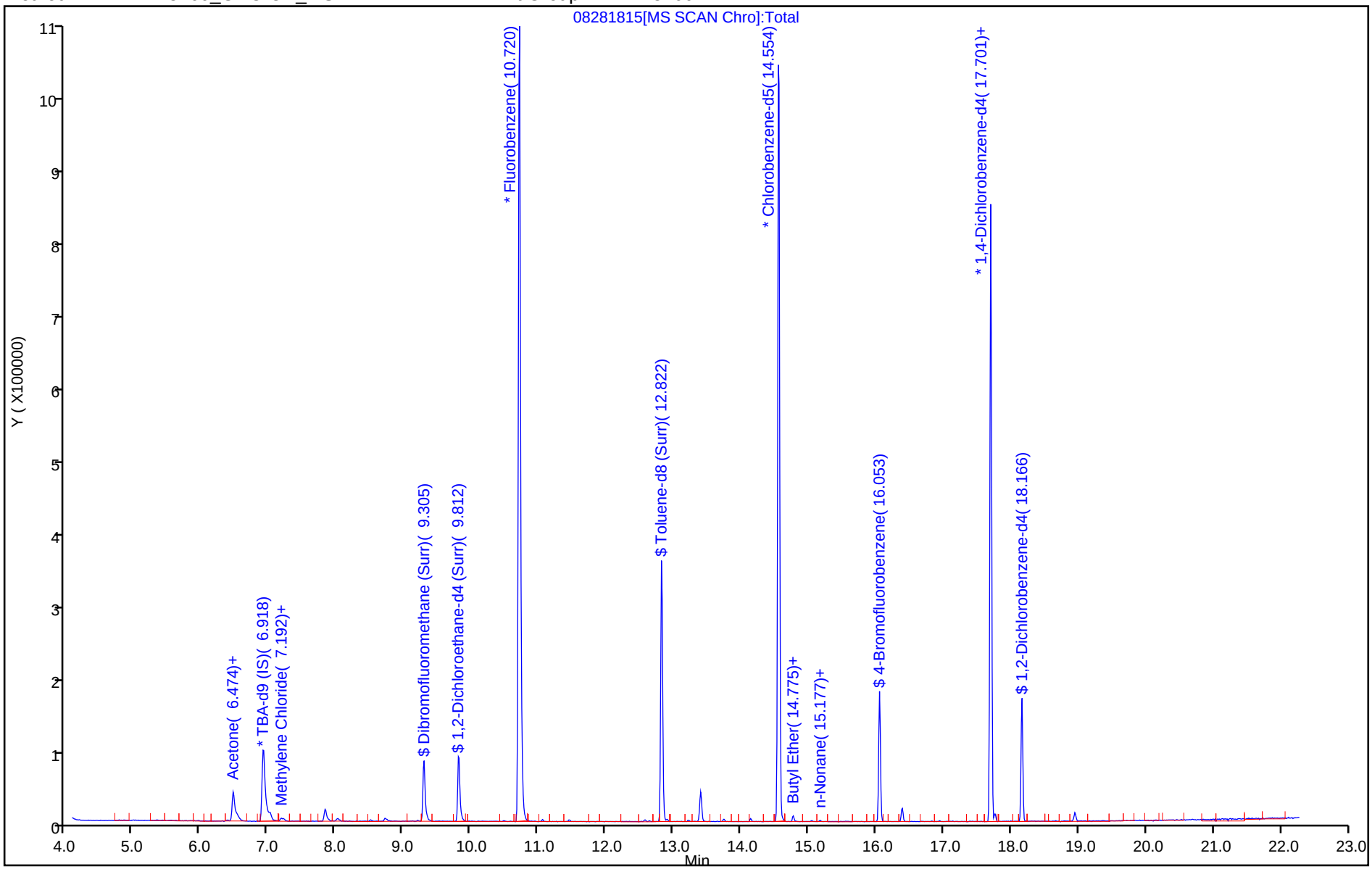
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 08:59:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281815.D				
Injection Date:	28-Aug-2018 14:49:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88192-A-2-A	Lab Sample ID:	720-88192-2	Worklist Smp#:	15
Client ID:	DG-I3S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281815.D
Lims ID: 720-88192-A-2-A
Client ID: DG-I3S--3.5-4
Sample Type: Client
Inject. Date: 28-Aug-2018 14:49:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-A-2
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 29-Aug-2018 08:59:01 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 08:59:01

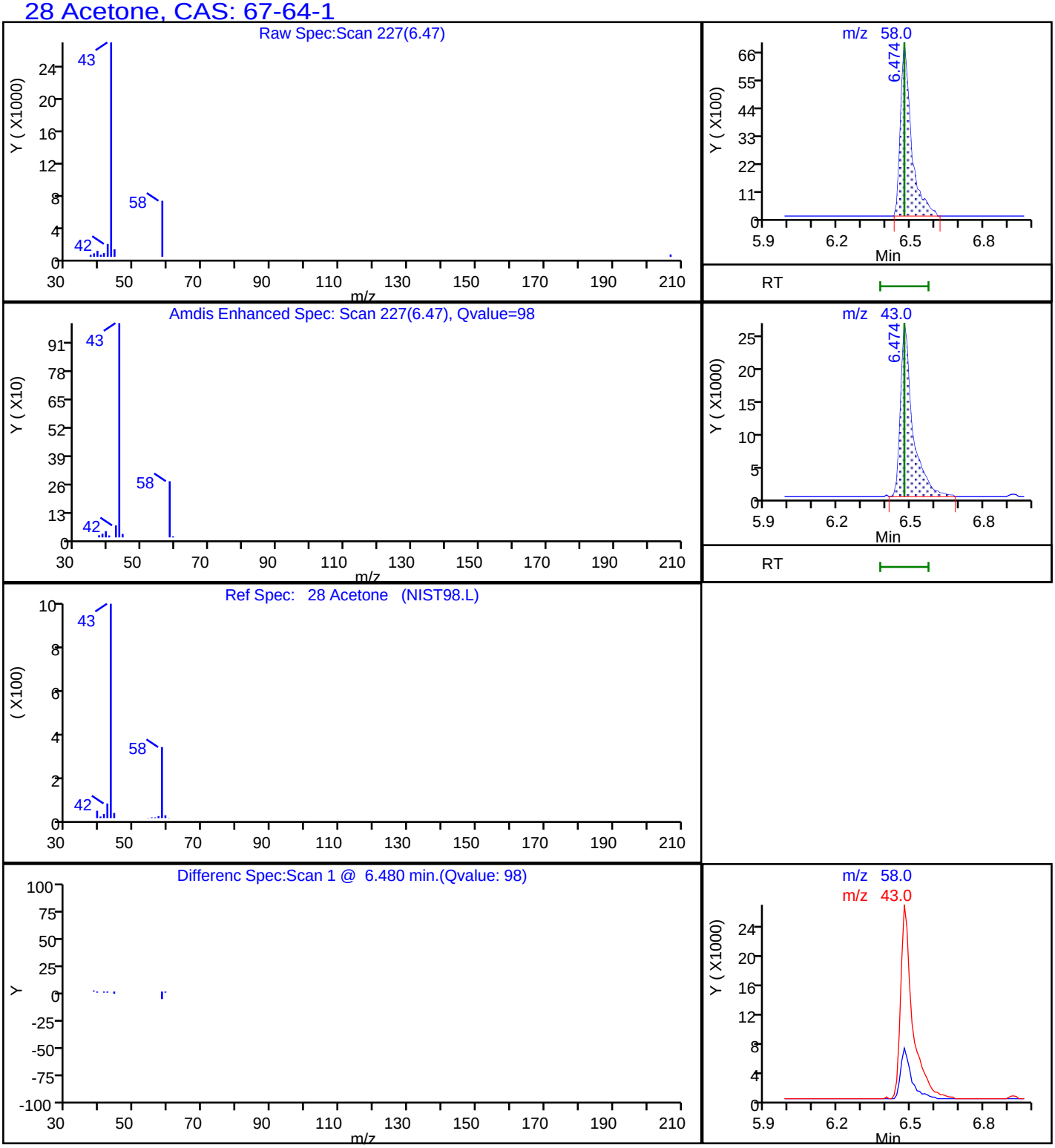
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.48	113.13
$ 10 Toluene-d8 (Surr)	7.50	6.84	91.22
$ 11 4-Bromofluorobenzene	7.50	6.27	83.64
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 29-Aug-2018 08:59:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281815.D				
Injection Date:	28-Aug-2018 14:49:30	Instrument ID:	CHMSV2		
Lims ID:	720-88192-A-2-A	Lab Sample ID:	720-88192-2		
Client ID:	DG-I3S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1

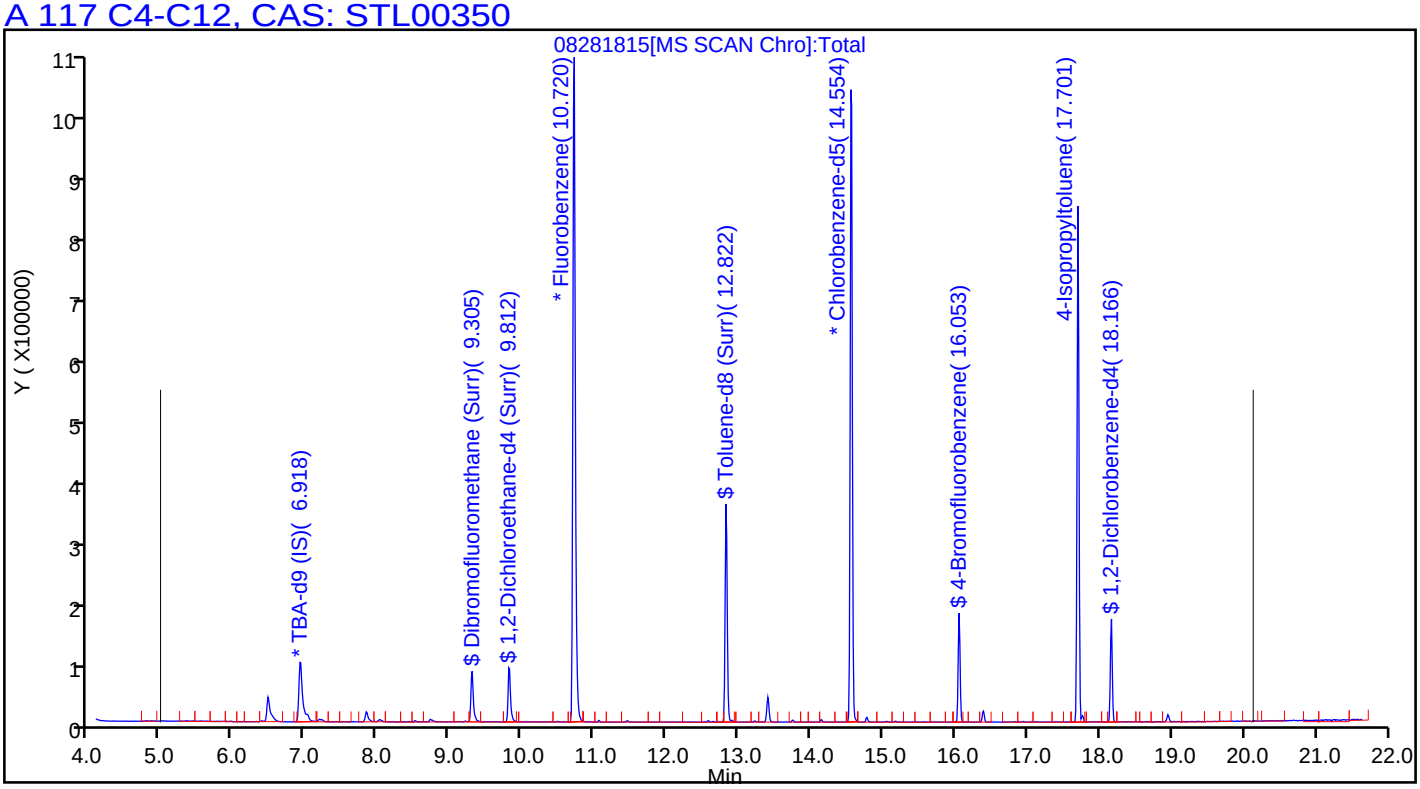


Report Date: 29-Aug-2018 08:59:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281815.D				
Injection Date:	28-Aug-2018 14:49:30	Instrument ID:	CHMSV2		
Lims ID:	720-88192-A-2-A	Lab Sample ID:	720-88192-2		
Client ID:	DG-I3S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



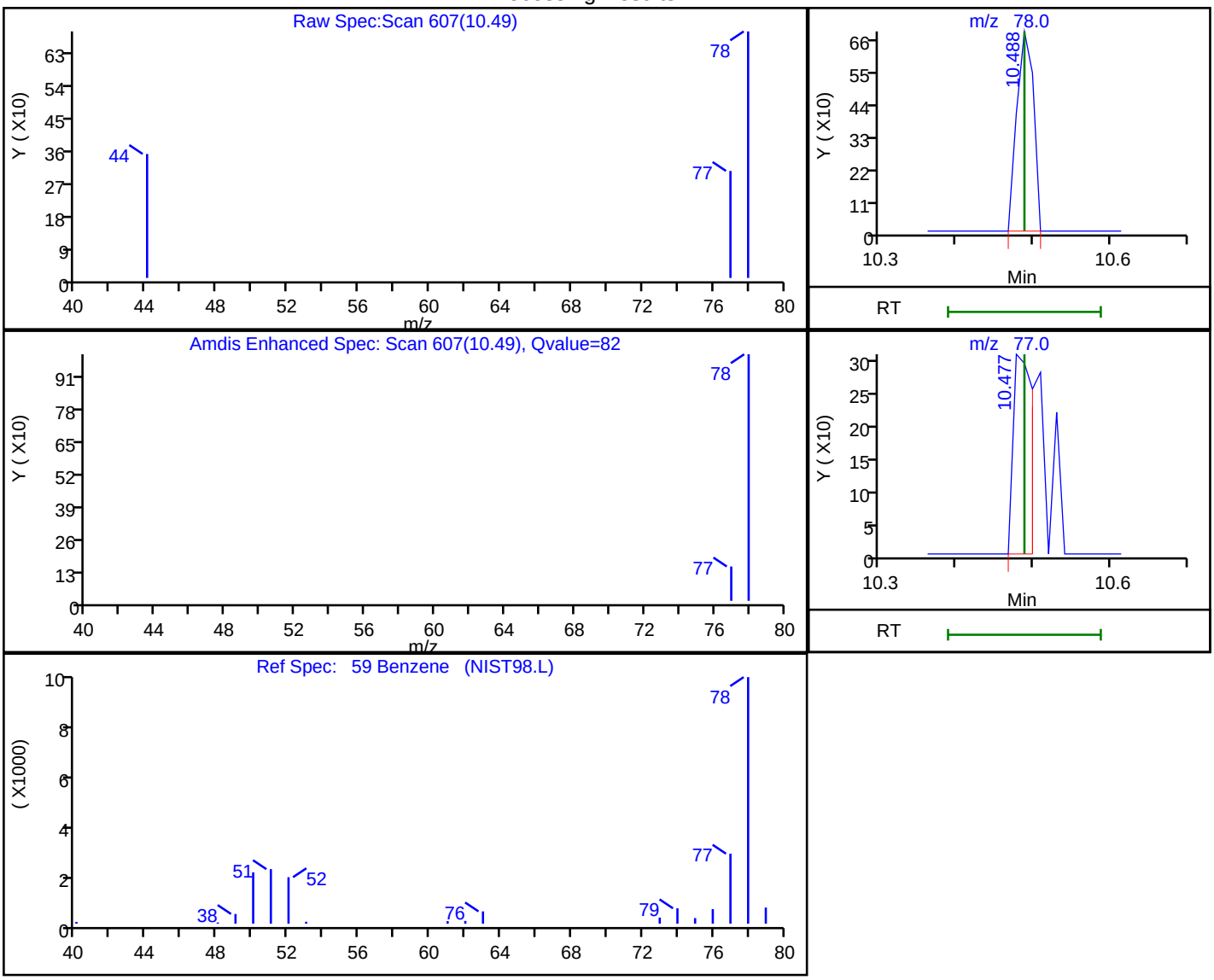
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180828-53515.b\08281815.D				
Injection Date:	28-Aug-2018 14:49:30	Instrument ID:	CHMSV2		
Lims ID:	720-88192-A-2-A	Lab Sample ID:	720-88192-2		
Client ID:	DG-I3S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

59 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
10.49	78.00	1030	0.029401
10.48	77.00	546	

Reviewer: chaijita, 29-Aug-2018 08:58:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-K3S-0.5-1 Lab Sample ID: 720-88192-5

Matrix: Solid Lab File ID: 08291813.D

Analysis Method: 8260B Date Collected: 08/22/2018 10:15

Sample wt/vol: 6.264(g) Date Analyzed: 08/29/2018 11:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.0	0.96
67-64-1	Acetone	ND		40	30
71-43-2	Benzene	ND		4.0	0.52
75-27-4	Dichlorobromomethane	ND		4.0	0.57
108-86-1	Bromobenzene	ND		4.0	0.63
74-97-5	Chlorobromomethane	ND		16	0.57
75-25-2	Bromoform	ND		4.0	1.6
74-83-9	Bromomethane	ND		8.0	0.63
78-93-3	2-Butanone (MEK)	28	J	40	17
104-51-8	n-Butylbenzene	ND		4.0	0.80
135-98-8	sec-Butylbenzene	ND		4.0	0.57
98-06-6	tert-Butylbenzene	ND		4.0	0.58
75-15-0	Carbon disulfide	ND	*	4.0	1.6
56-23-5	Carbon tetrachloride	ND		4.0	0.49
108-90-7	Chlorobenzene	ND		4.0	0.55
75-00-3	Chloroethane	ND		8.0	0.45
67-66-3	Chloroform	ND		4.0	0.53
74-87-3	Chloromethane	ND		8.0	0.63
95-49-8	2-Chlorotoluene	ND		4.0	0.52
106-43-4	4-Chlorotoluene	ND		4.0	0.54
124-48-1	Chlorodibromomethane	ND		4.0	0.57
95-50-1	1,2-Dichlorobenzene	ND		4.0	0.54
541-73-1	1,3-Dichlorobenzene	ND		4.0	0.57
106-46-7	1,4-Dichlorobenzene	ND		4.0	0.57
142-28-9	1,3-Dichloropropane	ND		4.0	0.58
563-58-6	1,1-Dichloropropene	ND		4.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.0	1.4
106-93-4	Ethylene Dibromide	ND		4.0	1.1
74-95-3	Dibromomethane	ND		8.0	0.69
75-71-8	Dichlorodifluoromethane	ND		8.0	0.63
75-34-3	1,1-Dichloroethane	ND		4.0	0.54
107-06-2	1,2-Dichloroethane	ND		4.0	0.61
75-35-4	1,1-Dichloroethene	ND	*	4.0	0.49
156-59-2	cis-1,2-Dichloroethene	ND		4.0	0.54
156-60-5	trans-1,2-Dichloroethene	ND		4.0	0.60
78-87-5	1,2-Dichloropropane	ND		4.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-K3S-0.5-1 Lab Sample ID: 720-88192-5

Matrix: Solid Lab File ID: 08291813.D

Analysis Method: 8260B Date Collected: 08/22/2018 10:15

Sample wt/vol: 6.264(g) Date Analyzed: 08/29/2018 11:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.0	0.55
10061-02-6	trans-1,3-Dichloropropene	ND		4.0	0.53
100-41-4	Ethylbenzene	ND		4.0	0.60
87-68-3	Hexachlorobutadiene	ND		4.0	0.72
591-78-6	2-Hexanone	ND		40	8.0
98-82-8	Isopropylbenzene	ND		4.0	0.54
99-87-6	4-Isopropyltoluene	ND		4.0	2.0
75-09-2	Methylene Chloride	ND		8.0	4.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		40	8.0
91-20-3	Naphthalene	ND		8.0	1.2
103-65-1	N-Propylbenzene	ND		4.0	0.53
100-42-5	Styrene	ND		4.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.0	0.61
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.0	0.60
127-18-4	Tetrachloroethene	ND		4.0	0.53
108-88-3	Toluene	ND		4.0	0.57
87-61-6	1,2,3-Trichlorobenzene	ND		4.0	0.59
120-82-1	1,2,4-Trichlorobenzene	ND		4.0	0.57
71-55-6	1,1,1-Trichloroethane	ND		4.0	0.49
79-00-5	1,1,2-Trichloroethane	ND		4.0	0.56
79-01-6	Trichloroethene	ND		4.0	0.50
75-69-4	Trichlorofluoromethane	ND		4.0	0.45
96-18-4	1,2,3-Trichloropropane	ND		4.0	0.61
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.0	1.7
95-63-6	1,2,4-Trimethylbenzene	ND		4.0	1.3
108-67-8	1,3,5-Trimethylbenzene	ND		4.0	0.52
108-05-4	Vinyl acetate	ND		16	4.0
75-01-4	Vinyl chloride	ND		4.0	0.58
1330-20-7	Xylenes, Total	ND		4.0	0.97
594-20-7	2,2-Dichloropropane	ND		4.0	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		200	80

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-K3S-0.5-1 Lab Sample ID: 720-88192-5

Matrix: Solid Lab File ID: 08291813.D

Analysis Method: 8260B Date Collected: 08/22/2018 10:15

Sample wt/vol: 6.264(g) Date Analyzed: 08/29/2018 11:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	85		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		60-140
2037-26-5	Toluene-d8 (Surr)	92		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291813.D
Lims ID: 720-88192-B-5-A
Client ID: DG-K3S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 11:40:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-B-5 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 30-Aug-2018 08:36:53 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 08:36:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	157105	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	914041	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	85	725128	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	279410	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.314	0.001	93	61479	7.94	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.811	9.821	0.000	0	71567	8.60	
$ 10 Toluene-d8 (Surr)	98	12.821	12.834	0.000	94	251365	6.93	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	91	71577	6.34	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	57628	5.89	
28 Acetone	58	6.474	6.480	0.000	98	8836	12.6	
34 Methylene Chloride	84	7.203	7.189	0.021	84	1672	0.2423	
44 2-Butanone (MEK)	72	8.745	8.753	0.000	95	9900	17.7	
124 Butane	43	4.995	4.996	-0.001	1	516	NR	
138 n-Nonane	43	15.166	15.198	-0.032	1	698	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	574790	8.15	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	295033	4.18	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	317678	4.50	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	676014	9.58	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	364000	5.16	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	364000	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	647986	9.19	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	465224	6.59	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	143497	2.03	
A 121 C7-C12	1	15.567	(11.005-20.130)		0	261942	3.71	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

Reagents:

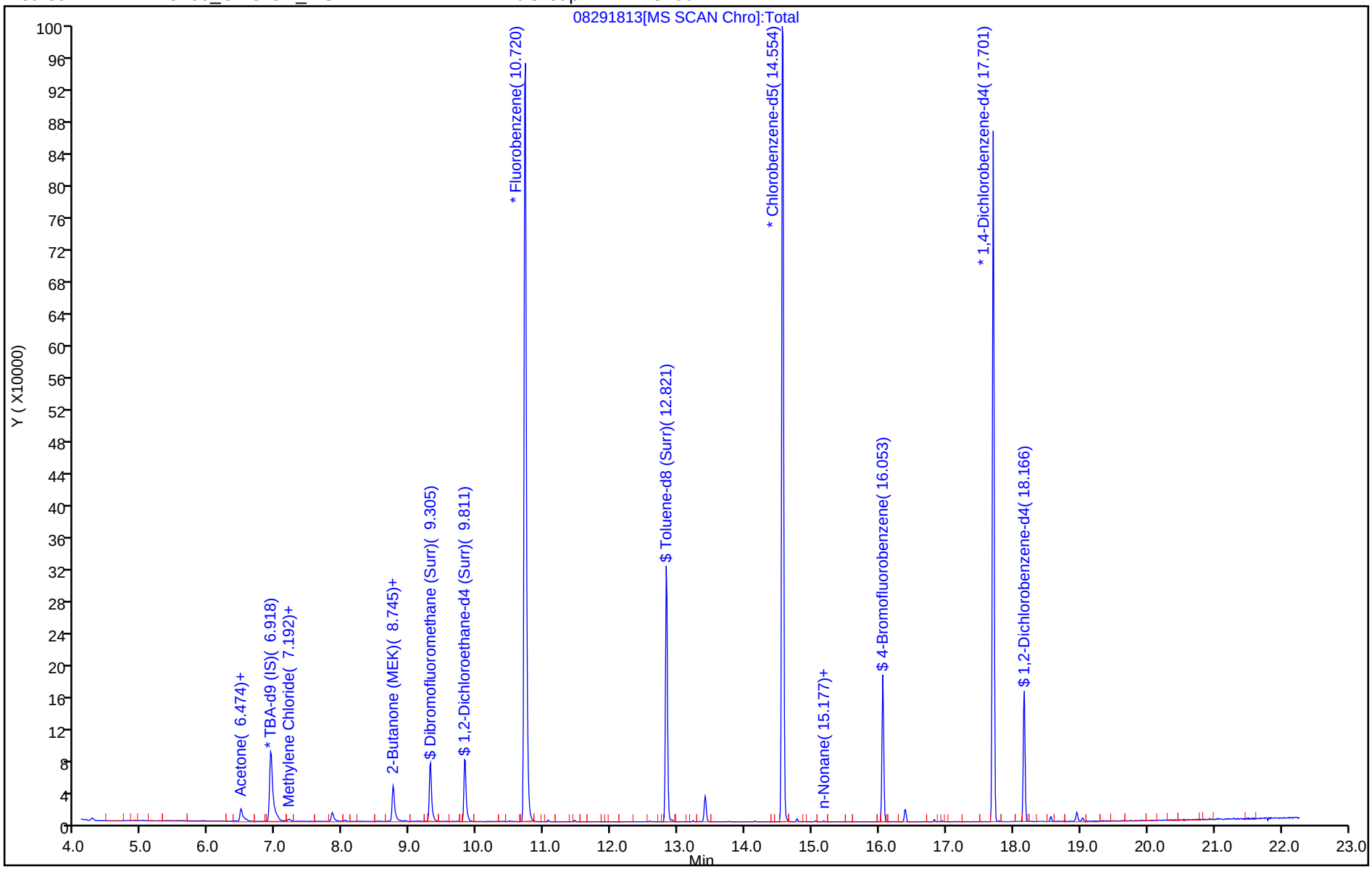
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 08:36:54 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291813.D

Injection Date:	29-Aug-2018 11:40:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88192-B-5-A	Lab Sample ID:	720-88192-5	Worklist Smp#:	11
Client ID:	DG-K3S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291813.D
Lims ID: 720-88192-B-5-A
Client ID: DG-K3S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 11:40:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-B-5 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 30-Aug-2018 08:36:53 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 08:36:53

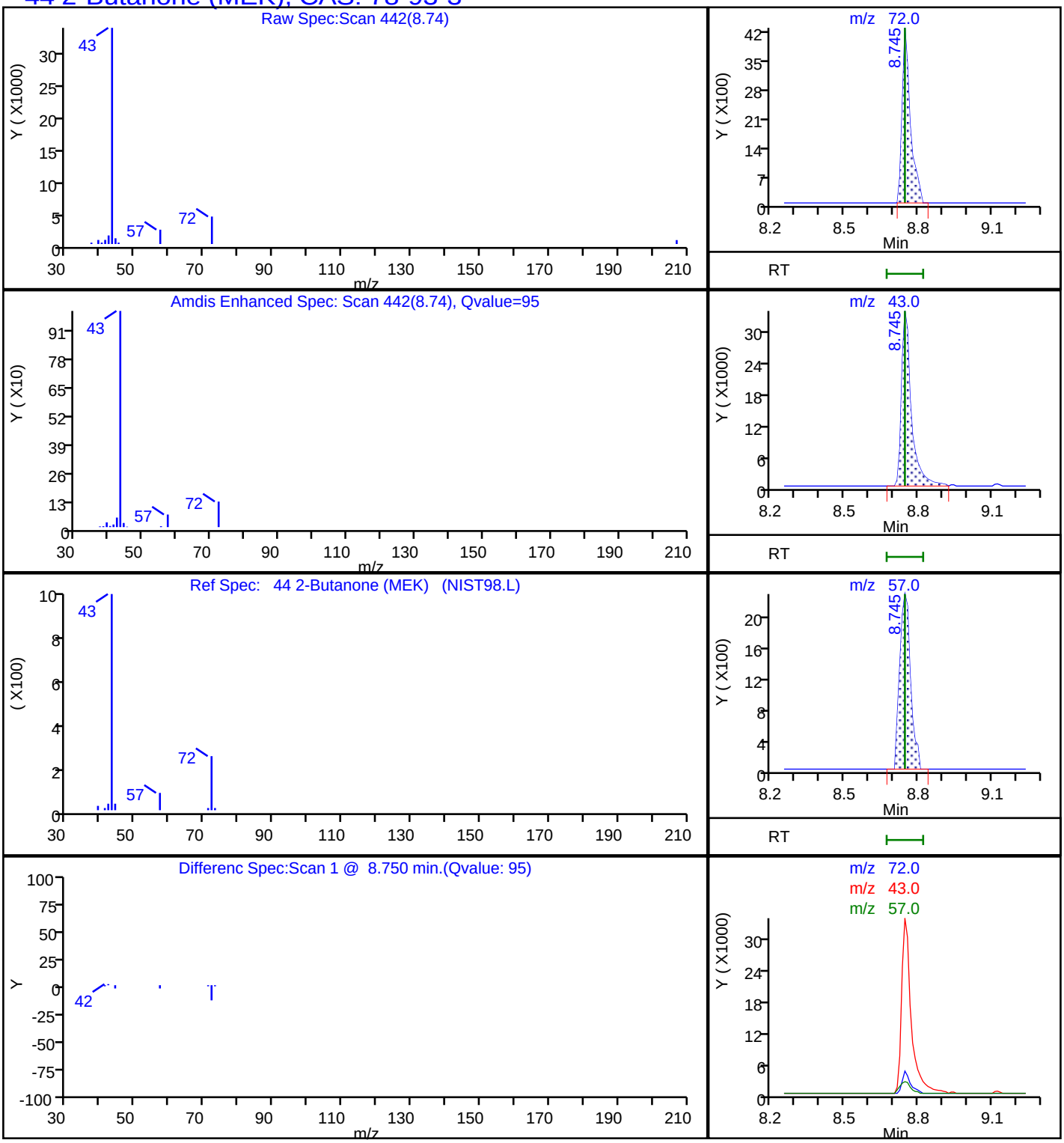
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.60	114.72
$ 10 Toluene-d8 (Surr)	7.50	6.93	92.35
$ 11 4-Bromofluorobenzene	7.50	6.34	84.52
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 30-Aug-2018 08:36:54 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291813.D				
Injection Date:	29-Aug-2018 11:40:30	Instrument ID:	CHMSV2		
Lims ID:	720-88192-B-5-A	Lab Sample ID:	720-88192-5		
Client ID:	DG-K3S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

44 2-Butanone (MEK), CAS: 78-93-3



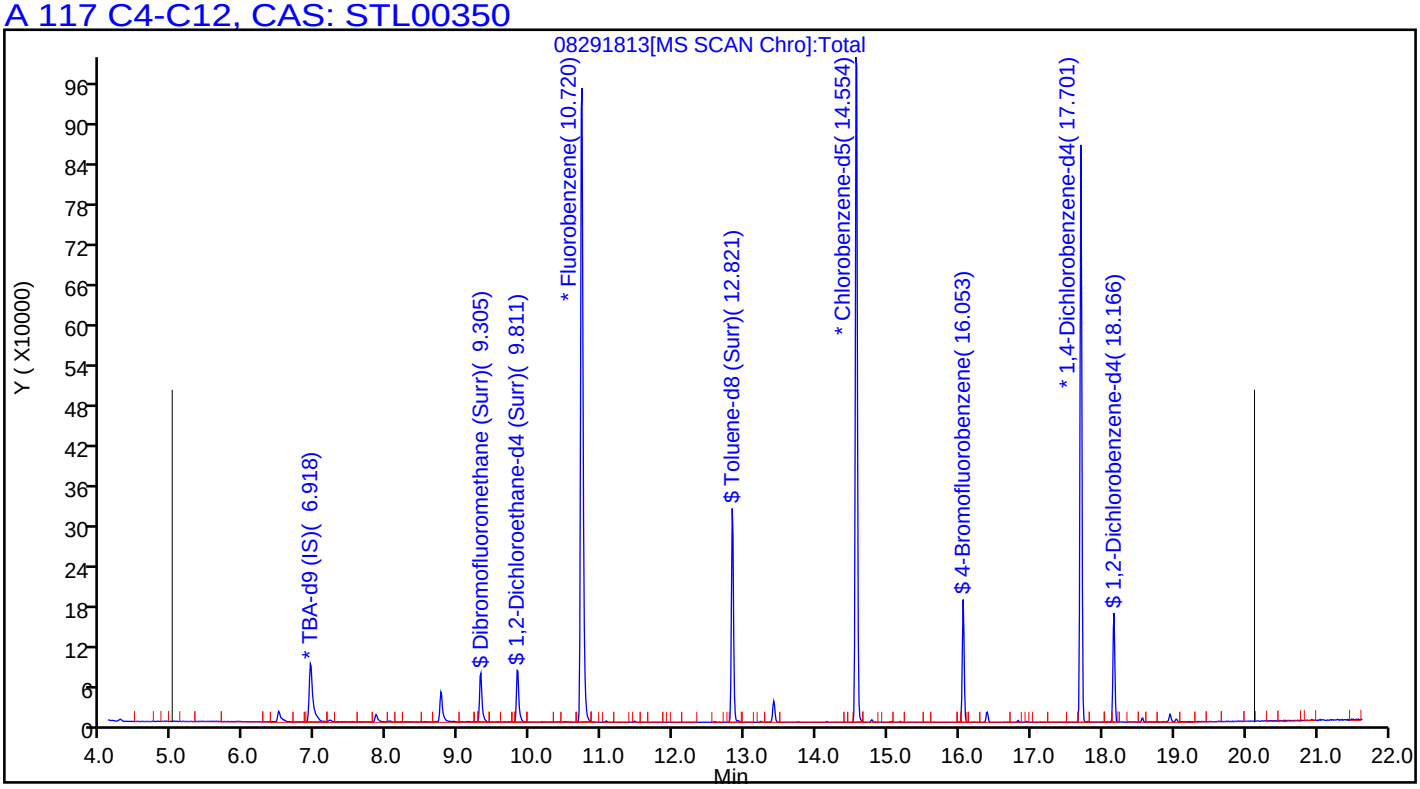
Report Date: 30-Aug-2018 08:36:55 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291813.D

Injection Date:	29-Aug-2018 11:40:30	Instrument ID:	CHMSV2		
Lims ID:	720-88192-B-5-A	Lab Sample ID:	720-88192-5		
Client ID:	DG-K3S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



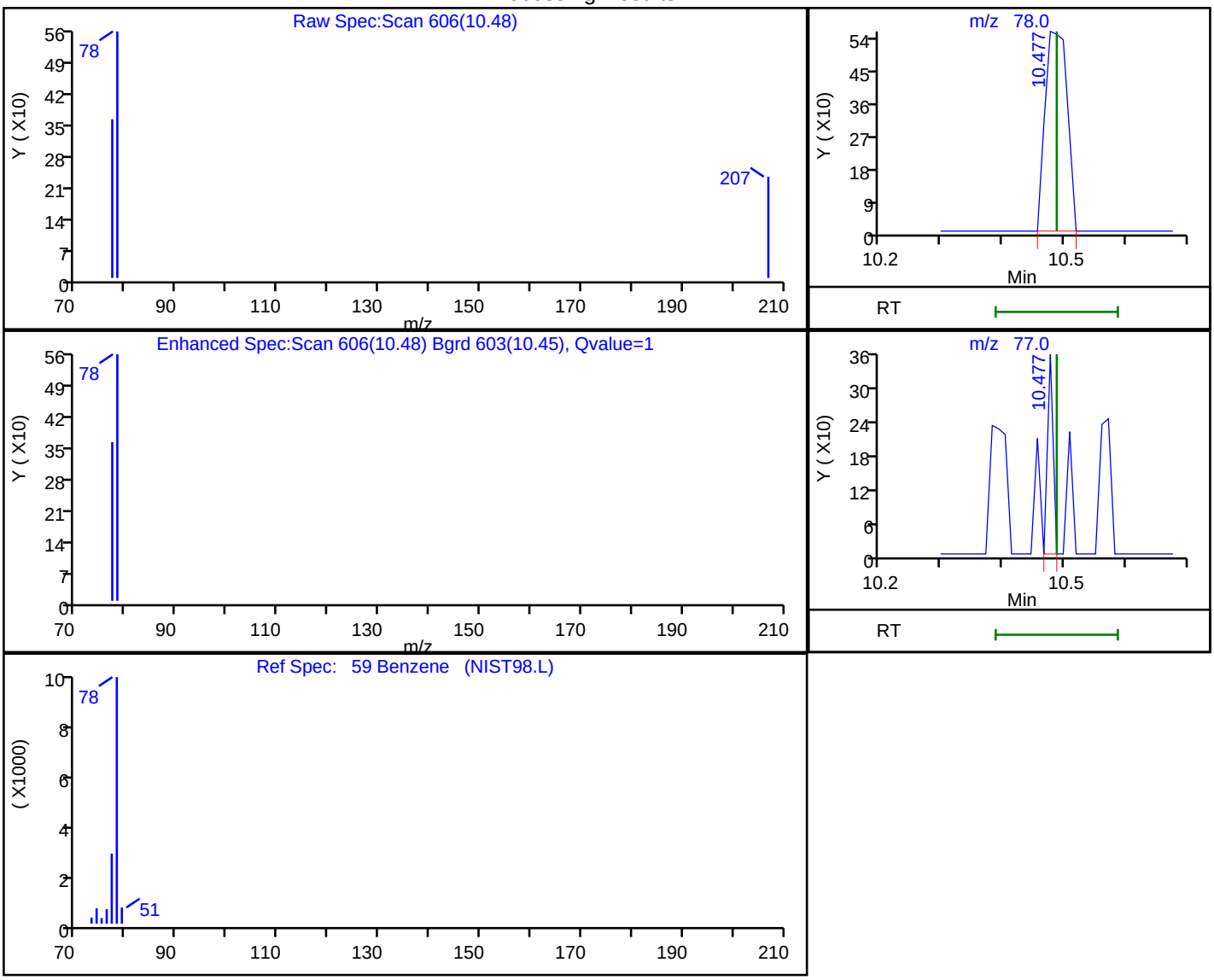
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291813.D				
Injection Date:	29-Aug-2018 11:40:30	Instrument ID:	CHMSV2		
Lims ID:	720-88192-B-5-A	Lab Sample ID:	720-88192-5		
Client ID:	DG-K3S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

59 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
10.48	78.00	1388	0.042097
10.48	77.00	226	

Reviewer: chaijita, 30-Aug-2018 08:36:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-K3S-3.5-4 Lab Sample ID: 720-88192-6

Matrix: Solid Lab File ID: 08291814.D

Analysis Method: 8260B Date Collected: 08/22/2018 10:15

Sample wt/vol: 6.584(g) Date Analyzed: 08/29/2018 12:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND	*	3.8	0.91
67-64-1	Acetone	42	*	38	29
71-43-2	Benzene	ND	*	3.8	0.49
75-27-4	Dichlorobromomethane	ND	*	3.8	0.55
108-86-1	Bromobenzene	ND	*	3.8	0.60
74-97-5	Chlorobromomethane	ND	*	15	0.55
75-25-2	Bromoform	ND	*	3.8	1.5
74-83-9	Bromomethane	ND	*	7.6	0.60
78-93-3	2-Butanone (MEK)	ND	*	38	16
104-51-8	n-Butylbenzene	ND	*	3.8	0.76
135-98-8	sec-Butylbenzene	ND	*	3.8	0.55
98-06-6	tert-Butylbenzene	ND	*	3.8	0.55
75-15-0	Carbon disulfide	ND	*	3.8	1.5
56-23-5	Carbon tetrachloride	ND	*	3.8	0.47
108-90-7	Chlorobenzene	ND	*	3.8	0.52
75-00-3	Chloroethane	ND	*	7.6	0.43
67-66-3	Chloroform	ND	*	3.8	0.50
74-87-3	Chloromethane	ND	*	7.6	0.60
95-49-8	2-Chlorotoluene	ND	*	3.8	0.49
106-43-4	4-Chlorotoluene	ND	*	3.8	0.52
124-48-1	Chlorodibromomethane	ND	*	3.8	0.54
95-50-1	1,2-Dichlorobenzene	ND	*	3.8	0.52
541-73-1	1,3-Dichlorobenzene	ND	*	3.8	0.55
106-46-7	1,4-Dichlorobenzene	ND	*	3.8	0.54
142-28-9	1,3-Dichloropropane	ND	*	3.8	0.55
563-58-6	1,1-Dichloropropene	ND	*	3.8	0.52
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	7.6	1.3
106-93-4	Ethylene Dibromide	ND	*	3.8	1.1
74-95-3	Dibromomethane	ND	*	7.6	0.65
75-71-8	Dichlorodifluoromethane	ND	*	7.6	0.60
75-34-3	1,1-Dichloroethane	ND	*	3.8	0.52
107-06-2	1,2-Dichloroethane	ND	*	3.8	0.58
75-35-4	1,1-Dichloroethene	ND	*	3.8	0.47
156-59-2	cis-1,2-Dichloroethene	ND	*	3.8	0.52
156-60-5	trans-1,2-Dichloroethene	ND	*	3.8	0.57
78-87-5	1,2-Dichloropropane	ND	*	3.8	0.48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-K3S-3.5-4 Lab Sample ID: 720-88192-6

Matrix: Solid Lab File ID: 08291814.D

Analysis Method: 8260B Date Collected: 08/22/2018 10:15

Sample wt/vol: 6.584(g) Date Analyzed: 08/29/2018 12:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND	*	3.8	0.52
10061-02-6	trans-1,3-Dichloropropene	ND	*	3.8	0.51
100-41-4	Ethylbenzene	ND	*	3.8	0.57
87-68-3	Hexachlorobutadiene	ND	*	3.8	0.68
591-78-6	2-Hexanone	ND	*	38	7.6
98-82-8	Isopropylbenzene	ND	*	3.8	0.52
99-87-6	4-Isopropyltoluene	ND	*	3.8	1.9
75-09-2	Methylene Chloride	ND	*	7.6	4.3
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	*	38	7.6
91-20-3	Naphthalene	ND	*	7.6	1.1
103-65-1	N-Propylbenzene	ND	*	3.8	0.50
100-42-5	Styrene	ND	*	3.8	0.48
630-20-6	1,1,1,2-Tetrachloroethane	ND	*	3.8	0.58
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	3.8	0.57
127-18-4	Tetrachloroethene	ND	*	3.8	0.51
108-88-3	Toluene	ND	*	3.8	0.54
87-61-6	1,2,3-Trichlorobenzene	ND	*	3.8	0.56
120-82-1	1,2,4-Trichlorobenzene	ND	*	3.8	0.54
71-55-6	1,1,1-Trichloroethane	ND	*	3.8	0.46
79-00-5	1,1,2-Trichloroethane	ND	*	3.8	0.53
79-01-6	Trichloroethene	ND	*	3.8	0.48
75-69-4	Trichlorofluoromethane	ND	*	3.8	0.43
96-18-4	1,2,3-Trichloropropane	ND	*	3.8	0.58
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.8	1.6
95-63-6	1,2,4-Trimethylbenzene	ND	*	3.8	1.2
108-67-8	1,3,5-Trimethylbenzene	ND	*	3.8	0.49
108-05-4	Vinyl acetate	ND	*	15	3.8
75-01-4	Vinyl chloride	ND	*	3.8	0.55
1330-20-7	Xylenes, Total	ND		3.8	0.93
594-20-7	2,2-Dichloropropane	ND	*	3.8	1.5
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND	*	190	76

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-K3S-3.5-4 Lab Sample ID: 720-88192-6

Matrix: Solid Lab File ID: 08291814.D

Analysis Method: 8260B Date Collected: 08/22/2018 10:15

Sample wt/vol: 6.584(g) Date Analyzed: 08/29/2018 12:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	85	*	45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115	*	60-140
2037-26-5	Toluene-d8 (Surr)	94	*	58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291814.D
Lims ID: 720-88192-B-6-A
Client ID: DG-K3S--3.5-4
Sample Type: Client
Inject. Date: 29-Aug-2018 12:23:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-B-6 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 30-Aug-2018 08:36:53 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 08:37:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.917	6.918	-0.001	0	73439	250.0	s
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	393262	25.0	s
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	85	310843	25.0	s
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	95	124468	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.294	9.314	-0.010	92	26234	7.88	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.811	9.821	0.000	0	30923	8.64	
$ 10 Toluene-d8 (Surr)	98	12.821	12.834	0.000	95	110084	7.05	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	90	30822	6.37	
$ 12 1,2-Dichlorobenzene-d4	152	18.165	18.166	-0.001	84	25573	5.87	
28 Acetone	58	6.474	6.480	0.000	97	8447	28.0	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	274804	9.05	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	91796	3.02	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	109166	3.60	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	341363	11.2	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	141308	4.66	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	141308	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	311322	10.3	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	206882	6.82	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	113682	3.75	
A 121 C7-C12	1	15.567	(11.005-20.130)		0	190500	6.28	

QC Flag Legend

Processing Flags
NC - Not Calibrated
s - Failed ISTD Recovery Test

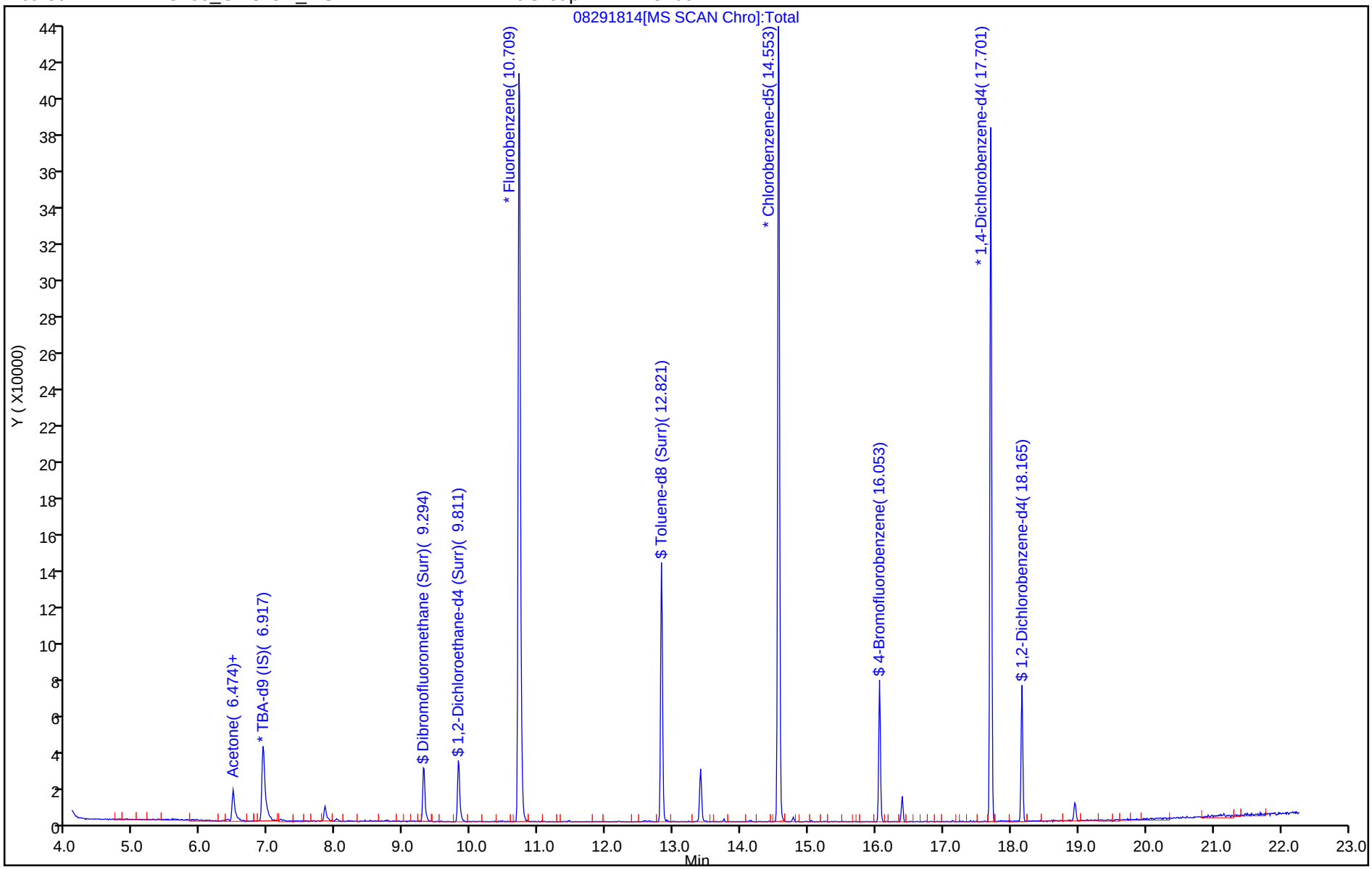
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 08:37:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291814.D				
Injection Date:	29-Aug-2018 12:23:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88192-B-6-A	Lab Sample ID:	720-88192-6	Worklist Smp#:	12
Client ID:	DG-K3S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291814.D
Lims ID: 720-88192-B-6-A
Client ID: DG-K3S--3.5-4
Sample Type: Client
Inject. Date: 29-Aug-2018 12:23:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-B-6 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 30-Aug-2018 08:36:53 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 08:37:34

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.64	115.21
$ 10 Toluene-d8 (Surr)	7.50	7.05	94.00
$ 11 4-Bromofluorobenzene	7.50	6.37	84.90
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

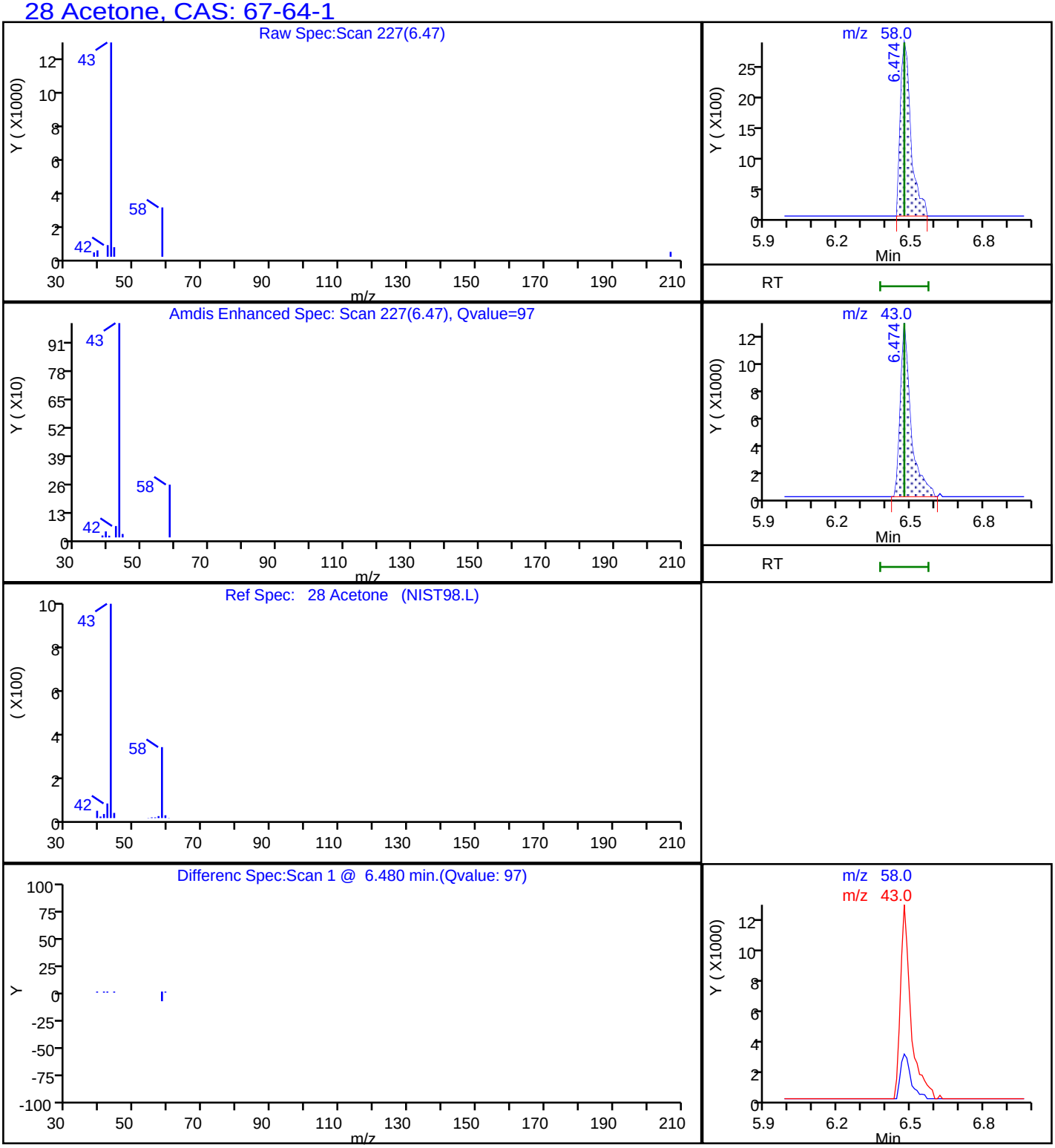
Report Date: 30-Aug-2018 08:37:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291814.D

Injection Date:	29-Aug-2018 12:23:30	Instrument ID:	CHMSV2		
Lims ID:	720-88192-B-6-A	Lab Sample ID:	720-88192-6		
Client ID:	DG-K3S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



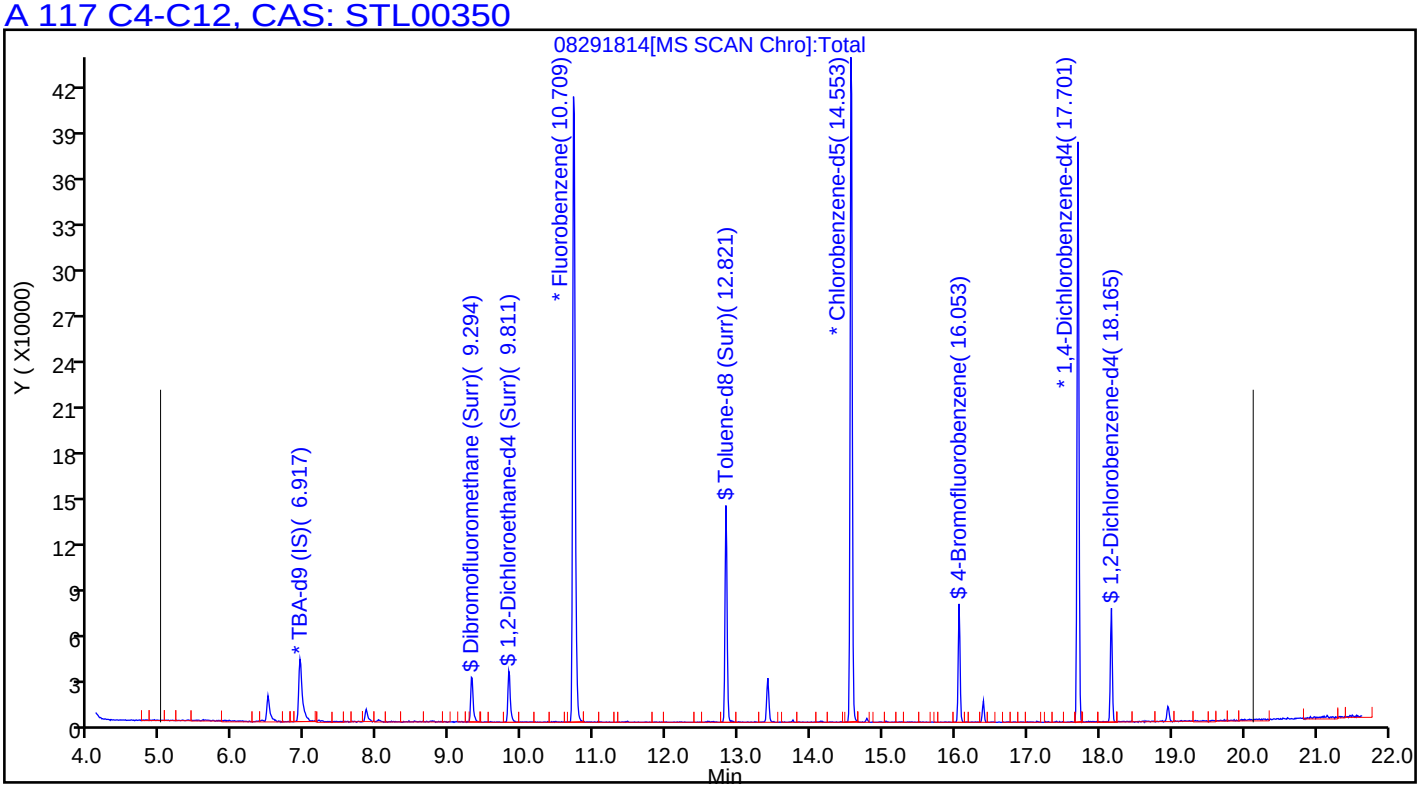
Report Date: 30-Aug-2018 08:37:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291814.D

Injection Date:	29-Aug-2018 12:23:30	Instrument ID:	CHMSV2		
Lims ID:	720-88192-B-6-A	Lab Sample ID:	720-88192-6		
Client ID:	DG-K3S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-M3S-0.5-1 Lab Sample ID: 720-88192-9

Matrix: Solid Lab File ID: 08281830.D

Analysis Method: 8260B Date Collected: 08/22/2018 10:40

Sample wt/vol: 5.808(g) Date Analyzed: 08/28/2018 22:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.3	1.0
67-64-1	Acetone	68		43	33
71-43-2	Benzene	ND		4.3	0.56
75-27-4	Dichlorobromomethane	ND		4.3	0.62
108-86-1	Bromobenzene	ND		4.3	0.68
74-97-5	Chlorobromomethane	ND		17	0.62
75-25-2	Bromoform	ND		4.3	1.7
74-83-9	Bromomethane	ND		8.6	0.68
78-93-3	2-Butanone (MEK)	ND		43	18
104-51-8	n-Butylbenzene	ND		4.3	0.86
135-98-8	sec-Butylbenzene	ND		4.3	0.62
98-06-6	tert-Butylbenzene	ND		4.3	0.63
75-15-0	Carbon disulfide	ND		4.3	1.7
56-23-5	Carbon tetrachloride	ND		4.3	0.53
108-90-7	Chlorobenzene	ND		4.3	0.59
75-00-3	Chloroethane	ND		8.6	0.48
67-66-3	Chloroform	ND		4.3	0.57
74-87-3	Chloromethane	ND		8.6	0.68
95-49-8	2-Chlorotoluene	ND		4.3	0.56
106-43-4	4-Chlorotoluene	ND		4.3	0.59
124-48-1	Chlorodibromomethane	ND		4.3	0.61
95-50-1	1,2-Dichlorobenzene	ND		4.3	0.59
541-73-1	1,3-Dichlorobenzene	ND		4.3	0.62
106-46-7	1,4-Dichlorobenzene	ND		4.3	0.61
142-28-9	1,3-Dichloropropane	ND		4.3	0.63
563-58-6	1,1-Dichloropropene	ND		4.3	0.59
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.6	1.5
106-93-4	Ethylene Dibromide	ND		4.3	1.2
74-95-3	Dibromomethane	ND		8.6	0.74
75-71-8	Dichlorodifluoromethane	ND		8.6	0.68
75-34-3	1,1-Dichloroethane	ND		4.3	0.59
107-06-2	1,2-Dichloroethane	ND		4.3	0.65
75-35-4	1,1-Dichloroethene	ND	*	4.3	0.53
156-59-2	cis-1,2-Dichloroethene	ND		4.3	0.59
156-60-5	trans-1,2-Dichloroethene	ND		4.3	0.65
78-87-5	1,2-Dichloropropane	ND		4.3	0.54

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-M3S-0.5-1 Lab Sample ID: 720-88192-9

Matrix: Solid Lab File ID: 08281830.D

Analysis Method: 8260B Date Collected: 08/22/2018 10:40

Sample wt/vol: 5.808(g) Date Analyzed: 08/28/2018 22:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.3	0.59
10061-02-6	trans-1,3-Dichloropropene	ND		4.3	0.58
100-41-4	Ethylbenzene	ND		4.3	0.65
87-68-3	Hexachlorobutadiene	ND		4.3	0.77
591-78-6	2-Hexanone	ND		43	8.6
98-82-8	Isopropylbenzene	ND		4.3	0.59
99-87-6	4-Isopropyltoluene	ND		4.3	2.2
75-09-2	Methylene Chloride	ND		8.6	4.8
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		43	8.6
91-20-3	Naphthalene	ND		8.6	1.3
103-65-1	N-Propylbenzene	ND		4.3	0.57
100-42-5	Styrene	ND		4.3	0.54
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.3	0.65
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.3	0.65
127-18-4	Tetrachloroethene	ND		4.3	0.58
108-88-3	Toluene	ND		4.3	0.61
87-61-6	1,2,3-Trichlorobenzene	ND		4.3	0.64
120-82-1	1,2,4-Trichlorobenzene	ND		4.3	0.61
71-55-6	1,1,1-Trichloroethane	ND		4.3	0.53
79-00-5	1,1,2-Trichloroethane	ND		4.3	0.60
79-01-6	Trichloroethene	ND		4.3	0.54
75-69-4	Trichlorofluoromethane	ND		4.3	0.48
96-18-4	1,2,3-Trichloropropane	ND		4.3	0.66
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.3	1.8
95-63-6	1,2,4-Trimethylbenzene	ND		4.3	1.4
108-67-8	1,3,5-Trimethylbenzene	ND		4.3	0.56
108-05-4	Vinyl acetate	ND		17	4.3
75-01-4	Vinyl chloride	ND		4.3	0.63
1330-20-7	Xylenes, Total	ND		4.3	1.1
594-20-7	2,2-Dichloropropane	ND		4.3	1.7
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		220	86

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-M3S-0.5-1 Lab Sample ID: 720-88192-9

Matrix: Solid Lab File ID: 08281830.D

Analysis Method: 8260B Date Collected: 08/22/2018 10:40

Sample wt/vol: 5.808(g) Date Analyzed: 08/28/2018 22:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	88		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		60-140
2037-26-5	Toluene-d8 (Surr)	88		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281830.D
Lims ID: 720-88192-A-9-A
Client ID: DG-M3S--0.5-1
Sample Type: Client
Inject. Date: 28-Aug-2018 22:11:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-A-9
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:51 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 10:02:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.813	6.819	-0.006	0	328199	250.0	
* 2 Fluorobenzene	96	10.598	10.599	-0.001	98	849248	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.439	0.000	86	572290	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.579	0.000	95	239214	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.190	0.000	94	75396	7.91	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.702	0.006	0	93454	7.83	
$ 10 Toluene-d8 (Surr)	98	12.708	12.708	0.000	93	225617	6.57	
$ 11 4-Bromofluorobenzene	95	15.933	15.933	0.000	93	73701	6.62	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.048	0.000	84	60896	6.57	
28 Acetone	58	6.368	6.368	0.000	99	39131	39.3	
34 Methylene Chloride	84	7.069	7.075	-0.006	97	2408	0.2620	
44 Hexane	57	8.617	8.611	0.006	80	3022	0.1998	
52 Tert-butyl ethyl ether	59	9.105	9.099	0.006	94	2298	0.0698	
46 Isobutyl alcohol	43	9.111	9.129	-0.018	32	605	0.7275	
150 t-Amyl alcohol	59	9.550	9.556	-0.006	1	156	0.1390	
59 Benzene	78	10.379	10.367	0.012	95	4383	0.1213	
145 Methylcyclohexane	83	11.690	11.690	0.000	82	667	0.0463	
75 Toluene	92	12.793	12.787	0.006	98	4481	0.2382	
149 1-Chlorohexane	55	14.439	14.354	0.085	33	6113	0.5643	
128 Butyl Ether	87	14.671	14.659	0.012	94	1043	0.1832	
84 Ethylbenzene	91	14.707	14.701	0.006	90	1922	0.0525	
85 m-Xylene & p-Xylene	91	14.927	14.933	-0.006	0	5384	0.1864	
88 o-Xylene	91	15.433	15.427	0.006	92	2745	0.0915	
98 1,3,5-Trimethylbenzene	105	16.780	16.780	0.006	87	1898	0.0764	
101 1,2,4-Trimethylbenzene	105	17.280	17.286	0.000	97	7138	0.2769	
136 1,2,3-Trimethylbenzene	105	17.835	17.835	0.006	94	2538	0.0939	
107 n-Butylbenzene	91	18.170	18.170	0.006	83	2257	0.0964	
111 1,2,4-Trichlorobenzene	180	20.420	20.415	0.012	88	1332	0.1265	
112 Naphthalene	128	20.749	20.750	0.006	98	11743	0.4768	
113 Hexachlorobutadiene	225	20.804	20.811	0.000	82	1229	0.1985	
114 1,2,3-Trichlorobenzene	180	21.017	21.018	0.006	90	1703	0.1715	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
20 Butane	58	4.862	4.862	0.000	97	695	NR	
29 Pentane	43	6.368	6.410	-0.042	68	136200	NR	
135 n-Nonane	57	15.061	15.055	0.006	1	384	NR	
99 n-Decane	57	16.829	16.829	0.000	59	459	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	930365	11.9	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	219520	2.82	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	331816	4.26	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1137081	14.6	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	413850	5.31	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	1061671	13.6	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	619620	7.96	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	202047	2.59	
A 121 C7-C12	1	15.448	(10.891-20.005)		0	480295	6.17	
S 122 Xylenes, Total	1				0		0.2779	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

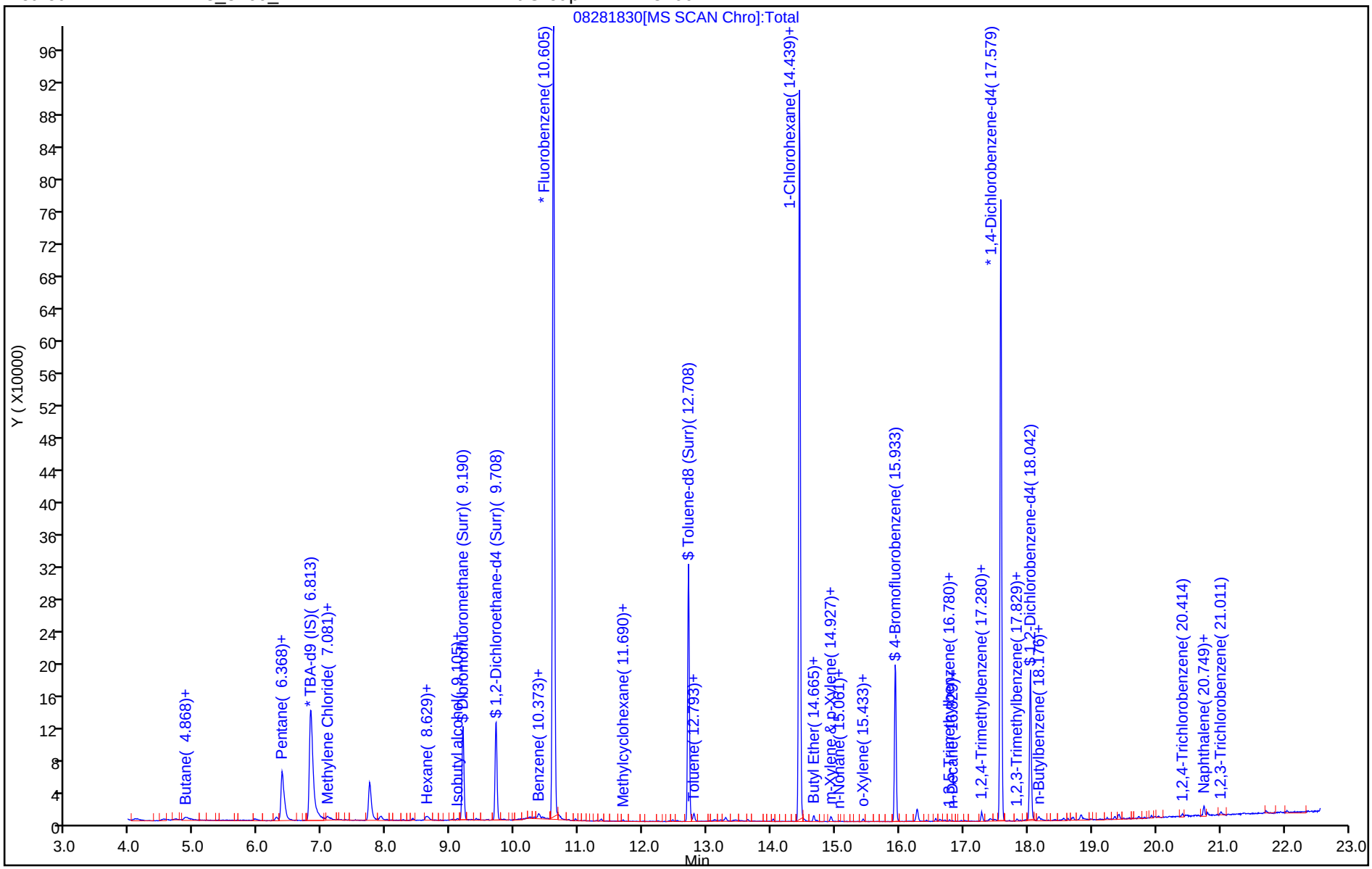
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 10:02:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281830.D

Injection Date:	28-Aug-2018 22:11:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88192-A-9-A	Lab Sample ID:	720-88192-9	Worklist Smp#:	9
Client ID:	DG-M3S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281830.D
Lims ID: 720-88192-A-9-A
Client ID: DG-M3S--0.5-1
Sample Type: Client
Inject. Date: 28-Aug-2018 22:11:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-A-9
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:51 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 10:02:24

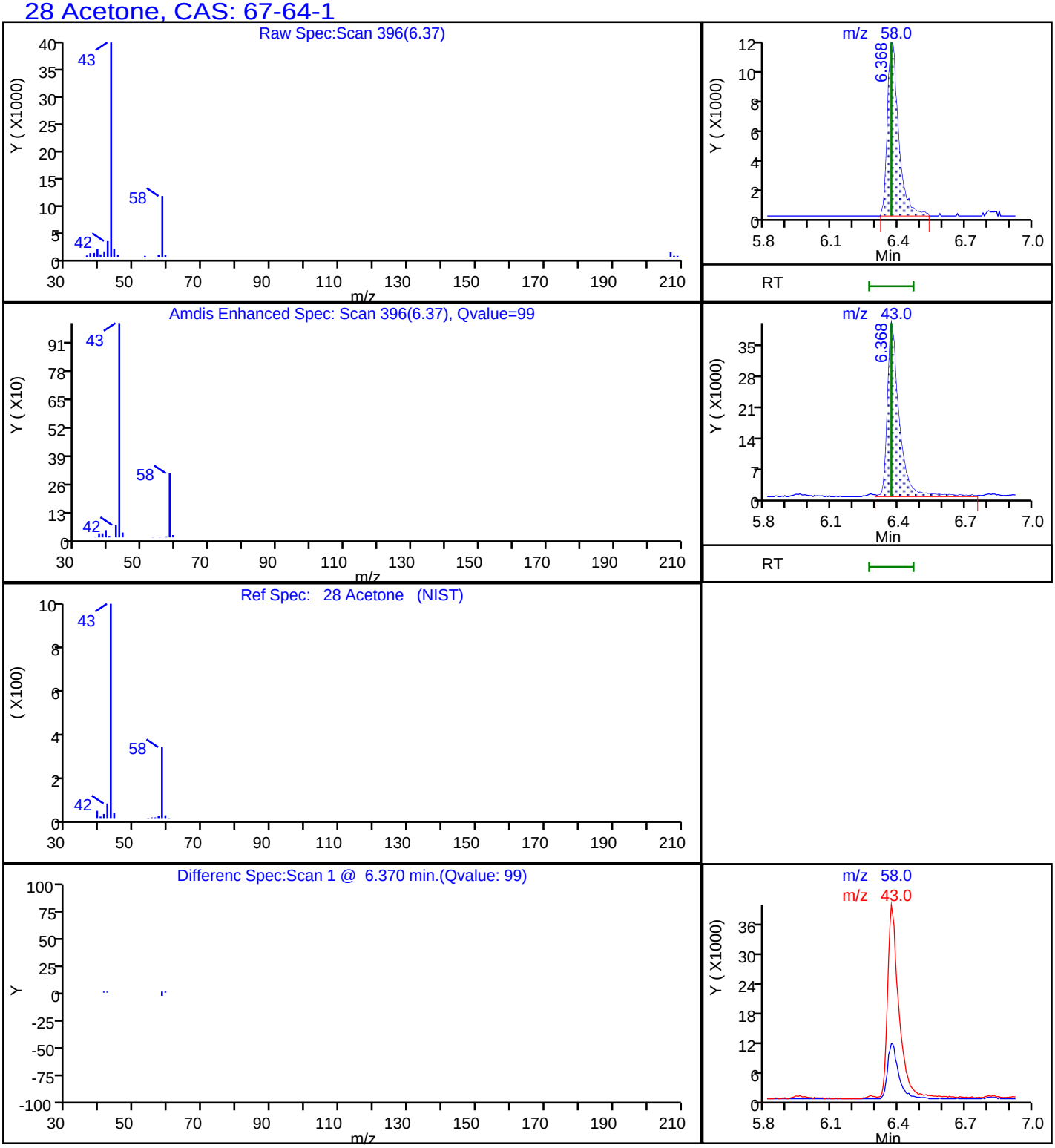
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.83	104.35
$ 10 Toluene-d8 (Surr)	7.50	6.57	87.59
$ 11 4-Bromofluorobenzene	7.50	6.62	88.29
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281830.D

Injection Date:	28-Aug-2018 22:11:30	Instrument ID:	HP13		
Lims ID:	720-88192-A-9-A	Lab Sample ID:	720-88192-9		
Client ID:	DG-M3S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1

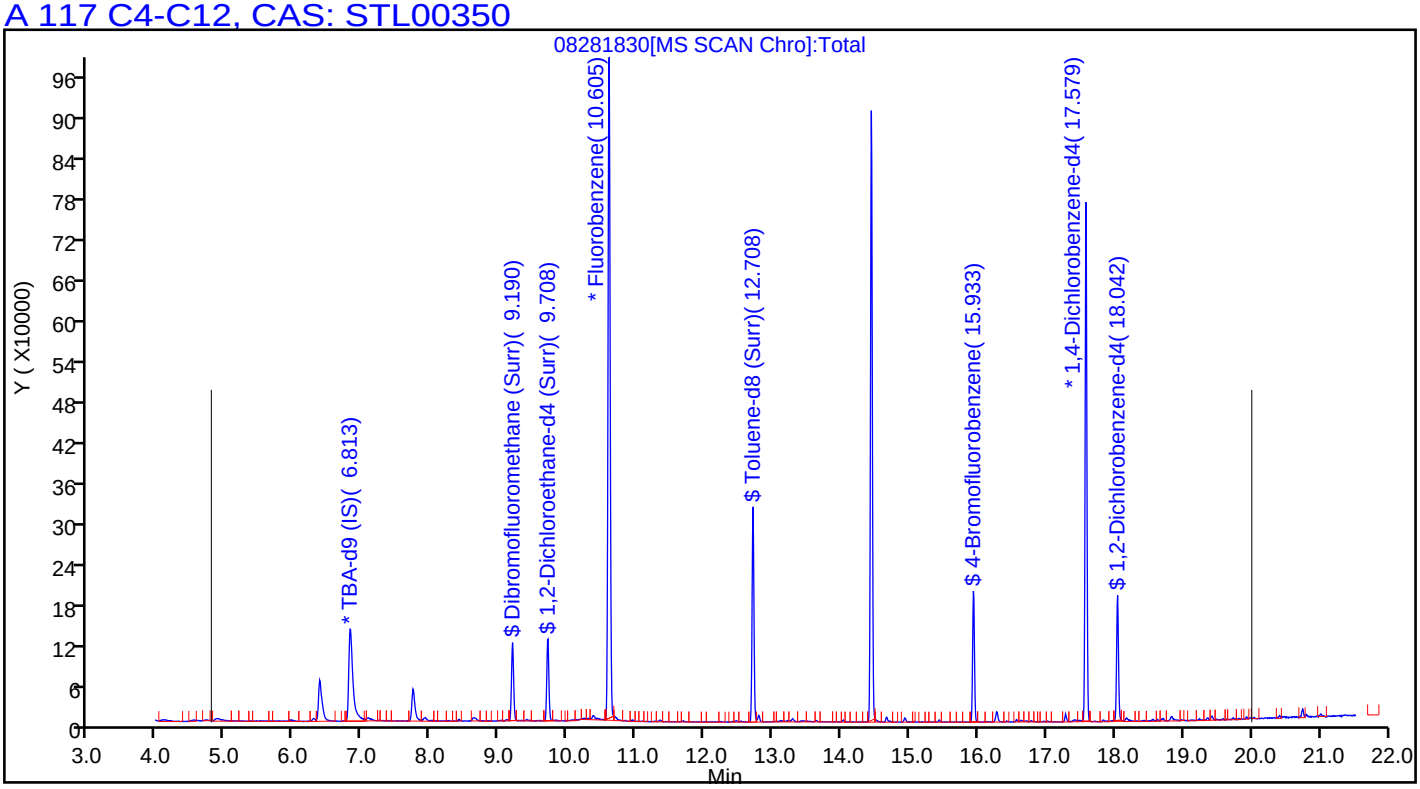


Report Date: 29-Aug-2018 10:02:27 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281830.D				
Injection Date:	28-Aug-2018 22:11:30	Instrument ID:	HP13		
Lims ID:	720-88192-A-9-A	Lab Sample ID:	720-88192-9		
Client ID:	DG-M3S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-M3S-3.5-4 Lab Sample ID: 720-88192-10

Matrix: Solid Lab File ID: 08291815.D

Analysis Method: 8260B Date Collected: 08/22/2018 10:40

Sample wt/vol: 4.268(g) Date Analyzed: 08/29/2018 12:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		5.9	1.4
67-64-1	Acetone	63		59	45
71-43-2	Benzene	ND		5.9	0.76
75-27-4	Dichlorobromomethane	ND		5.9	0.84
108-86-1	Bromobenzene	ND	*	5.9	0.93
74-97-5	Chlorobromomethane	ND		23	0.84
75-25-2	Bromoform	ND	*	5.9	2.3
74-83-9	Bromomethane	ND		12	0.93
78-93-3	2-Butanone (MEK)	ND		59	25
104-51-8	n-Butylbenzene	ND	*	5.9	1.2
135-98-8	sec-Butylbenzene	ND	*	5.9	0.84
98-06-6	tert-Butylbenzene	ND	*	5.9	0.86
75-15-0	Carbon disulfide	ND	*	5.9	2.3
56-23-5	Carbon tetrachloride	ND		5.9	0.73
108-90-7	Chlorobenzene	ND	*	5.9	0.81
75-00-3	Chloroethane	ND		12	0.66
67-66-3	Chloroform	ND		5.9	0.77
74-87-3	Chloromethane	ND		12	0.93
95-49-8	2-Chlorotoluene	ND	*	5.9	0.76
106-43-4	4-Chlorotoluene	ND	*	5.9	0.80
124-48-1	Chlorodibromomethane	ND		5.9	0.83
95-50-1	1,2-Dichlorobenzene	ND	*	5.9	0.80
541-73-1	1,3-Dichlorobenzene	ND	*	5.9	0.84
106-46-7	1,4-Dichlorobenzene	ND	*	5.9	0.83
142-28-9	1,3-Dichloropropane	ND		5.9	0.86
563-58-6	1,1-Dichloropropene	ND		5.9	0.81
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	12	2.0
106-93-4	Ethylene Dibromide	ND		5.9	1.7
74-95-3	Dibromomethane	ND		12	1.0
75-71-8	Dichlorodifluoromethane	ND		12	0.93
75-34-3	1,1-Dichloroethane	ND		5.9	0.80
107-06-2	1,2-Dichloroethane	ND		5.9	0.89
75-35-4	1,1-Dichloroethene	ND	*	5.9	0.73
156-59-2	cis-1,2-Dichloroethene	ND		5.9	0.80
156-60-5	trans-1,2-Dichloroethene	ND		5.9	0.88
78-87-5	1,2-Dichloropropane	ND		5.9	0.74

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-M3S-3.5-4 Lab Sample ID: 720-88192-10

Matrix: Solid Lab File ID: 08291815.D

Analysis Method: 8260B Date Collected: 08/22/2018 10:40

Sample wt/vol: 4.268(g) Date Analyzed: 08/29/2018 12:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		5.9	0.81
10061-02-6	trans-1,3-Dichloropropene	ND		5.9	0.78
100-41-4	Ethylbenzene	ND	*	5.9	0.88
87-68-3	Hexachlorobutadiene	ND	*	5.9	1.1
591-78-6	2-Hexanone	ND		59	12
98-82-8	Isopropylbenzene	ND	*	5.9	0.80
99-87-6	4-Isopropyltoluene	ND	*	5.9	2.9
75-09-2	Methylene Chloride	ND		12	6.6
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		59	12
91-20-3	Naphthalene	ND	*	12	1.8
103-65-1	N-Propylbenzene	ND	*	5.9	0.77
100-42-5	Styrene	ND	*	5.9	0.74
630-20-6	1,1,1,2-Tetrachloroethane	ND	*	5.9	0.89
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	5.9	0.88
127-18-4	Tetrachloroethene	ND		5.9	0.78
108-88-3	Toluene	ND	*	5.9	0.83
87-61-6	1,2,3-Trichlorobenzene	ND	*	5.9	0.87
120-82-1	1,2,4-Trichlorobenzene	ND	*	5.9	0.83
71-55-6	1,1,1-Trichloroethane	ND		5.9	0.71
79-00-5	1,1,2-Trichloroethane	ND		5.9	0.82
79-01-6	Trichloroethene	ND		5.9	0.74
75-69-4	Trichlorofluoromethane	ND		5.9	0.66
96-18-4	1,2,3-Trichloropropane	ND	*	5.9	0.90
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	5.9	2.4
95-63-6	1,2,4-Trimethylbenzene	ND	*	5.9	1.9
108-67-8	1,3,5-Trimethylbenzene	ND	*	5.9	0.76
108-05-4	Vinyl acetate	ND		23	5.9
75-01-4	Vinyl chloride	ND		5.9	0.86
1330-20-7	Xylenes, Total	ND		5.9	1.4
594-20-7	2,2-Dichloropropane	ND		5.9	2.3
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		290	120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-M3S-3.5-4 Lab Sample ID: 720-88192-10

Matrix: Solid Lab File ID: 08291815.D

Analysis Method: 8260B Date Collected: 08/22/2018 10:40

Sample wt/vol: 4.268(g) Date Analyzed: 08/29/2018 12:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	75	*	45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	129		60-140
2037-26-5	Toluene-d8 (Surr)	93		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291815.D
Lims ID: 720-88192-B-10-A
Client ID: DG-M3S--3.5-4
Sample Type: Client
Inject. Date: 29-Aug-2018 12:51:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-B-10 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 30-Aug-2018 08:40:45 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 08:40:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	144595	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	734806	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	86	486366	25.0	s
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	95	151925	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.304	9.314	0.000	92	55542	8.92	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.811	9.821	0.000	0	64777	9.69	
$ 10 Toluene-d8 (Surr)	98	12.821	12.834	0.000	94	202775	6.95	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	91	42501	5.61	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	32194	6.06	
28 Acetone	58	6.474	6.480	0.000	97	15140	26.8	
59 Benzene	78	10.487	10.498	0.000	94	2948	0.1112	
124 Butane	43	5.006	4.996	0.010	1	1099	NR	
138 n-Nonane	43	15.177	15.198	-0.021	1	385	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	912806	16.1	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	167570	2.95	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	191649	3.38	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	1000374	17.6	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	236030	4.16	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	236030	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	838959	14.8	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	323598	5.71	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	157544	2.78	
A 121 C7-C12	1	15.567	(11.005-20.130)		0	261746	4.62	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

s - Failed ISTD Recovery Test

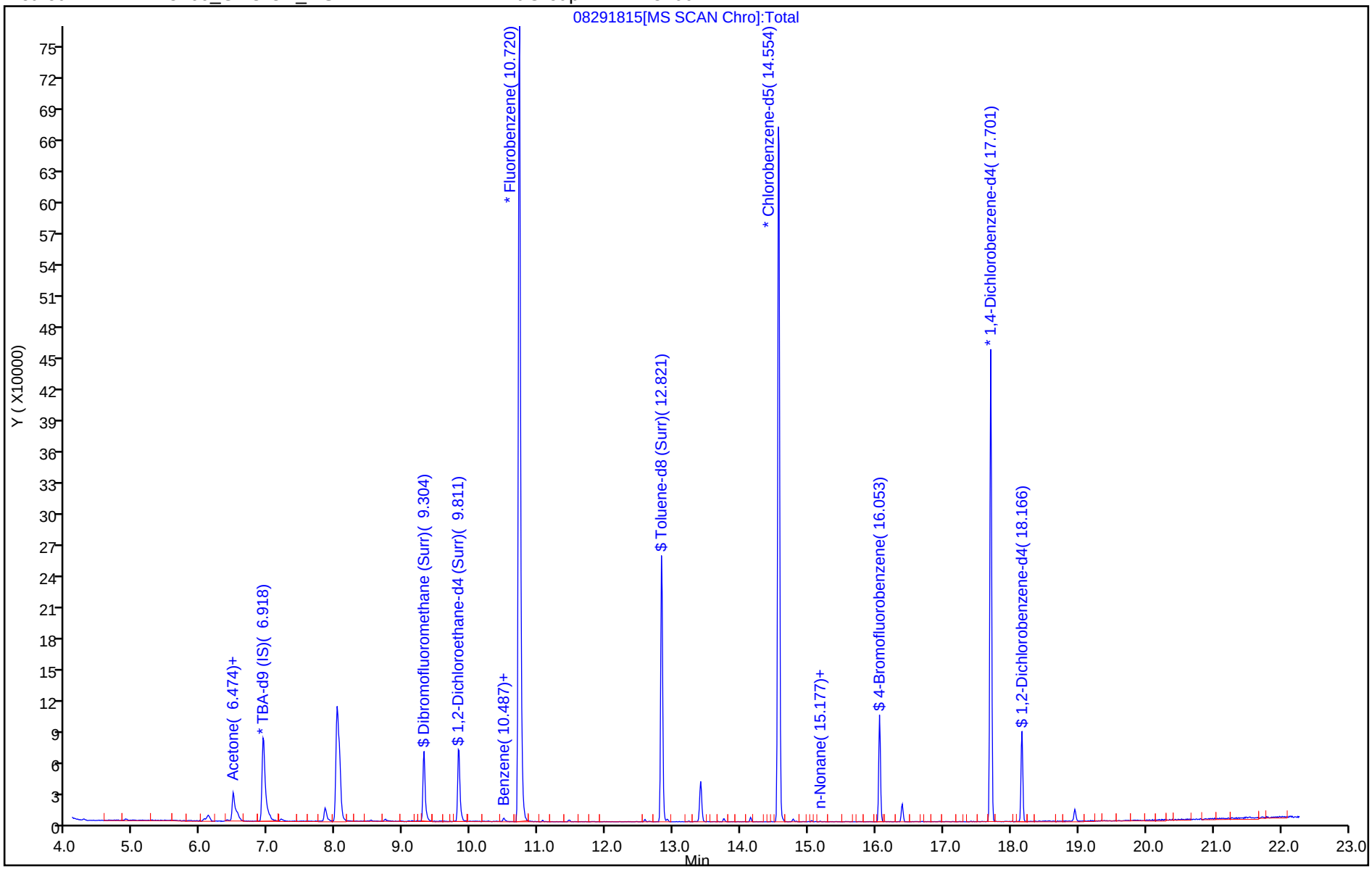
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 08:40:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291815.D				
Injection Date:	29-Aug-2018 12:51:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88192-B-10-A	Lab Sample ID:	720-88192-10	Worklist Smp#:	13
Client ID:	DG-M3S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291815.D
Lims ID: 720-88192-B-10-A
Client ID: DG-M3S--3.5-4
Sample Type: Client
Inject. Date: 29-Aug-2018 12:51:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-B-10 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 30-Aug-2018 08:40:45 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 08:40:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	9.69	129.16
$ 10 Toluene-d8 (Surr)	7.50	6.95	92.67
$ 11 4-Bromofluorobenzene	7.50	5.61	74.82
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

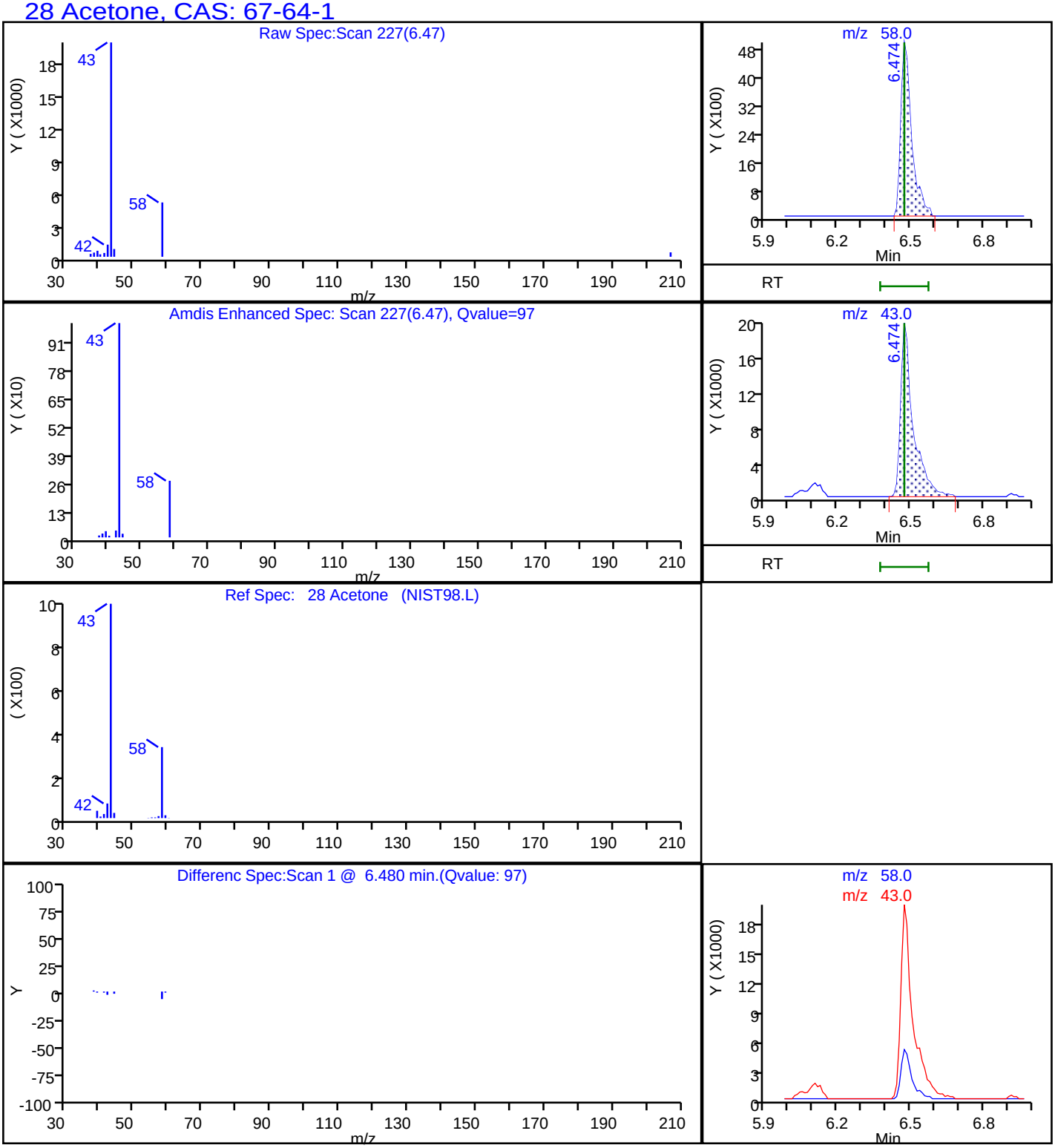
Report Date: 30-Aug-2018 08:40:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291815.D

Injection Date:	29-Aug-2018 12:51:30	Instrument ID:	CHMSV2		
Lims ID:	720-88192-B-10-A	Lab Sample ID:	720-88192-10		
Client ID:	DG-M3S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



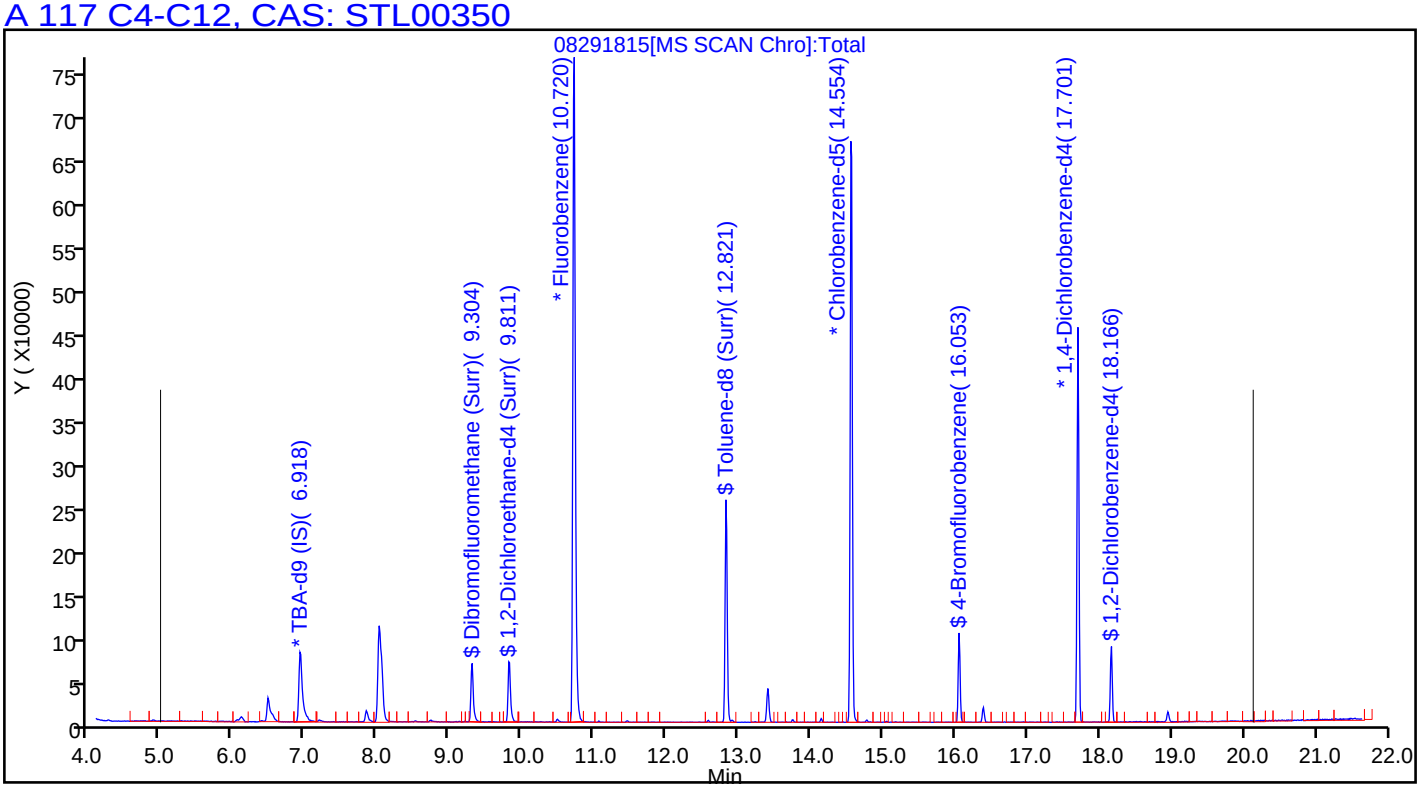
Report Date: 30-Aug-2018 08:40:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291815.D

Injection Date:	29-Aug-2018 12:51:30	Instrument ID:	CHMSV2		
Lims ID:	720-88192-B-10-A	Lab Sample ID:	720-88192-10		
Client ID:	DG-M3S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



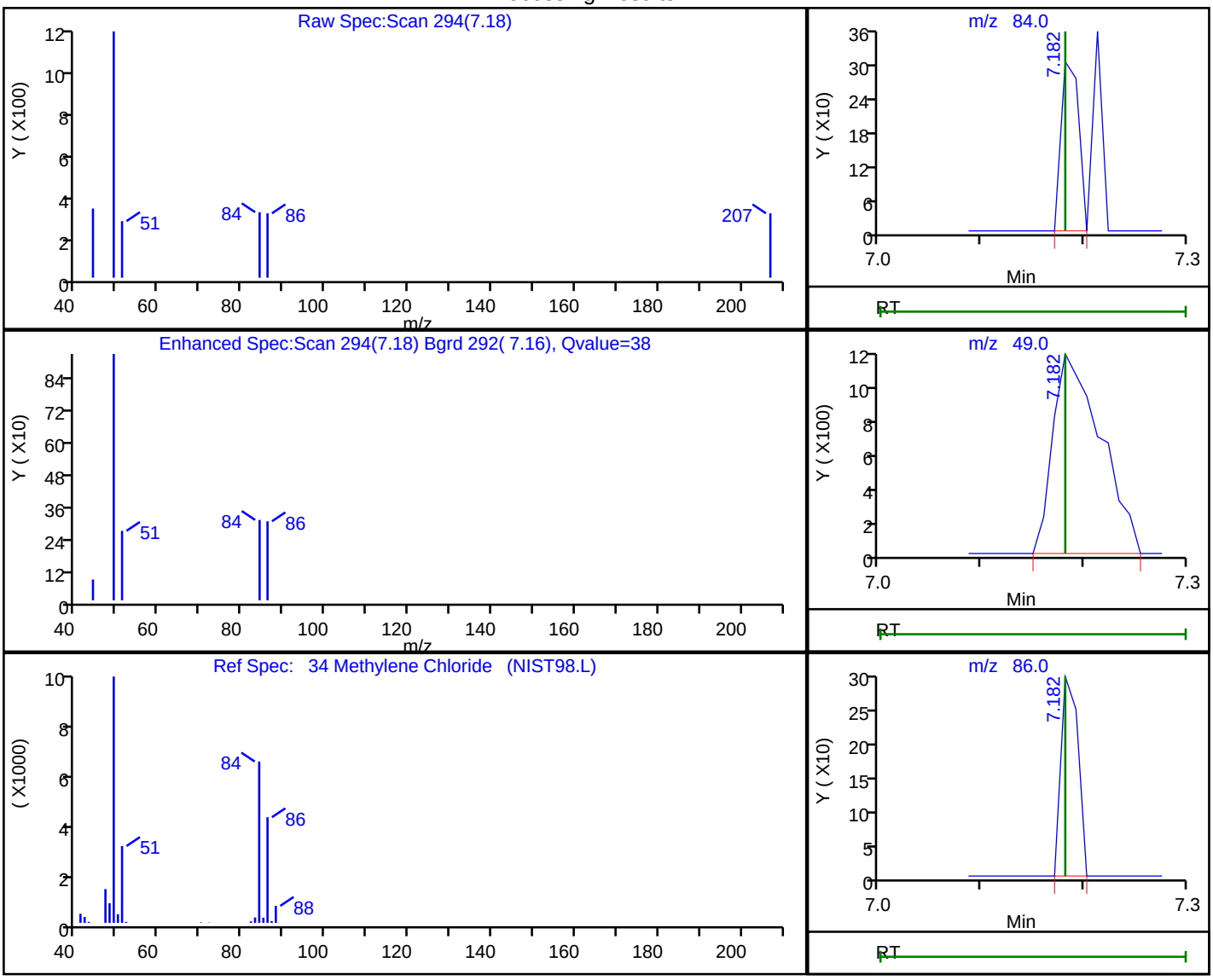
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291815.D				
Injection Date:	29-Aug-2018 12:51:30	Instrument ID:	CHMSV2		
Lims ID:	720-88192-B-10-A	Lab Sample ID:	720-88192-10		
Client ID:	DG-M3S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

34 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
7.18	84.00	364	0.065616
7.18	49.00	3711	
7.18	86.00	345	

Reviewer: chaijita, 30-Aug-2018 08:39:07

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-M3S-7.5-8 Lab Sample ID: 720-88192-11

Matrix: Solid Lab File ID: 08281821.D

Analysis Method: 8260B Date Collected: 08/22/2018 10:40

Sample wt/vol: 5.618(g) Date Analyzed: 08/28/2018 18:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.4	1.1
67-64-1	Acetone	49		44	34
71-43-2	Benzene	ND		4.4	0.58
75-27-4	Dichlorobromomethane	ND		4.4	0.64
108-86-1	Bromobenzene	ND	*	4.4	0.70
74-97-5	Chlorobromomethane	ND		18	0.64
75-25-2	Bromoform	ND		4.4	1.8
74-83-9	Bromomethane	ND		8.9	0.70
78-93-3	2-Butanone (MEK)	ND		44	19
104-51-8	n-Butylbenzene	ND	*	4.4	0.89
135-98-8	sec-Butylbenzene	ND	*	4.4	0.64
98-06-6	tert-Butylbenzene	ND	*	4.4	0.65
75-15-0	Carbon disulfide	ND		4.4	1.8
56-23-5	Carbon tetrachloride	ND		4.4	0.55
108-90-7	Chlorobenzene	ND		4.4	0.61
75-00-3	Chloroethane	ND		8.9	0.50
67-66-3	Chloroform	ND		4.4	0.59
74-87-3	Chloromethane	ND		8.9	0.70
95-49-8	2-Chlorotoluene	ND	*	4.4	0.58
106-43-4	4-Chlorotoluene	ND	*	4.4	0.61
124-48-1	Chlorodibromomethane	ND		4.4	0.63
95-50-1	1,2-Dichlorobenzene	ND	*	4.4	0.61
541-73-1	1,3-Dichlorobenzene	ND	*	4.4	0.64
106-46-7	1,4-Dichlorobenzene	ND	*	4.4	0.63
142-28-9	1,3-Dichloropropane	ND		4.4	0.65
563-58-6	1,1-Dichloropropene	ND		4.4	0.61
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	8.9	1.5
106-93-4	Ethylene Dibromide	ND		4.4	1.3
74-95-3	Dibromomethane	ND		8.9	0.77
75-71-8	Dichlorodifluoromethane	ND		8.9	0.70
75-34-3	1,1-Dichloroethane	ND		4.4	0.61
107-06-2	1,2-Dichloroethane	ND		4.4	0.68
75-35-4	1,1-Dichloroethene	ND		4.4	0.55
156-59-2	cis-1,2-Dichloroethene	2.7	J	4.4	0.61
156-60-5	trans-1,2-Dichloroethene	ND		4.4	0.67
78-87-5	1,2-Dichloropropane	ND		4.4	0.56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-M3S-7.5-8 Lab Sample ID: 720-88192-11

Matrix: Solid Lab File ID: 08281821.D

Analysis Method: 8260B Date Collected: 08/22/2018 10:40

Sample wt/vol: 5.618(g) Date Analyzed: 08/28/2018 18:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.4	0.61
10061-02-6	trans-1,3-Dichloropropene	ND		4.4	0.60
100-41-4	Ethylbenzene	ND		4.4	0.67
87-68-3	Hexachlorobutadiene	ND	*	4.4	0.80
591-78-6	2-Hexanone	ND		44	8.9
98-82-8	Isopropylbenzene	ND		4.4	0.61
99-87-6	4-Isopropyltoluene	ND	*	4.4	2.2
75-09-2	Methylene Chloride	ND		8.9	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		44	8.9
91-20-3	Naphthalene	ND	*	8.9	1.3
103-65-1	N-Propylbenzene	ND	*	4.4	0.59
100-42-5	Styrene	ND		4.4	0.56
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.4	0.68
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.4	0.67
127-18-4	Tetrachloroethene	ND		4.4	0.60
108-88-3	Toluene	ND		4.4	0.63
87-61-6	1,2,3-Trichlorobenzene	ND	*	4.4	0.66
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.4	0.63
71-55-6	1,1,1-Trichloroethane	ND		4.4	0.54
79-00-5	1,1,2-Trichloroethane	ND		4.4	0.62
79-01-6	Trichloroethene	ND		4.4	0.56
75-69-4	Trichlorofluoromethane	ND		4.4	0.50
96-18-4	1,2,3-Trichloropropane	ND	*	4.4	0.69
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.9
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.4	1.5
108-67-8	1,3,5-Trimethylbenzene	ND	*	4.4	0.58
108-05-4	Vinyl acetate	ND		18	4.4
75-01-4	Vinyl chloride	ND		4.4	0.65
1330-20-7	Xylenes, Total	ND		4.4	1.1
594-20-7	2,2-Dichloropropane	ND		4.4	1.8
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		220	89

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-M3S-7.5-8 Lab Sample ID: 720-88192-11

Matrix: Solid Lab File ID: 08281821.D

Analysis Method: 8260B Date Collected: 08/22/2018 10:40

Sample wt/vol: 5.618(g) Date Analyzed: 08/28/2018 18:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	82		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		60-140
2037-26-5	Toluene-d8 (Surr)	88		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281821.D
Lims ID: 720-88192-A-11-A
Client ID: DG-M3S--7.5-8
Sample Type: Client
Inject. Date: 28-Aug-2018 18:01:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-A-11
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:30:59 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:30:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.825	0.000	0	228310	250.0	
* 2 Fluorobenzene	96	10.599	10.605	-0.006	98	626648	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	87	401664	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.591	-0.012	95	147757	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.190	9.191	-0.006	93	54304	7.72	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.709	-0.007	0	66330	7.53	
$ 10 Toluene-d8 (Surr)	98	12.708	12.707	-0.006	93	168052	6.63	
$ 11 4-Bromofluorobenzene	95	15.933	15.932	-0.006	94	48270	6.18	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	-0.006	85	39150	6.84	
28 Acetone	58	6.380	6.370	0.006	99	20164	27.4	
34 Methylene Chloride	84	7.087	7.081	0.006	96	1042	0.1537	
144 Methyl acetate	43	7.124	7.126	-0.006	97	3555	0.6638	
49 cis-1,2-Dichloroethene	61	8.812	8.813	-0.007	82	15713	1.52	
140 Ethyl acetate	43	9.013	9.002	0.005	98	8232	0.99	
52 Tert-butyl ethyl ether	59	9.099	9.099	-0.006	85	1229	0.0506	M
29 Pentane	43	6.374	6.410	-0.036	71	70301	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	583916	10.2	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	194751	3.39	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	256943	4.47	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	639065	11.1	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	308689	5.37	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	606334	10.6	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	363838	6.33	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	116011	2.02	
A 121 C7-C12	1	15.454	(10.903-20.005)		0	220817	3.84	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

s - Failed ISTD Recovery Test

Review Flags

M - Manually Integrated

Reagents:

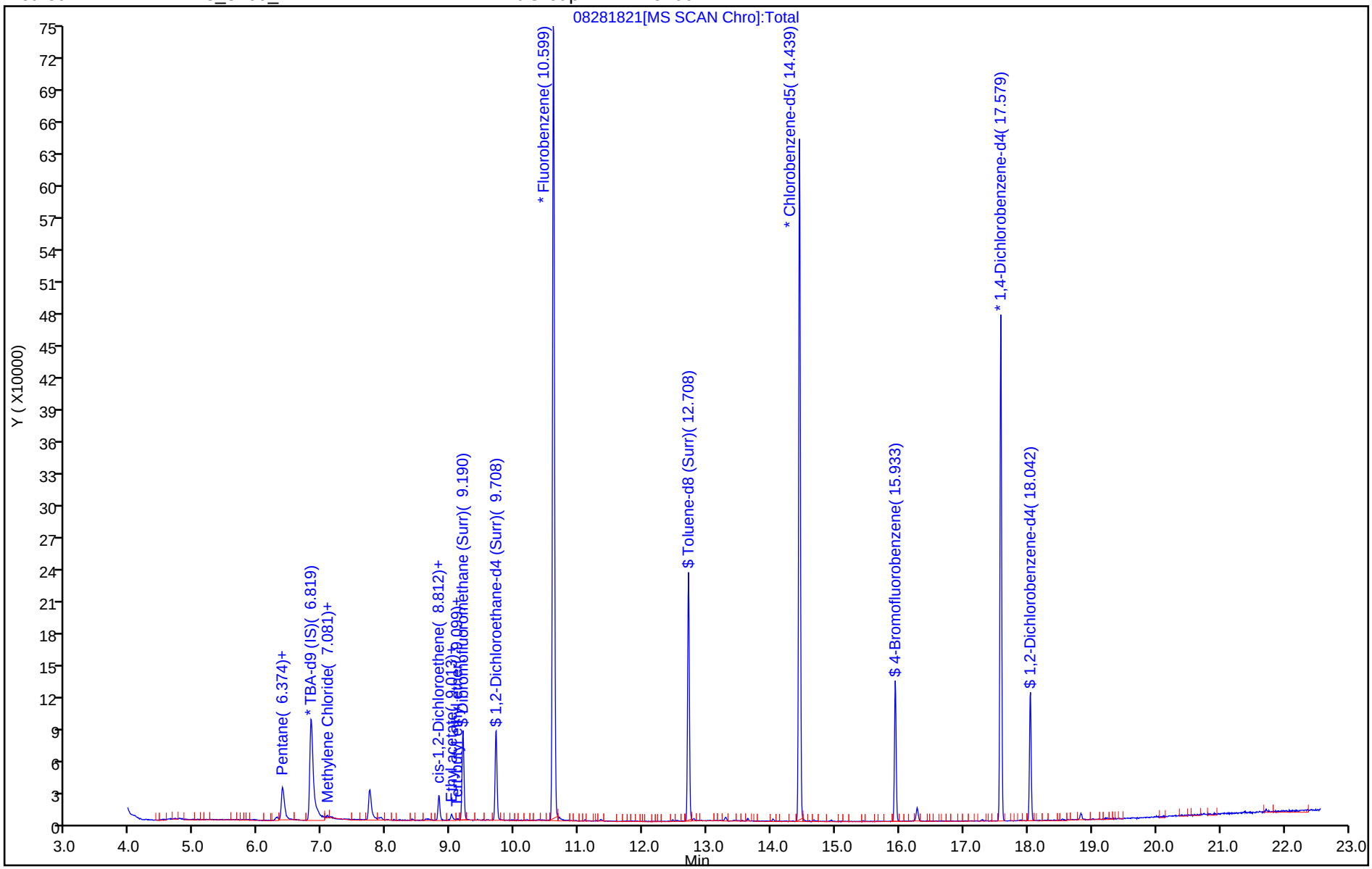
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:31:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281821.D

Injection Date:	28-Aug-2018 18:01:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88192-A-11-A	Lab Sample ID:	720-88192-11	Worklist Smp#:	21
Client ID:	DG-M3S--7.5-8				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281821.D
Lims ID: 720-88192-A-11-A
Client ID: DG-M3S--7.5-8
Sample Type: Client
Inject. Date: 28-Aug-2018 18:01:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-A-11
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:30:59 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:30:59

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.53	100.37
$ 10 Toluene-d8 (Surr)	7.50	6.63	88.41
$ 11 4-Bromofluorobenzene	7.50	6.18	82.39
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

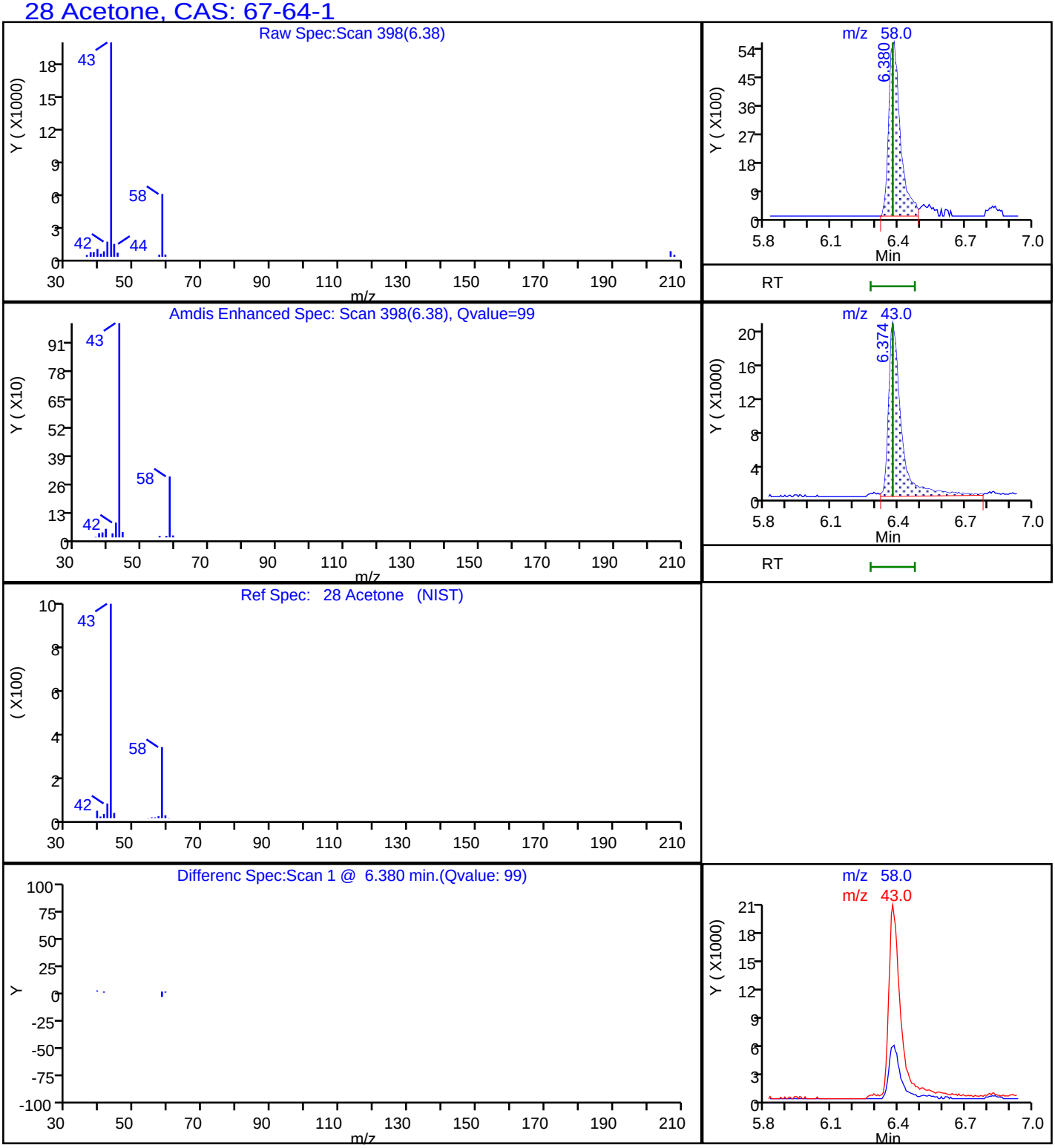
Report Date: 29-Aug-2018 09:31:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281821.D

Injection Date:	28-Aug-2018 18:01:30	Instrument ID:	HP13		
Lims ID:	720-88192-A-11-A	Lab Sample ID:	720-88192-11		
Client ID:	DG-M3S--7.5-8				
Operator ID:	VOA	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



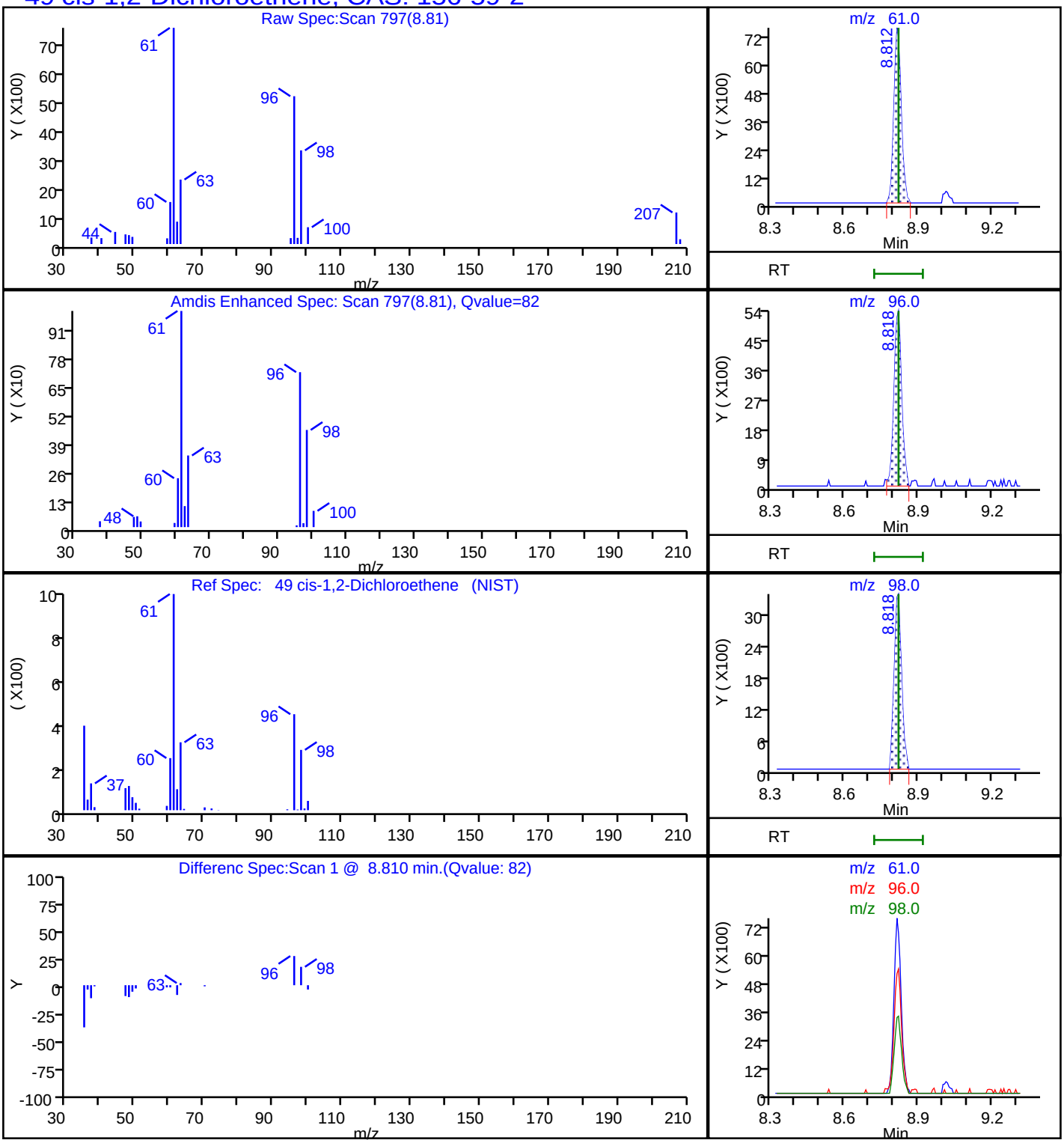
Report Date: 29-Aug-2018 09:31:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281821.D

Injection Date:	28-Aug-2018 18:01:30	Instrument ID:	HP13		
Lims ID:	720-88192-A-11-A	Lab Sample ID:	720-88192-11		
Client ID:	DG-M3S--7.5-8				
Operator ID:	VOA	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

49 cis-1,2-Dichloroethene, CAS: 156-59-2

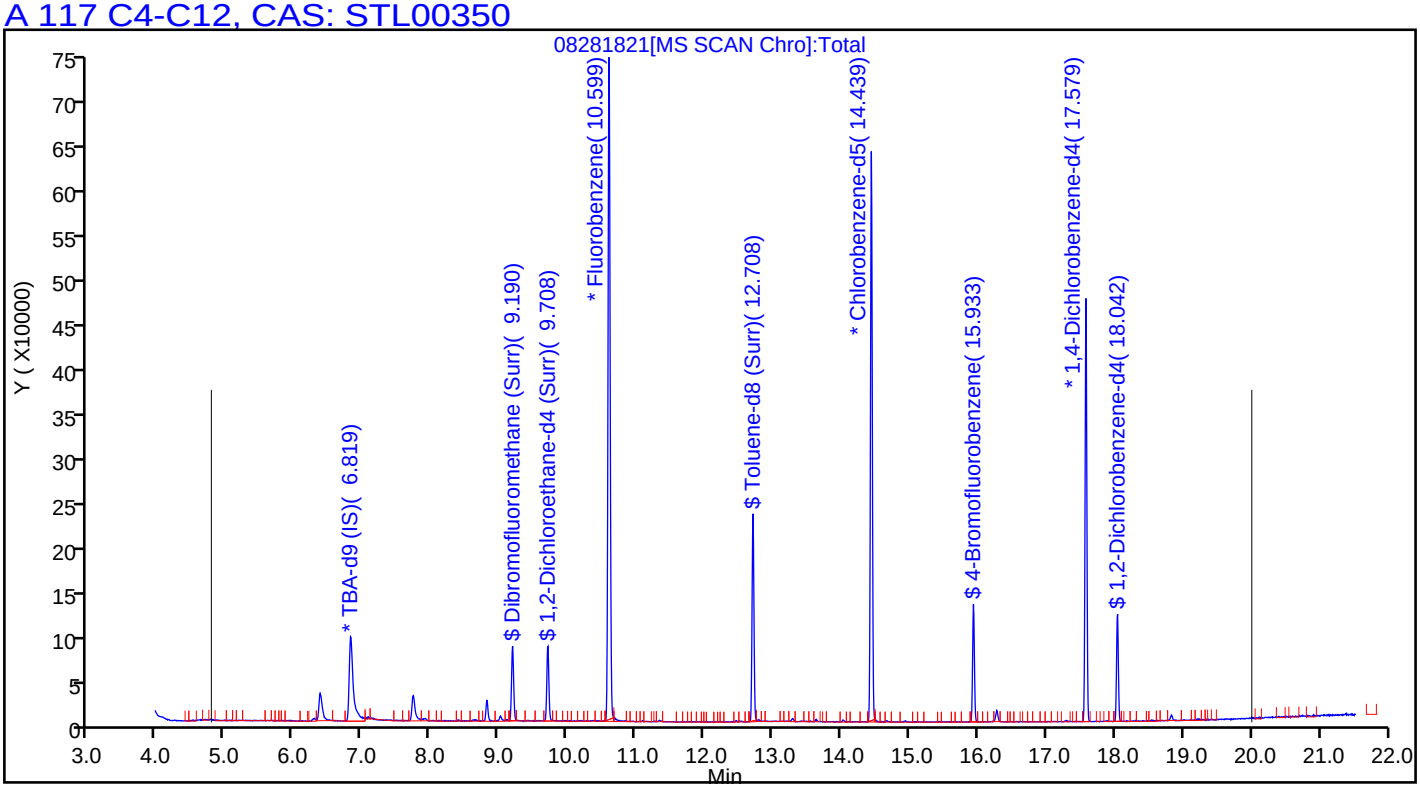


Report Date: 29-Aug-2018 09:31:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281821.D				
Injection Date:	28-Aug-2018 18:01:30	Instrument ID:	HP13		
Lims ID:	720-88192-A-11-A	Lab Sample ID:	720-88192-11		
Client ID:	DG-M3S--7.5-8				
Operator ID:	VOA	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



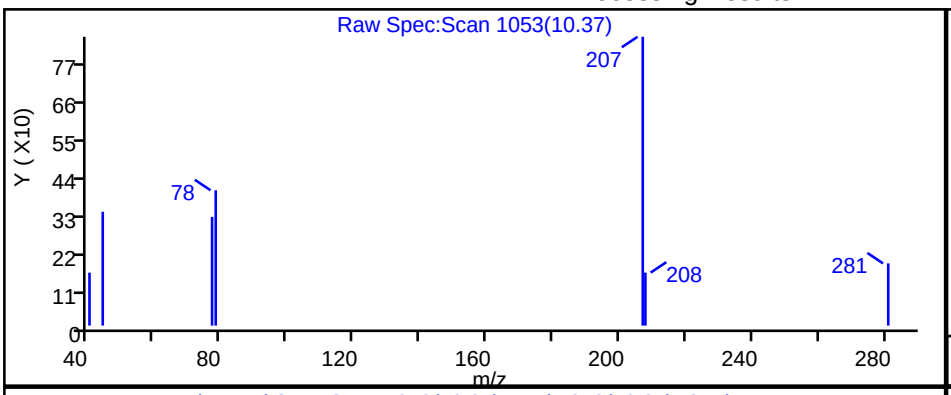
User Disabled Compound Report

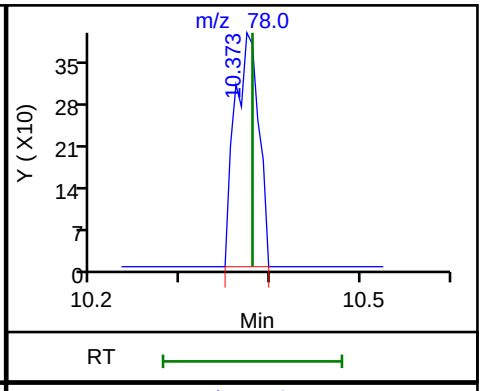
TestAmerica Pleasanton

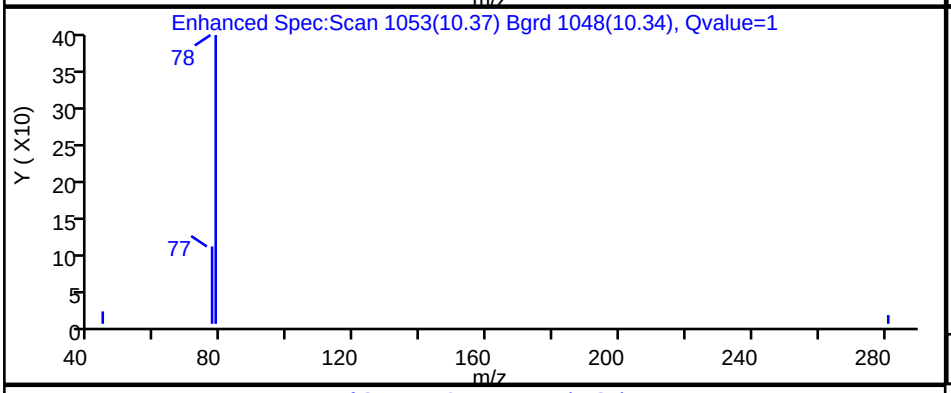
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281821.D				
Injection Date:	28-Aug-2018 18:01:30	Instrument ID:	HP13		
Lims ID:	720-88192-A-11-A	Lab Sample ID:	720-88192-11		
Client ID:	DG-M3S--7.5-8				
Operator ID:	VOA	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

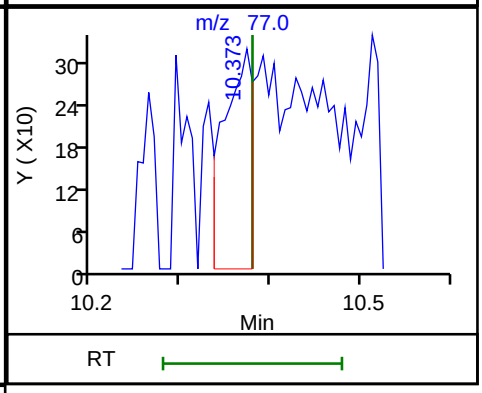
59 Benzene, CAS: 71-43-2

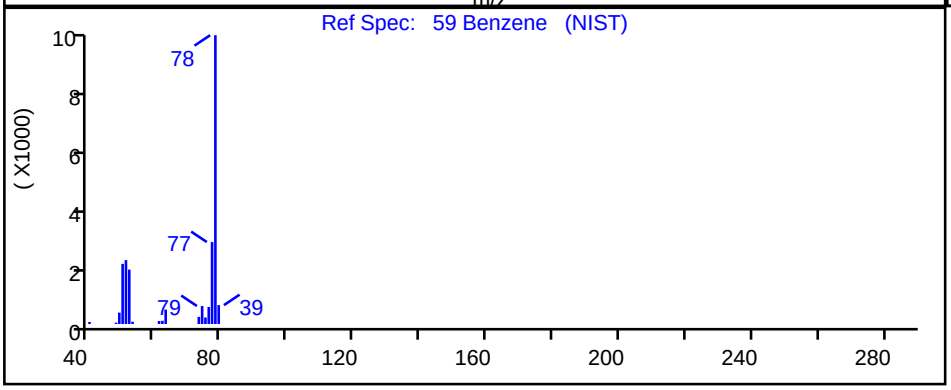
Processing Results











RT	Mass	Response	Amount
10.37	78.00	727	0.027263
10.37	77.00	714	

Reviewer: chaijita, 29-Aug-2018 09:29:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-L5S-0.5-1 Lab Sample ID: 720-88192-14

Matrix: Solid Lab File ID: 08291817.D

Analysis Method: 8260B Date Collected: 08/22/2018 11:20

Sample wt/vol: 6.076(g) Date Analyzed: 08/29/2018 13:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.1	0.99
67-64-1	Acetone	33	J	41	31
71-43-2	Benzene	ND		4.1	0.53
75-27-4	Dichlorobromomethane	ND		4.1	0.59
108-86-1	Bromobenzene	ND	*	4.1	0.65
74-97-5	Chlorobromomethane	ND		16	0.59
75-25-2	Bromoform	ND		4.1	1.6
74-83-9	Bromomethane	ND		8.2	0.65
78-93-3	2-Butanone (MEK)	ND		41	17
104-51-8	n-Butylbenzene	ND	*	4.1	0.82
135-98-8	sec-Butylbenzene	ND	*	4.1	0.59
98-06-6	tert-Butylbenzene	ND	*	4.1	0.60
75-15-0	Carbon disulfide	ND	*	4.1	1.6
56-23-5	Carbon tetrachloride	ND		4.1	0.51
108-90-7	Chlorobenzene	ND		4.1	0.57
75-00-3	Chloroethane	ND		8.2	0.46
67-66-3	Chloroform	ND		4.1	0.54
74-87-3	Chloromethane	ND		8.2	0.65
95-49-8	2-Chlorotoluene	ND	*	4.1	0.53
106-43-4	4-Chlorotoluene	ND	*	4.1	0.56
124-48-1	Chlorodibromomethane	ND		4.1	0.58
95-50-1	1,2-Dichlorobenzene	ND	*	4.1	0.56
541-73-1	1,3-Dichlorobenzene	ND	*	4.1	0.59
106-46-7	1,4-Dichlorobenzene	ND	*	4.1	0.58
142-28-9	1,3-Dichloropropane	ND		4.1	0.60
563-58-6	1,1-Dichloropropene	ND		4.1	0.57
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	8.2	1.4
106-93-4	Ethylene Dibromide	ND		4.1	1.2
74-95-3	Dibromomethane	ND		8.2	0.71
75-71-8	Dichlorodifluoromethane	ND		8.2	0.65
75-34-3	1,1-Dichloroethane	ND		4.1	0.56
107-06-2	1,2-Dichloroethane	ND		4.1	0.63
75-35-4	1,1-Dichloroethene	ND	*	4.1	0.51
156-59-2	cis-1,2-Dichloroethene	ND		4.1	0.56
156-60-5	trans-1,2-Dichloroethene	ND		4.1	0.62
78-87-5	1,2-Dichloropropane	ND		4.1	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-L5S-0.5-1 Lab Sample ID: 720-88192-14

Matrix: Solid Lab File ID: 08291817.D

Analysis Method: 8260B Date Collected: 08/22/2018 11:20

Sample wt/vol: 6.076(g) Date Analyzed: 08/29/2018 13:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.1	0.57
10061-02-6	trans-1,3-Dichloropropene	ND		4.1	0.55
100-41-4	Ethylbenzene	ND		4.1	0.62
87-68-3	Hexachlorobutadiene	ND	*	4.1	0.74
591-78-6	2-Hexanone	ND		41	8.2
98-82-8	Isopropylbenzene	ND		4.1	0.56
99-87-6	4-Isopropyltoluene	ND	*	4.1	2.1
75-09-2	Methylene Chloride	ND		8.2	4.6
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		41	8.2
91-20-3	Naphthalene	ND	*	8.2	1.2
103-65-1	N-Propylbenzene	ND	*	4.1	0.54
100-42-5	Styrene	ND		4.1	0.52
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.1	0.63
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.1	0.62
127-18-4	Tetrachloroethene	ND		4.1	0.55
108-88-3	Toluene	ND		4.1	0.58
87-61-6	1,2,3-Trichlorobenzene	ND	*	4.1	0.61
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.1	0.58
71-55-6	1,1,1-Trichloroethane	ND		4.1	0.50
79-00-5	1,1,2-Trichloroethane	ND		4.1	0.58
79-01-6	Trichloroethene	ND		4.1	0.52
75-69-4	Trichlorofluoromethane	ND		4.1	0.46
96-18-4	1,2,3-Trichloropropane	ND	*	4.1	0.63
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.1	1.7
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.1	1.3
108-67-8	1,3,5-Trimethylbenzene	ND	*	4.1	0.53
108-05-4	Vinyl acetate	ND		16	4.1
75-01-4	Vinyl chloride	ND		4.1	0.60
1330-20-7	Xylenes, Total	ND		4.1	1.0
594-20-7	2,2-Dichloropropane	ND		4.1	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		210	82

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-L5S-0.5-1 Lab Sample ID: 720-88192-14

Matrix: Solid Lab File ID: 08291817.D

Analysis Method: 8260B Date Collected: 08/22/2018 11:20

Sample wt/vol: 6.076(g) Date Analyzed: 08/29/2018 13:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	77		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	121		60-140
2037-26-5	Toluene-d8 (Surr)	89		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291817.D
Lims ID: 720-88192-B-14-A
Client ID: DG-L5S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 13:48:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-B-14 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 30-Aug-2018 08:41:51 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 08:42:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	179502	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	834580	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	86	581979	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	161982	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.305	9.314	0.001	92	57992	8.20	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.812	9.821	0.001	0	68836	9.06	
$ 10 Toluene-d8 (Surr)	98	12.822	12.834	0.001	94	220315	6.65	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	91	52061	5.74	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	33916	5.98	
28 Acetone	58	6.485	6.480	0.011	97	13048	20.3	
34 Methylene Chloride	84	7.182	7.189	0.000	82	1488	0.2362	
131 Butyl Ether	87	14.775	14.775	0.000	91	280	0.0567	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	423457	6.57	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	130465	2.03	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	155980	2.42	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	491252	7.63	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	194087	3.01	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	194087	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	458496	7.12	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	259127	4.02	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	135896	2.11	
A 121 C7-C12	1	15.567	(11.005-20.130)		0	220321	3.42	

QC Flag Legend

Processing Flags

NC - Not Calibrated

s - Failed ISTD Recovery Test

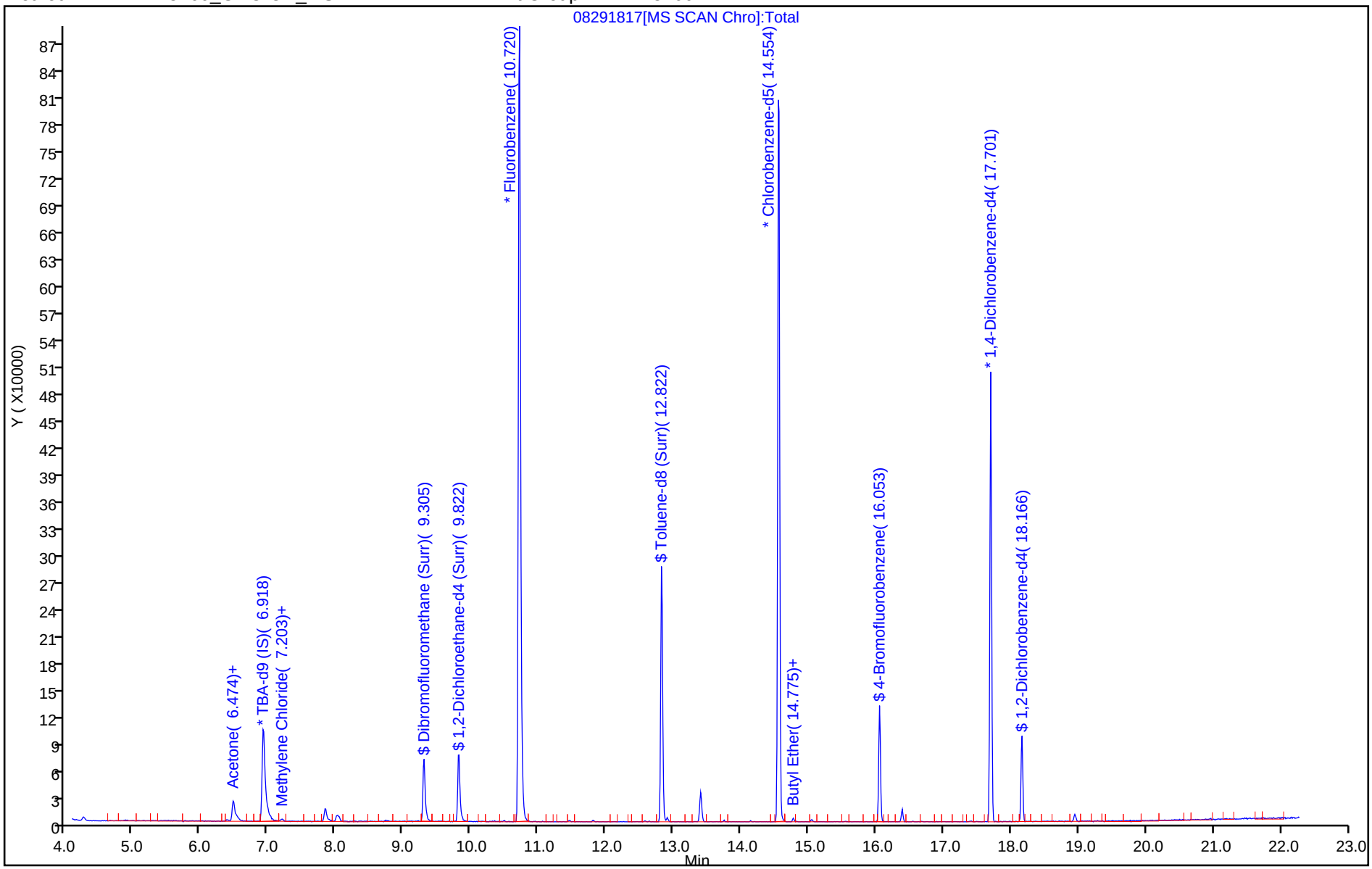
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 08:42:42 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291817.D				
Injection Date:	29-Aug-2018 13:48:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88192-B-14-A	Lab Sample ID:	720-88192-14	Worklist Smp#:	15
Client ID:	DG-L5S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291817.D
Lims ID: 720-88192-B-14-A
Client ID: DG-L5S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 13:48:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-B-14 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 30-Aug-2018 08:41:51 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

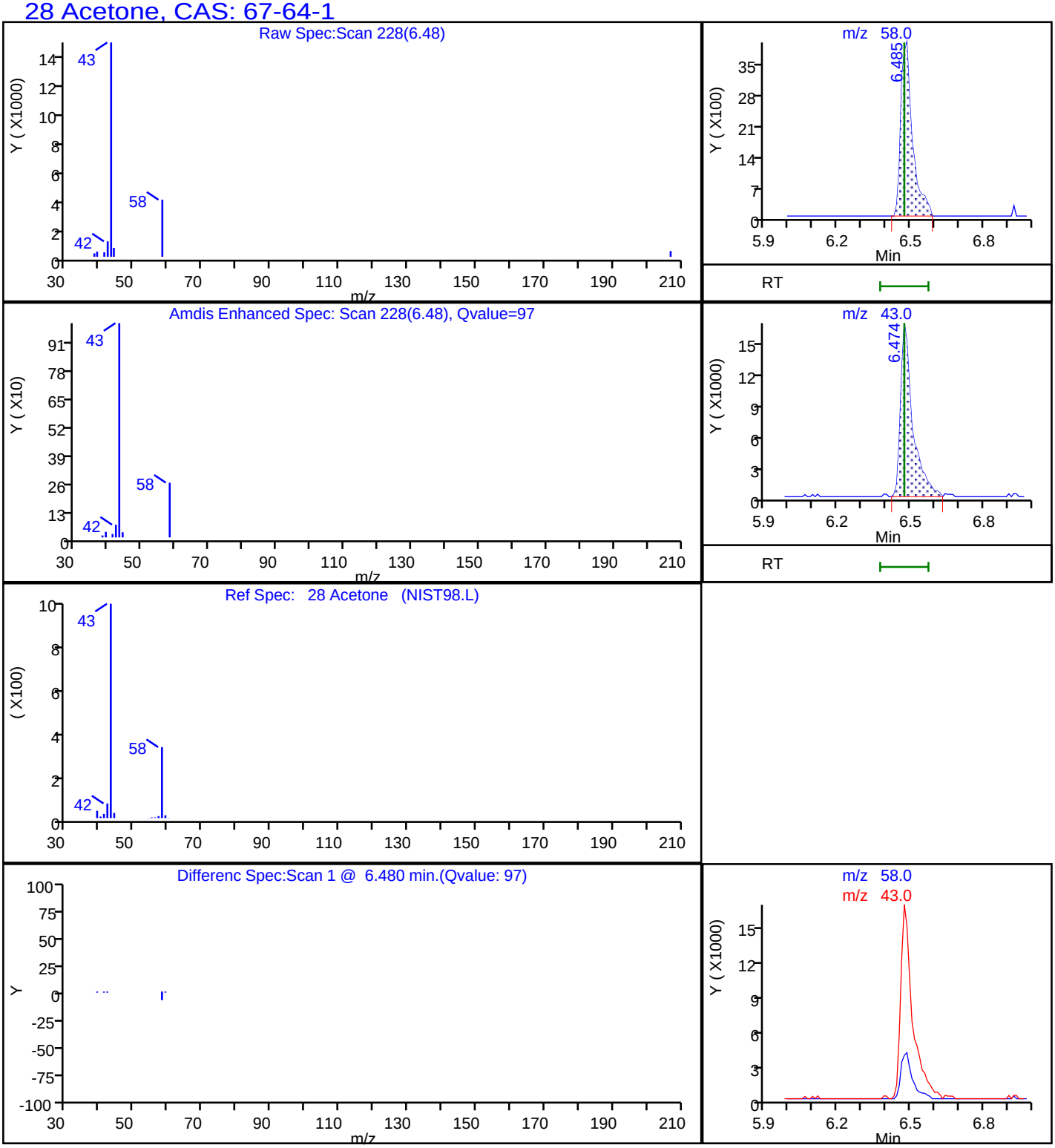
First Level Reviewer: chaijita Date: 30-Aug-2018 08:42:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	9.06	120.85
$ 10 Toluene-d8 (Surr)	7.50	6.65	88.65
$ 11 4-Bromofluorobenzene	7.50	5.74	76.60
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291817.D				
Injection Date:	29-Aug-2018 13:48:30	Instrument ID:	CHMSV2		
Lims ID:	720-88192-B-14-A	Lab Sample ID:	720-88192-14		
Client ID:	DG-L5S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1

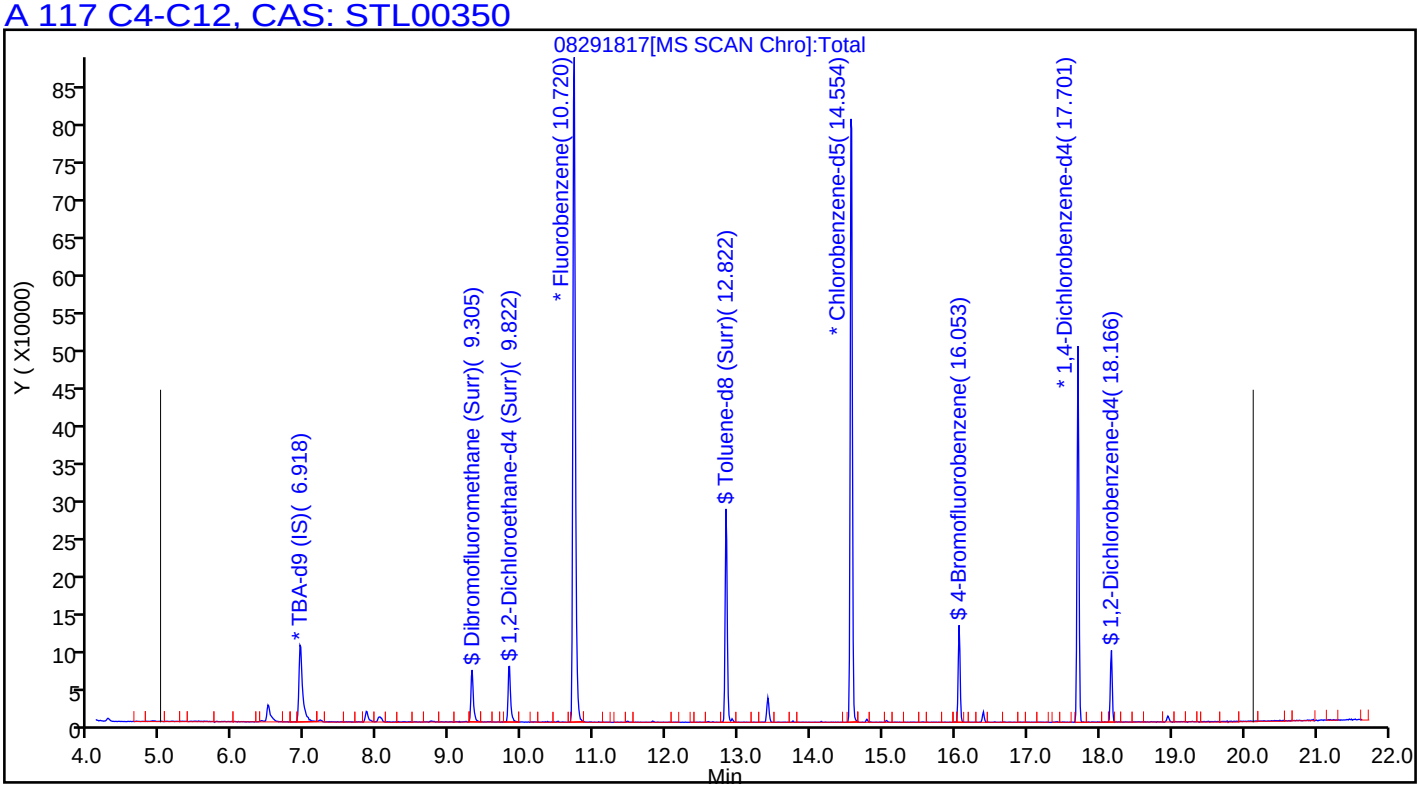


Report Date: 30-Aug-2018 08:42:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291817.D				
Injection Date:	29-Aug-2018 13:48:30	Instrument ID:	CHMSV2		
Lims ID:	720-88192-B-14-A	Lab Sample ID:	720-88192-14		
Client ID:	DG-L5S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-L5S-3.5-4 Lab Sample ID: 720-88192-15

Matrix: Solid Lab File ID: 08281819.D

Analysis Method: 8260B Date Collected: 08/22/2018 11:20

Sample wt/vol: 5.895(g) Date Analyzed: 08/28/2018 17:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250345 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.2	1.0
67-64-1	Acetone	46		42	32
71-43-2	Benzene	ND		4.2	0.55
75-27-4	Dichlorobromomethane	ND		4.2	0.61
108-86-1	Bromobenzene	ND		4.2	0.67
74-97-5	Chlorobromomethane	ND		17	0.61
75-25-2	Bromoform	ND		4.2	1.7
74-83-9	Bromomethane	ND		8.5	0.67
78-93-3	2-Butanone (MEK)	ND		42	18
104-51-8	n-Butylbenzene	ND		4.2	0.85
135-98-8	sec-Butylbenzene	ND		4.2	0.61
98-06-6	tert-Butylbenzene	ND		4.2	0.62
75-15-0	Carbon disulfide	ND		4.2	1.7
56-23-5	Carbon tetrachloride	ND		4.2	0.53
108-90-7	Chlorobenzene	ND		4.2	0.59
75-00-3	Chloroethane	ND		8.5	0.47
67-66-3	Chloroform	ND		4.2	0.56
74-87-3	Chloromethane	ND		8.5	0.67
95-49-8	2-Chlorotoluene	ND		4.2	0.55
106-43-4	4-Chlorotoluene	ND		4.2	0.58
124-48-1	Chlorodibromomethane	ND		4.2	0.60
95-50-1	1,2-Dichlorobenzene	ND		4.2	0.58
541-73-1	1,3-Dichlorobenzene	ND		4.2	0.61
106-46-7	1,4-Dichlorobenzene	ND		4.2	0.60
142-28-9	1,3-Dichloropropane	ND		4.2	0.62
563-58-6	1,1-Dichloropropene	ND		4.2	0.59
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.5	1.4
106-93-4	Ethylene Dibromide	ND		4.2	1.2
74-95-3	Dibromomethane	ND		8.5	0.73
75-71-8	Dichlorodifluoromethane	ND		8.5	0.67
75-34-3	1,1-Dichloroethane	ND		4.2	0.58
107-06-2	1,2-Dichloroethane	ND		4.2	0.64
75-35-4	1,1-Dichloroethene	ND		4.2	0.53
156-59-2	cis-1,2-Dichloroethene	ND		4.2	0.58
156-60-5	trans-1,2-Dichloroethene	ND		4.2	0.64
78-87-5	1,2-Dichloropropane	ND		4.2	0.53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-L5S-3.5-4 Lab Sample ID: 720-88192-15

Matrix: Solid Lab File ID: 08281819.D

Analysis Method: 8260B Date Collected: 08/22/2018 11:20

Sample wt/vol: 5.895(g) Date Analyzed: 08/28/2018 17:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250345 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.2	0.59
10061-02-6	trans-1,3-Dichloropropene	ND		4.2	0.57
100-41-4	Ethylbenzene	ND		4.2	0.64
87-68-3	Hexachlorobutadiene	ND		4.2	0.76
591-78-6	2-Hexanone	ND		42	8.5
98-82-8	Isopropylbenzene	ND		4.2	0.58
99-87-6	4-Isopropyltoluene	ND		4.2	2.1
75-09-2	Methylene Chloride	ND		8.5	4.7
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		42	8.5
91-20-3	Naphthalene	ND		8.5	1.3
103-65-1	N-Propylbenzene	ND		4.2	0.56
100-42-5	Styrene	ND		4.2	0.53
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.2	0.64
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.2	0.64
127-18-4	Tetrachloroethene	ND		4.2	0.57
108-88-3	Toluene	ND		4.2	0.60
87-61-6	1,2,3-Trichlorobenzene	ND		4.2	0.63
120-82-1	1,2,4-Trichlorobenzene	ND		4.2	0.60
71-55-6	1,1,1-Trichloroethane	ND		4.2	0.52
79-00-5	1,1,2-Trichloroethane	ND		4.2	0.59
79-01-6	Trichloroethene	ND		4.2	0.53
75-69-4	Trichlorofluoromethane	ND		4.2	0.47
96-18-4	1,2,3-Trichloropropane	ND		4.2	0.65
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	1.8
95-63-6	1,2,4-Trimethylbenzene	ND		4.2	1.4
108-67-8	1,3,5-Trimethylbenzene	ND		4.2	0.55
108-05-4	Vinyl acetate	ND		17	4.2
75-01-4	Vinyl chloride	ND		4.2	0.62
1330-20-7	Xylenes, Total	ND		4.2	1.0
594-20-7	2,2-Dichloropropane	ND		4.2	1.7
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		210	85

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DG-L5S-3.5-4 Lab Sample ID: 720-88192-15

Matrix: Solid Lab File ID: 08281819.D

Analysis Method: 8260B Date Collected: 08/22/2018 11:20

Sample wt/vol: 5.895(g) Date Analyzed: 08/28/2018 17:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250345 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	94		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		60-140
2037-26-5	Toluene-d8 (Surr)	98		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281819.D
Lims ID: 720-88192-A-15-A
Client ID: DG-L5S--3.5-4
Sample Type: Client
Inject. Date: 28-Aug-2018 17:17:30 ALS Bottle#: 18 Worklist Smp#: 23
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-A-15
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:48:36 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:50:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.091	7.093	-0.002	98	168122	250.0	
* 2 Fluorobenzene	96	10.898	10.901	-0.003	98	803053	25.0	
* 4 Chlorobenzene-d5	117	14.746	14.738	0.008	87	543125	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.885	17.878	0.007	94	247712	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.491	9.483	0.008	53	55902	7.67	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.007	10.000	0.008	98	61310	8.57	
$ 10 Toluene-d8 (Surr)	98	13.005	13.007	-0.002	93	212727	7.36	
$ 11 4-Bromofluorobenzene	95	16.235	16.238	0.008	86	69575	7.05	
$ 12 1,2-Dichlorobenzene-d4	152	18.341	18.354	-0.002	80	56170	6.14	
28 Acetone	58	6.645	6.638	0.007	94	13530	27.2	
34 Methylene Chloride	84	7.364	7.357	0.008	28	1126	0.1561	
126 Butyl Ether	87	14.949	14.948	0.008	47	1550	0.2625	
29 Pentane	43	6.645	6.675	-0.030	37	48479	NR	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	352603	5.27	
A 153 C6-C8	1	11.142	(8.825-13.459)		0	96748	1.45	
A 154 C6-C9	1	12.099	(8.825-15.373)		0	151104	2.26	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	391777	5.86	
A 119 C6-C10	1	12.980	(8.825-17.135)		0	159190	2.38	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	358714	5.37	
A 120 C6-C12	1	14.540	(8.825-20.255)		0	196318	2.94	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	63467	0.9494	
A 121 C7-C12	1	15.719	(11.184-20.255)		0	144064	2.15	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

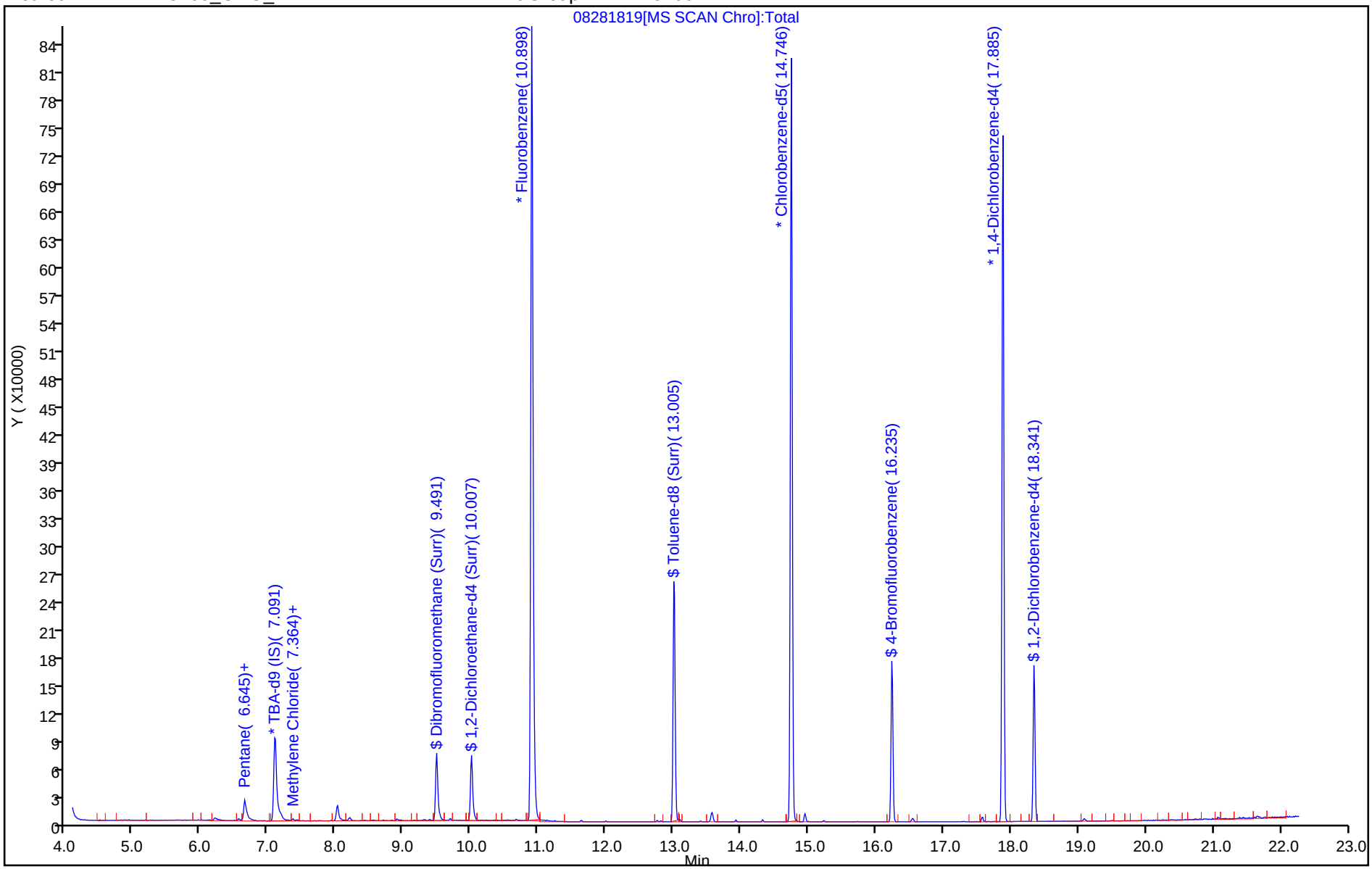
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:50:09 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281819.D

Injection Date:	28-Aug-2018 17:17:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88192-A-15-A	Lab Sample ID:	720-88192-15	Worklist Smp#:	23
Client ID:	DG-L5S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281819.D
Lims ID: 720-88192-A-15-A
Client ID: DG-L5S--3.5-4
Sample Type: Client
Inject. Date: 28-Aug-2018 17:17:30 ALS Bottle#: 18 Worklist Smp#: 23
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-A-15
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:48:36 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

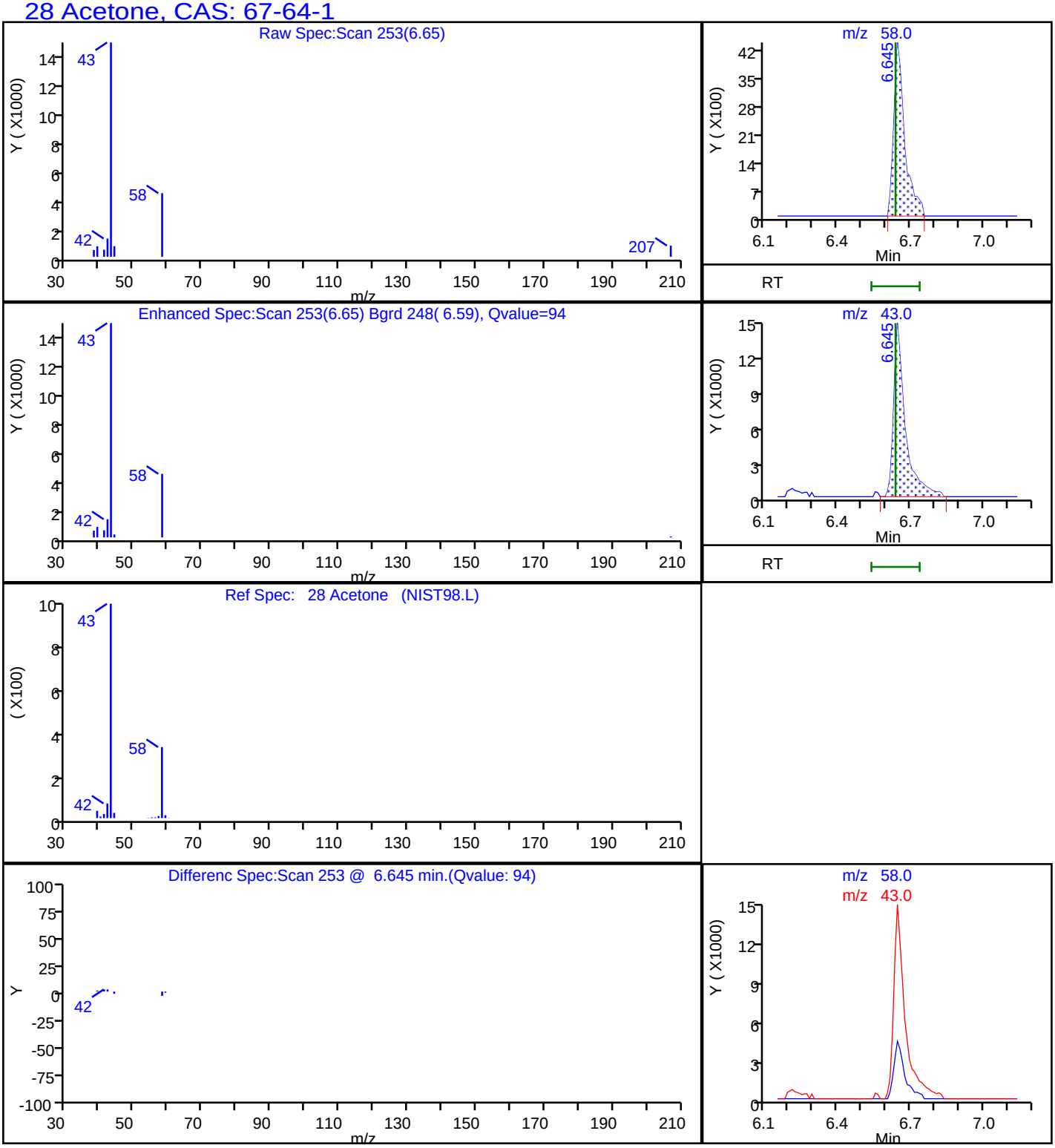
First Level Reviewer: chaijita Date: 29-Aug-2018 09:50:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.57	114.31
$ 10 Toluene-d8 (Surr)	7.50	7.36	98.14
$ 11 4-Bromofluorobenzene	7.50	7.05	93.95
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281819.D				
Injection Date:	28-Aug-2018 17:17:30	Instrument ID:	HP7		
Lims ID:	720-88192-A-15-A	Lab Sample ID:	720-88192-15		
Client ID:	DG-L5S--3.5-4				
Operator ID:	SF	ALS Bottle#:	18	Worklist Smp#:	23
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



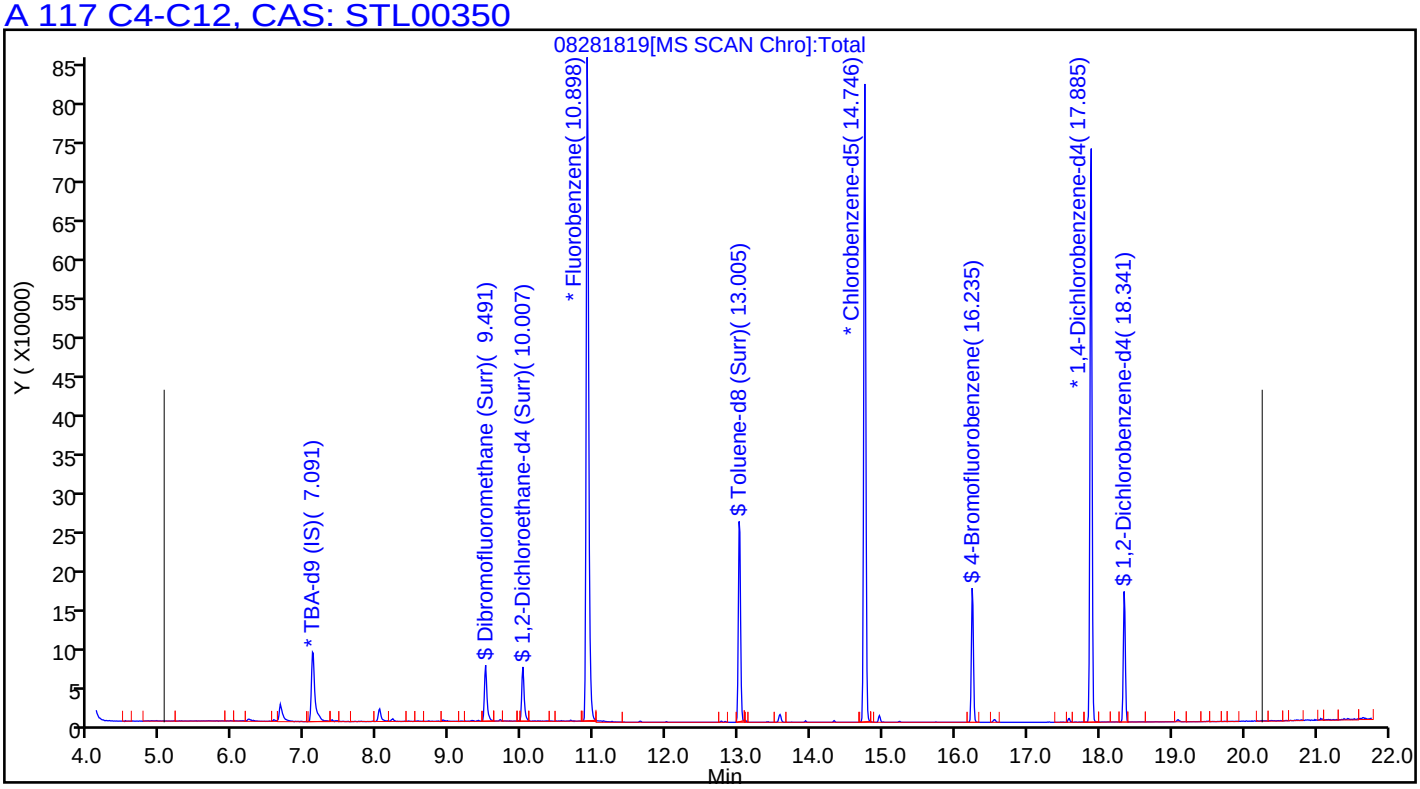
Report Date: 29-Aug-2018 09:50:10 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53512.b\08281819.D

Injection Date:	28-Aug-2018 17:17:30	Instrument ID:	HP7		
Lims ID:	720-88192-A-15-A	Lab Sample ID:	720-88192-15		
Client ID:	DG-L5S--3.5-4				
Operator ID:	SF	ALS Bottle#:	18	Worklist Smp#:	23
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DUP-02 Lab Sample ID: 720-88192-18

Matrix: Solid Lab File ID: 08291818.D

Analysis Method: 8260B Date Collected: 08/22/2018 00:00

Sample wt/vol: 6.357(g) Date Analyzed: 08/29/2018 14:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.9	0.94
67-64-1	Acetone	56		39	30
71-43-2	Benzene	ND		3.9	0.51
75-27-4	Dichlorobromomethane	ND		3.9	0.57
108-86-1	Bromobenzene	ND	*	3.9	0.62
74-97-5	Chlorobromomethane	ND		16	0.57
75-25-2	Bromoform	ND		3.9	1.6
74-83-9	Bromomethane	ND		7.9	0.62
78-93-3	2-Butanone (MEK)	ND		39	17
104-51-8	n-Butylbenzene	ND	*	3.9	0.79
135-98-8	sec-Butylbenzene	ND	*	3.9	0.57
98-06-6	tert-Butylbenzene	ND	*	3.9	0.57
75-15-0	Carbon disulfide	ND	*	3.9	1.6
56-23-5	Carbon tetrachloride	ND		3.9	0.49
108-90-7	Chlorobenzene	ND		3.9	0.54
75-00-3	Chloroethane	ND		7.9	0.44
67-66-3	Chloroform	ND		3.9	0.52
74-87-3	Chloromethane	ND		7.9	0.62
95-49-8	2-Chlorotoluene	ND	*	3.9	0.51
106-43-4	4-Chlorotoluene	ND	*	3.9	0.53
124-48-1	Chlorodibromomethane	ND		3.9	0.56
95-50-1	1,2-Dichlorobenzene	ND	*	3.9	0.53
541-73-1	1,3-Dichlorobenzene	ND	*	3.9	0.57
106-46-7	1,4-Dichlorobenzene	ND	*	3.9	0.56
142-28-9	1,3-Dichloropropane	ND		3.9	0.57
563-58-6	1,1-Dichloropropene	ND		3.9	0.54
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	7.9	1.3
106-93-4	Ethylene Dibromide	ND		3.9	1.1
74-95-3	Dibromomethane	ND		7.9	0.68
75-71-8	Dichlorodifluoromethane	ND		7.9	0.62
75-34-3	1,1-Dichloroethane	ND		3.9	0.53
107-06-2	1,2-Dichloroethane	ND		3.9	0.60
75-35-4	1,1-Dichloroethene	ND	*	3.9	0.49
156-59-2	cis-1,2-Dichloroethene	ND		3.9	0.53
156-60-5	trans-1,2-Dichloroethene	ND		3.9	0.59
78-87-5	1,2-Dichloropropane	ND		3.9	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DUP-02 Lab Sample ID: 720-88192-18

Matrix: Solid Lab File ID: 08291818.D

Analysis Method: 8260B Date Collected: 08/22/2018 00:00

Sample wt/vol: 6.357(g) Date Analyzed: 08/29/2018 14:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.9	0.54
10061-02-6	trans-1,3-Dichloropropene	ND		3.9	0.53
100-41-4	Ethylbenzene	ND		3.9	0.59
87-68-3	Hexachlorobutadiene	ND	*	3.9	0.71
591-78-6	2-Hexanone	ND		39	7.9
98-82-8	Isopropylbenzene	ND		3.9	0.53
99-87-6	4-Isopropyltoluene	ND	*	3.9	2.0
75-09-2	Methylene Chloride	ND		7.9	4.4
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		39	7.9
91-20-3	Naphthalene	ND	*	7.9	1.2
103-65-1	N-Propylbenzene	ND	*	3.9	0.52
100-42-5	Styrene	ND		3.9	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.9	0.60
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	3.9	0.59
127-18-4	Tetrachloroethene	ND		3.9	0.53
108-88-3	Toluene	ND		3.9	0.56
87-61-6	1,2,3-Trichlorobenzene	ND	*	3.9	0.58
120-82-1	1,2,4-Trichlorobenzene	ND	*	3.9	0.56
71-55-6	1,1,1-Trichloroethane	ND		3.9	0.48
79-00-5	1,1,2-Trichloroethane	ND		3.9	0.55
79-01-6	Trichloroethene	ND		3.9	0.50
75-69-4	Trichlorofluoromethane	ND		3.9	0.44
96-18-4	1,2,3-Trichloropropane	ND	*	3.9	0.61
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.9	1.6
95-63-6	1,2,4-Trimethylbenzene	ND	*	3.9	1.3
108-67-8	1,3,5-Trimethylbenzene	ND	*	3.9	0.51
108-05-4	Vinyl acetate	ND		16	3.9
75-01-4	Vinyl chloride	ND		3.9	0.57
1330-20-7	Xylenes, Total	ND		3.9	0.96
594-20-7	2,2-Dichloropropane	ND		3.9	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		200	79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: DUP-02 Lab Sample ID: 720-88192-18

Matrix: Solid Lab File ID: 08291818.D

Analysis Method: 8260B Date Collected: 08/22/2018 00:00

Sample wt/vol: 6.357(g) Date Analyzed: 08/29/2018 14:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	79		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	124		60-140
2037-26-5	Toluene-d8 (Surr)	91		58-140

Report Date: 30-Aug-2018 09:35:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291818.D
Lims ID: 720-88192-B-18-A
Client ID: DUP-02
Sample Type: Client
Inject. Date: 29-Aug-2018 14:16:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-B-18 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 30-Aug-2018 09:35:18 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 09:35:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	181886	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	810948	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	86	565623	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	95	174734	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.305	9.314	0.001	93	56852	8.28	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.821	0.011	0	68609	9.30	
$ 10 Toluene-d8 (Surr)	98	12.822	12.834	0.001	95	219102	6.80	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	90	52429	5.95	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	36577	5.98	
28 Acetone	58	6.474	6.480	0.000	97	22238	35.7	
34 Methylene Chloride	84	7.203	7.189	0.021	6	850	0.1388	
149 Methylcyclohexane	83	11.808	11.808	0.000	82	1425	0.0968	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	470251	7.51	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	130727	2.09	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	155590	2.49	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	532625	8.51	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	191548	3.06	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	191548	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	511398	8.17	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	253922	4.06	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	128828	2.06	
A 121 C7-C12	1	15.567	(11.005-20.130)		0	212800	3.40	

QC Flag Legend

Processing Flags

NC - Not Calibrated

s - Failed ISTD Recovery Test

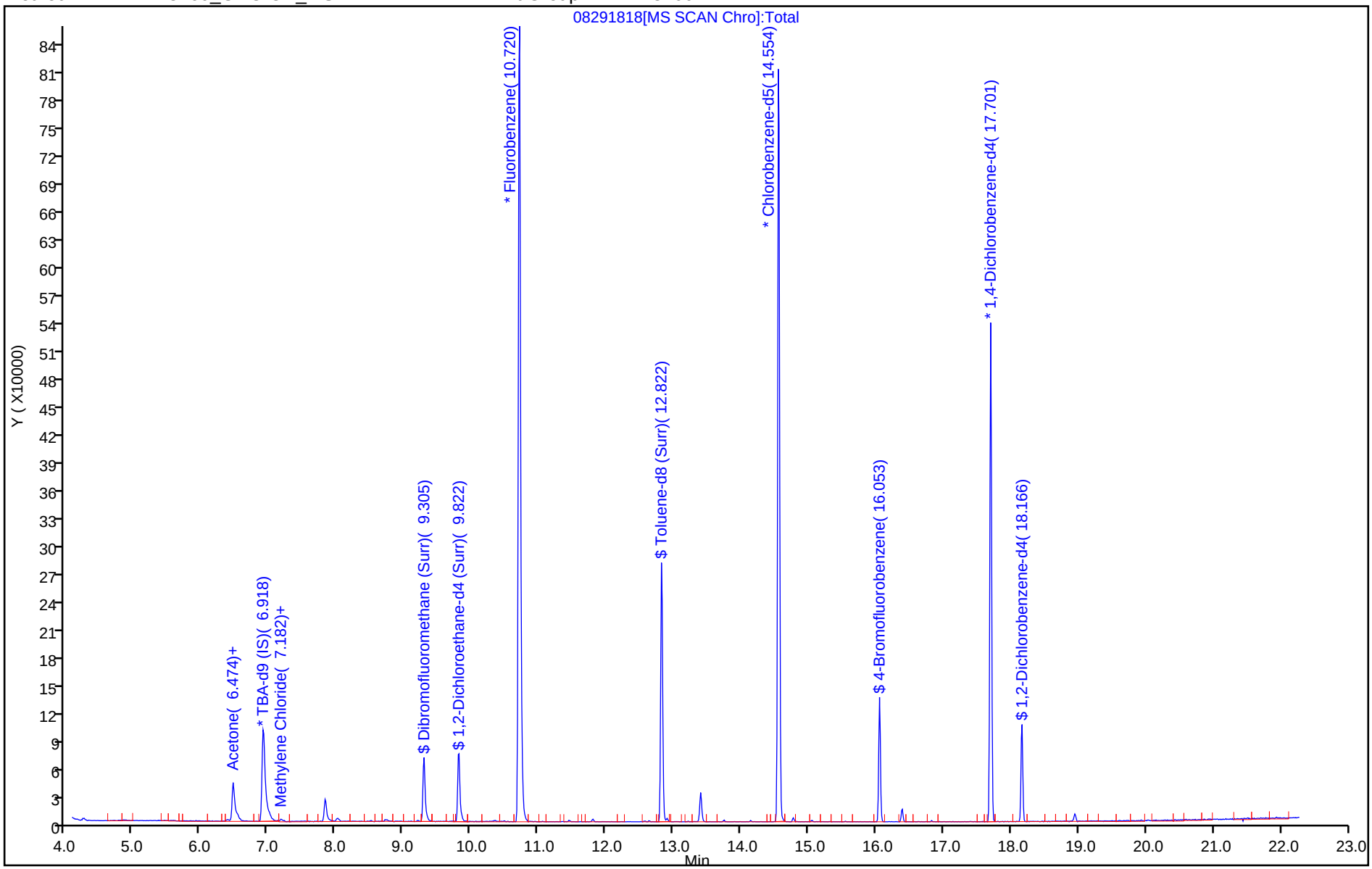
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 09:35:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291818.D				
Injection Date:	29-Aug-2018 14:16:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88192-B-18-A	Lab Sample ID:	720-88192-18	Worklist Smp#:	16
Client ID:	DUP-02				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291818.D
Lims ID: 720-88192-B-18-A
Client ID: DUP-02
Sample Type: Client
Inject. Date: 29-Aug-2018 14:16:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-B-18 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 30-Aug-2018 09:35:18 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

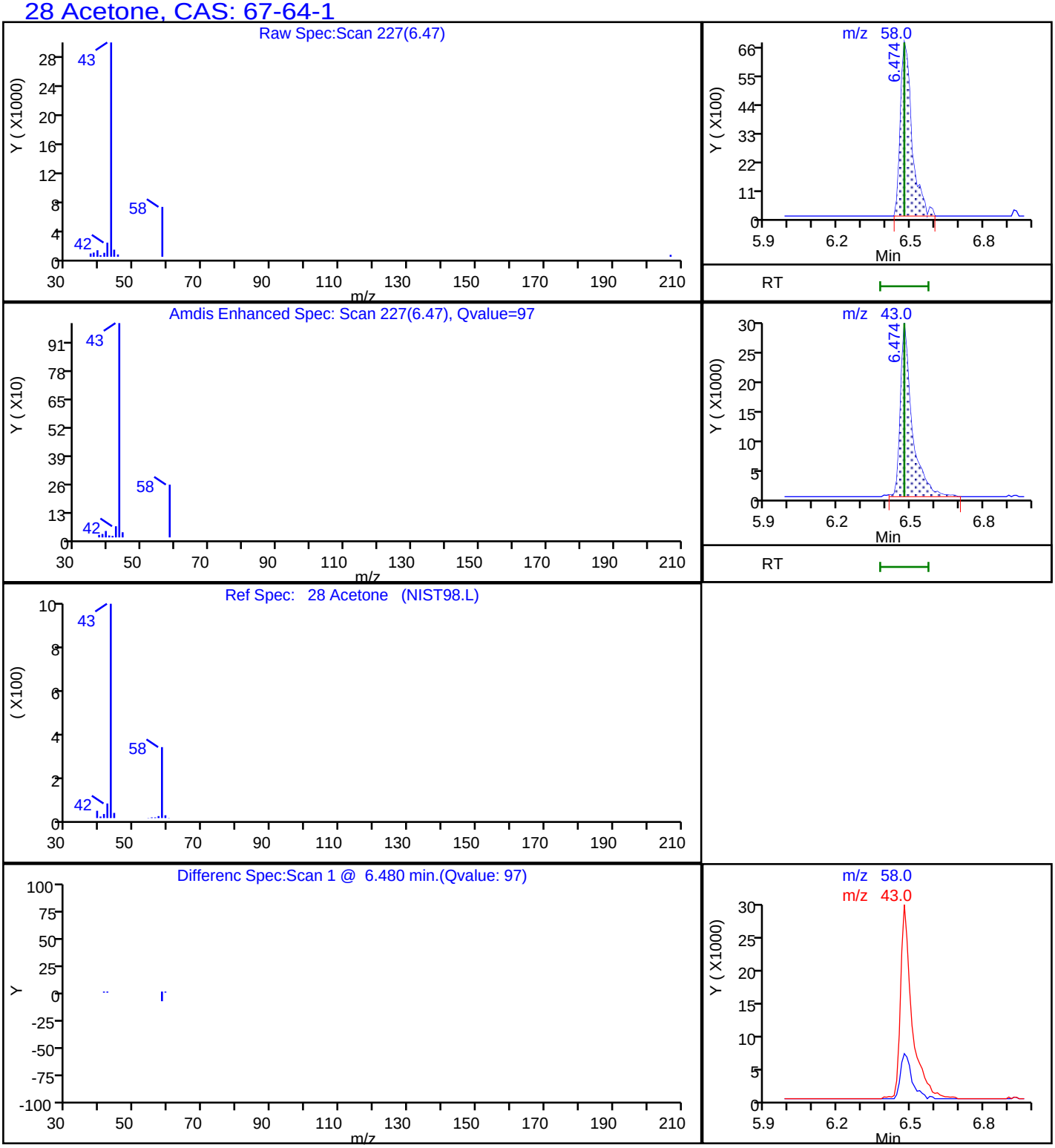
First Level Reviewer: chaijita Date: 30-Aug-2018 09:35:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	9.30	123.96
$ 10 Toluene-d8 (Surr)	7.50	6.80	90.73
$ 11 4-Bromofluorobenzene	7.50	5.95	79.37
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291818.D				
Injection Date:	29-Aug-2018 14:16:30	Instrument ID:	CHMSV2		
Lims ID:	720-88192-B-18-A	Lab Sample ID:	720-88192-18		
Client ID:	DUP-02				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



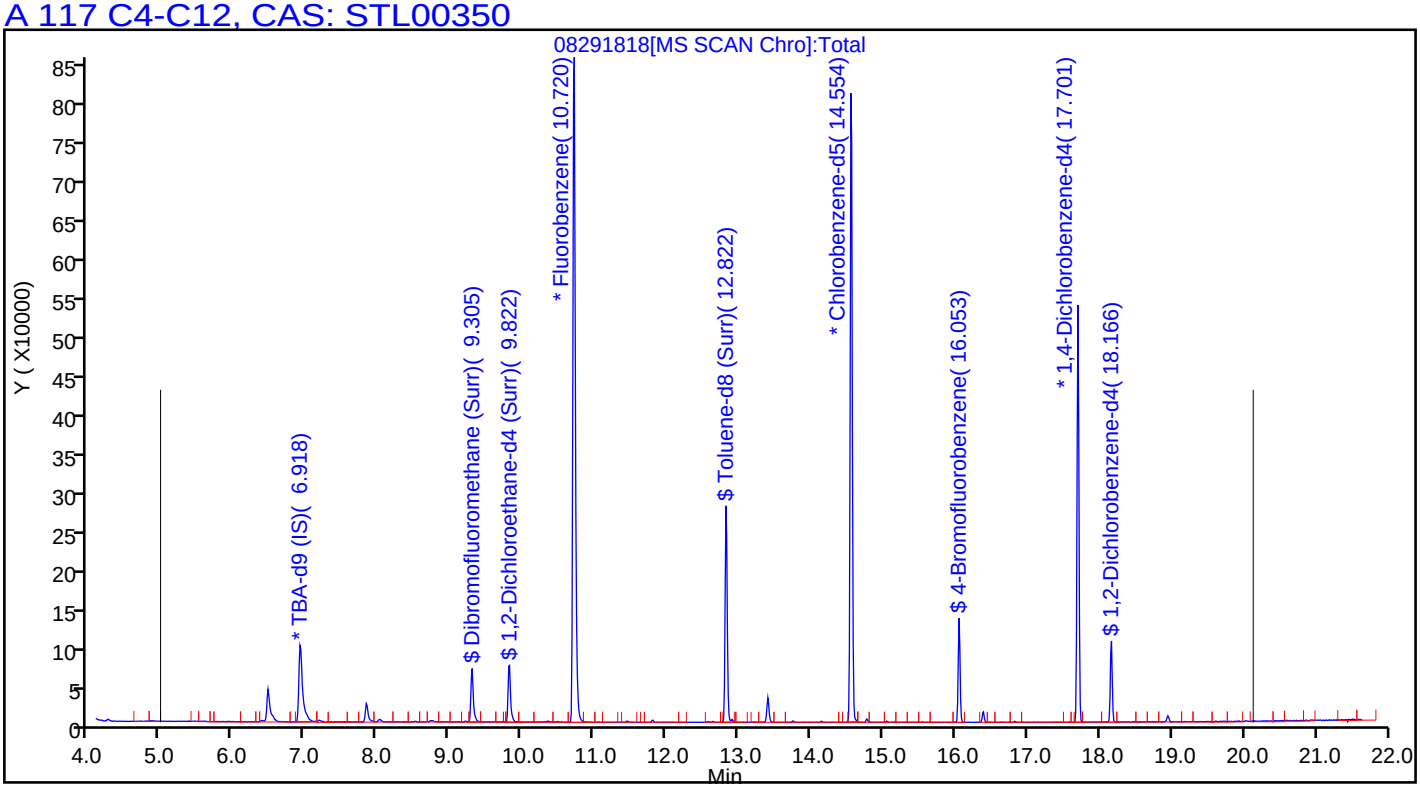
Report Date: 30-Aug-2018 09:35:20 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291818.D

Injection Date:	29-Aug-2018 14:16:30	Instrument ID:	CHMSV2		
Lims ID:	720-88192-B-18-A	Lab Sample ID:	720-88192-18		
Client ID:	DUP-02				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



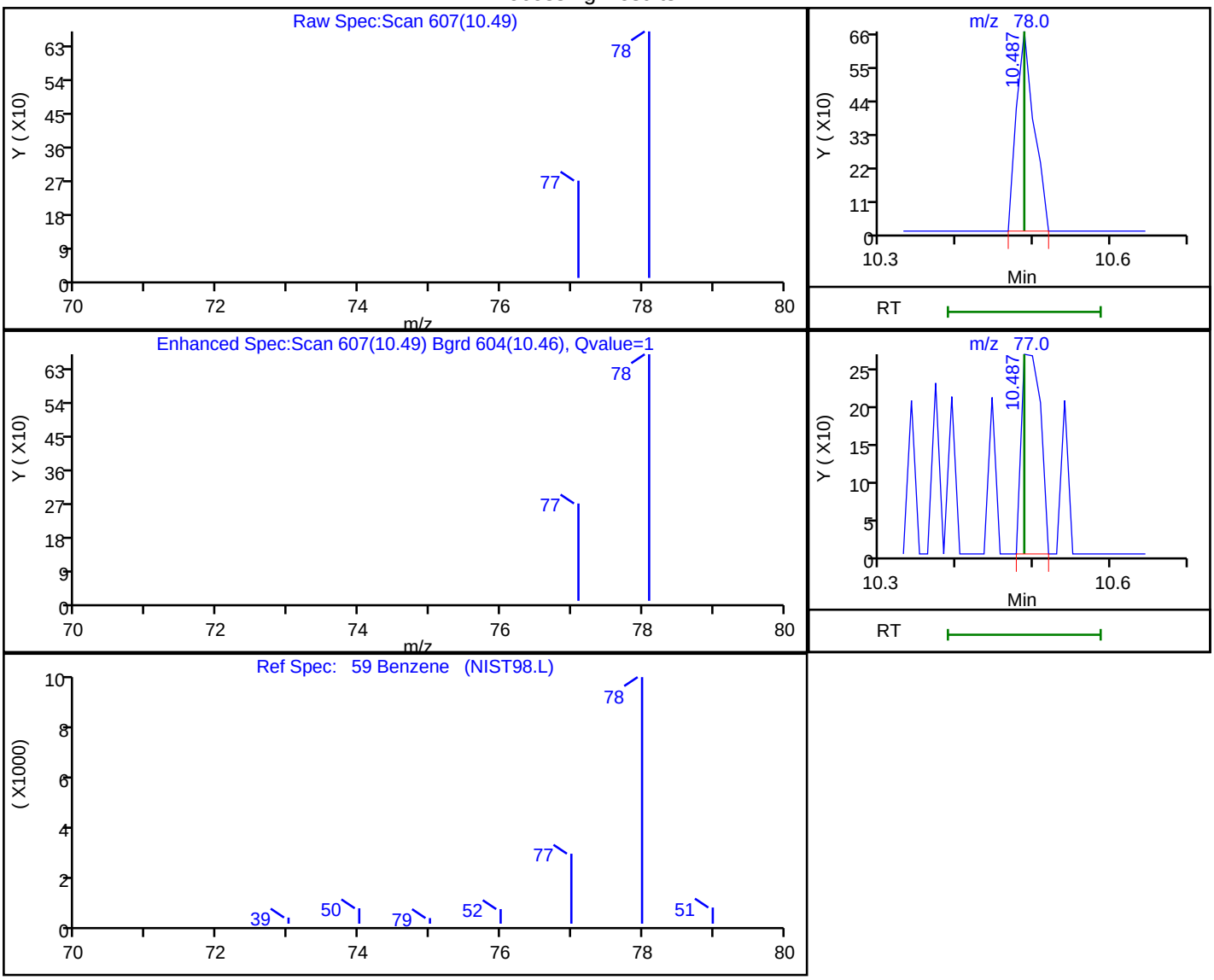
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291818.D				
Injection Date:	29-Aug-2018 14:16:30	Instrument ID:	CHMSV2		
Lims ID:	720-88192-B-18-A	Lab Sample ID:	720-88192-18		
Client ID:	DUP-02				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

59 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
10.49	78.00	1069	0.036543
10.49	77.00	460	

Reviewer: chaijita, 30-Aug-2018 09:34:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: TB-2 Lab Sample ID: 720-88192-20

Matrix: Water Lab File ID: 08291837.D

Analysis Method: 8260B Date Collected: 08/22/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 00:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250529 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND	*	0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: TB-2 Lab Sample ID: 720-88192-20

Matrix: Water Lab File ID: 08291837.D

Analysis Method: 8260B Date Collected: 08/22/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 00:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250529 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	ND		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	ND		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88192-1

SDG No.:

Client Sample ID: TB-2 Lab Sample ID: 720-88192-20

Matrix: Water Lab File ID: 08291837.D

Analysis Method: 8260B Date Collected: 08/22/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 00:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250529 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		72-130
460-00-4	4-Bromofluorobenzene	98		67-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

Report Date: 30-Aug-2018 10:29:10 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180829-53557.b\08291837.D
Lims ID: 720-88192-A-20
Client ID: TB-2
Sample Type: Client
Inject. Date: 30-Aug-2018 00:18:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-A-20 TB
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180829-53557.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 10:27:35 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: medinaj Date: 30-Aug-2018 10:29:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.819	0.000	0	268774	250.0	
* 2 Fluorobenzene	96	10.605	10.599	0.006	98	959287	25.0	
* 4 Chlorobenzene-d5	117	14.445	14.439	0.006	87	800240	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.585	17.579	0.006	95	432997	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.189	0.006	94	79946	7.43	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.708	0.006	0	99626	7.39	
$ 10 Toluene-d8 (Surr)	98	12.714	12.709	0.012	93	283104	7.30	
$ 11 4-Bromofluorobenzene	95	15.939	15.933	0.012	94	113939	7.32	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.042	0.006	84	97961	5.84	
28 Acetone	58	6.380	6.371	0.012	98	1179	1.05	
34 Methylene Chloride	84	7.087	7.079	0.012	85	849	0.0818	
54 Tetrahydrofuran	42	9.434	9.427	0.012	90	3567	0.9086	
59 Benzene	78	10.379	10.373	0.012	1	187	0.004581	7
149 1-Chlorohexane	55	14.445	14.362	0.091	33	8576	0.7009	
128 Butyl Ether	87	14.665	14.659	0.012	95	1164	0.1462	
87 Styrene	104	15.348	15.342	0.012	89	1333	0.0397	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	1087810	12.4	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	176150	2.00	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	475031	5.40	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1396779	15.9	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	1016293	11.6	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	1372033	15.6	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	1325262	15.1	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	850905	9.67	
A 121 C7-C12	1	15.448	(10.891-20.005)		0	1216327	13.8	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

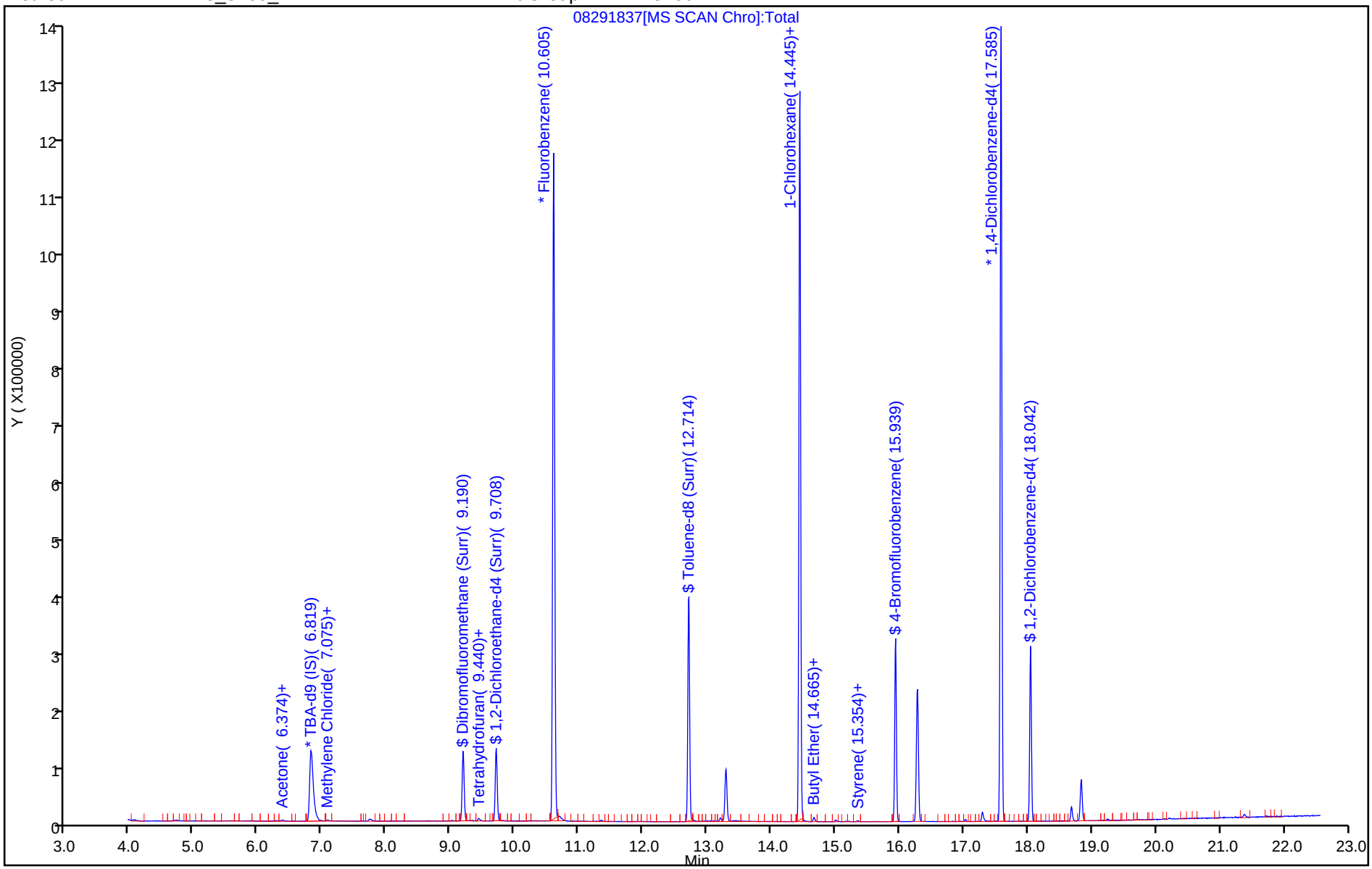
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 10:29:10 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180829-53557.b\08291837.D				
Injection Date:	30-Aug-2018 00:18:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88192-A-20	Lab Sample ID:	720-88192-20	Worklist Smp#:	14
Client ID:	TB-2				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180829-53557.b\08291837.D
Lims ID: 720-88192-A-20
Client ID: TB-2
Sample Type: Client
Inject. Date: 30-Aug-2018 00:18:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88192-A-20 TB
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180829-53557.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 10:27:35 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: medinaj Date: 30-Aug-2018 10:29:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.39	98.48
$ 10 Toluene-d8 (Surr)	7.50	7.30	97.30
$ 11 4-Bromofluorobenzene	7.50	7.32	97.62
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

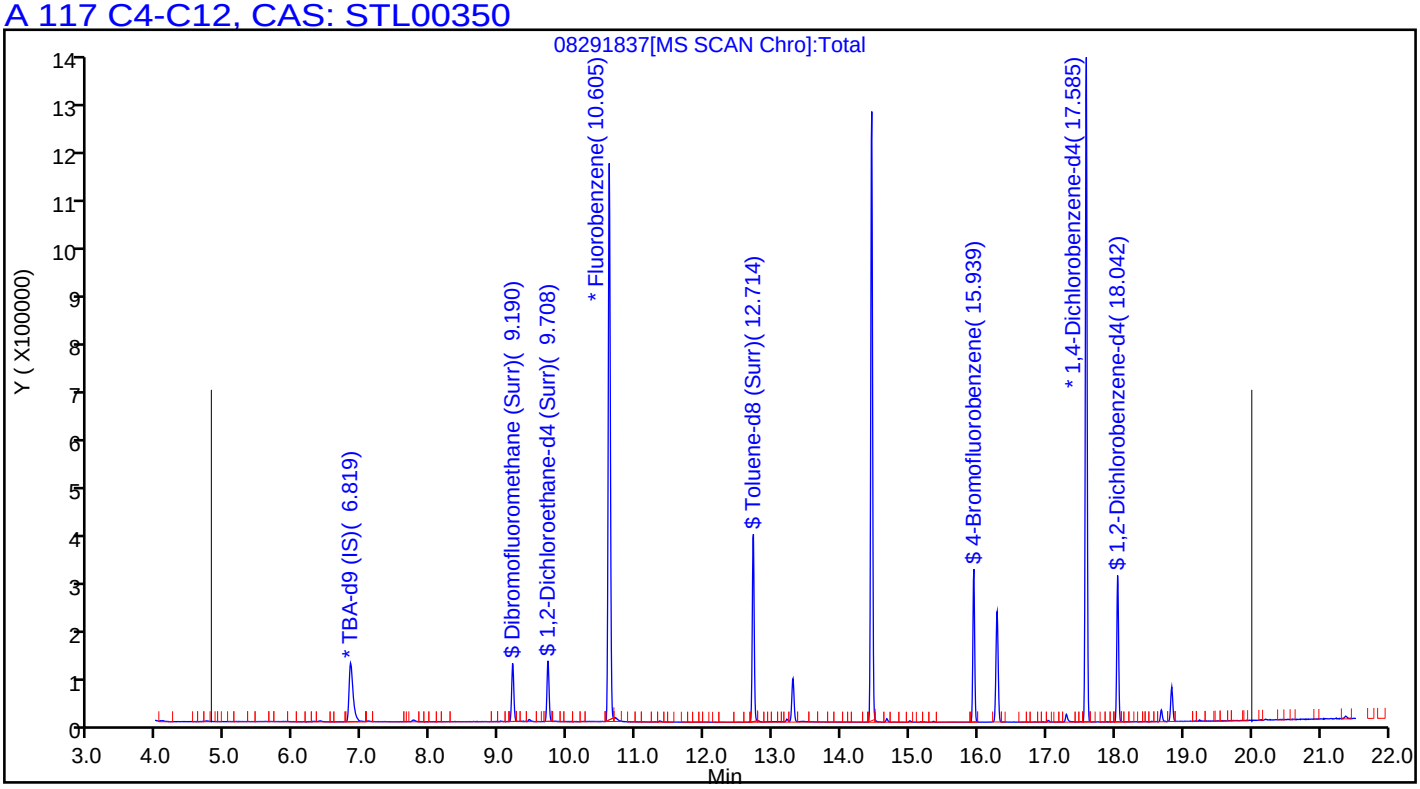
Report Date: 30-Aug-2018 10:29:11 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180829-53557.b\08291837.D

Injection Date:	30-Aug-2018 00:18:30	Instrument ID:	HP13		
Lims ID:	720-88192-A-20	Lab Sample ID:	720-88192-20		
Client ID:	TB-2				
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(45-131)	(60-140)	(58-140)
720-88192-1	DG-I3S-0.5-1	95	117	99
720-88192-2	DG-I3S-3.5-4	84	113	91
720-88192-5	DG-K3S-0.5-1	85	115	92
720-88192-6	DG-K3S-3.5-4	85 *	115 *	94 *
720-88192-9	DG-M3S-0.5-1	88	104	88
720-88192-10	DG-M3S-3.5-4	75 *	129	93
720-88192-11	DG-M3S-7.5-8	82	100	88
720-88192-14	DG-L5S-0.5-1	77	121	89
720-88192-15	DG-L5S-3.5-4	94	114	98
720-88192-18	DUP-02	79	124	91
LCS 720-250345/5	Lab Control Sample	101	95	101
LCS 720-250345/7	Lab Control Sample	100	100	102
LCS 720-250350/5	Lab Control Sample	99	95	99
LCS 720-250350/7	Lab Control Sample	99	94	96
LCS 720-250352/5	Lab Control Sample	96	88	91
LCS 720-250352/7	Lab Control Sample	99	93	96
LCS 720-250405/5	Lab Control Sample	95	95	99
LCS 720-250405/7	Lab Control Sample	97	92	97
LCS 720-250407/5	Lab Control Sample	99	94	100
LCS 720-250407/7	Lab Control Sample	100	103	102
LCS 720-250453/5	Lab Control Sample	95	98	96
LCS 720-250453/7	Lab Control Sample	97	96	98
LCSD 720-250345/6	Lab Control Sample Dup	101	95	100
LCSD 720-250345/8	Lab Control Sample Dup	100	101	102
LCSD 720-250350/6	Lab Control Sample Dup	99	94	97
LCSD 720-250350/8	Lab Control Sample Dup	100	95	97
LCSD 720-250352/6	Lab Control Sample Dup	95	94	97
LCSD 720-250352/8	Lab Control Sample Dup	96	93	101
LCSD 720-250405/6	Lab Control Sample Dup	98	92	98
LCSD 720-250405/8	Lab Control Sample Dup	95	95	96
LCSD 720-250407/6	Lab Control Sample Dup	101	97	101
LCSD 720-250407/8	Lab Control Sample Dup	100	103	102
LCSD 720-250453/6	Lab Control Sample Dup	93	96	96
LCSD 720-250453/8	Lab Control Sample Dup	99	101	97
MB 720-250345/4	Method Blank	98	102	103
MB 720-250350/4	Method Blank	102	94	95
MB 720-250352/4	Method Blank	96	89	95
MB 720-250405/4	Method Blank	100	94	97
MB 720-250407/4	Method Blank	99	103	102
MB 720-250453/4	Method Blank	95	100	96

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(72-130)	(67-130)	(70-130)
720-88192-20	TB-2	98	98	97
720-88210-A-3 MS	Matrix Spike	94	98	97
720-88210-A-3 MSD	Matrix Spike Duplicate	95	96	97
LCS 720-250529/5	Lab Control Sample	97	97	98
LCS 720-250529/7	Lab Control Sample	93	99	95
LCSD 720-250529/6	Lab Control Sample Dup	96	96	98
LCSD 720-250529/8	Lab Control Sample Dup	95	100	95
MB 720-250529/4	Method Blank	93	98	94

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
TOL = Toluene-d8 (Surr)

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		FBP	TPHL
Lab Sample ID	Client Sample ID	(33-120)	(35-146)
720-88190-E-11-A MS	Matrix Spike	72	91
720-88190-E-11-B MSD	Matrix Spike Duplicate	73	92
720-88192-1	DG-I3S-0.5-1	81	91
720-88192-2	DG-I3S-3.5-4	80	87
720-88192-5	DG-K3S-0.5-1	73	91
720-88192-6	DG-K3S-3.5-4	84	92
720-88192-9	DG-M3S-0.5-1	79	90
720-88192-10	DG-M3S-3.5-4	70	81
720-88192-11	DG-M3S-7.5-8	86	94
720-88192-14	DG-L5S-0.5-1	86	99
720-88192-15	DG-L5S-3.5-4	70	71
720-88192-18	DUP-02	63	99
720-88216-A-9-F MS	Matrix Spike	68	86
720-88216-A-9-G MSD	Matrix Spike Duplicate	74	88
LCS 720-250048/2-A	Lab Control Sample	75	88
LCS 720-250190/2-A	Lab Control Sample	86	106
MB 720-250048/1-A	Method Blank	92	93
MB 720-250190/1-A	Method Blank	98	96

Surrogate Legend

FBP = 2-Fluorobiphenyl
TPHL = Terphenyl-d14

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TPH1
Lab Sample ID	Client Sample ID	(40-130)
720-88186-D-5-A MS	Matrix Spike	0 D X

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TPH1 (40-130)
720-88186-D-5-B MSD	Matrix Spike Duplicate	0 D X
720-88190-D-10-A MS	Matrix Spike	88
720-88190-D-10-B MSD	Matrix Spike Duplicate	94
720-88192-1	DG-I3S-0.5-1	99
720-88192-2	DG-I3S-3.5-4	87
720-88192-5	DG-K3S-0.5-1	119
720-88192-6	DG-K3S-3.5-4	101
720-88192-9	DG-M3S-0.5-1	84
720-88192-10	DG-M3S-3.5-4	70
720-88192-11	DG-M3S-7.5-8	92
720-88192-14	DG-L5S-0.5-1	85
720-88192-15	DG-L5S-3.5-4	69
720-88192-18	DUP-02	60
LCS 720-250044/2-A	Lab Control Sample	94
LCS 720-250075/2-A	Lab Control Sample	89
MB 720-250044/1-A	Method Blank	97
MB 720-250075/1-A	Method Blank	92

Surrogate Legend

TPH = p-Terphenyl

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP1 (21-136)	TCX1 (21-145)
720-88186-D-1-C MS	Matrix Spike	63 p	74
720-88186-D-1-D MSD	Matrix Spike Duplicate	71	69
720-88190-D-10-E MS	Matrix Spike	71	77
720-88192-6	DG-K3S-3.5-4	114	112
720-88192-9	DG-M3S-0.5-1	92	87
720-88192-10	DG-M3S-3.5-4	89	89
720-88192-11	DG-M3S-7.5-8	86	80
720-88192-14	DG-L5S-0.5-1	0 X	0 X

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX1 (21-145)
720-88190-D-10-F MSD	Matrix Spike Duplicate	89	83

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP1 (21-136)	TCX2 (21-145)
720-88192-1	DG-I3S-0.5-1	92	88
720-88192-2	DG-I3S-3.5-4	92	96
720-88192-5	DG-K3S-0.5-1	105	96
LCS 720-250087/2-A	Lab Control Sample	107	86
MB 720-250087/1-A	Method Blank	108	89

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX2 (21-145)
720-88192-15	DG-L5S-3.5-4	104	79
720-88192-18	DUP-02	137 X	88
LCS 720-250053/2-A	Lab Control Sample	103	86
LCS 720-250087/2-A	Lab Control Sample	104	82
MB 720-250053/1-A	Method Blank	105	90

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX1 (14-128)	DCBP1 (10-132)
720-88192-1	DG-I3S-0.5-1	88	89
720-88192-2	DG-I3S-3.5-4	64	86
720-88192-6	DG-K3S-3.5-4	50	40
720-88192-9	DG-M3S-0.5-1	77 p	91 p
720-88192-10	DG-M3S-3.5-4	46	64
720-88192-11	DG-M3S-7.5-8	73	85
720-88192-14	DG-L5S-0.5-1	27	15 p
720-88192-18	DUP-02	85	108
720-88192-18 MS	DUP-02	14	21
720-88192-18 MSD	DUP-02	86	98
LCS 240-342523/14-A	Lab Control Sample	65	73
MB 240-342523/13-A	Method Blank	88	96

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	TCX2 (14-128)	DCBP2 (10-132)								
720-88192-5	DG-K3S-0.5-1	89	88								
720-88192-15	DG-L5S-3.5-4	45	34								
LCS 240-342977/25-A	Lab Control Sample	85	78								
MB 240-342977/24-A	Method Blank	83	85								

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-250345/4
Matrix: Solid
Analysis Batch: 250345

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:39	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:39	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 09:39	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:39	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 09:39	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 09:39	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:39	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 09:39	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 09:39	1
Acetone	ND		50	38	ug/Kg			08/28/18 09:39	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 09:39	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 09:39	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:39	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 09:39	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 09:39	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 09:39	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 09:39	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 09:39	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 09:39	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 09:39	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 09:39	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 09:39	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 09:39	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 09:39	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 09:39	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 09:39	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 09:39	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 09:39	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 09:39	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 09:39	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:39	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 09:39	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 09:39	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 09:39	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:39	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 09:39	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 09:39	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 09:39	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 09:39	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:39	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 09:39	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 09:39	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 09:39	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:39	1
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 09:39	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 09:39	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 09:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 09:39	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250345/4
Matrix: Solid
Analysis Batch: 250345

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 09:39	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 09:39	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 09:39	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 09:39	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 09:39	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:39	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 09:39	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 09:39	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 09:39	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 09:39	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 09:39	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 09:39	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 09:39	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 09:39	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 09:39	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 09:39	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 09:39	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 09:39	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 09:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*45 - 131*		*08/28/18 09:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*60 - 140*		*08/28/18 09:39*	*1*
Toluene-d8 (Surr)	*103*		*58 - 140*		*08/28/18 09:39*	*1*

Lab Sample ID: LCS 720-250345/5
Matrix: Solid
Analysis Batch: 250345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	50.0	44.9		ug/Kg		90	70 - 130
1,3-Dichlorobenzene	50.0	45.9		ug/Kg		92	70 - 131
2-Butanone (MEK)	250	226		ug/Kg		90	59 - 159
1,4-Dichlorobenzene	50.0	45.6		ug/Kg		91	70 - 130
2-Chlorotoluene	50.0	47.6		ug/Kg		95	70 - 138
1,3-Dichloropropane	50.0	44.3		ug/Kg		89	70 - 140
1,1-Dichloropropene	50.0	47.3		ug/Kg		95	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	43.3		ug/Kg		87	60 - 145
4-Chlorotoluene	50.0	48.3		ug/Kg		97	70 - 136
Acetone	250	215		ug/Kg		86	30 - 162
1,1-Dichloroethane	50.0	48.2		ug/Kg		96	70 - 130
Benzene	50.0	46.5		ug/Kg		93	70 - 130
1,2-Dichloroethane	50.0	44.5		ug/Kg		89	70 - 130
Bromobenzene	50.0	44.3		ug/Kg		89	70 - 130
1,1-Dichloroethene	50.0	49.9		ug/Kg		100	74 - 122
Bromoform	50.0	44.4		ug/Kg		89	59 - 158
Bromomethane	50.0	54.5		ug/Kg		109	59 - 132

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250345/5
Matrix: Solid
Analysis Batch: 250345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	50.0	48.4		ug/Kg		97	73 - 127
Carbon disulfide	50.0	54.7		ug/Kg		109	60 - 140
Carbon tetrachloride	50.0	47.7		ug/Kg		95	70 - 142
Chlorobenzene	50.0	45.6		ug/Kg		91	70 - 130
Chlorobromomethane	50.0	45.9		ug/Kg		92	70 - 130
Chlorodibromomethane	50.0	46.3		ug/Kg		93	70 - 146
2-Hexanone	250	243		ug/Kg		97	62 - 158
Chloroethane	50.0	52.6		ug/Kg		105	65 - 130
Chloroform	50.0	46.5		ug/Kg		93	77 - 127
4-Isopropyltoluene	50.0	48.7		ug/Kg		97	70 - 133
Chloromethane	50.0	56.0		ug/Kg		112	55 - 140
cis-1,2-Dichloroethene	50.0	47.8		ug/Kg		96	70 - 138
4-Methyl-2-pentanone (MIBK)	250	252		ug/Kg		101	60 - 160
cis-1,3-Dichloropropene	50.0	49.6		ug/Kg		99	68 - 147
Dibromomethane	50.0	44.0		ug/Kg		88	70 - 139
Dichlorobromomethane	50.0	46.6		ug/Kg		93	70 - 140
Dichlorodifluoromethane	50.0	54.8		ug/Kg		110	37 - 158
1,1,1,2-Tetrachloroethane	50.0	46.8		ug/Kg		94	70 - 130
Ethylbenzene	50.0	47.9		ug/Kg		96	80 - 137
1,1,2,2-Tetrachloroethane	50.0	43.9		ug/Kg		88	70 - 146
Ethylene Dibromide	50.0	45.1		ug/Kg		90	70 - 140
1,2,3-Trichlorobenzene	50.0	43.0		ug/Kg		86	60 - 140
1,2,4-Trichlorobenzene	50.0	44.4		ug/Kg		89	60 - 140
1,1,1-Trichloroethane	50.0	47.3		ug/Kg		95	70 - 130
1,1,2-Trichloroethane	50.0	45.9		ug/Kg		92	70 - 130
Hexachlorobutadiene	50.0	44.1		ug/Kg		88	70 - 132
Isopropylbenzene	50.0	46.8		ug/Kg		94	70 - 130
Methyl tert-butyl ether	50.0	45.1		ug/Kg		90	70 - 144
1,2,3-Trichloropropane	50.0	44.0		ug/Kg		88	70 - 146
Methylene Chloride	50.0	45.5		ug/Kg		91	70 - 134
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	52.2		ug/Kg		104	60 - 140
1,2,4-Trimethylbenzene	50.0	47.9		ug/Kg		96	70 - 130
Naphthalene	50.0	42.1		ug/Kg		84	60 - 147
1,3,5-Trimethylbenzene	50.0	47.8		ug/Kg		96	70 - 131
n-Butylbenzene	50.0	48.8		ug/Kg		98	70 - 142
N-Propylbenzene	50.0	49.6		ug/Kg		99	70 - 130
m-Xylene & p-Xylene	50.0	47.1		ug/Kg		94	70 - 146
sec-Butylbenzene	50.0	49.2		ug/Kg		98	70 - 136
o-Xylene	50.0	47.2		ug/Kg		94	70 - 140
Styrene	50.0	46.2		ug/Kg		92	70 - 130
tert-Butylbenzene	50.0	47.5		ug/Kg		95	70 - 130
Tetrachloroethene	50.0	46.2		ug/Kg		92	70 - 132
Toluene	50.0	45.8		ug/Kg		92	75 - 120
2,2-Dichloropropane	50.0	49.8		ug/Kg		100	70 - 162
trans-1,2-Dichloroethene	50.0	49.6		ug/Kg		99	67 - 130
trans-1,3-Dichloropropene	50.0	47.0		ug/Kg		94	70 - 155
Trichloroethene	50.0	44.3		ug/Kg		89	70 - 133

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250345/5
Matrix: Solid
Analysis Batch: 250345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichlorofluoromethane	50.0	56.4		ug/Kg		113	60 - 140
Vinyl acetate	50.0	53.1		ug/Kg		106	38 - 176
Vinyl chloride	50.0	55.3		ug/Kg		111	58 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: LCS 720-250345/7
Matrix: Solid
Analysis Batch: 250345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	990		ug/Kg		99	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: LCSD 720-250345/6
Matrix: Solid
Analysis Batch: 250345

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	50.0	45.0		ug/Kg		90	70 - 130	0	20
1,3-Dichlorobenzene	50.0	45.6		ug/Kg		91	70 - 131	1	20
2-Butanone (MEK)	250	216		ug/Kg		86	59 - 159	5	20
1,4-Dichlorobenzene	50.0	45.8		ug/Kg		92	70 - 130	1	20
2-Chlorotoluene	50.0	47.9		ug/Kg		96	70 - 138	1	20
1,3-Dichloropropane	50.0	44.3		ug/Kg		89	70 - 140	0	20
1,1-Dichloropropene	50.0	47.8		ug/Kg		96	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	42.6		ug/Kg		85	60 - 145	2	20
4-Chlorotoluene	50.0	48.1		ug/Kg		96	70 - 136	0	20
Acetone	250	210		ug/Kg		84	30 - 162	2	30
1,1-Dichloroethane	50.0	48.8		ug/Kg		98	70 - 130	1	20
Benzene	50.0	46.6		ug/Kg		93	70 - 130	0	20
1,2-Dichloroethane	50.0	44.9		ug/Kg		90	70 - 130	1	20
Bromobenzene	50.0	44.6		ug/Kg		89	70 - 130	1	20
1,1-Dichloroethene	50.0	50.3		ug/Kg		101	74 - 122	1	20
Bromoform	50.0	44.9		ug/Kg		90	59 - 158	1	20
Bromomethane	50.0	54.5		ug/Kg		109	59 - 132	0	20
1,2-Dichloropropane	50.0	48.5		ug/Kg		97	73 - 127	0	20
Carbon disulfide	50.0	54.3		ug/Kg		109	60 - 140	1	20
Carbon tetrachloride	50.0	48.1		ug/Kg		96	70 - 142	1	20
Chlorobenzene	50.0	46.0		ug/Kg		92	70 - 130	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250345/6
Matrix: Solid
Analysis Batch: 250345

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobromomethane			50.0	46.1		ug/Kg		92	70 - 130	0	20
Chlorodibromomethane			50.0	46.0		ug/Kg		92	70 - 146	1	20
2-Hexanone			250	241		ug/Kg		97	62 - 158	1	20
Chloroethane			50.0	53.2		ug/Kg		106	65 - 130	1	20
Chloroform			50.0	46.8		ug/Kg		94	77 - 127	1	20
4-Isopropyltoluene			50.0	49.3		ug/Kg		99	70 - 133	1	20
Chloromethane			50.0	56.1		ug/Kg		112	55 - 140	0	20
cis-1,2-Dichloroethene			50.0	48.0		ug/Kg		96	70 - 138	0	20
4-Methyl-2-pentanone (MIBK)			250	249		ug/Kg		99	60 - 160	1	20
cis-1,3-Dichloropropene			50.0	49.6		ug/Kg		99	68 - 147	0	20
Dibromomethane			50.0	44.4		ug/Kg		89	70 - 139	1	20
Dichlorobromomethane			50.0	46.2		ug/Kg		92	70 - 140	1	20
Dichlorodifluoromethane			50.0	54.6		ug/Kg		109	37 - 158	0	20
1,1,1,2-Tetrachloroethane			50.0	47.3		ug/Kg		95	70 - 130	1	20
Ethylbenzene			50.0	48.4		ug/Kg		97	80 - 137	1	20
1,1,2,2-Tetrachloroethane			50.0	44.2		ug/Kg		88	70 - 146	1	20
Ethylene Dibromide			50.0	45.2		ug/Kg		90	70 - 140	0	20
1,2,3-Trichlorobenzene			50.0	43.6		ug/Kg		87	60 - 140	1	20
1,2,4-Trichlorobenzene			50.0	44.6		ug/Kg		89	60 - 140	0	20
1,1,1-Trichloroethane			50.0	47.1		ug/Kg		94	70 - 130	0	20
1,1,2-Trichloroethane			50.0	46.3		ug/Kg		93	70 - 130	1	20
Hexachlorobutadiene			50.0	44.7		ug/Kg		89	70 - 132	2	20
Isopropylbenzene			50.0	47.5		ug/Kg		95	70 - 130	1	20
Methyl tert-butyl ether			50.0	45.3		ug/Kg		91	70 - 144	1	20
1,2,3-Trichloropropane			50.0	43.7		ug/Kg		87	70 - 146	1	20
Methylene Chloride			50.0	46.1		ug/Kg		92	70 - 134	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	51.8		ug/Kg		104	60 - 140	1	20
1,2,4-Trimethylbenzene			50.0	47.9		ug/Kg		96	70 - 130	0	20
Naphthalene			50.0	42.9		ug/Kg		86	60 - 147	2	20
1,3,5-Trimethylbenzene			50.0	47.8		ug/Kg		96	70 - 131	0	20
n-Butylbenzene			50.0	48.9		ug/Kg		98	70 - 142	0	20
N-Propylbenzene			50.0	49.5		ug/Kg		99	70 - 130	0	20
m-Xylene & p-Xylene			50.0	47.5		ug/Kg		95	70 - 146	1	20
sec-Butylbenzene			50.0	49.4		ug/Kg		99	70 - 136	1	20
o-Xylene			50.0	47.9		ug/Kg		96	70 - 140	1	20
Styrene			50.0	46.6		ug/Kg		93	70 - 130	1	20
tert-Butylbenzene			50.0	47.8		ug/Kg		96	70 - 130	1	20
Tetrachloroethene			50.0	45.2		ug/Kg		90	70 - 132	2	20
Toluene			50.0	46.2		ug/Kg		92	75 - 120	1	20
2,2-Dichloropropane			50.0	50.0		ug/Kg		100	70 - 162	0	20
trans-1,2-Dichloroethene			50.0	50.2		ug/Kg		100	67 - 130	1	20
trans-1,3-Dichloropropene			50.0	47.2		ug/Kg		94	70 - 155	0	20
Trichloroethene			50.0	44.5		ug/Kg		89	70 - 133	0	20
Trichlorofluoromethane			50.0	57.0		ug/Kg		114	60 - 140	1	20
Vinyl acetate			50.0	53.4		ug/Kg		107	38 - 176	1	20
Vinyl chloride			50.0	54.9		ug/Kg		110	58 - 125	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250345/6
Matrix: Solid
Analysis Batch: 250345

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*101*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCSD 720-250345/8
Matrix: Solid
Analysis Batch: 250345

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	980		ug/Kg		98	70 - 122	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: MB 720-250350/4
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:36	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 09:36	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 09:36	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 09:36	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:36	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 09:36	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
Acetone	ND		50	38	ug/Kg			08/28/18 09:36	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 09:36	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:36	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 09:36	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 09:36	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 09:36	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 09:36	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 09:36	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 09:36	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 09:36	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 09:36	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 09:36	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 09:36	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 09:36	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 09:36	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250350/4
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 09:36	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 09:36	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 09:36	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:36	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 09:36	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 09:36	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 09:36	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:36	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 09:36	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 09:36	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 09:36	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 09:36	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 09:36	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 09:36	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 09:36	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 09:36	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 09:36	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 09:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 09:36	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 09:36	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 09:36	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 09:36	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 09:36	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 09:36	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:36	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 09:36	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 09:36	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 09:36	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 09:36	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 09:36	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 09:36	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 09:36	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 09:36	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 09:36	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 09:36	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 09:36	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 09:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*45 - 131*		*08/28/18 09:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*		*08/28/18 09:36*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*		*08/28/18 09:36*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250350/5
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	50.0	45.7		ug/Kg		91	70 - 130
1,3-Dichlorobenzene	50.0	44.2		ug/Kg		88	70 - 131
2-Butanone (MEK)	250	246		ug/Kg		99	59 - 159
1,4-Dichlorobenzene	50.0	45.2		ug/Kg		90	70 - 130
2-Chlorotoluene	50.0	41.6		ug/Kg		83	70 - 138
1,3-Dichloropropane	50.0	46.3		ug/Kg		93	70 - 140
1,1-Dichloropropene	50.0	46.0		ug/Kg		92	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	50.7		ug/Kg		101	60 - 145
4-Chlorotoluene	50.0	42.0		ug/Kg		84	70 - 136
Acetone	250	264		ug/Kg		105	30 - 162
1,1-Dichloroethane	50.0	45.7		ug/Kg		91	70 - 130
Benzene	50.0	44.9		ug/Kg		90	70 - 130
1,2-Dichloroethane	50.0	44.9		ug/Kg		90	70 - 130
Bromobenzene	50.0	43.2		ug/Kg		86	70 - 130
1,1-Dichloroethene	50.0	51.9		ug/Kg		104	74 - 122
Bromoform	50.0	48.6		ug/Kg		97	59 - 158
Bromomethane	50.0	55.6		ug/Kg		111	59 - 132
1,2-Dichloropropane	50.0	45.8		ug/Kg		92	73 - 127
Carbon disulfide	50.0	55.6		ug/Kg		111	60 - 140
Carbon tetrachloride	50.0	47.8		ug/Kg		96	70 - 142
Chlorobenzene	50.0	45.6		ug/Kg		91	70 - 130
Chlorobromomethane	50.0	48.5		ug/Kg		97	70 - 130
Chlorodibromomethane	50.0	48.6		ug/Kg		97	70 - 146
2-Hexanone	250	272		ug/Kg		109	62 - 158
Chloroethane	50.0	52.3		ug/Kg		105	65 - 130
Chloroform	50.0	45.1		ug/Kg		90	77 - 127
4-Isopropyltoluene	50.0	45.2		ug/Kg		90	70 - 133
Chloromethane	50.0	57.1		ug/Kg		114	55 - 140
cis-1,2-Dichloroethene	50.0	45.3		ug/Kg		91	70 - 138
4-Methyl-2-pentanone (MIBK)	250	272		ug/Kg		109	60 - 160
cis-1,3-Dichloropropene	50.0	48.4		ug/Kg		97	68 - 147
Dibromomethane	50.0	45.6		ug/Kg		91	70 - 139
Dichlorobromomethane	50.0	45.7		ug/Kg		91	70 - 140
Dichlorodifluoromethane	50.0	62.3		ug/Kg		125	37 - 158
1,1,1,2-Tetrachloroethane	50.0	47.1		ug/Kg		94	70 - 130
Ethylbenzene	50.0	44.3		ug/Kg		89	80 - 137
1,1,2,2-Tetrachloroethane	50.0	44.6		ug/Kg		89	70 - 146
Ethylene Dibromide	50.0	48.1		ug/Kg		96	70 - 140
1,2,3-Trichlorobenzene	50.0	50.8		ug/Kg		102	60 - 140
1,2,4-Trichlorobenzene	50.0	49.8		ug/Kg		100	60 - 140
1,1,1-Trichloroethane	50.0	47.4		ug/Kg		95	70 - 130
1,1,2-Trichloroethane	50.0	48.0		ug/Kg		96	70 - 130
Hexachlorobutadiene	50.0	50.4		ug/Kg		101	70 - 132
Isopropylbenzene	50.0	46.2		ug/Kg		92	70 - 130
Methyl tert-butyl ether	50.0	45.9		ug/Kg		92	70 - 144
1,2,3-Trichloropropane	50.0	45.3		ug/Kg		91	70 - 146
Methylene Chloride	50.0	46.7		ug/Kg		93	70 - 134

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250350/5
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	59.8		ug/Kg		120	60 - 140
1,2,4-Trimethylbenzene	50.0	42.3		ug/Kg		85	70 - 130
Naphthalene	50.0	48.2		ug/Kg		96	60 - 147
1,3,5-Trimethylbenzene	50.0	42.3		ug/Kg		85	70 - 131
n-Butylbenzene	50.0	46.6		ug/Kg		93	70 - 142
N-Propylbenzene	50.0	42.6		ug/Kg		85	70 - 130
m-Xylene & p-Xylene	50.0	44.1		ug/Kg		88	70 - 146
sec-Butylbenzene	50.0	43.9		ug/Kg		88	70 - 136
o-Xylene	50.0	44.6		ug/Kg		89	70 - 140
Styrene	50.0	44.5		ug/Kg		89	70 - 130
tert-Butylbenzene	50.0	43.6		ug/Kg		87	70 - 130
Tetrachloroethene	50.0	48.2		ug/Kg		96	70 - 132
Toluene	50.0	44.7		ug/Kg		89	75 - 120
2,2-Dichloropropane	50.0	47.6		ug/Kg		95	70 - 162
trans-1,2-Dichloroethene	50.0	49.1		ug/Kg		98	67 - 130
trans-1,3-Dichloropropene	50.0	46.7		ug/Kg		93	70 - 155
Trichloroethene	50.0	47.0		ug/Kg		94	70 - 133
Trichlorofluoromethane	50.0	57.5		ug/Kg		115	60 - 140
Vinyl acetate	50.0	51.9		ug/Kg		104	38 - 176
Vinyl chloride	50.0	53.8		ug/Kg		108	58 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Lab Sample ID: LCS 720-250350/7
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	985		ug/Kg		99	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250350/6
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	50.0	45.5		ug/Kg		91	70 - 130	1	20
1,3-Dichlorobenzene	50.0	43.6		ug/Kg		87	70 - 131	1	20
2-Butanone (MEK)	250	259		ug/Kg		103	59 - 159	5	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250350/6
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene	50.0	44.2		ug/Kg		88	70 - 130	2	20
2-Chlorotoluene	50.0	40.9		ug/Kg		82	70 - 138	2	20
1,3-Dichloropropane	50.0	45.5		ug/Kg		91	70 - 140	2	20
1,1-Dichloropropene	50.0	43.8		ug/Kg		88	70 - 130	5	20
1,2-Dibromo-3-Chloropropane	50.0	50.9		ug/Kg		102	60 - 145	0	20
4-Chlorotoluene	50.0	41.5		ug/Kg		83	70 - 136	1	20
Acetone	250	260		ug/Kg		104	30 - 162	2	30
1,1-Dichloroethane	50.0	45.0		ug/Kg		90	70 - 130	2	20
Benzene	50.0	42.9		ug/Kg		86	70 - 130	5	20
1,2-Dichloroethane	50.0	44.4		ug/Kg		89	70 - 130	1	20
Bromobenzene	50.0	43.3		ug/Kg		87	70 - 130	0	20
1,1-Dichloroethene	50.0	50.3		ug/Kg		101	74 - 122	3	20
Bromoform	50.0	47.8		ug/Kg		96	59 - 158	2	20
Bromomethane	50.0	54.0		ug/Kg		108	59 - 132	3	20
1,2-Dichloropropane	50.0	44.2		ug/Kg		88	73 - 127	4	20
Carbon disulfide	50.0	51.7		ug/Kg		103	60 - 140	7	20
Carbon tetrachloride	50.0	44.8		ug/Kg		90	70 - 142	6	20
Chlorobenzene	50.0	44.8		ug/Kg		90	70 - 130	2	20
Chlorobromomethane	50.0	48.1		ug/Kg		96	70 - 130	1	20
Chlorodibromomethane	50.0	47.7		ug/Kg		95	70 - 146	2	20
2-Hexanone	250	269		ug/Kg		108	62 - 158	1	20
Chloroethane	50.0	50.5		ug/Kg		101	65 - 130	4	20
Chloroform	50.0	43.5		ug/Kg		87	77 - 127	4	20
4-Isopropyltoluene	50.0	44.1		ug/Kg		88	70 - 133	2	20
Chloromethane	50.0	53.4		ug/Kg		107	55 - 140	7	20
cis-1,2-Dichloroethene	50.0	43.6		ug/Kg		87	70 - 138	4	20
4-Methyl-2-pentanone (MIBK)	250	269		ug/Kg		107	60 - 160	1	20
cis-1,3-Dichloropropene	50.0	47.1		ug/Kg		94	68 - 147	3	20
Dibromomethane	50.0	45.9		ug/Kg		92	70 - 139	1	20
Dichlorobromomethane	50.0	45.0		ug/Kg		90	70 - 140	2	20
Dichlorodifluoromethane	50.0	58.8		ug/Kg		118	37 - 158	6	20
1,1,1,2-Tetrachloroethane	50.0	46.4		ug/Kg		93	70 - 130	1	20
Ethylbenzene	50.0	42.8		ug/Kg		86	80 - 137	4	20
1,1,2,2-Tetrachloroethane	50.0	44.5		ug/Kg		89	70 - 146	0	20
Ethylene Dibromide	50.0	47.2		ug/Kg		94	70 - 140	2	20
1,2,3-Trichlorobenzene	50.0	50.8		ug/Kg		102	60 - 140	0	20
1,2,4-Trichlorobenzene	50.0	50.0		ug/Kg		100	60 - 140	0	20
1,1,1-Trichloroethane	50.0	44.9		ug/Kg		90	70 - 130	5	20
1,1,2-Trichloroethane	50.0	46.5		ug/Kg		93	70 - 130	3	20
Hexachlorobutadiene	50.0	47.8		ug/Kg		96	70 - 132	5	20
Isopropylbenzene	50.0	44.7		ug/Kg		89	70 - 130	3	20
Methyl tert-butyl ether	50.0	46.2		ug/Kg		92	70 - 144	1	20
1,2,3-Trichloropropane	50.0	45.8		ug/Kg		92	70 - 146	1	20
Methylene Chloride	50.0	44.9		ug/Kg		90	70 - 134	4	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	55.0		ug/Kg		110	60 - 140	8	20
1,2,4-Trimethylbenzene	50.0	42.1		ug/Kg		84	70 - 130	1	20
Naphthalene	50.0	49.1		ug/Kg		98	60 - 147	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250350/6
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trimethylbenzene			50.0	41.7		ug/Kg		83	70 - 131	1	20
n-Butylbenzene			50.0	45.2		ug/Kg		90	70 - 142	3	20
N-Propylbenzene			50.0	41.5		ug/Kg		83	70 - 130	3	20
m-Xylene & p-Xylene			50.0	42.6		ug/Kg		85	70 - 146	3	20
sec-Butylbenzene			50.0	42.7		ug/Kg		85	70 - 136	3	20
o-Xylene			50.0	43.4		ug/Kg		87	70 - 140	3	20
Styrene			50.0	43.9		ug/Kg		88	70 - 130	1	20
tert-Butylbenzene			50.0	42.5		ug/Kg		85	70 - 130	3	20
Tetrachloroethene			50.0	46.0		ug/Kg		92	70 - 132	5	20
Toluene			50.0	43.0		ug/Kg		86	75 - 120	4	20
2,2-Dichloropropane			50.0	44.4		ug/Kg		89	70 - 162	7	20
trans-1,2-Dichloroethene			50.0	45.9		ug/Kg		92	67 - 130	7	20
trans-1,3-Dichloropropene			50.0	44.6		ug/Kg		89	70 - 155	5	20
Trichloroethene			50.0	45.6		ug/Kg		91	70 - 133	3	20
Trichlorofluoromethane			50.0	55.4		ug/Kg		111	60 - 140	4	20
Vinyl acetate			50.0	52.9		ug/Kg		106	38 - 176	2	20
Vinyl chloride			50.0	51.5		ug/Kg		103	58 - 125	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250350/8
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	976		ug/Kg		98	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: MB 720-250352/4
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:35	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:35	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 09:35	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:35	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 09:35	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 09:35	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:35	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250352/4
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 09:35	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 09:35	1
Acetone	ND		50	38	ug/Kg			08/28/18 09:35	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 09:35	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 09:35	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:35	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 09:35	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 09:35	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 09:35	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 09:35	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 09:35	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 09:35	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 09:35	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 09:35	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 09:35	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 09:35	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 09:35	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 09:35	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 09:35	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 09:35	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 09:35	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 09:35	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 09:35	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:35	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 09:35	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 09:35	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 09:35	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:35	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 09:35	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 09:35	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 09:35	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 09:35	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:35	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 09:35	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 09:35	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 09:35	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:35	1
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 09:35	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 09:35	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 09:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 09:35	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 09:35	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 09:35	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 09:35	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 09:35	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 09:35	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:35	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 09:35	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250352/4
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 09:35	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 09:35	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 09:35	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 09:35	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 09:35	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 09:35	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 09:35	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 09:35	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 09:35	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 09:35	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 09:35	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 09:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*45 - 131*		*08/28/18 09:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*60 - 140*		*08/28/18 09:35*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*		*08/28/18 09:35*	*1*

Lab Sample ID: LCS 720-250352/5
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	50.0	43.6		ug/Kg		87	70 - 130
1,3-Dichlorobenzene	50.0	45.4		ug/Kg		91	70 - 131
2-Butanone (MEK)	250	242		ug/Kg		97	59 - 159
1,4-Dichlorobenzene	50.0	44.1		ug/Kg		88	70 - 130
2-Chlorotoluene	50.0	45.3		ug/Kg		91	70 - 138
1,3-Dichloropropane	50.0	39.8		ug/Kg		80	70 - 140
1,1-Dichloropropene	50.0	47.0		ug/Kg		94	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	41.9		ug/Kg		84	60 - 145
4-Chlorotoluene	50.0	45.2		ug/Kg		90	70 - 136
Acetone	250	230		ug/Kg		92	30 - 162
1,1-Dichloroethane	50.0	43.5		ug/Kg		87	70 - 130
Benzene	50.0	44.7		ug/Kg		89	70 - 130
1,2-Dichloroethane	50.0	42.5		ug/Kg		85	70 - 130
Bromobenzene	50.0	42.8		ug/Kg		86	70 - 130
1,1-Dichloroethene	50.0	52.1		ug/Kg		104	74 - 122
Bromoform	50.0	40.2		ug/Kg		80	59 - 158
Bromomethane	50.0	56.9		ug/Kg		114	59 - 132
1,2-Dichloropropane	50.0	43.3		ug/Kg		87	73 - 127
Carbon disulfide	50.0	52.1		ug/Kg		104	60 - 140
Carbon tetrachloride	50.0	47.1		ug/Kg		94	70 - 142
Chlorobenzene	50.0	45.1		ug/Kg		90	70 - 130
Chlorobromomethane	50.0	43.1		ug/Kg		86	70 - 130
Chlorodibromomethane	50.0	39.8		ug/Kg		80	70 - 146
2-Hexanone	250	230		ug/Kg		92	62 - 158

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250352/5
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	50.0	53.3		ug/Kg		107	65 - 130
Chloroform	50.0	42.3		ug/Kg		85	77 - 127
4-Isopropyltoluene	50.0	46.2		ug/Kg		92	70 - 133
Chloromethane	50.0	54.5		ug/Kg		109	55 - 140
cis-1,2-Dichloroethene	50.0	43.0		ug/Kg		86	70 - 138
4-Methyl-2-pentanone (MIBK)	250	227		ug/Kg		91	60 - 160
cis-1,3-Dichloropropene	50.0	41.9		ug/Kg		84	68 - 147
Dibromomethane	50.0	44.0		ug/Kg		88	70 - 139
Dichlorobromomethane	50.0	43.0		ug/Kg		86	70 - 140
Dichlorodifluoromethane	50.0	67.2		ug/Kg		134	37 - 158
1,1,1,2-Tetrachloroethane	50.0	45.3		ug/Kg		91	70 - 130
Ethylbenzene	50.0	46.0		ug/Kg		92	80 - 137
1,1,2,2-Tetrachloroethane	50.0	45.0		ug/Kg		90	70 - 146
Ethylene Dibromide	50.0	42.8		ug/Kg		86	70 - 140
1,2,3-Trichlorobenzene	50.0	40.9		ug/Kg		82	60 - 140
1,2,4-Trichlorobenzene	50.0	41.6		ug/Kg		83	60 - 140
1,1,1-Trichloroethane	50.0	47.5		ug/Kg		95	70 - 130
1,1,2-Trichloroethane	50.0	43.4		ug/Kg		87	70 - 130
Hexachlorobutadiene	50.0	43.5		ug/Kg		87	70 - 132
Isopropylbenzene	50.0	47.6		ug/Kg		95	70 - 130
Methyl tert-butyl ether	50.0	42.2		ug/Kg		84	70 - 144
1,2,3-Trichloropropane	50.0	43.9		ug/Kg		88	70 - 146
Methylene Chloride	50.0	41.0		ug/Kg		82	70 - 134
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	52.8		ug/Kg		106	60 - 140
1,2,4-Trimethylbenzene	50.0	45.6		ug/Kg		91	70 - 130
Naphthalene	50.0	41.1		ug/Kg		82	60 - 147
1,3,5-Trimethylbenzene	50.0	46.1		ug/Kg		92	70 - 131
n-Butylbenzene	50.0	42.4		ug/Kg		85	70 - 142
N-Propylbenzene	50.0	46.0		ug/Kg		92	70 - 130
m-Xylene & p-Xylene	50.0	46.5		ug/Kg		93	70 - 146
sec-Butylbenzene	50.0	46.0		ug/Kg		92	70 - 136
o-Xylene	50.0	46.7		ug/Kg		93	70 - 140
Styrene	50.0	42.4		ug/Kg		85	70 - 130
tert-Butylbenzene	50.0	45.1		ug/Kg		90	70 - 130
Tetrachloroethene	50.0	46.8		ug/Kg		94	70 - 132
Toluene	50.0	43.3		ug/Kg		87	75 - 120
2,2-Dichloropropane	50.0	51.2		ug/Kg		102	70 - 162
trans-1,2-Dichloroethene	50.0	48.3		ug/Kg		97	67 - 130
trans-1,3-Dichloropropene	50.0	39.0		ug/Kg		78	70 - 155
Trichloroethene	50.0	45.5		ug/Kg		91	70 - 133
Trichlorofluoromethane	50.0	56.9		ug/Kg		114	60 - 140
Vinyl acetate	50.0	48.5		ug/Kg		97	38 - 176
Vinyl chloride	50.0	58.3		ug/Kg		117	58 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*88*		*60 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250352/5
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	*91*		*58 - 140*

Lab Sample ID: LCS 720-250352/7
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C4-C12			1000	1090		ug/Kg		109	70 - 122		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*93*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250352/6
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene			50.0	44.6		ug/Kg		89	70 - 130	2	20
1,3-Dichlorobenzene			50.0	45.5		ug/Kg		91	70 - 131	0	20
2-Butanone (MEK)			250	262		ug/Kg		105	59 - 159	8	20
1,4-Dichlorobenzene			50.0	44.0		ug/Kg		88	70 - 130	0	20
2-Chlorotoluene			50.0	47.8		ug/Kg		96	70 - 138	5	20
1,3-Dichloropropane			50.0	43.9		ug/Kg		88	70 - 140	10	20
1,1-Dichloropropene			50.0	46.9		ug/Kg		94	70 - 130	0	20
1,2-Dibromo-3-Chloropropane			50.0	43.1		ug/Kg		86	60 - 145	3	20
4-Chlorotoluene			50.0	47.2		ug/Kg		94	70 - 136	5	20
Acetone			250	243		ug/Kg		97	30 - 162	5	30
1,1-Dichloroethane			50.0	47.8		ug/Kg		96	70 - 130	9	20
Benzene			50.0	44.3		ug/Kg		89	70 - 130	1	20
1,2-Dichloroethane			50.0	43.7		ug/Kg		87	70 - 130	3	20
Bromobenzene			50.0	46.2		ug/Kg		92	70 - 130	8	20
1,1-Dichloroethene			50.0	55.6		ug/Kg		111	74 - 122	7	20
Bromoform			50.0	41.7		ug/Kg		83	59 - 158	4	20
Bromomethane			50.0	64.7		ug/Kg		129	59 - 132	13	20
1,2-Dichloropropane			50.0	44.1		ug/Kg		88	73 - 127	2	20
Carbon disulfide			50.0	57.0		ug/Kg		114	60 - 140	9	20
Carbon tetrachloride			50.0	47.9		ug/Kg		96	70 - 142	2	20
Chlorobenzene			50.0	43.9		ug/Kg		88	70 - 130	3	20
Chlorobromomethane			50.0	47.7		ug/Kg		95	70 - 130	10	20
Chlorodibromomethane			50.0	43.3		ug/Kg		87	70 - 146	8	20
2-Hexanone			250	248		ug/Kg		99	62 - 158	8	20
Chloroethane			50.0	60.5		ug/Kg		121	65 - 130	13	20
Chloroform			50.0	44.9		ug/Kg		90	77 - 127	6	20
4-Isopropyltoluene			50.0	45.8		ug/Kg		92	70 - 133	1	20
Chloromethane			50.0	61.3		ug/Kg		123	55 - 140	12	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250352/6
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene			50.0	46.8		ug/Kg		94	70 - 138	8	20
4-Methyl-2-pentanone (MIBK)			250	241		ug/Kg		96	60 - 160	6	20
cis-1,3-Dichloropropene			50.0	44.5		ug/Kg		89	68 - 147	6	20
Dibromomethane			50.0	43.9		ug/Kg		88	70 - 139	0	20
Dichlorobromomethane			50.0	44.3		ug/Kg		89	70 - 140	3	20
Dichlorodifluoromethane			50.0	72.9		ug/Kg		146	37 - 158	8	20
1,1,1,2-Tetrachloroethane			50.0	44.6		ug/Kg		89	70 - 130	2	20
Ethylbenzene			50.0	44.6		ug/Kg		89	80 - 137	3	20
1,1,2,2-Tetrachloroethane			50.0	46.8		ug/Kg		94	70 - 146	4	20
Ethylene Dibromide			50.0	45.7		ug/Kg		91	70 - 140	6	20
1,2,3-Trichlorobenzene			50.0	45.3		ug/Kg		91	60 - 140	10	20
1,2,4-Trichlorobenzene			50.0	45.8		ug/Kg		92	60 - 140	10	20
1,1,1-Trichloroethane			50.0	48.3		ug/Kg		97	70 - 130	2	20
1,1,2-Trichloroethane			50.0	45.2		ug/Kg		90	70 - 130	4	20
Hexachlorobutadiene			50.0	47.8		ug/Kg		96	70 - 132	9	20
Isopropylbenzene			50.0	47.7		ug/Kg		95	70 - 130	0	20
Methyl tert-butyl ether			50.0	46.5		ug/Kg		93	70 - 144	10	20
1,2,3-Trichloropropane			50.0	46.3		ug/Kg		93	70 - 146	5	20
Methylene Chloride			50.0	44.6		ug/Kg		89	70 - 134	8	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	55.1		ug/Kg		110	60 - 140	4	20
1,2,4-Trimethylbenzene			50.0	45.2		ug/Kg		90	70 - 130	1	20
Naphthalene			50.0	44.9		ug/Kg		90	60 - 147	9	20
1,3,5-Trimethylbenzene			50.0	45.1		ug/Kg		90	70 - 131	2	20
n-Butylbenzene			50.0	44.7		ug/Kg		89	70 - 142	5	20
N-Propylbenzene			50.0	47.7		ug/Kg		95	70 - 130	4	20
m-Xylene & p-Xylene			50.0	45.9		ug/Kg		92	70 - 146	1	20
sec-Butylbenzene			50.0	45.3		ug/Kg		91	70 - 136	2	20
o-Xylene			50.0	46.0		ug/Kg		92	70 - 140	1	20
Styrene			50.0	42.8		ug/Kg		86	70 - 130	1	20
tert-Butylbenzene			50.0	44.3		ug/Kg		89	70 - 130	2	20
Tetrachloroethene			50.0	48.2		ug/Kg		96	70 - 132	3	20
Toluene			50.0	42.9		ug/Kg		86	75 - 120	1	20
2,2-Dichloropropane			50.0	55.2		ug/Kg		110	70 - 162	7	20
trans-1,2-Dichloroethene			50.0	52.5		ug/Kg		105	67 - 130	8	20
trans-1,3-Dichloropropene			50.0	42.4		ug/Kg		85	70 - 155	8	20
Trichloroethene			50.0	46.7		ug/Kg		93	70 - 133	2	20
Trichlorofluoromethane			50.0	61.7		ug/Kg		123	60 - 140	8	20
Vinyl acetate			50.0	51.3		ug/Kg		103	38 - 176	6	20
Vinyl chloride			50.0	65.3	*	ug/Kg		131	58 - 125	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250352/8
Matrix: Solid
Analysis Batch: 250352

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1080		ug/Kg		108	70 - 122	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*93*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: MB 720-250405/4
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:56	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 19:56	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 19:56	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 19:56	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:56	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 19:56	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
Acetone	ND		50	38	ug/Kg			08/28/18 19:56	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 19:56	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:56	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 19:56	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 19:56	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 19:56	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 19:56	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 19:56	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 19:56	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 19:56	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 19:56	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 19:56	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 19:56	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 19:56	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 19:56	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 19:56	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 19:56	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 19:56	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:56	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 19:56	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 19:56	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 19:56	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:56	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250405/4
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 19:56	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 19:56	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 19:56	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 19:56	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 19:56	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 19:56	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 19:56	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 19:56	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 19:56	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 19:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 19:56	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 19:56	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 19:56	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 19:56	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 19:56	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 19:56	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:56	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 19:56	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 19:56	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 19:56	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 19:56	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 19:56	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 19:56	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 19:56	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 19:56	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 19:56	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 19:56	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 19:56	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 19:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*45 - 131*		*08/28/18 19:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*		*08/28/18 19:56*	*1*
Toluene-d8 (Surr)	*97*		*58 - 140*		*08/28/18 19:56*	*1*

Lab Sample ID: LCS 720-250405/5
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	50.0	50.7		ug/Kg		101	70 - 130
1,3-Dichlorobenzene	50.0	50.1		ug/Kg		100	70 - 131
2-Butanone (MEK)	250	239		ug/Kg		96	59 - 159
1,4-Dichlorobenzene	50.0	50.3		ug/Kg		101	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250405/5
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chlorotoluene	50.0	48.0		ug/Kg		96	70 - 138
1,3-Dichloropropane	50.0	49.5		ug/Kg		99	70 - 140
1,1-Dichloropropene	50.0	52.1		ug/Kg		104	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	51.4		ug/Kg		103	60 - 145
4-Chlorotoluene	50.0	48.3		ug/Kg		97	70 - 136
Acetone	250	226		ug/Kg		90	30 - 162
1,1-Dichloroethane	50.0	53.0		ug/Kg		106	70 - 130
Benzene	50.0	50.5		ug/Kg		101	70 - 130
1,2-Dichloroethane	50.0	51.6		ug/Kg		103	70 - 130
Bromobenzene	50.0	50.3		ug/Kg		101	70 - 130
1,1-Dichloroethene	50.0	64.5	*	ug/Kg		129	74 - 122
Bromoform	50.0	52.8		ug/Kg		106	59 - 158
Bromomethane	50.0	53.2		ug/Kg		106	59 - 132
1,2-Dichloropropane	50.0	51.2		ug/Kg		102	73 - 127
Carbon disulfide	50.0	69.8		ug/Kg		140	60 - 140
Carbon tetrachloride	50.0	55.1		ug/Kg		110	70 - 142
Chlorobenzene	50.0	51.1		ug/Kg		102	70 - 130
Chlorobromomethane	50.0	53.9		ug/Kg		108	70 - 130
Chlorodibromomethane	50.0	53.0		ug/Kg		106	70 - 146
2-Hexanone	250	237		ug/Kg		95	62 - 158
Chloroethane	50.0	49.5		ug/Kg		99	65 - 130
Chloroform	50.0	51.2		ug/Kg		102	77 - 127
4-Isopropyltoluene	50.0	50.7		ug/Kg		101	70 - 133
Chloromethane	50.0	53.9		ug/Kg		108	55 - 140
cis-1,2-Dichloroethene	50.0	51.7		ug/Kg		103	70 - 138
4-Methyl-2-pentanone (MIBK)	250	235		ug/Kg		94	60 - 160
cis-1,3-Dichloropropene	50.0	52.9		ug/Kg		106	68 - 147
Dibromomethane	50.0	49.6		ug/Kg		99	70 - 139
Dichlorobromomethane	50.0	50.2		ug/Kg		100	70 - 140
Dichlorodifluoromethane	50.0	57.8		ug/Kg		116	37 - 158
1,1,1,2-Tetrachloroethane	50.0	52.7		ug/Kg		105	70 - 130
Ethylbenzene	50.0	49.7		ug/Kg		99	80 - 137
1,1,2,2-Tetrachloroethane	50.0	47.1		ug/Kg		94	70 - 146
Ethylene Dibromide	50.0	51.5		ug/Kg		103	70 - 140
1,2,3-Trichlorobenzene	50.0	51.2		ug/Kg		102	60 - 140
1,2,4-Trichlorobenzene	50.0	52.2		ug/Kg		104	60 - 140
1,1,1-Trichloroethane	50.0	54.1		ug/Kg		108	70 - 130
1,1,2-Trichloroethane	50.0	50.3		ug/Kg		101	70 - 130
Hexachlorobutadiene	50.0	52.5		ug/Kg		105	70 - 132
Isopropylbenzene	50.0	51.4		ug/Kg		103	70 - 130
Methyl tert-butyl ether	50.0	50.0		ug/Kg		100	70 - 144
1,2,3-Trichloropropane	50.0	49.7		ug/Kg		99	70 - 146
Methylene Chloride	50.0	53.1		ug/Kg		106	70 - 134
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	69.7		ug/Kg		139	60 - 140
1,2,4-Trimethylbenzene	50.0	48.2		ug/Kg		96	70 - 130
Naphthalene	50.0	49.1		ug/Kg		98	60 - 147
1,3,5-Trimethylbenzene	50.0	48.9		ug/Kg		98	70 - 131

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250405/5
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
n-Butylbenzene	50.0	51.2		ug/Kg		102	70 - 142
N-Propylbenzene	50.0	49.2		ug/Kg		98	70 - 130
m-Xylene & p-Xylene	50.0	49.5		ug/Kg		99	70 - 146
sec-Butylbenzene	50.0	49.9		ug/Kg		100	70 - 136
o-Xylene	50.0	49.8		ug/Kg		100	70 - 140
Styrene	50.0	49.2		ug/Kg		98	70 - 130
tert-Butylbenzene	50.0	49.5		ug/Kg		99	70 - 130
Tetrachloroethene	50.0	54.4		ug/Kg		109	70 - 132
Toluene	50.0	51.0		ug/Kg		102	75 - 120
2,2-Dichloropropane	50.0	51.9		ug/Kg		104	70 - 162
trans-1,2-Dichloroethene	50.0	56.0		ug/Kg		112	67 - 130
trans-1,3-Dichloropropene	50.0	50.1		ug/Kg		100	70 - 155
Trichloroethene	50.0	53.9		ug/Kg		108	70 - 133
Trichlorofluoromethane	50.0	55.7		ug/Kg		111	60 - 140
Vinyl acetate	50.0	47.6		ug/Kg		95	38 - 176
Vinyl chloride	50.0	51.3		ug/Kg		103	58 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Lab Sample ID: LCS 720-250405/7
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	920		ug/Kg		92	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250405/6
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	50.0	50.1		ug/Kg		100	70 - 130	1	20
1,3-Dichlorobenzene	50.0	49.0		ug/Kg		98	70 - 131	2	20
2-Butanone (MEK)	250	224		ug/Kg		90	59 - 159	6	20
1,4-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130	1	20
2-Chlorotoluene	50.0	46.5		ug/Kg		93	70 - 138	3	20
1,3-Dichloropropane	50.0	48.4		ug/Kg		97	70 - 140	2	20
1,1-Dichloropropene	50.0	52.0		ug/Kg		104	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	50.0	50.6		ug/Kg		101	60 - 145	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250405/6
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Chlorotoluene	50.0	46.8		ug/Kg		94	70 - 136	3	20
Acetone	250	202		ug/Kg		81	30 - 162	11	30
1,1-Dichloroethane	50.0	51.1		ug/Kg		102	70 - 130	4	20
Benzene	50.0	49.4		ug/Kg		99	70 - 130	2	20
1,2-Dichloroethane	50.0	50.1		ug/Kg		100	70 - 130	3	20
Bromobenzene	50.0	48.4		ug/Kg		97	70 - 130	4	20
1,1-Dichloroethene	50.0	61.9	*	ug/Kg		124	74 - 122	4	20
Bromoform	50.0	52.4		ug/Kg		105	59 - 158	1	20
Bromomethane	50.0	52.2		ug/Kg		104	59 - 132	2	20
1,2-Dichloropropane	50.0	49.7		ug/Kg		99	73 - 127	3	20
Carbon disulfide	50.0	68.3		ug/Kg		137	60 - 140	2	20
Carbon tetrachloride	50.0	54.3		ug/Kg		109	70 - 142	1	20
Chlorobenzene	50.0	50.7		ug/Kg		101	70 - 130	1	20
Chlorobromomethane	50.0	53.7		ug/Kg		107	70 - 130	0	20
Chlorodibromomethane	50.0	52.0		ug/Kg		104	70 - 146	2	20
2-Hexanone	250	231		ug/Kg		92	62 - 158	3	20
Chloroethane	50.0	48.2		ug/Kg		96	65 - 130	3	20
Chloroform	50.0	49.8		ug/Kg		100	77 - 127	3	20
4-Isopropyltoluene	50.0	50.9		ug/Kg		102	70 - 133	0	20
Chloromethane	50.0	52.8		ug/Kg		106	55 - 140	2	20
cis-1,2-Dichloroethene	50.0	50.3		ug/Kg		101	70 - 138	3	20
4-Methyl-2-pentanone (MIBK)	250	231		ug/Kg		92	60 - 160	2	20
cis-1,3-Dichloropropene	50.0	52.1		ug/Kg		104	68 - 147	1	20
Dibromomethane	50.0	49.4		ug/Kg		99	70 - 139	0	20
Dichlorobromomethane	50.0	49.9		ug/Kg		100	70 - 140	0	20
Dichlorodifluoromethane	50.0	58.2		ug/Kg		116	37 - 158	1	20
1,1,1,2-Tetrachloroethane	50.0	52.6		ug/Kg		105	70 - 130	0	20
Ethylbenzene	50.0	49.1		ug/Kg		98	80 - 137	1	20
1,1,2,2-Tetrachloroethane	50.0	45.7		ug/Kg		91	70 - 146	3	20
Ethylene Dibromide	50.0	50.0		ug/Kg		100	70 - 140	3	20
1,2,3-Trichlorobenzene	50.0	52.8		ug/Kg		106	60 - 140	3	20
1,2,4-Trichlorobenzene	50.0	53.6		ug/Kg		107	60 - 140	3	20
1,1,1-Trichloroethane	50.0	53.3		ug/Kg		107	70 - 130	2	20
1,1,2-Trichloroethane	50.0	49.6		ug/Kg		99	70 - 130	1	20
Hexachlorobutadiene	50.0	55.2		ug/Kg		110	70 - 132	5	20
Isopropylbenzene	50.0	51.2		ug/Kg		102	70 - 130	0	20
Methyl tert-butyl ether	50.0	50.2		ug/Kg		100	70 - 144	0	20
1,2,3-Trichloropropane	50.0	47.4		ug/Kg		95	70 - 146	5	20
Methylene Chloride	50.0	51.6		ug/Kg		103	70 - 134	3	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	70.5	*	ug/Kg		141	60 - 140	1	20
1,2,4-Trimethylbenzene	50.0	47.3		ug/Kg		95	70 - 130	2	20
Naphthalene	50.0	49.4		ug/Kg		99	60 - 147	0	20
1,3,5-Trimethylbenzene	50.0	47.7		ug/Kg		95	70 - 131	3	20
n-Butylbenzene	50.0	52.3		ug/Kg		105	70 - 142	2	20
N-Propylbenzene	50.0	48.2		ug/Kg		96	70 - 130	2	20
m-Xylene & p-Xylene	50.0	48.9		ug/Kg		98	70 - 146	1	20
sec-Butylbenzene	50.0	49.3		ug/Kg		99	70 - 136	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250405/6
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
o-Xylene			50.0	49.5		ug/Kg		99	70 - 140	1	20
Styrene			50.0	48.5		ug/Kg		97	70 - 130	1	20
tert-Butylbenzene			50.0	48.8		ug/Kg		98	70 - 130	1	20
Tetrachloroethene			50.0	53.5		ug/Kg		107	70 - 132	2	20
Toluene			50.0	49.8		ug/Kg		100	75 - 120	2	20
2,2-Dichloropropane			50.0	54.3		ug/Kg		109	70 - 162	5	20
trans-1,2-Dichloroethene			50.0	55.4		ug/Kg		111	67 - 130	1	20
trans-1,3-Dichloropropene			50.0	49.1		ug/Kg		98	70 - 155	2	20
Trichloroethene			50.0	53.0		ug/Kg		106	70 - 133	2	20
Trichlorofluoromethane			50.0	54.3		ug/Kg		109	60 - 140	3	20
Vinyl acetate			50.0	47.3		ug/Kg		95	38 - 176	1	20
Vinyl chloride			50.0	51.5		ug/Kg		103	58 - 125	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250405/8
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	876		ug/Kg		88	70 - 122	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: MB 720-250407/4
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:46	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 19:46	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 19:46	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 19:46	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:46	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 19:46	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
Acetone	ND		50	38	ug/Kg			08/28/18 19:46	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 19:46	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250407/4
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:46	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 19:46	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 19:46	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 19:46	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 19:46	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 19:46	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 19:46	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 19:46	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 19:46	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 19:46	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 19:46	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 19:46	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 19:46	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 19:46	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 19:46	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 19:46	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:46	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 19:46	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 19:46	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 19:46	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:46	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 19:46	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 19:46	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 19:46	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 19:46	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 19:46	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 19:46	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 19:46	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 19:46	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 19:46	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 19:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 19:46	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 19:46	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 19:46	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 19:46	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 19:46	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 19:46	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:46	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 19:46	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 19:46	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 19:46	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 19:46	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 19:46	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250407/4
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 19:46	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 19:46	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 19:46	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 19:46	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 19:46	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 19:46	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 19:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*45 - 131*		*08/28/18 19:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*		*08/28/18 19:46*	*1*
Toluene-d8 (Surr)	*102*		*58 - 140*		*08/28/18 19:46*	*1*

Lab Sample ID: LCS 720-250407/5
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	50.0	51.0		ug/Kg		102	70 - 130
1,3-Dichlorobenzene	50.0	51.6		ug/Kg		103	70 - 131
2-Butanone (MEK)	250	231		ug/Kg		92	59 - 159
1,4-Dichlorobenzene	50.0	51.4		ug/Kg		103	70 - 130
2-Chlorotoluene	50.0	54.5		ug/Kg		109	70 - 138
1,3-Dichloropropane	50.0	50.8		ug/Kg		102	70 - 140
1,1-Dichloropropene	50.0	56.5		ug/Kg		113	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	50.5		ug/Kg		101	60 - 145
4-Chlorotoluene	50.0	54.9		ug/Kg		110	70 - 136
Acetone	250	219		ug/Kg		88	30 - 162
1,1-Dichloroethane	50.0	58.1		ug/Kg		116	70 - 130
Benzene	50.0	55.2		ug/Kg		110	70 - 130
1,2-Dichloroethane	50.0	51.4		ug/Kg		103	70 - 130
Bromobenzene	50.0	51.1		ug/Kg		102	70 - 130
1,1-Dichloroethene	50.0	63.4	*	ug/Kg		127	74 - 122
Bromoform	50.0	49.7		ug/Kg		99	59 - 158
Bromomethane	50.0	51.3		ug/Kg		103	59 - 132
1,2-Dichloropropane	50.0	56.8		ug/Kg		114	73 - 127
Carbon disulfide	50.0	74.6	*	ug/Kg		149	60 - 140
Carbon tetrachloride	50.0	56.6		ug/Kg		113	70 - 142
Chlorobenzene	50.0	51.4		ug/Kg		103	70 - 130
Chlorobromomethane	50.0	53.8		ug/Kg		108	70 - 130
Chlorodibromomethane	50.0	52.1		ug/Kg		104	70 - 146
2-Hexanone	250	248		ug/Kg		99	62 - 158
Chloroethane	50.0	50.8		ug/Kg		102	65 - 130
Chloroform	50.0	54.3		ug/Kg		109	77 - 127
4-Isopropyltoluene	50.0	55.5		ug/Kg		111	70 - 133
Chloromethane	50.0	55.7		ug/Kg		111	55 - 140
cis-1,2-Dichloroethene	50.0	56.6		ug/Kg		113	70 - 138

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250407/5
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Methyl-2-pentanone (MIBK)	250	255		ug/Kg		102	60 - 160
cis-1,3-Dichloropropene	50.0	56.4		ug/Kg		113	68 - 147
Dibromomethane	50.0	51.2		ug/Kg		102	70 - 139
Dichlorobromomethane	50.0	53.5		ug/Kg		107	70 - 140
Dichlorodifluoromethane	50.0	51.4		ug/Kg		103	37 - 158
1,1,1,2-Tetrachloroethane	50.0	52.8		ug/Kg		106	70 - 130
Ethylbenzene	50.0	54.7		ug/Kg		109	80 - 137
1,1,2,2-Tetrachloroethane	50.0	51.3		ug/Kg		103	70 - 146
Ethylene Dibromide	50.0	51.9		ug/Kg		104	70 - 140
1,2,3-Trichlorobenzene	50.0	47.3		ug/Kg		95	60 - 140
1,2,4-Trichlorobenzene	50.0	48.6		ug/Kg		97	60 - 140
1,1,1-Trichloroethane	50.0	55.6		ug/Kg		111	70 - 130
1,1,2-Trichloroethane	50.0	52.4		ug/Kg		105	70 - 130
Hexachlorobutadiene	50.0	49.1		ug/Kg		98	70 - 132
Isopropylbenzene	50.0	53.0		ug/Kg		106	70 - 130
Methyl tert-butyl ether	50.0	52.3		ug/Kg		105	70 - 144
1,2,3-Trichloropropane	50.0	50.8		ug/Kg		102	70 - 146
Methylene Chloride	50.0	54.3		ug/Kg		109	70 - 134
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	66.9		ug/Kg		134	60 - 140
1,2,4-Trimethylbenzene	50.0	54.2		ug/Kg		108	70 - 130
Naphthalene	50.0	48.2		ug/Kg		96	60 - 147
1,3,5-Trimethylbenzene	50.0	55.2		ug/Kg		110	70 - 131
n-Butylbenzene	50.0	55.0		ug/Kg		110	70 - 142
N-Propylbenzene	50.0	57.1		ug/Kg		114	70 - 130
m-Xylene & p-Xylene	50.0	53.0		ug/Kg		106	70 - 146
sec-Butylbenzene	50.0	56.8		ug/Kg		114	70 - 136
o-Xylene	50.0	53.4		ug/Kg		107	70 - 140
Styrene	50.0	51.9		ug/Kg		104	70 - 130
tert-Butylbenzene	50.0	55.0		ug/Kg		110	70 - 130
Tetrachloroethene	50.0	52.1		ug/Kg		104	70 - 132
Toluene	50.0	52.2		ug/Kg		104	75 - 120
2,2-Dichloropropane	50.0	57.7		ug/Kg		115	70 - 162
trans-1,2-Dichloroethene	50.0	59.4		ug/Kg		119	67 - 130
trans-1,3-Dichloropropene	50.0	53.1		ug/Kg		106	70 - 155
Trichloroethene	50.0	51.4		ug/Kg		103	70 - 133
Trichlorofluoromethane	50.0	54.5		ug/Kg		109	60 - 140
Vinyl acetate	50.0	53.1		ug/Kg		106	38 - 176
Vinyl chloride	50.0	53.9		ug/Kg		108	58 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250407/7
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C4-C12			1000	937		ug/Kg		94	70 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: LCSD 720-250407/6
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene			50.0	50.3		ug/Kg		101	70 - 130	1	20
1,3-Dichlorobenzene			50.0	50.8		ug/Kg		102	70 - 131	2	20
2-Butanone (MEK)			250	232		ug/Kg		93	59 - 159	1	20
1,4-Dichlorobenzene			50.0	50.4		ug/Kg		101	70 - 130	2	20
2-Chlorotoluene			50.0	53.4		ug/Kg		107	70 - 138	2	20
1,3-Dichloropropane			50.0	50.7		ug/Kg		101	70 - 140	0	20
1,1-Dichloropropene			50.0	55.3		ug/Kg		111	70 - 130	2	20
1,2-Dibromo-3-Chloropropane			50.0	51.2		ug/Kg		102	60 - 145	1	20
4-Chlorotoluene			50.0	53.6		ug/Kg		107	70 - 136	2	20
Acetone			250	232		ug/Kg		93	30 - 162	6	30
1,1-Dichloroethane			50.0	57.1		ug/Kg		114	70 - 130	2	20
Benzene			50.0	53.9		ug/Kg		108	70 - 130	2	20
1,2-Dichloroethane			50.0	51.5		ug/Kg		103	70 - 130	0	20
Bromobenzene			50.0	49.7		ug/Kg		99	70 - 130	3	20
1,1-Dichloroethene			50.0	61.4	*	ug/Kg		123	74 - 122	3	20
Bromoform			50.0	51.5		ug/Kg		103	59 - 158	4	20
Bromomethane			50.0	51.5		ug/Kg		103	59 - 132	0	20
1,2-Dichloropropane			50.0	56.4		ug/Kg		113	73 - 127	1	20
Carbon disulfide			50.0	72.7	*	ug/Kg		145	60 - 140	3	20
Carbon tetrachloride			50.0	54.8		ug/Kg		110	70 - 142	3	20
Chlorobenzene			50.0	51.6		ug/Kg		103	70 - 130	0	20
Chlorobromomethane			50.0	52.9		ug/Kg		106	70 - 130	2	20
Chlorodibromomethane			50.0	51.6		ug/Kg		103	70 - 146	1	20
2-Hexanone			250	257		ug/Kg		103	62 - 158	4	20
Chloroethane			50.0	51.0		ug/Kg		102	65 - 130	0	20
Chloroform			50.0	53.1		ug/Kg		106	77 - 127	2	20
4-Isopropyltoluene			50.0	54.5		ug/Kg		109	70 - 133	2	20
Chloromethane			50.0	54.5		ug/Kg		109	55 - 140	2	20
cis-1,2-Dichloroethene			50.0	55.9		ug/Kg		112	70 - 138	1	20
4-Methyl-2-pentanone (MIBK)			250	261		ug/Kg		105	60 - 160	2	20
cis-1,3-Dichloropropene			50.0	56.8		ug/Kg		114	68 - 147	1	20
Dibromomethane			50.0	51.2		ug/Kg		102	70 - 139	0	20
Dichlorobromomethane			50.0	53.0		ug/Kg		106	70 - 140	1	20
Dichlorodifluoromethane			50.0	51.9		ug/Kg		104	37 - 158	1	20
1,1,1,2-Tetrachloroethane			50.0	53.0		ug/Kg		106	70 - 130	0	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250407/6
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene			50.0	54.4		ug/Kg		109	80 - 137	1	20
1,1,2,2-Tetrachloroethane			50.0	51.0		ug/Kg		102	70 - 146	1	20
Ethylene Dibromide			50.0	51.9		ug/Kg		104	70 - 140	0	20
1,2,3-Trichlorobenzene			50.0	49.0		ug/Kg		98	60 - 140	4	20
1,2,4-Trichlorobenzene			50.0	49.1		ug/Kg		98	60 - 140	1	20
1,1,1-Trichloroethane			50.0	53.8		ug/Kg		108	70 - 130	3	20
1,1,2-Trichloroethane			50.0	52.6		ug/Kg		105	70 - 130	1	20
Hexachlorobutadiene			50.0	48.7		ug/Kg		97	70 - 132	1	20
Isopropylbenzene			50.0	52.9		ug/Kg		106	70 - 130	0	20
Methyl tert-butyl ether			50.0	53.3		ug/Kg		107	70 - 144	2	20
1,2,3-Trichloropropane			50.0	51.0		ug/Kg		102	70 - 146	0	20
Methylene Chloride			50.0	54.0		ug/Kg		108	70 - 134	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	64.7		ug/Kg		129	60 - 140	3	20
1,2,4-Trimethylbenzene			50.0	53.1		ug/Kg		106	70 - 130	2	20
Naphthalene			50.0	49.5		ug/Kg		99	60 - 147	3	20
1,3,5-Trimethylbenzene			50.0	53.9		ug/Kg		108	70 - 131	2	20
n-Butylbenzene			50.0	54.6		ug/Kg		109	70 - 142	1	20
N-Propylbenzene			50.0	55.8		ug/Kg		112	70 - 130	2	20
m-Xylene & p-Xylene			50.0	53.0		ug/Kg		106	70 - 146	0	20
sec-Butylbenzene			50.0	55.2		ug/Kg		110	70 - 136	3	20
o-Xylene			50.0	53.6		ug/Kg		107	70 - 140	0	20
Styrene			50.0	52.2		ug/Kg		104	70 - 130	1	20
tert-Butylbenzene			50.0	53.7		ug/Kg		107	70 - 130	2	20
Tetrachloroethene			50.0	50.7		ug/Kg		101	70 - 132	3	20
Toluene			50.0	52.5		ug/Kg		105	75 - 120	1	20
2,2-Dichloropropane			50.0	57.5		ug/Kg		115	70 - 162	0	20
trans-1,2-Dichloroethene			50.0	58.3		ug/Kg		117	67 - 130	2	20
trans-1,3-Dichloropropene			50.0	53.6		ug/Kg		107	70 - 155	1	20
Trichloroethene			50.0	50.3		ug/Kg		101	70 - 133	2	20
Trichlorofluoromethane			50.0	53.4		ug/Kg		107	60 - 140	2	20
Vinyl acetate			50.0	52.6		ug/Kg		105	38 - 176	1	20
Vinyl chloride			50.0	53.4		ug/Kg		107	58 - 125	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*97*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: LCSD 720-250407/8
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	943		ug/Kg		94	70 - 122	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250407/8
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: MB 720-250453/4
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/29/18 08:20	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/29/18 08:20	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/29/18 08:20	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 08:20	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/29/18 08:20	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/29/18 08:20	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 08:20	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/29/18 08:20	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/29/18 08:20	1
Acetone	ND		50	38	ug/Kg			08/29/18 08:20	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/29/18 08:20	1
Benzene	ND		5.0	0.65	ug/Kg			08/29/18 08:20	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/29/18 08:20	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/29/18 08:20	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/29/18 08:20	1
Bromoform	ND		5.0	2.0	ug/Kg			08/29/18 08:20	1
Bromomethane	ND		10	0.79	ug/Kg			08/29/18 08:20	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/29/18 08:20	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/29/18 08:20	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/29/18 08:20	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/29/18 08:20	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/29/18 08:20	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/29/18 08:20	1
2-Hexanone	ND		50	10	ug/Kg			08/29/18 08:20	1
Chloroethane	ND		10	0.56	ug/Kg			08/29/18 08:20	1
Chloroform	ND		5.0	0.66	ug/Kg			08/29/18 08:20	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/29/18 08:20	1
Chloromethane	ND		10	0.79	ug/Kg			08/29/18 08:20	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/29/18 08:20	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/29/18 08:20	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 08:20	1
Dibromomethane	ND		10	0.86	ug/Kg			08/29/18 08:20	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/29/18 08:20	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/29/18 08:20	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/29/18 08:20	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/29/18 08:20	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/29/18 08:20	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/29/18 08:20	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/29/18 08:20	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250453/4
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 08:20	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/29/18 08:20	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/29/18 08:20	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/29/18 08:20	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/29/18 08:20	1
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/29/18 08:20	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/29/18 08:20	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/29/18 08:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/29/18 08:20	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/29/18 08:20	1
Naphthalene	ND		10	1.5	ug/Kg			08/29/18 08:20	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/29/18 08:20	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/29/18 08:20	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/29/18 08:20	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/29/18 08:20	1
Styrene	ND		5.0	0.63	ug/Kg			08/29/18 08:20	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/29/18 08:20	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/29/18 08:20	1
Toluene	ND		5.0	0.71	ug/Kg			08/29/18 08:20	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/29/18 08:20	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/29/18 08:20	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/29/18 08:20	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/29/18 08:20	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/29/18 08:20	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/29/18 08:20	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/29/18 08:20	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/29/18 08:20	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/29/18 08:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*45 - 131*		*08/29/18 08:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*		*08/29/18 08:20*	*1*
Toluene-d8 (Surr)	*96*		*58 - 140*		*08/29/18 08:20*	*1*

Lab Sample ID: LCS 720-250453/5
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	50.0	51.4		ug/Kg		103	70 - 130
1,3-Dichlorobenzene	50.0	51.6		ug/Kg		103	70 - 131
2-Butanone (MEK)	250	233		ug/Kg		93	59 - 159
1,4-Dichlorobenzene	50.0	50.8		ug/Kg		102	70 - 130
2-Chlorotoluene	50.0	49.9		ug/Kg		100	70 - 138
1,3-Dichloropropane	50.0	51.5		ug/Kg		103	70 - 140
1,1-Dichloropropene	50.0	56.6		ug/Kg		113	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	48.0		ug/Kg		96	60 - 145

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250453/5
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chlorotoluene	50.0	50.5		ug/Kg		101	70 - 136
Acetone	250	221		ug/Kg		88	30 - 162
1,1-Dichloroethane	50.0	55.4		ug/Kg		111	70 - 130
Benzene	50.0	53.0		ug/Kg		106	70 - 130
1,2-Dichloroethane	50.0	56.0		ug/Kg		112	70 - 130
Bromobenzene	50.0	49.2		ug/Kg		98	70 - 130
1,1-Dichloroethene	50.0	68.3	*	ug/Kg		137	74 - 122
Bromoform	50.0	51.3		ug/Kg		103	59 - 158
Bromomethane	50.0	57.6		ug/Kg		115	59 - 132
1,2-Dichloropropane	50.0	52.0		ug/Kg		104	73 - 127
Carbon disulfide	50.0	73.0	*	ug/Kg		146	60 - 140
Carbon tetrachloride	50.0	60.4		ug/Kg		121	70 - 142
Chlorobenzene	50.0	52.7		ug/Kg		105	70 - 130
Chlorobromomethane	50.0	56.5		ug/Kg		113	70 - 130
Chlorodibromomethane	50.0	54.7		ug/Kg		109	70 - 146
2-Hexanone	250	232		ug/Kg		93	62 - 158
Chloroethane	50.0	51.2		ug/Kg		102	65 - 130
Chloroform	50.0	54.4		ug/Kg		109	77 - 127
4-Isopropyltoluene	50.0	51.3		ug/Kg		103	70 - 133
Chloromethane	50.0	51.2		ug/Kg		102	55 - 140
cis-1,2-Dichloroethene	50.0	55.0		ug/Kg		110	70 - 138
4-Methyl-2-pentanone (MIBK)	250	229		ug/Kg		92	60 - 160
cis-1,3-Dichloropropene	50.0	53.8		ug/Kg		108	68 - 147
Dibromomethane	50.0	52.5		ug/Kg		105	70 - 139
Dichlorobromomethane	50.0	55.4		ug/Kg		111	70 - 140
Dichlorodifluoromethane	50.0	61.5		ug/Kg		123	37 - 158
1,1,1,2-Tetrachloroethane	50.0	56.1		ug/Kg		112	70 - 130
Ethylbenzene	50.0	52.2		ug/Kg		104	80 - 137
1,1,2,2-Tetrachloroethane	50.0	46.6		ug/Kg		93	70 - 146
Ethylene Dibromide	50.0	54.1		ug/Kg		108	70 - 140
1,2,3-Trichlorobenzene	50.0	51.2		ug/Kg		102	60 - 140
1,2,4-Trichlorobenzene	50.0	52.8		ug/Kg		106	60 - 140
1,1,1-Trichloroethane	50.0	60.6		ug/Kg		121	70 - 130
1,1,2-Trichloroethane	50.0	52.0		ug/Kg		104	70 - 130
Hexachlorobutadiene	50.0	53.5		ug/Kg		107	70 - 132
Isopropylbenzene	50.0	54.1		ug/Kg		108	70 - 130
Methyl tert-butyl ether	50.0	55.9		ug/Kg		112	70 - 144
1,2,3-Trichloropropane	50.0	48.2		ug/Kg		96	70 - 146
Methylene Chloride	50.0	52.5		ug/Kg		105	70 - 134
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	73.1	*	ug/Kg		146	60 - 140
1,2,4-Trimethylbenzene	50.0	51.0		ug/Kg		102	70 - 130
Naphthalene	50.0	49.3		ug/Kg		99	60 - 147
1,3,5-Trimethylbenzene	50.0	50.6		ug/Kg		101	70 - 131
n-Butylbenzene	50.0	49.9		ug/Kg		100	70 - 142
N-Propylbenzene	50.0	49.5		ug/Kg		99	70 - 130
m-Xylene & p-Xylene	50.0	54.0		ug/Kg		108	70 - 146
sec-Butylbenzene	50.0	49.7		ug/Kg		99	70 - 136

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250453/5
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
o-Xylene			50.0	53.8		ug/Kg		108	70 - 140		
Styrene			50.0	49.5		ug/Kg		99	70 - 130		
tert-Butylbenzene			50.0	49.4		ug/Kg		99	70 - 130		
Tetrachloroethene			50.0	58.1		ug/Kg		116	70 - 132		
Toluene			50.0	50.8		ug/Kg		102	75 - 120		
2,2-Dichloropropane			50.0	66.7		ug/Kg		133	70 - 162		
trans-1,2-Dichloroethene			50.0	61.8		ug/Kg		124	67 - 130		
trans-1,3-Dichloropropene			50.0	52.5		ug/Kg		105	70 - 155		
Trichloroethene			50.0	57.3		ug/Kg		115	70 - 133		
Trichlorofluoromethane			50.0	59.2		ug/Kg		118	60 - 140		
Vinyl acetate			50.0	48.2		ug/Kg		96	38 - 176		
Vinyl chloride			50.0	54.2		ug/Kg		108	58 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCS 720-250453/7
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C4-C12			1000	1040		ug/Kg		104	70 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250453/6
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene			50.0	51.9		ug/Kg		104	70 - 130	1	20
1,3-Dichlorobenzene			50.0	53.3		ug/Kg		107	70 - 131	3	20
2-Butanone (MEK)			250	218		ug/Kg		87	59 - 159	7	20
1,4-Dichlorobenzene			50.0	52.1		ug/Kg		104	70 - 130	2	20
2-Chlorotoluene			50.0	51.7		ug/Kg		103	70 - 138	4	20
1,3-Dichloropropane			50.0	49.0		ug/Kg		98	70 - 140	5	20
1,1-Dichloropropene			50.0	55.5		ug/Kg		111	70 - 130	2	20
1,2-Dibromo-3-Chloropropane			50.0	48.2		ug/Kg		96	60 - 145	1	20
4-Chlorotoluene			50.0	51.9		ug/Kg		104	70 - 136	3	20
Acetone			250	198		ug/Kg		79	30 - 162	11	30
1,1-Dichloroethane			50.0	54.6		ug/Kg		109	70 - 130	1	20
Benzene			50.0	52.6		ug/Kg		105	70 - 130	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250453/6
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloroethane	50.0	54.5		ug/Kg		109	70 - 130	3	20
Bromobenzene	50.0	51.5		ug/Kg		103	70 - 130	5	20
1,1-Dichloroethene	50.0	68.0	*	ug/Kg		136	74 - 122	0	20
Bromoform	50.0	49.7		ug/Kg		99	59 - 158	3	20
Bromomethane	50.0	56.6		ug/Kg		113	59 - 132	2	20
1,2-Dichloropropane	50.0	51.7		ug/Kg		103	73 - 127	1	20
Carbon disulfide	50.0	72.1	*	ug/Kg		144	60 - 140	1	20
Carbon tetrachloride	50.0	60.6		ug/Kg		121	70 - 142	0	20
Chlorobenzene	50.0	52.6		ug/Kg		105	70 - 130	0	20
Chlorobromomethane	50.0	55.9		ug/Kg		112	70 - 130	1	20
Chlorodibromomethane	50.0	52.6		ug/Kg		105	70 - 146	4	20
2-Hexanone	250	213		ug/Kg		85	62 - 158	8	20
Chloroethane	50.0	50.8		ug/Kg		102	65 - 130	1	20
Chloroform	50.0	53.7		ug/Kg		107	77 - 127	1	20
4-Isopropyltoluene	50.0	51.8		ug/Kg		104	70 - 133	1	20
Chloromethane	50.0	51.2		ug/Kg		102	55 - 140	0	20
cis-1,2-Dichloroethene	50.0	54.0		ug/Kg		108	70 - 138	2	20
4-Methyl-2-pentanone (MIBK)	250	216		ug/Kg		86	60 - 160	6	20
cis-1,3-Dichloropropene	50.0	52.3		ug/Kg		105	68 - 147	3	20
Dibromomethane	50.0	51.4		ug/Kg		103	70 - 139	2	20
Dichlorobromomethane	50.0	54.6		ug/Kg		109	70 - 140	1	20
Dichlorodifluoromethane	50.0	61.3		ug/Kg		123	37 - 158	0	20
1,1,1,2-Tetrachloroethane	50.0	55.6		ug/Kg		111	70 - 130	1	20
Ethylbenzene	50.0	51.5		ug/Kg		103	80 - 137	1	20
1,1,2,2-Tetrachloroethane	50.0	47.8		ug/Kg		96	70 - 146	3	20
Ethylene Dibromide	50.0	52.5		ug/Kg		105	70 - 140	3	20
1,2,3-Trichlorobenzene	50.0	50.0		ug/Kg		100	60 - 140	2	20
1,2,4-Trichlorobenzene	50.0	51.7		ug/Kg		103	60 - 140	2	20
1,1,1-Trichloroethane	50.0	59.3		ug/Kg		119	70 - 130	2	20
1,1,2-Trichloroethane	50.0	51.0		ug/Kg		102	70 - 130	2	20
Hexachlorobutadiene	50.0	49.3		ug/Kg		99	70 - 132	8	20
Isopropylbenzene	50.0	54.1		ug/Kg		108	70 - 130	0	20
Methyl tert-butyl ether	50.0	54.2		ug/Kg		108	70 - 144	3	20
1,2,3-Trichloropropane	50.0	48.5		ug/Kg		97	70 - 146	1	20
Methylene Chloride	50.0	51.8		ug/Kg		104	70 - 134	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	71.3	*	ug/Kg		143	60 - 140	2	20
1,2,4-Trimethylbenzene	50.0	52.4		ug/Kg		105	70 - 130	3	20
Naphthalene	50.0	48.2		ug/Kg		96	60 - 147	2	20
1,3,5-Trimethylbenzene	50.0	52.2		ug/Kg		104	70 - 131	3	20
n-Butylbenzene	50.0	49.2		ug/Kg		98	70 - 142	1	20
N-Propylbenzene	50.0	50.8		ug/Kg		102	70 - 130	3	20
m-Xylene & p-Xylene	50.0	53.1		ug/Kg		106	70 - 146	2	20
sec-Butylbenzene	50.0	51.1		ug/Kg		102	70 - 136	3	20
o-Xylene	50.0	53.2		ug/Kg		106	70 - 140	1	20
Styrene	50.0	49.0		ug/Kg		98	70 - 130	1	20
tert-Butylbenzene	50.0	51.4		ug/Kg		103	70 - 130	4	20
Tetrachloroethene	50.0	56.7		ug/Kg		113	70 - 132	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250453/6
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			50.0	51.2		ug/Kg		102	75 - 120	1	20
2,2-Dichloropropane			50.0	63.4		ug/Kg		127	70 - 162	5	20
trans-1,2-Dichloroethene			50.0	61.1		ug/Kg		122	67 - 130	1	20
trans-1,3-Dichloropropene			50.0	51.0		ug/Kg		102	70 - 155	3	20
Trichloroethene			50.0	55.4		ug/Kg		111	70 - 133	3	20
Trichlorofluoromethane			50.0	57.9		ug/Kg		116	60 - 140	2	20
Vinyl acetate			50.0	47.8		ug/Kg		96	38 - 176	1	20
Vinyl chloride			50.0	55.4		ug/Kg		111	58 - 125	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250453/8
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1070		ug/Kg		107	70 - 122	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: MB 720-250529/4
Matrix: Water
Analysis Batch: 250529

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/29/18 19:36	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/29/18 19:36	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/29/18 19:36	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/29/18 19:36	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/29/18 19:36	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/29/18 19:36	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/29/18 19:36	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/29/18 19:36	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/29/18 19:36	1
Acetone	ND		50	20	ug/L			08/29/18 19:36	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/29/18 19:36	1
Benzene	ND		0.50	0.25	ug/L			08/29/18 19:36	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/29/18 19:36	1
Bromobenzene	ND		1.0	0.20	ug/L			08/29/18 19:36	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/29/18 19:36	1
Bromoform	ND		1.0	0.50	ug/L			08/29/18 19:36	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250529/4
Matrix: Water
Analysis Batch: 250529

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		1.0	0.49	ug/L			08/29/18 19:36	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/29/18 19:36	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/29/18 19:36	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/29/18 19:36	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/29/18 19:36	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/29/18 19:36	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/29/18 19:36	1
2-Hexanone	ND		50	3.0	ug/L			08/29/18 19:36	1
Chloroethane	ND		1.0	0.17	ug/L			08/29/18 19:36	1
Chloroform	ND		1.0	0.40	ug/L			08/29/18 19:36	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/29/18 19:36	1
Chloromethane	ND		1.0	0.19	ug/L			08/29/18 19:36	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/29/18 19:36	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/29/18 19:36	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/29/18 19:36	1
Dibromomethane	ND		0.50	0.30	ug/L			08/29/18 19:36	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/29/18 19:36	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/29/18 19:36	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/29/18 19:36	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/29/18 19:36	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/29/18 19:36	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/29/18 19:36	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/29/18 19:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/29/18 19:36	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/29/18 19:36	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/29/18 19:36	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/29/18 19:36	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/29/18 19:36	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/29/18 19:36	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/29/18 19:36	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/29/18 19:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/29/18 19:36	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/29/18 19:36	1
Naphthalene	0.233	J	1.0	0.22	ug/L			08/29/18 19:36	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/29/18 19:36	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/29/18 19:36	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/29/18 19:36	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/29/18 19:36	1
Styrene	ND		0.50	0.22	ug/L			08/29/18 19:36	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/29/18 19:36	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/29/18 19:36	1
Toluene	ND		0.50	0.17	ug/L			08/29/18 19:36	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/29/18 19:36	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/29/18 19:36	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/29/18 19:36	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/29/18 19:36	1
Trichloroethene	ND		0.50	0.20	ug/L			08/29/18 19:36	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250529/4
Matrix: Water
Analysis Batch: 250529

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/29/18 19:36	1
Vinyl acetate	ND		10	0.60	ug/L			08/29/18 19:36	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/29/18 19:36	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/29/18 19:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*67 - 130*		*08/29/18 19:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*72 - 130*		*08/29/18 19:36*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/29/18 19:36*	*1*

Lab Sample ID: LCS 720-250529/5
Matrix: Water
Analysis Batch: 250529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	77 - 117
1,3-Dichlorobenzene	25.0	24.3		ug/L		97	76 - 116
2-Butanone (MEK)	125	115		ug/L		92	66 - 133
1,4-Dichlorobenzene	25.0	24.5		ug/L		98	76 - 116
2-Chlorotoluene	25.0	23.1		ug/L		92	75 - 115
1,3-Dichloropropane	25.0	24.6		ug/L		98	77 - 117
1,1-Dichloropropene	25.0	25.7		ug/L		103	83 - 130
1,2-Dibromo-3-Chloropropane	25.0	24.8		ug/L		99	74 - 126
4-Chlorotoluene	25.0	23.1		ug/L		93	73 - 119
Acetone	125	117		ug/L		94	61 - 147
1,1-Dichloroethane	25.0	25.7		ug/L		103	77 - 119
Benzene	25.0	24.8		ug/L		99	79 - 119
1,2-Dichloroethane	25.0	25.9		ug/L		104	73 - 122
Bromobenzene	25.0	24.0		ug/L		96	77 - 117
1,1-Dichloroethene	25.0	30.6	*	ug/L		122	69 - 119
Bromoform	25.0	26.5		ug/L		106	75 - 127
Bromomethane	25.0	25.9		ug/L		104	70 - 132
1,2-Dichloropropane	25.0	25.3		ug/L		101	79 - 119
Carbon disulfide	25.0	33.6	*	ug/L		134	64 - 127
Carbon tetrachloride	25.0	27.5		ug/L		110	72 - 142
Chlorobenzene	25.0	25.2		ug/L		101	76 - 116
Chlorobromomethane	25.0	27.0		ug/L		108	81 - 122
Chlorodibromomethane	25.0	26.8		ug/L		107	77 - 133
2-Hexanone	125	116		ug/L		93	63 - 140
Chloroethane	25.0	24.3		ug/L		97	70 - 131
Chloroform	25.0	25.3		ug/L		101	82 - 119
4-Isopropyltoluene	25.0	24.8		ug/L		99	80 - 120
Chloromethane	25.0	26.0		ug/L		104	49 - 134
cis-1,2-Dichloroethene	25.0	25.4		ug/L		102	77 - 117
4-Methyl-2-pentanone (MIBK)	125	117		ug/L		94	66 - 140
cis-1,3-Dichloropropene	25.0	26.0		ug/L		104	82 - 119
Dibromomethane	25.0	25.1		ug/L		100	79 - 117
Dichlorobromomethane	25.0	25.4		ug/L		102	81 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250529/5
Matrix: Water
Analysis Batch: 250529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	25.0	26.8		ug/L		107	21 - 150
1,1,1,2-Tetrachloroethane	25.0	26.0		ug/L		104	81 - 121
Ethylbenzene	25.0	24.2		ug/L		97	77 - 117
1,1,2,2-Tetrachloroethane	25.0	22.5		ug/L		90	70 - 115
Ethylene Dibromide	25.0	25.6		ug/L		102	80 - 121
1,2,3-Trichlorobenzene	25.0	25.7		ug/L		103	87 - 123
1,2,4-Trichlorobenzene	25.0	26.0		ug/L		104	78 - 120
1,1,1-Trichloroethane	25.0	26.9		ug/L		107	74 - 130
1,1,2-Trichloroethane	25.0	24.9		ug/L		100	80 - 117
Hexachlorobutadiene	25.0	26.3		ug/L		105	78 - 140
Isopropylbenzene	25.0	25.3		ug/L		101	77 - 130
Methyl tert-butyl ether	25.0	25.4		ug/L		101	70 - 130
1,2,3-Trichloropropane	25.0	23.5		ug/L		94	77 - 120
Methylene Chloride	25.0	25.7		ug/L		103	75 - 117
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	34.6	*	ug/L		139	70 - 133
1,2,4-Trimethylbenzene	25.0	23.3		ug/L		93	75 - 115
Naphthalene	25.0	23.7		ug/L		95	81 - 121
1,3,5-Trimethylbenzene	25.0	23.4		ug/L		94	77 - 117
n-Butylbenzene	25.0	25.0		ug/L		100	78 - 119
N-Propylbenzene	25.0	23.6		ug/L		94	77 - 117
m-Xylene & p-Xylene	25.0	24.1		ug/L		96	74 - 119
sec-Butylbenzene	25.0	23.9		ug/L		96	78 - 118
o-Xylene	25.0	24.6		ug/L		98	77 - 118
Styrene	25.0	24.1		ug/L		96	76 - 116
tert-Butylbenzene	25.0	24.0		ug/L		96	78 - 118
Tetrachloroethene	25.0	27.1		ug/L		109	81 - 130
Toluene	25.0	24.6		ug/L		98	75 - 120
2,2-Dichloropropane	25.0	27.2		ug/L		109	74 - 156
trans-1,2-Dichloroethene	25.0	27.1		ug/L		109	79 - 117
trans-1,3-Dichloropropene	25.0	24.9		ug/L		99	76 - 122
Trichloroethene	25.0	26.6		ug/L		106	80 - 123
Trichlorofluoromethane	25.0	27.0		ug/L		108	75 - 141
Vinyl acetate	25.0	23.6		ug/L		94	50 - 126
Vinyl chloride	25.0	24.3		ug/L		97	58 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: LCS 720-250529/7
Matrix: Water
Analysis Batch: 250529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	500	457		ug/L		91	77 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250529/7
Matrix: Water
Analysis Batch: 250529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*72 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 720-250529/6
Matrix: Water
Analysis Batch: 250529

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	77 - 117	0	20
1,3-Dichlorobenzene	25.0	24.4		ug/L		98	76 - 116	1	20
2-Butanone (MEK)	125	120		ug/L		96	66 - 133	4	22
1,4-Dichlorobenzene	25.0	24.5		ug/L		98	76 - 116	0	20
2-Chlorotoluene	25.0	23.2		ug/L		93	75 - 115	0	20
1,3-Dichloropropane	25.0	25.0		ug/L		100	77 - 117	2	20
1,1-Dichloropropene	25.0	25.5		ug/L		102	83 - 130	1	20
1,2-Dibromo-3-Chloropropane	25.0	25.0		ug/L		100	74 - 126	1	20
4-Chlorotoluene	25.0	23.3		ug/L		93	73 - 119	1	20
Acetone	125	117		ug/L		93	61 - 147	0	30
1,1-Dichloroethane	25.0	25.6		ug/L		102	77 - 119	0	20
Benzene	25.0	24.5		ug/L		98	79 - 119	1	20
1,2-Dichloroethane	25.0	25.5		ug/L		102	73 - 122	1	20
Bromobenzene	25.0	24.6		ug/L		98	77 - 117	2	20
1,1-Dichloroethene	25.0	31.2	*	ug/L		125	69 - 119	2	20
Bromoform	25.0	26.7		ug/L		107	75 - 127	1	20
Bromomethane	25.0	26.5		ug/L		106	70 - 132	2	20
1,2-Dichloropropane	25.0	25.2		ug/L		101	79 - 119	1	20
Carbon disulfide	25.0	33.5	*	ug/L		134	64 - 127	0	20
Carbon tetrachloride	25.0	27.1		ug/L		108	72 - 142	2	20
Chlorobenzene	25.0	25.2		ug/L		101	76 - 116	0	20
Chlorobromomethane	25.0	26.9		ug/L		108	81 - 122	0	20
Chlorodibromomethane	25.0	26.8		ug/L		107	77 - 133	0	20
2-Hexanone	125	119		ug/L		95	63 - 140	2	24
Chloroethane	25.0	24.5		ug/L		98	70 - 131	1	20
Chloroform	25.0	24.9		ug/L		99	82 - 119	2	20
4-Isopropyltoluene	25.0	24.7		ug/L		99	80 - 120	0	20
Chloromethane	25.0	26.4		ug/L		105	49 - 134	1	20
cis-1,2-Dichloroethene	25.0	25.3		ug/L		101	77 - 117	0	20
4-Methyl-2-pentanone (MIBK)	125	118		ug/L		95	66 - 140	1	21
cis-1,3-Dichloropropene	25.0	26.4		ug/L		106	82 - 119	1	20
Dibromomethane	25.0	25.2		ug/L		101	79 - 117	0	20
Dichlorobromomethane	25.0	24.8		ug/L		99	81 - 130	3	20
Dichlorodifluoromethane	25.0	27.7		ug/L		111	21 - 150	3	20
1,1,1,2-Tetrachloroethane	25.0	25.9		ug/L		104	81 - 121	1	20
Ethylbenzene	25.0	24.3		ug/L		97	77 - 117	0	20
1,1,2,2-Tetrachloroethane	25.0	23.2		ug/L		93	70 - 115	3	20
Ethylene Dibromide	25.0	25.8		ug/L		103	80 - 121	1	20
1,2,3-Trichlorobenzene	25.0	26.2		ug/L		105	87 - 123	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250529/6
Matrix: Water
Analysis Batch: 250529

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene			25.0	26.4		ug/L		106	78 - 120	2	20
1,1,1-Trichloroethane			25.0	26.2		ug/L		105	74 - 130	2	20
1,1,2-Trichloroethane			25.0	25.7		ug/L		103	80 - 117	3	20
Hexachlorobutadiene			25.0	26.6		ug/L		107	78 - 140	1	20
Isopropylbenzene			25.0	24.9		ug/L		100	77 - 130	2	20
Methyl tert-butyl ether			25.0	25.0		ug/L		100	70 - 130	1	20
1,2,3-Trichloropropane			25.0	24.2		ug/L		97	77 - 120	3	20
Methylene Chloride			25.0	26.1		ug/L		104	75 - 117	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane			25.0	33.6	*	ug/L		134	70 - 133	3	20
1,2,4-Trimethylbenzene			25.0	23.2		ug/L		93	75 - 115	0	20
Naphthalene			25.0	24.6		ug/L		98	81 - 121	4	20
1,3,5-Trimethylbenzene			25.0	23.5		ug/L		94	77 - 117	0	20
n-Butylbenzene			25.0	25.1		ug/L		100	78 - 119	0	20
N-Propylbenzene			25.0	23.7		ug/L		95	77 - 117	1	20
m-Xylene & p-Xylene			25.0	24.1		ug/L		96	74 - 119	0	20
sec-Butylbenzene			25.0	24.1		ug/L		97	78 - 118	1	20
o-Xylene			25.0	24.2		ug/L		97	77 - 118	2	20
Styrene			25.0	24.2		ug/L		97	76 - 116	0	20
tert-Butylbenzene			25.0	23.7		ug/L		95	78 - 118	1	20
Tetrachloroethene			25.0	26.8		ug/L		107	81 - 130	1	20
Toluene			25.0	24.7		ug/L		99	75 - 120	0	20
2,2-Dichloropropane			25.0	26.0		ug/L		104	74 - 156	4	20
trans-1,2-Dichloroethene			25.0	27.2		ug/L		109	79 - 117	0	20
trans-1,3-Dichloropropene			25.0	25.2		ug/L		101	76 - 122	1	20
Trichloroethene			25.0	26.2		ug/L		105	80 - 123	2	20
Trichlorofluoromethane			25.0	27.4		ug/L		110	75 - 141	1	20
Vinyl acetate			25.0	23.7		ug/L		95	50 - 126	1	20
Vinyl chloride			25.0	24.8		ug/L		99	58 - 138	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 720-250529/8
Matrix: Water
Analysis Batch: 250529

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			500	470		ug/L		94	77 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88210-A-3 MS
Matrix: Water
Analysis Batch: 250529

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	ND		25.0	21.9		ug/L		87	60 - 140
1,3-Dichlorobenzene	ND		25.0	21.2		ug/L		85	60 - 140
2-Butanone (MEK)	ND		125	117		ug/L		94	60 - 140
1,4-Dichlorobenzene	ND		25.0	21.5		ug/L		86	60 - 140
2-Chlorotoluene	ND		25.0	20.1		ug/L		80	60 - 140
1,3-Dichloropropane	ND		25.0	20.9		ug/L		84	60 - 140
1,1-Dichloropropene	ND		25.0	20.6		ug/L		82	60 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	23.9		ug/L		96	60 - 140
4-Chlorotoluene	ND		25.0	20.3		ug/L		81	60 - 140
Acetone	ND		125	114		ug/L		91	60 - 140
1,1-Dichloroethane	ND		25.0	21.2		ug/L		85	60 - 140
Benzene	0.27	J	25.0	20.4		ug/L		81	60 - 140
1,2-Dichloroethane	ND		25.0	21.3		ug/L		85	60 - 140
Bromobenzene	ND		25.0	20.9		ug/L		84	60 - 140
1,1-Dichloroethene	ND	*	25.0	22.8		ug/L		91	60 - 140
Bromoform	ND		25.0	23.5		ug/L		94	56 - 140
Bromomethane	ND		25.0	25.1		ug/L		100	23 - 140
1,2-Dichloropropane	ND		25.0	20.9		ug/L		84	60 - 140
Carbon disulfide	ND	*	25.0	22.4		ug/L		89	38 - 140
Carbon tetrachloride	ND		25.0	22.1		ug/L		88	60 - 140
Chlorobenzene	ND		25.0	21.6		ug/L		87	60 - 140
Chlorobromomethane	ND		25.0	21.9		ug/L		88	60 - 140
Chlorodibromomethane	ND		25.0	22.7		ug/L		91	60 - 140
2-Hexanone	ND		125	123		ug/L		98	60 - 140
Chloroethane	ND		25.0	23.2		ug/L		93	51 - 140
Chloroform	ND		25.0	20.8		ug/L		83	60 - 140
4-Isopropyltoluene	ND		25.0	21.8		ug/L		87	60 - 140
Chloromethane	ND		25.0	25.4		ug/L		102	52 - 140
cis-1,2-Dichloroethene	0.077	J	25.0	20.8		ug/L		83	60 - 140
4-Methyl-2-pentanone (MIBK)	ND		125	123		ug/L		98	58 - 130
cis-1,3-Dichloropropene	ND		25.0	21.5		ug/L		86	60 - 140
Dibromomethane	ND		25.0	20.7		ug/L		83	60 - 140
Dichlorobromomethane	ND		25.0	21.2		ug/L		85	60 - 140
Dichlorodifluoromethane	ND		25.0	26.2		ug/L		105	38 - 140
1,1,1,2-Tetrachloroethane	ND		25.0	22.5		ug/L		90	60 - 140
Ethylbenzene	ND		25.0	20.9		ug/L		84	60 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	20.9		ug/L		84	60 - 140
Ethylene Dibromide	ND		25.0	21.6		ug/L		87	60 - 140
1,2,3-Trichlorobenzene	ND		25.0	23.4		ug/L		94	60 - 140
1,2,4-Trichlorobenzene	ND		25.0	23.2		ug/L		93	60 - 140
1,1,1-Trichloroethane	ND		25.0	21.5		ug/L		86	60 - 140
1,1,2-Trichloroethane	ND		25.0	21.4		ug/L		86	60 - 140
Hexachlorobutadiene	ND		25.0	23.6		ug/L		94	60 - 140
Isopropylbenzene	ND		25.0	22.0		ug/L		88	60 - 140
Methyl tert-butyl ether	ND		25.0	20.6		ug/L		82	60 - 138
1,2,3-Trichloropropane	ND		25.0	21.9		ug/L		87	60 - 140
Methylene Chloride	ND		25.0	20.3		ug/L		81	40 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88210-A-3 MS
Matrix: Water
Analysis Batch: 250529

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	25.0	25.5		ug/L		102	60 - 140
1,2,4-Trimethylbenzene	ND		25.0	20.3		ug/L		81	60 - 140
Naphthalene	ND		25.0	22.5		ug/L		90	56 - 140
1,3,5-Trimethylbenzene	ND		25.0	20.4		ug/L		82	60 - 140
n-Butylbenzene	ND		25.0	22.0		ug/L		88	60 - 140
N-Propylbenzene	ND		25.0	20.5		ug/L		82	60 - 140
m-Xylene & p-Xylene	ND		25.0	20.7		ug/L		83	60 - 140
sec-Butylbenzene	ND		25.0	21.0		ug/L		84	60 - 140
o-Xylene	ND		25.0	21.1		ug/L		84	60 - 140
Styrene	ND		25.0	20.9		ug/L		84	60 - 140
tert-Butylbenzene	ND		25.0	21.3		ug/L		85	60 - 140
Tetrachloroethene	ND		25.0	21.9		ug/L		88	60 - 140
Toluene	ND		25.0	20.8		ug/L		83	60 - 140
2,2-Dichloropropane	ND		25.0	20.2		ug/L		81	60 - 140
trans-1,2-Dichloroethene	ND		25.0	21.5		ug/L		86	60 - 140
trans-1,3-Dichloropropene	ND		25.0	20.7		ug/L		83	60 - 140
Trichloroethene	ND		25.0	21.8		ug/L		87	60 - 140
Trichlorofluoromethane	ND		25.0	26.1		ug/L		105	60 - 140
Vinyl acetate	ND		25.0	23.0		ug/L		92	40 - 140
Vinyl chloride	1.9		25.0	25.5		ug/L		94	58 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*72 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: 720-88210-A-3 MSD
Matrix: Water
Analysis Batch: 250529

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	ND		25.0	22.4		ug/L		90	60 - 140	3	20
1,3-Dichlorobenzene	ND		25.0	21.7		ug/L		87	60 - 140	3	20
2-Butanone (MEK)	ND		125	122		ug/L		98	60 - 140	4	20
1,4-Dichlorobenzene	ND		25.0	21.9		ug/L		88	60 - 140	2	20
2-Chlorotoluene	ND		25.0	20.7		ug/L		83	60 - 140	3	20
1,3-Dichloropropane	ND		25.0	21.1		ug/L		84	60 - 140	1	20
1,1-Dichloropropene	ND		25.0	20.6		ug/L		82	60 - 140	0	20
1,2-Dibromo-3-Chloropropane	ND		25.0	24.7		ug/L		99	60 - 140	3	20
4-Chlorotoluene	ND		25.0	20.5		ug/L		82	60 - 140	1	20
Acetone	ND		125	114		ug/L		91	60 - 140	0	20
1,1-Dichloroethane	ND		25.0	20.9		ug/L		83	60 - 140	2	20
Benzene	0.27	J	25.0	20.3		ug/L		80	60 - 140	0	20
1,2-Dichloroethane	ND		25.0	21.2		ug/L		85	60 - 140	1	20
Bromobenzene	ND		25.0	21.7		ug/L		87	60 - 140	4	20
1,1-Dichloroethene	ND	*	25.0	22.6		ug/L		90	60 - 140	1	20
Bromoform	ND		25.0	23.0		ug/L		92	56 - 140	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88210-A-3 MSD
Matrix: Water
Analysis Batch: 250529

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromomethane	ND		25.0	26.1		ug/L		104	23 - 140	4	20
1,2-Dichloropropane	ND		25.0	21.4		ug/L		86	60 - 140	3	20
Carbon disulfide	ND	*	25.0	21.8		ug/L		87	38 - 140	2	20
Carbon tetrachloride	ND		25.0	21.8		ug/L		87	60 - 140	1	20
Chlorobenzene	ND		25.0	21.5		ug/L		86	60 - 140	1	20
Chlorobromomethane	ND		25.0	22.0		ug/L		88	60 - 140	0	20
Chlorodibromomethane	ND		25.0	22.8		ug/L		91	60 - 140	1	20
2-Hexanone	ND		125	121		ug/L		97	60 - 140	1	20
Chloroethane	ND		25.0	24.6		ug/L		98	51 - 140	6	20
Chloroform	ND		25.0	20.8		ug/L		83	60 - 140	0	20
4-Isopropyltoluene	ND		25.0	22.1		ug/L		88	60 - 140	1	20
Chloromethane	ND		25.0	26.0		ug/L		104	52 - 140	2	20
cis-1,2-Dichloroethene	0.077	J	25.0	20.7		ug/L		82	60 - 140	0	20
4-Methyl-2-pentanone (MIBK)	ND		125	121		ug/L		97	58 - 130	1	20
cis-1,3-Dichloropropene	ND		25.0	21.9		ug/L		87	60 - 140	2	20
Dibromomethane	ND		25.0	21.1		ug/L		84	60 - 140	2	20
Dichlorobromomethane	ND		25.0	20.9		ug/L		84	60 - 140	1	20
Dichlorodifluoromethane	ND		25.0	26.7		ug/L		107	38 - 140	2	20
1,1,1,2-Tetrachloroethane	ND		25.0	22.7		ug/L		91	60 - 140	1	20
Ethylbenzene	ND		25.0	20.6		ug/L		83	60 - 140	1	20
1,1,2,2-Tetrachloroethane	ND		25.0	21.7		ug/L		87	60 - 140	4	20
Ethylene Dibromide	ND		25.0	21.8		ug/L		87	60 - 140	1	20
1,2,3-Trichlorobenzene	ND		25.0	23.6		ug/L		94	60 - 140	1	20
1,2,4-Trichlorobenzene	ND		25.0	23.0		ug/L		92	60 - 140	1	20
1,1,1-Trichloroethane	ND		25.0	21.5		ug/L		86	60 - 140	0	20
1,1,2-Trichloroethane	ND		25.0	21.6		ug/L		87	60 - 140	1	20
Hexachlorobutadiene	ND		25.0	23.9		ug/L		96	60 - 140	1	20
Isopropylbenzene	ND		25.0	21.7		ug/L		87	60 - 140	1	20
Methyl tert-butyl ether	ND		25.0	20.8		ug/L		83	60 - 138	1	20
1,2,3-Trichloropropane	ND		25.0	22.5		ug/L		90	60 - 140	3	20
Methylene Chloride	ND		25.0	20.4		ug/L		82	40 - 140	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	25.0	24.7		ug/L		99	60 - 140	3	20
1,2,4-Trimethylbenzene	ND		25.0	20.7		ug/L		83	60 - 140	2	20
Naphthalene	ND		25.0	23.1		ug/L		92	56 - 140	3	20
1,3,5-Trimethylbenzene	ND		25.0	20.9		ug/L		84	60 - 140	2	20
n-Butylbenzene	ND		25.0	21.9		ug/L		88	60 - 140	0	20
N-Propylbenzene	ND		25.0	21.0		ug/L		84	60 - 140	2	20
m-Xylene & p-Xylene	ND		25.0	20.4		ug/L		82	60 - 140	1	20
sec-Butylbenzene	ND		25.0	21.8		ug/L		87	60 - 140	3	20
o-Xylene	ND		25.0	20.9		ug/L		84	60 - 140	1	20
Styrene	ND		25.0	20.6		ug/L		82	60 - 140	1	20
tert-Butylbenzene	ND		25.0	21.8		ug/L		87	60 - 140	3	20
Tetrachloroethene	ND		25.0	21.7		ug/L		87	60 - 140	1	20
Toluene	ND		25.0	20.8		ug/L		83	60 - 140	0	20
2,2-Dichloropropane	ND		25.0	20.5		ug/L		82	60 - 140	1	20
trans-1,2-Dichloroethene	ND		25.0	21.4		ug/L		86	60 - 140	1	20
trans-1,3-Dichloropropene	ND		25.0	20.9		ug/L		84	60 - 140	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88210-A-3 MSD
Matrix: Water
Analysis Batch: 250529

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichloroethene	ND		25.0	21.7		ug/L		87	60 - 140	0	20
Trichlorofluoromethane	ND		25.0	27.0		ug/L		108	60 - 140	3	20
Vinyl acetate	ND		25.0	23.1		ug/L		92	40 - 140	0	20
Vinyl chloride	1.9		25.0	27.6		ug/L		103	58 - 140	8	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 720-250048/1-A
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250048

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Anthracene	ND		5.0	2.0	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Chrysene	ND		5.0	1.4	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Fluorene	ND		5.0	2.2	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Naphthalene	4.04	J	5.0	3.5	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/23/18 09:43	08/24/18 23:03	1
Pyrene	ND		5.0	1.7	ug/Kg		08/23/18 09:43	08/24/18 23:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*92*		*33 - 120*	*08/23/18 09:43*	*08/24/18 23:03*	*1*
Terphenyl-d14	*93*		*35 - 146*	*08/23/18 09:43*	*08/24/18 23:03*	*1*

Lab Sample ID: LCS 720-250048/2-A
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250048

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	465		ug/Kg		70	46 - 110
Acenaphthene	667	468		ug/Kg		70	46 - 106
Acenaphthylene	667	458		ug/Kg		69	46 - 108

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 720-250048/2-A
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250048

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Anthracene	667	524		ug/Kg		79	55 - 103
Benzo[a]anthracene	667	577		ug/Kg		87	54 - 110
Benzo[a]pyrene	667	575		ug/Kg		86	62 - 111
Benzo[b]fluoranthene	667	582		ug/Kg		87	60 - 109
Benzo[g,h,i]perylene	667	666		ug/Kg		100	52 - 114
Benzo[k]fluoranthene	667	558		ug/Kg		84	58 - 109
Chrysene	667	540		ug/Kg		81	54 - 108
Dibenz(a,h)anthracene	667	632		ug/Kg		95	58 - 112
Fluoranthene	667	568		ug/Kg		85	59 - 109
Fluorene	667	494		ug/Kg		74	52 - 106
Indeno[1,2,3-cd]pyrene	667	686		ug/Kg		103	55 - 120
Naphthalene	667	511		ug/Kg		77	49 - 110
Phenanthrene	667	523		ug/Kg		78	57 - 110
Pyrene	667	553		ug/Kg		83	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*33 - 120*
Terphenyl-d14	*88*		*35 - 146*

Lab Sample ID: 720-88190-E-11-A MS
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250048

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	ND		655	448		ug/Kg		68	46 - 110
Acenaphthene	ND		655	447		ug/Kg		68	46 - 106
Acenaphthylene	ND		655	442		ug/Kg		67	46 - 108
Anthracene	ND		655	513		ug/Kg		78	55 - 103
Benzo[a]anthracene	ND		655	572		ug/Kg		87	54 - 110
Benzo[a]pyrene	2.3	J	655	562		ug/Kg		85	62 - 111
Benzo[b]fluoranthene	3.0	J	655	592		ug/Kg		90	60 - 109
Benzo[g,h,i]perylene	ND		655	505		ug/Kg		77	52 - 114
Benzo[k]fluoranthene	ND		655	527		ug/Kg		81	58 - 109
Chrysene	ND		655	542		ug/Kg		83	54 - 108
Dibenz(a,h)anthracene	ND		655	542		ug/Kg		83	58 - 112
Fluoranthene	1.9	J	655	563		ug/Kg		86	59 - 109
Fluorene	ND		655	476		ug/Kg		73	52 - 106
Indeno[1,2,3-cd]pyrene	ND		655	571		ug/Kg		87	55 - 120
Naphthalene	ND		655	435		ug/Kg		66	49 - 110
Phenanthrene	1.8	J	655	508		ug/Kg		78	57 - 110
Pyrene	2.3	J	655	565		ug/Kg		86	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*72*		*33 - 120*
Terphenyl-d14	*91*		*35 - 146*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88190-E-11-B MSD
Matrix: Solid
Analysis Batch: 250212

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250048

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	ND		655	448		ug/Kg		68	46 - 110	0	35
Acenaphthene	ND		655	473		ug/Kg		72	46 - 106	6	35
Acenaphthylene	ND		655	457		ug/Kg		70	46 - 108	3	35
Anthracene	ND		655	525		ug/Kg		80	55 - 103	2	35
Benzo[a]anthracene	ND		655	579		ug/Kg		88	54 - 110	1	35
Benzo[a]pyrene	2.3	J	655	573		ug/Kg		87	62 - 111	2	35
Benzo[b]fluoranthene	3.0	J	655	585		ug/Kg		89	60 - 109	1	35
Benzo[g,h,i]perylene	ND		655	483		ug/Kg		74	52 - 114	4	35
Benzo[k]fluoranthene	ND		655	551		ug/Kg		84	58 - 109	4	35
Chrysene	ND		655	549		ug/Kg		84	54 - 108	1	35
Dibenz(a,h)anthracene	ND		655	525		ug/Kg		80	58 - 112	3	35
Fluoranthene	1.9	J	655	571		ug/Kg		87	59 - 109	1	35
Fluorene	ND		655	497		ug/Kg		76	52 - 106	4	35
Indeno[1,2,3-cd]pyrene	ND		655	551		ug/Kg		84	55 - 120	3	35
Naphthalene	ND		655	427		ug/Kg		65	49 - 110	2	35
Phenanthrene	1.8	J	655	515		ug/Kg		79	57 - 110	1	35
Pyrene	2.3	J	655	574		ug/Kg		87	50 - 120	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*33 - 120*
Terphenyl-d14	*92*		*35 - 146*

Lab Sample ID: MB 720-250190/1-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250190

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Anthracene	ND		5.0	2.0	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Chrysene	2.59	J	5.0	1.4	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Fluorene	ND		5.0	2.2	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Pyrene	ND		5.0	1.7	ug/Kg		08/24/18 15:31	08/28/18 19:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*98*		*33 - 120*	*08/24/18 15:31*	*08/28/18 19:42*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 720-250190/1-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250190

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	96		35 - 146	08/24/18 15:31	08/28/18 19:42	1

Lab Sample ID: LCS 720-250190/2-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250190

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	470		ug/Kg		71	46 - 110
Acenaphthene	667	484		ug/Kg		73	46 - 106
Acenaphthylene	667	457		ug/Kg		69	46 - 108
Anthracene	667	562		ug/Kg		84	55 - 103
Benzo[a]anthracene	667	658		ug/Kg		99	54 - 110
Benzo[a]pyrene	667	619		ug/Kg		93	62 - 111
Benzo[b]fluoranthene	667	596		ug/Kg		89	60 - 109
Benzo[g,h,i]perylene	667	625		ug/Kg		94	52 - 114
Benzo[k]fluoranthene	667	583		ug/Kg		87	58 - 109
Chrysene	667	671		ug/Kg		101	54 - 108
Dibenz(a,h)anthracene	667	635		ug/Kg		95	58 - 112
Fluoranthene	667	576		ug/Kg		86	59 - 109
Fluorene	667	505		ug/Kg		76	52 - 106
Indeno[1,2,3-cd]pyrene	667	644		ug/Kg		97	55 - 120
Naphthalene	667	443		ug/Kg		67	49 - 110
Phenanthrene	667	554		ug/Kg		83	57 - 110
Pyrene	667	689		ug/Kg		103	50 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	86		33 - 120
Terphenyl-d14	106		35 - 146

Lab Sample ID: 720-88216-A-9-F MS
Matrix: Solid
Analysis Batch: 250501

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250190

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	28	J	666	417		ug/Kg		59	46 - 110
Acenaphthene	ND		666	472		ug/Kg		71	46 - 106
Acenaphthylene	11	J	666	504		ug/Kg		74	46 - 108
Anthracene	20		666	528		ug/Kg		76	55 - 103
Benzo[a]anthracene	50		666	602		ug/Kg		83	54 - 110
Benzo[a]pyrene	75		666	571		ug/Kg		74	62 - 111
Benzo[b]fluoranthene	100		666	595		ug/Kg		74	60 - 109
Benzo[g,h,i]perylene	96		666	499		ug/Kg		60	52 - 114
Benzo[k]fluoranthene	42		666	537		ug/Kg		74	58 - 109
Chrysene	72	B	666	569		ug/Kg		75	54 - 108
Dibenz(a,h)anthracene	16	J	666	555		ug/Kg		81	58 - 112
Fluoranthene	96		666	546		ug/Kg		68	59 - 109
Fluorene	ND		666	510		ug/Kg		77	52 - 106
Indeno[1,2,3-cd]pyrene	51		666	560		ug/Kg		77	55 - 120

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88216-A-9-F MS
Matrix: Solid
Analysis Batch: 250501

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250190

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	29		666	406		ug/Kg		57	49 - 110
Phenanthrene	71		666	524		ug/Kg		68	57 - 110
Pyrene	110		666	591		ug/Kg		72	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*33 - 120*
Terphenyl-d14	*86*		*35 - 146*

Lab Sample ID: 720-88216-A-9-G MSD
Matrix: Solid
Analysis Batch: 250501

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250190

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	28	J	628	430		ug/Kg		64	46 - 110	3	35
Acenaphthene	ND		628	477		ug/Kg		76	46 - 106	1	35
Acenaphthylene	11	J	628	503		ug/Kg		78	46 - 108	0	35
Anthracene	20		628	513		ug/Kg		78	55 - 103	3	35
Benzo[a]anthracene	50		628	573		ug/Kg		83	54 - 110	5	35
Benzo[a]pyrene	75		628	555		ug/Kg		76	62 - 111	3	35
Benzo[b]fluoranthene	100		628	551		ug/Kg		71	60 - 109	8	35
Benzo[g,h,i]perylene	96		628	478		ug/Kg		61	52 - 114	4	35
Benzo[k]fluoranthene	42		628	518		ug/Kg		76	58 - 109	4	35
Chrysene	72	B	628	546		ug/Kg		75	54 - 108	4	35
Dibenz(a,h)anthracene	16	J	628	532		ug/Kg		82	58 - 112	4	35
Fluoranthene	96		628	530		ug/Kg		69	59 - 109	3	35
Fluorene	ND		628	513		ug/Kg		82	52 - 106	1	35
Indeno[1,2,3-cd]pyrene	51		628	536		ug/Kg		77	55 - 120	4	35
Naphthalene	29		628	430		ug/Kg		64	49 - 110	6	35
Phenanthrene	71		628	516		ug/Kg		71	57 - 110	2	35
Pyrene	110		628	571		ug/Kg		73	50 - 120	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*74*		*33 - 120*
Terphenyl-d14	*88*		*35 - 146*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-250044/1-A
Matrix: Solid
Analysis Batch: 250133

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250044

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/23/18 08:42	08/24/18 13:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*97*		*40 - 130*	*08/23/18 08:42*	*08/24/18 13:30*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 720-250044/2-A
Matrix: Solid
Analysis Batch: 250037

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250044

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	167000	141000		ug/Kg		85	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*94*		*40 - 130*

Lab Sample ID: 720-88190-D-10-A MS
Matrix: Solid
Analysis Batch: 250037

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250044

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	31000		160000	169000		ug/Kg		87	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*88*		*40 - 130*

Lab Sample ID: 720-88190-D-10-B MSD
Matrix: Solid
Analysis Batch: 250037

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250044

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	31000		160000	160000		ug/Kg		81	50 - 150	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*94*		*40 - 130*

Lab Sample ID: MB 720-250075/1-A
Matrix: Solid
Analysis Batch: 250034

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250075

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/23/18 13:06	08/23/18 23:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*92*		*40 - 130*	*08/23/18 13:06*	*08/23/18 23:06*	*1*

Lab Sample ID: LCS 720-250075/2-A
Matrix: Solid
Analysis Batch: 250034

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250075

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	167000	165000		ug/Kg		99	50 - 150

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 720-250075/2-A
Matrix: Solid
Analysis Batch: 250034

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250075

Surrogate	LCS %Recovery	LCS Qualifier	Limits
p-Terphenyl	*89*		*40 - 130*

Lab Sample ID: 720-88186-D-5-A MS
Matrix: Solid
Analysis Batch: 250133

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250075

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	280000	F1	163000	354000	F1	ug/Kg		44	50 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
p-Terphenyl	*0*	*D X*	*40 - 130*

Lab Sample ID: 720-88186-D-5-B MSD
Matrix: Solid
Analysis Batch: 250133

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250075

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	280000	F1	163000	348000	F1	ug/Kg		40	50 - 150	2	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
p-Terphenyl	*0*	*D X*	*40 - 130*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-250053/1-A
Matrix: Solid
Analysis Batch: 250196

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250053

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Aldrin	ND		2.0	0.50	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endrin	ND		2.0	0.46	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/23/18 10:51	08/24/18 21:13	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 720-250053/1-A
Matrix: Solid
Analysis Batch: 250196

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250053

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	ND		2.0	0.46	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
Toxaphene	ND		40	6.8	ug/Kg		08/23/18 10:51	08/24/18 21:13	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/23/18 10:51	08/24/18 21:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*105*		*21 - 136*	*08/23/18 10:51*	*08/24/18 21:13*	*1*
Tetrachloro-m-xylene	*90*		*21 - 145*	*08/23/18 10:51*	*08/24/18 21:13*	*1*

Lab Sample ID: LCS 720-250053/2-A
Matrix: Solid
Analysis Batch: 250196

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250053

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	16.0		ug/Kg		96	75 - 128
4,4'-DDE	16.7	15.7		ug/Kg		94	76 - 126
4,4'-DDT	16.7	15.5		ug/Kg		93	63 - 127
Aldrin	16.7	13.4		ug/Kg		80	65 - 120
alpha-BHC	16.7	12.9		ug/Kg		77	46 - 122
beta-BHC	16.7	16.8		ug/Kg		101	78 - 136
cis-Chlordane	16.7	15.4		ug/Kg		93	70 - 120
delta-BHC	16.7	13.1		ug/Kg		79	43 - 125
Dieldrin	16.7	15.2		ug/Kg		91	72 - 120
Endosulfan I	16.7	16.1		ug/Kg		96	62 - 120
Endosulfan II	16.7	16.6		ug/Kg		100	65 - 120
Endosulfan sulfate	16.7	16.0		ug/Kg		96	72 - 121
Endrin	16.7	16.4		ug/Kg		98	68 - 120
Endrin aldehyde	16.7	15.8		ug/Kg		95	68 - 120
Endrin ketone	16.7	16.3		ug/Kg		98	75 - 136
gamma-BHC (Lindane)	16.7	14.5		ug/Kg		87	72 - 120
Heptachlor	16.7	15.1		ug/Kg		91	69 - 120
Heptachlor epoxide	16.7	15.7		ug/Kg		94	68 - 120
Methoxychlor	16.7	17.5		ug/Kg		105	71 - 132
trans-Chlordane	16.7	15.2		ug/Kg		91	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*103*		*21 - 136*
Tetrachloro-m-xylene	*86*		*21 - 145*

Lab Sample ID: 720-88190-D-10-E MS
Matrix: Solid
Analysis Batch: 250248

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250053

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		16.4	13.4		ug/Kg		82	40 - 120
4,4'-DDE	ND		16.4	12.8		ug/Kg		78	40 - 120
4,4'-DDT	ND		16.4	11.6		ug/Kg		71	17 - 144

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88190-D-10-E MS
Matrix: Solid
Analysis Batch: 250248

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250053

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	ND		16.4	12.6		ug/Kg		77	53 - 120
alpha-BHC	ND		16.4	12.5		ug/Kg		76	40 - 120
beta-BHC	ND		16.4	11.9		ug/Kg		72	40 - 120
cis-Chlordane	ND		16.4	12.7		ug/Kg		77	40 - 120
delta-BHC	ND		16.4	11.8		ug/Kg		72	40 - 120
Dieldrin	ND		16.4	14.1		ug/Kg		86	46 - 130
Endosulfan I	ND		16.4	13.2		ug/Kg		80	40 - 120
Endosulfan II	ND		16.4	13.9		ug/Kg		85	40 - 120
Endosulfan sulfate	ND		16.4	13.0		ug/Kg		79	40 - 120
Endrin	ND		16.4	14.0		ug/Kg		85	32 - 143
Endrin aldehyde	ND		16.4	10.6		ug/Kg		64	40 - 120
Endrin ketone	ND		16.4	11.5		ug/Kg		70	40 - 120
gamma-BHC (Lindane)	ND		16.4	13.4		ug/Kg		82	58 - 120
Heptachlor	ND		16.4	13.6		ug/Kg		83	52 - 120
Heptachlor epoxide	ND		16.4	13.0		ug/Kg		79	40 - 120
Methoxychlor	ND		16.4	11.8		ug/Kg		72	40 - 120
trans-Chlordane	ND		16.4	12.7		ug/Kg		77	40 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*71*		*21 - 136*
Tetrachloro-m-xylene	*77*		*21 - 145*

Lab Sample ID: 720-88190-D-10-F MSD
Matrix: Solid
Analysis Batch: 250248

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250053

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		16.4	15.2		ug/Kg		92	40 - 120	12	20
4,4'-DDE	ND		16.4	14.4		ug/Kg		88	40 - 120	12	20
4,4'-DDT	ND		16.4	12.8		ug/Kg		78	17 - 144	10	20
Aldrin	ND		16.4	14.3		ug/Kg		87	53 - 120	13	20
alpha-BHC	ND		16.4	13.5		ug/Kg		82	40 - 120	8	20
beta-BHC	ND		16.4	13.8		ug/Kg		84	40 - 120	15	20
cis-Chlordane	ND		16.4	14.3		ug/Kg		87	40 - 120	12	20
delta-BHC	ND		16.4	13.6		ug/Kg		83	40 - 120	14	20
Dieldrin	ND		16.4	15.2		ug/Kg		93	46 - 130	7	20
Endosulfan I	ND		16.4	14.9		ug/Kg		91	40 - 120	12	20
Endosulfan II	ND		16.4	15.3		ug/Kg		93	40 - 120	9	30
Endosulfan sulfate	ND		16.4	14.3		ug/Kg		87	40 - 120	9	20
Endrin	ND		16.4	15.8		ug/Kg		96	32 - 143	12	20
Endrin aldehyde	ND		16.4	11.5		ug/Kg		70	40 - 120	9	20
Endrin ketone	ND		16.4	13.5		ug/Kg		82	40 - 120	16	20
gamma-BHC (Lindane)	ND		16.4	14.3		ug/Kg		87	58 - 120	6	20
Heptachlor	ND		16.4	15.2		ug/Kg		92	52 - 120	11	20
Heptachlor epoxide	ND		16.4	14.7		ug/Kg		89	40 - 120	12	20
Methoxychlor	ND		16.4	12.7		ug/Kg		77	40 - 120	7	20
trans-Chlordane	ND		16.4	14.3		ug/Kg		87	40 - 120	12	20

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88190-D-10-F MSD
Matrix: Solid
Analysis Batch: 250248

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250053

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	89		21 - 136
Tetrachloro-m-xylene	83		21 - 145

Lab Sample ID: MB 720-250087/1-A
Matrix: Solid
Analysis Batch: 250496

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250087

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
Aldrin	ND		2.0	0.50	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
Endrin	ND		2.0	0.46	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
Toxaphene	ND		40	6.8	ug/Kg		08/23/18 14:52	08/29/18 19:49	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/23/18 14:52	08/29/18 19:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	108		21 - 136	08/23/18 14:52	08/29/18 19:49	1
Tetrachloro-m-xylene	89		21 - 145	08/23/18 14:52	08/29/18 19:49	1

Lab Sample ID: LCS 720-250087/2-A
Matrix: Solid
Analysis Batch: 250387

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250087

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	16.4		ug/Kg		98	75 - 128
4,4'-DDE	16.7	15.1		ug/Kg		91	76 - 126
4,4'-DDT	16.7	14.8		ug/Kg		89	63 - 127
Aldrin	16.7	12.6		ug/Kg		76	65 - 120
alpha-BHC	16.7	11.2		ug/Kg		67	46 - 122
beta-BHC	16.7	16.2		ug/Kg		97	78 - 136
cis-Chlordane	16.7	14.9		ug/Kg		89	70 - 120
delta-BHC	16.7	13.5		ug/Kg		81	43 - 125

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-250087/2-A
Matrix: Solid
Analysis Batch: 250387

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250087

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dieldrin	16.7	14.9		ug/Kg		90	72 - 120
Endosulfan I	16.7	14.9		ug/Kg		89	62 - 120
Endosulfan II	16.7	15.6		ug/Kg		94	65 - 120
Endosulfan sulfate	16.7	15.0		ug/Kg		90	72 - 121
Endrin	16.7	15.8		ug/Kg		95	68 - 120
Endrin aldehyde	16.7	16.9		ug/Kg		101	68 - 120
Endrin ketone	16.7	16.4		ug/Kg		98	75 - 136
gamma-BHC (Lindane)	16.7	14.6		ug/Kg		87	72 - 120
Heptachlor	16.7	14.6		ug/Kg		88	69 - 120
Heptachlor epoxide	16.7	15.0		ug/Kg		90	68 - 120
Methoxychlor	16.7	16.8		ug/Kg		101	71 - 132
trans-Chlordane	16.7	14.9		ug/Kg		89	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*104*		*21 - 136*
Tetrachloro-m-xylene	*82*		*21 - 145*

Lab Sample ID: LCS 720-250087/2-A
Matrix: Solid
Analysis Batch: 250496

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250087

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	17.5		ug/Kg		105	75 - 128
4,4'-DDE	16.7	16.5		ug/Kg		99	76 - 126
4,4'-DDT	16.7	15.9		ug/Kg		95	63 - 127
Aldrin	16.7	13.5		ug/Kg		81	65 - 120
alpha-BHC	16.7	11.8		ug/Kg		71	46 - 122
beta-BHC	16.7	16.9		ug/Kg		101	78 - 136
cis-Chlordane	16.7	15.9		ug/Kg		96	70 - 120
delta-BHC	16.7	13.9		ug/Kg		83	43 - 125
Dieldrin	16.7	16.0		ug/Kg		96	72 - 120
Endosulfan I	16.7	15.9		ug/Kg		95	62 - 120
Endosulfan II	16.7	16.6		ug/Kg		100	65 - 120
Endosulfan sulfate	16.7	16.7		ug/Kg		100	72 - 121
Endrin	16.7	16.7		ug/Kg		100	68 - 120
Endrin aldehyde	16.7	18.4		ug/Kg		110	68 - 120
Endrin ketone	16.7	17.3		ug/Kg		104	75 - 136
gamma-BHC (Lindane)	16.7	15.0		ug/Kg		90	72 - 120
Heptachlor	16.7	15.5		ug/Kg		93	69 - 120
Heptachlor epoxide	16.7	16.0		ug/Kg		96	68 - 120
Methoxychlor	16.7	18.3		ug/Kg		110	71 - 132
trans-Chlordane	16.7	15.9		ug/Kg		96	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*107*		*21 - 136*
Tetrachloro-m-xylene	*86*		*21 - 145*

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88186-D-1-C MS
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250087

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		16.4	18.3		ug/Kg		111	40 - 120
4,4'-DDE	ND		16.4	13.8		ug/Kg		84	40 - 120
4,4'-DDT	ND	F2	16.4	8.22		ug/Kg		50	17 - 144
Aldrin	ND		16.4	13.8		ug/Kg		84	53 - 120
alpha-BHC	ND		16.4	12.3		ug/Kg		75	40 - 120
beta-BHC	ND		16.4	13.0	p	ug/Kg		79	40 - 120
cis-Chlordane	ND		16.4	13.5		ug/Kg		82	40 - 120
delta-BHC	ND		16.4	12.8		ug/Kg		78	40 - 120
Dieldrin	ND		16.4	13.3		ug/Kg		81	46 - 130
Endosulfan I	ND		16.4	13.0		ug/Kg		79	40 - 120
Endosulfan II	ND		16.4	13.1		ug/Kg		80	40 - 120
Endosulfan sulfate	ND		16.4	13.0		ug/Kg		79	40 - 120
Endrin	ND		16.4	13.5		ug/Kg		82	32 - 143
Endrin aldehyde	ND		16.4	10.4		ug/Kg		63	40 - 120
Endrin ketone	ND		16.4	8.95	p	ug/Kg		54	40 - 120
gamma-BHC (Lindane)	ND		16.4	14.5		ug/Kg		88	58 - 120
Heptachlor	ND		16.4	11.6		ug/Kg		71	52 - 120
Heptachlor epoxide	ND		16.4	14.6		ug/Kg		89	40 - 120
Methoxychlor	ND	F1 F2	16.4	8.11		ug/Kg		49	40 - 120
trans-Chlordane	ND		16.4	12.5		ug/Kg		76	40 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*63*	*p*	*21 - 136*
Tetrachloro-m-xylene	*74*		*21 - 145*

Lab Sample ID: 720-88186-D-1-D MSD
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250087

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		16.5	15.1		ug/Kg		92	40 - 120	19	20
4,4'-DDE	ND		16.5	12.8		ug/Kg		78	40 - 120	7	20
4,4'-DDT	ND	F2	16.5	5.17	F2	ug/Kg		31	17 - 144	46	20
Aldrin	ND		16.5	11.4		ug/Kg		69	53 - 120	20	20
alpha-BHC	ND		16.5	11.7		ug/Kg		71	40 - 120	5	20
beta-BHC	ND		16.5	12.4	p	ug/Kg		75	40 - 120	5	20
cis-Chlordane	ND		16.5	12.5		ug/Kg		76	40 - 120	8	20
delta-BHC	ND		16.5	12.1		ug/Kg		74	40 - 120	6	20
Dieldrin	ND		16.5	12.3		ug/Kg		75	46 - 130	8	20
Endosulfan I	ND		16.5	11.0		ug/Kg		67	40 - 120	16	20
Endosulfan II	ND		16.5	12.2		ug/Kg		74	40 - 120	7	30
Endosulfan sulfate	ND		16.5	12.5		ug/Kg		76	40 - 120	4	20
Endrin	ND		16.5	12.6		ug/Kg		77	32 - 143	7	20
Endrin aldehyde	ND		16.5	11.2		ug/Kg		68	40 - 120	8	20
Endrin ketone	ND		16.5	7.75	p	ug/Kg		47	40 - 120	14	20
gamma-BHC (Lindane)	ND		16.5	13.7		ug/Kg		83	58 - 120	6	20
Heptachlor	ND		16.5	10.9		ug/Kg		66	52 - 120	6	20
Heptachlor epoxide	ND		16.5	12.3		ug/Kg		75	40 - 120	17	20

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88186-D-1-D MSD
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250087

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methoxychlor	ND	F1 F2	16.5	4.88	F1 F2	ug/Kg		30	40 - 120	50	20
trans-Chlordane	ND		16.5	11.4		ug/Kg		69	40 - 120	9	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*71*		*21 - 136*
Tetrachloro-m-xylene	*69*		*21 - 145*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-342523/13-A
Matrix: Solid
Analysis Batch: 342738

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 342523

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/26/18 10:47	08/28/18 10:53	1
Aroclor-1221	ND		50	24	ug/Kg		08/26/18 10:47	08/28/18 10:53	1
Aroclor-1232	ND		50	23	ug/Kg		08/26/18 10:47	08/28/18 10:53	1
Aroclor-1242	ND		50	19	ug/Kg		08/26/18 10:47	08/28/18 10:53	1
Aroclor-1248	ND		50	24	ug/Kg		08/26/18 10:47	08/28/18 10:53	1
Aroclor-1254	ND		50	23	ug/Kg		08/26/18 10:47	08/28/18 10:53	1
Aroclor-1260	ND		50	22	ug/Kg		08/26/18 10:47	08/28/18 10:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*88*		*14 - 128*	*08/26/18 10:47*	*08/28/18 10:53*	*1*
DCB Decachlorobiphenyl	*96*		*10 - 132*	*08/26/18 10:47*	*08/28/18 10:53*	*1*

Lab Sample ID: LCS 240-342523/14-A
Matrix: Solid
Analysis Batch: 342738

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 342523

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	584		ug/Kg		58	47 - 120
Aroclor-1260	1000	700		ug/Kg		70	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*65*		*14 - 128*
DCB Decachlorobiphenyl	*73*		*10 - 132*

Lab Sample ID: 720-88192-18 MS
Matrix: Solid
Analysis Batch: 342738

Client Sample ID: DUP-02
Prep Type: Total/NA
Prep Batch: 342523

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	ND	F2 F1	976	182	J F1	ug/Kg		19	31 - 120
Aroclor-1260	3000	F2 F1	976	774	F1	ug/Kg		-232	21 - 122

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 720-88192-18 MS
Matrix: Solid
Analysis Batch: 342738

Client Sample ID: DUP-02
Prep Type: Total/NA
Prep Batch: 342523

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*14*		*14 - 128*
DCB Decachlorobiphenyl	*21*		*10 - 132*

Lab Sample ID: 720-88192-18 MSD
Matrix: Solid
Analysis Batch: 342738

Client Sample ID: DUP-02
Prep Type: Total/NA
Prep Batch: 342523

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND	F2 F1	956	722	F2	ug/Kg		76	31 - 120	120	30
Aroclor-1260	3000	F2 F1	956	3500	F2	ug/Kg		48	21 - 122	128	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*86*		*14 - 128*
DCB Decachlorobiphenyl	*98*		*10 - 132*

Lab Sample ID: MB 240-342977/24-A
Matrix: Solid
Analysis Batch: 343129

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 342977

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 08:11	08/30/18 13:22	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 08:11	08/30/18 13:22	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 08:11	08/30/18 13:22	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 08:11	08/30/18 13:22	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 08:11	08/30/18 13:22	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 08:11	08/30/18 13:22	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 08:11	08/30/18 13:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*14 - 128*	*08/29/18 08:11*	*08/30/18 13:22*	*1*
DCB Decachlorobiphenyl	*85*		*10 - 132*	*08/29/18 08:11*	*08/30/18 13:22*	*1*

Lab Sample ID: LCS 240-342977/25-A
Matrix: Solid
Analysis Batch: 343129

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 342977

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			1000	729		ug/Kg		73	47 - 120		
Aroclor-1260			1000	749		ug/Kg		75	46 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*85*		*14 - 128*
DCB Decachlorobiphenyl	*78*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250194/1-A
Matrix: Solid
Analysis Batch: 250251

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250194

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Arsenic	ND		1.0	0.085	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Barium	ND		0.50	0.071	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Beryllium	ND		0.10	0.033	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Cadmium	ND		0.13	0.012	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Chromium	ND		0.50	0.053	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Cobalt	ND		0.20	0.020	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Copper	ND		1.5	0.71	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Lead	ND		0.50	0.11	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Nickel	ND		0.50	0.051	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Selenium	ND		1.0	0.15	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Silver	0.0600	J	0.25	0.051	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Thallium	ND		0.50	0.15	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Vanadium	ND		0.50	0.068	mg/Kg		08/24/18 16:34	08/25/18 13:41	1
Zinc	ND		1.5	0.64	mg/Kg		08/24/18 16:34	08/25/18 13:41	1

Lab Sample ID: LCS 720-250194/2-A
Matrix: Solid
Analysis Batch: 250251

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250194

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.8		mg/Kg		96	80 - 120
Arsenic	50.0	48.0		mg/Kg		96	80 - 120
Barium	50.0	49.6		mg/Kg		99	80 - 120
Beryllium	50.0	46.3		mg/Kg		93	80 - 120
Cadmium	50.0	48.5		mg/Kg		97	80 - 120
Chromium	50.0	49.3		mg/Kg		99	80 - 120
Cobalt	50.0	48.3		mg/Kg		97	80 - 120
Copper	50.0	49.7		mg/Kg		99	80 - 120
Lead	50.0	49.3		mg/Kg		99	80 - 120
Molybdenum	50.0	51.1		mg/Kg		102	80 - 120
Nickel	50.0	50.0		mg/Kg		100	80 - 120
Selenium	50.0	49.0		mg/Kg		98	80 - 120
Silver	25.0	25.0		mg/Kg		100	80 - 120
Thallium	50.0	51.3		mg/Kg		103	80 - 120
Vanadium	50.0	46.6		mg/Kg		93	80 - 120
Zinc	50.0	47.5		mg/Kg		95	80 - 120

Lab Sample ID: 720-88214-D-2-A MS
Matrix: Solid
Analysis Batch: 250251

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250194

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.36	J F1	39.1	13.3	F1	mg/Kg		33	75 - 125
Arsenic	12		39.1	48.5		mg/Kg		94	75 - 125
Barium	140	F1	39.1	182		mg/Kg		96	75 - 125
Beryllium	0.43		39.1	36.0		mg/Kg		91	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88214-D-2-A MS
Matrix: Solid
Analysis Batch: 250251

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250194

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.48		39.1	40.0		mg/Kg		101	75 - 125
Chromium	32		39.1	77.0		mg/Kg		114	75 - 125
Cobalt	7.4		39.1	46.6		mg/Kg		100	75 - 125
Copper	47	F1	39.1	73.5	F1	mg/Kg		68	75 - 125
Lead	82	F1	39.1	128		mg/Kg		118	75 - 125
Molybdenum	0.85	J	39.1	37.8		mg/Kg		95	75 - 125
Nickel	42		39.1	82.4		mg/Kg		103	75 - 125
Selenium	0.91	J	39.1	39.0		mg/Kg		98	75 - 125
Silver	ND		19.5	19.8		mg/Kg		102	75 - 125
Thallium	ND		39.1	39.5		mg/Kg		101	75 - 125
Vanadium	30		39.1	65.8		mg/Kg		93	75 - 125
Zinc	160	F1	39.1	182	F1	mg/Kg		65	75 - 125

Lab Sample ID: 720-88214-D-2-B MSD
Matrix: Solid
Analysis Batch: 250251

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250194

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.36	J F1	38.8	12.8	F1	mg/Kg		32	75 - 125	4	20
Arsenic	12		38.8	49.8		mg/Kg		98	75 - 125	3	20
Barium	140	F1	38.8	198	F1	mg/Kg		138	75 - 125	8	20
Beryllium	0.43		38.8	37.4		mg/Kg		95	75 - 125	4	20
Cadmium	0.48		38.8	40.6		mg/Kg		103	75 - 125	2	20
Chromium	32		38.8	77.4		mg/Kg		116	75 - 125	1	20
Cobalt	7.4		38.8	48.1		mg/Kg		105	75 - 125	3	20
Copper	47	F1	38.8	67.9	F1	mg/Kg		55	75 - 125	8	20
Lead	82	F1	38.8	139	F1	mg/Kg		149	75 - 125	9	20
Molybdenum	0.85	J	38.8	37.5		mg/Kg		94	75 - 125	1	20
Nickel	42		38.8	85.5		mg/Kg		112	75 - 125	4	20
Selenium	0.91	J	38.8	39.5		mg/Kg		100	75 - 125	1	20
Silver	ND		19.4	19.9		mg/Kg		103	75 - 125	0	20
Thallium	ND		38.8	39.8		mg/Kg		103	75 - 125	1	20
Vanadium	30		38.8	69.4		mg/Kg		102	75 - 125	5	20
Zinc	160	F1	38.8	187	4	mg/Kg		80	75 - 125	3	20

Lab Sample ID: MB 720-250197/1-A
Matrix: Solid
Analysis Batch: 250325

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250197

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Arsenic	ND		1.0	0.085	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Barium	ND		0.50	0.071	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Beryllium	ND		0.10	0.033	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Cadmium	ND		0.13	0.012	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Chromium	ND		0.50	0.053	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Cobalt	ND		0.20	0.020	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Copper	ND		1.5	0.71	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Lead	ND		0.50	0.11	mg/Kg		08/24/18 16:33	08/27/18 14:39	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250197/1-A
Matrix: Solid
Analysis Batch: 250325

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250197

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.50	0.064	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Nickel	ND		0.50	0.051	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Selenium	ND		1.0	0.15	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Silver	ND		0.25	0.051	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Thallium	ND		0.50	0.15	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Vanadium	ND		0.50	0.068	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Zinc	ND		1.5	0.64	mg/Kg		08/24/18 16:33	08/27/18 14:39	1

Lab Sample ID: LCS 720-250197/2-A
Matrix: Solid
Analysis Batch: 250325

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250197

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.9		mg/Kg		96	80 - 120
Arsenic	50.0	47.3		mg/Kg		95	80 - 120
Barium	50.0	51.5		mg/Kg		103	80 - 120
Beryllium	50.0	50.6		mg/Kg		101	80 - 120
Cadmium	50.0	47.8		mg/Kg		96	80 - 120
Chromium	50.0	47.8		mg/Kg		96	80 - 120
Cobalt	50.0	48.7		mg/Kg		97	80 - 120
Copper	50.0	48.4		mg/Kg		97	80 - 120
Lead	50.0	48.6		mg/Kg		97	80 - 120
Molybdenum	50.0	48.6		mg/Kg		97	80 - 120
Nickel	50.0	48.5		mg/Kg		97	80 - 120
Selenium	50.0	46.6		mg/Kg		93	80 - 120
Silver	25.0	26.4		mg/Kg		105	80 - 120
Thallium	50.0	49.0		mg/Kg		98	80 - 120
Vanadium	50.0	48.9		mg/Kg		98	80 - 120
Zinc	50.0	47.9		mg/Kg		96	80 - 120

Lab Sample ID: 720-88192-7 MS
Matrix: Solid
Analysis Batch: 250325

Client Sample ID: DG-L3S-0.5-1
Prep Type: Total/NA
Prep Batch: 250197

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	2.3	F1	45.0	15.2	F1	mg/Kg		29	75 - 125
Arsenic	12		45.0	65.2		mg/Kg		118	75 - 125
Barium	75	F1	45.0	134	F1	mg/Kg		129	75 - 125
Beryllium	0.14	J F1	45.0	56.7	F1	mg/Kg		126	75 - 125
Cadmium	1.0		45.0	52.0		mg/Kg		113	75 - 125
Chromium	26	F1	45.0	89.4	F1	mg/Kg		140	75 - 125
Cobalt	11		45.0	63.7		mg/Kg		117	75 - 125
Copper	140	F1	45.0	233	F1	mg/Kg		217	75 - 125
Lead	170	F1	45.0	216		mg/Kg		105	75 - 125
Molybdenum	1.4	J	45.0	54.9		mg/Kg		119	75 - 125
Nickel	20	F1	45.0	76.8	F1	mg/Kg		127	75 - 125
Selenium	ND		45.0	50.2		mg/Kg		111	75 - 125
Silver	ND	F1	22.5	30.0	F1	mg/Kg		133	75 - 125
Thallium	0.95	J	45.0	50.8		mg/Kg		111	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88192-7 MS
Matrix: Solid
Analysis Batch: 250325

Client Sample ID: DG-L3S-0.5-1
Prep Type: Total/NA
Prep Batch: 250197

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	76	F1	45.0	133	F1	mg/Kg		127	75 - 125
Zinc	290		45.0	324	4	mg/Kg		72	75 - 125

Lab Sample ID: 720-88192-7 MSD
Matrix: Solid
Analysis Batch: 250325

Client Sample ID: DG-L3S-0.5-1
Prep Type: Total/NA
Prep Batch: 250197

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	2.3	F1	45.9	14.1	F1	mg/Kg		26	75 - 125	8	20
Arsenic	12		45.9	65.6		mg/Kg		117	75 - 125	1	20
Barium	75	F1	45.9	138	F1	mg/Kg		137	75 - 125	3	20
Beryllium	0.14	J F1	45.9	59.9	F1	mg/Kg		130	75 - 125	6	20
Cadmium	1.0		45.9	54.7		mg/Kg		117	75 - 125	5	20
Chromium	26	F1	45.9	77.3		mg/Kg		111	75 - 125	15	20
Cobalt	11		45.9	66.4		mg/Kg		121	75 - 125	4	20
Copper	140	F1	45.9	198	F1	mg/Kg		136	75 - 125	16	20
Lead	170	F1	45.9	260	F1	mg/Kg		198	75 - 125	18	20
Molybdenum	1.4	J	45.9	53.9		mg/Kg		114	75 - 125	2	20
Nickel	20	F1	45.9	71.5		mg/Kg		113	75 - 125	7	20
Selenium	ND		45.9	53.6		mg/Kg		117	75 - 125	7	20
Silver	ND	F1	22.9	31.8	F1	mg/Kg		139	75 - 125	6	20
Thallium	0.95	J	45.9	53.3		mg/Kg		114	75 - 125	5	20
Vanadium	76	F1	45.9	153	F1	mg/Kg		167	75 - 125	13	20
Zinc	290		45.9	342	4	mg/Kg		109	75 - 125	5	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250236/1-A
Matrix: Solid
Analysis Batch: 250467

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250236

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/27/18 20:30	08/28/18 22:33	1

Lab Sample ID: LCS 720-250236/2-A
Matrix: Solid
Analysis Batch: 250467

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250236

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.763		mg/Kg		92	80 - 120

Lab Sample ID: 720-88191-A-11-F MS
Matrix: Solid
Analysis Batch: 250467

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250236

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.062		0.725	0.825		mg/Kg		105	75 - 125

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: 720-88191-A-11-G MSD
Matrix: Solid
Analysis Batch: 250467

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250236

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.062		0.725	0.838		mg/Kg		107	75 - 125	2	20

Lab Sample ID: MB 720-250239/1-A
Matrix: Solid
Analysis Batch: 250500

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250239

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/25/18 13:53	08/29/18 12:26	1

Lab Sample ID: LCS 720-250239/2-A
Matrix: Solid
Analysis Batch: 250500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250239

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.920		mg/Kg		110	80 - 120

Lab Sample ID: 720-88235-A-1-A MS
Matrix: Solid
Analysis Batch: 250500

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250239

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12		0.735	0.903		mg/Kg		107	75 - 125

Lab Sample ID: 720-88235-A-1-B MSD
Matrix: Solid
Analysis Batch: 250500

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250239

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.12		0.725	0.952		mg/Kg		115	75 - 125	5	20

GC/MS VOA

Prep Batch: 250051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-1	DG-I3S-0.5-1	Total/NA	Solid	5035	

Analysis Batch: 250345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-15	DG-L5S-3.5-4	Total/NA	Solid	8260B	250367
MB 720-250345/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250345/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250345/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250345/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250345/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-11	DG-M3S-7.5-8	Total/NA	Solid	8260B	250367
MB 720-250350/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250350/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250350/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250350/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250350/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-2	DG-I3S-3.5-4	Total/NA	Solid	8260B	250367
MB 720-250352/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250352/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250352/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250352/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250352/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-2	DG-I3S-3.5-4	Total/NA	Solid	5035	
720-88192-9	DG-M3S-0.5-1	Total/NA	Solid	5035	
720-88192-11	DG-M3S-7.5-8	Total/NA	Solid	5035	
720-88192-15	DG-L5S-3.5-4	Total/NA	Solid	5035	

Analysis Batch: 250405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-9	DG-M3S-0.5-1	Total/NA	Solid	8260B	250367
MB 720-250405/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250405/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250405/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250405/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250405/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-1	DG-I3S-0.5-1	Total/NA	Solid	8260B	250051
MB 720-250407/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250407/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250407/7	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS VOA (Continued)

Analysis Batch: 250407 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 720-250407/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250407/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-5	DG-K3S-0.5-1	Total/NA	Solid	8260B	250481
720-88192-6	DG-K3S-3.5-4	Total/NA	Solid	8260B	250481
720-88192-10	DG-M3S-3.5-4	Total/NA	Solid	8260B	250481
720-88192-14	DG-L5S-0.5-1	Total/NA	Solid	8260B	250481
720-88192-18	DUP-02	Total/NA	Solid	8260B	250481
MB 720-250453/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250453/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250453/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250453/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250453/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-5	DG-K3S-0.5-1	Total/NA	Solid	5035	
720-88192-6	DG-K3S-3.5-4	Total/NA	Solid	5035	
720-88192-10	DG-M3S-3.5-4	Total/NA	Solid	5035	
720-88192-14	DG-L5S-0.5-1	Total/NA	Solid	5035	
720-88192-18	DUP-02	Total/NA	Solid	5035	

Analysis Batch: 250529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-20	TB-2	Total/NA	Water	8260B	
MB 720-250529/4	Method Blank	Total/NA	Water	8260B	
LCS 720-250529/5	Lab Control Sample	Total/NA	Water	8260B	
LCS 720-250529/7	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-250529/6	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 720-250529/8	Lab Control Sample Dup	Total/NA	Water	8260B	
720-88210-A-3 MS	Matrix Spike	Total/NA	Water	8260B	
720-88210-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 250048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-1	DG-I3S-0.5-1	Total/NA	Solid	3546	
720-88192-2	DG-I3S-3.5-4	Total/NA	Solid	3546	
720-88192-5	DG-K3S-0.5-1	Total/NA	Solid	3546	
720-88192-6	DG-K3S-3.5-4	Total/NA	Solid	3546	
720-88192-9	DG-M3S-0.5-1	Total/NA	Solid	3546	
720-88192-10	DG-M3S-3.5-4	Total/NA	Solid	3546	
720-88192-11	DG-M3S-7.5-8	Total/NA	Solid	3546	
720-88192-14	DG-L5S-0.5-1	Total/NA	Solid	3546	
MB 720-250048/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250048/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88190-E-11-A MS	Matrix Spike	Total/NA	Solid	3546	

GC/MS Semi VOA (Continued)

Prep Batch: 250048 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-E-11-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-15	DG-L5S-3.5-4	Total/NA	Solid	3546	
720-88192-18	DUP-02	Total/NA	Solid	3546	
MB 720-250190/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250190/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-A-9-F MS	Matrix Spike	Total/NA	Solid	3546	
720-88216-A-9-G MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-1	DG-I3S-0.5-1	Total/NA	Solid	8270C SIM	250048
720-88192-2	DG-I3S-3.5-4	Total/NA	Solid	8270C SIM	250048
720-88192-6	DG-K3S-3.5-4	Total/NA	Solid	8270C SIM	250048
720-88192-9	DG-M3S-0.5-1	Total/NA	Solid	8270C SIM	250048
720-88192-10	DG-M3S-3.5-4	Total/NA	Solid	8270C SIM	250048
720-88192-11	DG-M3S-7.5-8	Total/NA	Solid	8270C SIM	250048
720-88192-14	DG-L5S-0.5-1	Total/NA	Solid	8270C SIM	250048
MB 720-250048/1-A	Method Blank	Total/NA	Solid	8270C SIM	250048
LCS 720-250048/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250048
720-88190-E-11-A MS	Matrix Spike	Total/NA	Solid	8270C SIM	250048
720-88190-E-11-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250048

Analysis Batch: 250333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-5	DG-K3S-0.5-1	Total/NA	Solid	8270C SIM	250048

Analysis Batch: 250399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250190/1-A	Method Blank	Total/NA	Solid	8270C SIM	250190
LCS 720-250190/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250190

Analysis Batch: 250501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-15	DG-L5S-3.5-4	Total/NA	Solid	8270C SIM	250190
720-88192-18	DUP-02	Total/NA	Solid	8270C SIM	250190
720-88216-A-9-F MS	Matrix Spike	Total/NA	Solid	8270C SIM	250190
720-88216-A-9-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250190

GC Semi VOA

Analysis Batch: 250034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-11	DG-M3S-7.5-8	Total/NA	Solid	8015B	250075
720-88192-15	DG-L5S-3.5-4	Total/NA	Solid	8015B	250075
720-88192-18	DUP-02	Total/NA	Solid	8015B	250075
MB 720-250075/1-A	Method Blank	Total/NA	Solid	8015B	250075
LCS 720-250075/2-A	Lab Control Sample	Total/NA	Solid	8015B	250075

GC Semi VOA (Continued)

Analysis Batch: 250035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-9	DG-M3S-0.5-1	Total/NA	Solid	8015B	250044
720-88192-10	DG-M3S-3.5-4	Total/NA	Solid	8015B	250044

Analysis Batch: 250036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-5	DG-K3S-0.5-1	Total/NA	Solid	8015B	250044
720-88192-6	DG-K3S-3.5-4	Total/NA	Solid	8015B	250044

Analysis Batch: 250037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-1	DG-I3S-0.5-1	Total/NA	Solid	8015B	250044
720-88192-2	DG-I3S-3.5-4	Total/NA	Solid	8015B	250044
LCS 720-250044/2-A	Lab Control Sample	Total/NA	Solid	8015B	250044
720-88190-D-10-A MS	Matrix Spike	Total/NA	Solid	8015B	250044
720-88190-D-10-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	250044

Prep Batch: 250044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-1	DG-I3S-0.5-1	Total/NA	Solid	3546	
720-88192-2	DG-I3S-3.5-4	Total/NA	Solid	3546	
720-88192-5	DG-K3S-0.5-1	Total/NA	Solid	3546	
720-88192-6	DG-K3S-3.5-4	Total/NA	Solid	3546	
720-88192-9	DG-M3S-0.5-1	Total/NA	Solid	3546	
720-88192-10	DG-M3S-3.5-4	Total/NA	Solid	3546	
MB 720-250044/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250044/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88190-D-10-A MS	Matrix Spike	Total/NA	Solid	3546	
720-88190-D-10-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-1	DG-I3S-0.5-1	Total/NA	Solid	3546	
720-88192-2	DG-I3S-3.5-4	Total/NA	Solid	3546	
720-88192-5	DG-K3S-0.5-1	Total/NA	Solid	3546	
720-88192-6	DG-K3S-3.5-4	Total/NA	Solid	3546	
MB 720-250053/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250053/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88190-D-10-E MS	Matrix Spike	Total/NA	Solid	3546	
720-88190-D-10-F MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-11	DG-M3S-7.5-8	Total/NA	Solid	3546	
720-88192-14	DG-L5S-0.5-1	Total/NA	Solid	3546	
720-88192-15	DG-L5S-3.5-4	Total/NA	Solid	3546	
720-88192-18	DUP-02	Total/NA	Solid	3546	
MB 720-250075/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250075/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88186-D-5-A MS	Matrix Spike	Total/NA	Solid	3546	
720-88186-D-5-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 250087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-9	DG-M3S-0.5-1	Total/NA	Solid	3546	
720-88192-10	DG-M3S-3.5-4	Total/NA	Solid	3546	
720-88192-11	DG-M3S-7.5-8	Total/NA	Solid	3546	
720-88192-14	DG-L5S-0.5-1	Total/NA	Solid	3546	
720-88192-15	DG-L5S-3.5-4	Total/NA	Solid	3546	
720-88192-18	DUP-02	Total/NA	Solid	3546	
MB 720-250087/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250087/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88186-D-1-C MS	Matrix Spike	Total/NA	Solid	3546	
720-88186-D-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-14	DG-L5S-0.5-1	Total/NA	Solid	8015B	250075
MB 720-250044/1-A	Method Blank	Total/NA	Solid	8015B	250044
720-88186-D-5-A MS	Matrix Spike	Total/NA	Solid	8015B	250075
720-88186-D-5-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	250075

Analysis Batch: 250196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250053/1-A	Method Blank	Total/NA	Solid	8081A	250053
LCS 720-250053/2-A	Lab Control Sample	Total/NA	Solid	8081A	250053

Analysis Batch: 250248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88190-D-10-E MS	Matrix Spike	Total/NA	Solid	8081A	250053
720-88190-D-10-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	250053

Analysis Batch: 250335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88186-D-1-C MS	Matrix Spike	Total/NA	Solid	8081A	250087
720-88186-D-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	250087

Analysis Batch: 250387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-250087/2-A	Lab Control Sample	Total/NA	Solid	8081A	250087

Analysis Batch: 250445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-14	DG-L5S-0.5-1	Total/NA	Solid	8081A	250087
720-88192-15	DG-L5S-3.5-4	Total/NA	Solid	8081A	250087
720-88192-18	DUP-02	Total/NA	Solid	8081A	250087

Analysis Batch: 250496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-1	DG-I3S-0.5-1	Total/NA	Solid	8081A	250053
720-88192-2	DG-I3S-3.5-4	Total/NA	Solid	8081A	250053
720-88192-5	DG-K3S-0.5-1	Total/NA	Solid	8081A	250053
720-88192-6	DG-K3S-3.5-4	Total/NA	Solid	8081A	250053
720-88192-9	DG-M3S-0.5-1	Total/NA	Solid	8081A	250087
720-88192-10	DG-M3S-3.5-4	Total/NA	Solid	8081A	250087

GC Semi VOA (Continued)

Analysis Batch: 250496 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-11	DG-M3S-7.5-8	Total/NA	Solid	8081A	250087
MB 720-250087/1-A	Method Blank	Total/NA	Solid	8081A	250087
LCS 720-250087/2-A	Lab Control Sample	Total/NA	Solid	8081A	250087

Prep Batch: 342523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-1	DG-I3S-0.5-1	Total/NA	Solid	3540C	
720-88192-2	DG-I3S-3.5-4	Total/NA	Solid	3540C	
720-88192-6	DG-K3S-3.5-4	Total/NA	Solid	3540C	
720-88192-9	DG-M3S-0.5-1	Total/NA	Solid	3540C	
720-88192-10	DG-M3S-3.5-4	Total/NA	Solid	3540C	
720-88192-11	DG-M3S-7.5-8	Total/NA	Solid	3540C	
720-88192-14	DG-L5S-0.5-1	Total/NA	Solid	3540C	
720-88192-18	DUP-02	Total/NA	Solid	3540C	
MB 240-342523/13-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-342523/14-A	Lab Control Sample	Total/NA	Solid	3540C	
720-88192-18 MS	DUP-02	Total/NA	Solid	3540C	
720-88192-18 MSD	DUP-02	Total/NA	Solid	3540C	

Analysis Batch: 342738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-1	DG-I3S-0.5-1	Total/NA	Solid	8082	342523
720-88192-2	DG-I3S-3.5-4	Total/NA	Solid	8082	342523
720-88192-6	DG-K3S-3.5-4	Total/NA	Solid	8082	342523
720-88192-9	DG-M3S-0.5-1	Total/NA	Solid	8082	342523
720-88192-10	DG-M3S-3.5-4	Total/NA	Solid	8082	342523
720-88192-11	DG-M3S-7.5-8	Total/NA	Solid	8082	342523
720-88192-14	DG-L5S-0.5-1	Total/NA	Solid	8082	342523
720-88192-18	DUP-02	Total/NA	Solid	8082	342523
MB 240-342523/13-A	Method Blank	Total/NA	Solid	8082	342523
LCS 240-342523/14-A	Lab Control Sample	Total/NA	Solid	8082	342523
720-88192-18 MS	DUP-02	Total/NA	Solid	8082	342523
720-88192-18 MSD	DUP-02	Total/NA	Solid	8082	342523

Prep Batch: 342977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-5	DG-K3S-0.5-1	Total/NA	Solid	3540C	
720-88192-15	DG-L5S-3.5-4	Total/NA	Solid	3540C	
MB 240-342977/24-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-342977/25-A	Lab Control Sample	Total/NA	Solid	3540C	

Analysis Batch: 343129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-5	DG-K3S-0.5-1	Total/NA	Solid	8082	342977
720-88192-15	DG-L5S-3.5-4	Total/NA	Solid	8082	342977
MB 240-342977/24-A	Method Blank	Total/NA	Solid	8082	342977
LCS 240-342977/25-A	Lab Control Sample	Total/NA	Solid	8082	342977

Metals

Prep Batch: 250194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-1	DG-I3S-0.5-1	Total/NA	Solid	3050B	
720-88192-2	DG-I3S-3.5-4	Total/NA	Solid	3050B	
720-88192-3	DG-J3S-0.5-1	Total/NA	Solid	3050B	
720-88192-4	DG-J3S-3.5-4	Total/NA	Solid	3050B	
720-88192-5	DG-K3S-0.5-1	Total/NA	Solid	3050B	
MB 720-250194/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250194/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88214-D-2-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88214-D-2-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-6	DG-K3S-3.5-4	Total/NA	Solid	3050B	
720-88192-7	DG-L3S-0.5-1	Total/NA	Solid	3050B	
720-88192-8	DG-L3S-3.5-4	Total/NA	Solid	3050B	
720-88192-9	DG-M3S-0.5-1	Total/NA	Solid	3050B	
720-88192-10	DG-M3S-3.5-4	Total/NA	Solid	3050B	
720-88192-11	DG-M3S-7.5-8	Total/NA	Solid	3050B	
720-88192-12	DG-M5S-0.5-1	Total/NA	Solid	3050B	
720-88192-13	DG-M5S-3.5-4	Total/NA	Solid	3050B	
720-88192-14	DG-L5S-0.5-1	Total/NA	Solid	3050B	
720-88192-15	DG-L5S-3.5-4	Total/NA	Solid	3050B	
720-88192-16	DG-K5S-0.5-1	Total/NA	Solid	3050B	
720-88192-17	DG-K5S-3.5-4	Total/NA	Solid	3050B	
720-88192-18	DUP-02	Total/NA	Solid	3050B	
720-88192-19	DUP-12	Total/NA	Solid	3050B	
MB 720-250197/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250197/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88192-7 MS	DG-L3S-0.5-1	Total/NA	Solid	3050B	
720-88192-7 MSD	DG-L3S-0.5-1	Total/NA	Solid	3050B	

Prep Batch: 250236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-1	DG-I3S-0.5-1	Total/NA	Solid	7471A	
720-88192-2	DG-I3S-3.5-4	Total/NA	Solid	7471A	
720-88192-3	DG-J3S-0.5-1	Total/NA	Solid	7471A	
720-88192-4	DG-J3S-3.5-4	Total/NA	Solid	7471A	
720-88192-5	DG-K3S-0.5-1	Total/NA	Solid	7471A	
720-88192-6	DG-K3S-3.5-4	Total/NA	Solid	7471A	
720-88192-7	DG-L3S-0.5-1	Total/NA	Solid	7471A	
720-88192-8	DG-L3S-3.5-4	Total/NA	Solid	7471A	
720-88192-9	DG-M3S-0.5-1	Total/NA	Solid	7471A	
720-88192-11	DG-M3S-7.5-8	Total/NA	Solid	7471A	
MB 720-250236/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250236/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88191-A-11-F MS	Matrix Spike	Total/NA	Solid	7471A	
720-88191-A-11-G MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Prep Batch: 250239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-10	DG-M3S-3.5-4	Total/NA	Solid	7471A	

Metals (Continued)

Prep Batch: 250239 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-12	DG-M5S-0.5-1	Total/NA	Solid	7471A	
720-88192-13	DG-M5S-3.5-4	Total/NA	Solid	7471A	
720-88192-14	DG-L5S-0.5-1	Total/NA	Solid	7471A	
720-88192-15	DG-L5S-3.5-4	Total/NA	Solid	7471A	
720-88192-16	DG-K5S-0.5-1	Total/NA	Solid	7471A	
720-88192-17	DG-K5S-3.5-4	Total/NA	Solid	7471A	
720-88192-18	DUP-02	Total/NA	Solid	7471A	
720-88192-19	DUP-12	Total/NA	Solid	7471A	
MB 720-250239/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250239/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88235-A-1-A MS	Matrix Spike	Total/NA	Solid	7471A	
720-88235-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 250251

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-1	DG-I3S-0.5-1	Total/NA	Solid	6010B	250194
720-88192-2	DG-I3S-3.5-4	Total/NA	Solid	6010B	250194
720-88192-3	DG-J3S-0.5-1	Total/NA	Solid	6010B	250194
720-88192-4	DG-J3S-3.5-4	Total/NA	Solid	6010B	250194
720-88192-5	DG-K3S-0.5-1	Total/NA	Solid	6010B	250194
MB 720-250194/1-A	Method Blank	Total/NA	Solid	6010B	250194
LCS 720-250194/2-A	Lab Control Sample	Total/NA	Solid	6010B	250194
720-88214-D-2-A MS	Matrix Spike	Total/NA	Solid	6010B	250194
720-88214-D-2-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250194

Analysis Batch: 250325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-6	DG-K3S-3.5-4	Total/NA	Solid	6010B	250197
720-88192-7	DG-L3S-0.5-1	Total/NA	Solid	6010B	250197
720-88192-8	DG-L3S-3.5-4	Total/NA	Solid	6010B	250197
720-88192-9	DG-M3S-0.5-1	Total/NA	Solid	6010B	250197
720-88192-10	DG-M3S-3.5-4	Total/NA	Solid	6010B	250197
720-88192-11	DG-M3S-7.5-8	Total/NA	Solid	6010B	250197
720-88192-12	DG-M5S-0.5-1	Total/NA	Solid	6010B	250197
720-88192-13	DG-M5S-3.5-4	Total/NA	Solid	6010B	250197
720-88192-14	DG-L5S-0.5-1	Total/NA	Solid	6010B	250197
720-88192-15	DG-L5S-3.5-4	Total/NA	Solid	6010B	250197
720-88192-16	DG-K5S-0.5-1	Total/NA	Solid	6010B	250197
720-88192-17	DG-K5S-3.5-4	Total/NA	Solid	6010B	250197
720-88192-18	DUP-02	Total/NA	Solid	6010B	250197
720-88192-19	DUP-12	Total/NA	Solid	6010B	250197
MB 720-250197/1-A	Method Blank	Total/NA	Solid	6010B	250197
LCS 720-250197/2-A	Lab Control Sample	Total/NA	Solid	6010B	250197
720-88192-7 MS	DG-L3S-0.5-1	Total/NA	Solid	6010B	250197
720-88192-7 MSD	DG-L3S-0.5-1	Total/NA	Solid	6010B	250197

Analysis Batch: 250417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-6	DG-K3S-3.5-4	Total/NA	Solid	6010B	250197
720-88192-10	DG-M3S-3.5-4	Total/NA	Solid	6010B	250197
720-88192-13	DG-M5S-3.5-4	Total/NA	Solid	6010B	250197

Metals (Continued)

Analysis Batch: 250417 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-15	DG-L5S-3.5-4	Total/NA	Solid	6010B	250197

Analysis Batch: 250467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-1	DG-I3S-0.5-1	Total/NA	Solid	7471A	250236
720-88192-2	DG-I3S-3.5-4	Total/NA	Solid	7471A	250236
720-88192-3	DG-J3S-0.5-1	Total/NA	Solid	7471A	250236
720-88192-4	DG-J3S-3.5-4	Total/NA	Solid	7471A	250236
720-88192-5	DG-K3S-0.5-1	Total/NA	Solid	7471A	250236
720-88192-6	DG-K3S-3.5-4	Total/NA	Solid	7471A	250236
720-88192-7	DG-L3S-0.5-1	Total/NA	Solid	7471A	250236
720-88192-8	DG-L3S-3.5-4	Total/NA	Solid	7471A	250236
720-88192-9	DG-M3S-0.5-1	Total/NA	Solid	7471A	250236
720-88192-11	DG-M3S-7.5-8	Total/NA	Solid	7471A	250236
MB 720-250236/1-A	Method Blank	Total/NA	Solid	7471A	250236
LCS 720-250236/2-A	Lab Control Sample	Total/NA	Solid	7471A	250236
720-88191-A-11-F MS	Matrix Spike	Total/NA	Solid	7471A	250236
720-88191-A-11-G MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250236

Analysis Batch: 250500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88192-10	DG-M3S-3.5-4	Total/NA	Solid	7471A	250239
720-88192-12	DG-M5S-0.5-1	Total/NA	Solid	7471A	250239
720-88192-13	DG-M5S-3.5-4	Total/NA	Solid	7471A	250239
720-88192-14	DG-L5S-0.5-1	Total/NA	Solid	7471A	250239
720-88192-15	DG-L5S-3.5-4	Total/NA	Solid	7471A	250239
720-88192-16	DG-K5S-0.5-1	Total/NA	Solid	7471A	250239
720-88192-17	DG-K5S-3.5-4	Total/NA	Solid	7471A	250239
720-88192-18	DUP-02	Total/NA	Solid	7471A	250239
720-88192-19	DUP-12	Total/NA	Solid	7471A	250239
MB 720-250239/1-A	Method Blank	Total/NA	Solid	7471A	250239
LCS 720-250239/2-A	Lab Control Sample	Total/NA	Solid	7471A	250239
720-88235-A-1-A MS	Matrix Spike	Total/NA	Solid	7471A	250239
720-88235-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250239

Client Sample ID: DG-I3S-0.5-1

Lab Sample ID: 720-88192-1

Date Collected: 08/22/18 09:30

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250051	08/23/18 02:50	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250407	08/29/18 01:24	JRM	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250212	08/25/18 06:31	LPL	TAL PLS
Total/NA	Prep	3546			250044	08/23/18 08:42	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250037	08/24/18 00:14	JXL	TAL PLS
Total/NA	Prep	3546			250053	08/23/18 11:26	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250496	08/29/18 23:06	JZT	TAL PLS
Total/NA	Prep	3540C			342523	08/26/18 10:47	SDE	TAL CAN
Total/NA	Analysis	8082		1	342738	08/28/18 11:37	LSH	TAL CAN
Total/NA	Prep	3050B			250194	08/24/18 16:34	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250251	08/25/18 15:27	OBI	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250467	08/28/18 23:11	OBI	TAL PLS

Client Sample ID: DG-I3S-3.5-4

Lab Sample ID: 720-88192-2

Date Collected: 08/22/18 09:30

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250367	08/23/18 02:50	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250352	08/28/18 14:49	A1C	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250212	08/25/18 06:55	LPL	TAL PLS
Total/NA	Prep	3546			250044	08/23/18 08:42	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250037	08/24/18 00:38	JXL	TAL PLS
Total/NA	Prep	3546			250053	08/23/18 11:26	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250496	08/29/18 23:23	JZT	TAL PLS
Total/NA	Prep	3540C			342523	08/26/18 10:47	SDE	TAL CAN
Total/NA	Analysis	8082		1	342738	08/28/18 12:00	LSH	TAL CAN
Total/NA	Prep	3050B			250194	08/24/18 16:34	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250251	08/25/18 15:31	OBI	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250467	08/28/18 23:13	OBI	TAL PLS

Client Sample ID: DG-J3S-0.5-1

Lab Sample ID: 720-88192-3

Date Collected: 08/22/18 09:55

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250194	08/24/18 16:34	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250251	08/25/18 15:36	OBI	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS

Client Sample ID: DG-J3S-0.5-1

Lab Sample ID: 720-88192-3

Date Collected: 08/22/18 09:55

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	250467	08/28/18 23:20	OBI	TAL PLS

Client Sample ID: DG-J3S-3.5-4

Lab Sample ID: 720-88192-4

Date Collected: 08/22/18 09:55

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250194	08/24/18 16:34	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250251	08/25/18 15:41	OBI	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250467	08/28/18 23:22	OBI	TAL PLS

Client Sample ID: DG-K3S-0.5-1

Lab Sample ID: 720-88192-5

Date Collected: 08/22/18 10:15

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250481	08/23/18 02:50	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250453	08/29/18 11:40	A1C	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250333	08/27/18 21:58	LPL	TAL PLS
Total/NA	Prep	3546			250044	08/23/18 08:42	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250036	08/23/18 23:50	JXL	TAL PLS
Total/NA	Prep	3546			250053	08/23/18 11:26	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250496	08/29/18 23:39	JZT	TAL PLS
Total/NA	Prep	3540C			342977	08/29/18 08:11	SLD	TAL CAN
Total/NA	Analysis	8082		1	343129	08/30/18 14:20	LSH	TAL CAN
Total/NA	Prep	3050B			250194	08/24/18 16:34	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250251	08/25/18 15:46	OBI	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250467	08/28/18 23:25	OBI	TAL PLS

Client Sample ID: DG-K3S-3.5-4

Lab Sample ID: 720-88192-6

Date Collected: 08/22/18 10:15

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250481	08/23/18 02:50	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250453	08/29/18 12:23	A1C	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250212	08/24/18 23:27	LPL	TAL PLS
Total/NA	Prep	3546			250044	08/23/18 08:42	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250036	08/23/18 23:26	JXL	TAL PLS

Client Sample ID: DG-K3S-3.5-4

Lab Sample ID: 720-88192-6

Date Collected: 08/22/18 10:15

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			250053	08/23/18 11:26	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250496	08/29/18 23:55	JZT	TAL PLS
Total/NA	Prep	3540C			342523	08/26/18 10:47	SDE	TAL CAN
Total/NA	Analysis	8082		1	342738	08/28/18 12:47	LSH	TAL CAN
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 15:17	BKR	TAL PLS
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		20	250417	08/28/18 14:51	OBI	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250467	08/28/18 23:27	OBI	TAL PLS

Client Sample ID: DG-L3S-0.5-1

Lab Sample ID: 720-88192-7

Date Collected: 08/22/18 10:25

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 15:08	BKR	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250467	08/28/18 23:29	OBI	TAL PLS

Client Sample ID: DG-L3S-3.5-4

Lab Sample ID: 720-88192-8

Date Collected: 08/22/18 10:25

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 15:22	BKR	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250467	08/28/18 23:32	OBI	TAL PLS

Client Sample ID: DG-M3S-0.5-1

Lab Sample ID: 720-88192-9

Date Collected: 08/22/18 10:40

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250367	08/23/18 02:50	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250405	08/28/18 22:11	JRM	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250212	08/24/18 23:50	LPL	TAL PLS
Total/NA	Prep	3546			250044	08/23/18 08:42	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250035	08/24/18 02:31	JXL	TAL PLS
Total/NA	Prep	3546			250087	08/23/18 14:52	MAB	TAL PLS

Client Sample ID: DG-M3S-0.5-1

Lab Sample ID: 720-88192-9

Date Collected: 08/22/18 10:40

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8081A		1	250496	08/30/18 00:12	JZT	TAL PLS
Total/NA	Prep	3540C			342523	08/26/18 10:47	SDE	TAL CAN
Total/NA	Analysis	8082		1	342738	08/28/18 13:10	LSH	TAL CAN
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 16:57	BKR	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250467	08/28/18 23:34	OBI	TAL PLS

Client Sample ID: DG-M3S-3.5-4

Lab Sample ID: 720-88192-10

Date Collected: 08/22/18 10:40

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250481	08/23/18 02:50	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250453	08/29/18 12:51	A1C	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250212	08/25/18 00:14	LPL	TAL PLS
Total/NA	Prep	3546			250044	08/23/18 08:42	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250035	08/24/18 03:00	JXL	TAL PLS
Total/NA	Prep	3546			250087	08/23/18 14:52	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250496	08/30/18 00:28	JZT	TAL PLS
Total/NA	Prep	3540C			342523	08/26/18 10:47	SDE	TAL CAN
Total/NA	Analysis	8082		1	342738	08/28/18 13:33	LSH	TAL CAN
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 15:36	BKR	TAL PLS
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		10	250417	08/28/18 14:56	OBI	TAL PLS
Total/NA	Prep	7471A			250239	08/25/18 13:53	MAG	TAL PLS
Total/NA	Analysis	7471A		10	250500	08/29/18 13:34	OBI	TAL PLS

Client Sample ID: DG-M3S-7.5-8

Lab Sample ID: 720-88192-11

Date Collected: 08/22/18 10:40

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250367	08/23/18 02:50	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250350	08/28/18 18:01	A1C	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250212	08/25/18 00:37	LPL	TAL PLS
Total/NA	Prep	3546			250075	08/23/18 13:06	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250034	08/24/18 01:03	JXL	TAL PLS
Total/NA	Prep	3546			250087	08/23/18 14:52	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250496	08/30/18 00:45	JZT	TAL PLS

Client Sample ID: DG-M3S-7.5-8

Lab Sample ID: 720-88192-11

Date Collected: 08/22/18 10:40

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			342523	08/26/18 10:47	SDE	TAL CAN
Total/NA	Analysis	8082		1	342738	08/28/18 13:56	LSH	TAL CAN
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 15:41	BKR	TAL PLS
Total/NA	Prep	7471A			250236	08/27/18 20:30	GLL	TAL PLS
Total/NA	Analysis	7471A		1	250467	08/28/18 23:36	OBI	TAL PLS

Client Sample ID: DG-M5S-0.5-1

Lab Sample ID: 720-88192-12

Date Collected: 08/22/18 11:05

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 15:46	BKR	TAL PLS
Total/NA	Prep	7471A			250239	08/25/18 13:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250500	08/29/18 13:08	OBI	TAL PLS

Client Sample ID: DG-M5S-3.5-4

Lab Sample ID: 720-88192-13

Date Collected: 08/22/18 11:05

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 15:50	BKR	TAL PLS
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		20	250417	08/28/18 15:01	OBI	TAL PLS
Total/NA	Prep	7471A			250239	08/25/18 13:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250500	08/29/18 13:11	OBI	TAL PLS

Client Sample ID: DG-L5S-0.5-1

Lab Sample ID: 720-88192-14

Date Collected: 08/22/18 11:20

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250481	08/23/18 02:50	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250453	08/29/18 13:48	A1C	TAL PLS
Total/NA	Prep	3546			250048	08/23/18 09:43	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250212	08/25/18 07:19	LPL	TAL PLS
Total/NA	Prep	3546			250075	08/23/18 13:06	MAB	TAL PLS
Total/NA	Analysis	8015B		3	250133	08/24/18 11:43	JXL	TAL PLS
Total/NA	Prep	3546			250087	08/23/18 14:52	MAB	TAL PLS
Total/NA	Analysis	8081A		10	250445	08/29/18 09:43	MQL	TAL PLS
Total/NA	Prep	3540C			342523	08/26/18 10:47	SDE	TAL CAN

Client Sample ID: DG-L5S-0.5-1

Lab Sample ID: 720-88192-14

Date Collected: 08/22/18 11:20

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		20	342738	08/28/18 14:19	LSH	TAL CAN
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 15:55	BKR	TAL PLS
Total/NA	Prep	7471A			250239	08/25/18 13:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250500	08/29/18 13:13	OBI	TAL PLS

Client Sample ID: DG-L5S-3.5-4

Lab Sample ID: 720-88192-15

Date Collected: 08/22/18 11:20

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250367	08/23/18 02:50	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250345	08/28/18 17:17	MJK	TAL PLS
Total/NA	Prep	3546			250190	08/24/18 15:31	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250501	08/29/18 19:55	LPL	TAL PLS
Total/NA	Prep	3546			250075	08/23/18 13:06	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250034	08/24/18 01:33	JXL	TAL PLS
Total/NA	Prep	3546			250087	08/23/18 14:52	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250445	08/29/18 09:08	MQL	TAL PLS
Total/NA	Prep	3540C			342977	08/29/18 08:11	SLD	TAL CAN
Total/NA	Analysis	8082		1	343129	08/30/18 14:01	LSH	TAL CAN
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 16:00	BKR	TAL PLS
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		10	250417	08/28/18 15:06	OBI	TAL PLS
Total/NA	Prep	7471A			250239	08/25/18 13:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250500	08/29/18 13:15	OBI	TAL PLS

Client Sample ID: DG-K5S-0.5-1

Lab Sample ID: 720-88192-16

Date Collected: 08/22/18 11:50

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 16:05	BKR	TAL PLS
Total/NA	Prep	7471A			250239	08/25/18 13:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250500	08/29/18 13:23	OBI	TAL PLS

Client Sample ID: DG-K5S-3.5-4

Lab Sample ID: 720-88192-17

Date Collected: 08/22/18 11:50

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 16:09	BKR	TAL PLS
Total/NA	Prep	7471A			250239	08/25/18 13:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250500	08/29/18 13:25	OBI	TAL PLS

Client Sample ID: DUP-02

Lab Sample ID: 720-88192-18

Date Collected: 08/22/18 00:00

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250481	08/23/18 02:50	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250453	08/29/18 14:16	A1C	TAL PLS
Total/NA	Prep	3546			250190	08/24/18 15:31	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250501	08/29/18 20:19	LPL	TAL PLS
Total/NA	Prep	3546			250075	08/23/18 13:06	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250034	08/24/18 02:31	JXL	TAL PLS
Total/NA	Prep	3546			250087	08/23/18 14:52	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250445	08/29/18 09:26	MQL	TAL PLS
Total/NA	Prep	3540C			342523	08/26/18 10:47	SDE	TAL CAN
Total/NA	Analysis	8082		5	342738	08/28/18 15:03	LSH	TAL CAN
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 16:14	BKR	TAL PLS
Total/NA	Prep	7471A			250239	08/25/18 13:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250500	08/29/18 13:27	OBI	TAL PLS

Client Sample ID: DUP-12

Lab Sample ID: 720-88192-19

Date Collected: 08/22/18 00:00

Matrix: Solid

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 16:19	BKR	TAL PLS
Total/NA	Prep	7471A			250239	08/25/18 13:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250500	08/29/18 13:30	OBI	TAL PLS

Client Sample ID: TB-2

Lab Sample ID: 720-88192-20

Date Collected: 08/22/18 00:00

Matrix: Water

Date Received: 08/22/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250529	08/30/18 00:18	JRM	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
Subcontract	Asbestos - CARB 435	None	
3050B	Preparation, Metals	SW846	TAL PLS
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL PLS
5030B	Purge and Trap	SW846	TAL PLS
5035	Closed System Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

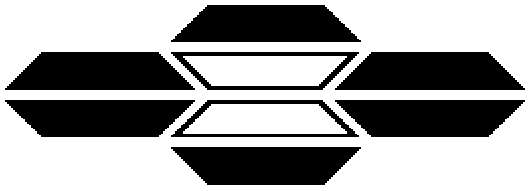
TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88192-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88192-1	DG-I3S-0.5-1	Solid	08/22/18 09:30	08/22/18 14:30
720-88192-2	DG-I3S-3.5-4	Solid	08/22/18 09:30	08/22/18 14:30
720-88192-3	DG-J3S-0.5-1	Solid	08/22/18 09:55	08/22/18 14:30
720-88192-4	DG-J3S-3.5-4	Solid	08/22/18 09:55	08/22/18 14:30
720-88192-5	DG-K3S-0.5-1	Solid	08/22/18 10:15	08/22/18 14:30
720-88192-6	DG-K3S-3.5-4	Solid	08/22/18 10:15	08/22/18 14:30
720-88192-7	DG-L3S-0.5-1	Solid	08/22/18 10:25	08/22/18 14:30
720-88192-8	DG-L3S-3.5-4	Solid	08/22/18 10:25	08/22/18 14:30
720-88192-9	DG-M3S-0.5-1	Solid	08/22/18 10:40	08/22/18 14:30
720-88192-10	DG-M3S-3.5-4	Solid	08/22/18 10:40	08/22/18 14:30
720-88192-11	DG-M3S-7.5-8	Solid	08/22/18 10:40	08/22/18 14:30
720-88192-12	DG-M5S-0.5-1	Solid	08/22/18 11:05	08/22/18 14:30
720-88192-13	DG-M5S-3.5-4	Solid	08/22/18 11:05	08/22/18 14:30
720-88192-14	DG-L5S-0.5-1	Solid	08/22/18 11:20	08/22/18 14:30
720-88192-15	DG-L5S-3.5-4	Solid	08/22/18 11:20	08/22/18 14:30
720-88192-16	DG-K5S-0.5-1	Solid	08/22/18 11:50	08/22/18 14:30
720-88192-17	DG-K5S-3.5-4	Solid	08/22/18 11:50	08/22/18 14:30
720-88192-18	DUP-02	Solid	08/22/18 00:00	08/22/18 14:30
720-88192-19	DUP-12	Solid	08/22/18 00:00	08/22/18 14:30
720-88192-20	TB-2	Water	08/22/18 00:00	08/22/18 14:30



ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01195

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Aug/31/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01195
Polarized light microscopy analytical results for 10 bulk sample(s).
Job Site: 720-88192-1
Job No.: UPC-OU-SM

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 10

Samples Analyzed: 10

Job Site / No. UPC-OU-SM
720-88192-1

Report No. **359824**
Date Submitted: Aug-23-18
Date Reported: Aug-29-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DG-I3S-0.5-1		**<0.25%**	**None Detected**	720-88192-1
Lab ID # 1283-01195-001	**400** - Total Points			No Asbestos Detected
DG-I3S-3.5-4		**<0.25%**	**None Detected**	720-88192-2
Lab ID # 1283-01195-002	**400** - Total Points			No Asbestos Detected
DG-K3S-0.5-1		**<0.25%**	**None Detected**	720-88192-5
Lab ID # 1283-01195-003	**400** - Total Points			No Asbestos Detected
DG-K3S-3.5-4		**<0.25%**	**None Detected**	720-88192-6
Lab ID # 1283-01195-004	**400** - Total Points			No Asbestos Detected
DG-M3S-0.5-1		**<0.25%**	**None Detected**	720-88192-9
Lab ID # 1283-01195-005	**400** - Total Points			No Asbestos Detected
DG-M3S-3.5-4		**<0.25%**	**None Detected**	720-88192-10
Lab ID # 1283-01195-006	**400** - Total Points			No Asbestos Detected
DG-M3S-7.5-8		**<0.25%**	**None Detected**	720-88192-11
Lab ID # 1283-01195-007	**400** - Total Points			No Asbestos Detected
DG-L3S-0.5-1		**<0.25%**	**None Detected**	720-88192-14
Lab ID # 1283-01195-008	**400** - Total Points			No Asbestos Detected
DG-L3S-3.5-4		**<0.25%**	**None Detected**	720-88192-15
Lab ID # 1283-01195-009	**400** - Total Points			No Asbestos Detected
DUP-02		**<0.25%**	**None Detected**	720-88192-18
Lab ID # 1283-01195-010	**400** - Total Points			No Asbestos Detected

QC Reviewer _____ **Analys** _____

#359824

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39392.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 2
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88192-1
Address: 630 BANCROFT WAY, ,	Due Date Requested: 8/29/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Wastewater, Sludge, Groundwater, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
		Preservation Code:			X	X		X	
DG-I3S--0.5-1 (720-88192-1)	8/22/18	09:30 Pacific		Solid			X	1	
DG-I3S--3.5-4 (720-88192-2)	8/22/18	09:30 Pacific		Solid			X	1	
DG-K3S--0.5-1 (720-88192-5)	8/22/18	10:15 Pacific		Solid			X	1	
DG-K3S--3.5-4 (720-88192-6)	8/22/18	10:15 Pacific		Solid			X	1	
DG-M3S--0.5-1 (720-88192-9)	8/22/18	10:40 Pacific		Solid			X	1	
DG-M3S--3.5-4 (720-88192-10)	8/22/18	10:40 Pacific		Solid			X	1	
DG-M3S--7.5-8 (720-88192-11)	8/22/18	10:40 Pacific		Solid			X	1	
DG-L5S--0.5-1 (720-88192-14)	8/22/18	11:20 Pacific		Solid			X	1	
DG-L5S--3.5-4 (720-88192-15)	8/22/18	11:20 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature] 1770	8/23/18 1405		MB	AUG23 '18 2:09PM	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature[s] °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39392.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 2 of 2
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88192-1
Address: 630 BANCROFT WAY, ,	Due Date Requested: 8/29/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
DUP-02 (720-88192-18)	8/22/18	Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain of custody.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature] 17720	8/29/18 1405		MB	AUG23 '18 2:09PM	
2	[signature]	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88192

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185053

Date 3/22 Page 1 of 2

11/21/2018 (Rev. 1)

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
Bill To: GEOSYNTEC
Sampled By: M. KAHRILAS
Attn: ANTHONY SMITH
Phone: 847-530-7602

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☒ EPA 8081 PCBs ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☒ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (LARB 435)
DG-I35-0.5-1	3/22	930	S		X			X		X		X	X									X
DG-I35-3.5-4		930			X			X		X		X	X									X
DG-J35-0.5-1		955											X									
DG-J35-3.5-4		955											X									
DG-K35-0.5-1		1015			X			X		X		X	X									X
DG-K35-3.5-4		1015			X			X		X		X	X									X
DG-L35-0.5-1		1025											X									
DG-L35-3.5-4		1025											X									
DG-M35-0.5-1		1040			X			X		X		X	X									X
DG-M35-3.5-4	V	1040	V		X			X		X		X	X									X

Project Info.

Project Name/ #: LRC ou-SM
PO#: WG2445101
Credit Card Y/N:

Sample Receipt

of Containers:
Head Space:
Temp:

If yes, please call with payment information ASAP

TAT: 10 Day | (5 Day) | 4 Day | 3 Day | 2 Day | 1 Day | Other:

~~* Metals Samples are Filtered~~ MK

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

1-9 | 2-6 | 7-6 | ~~TC~~ 0.7°C
3/22/18

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: 1230	Signature: 1430	720-88192 Chain of Custody
Printed Name: MIRANDA KAHRILAS 3/22	Printed Name: 8/22/18	
Company: GEO	Company: TA720	
1) Received by:	**2) Received by:**	**3) Received by:**
Signature: 1230	Signature: 1430	Signature: Time
Printed Name: 8/22/18	Printed Name: T Bullock 8/22/18	Printed Name: Date
Company: TA720	Company: TA720	Company:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88192

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185053

Date 8/22 Page 2 of 2

11/21/2018 (Rev. 1)

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
Bill To: GEOSYNTEC
Sampled By: M. KAHRILAS
Attn: ANTHONY SMITH
Phone: 917-530-7602

Analysis Request

Sample ID	Date	Time	Mat. Ind.	Preserv	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☒ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☒ EPA 8081 ☒ EPA 8082 PCBs	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)
DG-M3S-7.5-B	8/22	1040	S		X			X		X		X	X									
DG-M5S-0.5-1		1105											X									X
DG-M5S-3.5-4		1105											X									
DG-L5S-0.5-1		1120			X			X		X		X	X									
DG-L5S-3.5-4		1120			X			X		X		X	X									X
DG-K5S 0.5-1		1150											X									X
DG-K5S-3.5-4		1150											X									
DUP-02		—			X			X		X		X	X									
DUP-12		—											X									X

Project Info.

Project Name/ #: VPC ov-SM
PO#: WG2445101
Credit Card Y/N:

Sample Receipt

of Containers:
Head Space:
Temp:

If yes, please call with payment information ASAP

TAT: 10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID ___

1-9 2-6 2-6 TC 8/8/22/18
0.7°C

See Terms and Conditions on reverse

1) Relinquished by:
Signature: 1230 Time
Printed Name: MIRANDA KAHRILAS 8/22 Date
Company:

1) Received by:
Signature: 1230 Time
Printed Name: 8/22/18 Date
Company: TA 720

2) Relinquished by:
Signature: 1430 Time
Printed Name: 8/22/18 Date
Company: TA 720

2) Received by:
Signature: 1430 Time
Printed Name: 8/22/18 Date
Company: TA 720

3) Relinquished by:
Signature Time
Printed Name Date
Company

3) Received by:
Signature Time
Printed Name Date
Company

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

2.4 | C2.4

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39393.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88192-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 8/29/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

C1452Q02

Special Instructions/Note:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers
			Preservation Code:					
DG-I3S--0.5-1 (720-88192-1)	8/22/18	09:30 Pacific		Solid			X	1
DG-I3S--3.5-4 (720-88192-2)	8/22/18	09:30 Pacific		Solid			X	1
DG-K3S--0.5-1 (720-88192-5)	8/22/18	10:15 Pacific		Solid			X	1
DG-K3S--3.5-4 (720-88192-6)	8/22/18	10:15 Pacific		Solid			X	1
DG-M3S--0.5-1 (720-88192-9)	8/22/18	10:40 Pacific		Solid			X	1
DG-M3S--3.5-4 (720-88192-10)	8/22/18	10:40 Pacific		Solid			X	1
DG-M3S--7.5-8 (720-88192-11)	8/22/18	10:40 Pacific		Solid			X	1
DG-L5S--0.5-1 (720-88192-14)	8/22/18	11:20 Pacific		Solid			X	1
DG-L5S--3.5-4 (720-88192-15)	8/22/18	11:20 Pacific		Solid			X	1

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		8/23/18 12:43	FMT		8/24/18 915	JAC
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39393.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88192-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 8/29/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DUP-02 (720-88192-18)	8/22/18	Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/23/18 12:43	FRD		8/24/18 915	FTC
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client TH Plasmation Site Name _____ Cooler unpacked by:

Cooler Received on 8/24/18 Opened on 8/24/18

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TH Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **+0** °C) Observed Cooler Temp. 2.4 °C Corrected Cooler Temp. 2.4 °C
   IR GUN #36 (CF **-0.3**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC849161**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

_____

_____

_____

_____

_____

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

WI-NC-099

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88192-1

Login Number: 88192
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	False	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88203-1
Client Project/Site: UPC OU-SM

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
8/31/2018 5:16:46 PM

Micah Smith, Project Manager II
(916)374-4302
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 6
Surrogate Summary 11
QC Sample Results 12
QC Association Summary 14
Lab Chronicle 15
Certification Summary 16
Method Summary 17
Sample Summary 18
Chain of Custody 19
Receipt Checklists 22

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88203-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88203-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88203-1

Comments
No additional comments.

Receipt
The samples were received on 8/23/2018 3:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.7º C.

GC/MS VOA
Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batches 490-538385 and 490-538850.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88203-1

Client Sample ID: DG-J5S-0.5-1 — Lab Sample ID: 720-88203-1

No Detections.

Client Sample ID: DG-H5S-0.5-1 — Lab Sample ID: 720-88203-2

No Detections.

Client Sample ID: DG-F5S-0.5-1 — Lab Sample ID: 720-88203-3

No Detections.

Client Sample ID: DG-D5S-0.5-1 — Lab Sample ID: 720-88203-4

No Detections.

Client Sample ID: DG-B5S-0.5-1 — Lab Sample ID: 720-88203-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88203-1

Client Sample ID: DG-J5S-0.5-1
Date Collected: 08/22/18 14:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88203-1
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0015	0.00041	mg/Kg		08/22/18 16:00	08/24/18 18:03	1
1,2-Dibromo-3-Chloropropane	ND		0.0037	0.00052	mg/Kg		08/22/18 16:00	08/24/18 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*	*08/22/18 16:00*	*08/24/18 18:03*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*08/22/18 16:00*	*08/24/18 18:03*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*	*08/22/18 16:00*	*08/24/18 18:03*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*	*08/22/18 16:00*	*08/24/18 18:03*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88203-1

Client Sample ID: DG-H5S-0.5-1
Date Collected: 08/22/18 14:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88203-2
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0016	0.00045	mg/Kg		08/22/18 16:30	08/27/18 14:45	1
1,2-Dibromo-3-Chloropropane	ND		0.0041	0.00058	mg/Kg		08/22/18 16:30	08/27/18 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*	*08/22/18 16:30*	*08/27/18 14:45*	*1*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*08/22/18 16:30*	*08/27/18 14:45*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*	*08/22/18 16:30*	*08/27/18 14:45*	*1*
Toluene-d8 (Surr)	*109*		*70 - 130*	*08/22/18 16:30*	*08/27/18 14:45*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88203-1

Client Sample ID: DG-F5S-0.5-1
Date Collected: 08/22/18 15:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88203-3
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0016	0.00043	mg/Kg		08/22/18 17:45	08/24/18 18:59	1
1,2-Dibromo-3-Chloropropane	ND		0.0039	0.00055	mg/Kg		08/22/18 17:45	08/24/18 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*	*08/22/18 17:45*	*08/24/18 18:59*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*08/22/18 17:45*	*08/24/18 18:59*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*	*08/22/18 17:45*	*08/24/18 18:59*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/22/18 17:45*	*08/24/18 18:59*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88203-1

Client Sample ID: DG-D5S-0.5-1
Date Collected: 08/22/18 16:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88203-4
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0014	0.00040	mg/Kg		08/22/18 18:45	08/27/18 15:13	1
1,2-Dibromo-3-Chloropropane	ND		0.0036	0.00051	mg/Kg		08/22/18 18:45	08/27/18 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*	*08/22/18 18:45*	*08/27/18 15:13*	*1*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*08/22/18 18:45*	*08/27/18 15:13*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*	*08/22/18 18:45*	*08/27/18 15:13*	*1*
Toluene-d8 (Surr)	*110*		*70 - 130*	*08/22/18 18:45*	*08/27/18 15:13*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88203-1

Client Sample ID: DG-B5S-0.5-1
Date Collected: 08/23/18 11:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88203-5
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0016	0.00044	mg/Kg		08/23/18 13:45	08/24/18 19:55	1
1,2-Dibromo-3-Chloropropane	ND		0.0040	0.00056	mg/Kg		08/23/18 13:45	08/24/18 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*	*08/23/18 13:45*	*08/24/18 19:55*	*1*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*08/23/18 13:45*	*08/24/18 19:55*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*	*08/23/18 13:45*	*08/24/18 19:55*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*	*08/23/18 13:45*	*08/24/18 19:55*	*1*

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88203-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
720-88203-1	DG-J5S-0.5-1	86	104	97	104
720-88203-2	DG-H5S-0.5-1	86	119	97	109
720-88203-3	DG-F5S-0.5-1	88	102	97	101
720-88203-4	DG-D5S-0.5-1	84	122	95	110
720-88203-5	DG-B5S-0.5-1	86	113	96	106
LCS 490-538385/3	Lab Control Sample	84	99	95	100
LCS 490-538850/3	Lab Control Sample	82	97	96	99
LCSD 490-538385/4	Lab Control Sample Dup	83	101	95	101
LCSD 490-538850/4	Lab Control Sample Dup	82	97	97	100
MB 490-538385/6	Method Blank	82	99	96	102
MB 490-538850/9	Method Blank	84	99	97	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-538385/6
Matrix: Solid
Analysis Batch: 538385

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0020	0.00055	mg/Kg			08/24/18 12:43	1
1,2-Dibromo-3-Chloropropane	ND		0.0050	0.00070	mg/Kg			08/24/18 12:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 130*		*08/24/18 12:43*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/24/18 12:43*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*08/24/18 12:43*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*08/24/18 12:43*	*1*

Lab Sample ID: LCS 490-538385/3
Matrix: Solid
Analysis Batch: 538385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.0500	0.0382		mg/Kg		76	60 - 139
1,2-Dibromo-3-Chloropropane	0.0500	0.0353		mg/Kg		71	47 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 490-538385/4
Matrix: Solid
Analysis Batch: 538385

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.0500	0.0423		mg/Kg		85	60 - 139	10	16
1,2-Dibromo-3-Chloropropane	0.0500	0.0389		mg/Kg		78	47 - 144	10	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 490-538850/9
Matrix: Solid
Analysis Batch: 538850

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0020	0.00055	mg/Kg			08/27/18 14:17	1
1,2-Dibromo-3-Chloropropane	ND		0.0050	0.00070	mg/Kg			08/27/18 14:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*		*08/27/18 14:17*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-538850/9
Matrix: Solid
Analysis Batch: 538850

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130		08/27/18 14:17	1
Dibromofluoromethane (Surr)	97		70 - 130		08/27/18 14:17	1
Toluene-d8 (Surr)	100		70 - 130		08/27/18 14:17	1

Lab Sample ID: LCS 490-538850/3
Matrix: Solid
Analysis Batch: 538850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	0.0500	0.0399		mg/Kg		80	60 - 139
1,2-Dibromo-3-Chloropropane	0.0500	0.0363		mg/Kg		73	47 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	82		70 - 130
4-Bromofluorobenzene (Surr)	97		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: LCSD 490-538850/4
Matrix: Solid
Analysis Batch: 538850

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	0.0500	0.0400		mg/Kg		80	60 - 139	0	16
1,2-Dibromo-3-Chloropropane	0.0500	0.0370		mg/Kg		74	47 - 144	2	38

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	82		70 - 130
4-Bromofluorobenzene (Surr)	97		70 - 130
Dibromofluoromethane (Surr)	97		70 - 130
Toluene-d8 (Surr)	100		70 - 130

GC/MS VOA

Analysis Batch: 538385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88203-1	DG-J5S-0.5-1	Total/NA	Solid	8260B	538502
720-88203-3	DG-F5S-0.5-1	Total/NA	Solid	8260B	538502
720-88203-5	DG-B5S-0.5-1	Total/NA	Solid	8260B	538502
MB 490-538385/6	Method Blank	Total/NA	Solid	8260B	
LCS 490-538385/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-538385/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 538502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88203-1	DG-J5S-0.5-1	Total/NA	Solid	5035	
720-88203-2	DG-H5S-0.5-1	Total/NA	Solid	5035	
720-88203-3	DG-F5S-0.5-1	Total/NA	Solid	5035	
720-88203-4	DG-D5S-0.5-1	Total/NA	Solid	5035	
720-88203-5	DG-B5S-0.5-1	Total/NA	Solid	5035	

Analysis Batch: 538850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88203-2	DG-H5S-0.5-1	Total/NA	Solid	8260B	538502
720-88203-4	DG-D5S-0.5-1	Total/NA	Solid	8260B	538502
MB 490-538850/9	Method Blank	Total/NA	Solid	8260B	
LCS 490-538850/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-538850/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88203-1

Client Sample ID: DG-J5S-0.5-1
Date Collected: 08/22/18 14:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88203-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			538502	08/22/18 16:00	DHC	TAL NSH
Total/NA	Analysis	8260B		1	538385	08/24/18 18:03	PN	TAL NSH

Client Sample ID: DG-H5S-0.5-1
Date Collected: 08/22/18 14:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88203-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			538502	08/22/18 16:30	DHC	TAL NSH
Total/NA	Analysis	8260B		1	538850	08/27/18 14:45	S1S	TAL NSH

Client Sample ID: DG-F5S-0.5-1
Date Collected: 08/22/18 15:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88203-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			538502	08/22/18 17:45	DHC	TAL NSH
Total/NA	Analysis	8260B		1	538385	08/24/18 18:59	PN	TAL NSH

Client Sample ID: DG-D5S-0.5-1
Date Collected: 08/22/18 16:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88203-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			538502	08/22/18 18:45	DHC	TAL NSH
Total/NA	Analysis	8260B		1	538850	08/27/18 15:13	S1S	TAL NSH

Client Sample ID: DG-B5S-0.5-1
Date Collected: 08/23/18 11:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88203-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			538502	08/23/18 13:45	DHC	TAL NSH
Total/NA	Analysis	8260B		1	538385	08/24/18 19:55	PN	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88203-1

Laboratory: TestAmerica Pleasanton

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-19
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-19
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-19
Georgia	State Program	4	NA: NELAP & A2LA	12-31-19
Illinois	NELAP	5	200010	12-09-18
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-18
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-18
Louisiana	NELAP	6	30613	06-30-19
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-19
Minnesota	NELAP	5	047-999-345	12-31-18
Mississippi	State Program	4	N/A	06-30-19
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-19
New Hampshire	NELAP	1	2963	10-09-18
New Jersey	NELAP	2	TN965	06-30-19
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-18
North Dakota	State Program	8	R-146	06-30-19
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-19
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	07-31-19
Rhode Island	State Program	1	LAO00268	12-30-18
South Carolina	State Program	4	84009 (001)	02-28-19
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-19
Washington	State Program	10	C789	07-19-19
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-19
Wyoming (UST)	A2LA	8	453.07	12-31-19

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88203-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
5035	Closed System Purge and Trap	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88203-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88203-1	DG-J5S-0.5-1	Solid	08/22/18 14:00	08/23/18 15:40
720-88203-2	DG-H5S-0.5-1	Solid	08/22/18 14:30	08/23/18 15:40
720-88203-3	DG-F5S-0.5-1	Solid	08/22/18 15:45	08/23/18 15:40
720-88203-4	DG-D5S-0.5-1	Solid	08/22/18 16:45	08/23/18 15:40
720-88203-5	DG-B5S-0.5-1	Solid	08/23/18 11:45	08/23/18 15:40

720-88203 SAC

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA Pleasanton Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185088

Date 8/22 Page 1 of 1

8/31/2018

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: MKahrilas@geosyntec.com
Bill To: A-SMITH
Sampled By: M. KAHRILAS
Attn: GEO
Phone: 347-530-7602

Analysis Request

Sample ID	Date	Time	# of Containers	Matrix
DG-J55--0.5-1	8/22	1400	5	
~~DG-E55--0.5-1~~		1415	MK	
DG-H55--0.5-1		1430		
DG-F55-0.5-1		1545		
DG-D55-0.5-1		1645		
DG-B55--0.5-1	8/23	1145		

Analysis Request columns: Volatile Organics GCMS (VOCs) ☐ EPA 8260B; HVOCs by ☐ EPA 8260B; EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol; TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other ___; SemiVolatile Organics GCMS ☐ EPA 8270C; PNA/PAH's by ☐ 8270C ☐ 8270C SIM; Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total; Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082; CAM17 Metals (EPA 6010/7470/7471); Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___; Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___; ☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP; Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199; pH ☐ 9040 ☐ SM4500; ☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS; Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4; ☐ Perchlorate by EPA 314.0; COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity; 1,2,3-TCP (8260B - SIM 5035)

720-88203 Chain of Custody

Page 19 of 22

Project Info.

Project Name/ #: UPC OU-SM1
PO#: WG [illegible] 2565

Sample Receipt

# of Containers:
Head Space:
Temp:

Credit Card Y/N: If yes, please call with payment information ASAP

TAT: 10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID ___

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [illegible] Time: 1305	Signature: [illegible] Time: 1540	Signature: Time:
Printed Name: MIRANDA KAHRILAS Date: 8/23	Printed Name: Date: 8/23/18	Printed Name: Date:
Company: GEO	Company: TA 720	Company:
1) Received by:	**2) Received by:**	**3) Received by:**
Signature: [illegible] Time: 1707	Signature: [illegible] Time: 1590	Signature: Time:
Printed Name: Date: 8/23	Printed Name: Dennis Arce 8/23/18	Printed Name: Date:
Company: TA720	Company: TA-70	Company: 1.7C

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

720-88203 Chain of Custody

COOLER RECEIPT FORM

Cooler Received/Opened On 8/24/2018 @ 0925

Time Samples Removed From Cooler 1207 Time Samples Placed In Storage 1215 (2 Hour Window)

1. Tracking # 5543 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17960357 pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: 2.4 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Side

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) GH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

● ⬅ Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) GH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) GH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) GH

I certify that I attached a label with the unique LIMS number to each container (intial) GH

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
Page 1 of 1

Revised 8/23/17

8/31/2018

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	COC No: 720-39399.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California	Job #: 720-88203-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 8/29/2018		
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: Brisbane Data Gap Invest Work Plan	Project #: 72013717		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B/5035LP_Calc 1,2,3-TCP and 1,2-Dibromo-3-chloropropane	8260B/5035A_M_Calc 1,2,3-TCP and 1,2-Dibromo-3-chloropropane	Total Number of containers	Special Instructions/Note:
			Preservation Code:							Loc: 720 88203
DG-J55-0.5-1 (720-88203-1)	8/22/18	14:00 Pacific		Solid			X	X	3	
DG-H55-0.5-1 (720-88203-2)	8/22/18	14:30 Pacific		Solid			X	X	3	
DG-F55-0.5-1 (720-88203-3)	8/22/18	15:45 Pacific		Solid			X	X	3	
DG-D55-0.5-1 (720-88203-4)	8/22/18	16:45 Pacific		Solid			X	X	3	
DG-B55-0.5-1 (720-88203-5)	8/23/18	11:45 Pacific		Solid			X	X	3	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 8/23/18 1600	Company TA-720	Received by:	Date/Time: 8-24-18/0925	Company TA-NAS
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.4

Ver: 09/20/2016

8/31/2018

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88203-1

Login Number: 88203
List Number: 1
Creator: Arauz, Dennis

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88215-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/21/2018 5:53:29 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 14
QC Sample Results 38
QC Association Summary 45
Lab Chronicle 49
Certification Summary 55
Method Summary 56
Sample Summary 57
Chain of Custody 58
Receipt Checklists 60

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Job ID: 720-88215-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88215-1

Comments
This report was revised on 11/21/18 to change the units for the metals data to report in mg/Kg, as requested.

Receipt
The samples were received on 8/23/2018 3:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1º C.

Receipt Exceptions
The following samples were submitted for analysis; however, it was not listed on the Chain-of-Custody (COC):
The following 4 samples logged on hold. received 1 x 8 oz. soil jar for each sample:
DG-A2S-0.5-1 collected date/time: 8/22/18 @07:45,
DG-A2S-3.5-4 collected date/time: 8/22/18 @07:45,
DG-B2S-0.5-1 collected date/time: 8/22/18 @08:00,
DG-B2S-3.5-4 collected date/time: 8/22/18 @08:00,
The client confirmed that they were to be analyzed.

Collection times for "DUP-" samples are not indicated on the COC.

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and /or precision for preparation batches 720-250197, 720-250235, and 720-250292 and analytical batches 720-250325, 720-250353, and 720-250491 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes : DG-J6S-0.5-1 (720-88215-1), DG-L6S-0.5-1 (720-88215-3), DG-L6S-3.5-4 (720-88215-4), DG-M6S-0.5-1 (720-88215-5), DG-M6S-3.5-4 (720-88215-6), DG-M8S-0.5-1 (720-88215-7), DG-M8S-3.5-4 (720-88215-8), DUP-10 (720-88215-9), DUP-9 (720-88215-10), DG-D6-0.5-1 (720-88215-11), DG-D6-3.5-4 (720-88215-12), DG-E6-0.5-1 (720-88215-13), DG-E6-3.5-4 (720-88215-14), DG-G6-0.5-1 (720-88215-15), DG-G6-3.5-4 (720-88215-16), DG-I6-3.5-4 (720-88215-18), DUP-8 (720-88215-19), DUP-7 (720-88215-20), DG-A2S-0.5-1 (720-88215-21), DG-A2S-3.5-4 (720-88215-22) and DG-B2S-0.5-1 (720-88215-23). Elevated reporting limits (RLs) are provided.

Method(s) 7471A: Due to the high concentration of Hg, the matrix spike duplicate (MSD) for preparation batch 720-250416 and analytical batch 720-250599 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-J6S-0.5-1 — Lab Sample ID: 720-88215-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.9		1.3	0.22	mg/Kg	4		6010B	Total/NA
Arsenic	8.2		2.6	0.22	mg/Kg	4		6010B	Total/NA
Barium	180	B	1.3	0.19	mg/Kg	4		6010B	Total/NA
Beryllium	0.17	J	0.26	0.086	mg/Kg	4		6010B	Total/NA
Cadmium	1.6		0.33	0.033	mg/Kg	4		6010B	Total/NA
Chromium	52		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	10		0.53	0.053	mg/Kg	4		6010B	Total/NA
Copper	160		3.9	1.9	mg/Kg	4		6010B	Total/NA
Lead	270		1.3	0.28	mg/Kg	4		6010B	Total/NA
Molybdenum	12		1.3	0.17	mg/Kg	4		6010B	Total/NA
Nickel	88		1.3	0.13	mg/Kg	4		6010B	Total/NA
Thallium	1.1	J	1.3	0.38	mg/Kg	4		6010B	Total/NA
Vanadium	58		1.3	0.18	mg/Kg	4		6010B	Total/NA
Zinc	350		3.9	1.7	mg/Kg	4		6010B	Total/NA
Mercury	0.24		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-J6S-3.5-4 — Lab Sample ID: 720-88215-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.0	J	3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	53	B	1.8	0.25	mg/Kg	4		6010B	Total/NA
Beryllium	0.13	J	0.35	0.11	mg/Kg	4		6010B	Total/NA
Chromium	7.0		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	2.3		0.70	0.070	mg/Kg	4		6010B	Total/NA
Copper	7.6		5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	22		1.8	0.37	mg/Kg	4		6010B	Total/NA
Nickel	4.1		1.8	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	14		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	39		5.3	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.052		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L6S-0.5-1 — Lab Sample ID: 720-88215-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.38	J	1.5	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	0.84	J	3.1	0.26	mg/Kg	4		6010B	Total/NA
Barium	34	B	1.5	0.22	mg/Kg	4		6010B	Total/NA
Chromium	9.4		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	14		0.62	0.062	mg/Kg	4		6010B	Total/NA
Copper	85		4.6	2.2	mg/Kg	4		6010B	Total/NA
Lead	0.74	J	1.5	0.32	mg/Kg	4		6010B	Total/NA
Molybdenum	0.28	J	1.5	0.20	mg/Kg	4		6010B	Total/NA
Nickel	5.4		1.5	0.16	mg/Kg	4		6010B	Total/NA
Thallium	1.4	J	1.5	0.45	mg/Kg	4		6010B	Total/NA
Vanadium	140		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	51		4.6	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.040		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L6S-3.5-4 — Lab Sample ID: 720-88215-4

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-L6S-3.5-4 (Continued) — Lab Sample ID: 720-88215-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.2		1.5	0.24	mg/Kg	4		6010B	Total/NA
Arsenic	61		2.9	0.25	mg/Kg	4		6010B	Total/NA
Barium	72	B	1.5	0.21	mg/Kg	4		6010B	Total/NA
Beryllium	0.16	J	0.29	0.095	mg/Kg	4		6010B	Total/NA
Cadmium	0.17	J	0.36	0.036	mg/Kg	4		6010B	Total/NA
Chromium	24		1.5	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	7.6		0.58	0.058	mg/Kg	4		6010B	Total/NA
Copper	120		4.4	2.1	mg/Kg	4		6010B	Total/NA
Lead	300		1.5	0.31	mg/Kg	4		6010B	Total/NA
Molybdenum	0.36	J	1.5	0.19	mg/Kg	4		6010B	Total/NA
Nickel	15		1.5	0.15	mg/Kg	4		6010B	Total/NA
Thallium	0.62	J	1.5	0.42	mg/Kg	4		6010B	Total/NA
Vanadium	61		1.5	0.20	mg/Kg	4		6010B	Total/NA
Zinc	170		4.4	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.14		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M6S-0.5-1 — Lab Sample ID: 720-88215-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	3.3		1.3	0.21	mg/Kg	4		6010B	Total/NA
Arsenic	16		2.5	0.22	mg/Kg	4		6010B	Total/NA
Barium	160	B	1.3	0.18	mg/Kg	4		6010B	Total/NA
Beryllium	0.12	J	0.25	0.083	mg/Kg	4		6010B	Total/NA
Cadmium	3.1		0.32	0.032	mg/Kg	4		6010B	Total/NA
Chromium	53		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	10		0.51	0.051	mg/Kg	4		6010B	Total/NA
Copper	200		3.8	1.8	mg/Kg	4		6010B	Total/NA
Lead	360		1.3	0.27	mg/Kg	4		6010B	Total/NA
Molybdenum	9.8		1.3	0.16	mg/Kg	4		6010B	Total/NA
Nickel	49		1.3	0.13	mg/Kg	4		6010B	Total/NA
Silver	0.19	J	0.64	0.13	mg/Kg	4		6010B	Total/NA
Thallium	0.98	J	1.3	0.37	mg/Kg	4		6010B	Total/NA
Vanadium	53		1.3	0.17	mg/Kg	4		6010B	Total/NA
Zinc	400		3.8	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.29		0.015	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M6S-3.5-4 — Lab Sample ID: 720-88215-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	4.7		1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	83		3.0	0.25	mg/Kg	4		6010B	Total/NA
Barium	100	B	1.5	0.21	mg/Kg	4		6010B	Total/NA
Cadmium	0.89		0.37	0.037	mg/Kg	4		6010B	Total/NA
Chromium	18		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.59	0.059	mg/Kg	4		6010B	Total/NA
Copper	300		4.4	2.1	mg/Kg	4		6010B	Total/NA
Lead	340		1.5	0.31	mg/Kg	4		6010B	Total/NA
Molybdenum	0.35	J	1.5	0.19	mg/Kg	4		6010B	Total/NA
Nickel	15		1.5	0.15	mg/Kg	4		6010B	Total/NA
Silver	3.3		0.74	0.15	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-M6S-3.5-4 (Continued) — Lab Sample ID: 720-88215-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Thallium	1.5		1.5	0.43	mg/Kg	4		6010B	Total/NA
Vanadium	90		1.5	0.20	mg/Kg	4		6010B	Total/NA
Zinc	460		4.4	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.18		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M8S-0.5-1 — Lab Sample ID: 720-88215-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.56	J	1.2	0.20	mg/Kg	4		6010B	Total/NA
Arsenic	1.4	J	2.4	0.21	mg/Kg	4		6010B	Total/NA
Barium	19	B	1.2	0.17	mg/Kg	4		6010B	Total/NA
Chromium	12		1.2	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.48	0.048	mg/Kg	4		6010B	Total/NA
Copper	98		3.6	1.7	mg/Kg	4		6010B	Total/NA
Lead	17		1.2	0.25	mg/Kg	4		6010B	Total/NA
Molybdenum	0.29	J	1.2	0.16	mg/Kg	4		6010B	Total/NA
Nickel	13		1.2	0.12	mg/Kg	4		6010B	Total/NA
Thallium	1.1	J	1.2	0.35	mg/Kg	4		6010B	Total/NA
Vanadium	88		1.2	0.16	mg/Kg	4		6010B	Total/NA
Zinc	48		3.6	1.5	mg/Kg	4		6010B	Total/NA
Mercury	0.055		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-M8S-3.5-4 — Lab Sample ID: 720-88215-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	6.3		1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	32		3.8	0.33	mg/Kg	4		6010B	Total/NA
Barium	130	B	1.9	0.27	mg/Kg	4		6010B	Total/NA
Beryllium	0.89		0.38	0.13	mg/Kg	4		6010B	Total/NA
Chromium	67		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	19		0.77	0.077	mg/Kg	4		6010B	Total/NA
Copper	42		5.8	2.7	mg/Kg	4		6010B	Total/NA
Lead	100		1.9	0.40	mg/Kg	4		6010B	Total/NA
Molybdenum	0.58	J	1.9	0.25	mg/Kg	4		6010B	Total/NA
Nickel	36		1.9	0.20	mg/Kg	4		6010B	Total/NA
Thallium	0.93	J	1.9	0.56	mg/Kg	4		6010B	Total/NA
Vanadium	77		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	53		5.8	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.023		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-10 — Lab Sample ID: 720-88215-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.97	J	3.2	0.27	mg/Kg	4		6010B	Total/NA
Barium	33	B	1.6	0.23	mg/Kg	4		6010B	Total/NA
Chromium	9.9		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.65	0.065	mg/Kg	4		6010B	Total/NA
Copper	86		4.8	2.3	mg/Kg	4		6010B	Total/NA
Lead	2.2		1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	0.31	J	1.6	0.21	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-10 (Continued) — Lab Sample ID: 720-88215-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	5.8		1.6	0.16	mg/Kg	4		6010B	Total/NA
Thallium	1.1	J	1.6	0.47	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	53		4.8	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.044		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-9 — Lab Sample ID: 720-88215-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.60	J	1.6	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	3.5		3.2	0.27	mg/Kg	4		6010B	Total/NA
Barium	70	B	1.6	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.25	J	0.32	0.10	mg/Kg	4		6010B	Total/NA
Chromium	72		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	9.5		0.63	0.063	mg/Kg	4		6010B	Total/NA
Copper	13		4.8	2.3	mg/Kg	4		6010B	Total/NA
Lead	15		1.6	0.33	mg/Kg	4		6010B	Total/NA
Nickel	52		1.6	0.16	mg/Kg	4		6010B	Total/NA
Thallium	0.52	J	1.6	0.46	mg/Kg	4		6010B	Total/NA
Vanadium	53		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	46		4.8	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.13		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-D6S-0.5-1 — Lab Sample ID: 720-88215-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.54	J	1.8	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	2.2	J	3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	33		1.8	0.25	mg/Kg	4		6010B	Total/NA
Chromium	12		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.70	0.070	mg/Kg	4		6010B	Total/NA
Copper	150		5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	47		1.8	0.37	mg/Kg	4		6010B	Total/NA
Molybdenum	0.52	J	1.8	0.22	mg/Kg	4		6010B	Total/NA
Nickel	6.3		1.8	0.18	mg/Kg	4		6010B	Total/NA
Thallium	1.5	J	1.8	0.51	mg/Kg	4		6010B	Total/NA
Vanadium	130		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	77		5.3	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.12		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-D6S-3.5-4 — Lab Sample ID: 720-88215-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.2	J	1.4	0.22	mg/Kg	4		6010B	Total/NA
Arsenic	4.4		2.7	0.23	mg/Kg	4		6010B	Total/NA
Barium	53		1.4	0.19	mg/Kg	4		6010B	Total/NA
Beryllium	0.094	J	0.27	0.088	mg/Kg	4		6010B	Total/NA
Cadmium	0.098	J	0.34	0.034	mg/Kg	4		6010B	Total/NA
Chromium	13		1.4	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.54	0.054	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-D6S-3.5-4 (Continued) — Lab Sample ID: 720-88215-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	99		4.1	1.9	mg/Kg	4		6010B	Total/NA
Lead	78		1.4	0.28	mg/Kg	4		6010B	Total/NA
Molybdenum	0.40	J	1.4	0.17	mg/Kg	4		6010B	Total/NA
Nickel	6.9		1.4	0.14	mg/Kg	4		6010B	Total/NA
Thallium	1.1	J	1.4	0.39	mg/Kg	4		6010B	Total/NA
Vanadium	79		1.4	0.18	mg/Kg	4		6010B	Total/NA
Zinc	77		4.1	1.7	mg/Kg	4		6010B	Total/NA
Mercury	0.10		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E6S-0.5-1 — Lab Sample ID: 720-88215-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.2		1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	4.0		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	84		1.7	0.24	mg/Kg	4		6010B	Total/NA
Cadmium	0.52		0.42	0.041	mg/Kg	4		6010B	Total/NA
Chromium	19		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.67	0.067	mg/Kg	4		6010B	Total/NA
Copper	190		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	140		1.7	0.35	mg/Kg	4		6010B	Total/NA
Molybdenum	1.1	J	1.7	0.21	mg/Kg	4		6010B	Total/NA
Nickel	14		1.7	0.17	mg/Kg	4		6010B	Total/NA
Thallium	1.3	J	1.7	0.48	mg/Kg	4		6010B	Total/NA
Vanadium	94		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	170		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.15		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E6S-3.5-4 — Lab Sample ID: 720-88215-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.4	J	1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	4.6		3.0	0.26	mg/Kg	4		6010B	Total/NA
Barium	67		1.5	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.12	J	0.30	0.098	mg/Kg	4		6010B	Total/NA
Cadmium	1.1		0.38	0.038	mg/Kg	4		6010B	Total/NA
Chromium	11		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.61	0.061	mg/Kg	4		6010B	Total/NA
Copper	170		4.5	2.2	mg/Kg	4		6010B	Total/NA
Lead	170		1.5	0.32	mg/Kg	4		6010B	Total/NA
Molybdenum	0.34	J	1.5	0.19	mg/Kg	4		6010B	Total/NA
Nickel	7.4		1.5	0.15	mg/Kg	4		6010B	Total/NA
Silver	0.62	J	0.76	0.15	mg/Kg	4		6010B	Total/NA
Thallium	1.8		1.5	0.44	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	230		4.5	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.089		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-G6S-0.5-1 — Lab Sample ID: 720-88215-15

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-G6S-0.5-1 (Continued) — Lab Sample ID: 720-88215-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.58	J	1.8	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	2.2	J	3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	38		1.8	0.25	mg/Kg	4		6010B	Total/NA
Cadmium	0.15	J	0.44	0.044	mg/Kg	4		6010B	Total/NA
Chromium	17		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.70	0.070	mg/Kg	4		6010B	Total/NA
Copper	130		5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	55		1.8	0.37	mg/Kg	4		6010B	Total/NA
Molybdenum	1.1	J	1.8	0.22	mg/Kg	4		6010B	Total/NA
Nickel	13		1.8	0.18	mg/Kg	4		6010B	Total/NA
Thallium	1.5	J	1.8	0.51	mg/Kg	4		6010B	Total/NA
Vanadium	99		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	84		5.3	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.063		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-G6S-3.5-4 — Lab Sample ID: 720-88215-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	3.0		1.8	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	64		3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	71		1.8	0.25	mg/Kg	4		6010B	Total/NA
Cadmium	0.079	J	0.44	0.044	mg/Kg	4		6010B	Total/NA
Chromium	190		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	22		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	32		5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	83		1.8	0.37	mg/Kg	4		6010B	Total/NA
Molybdenum	0.26	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	320		1.8	0.18	mg/Kg	4		6010B	Total/NA
Thallium	0.57	J	1.8	0.51	mg/Kg	4		6010B	Total/NA
Vanadium	40		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	83		5.3	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.20		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I6S-0.5-1 — Lab Sample ID: 720-88215-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.2	J	2.0	0.33	mg/Kg	4		6010B	Total/NA
Arsenic	3.1	J	4.0	0.34	mg/Kg	4		6010B	Total/NA
Barium	61		2.0	0.28	mg/Kg	4		6010B	Total/NA
Chromium	68		2.0	0.21	mg/Kg	4		6010B	Total/NA
Cobalt	9.6		0.79	0.079	mg/Kg	4		6010B	Total/NA
Copper	22		5.9	2.8	mg/Kg	4		6010B	Total/NA
Lead	37		2.0	0.42	mg/Kg	4		6010B	Total/NA
Nickel	48		2.0	0.20	mg/Kg	4		6010B	Total/NA
Vanadium	57		2.0	0.27	mg/Kg	4		6010B	Total/NA
Zinc	56		5.9	2.5	mg/Kg	4		6010B	Total/NA
Mercury	0.099		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I6S-3.5-4 — Lab Sample ID: 720-88215-18

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-I6S-3.5-4 (Continued) — Lab Sample ID: 720-88215-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.3		1.1	0.19	mg/Kg	4		6010B	Total/NA
Arsenic	4.3		2.2	0.19	mg/Kg	4		6010B	Total/NA
Barium	100		1.1	0.16	mg/Kg	4		6010B	Total/NA
Beryllium	0.26		0.22	0.073	mg/Kg	4		6010B	Total/NA
Cadmium	0.039	J	0.28	0.028	mg/Kg	4		6010B	Total/NA
Chromium	80		1.1	0.12	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.45	0.045	mg/Kg	4		6010B	Total/NA
Copper	24		3.4	1.6	mg/Kg	4		6010B	Total/NA
Lead	28		1.1	0.24	mg/Kg	4		6010B	Total/NA
Molybdenum	0.22	J	1.1	0.14	mg/Kg	4		6010B	Total/NA
Nickel	48		1.1	0.11	mg/Kg	4		6010B	Total/NA
Thallium	0.61	J	1.1	0.33	mg/Kg	4		6010B	Total/NA
Vanadium	63		1.1	0.15	mg/Kg	4		6010B	Total/NA
Zinc	79		3.4	1.4	mg/Kg	4		6010B	Total/NA
Mercury	0.23		0.015	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-8 — Lab Sample ID: 720-88215-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.68	J	1.5	0.24	mg/Kg	4		6010B	Total/NA
Arsenic	1.8	J	2.9	0.25	mg/Kg	4		6010B	Total/NA
Barium	33		1.5	0.21	mg/Kg	4		6010B	Total/NA
Cadmium	0.12	J	0.36	0.036	mg/Kg	4		6010B	Total/NA
Chromium	20		1.5	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.58	0.058	mg/Kg	4		6010B	Total/NA
Copper	130		4.4	2.1	mg/Kg	4		6010B	Total/NA
Lead	37		1.5	0.31	mg/Kg	4		6010B	Total/NA
Molybdenum	0.93	J	1.5	0.19	mg/Kg	4		6010B	Total/NA
Nickel	12		1.5	0.15	mg/Kg	4		6010B	Total/NA
Thallium	1.0	J	1.5	0.42	mg/Kg	4		6010B	Total/NA
Vanadium	97		1.5	0.20	mg/Kg	4		6010B	Total/NA
Zinc	82		4.4	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.067		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-7 — Lab Sample ID: 720-88215-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.29	J	1.2	0.20	mg/Kg	4		6010B	Total/NA
Arsenic	1.8	J	2.4	0.20	mg/Kg	4		6010B	Total/NA
Barium	51		1.2	0.17	mg/Kg	4		6010B	Total/NA
Cadmium	0.34		0.30	0.030	mg/Kg	4		6010B	Total/NA
Chromium	11		1.2	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.48	0.048	mg/Kg	4		6010B	Total/NA
Copper	130		3.6	1.7	mg/Kg	4		6010B	Total/NA
Lead	58		1.2	0.25	mg/Kg	4		6010B	Total/NA
Molybdenum	0.28	J	1.2	0.15	mg/Kg	4		6010B	Total/NA
Nickel	5.7		1.2	0.12	mg/Kg	4		6010B	Total/NA
Silver	0.14	J	0.60	0.12	mg/Kg	4		6010B	Total/NA
Thallium	1.2		1.2	0.35	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.2	0.16	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DUP-7 (Continued) — Lab Sample ID: 720-88215-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	96		3.6	1.5	mg/Kg	4		6010B	Total/NA
Mercury	0.061		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-A2S-0.5-1 — Lab Sample ID: 720-88215-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	17		1.4	0.23	mg/Kg	4		6010B	Total/NA
Arsenic	190		2.7	0.23	mg/Kg	4		6010B	Total/NA
Barium	250		1.4	0.19	mg/Kg	4		6010B	Total/NA
Beryllium	0.095	J	0.27	0.089	mg/Kg	4		6010B	Total/NA
Cadmium	11		0.34	0.034	mg/Kg	4		6010B	Total/NA
Chromium	51		1.4	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.55	0.055	mg/Kg	4		6010B	Total/NA
Copper	740		4.1	2.0	mg/Kg	4		6010B	Total/NA
Lead	2400		1.4	0.29	mg/Kg	4		6010B	Total/NA
Molybdenum	4.9		1.4	0.18	mg/Kg	4		6010B	Total/NA
Nickel	47		1.4	0.14	mg/Kg	4		6010B	Total/NA
Silver	2.7		0.68	0.14	mg/Kg	4		6010B	Total/NA
Thallium	1.2	J	1.4	0.40	mg/Kg	4		6010B	Total/NA
Vanadium	58		1.4	0.19	mg/Kg	4		6010B	Total/NA
Zinc	1100		4.1	1.7	mg/Kg	4		6010B	Total/NA
Mercury	0.52	F1	0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-A2S-3.5-4 — Lab Sample ID: 720-88215-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	3.1		2.0	0.33	mg/Kg	4		6010B	Total/NA
Arsenic	110		3.9	0.33	mg/Kg	4		6010B	Total/NA
Barium	210		2.0	0.28	mg/Kg	4		6010B	Total/NA
Beryllium	0.27	J	0.39	0.13	mg/Kg	4		6010B	Total/NA
Cadmium	0.24	J	0.49	0.049	mg/Kg	4		6010B	Total/NA
Chromium	120		2.0	0.21	mg/Kg	4		6010B	Total/NA
Cobalt	22		0.78	0.078	mg/Kg	4		6010B	Total/NA
Copper	74		5.9	2.8	mg/Kg	4		6010B	Total/NA
Lead	150		2.0	0.41	mg/Kg	4		6010B	Total/NA
Molybdenum	0.98	J	2.0	0.25	mg/Kg	4		6010B	Total/NA
Nickel	150		2.0	0.20	mg/Kg	4		6010B	Total/NA
Thallium	1.5	J	2.0	0.57	mg/Kg	4		6010B	Total/NA
Vanadium	92		2.0	0.27	mg/Kg	4		6010B	Total/NA
Zinc	140		5.9	2.5	mg/Kg	4		6010B	Total/NA
Mercury	1.4		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B2S-0.5-1 — Lab Sample ID: 720-88215-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	5.9		1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	130		3.2	0.27	mg/Kg	4		6010B	Total/NA
Barium	240		1.6	0.23	mg/Kg	4		6010B	Total/NA
Cadmium	2.8		0.40	0.040	mg/Kg	4		6010B	Total/NA
Chromium	90		1.6	0.17	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-B2S-0.5-1 (Continued) — Lab Sample ID: 720-88215-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	16		0.64	0.064	mg/Kg	4		6010B	Total/NA
Copper	310		4.8	2.3	mg/Kg	4		6010B	Total/NA
Lead	510		1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	4.1		1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	55		1.6	0.16	mg/Kg	4		6010B	Total/NA
Silver	0.74	J	0.80	0.16	mg/Kg	4		6010B	Total/NA
Thallium	1.3	J	1.6	0.46	mg/Kg	4		6010B	Total/NA
Vanadium	78		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	580		4.8	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.57		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B2S-3.5-4 — Lab Sample ID: 720-88215-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.6		1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	280		3.6	0.31	mg/Kg	4		6010B	Total/NA
Barium	250		1.8	0.26	mg/Kg	4		6010B	Total/NA
Beryllium	0.20	J	0.36	0.12	mg/Kg	4		6010B	Total/NA
Cadmium	0.21	J	0.45	0.045	mg/Kg	4		6010B	Total/NA
Chromium	34		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	6.0		0.72	0.072	mg/Kg	4		6010B	Total/NA
Copper	49		5.4	2.6	mg/Kg	4		6010B	Total/NA
Lead	250		1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	0.51	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	37		1.8	0.18	mg/Kg	4		6010B	Total/NA
Silver	0.41	J	0.90	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	26		1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	170		5.4	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.063		0.017	0.0025	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-J6S-0.5-1
Date Collected: 08/22/18 14:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-1
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.9		1.3	0.22	mg/Kg		08/25/18 12:57	08/27/18 21:36	4
Arsenic	8.2		2.6	0.22	mg/Kg		08/25/18 12:57	08/27/18 21:36	4
Barium	180	B	1.3	0.19	mg/Kg		08/25/18 12:57	08/27/18 21:36	4
Beryllium	0.17	J	0.26	0.086	mg/Kg		08/25/18 12:57	08/27/18 21:36	4
Cadmium	1.6		0.33	0.033	mg/Kg		08/25/18 12:57	08/27/18 21:36	4
Chromium	52		1.3	0.14	mg/Kg		08/25/18 12:57	08/27/18 21:36	4
Cobalt	10		0.53	0.053	mg/Kg		08/25/18 12:57	08/27/18 21:36	4
Copper	160		3.9	1.9	mg/Kg		08/25/18 12:57	08/27/18 21:36	4
Lead	270		1.3	0.28	mg/Kg		08/25/18 12:57	08/27/18 21:36	4
Molybdenum	12		1.3	0.17	mg/Kg		08/25/18 12:57	08/27/18 21:36	4
Nickel	88		1.3	0.13	mg/Kg		08/25/18 12:57	08/27/18 21:36	4
Selenium	ND		2.6	0.39	mg/Kg		08/25/18 12:57	08/27/18 21:36	4
Silver	ND		0.66	0.13	mg/Kg		08/25/18 12:57	08/27/18 21:36	4
Thallium	1.1	J	1.3	0.38	mg/Kg		08/25/18 12:57	08/27/18 21:36	4
Vanadium	58		1.3	0.18	mg/Kg		08/25/18 12:57	08/27/18 21:36	4
Zinc	350		3.9	1.7	mg/Kg		08/25/18 12:57	08/27/18 21:36	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.24		0.016	0.0023	mg/Kg		08/29/18 20:30	08/30/18 14:47	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-J6S-3.5-4
Date Collected: 08/22/18 14:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-2
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.8	0.29	mg/Kg		08/25/18 12:57	08/27/18 21:40	4
Arsenic	**3.0**	**J**	3.5	0.30	mg/Kg		08/25/18 12:57	08/27/18 21:40	4
Barium	**53**	**B**	1.8	0.25	mg/Kg		08/25/18 12:57	08/27/18 21:40	4
Beryllium	**0.13**	**J**	0.35	0.11	mg/Kg		08/25/18 12:57	08/27/18 21:40	4
Cadmium	ND		0.44	0.044	mg/Kg		08/25/18 12:57	08/27/18 21:40	4
Chromium	**7.0**		1.8	0.19	mg/Kg		08/25/18 12:57	08/27/18 21:40	4
Cobalt	**2.3**		0.70	0.070	mg/Kg		08/25/18 12:57	08/27/18 21:40	4
Copper	**7.6**		5.3	2.5	mg/Kg		08/25/18 12:57	08/27/18 21:40	4
Lead	**22**		1.8	0.37	mg/Kg		08/25/18 12:57	08/27/18 21:40	4
Molybdenum	ND		1.8	0.22	mg/Kg		08/25/18 12:57	08/27/18 21:40	4
Nickel	**4.1**		1.8	0.18	mg/Kg		08/25/18 12:57	08/27/18 21:40	4
Selenium	ND		3.5	0.53	mg/Kg		08/25/18 12:57	08/27/18 21:40	4
Silver	ND		0.88	0.18	mg/Kg		08/25/18 12:57	08/27/18 21:40	4
Thallium	ND		1.8	0.51	mg/Kg		08/25/18 12:57	08/27/18 21:40	4
Vanadium	**14**		1.8	0.24	mg/Kg		08/25/18 12:57	08/27/18 21:40	4
Zinc	**39**		5.3	2.2	mg/Kg		08/25/18 12:57	08/27/18 21:40	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.052**		0.015	0.0022	mg/Kg		08/29/18 20:30	08/30/18 14:49	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-L6S-0.5-1
Date Collected: 08/22/18 14:50
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-3
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.38	J	1.5	0.26	mg/Kg		08/25/18 12:57	08/27/18 21:45	4
Arsenic	0.84	J	3.1	0.26	mg/Kg		08/25/18 12:57	08/27/18 21:45	4
Barium	34	B	1.5	0.22	mg/Kg		08/25/18 12:57	08/27/18 21:45	4
Beryllium	ND		0.31	0.10	mg/Kg		08/25/18 12:57	08/27/18 21:45	4
Cadmium	ND		0.38	0.038	mg/Kg		08/25/18 12:57	08/27/18 21:45	4
Chromium	9.4		1.5	0.16	mg/Kg		08/25/18 12:57	08/27/18 21:45	4
Cobalt	14		0.62	0.062	mg/Kg		08/25/18 12:57	08/27/18 21:45	4
Copper	85		4.6	2.2	mg/Kg		08/25/18 12:57	08/27/18 21:45	4
Lead	0.74	J	1.5	0.32	mg/Kg		08/25/18 12:57	08/27/18 21:45	4
Molybdenum	0.28	J	1.5	0.20	mg/Kg		08/25/18 12:57	08/27/18 21:45	4
Nickel	5.4		1.5	0.16	mg/Kg		08/25/18 12:57	08/27/18 21:45	4
Selenium	ND		3.1	0.46	mg/Kg		08/25/18 12:57	08/27/18 21:45	4
Silver	ND		0.77	0.16	mg/Kg		08/25/18 12:57	08/27/18 21:45	4
Thallium	1.4	J	1.5	0.45	mg/Kg		08/25/18 12:57	08/27/18 21:45	4
Vanadium	140		1.5	0.21	mg/Kg		08/25/18 12:57	08/27/18 21:45	4
Zinc	51		4.6	2.0	mg/Kg		08/25/18 12:57	08/27/18 21:45	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040		0.015	0.0022	mg/Kg		08/29/18 20:30	08/30/18 14:51	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-L6S-3.5-4
Date Collected: 08/22/18 14:50
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-4
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.2		1.5	0.24	mg/Kg		08/25/18 12:57	08/27/18 21:50	4
Arsenic	61		2.9	0.25	mg/Kg		08/25/18 12:57	08/27/18 21:50	4
Barium	72	B	1.5	0.21	mg/Kg		08/25/18 12:57	08/27/18 21:50	4
Beryllium	0.16	J	0.29	0.095	mg/Kg		08/25/18 12:57	08/27/18 21:50	4
Cadmium	0.17	J	0.36	0.036	mg/Kg		08/25/18 12:57	08/27/18 21:50	4
Chromium	24		1.5	0.15	mg/Kg		08/25/18 12:57	08/27/18 21:50	4
Cobalt	7.6		0.58	0.058	mg/Kg		08/25/18 12:57	08/27/18 21:50	4
Copper	120		4.4	2.1	mg/Kg		08/25/18 12:57	08/27/18 21:50	4
Lead	300		1.5	0.31	mg/Kg		08/25/18 12:57	08/27/18 21:50	4
Molybdenum	0.36	J	1.5	0.19	mg/Kg		08/25/18 12:57	08/27/18 21:50	4
Nickel	15		1.5	0.15	mg/Kg		08/25/18 12:57	08/27/18 21:50	4
Selenium	ND		2.9	0.44	mg/Kg		08/25/18 12:57	08/27/18 21:50	4
Silver	ND		0.73	0.15	mg/Kg		08/25/18 12:57	08/27/18 21:50	4
Thallium	0.62	J	1.5	0.42	mg/Kg		08/25/18 12:57	08/27/18 21:50	4
Vanadium	61		1.5	0.20	mg/Kg		08/25/18 12:57	08/27/18 21:50	4
Zinc	170		4.4	1.9	mg/Kg		08/25/18 12:57	08/27/18 21:50	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14		0.017	0.0025	mg/Kg		08/29/18 20:30	08/30/18 14:54	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-M6S-0.5-1
Date Collected: 08/22/18 15:50
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-5
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.3		1.3	0.21	mg/Kg		08/25/18 12:57	08/27/18 21:55	4
Arsenic	16		2.5	0.22	mg/Kg		08/25/18 12:57	08/27/18 21:55	4
Barium	160	B	1.3	0.18	mg/Kg		08/25/18 12:57	08/27/18 21:55	4
Beryllium	0.12	J	0.25	0.083	mg/Kg		08/25/18 12:57	08/27/18 21:55	4
Cadmium	3.1		0.32	0.032	mg/Kg		08/25/18 12:57	08/27/18 21:55	4
Chromium	53		1.3	0.14	mg/Kg		08/25/18 12:57	08/27/18 21:55	4
Cobalt	10		0.51	0.051	mg/Kg		08/25/18 12:57	08/27/18 21:55	4
Copper	200		3.8	1.8	mg/Kg		08/25/18 12:57	08/27/18 21:55	4
Lead	360		1.3	0.27	mg/Kg		08/25/18 12:57	08/27/18 21:55	4
Molybdenum	9.8		1.3	0.16	mg/Kg		08/25/18 12:57	08/27/18 21:55	4
Nickel	49		1.3	0.13	mg/Kg		08/25/18 12:57	08/27/18 21:55	4
Selenium	ND		2.5	0.38	mg/Kg		08/25/18 12:57	08/27/18 21:55	4
Silver	0.19	J	0.64	0.13	mg/Kg		08/25/18 12:57	08/27/18 21:55	4
Thallium	0.98	J	1.3	0.37	mg/Kg		08/25/18 12:57	08/27/18 21:55	4
Vanadium	53		1.3	0.17	mg/Kg		08/25/18 12:57	08/27/18 21:55	4
Zinc	400		3.8	1.6	mg/Kg		08/25/18 12:57	08/27/18 21:55	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.29		0.015	0.0021	mg/Kg		08/29/18 20:30	08/30/18 14:56	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-M6S-3.5-4
Date Collected: 08/22/18 15:50
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-6
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.7		1.5	0.25	mg/Kg		08/25/18 12:57	08/27/18 22:00	4
Arsenic	83		3.0	0.25	mg/Kg		08/25/18 12:57	08/27/18 22:00	4
Barium	100	B	1.5	0.21	mg/Kg		08/25/18 12:57	08/27/18 22:00	4
Beryllium	ND		0.30	0.096	mg/Kg		08/25/18 12:57	08/27/18 22:00	4
Cadmium	0.89		0.37	0.037	mg/Kg		08/25/18 12:57	08/27/18 22:00	4
Chromium	18		1.5	0.16	mg/Kg		08/25/18 12:57	08/27/18 22:00	4
Cobalt	12		0.59	0.059	mg/Kg		08/25/18 12:57	08/27/18 22:00	4
Copper	300		4.4	2.1	mg/Kg		08/25/18 12:57	08/27/18 22:00	4
Lead	340		1.5	0.31	mg/Kg		08/25/18 12:57	08/27/18 22:00	4
Molybdenum	0.35	J	1.5	0.19	mg/Kg		08/25/18 12:57	08/27/18 22:00	4
Nickel	15		1.5	0.15	mg/Kg		08/25/18 12:57	08/27/18 22:00	4
Selenium	ND		3.0	0.44	mg/Kg		08/25/18 12:57	08/27/18 22:00	4
Silver	3.3		0.74	0.15	mg/Kg		08/25/18 12:57	08/27/18 22:00	4
Thallium	1.5		1.5	0.43	mg/Kg		08/25/18 12:57	08/27/18 22:00	4
Vanadium	90		1.5	0.20	mg/Kg		08/25/18 12:57	08/27/18 22:00	4
Zinc	460		4.4	1.9	mg/Kg		08/25/18 12:57	08/27/18 22:00	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.18		0.017	0.0025	mg/Kg		08/29/18 20:30	08/30/18 14:58	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-M8S-0.5-1
Date Collected: 08/22/18 16:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-7
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.56	J	1.2	0.20	mg/Kg		08/25/18 12:57	08/27/18 22:04	4
Arsenic	1.4	J	2.4	0.21	mg/Kg		08/25/18 12:57	08/27/18 22:04	4
Barium	19	B	1.2	0.17	mg/Kg		08/25/18 12:57	08/27/18 22:04	4
Beryllium	ND		0.24	0.079	mg/Kg		08/25/18 12:57	08/27/18 22:04	4
Cadmium	ND		0.30	0.030	mg/Kg		08/25/18 12:57	08/27/18 22:04	4
Chromium	12		1.2	0.13	mg/Kg		08/25/18 12:57	08/27/18 22:04	4
Cobalt	12		0.48	0.048	mg/Kg		08/25/18 12:57	08/27/18 22:04	4
Copper	98		3.6	1.7	mg/Kg		08/25/18 12:57	08/27/18 22:04	4
Lead	17		1.2	0.25	mg/Kg		08/25/18 12:57	08/27/18 22:04	4
Molybdenum	0.29	J	1.2	0.16	mg/Kg		08/25/18 12:57	08/27/18 22:04	4
Nickel	13		1.2	0.12	mg/Kg		08/25/18 12:57	08/27/18 22:04	4
Selenium	ND		2.4	0.36	mg/Kg		08/25/18 12:57	08/27/18 22:04	4
Silver	ND		0.61	0.12	mg/Kg		08/25/18 12:57	08/27/18 22:04	4
Thallium	1.1	J	1.2	0.35	mg/Kg		08/25/18 12:57	08/27/18 22:04	4
Vanadium	88		1.2	0.16	mg/Kg		08/25/18 12:57	08/27/18 22:04	4
Zinc	48		3.6	1.5	mg/Kg		08/25/18 12:57	08/27/18 22:04	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.055		0.016	0.0023	mg/Kg		08/29/18 20:30	08/30/18 15:05	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-M8S-3.5-4
Date Collected: 08/22/18 16:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-8
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	6.3		1.9	0.32	mg/Kg		08/25/18 12:57	08/27/18 22:19	4
Arsenic	32		3.8	0.33	mg/Kg		08/25/18 12:57	08/27/18 22:19	4
Barium	130	B	1.9	0.27	mg/Kg		08/25/18 12:57	08/27/18 22:19	4
Beryllium	0.89		0.38	0.13	mg/Kg		08/25/18 12:57	08/27/18 22:19	4
Cadmium	ND		0.48	0.048	mg/Kg		08/25/18 12:57	08/27/18 22:19	4
Chromium	67		1.9	0.20	mg/Kg		08/25/18 12:57	08/27/18 22:19	4
Cobalt	19		0.77	0.077	mg/Kg		08/25/18 12:57	08/27/18 22:19	4
Copper	42		5.8	2.7	mg/Kg		08/25/18 12:57	08/27/18 22:19	4
Lead	100		1.9	0.40	mg/Kg		08/25/18 12:57	08/27/18 22:19	4
Molybdenum	0.58	J	1.9	0.25	mg/Kg		08/25/18 12:57	08/27/18 22:19	4
Nickel	36		1.9	0.20	mg/Kg		08/25/18 12:57	08/27/18 22:19	4
Selenium	ND		3.8	0.58	mg/Kg		08/25/18 12:57	08/27/18 22:19	4
Silver	ND		0.96	0.19	mg/Kg		08/25/18 12:57	08/27/18 22:19	4
Thallium	0.93	J	1.9	0.56	mg/Kg		08/25/18 12:57	08/27/18 22:19	4
Vanadium	77		1.9	0.26	mg/Kg		08/25/18 12:57	08/27/18 22:19	4
Zinc	53		5.8	2.4	mg/Kg		08/25/18 12:57	08/27/18 22:19	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023		0.015	0.0023	mg/Kg		08/29/18 20:30	08/30/18 15:08	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DUP-10
Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-9
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.6	0.27	mg/Kg		08/25/18 12:57	08/27/18 22:23	4
Arsenic	**0.97**	**J**	3.2	0.27	mg/Kg		08/25/18 12:57	08/27/18 22:23	4
Barium	**33**	**B**	1.6	0.23	mg/Kg		08/25/18 12:57	08/27/18 22:23	4
Beryllium	ND		0.32	0.10	mg/Kg		08/25/18 12:57	08/27/18 22:23	4
Cadmium	ND		0.40	0.040	mg/Kg		08/25/18 12:57	08/27/18 22:23	4
Chromium	**9.9**		1.6	0.17	mg/Kg		08/25/18 12:57	08/27/18 22:23	4
Cobalt	**13**		0.65	0.065	mg/Kg		08/25/18 12:57	08/27/18 22:23	4
Copper	**86**		4.8	2.3	mg/Kg		08/25/18 12:57	08/27/18 22:23	4
Lead	**2.2**		1.6	0.34	mg/Kg		08/25/18 12:57	08/27/18 22:23	4
Molybdenum	**0.31**	**J**	1.6	0.21	mg/Kg		08/25/18 12:57	08/27/18 22:23	4
Nickel	**5.8**		1.6	0.16	mg/Kg		08/25/18 12:57	08/27/18 22:23	4
Selenium	ND		3.2	0.48	mg/Kg		08/25/18 12:57	08/27/18 22:23	4
Silver	ND		0.81	0.16	mg/Kg		08/25/18 12:57	08/27/18 22:23	4
Thallium	**1.1**	**J**	1.6	0.47	mg/Kg		08/25/18 12:57	08/27/18 22:23	4
Vanadium	**110**		1.6	0.22	mg/Kg		08/25/18 12:57	08/27/18 22:23	4
Zinc	**53**		4.8	2.0	mg/Kg		08/25/18 12:57	08/27/18 22:23	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.044**		0.014	0.0021	mg/Kg		08/29/18 20:30	08/30/18 15:10	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DUP-9
Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-10
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.60	J	1.6	0.26	mg/Kg		08/25/18 12:57	08/27/18 22:28	4
Arsenic	3.5		3.2	0.27	mg/Kg		08/25/18 12:57	08/27/18 22:28	4
Barium	70	B	1.6	0.23	mg/Kg		08/25/18 12:57	08/27/18 22:28	4
Beryllium	0.25	J	0.32	0.10	mg/Kg		08/25/18 12:57	08/27/18 22:28	4
Cadmium	ND		0.40	0.039	mg/Kg		08/25/18 12:57	08/27/18 22:28	4
Chromium	72		1.6	0.17	mg/Kg		08/25/18 12:57	08/27/18 22:28	4
Cobalt	9.5		0.63	0.063	mg/Kg		08/25/18 12:57	08/27/18 22:28	4
Copper	13		4.8	2.3	mg/Kg		08/25/18 12:57	08/27/18 22:28	4
Lead	15		1.6	0.33	mg/Kg		08/25/18 12:57	08/27/18 22:28	4
Molybdenum	ND		1.6	0.20	mg/Kg		08/25/18 12:57	08/27/18 22:28	4
Nickel	52		1.6	0.16	mg/Kg		08/25/18 12:57	08/27/18 22:28	4
Selenium	ND		3.2	0.48	mg/Kg		08/25/18 12:57	08/27/18 22:28	4
Silver	ND		0.79	0.16	mg/Kg		08/25/18 12:57	08/27/18 22:28	4
Thallium	0.52	J	1.6	0.46	mg/Kg		08/25/18 12:57	08/27/18 22:28	4
Vanadium	53		1.6	0.22	mg/Kg		08/25/18 12:57	08/27/18 22:28	4
Zinc	46		4.8	2.0	mg/Kg		08/25/18 12:57	08/27/18 22:28	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13		0.014	0.0021	mg/Kg		08/29/18 20:30	08/30/18 15:12	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-D6S-0.5-1
Date Collected: 08/22/18 11:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-11
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.54	J	1.8	0.29	mg/Kg		08/24/18 16:33	08/27/18 16:33	4
Arsenic	2.2	J	3.5	0.30	mg/Kg		08/24/18 16:33	08/27/18 16:33	4
Barium	33		1.8	0.25	mg/Kg		08/24/18 16:33	08/27/18 16:33	4
Beryllium	ND		0.35	0.11	mg/Kg		08/24/18 16:33	08/27/18 16:33	4
Cadmium	ND		0.44	0.044	mg/Kg		08/24/18 16:33	08/27/18 16:33	4
Chromium	12		1.8	0.19	mg/Kg		08/24/18 16:33	08/27/18 16:33	4
Cobalt	15		0.70	0.070	mg/Kg		08/24/18 16:33	08/27/18 16:33	4
Copper	150		5.3	2.5	mg/Kg		08/24/18 16:33	08/27/18 16:33	4
Lead	47		1.8	0.37	mg/Kg		08/24/18 16:33	08/27/18 16:33	4
Molybdenum	0.52	J	1.8	0.22	mg/Kg		08/24/18 16:33	08/27/18 16:33	4
Nickel	6.3		1.8	0.18	mg/Kg		08/24/18 16:33	08/27/18 16:33	4
Selenium	ND		3.5	0.53	mg/Kg		08/24/18 16:33	08/27/18 16:33	4
Silver	ND		0.88	0.18	mg/Kg		08/24/18 16:33	08/27/18 16:33	4
Thallium	1.5	J	1.8	0.51	mg/Kg		08/24/18 16:33	08/27/18 16:33	4
Vanadium	130		1.8	0.24	mg/Kg		08/24/18 16:33	08/27/18 16:33	4
Zinc	77		5.3	2.2	mg/Kg		08/24/18 16:33	08/27/18 16:33	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.017	0.0025	mg/Kg		08/29/18 20:30	08/30/18 15:15	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-D6S-3.5-4
Date Collected: 08/22/18 11:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-12
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.2	J	1.4	0.22	mg/Kg		08/24/18 16:33	08/27/18 16:38	4
Arsenic	4.4		2.7	0.23	mg/Kg		08/24/18 16:33	08/27/18 16:38	4
Barium	53		1.4	0.19	mg/Kg		08/24/18 16:33	08/27/18 16:38	4
Beryllium	0.094	J	0.27	0.088	mg/Kg		08/24/18 16:33	08/27/18 16:38	4
Cadmium	0.098	J	0.34	0.034	mg/Kg		08/24/18 16:33	08/27/18 16:38	4
Chromium	13		1.4	0.14	mg/Kg		08/24/18 16:33	08/27/18 16:38	4
Cobalt	11		0.54	0.054	mg/Kg		08/24/18 16:33	08/27/18 16:38	4
Copper	99		4.1	1.9	mg/Kg		08/24/18 16:33	08/27/18 16:38	4
Lead	78		1.4	0.28	mg/Kg		08/24/18 16:33	08/27/18 16:38	4
Molybdenum	0.40	J	1.4	0.17	mg/Kg		08/24/18 16:33	08/27/18 16:38	4
Nickel	6.9		1.4	0.14	mg/Kg		08/24/18 16:33	08/27/18 16:38	4
Selenium	ND		2.7	0.41	mg/Kg		08/24/18 16:33	08/27/18 16:38	4
Silver	ND		0.68	0.14	mg/Kg		08/24/18 16:33	08/27/18 16:38	4
Thallium	1.1	J	1.4	0.39	mg/Kg		08/24/18 16:33	08/27/18 16:38	4
Vanadium	79		1.4	0.18	mg/Kg		08/24/18 16:33	08/27/18 16:38	4
Zinc	77		4.1	1.7	mg/Kg		08/24/18 16:33	08/27/18 16:38	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10		0.015	0.0023	mg/Kg		08/29/18 20:30	08/30/18 15:17	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-E6S-0.5-1
Date Collected: 08/22/18 11:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-13
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.2		1.7	0.28	mg/Kg		08/24/18 16:33	08/27/18 16:42	4
Arsenic	4.0		3.3	0.28	mg/Kg		08/24/18 16:33	08/27/18 16:42	4
Barium	84		1.7	0.24	mg/Kg		08/24/18 16:33	08/27/18 16:42	4
Beryllium	ND		0.33	0.11	mg/Kg		08/24/18 16:33	08/27/18 16:42	4
Cadmium	0.52		0.42	0.041	mg/Kg		08/24/18 16:33	08/27/18 16:42	4
Chromium	19		1.7	0.18	mg/Kg		08/24/18 16:33	08/27/18 16:42	4
Cobalt	13		0.67	0.067	mg/Kg		08/24/18 16:33	08/27/18 16:42	4
Copper	190		5.0	2.4	mg/Kg		08/24/18 16:33	08/27/18 16:42	4
Lead	140		1.7	0.35	mg/Kg		08/24/18 16:33	08/27/18 16:42	4
Molybdenum	1.1	J	1.7	0.21	mg/Kg		08/24/18 16:33	08/27/18 16:42	4
Nickel	14		1.7	0.17	mg/Kg		08/24/18 16:33	08/27/18 16:42	4
Selenium	ND		3.3	0.50	mg/Kg		08/24/18 16:33	08/27/18 16:42	4
Silver	ND		0.83	0.17	mg/Kg		08/24/18 16:33	08/27/18 16:42	4
Thallium	1.3	J	1.7	0.48	mg/Kg		08/24/18 16:33	08/27/18 16:42	4
Vanadium	94		1.7	0.23	mg/Kg		08/24/18 16:33	08/27/18 16:42	4
Zinc	170		5.0	2.1	mg/Kg		08/24/18 16:33	08/27/18 16:42	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15		0.017	0.0025	mg/Kg		08/29/18 20:30	08/30/18 15:19	1

Client Sample ID: DG-E6S-3.5-4

Date Collected: 08/22/18 11:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-14

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.4	J	1.5	0.25	mg/Kg		08/24/18 16:33	08/27/18 16:47	4
Arsenic	4.6		3.0	0.26	mg/Kg		08/24/18 16:33	08/27/18 16:47	4
Barium	67		1.5	0.22	mg/Kg		08/24/18 16:33	08/27/18 16:47	4
Beryllium	0.12	J	0.30	0.098	mg/Kg		08/24/18 16:33	08/27/18 16:47	4
Cadmium	1.1		0.38	0.038	mg/Kg		08/24/18 16:33	08/27/18 16:47	4
Chromium	11		1.5	0.16	mg/Kg		08/24/18 16:33	08/27/18 16:47	4
Cobalt	13		0.61	0.061	mg/Kg		08/24/18 16:33	08/27/18 16:47	4
Copper	170		4.5	2.2	mg/Kg		08/24/18 16:33	08/27/18 16:47	4
Lead	170		1.5	0.32	mg/Kg		08/24/18 16:33	08/27/18 16:47	4
Molybdenum	0.34	J	1.5	0.19	mg/Kg		08/24/18 16:33	08/27/18 16:47	4
Nickel	7.4		1.5	0.15	mg/Kg		08/24/18 16:33	08/27/18 16:47	4
Selenium	ND		3.0	0.45	mg/Kg		08/24/18 16:33	08/27/18 16:47	4
Silver	0.62	J	0.76	0.15	mg/Kg		08/24/18 16:33	08/27/18 16:47	4
Thallium	1.8		1.5	0.44	mg/Kg		08/24/18 16:33	08/27/18 16:47	4
Vanadium	110		1.5	0.21	mg/Kg		08/24/18 16:33	08/27/18 16:47	4
Zinc	230		4.5	1.9	mg/Kg		08/24/18 16:33	08/27/18 16:47	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.089		0.016	0.0024	mg/Kg		08/29/18 20:30	08/30/18 15:21	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-G6S-0.5-1
Date Collected: 08/22/18 12:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-15
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.58	J	1.8	0.29	mg/Kg		08/24/18 16:33	08/27/18 16:52	4
Arsenic	2.2	J	3.5	0.30	mg/Kg		08/24/18 16:33	08/27/18 16:52	4
Barium	38		1.8	0.25	mg/Kg		08/24/18 16:33	08/27/18 16:52	4
Beryllium	ND		0.35	0.11	mg/Kg		08/24/18 16:33	08/27/18 16:52	4
Cadmium	0.15	J	0.44	0.044	mg/Kg		08/24/18 16:33	08/27/18 16:52	4
Chromium	17		1.8	0.19	mg/Kg		08/24/18 16:33	08/27/18 16:52	4
Cobalt	15		0.70	0.070	mg/Kg		08/24/18 16:33	08/27/18 16:52	4
Copper	130		5.3	2.5	mg/Kg		08/24/18 16:33	08/27/18 16:52	4
Lead	55		1.8	0.37	mg/Kg		08/24/18 16:33	08/27/18 16:52	4
Molybdenum	1.1	J	1.8	0.22	mg/Kg		08/24/18 16:33	08/27/18 16:52	4
Nickel	13		1.8	0.18	mg/Kg		08/24/18 16:33	08/27/18 16:52	4
Selenium	ND		3.5	0.53	mg/Kg		08/24/18 16:33	08/27/18 16:52	4
Silver	ND		0.88	0.18	mg/Kg		08/24/18 16:33	08/27/18 16:52	4
Thallium	1.5	J	1.8	0.51	mg/Kg		08/24/18 16:33	08/27/18 16:52	4
Vanadium	99		1.8	0.24	mg/Kg		08/24/18 16:33	08/27/18 16:52	4
Zinc	84		5.3	2.2	mg/Kg		08/24/18 16:33	08/27/18 16:52	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.063		0.017	0.0025	mg/Kg		08/29/18 20:30	08/30/18 15:24	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-G6S-3.5-4
Date Collected: 08/22/18 12:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-16
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.0		1.8	0.29	mg/Kg		08/27/18 12:41	08/29/18 10:42	4
Arsenic	64		3.5	0.30	mg/Kg		08/27/18 12:41	08/29/18 10:42	4
Barium	71		1.8	0.25	mg/Kg		08/27/18 12:41	08/29/18 10:42	4
Beryllium	ND		0.35	0.12	mg/Kg		08/27/18 12:41	08/29/18 10:42	4
Cadmium	0.079	J	0.44	0.044	mg/Kg		08/27/18 12:41	08/29/18 10:42	4
Chromium	190		1.8	0.19	mg/Kg		08/27/18 12:41	08/29/18 10:42	4
Cobalt	22		0.71	0.071	mg/Kg		08/27/18 12:41	08/29/18 10:42	4
Copper	32		5.3	2.5	mg/Kg		08/27/18 12:41	08/29/18 10:42	4
Lead	83		1.8	0.37	mg/Kg		08/27/18 12:41	08/29/18 10:42	4
Molybdenum	0.26	J	1.8	0.23	mg/Kg		08/27/18 12:41	08/29/18 10:42	4
Nickel	320		1.8	0.18	mg/Kg		08/27/18 12:41	08/29/18 10:42	4
Selenium	ND		3.5	0.53	mg/Kg		08/27/18 12:41	08/29/18 10:42	4
Silver	ND		0.88	0.18	mg/Kg		08/27/18 12:41	08/29/18 10:42	4
Thallium	0.57	J	1.8	0.51	mg/Kg		08/27/18 12:41	08/29/18 10:42	4
Vanadium	40		1.8	0.24	mg/Kg		08/27/18 12:41	08/29/18 10:42	4
Zinc	83		5.3	2.2	mg/Kg		08/27/18 12:41	08/29/18 10:42	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20		0.015	0.0023	mg/Kg		08/29/18 20:30	08/30/18 15:26	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-I6S-0.5-1
Date Collected: 08/22/18 14:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-17
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.2	J	2.0	0.33	mg/Kg		08/27/18 12:41	08/29/18 10:47	4
Arsenic	3.1	J	4.0	0.34	mg/Kg		08/27/18 12:41	08/29/18 10:47	4
Barium	61		2.0	0.28	mg/Kg		08/27/18 12:41	08/29/18 10:47	4
Beryllium	ND		0.40	0.13	mg/Kg		08/27/18 12:41	08/29/18 10:47	4
Cadmium	ND		0.50	0.049	mg/Kg		08/27/18 12:41	08/29/18 10:47	4
Chromium	68		2.0	0.21	mg/Kg		08/27/18 12:41	08/29/18 10:47	4
Cobalt	9.6		0.79	0.079	mg/Kg		08/27/18 12:41	08/29/18 10:47	4
Copper	22		5.9	2.8	mg/Kg		08/27/18 12:41	08/29/18 10:47	4
Lead	37		2.0	0.42	mg/Kg		08/27/18 12:41	08/29/18 10:47	4
Molybdenum	ND		2.0	0.25	mg/Kg		08/27/18 12:41	08/29/18 10:47	4
Nickel	48		2.0	0.20	mg/Kg		08/27/18 12:41	08/29/18 10:47	4
Selenium	ND		4.0	0.59	mg/Kg		08/27/18 12:41	08/29/18 10:47	4
Silver	ND		0.99	0.20	mg/Kg		08/27/18 12:41	08/29/18 10:47	4
Thallium	ND		2.0	0.57	mg/Kg		08/27/18 12:41	08/29/18 10:47	4
Vanadium	57		2.0	0.27	mg/Kg		08/27/18 12:41	08/29/18 10:47	4
Zinc	56		5.9	2.5	mg/Kg		08/27/18 12:41	08/29/18 10:47	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.099		0.016	0.0024	mg/Kg		08/29/18 20:30	08/30/18 15:33	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-I6S-3.5-4
Date Collected: 08/22/18 14:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-18
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.3		1.1	0.19	mg/Kg		08/27/18 12:41	08/29/18 10:52	4
Arsenic	4.3		2.2	0.19	mg/Kg		08/27/18 12:41	08/29/18 10:52	4
Barium	100		1.1	0.16	mg/Kg		08/27/18 12:41	08/29/18 10:52	4
Beryllium	0.26		0.22	0.073	mg/Kg		08/27/18 12:41	08/29/18 10:52	4
Cadmium	0.039	J	0.28	0.028	mg/Kg		08/27/18 12:41	08/29/18 10:52	4
Chromium	80		1.1	0.12	mg/Kg		08/27/18 12:41	08/29/18 10:52	4
Cobalt	11		0.45	0.045	mg/Kg		08/27/18 12:41	08/29/18 10:52	4
Copper	24		3.4	1.6	mg/Kg		08/27/18 12:41	08/29/18 10:52	4
Lead	28		1.1	0.24	mg/Kg		08/27/18 12:41	08/29/18 10:52	4
Molybdenum	0.22	J	1.1	0.14	mg/Kg		08/27/18 12:41	08/29/18 10:52	4
Nickel	48		1.1	0.11	mg/Kg		08/27/18 12:41	08/29/18 10:52	4
Selenium	ND		2.2	0.34	mg/Kg		08/27/18 12:41	08/29/18 10:52	4
Silver	ND		0.56	0.11	mg/Kg		08/27/18 12:41	08/29/18 10:52	4
Thallium	0.61	J	1.1	0.33	mg/Kg		08/27/18 12:41	08/29/18 10:52	4
Vanadium	63		1.1	0.15	mg/Kg		08/27/18 12:41	08/29/18 10:52	4
Zinc	79		3.4	1.4	mg/Kg		08/27/18 12:41	08/29/18 10:52	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.23		0.015	0.0021	mg/Kg		08/29/18 20:30	08/30/18 15:35	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DUP-8
Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-19
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.68	J	1.5	0.24	mg/Kg		08/27/18 12:41	08/29/18 10:56	4
Arsenic	1.8	J	2.9	0.25	mg/Kg		08/27/18 12:41	08/29/18 10:56	4
Barium	33		1.5	0.21	mg/Kg		08/27/18 12:41	08/29/18 10:56	4
Beryllium	ND		0.29	0.095	mg/Kg		08/27/18 12:41	08/29/18 10:56	4
Cadmium	0.12	J	0.36	0.036	mg/Kg		08/27/18 12:41	08/29/18 10:56	4
Chromium	20		1.5	0.15	mg/Kg		08/27/18 12:41	08/29/18 10:56	4
Cobalt	15		0.58	0.058	mg/Kg		08/27/18 12:41	08/29/18 10:56	4
Copper	130		4.4	2.1	mg/Kg		08/27/18 12:41	08/29/18 10:56	4
Lead	37		1.5	0.31	mg/Kg		08/27/18 12:41	08/29/18 10:56	4
Molybdenum	0.93	J	1.5	0.19	mg/Kg		08/27/18 12:41	08/29/18 10:56	4
Nickel	12		1.5	0.15	mg/Kg		08/27/18 12:41	08/29/18 10:56	4
Selenium	ND		2.9	0.44	mg/Kg		08/27/18 12:41	08/29/18 10:56	4
Silver	ND		0.73	0.15	mg/Kg		08/27/18 12:41	08/29/18 10:56	4
Thallium	1.0	J	1.5	0.42	mg/Kg		08/27/18 12:41	08/29/18 10:56	4
Vanadium	97		1.5	0.20	mg/Kg		08/27/18 12:41	08/29/18 10:56	4
Zinc	82		4.4	1.9	mg/Kg		08/27/18 12:41	08/29/18 10:56	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.067		0.016	0.0024	mg/Kg		08/29/18 20:30	08/30/18 15:38	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DUP-7
Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-20
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.29	J	1.2	0.20	mg/Kg		08/27/18 12:41	08/29/18 11:01	4
Arsenic	1.8	J	2.4	0.20	mg/Kg		08/27/18 12:41	08/29/18 11:01	4
Barium	51		1.2	0.17	mg/Kg		08/27/18 12:41	08/29/18 11:01	4
Beryllium	ND		0.24	0.078	mg/Kg		08/27/18 12:41	08/29/18 11:01	4
Cadmium	0.34		0.30	0.030	mg/Kg		08/27/18 12:41	08/29/18 11:01	4
Chromium	11		1.2	0.13	mg/Kg		08/27/18 12:41	08/29/18 11:01	4
Cobalt	12		0.48	0.048	mg/Kg		08/27/18 12:41	08/29/18 11:01	4
Copper	130		3.6	1.7	mg/Kg		08/27/18 12:41	08/29/18 11:01	4
Lead	58		1.2	0.25	mg/Kg		08/27/18 12:41	08/29/18 11:01	4
Molybdenum	0.28	J	1.2	0.15	mg/Kg		08/27/18 12:41	08/29/18 11:01	4
Nickel	5.7		1.2	0.12	mg/Kg		08/27/18 12:41	08/29/18 11:01	4
Selenium	ND		2.4	0.36	mg/Kg		08/27/18 12:41	08/29/18 11:01	4
Silver	0.14	J	0.60	0.12	mg/Kg		08/27/18 12:41	08/29/18 11:01	4
Thallium	1.2		1.2	0.35	mg/Kg		08/27/18 12:41	08/29/18 11:01	4
Vanadium	110		1.2	0.16	mg/Kg		08/27/18 12:41	08/29/18 11:01	4
Zinc	96		3.6	1.5	mg/Kg		08/27/18 12:41	08/29/18 11:01	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.061		0.015	0.0023	mg/Kg		08/29/18 20:30	08/30/18 15:40	1

Client Sample ID: DG-A2S-0.5-1

Date Collected: 08/22/18 07:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-21

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	17		1.4	0.23	mg/Kg		08/27/18 12:41	08/29/18 11:06	4
Arsenic	190		2.7	0.23	mg/Kg		08/27/18 12:41	08/29/18 11:06	4
Barium	250		1.4	0.19	mg/Kg		08/27/18 12:41	08/29/18 11:06	4
Beryllium	0.095	J	0.27	0.089	mg/Kg		08/27/18 12:41	08/29/18 11:06	4
Cadmium	11		0.34	0.034	mg/Kg		08/27/18 12:41	08/29/18 11:06	4
Chromium	51		1.4	0.15	mg/Kg		08/27/18 12:41	08/29/18 11:06	4
Cobalt	11		0.55	0.055	mg/Kg		08/27/18 12:41	08/29/18 11:06	4
Copper	740		4.1	2.0	mg/Kg		08/27/18 12:41	08/29/18 11:06	4
Lead	2400		1.4	0.29	mg/Kg		08/27/18 12:41	08/29/18 11:06	4
Molybdenum	4.9		1.4	0.18	mg/Kg		08/27/18 12:41	08/29/18 11:06	4
Nickel	47		1.4	0.14	mg/Kg		08/27/18 12:41	08/29/18 11:06	4
Selenium	ND		2.7	0.41	mg/Kg		08/27/18 12:41	08/29/18 11:06	4
Silver	2.7		0.68	0.14	mg/Kg		08/27/18 12:41	08/29/18 11:06	4
Thallium	1.2	J	1.4	0.40	mg/Kg		08/27/18 12:41	08/29/18 11:06	4
Vanadium	58		1.4	0.19	mg/Kg		08/27/18 12:41	08/29/18 11:06	4
Zinc	1100		4.1	1.7	mg/Kg		08/27/18 12:41	08/29/18 11:06	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.52	F1	0.017	0.0025	mg/Kg		08/28/18 15:53	08/30/18 12:14	1

Client Sample ID: DG-A2S-3.5-4

Date Collected: 08/22/18 07:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-22

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.1		2.0	0.33	mg/Kg		08/27/18 12:41	08/29/18 11:20	4
Arsenic	110		3.9	0.33	mg/Kg		08/27/18 12:41	08/29/18 11:20	4
Barium	210		2.0	0.28	mg/Kg		08/27/18 12:41	08/29/18 11:20	4
Beryllium	0.27	J	0.39	0.13	mg/Kg		08/27/18 12:41	08/29/18 11:20	4
Cadmium	0.24	J	0.49	0.049	mg/Kg		08/27/18 12:41	08/29/18 11:20	4
Chromium	120		2.0	0.21	mg/Kg		08/27/18 12:41	08/29/18 11:20	4
Cobalt	22		0.78	0.078	mg/Kg		08/27/18 12:41	08/29/18 11:20	4
Copper	74		5.9	2.8	mg/Kg		08/27/18 12:41	08/29/18 11:20	4
Lead	150		2.0	0.41	mg/Kg		08/27/18 12:41	08/29/18 11:20	4
Molybdenum	0.98	J	2.0	0.25	mg/Kg		08/27/18 12:41	08/29/18 11:20	4
Nickel	150		2.0	0.20	mg/Kg		08/27/18 12:41	08/29/18 11:20	4
Selenium	ND		3.9	0.59	mg/Kg		08/27/18 12:41	08/29/18 11:20	4
Silver	ND		0.98	0.20	mg/Kg		08/27/18 12:41	08/29/18 11:20	4
Thallium	1.5	J	2.0	0.57	mg/Kg		08/27/18 12:41	08/29/18 11:20	4
Vanadium	92		2.0	0.27	mg/Kg		08/27/18 12:41	08/29/18 11:20	4
Zinc	140		5.9	2.5	mg/Kg		08/27/18 12:41	08/29/18 11:20	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.4		0.017	0.0025	mg/Kg		08/28/18 15:53	08/30/18 12:17	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-B2S-0.5-1
Date Collected: 08/22/18 08:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-23
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.9		1.6	0.27	mg/Kg		08/27/18 12:41	08/29/18 11:25	4
Arsenic	130		3.2	0.27	mg/Kg		08/27/18 12:41	08/29/18 11:25	4
Barium	240		1.6	0.23	mg/Kg		08/27/18 12:41	08/29/18 11:25	4
Beryllium	ND		0.32	0.10	mg/Kg		08/27/18 12:41	08/29/18 11:25	4
Cadmium	2.8		0.40	0.040	mg/Kg		08/27/18 12:41	08/29/18 11:25	4
Chromium	90		1.6	0.17	mg/Kg		08/27/18 12:41	08/29/18 11:25	4
Cobalt	16		0.64	0.064	mg/Kg		08/27/18 12:41	08/29/18 11:25	4
Copper	310		4.8	2.3	mg/Kg		08/27/18 12:41	08/29/18 11:25	4
Lead	510		1.6	0.34	mg/Kg		08/27/18 12:41	08/29/18 11:25	4
Molybdenum	4.1		1.6	0.20	mg/Kg		08/27/18 12:41	08/29/18 11:25	4
Nickel	55		1.6	0.16	mg/Kg		08/27/18 12:41	08/29/18 11:25	4
Selenium	ND		3.2	0.48	mg/Kg		08/27/18 12:41	08/29/18 11:25	4
Silver	0.74	J	0.80	0.16	mg/Kg		08/27/18 12:41	08/29/18 11:25	4
Thallium	1.3	J	1.6	0.46	mg/Kg		08/27/18 12:41	08/29/18 11:25	4
Vanadium	78		1.6	0.22	mg/Kg		08/27/18 12:41	08/29/18 11:25	4
Zinc	580		4.8	2.0	mg/Kg		08/27/18 12:41	08/29/18 11:25	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.57		0.014	0.0021	mg/Kg		08/28/18 15:53	08/30/18 12:19	1

Client Sample ID: DG-B2S-3.5-4

Date Collected: 08/22/18 08:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-24

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.6		1.8	0.30	mg/Kg		08/27/18 12:41	08/29/18 11:30	4
Arsenic	280		3.6	0.31	mg/Kg		08/27/18 12:41	08/29/18 11:30	4
Barium	250		1.8	0.26	mg/Kg		08/27/18 12:41	08/29/18 11:30	4
Beryllium	0.20	J	0.36	0.12	mg/Kg		08/27/18 12:41	08/29/18 11:30	4
Cadmium	0.21	J	0.45	0.045	mg/Kg		08/27/18 12:41	08/29/18 11:30	4
Chromium	34		1.8	0.19	mg/Kg		08/27/18 12:41	08/29/18 11:30	4
Cobalt	6.0		0.72	0.072	mg/Kg		08/27/18 12:41	08/29/18 11:30	4
Copper	49		5.4	2.6	mg/Kg		08/27/18 12:41	08/29/18 11:30	4
Lead	250		1.8	0.38	mg/Kg		08/27/18 12:41	08/29/18 11:30	4
Molybdenum	0.51	J	1.8	0.23	mg/Kg		08/27/18 12:41	08/29/18 11:30	4
Nickel	37		1.8	0.18	mg/Kg		08/27/18 12:41	08/29/18 11:30	4
Selenium	ND		3.6	0.54	mg/Kg		08/27/18 12:41	08/29/18 11:30	4
Silver	0.41	J	0.90	0.18	mg/Kg		08/27/18 12:41	08/29/18 11:30	4
Thallium	ND		1.8	0.52	mg/Kg		08/27/18 12:41	08/29/18 11:30	4
Vanadium	26		1.8	0.25	mg/Kg		08/27/18 12:41	08/29/18 11:30	4
Zinc	170		5.4	2.3	mg/Kg		08/27/18 12:41	08/29/18 11:30	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.063		0.017	0.0025	mg/Kg		08/28/18 15:53	08/30/18 12:22	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250197/1-A
Matrix: Solid
Analysis Batch: 250325

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250197

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Arsenic	ND		1.0	0.085	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Barium	ND		0.50	0.071	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Beryllium	ND		0.10	0.033	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Cadmium	ND		0.13	0.012	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Chromium	ND		0.50	0.053	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Cobalt	ND		0.20	0.020	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Copper	ND		1.5	0.71	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Lead	ND		0.50	0.11	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Nickel	ND		0.50	0.051	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Selenium	ND		1.0	0.15	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Silver	ND		0.25	0.051	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Thallium	ND		0.50	0.15	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Vanadium	ND		0.50	0.068	mg/Kg		08/24/18 16:33	08/27/18 14:39	1
Zinc	ND		1.5	0.64	mg/Kg		08/24/18 16:33	08/27/18 14:39	1

Lab Sample ID: LCS 720-250197/2-A
Matrix: Solid
Analysis Batch: 250325

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250197

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.9		mg/Kg		96	80 - 120
Arsenic	50.0	47.3		mg/Kg		95	80 - 120
Barium	50.0	51.5		mg/Kg		103	80 - 120
Beryllium	50.0	50.6		mg/Kg		101	80 - 120
Cadmium	50.0	47.8		mg/Kg		96	80 - 120
Chromium	50.0	47.8		mg/Kg		96	80 - 120
Cobalt	50.0	48.7		mg/Kg		97	80 - 120
Copper	50.0	48.4		mg/Kg		97	80 - 120
Lead	50.0	48.6		mg/Kg		97	80 - 120
Molybdenum	50.0	48.6		mg/Kg		97	80 - 120
Nickel	50.0	48.5		mg/Kg		97	80 - 120
Selenium	50.0	46.6		mg/Kg		93	80 - 120
Silver	25.0	26.4		mg/Kg		105	80 - 120
Thallium	50.0	49.0		mg/Kg		98	80 - 120
Vanadium	50.0	48.9		mg/Kg		98	80 - 120
Zinc	50.0	47.9		mg/Kg		96	80 - 120

Lab Sample ID: 720-88192-A-7-A MS
Matrix: Solid
Analysis Batch: 250325

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250197

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	2.3	F1	45.0	15.2	F1	mg/Kg		29	75 - 125
Arsenic	12		45.0	65.2		mg/Kg		118	75 - 125
Barium	75	F1	45.0	134	F1	mg/Kg		129	75 - 125
Beryllium	0.14	J F1	45.0	56.7	F1	mg/Kg		126	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88192-A-7-A MS
Matrix: Solid
Analysis Batch: 250325

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250197

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	1.0		45.0	52.0		mg/Kg		113	75 - 125
Chromium	26	F1	45.0	89.4	F1	mg/Kg		140	75 - 125
Cobalt	11		45.0	63.7		mg/Kg		117	75 - 125
Copper	140	F1	45.0	233	F1	mg/Kg		217	75 - 125
Lead	170	F1	45.0	216		mg/Kg		105	75 - 125
Molybdenum	1.4	J	45.0	54.9		mg/Kg		119	75 - 125
Nickel	20	F1	45.0	76.8	F1	mg/Kg		127	75 - 125
Selenium	ND		45.0	50.2		mg/Kg		111	75 - 125
Silver	ND	F1	22.5	30.0	F1	mg/Kg		133	75 - 125
Thallium	0.95	J	45.0	50.8		mg/Kg		111	75 - 125
Vanadium	76	F1	45.0	133	F1	mg/Kg		127	75 - 125
Zinc	290		45.0	324	4	mg/Kg		72	75 - 125

Lab Sample ID: 720-88192-A-7-B MSD
Matrix: Solid
Analysis Batch: 250325

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250197

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	2.3	F1	45.9	14.1	F1	mg/Kg		26	75 - 125	8	20
Arsenic	12		45.9	65.6		mg/Kg		117	75 - 125	1	20
Barium	75	F1	45.9	138	F1	mg/Kg		137	75 - 125	3	20
Beryllium	0.14	J F1	45.9	59.9	F1	mg/Kg		130	75 - 125	6	20
Cadmium	1.0		45.9	54.7		mg/Kg		117	75 - 125	5	20
Chromium	26	F1	45.9	77.3		mg/Kg		111	75 - 125	15	20
Cobalt	11		45.9	66.4		mg/Kg		121	75 - 125	4	20
Copper	140	F1	45.9	198	F1	mg/Kg		136	75 - 125	16	20
Lead	170	F1	45.9	260	F1	mg/Kg		198	75 - 125	18	20
Molybdenum	1.4	J	45.9	53.9		mg/Kg		114	75 - 125	2	20
Nickel	20	F1	45.9	71.5		mg/Kg		113	75 - 125	7	20
Selenium	ND		45.9	53.6		mg/Kg		117	75 - 125	7	20
Silver	ND	F1	22.9	31.8	F1	mg/Kg		139	75 - 125	6	20
Thallium	0.95	J	45.9	53.3		mg/Kg		114	75 - 125	5	20
Vanadium	76	F1	45.9	153	F1	mg/Kg		167	75 - 125	13	20
Zinc	290		45.9	342	4	mg/Kg		109	75 - 125	5	20

Lab Sample ID: MB 720-250235/1-A
Matrix: Solid
Analysis Batch: 250353

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250235

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Arsenic	ND		1.0	0.085	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Barium	0.0875	J	0.50	0.071	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Beryllium	ND		0.10	0.033	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Cadmium	ND		0.13	0.012	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Chromium	ND		0.50	0.053	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Cobalt	ND		0.20	0.020	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Copper	ND		1.5	0.71	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Lead	ND		0.50	0.11	mg/Kg		08/25/18 12:57	08/27/18 20:53	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250235/1-A
Matrix: Solid
Analysis Batch: 250353

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250235

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.50	0.064	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Nickel	ND		0.50	0.051	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Selenium	ND		1.0	0.15	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Silver	ND		0.25	0.051	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Thallium	ND		0.50	0.15	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Vanadium	ND		0.50	0.068	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Zinc	ND		1.5	0.64	mg/Kg		08/25/18 12:57	08/27/18 20:53	1

Lab Sample ID: LCS 720-250235/2-A
Matrix: Solid
Analysis Batch: 250353

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250235

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	46.8		mg/Kg		94	80 - 120
Arsenic	50.0	46.8		mg/Kg		94	80 - 120
Barium	50.0	54.4		mg/Kg		109	80 - 120
Beryllium	50.0	52.6		mg/Kg		105	80 - 120
Cadmium	50.0	47.3		mg/Kg		95	80 - 120
Chromium	50.0	46.4		mg/Kg		93	80 - 120
Cobalt	50.0	48.5		mg/Kg		97	80 - 120
Copper	50.0	47.3		mg/Kg		95	80 - 120
Lead	50.0	48.0		mg/Kg		96	80 - 120
Molybdenum	50.0	48.2		mg/Kg		96	80 - 120
Nickel	50.0	47.6		mg/Kg		95	80 - 120
Selenium	50.0	46.0		mg/Kg		92	80 - 120
Silver	25.0	24.6		mg/Kg		98	80 - 120
Thallium	50.0	48.2		mg/Kg		96	80 - 120
Vanadium	50.0	48.5		mg/Kg		97	80 - 120
Zinc	50.0	47.6		mg/Kg		95	80 - 120

Lab Sample ID: 720-88197-A-1-B MS
Matrix: Solid
Analysis Batch: 250353

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250235

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND	F1	31.4	10.7	F1	mg/Kg		34	75 - 125
Arsenic	5.6		31.4	39.6		mg/Kg		108	75 - 125
Barium	190	B	31.4	273	4	mg/Kg		265	75 - 125
Beryllium	0.37		31.4	36.3		mg/Kg		114	75 - 125
Cadmium	0.12	J	31.4	32.8		mg/Kg		104	75 - 125
Chromium	39	F1	31.4	79.3	F1	mg/Kg		127	75 - 125
Cobalt	12	F1 F2	31.4	42.8		mg/Kg		99	75 - 125
Copper	20	F1	31.4	56.9		mg/Kg		118	75 - 125
Lead	6.6		31.4	39.6		mg/Kg		105	75 - 125
Molybdenum	0.20	J	31.4	28.8		mg/Kg		91	75 - 125
Nickel	110	F1	31.4	85.8	F1	mg/Kg		-79	75 - 125
Selenium	ND		31.4	31.0		mg/Kg		99	75 - 125
Silver	ND		15.7	18.6		mg/Kg		118	75 - 125
Thallium	0.50	J	31.4	31.6		mg/Kg		99	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88197-A-1-B MS
Matrix: Solid
Analysis Batch: 250353

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250235

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	31	F1	31.4	69.7		mg/Kg		122	75 - 125
Zinc	41		31.4	80.2		mg/Kg		123	75 - 125

Lab Sample ID: 720-88197-A-1-C MSD
Matrix: Solid
Analysis Batch: 250353

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250235

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND	F1	31.4	10.7	F1	mg/Kg		34	75 - 125	0	20
Arsenic	5.6		31.4	40.4		mg/Kg		111	75 - 125	2	20
Barium	190	B	31.4	282	4	mg/Kg		294	75 - 125	3	20
Beryllium	0.37		31.4	39.5		mg/Kg		124	75 - 125	8	20
Cadmium	0.12	J	31.4	34.5		mg/Kg		109	75 - 125	5	20
Chromium	39	F1	31.4	77.6		mg/Kg		122	75 - 125	2	20
Cobalt	12	F1 F2	31.4	60.6	F1 F2	mg/Kg		156	75 - 125	34	20
Copper	20	F1	31.4	62.5	F1	mg/Kg		136	75 - 125	9	20
Lead	6.6		31.4	41.3		mg/Kg		110	75 - 125	4	20
Molybdenum	0.20	J	31.4	31.2		mg/Kg		98	75 - 125	8	20
Nickel	110	F1	31.4	95.1	F1	mg/Kg		-49	75 - 125	10	20
Selenium	ND		31.4	33.1		mg/Kg		105	75 - 125	7	20
Silver	ND		15.7	19.4		mg/Kg		124	75 - 125	4	20
Thallium	0.50	J	31.4	33.4		mg/Kg		105	75 - 125	5	20
Vanadium	31	F1	31.4	71.9	F1	mg/Kg		129	75 - 125	3	20
Zinc	41		31.4	80.9		mg/Kg		125	75 - 125	1	20

Lab Sample ID: MB 720-250292/1-A
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250292

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Arsenic	ND		1.0	0.085	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Barium	ND		0.50	0.071	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Beryllium	ND		0.10	0.033	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Cadmium	ND		0.13	0.012	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Chromium	ND		0.50	0.053	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Cobalt	ND		0.20	0.020	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Copper	ND		1.5	0.71	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Lead	ND		0.50	0.11	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Nickel	ND		0.50	0.051	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Selenium	ND		1.0	0.15	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Silver	ND		0.25	0.051	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Thallium	ND		0.50	0.15	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Vanadium	ND		0.50	0.068	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Zinc	ND		1.5	0.64	mg/Kg		08/27/18 12:41	08/29/18 09:26	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-250292/2-A
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250292

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	45.2		mg/Kg		90	80 - 120
Arsenic	50.0	44.9		mg/Kg		90	80 - 120
Barium	50.0	47.6		mg/Kg		95	80 - 120
Beryllium	50.0	47.8		mg/Kg		96	80 - 120
Cadmium	50.0	45.7		mg/Kg		91	80 - 120
Chromium	50.0	46.1		mg/Kg		92	80 - 120
Cobalt	50.0	46.1		mg/Kg		92	80 - 120
Copper	50.0	46.4		mg/Kg		93	80 - 120
Lead	50.0	46.2		mg/Kg		92	80 - 120
Molybdenum	50.0	46.2		mg/Kg		92	80 - 120
Nickel	50.0	46.6		mg/Kg		93	80 - 120
Selenium	50.0	43.9		mg/Kg		88	80 - 120
Silver	25.0	22.7		mg/Kg		91	80 - 120
Thallium	50.0	46.5		mg/Kg		93	80 - 120
Vanadium	50.0	46.1		mg/Kg		92	80 - 120
Zinc	50.0	45.3		mg/Kg		91	80 - 120

Lab Sample ID: 720-88216-A-9-K MS
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250292

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND	F1	45.5	12.0	F1	mg/Kg		26	75 - 125
Arsenic	1.2	J	45.5	51.7		mg/Kg		111	75 - 125
Barium	42	F1	45.5	93.3		mg/Kg		114	75 - 125
Beryllium	ND	F1	45.5	55.7		mg/Kg		123	75 - 125
Cadmium	ND		45.5	50.6		mg/Kg		111	75 - 125
Chromium	11		45.5	62.1		mg/Kg		112	75 - 125
Cobalt	8.2		45.5	58.2		mg/Kg		110	75 - 125
Copper	120	F1	45.5	162		mg/Kg		81	75 - 125
Lead	6.9		45.5	56.0		mg/Kg		108	75 - 125
Molybdenum	ND		45.5	49.3		mg/Kg		108	75 - 125
Nickel	5.0		45.5	54.6		mg/Kg		109	75 - 125
Selenium	ND		45.5	49.4		mg/Kg		109	75 - 125
Silver	ND	F1	22.7	27.5		mg/Kg		121	75 - 125
Thallium	0.83	J	45.5	49.7		mg/Kg		108	75 - 125
Vanadium	81	F1	45.5	134		mg/Kg		116	75 - 125
Zinc	32		45.5	82.5		mg/Kg		111	75 - 125

Lab Sample ID: 720-88216-A-9-L MSD
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250292

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND	F1	45.0	11.2	F1	mg/Kg		25	75 - 125	6	20
Arsenic	1.2	J	45.0	53.6		mg/Kg		116	75 - 125	4	20
Barium	42	F1	45.0	105	F1	mg/Kg		140	75 - 125	12	20
Beryllium	ND	F1	45.0	58.2	F1	mg/Kg		129	75 - 125	4	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88216-A-9-L MSD
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250292

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	ND		45.0	51.4		mg/Kg		114	75 - 125	2	20
Chromium	11		45.0	67.6		mg/Kg		125	75 - 125	8	20
Cobalt	8.2		45.0	60.4		mg/Kg		116	75 - 125	4	20
Copper	120	F1	45.0	186	F1	mg/Kg		136	75 - 125	14	20
Lead	6.9		45.0	58.6		mg/Kg		115	75 - 125	4	20
Molybdenum	ND		45.0	49.9		mg/Kg		111	75 - 125	1	20
Nickel	5.0		45.0	56.1		mg/Kg		113	75 - 125	3	20
Selenium	ND		45.0	51.4		mg/Kg		114	75 - 125	4	20
Silver	ND	F1	22.5	29.3	F1	mg/Kg		130	75 - 125	6	20
Thallium	0.83	J	45.0	50.5		mg/Kg		110	75 - 125	2	20
Vanadium	81	F1	45.0	156	F1	mg/Kg		167	75 - 125	16	20
Zinc	32		45.0	87.9		mg/Kg		124	75 - 125	6	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250269/1-A
Matrix: Solid
Analysis Batch: 250675

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250269

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/29/18 20:30	08/30/18 14:37	1

Lab Sample ID: LCS 720-250269/2-A
Matrix: Solid
Analysis Batch: 250675

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250269

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.789		mg/Kg		95	80 - 120

Lab Sample ID: 720-88215-1 MS
Matrix: Solid
Analysis Batch: 250675

Client Sample ID: DG-J6S-0.5-1
Prep Type: Total/NA
Prep Batch: 250269

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.24		0.794	1.09		mg/Kg		107	75 - 125

Lab Sample ID: 720-88215-1 MSD
Matrix: Solid
Analysis Batch: 250675

Client Sample ID: DG-J6S-0.5-1
Prep Type: Total/NA
Prep Batch: 250269

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.24		0.769	1.03		mg/Kg		103	75 - 125	5	20

Lab Sample ID: MB 720-250416/1-A
Matrix: Solid
Analysis Batch: 250599

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250416

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/28/18 15:53	08/30/18 12:05	1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 720-250416/2-A
Matrix: Solid
Analysis Batch: 250599

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250416

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.814		mg/Kg		98	80 - 120

Lab Sample ID: 720-88215-21 MS
Matrix: Solid
Analysis Batch: 250599

Client Sample ID: DG-A2S-0.5-1
Prep Type: Total/NA
Prep Batch: 250416

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.52	F1	0.833	1.43		mg/Kg		109	75 - 125

Lab Sample ID: 720-88215-21 MSD
Matrix: Solid
Analysis Batch: 250599

Client Sample ID: DG-A2S-0.5-1
Prep Type: Total/NA
Prep Batch: 250416

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.52	F1	0.833	1.61	F1	mg/Kg		131	75 - 125	12	20

Metals

Prep Batch: 250197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88215-11	DG-D6S-0.5-1	Total/NA	Solid	3050B	
720-88215-12	DG-D6S-3.5-4	Total/NA	Solid	3050B	
720-88215-13	DG-E6S-0.5-1	Total/NA	Solid	3050B	
720-88215-14	DG-E6S-3.5-4	Total/NA	Solid	3050B	
720-88215-15	DG-G6S-0.5-1	Total/NA	Solid	3050B	
MB 720-250197/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250197/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88192-A-7-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88192-A-7-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88215-1	DG-J6S-0.5-1	Total/NA	Solid	3050B	
720-88215-2	DG-J6S-3.5-4	Total/NA	Solid	3050B	
720-88215-3	DG-L6S-0.5-1	Total/NA	Solid	3050B	
720-88215-4	DG-L6S-3.5-4	Total/NA	Solid	3050B	
720-88215-5	DG-M6S-0.5-1	Total/NA	Solid	3050B	
720-88215-6	DG-M6S-3.5-4	Total/NA	Solid	3050B	
720-88215-7	DG-M8S-0.5-1	Total/NA	Solid	3050B	
720-88215-8	DG-M8S-3.5-4	Total/NA	Solid	3050B	
720-88215-9	DUP-10	Total/NA	Solid	3050B	
720-88215-10	DUP-9	Total/NA	Solid	3050B	
MB 720-250235/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250235/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88197-A-1-B MS	Matrix Spike	Total/NA	Solid	3050B	
720-88197-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88215-1	DG-J6S-0.5-1	Total/NA	Solid	7471A	
720-88215-2	DG-J6S-3.5-4	Total/NA	Solid	7471A	
720-88215-3	DG-L6S-0.5-1	Total/NA	Solid	7471A	
720-88215-4	DG-L6S-3.5-4	Total/NA	Solid	7471A	
720-88215-5	DG-M6S-0.5-1	Total/NA	Solid	7471A	
720-88215-6	DG-M6S-3.5-4	Total/NA	Solid	7471A	
720-88215-7	DG-M8S-0.5-1	Total/NA	Solid	7471A	
720-88215-8	DG-M8S-3.5-4	Total/NA	Solid	7471A	
720-88215-9	DUP-10	Total/NA	Solid	7471A	
720-88215-10	DUP-9	Total/NA	Solid	7471A	
720-88215-11	DG-D6S-0.5-1	Total/NA	Solid	7471A	
720-88215-12	DG-D6S-3.5-4	Total/NA	Solid	7471A	
720-88215-13	DG-E6S-0.5-1	Total/NA	Solid	7471A	
720-88215-14	DG-E6S-3.5-4	Total/NA	Solid	7471A	
720-88215-15	DG-G6S-0.5-1	Total/NA	Solid	7471A	
720-88215-16	DG-G6S-3.5-4	Total/NA	Solid	7471A	
720-88215-17	DG-I6S-0.5-1	Total/NA	Solid	7471A	
720-88215-18	DG-I6S-3.5-4	Total/NA	Solid	7471A	
720-88215-19	DUP-8	Total/NA	Solid	7471A	
720-88215-20	DUP-7	Total/NA	Solid	7471A	
MB 720-250269/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250269/2-A	Lab Control Sample	Total/NA	Solid	7471A	

Metals (Continued)

Prep Batch: 250269 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88215-1 MS	DG-J6S-0.5-1	Total/NA	Solid	7471A	
720-88215-1 MSD	DG-J6S-0.5-1	Total/NA	Solid	7471A	

Prep Batch: 250292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88215-16	DG-G6S-3.5-4	Total/NA	Solid	3050B	
720-88215-17	DG-I6S-0.5-1	Total/NA	Solid	3050B	
720-88215-18	DG-I6S-3.5-4	Total/NA	Solid	3050B	
720-88215-19	DUP-8	Total/NA	Solid	3050B	
720-88215-20	DUP-7	Total/NA	Solid	3050B	
720-88215-21	DG-A2S-0.5-1	Total/NA	Solid	3050B	
720-88215-22	DG-A2S-3.5-4	Total/NA	Solid	3050B	
720-88215-23	DG-B2S-0.5-1	Total/NA	Solid	3050B	
720-88215-24	DG-B2S-3.5-4	Total/NA	Solid	3050B	
MB 720-250292/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250292/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88216-A-9-K MS	Matrix Spike	Total/NA	Solid	3050B	
720-88216-A-9-L MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 250325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88215-11	DG-D6S-0.5-1	Total/NA	Solid	6010B	250197
720-88215-12	DG-D6S-3.5-4	Total/NA	Solid	6010B	250197
720-88215-13	DG-E6S-0.5-1	Total/NA	Solid	6010B	250197
720-88215-14	DG-E6S-3.5-4	Total/NA	Solid	6010B	250197
720-88215-15	DG-G6S-0.5-1	Total/NA	Solid	6010B	250197
MB 720-250197/1-A	Method Blank	Total/NA	Solid	6010B	250197
LCS 720-250197/2-A	Lab Control Sample	Total/NA	Solid	6010B	250197
720-88192-A-7-A MS	Matrix Spike	Total/NA	Solid	6010B	250197
720-88192-A-7-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250197

Analysis Batch: 250353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88215-1	DG-J6S-0.5-1	Total/NA	Solid	6010B	250235
720-88215-2	DG-J6S-3.5-4	Total/NA	Solid	6010B	250235
720-88215-3	DG-L6S-0.5-1	Total/NA	Solid	6010B	250235
720-88215-4	DG-L6S-3.5-4	Total/NA	Solid	6010B	250235
720-88215-5	DG-M6S-0.5-1	Total/NA	Solid	6010B	250235
720-88215-6	DG-M6S-3.5-4	Total/NA	Solid	6010B	250235
720-88215-7	DG-M8S-0.5-1	Total/NA	Solid	6010B	250235
720-88215-8	DG-M8S-3.5-4	Total/NA	Solid	6010B	250235
720-88215-9	DUP-10	Total/NA	Solid	6010B	250235
720-88215-10	DUP-9	Total/NA	Solid	6010B	250235
MB 720-250235/1-A	Method Blank	Total/NA	Solid	6010B	250235
LCS 720-250235/2-A	Lab Control Sample	Total/NA	Solid	6010B	250235
720-88197-A-1-B MS	Matrix Spike	Total/NA	Solid	6010B	250235
720-88197-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250235

Prep Batch: 250416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88215-21	DG-A2S-0.5-1	Total/NA	Solid	7471A	

Metals (Continued)

Prep Batch: 250416 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88215-22	DG-A2S-3.5-4	Total/NA	Solid	7471A	
720-88215-23	DG-B2S-0.5-1	Total/NA	Solid	7471A	
720-88215-24	DG-B2S-3.5-4	Total/NA	Solid	7471A	
MB 720-250416/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250416/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88215-21 MS	DG-A2S-0.5-1	Total/NA	Solid	7471A	
720-88215-21 MSD	DG-A2S-0.5-1	Total/NA	Solid	7471A	

Analysis Batch: 250491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88215-16	DG-G6S-3.5-4	Total/NA	Solid	6010B	250292
720-88215-17	DG-I6S-0.5-1	Total/NA	Solid	6010B	250292
720-88215-18	DG-I6S-3.5-4	Total/NA	Solid	6010B	250292
720-88215-19	DUP-8	Total/NA	Solid	6010B	250292
720-88215-20	DUP-7	Total/NA	Solid	6010B	250292
720-88215-21	DG-A2S-0.5-1	Total/NA	Solid	6010B	250292
720-88215-22	DG-A2S-3.5-4	Total/NA	Solid	6010B	250292
720-88215-23	DG-B2S-0.5-1	Total/NA	Solid	6010B	250292
720-88215-24	DG-B2S-3.5-4	Total/NA	Solid	6010B	250292
MB 720-250292/1-A	Method Blank	Total/NA	Solid	6010B	250292
LCS 720-250292/2-A	Lab Control Sample	Total/NA	Solid	6010B	250292
720-88216-A-9-K MS	Matrix Spike	Total/NA	Solid	6010B	250292
720-88216-A-9-L MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250292

Analysis Batch: 250599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88215-21	DG-A2S-0.5-1	Total/NA	Solid	7471A	250416
720-88215-22	DG-A2S-3.5-4	Total/NA	Solid	7471A	250416
720-88215-23	DG-B2S-0.5-1	Total/NA	Solid	7471A	250416
720-88215-24	DG-B2S-3.5-4	Total/NA	Solid	7471A	250416
MB 720-250416/1-A	Method Blank	Total/NA	Solid	7471A	250416
LCS 720-250416/2-A	Lab Control Sample	Total/NA	Solid	7471A	250416
720-88215-21 MS	DG-A2S-0.5-1	Total/NA	Solid	7471A	250416
720-88215-21 MSD	DG-A2S-0.5-1	Total/NA	Solid	7471A	250416

Analysis Batch: 250675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88215-1	DG-J6S-0.5-1	Total/NA	Solid	7471A	250269
720-88215-2	DG-J6S-3.5-4	Total/NA	Solid	7471A	250269
720-88215-3	DG-L6S-0.5-1	Total/NA	Solid	7471A	250269
720-88215-4	DG-L6S-3.5-4	Total/NA	Solid	7471A	250269
720-88215-5	DG-M6S-0.5-1	Total/NA	Solid	7471A	250269
720-88215-6	DG-M6S-3.5-4	Total/NA	Solid	7471A	250269
720-88215-7	DG-M8S-0.5-1	Total/NA	Solid	7471A	250269
720-88215-8	DG-M8S-3.5-4	Total/NA	Solid	7471A	250269
720-88215-9	DUP-10	Total/NA	Solid	7471A	250269
720-88215-10	DUP-9	Total/NA	Solid	7471A	250269
720-88215-11	DG-D6S-0.5-1	Total/NA	Solid	7471A	250269
720-88215-12	DG-D6S-3.5-4	Total/NA	Solid	7471A	250269
720-88215-13	DG-E6S-0.5-1	Total/NA	Solid	7471A	250269
720-88215-14	DG-E6S-3.5-4	Total/NA	Solid	7471A	250269

Metals (Continued)

Analysis Batch: 250675 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88215-15	DG-G6S-0.5-1	Total/NA	Solid	7471A	250269
720-88215-16	DG-G6S-3.5-4	Total/NA	Solid	7471A	250269
720-88215-17	DG-I6S-0.5-1	Total/NA	Solid	7471A	250269
720-88215-18	DG-I6S-3.5-4	Total/NA	Solid	7471A	250269
720-88215-19	DUP-8	Total/NA	Solid	7471A	250269
720-88215-20	DUP-7	Total/NA	Solid	7471A	250269
MB 720-250269/1-A	Method Blank	Total/NA	Solid	7471A	250269
LCS 720-250269/2-A	Lab Control Sample	Total/NA	Solid	7471A	250269
720-88215-1 MS	DG-J6S-0.5-1	Total/NA	Solid	7471A	250269
720-88215-1 MSD	DG-J6S-0.5-1	Total/NA	Solid	7471A	250269

Client Sample ID: DG-J6S-0.5-1

Lab Sample ID: 720-88215-1

Date Collected: 08/22/18 14:30

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250353	08/27/18 21:36	OBI	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250675	08/30/18 14:47	MAG	TAL PLS

Client Sample ID: DG-J6S-3.5-4

Lab Sample ID: 720-88215-2

Date Collected: 08/22/18 14:30

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250353	08/27/18 21:40	OBI	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250675	08/30/18 14:49	MAG	TAL PLS

Client Sample ID: DG-L6S-0.5-1

Lab Sample ID: 720-88215-3

Date Collected: 08/22/18 14:50

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250353	08/27/18 21:45	OBI	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250675	08/30/18 14:51	MAG	TAL PLS

Client Sample ID: DG-L6S-3.5-4

Lab Sample ID: 720-88215-4

Date Collected: 08/22/18 14:50

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250353	08/27/18 21:50	OBI	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250675	08/30/18 14:54	MAG	TAL PLS

Client Sample ID: DG-M6S-0.5-1

Lab Sample ID: 720-88215-5

Date Collected: 08/22/18 15:50

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250353	08/27/18 21:55	OBI	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-M6S-0.5-1

Lab Sample ID: 720-88215-5

Date Collected: 08/22/18 15:50
Matrix: Solid
Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	250675	08/30/18 14:56	MAG	TAL PLS

Client Sample ID: DG-M6S-3.5-4

Lab Sample ID: 720-88215-6

Date Collected: 08/22/18 15:50
Matrix: Solid
Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250353	08/27/18 22:00	OBI	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250675	08/30/18 14:58	MAG	TAL PLS

Client Sample ID: DG-M8S-0.5-1

Lab Sample ID: 720-88215-7

Date Collected: 08/22/18 16:15
Matrix: Solid
Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250353	08/27/18 22:04	OBI	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250675	08/30/18 15:05	MAG	TAL PLS

Client Sample ID: DG-M8S-3.5-4

Lab Sample ID: 720-88215-8

Date Collected: 08/22/18 16:15
Matrix: Solid
Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250353	08/27/18 22:19	OBI	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250675	08/30/18 15:08	MAG	TAL PLS

Client Sample ID: DUP-10

Lab Sample ID: 720-88215-9

Date Collected: 08/22/18 00:00
Matrix: Solid
Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250353	08/27/18 22:23	OBI	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250675	08/30/18 15:10	MAG	TAL PLS

Client Sample ID: DUP-9

Lab Sample ID: 720-88215-10

Date Collected: 08/22/18 00:00

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250353	08/27/18 22:28	OBI	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250675	08/30/18 15:12	MAG	TAL PLS

Client Sample ID: DG-D6S-0.5-1

Lab Sample ID: 720-88215-11

Date Collected: 08/22/18 11:00

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 16:33	BKR	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250675	08/30/18 15:15	MAG	TAL PLS

Client Sample ID: DG-D6S-3.5-4

Lab Sample ID: 720-88215-12

Date Collected: 08/22/18 11:00

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 16:38	BKR	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250675	08/30/18 15:17	MAG	TAL PLS

Client Sample ID: DG-E6S-0.5-1

Lab Sample ID: 720-88215-13

Date Collected: 08/22/18 11:30

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 16:42	BKR	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250675	08/30/18 15:19	MAG	TAL PLS

Client Sample ID: DG-E6S-3.5-4

Lab Sample ID: 720-88215-14

Date Collected: 08/22/18 11:30

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 16:47	BKR	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-E6S-3.5-4
Date Collected: 08/22/18 11:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	250675	08/30/18 15:21	MAG	TAL PLS

Client Sample ID: DG-G6S-0.5-1
Date Collected: 08/22/18 12:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250197	08/24/18 16:33	MAA	TAL PLS
Total/NA	Analysis	6010B		4	250325	08/27/18 16:52	BKR	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250675	08/30/18 15:24	MAG	TAL PLS

Client Sample ID: DG-G6S-3.5-4
Date Collected: 08/22/18 12:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 10:42	BKR	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250675	08/30/18 15:26	MAG	TAL PLS

Client Sample ID: DG-I6S-0.5-1
Date Collected: 08/22/18 14:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 10:47	BKR	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250675	08/30/18 15:33	MAG	TAL PLS

Client Sample ID: DG-I6S-3.5-4
Date Collected: 08/22/18 14:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 10:52	BKR	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250675	08/30/18 15:35	MAG	TAL PLS

Client Sample ID: DUP-8
Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 10:56	BKR	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250675	08/30/18 15:38	MAG	TAL PLS

Client Sample ID: DUP-7
Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 11:01	BKR	TAL PLS
Total/NA	Prep	7471A			250269	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250675	08/30/18 15:40	MAG	TAL PLS

Client Sample ID: DG-A2S-0.5-1
Date Collected: 08/22/18 07:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 11:06	BKR	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250599	08/30/18 12:14	OBI	TAL PLS

Client Sample ID: DG-A2S-3.5-4
Date Collected: 08/22/18 07:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 11:20	BKR	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250599	08/30/18 12:17	OBI	TAL PLS

Client Sample ID: DG-B2S-0.5-1
Date Collected: 08/22/18 08:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88215-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 11:25	BKR	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Client Sample ID: DG-B2S-0.5-1

Lab Sample ID: 720-88215-23

Date Collected: 08/22/18 08:00

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	250599	08/30/18 12:19	OBI	TAL PLS

Client Sample ID: DG-B2S-3.5-4

Lab Sample ID: 720-88215-24

Date Collected: 08/22/18 08:00

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 11:30	BKR	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250599	08/30/18 12:22	OBI	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc. TestAmerica Job ID: 720-88215-1
Project/Site: UPC OU-SM

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
3050B	Preparation, Metals	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88215-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88215-1	DG-J6S-0.5-1	Solid	08/22/18 14:30	08/23/18 15:40
720-88215-2	DG-J6S-3.5-4	Solid	08/22/18 14:30	08/23/18 15:40
720-88215-3	DG-L6S-0.5-1	Solid	08/22/18 14:50	08/23/18 15:40
720-88215-4	DG-L6S-3.5-4	Solid	08/22/18 14:50	08/23/18 15:40
720-88215-5	DG-M6S-0.5-1	Solid	08/22/18 15:50	08/23/18 15:40
720-88215-6	DG-M6S-3.5-4	Solid	08/22/18 15:50	08/23/18 15:40
720-88215-7	DG-M8S-0.5-1	Solid	08/22/18 16:15	08/23/18 15:40
720-88215-8	DG-M8S-3.5-4	Solid	08/22/18 16:15	08/23/18 15:40
720-88215-9	DUP-10	Solid	08/22/18 00:00	08/23/18 15:40
720-88215-10	DUP-9	Solid	08/22/18 00:00	08/23/18 15:40
720-88215-11	DG-D6S-0.5-1	Solid	08/22/18 11:00	08/23/18 15:40
720-88215-12	DG-D6S-3.5-4	Solid	08/22/18 11:00	08/23/18 15:40
720-88215-13	DG-E6S-0.5-1	Solid	08/22/18 11:30	08/23/18 15:40
720-88215-14	DG-E6S-3.5-4	Solid	08/22/18 11:30	08/23/18 15:40
720-88215-15	DG-G6S-0.5-1	Solid	08/22/18 12:15	08/23/18 15:40
720-88215-16	DG-G6S-3.5-4	Solid	08/22/18 12:15	08/23/18 15:40
720-88215-17	DG-I6S-0.5-1	Solid	08/22/18 14:15	08/23/18 15:40
720-88215-18	DG-I6S-3.5-4	Solid	08/22/18 14:15	08/23/18 15:40
720-88215-19	DUP-8	Solid	08/22/18 00:00	08/23/18 15:40
720-88215-20	DUP-7	Solid	08/22/18 00:00	08/23/18 15:40
720-88215-21	DG-A2S-0.5-1	Solid	08/22/18 07:45	08/23/18 15:40
720-88215-22	DG-A2S-3.5-4	Solid	08/22/18 07:45	08/23/18 15:40
720-88215-23	DG-B2S-0.5-1	Solid	08/22/18 08:00	08/23/18 15:40
720-88215-24	DG-B2S-3.5-4	Solid	08/22/18 08:00	08/23/18 15:40

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88215

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185087

Date 8/22/18 Page 1 of 2

11/21/2018 (Rev. 1)

Report To

Attn: Keaton Belli
Company: Geosyntec
Address: 1111 Broadway 6th floor
Email: kbelli@geosyntec.com
Bill To: Geosyntec
Sampled By: K. Belli
Attn: Anthony Smith
Phone: 4708810525

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other	Semi-Volatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity
DG-J6S-0.5-1	8/22	1430	S	N									X									
DG-J6S-3.5-4		1430											X									
DG-L6S-0.5-1		1450											X									
DG-L6S-3.5-4		1450											X									
DG-M6S-0.5-1		1550											X									
DG-M6S-3.5-4		1550											X									
DG-M8S-0.5-1		1615											X									
DG-M8S-3.5-4		1615											X									
DUP-10	8/22		S	N									X									
DUP-9	8/22		S	N									X									

Project Info.

Project Name/ #: UPC OU-SM
PO#: WG2445/01
Credit Card Y/N:

Sample Receipt

of Containers:
Head Space:
Temp: 2.1 °C

If yes, please call with payment information ASAP

TAT: 10 Day | (5 Day) | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID

See Terms and Conditions on reverse

	1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature	Keaton Belli		
Time	1250	1540	
Printed Name	Keaton Belli		
Date	8/23	8/23/18	
Company	Geosyntec	TA-PLE	720-88215 Chain of Custody

	1) Received by:	2) Received by:	3) Received by:
Signature			
Time	1250	1540	
Printed Name		I. Bullock	
Date	8/23/18	8/23/18	
Company	TA-PLE	TA-PLE	3.1

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88215

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: 185 87

Date 8/22/18 Page 2 of 2

11/21/2018 (Rev. 1)

Report To

Attn: Keaton Belli
Company: Geosyntec
Address: 1111 Broadway 6th floor
Email: KBelli@geosyntec.com
Bill To: Geosyntec
Sampled By: K. Belli
Attn: Anthony Smith
Phone: 470 881 0525

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides PCBs ☐ EPA 8081 ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity
DG-D6S-0.5-1	8/22	1100	S	N									X									
DG-D6S-3.5-4		1100	S	N									X									
DG-E6S-0.5-1		1130	S	N									X									
DG-E6S-3.5-4		1130	S	N									X									
DG-G6S-0.5-1		1215	S	N									X									
DG-G6S-3.5-4		1215	S	N									X									
DG-I6S-0.5-1		1415	S	N									X									
DG-I6S-3.5-4	↓	1415	S	N									X									
DUP-8	8/22		S	N									X									
DUP-7	8/22		S	N									X									

Project Info.

Project Name/ #: UPC OU-SM
PO#: WG2445/01
Credit Card Y/N:

Sample Receipt

of Containers:
Head Space:
Temp:
If yes, please call with payment information ASAP

TAT: 10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID ___

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: K. Belli — Time: 1250	Signature: — Time: 1540	Signature: — Time:
Printed Name: Keaton Belli — Date: 8/23	Printed Name: — Date: 8/23/18	Printed Name: — Date:
Company: Geosyntec	Company: TA 720	Company:
1) Received by:	**2) Received by:**	**3) Received by:**
Signature: — Time: 1250	Signature: — Time: 1540	Signature: — Time:
Printed Name: — Date: 8/23/18	Printed Name: A. Bullock — Date: 8/23/18	Printed Name: — Date:
Company: TA 720	Company: TA 720	Company: 3.1C

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88215-1

Login Number: 88215
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88216-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/21/2018 6:05:22 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 5
Detection Summary 8
Client Sample Results 15
Surrogate Summary 107
QC Sample Results 110
QC Association Summary 158
Lab Chronicle 166
Certification Summary 171
Method Summary 172
Sample Summary 173
Subcontract Data 174
Chain of Custody 178
Receipt Checklists 182

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	ISTD response or retention time outside acceptable limits

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88216-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88216-1

Comments
This report was revised on 11/21/18 to change the units for the metals data to report in mg/Kg, as requested.

Receipt
The samples were received on 8/23/2018 3:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1º C.

Receipt Exceptions
Collection times for "DUP-" samples are not indicated on the COC.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 720-250405 recovered outside control limits for the following analytes: 1,1-Dichloroethene. The laboratory control sample duplicate (LCSD) for analytical batch 720-250405 recovered outside control limits for the following analytes: 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS/LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250622 recovered outside control limits for the following analytes: Carbon disulfide and 1,1-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: Internal standard responses were outside of acceptance limits for the following sample: DG-G6S-MS/MDS (720-88216-9). The sample shows evidence of matrix interference confirmed when analyzed as MS/MSD.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250320 and analytical batch 720-250622 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250644 recovered outside control limits for the following analytes: 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250320 and analytical batch 720-250644 were outside control limits for the following analytes:1,1,2-Trichloro-1,2,2-trifluoroethane. This analyte was also biased high in the LCS, but were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270C SIM: The following samples were diluted due to the abundance of non-target analytes: DG-G6S-MS/MDS (720-88216-9), DG-G6S-MS/MDS (720-88216-9[MS]) and DG-G6S-MS/MDS (720-88216-9[MSD]). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8015B: The method blank for preparation batch 720-250263 and analytical batch 720-250252 contained Diesel Range Organics [C10-C28] above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 8081A: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batches 720-250393 and analytical batches 720-250609 was outside control limits on one of the two columns. Sample matrix interference is suspected.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250160 and analytical batch

Job ID: 720-88216-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

720-250335 were outside control limits on one of the two columns. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8081A: The %RPD between the primary and confirmation column exceeded 40% for 4,4'-DDD for the following sample: DG-G6S-MS/MDS (720-88216-9). The lower value has been reported and qualified in accordance with the laboratory's SOP.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batches 720-250242, 720-250235, 720-250310, 720-250292, and 720-250365 and analytical batches 720-250349, 720-250353, 720-250437, 720-250491, and 720-250585 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The post digestion spike % recovery associated with batch 720-250349 was outside of the 75-125% control limits.

Analyte:	% D:
Barium	126%

Method(s) 6010B: The post digestion spike % recovery associated with batch 720-250491 was outside of the 75-125% control limits.

Analyte:	% D:
Silver	133%
Barium	145%
Beryllium	139%
Chromium	130%
Copper	155%
Vanadium	144%

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250491 was outside control limits: (720-88216-A-9-M SD)

Analyte:	% D:
Barium	29%
Cobalt	20%
Chromium	27%
Vanadium	23%

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250585 was outside control limits: (720-88216-A-17-X SD)

Analyte:	% D:
Barium	49%
Cobalt	37%
Chromium	43%
Nickel	36%
Lead	41%
Vanadium	40%

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DG-A4S-0.5-1 (720-88216-1), DG-A4S-3.5-4 (720-88216-2), DG-A4S-19.5-20 (720-88216-3), DG-A6S-0.5-1 (720-88216-4), DG-A6S-3.5-4 (720-88216-5), DG-A6S-19.5-20 (720-88216-6), DG-B6S-0.5-1 (720-88216-7), DG-B6S-3.5-4 (720-88216-8), DG-G6S-MS/MDS (720-88216-9), DUP-6 (720-88216-10), DG-L8S-0.5-1 (720-88216-11), DG-L8S-3.5-4 (720-88216-12), DG-K8S-0.5-1 (720-88216-13), DG-K8S-3.5-4 (720-88216-14), DG-J8S-0.5-1 (720-88216-15), DG-J8S-3.5-4 (720-88216-16), DG-K8S-MS/MDS (720-88216-17) and DUP-20 (720-88216-18). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Job ID: 720-88216-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Subcontract Work

Method Asbestos - CARB 435: This method was subcontracted to ASBESTOS TEM LABORATORIES, INC.. The subcontract laboratory certification is different from that of the facility issuing the final report.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-A4S-0.5-1 — Lab Sample ID: 720-88216-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	8.8		1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	20	B	3.8	0.32	mg/Kg	4		6010B	Total/NA
Barium	240		1.9	0.27	mg/Kg	4		6010B	Total/NA
Beryllium	0.18	J	0.38	0.12	mg/Kg	4		6010B	Total/NA
Cadmium	24		0.48	0.047	mg/Kg	4		6010B	Total/NA
Chromium	42		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	14		0.76	0.076	mg/Kg	4		6010B	Total/NA
Copper	400		5.7	2.7	mg/Kg	4		6010B	Total/NA
Lead	690		1.9	0.40	mg/Kg	4		6010B	Total/NA
Molybdenum	3.3		1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	37		1.9	0.19	mg/Kg	4		6010B	Total/NA
Thallium	1.2	J	1.9	0.55	mg/Kg	4		6010B	Total/NA
Vanadium	93		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	690		5.7	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.62		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-A4S-3.5-4 — Lab Sample ID: 720-88216-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.6		1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	11	B	3.2	0.27	mg/Kg	4		6010B	Total/NA
Barium	68		1.6	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.22	J	0.32	0.10	mg/Kg	4		6010B	Total/NA
Cadmium	0.20	J	0.40	0.040	mg/Kg	4		6010B	Total/NA
Chromium	30		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	7.8		0.64	0.064	mg/Kg	4		6010B	Total/NA
Copper	140		4.8	2.3	mg/Kg	4		6010B	Total/NA
Lead	130		1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	0.22	J	1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	25		1.6	0.16	mg/Kg	4		6010B	Total/NA
Thallium	0.55	J	1.6	0.46	mg/Kg	4		6010B	Total/NA
Vanadium	42		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	250		4.8	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.18		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-A4S-19.5-20 — Lab Sample ID: 720-88216-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	890	J	2000	740	ug/Kg	1		8015B	Total/NA
Antimony	0.58	J	1.2	0.20	mg/Kg	4		6010B	Total/NA
Arsenic	0.73	J	2.4	0.21	mg/Kg	4		6010B	Total/NA
Barium	40		1.2	0.17	mg/Kg	4		6010B	Total/NA
Chromium	72		1.2	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	2.5		0.49	0.049	mg/Kg	4		6010B	Total/NA
Copper	4.7		3.7	1.7	mg/Kg	4		6010B	Total/NA
Lead	1.6		1.2	0.26	mg/Kg	4		6010B	Total/NA
Nickel	18		1.2	0.12	mg/Kg	4		6010B	Total/NA
Vanadium	23		1.2	0.17	mg/Kg	4		6010B	Total/NA
Zinc	16		3.7	1.5	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-A6S-0.5-1 — Lab Sample ID: 720-88216-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	23		1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	16		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	130		1.7	0.24	mg/Kg	4		6010B	Total/NA
Cadmium	2.1		0.42	0.042	mg/Kg	4		6010B	Total/NA
Chromium	16		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	9.5		0.68	0.068	mg/Kg	4		6010B	Total/NA
Copper	6000		5.1	2.4	mg/Kg	4		6010B	Total/NA
Lead	1200		1.7	0.36	mg/Kg	4		6010B	Total/NA
Molybdenum	0.95	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	20		1.7	0.17	mg/Kg	4		6010B	Total/NA
Selenium	1.4	J	3.4	0.51	mg/Kg	4		6010B	Total/NA
Silver	2.4		0.85	0.17	mg/Kg	4		6010B	Total/NA
Thallium	1.4	J	1.7	0.49	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	450		5.1	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.27		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-A6S-3.5-4 — Lab Sample ID: 720-88216-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.99	J	1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	4.8		3.7	0.31	mg/Kg	4		6010B	Total/NA
Barium	86		1.8	0.26	mg/Kg	4		6010B	Total/NA
Beryllium	0.16	J	0.37	0.12	mg/Kg	4		6010B	Total/NA
Chromium	51		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.73	0.073	mg/Kg	4		6010B	Total/NA
Copper	42		5.5	2.6	mg/Kg	4		6010B	Total/NA
Lead	19		1.8	0.39	mg/Kg	4		6010B	Total/NA
Molybdenum	0.36	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	70		1.8	0.19	mg/Kg	4		6010B	Total/NA
Thallium	0.72	J	1.8	0.53	mg/Kg	4		6010B	Total/NA
Vanadium	32		1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	56		5.5	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.041		0.015	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-A6S-19.5-20 — Lab Sample ID: 720-88216-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	31	J	34	26	ug/Kg	1		8260B	Total/NA
cis-1,2-Dichloroethene	35		3.4	0.47	ug/Kg	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.96	J	3.4	0.52	ug/Kg	1		8260B	Total/NA
Trichloroethene	0.53	J	3.4	0.43	ug/Kg	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	2000		1900	720	ug/Kg	1		8015B	Total/NA
Antimony	0.61	J	1.7	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	0.76	J	3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	29		1.7	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.14	J	0.33	0.11	mg/Kg	4		6010B	Total/NA
Chromium	48		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	4.6		0.66	0.066	mg/Kg	4		6010B	Total/NA
Copper	3.6	J	5.0	2.4	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-A6S-19.5-20 (Continued) — Lab Sample ID: 720-88216-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	1.8		1.7	0.35	mg/Kg	4		6010B	Total/NA
Nickel	19		1.7	0.17	mg/Kg	4		6010B	Total/NA
Thallium	0.50	J	1.7	0.48	mg/Kg	4		6010B	Total/NA
Vanadium	30		1.7	0.22	mg/Kg	4		6010B	Total/NA
Zinc	13		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.0052	J	0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B6S-0.5-1 — Lab Sample ID: 720-88216-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	7.4		1.2	0.20	mg/Kg	4		6010B	Total/NA
Arsenic	13		2.4	0.20	mg/Kg	4		6010B	Total/NA
Barium	150		1.2	0.17	mg/Kg	4		6010B	Total/NA
Beryllium	0.095	J	0.24	0.078	mg/Kg	4		6010B	Total/NA
Cadmium	2.1		0.30	0.030	mg/Kg	4		6010B	Total/NA
Chromium	26		1.2	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	9.6		0.48	0.048	mg/Kg	4		6010B	Total/NA
Copper	190		3.6	1.7	mg/Kg	4		6010B	Total/NA
Lead	500		1.2	0.25	mg/Kg	4		6010B	Total/NA
Molybdenum	1.2		1.2	0.15	mg/Kg	4		6010B	Total/NA
Nickel	25		1.2	0.12	mg/Kg	4		6010B	Total/NA
Selenium	0.67	J	2.4	0.36	mg/Kg	4		6010B	Total/NA
Silver	1.1		0.60	0.12	mg/Kg	4		6010B	Total/NA
Thallium	0.99	J	1.2	0.35	mg/Kg	4		6010B	Total/NA
Vanadium	60		1.2	0.16	mg/Kg	4		6010B	Total/NA
Zinc	380		3.6	1.5	mg/Kg	4		6010B	Total/NA
Mercury	0.25		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B6S-3.5-4 — Lab Sample ID: 720-88216-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.2		1.7	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	3.0	J	3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	120		1.7	0.23	mg/Kg	4		6010B	Total/NA
Cadmium	0.043	J	0.41	0.041	mg/Kg	4		6010B	Total/NA
Chromium	150		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	32		0.66	0.066	mg/Kg	4		6010B	Total/NA
Copper	59		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	27		1.7	0.35	mg/Kg	4		6010B	Total/NA
Molybdenum	0.52	J	1.7	0.21	mg/Kg	4		6010B	Total/NA
Nickel	130		1.7	0.17	mg/Kg	4		6010B	Total/NA
Selenium	0.53	J	3.3	0.50	mg/Kg	4		6010B	Total/NA
Silver	0.94		0.83	0.17	mg/Kg	4		6010B	Total/NA
Thallium	3.1		1.7	0.48	mg/Kg	4		6010B	Total/NA
Vanadium	140		1.7	0.22	mg/Kg	4		6010B	Total/NA
Zinc	84		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.063		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-G6S-MS/MDS — Lab Sample ID: 720-88216-9

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-G6S-MS/MDS (Continued) — Lab Sample ID: 720-88216-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	28	J	39	20	ug/Kg	2		8270C SIM	Total/NA
Acenaphthylene	11	J	20	9.4	ug/Kg	2		8270C SIM	Total/NA
Anthracene	20		20	7.8	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	50		20	5.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	75		20	7.5	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	100		20	8.2	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	96		20	17	ug/Kg	2		8270C SIM	Total/NA
Benzo[k]fluoranthene	42		20	8.2	ug/Kg	2		8270C SIM	Total/NA
Chrysene	72	B	20	5.5	ug/Kg	2		8270C SIM	Total/NA
Dibenz(a,h)anthracene	16	J	20	14	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	96		20	5.5	ug/Kg	2		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	51		20	16	ug/Kg	2		8270C SIM	Total/NA
Naphthalene	29		20	14	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	71		20	7.1	ug/Kg	2		8270C SIM	Total/NA
Pyrene	110		20	6.7	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	83000		3800	1400	ug/Kg	2		8015B	Total/NA
4,4'-DDD	0.90	J p	1.9	0.58	ug/Kg	1		8081A	Total/NA
4,4'-DDE	0.76	J	1.9	0.40	ug/Kg	1		8081A	Total/NA
Arsenic	1.2	J	3.6	0.31	mg/Kg	4		6010B	Total/NA
Barium	42	F1	1.8	0.26	mg/Kg	4		6010B	Total/NA
Chromium	11		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	8.2		0.72	0.072	mg/Kg	4		6010B	Total/NA
Copper	120	F1	5.4	2.6	mg/Kg	4		6010B	Total/NA
Lead	6.9		1.8	0.38	mg/Kg	4		6010B	Total/NA
Nickel	5.0		1.8	0.18	mg/Kg	4		6010B	Total/NA
Thallium	0.83	J	1.8	0.52	mg/Kg	4		6010B	Total/NA
Vanadium	81	F1	1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	32		5.4	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.029		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-6 — Lab Sample ID: 720-88216-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.78	J	1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	8.3		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	160		1.7	0.24	mg/Kg	4		6010B	Total/NA
Beryllium	0.32	J	0.34	0.11	mg/Kg	4		6010B	Total/NA
Chromium	42		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.68	0.068	mg/Kg	4		6010B	Total/NA
Copper	37		5.1	2.4	mg/Kg	4		6010B	Total/NA
Lead	12		1.7	0.36	mg/Kg	4		6010B	Total/NA
Molybdenum	0.40	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	61		1.7	0.17	mg/Kg	4		6010B	Total/NA
Silver	0.20	J	0.85	0.17	mg/Kg	4		6010B	Total/NA
Thallium	0.75	J	1.7	0.49	mg/Kg	4		6010B	Total/NA
Vanadium	32		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	66		5.1	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.037		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L8S-0.5-1 — Lab Sample ID: 720-88216-11

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-L8S-0.5-1 (Continued) — Lab Sample ID: 720-88216-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.7		1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	97		3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	150		1.6	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.26	J	0.33	0.11	mg/Kg	4		6010B	Total/NA
Cadmium	0.090	J	0.41	0.040	mg/Kg	4		6010B	Total/NA
Chromium	97		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	21		0.65	0.065	mg/Kg	4		6010B	Total/NA
Copper	130		4.9	2.3	mg/Kg	4		6010B	Total/NA
Lead	680		1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	0.99	J	1.6	0.21	mg/Kg	4		6010B	Total/NA
Nickel	110		1.6	0.17	mg/Kg	4		6010B	Total/NA
Selenium	0.96	J	3.3	0.49	mg/Kg	4		6010B	Total/NA
Silver	0.74	J	0.81	0.16	mg/Kg	4		6010B	Total/NA
Vanadium	94		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	230		4.9	2.1	mg/Kg	4		6010B	Total/NA
Mercury	1.2		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L8S-3.5-4 — Lab Sample ID: 720-88216-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.0	J	1.9	0.31	mg/Kg	4		6010B	Total/NA
Arsenic	59		3.7	0.32	mg/Kg	4		6010B	Total/NA
Barium	45		1.9	0.27	mg/Kg	4		6010B	Total/NA
Chromium	70		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	9.4		0.75	0.075	mg/Kg	4		6010B	Total/NA
Copper	15		5.6	2.7	mg/Kg	4		6010B	Total/NA
Lead	8.1		1.9	0.39	mg/Kg	4		6010B	Total/NA
Nickel	33		1.9	0.19	mg/Kg	4		6010B	Total/NA
Vanadium	44		1.9	0.25	mg/Kg	4		6010B	Total/NA
Zinc	36		5.6	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.049		0.014	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K8S-0.5-1 — Lab Sample ID: 720-88216-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.5	J	1.9	0.31	mg/Kg	4		6010B	Total/NA
Arsenic	8.3		3.8	0.32	mg/Kg	4		6010B	Total/NA
Barium	270	B	1.9	0.27	mg/Kg	4		6010B	Total/NA
Beryllium	0.17	J	0.38	0.12	mg/Kg	4		6010B	Total/NA
Cadmium	1.9		0.47	0.047	mg/Kg	4		6010B	Total/NA
Chromium	48		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	9.9		0.75	0.075	mg/Kg	4		6010B	Total/NA
Copper	100		5.7	2.7	mg/Kg	4		6010B	Total/NA
Lead	690		1.9	0.40	mg/Kg	4		6010B	Total/NA
Molybdenum	0.56	J	1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	28		1.9	0.19	mg/Kg	4		6010B	Total/NA
Thallium	0.86	J	1.9	0.55	mg/Kg	4		6010B	Total/NA
Vanadium	72		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	410		5.7	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.16		0.016	0.0024	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-K8S-3.5-4 — Lab Sample ID: 720-88216-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.2	J	1.7	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	6.9		3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	70	B	1.7	0.25	mg/Kg	4		6010B	Total/NA
Beryllium	0.72		0.35	0.11	mg/Kg	4		6010B	Total/NA
Chromium	39		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.70	0.070	mg/Kg	4		6010B	Total/NA
Copper	39		5.2	2.5	mg/Kg	4		6010B	Total/NA
Lead	29		1.7	0.37	mg/Kg	4		6010B	Total/NA
Molybdenum	0.28	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	36		1.7	0.18	mg/Kg	4		6010B	Total/NA
Thallium	0.80	J	1.7	0.50	mg/Kg	4		6010B	Total/NA
Vanadium	52		1.7	0.24	mg/Kg	4		6010B	Total/NA
Zinc	120		5.2	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.081		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-J8S-0.5-1 — Lab Sample ID: 720-88216-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.4		2.7	0.23	mg/Kg	4		6010B	Total/NA
Barium	110	B	1.4	0.19	mg/Kg	4		6010B	Total/NA
Beryllium	0.43		0.27	0.088	mg/Kg	4		6010B	Total/NA
Cadmium	1.3		0.34	0.034	mg/Kg	4		6010B	Total/NA
Chromium	24		1.4	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.54	0.054	mg/Kg	4		6010B	Total/NA
Copper	51		4.1	1.9	mg/Kg	4		6010B	Total/NA
Lead	27		1.4	0.29	mg/Kg	4		6010B	Total/NA
Molybdenum	0.54	J	1.4	0.17	mg/Kg	4		6010B	Total/NA
Nickel	35		1.4	0.14	mg/Kg	4		6010B	Total/NA
Thallium	0.62	J	1.4	0.39	mg/Kg	4		6010B	Total/NA
Vanadium	50		1.4	0.19	mg/Kg	4		6010B	Total/NA
Zinc	81		4.1	1.7	mg/Kg	4		6010B	Total/NA
Mercury	0.033		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-J8S-3.5-4 — Lab Sample ID: 720-88216-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.37	J	1.4	0.24	mg/Kg	4		6010B	Total/NA
Arsenic	0.50	J	2.9	0.24	mg/Kg	4		6010B	Total/NA
Barium	17	B	1.4	0.20	mg/Kg	4		6010B	Total/NA
Chromium	25		1.4	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	17		0.57	0.057	mg/Kg	4		6010B	Total/NA
Copper	100		4.3	2.0	mg/Kg	4		6010B	Total/NA
Lead	2.8		1.4	0.30	mg/Kg	4		6010B	Total/NA
Nickel	14		1.4	0.15	mg/Kg	4		6010B	Total/NA
Thallium	0.50	J	1.4	0.41	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.4	0.19	mg/Kg	4		6010B	Total/NA
Zinc	53		4.3	1.8	mg/Kg	4		6010B	Total/NA
Mercury	0.040		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K8S-MS/MDS — Lab Sample ID: 720-88216-17

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-K8S-MS/MDS (Continued) — Lab Sample ID: 720-88216-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	2.3	J	4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	4.2	J	4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	4.6	J	4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	7.4		4.9	4.2	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	2.6	J	4.9	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	3.4	J	4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	4.6	J B	4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	5.9		4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	6.3	B	4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	6600	B	2000	740	ug/Kg	1		8015B	Total/NA
Antimony	1.1	J	1.4	0.24	mg/Kg	4		6010B	Total/NA
Arsenic	2.5	J	2.9	0.25	mg/Kg	4		6010B	Total/NA
Barium	83	B	1.4	0.21	mg/Kg	4		6010B	Total/NA
Chromium	88		1.4	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	17		0.58	0.058	mg/Kg	4		6010B	Total/NA
Copper	37		4.3	2.1	mg/Kg	4		6010B	Total/NA
Lead	19		1.4	0.30	mg/Kg	4		6010B	Total/NA
Nickel	42		1.4	0.15	mg/Kg	4		6010B	Total/NA
Thallium	1.7		1.4	0.42	mg/Kg	4		6010B	Total/NA
Vanadium	100		1.4	0.20	mg/Kg	4		6010B	Total/NA
Zinc	48		4.3	1.8	mg/Kg	4		6010B	Total/NA
Mercury	0.061		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-20 — Lab Sample ID: 720-88216-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.0	J	1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	84		3.1	0.26	mg/Kg	4		6010B	Total/NA
Barium	59	B	1.5	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.28	J	0.31	0.099	mg/Kg	4		6010B	Total/NA
Chromium	86		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	8.5		0.61	0.061	mg/Kg	4		6010B	Total/NA
Copper	12		4.6	2.2	mg/Kg	4		6010B	Total/NA
Lead	24		1.5	0.32	mg/Kg	4		6010B	Total/NA
Nickel	37		1.5	0.16	mg/Kg	4		6010B	Total/NA
Thallium	0.80	J	1.5	0.44	mg/Kg	4		6010B	Total/NA
Vanadium	56		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	29		4.6	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.036		0.015	0.0022	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-A4S-0.5-1
Date Collected: 08/22/18 08:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-1
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	8.8		1.9	0.32	mg/Kg		08/25/18 14:28	08/27/18 20:43	4
Arsenic	20	B	3.8	0.32	mg/Kg		08/25/18 14:28	08/27/18 20:43	4
Barium	240		1.9	0.27	mg/Kg		08/25/18 14:28	08/27/18 20:43	4
Beryllium	0.18	J	0.38	0.12	mg/Kg		08/25/18 14:28	08/27/18 20:43	4
Cadmium	24		0.48	0.047	mg/Kg		08/25/18 14:28	08/27/18 20:43	4
Chromium	42		1.9	0.20	mg/Kg		08/25/18 14:28	08/27/18 20:43	4
Cobalt	14		0.76	0.076	mg/Kg		08/25/18 14:28	08/27/18 20:43	4
Copper	400		5.7	2.7	mg/Kg		08/25/18 14:28	08/27/18 20:43	4
Lead	690		1.9	0.40	mg/Kg		08/25/18 14:28	08/27/18 20:43	4
Molybdenum	3.3		1.9	0.24	mg/Kg		08/25/18 14:28	08/27/18 20:43	4
Nickel	37		1.9	0.19	mg/Kg		08/25/18 14:28	08/27/18 20:43	4
Selenium	ND		3.8	0.57	mg/Kg		08/25/18 14:28	08/27/18 20:43	4
Silver	ND		0.95	0.19	mg/Kg		08/25/18 14:28	08/27/18 20:43	4
Thallium	1.2	J	1.9	0.55	mg/Kg		08/25/18 14:28	08/27/18 20:43	4
Vanadium	93		1.9	0.26	mg/Kg		08/25/18 14:28	08/27/18 20:43	4
Zinc	690		5.7	2.4	mg/Kg		08/25/18 14:28	08/27/18 20:43	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.62		0.017	0.0025	mg/Kg		08/29/18 20:30	08/30/18 10:07	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-A4S-3.5-4
Date Collected: 08/22/18 08:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-2
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.6		1.6	0.27	mg/Kg		08/25/18 14:28	08/27/18 20:48	4
Arsenic	11	B	3.2	0.27	mg/Kg		08/25/18 14:28	08/27/18 20:48	4
Barium	68		1.6	0.23	mg/Kg		08/25/18 14:28	08/27/18 20:48	4
Beryllium	0.22	J	0.32	0.10	mg/Kg		08/25/18 14:28	08/27/18 20:48	4
Cadmium	0.20	J	0.40	0.040	mg/Kg		08/25/18 14:28	08/27/18 20:48	4
Chromium	30		1.6	0.17	mg/Kg		08/25/18 14:28	08/27/18 20:48	4
Cobalt	7.8		0.64	0.064	mg/Kg		08/25/18 14:28	08/27/18 20:48	4
Copper	140		4.8	2.3	mg/Kg		08/25/18 14:28	08/27/18 20:48	4
Lead	130		1.6	0.34	mg/Kg		08/25/18 14:28	08/27/18 20:48	4
Molybdenum	0.22	J	1.6	0.20	mg/Kg		08/25/18 14:28	08/27/18 20:48	4
Nickel	25		1.6	0.16	mg/Kg		08/25/18 14:28	08/27/18 20:48	4
Selenium	ND		3.2	0.48	mg/Kg		08/25/18 14:28	08/27/18 20:48	4
Silver	ND		0.80	0.16	mg/Kg		08/25/18 14:28	08/27/18 20:48	4
Thallium	0.55	J	1.6	0.46	mg/Kg		08/25/18 14:28	08/27/18 20:48	4
Vanadium	42		1.6	0.22	mg/Kg		08/25/18 14:28	08/27/18 20:48	4
Zinc	250		4.8	2.0	mg/Kg		08/25/18 14:28	08/27/18 20:48	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.18		0.016	0.0024	mg/Kg		08/29/18 20:30	08/30/18 10:15	1

Client Sample ID: DG-A4S-19.5-20
Date Collected: 08/22/18 09:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-3
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.4	0.81	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Acetone	ND		34	26	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Benzene	ND		3.4	0.44	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Dichlorobromomethane	ND		3.4	0.49	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Bromobenzene	ND		3.4	0.54	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Chlorobromomethane	ND		14	0.49	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Bromoform	ND		3.4	1.4	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Bromomethane	ND		6.8	0.54	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
2-Butanone (MEK)	ND		34	14	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
n-Butylbenzene	ND		3.4	0.68	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
sec-Butylbenzene	ND		3.4	0.49	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
tert-Butylbenzene	ND		3.4	0.50	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Carbon disulfide	ND		3.4	1.4	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Carbon tetrachloride	ND		3.4	0.42	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Chlorobenzene	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Chloroethane	ND		6.8	0.38	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Chloroform	ND		3.4	0.45	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Chloromethane	ND		6.8	0.54	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
2-Chlorotoluene	ND		3.4	0.44	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
4-Chlorotoluene	ND		3.4	0.46	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Chlorodibromomethane	ND		3.4	0.48	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
1,2-Dichlorobenzene	ND		3.4	0.46	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
1,3-Dichlorobenzene	ND		3.4	0.49	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
1,4-Dichlorobenzene	ND		3.4	0.48	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
1,3-Dichloropropane	ND		3.4	0.50	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
1,1-Dichloropropene	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
1,2-Dibromo-3-Chloropropane	ND		6.8	1.2	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Ethylene Dibromide	ND		3.4	0.97	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Dibromomethane	ND		6.8	0.58	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Dichlorodifluoromethane	ND		6.8	0.54	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
1,1-Dichloroethane	ND		3.4	0.46	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
1,2-Dichloroethane	ND		3.4	0.52	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
1,1-Dichloroethene	ND	*	3.4	0.42	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
cis-1,2-Dichloroethene	ND		3.4	0.46	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
trans-1,2-Dichloroethene	ND		3.4	0.51	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
1,2-Dichloropropane	ND		3.4	0.43	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
cis-1,3-Dichloropropene	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
trans-1,3-Dichloropropene	ND		3.4	0.45	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Ethylbenzene	ND		3.4	0.51	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Hexachlorobutadiene	ND		3.4	0.61	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
2-Hexanone	ND		34	6.8	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Isopropylbenzene	ND		3.4	0.46	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
4-Isopropyltoluene	ND		3.4	1.7	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Methylene Chloride	ND		6.8	3.8	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
4-Methyl-2-pentanone (MIBK)	ND		34	6.8	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Naphthalene	ND		6.8	1.0	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
N-Propylbenzene	ND		3.4	0.45	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Styrene	ND		3.4	0.43	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
1,1,1,2-Tetrachloroethane	ND		3.4	0.52	ug/Kg		08/24/18 02:25	08/28/18 23:08	1

Client Sample ID: DG-A4S-19.5-20
Date Collected: 08/22/18 09:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-3
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.4	0.51	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Tetrachloroethene	ND		3.4	0.45	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Toluene	ND		3.4	0.48	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
1,2,3-Trichlorobenzene	ND		3.4	0.50	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
1,2,4-Trichlorobenzene	ND		3.4	0.48	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
1,1,1-Trichloroethane	ND		3.4	0.41	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
1,1,2-Trichloroethane	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Trichloroethene	ND		3.4	0.43	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Trichlorofluoromethane	ND		3.4	0.38	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
1,2,3-Trichloropropane	ND		3.4	0.52	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.4	1.4	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
1,2,4-Trimethylbenzene	ND		3.4	1.1	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
1,3,5-Trimethylbenzene	ND		3.4	0.44	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Vinyl acetate	ND		14	3.4	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Vinyl chloride	ND		3.4	0.50	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Xylenes, Total	ND		3.4	0.83	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
2,2-Dichloropropane	ND		3.4	1.4	ug/Kg		08/24/18 02:25	08/28/18 23:08	1
Gasoline Range Organics (GRO) -C4-C12	ND		170	68	ug/Kg		08/24/18 02:25	08/28/18 23:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*45 - 131*	*08/24/18 02:25*	*08/28/18 23:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*60 - 140*	*08/24/18 02:25*	*08/28/18 23:08*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*	*08/24/18 02:25*	*08/28/18 23:08*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.7	4.9	ug/Kg		08/24/18 15:31	08/29/18 19:32	1
Acenaphthene	ND		4.9	2.7	ug/Kg		08/24/18 15:31	08/29/18 19:32	1
Acenaphthylene	ND		4.9	2.3	ug/Kg		08/24/18 15:31	08/29/18 19:32	1
Anthracene	ND		4.9	1.9	ug/Kg		08/24/18 15:31	08/29/18 19:32	1
Benzo[a]anthracene	ND		4.9	1.5	ug/Kg		08/24/18 15:31	08/29/18 19:32	1
Benzo[a]pyrene	ND		4.9	1.9	ug/Kg		08/24/18 15:31	08/29/18 19:32	1
Benzo[b]fluoranthene	ND		4.9	2.0	ug/Kg		08/24/18 15:31	08/29/18 19:32	1
Benzo[g,h,i]perylene	ND		4.9	4.2	ug/Kg		08/24/18 15:31	08/29/18 19:32	1
Benzo[k]fluoranthene	ND		4.9	2.0	ug/Kg		08/24/18 15:31	08/29/18 19:32	1
Chrysene	ND		4.9	1.4	ug/Kg		08/24/18 15:31	08/29/18 19:32	1
Dibenz(a,h)anthracene	ND		4.9	3.4	ug/Kg		08/24/18 15:31	08/29/18 19:32	1
Fluoranthene	ND		4.9	1.4	ug/Kg		08/24/18 15:31	08/29/18 19:32	1
Fluorene	ND		4.9	2.1	ug/Kg		08/24/18 15:31	08/29/18 19:32	1
Indeno[1,2,3-cd]pyrene	ND		4.9	4.1	ug/Kg		08/24/18 15:31	08/29/18 19:32	1
Naphthalene	ND		4.9	3.4	ug/Kg		08/24/18 15:31	08/29/18 19:32	1
Phenanthrene	ND		4.9	1.8	ug/Kg		08/24/18 15:31	08/29/18 19:32	1
Pyrene	ND		4.9	1.7	ug/Kg		08/24/18 15:31	08/29/18 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*33 - 120*	*08/24/18 15:31*	*08/29/18 19:32*	*1*
Terphenyl-d14	*98*		*35 - 146*	*08/24/18 15:31*	*08/29/18 19:32*	*1*

Client Sample ID: DG-A4S-19.5-20

Date Collected: 08/22/18 09:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-3

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	890	J	2000	740	ug/Kg		08/28/18 08:21	08/30/18 12:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*87*		*40 - 130*	*08/28/18 08:21*	*08/30/18 12:25*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
Aldrin	ND		1.9	0.47	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
Endosulfan II	ND		1.9	0.46	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
Endrin	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
Methoxychlor	ND		1.9	0.64	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
Toxaphene	ND		38	6.4	ug/Kg		08/24/18 11:26	08/29/18 10:19	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/29/18 10:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*85*		*21 - 136*	*08/24/18 11:26*	*08/29/18 10:19*	*1*
Tetrachloro-m-xylene	*65*		*21 - 145*	*08/24/18 11:26*	*08/29/18 10:19*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	21	ug/Kg		08/27/18 11:05	08/28/18 20:33	1
Aroclor-1221	ND		49	23	ug/Kg		08/27/18 11:05	08/28/18 20:33	1
Aroclor-1232	ND		49	22	ug/Kg		08/27/18 11:05	08/28/18 20:33	1
Aroclor-1242	ND		49	18	ug/Kg		08/27/18 11:05	08/28/18 20:33	1
Aroclor-1248	ND		49	23	ug/Kg		08/27/18 11:05	08/28/18 20:33	1
Aroclor-1254	ND		49	22	ug/Kg		08/27/18 11:05	08/28/18 20:33	1
Aroclor-1260	ND		49	21	ug/Kg		08/27/18 11:05	08/28/18 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*14 - 128*	*08/27/18 11:05*	*08/28/18 20:33*	*1*
DCB Decachlorobiphenyl	*90*		*10 - 132*	*08/27/18 11:05*	*08/28/18 20:33*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.58	J	1.2	0.20	mg/Kg		08/27/18 12:41	08/29/18 11:44	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-A4S-19.5-20
Date Collected: 08/22/18 09:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-3
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.73**	**J**	2.4	0.21	mg/Kg		08/27/18 12:41	08/29/18 11:44	4
Barium	**40**		1.2	0.17	mg/Kg		08/27/18 12:41	08/29/18 11:44	4
Beryllium	ND		0.24	0.079	mg/Kg		08/27/18 12:41	08/29/18 11:44	4
Cadmium	ND		0.30	0.030	mg/Kg		08/27/18 12:41	08/29/18 11:44	4
Chromium	**72**		1.2	0.13	mg/Kg		08/27/18 12:41	08/29/18 11:44	4
Cobalt	**2.5**		0.49	0.049	mg/Kg		08/27/18 12:41	08/29/18 11:44	4
Copper	**4.7**		3.7	1.7	mg/Kg		08/27/18 12:41	08/29/18 11:44	4
Lead	**1.6**		1.2	0.26	mg/Kg		08/27/18 12:41	08/29/18 11:44	4
Molybdenum	ND		1.2	0.16	mg/Kg		08/27/18 12:41	08/29/18 11:44	4
Nickel	**18**		1.2	0.12	mg/Kg		08/27/18 12:41	08/29/18 11:44	4
Selenium	ND		2.4	0.37	mg/Kg		08/27/18 12:41	08/29/18 11:44	4
Silver	ND		0.61	0.12	mg/Kg		08/27/18 12:41	08/29/18 11:44	4
Thallium	ND		1.2	0.35	mg/Kg		08/27/18 12:41	08/29/18 11:44	4
Vanadium	**23**		1.2	0.17	mg/Kg		08/27/18 12:41	08/29/18 11:44	4
Zinc	**16**		3.7	1.5	mg/Kg		08/27/18 12:41	08/29/18 11:44	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.016	0.0023	mg/Kg		08/29/18 20:30	08/30/18 10:17	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-A6S-0.5-1
Date Collected: 08/22/18 10:05
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-4
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	23		1.7	0.28	mg/Kg		08/27/18 14:52	08/28/18 16:22	4
Arsenic	16		3.4	0.29	mg/Kg		08/27/18 14:52	08/28/18 16:22	4
Barium	130		1.7	0.24	mg/Kg		08/27/18 14:52	08/28/18 16:22	4
Beryllium	ND		0.34	0.11	mg/Kg		08/27/18 14:52	08/28/18 16:22	4
Cadmium	2.1		0.42	0.042	mg/Kg		08/27/18 14:52	08/28/18 16:22	4
Chromium	16		1.7	0.18	mg/Kg		08/27/18 14:52	08/28/18 16:22	4
Cobalt	9.5		0.68	0.068	mg/Kg		08/27/18 14:52	08/28/18 16:22	4
Copper	6000		5.1	2.4	mg/Kg		08/27/18 14:52	08/28/18 16:22	4
Lead	1200		1.7	0.36	mg/Kg		08/27/18 14:52	08/28/18 16:22	4
Molybdenum	0.95	J	1.7	0.22	mg/Kg		08/27/18 14:52	08/28/18 16:22	4
Nickel	20		1.7	0.17	mg/Kg		08/27/18 14:52	08/28/18 16:22	4
Selenium	1.4	J	3.4	0.51	mg/Kg		08/27/18 14:52	08/28/18 16:22	4
Silver	2.4		0.85	0.17	mg/Kg		08/27/18 14:52	08/28/18 16:22	4
Thallium	1.4	J	1.7	0.49	mg/Kg		08/27/18 14:52	08/28/18 16:22	4
Vanadium	110		1.7	0.23	mg/Kg		08/27/18 14:52	08/28/18 16:22	4
Zinc	450		5.1	2.2	mg/Kg		08/27/18 14:52	08/28/18 16:22	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.27		0.017	0.0025	mg/Kg		08/29/18 20:30	08/30/18 10:19	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-A6S-3.5-4
Date Collected: 08/22/18 10:05
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-5
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.99	J	1.8	0.30	mg/Kg		08/27/18 14:52	08/28/18 16:27	4
Arsenic	4.8		3.7	0.31	mg/Kg		08/27/18 14:52	08/28/18 16:27	4
Barium	86		1.8	0.26	mg/Kg		08/27/18 14:52	08/28/18 16:27	4
Beryllium	0.16	J	0.37	0.12	mg/Kg		08/27/18 14:52	08/28/18 16:27	4
Cadmium	ND		0.46	0.046	mg/Kg		08/27/18 14:52	08/28/18 16:27	4
Chromium	51		1.8	0.19	mg/Kg		08/27/18 14:52	08/28/18 16:27	4
Cobalt	12		0.73	0.073	mg/Kg		08/27/18 14:52	08/28/18 16:27	4
Copper	42		5.5	2.6	mg/Kg		08/27/18 14:52	08/28/18 16:27	4
Lead	19		1.8	0.39	mg/Kg		08/27/18 14:52	08/28/18 16:27	4
Molybdenum	0.36	J	1.8	0.23	mg/Kg		08/27/18 14:52	08/28/18 16:27	4
Nickel	70		1.8	0.19	mg/Kg		08/27/18 14:52	08/28/18 16:27	4
Selenium	ND		3.7	0.55	mg/Kg		08/27/18 14:52	08/28/18 16:27	4
Silver	ND		0.92	0.19	mg/Kg		08/27/18 14:52	08/28/18 16:27	4
Thallium	0.72	J	1.8	0.53	mg/Kg		08/27/18 14:52	08/28/18 16:27	4
Vanadium	32		1.8	0.25	mg/Kg		08/27/18 14:52	08/28/18 16:27	4
Zinc	56		5.5	2.3	mg/Kg		08/27/18 14:52	08/28/18 16:27	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.041		0.015	0.0021	mg/Kg		08/29/18 20:30	08/30/18 10:21	1

Client Sample ID: DG-A6S-19.5-20
Date Collected: 08/22/18 10:10
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-6
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.4	0.83	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Acetone	**31**	**J**	34	26	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Benzene	ND		3.4	0.45	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Dichlorobromomethane	ND		3.4	0.50	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Bromobenzene	ND		3.4	0.54	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Chlorobromomethane	ND		14	0.50	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Bromoform	ND		3.4	1.4	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Bromomethane	ND		6.9	0.54	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
2-Butanone (MEK)	ND		34	14	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
n-Butylbenzene	ND		3.4	0.69	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
sec-Butylbenzene	ND		3.4	0.50	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
tert-Butylbenzene	ND		3.4	0.50	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Carbon disulfide	ND		3.4	1.4	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Carbon tetrachloride	ND		3.4	0.43	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Chlorobenzene	ND		3.4	0.48	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Chloroethane	ND		6.9	0.39	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Chloroform	ND		3.4	0.45	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Chloromethane	ND		6.9	0.54	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
2-Chlorotoluene	ND		3.4	0.45	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
4-Chlorotoluene	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Chlorodibromomethane	ND		3.4	0.49	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
1,2-Dichlorobenzene	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
1,3-Dichlorobenzene	ND		3.4	0.50	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
1,4-Dichlorobenzene	ND		3.4	0.49	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
1,3-Dichloropropane	ND		3.4	0.50	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
1,1-Dichloropropene	ND		3.4	0.48	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
1,2-Dibromo-3-Chloropropane	ND		6.9	1.2	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Ethylene Dibromide	ND		3.4	0.98	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Dibromomethane	ND		6.9	0.59	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Dichlorodifluoromethane	ND		6.9	0.54	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
1,1-Dichloroethane	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
1,2-Dichloroethane	ND		3.4	0.52	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
1,1-Dichloroethene	ND	*	3.4	0.43	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
cis-1,2-Dichloroethene	**35**		3.4	0.47	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
trans-1,2-Dichloroethene	**0.96**	**J**	3.4	0.52	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
1,2-Dichloropropane	ND		3.4	0.43	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
cis-1,3-Dichloropropene	ND		3.4	0.48	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
trans-1,3-Dichloropropene	ND		3.4	0.46	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Ethylbenzene	ND		3.4	0.52	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Hexachlorobutadiene	ND		3.4	0.62	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
2-Hexanone	ND		34	6.9	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Isopropylbenzene	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
4-Isopropyltoluene	ND		3.4	1.7	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Methylene Chloride	ND		6.9	3.9	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
4-Methyl-2-pentanone (MIBK)	ND		34	6.9	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Naphthalene	ND		6.9	1.0	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
N-Propylbenzene	ND		3.4	0.45	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Styrene	ND		3.4	0.43	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
1,1,1,2-Tetrachloroethane	ND		3.4	0.52	ug/Kg		08/24/18 02:25	08/28/18 23:37	1

Client Sample ID: DG-A6S-19.5-20

Date Collected: 08/22/18 10:10
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-6

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.4	0.52	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Tetrachloroethene	ND		3.4	0.46	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Toluene	ND		3.4	0.49	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
1,2,3-Trichlorobenzene	ND		3.4	0.51	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
1,2,4-Trichlorobenzene	ND		3.4	0.49	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
1,1,1-Trichloroethane	ND		3.4	0.42	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
1,1,2-Trichloroethane	ND		3.4	0.48	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Trichloroethene	**0.53**	**J**	3.4	0.43	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Trichlorofluoromethane	ND		3.4	0.39	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
1,2,3-Trichloropropane	ND		3.4	0.53	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.4	1.4	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
1,2,4-Trimethylbenzene	ND		3.4	1.1	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
1,3,5-Trimethylbenzene	ND		3.4	0.45	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Vinyl acetate	ND		14	3.4	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Vinyl chloride	ND		3.4	0.50	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Xylenes, Total	ND		3.4	0.84	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
2,2-Dichloropropane	ND		3.4	1.4	ug/Kg		08/24/18 02:25	08/28/18 23:37	1
Gasoline Range Organics (GRO) -C4-C12	ND		170	69	ug/Kg		08/24/18 02:25	08/28/18 23:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*45 - 131*	*08/24/18 02:25*	*08/28/18 23:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*	*08/24/18 02:25*	*08/28/18 23:37*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*	*08/24/18 02:25*	*08/28/18 23:37*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.6	4.8	ug/Kg		08/24/18 15:31	08/29/18 21:07	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/24/18 15:31	08/29/18 21:07	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		08/24/18 15:31	08/29/18 21:07	1
Anthracene	ND		4.8	1.9	ug/Kg		08/24/18 15:31	08/29/18 21:07	1
Benzo[a]anthracene	ND		4.8	1.4	ug/Kg		08/24/18 15:31	08/29/18 21:07	1
Benzo[a]pyrene	ND		4.8	1.8	ug/Kg		08/24/18 15:31	08/29/18 21:07	1
Benzo[b]fluoranthene	ND		4.8	2.0	ug/Kg		08/24/18 15:31	08/29/18 21:07	1
Benzo[g,h,i]perylene	ND		4.8	4.1	ug/Kg		08/24/18 15:31	08/29/18 21:07	1
Benzo[k]fluoranthene	ND		4.8	2.0	ug/Kg		08/24/18 15:31	08/29/18 21:07	1
Chrysene	ND		4.8	1.3	ug/Kg		08/24/18 15:31	08/29/18 21:07	1
Dibenz(a,h)anthracene	ND		4.8	3.4	ug/Kg		08/24/18 15:31	08/29/18 21:07	1
Fluoranthene	ND		4.8	1.3	ug/Kg		08/24/18 15:31	08/29/18 21:07	1
Fluorene	ND		4.8	2.1	ug/Kg		08/24/18 15:31	08/29/18 21:07	1
Indeno[1,2,3-cd]pyrene	ND		4.8	4.0	ug/Kg		08/24/18 15:31	08/29/18 21:07	1
Naphthalene	ND		4.8	3.4	ug/Kg		08/24/18 15:31	08/29/18 21:07	1
Phenanthrene	ND		4.8	1.7	ug/Kg		08/24/18 15:31	08/29/18 21:07	1
Pyrene	ND		4.8	1.6	ug/Kg		08/24/18 15:31	08/29/18 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*47*		*33 - 120*	*08/24/18 15:31*	*08/29/18 21:07*	*1*
Terphenyl-d14	*78*		*35 - 146*	*08/24/18 15:31*	*08/29/18 21:07*	*1*

Client Sample ID: DG-A6S-19.5-20

Date Collected: 08/22/18 10:10
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-6

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2000		1900	720	ug/Kg		08/28/18 08:21	08/30/18 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*122*		*40 - 130*	*08/28/18 08:21*	*08/30/18 13:13*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
Aldrin	ND		1.9	0.48	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
Endrin	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
Toxaphene	ND		38	6.5	ug/Kg		08/24/18 11:26	08/29/18 10:36	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/29/18 10:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*72*		*21 - 136*	*08/24/18 11:26*	*08/29/18 10:36*	*1*
Tetrachloro-m-xylene	*62*		*21 - 145*	*08/24/18 11:26*	*08/29/18 10:36*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/27/18 11:05	08/28/18 20:55	1
Aroclor-1221	ND		51	24	ug/Kg		08/27/18 11:05	08/28/18 20:55	1
Aroclor-1232	ND		51	23	ug/Kg		08/27/18 11:05	08/28/18 20:55	1
Aroclor-1242	ND		51	19	ug/Kg		08/27/18 11:05	08/28/18 20:55	1
Aroclor-1248	ND		51	24	ug/Kg		08/27/18 11:05	08/28/18 20:55	1
Aroclor-1254	ND		51	23	ug/Kg		08/27/18 11:05	08/28/18 20:55	1
Aroclor-1260	ND		51	22	ug/Kg		08/27/18 11:05	08/28/18 20:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*102*		*14 - 128*	*08/27/18 11:05*	*08/28/18 20:55*	*1*
DCB Decachlorobiphenyl	*119*		*10 - 132*	*08/27/18 11:05*	*08/28/18 20:55*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.61	J	1.7	0.27	mg/Kg		08/27/18 14:52	08/28/18 16:32	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-A6S-19.5-20
Date Collected: 08/22/18 10:10
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-6
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.76	J	3.3	0.28	mg/Kg		08/27/18 14:52	08/28/18 16:32	4
Barium	29		1.7	0.23	mg/Kg		08/27/18 14:52	08/28/18 16:32	4
Beryllium	0.14	J	0.33	0.11	mg/Kg		08/27/18 14:52	08/28/18 16:32	4
Cadmium	ND		0.41	0.041	mg/Kg		08/27/18 14:52	08/28/18 16:32	4
Chromium	48		1.7	0.18	mg/Kg		08/27/18 14:52	08/28/18 16:32	4
Cobalt	4.6		0.66	0.066	mg/Kg		08/27/18 14:52	08/28/18 16:32	4
Copper	3.6	J	5.0	2.4	mg/Kg		08/27/18 14:52	08/29/18 23:28	4
Lead	1.8		1.7	0.35	mg/Kg		08/27/18 14:52	08/28/18 16:32	4
Molybdenum	ND		1.7	0.21	mg/Kg		08/27/18 14:52	08/28/18 16:32	4
Nickel	19		1.7	0.17	mg/Kg		08/27/18 14:52	08/28/18 16:32	4
Selenium	ND		3.3	0.50	mg/Kg		08/27/18 14:52	08/28/18 16:32	4
Silver	ND		0.83	0.17	mg/Kg		08/27/18 14:52	08/28/18 16:32	4
Thallium	0.50	J	1.7	0.48	mg/Kg		08/27/18 14:52	08/28/18 16:32	4
Vanadium	30		1.7	0.22	mg/Kg		08/27/18 14:52	08/28/18 16:32	4
Zinc	13		5.0	2.1	mg/Kg		08/27/18 14:52	08/28/18 16:32	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0052	J	0.016	0.0023	mg/Kg		08/29/18 20:30	08/30/18 10:24	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-B6S-0.5-1
Date Collected: 08/22/18 10:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-7
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	7.4		1.2	0.20	mg/Kg		08/27/18 14:52	08/28/18 16:46	4
Arsenic	13		2.4	0.20	mg/Kg		08/27/18 14:52	08/28/18 16:46	4
Barium	150		1.2	0.17	mg/Kg		08/27/18 14:52	08/28/18 16:46	4
Beryllium	0.095	J	0.24	0.078	mg/Kg		08/27/18 14:52	08/28/18 16:46	4
Cadmium	2.1		0.30	0.030	mg/Kg		08/27/18 14:52	08/28/18 16:46	4
Chromium	26		1.2	0.13	mg/Kg		08/27/18 14:52	08/28/18 16:46	4
Cobalt	9.6		0.48	0.048	mg/Kg		08/27/18 14:52	08/28/18 16:46	4
Copper	190		3.6	1.7	mg/Kg		08/27/18 14:52	08/28/18 16:46	4
Lead	500		1.2	0.25	mg/Kg		08/27/18 14:52	08/28/18 16:46	4
Molybdenum	1.2		1.2	0.15	mg/Kg		08/27/18 14:52	08/28/18 16:46	4
Nickel	25		1.2	0.12	mg/Kg		08/27/18 14:52	08/28/18 16:46	4
Selenium	0.67	J	2.4	0.36	mg/Kg		08/27/18 14:52	08/28/18 16:46	4
Silver	1.1		0.60	0.12	mg/Kg		08/27/18 14:52	08/28/18 16:46	4
Thallium	0.99	J	1.2	0.35	mg/Kg		08/27/18 14:52	08/28/18 16:46	4
Vanadium	60		1.2	0.16	mg/Kg		08/27/18 14:52	08/28/18 16:46	4
Zinc	380		3.6	1.5	mg/Kg		08/27/18 14:52	08/28/18 16:46	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.25		0.016	0.0023	mg/Kg		08/29/18 20:30	08/30/18 10:26	1

Client Sample ID: DG-B6S-3.5-4

Date Collected: 08/22/18 10:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-8

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.2		1.7	0.27	mg/Kg		08/27/18 14:52	08/28/18 16:51	4
Arsenic	3.0	J	3.3	0.28	mg/Kg		08/27/18 14:52	08/28/18 16:51	4
Barium	120		1.7	0.23	mg/Kg		08/27/18 14:52	08/28/18 16:51	4
Beryllium	ND		0.33	0.11	mg/Kg		08/27/18 14:52	08/28/18 16:51	4
Cadmium	0.043	J	0.41	0.041	mg/Kg		08/27/18 14:52	08/28/18 16:51	4
Chromium	150		1.7	0.18	mg/Kg		08/27/18 14:52	08/28/18 16:51	4
Cobalt	32		0.66	0.066	mg/Kg		08/27/18 14:52	08/28/18 16:51	4
Copper	59		5.0	2.4	mg/Kg		08/27/18 14:52	08/28/18 16:51	4
Lead	27		1.7	0.35	mg/Kg		08/27/18 14:52	08/28/18 16:51	4
Molybdenum	0.52	J	1.7	0.21	mg/Kg		08/27/18 14:52	08/28/18 16:51	4
Nickel	130		1.7	0.17	mg/Kg		08/27/18 14:52	08/28/18 16:51	4
Selenium	0.53	J	3.3	0.50	mg/Kg		08/27/18 14:52	08/28/18 16:51	4
Silver	0.94		0.83	0.17	mg/Kg		08/27/18 14:52	08/28/18 16:51	4
Thallium	3.1		1.7	0.48	mg/Kg		08/27/18 14:52	08/28/18 16:51	4
Vanadium	140		1.7	0.22	mg/Kg		08/27/18 14:52	08/28/18 16:51	4
Zinc	84		5.0	2.1	mg/Kg		08/27/18 14:52	08/28/18 16:51	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.063		0.016	0.0023	mg/Kg		08/29/18 20:30	08/30/18 10:28	1

Client Sample ID: DG-G6S-MS/MDS

Date Collected: 08/22/18 14:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-9

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.6	1.1	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Acetone	ND		46	35	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Benzene	ND		4.6	0.60	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Dichlorobromomethane	ND		4.6	0.67	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Bromobenzene	ND	*	4.6	0.73	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Chlorobromomethane	ND		19	0.67	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Bromoform	ND		4.6	1.9	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Bromomethane	ND		9.3	0.73	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
2-Butanone (MEK)	ND		46	19	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
n-Butylbenzene	ND	*	4.6	0.93	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
sec-Butylbenzene	ND	*	4.6	0.67	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
tert-Butylbenzene	ND	* F1	4.6	0.68	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Carbon disulfide	ND	*	4.6	1.9	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Carbon tetrachloride	ND		4.6	0.57	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Chlorobenzene	ND		4.6	0.64	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Chloroethane	ND		9.3	0.52	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Chloroform	ND		4.6	0.61	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Chloromethane	ND		9.3	0.73	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
2-Chlorotoluene	ND	* F1	4.6	0.60	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
4-Chlorotoluene	ND	*	4.6	0.63	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Chlorodibromomethane	ND		4.6	0.66	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
1,2-Dichlorobenzene	ND	*	4.6	0.63	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
1,3-Dichlorobenzene	ND	*	4.6	0.67	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
1,4-Dichlorobenzene	ND	*	4.6	0.66	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
1,3-Dichloropropane	ND		4.6	0.68	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
1,1-Dichloropropene	ND		4.6	0.64	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
1,2-Dibromo-3-Chloropropane	ND	*	9.3	1.6	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Ethylene Dibromide	ND		4.6	1.3	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Dibromomethane	ND		9.3	0.80	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Dichlorodifluoromethane	ND		9.3	0.73	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
1,1-Dichloroethane	ND		4.6	0.63	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
1,2-Dichloroethane	ND		4.6	0.70	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
1,1-Dichloroethene	ND	*	4.6	0.57	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
cis-1,2-Dichloroethene	ND		4.6	0.63	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
trans-1,2-Dichloroethene	ND		4.6	0.69	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
1,2-Dichloropropane	ND		4.6	0.58	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
cis-1,3-Dichloropropene	ND		4.6	0.64	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
trans-1,3-Dichloropropene	ND		4.6	0.62	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Ethylbenzene	ND		4.6	0.69	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Hexachlorobutadiene	ND	*	4.6	0.83	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
2-Hexanone	ND		46	9.3	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Isopropylbenzene	ND		4.6	0.63	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
4-Isopropyltoluene	ND	*	4.6	2.3	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Methylene Chloride	ND		9.3	5.2	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
4-Methyl-2-pentanone (MIBK)	ND		46	9.3	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Naphthalene	ND	*	9.3	1.4	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
N-Propylbenzene	ND	* F1	4.6	0.61	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Styrene	ND		4.6	0.58	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
1,1,1,2-Tetrachloroethane	ND		4.6	0.70	ug/Kg		08/24/18 09:01	08/31/18 02:54	1

Client Sample ID: DG-G6S-MS/MDS
Date Collected: 08/22/18 14:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-9
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.6	0.69	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Tetrachloroethene	ND		4.6	0.62	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Toluene	ND		4.6	0.66	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
1,2,3-Trichlorobenzene	ND	* F1	4.6	0.69	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
1,2,4-Trichlorobenzene	ND	*	4.6	0.66	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
1,1,1-Trichloroethane	ND		4.6	0.56	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
1,1,2-Trichloroethane	ND		4.6	0.65	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Trichloroethene	ND		4.6	0.58	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Trichlorofluoromethane	ND		4.6	0.52	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
1,2,3-Trichloropropane	ND	*	4.6	0.71	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1	4.6	1.9	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
1,2,4-Trimethylbenzene	ND	*	4.6	1.5	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
1,3,5-Trimethylbenzene	ND	* F1	4.6	0.60	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Vinyl acetate	ND	F1	19	4.6	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Vinyl chloride	ND		4.6	0.68	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Xylenes, Total	ND		4.6	1.1	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
2,2-Dichloropropane	ND		4.6	1.9	ug/Kg		08/24/18 09:01	08/31/18 02:54	1
Gasoline Range Organics (GRO) -C4-C12	ND		230	93	ug/Kg		08/24/18 09:01	08/31/18 02:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*45 - 131*	*08/24/18 09:01*	*08/31/18 02:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*	*08/24/18 09:01*	*08/31/18 02:54*	*1*
Toluene-d8 (Surr)	*98*		*58 - 140*	*08/24/18 09:01*	*08/31/18 02:54*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**28**	**J**	39	20	ug/Kg		08/24/18 15:31	08/29/18 14:47	2
Acenaphthene	ND		20	11	ug/Kg		08/24/18 15:31	08/29/18 14:47	2
Acenaphthylene	**11**	**J**	20	9.4	ug/Kg		08/24/18 15:31	08/29/18 14:47	2
Anthracene	**20**		20	7.8	ug/Kg		08/24/18 15:31	08/29/18 14:47	2
Benzo[a]anthracene	**50**		20	5.9	ug/Kg		08/24/18 15:31	08/29/18 14:47	2
Benzo[a]pyrene	**75**		20	7.5	ug/Kg		08/24/18 15:31	08/29/18 14:47	2
Benzo[b]fluoranthene	**100**		20	8.2	ug/Kg		08/24/18 15:31	08/29/18 14:47	2
Benzo[g,h,i]perylene	**96**		20	17	ug/Kg		08/24/18 15:31	08/29/18 14:47	2
Benzo[k]fluoranthene	**42**		20	8.2	ug/Kg		08/24/18 15:31	08/29/18 14:47	2
Chrysene	**72**	**B**	20	5.5	ug/Kg		08/24/18 15:31	08/29/18 14:47	2
Dibenz(a,h)anthracene	**16**	**J**	20	14	ug/Kg		08/24/18 15:31	08/29/18 14:47	2
Fluoranthene	**96**		20	5.5	ug/Kg		08/24/18 15:31	08/29/18 14:47	2
Fluorene	ND		20	8.6	ug/Kg		08/24/18 15:31	08/29/18 14:47	2
Indeno[1,2,3-cd]pyrene	**51**		20	16	ug/Kg		08/24/18 15:31	08/29/18 14:47	2
Naphthalene	**29**		20	14	ug/Kg		08/24/18 15:31	08/29/18 14:47	2
Phenanthrene	**71**		20	7.1	ug/Kg		08/24/18 15:31	08/29/18 14:47	2
Pyrene	**110**		20	6.7	ug/Kg		08/24/18 15:31	08/29/18 14:47	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*33 - 120*	*08/24/18 15:31*	*08/29/18 14:47*	*2*
Terphenyl-d14	*112*		*35 - 146*	*08/24/18 15:31*	*08/29/18 14:47*	*2*

Client Sample ID: DG-G6S-MS/MDS

Date Collected: 08/22/18 14:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-9

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**83000**		3800	1400	ug/Kg		08/28/18 08:21	08/29/18 16:17	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*76*		*40 - 130*	*08/28/18 08:21*	*08/29/18 16:17*	*2*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**0.90**	**J p**	1.9	0.58	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
4,4'-DDE	**0.76**	**J**	1.9	0.40	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
Aldrin	ND		1.9	0.48	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
Endosulfan sulfate	ND	F2	1.9	0.36	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
Endrin	ND		1.9	0.44	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
Toxaphene	ND		38	6.5	ug/Kg		08/28/18 13:36	08/31/18 01:10	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/28/18 13:36	08/31/18 01:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*101*		*21 - 136*	*08/28/18 13:36*	*08/31/18 01:10*	*1*
Tetrachloro-m-xylene	*93*		*21 - 145*	*08/28/18 13:36*	*08/31/18 01:10*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/30/18 06:23	08/31/18 13:02	1
Aroclor-1221	ND		51	25	ug/Kg		08/30/18 06:23	08/31/18 13:02	1
Aroclor-1232	ND		51	23	ug/Kg		08/30/18 06:23	08/31/18 13:02	1
Aroclor-1242	ND		51	19	ug/Kg		08/30/18 06:23	08/31/18 13:02	1
Aroclor-1248	ND		51	25	ug/Kg		08/30/18 06:23	08/31/18 13:02	1
Aroclor-1254	ND		51	23	ug/Kg		08/30/18 06:23	08/31/18 13:02	1
Aroclor-1260	ND		51	22	ug/Kg		08/30/18 06:23	08/31/18 13:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*94*		*14 - 128*	*08/30/18 06:23*	*08/31/18 13:02*	*1*
DCB Decachlorobiphenyl	*84*		*10 - 132*	*08/30/18 06:23*	*08/31/18 13:02*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	F1	1.8	0.30	mg/Kg		08/27/18 12:41	08/29/18 09:55	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-G6S-MS/MDS
Date Collected: 08/22/18 14:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-9
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.2**	**J**	3.6	0.31	mg/Kg		08/27/18 12:41	08/29/18 09:55	4
Barium	**42**	**F1**	1.8	0.26	mg/Kg		08/27/18 12:41	08/29/18 09:55	4
Beryllium	ND	F1	0.36	0.12	mg/Kg		08/27/18 12:41	08/29/18 09:55	4
Cadmium	ND		0.45	0.045	mg/Kg		08/27/18 12:41	08/29/18 09:55	4
Chromium	**11**		1.8	0.19	mg/Kg		08/27/18 12:41	08/29/18 09:55	4
Cobalt	**8.2**		0.72	0.072	mg/Kg		08/27/18 12:41	08/29/18 09:55	4
Copper	**120**	**F1**	5.4	2.6	mg/Kg		08/27/18 12:41	08/29/18 09:55	4
Lead	**6.9**		1.8	0.38	mg/Kg		08/27/18 12:41	08/29/18 09:55	4
Molybdenum	ND		1.8	0.23	mg/Kg		08/27/18 12:41	08/29/18 09:55	4
Nickel	**5.0**		1.8	0.18	mg/Kg		08/27/18 12:41	08/29/18 09:55	4
Selenium	ND		3.6	0.54	mg/Kg		08/27/18 12:41	08/29/18 09:55	4
Silver	ND	F1	0.90	0.18	mg/Kg		08/27/18 12:41	08/29/18 09:55	4
Thallium	**0.83**	**J**	1.8	0.52	mg/Kg		08/27/18 12:41	08/29/18 09:55	4
Vanadium	**81**	**F1**	1.8	0.25	mg/Kg		08/27/18 12:41	08/29/18 09:55	4
Zinc	**32**		5.4	2.3	mg/Kg		08/27/18 12:41	08/29/18 09:55	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.029**		0.015	0.0022	mg/Kg		08/29/18 20:30	08/30/18 10:05	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DUP-6
Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-10
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.78	J	1.7	0.28	mg/Kg		08/27/18 14:52	08/28/18 16:55	4
Arsenic	8.3		3.4	0.29	mg/Kg		08/27/18 14:52	08/28/18 16:55	4
Barium	160		1.7	0.24	mg/Kg		08/27/18 14:52	08/28/18 16:55	4
Beryllium	0.32	J	0.34	0.11	mg/Kg		08/27/18 14:52	08/28/18 16:55	4
Cadmium	ND		0.42	0.042	mg/Kg		08/27/18 14:52	08/28/18 16:55	4
Chromium	42		1.7	0.18	mg/Kg		08/27/18 14:52	08/28/18 16:55	4
Cobalt	13		0.68	0.068	mg/Kg		08/27/18 14:52	08/28/18 16:55	4
Copper	37		5.1	2.4	mg/Kg		08/27/18 14:52	08/28/18 16:55	4
Lead	12		1.7	0.36	mg/Kg		08/27/18 14:52	08/28/18 16:55	4
Molybdenum	0.40	J	1.7	0.22	mg/Kg		08/27/18 14:52	08/28/18 16:55	4
Nickel	61		1.7	0.17	mg/Kg		08/27/18 14:52	08/28/18 16:55	4
Selenium	ND		3.4	0.51	mg/Kg		08/27/18 14:52	08/28/18 16:55	4
Silver	0.20	J	0.85	0.17	mg/Kg		08/27/18 14:52	08/28/18 16:55	4
Thallium	0.75	J	1.7	0.49	mg/Kg		08/27/18 14:52	08/28/18 16:55	4
Vanadium	32		1.7	0.23	mg/Kg		08/27/18 14:52	08/28/18 16:55	4
Zinc	66		5.1	2.2	mg/Kg		08/27/18 14:52	08/28/18 16:55	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.037		0.016	0.0023	mg/Kg		08/29/18 20:30	08/30/18 10:31	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-L8S-0.5-1
Date Collected: 08/22/18 16:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-11
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.7		1.6	0.27	mg/Kg		08/27/18 14:52	08/29/18 23:33	4
Arsenic	97		3.3	0.28	mg/Kg		08/27/18 14:52	08/29/18 23:33	4
Barium	150		1.6	0.23	mg/Kg		08/27/18 14:52	08/29/18 23:33	4
Beryllium	0.26	J	0.33	0.11	mg/Kg		08/27/18 14:52	08/29/18 23:33	4
Cadmium	0.090	J	0.41	0.040	mg/Kg		08/27/18 14:52	08/29/18 23:33	4
Chromium	97		1.6	0.17	mg/Kg		08/27/18 14:52	08/29/18 23:33	4
Cobalt	21		0.65	0.065	mg/Kg		08/27/18 14:52	08/29/18 23:33	4
Copper	130		4.9	2.3	mg/Kg		08/27/18 14:52	08/29/18 23:33	4
Lead	680		1.6	0.34	mg/Kg		08/27/18 14:52	08/29/18 23:33	4
Molybdenum	0.99	J	1.6	0.21	mg/Kg		08/27/18 14:52	08/29/18 23:33	4
Nickel	110		1.6	0.17	mg/Kg		08/27/18 14:52	08/29/18 23:33	4
Selenium	0.96	J	3.3	0.49	mg/Kg		08/27/18 14:52	08/29/18 23:33	4
Silver	0.74	J	0.81	0.16	mg/Kg		08/27/18 14:52	08/29/18 23:33	4
Thallium	ND		1.6	0.47	mg/Kg		08/27/18 14:52	08/29/18 23:33	4
Vanadium	94		1.6	0.22	mg/Kg		08/27/18 14:52	08/29/18 23:33	4
Zinc	230		4.9	2.1	mg/Kg		08/27/18 14:52	08/29/18 23:33	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.2		0.016	0.0023	mg/Kg		08/29/18 20:30	08/30/18 10:33	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-L8S-3.5-4
Date Collected: 08/22/18 16:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-12
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.0	J	1.9	0.31	mg/Kg		08/27/18 14:52	08/28/18 17:05	4
Arsenic	59		3.7	0.32	mg/Kg		08/27/18 14:52	08/28/18 17:05	4
Barium	45		1.9	0.27	mg/Kg		08/27/18 14:52	08/28/18 17:05	4
Beryllium	ND		0.37	0.12	mg/Kg		08/27/18 14:52	08/28/18 17:05	4
Cadmium	ND		0.47	0.046	mg/Kg		08/27/18 14:52	08/28/18 17:05	4
Chromium	70		1.9	0.20	mg/Kg		08/27/18 14:52	08/28/18 17:05	4
Cobalt	9.4		0.75	0.075	mg/Kg		08/27/18 14:52	08/28/18 17:05	4
Copper	15		5.6	2.7	mg/Kg		08/27/18 14:52	08/28/18 17:05	4
Lead	8.1		1.9	0.39	mg/Kg		08/27/18 14:52	08/28/18 17:05	4
Molybdenum	ND		1.9	0.24	mg/Kg		08/27/18 14:52	08/28/18 17:05	4
Nickel	33		1.9	0.19	mg/Kg		08/27/18 14:52	08/28/18 17:05	4
Selenium	ND		3.7	0.56	mg/Kg		08/27/18 14:52	08/28/18 17:05	4
Silver	ND		0.93	0.19	mg/Kg		08/27/18 14:52	08/28/18 17:05	4
Thallium	ND		1.9	0.54	mg/Kg		08/27/18 14:52	08/28/18 17:05	4
Vanadium	44		1.9	0.25	mg/Kg		08/27/18 14:52	08/28/18 17:05	4
Zinc	36		5.6	2.4	mg/Kg		08/27/18 14:52	08/28/18 17:05	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.049		0.014	0.0021	mg/Kg		08/29/18 20:30	08/30/18 10:35	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-K8S-0.5-1
Date Collected: 08/22/18 16:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-13
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.5	J	1.9	0.31	mg/Kg		08/25/18 12:57	08/27/18 22:33	4
Arsenic	8.3		3.8	0.32	mg/Kg		08/25/18 12:57	08/27/18 22:33	4
Barium	270	B	1.9	0.27	mg/Kg		08/25/18 12:57	08/27/18 22:33	4
Beryllium	0.17	J	0.38	0.12	mg/Kg		08/25/18 12:57	08/27/18 22:33	4
Cadmium	1.9		0.47	0.047	mg/Kg		08/25/18 12:57	08/27/18 22:33	4
Chromium	48		1.9	0.20	mg/Kg		08/25/18 12:57	08/27/18 22:33	4
Cobalt	9.9		0.75	0.075	mg/Kg		08/25/18 12:57	08/27/18 22:33	4
Copper	100		5.7	2.7	mg/Kg		08/25/18 12:57	08/27/18 22:33	4
Lead	690		1.9	0.40	mg/Kg		08/25/18 12:57	08/27/18 22:33	4
Molybdenum	0.56	J	1.9	0.24	mg/Kg		08/25/18 12:57	08/27/18 22:33	4
Nickel	28		1.9	0.19	mg/Kg		08/25/18 12:57	08/27/18 22:33	4
Selenium	ND		3.8	0.57	mg/Kg		08/25/18 12:57	08/27/18 22:33	4
Silver	ND		0.94	0.19	mg/Kg		08/25/18 12:57	08/27/18 22:33	4
Thallium	0.86	J	1.9	0.55	mg/Kg		08/25/18 12:57	08/27/18 22:33	4
Vanadium	72		1.9	0.26	mg/Kg		08/25/18 12:57	08/27/18 22:33	4
Zinc	410		5.7	2.4	mg/Kg		08/25/18 12:57	08/27/18 22:33	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16		0.016	0.0024	mg/Kg		08/29/18 20:30	08/30/18 10:43	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-K8S-3.5-4
Date Collected: 08/22/18 16:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-14
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.2	J	1.7	0.29	mg/Kg		08/25/18 12:57	08/27/18 22:38	4
Arsenic	6.9		3.5	0.30	mg/Kg		08/25/18 12:57	08/27/18 22:38	4
Barium	70	B	1.7	0.25	mg/Kg		08/25/18 12:57	08/27/18 22:38	4
Beryllium	0.72		0.35	0.11	mg/Kg		08/25/18 12:57	08/27/18 22:38	4
Cadmium	ND		0.43	0.043	mg/Kg		08/25/18 12:57	08/27/18 22:38	4
Chromium	39		1.7	0.18	mg/Kg		08/25/18 12:57	08/27/18 22:38	4
Cobalt	13		0.70	0.070	mg/Kg		08/25/18 12:57	08/27/18 22:38	4
Copper	39		5.2	2.5	mg/Kg		08/25/18 12:57	08/27/18 22:38	4
Lead	29		1.7	0.37	mg/Kg		08/25/18 12:57	08/27/18 22:38	4
Molybdenum	0.28	J	1.7	0.22	mg/Kg		08/25/18 12:57	08/27/18 22:38	4
Nickel	36		1.7	0.18	mg/Kg		08/25/18 12:57	08/27/18 22:38	4
Selenium	ND		3.5	0.52	mg/Kg		08/25/18 12:57	08/27/18 22:38	4
Silver	ND		0.87	0.18	mg/Kg		08/25/18 12:57	08/27/18 22:38	4
Thallium	0.80	J	1.7	0.50	mg/Kg		08/25/18 12:57	08/27/18 22:38	4
Vanadium	52		1.7	0.24	mg/Kg		08/25/18 12:57	08/27/18 22:38	4
Zinc	120		5.2	2.2	mg/Kg		08/25/18 12:57	08/27/18 22:38	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.081		0.015	0.0022	mg/Kg		08/29/18 20:30	08/30/18 10:45	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-J8S-0.5-1
Date Collected: 08/22/18 17:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-15
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.4	0.23	mg/Kg		08/25/18 12:57	08/27/18 22:42	4
Arsenic	**4.4**		2.7	0.23	mg/Kg		08/25/18 12:57	08/27/18 22:42	4
Barium	**110**	**B**	1.4	0.19	mg/Kg		08/25/18 12:57	08/27/18 22:42	4
Beryllium	**0.43**		0.27	0.088	mg/Kg		08/25/18 12:57	08/27/18 22:42	4
Cadmium	**1.3**		0.34	0.034	mg/Kg		08/25/18 12:57	08/27/18 22:42	4
Chromium	**24**		1.4	0.14	mg/Kg		08/25/18 12:57	08/27/18 22:42	4
Cobalt	**12**		0.54	0.054	mg/Kg		08/25/18 12:57	08/27/18 22:42	4
Copper	**51**		4.1	1.9	mg/Kg		08/25/18 12:57	08/27/18 22:42	4
Lead	**27**		1.4	0.29	mg/Kg		08/25/18 12:57	08/27/18 22:42	4
Molybdenum	**0.54**	**J**	1.4	0.17	mg/Kg		08/25/18 12:57	08/27/18 22:42	4
Nickel	**35**		1.4	0.14	mg/Kg		08/25/18 12:57	08/27/18 22:42	4
Selenium	ND		2.7	0.41	mg/Kg		08/25/18 12:57	08/27/18 22:42	4
Silver	ND		0.68	0.14	mg/Kg		08/25/18 12:57	08/27/18 22:42	4
Thallium	**0.62**	**J**	1.4	0.39	mg/Kg		08/25/18 12:57	08/27/18 22:42	4
Vanadium	**50**		1.4	0.19	mg/Kg		08/25/18 12:57	08/27/18 22:42	4
Zinc	**81**		4.1	1.7	mg/Kg		08/25/18 12:57	08/27/18 22:42	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.033**		0.017	0.0025	mg/Kg		08/29/18 20:30	08/30/18 10:47	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-J8S-3.5-4
Date Collected: 08/22/18 17:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-16
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.37	J	1.4	0.24	mg/Kg		08/25/18 12:57	08/27/18 22:47	4
Arsenic	0.50	J	2.9	0.24	mg/Kg		08/25/18 12:57	08/27/18 22:47	4
Barium	17	B	1.4	0.20	mg/Kg		08/25/18 12:57	08/27/18 22:47	4
Beryllium	ND		0.29	0.093	mg/Kg		08/25/18 12:57	08/27/18 22:47	4
Cadmium	ND		0.36	0.035	mg/Kg		08/25/18 12:57	08/27/18 22:47	4
Chromium	25		1.4	0.15	mg/Kg		08/25/18 12:57	08/27/18 22:47	4
Cobalt	17		0.57	0.057	mg/Kg		08/25/18 12:57	08/27/18 22:47	4
Copper	100		4.3	2.0	mg/Kg		08/25/18 12:57	08/27/18 22:47	4
Lead	2.8		1.4	0.30	mg/Kg		08/25/18 12:57	08/27/18 22:47	4
Molybdenum	ND		1.4	0.18	mg/Kg		08/25/18 12:57	08/27/18 22:47	4
Nickel	14		1.4	0.15	mg/Kg		08/25/18 12:57	08/27/18 22:47	4
Selenium	ND		2.9	0.43	mg/Kg		08/25/18 12:57	08/27/18 22:47	4
Silver	ND		0.71	0.14	mg/Kg		08/25/18 12:57	08/27/18 22:47	4
Thallium	0.50	J	1.4	0.41	mg/Kg		08/25/18 12:57	08/28/18 15:25	4
Vanadium	110		1.4	0.19	mg/Kg		08/25/18 12:57	08/27/18 22:47	4
Zinc	53		4.3	1.8	mg/Kg		08/25/18 12:57	08/27/18 22:47	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040		0.016	0.0024	mg/Kg		08/29/18 20:30	08/30/18 10:50	1

Client Sample ID: DG-K8S-MS/MDS
Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-17
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.9	1.2	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Acetone	ND		49	37	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Benzene	ND		4.9	0.63	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Dichlorobromomethane	ND		4.9	0.70	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Bromobenzene	ND		4.9	0.77	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Chlorobromomethane	ND		19	0.70	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Bromoform	ND		4.9	1.9	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Bromomethane	ND		9.7	0.77	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
2-Butanone (MEK)	ND		49	20	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
n-Butylbenzene	ND		4.9	0.97	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
sec-Butylbenzene	ND		4.9	0.70	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
tert-Butylbenzene	ND		4.9	0.71	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Carbon disulfide	ND		4.9	1.9	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Carbon tetrachloride	ND		4.9	0.60	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Chlorobenzene	ND		4.9	0.67	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Chloroethane	ND		9.7	0.54	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Chloroform	ND		4.9	0.64	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Chloromethane	ND		9.7	0.77	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
2-Chlorotoluene	ND		4.9	0.63	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
4-Chlorotoluene	ND		4.9	0.66	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Chlorodibromomethane	ND		4.9	0.69	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
1,2-Dichlorobenzene	ND		4.9	0.66	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
1,3-Dichlorobenzene	ND		4.9	0.70	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
1,4-Dichlorobenzene	ND		4.9	0.69	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
1,3-Dichloropropane	ND		4.9	0.71	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
1,1-Dichloropropene	ND		4.9	0.67	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
1,2-Dibromo-3-Chloropropane	ND		9.7	1.7	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Ethylene Dibromide	ND		4.9	1.4	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Dibromomethane	ND		9.7	0.84	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Dichlorodifluoromethane	ND		9.7	0.77	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
1,1-Dichloroethane	ND		4.9	0.66	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
1,2-Dichloroethane	ND		4.9	0.74	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
1,1-Dichloroethene	ND	*	4.9	0.60	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
cis-1,2-Dichloroethene	ND		4.9	0.66	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
trans-1,2-Dichloroethene	ND		4.9	0.73	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
1,2-Dichloropropane	ND		4.9	0.61	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
cis-1,3-Dichloropropene	ND		4.9	0.67	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
trans-1,3-Dichloropropene	ND		4.9	0.65	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Ethylbenzene	ND		4.9	0.73	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Hexachlorobutadiene	ND		4.9	0.88	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
2-Hexanone	ND		49	9.7	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Isopropylbenzene	ND		4.9	0.66	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
4-Isopropyltoluene	ND		4.9	2.4	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Methylene Chloride	ND		9.7	5.4	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
4-Methyl-2-pentanone (MIBK)	ND		49	9.7	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Naphthalene	ND		9.7	1.5	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
N-Propylbenzene	ND		4.9	0.64	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Styrene	ND		4.9	0.61	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
1,1,1,2-Tetrachloroethane	ND		4.9	0.74	ug/Kg		08/24/18 09:01	08/31/18 09:32	1

Client Sample ID: DG-K8S-MS/MDS
Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-17
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.9	0.73	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Tetrachloroethene	ND		4.9	0.65	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Toluene	ND		4.9	0.69	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
1,2,3-Trichlorobenzene	ND		4.9	0.72	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
1,2,4-Trichlorobenzene	ND		4.9	0.69	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
1,1,1-Trichloroethane	ND		4.9	0.59	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
1,1,2-Trichloroethane	ND		4.9	0.68	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Trichloroethene	ND		4.9	0.61	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Trichlorofluoromethane	ND		4.9	0.54	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
1,2,3-Trichloropropane	ND		4.9	0.75	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1 *	4.9	2.0	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
1,2,4-Trimethylbenzene	ND		4.9	1.6	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
1,3,5-Trimethylbenzene	ND		4.9	0.63	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Vinyl acetate	ND		19	4.9	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Vinyl chloride	ND		4.9	0.71	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Xylenes, Total	ND		4.9	1.2	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
2,2-Dichloropropane	ND		4.9	1.9	ug/Kg		08/24/18 09:01	08/31/18 09:32	1
Gasoline Range Organics (GRO) -C4-C12	ND		240	97	ug/Kg		08/24/18 09:01	08/31/18 09:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*45 - 131*	*08/24/18 09:01*	*08/31/18 09:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*	*08/24/18 09:01*	*08/31/18 09:32*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*	*08/24/18 09:01*	*08/31/18 09:32*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.9	4.9	ug/Kg		08/27/18 12:37	08/29/18 14:23	1
Acenaphthene	ND		4.9	2.8	ug/Kg		08/27/18 12:37	08/29/18 14:23	1
Acenaphthylene	ND		4.9	2.4	ug/Kg		08/27/18 12:37	08/29/18 14:23	1
Anthracene	**2.3**	**J**	4.9	2.0	ug/Kg		08/27/18 12:37	08/29/18 14:23	1
Benzo[a]anthracene	ND		4.9	1.5	ug/Kg		08/27/18 12:37	08/29/18 14:23	1
Benzo[a]pyrene	**4.2**	**J**	4.9	1.9	ug/Kg		08/27/18 12:37	08/29/18 14:23	1
Benzo[b]fluoranthene	**4.6**	**J**	4.9	2.1	ug/Kg		08/27/18 12:37	08/29/18 14:23	1
Benzo[g,h,i]perylene	**7.4**		4.9	4.2	ug/Kg		08/27/18 12:37	08/29/18 14:23	1
Benzo[k]fluoranthene	**2.6**	**J**	4.9	2.1	ug/Kg		08/27/18 12:37	08/29/18 14:23	1
Chrysene	**3.4**	**J**	4.9	1.4	ug/Kg		08/27/18 12:37	08/29/18 14:23	1
Dibenz(a,h)anthracene	ND		4.9	3.5	ug/Kg		08/27/18 12:37	08/29/18 14:23	1
Fluoranthene	**4.6**	**J B**	4.9	1.4	ug/Kg		08/27/18 12:37	08/29/18 14:23	1
Fluorene	ND		4.9	2.2	ug/Kg		08/27/18 12:37	08/29/18 14:23	1
Indeno[1,2,3-cd]pyrene	ND		4.9	4.1	ug/Kg		08/27/18 12:37	08/29/18 14:23	1
Naphthalene	ND		4.9	3.5	ug/Kg		08/27/18 12:37	08/29/18 14:23	1
Phenanthrene	**5.9**		4.9	1.8	ug/Kg		08/27/18 12:37	08/29/18 14:23	1
Pyrene	**6.3**	**B**	4.9	1.7	ug/Kg		08/27/18 12:37	08/29/18 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*33 - 120*	*08/27/18 12:37*	*08/29/18 14:23*	*1*
Terphenyl-d14	*89*		*35 - 146*	*08/27/18 12:37*	*08/29/18 14:23*	*1*

Client Sample ID: DG-K8S-MS/MDS

Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-17

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	6600	B	2000	740	ug/Kg		08/27/18 08:59	08/27/18 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*87*		*40 - 130*	*08/27/18 08:59*	*08/27/18 21:08*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
Aldrin	ND		2.0	0.50	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
beta-BHC	ND	F1	2.0	0.36	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
Endrin	ND		2.0	0.46	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
Toxaphene	ND		40	6.8	ug/Kg		08/24/18 11:26	08/28/18 07:43	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/24/18 11:26	08/28/18 07:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*89*		*21 - 136*	*08/24/18 11:26*	*08/28/18 07:43*	*1*
Tetrachloro-m-xylene	*85*		*21 - 145*	*08/24/18 11:26*	*08/28/18 07:43*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/30/18 06:23	08/31/18 14:46	1
Aroclor-1221	ND		51	24	ug/Kg		08/30/18 06:23	08/31/18 14:46	1
Aroclor-1232	ND		51	23	ug/Kg		08/30/18 06:23	08/31/18 14:46	1
Aroclor-1242	ND		51	19	ug/Kg		08/30/18 06:23	08/31/18 14:46	1
Aroclor-1248	ND		51	24	ug/Kg		08/30/18 06:23	08/31/18 14:46	1
Aroclor-1254	ND		51	23	ug/Kg		08/30/18 06:23	08/31/18 14:46	1
Aroclor-1260	ND		51	22	ug/Kg		08/30/18 06:23	08/31/18 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*79*		*14 - 128*	*08/30/18 06:23*	*08/31/18 14:46*	*1*
DCB Decachlorobiphenyl	*87*		*10 - 132*	*08/30/18 06:23*	*08/31/18 14:46*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.1	J	1.4	0.24	mg/Kg		08/25/18 12:57	08/27/18 22:52	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-K8S-MS/MDS
Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-17
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.5	J	2.9	0.25	mg/Kg		08/25/18 12:57	08/27/18 22:52	4
Barium	83	B	1.4	0.21	mg/Kg		08/25/18 12:57	08/27/18 22:52	4
Beryllium	ND		0.29	0.094	mg/Kg		08/25/18 12:57	08/27/18 22:52	4
Cadmium	ND		0.36	0.036	mg/Kg		08/25/18 12:57	08/27/18 22:52	4
Chromium	88		1.4	0.15	mg/Kg		08/25/18 12:57	08/27/18 22:52	4
Cobalt	17		0.58	0.058	mg/Kg		08/25/18 12:57	08/27/18 22:52	4
Copper	37		4.3	2.1	mg/Kg		08/25/18 12:57	08/27/18 22:52	4
Lead	19		1.4	0.30	mg/Kg		08/25/18 12:57	08/27/18 22:52	4
Molybdenum	ND		1.4	0.19	mg/Kg		08/25/18 12:57	08/27/18 22:52	4
Nickel	42		1.4	0.15	mg/Kg		08/25/18 12:57	08/27/18 22:52	4
Selenium	ND		2.9	0.43	mg/Kg		08/25/18 12:57	08/27/18 22:52	4
Silver	ND		0.72	0.15	mg/Kg		08/25/18 12:57	08/27/18 22:52	4
Thallium	1.7		1.4	0.42	mg/Kg		08/25/18 12:57	08/27/18 22:52	4
Vanadium	100		1.4	0.20	mg/Kg		08/25/18 12:57	08/27/18 22:52	4
Zinc	48		4.3	1.8	mg/Kg		08/25/18 12:57	08/27/18 22:52	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.061		0.016	0.0023	mg/Kg		08/29/18 20:30	08/30/18 10:57	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DUP-20
Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88216-18
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.0	J	1.5	0.25	mg/Kg		08/25/18 12:57	08/27/18 22:57	4
Arsenic	84		3.1	0.26	mg/Kg		08/25/18 12:57	08/27/18 22:57	4
Barium	59	B	1.5	0.22	mg/Kg		08/25/18 12:57	08/27/18 22:57	4
Beryllium	0.28	J	0.31	0.099	mg/Kg		08/25/18 12:57	08/27/18 22:57	4
Cadmium	ND		0.38	0.038	mg/Kg		08/25/18 12:57	08/27/18 22:57	4
Chromium	86		1.5	0.16	mg/Kg		08/25/18 12:57	08/27/18 22:57	4
Cobalt	8.5		0.61	0.061	mg/Kg		08/25/18 12:57	08/27/18 22:57	4
Copper	12		4.6	2.2	mg/Kg		08/25/18 12:57	08/27/18 22:57	4
Lead	24		1.5	0.32	mg/Kg		08/25/18 12:57	08/27/18 22:57	4
Molybdenum	ND		1.5	0.20	mg/Kg		08/25/18 12:57	08/27/18 22:57	4
Nickel	37		1.5	0.16	mg/Kg		08/25/18 12:57	08/27/18 22:57	4
Selenium	ND		3.1	0.46	mg/Kg		08/25/18 12:57	08/27/18 22:57	4
Silver	ND		0.76	0.15	mg/Kg		08/25/18 12:57	08/27/18 22:57	4
Thallium	0.80	J	1.5	0.44	mg/Kg		08/25/18 12:57	08/27/18 22:57	4
Vanadium	56		1.5	0.21	mg/Kg		08/25/18 12:57	08/27/18 22:57	4
Zinc	29		4.6	1.9	mg/Kg		08/25/18 12:57	08/27/18 22:57	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.036		0.015	0.0022	mg/Kg		08/29/18 20:30	08/30/18 10:59	1

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88216-1

SDG No.:

Client Sample ID: DG-A4S-19.5-20 Lab Sample ID: 720-88216-3

Matrix: Solid Lab File ID: FID1000007.D

Analysis Method: 8015B Date Collected: 08/22/2018 09:00

Extraction Method: 3546 Date Extracted: 08/28/2018 08:21

Sample wt/vol: 15.28(g) Date Analyzed: 08/30/2018 12:25

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250568 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	890	J	2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	87		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000007.D
Lims ID: 720-88216-E-3-E
Client ID: DG-A4S-19.5-20
Sample Type: Client
Inject. Date: 30-Aug-2018 12:25:15 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053573-007
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\DRO6_A.m
Limit Group: DRO
Last Update: 30-Aug-2018 12:56:03 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK001

First Level Reviewer: luj Date: 30-Aug-2018 12:56:03

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.231			ND	
	23 n-Decane	2.111	2.118	-0.007	4934	NC	
A	21 Stoddard Solvent	2.735	(1.231-4.240)		2473602	1.39	
A	1 C9-C13	2.735	(1.231-4.240)		2473602	1.39	
A	57 C10-C12	2.866	(2.118-3.613)		2177497	1.41	
	24 Dodecane	3.601	3.613	-0.012	18318	NC	
A	3 C9 - C17	3.780	(1.231-6.330)		4273434	2.19	
A	60 C10-C16	3.984	(2.118-5.849)		3725387	2.13	
A	47 C9 - C18	4.006	(1.231-6.780)		4670051	2.89	
A	25 C9-C19	4.220	(1.231-7.210)		4867050	2.48	
A	15 Kerosene	4.220	(1.231-7.210)		4867050	3.01	
	26 C13	4.248	4.240	0.008	4131	NC	
$	27 n-Decanoic Acid (Surr)		4.607			ND	U
A	59 C12-C16	4.731	(3.613-5.849)		1566208	1.02	
A	62 C10-C20	4.871	(2.118-7.623)		6501386	4.22	
A	28 C9-C24	5.172	(1.231-9.113)		9722523	6.30	
A	29 C9-C25	5.341	(1.231-9.452)		10228399	6.63	
A	54 C10-C23	5.440	(2.118-8.762)		6909280	4.48	
A	4 C10-C24	5.616	(2.118-9.113)		9610525	6.23	
A	16 C10-C25	5.785	(2.118-9.452)		10116401	6.56	
	45 Hexadecane	5.867	5.849	0.018	26830	NC	
A	14 C10-C26	5.948	(2.118-9.778)		10305406	6.68	
A	67 C12-C22	6.005	(3.613-8.397)		4750101	3.08	
A	12 Unknown Hydrocarbons	6.258	(2.118-10.399)		10504937	NC	
A	5 Diesel	6.258	(2.118-10.399)		10504937	6.81	
A	32 C10-C28	6.258	(2.118-10.399)		10504937	6.81	
A	30 C13-C22	6.319	(4.240-8.397)		4547676	2.95	
	44 Heptadecane	6.324	6.330	-0.006	188132	NC	
A	31 C12-C24	6.363	(3.613-9.113)		7451346	4.83	
	51 n-Octadecane	6.774	6.780	-0.006	171041	NC	
A	52 Mineral oil	6.879	(1.231-12.528)		14967898	8.45	
A	11 Bunker Range Organics (C9-	6.879	(1.231-12.528)		14967898	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	6.879	(1.231-12.528)		14967898	NC	
33 C19	7.221	7.210	0.011	17182	NC	
A 64 C13-C28	7.319	(4.240-10.399)		8143333	5.28	
A 17 C10-C36	7.323	(2.118-12.528)		14855900	9.63	
A 13 C9-C40	7.390	(1.231-13.549)		21864277	16.2	
A 68 Crude Oil Range Organics (	7.390	(1.231-13.549)		21864277	NC	
A 58 C16-C24	7.481	(5.849-9.113)		5930631	3.85	
61 icosane	7.620	7.623	-0.003	748621	NC	
A 6 C10-C40	7.834	(2.118-13.549)		21752279	16.1	
$ 34 p-Terphenyl	8.101	8.114	-0.013	41834966	21.8	
35 n-Docosane		8.397			ND	
A 18 C12-C40	8.581	(3.613-13.549)		19593100	14.6	
36 Tricosane	8.784	8.762	0.022	274752	NC	
A 66 C13-C40	8.894	(4.240-13.549)		19390675	14.4	
37 n-Tetracosane	9.086	9.113	-0.027	85683	NC	
A 2 C16-C36 ORO	9.188	(5.849-12.528)		22017096	19.3	
38 C25	9.449	9.452	-0.003	61686	NC	
A 19 C16-C40	9.699	(5.849-13.549)		18072385	13.5	
46 n-Hexacosane	9.795	9.778	0.017	10987	NC	
A 20 C19-C36	9.869	(7.210-12.528)		20096189	15.1	
A 55 C23-C32	10.144	(8.762-11.526)		4347970	6.26	
39 n-Octacosane	10.439	10.399	0.040	25220	NC	
65 C29	10.666	10.694	-0.028	7556	NC	
A 7 Motor Oil	10.820	(9.113-12.528)		3502853	3.93	
A 40 C24-C36	10.820	(9.113-12.528)		8565932	9.62	M
A 10 C22-C40		(8.397-13.549)			ND	
A 49 C25-C36	10.990	(9.452-12.528)		4801185	5.36	
A 41 C23-C40	11.156	(8.762-13.549)		14842999	11.6	
A 8 C24-C40	11.331	(9.113-13.549)		12227437	10.0	
56 Dotriacontane	11.544	11.526	0.018	314768	NC	
A 50 C28-C40	11.974	(10.399-13.549)		11247342	11.8	
A 63 C29-C40	12.122	(10.694-13.549)		11121232	12.8	
42 n-Hexatriacontane	12.578	12.528	0.050	708630	NC	
43 C40	13.555	13.549	0.006	407124	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

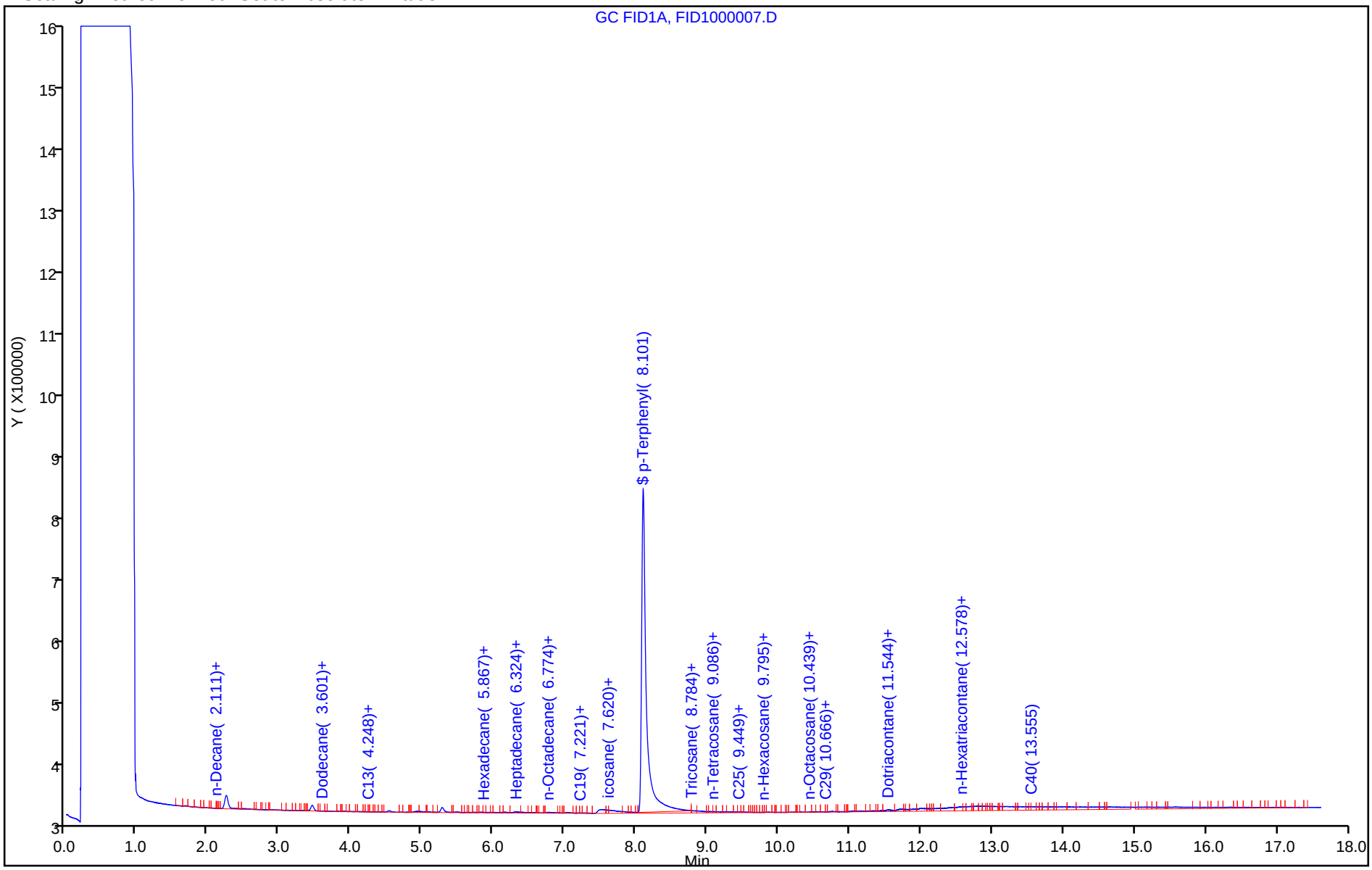
Report Date: 30-Aug-2018 12:56:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000007.D

Injection Date:	30-Aug-2018 12:25:15	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88216-E-3-E	Lab Sample ID:	720-88216-3	Worklist Smp#:	7
Client ID:	DG-A4S-19.5-20				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000007.D
Lims ID: 720-88216-E-3-E
Client ID: DG-A4S-19.5-20
Sample Type: Client
Inject. Date: 30-Aug-2018 12:25:15 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053573-007
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\DRO6_A.m
Limit Group: DRO
Last Update: 30-Aug-2018 12:56:03 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK001

First Level Reviewer: luj Date: 30-Aug-2018 12:56:03

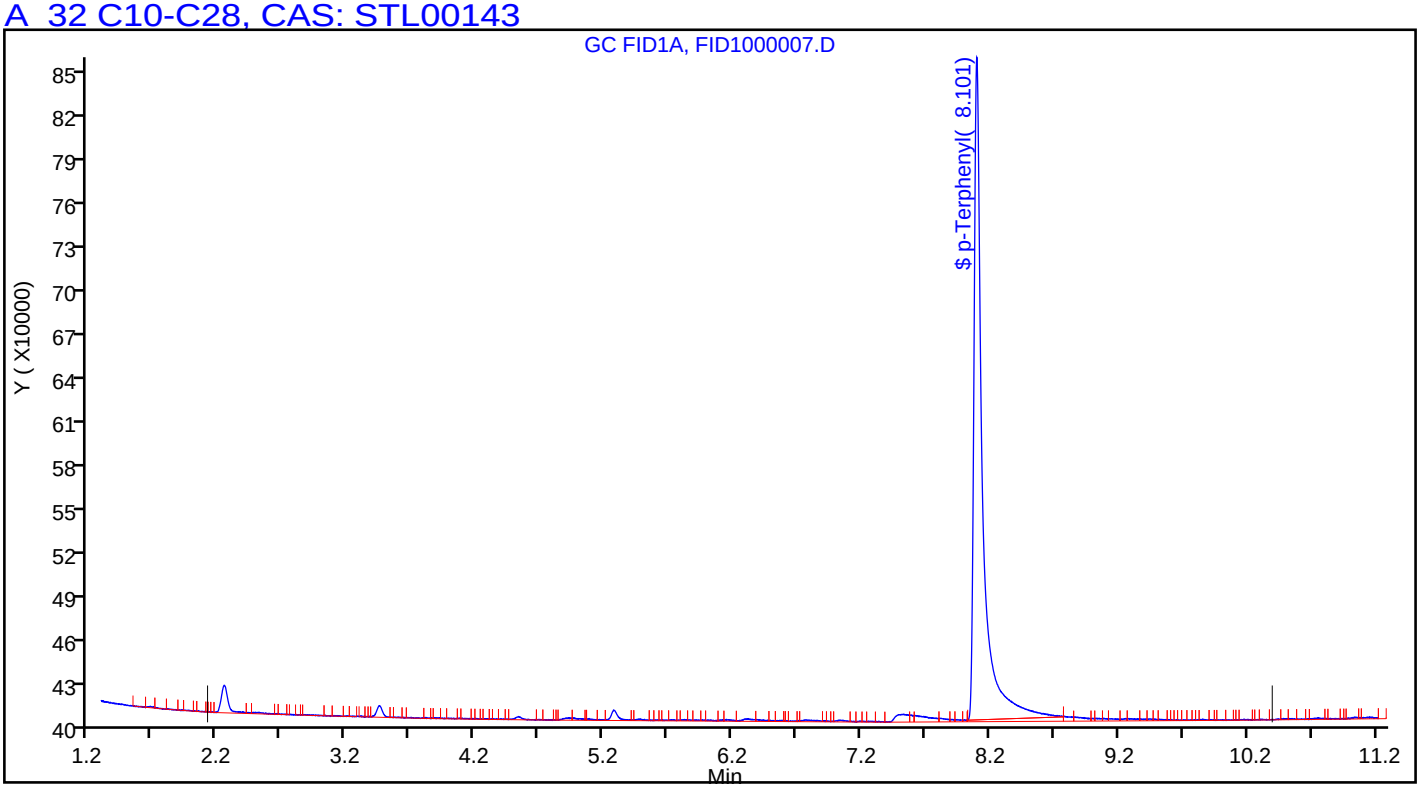
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	21.8	87.14

Report Date: 30-Aug-2018 12:56:06 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000007.D				
Injection Date:	30-Aug-2018 12:25:15	Instrument ID:	CHDRO6		
Lims ID:	720-88216-E-3-E	Lab Sample ID:	720-88216-3		
Client ID:	DG-A4S-19.5-20				
Operator ID:	DCH	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88216-1

SDG No.:

Client Sample ID: DG-A6S-19.5-20 Lab Sample ID: 720-88216-6

Matrix: Solid Lab File ID: FID1000009.D

Analysis Method: 8015B Date Collected: 08/22/2018 10:10

Extraction Method: 3546 Date Extracted: 08/28/2018 08:21

Sample wt/vol: 15.57(g) Date Analyzed: 08/30/2018 13:13

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250568 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	2000		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	122		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000009.D
Lims ID: 720-88216-D-6-A
Client ID: DG-A6S-19.5-20
Sample Type: Client
Inject. Date: 30-Aug-2018 13:13:59 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053573-009
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\DRO6_A.m
Limit Group: DRO
Last Update: 30-Aug-2018 14:02:39 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK001

First Level Reviewer: luj Date: 30-Aug-2018 14:11:14

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.231			ND	
	23 n-Decane	2.127	2.118	0.009	17402	NC	
A	21 Stoddard Solvent	2.735	(1.231-4.240)		2947246	1.65	
A	1 C9-C13	2.735	(1.231-4.240)		2947246	1.66	
A	57 C10-C12	2.866	(2.118-3.613)		2290044	1.48	
	24 Dodecane	3.590	3.613	-0.023	8310	NC	
A	3 C9 - C17	3.780	(1.231-6.330)		4262108	2.18	
A	60 C10-C16	3.984	(2.118-5.849)		3776601	2.16	
A	47 C9 - C18	4.006	(1.231-6.780)		4387320	2.72	
A	25 C9-C19	4.220	(1.231-7.210)		4779510	2.44	
A	15 Kerosene	4.220	(1.231-7.210)		4779510	2.96	
	26 C13	4.306	4.240	0.066	35196	NC	
$	27 n-Decanoic Acid (Surr)		4.607			ND	U
A	59 C12-C16	4.731	(3.613-5.849)		1494867	0.9692	
A	62 C10-C20	4.871	(2.118-7.623)		8708446	5.65	
A	28 C9-C24	5.172	(1.231-9.113)		19816922	12.8	
A	29 C9-C25	5.341	(1.231-9.452)		20983992	13.6	
A	54 C10-C23	5.440	(2.118-8.762)		18945868	12.3	
A	4 C10-C24	5.616	(2.118-9.113)		19664909	12.7	
A	16 C10-C25	5.785	(2.118-9.452)		20831979	13.5	
	45 Hexadecane	5.873	5.849	0.023	9967	NC	
A	14 C10-C26	5.948	(2.118-9.778)		21024970	13.6	
A	67 C12-C22	6.005	(3.613-8.397)		16316664	10.6	
A	12 Unknown Hydrocarbons	6.258	(2.118-10.399)		23569671	NC	
A	5 Diesel	6.258	(2.118-10.399)		23569671	15.3	
A	32 C10-C28	6.258	(2.118-10.399)		23569671	15.3	
A	30 C13-C22	6.319	(4.240-8.397)		16101778	10.4	
	44 Heptadecane	6.326	6.330	-0.004	160917	NC	
A	31 C12-C24	6.363	(3.613-9.113)		17383175	11.3	
	51 n-Octadecane	6.796	6.780	0.016	30397	NC	
A	52 Mineral oil	6.879	(1.231-12.528)		54644895	30.9	
A	11 Bunker Range Organics (C9-	6.879	(1.231-12.528)		54644895	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	6.879	(1.231-12.528)		54644895	NC	
33 C19	7.226	7.210	0.016	66449	NC	
A 64 C13-C28	7.319	(4.240-10.399)		21073051	13.7	
A 17 C10-C36	7.323	(2.118-12.528)		54492882	35.3	
A 13 C9-C40	7.390	(1.231-13.549)		75172982	55.7	
A 68 Crude Oil Range Organics (	7.390	(1.231-13.549)		75172982	NC	
A 58 C16-C24	7.481	(5.849-9.113)		15888308	10.3	
61 icosane	7.631	7.623	0.008	107901	NC	
A 6 C10-C40	7.834	(2.118-13.549)		75020969	55.7	
$ 34 p-Terphenyl	8.095	8.114	-0.019	58797446	30.6	
35 n-Docosane		8.397			ND	
A 18 C12-C40	8.581	(3.613-13.549)		72739235	54.1	
36 Tricosane	8.767	8.762	0.005	382123	NC	
A 66 C13-C40	8.894	(4.240-13.549)		72524349	54.0	
37 n-Tetracosane	9.127	9.113	0.014	324098	NC	
A 2 C16-C36 ORO	9.188	(5.849-12.528)		68397791	60.0	
38 C25	9.447	9.452	-0.005	711205	NC	
A 19 C16-C40	9.699	(5.849-13.549)		71244368	53.3	
46 n-Hexacosane	9.779	9.778	0.001	198400	NC	
A 20 C19-C36	9.869	(7.210-12.528)		67313110	50.6	
A 55 C23-C32	10.144	(8.762-11.526)		17155775	24.7	
39 n-Octacosane	10.447	10.399	0.048	1137500	NC	
65 C29	10.695	10.694	0.001	1977206	NC	
A 7 Motor Oil	10.820	(9.113-12.528)		29786786	33.4	
A 40 C24-C36	10.820	(9.113-12.528)		29786786	33.4	
A 10 C22-C40	10.973	(8.397-13.549)		49459919	39.8	
A 49 C25-C36	10.990	(9.452-12.528)		34372108	38.4	
A 41 C23-C40	11.156	(8.762-13.549)		56075101	43.9	
A 8 C24-C40	11.331	(9.113-13.549)		55356060	45.5	
56 Dotriacontane	11.535	11.526	0.009	1104489	NC	
A 50 C28-C40	11.974	(10.399-13.549)		51451298	54.2	
A 63 C29-C40	12.122	(10.694-13.549)		49963349	57.7	
42 n-Hexatriacontane	12.544	12.528	0.016	3885814	NC	
43 C40	13.486	13.549	-0.063	2557677	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

U - Marked Undetected

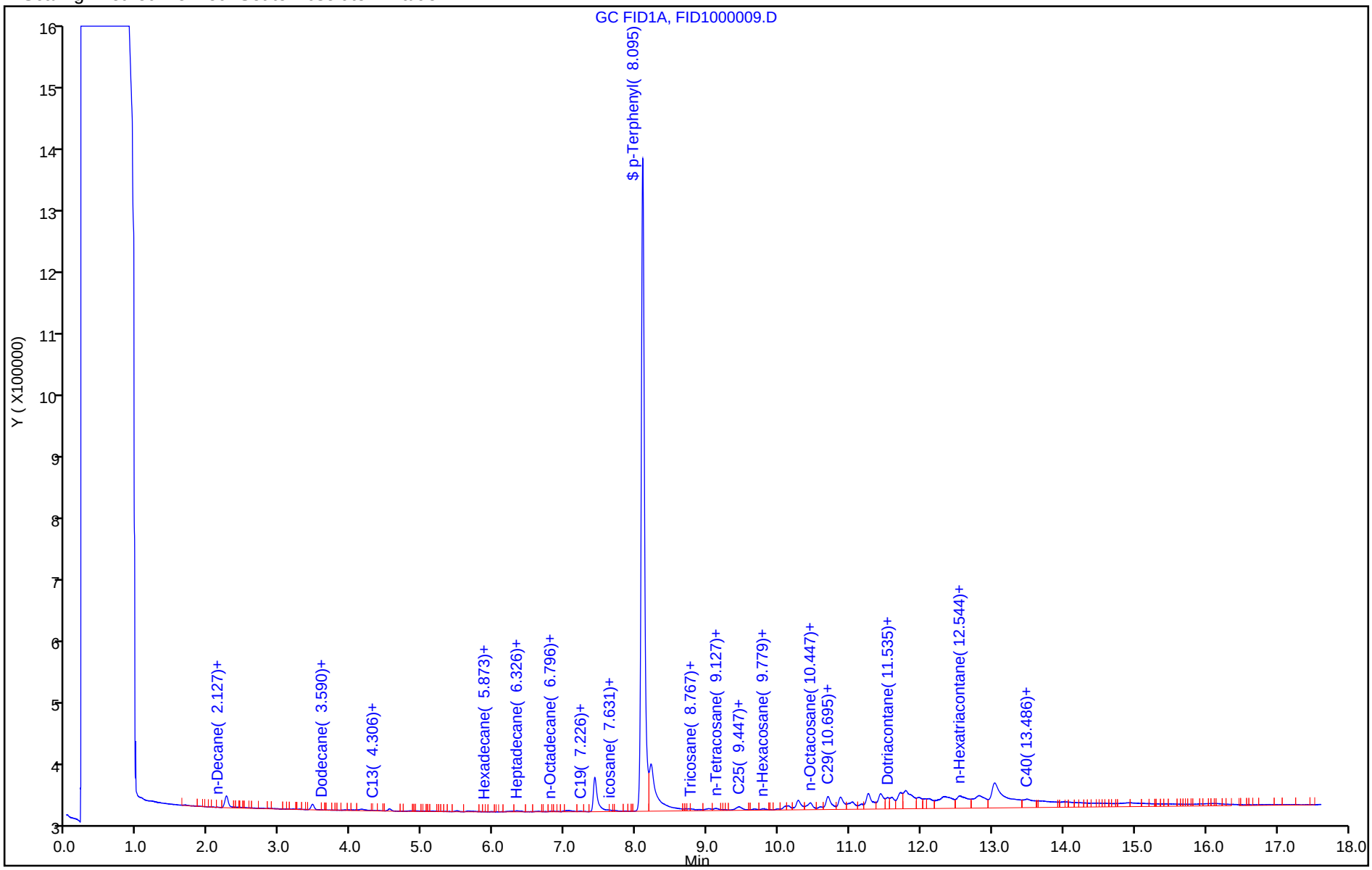
Report Date: 30-Aug-2018 14:11:15 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000009.D

Injection Date:	30-Aug-2018 13:13:59	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88216-D-6-A	Lab Sample ID:	720-88216-6	Worklist Smp#:	9
Client ID:	DG-A6S-19.5-20				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000009.D				
Lims ID:	720-88216-D-6-A				
Client ID:	DG-A6S-19.5-20				
Sample Type:	Client				
Inject. Date:	30-Aug-2018 13:13:59	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053573-009				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\DRO6_A.m				
Limit Group:	DRO				
Last Update:	30-Aug-2018 14:02:39	Calib Date:	30-Aug-2018 10:14:10		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK001				
First Level Reviewer: luj		Date:	30-Aug-2018 14:11:14		

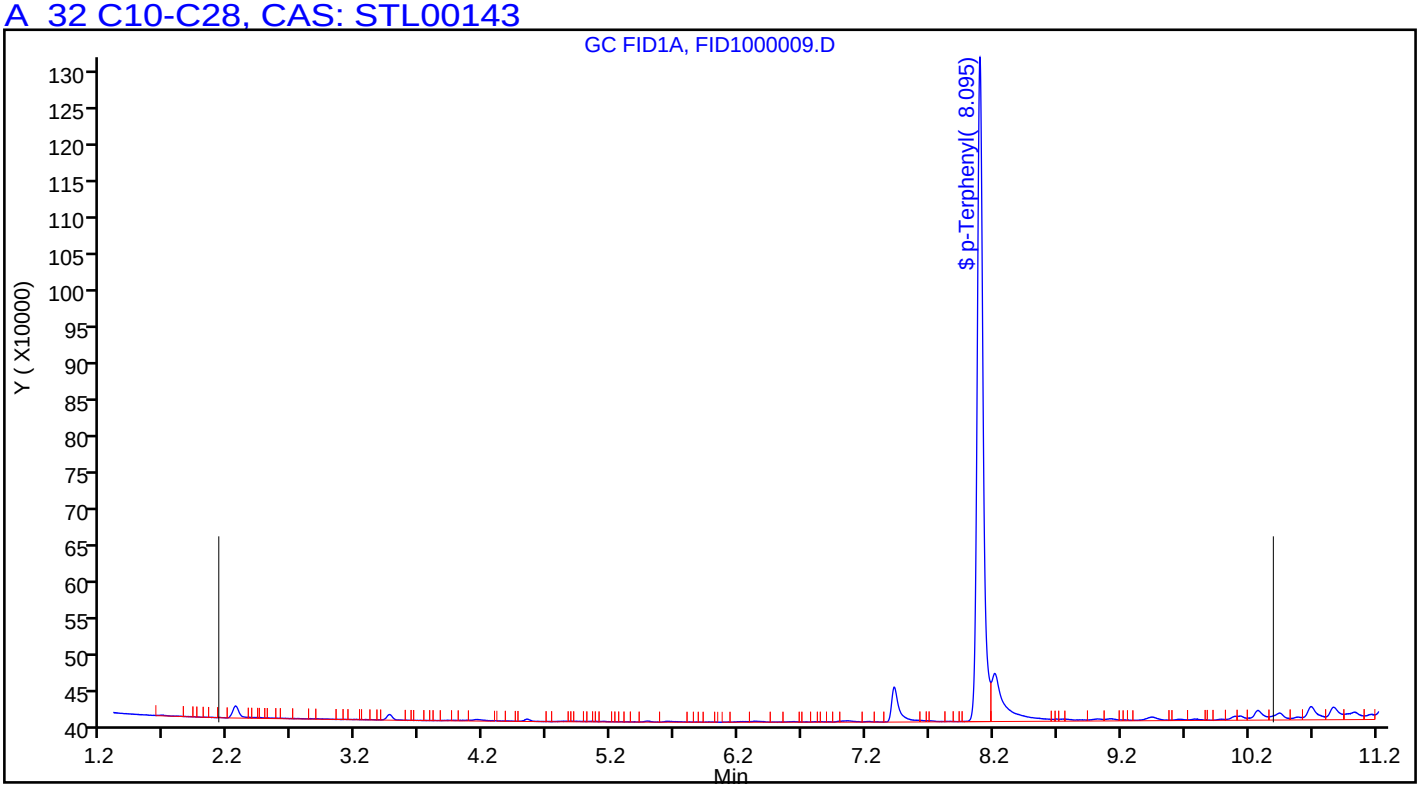
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	30.6	122.47

Report Date: 30-Aug-2018 14:11:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000009.D				
Injection Date:	30-Aug-2018 13:13:59	Instrument ID:	CHDRO6		
Lims ID:	720-88216-D-6-A	Lab Sample ID:	720-88216-6		
Client ID:	DG-A6S-19.5-20				
Operator ID:	DCH	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88216-1

SDG No.:

Client Sample ID: DG-G6S-MS/MDS Lab Sample ID: 720-88216-9

Matrix: Solid Lab File ID: FID2000010.D

Analysis Method: 8015B Date Collected: 08/22/2018 14:30

Extraction Method: 3546 Date Extracted: 08/28/2018 08:21

Sample wt/vol: 15.79(g) Date Analyzed: 08/29/2018 16:17

Con. Extract Vol.: 2(mL) Dilution Factor: 2

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250459 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	83000		3800	1400

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	76		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180829-53545.b\FID2000010.D
Lims ID: 720-88216-A-9-X
Client ID: DG-G6S-MS/MDS
Sample Type: Client
Inject. Date: 29-Aug-2018 16:17:17 ALS Bottle#: 60 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 2.0000
Sample Info: 720-0053545-010
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180829-53545.b\DRO6_B.m
Limit Group: DRO
Last Update: 29-Aug-2018 17:21:17 Calib Date: 29-Aug-2018 09:05:42
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180829-53545.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 17:21:17

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.320			ND	
	23 n-Decane	2.113	2.181	-0.068	41065	NC	
A	1 C9-C13	2.786	(1.320-4.253)		1691677	0.7755	
A	21 Stoddard Solvent	2.786	(1.320-4.253)		1691677	NC	
A	57 C10-C12	2.910	(2.181-3.638)		1335330	8.06	
	24 Dodecane	3.596	3.638	-0.042	84726	NC	
A	3 C9 - C17	3.817	(1.320-6.315)		4978494	2.18	M
A	60 C10-C16	4.010	(2.181-5.839)		3482236	1.72	M
A	47 C9 - C18	4.039	(1.320-6.758)		7579841	4.00	M
A	25 C9-C19	4.251	(1.320-7.182)		14246174	6.19	M
A	15 Kerosene	4.251	(1.320-7.182)		14246174	7.51	M
	26 C13	4.269	4.253	0.016	55817	NC	
$	27 n-Decanoic Acid (Surr)		4.637			ND	U
A	59 C12-C16	4.739	(3.638-5.839)		2231632	8.56	M
A	61 C10-C20	4.885	(2.181-7.590)		14175549	15.3	M
A	28 C9-C24	5.189	(1.320-9.059)		249203801	148.4	M
A	29 C9-C25	5.356	(1.320-9.392)		302513769	178.6	M
A	54 C10-C23	5.447	(2.181-8.713)		148404071	91.3	M
A	4 C10-C24	5.620	(2.181-9.059)		249133176	148.4	M
A	16 C10-C25	5.786	(2.181-9.392)		302443144	178.5	M
	45 Hexadecane		5.839			ND	
A	14 C10-C26	5.947	(2.181-9.713)		349213337	205.0	M
A	67 C12-C22	5.996	(3.638-8.354)		125578947	78.4	M
A	32 C10-C28	6.253	(2.181-10.324)		564610634	327.0	M
A	5 Diesel	6.253	(2.181-10.324)		564610634	327.0	M
A	12 Unknown Hydrocarbons	6.253	(2.181-10.324)		564610634	NC	M
A	30 C13-C22	6.303	(4.253-8.354)		125208499	78.2	M
	44 Heptadecane	6.361	6.315	0.046	2601347	NC	M
A	31 C12-C24	6.349	(3.638-9.059)		247882572	147.7	M
	49 n-Octadecane	6.818	6.758	0.060	6666333	NC	M
A	9 Crude Oil Range Organics (	6.867	(1.320-12.415)		1249337719	NC	M
A	11 Bunker Range Organics (C9-	6.867	(1.320-12.415)		1249337719	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.867	(1.320-12.415)		1249337719	591.8	M
33 C19		7.182			ND	
A 64 C13-C28	7.289	(4.253-10.324)		562989582	326.1	M
A 17 C10-C36	7.298	(2.181-12.415)		1249267094	714.7	M
A 68 Crude Oil Range Organics (	7.358	(1.320-13.397)		2090809749	NC	M
A 13 C9-C40	7.358	(1.320-13.397)		2090809749	1338.3	M
A 58 C16-C24	7.449	(5.839-9.059)		245650940	146.4	M
62 icosane	7.611	7.590	0.021	38274046	NC	M
A 6 C10-C40	7.789	(2.181-13.397)		2090739124	1339.7	M
$ 34 p-Terphenyl	8.105	8.079	0.026	19314607	9.50	
35 n-Docosane	8.374	8.354	0.020	21574520	NC	M
A 18 C12-C40	8.518	(3.638-13.397)		2089488520	1342.6	M
36 Tricosane	8.792	8.713	0.079	66003911	NC	M
A 66 C13-C40	8.825	(4.253-13.397)		2089118072	1343.9	M
37 n-Tetracosane	9.071	9.059	0.012	25618633	NC	M
A 2 C16-C36 ORO	9.127	(5.839-12.415)		1245784858	1053.6	M
38 C25	9.399	9.392	0.007	46770193	NC	M
A 19 C16-C40	9.618	(5.839-13.397)		2087256888	1347.2	M
46 n-Hexacosane	9.757	9.713	0.044	74369550	NC	M
A 20 C19-C36	9.798	(7.182-12.415)		1047653623	769.6	
A 55 C23-C32	10.072	(8.713-11.431)		846215931	1093.5	M
39 n-Octacosane	10.270	10.324	-0.054	30477108	NC	M
65 C29	10.623	10.614	0.009	75319873	NC	M
A 40 C24-C36	10.737	(9.059-12.415)		1019826294	1040.2	M
A 7 Motor Oil	10.737	(9.059-12.415)		912886922	931.1	
A 10 C22-C40	10.875	(8.354-13.397)		1264768447	909.9	
A 50 C25-C36	10.903	(9.392-12.415)		834020404	905.4	
A 41 C23-C40	11.055	(8.713-13.397)		1219943582	892.6	
A 8 C24-C40	11.228	(9.059-13.397)		1188596019	886.2	
56 Dotriacontane	11.372	11.431	-0.059	88659439	NC	M
A 51 C28-C40	11.861	(10.324-13.397)		920888642	848.9	
A 63 C29-C40	12.006	(10.614-13.397)		834090266	834.6	
42 n-Hexatriacontane	12.437	12.415	0.022	87286967	NC	M
43 C40		13.397			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

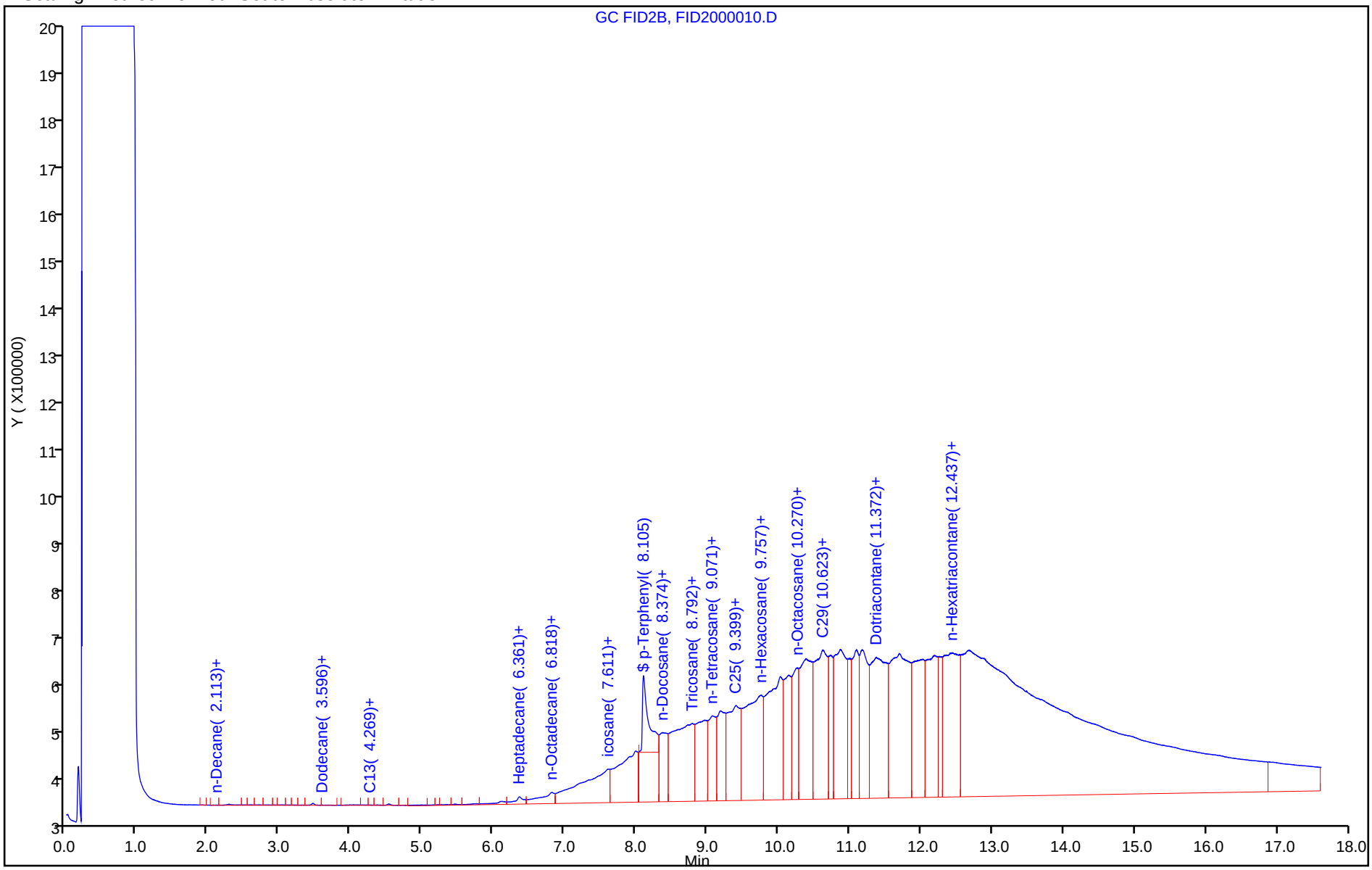
Report Date: 29-Aug-2018 17:21:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180829-53545.b\FID2000010.D

Injection Date:	29-Aug-2018 16:17:17	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88216-A-9-X	Lab Sample ID:	720-88216-9	Worklist Smp#:	10
Client ID:	DG-G6S-MS/MDS				
Injection Vol:	1.0 ul	Dil. Factor:	2.0000	ALS Bottle#:	60
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180829-53545.b\FID2000010.D				
Lims ID:	720-88216-A-9-X				
Client ID:	DG-G6S-MS/MDS				
Sample Type:	Client				
Inject. Date:	29-Aug-2018 16:17:17	ALS Bottle#:	60	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Sample Info:	720-0053545-010				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180829-53545.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	29-Aug-2018 17:21:17	Calib Date:	29-Aug-2018 09:05:42		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180829-53545.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK008				

First Level Reviewer: luj Date: 29-Aug-2018 17:21:17

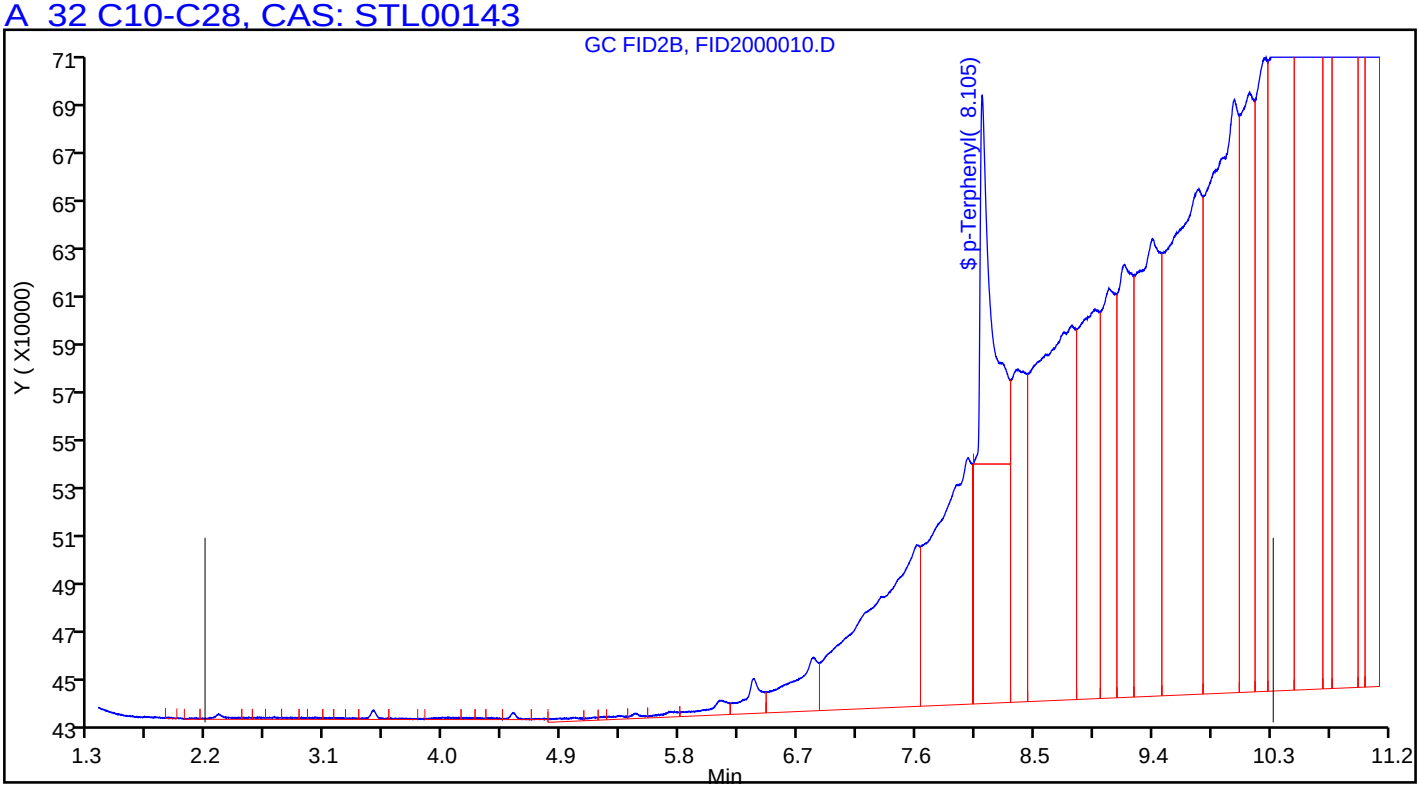
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	9.50	37.99

Report Date: 29-Aug-2018 17:21:22 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180829-53545.b\FID2000010.D				
Injection Date:	29-Aug-2018 16:17:17	Instrument ID:	CHDRO6		
Lims ID:	720-88216-A-9-X	Lab Sample ID:	720-88216-9		
Client ID:	DG-G6S-MS/MDS				
Operator ID:	DCH	ALS Bottle#:	60	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

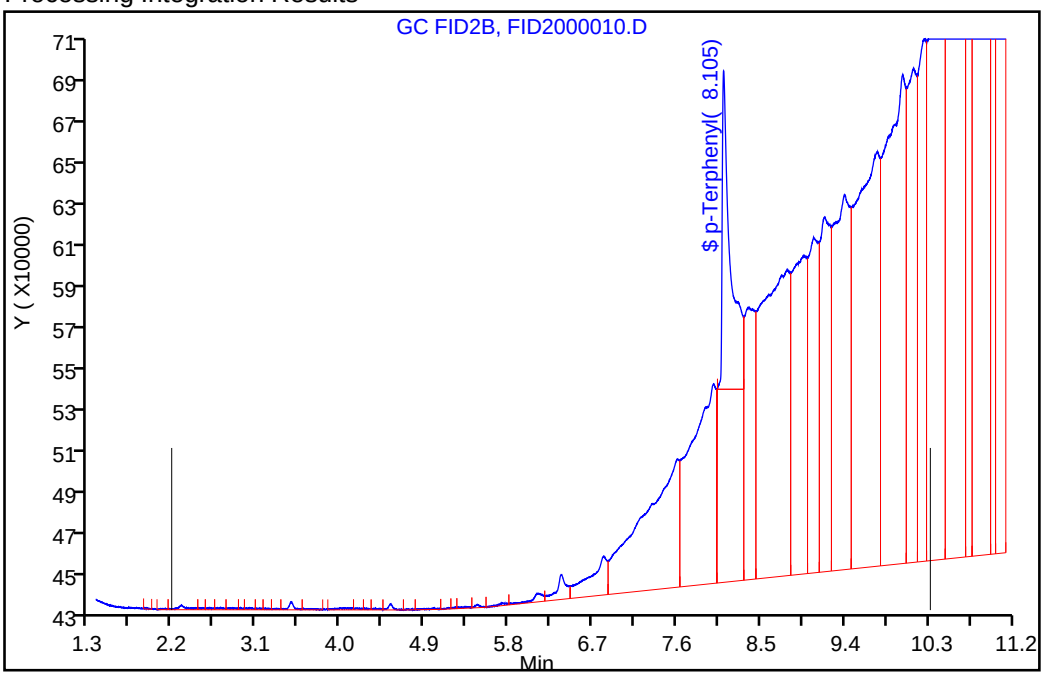
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180829-53545.b\FID2000010.D				
Injection Date:	29-Aug-2018 16:17:17	Instrument ID:	CHDRO6		
Lims ID:	720-88216-A-9-X	Lab Sample ID:	720-88216-9		
Client ID:	DG-G6S-MS/MDS				
Operator ID:	DCH	ALS Bottle#:	60	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.253, CAS: STL00143

Signal: 1

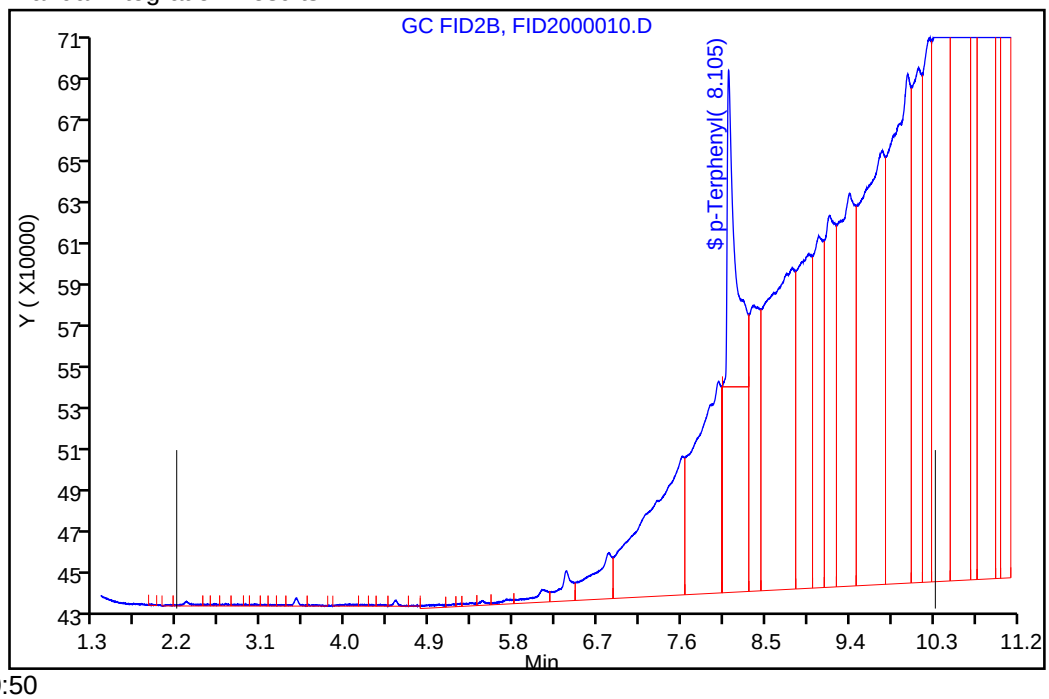
Processing Integration Results

RT: 6.25
Response: 526952352
Amount: 305.6705



Manual Integration Results

RT: 6.25
Response: 564610634
Amount: 326.9934



Reviewer: luj, 29-Aug-2018 17:20:50

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88216-1

SDG No.:

Client Sample ID: DG-K8S-MS/MDS Lab Sample ID: 720-88216-17

Matrix: Solid Lab File ID: FID2000021.D

Analysis Method: 8015B Date Collected: 08/22/2018 00:00

Extraction Method: 3546 Date Extracted: 08/27/2018 08:59

Sample wt/vol: 15.14(g) Date Analyzed: 08/27/2018 21:08

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250257 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	6600	B	2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	87		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180827-53491.b\FID2000021.D
Lims ID: 720-88216-A-17-K
Client ID: DG-K8S-MS/MDS
Sample Type: Client
Inject. Date: 27-Aug-2018 21:08:09 ALS Bottle#: 71 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053491-021
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180827-53491.b\DRO6_B.m
Limit Group: DRO
Last Update: 28-Aug-2018 13:54:58 Calib Date: 27-Aug-2018 08:32:34
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180827-53491.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK013

First Level Reviewer: luj Date: 28-Aug-2018 13:54:58

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.330			ND	
23 n-Decane	2.110	2.185	-0.075	56456	NC	
A 1 C9-C13	2.790	(1.330-4.250)		2534662	1.16	
A 21 Stoddard Solvent	2.790	(1.330-4.250)		2534662	NC	
A 57 C10-C12	2.911	(2.185-3.636)		1738590	8.28	
24 Dodecane	3.654	3.636	0.018	107789	NC	
A 3 C9 - C17	3.817	(1.330-6.304)		4093573	1.79	M
A 60 C10-C16	4.007	(2.185-5.829)		3254979	1.61	M
A 47 C9 - C18	4.038	(1.330-6.745)		5209615	2.75	M
A 15 Kerosene	4.249	(1.330-7.168)		6577622	3.47	M
A 25 C9-C19	4.249	(1.330-7.168)		6577622	2.86	M
26 C13	4.329	4.250	0.079	64476	NC	
$ 27 n-Decanoic Acid (Surr)		4.629			ND	U
A 59 C12-C16	4.733	(3.636-5.829)		1516389	8.16	M
A 61 C10-C20	4.880	(2.185-7.575)		9177515	12.5	M
A 28 C9-C24	5.185	(1.330-9.040)		34742287	27.0	M
A 29 C9-C25	5.351	(1.330-9.371)		45562054	33.1	M
A 54 C10-C23	5.440	(2.185-8.696)		29491116	24.0	M
A 4 C10-C24	5.612	(2.185-9.040)		34570546	26.9	M
A 16 C10-C25	5.778	(2.185-9.371)		45390313	33.0	M
45 Hexadecane		5.829			ND	
A 14 C10-C26	5.938	(2.185-9.691)		53900812	37.8	M
A 67 C12-C22	5.987	(3.636-8.337)		27752526	23.0	M
A 32 C10-C28	6.242	(2.185-10.299)		75564167	50.1	M
A 5 Diesel	6.242	(2.185-10.299)		75564167	50.1	M
A 12 Unknown Hydrocarbons	6.242	(2.185-10.299)		75564167	NC	M
A 30 C13-C22	6.294	(4.250-8.337)		27508192	22.9	M
44 Heptadecane	6.342	6.304	0.038	695463	NC	M
A 31 C12-C24	6.338	(3.636-9.040)		32831956	25.9	M
49 n-Octadecane	6.796	6.745	0.051	630675	NC	M
A 9 Crude Oil Range Organics (	6.856	(1.330-12.383)		252800350	NC	M
A 11 Bunker Range Organics (C9-	6.856	(1.330-12.383)		252800350	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.856	(1.330-12.383)		252800350	119.8	M
33 C19	7.186	7.168	0.018	550683	NC	M
A 64 C13-C28	7.275	(4.250-10.299)		73581243	49.0	M
A 17 C10-C36	7.284	(2.185-12.383)		252628609	150.3	M
A 13 C9-C40	7.342	(1.330-13.355)		513937917	329.0	M
A 68 Crude Oil Range Organics (	7.342	(1.330-13.355)		513937917	NC	M
A 58 C16-C24	7.435	(5.829-9.040)		31726237	25.3	M
62 icosane	7.588	7.575	0.013	1039902	NC	M
A 6 C10-C40	7.770	(2.185-13.355)		513766176	329.2	M
$ 34 p-Terphenyl	8.052	8.074	-0.022	44302343	21.8	M
35 n-Docosane		8.337			ND	
A 18 C12-C40	8.496	(3.636-13.355)		512027586	329.0	M
36 Tricosane	8.699	8.696	0.003	5079430	NC	M
A 66 C13-C40	8.802	(4.250-13.355)		511783252	329.2	M
37 n-Tetracosane	9.064	9.040	0.024	5591075	NC	M
A 2 C16-C36 ORO	9.106	(5.829-12.383)		249784300	211.2	M
38 C25	9.377	9.371	0.006	8510499	NC	M
A 19 C16-C40	9.592	(5.829-13.355)		510921867	329.8	M
46 n-Hexacosane	9.698	9.691	0.007	8189667	NC	M
A 20 C19-C36	9.775	(7.168-12.383)		129272675	95.0	
A 55 C23-C32	10.049	(8.696-11.403)		132767449	171.6	M
39 n-Octacosane	10.321	10.299	0.022	19109558	NC	M
65 C29	10.596	10.588	0.008	18315003	NC	M
A 40 C24-C36	10.711	(9.040-12.383)		223246497	227.7	M
A 7 Motor Oil	10.711	(9.040-12.383)		163686351	167.0	
A 10 C22-C40	10.846	(8.337-13.355)		196123874	141.1	
A 50 C25-C36	10.877	(9.371-12.383)		154973892	168.2	
A 41 C23-C40	11.025	(8.696-13.355)		260082262	190.3	
A 8 C24-C40	11.197	(9.040-13.355)		272297126	203.0	
56 Dotriacontane	11.418	11.403	0.015	13032603	NC	M
A 51 C28-C40	11.827	(10.299-13.355)		256473582	236.4	
A 63 C29-C40	11.971	(10.588-13.355)		244511805	244.7	
42 n-Hexatriacontane		12.383			ND	
43 C40		13.355			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

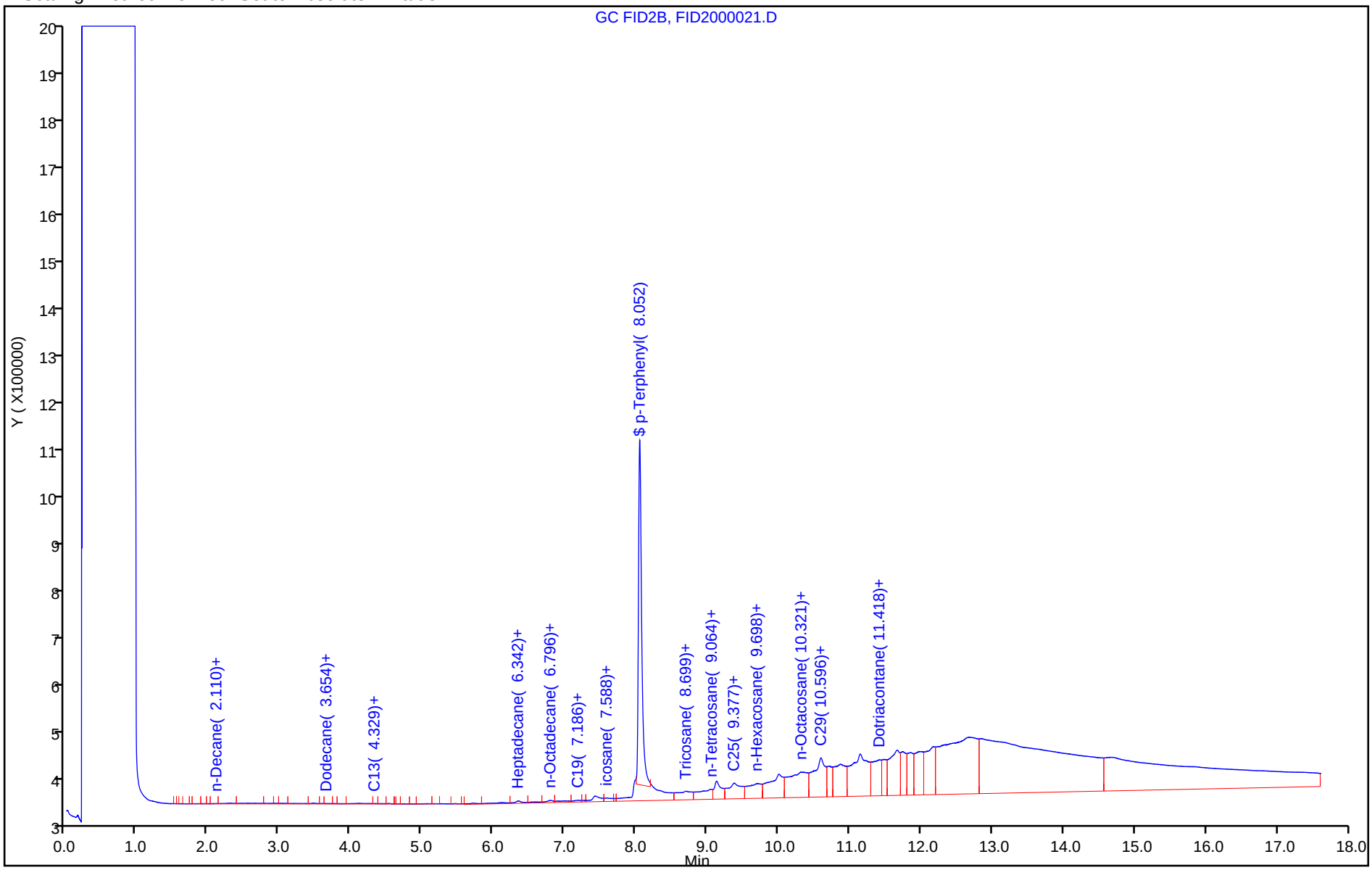
Report Date: 28-Aug-2018 13:54:59 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180827-53491.b\FID2000021.D

Injection Date:	27-Aug-2018 21:08:09	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88216-A-17-K	Lab Sample ID:	720-88216-17	Worklist Smp#:	21
Client ID:	DG-K8S-MS/MDS				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	71
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180827-53491.b\FID2000021.D				
Lims ID:	720-88216-A-17-K				
Client ID:	DG-K8S-MS/MDS				
Sample Type:	Client				
Inject. Date:	27-Aug-2018 21:08:09	ALS Bottle#:	71	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053491-021				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180827-53491.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	28-Aug-2018 13:54:58	Calib Date:	27-Aug-2018 08:32:34		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180827-53491.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK013				
First Level Reviewer: luj		Date:	28-Aug-2018 13:54:58		

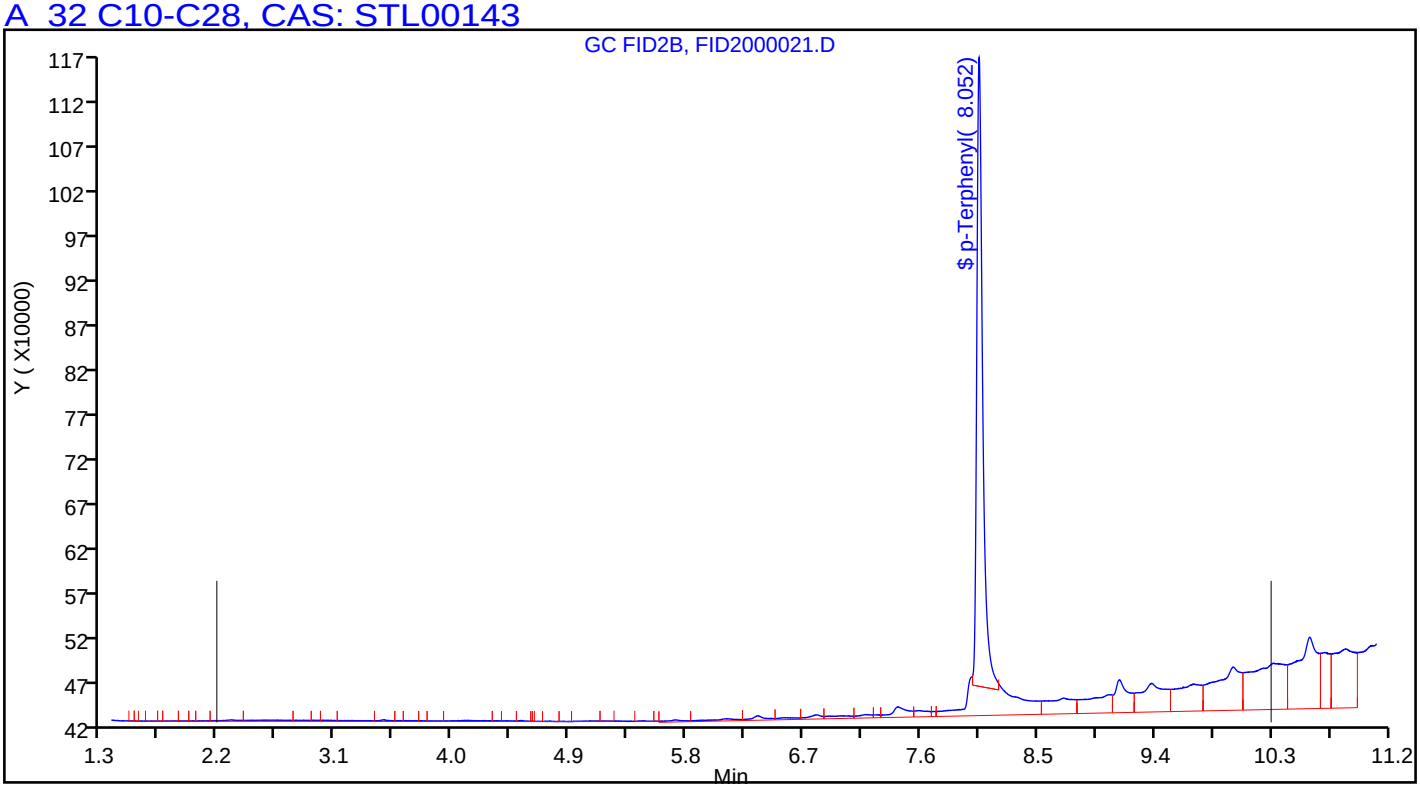
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	21.8	87.15

Report Date: 28-Aug-2018 13:55:04 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180827-53491.b\FID2000021.D				
Injection Date:	27-Aug-2018 21:08:09	Instrument ID:	CHDRO6		
Lims ID:	720-88216-A-17-K	Lab Sample ID:	720-88216-17		
Client ID:	DG-K8S-MS/MDS				
Operator ID:	DCH	ALS Bottle#:	71	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

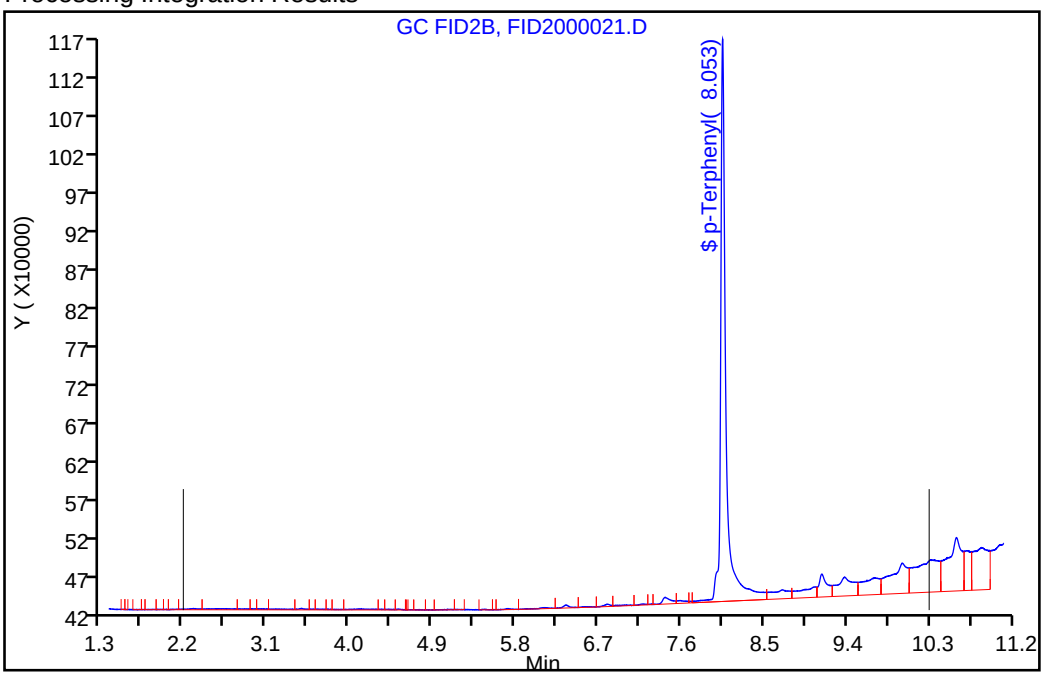
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180827-53491.b\FID2000021.D				
Injection Date:	27-Aug-2018 21:08:09	Instrument ID:	CHDRO6		
Lims ID:	720-88216-A-17-K	Lab Sample ID:	720-88216-17		
Client ID:	DG-K8S-MS/MDS				
Operator ID:	DCH	ALS Bottle#:	71	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.242, CAS: STL00143

Signal: 1

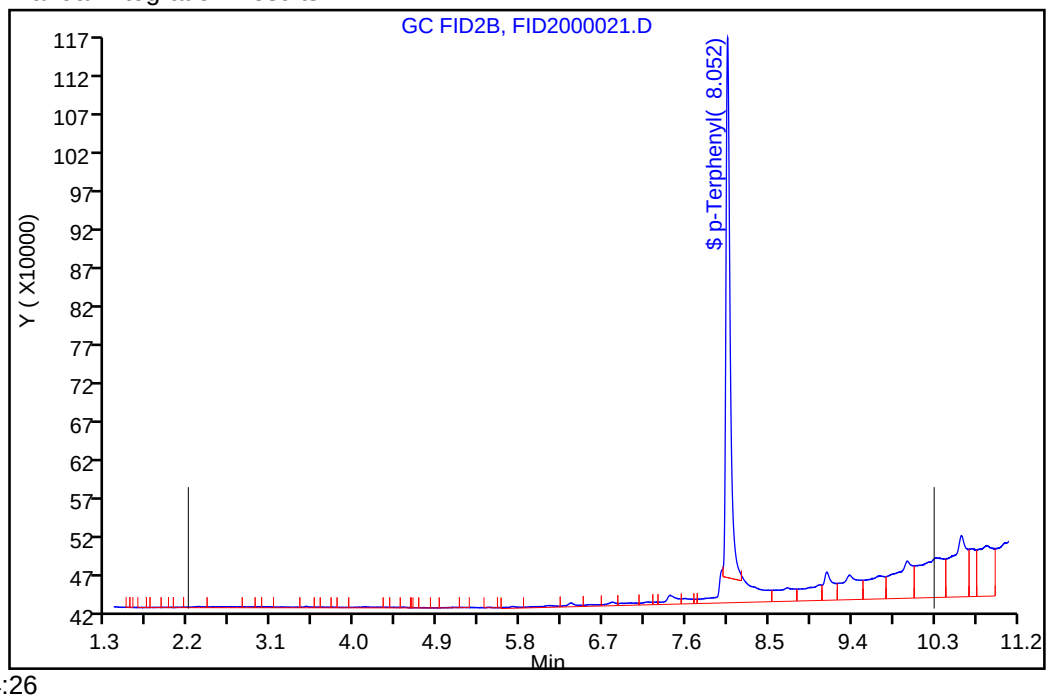
Processing Integration Results

RT: 6.24
Response: 38257414
Amount: 28.961430



Manual Integration Results

RT: 6.24
Response: 75564167
Amount: 50.085277



Reviewer: luj, 28-Aug-2018 13:54:26

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

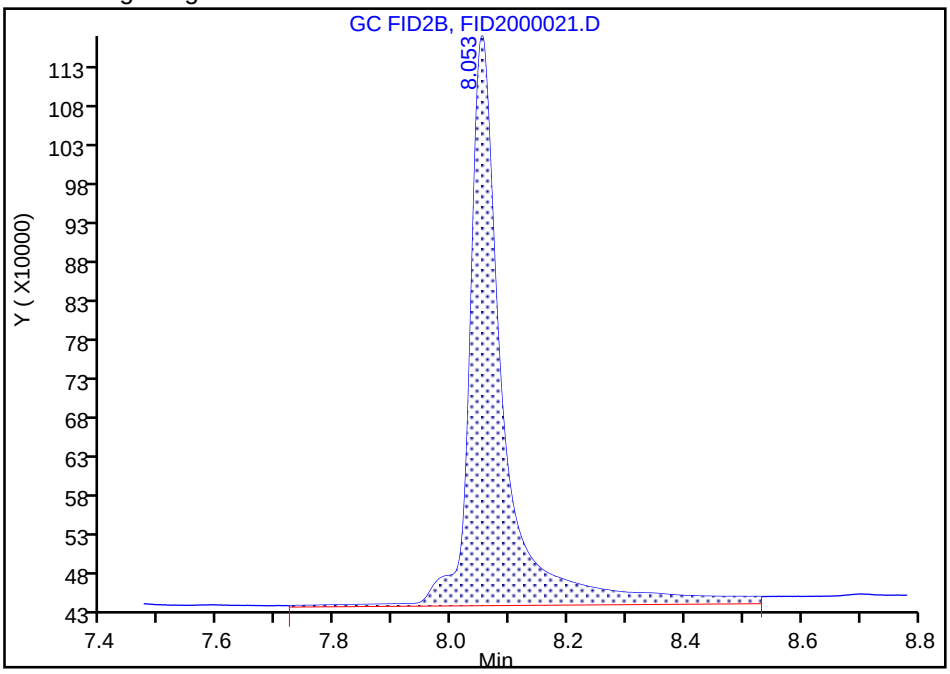
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180827-53491.b\FID2000021.D				
Injection Date:	27-Aug-2018 21:08:09	Instrument ID:	CHDRO6		
Lims ID:	720-88216-A-17-K	Lab Sample ID:	720-88216-17		
Client ID:	DG-K8S-MS/MDS				
Operator ID:	DCH	ALS Bottle#:	71	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

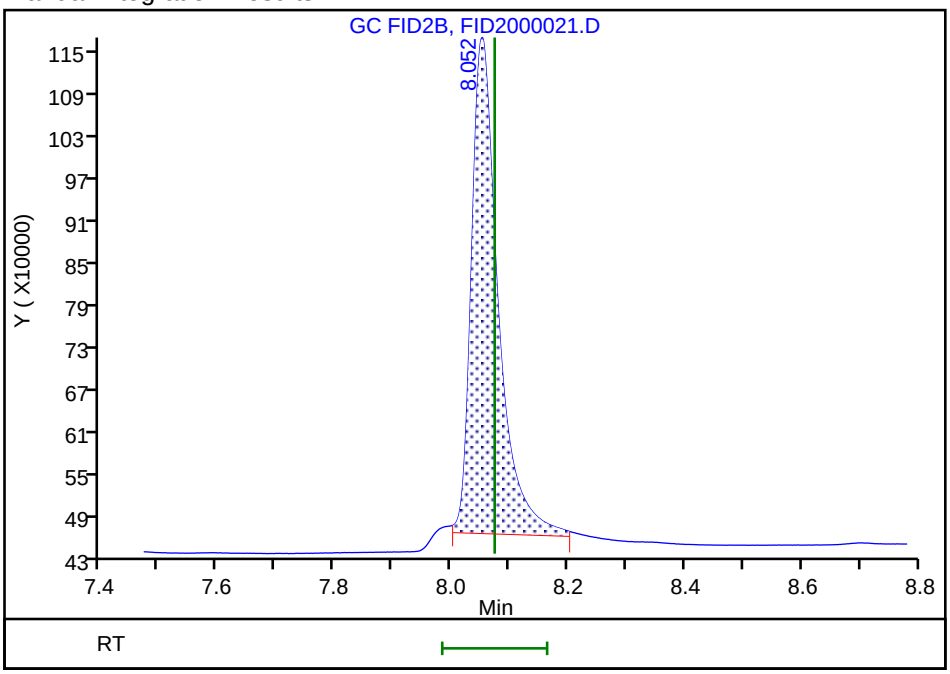
Processing Integration Results

RT: 8.05
Area: 58862180
Amount: 28.947843
Amount Units: mg/L



Manual Integration Results

RT: 8.05
Area: 44302343
Amount: 21.787458
Amount Units: mg/L



Reviewer: luj, 28-Aug-2018 13:54:42

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88216-1

SDG No.:

Client Sample ID: DG-A4S-19.5-20 Lab Sample ID: 720-88216-3

Matrix: Solid Lab File ID: 08281832.D

Analysis Method: 8260B Date Collected: 08/22/2018 09:00

Sample wt/vol: 7.37(g) Date Analyzed: 08/28/2018 23:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.4	0.81
67-64-1	Acetone	ND		34	26
71-43-2	Benzene	ND		3.4	0.44
75-27-4	Dichlorobromomethane	ND		3.4	0.49
108-86-1	Bromobenzene	ND		3.4	0.54
74-97-5	Chlorobromomethane	ND		14	0.49
75-25-2	Bromoform	ND		3.4	1.4
74-83-9	Bromomethane	ND		6.8	0.54
78-93-3	2-Butanone (MEK)	ND		34	14
104-51-8	n-Butylbenzene	ND		3.4	0.68
135-98-8	sec-Butylbenzene	ND		3.4	0.49
98-06-6	tert-Butylbenzene	ND		3.4	0.50
75-15-0	Carbon disulfide	ND		3.4	1.4
56-23-5	Carbon tetrachloride	ND		3.4	0.42
108-90-7	Chlorobenzene	ND		3.4	0.47
75-00-3	Chloroethane	ND		6.8	0.38
67-66-3	Chloroform	ND		3.4	0.45
74-87-3	Chloromethane	ND		6.8	0.54
95-49-8	2-Chlorotoluene	ND		3.4	0.44
106-43-4	4-Chlorotoluene	ND		3.4	0.46
124-48-1	Chlorodibromomethane	ND		3.4	0.48
95-50-1	1,2-Dichlorobenzene	ND		3.4	0.46
541-73-1	1,3-Dichlorobenzene	ND		3.4	0.49
106-46-7	1,4-Dichlorobenzene	ND		3.4	0.48
142-28-9	1,3-Dichloropropane	ND		3.4	0.50
563-58-6	1,1-Dichloropropene	ND		3.4	0.47
96-12-8	1,2-Dibromo-3-Chloropropane	ND		6.8	1.2
106-93-4	Ethylene Dibromide	ND		3.4	0.97
74-95-3	Dibromomethane	ND		6.8	0.58
75-71-8	Dichlorodifluoromethane	ND		6.8	0.54
75-34-3	1,1-Dichloroethane	ND		3.4	0.46
107-06-2	1,2-Dichloroethane	ND		3.4	0.52
75-35-4	1,1-Dichloroethene	ND	*	3.4	0.42
156-59-2	cis-1,2-Dichloroethene	ND		3.4	0.46
156-60-5	trans-1,2-Dichloroethene	ND		3.4	0.51
78-87-5	1,2-Dichloropropane	ND		3.4	0.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88216-1

SDG No.:

Client Sample ID: DG-A4S-19.5-20 Lab Sample ID: 720-88216-3

Matrix: Solid Lab File ID: 08281832.D

Analysis Method: 8260B Date Collected: 08/22/2018 09:00

Sample wt/vol: 7.37(g) Date Analyzed: 08/28/2018 23:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.4	0.47
10061-02-6	trans-1,3-Dichloropropene	ND		3.4	0.45
100-41-4	Ethylbenzene	ND		3.4	0.51
87-68-3	Hexachlorobutadiene	ND		3.4	0.61
591-78-6	2-Hexanone	ND		34	6.8
98-82-8	Isopropylbenzene	ND		3.4	0.46
99-87-6	4-Isopropyltoluene	ND		3.4	1.7
75-09-2	Methylene Chloride	ND		6.8	3.8
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		34	6.8
91-20-3	Naphthalene	ND		6.8	1.0
103-65-1	N-Propylbenzene	ND		3.4	0.45
100-42-5	Styrene	ND		3.4	0.43
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.4	0.52
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.4	0.51
127-18-4	Tetrachloroethene	ND		3.4	0.45
108-88-3	Toluene	ND		3.4	0.48
87-61-6	1,2,3-Trichlorobenzene	ND		3.4	0.50
120-82-1	1,2,4-Trichlorobenzene	ND		3.4	0.48
71-55-6	1,1,1-Trichloroethane	ND		3.4	0.41
79-00-5	1,1,2-Trichloroethane	ND		3.4	0.47
79-01-6	Trichloroethene	ND		3.4	0.43
75-69-4	Trichlorofluoromethane	ND		3.4	0.38
96-18-4	1,2,3-Trichloropropane	ND		3.4	0.52
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.4	1.4
95-63-6	1,2,4-Trimethylbenzene	ND		3.4	1.1
108-67-8	1,3,5-Trimethylbenzene	ND		3.4	0.44
108-05-4	Vinyl acetate	ND		14	3.4
75-01-4	Vinyl chloride	ND		3.4	0.50
1330-20-7	Xylenes, Total	ND		3.4	0.83
594-20-7	2,2-Dichloropropane	ND		3.4	1.4
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		170	68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88216-1

SDG No.:

Client Sample ID: DG-A4S-19.5-20 Lab Sample ID: 720-88216-3

Matrix: Solid Lab File ID: 08281832.D

Analysis Method: 8260B Date Collected: 08/22/2018 09:00

Sample wt/vol: 7.37(g) Date Analyzed: 08/28/2018 23:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	98		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		60-140
2037-26-5	Toluene-d8 (Surr)	95		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281832.D
Lims ID: 720-88216-A-3-B
Client ID: DG-A4S-19.5-20
Sample Type: Client
Inject. Date: 28-Aug-2018 23:08:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88216-A-3
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:51 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 10:02:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.819	0.006	0	327274	250.0	
* 2 Fluorobenzene	96	10.605	10.599	0.006	98	1035060	25.0	
* 4 Chlorobenzene-d5	117	14.445	14.439	0.006	86	829696	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.579	0.000	95	458504	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.196	9.190	0.006	94	85894	7.40	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.709	9.702	0.007	0	106245	7.30	
$ 10 Toluene-d8 (Surr)	98	12.708	12.708	0.000	93	299720	7.16	
$ 11 4-Bromofluorobenzene	95	15.933	15.933	0.000	95	118186	7.32	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.048	0.000	84	107209	6.04	
28 Acetone	58	6.380	6.368	0.012	99	19818	16.3	
34 Methylene Chloride	84	7.081	7.075	0.006	96	2825	0.2522	
144 Methyl acetate	43	7.136	7.124	0.012	99	3571	0.4037	
140 Ethyl acetate	43	9.007	9.001	0.006	99	136534	9.96	
59 Benzene	78	10.379	10.367	0.012	94	2620	0.0595	
66 Trichloroethene	132	11.098	11.092	0.006	94	3421	0.2998	
75 Toluene	92	12.793	12.787	0.006	98	6070	0.2226	
81 Tetrachloroethene	164	13.671	13.665	0.006	88	545	0.0545	
149 1-Chlorohexane	55	14.439	14.354	0.085	33	8591	0.6507	
128 Butyl Ether	87	14.665	14.659	0.006	94	1575	0.1908	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	1095188	11.5	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	413253	4.35	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	506301	5.33	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1249808	13.2	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	563948	5.94	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	1205317	12.7	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	717285	7.56	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	153948	1.62	
A 121 C7-C12	1	15.448	(10.891-20.005)		0	403659	4.25	

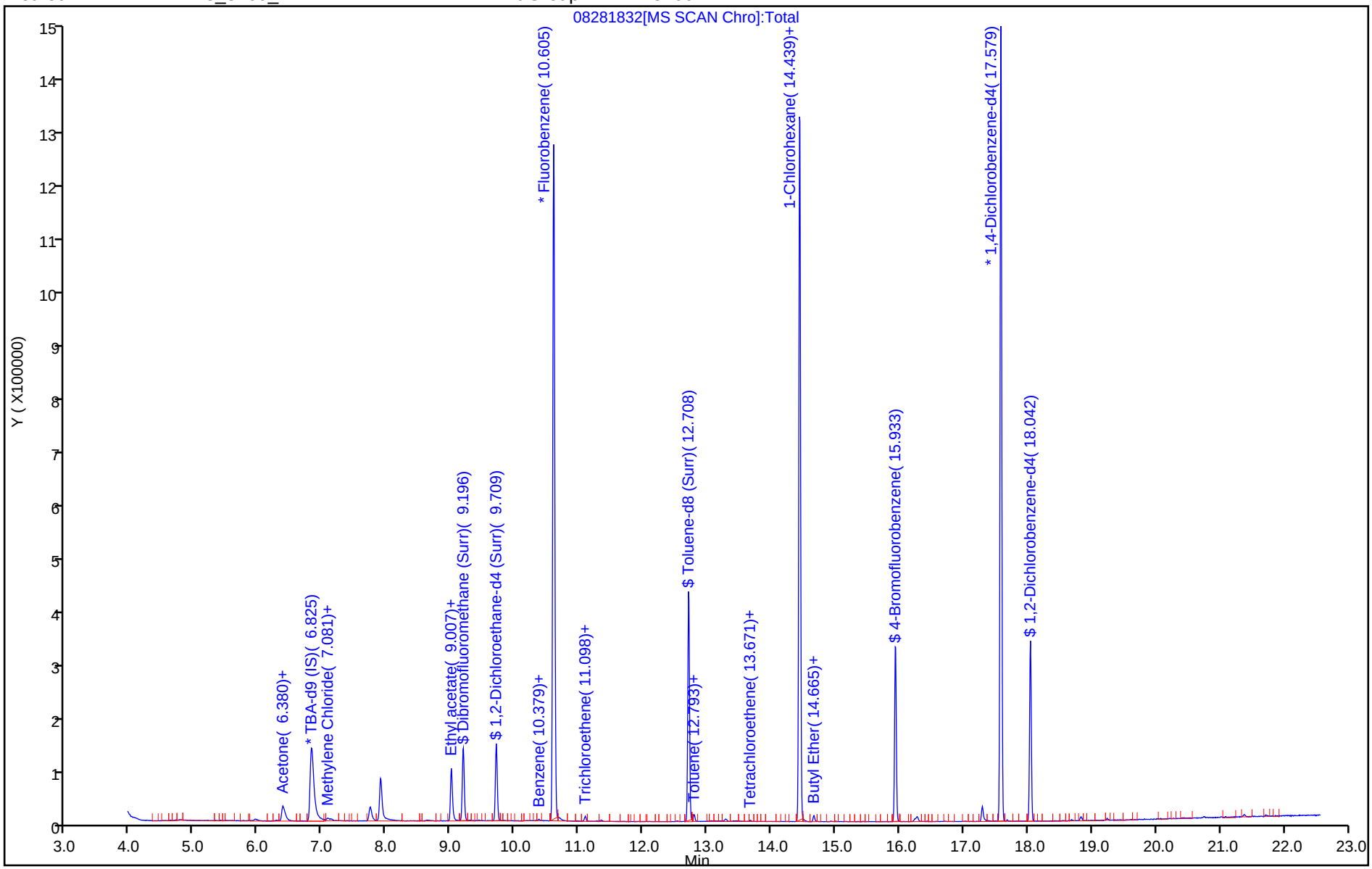
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 10:02:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281832.D				
Injection Date:	28-Aug-2018 23:08:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88216-A-3-B	Lab Sample ID:	720-88216-3	Worklist Smp#:	11
Client ID:	DG-A4S-19.5-20				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281832.D
Lims ID: 720-88216-A-3-B
Client ID: DG-A4S-19.5-20
Sample Type: Client
Inject. Date: 28-Aug-2018 23:08:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88216-A-3
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:51 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 10:02:45

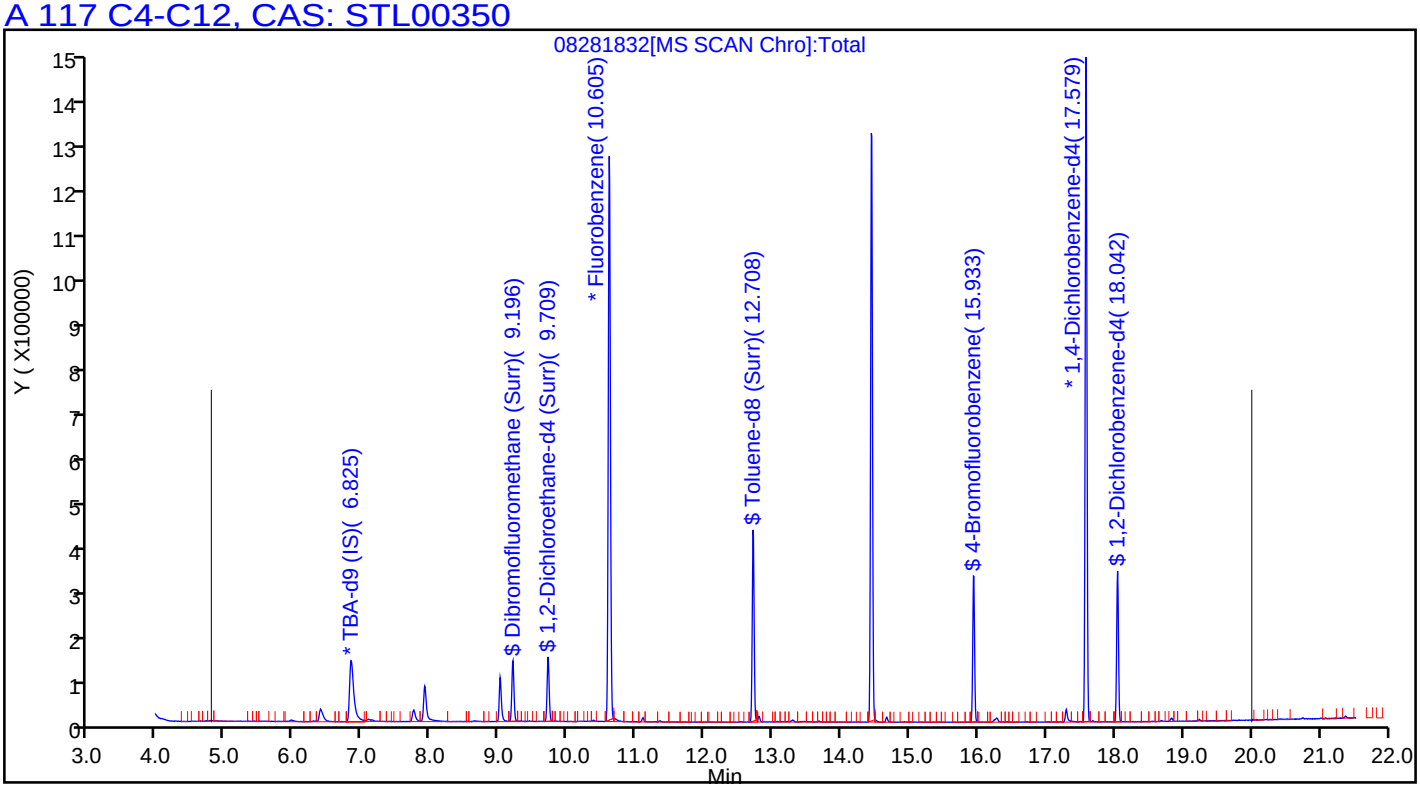
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.30	97.34
$ 10 Toluene-d8 (Surr)	7.50	7.16	95.47
$ 11 4-Bromofluorobenzene	7.50	7.32	97.66
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 29-Aug-2018 10:02:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281832.D				
Injection Date:	28-Aug-2018 23:08:30	Instrument ID:	HP13		
Lims ID:	720-88216-A-3-B	Lab Sample ID:	720-88216-3		
Client ID:	DG-A4S-19.5-20				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88216-1

SDG No.:

Client Sample ID: DG-A6S-19.5-20 Lab Sample ID: 720-88216-6

Matrix: Solid Lab File ID: 08281833.D

Analysis Method: 8260B Date Collected: 08/22/2018 10:10

Sample wt/vol: 7.261(g) Date Analyzed: 08/28/2018 23:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.4	0.83
67-64-1	Acetone	31	J	34	26
71-43-2	Benzene	ND		3.4	0.45
75-27-4	Dichlorobromomethane	ND		3.4	0.50
108-86-1	Bromobenzene	ND		3.4	0.54
74-97-5	Chlorobromomethane	ND		14	0.50
75-25-2	Bromoform	ND		3.4	1.4
74-83-9	Bromomethane	ND		6.9	0.54
78-93-3	2-Butanone (MEK)	ND		34	14
104-51-8	n-Butylbenzene	ND		3.4	0.69
135-98-8	sec-Butylbenzene	ND		3.4	0.50
98-06-6	tert-Butylbenzene	ND		3.4	0.50
75-15-0	Carbon disulfide	ND		3.4	1.4
56-23-5	Carbon tetrachloride	ND		3.4	0.43
108-90-7	Chlorobenzene	ND		3.4	0.48
75-00-3	Chloroethane	ND		6.9	0.39
67-66-3	Chloroform	ND		3.4	0.45
74-87-3	Chloromethane	ND		6.9	0.54
95-49-8	2-Chlorotoluene	ND		3.4	0.45
106-43-4	4-Chlorotoluene	ND		3.4	0.47
124-48-1	Chlorodibromomethane	ND		3.4	0.49
95-50-1	1,2-Dichlorobenzene	ND		3.4	0.47
541-73-1	1,3-Dichlorobenzene	ND		3.4	0.50
106-46-7	1,4-Dichlorobenzene	ND		3.4	0.49
142-28-9	1,3-Dichloropropane	ND		3.4	0.50
563-58-6	1,1-Dichloropropene	ND		3.4	0.48
96-12-8	1,2-Dibromo-3-Chloropropane	ND		6.9	1.2
106-93-4	Ethylene Dibromide	ND		3.4	0.98
74-95-3	Dibromomethane	ND		6.9	0.59
75-71-8	Dichlorodifluoromethane	ND		6.9	0.54
75-34-3	1,1-Dichloroethane	ND		3.4	0.47
107-06-2	1,2-Dichloroethane	ND		3.4	0.52
75-35-4	1,1-Dichloroethene	ND	*	3.4	0.43
156-59-2	cis-1,2-Dichloroethene	35		3.4	0.47
156-60-5	trans-1,2-Dichloroethene	0.96	J	3.4	0.52
78-87-5	1,2-Dichloropropane	ND		3.4	0.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88216-1

SDG No.:

Client Sample ID: DG-A6S-19.5-20 Lab Sample ID: 720-88216-6

Matrix: Solid Lab File ID: 08281833.D

Analysis Method: 8260B Date Collected: 08/22/2018 10:10

Sample wt/vol: 7.261(g) Date Analyzed: 08/28/2018 23:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.4	0.48
10061-02-6	trans-1,3-Dichloropropene	ND		3.4	0.46
100-41-4	Ethylbenzene	ND		3.4	0.52
87-68-3	Hexachlorobutadiene	ND		3.4	0.62
591-78-6	2-Hexanone	ND		34	6.9
98-82-8	Isopropylbenzene	ND		3.4	0.47
99-87-6	4-Isopropyltoluene	ND		3.4	1.7
75-09-2	Methylene Chloride	ND		6.9	3.9
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		34	6.9
91-20-3	Naphthalene	ND		6.9	1.0
103-65-1	N-Propylbenzene	ND		3.4	0.45
100-42-5	Styrene	ND		3.4	0.43
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.4	0.52
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.4	0.52
127-18-4	Tetrachloroethene	ND		3.4	0.46
108-88-3	Toluene	ND		3.4	0.49
87-61-6	1,2,3-Trichlorobenzene	ND		3.4	0.51
120-82-1	1,2,4-Trichlorobenzene	ND		3.4	0.49
71-55-6	1,1,1-Trichloroethane	ND		3.4	0.42
79-00-5	1,1,2-Trichloroethane	ND		3.4	0.48
79-01-6	Trichloroethene	0.53	J	3.4	0.43
75-69-4	Trichlorofluoromethane	ND		3.4	0.39
96-18-4	1,2,3-Trichloropropane	ND		3.4	0.53
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.4	1.4
95-63-6	1,2,4-Trimethylbenzene	ND		3.4	1.1
108-67-8	1,3,5-Trimethylbenzene	ND		3.4	0.45
108-05-4	Vinyl acetate	ND		14	3.4
75-01-4	Vinyl chloride	ND		3.4	0.50
1330-20-7	Xylenes, Total	ND		3.4	0.84
594-20-7	2,2-Dichloropropane	ND		3.4	1.4
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		170	69

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88216-1

SDG No.:

Client Sample ID: DG-A6S-19.5-20 Lab Sample ID: 720-88216-6

Matrix: Solid Lab File ID: 08281833.D

Analysis Method: 8260B Date Collected: 08/22/2018 10:10

Sample wt/vol: 7.261(g) Date Analyzed: 08/28/2018 23:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	99		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		60-140
2037-26-5	Toluene-d8 (Surr)	95		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281833.D
Lims ID: 720-88216-A-6-C
Client ID: DG-A6S-19.5-20
Sample Type: Client
Inject. Date: 28-Aug-2018 23:37:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88216-A-6
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:51 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 10:02:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.819	0.006	0	327268	250.0	
* 2 Fluorobenzene	96	10.605	10.599	0.006	98	936888	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.439	0.000	87	756308	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.585	17.579	0.006	95	405805	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.190	0.000	94	79773	7.59	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.702	0.006	0	100260	7.61	
$ 10 Toluene-d8 (Surr)	98	12.708	12.708	0.000	93	271037	7.15	
$ 11 4-Bromofluorobenzene	95	15.939	15.933	0.006	94	108950	7.41	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.048	0.000	84	94761	6.03	
$ 6 BFB	95	8.818	6.434	2.384	0	6201	NR	
27 Isopropyl alcohol	45	6.386	6.276	0.110	8	187	0.2130	
28 Acetone	58	6.380	6.368	0.012	99	24676	22.4	
34 Methylene Chloride	84	7.081	7.075	0.006	96	2312	0.2280	
144 Methyl acetate	43	7.136	7.124	0.012	99	11502	1.44	
37 Carbon disulfide	76	7.374	7.367	0.007	99	20287	0.9219	
38 trans-1,2-Dichloroethene	96	7.873	7.867	0.006	95	6475	0.6998	
45 2-Butanone (MEK)	72	8.648	8.635	0.013	84	233	0.1857	
49 cis-1,2-Dichloroethene	61	8.818	8.812	0.006	82	392382	25.5	
140 Ethyl acetate	43	9.007	9.001	0.006	99	23794	1.92	
59 Benzene	78	10.373	10.367	0.006	94	2376	0.0596	
66 Trichloroethene	132	11.092	11.092	0.000	94	3992	0.3865	
75 Toluene	92	12.793	12.787	0.006	98	4338	0.1745	
149 1-Chlorohexane	55	14.439	14.354	0.085	33	7891	0.6603	
128 Butyl Ether	87	14.665	14.659	0.006	94	1113	0.1479	
29 Pentane	43	6.380	6.410	-0.030	70	82794	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	2165882	25.2	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	1463012	17.0	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	1546146	18.0	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	2244845	26.1	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	1581319	18.4	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	2203783	25.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 120 C6-C12	1	14.281	(8.556-20.005)		0	1660282	19.3	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	124361	1.45	
A 121 C7-C12	1	15.448	(10.891-20.005)		0	280395	3.26	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

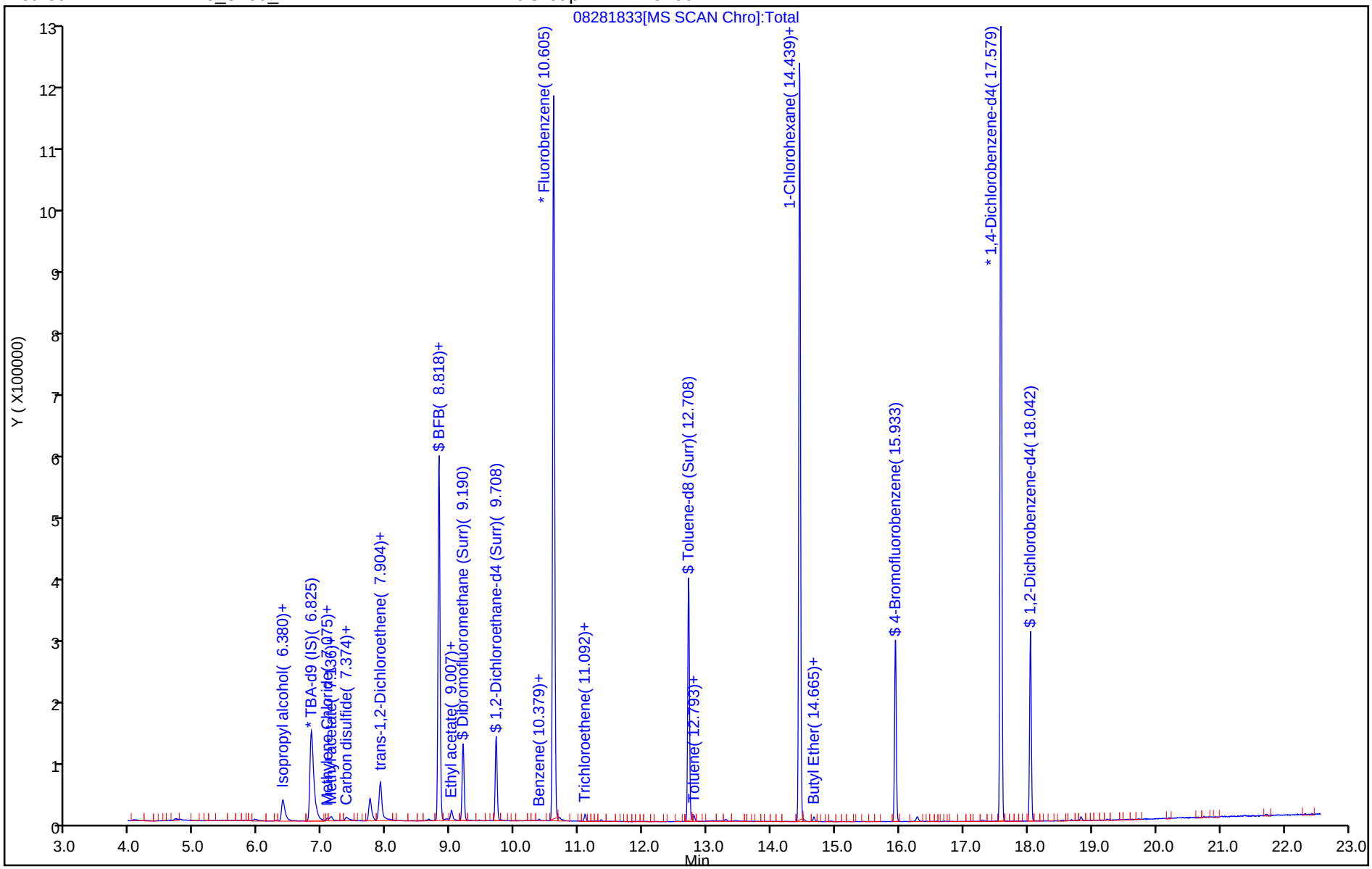
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 10:03:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281833.D

Injection Date:	28-Aug-2018 23:37:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88216-A-6-C	Lab Sample ID:	720-88216-6	Worklist Smp#:	12
Client ID:	DG-A6S-19.5-20				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281833.D
Lims ID: 720-88216-A-6-C
Client ID: DG-A6S-19.5-20
Sample Type: Client
Inject. Date: 28-Aug-2018 23:37:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88216-A-6
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:51 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 10:02:59

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.61	101.48
$ 10 Toluene-d8 (Surr)	7.50	7.15	95.38
$ 11 4-Bromofluorobenzene	7.50	7.41	98.76
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

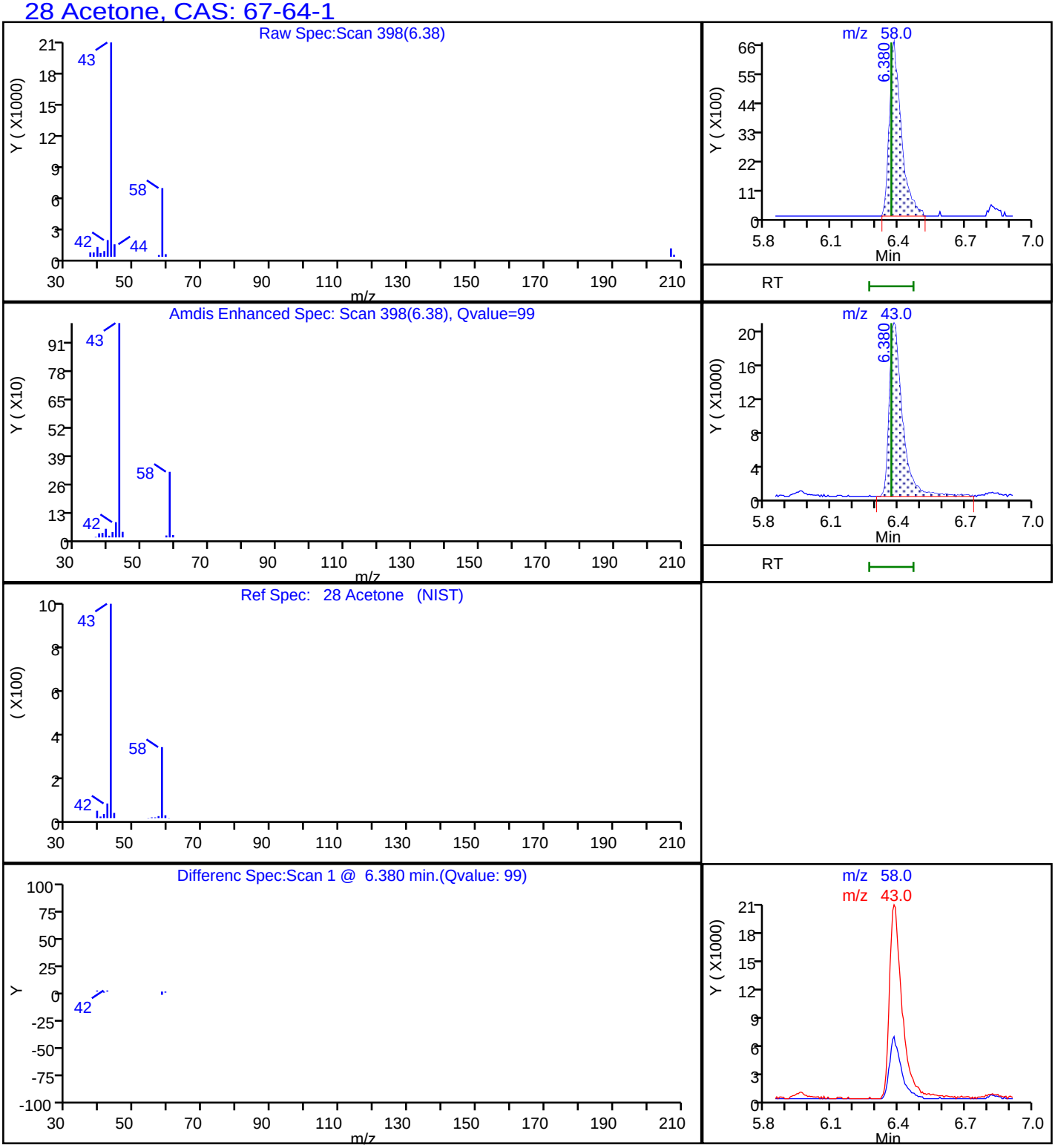
Report Date: 29-Aug-2018 10:03:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281833.D

Injection Date:	28-Aug-2018 23:37:30	Instrument ID:	HP13		
Lims ID:	720-88216-A-6-C	Lab Sample ID:	720-88216-6		
Client ID:	DG-A6S-19.5-20				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



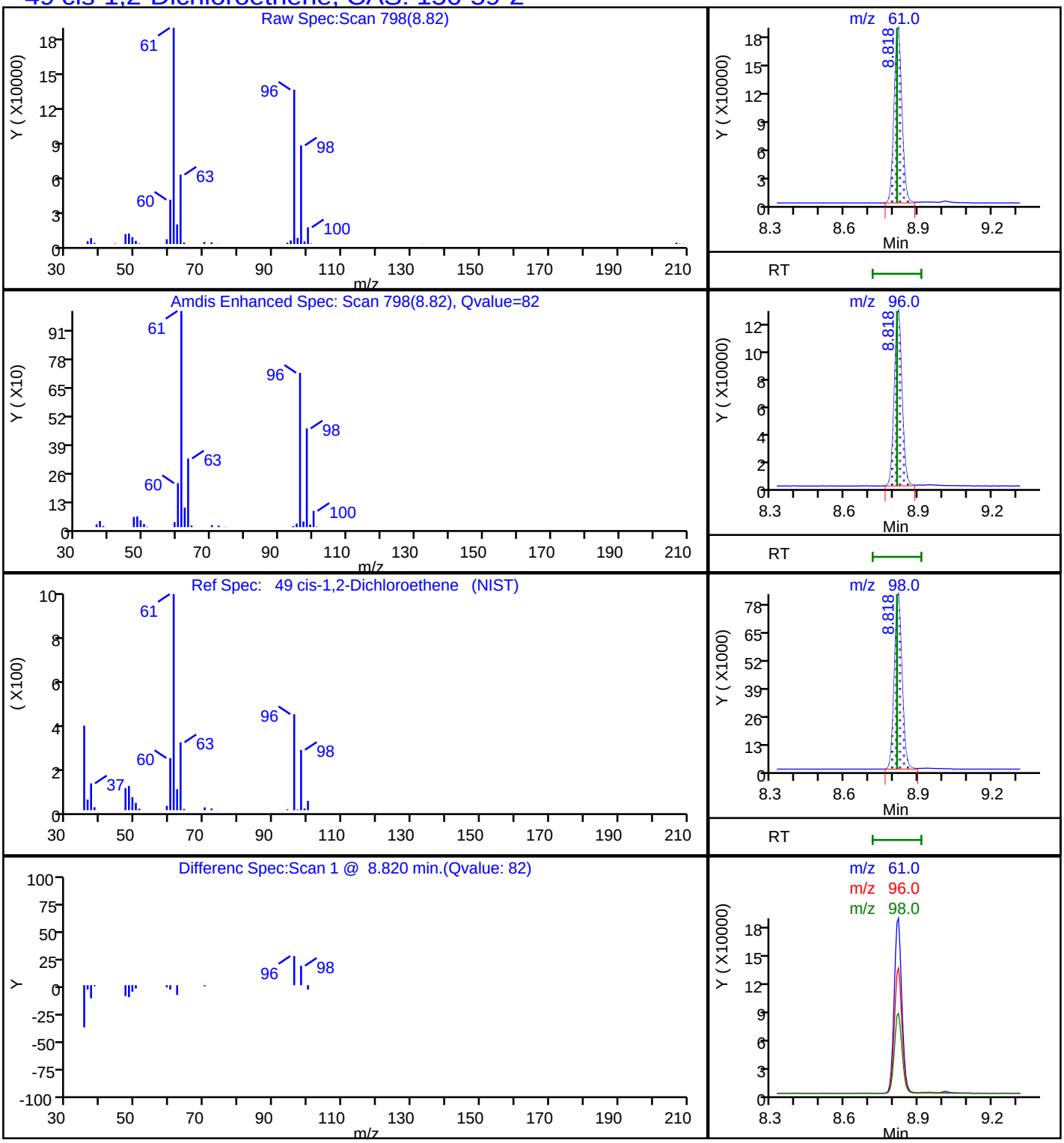
Report Date: 29-Aug-2018 10:03:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281833.D

Injection Date:	28-Aug-2018 23:37:30	Instrument ID:	HP13		
Lims ID:	720-88216-A-6-C	Lab Sample ID:	720-88216-6		
Client ID:	DG-A6S-19.5-20				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

49 cis-1,2-Dichloroethene, CAS: 156-59-2



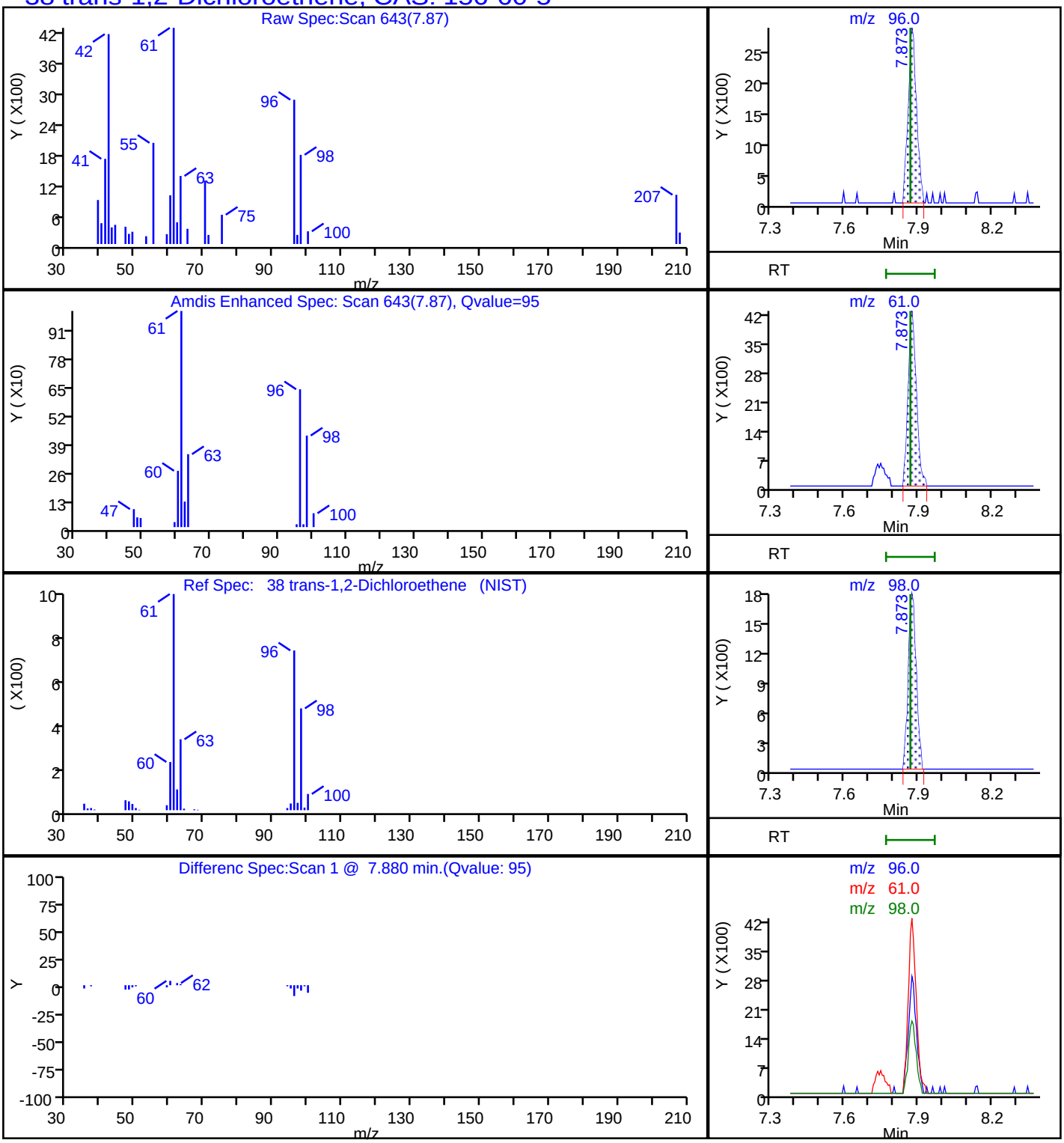
Report Date: 29-Aug-2018 10:03:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281833.D

Injection Date:	28-Aug-2018 23:37:30	Instrument ID:	HP13		
Lims ID:	720-88216-A-6-C	Lab Sample ID:	720-88216-6		
Client ID:	DG-A6S-19.5-20				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

38 trans-1,2-Dichloroethene, CAS: 156-60-5



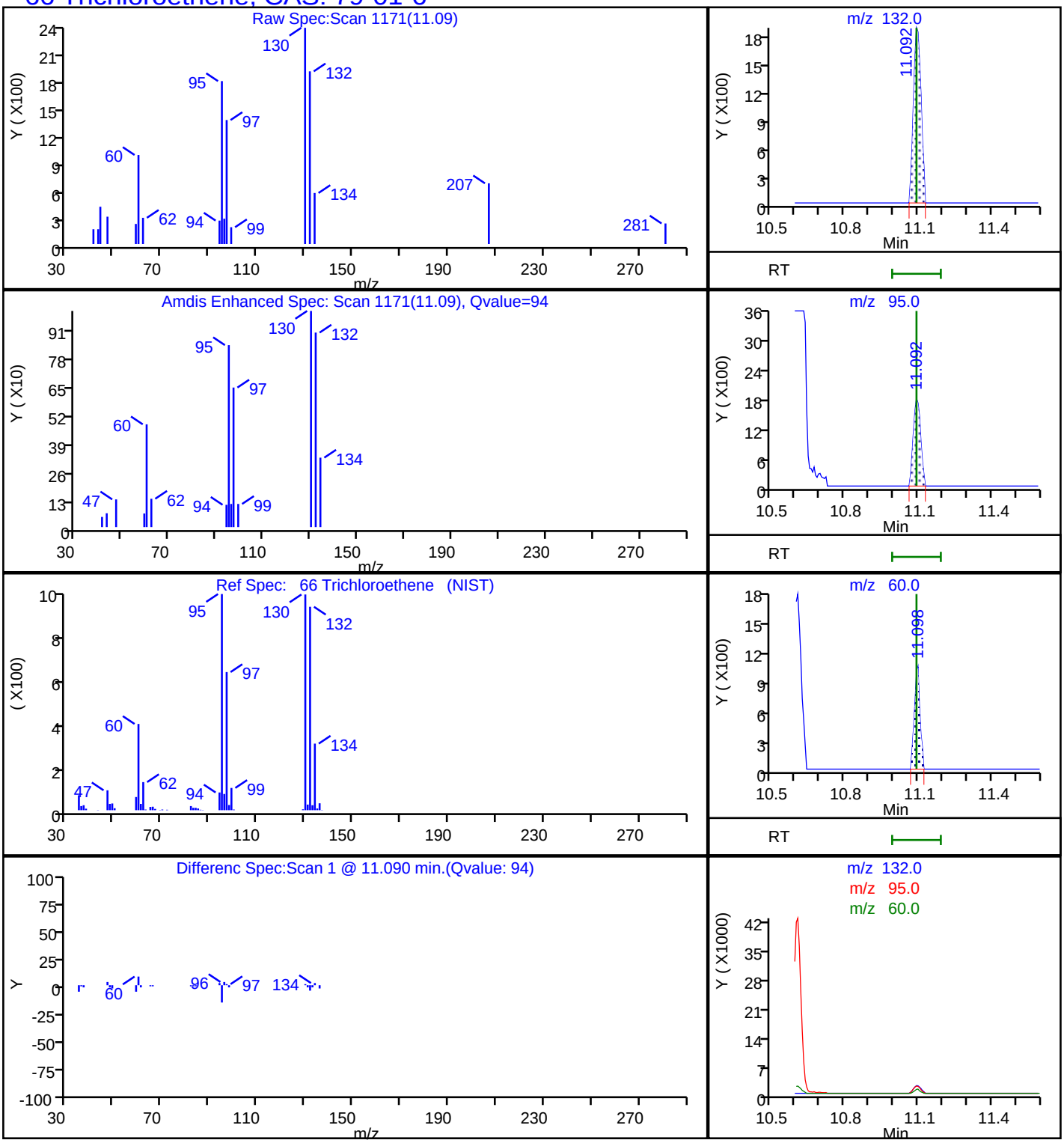
Report Date: 29-Aug-2018 10:03:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281833.D

Injection Date:	28-Aug-2018 23:37:30	Instrument ID:	HP13		
Lims ID:	720-88216-A-6-C	Lab Sample ID:	720-88216-6		
Client ID:	DG-A6S-19.5-20				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

66 Trichloroethene, CAS: 79-01-6

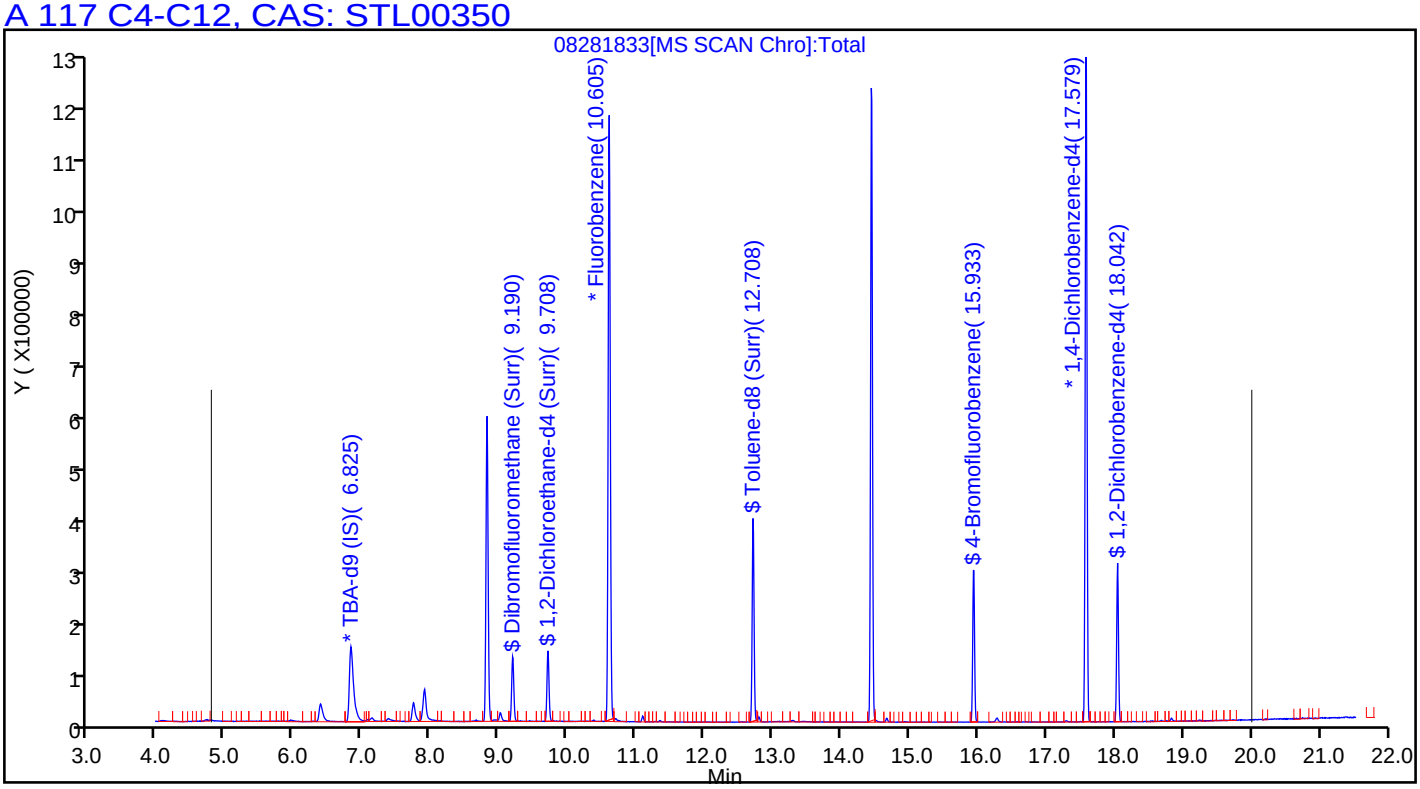


Report Date: 29-Aug-2018 10:03:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281833.D				
Injection Date:	28-Aug-2018 23:37:30	Instrument ID:	HP13		
Lims ID:	720-88216-A-6-C	Lab Sample ID:	720-88216-6		
Client ID:	DG-A6S-19.5-20				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88216-1

SDG No.:

Client Sample ID: DG-G6S-MS/MDS Lab Sample ID: 720-88216-9

Matrix: Solid Lab File ID: 08301839.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:30

Sample wt/vol: 5.40(g) Date Analyzed: 08/31/2018 02:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250622 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.6	1.1
67-64-1	Acetone	ND		46	35
71-43-2	Benzene	ND		4.6	0.60
75-27-4	Dichlorobromomethane	ND		4.6	0.67
108-86-1	Bromobenzene	ND	*	4.6	0.73
74-97-5	Chlorobromomethane	ND		19	0.67
75-25-2	Bromoform	ND		4.6	1.9
74-83-9	Bromomethane	ND		9.3	0.73
78-93-3	2-Butanone (MEK)	ND		46	19
104-51-8	n-Butylbenzene	ND	*	4.6	0.93
135-98-8	sec-Butylbenzene	ND	*	4.6	0.67
98-06-6	tert-Butylbenzene	ND	* F1	4.6	0.68
75-15-0	Carbon disulfide	ND	*	4.6	1.9
56-23-5	Carbon tetrachloride	ND		4.6	0.57
108-90-7	Chlorobenzene	ND		4.6	0.64
75-00-3	Chloroethane	ND		9.3	0.52
67-66-3	Chloroform	ND		4.6	0.61
74-87-3	Chloromethane	ND		9.3	0.73
95-49-8	2-Chlorotoluene	ND	* F1	4.6	0.60
106-43-4	4-Chlorotoluene	ND	*	4.6	0.63
124-48-1	Chlorodibromomethane	ND		4.6	0.66
95-50-1	1,2-Dichlorobenzene	ND	*	4.6	0.63
541-73-1	1,3-Dichlorobenzene	ND	*	4.6	0.67
106-46-7	1,4-Dichlorobenzene	ND	*	4.6	0.66
142-28-9	1,3-Dichloropropane	ND		4.6	0.68
563-58-6	1,1-Dichloropropene	ND		4.6	0.64
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	9.3	1.6
106-93-4	Ethylene Dibromide	ND		4.6	1.3
74-95-3	Dibromomethane	ND		9.3	0.80
75-71-8	Dichlorodifluoromethane	ND		9.3	0.73
75-34-3	1,1-Dichloroethane	ND		4.6	0.63
107-06-2	1,2-Dichloroethane	ND		4.6	0.70
75-35-4	1,1-Dichloroethene	ND	*	4.6	0.57
156-59-2	cis-1,2-Dichloroethene	ND		4.6	0.63
156-60-5	trans-1,2-Dichloroethene	ND		4.6	0.69
78-87-5	1,2-Dichloropropane	ND		4.6	0.58

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88216-1

SDG No.:

Client Sample ID: DG-G6S-MS/MDS Lab Sample ID: 720-88216-9

Matrix: Solid Lab File ID: 08301839.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:30

Sample wt/vol: 5.40(g) Date Analyzed: 08/31/2018 02:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250622 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.6	0.64
10061-02-6	trans-1,3-Dichloropropene	ND		4.6	0.62
100-41-4	Ethylbenzene	ND		4.6	0.69
87-68-3	Hexachlorobutadiene	ND	*	4.6	0.83
591-78-6	2-Hexanone	ND		46	9.3
98-82-8	Isopropylbenzene	ND		4.6	0.63
99-87-6	4-Isopropyltoluene	ND	*	4.6	2.3
75-09-2	Methylene Chloride	ND		9.3	5.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		46	9.3
91-20-3	Naphthalene	ND	*	9.3	1.4
103-65-1	N-Propylbenzene	ND	* F1	4.6	0.61
100-42-5	Styrene	ND		4.6	0.58
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.6	0.70
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.6	0.69
127-18-4	Tetrachloroethene	ND		4.6	0.62
108-88-3	Toluene	ND		4.6	0.66
87-61-6	1,2,3-Trichlorobenzene	ND	* F1	4.6	0.69
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.6	0.66
71-55-6	1,1,1-Trichloroethane	ND		4.6	0.56
79-00-5	1,1,2-Trichloroethane	ND		4.6	0.65
79-01-6	Trichloroethene	ND		4.6	0.58
75-69-4	Trichlorofluoromethane	ND		4.6	0.52
96-18-4	1,2,3-Trichloropropane	ND	*	4.6	0.71
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1	4.6	1.9
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.6	1.5
108-67-8	1,3,5-Trimethylbenzene	ND	* F1	4.6	0.60
108-05-4	Vinyl acetate	ND	F1	19	4.6
75-01-4	Vinyl chloride	ND		4.6	0.68
1330-20-7	Xylenes, Total	ND		4.6	1.1
594-20-7	2,2-Dichloropropane	ND		4.6	1.9
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		230	93

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88216-1

SDG No.:

Client Sample ID: DG-G6S-MS/MDS Lab Sample ID: 720-88216-9

Matrix: Solid Lab File ID: 08301839.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:30

Sample wt/vol: 5.40(g) Date Analyzed: 08/31/2018 02:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250622 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	87		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		60-140
2037-26-5	Toluene-d8 (Surr)	98		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301839.D
Lims ID: 720-88216-A-9-A
Client ID: DG-G6S-MS/MDS
Sample Type: Client
Inject. Date: 31-Aug-2018 02:54:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88216-A-9
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 31-Aug-2018 06:08:09 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:08:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.092	7.095	-0.003	98	132148	250.0	
* 2 Fluorobenzene	96	10.899	10.902	-0.003	98	863708	25.0	
* 4 Chlorobenzene-d5	117	14.747	14.740	0.007	86	531557	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.876	17.879	-0.003	96	206437	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.492	9.483	0.008	53	56229	7.17	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.008	10.000	0.007	98	54296	7.06	
$ 10 Toluene-d8 (Surr)	98	13.006	13.007	-0.002	92	227399	7.32	
$ 11 4-Bromofluorobenzene	95	16.236	16.248	-0.002	89	63329	6.55	
$ 12 1,2-Dichlorobenzene-d4	152	18.342	18.344	-0.003	74	45023	5.91	
59 Benzene	78	10.666	10.668	-0.003	1	745	0.0221	
29 Pentane	43	6.687	6.675	0.012	41	3222	NR	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	229830	3.20	
A 153 C6-C8	1	11.148	(8.836-13.459)		0	122398	1.70	
A 154 C6-C9	1	12.105	(8.836-15.373)		0	164112	2.28	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	278509	3.87	
A 119 C6-C10	1	12.986	(8.836-17.135)		0	169974	2.36	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	246474	3.43	
A 120 C6-C12	1	14.546	(8.836-20.255)		0	211772	2.95	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	48948	0.6808	
A 121 C7-C12	1	15.720	(11.186-20.255)		0	137700	1.92	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
s - Failed ISTD Recovery Test

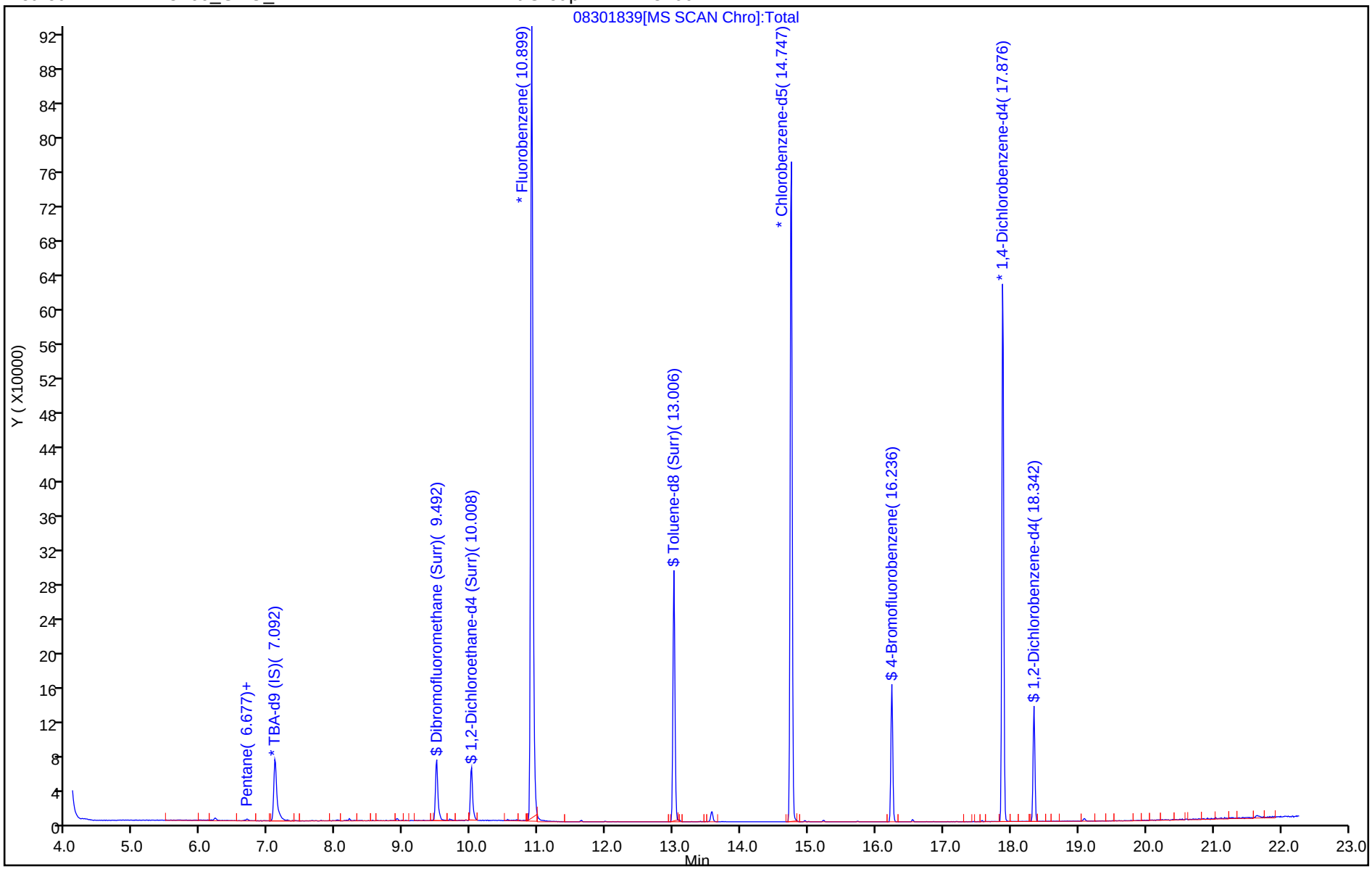
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 09:08:26 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301839.D				
Injection Date:	31-Aug-2018 02:54:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88216-A-9-A	Lab Sample ID:	720-88216-9	Worklist Smp#:	21
Client ID:	DG-G6S-MS/MDS				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301839.D
Lims ID: 720-88216-A-9-A
Client ID: DG-G6S-MS/MDS
Sample Type: Client
Inject. Date: 31-Aug-2018 02:54:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88216-A-9
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 31-Aug-2018 06:08:09 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 09:08:25

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	7.17	95.60
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.06	94.12
$ 10 Toluene-d8 (Surr)	7.50	7.32	97.54
$ 11 4-Bromofluorobenzene	7.50	6.55	87.38
$ 12 1,2-Dichlorobenzene-d4	6.00	5.91	98.47

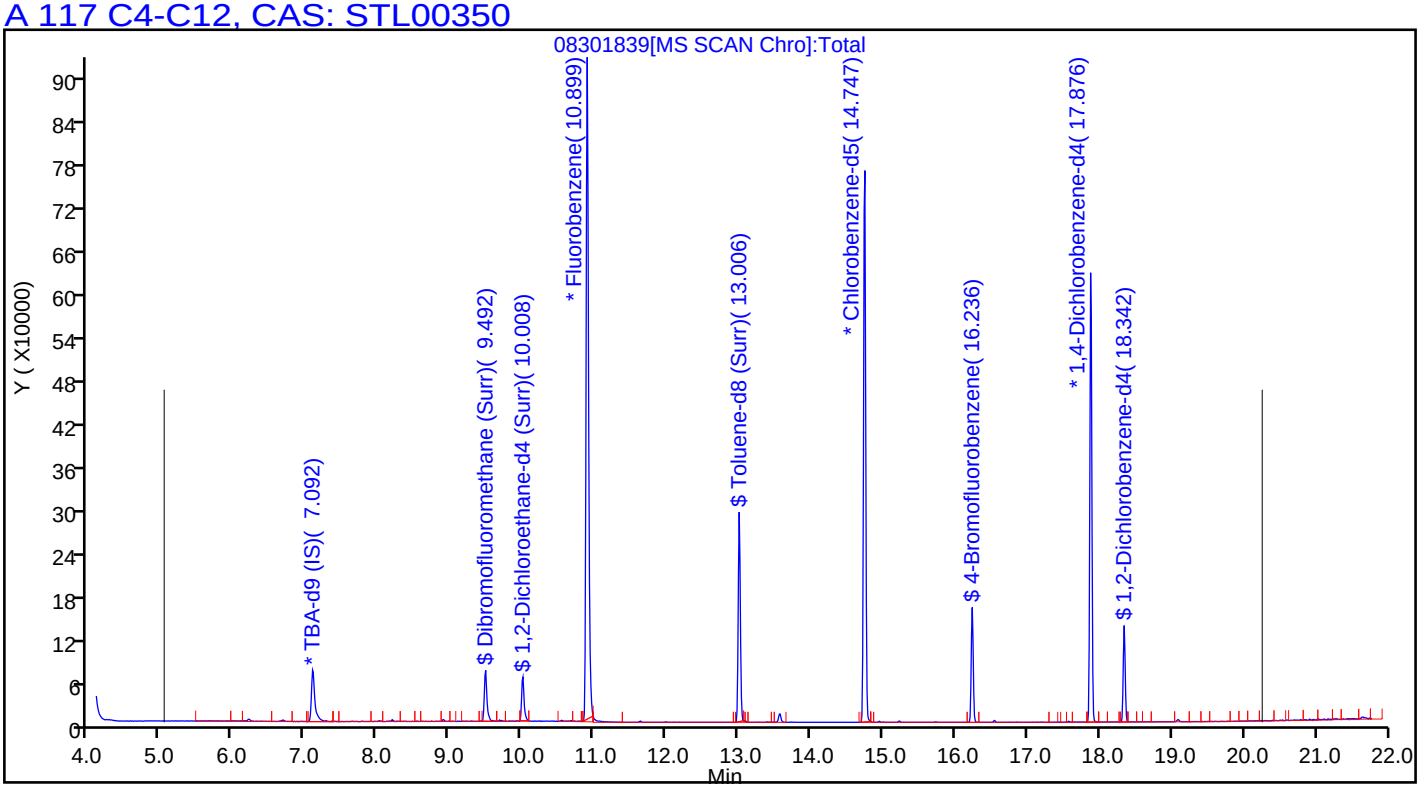
Report Date: 31-Aug-2018 09:08:26 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180830-53585.b\08301839.D

Injection Date:	31-Aug-2018 02:54:30	Instrument ID:	HP7		
Lims ID:	720-88216-A-9-A	Lab Sample ID:	720-88216-9		
Client ID:	DG-G6S-MS/MDS				
Operator ID:	SF	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88216-1

SDG No.:

Client Sample ID: DG-K8S-MS/MDS Lab Sample ID: 720-88216-17

Matrix: Solid Lab File ID: 08311809.D

Analysis Method: 8260B Date Collected: 08/22/2018 00:00

Sample wt/vol: 5.14(g) Date Analyzed: 08/31/2018 09:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250644 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.9	1.2
67-64-1	Acetone	ND		49	37
71-43-2	Benzene	ND		4.9	0.63
75-27-4	Dichlorobromomethane	ND		4.9	0.70
108-86-1	Bromobenzene	ND		4.9	0.77
74-97-5	Chlorobromomethane	ND		19	0.70
75-25-2	Bromoform	ND		4.9	1.9
74-83-9	Bromomethane	ND		9.7	0.77
78-93-3	2-Butanone (MEK)	ND		49	20
104-51-8	n-Butylbenzene	ND		4.9	0.97
135-98-8	sec-Butylbenzene	ND		4.9	0.70
98-06-6	tert-Butylbenzene	ND		4.9	0.71
75-15-0	Carbon disulfide	ND		4.9	1.9
56-23-5	Carbon tetrachloride	ND		4.9	0.60
108-90-7	Chlorobenzene	ND		4.9	0.67
75-00-3	Chloroethane	ND		9.7	0.54
67-66-3	Chloroform	ND		4.9	0.64
74-87-3	Chloromethane	ND		9.7	0.77
95-49-8	2-Chlorotoluene	ND		4.9	0.63
106-43-4	4-Chlorotoluene	ND		4.9	0.66
124-48-1	Chlorodibromomethane	ND		4.9	0.69
95-50-1	1,2-Dichlorobenzene	ND		4.9	0.66
541-73-1	1,3-Dichlorobenzene	ND		4.9	0.70
106-46-7	1,4-Dichlorobenzene	ND		4.9	0.69
142-28-9	1,3-Dichloropropane	ND		4.9	0.71
563-58-6	1,1-Dichloropropene	ND		4.9	0.67
96-12-8	1,2-Dibromo-3-Chloropropane	ND		9.7	1.7
106-93-4	Ethylene Dibromide	ND		4.9	1.4
74-95-3	Dibromomethane	ND		9.7	0.84
75-71-8	Dichlorodifluoromethane	ND		9.7	0.77
75-34-3	1,1-Dichloroethane	ND		4.9	0.66
107-06-2	1,2-Dichloroethane	ND		4.9	0.74
75-35-4	1,1-Dichloroethene	ND	*	4.9	0.60
156-59-2	cis-1,2-Dichloroethene	ND		4.9	0.66
156-60-5	trans-1,2-Dichloroethene	ND		4.9	0.73
78-87-5	1,2-Dichloropropane	ND		4.9	0.61

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88216-1

SDG No.:

Client Sample ID: DG-K8S-MS/MDS Lab Sample ID: 720-88216-17

Matrix: Solid Lab File ID: 08311809.D

Analysis Method: 8260B Date Collected: 08/22/2018 00:00

Sample wt/vol: 5.14(g) Date Analyzed: 08/31/2018 09:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250644 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.9	0.67
10061-02-6	trans-1,3-Dichloropropene	ND		4.9	0.65
100-41-4	Ethylbenzene	ND		4.9	0.73
87-68-3	Hexachlorobutadiene	ND		4.9	0.88
591-78-6	2-Hexanone	ND		49	9.7
98-82-8	Isopropylbenzene	ND		4.9	0.66
99-87-6	4-Isopropyltoluene	ND		4.9	2.4
75-09-2	Methylene Chloride	ND		9.7	5.4
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		49	9.7
91-20-3	Naphthalene	ND		9.7	1.5
103-65-1	N-Propylbenzene	ND		4.9	0.64
100-42-5	Styrene	ND		4.9	0.61
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.9	0.74
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.9	0.73
127-18-4	Tetrachloroethene	ND		4.9	0.65
108-88-3	Toluene	ND		4.9	0.69
87-61-6	1,2,3-Trichlorobenzene	ND		4.9	0.72
120-82-1	1,2,4-Trichlorobenzene	ND		4.9	0.69
71-55-6	1,1,1-Trichloroethane	ND		4.9	0.59
79-00-5	1,1,2-Trichloroethane	ND		4.9	0.68
79-01-6	Trichloroethene	ND		4.9	0.61
75-69-4	Trichlorofluoromethane	ND		4.9	0.54
96-18-4	1,2,3-Trichloropropane	ND		4.9	0.75
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1 *	4.9	2.0
95-63-6	1,2,4-Trimethylbenzene	ND		4.9	1.6
108-67-8	1,3,5-Trimethylbenzene	ND		4.9	0.63
108-05-4	Vinyl acetate	ND		19	4.9
75-01-4	Vinyl chloride	ND		4.9	0.71
1330-20-7	Xylenes, Total	ND		4.9	1.2
594-20-7	2,2-Dichloropropane	ND		4.9	1.9
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		240	97

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88216-1

SDG No.:

Client Sample ID: DG-K8S-MS/MDS Lab Sample ID: 720-88216-17

Matrix: Solid Lab File ID: 08311809.D

Analysis Method: 8260B Date Collected: 08/22/2018 00:00

Sample wt/vol: 5.14(g) Date Analyzed: 08/31/2018 09:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250644 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	98		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		60-140
2037-26-5	Toluene-d8 (Surr)	95		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311809.D
Lims ID: 720-88216-A-17-A
Client ID: DG-K8S-MS/MDS
Sample Type: Client
Inject. Date: 31-Aug-2018 09:32:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88216-A-17
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 11:01:51 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 11:02:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.819	0.006	0	287969	250.0	
* 2 Fluorobenzene	96	10.605	10.599	0.006	99	1048408	25.0	
* 4 Chlorobenzene-d5	117	14.445	14.445	0.000	87	833018	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.585	17.585	0.000	95	461881	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.196	9.196	0.006	94	84043	7.14	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.709	9.714	0.001	0	103445	7.02	
$ 10 Toluene-d8 (Surr)	98	12.714	12.715	0.006	93	301164	7.10	
$ 11 4-Bromofluorobenzene	95	15.933	15.933	0.000	94	118895	7.34	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.042	0.000	85	104972	5.87	
28 Acetone	58	6.392	6.377	0.018	96	463	0.3764	
34 Methylene Chloride	84	7.081	7.079	0.006	27	656	0.0578	
59 Benzene	78	10.373	10.379	0.000	1	132	0.002959	7
149 1-Chlorohexane	55	14.445	14.368	0.085	33	8869	0.6632	
85 m-Xylene & p-Xylene	91	14.933	14.933	0.000	0	2547	0.0606	
101 1,2,4-Trimethylbenzene	105	17.280	17.280	0.000	96	5552	0.1116	
107 n-Butylbenzene	91	18.176	18.170	0.006	89	2542	0.0562	
111 1,2,4-Trichlorobenzene	180	20.414	20.414	0.000	86	1566	0.0770	
112 Naphthalene	128	20.749	20.749	0.000	97	10904	0.2293	
113 Hexachlorobutadiene	225	20.804	20.804	0.000	79	937	0.0784	
114 1,2,3-Trichlorobenzene	180	21.017	21.017	0.000	92	1811	0.0944	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	437192	4.55	
A 154 C6-C8	1	10.852	(8.550-13.153)		0	235451	2.45	
A 155 C6-C9	1	11.842	(8.550-15.134)		0	310458	3.23	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	606863	6.31	
A 119 C6-C10	1	12.732	(8.550-16.914)		0	368043	3.83	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	588561	6.12	
A 120 C6-C12	1	14.278	(8.550-20.005)		0	537875	5.60	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	133522	1.39	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	352666	3.67	
S 122 Xylenes, Total	1				0		0.0606	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

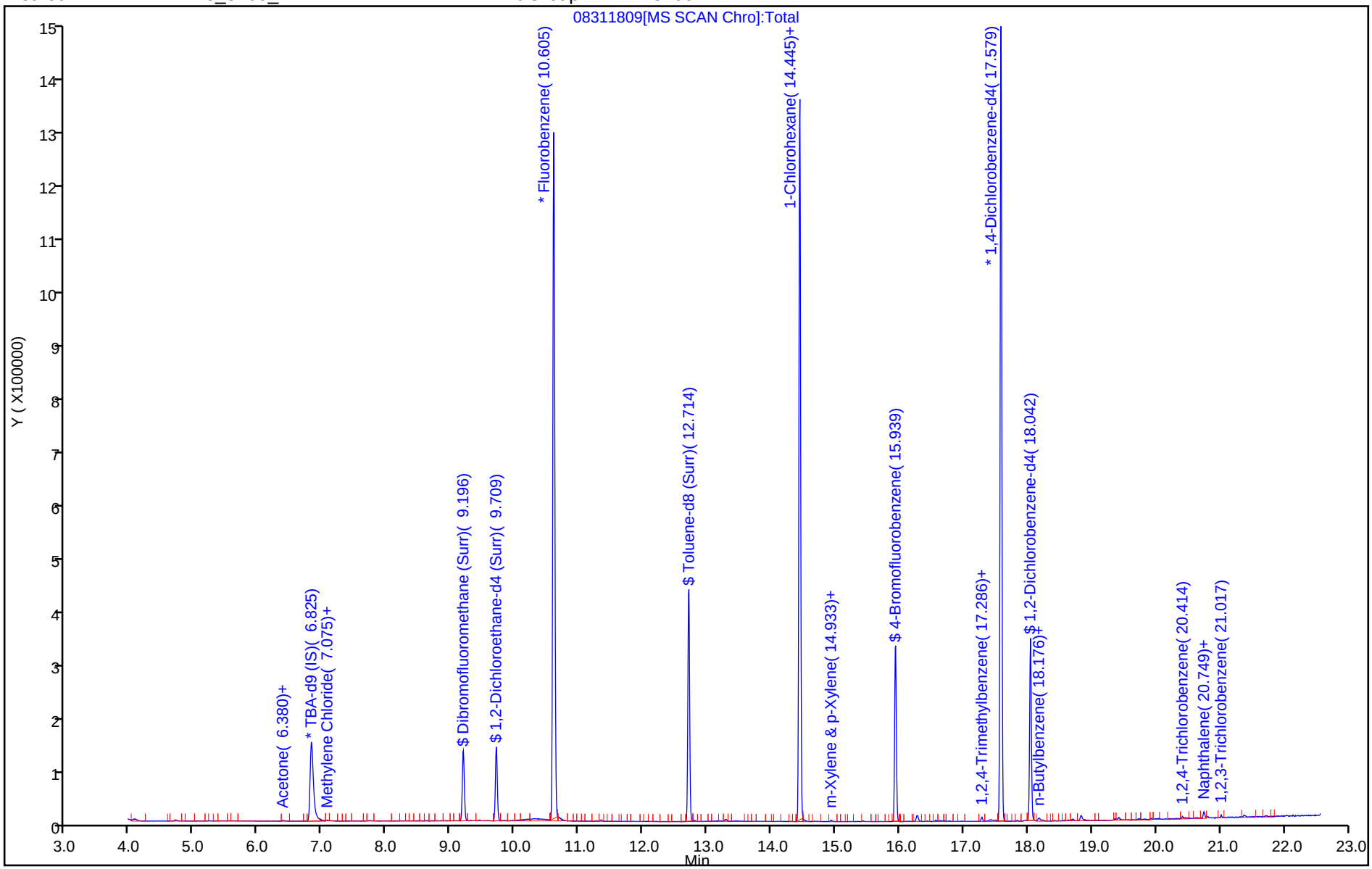
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 11:02:04 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311809.D				
Injection Date:	31-Aug-2018 09:32:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88216-A-17-A	Lab Sample ID:	720-88216-17	Worklist Smp#:	9
Client ID:	DG-K8S-MS/MDS				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311809.D
Lims ID: 720-88216-A-17-A
Client ID: DG-K8S-MS/MDS
Sample Type: Client
Inject. Date: 31-Aug-2018 09:32:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88216-A-17
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 11:01:51 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 11:02:03

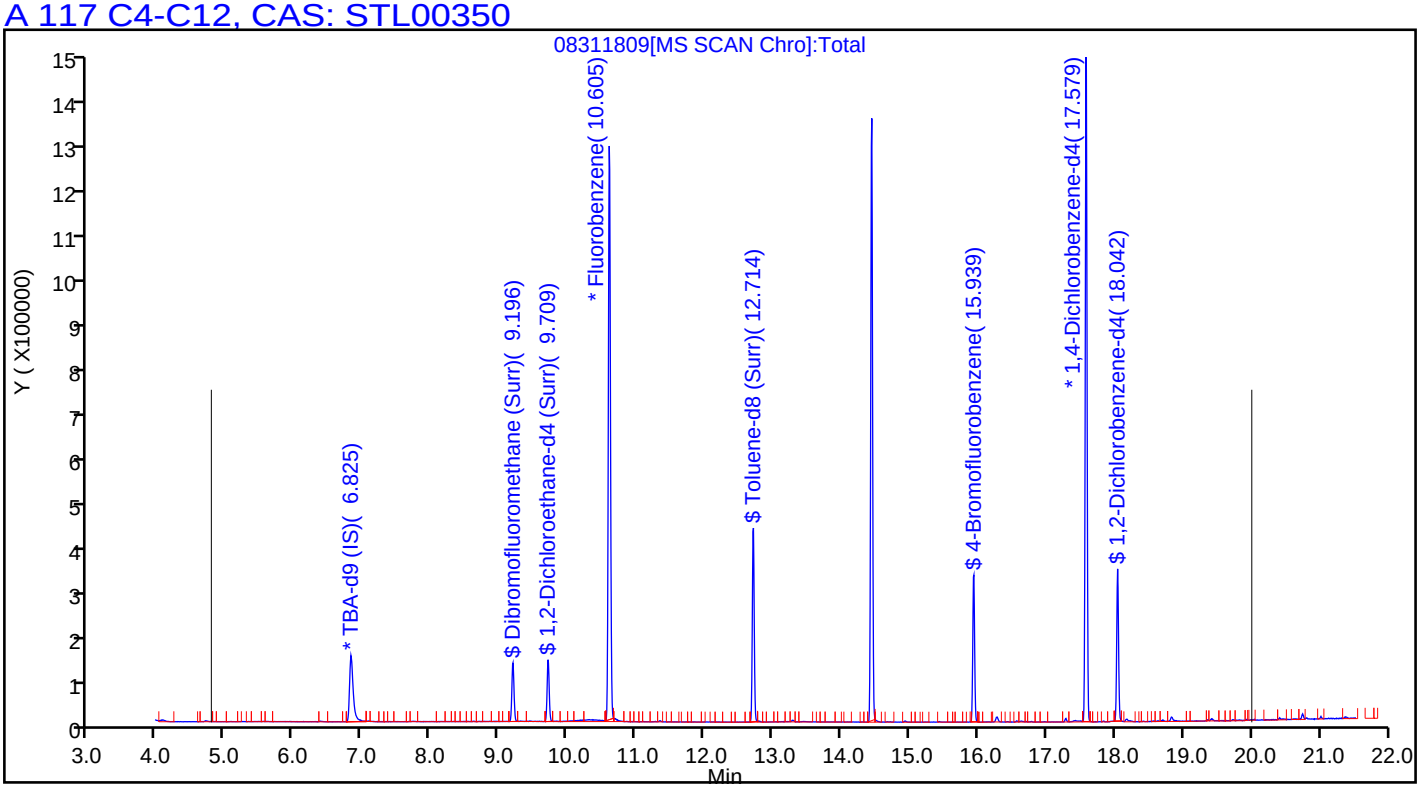
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	7.14	95.25
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.02	93.56
$ 10 Toluene-d8 (Surr)	7.50	7.10	94.70
$ 11 4-Bromofluorobenzene	7.50	7.34	97.85
$ 12 1,2-Dichlorobenzene-d4	6.00	5.87	97.81

Report Date: 31-Aug-2018 11:02:04 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180831-53596.b\08311809.D				
Injection Date:	31-Aug-2018 09:32:30	Instrument ID:	HP13		
Lims ID:	720-88216-A-17-A	Lab Sample ID:	720-88216-17		
Client ID:	DG-K8S-MS/MDS				
Operator ID:	VOA	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(45-131)	(60-140)	(58-140)
720-88216-3	DG-A4S-19.5-20	98	97	95
720-88216-6	DG-A6S-19.5-20	99	101	95
720-88216-9	DG-G6S-MS/MDS	87	94	98
720-88216-9 MS	DG-G6S-MS/MDS	87	94	96
720-88216-9 MSD	DG-G6S-MS/MDS	88	96	98
720-88216-17	DG-K8S-MS/MDS	98	94	95
720-88216-17MS	DG-K8S-MS/MDS	99	104	98
720-88216-17MSD	DG-K8S-MS/MDS	98	102	98
LCS 720-250405/5	Lab Control Sample	95	95	99
LCS 720-250405/7	Lab Control Sample	97	92	97
LCS 720-250622/5	Lab Control Sample	100	92	100
LCS 720-250622/7	Lab Control Sample	103	100	103
LCS 720-250644/5	Lab Control Sample	98	103	97
LCS 720-250644/7	Lab Control Sample	101	100	96
LCSD 720-250405/6	Lab Control Sample Dup	98	92	98
LCSD 720-250405/8	Lab Control Sample Dup	95	95	96
LCSD 720-250622/6	Lab Control Sample Dup	98	92	101
LCSD 720-250622/8	Lab Control Sample Dup	102	100	102
LCSD 720-250644/6	Lab Control Sample Dup	99	100	97
LCSD 720-250644/8	Lab Control Sample Dup	101	100	97
MB 720-250405/4	Method Blank	100	94	97
MB 720-250622/4	Method Blank	98	96	101
MB 720-250644/4	Method Blank	98	97	96

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		FBP	TPHL
Lab Sample ID	Client Sample ID	(33-120)	(35-146)
720-88216-3	DG-A4S-19.5-20	69	98
720-88216-6	DG-A6S-19.5-20	47	78
720-88216-9	DG-G6S-MS/MDS	84	112
720-88216-9 MS	DG-G6S-MS/MDS	68	86
720-88216-9 MSD	DG-G6S-MS/MDS	74	88
720-88216-17	DG-K8S-MS/MDS	70	89
720-88216-17MS	DG-K8S-MS/MDS	66	91
720-88216-17MSD	DG-K8S-MS/MDS	82	96
LCS 720-250190/2-A	Lab Control Sample	86	106
LCS 720-250290/2-A	Lab Control Sample	99	105
MB 720-250190/1-A	Method Blank	98	96
MB 720-250290/1-A	Method Blank	81	95

Surrogate Legend

FBP = 2-Fluorobiphenyl

TPHL = Terphenyl-d14

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TPH1
Lab Sample ID	Client Sample ID	(40-130)
720-88216-3	DG-A4S-19.5-20	87
720-88216-6	DG-A6S-19.5-20	122
720-88216-9	DG-G6S-MS/MDS	76
720-88216-9 MS	DG-G6S-MS/MDS	55
720-88216-9 MSD	DG-G6S-MS/MDS	65
720-88216-17	DG-K8S-MS/MDS	87
720-88216-17MS	DG-K8S-MS/MDS	112
720-88216-17MSD	DG-K8S-MS/MDS	105
LCS 720-250263/2-A	Lab Control Sample	91
LCS 720-250358/2-A	Lab Control Sample	94
MB 720-250263/1-A	Method Blank	106
MB 720-250358/1-A	Method Blank	82

Surrogate Legend

TPH = p-Terphenyl

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP2	TCX2
Lab Sample ID	Client Sample ID	(21-136)	(21-145)
720-88216-3	DG-A4S-19.5-20	85	65
720-88216-6	DG-A6S-19.5-20	72	62
720-88216-9	DG-G6S-MS/MDS	101	93
720-88216-9 MS	DG-G6S-MS/MDS	90	76
720-88216-9 MSD	DG-G6S-MS/MDS	100	82
720-88216-17	DG-K8S-MS/MDS	89	85
720-88216-17MS	DG-K8S-MS/MDS	92	82
720-88216-17MSD	DG-K8S-MS/MDS	93	83
LCS 720-250393/2-A	Lab Control Sample	95	84
MB 720-250160/1-A	Method Blank	85	85
MB 720-250393/1-A	Method Blank	98	84

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP1	TCX2
Lab Sample ID	Client Sample ID	(21-136)	(21-145)
LCS 720-250160/2-A	Lab Control Sample	89	86

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	TCX2 (14-128)	DCBP2 (10-132)								
720-88216-3	DG-A4S-19.5-20	80	90								
720-88216-6	DG-A6S-19.5-20	102	119								
720-88216-9	DG-G6S-MS/MDS	94	84								
720-88216-9 MS	DG-G6S-MS/MDS	79	77								
720-88216-9 MSD	DG-G6S-MS/MDS	70	67								
720-88216-17	DG-K8S-MS/MDS	79	87								
720-88216-17MS	DG-K8S-MS/MDS	79	85								
720-88216-17MSD	DG-K8S-MS/MDS	78	85								
720-88218-F-20-B MS	Matrix Spike	96	126								
720-88218-F-20-C MSD	Matrix Spike Duplicate	97	112								
LCS 240-342652/22-A	Lab Control Sample	71	86								
LCS 240-343154/10-A	Lab Control Sample	59	56								
MB 240-342652/21-A	Method Blank	80	95								
MB 240-343154/9-A	Method Blank	71	76								
MB 240-343154/9-A	Method Blank	85	84								

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: 720-88216-9 MS
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: DG-G6S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250320

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	ND		48.2	52.6		ug/Kg		109	69 - 130
Acetone	ND		241	236		ug/Kg		98	37 - 150
Benzene	ND		48.2	54.6		ug/Kg		113	70 - 130
Dichlorobromomethane	ND		48.2	51.3		ug/Kg		106	64 - 135
Bromobenzene	ND	*	48.2	58.0	*	ug/Kg		120	70 - 130
Chlorobromomethane	ND		48.2	50.7		ug/Kg		105	65 - 130
Bromoform	ND		48.2	44.9		ug/Kg		93	58 - 132
Bromomethane	ND		48.2	51.4		ug/Kg		107	56 - 130
2-Butanone (MEK)	ND		241	206		ug/Kg		85	41 - 150
n-Butylbenzene	ND	*	48.2	53.3	*	ug/Kg		111	60 - 145
sec-Butylbenzene	ND	*	48.2	64.7	*	ug/Kg		134	64 - 137
tert-Butylbenzene	ND	* F1	48.2	67.1	* F1	ug/Kg		139	63 - 134
Carbon disulfide	ND	*	48.2	69.7		ug/Kg		145	10 - 150
Carbon tetrachloride	ND		48.2	57.4		ug/Kg		119	54 - 130
Chlorobenzene	ND		48.2	49.6		ug/Kg		103	70 - 130
Chloroethane	ND		48.2	52.6		ug/Kg		109	61 - 130
Chloroform	ND		48.2	54.5		ug/Kg		113	67 - 130
Chloromethane	ND		48.2	56.2		ug/Kg		117	50 - 131
2-Chlorotoluene	ND	* F1	48.2	66.0	* F1	ug/Kg		137	70 - 130
4-Chlorotoluene	ND	*	48.2	61.5	*	ug/Kg		128	70 - 130
Chlorodibromomethane	ND		48.2	45.7		ug/Kg		95	60 - 141
1,2-Dichlorobenzene	ND	*	48.2	49.4	*	ug/Kg		102	70 - 130
1,3-Dichlorobenzene	ND	*	48.2	51.5	*	ug/Kg		107	70 - 130
1,4-Dichlorobenzene	ND	*	48.2	49.5	*	ug/Kg		103	70 - 130
1,3-Dichloropropane	ND		48.2	45.5		ug/Kg		94	70 - 130
1,1-Dichloropropene	ND		48.2	54.4		ug/Kg		113	67 - 130
1,2-Dibromo-3-Chloropropane	ND	*	48.2	53.8	*	ug/Kg		112	57 - 130
Ethylene Dibromide	ND		48.2	43.3		ug/Kg		90	66 - 135
Dibromomethane	ND		48.2	46.0		ug/Kg		95	65 - 131
Dichlorodifluoromethane	ND		48.2	44.8		ug/Kg		93	38 - 130
1,1-Dichloroethane	ND		48.2	59.8		ug/Kg		124	67 - 130
1,2-Dichloroethane	ND		48.2	49.3		ug/Kg		102	70 - 130
1,1-Dichloroethene	ND	*	48.2	62.9		ug/Kg		130	64 - 130
cis-1,2-Dichloroethene	ND		48.2	55.3		ug/Kg		115	68 - 131
trans-1,2-Dichloroethene	ND		48.2	57.3		ug/Kg		119	70 - 130
1,2-Dichloropropane	ND		48.2	56.7		ug/Kg		118	65 - 133
cis-1,3-Dichloropropene	ND		48.2	50.3		ug/Kg		104	46 - 139
trans-1,3-Dichloropropene	ND		48.2	43.7		ug/Kg		91	55 - 131
Ethylbenzene	ND		48.2	55.0		ug/Kg		114	65 - 130
Hexachlorobutadiene	ND	*	48.2	30.5	*	ug/Kg		63	58 - 132
2-Hexanone	ND		241	213		ug/Kg		88	44 - 150
Isopropylbenzene	ND		48.2	51.4		ug/Kg		107	65 - 130
4-Isopropyltoluene	ND	*	48.2	61.0	*	ug/Kg		127	69 - 134
Methylene Chloride	ND		48.2	56.6		ug/Kg		118	63 - 130
4-Methyl-2-pentanone (MIBK)	ND		241	234		ug/Kg		97	51 - 140
Naphthalene	ND	*	48.2	31.1	*	ug/Kg		64	45 - 146
N-Propylbenzene	ND	* F1	48.2	69.5	* F1	ug/Kg		144	70 - 130
Styrene	ND		48.2	45.6		ug/Kg		95	58 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88216-9 MS
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: DG-G6S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250320

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		48.2	54.8		ug/Kg		114	64 - 133
1,1,2,2-Tetrachloroethane	ND	*	48.2	62.7	*	ug/Kg		130	70 - 131
Tetrachloroethene	ND		48.2	45.8		ug/Kg		95	67 - 130
Toluene	ND		48.2	55.8		ug/Kg		116	70 - 130
1,2,3-Trichlorobenzene	ND	* F1	48.2	25.0	* F1	ug/Kg		52	58 - 138
1,2,4-Trichlorobenzene	ND	*	48.2	27.8	*	ug/Kg		58	49 - 144
1,1,1-Trichloroethane	ND		48.2	57.0		ug/Kg		118	57 - 133
1,1,2-Trichloroethane	ND		48.2	47.9		ug/Kg		99	68 - 132
Trichloroethene	ND		48.2	48.4		ug/Kg		100	66 - 130
Trichlorofluoromethane	ND		48.2	55.2		ug/Kg		115	61 - 130
1,2,3-Trichloropropane	ND	*	48.2	63.0	*	ug/Kg		131	62 - 150
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1	48.2	68.5	F1	ug/Kg		142	52 - 130
1,2,4-Trimethylbenzene	ND	*	48.2	63.3	*	ug/Kg		131	64 - 140
1,3,5-Trimethylbenzene	ND	* F1	48.2	66.6	* F1	ug/Kg		138	67 - 134
Vinyl acetate	ND	F1	48.2	14.7	J F1	ug/Kg		31	52 - 150
Vinyl chloride	ND		48.2	53.5		ug/Kg		111	62 - 130
m-Xylene & p-Xylene	ND		48.2	52.5		ug/Kg		109	70 - 130
o-Xylene	ND		48.2	53.4		ug/Kg		111	68 - 130
2,2-Dichloropropane	ND		48.2	57.1		ug/Kg		118	63 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*87*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: 720-88216-9 MSD
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: DG-G6S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250320

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		49.9	54.7		ug/Kg		110	69 - 130	4	20
Acetone	ND		250	243		ug/Kg		97	37 - 150	3	20
Benzene	ND		49.9	55.9		ug/Kg		112	70 - 130	2	20
Dichlorobromomethane	ND		49.9	52.7		ug/Kg		106	64 - 135	3	20
Bromobenzene	ND	*	49.9	60.6		ug/Kg		121	70 - 130	4	20
Chlorobromomethane	ND		49.9	52.0		ug/Kg		104	65 - 130	3	20
Bromoform	ND		49.9	47.7		ug/Kg		96	58 - 132	6	20
Bromomethane	ND		49.9	51.8		ug/Kg		104	56 - 130	1	20
2-Butanone (MEK)	ND		250	217		ug/Kg		87	41 - 150	5	20
n-Butylbenzene	ND	*	49.9	53.5		ug/Kg		107	60 - 145	0	20
sec-Butylbenzene	ND	*	49.9	65.4		ug/Kg		131	64 - 137	1	20
tert-Butylbenzene	ND	* F1	49.9	67.8	F1	ug/Kg		136	63 - 134	1	20
Carbon disulfide	ND	*	49.9	72.6		ug/Kg		145	10 - 150	4	20
Carbon tetrachloride	ND		49.9	57.3		ug/Kg		115	54 - 130	0	20
Chlorobenzene	ND		49.9	52.0		ug/Kg		104	70 - 130	5	20
Chloroethane	ND		49.9	52.7		ug/Kg		106	61 - 130	0	20
Chloroform	ND		49.9	55.5		ug/Kg		111	67 - 130	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88216-9 MSD
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: DG-G6S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250320

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloromethane	ND		49.9	55.6		ug/Kg		111	50 - 131	1	20
2-Chlorotoluene	ND	* F1	49.9	66.5	F1	ug/Kg		133	70 - 130	1	20
4-Chlorotoluene	ND	*	49.9	63.2		ug/Kg		127	70 - 130	3	20
Chlorodibromomethane	ND		49.9	47.9		ug/Kg		96	60 - 141	5	20
1,2-Dichlorobenzene	ND	*	49.9	50.3		ug/Kg		101	70 - 130	2	20
1,3-Dichlorobenzene	ND	*	49.9	52.2		ug/Kg		105	70 - 130	2	20
1,4-Dichlorobenzene	ND	*	49.9	50.7		ug/Kg		102	70 - 130	2	20
1,3-Dichloropropane	ND		49.9	47.7		ug/Kg		96	70 - 130	5	20
1,1-Dichloropropene	ND		49.9	56.2		ug/Kg		113	67 - 130	3	20
1,2-Dibromo-3-Chloropropane	ND	*	49.9	56.5		ug/Kg		113	57 - 130	5	20
Ethylene Dibromide	ND		49.9	45.7		ug/Kg		91	66 - 135	5	20
Dibromomethane	ND		49.9	48.2		ug/Kg		97	65 - 131	5	20
Dichlorodifluoromethane	ND		49.9	45.2		ug/Kg		91	38 - 130	1	20
1,1-Dichloroethane	ND		49.9	61.2		ug/Kg		123	67 - 130	2	20
1,2-Dichloroethane	ND		49.9	51.3		ug/Kg		103	70 - 130	4	20
1,1-Dichloroethene	ND	*	49.9	64.5		ug/Kg		129	64 - 130	3	20
cis-1,2-Dichloroethene	ND		49.9	56.8		ug/Kg		114	68 - 131	3	20
trans-1,2-Dichloroethene	ND		49.9	59.0		ug/Kg		118	70 - 130	3	20
1,2-Dichloropropane	ND		49.9	58.6		ug/Kg		117	65 - 133	3	20
cis-1,3-Dichloropropene	ND		49.9	52.6		ug/Kg		105	46 - 139	4	20
trans-1,3-Dichloropropene	ND		49.9	46.7		ug/Kg		94	55 - 131	7	20
Ethylbenzene	ND		49.9	56.7		ug/Kg		114	65 - 130	3	20
Hexachlorobutadiene	ND	*	49.9	32.2		ug/Kg		65	58 - 132	5	20
2-Hexanone	ND		250	231		ug/Kg		93	44 - 150	8	20
Isopropylbenzene	ND		49.9	52.7		ug/Kg		106	65 - 130	2	20
4-Isopropyltoluene	ND	*	49.9	61.0		ug/Kg		122	69 - 134	0	20
Methylene Chloride	ND		49.9	57.6		ug/Kg		115	63 - 130	2	20
4-Methyl-2-pentanone (MIBK)	ND		250	249		ug/Kg		100	51 - 140	6	20
Naphthalene	ND	*	49.9	34.0		ug/Kg		68	45 - 146	9	20
N-Propylbenzene	ND	* F1	49.9	70.6	F1	ug/Kg		142	70 - 130	2	20
Styrene	ND		49.9	49.2		ug/Kg		99	58 - 135	8	20
1,1,1,2-Tetrachloroethane	ND		49.9	56.1		ug/Kg		112	64 - 133	2	20
1,1,2,2-Tetrachloroethane	ND	*	49.9	64.8		ug/Kg		130	70 - 131	3	20
Tetrachloroethene	ND		49.9	47.0		ug/Kg		94	67 - 130	3	20
Toluene	ND		49.9	57.7		ug/Kg		116	70 - 130	3	20
1,2,3-Trichlorobenzene	ND	* F1	49.9	24.7	F1	ug/Kg		49	58 - 138	1	20
1,2,4-Trichlorobenzene	ND	*	49.9	27.4		ug/Kg		55	49 - 144	1	20
1,1,1-Trichloroethane	ND		49.9	57.0		ug/Kg		114	57 - 133	0	20
1,1,2-Trichloroethane	ND		49.9	49.4		ug/Kg		99	68 - 132	3	20
Trichloroethene	ND		49.9	50.1		ug/Kg		100	66 - 130	4	20
Trichlorofluoromethane	ND		49.9	55.0		ug/Kg		110	61 - 130	0	20
1,2,3-Trichloropropane	ND	*	49.9	66.0		ug/Kg		132	62 - 150	5	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1	49.9	67.5	F1	ug/Kg		135	52 - 130	2	20
1,2,4-Trimethylbenzene	ND	*	49.9	63.7		ug/Kg		128	64 - 140	1	20
1,3,5-Trimethylbenzene	ND	* F1	49.9	67.1	F1	ug/Kg		135	67 - 134	1	20
Vinyl acetate	ND	F1	49.9	15.5	J F1	ug/Kg		31	52 - 150	5	20
Vinyl chloride	ND		49.9	53.6		ug/Kg		107	62 - 130	0	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88216-9 MSD
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: DG-G6S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250320

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
m-Xylene & p-Xylene	ND		49.9	54.1		ug/Kg		108	70 - 130	3	20
o-Xylene	ND		49.9	54.6		ug/Kg		110	68 - 130	2	20
2,2-Dichloropropane	ND		49.9	57.6		ug/Kg		116	63 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*88*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: 720-88216-17MS
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: DG-K8S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250320

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	ND		49.1	53.7		ug/Kg		109	69 - 130
Acetone	ND		246	277		ug/Kg		113	37 - 150
Benzene	ND		49.1	48.4		ug/Kg		99	70 - 130
Dichlorobromomethane	ND		49.1	51.3		ug/Kg		105	64 - 135
Bromobenzene	ND		49.1	48.4		ug/Kg		99	70 - 130
Chlorobromomethane	ND		49.1	55.0		ug/Kg		112	65 - 130
Bromoform	ND		49.1	56.7		ug/Kg		115	58 - 132
Bromomethane	ND		49.1	47.9		ug/Kg		97	56 - 130
2-Butanone (MEK)	ND		246	262		ug/Kg		107	41 - 150
n-Butylbenzene	ND		49.1	50.2		ug/Kg		102	60 - 145
sec-Butylbenzene	ND		49.1	47.6		ug/Kg		97	64 - 137
tert-Butylbenzene	ND		49.1	47.4		ug/Kg		97	63 - 134
Carbon disulfide	ND		49.1	64.5		ug/Kg		131	10 - 150
Carbon tetrachloride	ND		49.1	54.3		ug/Kg		111	54 - 130
Chlorobenzene	ND		49.1	50.0		ug/Kg		102	70 - 130
Chloroethane	ND		49.1	45.8		ug/Kg		93	61 - 130
Chloroform	ND		49.1	50.8		ug/Kg		103	67 - 130
Chloromethane	ND		49.1	45.0		ug/Kg		92	50 - 131
2-Chlorotoluene	ND		49.1	45.6		ug/Kg		93	70 - 130
4-Chlorotoluene	ND		49.1	46.3		ug/Kg		94	70 - 130
Chlorodibromomethane	ND		49.1	56.5		ug/Kg		115	60 - 141
1,2-Dichlorobenzene	ND		49.1	50.2		ug/Kg		102	70 - 130
1,3-Dichlorobenzene	ND		49.1	48.9		ug/Kg		99	70 - 130
1,4-Dichlorobenzene	ND		49.1	49.5		ug/Kg		101	70 - 130
1,3-Dichloropropane	ND		49.1	52.2		ug/Kg		106	70 - 130
1,1-Dichloropropene	ND		49.1	50.8		ug/Kg		103	67 - 130
1,2-Dibromo-3-Chloropropane	ND		49.1	54.9		ug/Kg		112	57 - 130
Ethylene Dibromide	ND		49.1	54.2		ug/Kg		110	66 - 135
Dibromomethane	ND		49.1	52.8		ug/Kg		107	65 - 131
Dichlorodifluoromethane	ND		49.1	38.3		ug/Kg		78	38 - 130
1,1-Dichloroethane	ND		49.1	51.9		ug/Kg		106	67 - 130
1,2-Dichloroethane	ND		49.1	55.2		ug/Kg		112	70 - 130
1,1-Dichloroethene	ND	*	49.1	60.4		ug/Kg		123	64 - 130
cis-1,2-Dichloroethene	ND		49.1	51.6		ug/Kg		105	68 - 131

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88216-17MS
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: DG-K8S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250320

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	ND		49.1	53.7		ug/Kg		109	70 - 130
1,2-Dichloropropane	ND		49.1	51.1		ug/Kg		104	65 - 133
cis-1,3-Dichloropropene	ND		49.1	53.4		ug/Kg		109	46 - 139
trans-1,3-Dichloropropene	ND		49.1	52.4		ug/Kg		107	55 - 131
Ethylbenzene	ND		49.1	48.2		ug/Kg		98	65 - 130
Hexachlorobutadiene	ND		49.1	50.1		ug/Kg		102	58 - 132
2-Hexanone	ND		246	266		ug/Kg		108	44 - 150
Isopropylbenzene	ND		49.1	50.0		ug/Kg		102	65 - 130
4-Isopropyltoluene	ND		49.1	49.3		ug/Kg		100	69 - 134
Methylene Chloride	ND		49.1	52.5		ug/Kg		107	63 - 130
4-Methyl-2-pentanone (MIBK)	ND		246	260		ug/Kg		106	51 - 140
Naphthalene	ND		49.1	50.3		ug/Kg		102	45 - 146
N-Propylbenzene	ND		49.1	46.7		ug/Kg		95	70 - 130
Styrene	ND		49.1	48.2		ug/Kg		98	58 - 135
1,1,1,2-Tetrachloroethane	ND		49.1	52.7		ug/Kg		107	64 - 133
1,1,2,2-Tetrachloroethane	ND		49.1	48.6		ug/Kg		99	70 - 131
Tetrachloroethene	ND		49.1	53.3		ug/Kg		109	67 - 130
Toluene	ND		49.1	48.4		ug/Kg		99	70 - 130
1,2,3-Trichlorobenzene	ND		49.1	51.7		ug/Kg		105	58 - 138
1,2,4-Trichlorobenzene	ND		49.1	53.1		ug/Kg		108	49 - 144
1,1,1-Trichloroethane	ND		49.1	52.8		ug/Kg		107	57 - 133
1,1,2-Trichloroethane	ND		49.1	53.0		ug/Kg		108	68 - 132
Trichloroethene	ND		49.1	51.9		ug/Kg		106	66 - 130
Trichlorofluoromethane	ND		49.1	53.5		ug/Kg		109	61 - 130
1,2,3-Trichloropropane	ND		49.1	51.1		ug/Kg		104	62 - 150
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1 *	49.1	66.5	F1	ug/Kg		135	52 - 130
1,2,4-Trimethylbenzene	ND		49.1	46.8		ug/Kg		95	64 - 140
1,3,5-Trimethylbenzene	ND		49.1	46.5		ug/Kg		95	67 - 134
Vinyl acetate	ND		49.1	47.1		ug/Kg		96	52 - 150
Vinyl chloride	ND		49.1	43.7		ug/Kg		89	62 - 130
m-Xylene & p-Xylene	ND		49.1	48.0		ug/Kg		98	70 - 130
o-Xylene	ND		49.1	48.8		ug/Kg		99	68 - 130
2,2-Dichloropropane	ND		49.1	51.3		ug/Kg		104	63 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*104*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: 720-88216-17MSD
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: DG-K8S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250320

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		48.9	52.7		ug/Kg		108	69 - 130	2	20
Acetone	ND		245	268		ug/Kg		110	37 - 150	3	20
Benzene	ND		48.9	48.1		ug/Kg		98	70 - 130	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88216-17MSD
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: DG-K8S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250320

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorobromomethane	ND		48.9	50.5		ug/Kg		103	64 - 135	2	20
Bromobenzene	ND		48.9	47.6		ug/Kg		97	70 - 130	2	20
Chlorobromomethane	ND		48.9	54.4		ug/Kg		111	65 - 130	1	20
Bromoform	ND		48.9	55.0		ug/Kg		112	58 - 132	3	20
Bromomethane	ND		48.9	46.1		ug/Kg		94	56 - 130	4	20
2-Butanone (MEK)	ND		245	250		ug/Kg		102	41 - 150	5	20
n-Butylbenzene	ND		48.9	48.9		ug/Kg		100	60 - 145	3	20
sec-Butylbenzene	ND		48.9	46.8		ug/Kg		96	64 - 137	2	20
tert-Butylbenzene	ND		48.9	46.7		ug/Kg		95	63 - 134	2	20
Carbon disulfide	ND		48.9	63.1		ug/Kg		129	10 - 150	2	20
Carbon tetrachloride	ND		48.9	53.1		ug/Kg		109	54 - 130	2	20
Chlorobenzene	ND		48.9	48.4		ug/Kg		99	70 - 130	3	20
Chloroethane	ND		48.9	43.9		ug/Kg		90	61 - 130	4	20
Chloroform	ND		48.9	49.4		ug/Kg		101	67 - 130	3	20
Chloromethane	ND		48.9	42.6		ug/Kg		87	50 - 131	5	20
2-Chlorotoluene	ND		48.9	45.2		ug/Kg		92	70 - 130	1	20
4-Chlorotoluene	ND		48.9	45.5		ug/Kg		93	70 - 130	2	20
Chlorodibromomethane	ND		48.9	54.4		ug/Kg		111	60 - 141	4	20
1,2-Dichlorobenzene	ND		48.9	48.8		ug/Kg		100	70 - 130	3	20
1,3-Dichlorobenzene	ND		48.9	47.4		ug/Kg		97	70 - 130	3	20
1,4-Dichlorobenzene	ND		48.9	48.2		ug/Kg		98	70 - 130	3	20
1,3-Dichloropropane	ND		48.9	51.0		ug/Kg		104	70 - 130	2	20
1,1-Dichloropropene	ND		48.9	50.3		ug/Kg		103	67 - 130	1	20
1,2-Dibromo-3-Chloropropane	ND		48.9	54.2		ug/Kg		111	57 - 130	1	20
Ethylene Dibromide	ND		48.9	52.8		ug/Kg		108	66 - 135	3	20
Dibromomethane	ND		48.9	51.5		ug/Kg		105	65 - 131	2	20
Dichlorodifluoromethane	ND		48.9	35.0		ug/Kg		71	38 - 130	9	20
1,1-Dichloroethane	ND		48.9	50.5		ug/Kg		103	67 - 130	3	20
1,2-Dichloroethane	ND		48.9	52.7		ug/Kg		108	70 - 130	5	20
1,1-Dichloroethene	ND	*	48.9	57.9		ug/Kg		118	64 - 130	4	20
cis-1,2-Dichloroethene	ND		48.9	49.6		ug/Kg		101	68 - 131	4	20
trans-1,2-Dichloroethene	ND		48.9	52.8		ug/Kg		108	70 - 130	2	20
1,2-Dichloropropane	ND		48.9	49.8		ug/Kg		102	65 - 133	3	20
cis-1,3-Dichloropropene	ND		48.9	51.8		ug/Kg		106	46 - 139	3	20
trans-1,3-Dichloropropene	ND		48.9	50.7		ug/Kg		104	55 - 131	3	20
Ethylbenzene	ND		48.9	47.1		ug/Kg		96	65 - 130	2	20
Hexachlorobutadiene	ND		48.9	47.3		ug/Kg		97	58 - 132	6	20
2-Hexanone	ND		245	254		ug/Kg		104	44 - 150	5	20
Isopropylbenzene	ND		48.9	48.5		ug/Kg		99	65 - 130	3	20
4-Isopropyltoluene	ND		48.9	48.5		ug/Kg		99	69 - 134	2	20
Methylene Chloride	ND		48.9	50.6		ug/Kg		103	63 - 130	4	20
4-Methyl-2-pentanone (MIBK)	ND		245	250		ug/Kg		102	51 - 140	4	20
Naphthalene	ND		48.9	49.3		ug/Kg		101	45 - 146	2	20
N-Propylbenzene	ND		48.9	46.3		ug/Kg		95	70 - 130	1	20
Styrene	ND		48.9	46.4		ug/Kg		95	58 - 135	4	20
1,1,1,2-Tetrachloroethane	ND		48.9	51.1		ug/Kg		104	64 - 133	3	20
1,1,2,2-Tetrachloroethane	ND		48.9	47.8		ug/Kg		98	70 - 131	2	20
Tetrachloroethene	ND		48.9	51.8		ug/Kg		106	67 - 130	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88216-17MSD
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: DG-K8S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250320

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	ND		48.9	47.3		ug/Kg		97	70 - 130	2	20
1,2,3-Trichlorobenzene	ND		48.9	49.9		ug/Kg		102	58 - 138	3	20
1,2,4-Trichlorobenzene	ND		48.9	50.6		ug/Kg		104	49 - 144	5	20
1,1,1-Trichloroethane	ND		48.9	51.8		ug/Kg		106	57 - 133	2	20
1,1,2-Trichloroethane	ND		48.9	51.6		ug/Kg		105	68 - 132	3	20
Trichloroethene	ND		48.9	50.8		ug/Kg		104	66 - 130	2	20
Trichlorofluoromethane	ND		48.9	50.2		ug/Kg		103	61 - 130	6	20
1,2,3-Trichloropropane	ND		48.9	50.4		ug/Kg		103	62 - 150	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1 *	48.9	67.9	F1	ug/Kg		139	52 - 130	2	20
1,2,4-Trimethylbenzene	ND		48.9	45.9		ug/Kg		94	64 - 140	2	20
1,3,5-Trimethylbenzene	ND		48.9	46.0		ug/Kg		94	67 - 134	1	20
Vinyl acetate	ND		48.9	42.2		ug/Kg		86	52 - 150	11	20
Vinyl chloride	ND		48.9	42.8		ug/Kg		87	62 - 130	2	20
m-Xylene & p-Xylene	ND		48.9	47.0		ug/Kg		96	70 - 130	2	20
o-Xylene	ND		48.9	47.4		ug/Kg		97	68 - 130	3	20
2,2-Dichloropropane	ND		48.9	51.7		ug/Kg		106	63 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*102*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: MB 720-250405/4
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 19:56	1
Acetone	ND		50	38	ug/Kg			08/28/18 19:56	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 19:56	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 19:56	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 19:56	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 19:56	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 19:56	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 19:56	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 19:56	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 19:56	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:56	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 19:56	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 19:56	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 19:56	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 19:56	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 19:56	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 19:56	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 19:56	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 19:56	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250405/4
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:56	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 19:56	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:56	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 19:56	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 19:56	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 19:56	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 19:56	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:56	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 19:56	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 19:56	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 19:56	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:56	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 19:56	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 19:56	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 19:56	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 19:56	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 19:56	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 19:56	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 19:56	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 19:56	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 19:56	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 19:56	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:56	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 19:56	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 19:56	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 19:56	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 19:56	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 19:56	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 19:56	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 19:56	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 19:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 19:56	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 19:56	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 19:56	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 19:56	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 19:56	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 19:56	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 19:56	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 19:56	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250405/4
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		45 - 131		08/28/18 19:56	1
1,2-Dichloroethane-d4 (Surr)	94		60 - 140		08/28/18 19:56	1
Toluene-d8 (Surr)	97		58 - 140		08/28/18 19:56	1

Lab Sample ID: LCS 720-250405/5
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	50.0		ug/Kg		100	70 - 144
Acetone	250	226		ug/Kg		90	30 - 162
Benzene	50.0	50.5		ug/Kg		101	70 - 130
Dichlorobromomethane	50.0	50.2		ug/Kg		100	70 - 140
Bromobenzene	50.0	50.3		ug/Kg		101	70 - 130
Chlorobromomethane	50.0	53.9		ug/Kg		108	70 - 130
Bromoform	50.0	52.8		ug/Kg		106	59 - 158
Bromomethane	50.0	53.2		ug/Kg		106	59 - 132
2-Butanone (MEK)	250	239		ug/Kg		96	59 - 159
n-Butylbenzene	50.0	51.2		ug/Kg		102	70 - 142
sec-Butylbenzene	50.0	49.9		ug/Kg		100	70 - 136
tert-Butylbenzene	50.0	49.5		ug/Kg		99	70 - 130
Carbon disulfide	50.0	69.8		ug/Kg		140	60 - 140
Carbon tetrachloride	50.0	55.1		ug/Kg		110	70 - 142
Chlorobenzene	50.0	51.1		ug/Kg		102	70 - 130
Chloroethane	50.0	49.5		ug/Kg		99	65 - 130
Chloroform	50.0	51.2		ug/Kg		102	77 - 127
Chloromethane	50.0	53.9		ug/Kg		108	55 - 140
2-Chlorotoluene	50.0	48.0		ug/Kg		96	70 - 138
4-Chlorotoluene	50.0	48.3		ug/Kg		97	70 - 136
Chlorodibromomethane	50.0	53.0		ug/Kg		106	70 - 146
1,2-Dichlorobenzene	50.0	50.7		ug/Kg		101	70 - 130
1,3-Dichlorobenzene	50.0	50.1		ug/Kg		100	70 - 131
1,4-Dichlorobenzene	50.0	50.3		ug/Kg		101	70 - 130
1,3-Dichloropropane	50.0	49.5		ug/Kg		99	70 - 140
1,1-Dichloropropene	50.0	52.1		ug/Kg		104	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	51.4		ug/Kg		103	60 - 145
Ethylene Dibromide	50.0	51.5		ug/Kg		103	70 - 140
Dibromomethane	50.0	49.6		ug/Kg		99	70 - 139
Dichlorodifluoromethane	50.0	57.8		ug/Kg		116	37 - 158
1,1-Dichloroethane	50.0	53.0		ug/Kg		106	70 - 130
1,2-Dichloroethane	50.0	51.6		ug/Kg		103	70 - 130
1,1-Dichloroethene	50.0	64.5	*	ug/Kg		129	74 - 122
cis-1,2-Dichloroethene	50.0	51.7		ug/Kg		103	70 - 138
trans-1,2-Dichloroethene	50.0	56.0		ug/Kg		112	67 - 130
1,2-Dichloropropane	50.0	51.2		ug/Kg		102	73 - 127
cis-1,3-Dichloropropene	50.0	52.9		ug/Kg		106	68 - 147
trans-1,3-Dichloropropene	50.0	50.1		ug/Kg		100	70 - 155
Ethylbenzene	50.0	49.7		ug/Kg		99	80 - 137

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250405/5
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobutadiene	50.0	52.5		ug/Kg		105	70 - 132
2-Hexanone	250	237		ug/Kg		95	62 - 158
Isopropylbenzene	50.0	51.4		ug/Kg		103	70 - 130
4-Isopropyltoluene	50.0	50.7		ug/Kg		101	70 - 133
Methylene Chloride	50.0	53.1		ug/Kg		106	70 - 134
4-Methyl-2-pentanone (MIBK)	250	235		ug/Kg		94	60 - 160
Naphthalene	50.0	49.1		ug/Kg		98	60 - 147
N-Propylbenzene	50.0	49.2		ug/Kg		98	70 - 130
Styrene	50.0	49.2		ug/Kg		98	70 - 130
1,1,1,2-Tetrachloroethane	50.0	52.7		ug/Kg		105	70 - 130
1,1,2,2-Tetrachloroethane	50.0	47.1		ug/Kg		94	70 - 146
Tetrachloroethene	50.0	54.4		ug/Kg		109	70 - 132
Toluene	50.0	51.0		ug/Kg		102	75 - 120
1,2,3-Trichlorobenzene	50.0	51.2		ug/Kg		102	60 - 140
1,2,4-Trichlorobenzene	50.0	52.2		ug/Kg		104	60 - 140
1,1,1-Trichloroethane	50.0	54.1		ug/Kg		108	70 - 130
1,1,2-Trichloroethane	50.0	50.3		ug/Kg		101	70 - 130
Trichloroethene	50.0	53.9		ug/Kg		108	70 - 133
Trichlorofluoromethane	50.0	55.7		ug/Kg		111	60 - 140
1,2,3-Trichloropropane	50.0	49.7		ug/Kg		99	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	69.7		ug/Kg		139	60 - 140
1,2,4-Trimethylbenzene	50.0	48.2		ug/Kg		96	70 - 130
1,3,5-Trimethylbenzene	50.0	48.9		ug/Kg		98	70 - 131
Vinyl acetate	50.0	47.6		ug/Kg		95	38 - 176
Vinyl chloride	50.0	51.3		ug/Kg		103	58 - 125
m-Xylene & p-Xylene	50.0	49.5		ug/Kg		99	70 - 146
o-Xylene	50.0	49.8		ug/Kg		100	70 - 140
2,2-Dichloropropane	50.0	51.9		ug/Kg		104	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Lab Sample ID: LCS 720-250405/7
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	920		ug/Kg		92	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250405/6
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	50.2		ug/Kg		100	70 - 144	0	20
Acetone	250	202		ug/Kg		81	30 - 162	11	30
Benzene	50.0	49.4		ug/Kg		99	70 - 130	2	20
Dichlorobromomethane	50.0	49.9		ug/Kg		100	70 - 140	0	20
Bromobenzene	50.0	48.4		ug/Kg		97	70 - 130	4	20
Chlorobromomethane	50.0	53.7		ug/Kg		107	70 - 130	0	20
Bromoform	50.0	52.4		ug/Kg		105	59 - 158	1	20
Bromomethane	50.0	52.2		ug/Kg		104	59 - 132	2	20
2-Butanone (MEK)	250	224		ug/Kg		90	59 - 159	6	20
n-Butylbenzene	50.0	52.3		ug/Kg		105	70 - 142	2	20
sec-Butylbenzene	50.0	49.3		ug/Kg		99	70 - 136	1	20
tert-Butylbenzene	50.0	48.8		ug/Kg		98	70 - 130	1	20
Carbon disulfide	50.0	68.3		ug/Kg		137	60 - 140	2	20
Carbon tetrachloride	50.0	54.3		ug/Kg		109	70 - 142	1	20
Chlorobenzene	50.0	50.7		ug/Kg		101	70 - 130	1	20
Chloroethane	50.0	48.2		ug/Kg		96	65 - 130	3	20
Chloroform	50.0	49.8		ug/Kg		100	77 - 127	3	20
Chloromethane	50.0	52.8		ug/Kg		106	55 - 140	2	20
2-Chlorotoluene	50.0	46.5		ug/Kg		93	70 - 138	3	20
4-Chlorotoluene	50.0	46.8		ug/Kg		94	70 - 136	3	20
Chlorodibromomethane	50.0	52.0		ug/Kg		104	70 - 146	2	20
1,2-Dichlorobenzene	50.0	50.1		ug/Kg		100	70 - 130	1	20
1,3-Dichlorobenzene	50.0	49.0		ug/Kg		98	70 - 131	2	20
1,4-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130	1	20
1,3-Dichloropropane	50.0	48.4		ug/Kg		97	70 - 140	2	20
1,1-Dichloropropene	50.0	52.0		ug/Kg		104	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	50.0	50.6		ug/Kg		101	60 - 145	2	20
Ethylene Dibromide	50.0	50.0		ug/Kg		100	70 - 140	3	20
Dibromomethane	50.0	49.4		ug/Kg		99	70 - 139	0	20
Dichlorodifluoromethane	50.0	58.2		ug/Kg		116	37 - 158	1	20
1,1-Dichloroethane	50.0	51.1		ug/Kg		102	70 - 130	4	20
1,2-Dichloroethane	50.0	50.1		ug/Kg		100	70 - 130	3	20
1,1-Dichloroethene	50.0	61.9	*	ug/Kg		124	74 - 122	4	20
cis-1,2-Dichloroethene	50.0	50.3		ug/Kg		101	70 - 138	3	20
trans-1,2-Dichloroethene	50.0	55.4		ug/Kg		111	67 - 130	1	20
1,2-Dichloropropane	50.0	49.7		ug/Kg		99	73 - 127	3	20
cis-1,3-Dichloropropene	50.0	52.1		ug/Kg		104	68 - 147	1	20
trans-1,3-Dichloropropene	50.0	49.1		ug/Kg		98	70 - 155	2	20
Ethylbenzene	50.0	49.1		ug/Kg		98	80 - 137	1	20
Hexachlorobutadiene	50.0	55.2		ug/Kg		110	70 - 132	5	20
2-Hexanone	250	231		ug/Kg		92	62 - 158	3	20
Isopropylbenzene	50.0	51.2		ug/Kg		102	70 - 130	0	20
4-Isopropyltoluene	50.0	50.9		ug/Kg		102	70 - 133	0	20
Methylene Chloride	50.0	51.6		ug/Kg		103	70 - 134	3	20
4-Methyl-2-pentanone (MIBK)	250	231		ug/Kg		92	60 - 160	2	20
Naphthalene	50.0	49.4		ug/Kg		99	60 - 147	0	20
N-Propylbenzene	50.0	48.2		ug/Kg		96	70 - 130	2	20
Styrene	50.0	48.5		ug/Kg		97	70 - 130	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250405/6
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			50.0	52.6		ug/Kg		105	70 - 130	0	20
1,1,2,2-Tetrachloroethane			50.0	45.7		ug/Kg		91	70 - 146	3	20
Tetrachloroethene			50.0	53.5		ug/Kg		107	70 - 132	2	20
Toluene			50.0	49.8		ug/Kg		100	75 - 120	2	20
1,2,3-Trichlorobenzene			50.0	52.8		ug/Kg		106	60 - 140	3	20
1,2,4-Trichlorobenzene			50.0	53.6		ug/Kg		107	60 - 140	3	20
1,1,1-Trichloroethane			50.0	53.3		ug/Kg		107	70 - 130	2	20
1,1,2-Trichloroethane			50.0	49.6		ug/Kg		99	70 - 130	1	20
Trichloroethene			50.0	53.0		ug/Kg		106	70 - 133	2	20
Trichlorofluoromethane			50.0	54.3		ug/Kg		109	60 - 140	3	20
1,2,3-Trichloropropane			50.0	47.4		ug/Kg		95	70 - 146	5	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	70.5	*	ug/Kg		141	60 - 140	1	20
1,2,4-Trimethylbenzene			50.0	47.3		ug/Kg		95	70 - 130	2	20
1,3,5-Trimethylbenzene			50.0	47.7		ug/Kg		95	70 - 131	3	20
Vinyl acetate			50.0	47.3		ug/Kg		95	38 - 176	1	20
Vinyl chloride			50.0	51.5		ug/Kg		103	58 - 125	1	20
m-Xylene & p-Xylene			50.0	48.9		ug/Kg		98	70 - 146	1	20
o-Xylene			50.0	49.5		ug/Kg		99	70 - 140	1	20
2,2-Dichloropropane			50.0	54.3		ug/Kg		109	70 - 162	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250405/8
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	876		ug/Kg		88	70 - 122	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: MB 720-250622/4
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/30/18 18:12	1
Acetone	ND		50	38	ug/Kg			08/30/18 18:12	1
Benzene	ND		5.0	0.65	ug/Kg			08/30/18 18:12	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/30/18 18:12	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250622/4
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	ND		5.0	0.79	ug/Kg			08/30/18 18:12	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/30/18 18:12	1
Bromoform	ND		5.0	2.0	ug/Kg			08/30/18 18:12	1
Bromomethane	ND		10	0.79	ug/Kg			08/30/18 18:12	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/30/18 18:12	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/30/18 18:12	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/30/18 18:12	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/30/18 18:12	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/30/18 18:12	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/30/18 18:12	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/30/18 18:12	1
Chloroethane	ND		10	0.56	ug/Kg			08/30/18 18:12	1
Chloroform	ND		5.0	0.66	ug/Kg			08/30/18 18:12	1
Chloromethane	ND		10	0.79	ug/Kg			08/30/18 18:12	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/30/18 18:12	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/30/18 18:12	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/30/18 18:12	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/30/18 18:12	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/30/18 18:12	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 18:12	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/30/18 18:12	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 18:12	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/30/18 18:12	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/30/18 18:12	1
Dibromomethane	ND		10	0.86	ug/Kg			08/30/18 18:12	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/30/18 18:12	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/30/18 18:12	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/30/18 18:12	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/30/18 18:12	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/30/18 18:12	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/30/18 18:12	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/30/18 18:12	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 18:12	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/30/18 18:12	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/30/18 18:12	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/30/18 18:12	1
2-Hexanone	ND		50	10	ug/Kg			08/30/18 18:12	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/30/18 18:12	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/30/18 18:12	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/30/18 18:12	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/30/18 18:12	1
Naphthalene	ND		10	1.5	ug/Kg			08/30/18 18:12	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/30/18 18:12	1
Styrene	ND		5.0	0.63	ug/Kg			08/30/18 18:12	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/30/18 18:12	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/30/18 18:12	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/30/18 18:12	1
Toluene	ND		5.0	0.71	ug/Kg			08/30/18 18:12	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250622/4
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/30/18 18:12	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 18:12	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/30/18 18:12	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/30/18 18:12	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/30/18 18:12	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/30/18 18:12	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/30/18 18:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/30/18 18:12	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/30/18 18:12	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/30/18 18:12	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/30/18 18:12	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/30/18 18:12	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/30/18 18:12	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/30/18 18:12	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/30/18 18:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*45 - 131*		*08/30/18 18:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*		*08/30/18 18:12*	*1*
Toluene-d8 (Surr)	*101*		*58 - 140*		*08/30/18 18:12*	*1*

Lab Sample ID: LCS 720-250622/5
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	51.5		ug/Kg		103	70 - 144
Acetone	250	200		ug/Kg		80	30 - 162
Benzene	50.0	53.2		ug/Kg		106	70 - 130
Dichlorobromomethane	50.0	51.7		ug/Kg		103	70 - 140
Bromobenzene	50.0	49.4		ug/Kg		99	70 - 130
Chlorobromomethane	50.0	51.8		ug/Kg		104	70 - 130
Bromoform	50.0	49.6		ug/Kg		99	59 - 158
Bromomethane	50.0	49.2		ug/Kg		98	59 - 132
2-Butanone (MEK)	250	217		ug/Kg		87	59 - 159
n-Butylbenzene	50.0	54.4		ug/Kg		109	70 - 142
sec-Butylbenzene	50.0	55.2		ug/Kg		110	70 - 136
tert-Butylbenzene	50.0	53.7		ug/Kg		107	70 - 130
Carbon disulfide	50.0	72.6	*	ug/Kg		145	60 - 140
Carbon tetrachloride	50.0	57.1		ug/Kg		114	70 - 142
Chlorobenzene	50.0	51.0		ug/Kg		102	70 - 130
Chloroethane	50.0	47.4		ug/Kg		95	65 - 130
Chloroform	50.0	52.8		ug/Kg		106	77 - 127
Chloromethane	50.0	47.2		ug/Kg		94	55 - 140
2-Chlorotoluene	50.0	53.1		ug/Kg		106	70 - 138
4-Chlorotoluene	50.0	53.3		ug/Kg		107	70 - 136
Chlorodibromomethane	50.0	50.8		ug/Kg		102	70 - 146

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250622/5
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130
1,3-Dichlorobenzene	50.0	50.9		ug/Kg		102	70 - 131
1,4-Dichlorobenzene	50.0	50.5		ug/Kg		101	70 - 130
1,3-Dichloropropane	50.0	48.7		ug/Kg		97	70 - 140
1,1-Dichloropropene	50.0	56.5		ug/Kg		113	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	48.0		ug/Kg		96	60 - 145
Ethylene Dibromide	50.0	49.6		ug/Kg		99	70 - 140
Dibromomethane	50.0	49.5		ug/Kg		99	70 - 139
Dichlorodifluoromethane	50.0	42.1		ug/Kg		84	37 - 158
1,1-Dichloroethane	50.0	55.6		ug/Kg		111	70 - 130
1,2-Dichloroethane	50.0	49.7		ug/Kg		99	70 - 130
1,1-Dichloroethene	50.0	63.6	*	ug/Kg		127	74 - 122
cis-1,2-Dichloroethene	50.0	54.6		ug/Kg		109	70 - 138
trans-1,2-Dichloroethene	50.0	58.7		ug/Kg		117	67 - 130
1,2-Dichloropropane	50.0	53.7		ug/Kg		107	73 - 127
cis-1,3-Dichloropropene	50.0	54.8		ug/Kg		110	68 - 147
trans-1,3-Dichloropropene	50.0	51.7		ug/Kg		103	70 - 155
Ethylbenzene	50.0	54.0		ug/Kg		108	80 - 137
Hexachlorobutadiene	50.0	50.4		ug/Kg		101	70 - 132
2-Hexanone	250	230		ug/Kg		92	62 - 158
Isopropylbenzene	50.0	53.0		ug/Kg		106	70 - 130
4-Isopropyltoluene	50.0	55.2		ug/Kg		110	70 - 133
Methylene Chloride	50.0	52.7		ug/Kg		105	70 - 134
4-Methyl-2-pentanone (MIBK)	250	234		ug/Kg		94	60 - 160
Naphthalene	50.0	46.8		ug/Kg		94	60 - 147
N-Propylbenzene	50.0	56.0		ug/Kg		112	70 - 130
Styrene	50.0	51.3		ug/Kg		103	70 - 130
1,1,1,2-Tetrachloroethane	50.0	51.8		ug/Kg		104	70 - 130
1,1,2,2-Tetrachloroethane	50.0	48.0		ug/Kg		96	70 - 146
Tetrachloroethene	50.0	53.2		ug/Kg		106	70 - 132
Toluene	50.0	52.0		ug/Kg		104	75 - 120
1,2,3-Trichlorobenzene	50.0	47.4		ug/Kg		95	60 - 140
1,2,4-Trichlorobenzene	50.0	49.0		ug/Kg		98	60 - 140
1,1,1-Trichloroethane	50.0	55.2		ug/Kg		110	70 - 130
1,1,2-Trichloroethane	50.0	50.3		ug/Kg		101	70 - 130
Trichloroethene	50.0	51.3		ug/Kg		103	70 - 133
Trichlorofluoromethane	50.0	53.6		ug/Kg		107	60 - 140
1,2,3-Trichloropropane	50.0	47.8		ug/Kg		96	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	68.5		ug/Kg		137	60 - 140
1,2,4-Trimethylbenzene	50.0	53.2		ug/Kg		106	70 - 130
1,3,5-Trimethylbenzene	50.0	53.8		ug/Kg		108	70 - 131
Vinyl acetate	50.0	48.2		ug/Kg		96	38 - 176
Vinyl chloride	50.0	48.4		ug/Kg		97	58 - 125
m-Xylene & p-Xylene	50.0	53.1		ug/Kg		106	70 - 146
o-Xylene	50.0	53.0		ug/Kg		106	70 - 140
2,2-Dichloropropane	50.0	58.1		ug/Kg		116	70 - 162

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250622/5
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCS 720-250622/7
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C4-C12			1000	1020		ug/Kg		102	70 - 122		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	*103*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*103*		*58 - 140*

Lab Sample ID: LCSD 720-250622/6
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether			50.0	51.0		ug/Kg		102	70 - 144	1	20
Acetone			250	192		ug/Kg		77	30 - 162	4	30
Benzene			50.0	53.0		ug/Kg		106	70 - 130	0	20
Dichlorobromomethane			50.0	51.5		ug/Kg		103	70 - 140	0	20
Bromobenzene			50.0	50.0		ug/Kg		100	70 - 130	1	20
Chlorobromomethane			50.0	51.4		ug/Kg		103	70 - 130	1	20
Bromoform			50.0	47.7		ug/Kg		95	59 - 158	4	20
Bromomethane			50.0	49.0		ug/Kg		98	59 - 132	0	20
2-Butanone (MEK)			250	211		ug/Kg		84	59 - 159	3	20
n-Butylbenzene			50.0	54.3		ug/Kg		109	70 - 142	0	20
sec-Butylbenzene			50.0	55.1		ug/Kg		110	70 - 136	0	20
tert-Butylbenzene			50.0	53.8		ug/Kg		108	70 - 130	0	20
Carbon disulfide			50.0	71.9	*	ug/Kg		144	60 - 140	1	20
Carbon tetrachloride			50.0	57.0		ug/Kg		114	70 - 142	0	20
Chlorobenzene			50.0	50.3		ug/Kg		101	70 - 130	1	20
Chloroethane			50.0	47.4		ug/Kg		95	65 - 130	0	20
Chloroform			50.0	53.2		ug/Kg		106	77 - 127	1	20
Chloromethane			50.0	47.0		ug/Kg		94	55 - 140	0	20
2-Chlorotoluene			50.0	53.0		ug/Kg		106	70 - 138	0	20
4-Chlorotoluene			50.0	53.5		ug/Kg		107	70 - 136	0	20
Chlorodibromomethane			50.0	50.0		ug/Kg		100	70 - 146	2	20
1,2-Dichlorobenzene			50.0	50.0		ug/Kg		100	70 - 130	1	20
1,3-Dichlorobenzene			50.0	51.2		ug/Kg		102	70 - 131	1	20
1,4-Dichlorobenzene			50.0	50.4		ug/Kg		101	70 - 130	0	20
1,3-Dichloropropane			50.0	48.0		ug/Kg		96	70 - 140	1	20
1,1-Dichloropropene			50.0	55.8		ug/Kg		112	70 - 130	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250622/6
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			50.0	47.4		ug/Kg		95	60 - 145	1	20
Ethylene Dibromide			50.0	48.9		ug/Kg		98	70 - 140	1	20
Dibromomethane			50.0	48.2		ug/Kg		96	70 - 139	3	20
Dichlorodifluoromethane			50.0	40.6		ug/Kg		81	37 - 158	4	20
1,1-Dichloroethane			50.0	55.5		ug/Kg		111	70 - 130	0	20
1,2-Dichloroethane			50.0	49.2		ug/Kg		98	70 - 130	1	20
1,1-Dichloroethene			50.0	63.0	*	ug/Kg		126	74 - 122	1	20
cis-1,2-Dichloroethene			50.0	54.1		ug/Kg		108	70 - 138	1	20
trans-1,2-Dichloroethene			50.0	58.7		ug/Kg		117	67 - 130	0	20
1,2-Dichloropropane			50.0	53.9		ug/Kg		108	73 - 127	0	20
cis-1,3-Dichloropropene			50.0	54.5		ug/Kg		109	68 - 147	0	20
trans-1,3-Dichloropropene			50.0	51.0		ug/Kg		102	70 - 155	1	20
Ethylbenzene			50.0	52.8		ug/Kg		106	80 - 137	2	20
Hexachlorobutadiene			50.0	50.6		ug/Kg		101	70 - 132	0	20
2-Hexanone			250	219		ug/Kg		88	62 - 158	5	20
Isopropylbenzene			50.0	51.5		ug/Kg		103	70 - 130	3	20
4-Isopropyltoluene			50.0	54.8		ug/Kg		110	70 - 133	1	20
Methylene Chloride			50.0	53.1		ug/Kg		106	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)			250	228		ug/Kg		91	60 - 160	3	20
Naphthalene			50.0	46.7		ug/Kg		93	60 - 147	0	20
N-Propylbenzene			50.0	55.6		ug/Kg		111	70 - 130	1	20
Styrene			50.0	50.7		ug/Kg		101	70 - 130	1	20
1,1,1,2-Tetrachloroethane			50.0	51.4		ug/Kg		103	70 - 130	1	20
1,1,2,2-Tetrachloroethane			50.0	47.1		ug/Kg		94	70 - 146	2	20
Tetrachloroethene			50.0	51.9		ug/Kg		104	70 - 132	2	20
Toluene			50.0	50.9		ug/Kg		102	75 - 120	2	20
1,2,3-Trichlorobenzene			50.0	48.3		ug/Kg		97	60 - 140	2	20
1,2,4-Trichlorobenzene			50.0	49.5		ug/Kg		99	60 - 140	1	20
1,1,1-Trichloroethane			50.0	55.0		ug/Kg		110	70 - 130	0	20
1,1,2-Trichloroethane			50.0	50.1		ug/Kg		100	70 - 130	0	20
Trichloroethene			50.0	50.8		ug/Kg		102	70 - 133	1	20
Trichlorofluoromethane			50.0	53.2		ug/Kg		106	60 - 140	1	20
1,2,3-Trichloropropane			50.0	47.6		ug/Kg		95	70 - 146	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	68.5		ug/Kg		137	60 - 140	0	20
1,2,4-Trimethylbenzene			50.0	53.5		ug/Kg		107	70 - 130	1	20
1,3,5-Trimethylbenzene			50.0	54.0		ug/Kg		108	70 - 131	0	20
Vinyl acetate			50.0	47.4		ug/Kg		95	38 - 176	2	20
Vinyl chloride			50.0	47.7		ug/Kg		95	58 - 125	1	20
m-Xylene & p-Xylene			50.0	52.1		ug/Kg		104	70 - 146	2	20
o-Xylene			50.0	51.9		ug/Kg		104	70 - 140	2	20
2,2-Dichloropropane			50.0	58.6		ug/Kg		117	70 - 162	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250622/8
Matrix: Solid
Analysis Batch: 250622

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1000		ug/Kg		100	70 - 122	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: MB 720-250644/4
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/31/18 07:18	1
Acetone	ND		50	38	ug/Kg			08/31/18 07:18	1
Benzene	ND		5.0	0.65	ug/Kg			08/31/18 07:18	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/31/18 07:18	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/31/18 07:18	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/31/18 07:18	1
Bromoform	ND		5.0	2.0	ug/Kg			08/31/18 07:18	1
Bromomethane	ND		10	0.79	ug/Kg			08/31/18 07:18	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/31/18 07:18	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/31/18 07:18	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/31/18 07:18	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/31/18 07:18	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/31/18 07:18	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/31/18 07:18	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/31/18 07:18	1
Chloroethane	ND		10	0.56	ug/Kg			08/31/18 07:18	1
Chloroform	ND		5.0	0.66	ug/Kg			08/31/18 07:18	1
Chloromethane	ND		10	0.79	ug/Kg			08/31/18 07:18	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/31/18 07:18	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/31/18 07:18	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/31/18 07:18	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/31/18 07:18	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/31/18 07:18	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/31/18 07:18	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/31/18 07:18	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/31/18 07:18	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/31/18 07:18	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/31/18 07:18	1
Dibromomethane	ND		10	0.86	ug/Kg			08/31/18 07:18	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/31/18 07:18	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/31/18 07:18	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/31/18 07:18	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/31/18 07:18	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/31/18 07:18	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/31/18 07:18	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250644/4
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/31/18 07:18	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/31/18 07:18	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/31/18 07:18	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/31/18 07:18	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/31/18 07:18	1
2-Hexanone	ND		50	10	ug/Kg			08/31/18 07:18	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/31/18 07:18	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/31/18 07:18	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/31/18 07:18	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/31/18 07:18	1
Naphthalene	ND		10	1.5	ug/Kg			08/31/18 07:18	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/31/18 07:18	1
Styrene	ND		5.0	0.63	ug/Kg			08/31/18 07:18	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/31/18 07:18	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/31/18 07:18	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/31/18 07:18	1
Toluene	ND		5.0	0.71	ug/Kg			08/31/18 07:18	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/31/18 07:18	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/31/18 07:18	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/31/18 07:18	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/31/18 07:18	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/31/18 07:18	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/31/18 07:18	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/31/18 07:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/31/18 07:18	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/31/18 07:18	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/31/18 07:18	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/31/18 07:18	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/31/18 07:18	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/31/18 07:18	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/31/18 07:18	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/31/18 07:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*45 - 131*		*08/31/18 07:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*60 - 140*		*08/31/18 07:18*	*1*
Toluene-d8 (Surr)	*96*		*58 - 140*		*08/31/18 07:18*	*1*

Lab Sample ID: LCS 720-250644/5
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	54.5		ug/Kg		109	70 - 144
Acetone	250	280		ug/Kg		112	30 - 162
Benzene	50.0	50.9		ug/Kg		102	70 - 130
Dichlorobromomethane	50.0	52.7		ug/Kg		105	70 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250644/5
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	50.0	49.4		ug/Kg		99	70 - 130
Chlorobromomethane	50.0	56.3		ug/Kg		113	70 - 130
Bromoform	50.0	58.4		ug/Kg		117	59 - 158
Bromomethane	50.0	48.8		ug/Kg		98	59 - 132
2-Butanone (MEK)	250	278		ug/Kg		111	59 - 159
n-Butylbenzene	50.0	53.3		ug/Kg		107	70 - 142
sec-Butylbenzene	50.0	50.1		ug/Kg		100	70 - 136
tert-Butylbenzene	50.0	49.7		ug/Kg		99	70 - 130
Carbon disulfide	50.0	68.5		ug/Kg		137	60 - 140
Carbon tetrachloride	50.0	59.3		ug/Kg		119	70 - 142
Chlorobenzene	50.0	51.7		ug/Kg		103	70 - 130
Chloroethane	50.0	46.2		ug/Kg		92	65 - 130
Chloroform	50.0	52.8		ug/Kg		106	77 - 127
Chloromethane	50.0	48.2		ug/Kg		96	55 - 140
2-Chlorotoluene	50.0	47.5		ug/Kg		95	70 - 138
4-Chlorotoluene	50.0	47.9		ug/Kg		96	70 - 136
Chlorodibromomethane	50.0	57.2		ug/Kg		114	70 - 146
1,2-Dichlorobenzene	50.0	51.6		ug/Kg		103	70 - 130
1,3-Dichlorobenzene	50.0	50.2		ug/Kg		100	70 - 131
1,4-Dichlorobenzene	50.0	50.9		ug/Kg		102	70 - 130
1,3-Dichloropropane	50.0	52.5		ug/Kg		105	70 - 140
1,1-Dichloropropene	50.0	54.7		ug/Kg		109	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	57.6		ug/Kg		115	60 - 145
Ethylene Dibromide	50.0	55.6		ug/Kg		111	70 - 140
Dibromomethane	50.0	53.7		ug/Kg		107	70 - 139
Dichlorodifluoromethane	50.0	42.1		ug/Kg		84	37 - 158
1,1-Dichloroethane	50.0	54.1		ug/Kg		108	70 - 130
1,2-Dichloroethane	50.0	56.4		ug/Kg		113	70 - 130
1,1-Dichloroethene	50.0	64.6	*	ug/Kg		129	74 - 122
cis-1,2-Dichloroethene	50.0	53.0		ug/Kg		106	70 - 138
trans-1,2-Dichloroethene	50.0	56.8		ug/Kg		114	67 - 130
1,2-Dichloropropane	50.0	51.7		ug/Kg		103	73 - 127
cis-1,3-Dichloropropene	50.0	54.4		ug/Kg		109	68 - 147
trans-1,3-Dichloropropene	50.0	53.3		ug/Kg		107	70 - 155
Ethylbenzene	50.0	50.7		ug/Kg		101	80 - 137
Hexachlorobutadiene	50.0	56.1		ug/Kg		112	70 - 132
2-Hexanone	250	288		ug/Kg		115	62 - 158
Isopropylbenzene	50.0	53.1		ug/Kg		106	70 - 130
4-Isopropyltoluene	50.0	51.7		ug/Kg		103	70 - 133
Methylene Chloride	50.0	52.6		ug/Kg		105	70 - 134
4-Methyl-2-pentanone (MIBK)	250	282		ug/Kg		113	60 - 160
Naphthalene	50.0	53.4		ug/Kg		107	60 - 147
N-Propylbenzene	50.0	48.9		ug/Kg		98	70 - 130
Styrene	50.0	49.9		ug/Kg		100	70 - 130
1,1,1,2-Tetrachloroethane	50.0	54.3		ug/Kg		109	70 - 130
1,1,2,2-Tetrachloroethane	50.0	49.0		ug/Kg		98	70 - 146
Tetrachloroethene	50.0	57.1		ug/Kg		114	70 - 132
Toluene	50.0	50.7		ug/Kg		101	75 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250644/5
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichlorobenzene	50.0	55.4		ug/Kg		111	60 - 140
1,2,4-Trichlorobenzene	50.0	55.6		ug/Kg		111	60 - 140
1,1,1-Trichloroethane	50.0	58.0		ug/Kg		116	70 - 130
1,1,2-Trichloroethane	50.0	53.6		ug/Kg		107	70 - 130
Trichloroethene	50.0	55.2		ug/Kg		110	70 - 133
Trichlorofluoromethane	50.0	56.1		ug/Kg		112	60 - 140
1,2,3-Trichloropropane	50.0	52.9		ug/Kg		106	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	74.5	*	ug/Kg		149	60 - 140
1,2,4-Trimethylbenzene	50.0	48.1		ug/Kg		96	70 - 130
1,3,5-Trimethylbenzene	50.0	48.5		ug/Kg		97	70 - 131
Vinyl acetate	50.0	52.1		ug/Kg		104	38 - 176
Vinyl chloride	50.0	46.0		ug/Kg		92	58 - 125
m-Xylene & p-Xylene	50.0	50.7		ug/Kg		101	70 - 146
o-Xylene	50.0	51.3		ug/Kg		103	70 - 140
2,2-Dichloropropane	50.0	57.5		ug/Kg		115	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCS 720-250644/7
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	981		ug/Kg		98	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250644/6
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	53.0		ug/Kg		106	70 - 144	3	20
Acetone	250	260		ug/Kg		104	30 - 162	7	30
Benzene	50.0	50.0		ug/Kg		100	70 - 130	2	20
Dichlorobromomethane	50.0	52.5		ug/Kg		105	70 - 140	0	20
Bromobenzene	50.0	49.3		ug/Kg		99	70 - 130	0	20
Chlorobromomethane	50.0	55.0		ug/Kg		110	70 - 130	2	20
Bromoform	50.0	57.3		ug/Kg		115	59 - 158	2	20
Bromomethane	50.0	48.9		ug/Kg		98	59 - 132	0	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250644/6
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Butanone (MEK)	250	266		ug/Kg		106	59 - 159	4	20
n-Butylbenzene	50.0	52.4		ug/Kg		105	70 - 142	2	20
sec-Butylbenzene	50.0	49.6		ug/Kg		99	70 - 136	1	20
tert-Butylbenzene	50.0	49.0		ug/Kg		98	70 - 130	1	20
Carbon disulfide	50.0	67.2		ug/Kg		134	60 - 140	2	20
Carbon tetrachloride	50.0	56.7		ug/Kg		113	70 - 142	5	20
Chlorobenzene	50.0	51.1		ug/Kg		102	70 - 130	1	20
Chloroethane	50.0	46.4		ug/Kg		93	65 - 130	0	20
Chloroform	50.0	51.5		ug/Kg		103	77 - 127	2	20
Chloromethane	50.0	47.0		ug/Kg		94	55 - 140	2	20
2-Chlorotoluene	50.0	47.3		ug/Kg		95	70 - 138	0	20
4-Chlorotoluene	50.0	47.9		ug/Kg		96	70 - 136	0	20
Chlorodibromomethane	50.0	55.6		ug/Kg		111	70 - 146	3	20
1,2-Dichlorobenzene	50.0	51.5		ug/Kg		103	70 - 130	0	20
1,3-Dichlorobenzene	50.0	49.9		ug/Kg		100	70 - 131	1	20
1,4-Dichlorobenzene	50.0	50.7		ug/Kg		101	70 - 130	0	20
1,3-Dichloropropane	50.0	51.5		ug/Kg		103	70 - 140	2	20
1,1-Dichloropropene	50.0	53.1		ug/Kg		106	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	50.0	57.1		ug/Kg		114	60 - 145	1	20
Ethylene Dibromide	50.0	53.9		ug/Kg		108	70 - 140	3	20
Dibromomethane	50.0	52.9		ug/Kg		106	70 - 139	2	20
Dichlorodifluoromethane	50.0	39.6		ug/Kg		79	37 - 158	6	20
1,1-Dichloroethane	50.0	52.2		ug/Kg		104	70 - 130	3	20
1,2-Dichloroethane	50.0	54.0		ug/Kg		108	70 - 130	4	20
1,1-Dichloroethene	50.0	62.4	*	ug/Kg		125	74 - 122	3	20
cis-1,2-Dichloroethene	50.0	52.1		ug/Kg		104	70 - 138	2	20
trans-1,2-Dichloroethene	50.0	56.1		ug/Kg		112	67 - 130	1	20
1,2-Dichloropropane	50.0	51.5		ug/Kg		103	73 - 127	0	20
cis-1,3-Dichloropropene	50.0	53.4		ug/Kg		107	68 - 147	2	20
trans-1,3-Dichloropropene	50.0	51.6		ug/Kg		103	70 - 155	3	20
Ethylbenzene	50.0	49.8		ug/Kg		100	80 - 137	2	20
Hexachlorobutadiene	50.0	56.2		ug/Kg		112	70 - 132	0	20
2-Hexanone	250	270		ug/Kg		108	62 - 158	7	20
Isopropylbenzene	50.0	51.8		ug/Kg		104	70 - 130	2	20
4-Isopropyltoluene	50.0	51.0		ug/Kg		102	70 - 133	1	20
Methylene Chloride	50.0	52.0		ug/Kg		104	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	268		ug/Kg		107	60 - 160	5	20
Naphthalene	50.0	53.5		ug/Kg		107	60 - 147	0	20
N-Propylbenzene	50.0	48.7		ug/Kg		97	70 - 130	0	20
Styrene	50.0	49.2		ug/Kg		98	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	53.4		ug/Kg		107	70 - 130	2	20
1,1,2,2-Tetrachloroethane	50.0	49.5		ug/Kg		99	70 - 146	1	20
Tetrachloroethene	50.0	55.0		ug/Kg		110	70 - 132	4	20
Toluene	50.0	50.0		ug/Kg		100	75 - 120	1	20
1,2,3-Trichlorobenzene	50.0	55.1		ug/Kg		110	60 - 140	0	20
1,2,4-Trichlorobenzene	50.0	56.0		ug/Kg		112	60 - 140	1	20
1,1,1-Trichloroethane	50.0	55.3		ug/Kg		111	70 - 130	5	20
1,1,2-Trichloroethane	50.0	52.2		ug/Kg		104	70 - 130	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250644/6
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichloroethene			50.0	53.9		ug/Kg		108	70 - 133	2	20
Trichlorofluoromethane			50.0	54.0		ug/Kg		108	60 - 140	4	20
1,2,3-Trichloropropane			50.0	51.9		ug/Kg		104	70 - 146	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	70.0		ug/Kg		140	60 - 140	6	20
1,2,4-Trimethylbenzene			50.0	48.1		ug/Kg		96	70 - 130	0	20
1,3,5-Trimethylbenzene			50.0	48.2		ug/Kg		96	70 - 131	1	20
Vinyl acetate			50.0	50.5		ug/Kg		101	38 - 176	3	20
Vinyl chloride			50.0	44.8		ug/Kg		90	58 - 125	3	20
m-Xylene & p-Xylene			50.0	49.4		ug/Kg		99	70 - 146	2	20
o-Xylene			50.0	50.0		ug/Kg		100	70 - 140	2	20
2,2-Dichloropropane			50.0	55.4		ug/Kg		111	70 - 162	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250644/8
Matrix: Solid
Analysis Batch: 250644

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	974		ug/Kg		97	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 720-250190/1-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250190

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Anthracene	ND		5.0	2.0	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Chrysene	2.59	J	5.0	1.4	ug/Kg		08/24/18 15:31	08/28/18 19:42	1

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 720-250190/1-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250190

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Fluorene	ND		5.0	2.2	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Pyrene	ND		5.0	1.7	ug/Kg		08/24/18 15:31	08/28/18 19:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*98*		*33 - 120*	*08/24/18 15:31*	*08/28/18 19:42*	*1*
Terphenyl-d14	*96*		*35 - 146*	*08/24/18 15:31*	*08/28/18 19:42*	*1*

Lab Sample ID: LCS 720-250190/2-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250190

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	470		ug/Kg		71	46 - 110
Acenaphthene	667	484		ug/Kg		73	46 - 106
Acenaphthylene	667	457		ug/Kg		69	46 - 108
Anthracene	667	562		ug/Kg		84	55 - 103
Benzo[a]anthracene	667	658		ug/Kg		99	54 - 110
Benzo[a]pyrene	667	619		ug/Kg		93	62 - 111
Benzo[b]fluoranthene	667	596		ug/Kg		89	60 - 109
Benzo[g,h,i]perylene	667	625		ug/Kg		94	52 - 114
Benzo[k]fluoranthene	667	583		ug/Kg		87	58 - 109
Chrysene	667	671		ug/Kg		101	54 - 108
Dibenz(a,h)anthracene	667	635		ug/Kg		95	58 - 112
Fluoranthene	667	576		ug/Kg		86	59 - 109
Fluorene	667	505		ug/Kg		76	52 - 106
Indeno[1,2,3-cd]pyrene	667	644		ug/Kg		97	55 - 120
Naphthalene	667	443		ug/Kg		67	49 - 110
Phenanthrene	667	554		ug/Kg		83	57 - 110
Pyrene	667	689		ug/Kg		103	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*86*		*33 - 120*
Terphenyl-d14	*106*		*35 - 146*

Lab Sample ID: 720-88216-9 MS
Matrix: Solid
Analysis Batch: 250501

Client Sample ID: DG-G6S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250190

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	28	J	666	417		ug/Kg		59	46 - 110
Acenaphthene	ND		666	472		ug/Kg		71	46 - 106
Acenaphthylene	11	J	666	504		ug/Kg		74	46 - 108
Anthracene	20		666	528		ug/Kg		76	55 - 103

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88216-9 MS
Matrix: Solid
Analysis Batch: 250501

Client Sample ID: DG-G6S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250190

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	50		666	602		ug/Kg		83	54 - 110
Benzo[a]pyrene	75		666	571		ug/Kg		74	62 - 111
Benzo[b]fluoranthene	100		666	595		ug/Kg		74	60 - 109
Benzo[g,h,i]perylene	96		666	499		ug/Kg		60	52 - 114
Benzo[k]fluoranthene	42		666	537		ug/Kg		74	58 - 109
Chrysene	72	B	666	569		ug/Kg		75	54 - 108
Dibenz(a,h)anthracene	16	J	666	555		ug/Kg		81	58 - 112
Fluoranthene	96		666	546		ug/Kg		68	59 - 109
Fluorene	ND		666	510		ug/Kg		77	52 - 106
Indeno[1,2,3-cd]pyrene	51		666	560		ug/Kg		77	55 - 120
Naphthalene	29		666	406		ug/Kg		57	49 - 110
Phenanthrene	71		666	524		ug/Kg		68	57 - 110
Pyrene	110		666	591		ug/Kg		72	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*33 - 120*
Terphenyl-d14	*86*		*35 - 146*

Lab Sample ID: 720-88216-9 MSD
Matrix: Solid
Analysis Batch: 250501

Client Sample ID: DG-G6S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250190

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	28	J	628	430		ug/Kg		64	46 - 110	3	35
Acenaphthene	ND		628	477		ug/Kg		76	46 - 106	1	35
Acenaphthylene	11	J	628	503		ug/Kg		78	46 - 108	0	35
Anthracene	20		628	513		ug/Kg		78	55 - 103	3	35
Benzo[a]anthracene	50		628	573		ug/Kg		83	54 - 110	5	35
Benzo[a]pyrene	75		628	555		ug/Kg		76	62 - 111	3	35
Benzo[b]fluoranthene	100		628	551		ug/Kg		71	60 - 109	8	35
Benzo[g,h,i]perylene	96		628	478		ug/Kg		61	52 - 114	4	35
Benzo[k]fluoranthene	42		628	518		ug/Kg		76	58 - 109	4	35
Chrysene	72	B	628	546		ug/Kg		75	54 - 108	4	35
Dibenz(a,h)anthracene	16	J	628	532		ug/Kg		82	58 - 112	4	35
Fluoranthene	96		628	530		ug/Kg		69	59 - 109	3	35
Fluorene	ND		628	513		ug/Kg		82	52 - 106	1	35
Indeno[1,2,3-cd]pyrene	51		628	536		ug/Kg		77	55 - 120	4	35
Naphthalene	29		628	430		ug/Kg		64	49 - 110	6	35
Phenanthrene	71		628	516		ug/Kg		71	57 - 110	2	35
Pyrene	110		628	571		ug/Kg		73	50 - 120	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*74*		*33 - 120*
Terphenyl-d14	*88*		*35 - 146*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 720-250290/1-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250290

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Anthracene	ND		5.0	2.0	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Chrysene	ND		5.0	1.4	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Fluoranthene	1.69	J	5.0	1.4	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Fluorene	ND		5.0	2.2	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Pyrene	1.85	J	5.0	1.7	ug/Kg		08/27/18 12:37	08/28/18 18:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*33 - 120*	*08/27/18 12:37*	*08/28/18 18:55*	*1*
Terphenyl-d14	*95*		*35 - 146*	*08/27/18 12:37*	*08/28/18 18:55*	*1*

Lab Sample ID: LCS 720-250290/2-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250290

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	508		ug/Kg		76	46 - 110
Acenaphthene	667	529		ug/Kg		79	46 - 106
Acenaphthylene	667	519		ug/Kg		78	46 - 108
Anthracene	667	543		ug/Kg		81	55 - 103
Benzo[a]anthracene	667	650		ug/Kg		98	54 - 110
Benzo[a]pyrene	667	601		ug/Kg		90	62 - 111
Benzo[b]fluoranthene	667	581		ug/Kg		87	60 - 109
Benzo[g,h,i]perylene	667	611		ug/Kg		92	52 - 114
Benzo[k]fluoranthene	667	576		ug/Kg		86	58 - 109
Chrysene	667	644		ug/Kg		97	54 - 108
Dibenz(a,h)anthracene	667	622		ug/Kg		93	58 - 112
Fluoranthene	667	544		ug/Kg		82	59 - 109
Fluorene	667	539		ug/Kg		81	52 - 106
Indeno[1,2,3-cd]pyrene	667	634		ug/Kg		95	55 - 120
Naphthalene	667	489		ug/Kg		73	49 - 110
Phenanthrene	667	542		ug/Kg		81	57 - 110
Pyrene	667	672		ug/Kg		101	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*99*		*33 - 120*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 720-250290/2-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250290

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	*105*		*35 - 146*

Lab Sample ID: 720-88216-17MS
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: DG-K8S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250290

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	ND		657	415		ug/Kg		63	46 - 110
Acenaphthene	ND		657	479		ug/Kg		73	46 - 106
Acenaphthylene	ND		657	465		ug/Kg		71	46 - 108
Anthracene	2.3	J	657	526		ug/Kg		80	55 - 103
Benzo[a]anthracene	ND		657	585		ug/Kg		89	54 - 110
Benzo[a]pyrene	4.2	J	657	583		ug/Kg		88	62 - 111
Benzo[b]fluoranthene	4.6	J	657	592		ug/Kg		89	60 - 109
Benzo[g,h,i]perylene	7.4		657	523		ug/Kg		78	52 - 114
Benzo[k]fluoranthene	2.6	J	657	558		ug/Kg		84	58 - 109
Chrysene	3.4	J	657	584		ug/Kg		88	54 - 108
Dibenz(a,h)anthracene	ND		657	549		ug/Kg		84	58 - 112
Fluoranthene	4.6	J B	657	570		ug/Kg		86	59 - 109
Fluorene	ND		657	512		ug/Kg		78	52 - 106
Indeno[1,2,3-cd]pyrene	ND		657	549		ug/Kg		83	55 - 120
Naphthalene	ND		657	409		ug/Kg		62	49 - 110
Phenanthrene	5.9		657	539		ug/Kg		81	57 - 110
Pyrene	6.3	B	657	600		ug/Kg		90	50 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl	*66*		*33 - 120*
Terphenyl-d14	*91*		*35 - 146*

Lab Sample ID: 720-88216-17MSD
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: DG-K8S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250290

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	ND		658	442		ug/Kg		67	46 - 110	6	35
Acenaphthene	ND		658	501		ug/Kg		76	46 - 106	4	35
Acenaphthylene	ND		658	494		ug/Kg		75	46 - 108	6	35
Anthracene	2.3	J	658	538		ug/Kg		81	55 - 103	2	35
Benzo[a]anthracene	ND		658	640		ug/Kg		97	54 - 110	9	35
Benzo[a]pyrene	4.2	J	658	599		ug/Kg		90	62 - 111	3	35
Benzo[b]fluoranthene	4.6	J	658	629		ug/Kg		95	60 - 109	6	35
Benzo[g,h,i]perylene	7.4		658	475		ug/Kg		71	52 - 114	10	35
Benzo[k]fluoranthene	2.6	J	658	569		ug/Kg		86	58 - 109	2	35
Chrysene	3.4	J	658	614		ug/Kg		93	54 - 108	5	35
Dibenz(a,h)anthracene	ND		658	516		ug/Kg		78	58 - 112	6	35
Fluoranthene	4.6	J B	658	559		ug/Kg		84	59 - 109	2	35
Fluorene	ND		658	531		ug/Kg		81	52 - 106	4	35
Indeno[1,2,3-cd]pyrene	ND		658	518		ug/Kg		79	55 - 120	6	35

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88216-17MSD
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: DG-K8S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250290

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	ND		658	437		ug/Kg		66	49 - 110	7	35
Phenanthrene	5.9		658	548		ug/Kg		82	57 - 110	2	35
Pyrene	6.3	B	658	638		ug/Kg		96	50 - 120	6	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*82*		*33 - 120*
Terphenyl-d14	*96*		*35 - 146*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-250263/1-A
Matrix: Solid
Analysis Batch: 250252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250263

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1390	J	2000	750	ug/Kg		08/27/18 08:59	08/27/18 22:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*106*		*40 - 130*	*08/27/18 08:59*	*08/27/18 22:55*	*1*

Lab Sample ID: LCS 720-250263/2-A
Matrix: Solid
Analysis Batch: 250252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250263

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	167000	164000		ug/Kg		98	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*91*		*40 - 130*

Lab Sample ID: 720-88216-17MS
Matrix: Solid
Analysis Batch: 250257

Client Sample ID: DG-K8S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250263

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	6600	B	165000	158000		ug/Kg		92	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*112*		*40 - 130*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 720-88216-17MSD — **Client Sample ID: DG-K8S-MS/MDS**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250257 — **Prep Batch: 250263**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	6600	B	165000	161000		ug/Kg		94	50 - 150	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*105*		*40 - 130*

Lab Sample ID: MB 720-250358/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250458 — **Prep Batch: 250358**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/28/18 08:21	08/29/18 15:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*82*		*40 - 130*	*08/28/18 08:21*	*08/29/18 15:52*	*1*

Lab Sample ID: LCS 720-250358/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250459 — **Prep Batch: 250358**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			167000	140000		ug/Kg		84	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*94*		*40 - 130*

Lab Sample ID: 720-88216-9 MS — **Client Sample ID: DG-G6S-MS/MDS**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250459 — **Prep Batch: 250358**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	83000		158000	165000		ug/Kg		52	50 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*55*		*40 - 130*

Lab Sample ID: 720-88216-9 MSD — **Client Sample ID: DG-G6S-MS/MDS**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250459 — **Prep Batch: 250358**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	83000		158000	162000		ug/Kg		50	50 - 150	2	30

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 720-88216-9 MSD
Matrix: Solid
Analysis Batch: 250459

Client Sample ID: DG-G6S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250358

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*65*		*40 - 130*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-250160/1-A
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250160

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Aldrin	ND		2.0	0.50	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Endrin	ND		2.0	0.46	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Toxaphene	ND		40	6.8	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/24/18 11:26	08/28/18 05:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*85*		*21 - 136*	*08/24/18 11:26*	*08/28/18 05:07*	*1*
Tetrachloro-m-xylene	*85*		*21 - 145*	*08/24/18 11:26*	*08/28/18 05:07*	*1*

Lab Sample ID: LCS 720-250160/2-A
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250160

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	13.9		ug/Kg		84	75 - 128
4,4'-DDE	16.7	13.7		ug/Kg		82	76 - 126
4,4'-DDT	16.7	13.7		ug/Kg		82	63 - 127
Aldrin	16.7	12.8		ug/Kg		77	65 - 120
alpha-BHC	16.7	12.5		ug/Kg		75	46 - 122
beta-BHC	16.7	16.3		ug/Kg		98	78 - 136

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-250160/2-A
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250160

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-Chlordane	16.7	14.5		ug/Kg		87	70 - 120
delta-BHC	16.7	12.7		ug/Kg		76	43 - 125
Dieldrin	16.7	13.8		ug/Kg		83	72 - 120
Endosulfan I	16.7	14.8		ug/Kg		89	62 - 120
Endosulfan II	16.7	15.3		ug/Kg		92	65 - 120
Endosulfan sulfate	16.7	14.7		ug/Kg		88	72 - 121
Endrin	16.7	14.9		ug/Kg		89	68 - 120
Endrin aldehyde	16.7	14.9		ug/Kg		89	68 - 120
Endrin ketone	16.7	15.2		ug/Kg		91	75 - 136
gamma-BHC (Lindane)	16.7	14.1		ug/Kg		85	72 - 120
Heptachlor	16.7	14.1		ug/Kg		85	69 - 120
Heptachlor epoxide	16.7	14.5		ug/Kg		87	68 - 120
Methoxychlor	16.7	15.3		ug/Kg		92	71 - 132
trans-Chlordane	16.7	13.8		ug/Kg		83	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*89*		*21 - 136*
Tetrachloro-m-xylene	*86*		*21 - 145*

Lab Sample ID: 720-88216-17MS
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: DG-K8S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250160

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		16.6	14.3		ug/Kg		86	40 - 120
4,4'-DDE	ND		16.6	13.9		ug/Kg		83	40 - 120
4,4'-DDT	ND		16.6	14.0		ug/Kg		84	17 - 144
Aldrin	ND		16.6	13.5		ug/Kg		81	53 - 120
alpha-BHC	ND		16.6	12.5		ug/Kg		75	40 - 120
beta-BHC	ND	F1	16.6	17.0		ug/Kg		102	40 - 120
cis-Chlordane	ND		16.6	14.8		ug/Kg		89	40 - 120
delta-BHC	ND		16.6	13.3		ug/Kg		80	40 - 120
Dieldrin	ND		16.6	14.1		ug/Kg		85	46 - 130
Endosulfan I	ND		16.6	15.1		ug/Kg		91	40 - 120
Endosulfan II	ND		16.6	15.6		ug/Kg		94	40 - 120
Endosulfan sulfate	ND		16.6	14.7		ug/Kg		88	40 - 120
Endrin	ND		16.6	15.1		ug/Kg		91	32 - 143
Endrin aldehyde	ND		16.6	14.9		ug/Kg		90	40 - 120
Endrin ketone	ND		16.6	15.1		ug/Kg		91	40 - 120
gamma-BHC (Lindane)	ND		16.6	14.0		ug/Kg		84	58 - 120
Heptachlor	ND		16.6	14.1		ug/Kg		85	52 - 120
Heptachlor epoxide	ND		16.6	14.9		ug/Kg		90	40 - 120
Methoxychlor	ND		16.6	15.6		ug/Kg		94	40 - 120
trans-Chlordane	ND		16.6	14.2		ug/Kg		86	40 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*92*		*21 - 136*

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88216-17MS
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: DG-K8S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250160

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	*82*		*21 - 145*

Lab Sample ID: 720-88216-17MSD
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: DG-K8S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250160

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		16.0	14.4		ug/Kg		90	40 - 120	1	20
4,4'-DDE	ND		16.0	13.9		ug/Kg		87	40 - 120	0	20
4,4'-DDT	ND		16.0	14.1		ug/Kg		88	17 - 144	0	20
Aldrin	ND		16.0	13.3		ug/Kg		83	53 - 120	1	20
alpha-BHC	ND		16.0	12.3		ug/Kg		77	40 - 120	2	20
beta-BHC	ND	F1	16.0	16.6		ug/Kg		103	40 - 120	3	20
cis-Chlordane	ND		16.0	14.7		ug/Kg		92	40 - 120	1	20
delta-BHC	ND		16.0	13.0		ug/Kg		81	40 - 120	2	20
Dieldrin	ND		16.0	14.2		ug/Kg		89	46 - 130	1	20
Endosulfan I	ND		16.0	15.0		ug/Kg		93	40 - 120	0	20
Endosulfan II	ND		16.0	15.4		ug/Kg		96	40 - 120	1	30
Endosulfan sulfate	ND		16.0	15.1		ug/Kg		94	40 - 120	3	20
Endrin	ND		16.0	15.1		ug/Kg		94	32 - 143	0	20
Endrin aldehyde	ND		16.0	14.4		ug/Kg		90	40 - 120	4	20
Endrin ketone	ND		16.0	15.9		ug/Kg		99	40 - 120	5	20
gamma-BHC (Lindane)	ND		16.0	13.5		ug/Kg		84	58 - 120	4	20
Heptachlor	ND		16.0	14.0		ug/Kg		87	52 - 120	1	20
Heptachlor epoxide	ND		16.0	14.7		ug/Kg		92	40 - 120	1	20
Methoxychlor	ND		16.0	16.2		ug/Kg		101	40 - 120	4	20
trans-Chlordane	ND		16.0	14.2		ug/Kg		88	40 - 120	0	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	*93*		*21 - 136*
Tetrachloro-m-xylene	*83*		*21 - 145*

Lab Sample ID: MB 720-250393/1-A
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250393

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Aldrin	ND		2.0	0.50	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/28/18 13:36	08/30/18 23:31	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 720-250393/1-A
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250393

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan II	ND		2.0	0.49	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endrin	ND		2.0	0.46	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Toxaphene	ND		40	6.8	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/28/18 13:36	08/30/18 23:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*98*		*21 - 136*	*08/28/18 13:36*	*08/30/18 23:31*	*1*
Tetrachloro-m-xylene	*84*		*21 - 145*	*08/28/18 13:36*	*08/30/18 23:31*	*1*

Lab Sample ID: LCS 720-250393/2-A
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	16.2		ug/Kg		97	75 - 128
4,4'-DDE	16.7	15.4		ug/Kg		92	76 - 126
4,4'-DDT	16.7	14.2		ug/Kg		85	63 - 127
Aldrin	16.7	13.7		ug/Kg		82	65 - 120
alpha-BHC	16.7	11.2		ug/Kg		67	46 - 122
beta-BHC	16.7	16.6		ug/Kg		99	78 - 136
cis-Chlordane	16.7	15.0		ug/Kg		90	70 - 120
delta-BHC	16.7	13.6		ug/Kg		81	43 - 125
Dieldrin	16.7	15.0		ug/Kg		90	72 - 120
Endosulfan I	16.7	15.3		ug/Kg		92	62 - 120
Endosulfan II	16.7	15.6		ug/Kg		94	65 - 120
Endosulfan sulfate	16.7	15.0		ug/Kg		90	72 - 121
Endrin	16.7	15.7		ug/Kg		94	68 - 120
Endrin aldehyde	16.7	16.7		ug/Kg		100	68 - 120
Endrin ketone	16.7	15.5		ug/Kg		93	75 - 136
gamma-BHC (Lindane)	16.7	14.6		ug/Kg		88	72 - 120
Heptachlor	16.7	15.1		ug/Kg		91	69 - 120
Heptachlor epoxide	16.7	15.5		ug/Kg		93	68 - 120
Methoxychlor	16.7	15.9		ug/Kg		96	71 - 132
trans-Chlordane	16.7	15.1		ug/Kg		91	68 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*95*		*21 - 136*
Tetrachloro-m-xylene	*84*		*21 - 145*

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88216-9 MS
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: DG-G6S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250393

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.90	J p	15.9	13.9		ug/Kg		82	40 - 120
4,4'-DDE	0.76	J	15.9	13.9		ug/Kg		82	40 - 120
4,4'-DDT	ND		15.9	14.2		ug/Kg		89	17 - 144
Aldrin	ND		15.9	12.2		ug/Kg		77	53 - 120
alpha-BHC	ND		15.9	10.4		ug/Kg		65	40 - 120
beta-BHC	ND		15.9	15.2		ug/Kg		95	40 - 120
cis-Chlordane	ND		15.9	12.8		ug/Kg		80	40 - 120
delta-BHC	ND		15.9	12.0		ug/Kg		75	40 - 120
Dieldrin	ND		15.9	13.6		ug/Kg		85	46 - 130
Endosulfan I	ND		15.9	13.2		ug/Kg		83	40 - 120
Endosulfan II	ND		15.9	13.4		ug/Kg		84	40 - 120
Endosulfan sulfate	ND	F2	15.9	14.3		ug/Kg		90	40 - 120
Endrin	ND		15.9	14.7		ug/Kg		92	32 - 143
Endrin aldehyde	ND		15.9	12.9		ug/Kg		81	40 - 120
Endrin ketone	ND		15.9	13.5		ug/Kg		84	40 - 120
gamma-BHC (Lindane)	ND		15.9	13.0		ug/Kg		82	58 - 120
Heptachlor	ND		15.9	13.2		ug/Kg		83	52 - 120
Heptachlor epoxide	ND		15.9	13.1		ug/Kg		82	40 - 120
Methoxychlor	ND		15.9	15.2		ug/Kg		95	40 - 120
trans-Chlordane	ND		15.9	13.1		ug/Kg		82	40 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*90*		*21 - 136*
Tetrachloro-m-xylene	*76*		*21 - 145*

Lab Sample ID: 720-88216-9 MSD
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: DG-G6S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250393

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	0.90	J p	15.9	15.8		ug/Kg		94	40 - 120	13	20
4,4'-DDE	0.76	J	15.9	15.7		ug/Kg		94	40 - 120	12	20
4,4'-DDT	ND		15.9	15.9		ug/Kg		100	17 - 144	12	20
Aldrin	ND		15.9	13.8		ug/Kg		87	53 - 120	12	20
alpha-BHC	ND		15.9	11.8		ug/Kg		74	40 - 120	12	20
beta-BHC	ND		15.9	17.0		ug/Kg		107	40 - 120	11	20
cis-Chlordane	ND		15.9	14.5		ug/Kg		91	40 - 120	12	20
delta-BHC	ND		15.9	13.7		ug/Kg		86	40 - 120	13	20
Dieldrin	ND		15.9	15.3		ug/Kg		96	46 - 130	12	20
Endosulfan I	ND		15.9	14.9		ug/Kg		93	40 - 120	12	20
Endosulfan II	ND		15.9	15.3		ug/Kg		96	40 - 120	13	30
Endosulfan sulfate	ND	F2	15.9	16.5		ug/Kg		104	40 - 120	15	20
Endrin	ND		15.9	16.7		ug/Kg		105	32 - 143	12	20
Endrin aldehyde	ND		15.9	14.3		ug/Kg		90	40 - 120	10	20
Endrin ketone	ND		15.9	15.2		ug/Kg		96	40 - 120	12	20
gamma-BHC (Lindane)	ND		15.9	14.9		ug/Kg		93	58 - 120	14	20
Heptachlor	ND		15.9	15.1		ug/Kg		95	52 - 120	13	20
Heptachlor epoxide	ND		15.9	14.9		ug/Kg		93	40 - 120	13	20

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88216-9 MSD
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: DG-G6S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250393

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methoxychlor	ND		15.9	16.2		ug/Kg		102	40 - 120	7	20
trans-Chlordane	ND		15.9	14.8		ug/Kg		93	40 - 120	12	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*100*		*21 - 136*
Tetrachloro-m-xylene	*82*		*21 - 145*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-342652/21-A
Matrix: Solid
Analysis Batch: 342862

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 342652

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/27/18 11:05	08/29/18 02:00	1
Aroclor-1221	ND		50	24	ug/Kg		08/27/18 11:05	08/29/18 02:00	1
Aroclor-1232	ND		50	23	ug/Kg		08/27/18 11:05	08/29/18 02:00	1
Aroclor-1242	ND		50	19	ug/Kg		08/27/18 11:05	08/29/18 02:00	1
Aroclor-1248	ND		50	24	ug/Kg		08/27/18 11:05	08/29/18 02:00	1
Aroclor-1254	ND		50	23	ug/Kg		08/27/18 11:05	08/29/18 02:00	1
Aroclor-1260	ND		50	22	ug/Kg		08/27/18 11:05	08/29/18 02:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*14 - 128*	*08/27/18 11:05*	*08/29/18 02:00*	*1*
DCB Decachlorobiphenyl	*95*		*10 - 132*	*08/27/18 11:05*	*08/29/18 02:00*	*1*

Lab Sample ID: LCS 240-342652/22-A
Matrix: Solid
Analysis Batch: 342862

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 342652

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			1000	628		ug/Kg		63	47 - 120		
Aroclor-1260			1000	700		ug/Kg		70	46 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*71*		*14 - 128*
DCB Decachlorobiphenyl	*86*		*10 - 132*

Lab Sample ID: 720-88218-F-20-B MS
Matrix: Solid
Analysis Batch: 342862

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 342652

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016	ND		1030	867		ug/Kg		84	31 - 120		
Aroclor-1260	ND		1030	986		ug/Kg		95	21 - 122		

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 720-88218-F-20-B MS
Matrix: Solid
Analysis Batch: 342862

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 342652

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	96		14 - 128
DCB Decachlorobiphenyl	126		10 - 132

Lab Sample ID: 720-88218-F-20-C MSD
Matrix: Solid
Analysis Batch: 342862

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 342652

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		1020	851		ug/Kg		83	31 - 120	2	30
Aroclor-1260	ND		1020	959		ug/Kg		94	21 - 122	3	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	97		14 - 128
DCB Decachlorobiphenyl	112		10 - 132

Lab Sample ID: MB 240-343154/9-A
Matrix: Solid
Analysis Batch: 343339

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 343154

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/30/18 06:23	08/31/18 13:26	1
Aroclor-1221	ND		50	24	ug/Kg		08/30/18 06:23	08/31/18 13:26	1
Aroclor-1232	ND		50	23	ug/Kg		08/30/18 06:23	08/31/18 13:26	1
Aroclor-1242	ND		50	19	ug/Kg		08/30/18 06:23	08/31/18 13:26	1
Aroclor-1248	ND		50	24	ug/Kg		08/30/18 06:23	08/31/18 13:26	1
Aroclor-1254	ND		50	23	ug/Kg		08/30/18 06:23	08/31/18 13:26	1
Aroclor-1260	ND		50	22	ug/Kg		08/30/18 06:23	08/31/18 13:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	85		14 - 128	08/30/18 06:23	08/31/18 13:26	1
DCB Decachlorobiphenyl	84		10 - 132	08/30/18 06:23	08/31/18 13:26	1

Lab Sample ID: MB 240-343154/9-A
Matrix: Solid
Analysis Batch: 343336

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 343154

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/30/18 06:23	08/31/18 13:54	1
Aroclor-1221	ND		50	24	ug/Kg		08/30/18 06:23	08/31/18 13:54	1
Aroclor-1232	ND		50	23	ug/Kg		08/30/18 06:23	08/31/18 13:54	1
Aroclor-1242	ND		50	19	ug/Kg		08/30/18 06:23	08/31/18 13:54	1
Aroclor-1248	ND		50	24	ug/Kg		08/30/18 06:23	08/31/18 13:54	1
Aroclor-1254	ND		50	23	ug/Kg		08/30/18 06:23	08/31/18 13:54	1
Aroclor-1260	ND		50	22	ug/Kg		08/30/18 06:23	08/31/18 13:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	71		14 - 128	08/30/18 06:23	08/31/18 13:54	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 240-343154/9-A
Matrix: Solid
Analysis Batch: 343336

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 343154

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	76		10 - 132	08/30/18 06:23	08/31/18 13:54	1

Lab Sample ID: LCS 240-343154/10-A
Matrix: Solid
Analysis Batch: 343339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 343154

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			1000	620		ug/Kg		62	47 - 120		
Aroclor-1260			1000	621		ug/Kg		62	46 - 120		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	59		14 - 128
DCB Decachlorobiphenyl	56		10 - 132

Lab Sample ID: 720-88216-9 MS
Matrix: Solid
Analysis Batch: 343336

Client Sample ID: DG-G6S-MS/MDS
Prep Type: Total/NA
Prep Batch: 343154

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016	ND		1040	720		ug/Kg		69	31 - 120		
Aroclor-1260	ND		1040	777		ug/Kg		75	21 - 122		

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	79		14 - 128
DCB Decachlorobiphenyl	77		10 - 132

Lab Sample ID: 720-88216-9 MSD
Matrix: Solid
Analysis Batch: 343336

Client Sample ID: DG-G6S-MS/MDS
Prep Type: Total/NA
Prep Batch: 343154

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		1030	632		ug/Kg		61	31 - 120	13	30
Aroclor-1260	ND		1030	718		ug/Kg		69	21 - 122	8	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	70		14 - 128
DCB Decachlorobiphenyl	67		10 - 132

Lab Sample ID: 720-88216-17MS
Matrix: Solid
Analysis Batch: 343336

Client Sample ID: DG-K8S-MS/MDS
Prep Type: Total/NA
Prep Batch: 343154

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016	ND		990	668		ug/Kg		67	31 - 120		
Aroclor-1260	ND		990	775		ug/Kg		78	21 - 122		

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 720-88216-17MS
Matrix: Solid
Analysis Batch: 343336

Client Sample ID: DG-K8S-MS/MDS
Prep Type: Total/NA
Prep Batch: 343154

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*79*		*14 - 128*
DCB Decachlorobiphenyl	*85*		*10 - 132*

Lab Sample ID: 720-88216-17MSD
Matrix: Solid
Analysis Batch: 343336

Client Sample ID: DG-K8S-MS/MDS
Prep Type: Total/NA
Prep Batch: 343154

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		979	638		ug/Kg		65	31 - 120	9	30
Aroclor-1260	ND		979	775		ug/Kg		79	21 - 122	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*78*		*14 - 128*
DCB Decachlorobiphenyl	*85*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250235/1-A
Matrix: Solid
Analysis Batch: 250353

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250235

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Arsenic	ND		1.0	0.085	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Barium	0.0875	J	0.50	0.071	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Beryllium	ND		0.10	0.033	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Cadmium	ND		0.13	0.012	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Chromium	ND		0.50	0.053	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Cobalt	ND		0.20	0.020	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Copper	ND		1.5	0.71	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Lead	ND		0.50	0.11	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Nickel	ND		0.50	0.051	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Selenium	ND		1.0	0.15	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Silver	ND		0.25	0.051	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Thallium	ND		0.50	0.15	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Vanadium	ND		0.50	0.068	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Zinc	ND		1.5	0.64	mg/Kg		08/25/18 12:57	08/27/18 20:53	1

Lab Sample ID: LCS 720-250235/2-A
Matrix: Solid
Analysis Batch: 250353

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250235

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	46.8		mg/Kg		94	80 - 120
Arsenic	50.0	46.8		mg/Kg		94	80 - 120
Barium	50.0	54.4		mg/Kg		109	80 - 120
Beryllium	50.0	52.6		mg/Kg		105	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-250235/2-A
Matrix: Solid
Analysis Batch: 250353

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250235

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	50.0	47.3		mg/Kg		95	80 - 120
Chromium	50.0	46.4		mg/Kg		93	80 - 120
Cobalt	50.0	48.5		mg/Kg		97	80 - 120
Copper	50.0	47.3		mg/Kg		95	80 - 120
Lead	50.0	48.0		mg/Kg		96	80 - 120
Molybdenum	50.0	48.2		mg/Kg		96	80 - 120
Nickel	50.0	47.6		mg/Kg		95	80 - 120
Selenium	50.0	46.0		mg/Kg		92	80 - 120
Silver	25.0	24.6		mg/Kg		98	80 - 120
Thallium	50.0	48.2		mg/Kg		96	80 - 120
Vanadium	50.0	48.5		mg/Kg		97	80 - 120
Zinc	50.0	47.6		mg/Kg		95	80 - 120

Lab Sample ID: 720-88197-A-1-B MS
Matrix: Solid
Analysis Batch: 250353

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250235

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND	F1	31.4	10.7	F1	mg/Kg		34	75 - 125
Arsenic	5.6		31.4	39.6		mg/Kg		108	75 - 125
Barium	190	B	31.4	273	4	mg/Kg		265	75 - 125
Beryllium	0.37		31.4	36.3		mg/Kg		114	75 - 125
Cadmium	0.12	J	31.4	32.8		mg/Kg		104	75 - 125
Chromium	39	F1	31.4	79.3	F1	mg/Kg		127	75 - 125
Cobalt	12	F1 F2	31.4	42.8		mg/Kg		99	75 - 125
Copper	20	F1	31.4	56.9		mg/Kg		118	75 - 125
Lead	6.6		31.4	39.6		mg/Kg		105	75 - 125
Molybdenum	0.20	J	31.4	28.8		mg/Kg		91	75 - 125
Nickel	110	F1	31.4	85.8	F1	mg/Kg		-79	75 - 125
Selenium	ND		31.4	31.0		mg/Kg		99	75 - 125
Silver	ND		15.7	18.6		mg/Kg		118	75 - 125
Thallium	0.50	J	31.4	31.6		mg/Kg		99	75 - 125
Vanadium	31	F1	31.4	69.7		mg/Kg		122	75 - 125
Zinc	41		31.4	80.2		mg/Kg		123	75 - 125

Lab Sample ID: 720-88197-A-1-C MSD
Matrix: Solid
Analysis Batch: 250353

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250235

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND	F1	31.4	10.7	F1	mg/Kg		34	75 - 125	0	20
Arsenic	5.6		31.4	40.4		mg/Kg		111	75 - 125	2	20
Barium	190	B	31.4	282	4	mg/Kg		294	75 - 125	3	20
Beryllium	0.37		31.4	39.5		mg/Kg		124	75 - 125	8	20
Cadmium	0.12	J	31.4	34.5		mg/Kg		109	75 - 125	5	20
Chromium	39	F1	31.4	77.6		mg/Kg		122	75 - 125	2	20
Cobalt	12	F1 F2	31.4	60.6	F1 F2	mg/Kg		156	75 - 125	34	20
Copper	20	F1	31.4	62.5	F1	mg/Kg		136	75 - 125	9	20
Lead	6.6		31.4	41.3		mg/Kg		110	75 - 125	4	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88197-A-1-C MSD
Matrix: Solid
Analysis Batch: 250353

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250235

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Molybdenum	0.20	J	31.4	31.2		mg/Kg		98	75 - 125	8	20
Nickel	110	F1	31.4	95.1	F1	mg/Kg		-49	75 - 125	10	20
Selenium	ND		31.4	33.1		mg/Kg		105	75 - 125	7	20
Silver	ND		15.7	19.4		mg/Kg		124	75 - 125	4	20
Thallium	0.50	J	31.4	33.4		mg/Kg		105	75 - 125	5	20
Vanadium	31	F1	31.4	71.9	F1	mg/Kg		129	75 - 125	3	20
Zinc	41		31.4	80.9		mg/Kg		125	75 - 125	1	20

Lab Sample ID: MB 720-250242/1-A
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250242

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Arsenic	0.0855	J	1.0	0.085	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Barium	ND		0.50	0.071	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Beryllium	ND		0.10	0.033	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Cadmium	ND		0.13	0.012	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Chromium	ND		0.50	0.053	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Cobalt	ND		0.20	0.020	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Copper	ND		1.5	0.71	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Lead	ND		0.50	0.11	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Nickel	ND		0.50	0.051	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Selenium	ND		1.0	0.15	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Silver	ND		0.25	0.051	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Thallium	ND		0.50	0.15	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Vanadium	ND		0.50	0.068	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Zinc	ND		1.5	0.64	mg/Kg		08/25/18 14:28	08/27/18 18:31	1

Lab Sample ID: LCS 720-250242/2-A
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	48.2		mg/Kg		96	80 - 120
Arsenic	50.0	48.3		mg/Kg		97	80 - 120
Barium	50.0	52.4		mg/Kg		105	80 - 120
Beryllium	50.0	50.9		mg/Kg		102	80 - 120
Cadmium	50.0	48.4		mg/Kg		97	80 - 120
Chromium	50.0	47.6		mg/Kg		95	80 - 120
Cobalt	50.0	50.2		mg/Kg		100	80 - 120
Copper	50.0	48.6		mg/Kg		97	80 - 120
Lead	50.0	49.3		mg/Kg		99	80 - 120
Molybdenum	50.0	49.5		mg/Kg		99	80 - 120
Nickel	50.0	48.5		mg/Kg		97	80 - 120
Selenium	50.0	47.5		mg/Kg		95	80 - 120
Silver	25.0	26.4		mg/Kg		106	80 - 120
Thallium	50.0	49.6		mg/Kg		99	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-250242/2-A
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	50.0	49.7		mg/Kg		99	80 - 120
Zinc	50.0	49.1		mg/Kg		98	80 - 120

Lab Sample ID: 720-88217-A-4-A MS
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250242

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.80	J F1	38.8	12.4	F1	mg/Kg		30	75 - 125
Arsenic	2.1	J B	38.8	41.2		mg/Kg		101	75 - 125
Barium	83	F1	38.8	135	F1	mg/Kg		133	75 - 125
Beryllium	0.12	J	38.8	44.1		mg/Kg		113	75 - 125
Cadmium	ND		38.8	39.4		mg/Kg		102	75 - 125
Chromium	96		38.8	139		mg/Kg		112	75 - 125
Cobalt	30		38.8	73.1		mg/Kg		112	75 - 125
Copper	45	F1	38.8	97.5	F1	mg/Kg		135	75 - 125
Lead	2.7		38.8	41.1		mg/Kg		99	75 - 125
Molybdenum	0.22	J	38.8	33.9		mg/Kg		87	75 - 125
Nickel	68		38.8	110		mg/Kg		110	75 - 125
Selenium	ND		38.8	34.6		mg/Kg		89	75 - 125
Silver	ND	F1	19.4	24.4	F1	mg/Kg		126	75 - 125
Thallium	1.6		38.8	39.2		mg/Kg		97	75 - 125
Vanadium	100	F1	38.8	163	F1	mg/Kg		154	75 - 125
Zinc	68		38.8	114		mg/Kg		119	75 - 125

Lab Sample ID: 720-88217-A-4-B MSD
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250242

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.80	J F1	38.2	11.0	F1	mg/Kg		27	75 - 125	12	20
Arsenic	2.1	J B	38.2	41.6		mg/Kg		103	75 - 125	1	20
Barium	83	F1	38.2	153	F1	mg/Kg		183	75 - 125	13	20
Beryllium	0.12	J	38.2	44.7		mg/Kg		117	75 - 125	1	20
Cadmium	ND		38.2	39.5		mg/Kg		104	75 - 125	0	20
Chromium	96		38.2	142		mg/Kg		122	75 - 125	2	20
Cobalt	30		38.2	70.5		mg/Kg		107	75 - 125	4	20
Copper	45	F1	38.2	92.8		mg/Kg		125	75 - 125	5	20
Lead	2.7		38.2	41.2		mg/Kg		101	75 - 125	0	20
Molybdenum	0.22	J	38.2	34.9		mg/Kg		91	75 - 125	3	20
Nickel	68		38.2	110		mg/Kg		111	75 - 125	0	20
Selenium	ND		38.2	35.5		mg/Kg		93	75 - 125	3	20
Silver	ND	F1	19.1	24.6	F1	mg/Kg		129	75 - 125	1	20
Thallium	1.6		38.2	38.7		mg/Kg		97	75 - 125	1	20
Vanadium	100	F1	38.2	160	F1	mg/Kg		148	75 - 125	2	20
Zinc	68		38.2	109		mg/Kg		108	75 - 125	5	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250292/1-A
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250292

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Arsenic	ND		1.0	0.085	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Barium	ND		0.50	0.071	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Beryllium	ND		0.10	0.033	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Cadmium	ND		0.13	0.012	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Chromium	ND		0.50	0.053	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Cobalt	ND		0.20	0.020	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Copper	ND		1.5	0.71	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Lead	ND		0.50	0.11	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Nickel	ND		0.50	0.051	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Selenium	ND		1.0	0.15	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Silver	ND		0.25	0.051	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Thallium	ND		0.50	0.15	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Vanadium	ND		0.50	0.068	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Zinc	ND		1.5	0.64	mg/Kg		08/27/18 12:41	08/29/18 09:26	1

Lab Sample ID: LCS 720-250292/2-A
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250292

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	45.2		mg/Kg		90	80 - 120
Arsenic	50.0	44.9		mg/Kg		90	80 - 120
Barium	50.0	47.6		mg/Kg		95	80 - 120
Beryllium	50.0	47.8		mg/Kg		96	80 - 120
Cadmium	50.0	45.7		mg/Kg		91	80 - 120
Chromium	50.0	46.1		mg/Kg		92	80 - 120
Cobalt	50.0	46.1		mg/Kg		92	80 - 120
Copper	50.0	46.4		mg/Kg		93	80 - 120
Lead	50.0	46.2		mg/Kg		92	80 - 120
Molybdenum	50.0	46.2		mg/Kg		92	80 - 120
Nickel	50.0	46.6		mg/Kg		93	80 - 120
Selenium	50.0	43.9		mg/Kg		88	80 - 120
Silver	25.0	22.7		mg/Kg		91	80 - 120
Thallium	50.0	46.5		mg/Kg		93	80 - 120
Vanadium	50.0	46.1		mg/Kg		92	80 - 120
Zinc	50.0	45.3		mg/Kg		91	80 - 120

Lab Sample ID: 720-88216-9 MS
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: DG-G6S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250292

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND	F1	45.5	12.0	F1	mg/Kg		26	75 - 125
Arsenic	1.2	J	45.5	51.7		mg/Kg		111	75 - 125
Barium	42	F1	45.5	93.3		mg/Kg		114	75 - 125
Beryllium	ND	F1	45.5	55.7		mg/Kg		123	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88216-9 MS
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: DG-G6S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250292

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	ND		45.5	50.6		mg/Kg		111	75 - 125
Chromium	11		45.5	62.1		mg/Kg		112	75 - 125
Cobalt	8.2		45.5	58.2		mg/Kg		110	75 - 125
Copper	120	F1	45.5	162		mg/Kg		81	75 - 125
Lead	6.9		45.5	56.0		mg/Kg		108	75 - 125
Molybdenum	ND		45.5	49.3		mg/Kg		108	75 - 125
Nickel	5.0		45.5	54.6		mg/Kg		109	75 - 125
Selenium	ND		45.5	49.4		mg/Kg		109	75 - 125
Silver	ND	F1	22.7	27.5		mg/Kg		121	75 - 125
Thallium	0.83	J	45.5	49.7		mg/Kg		108	75 - 125
Vanadium	81	F1	45.5	134		mg/Kg		116	75 - 125
Zinc	32		45.5	82.5		mg/Kg		111	75 - 125

Lab Sample ID: 720-88216-9 MSD
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: DG-G6S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250292

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND	F1	45.0	11.2	F1	mg/Kg		25	75 - 125	6	20
Arsenic	1.2	J	45.0	53.6		mg/Kg		116	75 - 125	4	20
Barium	42	F1	45.0	105	F1	mg/Kg		140	75 - 125	12	20
Beryllium	ND	F1	45.0	58.2	F1	mg/Kg		129	75 - 125	4	20
Cadmium	ND		45.0	51.4		mg/Kg		114	75 - 125	2	20
Chromium	11		45.0	67.6		mg/Kg		125	75 - 125	8	20
Cobalt	8.2		45.0	60.4		mg/Kg		116	75 - 125	4	20
Copper	120	F1	45.0	186	F1	mg/Kg		136	75 - 125	14	20
Lead	6.9		45.0	58.6		mg/Kg		115	75 - 125	4	20
Molybdenum	ND		45.0	49.9		mg/Kg		111	75 - 125	1	20
Nickel	5.0		45.0	56.1		mg/Kg		113	75 - 125	3	20
Selenium	ND		45.0	51.4		mg/Kg		114	75 - 125	4	20
Silver	ND	F1	22.5	29.3	F1	mg/Kg		130	75 - 125	6	20
Thallium	0.83	J	45.0	50.5		mg/Kg		110	75 - 125	2	20
Vanadium	81	F1	45.0	156	F1	mg/Kg		167	75 - 125	16	20
Zinc	32		45.0	87.9		mg/Kg		124	75 - 125	6	20

Lab Sample ID: MB 720-250310/1-A
Matrix: Solid
Analysis Batch: 250437

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250310

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Arsenic	ND		1.0	0.085	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Barium	ND		0.50	0.071	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Beryllium	ND		0.10	0.033	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Cadmium	ND		0.13	0.012	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Chromium	ND		0.50	0.053	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Cobalt	ND		0.20	0.020	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Copper	ND		1.5	0.71	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Lead	ND		0.50	0.11	mg/Kg		08/27/18 14:52	08/28/18 15:49	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250310/1-A
Matrix: Solid
Analysis Batch: 250437

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250310

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.50	0.064	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Nickel	ND		0.50	0.051	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Selenium	ND		1.0	0.15	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Silver	ND		0.25	0.051	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Thallium	ND		0.50	0.15	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Vanadium	ND		0.50	0.068	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Zinc	ND		1.5	0.64	mg/Kg		08/27/18 14:52	08/28/18 15:49	1

Lab Sample ID: LCS 720-250310/2-A
Matrix: Solid
Analysis Batch: 250437

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250310

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	45.0		mg/Kg		90	80 - 120
Arsenic	50.0	44.9		mg/Kg		90	80 - 120
Barium	50.0	46.6		mg/Kg		93	80 - 120
Beryllium	50.0	46.9		mg/Kg		94	80 - 120
Cadmium	50.0	45.8		mg/Kg		92	80 - 120
Chromium	50.0	45.9		mg/Kg		92	80 - 120
Cobalt	50.0	46.5		mg/Kg		93	80 - 120
Copper	50.0	46.7		mg/Kg		93	80 - 120
Lead	50.0	46.4		mg/Kg		93	80 - 120
Molybdenum	50.0	46.3		mg/Kg		93	80 - 120
Nickel	50.0	46.4		mg/Kg		93	80 - 120
Selenium	50.0	44.1		mg/Kg		88	80 - 120
Silver	25.0	23.0		mg/Kg		92	80 - 120
Thallium	50.0	46.7		mg/Kg		93	80 - 120
Vanadium	50.0	46.4		mg/Kg		93	80 - 120
Zinc	50.0	45.5		mg/Kg		91	80 - 120

Lab Sample ID: 720-88235-A-1-D MS
Matrix: Solid
Analysis Batch: 250437

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250310

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.9	F1	47.6	13.4	F1	mg/Kg		24	75 - 125
Arsenic	4.2		47.6	56.2		mg/Kg		109	75 - 125
Barium	44	F1	47.6	110	F1	mg/Kg		139	75 - 125
Beryllium	ND		47.6	55.3		mg/Kg		116	75 - 125
Cadmium	0.54		47.6	51.5		mg/Kg		107	75 - 125
Chromium	19		47.6	77.5		mg/Kg		123	75 - 125
Cobalt	12		47.6	65.9		mg/Kg		113	75 - 125
Copper	150	F1	47.6	232	F1	mg/Kg		177	75 - 125
Lead	140	F1	47.6	214	F1	mg/Kg		147	75 - 125
Molybdenum	1.5	J	47.6	50.9		mg/Kg		104	75 - 125
Nickel	15		47.6	63.6		mg/Kg		102	75 - 125
Selenium	ND		47.6	51.4		mg/Kg		108	75 - 125
Silver	0.66	J	23.8	28.1		mg/Kg		115	75 - 125
Thallium	1.4	J	47.6	49.8		mg/Kg		102	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88235-A-1-D MS
Matrix: Solid
Analysis Batch: 250437

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250310

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	88	F1	47.6	161	F1	mg/Kg		151	75 - 125
Zinc	120	F1	47.6	208	F1	mg/Kg		175	75 - 125

Lab Sample ID: 720-88235-A-1-E MSD
Matrix: Solid
Analysis Batch: 250437

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250310

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.9	F1	48.1	13.0	F1	mg/Kg		23	75 - 125	3	20
Arsenic	4.2		48.1	56.4		mg/Kg		109	75 - 125	0	20
Barium	44	F1	48.1	107	F1	mg/Kg		133	75 - 125	2	20
Beryllium	ND		48.1	56.2		mg/Kg		117	75 - 125	2	20
Cadmium	0.54		48.1	51.5		mg/Kg		106	75 - 125	0	20
Chromium	19		48.1	72.8		mg/Kg		112	75 - 125	6	20
Cobalt	12		48.1	66.4		mg/Kg		113	75 - 125	1	20
Copper	150	F1	48.1	233	F1	mg/Kg		178	75 - 125	0	20
Lead	140	F1	48.1	207	F1	mg/Kg		132	75 - 125	3	20
Molybdenum	1.5	J	48.1	50.5		mg/Kg		102	75 - 125	1	20
Nickel	15		48.1	63.9		mg/Kg		101	75 - 125	0	20
Selenium	ND		48.1	50.9		mg/Kg		106	75 - 125	1	20
Silver	0.66	J	24.0	28.7		mg/Kg		117	75 - 125	2	20
Thallium	1.4	J	48.1	49.9		mg/Kg		101	75 - 125	0	20
Vanadium	88	F1	48.1	170	F1	mg/Kg		169	75 - 125	6	20
Zinc	120	F1	48.1	202	F1	mg/Kg		162	75 - 125	3	20

Lab Sample ID: MB 720-250365/1-A
Matrix: Solid
Analysis Batch: 250585

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250365

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.105	J	0.50	0.083	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Arsenic	ND		1.0	0.085	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Barium	0.0888	J	0.50	0.071	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Beryllium	ND		0.10	0.033	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Cadmium	ND		0.13	0.012	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Chromium	ND		0.50	0.053	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Cobalt	ND		0.20	0.020	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Copper	ND		1.5	0.71	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Lead	ND		0.50	0.11	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Nickel	ND		0.50	0.051	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Selenium	ND		1.0	0.15	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Silver	ND		0.25	0.051	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Thallium	ND		0.50	0.15	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Vanadium	ND		0.50	0.068	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Zinc	ND		1.5	0.64	mg/Kg		08/28/18 10:26	08/29/18 20:06	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-250365/2-A
Matrix: Solid
Analysis Batch: 250585

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250365

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.1		mg/Kg		94	80 - 120
Arsenic	50.0	47.7		mg/Kg		95	80 - 120
Barium	50.0	49.3		mg/Kg		99	80 - 120
Beryllium	50.0	48.6		mg/Kg		97	80 - 120
Cadmium	50.0	48.2		mg/Kg		96	80 - 120
Chromium	50.0	48.2		mg/Kg		96	80 - 120
Cobalt	50.0	49.6		mg/Kg		99	80 - 120
Copper	50.0	47.8		mg/Kg		96	80 - 120
Lead	50.0	49.1		mg/Kg		98	80 - 120
Molybdenum	50.0	48.6		mg/Kg		97	80 - 120
Nickel	50.0	48.4		mg/Kg		97	80 - 120
Selenium	50.0	46.1		mg/Kg		92	80 - 120
Silver	25.0	24.5		mg/Kg		98	80 - 120
Thallium	50.0	48.5		mg/Kg		97	80 - 120
Vanadium	50.0	48.4		mg/Kg		97	80 - 120
Zinc	50.0	48.6		mg/Kg		97	80 - 120

Lab Sample ID: 720-88216-17MS
Matrix: Solid
Analysis Batch: 250585

Client Sample ID: DG-K8S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250365

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.85	J B F1	45.5	12.2	F1	mg/Kg		25	75 - 125
Arsenic	2.0	J	45.5	43.5		mg/Kg		91	75 - 125
Barium	55	B	45.5	105		mg/Kg		109	75 - 125
Beryllium	ND		45.5	43.8		mg/Kg		96	75 - 125
Cadmium	0.064	J	45.5	43.5		mg/Kg		96	75 - 125
Chromium	63		45.5	115		mg/Kg		114	75 - 125
Cobalt	13		45.5	58.8		mg/Kg		101	75 - 125
Copper	29		45.5	74.8		mg/Kg		102	75 - 125
Lead	25		45.5	65.7		mg/Kg		89	75 - 125
Molybdenum	ND		45.5	40.7		mg/Kg		90	75 - 125
Nickel	35		45.5	80.9		mg/Kg		100	75 - 125
Selenium	ND		45.5	38.9		mg/Kg		86	75 - 125
Silver	ND		22.7	23.3		mg/Kg		103	75 - 125
Thallium	0.69	J	45.5	42.6		mg/Kg		92	75 - 125
Vanadium	79		45.5	136		mg/Kg		124	75 - 125
Zinc	37		45.5	84.5		mg/Kg		105	75 - 125

Lab Sample ID: 720-88216-17MSD
Matrix: Solid
Analysis Batch: 250585

Client Sample ID: DG-K8S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250365

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.85	J B F1	44.6	12.0	F1	mg/Kg		25	75 - 125	2	20
Arsenic	2.0	J	44.6	41.3		mg/Kg		88	75 - 125	5	20
Barium	55	B	44.6	104		mg/Kg		110	75 - 125	0	20
Beryllium	ND		44.6	42.1		mg/Kg		94	75 - 125	4	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88216-17MSD — **Client Sample ID: DG-K8S-MS/MDS**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250585 — **Prep Batch: 250365**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	0.064	J	44.6	41.7		mg/Kg		93	75 - 125	4	20
Chromium	63		44.6	110		mg/Kg		105	75 - 125	4	20
Cobalt	13		44.6	56.2		mg/Kg		96	75 - 125	5	20
Copper	29		44.6	74.5		mg/Kg		103	75 - 125	0	20
Lead	25		44.6	62.1		mg/Kg		82	75 - 125	6	20
Molybdenum	ND		44.6	38.4		mg/Kg		86	75 - 125	6	20
Nickel	35		44.6	83.6		mg/Kg		108	75 - 125	3	20
Selenium	ND		44.6	37.4		mg/Kg		84	75 - 125	4	20
Silver	ND		22.3	22.5		mg/Kg		101	75 - 125	4	20
Thallium	0.69	J	44.6	41.0		mg/Kg		90	75 - 125	4	20
Vanadium	79		44.6	130		mg/Kg		113	75 - 125	5	20
Zinc	37		44.6	81.0		mg/Kg		99	75 - 125	4	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250283/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250604 — **Prep Batch: 250283**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/29/18 20:30	08/30/18 09:55	1

Lab Sample ID: LCS 720-250283/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250604 — **Prep Batch: 250283**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.804		mg/Kg		96	80 - 120

Lab Sample ID: 720-88216-9 MS — **Client Sample ID: DG-G6S-MS/MDS**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250604 — **Prep Batch: 250283**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.029		0.735	0.757		mg/Kg		99	75 - 125

Lab Sample ID: 720-88216-9 MSD — **Client Sample ID: DG-G6S-MS/MDS**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250604 — **Prep Batch: 250283**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.029		0.714	0.730		mg/Kg		98	75 - 125	4	20

Lab Sample ID: 720-88216-17MS — **Client Sample ID: DG-K8S-MS/MDS**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 250604 — **Prep Batch: 250283**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.061		0.769	0.827		mg/Kg		100	75 - 125

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: 720-88216-17MSD
Matrix: Solid
Analysis Batch: 250604

Client Sample ID: DG-K8S-MS/MDS
Prep Type: Total/NA
Prep Batch: 250283

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.061		0.781	0.813		mg/Kg		96	75 - 125	2	20

GC/MS VOA

Prep Batch: 250146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-9	DG-G6S-MS/MDS	Total/NA	Solid	5030B	
720-88216-17	DG-K8S-MS/MDS	Total/NA	Solid	5030B	

Prep Batch: 250320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-9 MS	DG-G6S-MS/MDS	Total/NA	Solid	5030B	
720-88216-9 MSD	DG-G6S-MS/MDS	Total/NA	Solid	5030B	
720-88216-17MS	DG-K8S-MS/MDS	Total/NA	Solid	5030B	
720-88216-17MSD	DG-K8S-MS/MDS	Total/NA	Solid	5030B	

Prep Batch: 250367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-3	DG-A4S-19.5-20	Total/NA	Solid	5035	
720-88216-6	DG-A6S-19.5-20	Total/NA	Solid	5035	

Analysis Batch: 250405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-3	DG-A4S-19.5-20	Total/NA	Solid	8260B	250367
720-88216-6	DG-A6S-19.5-20	Total/NA	Solid	8260B	250367
MB 720-250405/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250405/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250405/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250405/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250405/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-9	DG-G6S-MS/MDS	Total/NA	Solid	8260B	250146
MB 720-250622/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250622/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250622/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250622/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250622/8	Lab Control Sample Dup	Total/NA	Solid	8260B	
720-88216-9 MS	DG-G6S-MS/MDS	Total/NA	Solid	8260B	250320
720-88216-9 MSD	DG-G6S-MS/MDS	Total/NA	Solid	8260B	250320

Analysis Batch: 250644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-17	DG-K8S-MS/MDS	Total/NA	Solid	8260B	250146
MB 720-250644/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250644/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250644/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250644/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250644/8	Lab Control Sample Dup	Total/NA	Solid	8260B	
720-88216-17MS	DG-K8S-MS/MDS	Total/NA	Solid	8260B	250320
720-88216-17MSD	DG-K8S-MS/MDS	Total/NA	Solid	8260B	250320

GC/MS Semi VOA

Prep Batch: 250190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-3	DG-A4S-19.5-20	Total/NA	Solid	3546	
720-88216-6	DG-A6S-19.5-20	Total/NA	Solid	3546	
720-88216-9	DG-G6S-MS/MDS	Total/NA	Solid	3546	
MB 720-250190/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250190/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-9 MS	DG-G6S-MS/MDS	Total/NA	Solid	3546	
720-88216-9 MSD	DG-G6S-MS/MDS	Total/NA	Solid	3546	

Prep Batch: 250290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-17	DG-K8S-MS/MDS	Total/NA	Solid	3546	
MB 720-250290/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250290/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-17MS	DG-K8S-MS/MDS	Total/NA	Solid	3546	
720-88216-17MSD	DG-K8S-MS/MDS	Total/NA	Solid	3546	

Analysis Batch: 250399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250190/1-A	Method Blank	Total/NA	Solid	8270C SIM	250190
MB 720-250290/1-A	Method Blank	Total/NA	Solid	8270C SIM	250290
LCS 720-250190/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250190
LCS 720-250290/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250290
720-88216-17MS	DG-K8S-MS/MDS	Total/NA	Solid	8270C SIM	250290
720-88216-17MSD	DG-K8S-MS/MDS	Total/NA	Solid	8270C SIM	250290

Analysis Batch: 250501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-3	DG-A4S-19.5-20	Total/NA	Solid	8270C SIM	250190
720-88216-6	DG-A6S-19.5-20	Total/NA	Solid	8270C SIM	250190
720-88216-9	DG-G6S-MS/MDS	Total/NA	Solid	8270C SIM	250190
720-88216-17	DG-K8S-MS/MDS	Total/NA	Solid	8270C SIM	250290
720-88216-9 MS	DG-G6S-MS/MDS	Total/NA	Solid	8270C SIM	250190
720-88216-9 MSD	DG-G6S-MS/MDS	Total/NA	Solid	8270C SIM	250190

GC Semi VOA

Prep Batch: 250160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-3	DG-A4S-19.5-20	Total/NA	Solid	3546	
720-88216-6	DG-A6S-19.5-20	Total/NA	Solid	3546	
720-88216-17	DG-K8S-MS/MDS	Total/NA	Solid	3546	
MB 720-250160/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250160/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-17MS	DG-K8S-MS/MDS	Total/NA	Solid	3546	
720-88216-17MSD	DG-K8S-MS/MDS	Total/NA	Solid	3546	

Analysis Batch: 250252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250263/1-A	Method Blank	Total/NA	Solid	8015B	250263
LCS 720-250263/2-A	Lab Control Sample	Total/NA	Solid	8015B	250263

GC Semi VOA (Continued)

Analysis Batch: 250257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-17	DG-K8S-MS/MDS	Total/NA	Solid	8015B	250263
720-88216-17MS	DG-K8S-MS/MDS	Total/NA	Solid	8015B	250263
720-88216-17MSD	DG-K8S-MS/MDS	Total/NA	Solid	8015B	250263

Prep Batch: 250263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-17	DG-K8S-MS/MDS	Total/NA	Solid	3546	
MB 720-250263/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250263/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-17MS	DG-K8S-MS/MDS	Total/NA	Solid	3546	
720-88216-17MSD	DG-K8S-MS/MDS	Total/NA	Solid	3546	

Analysis Batch: 250335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-17	DG-K8S-MS/MDS	Total/NA	Solid	8081A	250160
MB 720-250160/1-A	Method Blank	Total/NA	Solid	8081A	250160
LCS 720-250160/2-A	Lab Control Sample	Total/NA	Solid	8081A	250160
720-88216-17MS	DG-K8S-MS/MDS	Total/NA	Solid	8081A	250160
720-88216-17MSD	DG-K8S-MS/MDS	Total/NA	Solid	8081A	250160

Prep Batch: 250358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-3	DG-A4S-19.5-20	Total/NA	Solid	3546	
720-88216-6	DG-A6S-19.5-20	Total/NA	Solid	3546	
720-88216-9	DG-G6S-MS/MDS	Total/NA	Solid	3546	
MB 720-250358/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250358/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-9 MS	DG-G6S-MS/MDS	Total/NA	Solid	3546	
720-88216-9 MSD	DG-G6S-MS/MDS	Total/NA	Solid	3546	

Prep Batch: 250393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-9	DG-G6S-MS/MDS	Total/NA	Solid	3546	
MB 720-250393/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250393/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-9 MS	DG-G6S-MS/MDS	Total/NA	Solid	3546	
720-88216-9 MSD	DG-G6S-MS/MDS	Total/NA	Solid	3546	

Analysis Batch: 250445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-3	DG-A4S-19.5-20	Total/NA	Solid	8081A	250160
720-88216-6	DG-A6S-19.5-20	Total/NA	Solid	8081A	250160

Analysis Batch: 250458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250358/1-A	Method Blank	Total/NA	Solid	8015B	250358

Analysis Batch: 250459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-9	DG-G6S-MS/MDS	Total/NA	Solid	8015B	250358
LCS 720-250358/2-A	Lab Control Sample	Total/NA	Solid	8015B	250358

GC Semi VOA (Continued)

Analysis Batch: 250459 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-9 MS	DG-G6S-MS/MDS	Total/NA	Solid	8015B	250358
720-88216-9 MSD	DG-G6S-MS/MDS	Total/NA	Solid	8015B	250358

Analysis Batch: 250568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-3	DG-A4S-19.5-20	Total/NA	Solid	8015B	250358
720-88216-6	DG-A6S-19.5-20	Total/NA	Solid	8015B	250358

Analysis Batch: 250609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-9	DG-G6S-MS/MDS	Total/NA	Solid	8081A	250393
MB 720-250393/1-A	Method Blank	Total/NA	Solid	8081A	250393
LCS 720-250393/2-A	Lab Control Sample	Total/NA	Solid	8081A	250393
720-88216-9 MS	DG-G6S-MS/MDS	Total/NA	Solid	8081A	250393
720-88216-9 MSD	DG-G6S-MS/MDS	Total/NA	Solid	8081A	250393

Prep Batch: 342652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-3	DG-A4S-19.5-20	Total/NA	Solid	3540C	
720-88216-6	DG-A6S-19.5-20	Total/NA	Solid	3540C	
MB 240-342652/21-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-342652/22-A	Lab Control Sample	Total/NA	Solid	3540C	
720-88218-F-20-B MS	Matrix Spike	Total/NA	Solid	3540C	
720-88218-F-20-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3540C	

Analysis Batch: 342862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-3	DG-A4S-19.5-20	Total/NA	Solid	8082	342652
720-88216-6	DG-A6S-19.5-20	Total/NA	Solid	8082	342652
MB 240-342652/21-A	Method Blank	Total/NA	Solid	8082	342652
LCS 240-342652/22-A	Lab Control Sample	Total/NA	Solid	8082	342652
720-88218-F-20-B MS	Matrix Spike	Total/NA	Solid	8082	342652
720-88218-F-20-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8082	342652

Prep Batch: 343154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-9	DG-G6S-MS/MDS	Total/NA	Solid	3540C	
720-88216-17	DG-K8S-MS/MDS	Total/NA	Solid	3540C	
MB 240-343154/9-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-343154/10-A	Lab Control Sample	Total/NA	Solid	3540C	
720-88216-9 MS	DG-G6S-MS/MDS	Total/NA	Solid	3540C	
720-88216-9 MSD	DG-G6S-MS/MDS	Total/NA	Solid	3540C	
720-88216-17MS	DG-K8S-MS/MDS	Total/NA	Solid	3540C	
720-88216-17MSD	DG-K8S-MS/MDS	Total/NA	Solid	3540C	

Analysis Batch: 343336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-9	DG-G6S-MS/MDS	Total/NA	Solid	8082	343154
720-88216-17	DG-K8S-MS/MDS	Total/NA	Solid	8082	343154
MB 240-343154/9-A	Method Blank	Total/NA	Solid	8082	343154
720-88216-9 MS	DG-G6S-MS/MDS	Total/NA	Solid	8082	343154

GC Semi VOA (Continued)

Analysis Batch: 343336 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-9 MSD	DG-G6S-MS/MDS	Total/NA	Solid	8082	343154
720-88216-17MS	DG-K8S-MS/MDS	Total/NA	Solid	8082	343154
720-88216-17MSD	DG-K8S-MS/MDS	Total/NA	Solid	8082	343154

Analysis Batch: 343339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-343154/9-A	Method Blank	Total/NA	Solid	8082	343154
LCS 240-343154/10-A	Lab Control Sample	Total/NA	Solid	8082	343154

Metals

Prep Batch: 250235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-13	DG-K8S-0.5-1	Total/NA	Solid	3050B	
720-88216-14	DG-K8S-3.5-4	Total/NA	Solid	3050B	
720-88216-15	DG-J8S-0.5-1	Total/NA	Solid	3050B	
720-88216-16	DG-J8S-3.5-4	Total/NA	Solid	3050B	
720-88216-17	DG-K8S-MS/MDS	Total/NA	Solid	3050B	
720-88216-18	DUP-20	Total/NA	Solid	3050B	
MB 720-250235/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250235/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88197-A-1-B MS	Matrix Spike	Total/NA	Solid	3050B	
720-88197-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-1	DG-A4S-0.5-1	Total/NA	Solid	3050B	
720-88216-2	DG-A4S-3.5-4	Total/NA	Solid	3050B	
MB 720-250242/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250242/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88217-A-4-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88217-A-4-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-1	DG-A4S-0.5-1	Total/NA	Solid	7471A	
720-88216-2	DG-A4S-3.5-4	Total/NA	Solid	7471A	
720-88216-3	DG-A4S-19.5-20	Total/NA	Solid	7471A	
720-88216-4	DG-A6S-0.5-1	Total/NA	Solid	7471A	
720-88216-5	DG-A6S-3.5-4	Total/NA	Solid	7471A	
720-88216-6	DG-A6S-19.5-20	Total/NA	Solid	7471A	
720-88216-7	DG-B6S-0.5-1	Total/NA	Solid	7471A	
720-88216-8	DG-B6S-3.5-4	Total/NA	Solid	7471A	
720-88216-9	DG-G6S-MS/MDS	Total/NA	Solid	7471A	
720-88216-10	DUP-6	Total/NA	Solid	7471A	
720-88216-11	DG-L8S-0.5-1	Total/NA	Solid	7471A	
720-88216-12	DG-L8S-3.5-4	Total/NA	Solid	7471A	
720-88216-13	DG-K8S-0.5-1	Total/NA	Solid	7471A	
720-88216-14	DG-K8S-3.5-4	Total/NA	Solid	7471A	
720-88216-15	DG-J8S-0.5-1	Total/NA	Solid	7471A	

Metals (Continued)

Prep Batch: 250283 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-16	DG-J8S-3.5-4	Total/NA	Solid	7471A	
720-88216-17	DG-K8S-MS/MDS	Total/NA	Solid	7471A	
720-88216-18	DUP-20	Total/NA	Solid	7471A	
MB 720-250283/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250283/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88216-9 MS	DG-G6S-MS/MDS	Total/NA	Solid	7471A	
720-88216-9 MSD	DG-G6S-MS/MDS	Total/NA	Solid	7471A	
720-88216-17MS	DG-K8S-MS/MDS	Total/NA	Solid	7471A	
720-88216-17MSD	DG-K8S-MS/MDS	Total/NA	Solid	7471A	

Prep Batch: 250292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-3	DG-A4S-19.5-20	Total/NA	Solid	3050B	
720-88216-9	DG-G6S-MS/MDS	Total/NA	Solid	3050B	
MB 720-250292/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250292/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88216-9 MS	DG-G6S-MS/MDS	Total/NA	Solid	3050B	
720-88216-9 MSD	DG-G6S-MS/MDS	Total/NA	Solid	3050B	

Prep Batch: 250310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-4	DG-A6S-0.5-1	Total/NA	Solid	3050B	
720-88216-5	DG-A6S-3.5-4	Total/NA	Solid	3050B	
720-88216-6	DG-A6S-19.5-20	Total/NA	Solid	3050B	
720-88216-7	DG-B6S-0.5-1	Total/NA	Solid	3050B	
720-88216-8	DG-B6S-3.5-4	Total/NA	Solid	3050B	
720-88216-10	DUP-6	Total/NA	Solid	3050B	
720-88216-11	DG-L8S-0.5-1	Total/NA	Solid	3050B	
720-88216-12	DG-L8S-3.5-4	Total/NA	Solid	3050B	
MB 720-250310/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250310/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88235-A-1-D MS	Matrix Spike	Total/NA	Solid	3050B	
720-88235-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 250349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-1	DG-A4S-0.5-1	Total/NA	Solid	6010B	250242
720-88216-2	DG-A4S-3.5-4	Total/NA	Solid	6010B	250242
MB 720-250242/1-A	Method Blank	Total/NA	Solid	6010B	250242
LCS 720-250242/2-A	Lab Control Sample	Total/NA	Solid	6010B	250242
720-88217-A-4-A MS	Matrix Spike	Total/NA	Solid	6010B	250242
720-88217-A-4-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250242

Analysis Batch: 250353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-13	DG-K8S-0.5-1	Total/NA	Solid	6010B	250235
720-88216-14	DG-K8S-3.5-4	Total/NA	Solid	6010B	250235
720-88216-15	DG-J8S-0.5-1	Total/NA	Solid	6010B	250235
720-88216-16	DG-J8S-3.5-4	Total/NA	Solid	6010B	250235
720-88216-17	DG-K8S-MS/MDS	Total/NA	Solid	6010B	250235
720-88216-18	DUP-20	Total/NA	Solid	6010B	250235

Metals (Continued)

Analysis Batch: 250353 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250235/1-A	Method Blank	Total/NA	Solid	6010B	250235
LCS 720-250235/2-A	Lab Control Sample	Total/NA	Solid	6010B	250235
720-88197-A-1-B MS	Matrix Spike	Total/NA	Solid	6010B	250235
720-88197-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250235

Prep Batch: 250365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250365/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250365/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88216-17MS	DG-K8S-MS/MDS	Total/NA	Solid	3050B	
720-88216-17MSD	DG-K8S-MS/MDS	Total/NA	Solid	3050B	

Analysis Batch: 250436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-16	DG-J8S-3.5-4	Total/NA	Solid	6010B	250235

Analysis Batch: 250437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-4	DG-A6S-0.5-1	Total/NA	Solid	6010B	250310
720-88216-5	DG-A6S-3.5-4	Total/NA	Solid	6010B	250310
720-88216-6	DG-A6S-19.5-20	Total/NA	Solid	6010B	250310
720-88216-7	DG-B6S-0.5-1	Total/NA	Solid	6010B	250310
720-88216-8	DG-B6S-3.5-4	Total/NA	Solid	6010B	250310
720-88216-10	DUP-6	Total/NA	Solid	6010B	250310
720-88216-12	DG-L8S-3.5-4	Total/NA	Solid	6010B	250310
MB 720-250310/1-A	Method Blank	Total/NA	Solid	6010B	250310
LCS 720-250310/2-A	Lab Control Sample	Total/NA	Solid	6010B	250310
720-88235-A-1-D MS	Matrix Spike	Total/NA	Solid	6010B	250310
720-88235-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250310

Analysis Batch: 250491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-3	DG-A4S-19.5-20	Total/NA	Solid	6010B	250292
720-88216-9	DG-G6S-MS/MDS	Total/NA	Solid	6010B	250292
MB 720-250292/1-A	Method Blank	Total/NA	Solid	6010B	250292
LCS 720-250292/2-A	Lab Control Sample	Total/NA	Solid	6010B	250292
720-88216-9 MS	DG-G6S-MS/MDS	Total/NA	Solid	6010B	250292
720-88216-9 MSD	DG-G6S-MS/MDS	Total/NA	Solid	6010B	250292

Analysis Batch: 250560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-6	DG-A6S-19.5-20	Total/NA	Solid	6010B	250310
720-88216-11	DG-L8S-0.5-1	Total/NA	Solid	6010B	250310

Analysis Batch: 250585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250365/1-A	Method Blank	Total/NA	Solid	6010B	250365
LCS 720-250365/2-A	Lab Control Sample	Total/NA	Solid	6010B	250365
720-88216-17MS	DG-K8S-MS/MDS	Total/NA	Solid	6010B	250365
720-88216-17MSD	DG-K8S-MS/MDS	Total/NA	Solid	6010B	250365

Metals (Continued)

Analysis Batch: 250604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-1	DG-A4S-0.5-1	Total/NA	Solid	7471A	250283
720-88216-2	DG-A4S-3.5-4	Total/NA	Solid	7471A	250283
720-88216-3	DG-A4S-19.5-20	Total/NA	Solid	7471A	250283
720-88216-4	DG-A6S-0.5-1	Total/NA	Solid	7471A	250283
720-88216-5	DG-A6S-3.5-4	Total/NA	Solid	7471A	250283
720-88216-6	DG-A6S-19.5-20	Total/NA	Solid	7471A	250283
720-88216-7	DG-B6S-0.5-1	Total/NA	Solid	7471A	250283
720-88216-8	DG-B6S-3.5-4	Total/NA	Solid	7471A	250283
720-88216-9	DG-G6S-MS/MDS	Total/NA	Solid	7471A	250283
720-88216-10	DUP-6	Total/NA	Solid	7471A	250283
720-88216-11	DG-L8S-0.5-1	Total/NA	Solid	7471A	250283
720-88216-12	DG-L8S-3.5-4	Total/NA	Solid	7471A	250283
720-88216-13	DG-K8S-0.5-1	Total/NA	Solid	7471A	250283
720-88216-14	DG-K8S-3.5-4	Total/NA	Solid	7471A	250283
720-88216-15	DG-J8S-0.5-1	Total/NA	Solid	7471A	250283
720-88216-16	DG-J8S-3.5-4	Total/NA	Solid	7471A	250283
720-88216-17	DG-K8S-MS/MDS	Total/NA	Solid	7471A	250283
720-88216-18	DUP-20	Total/NA	Solid	7471A	250283
MB 720-250283/1-A	Method Blank	Total/NA	Solid	7471A	250283
LCS 720-250283/2-A	Lab Control Sample	Total/NA	Solid	7471A	250283
720-88216-9 MS	DG-G6S-MS/MDS	Total/NA	Solid	7471A	250283
720-88216-9 MSD	DG-G6S-MS/MDS	Total/NA	Solid	7471A	250283
720-88216-17MS	DG-K8S-MS/MDS	Total/NA	Solid	7471A	250283
720-88216-17MSD	DG-K8S-MS/MDS	Total/NA	Solid	7471A	250283

Client Sample ID: DG-A4S-0.5-1

Lab Sample ID: 720-88216-1

Date Collected: 08/22/18 08:15

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250349	08/27/18 20:43	OBI	TAL PLS
Total/NA	Prep	7471A			250283	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250604	08/30/18 10:07	MAG	TAL PLS

Client Sample ID: DG-A4S-3.5-4

Lab Sample ID: 720-88216-2

Date Collected: 08/22/18 08:15

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250349	08/27/18 20:48	OBI	TAL PLS
Total/NA	Prep	7471A			250283	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250604	08/30/18 10:15	MAG	TAL PLS

Client Sample ID: DG-A4S-19.5-20

Lab Sample ID: 720-88216-3

Date Collected: 08/22/18 09:00

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250367	08/24/18 02:25	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250405	08/28/18 23:08	JRM	TAL PLS
Total/NA	Prep	3546			250190	08/24/18 15:31	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250501	08/29/18 19:32	LPL	TAL PLS
Total/NA	Prep	3546			250358	08/28/18 08:21	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250568	08/30/18 12:25	JXL	TAL PLS
Total/NA	Prep	3546			250160	08/24/18 11:26	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250445	08/29/18 10:19	MQL	TAL PLS
Total/NA	Prep	3540C			342652	08/27/18 11:05	DVT	TAL CAN
Total/NA	Analysis	8082		1	342862	08/28/18 20:33	CSC	TAL CAN
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 11:44	BKR	TAL PLS
Total/NA	Prep	7471A			250283	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250604	08/30/18 10:17	MAG	TAL PLS

Client Sample ID: DG-A6S-0.5-1

Lab Sample ID: 720-88216-4

Date Collected: 08/22/18 10:05

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250437	08/28/18 16:22	BKR	TAL PLS
Total/NA	Prep	7471A			250283	08/29/18 20:30	MAG	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-A6S-0.5-1

Lab Sample ID: 720-88216-4

Date Collected: 08/22/18 10:05
Matrix: Solid
Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	250604	08/30/18 10:19	MAG	TAL PLS

Client Sample ID: DG-A6S-3.5-4

Lab Sample ID: 720-88216-5

Date Collected: 08/22/18 10:05
Matrix: Solid
Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250437	08/28/18 16:27	BKR	TAL PLS
Total/NA	Prep	7471A			250283	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250604	08/30/18 10:21	MAG	TAL PLS

Client Sample ID: DG-A6S-19.5-20

Lab Sample ID: 720-88216-6

Date Collected: 08/22/18 10:10
Matrix: Solid
Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250367	08/24/18 02:25	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250405	08/28/18 23:37	JRM	TAL PLS
Total/NA	Prep	3546			250190	08/24/18 15:31	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250501	08/29/18 21:07	LPL	TAL PLS
Total/NA	Prep	3546			250358	08/28/18 08:21	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250568	08/30/18 13:13	JXL	TAL PLS
Total/NA	Prep	3546			250160	08/24/18 11:26	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250445	08/29/18 10:36	MQL	TAL PLS
Total/NA	Prep	3540C			342652	08/27/18 11:05	DVT	TAL CAN
Total/NA	Analysis	8082		1	342862	08/28/18 20:55	CSC	TAL CAN
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250560	08/29/18 23:28	OBI	TAL PLS
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250437	08/28/18 16:32	BKR	TAL PLS
Total/NA	Prep	7471A			250283	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250604	08/30/18 10:24	MAG	TAL PLS

Client Sample ID: DG-B6S-0.5-1

Lab Sample ID: 720-88216-7

Date Collected: 08/22/18 10:45
Matrix: Solid
Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250437	08/28/18 16:46	BKR	TAL PLS
Total/NA	Prep	7471A			250283	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250604	08/30/18 10:26	MAG	TAL PLS

Client Sample ID: DG-B6S-3.5-4

Lab Sample ID: 720-88216-8

Date Collected: 08/22/18 10:45

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250437	08/28/18 16:51	BKR	TAL PLS
Total/NA	Prep	7471A			250283	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250604	08/30/18 10:28	MAG	TAL PLS

Client Sample ID: DG-G6S-MS/MDS

Lab Sample ID: 720-88216-9

Date Collected: 08/22/18 14:30

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			250146	08/24/18 09:01	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250622	08/31/18 02:54	JRM	TAL PLS
Total/NA	Prep	3546			250190	08/24/18 15:31	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250501	08/29/18 14:47	LPL	TAL PLS
Total/NA	Prep	3546			250358	08/28/18 08:21	MAB	TAL PLS
Total/NA	Analysis	8015B		2	250459	08/29/18 16:17	JXL	TAL PLS
Total/NA	Prep	3546			250393	08/28/18 13:36	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250609	08/31/18 01:10	MQL	TAL PLS
Total/NA	Prep	3540C			343154	08/30/18 06:23	DVT	TAL CAN
Total/NA	Analysis	8082		1	343336	08/31/18 13:02	LSH	TAL CAN
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 09:55	BKR	TAL PLS
Total/NA	Prep	7471A			250283	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250604	08/30/18 10:05	MAG	TAL PLS

Client Sample ID: DUP-6

Lab Sample ID: 720-88216-10

Date Collected: 08/22/18 00:00

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250437	08/28/18 16:55	BKR	TAL PLS
Total/NA	Prep	7471A			250283	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250604	08/30/18 10:31	MAG	TAL PLS

Client Sample ID: DG-L8S-0.5-1

Lab Sample ID: 720-88216-11

Date Collected: 08/22/18 16:30

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250560	08/29/18 23:33	OBI	TAL PLS
Total/NA	Prep	7471A			250283	08/29/18 20:30	MAG	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-L8S-0.5-1

Lab Sample ID: 720-88216-11
Matrix: Solid
Date Collected: 08/22/18 16:30
Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	250604	08/30/18 10:33	MAG	TAL PLS

Client Sample ID: DG-L8S-3.5-4

Lab Sample ID: 720-88216-12
Matrix: Solid
Date Collected: 08/22/18 16:30
Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250437	08/28/18 17:05	BKR	TAL PLS
Total/NA	Prep	7471A			250283	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250604	08/30/18 10:35	MAG	TAL PLS

Client Sample ID: DG-K8S-0.5-1

Lab Sample ID: 720-88216-13
Matrix: Solid
Date Collected: 08/22/18 16:45
Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250353	08/27/18 22:33	OBI	TAL PLS
Total/NA	Prep	7471A			250283	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250604	08/30/18 10:43	MAG	TAL PLS

Client Sample ID: DG-K8S-3.5-4

Lab Sample ID: 720-88216-14
Matrix: Solid
Date Collected: 08/22/18 16:45
Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250353	08/27/18 22:38	OBI	TAL PLS
Total/NA	Prep	7471A			250283	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250604	08/30/18 10:45	MAG	TAL PLS

Client Sample ID: DG-J8S-0.5-1

Lab Sample ID: 720-88216-15
Matrix: Solid
Date Collected: 08/22/18 17:00
Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250353	08/27/18 22:42	OBI	TAL PLS
Total/NA	Prep	7471A			250283	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250604	08/30/18 10:47	MAG	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Client Sample ID: DG-J8S-3.5-4

Lab Sample ID: 720-88216-16

Date Collected: 08/22/18 17:00

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250353	08/27/18 22:47	OBI	TAL PLS
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250436	08/28/18 15:25	OBI	TAL PLS
Total/NA	Prep	7471A			250283	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250604	08/30/18 10:50	MAG	TAL PLS

Client Sample ID: DG-K8S-MS/MDS

Lab Sample ID: 720-88216-17

Date Collected: 08/22/18 00:00

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			250146	08/24/18 09:01	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250644	08/31/18 09:32	JRM	TAL PLS
Total/NA	Prep	3546			250290	08/27/18 12:37	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250501	08/29/18 14:23	LPL	TAL PLS
Total/NA	Prep	3546			250263	08/27/18 08:59	WGR	TAL PLS
Total/NA	Analysis	8015B		1	250257	08/27/18 21:08	JXL	TAL PLS
Total/NA	Prep	3546			250160	08/24/18 11:26	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250335	08/28/18 07:43	MQL	TAL PLS
Total/NA	Prep	3540C			343154	08/30/18 06:23	DVT	TAL CAN
Total/NA	Analysis	8082		1	343336	08/31/18 14:46	LSH	TAL CAN
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250353	08/27/18 22:52	OBI	TAL PLS
Total/NA	Prep	7471A			250283	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250604	08/30/18 10:57	MAG	TAL PLS

Client Sample ID: DUP-20

Lab Sample ID: 720-88216-18

Date Collected: 08/22/18 00:00

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250353	08/27/18 22:57	OBI	TAL PLS
Total/NA	Prep	7471A			250283	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250604	08/30/18 10:59	MAG	TAL PLS

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
Subcontract	Asbestos - CARB 435	None	
3050B	Preparation, Metals	SW846	TAL PLS
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL PLS
5030B	Purge and Trap	SW846	TAL PLS
5035	Closed System Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88216-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88216-1	DG-A4S-0.5-1	Solid	08/22/18 08:15	08/23/18 15:40
720-88216-2	DG-A4S-3.5-4	Solid	08/22/18 08:15	08/23/18 15:40
720-88216-3	DG-A4S-19.5-20	Solid	08/22/18 09:00	08/23/18 15:40
720-88216-4	DG-A6S-0.5-1	Solid	08/22/18 10:05	08/23/18 15:40
720-88216-5	DG-A6S-3.5-4	Solid	08/22/18 10:05	08/23/18 15:40
720-88216-6	DG-A6S-19.5-20	Solid	08/22/18 10:10	08/23/18 15:40
720-88216-7	DG-B6S-0.5-1	Solid	08/22/18 10:45	08/23/18 15:40
720-88216-8	DG-B6S-3.5-4	Solid	08/22/18 10:45	08/23/18 15:40
720-88216-9	DG-G6S-MS/MDS	Solid	08/22/18 14:30	08/23/18 15:40
720-88216-10	DUP-6	Solid	08/22/18 00:00	08/23/18 15:40
720-88216-11	DG-L8S-0.5-1	Solid	08/22/18 16:30	08/23/18 15:40
720-88216-12	DG-L8S-3.5-4	Solid	08/22/18 16:30	08/23/18 15:40
720-88216-13	DG-K8S-0.5-1	Solid	08/22/18 16:45	08/23/18 15:40
720-88216-14	DG-K8S-3.5-4	Solid	08/22/18 16:45	08/23/18 15:40
720-88216-15	DG-J8S-0.5-1	Solid	08/22/18 17:00	08/23/18 15:40
720-88216-16	DG-J8S-3.5-4	Solid	08/22/18 17:00	08/23/18 15:40
720-88216-17	DG-K8S-MS/MDS	Solid	08/22/18 00:00	08/23/18 15:40
720-88216-18	DUP-20	Solid	08/22/18 00:00	08/23/18 15:40

ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01198

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Aug/30/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01198
Polarized light microscopy analytical results for 4 bulk sample(s).
Job Site: 720-88216-1
Job No.: UPC-OU-SM

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 4

Samples Analyzed: 4

Job Site / No. UPC-OU-SM
720-88216-1

Report No. **359848**
Date Submitted: Aug-24-18
Date Reported: Aug-30-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DG-A4S-19.5-20		**<0.25%**	**None Detected**	72088216-3
				No Asbestos Detected
Lab ID # 1283-01198-001	**400** - Total Points			
DG-A6S-19.5-20		**<0.25%**	**None Detected**	72088216-6
				No Asbestos Detected
Lab ID # 1283-01198-002	**400** - Total Points			
DG-G6S-MS/MDS		**<0.25%**	**None Detected**	72088216-9
				No Asbestos Detected
Lab ID # 1283-01198-003	**400** - Total Points			
DG-K8S-MS/MDS		**<0.25%**	**None Detected**	72088216-17
				No Asbestos Detected
Lab ID # 1283-01198-004	**400** - Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			

QC Reviewer _____ **Analys** _____

359848

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39405.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: Asbestos TEM Laboratories, Inc		Accreditations Required (See note): State Program - California		Job #: 720-88216-1
Address: 630 BANCROFT WAY,	Due Date Requested: 8/30/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Oil, Tissue, Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
DG-A4S-19.5-20 (720-88216-3)	8/22/18	09:00 Pacific		Solid			X	1	
DG-A5S-19.5-20 (720-88216-6)	8/22/18	10:10 Pacific		Solid			X	1	
DG-G6S-MS/MDS (720-88216-9)	8/22/18	14:30 Pacific		Solid			X	1	
DG-K8S-MS/MDS (720-88216-17)	8/22/18	Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:		Method of Shipment:	
Relinquished by:	Date/Time: 8/24/18 1215	Company: TA	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by: ATEM / RA	Date/Time: AUG24 '18 12:16PM	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:			

Ver: 09/20/2016

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88216

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185086

Date 8/22/18 Page 1 of 2

11/21/2018 (Rev. 1)

Report To

Attn: Keaton Belli
Company: Geosyntec
Address: 1111 Broadway 6th floor
Email: KBelli@geosyntec.com
Bill To: Geosyntec
Sampled By: Keaton Belli
Attn: Anthony Smith
Phone: 470 881 0525

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B + GRO	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☒ EPA 8081 PCBs ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)	
DG-A4S-0.5-1	8/22	815	S	N									X											
DG-A4S-3.5-4		815	S	N									X											
DG-A4S-19.5-20		900	S	N	X			X		X		X	X									X		
DG-A6S-0.5-1		1005	S	N									X											
DG-A6S-3.5-4		1005	S	N									X											
DG-A6S-19.5-20		1010	S	N	X			X		X		X	X									X		
DG-B6S-0.5-1		1045	S	N									X											
DG-B6S-3.5-4		1045	S	N									X											
DG-G6S-MS/MSD	8/22	1430	S	N	X			X		X		X	X											
DUP-6	8/22		S	N									X									X		

Project Info.

Project Name/ #: UPC OU-SM
PO#: WG2445/01
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers:
Head Space:
Temp: 3.1°C

TAT: 10 Day | (5 Day) | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: Keaton Belli	Signature:	720-88216 Chain of Custody
Time: 1250	Time: 1540	
Printed Name: Keaton Belli	Printed Name:	
Date: 8/23	Date: 8/23/18	
Company: Geosyntec	Company: TA PLV	Company

1) Received by:	2) Received by:	3) Received by:
Signature:	Signature:	Signature:
Time: 1250	Time: 1540	Time:
Printed Name:	Printed Name: C. Bullock 8/23/18	Printed Name:
Date: 8/23/18	Date:	Date:
Company: TA PLV	Company: TA PLV	Company:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88216

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: 185086

Date 8/22/18 Page 2 of 2

11/21/2018 (Rev. 1)

Page 179 of 182

Report To

Attn: Keaton Belli
Company: Geosyntec
Address: 1111 Broadway 6th floor
Email: kbelli@geosyntec.com
Bill To: Geosyntec
Sampled By: K Belli
Attn: Anthony Smith
Phone: 4708810525

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GCMS (VOCs) ☒ EPA 8260B + GRO	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GCMS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☒ EPA 8081 ☒ EPA 8082 PCBs	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)
DG-LBS-0.5-1	8/22	1630	S	N									X										
DG-LBS-3.5-4		1630											X										
DG-KBS-0.5-1		1645											X										
DG-KBS-3.5-4		1645											X										
DG-JBS-0.5-1		1700											X										
DG-JBS-3.5-4		1700											X										
													X										
DG-KBS-MS/MSD	8/22		S	N	X			X		X		X	X										
DUP-20	8/22		S	N									X									X	

Project Info.

Project Name/ #: UPC-OU-SM
PO#: WG2445/01
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers:
Head Space:
Temp:

10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: K Belli	Signature:	Signature:
Time: 1250	Time: 1540	Time:
Printed Name: Keaton Belli	Printed Name:	Printed Name:
Date: 8/23	Date: 8/23/18	Date:
Company: Geosyntec	Company: TA720	Company:

1) Received by:	2) Received by:	3) Received by:
Signature:	Signature:	Signature:
Time: 1250	Time: 1540	Time:
Printed Name:	Printed Name: L Bullock	Printed Name:
Date: 8/23/18	Date: 8/23/18	Date:
Company: TA720	Company: TA720	Company: 3.1C

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

4.2 | 4.2

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39408.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88216-1
Address: 4101 Shuffel Street NW,	Due Date Requested: 8/30/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

C206

Special Instructions/Note:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers
			Preservation Code:					
DG-A4S-19.5-20 (720-88216-3)	8/22/18	09:00 Pacific		Solid			X	1
DG-A6S-19.5-20 (720-88216-6)	8/22/18	10:10 Pacific		Solid			X	1
DG-G6S-MS/MDS (720-88216-9)	8/22/18	14:30 Pacific		Solid			X	1
DG-K8S-MS/MDS (720-88216-17)	8/22/18	Pacific		Solid			X	1

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		8/24/18 1234	TA720		8/25/18 1145	TA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client TA Pleasanton Site Name _____ Cooler unpacked by: DD

Cooler Received on 8/25/18 Opened on 8/27/18

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: ~~Wet Ice~~ Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 4.2 °C Corrected Cooler Temp. 4.2 °C
   IR GUN #36 (CF -0.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# **HC849151**
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
16. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

_____

_____

_____

_____

_____

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____.

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88216-1

Login Number: 88216
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88217-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/14/2018 8:08:17 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 5
Detection Summary 7
Client Sample Results 11
Surrogate Summary 98
QC Sample Results 101
QC Association Summary 130
Lab Chronicle 136
Certification Summary 139
Method Summary 141
Sample Summary 142
Subcontract Data 143
Chain of Custody 151
Receipt Checklists 158

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
H	Sample was prepped or analyzed beyond the specified holding time
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88217-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88217-1

Comments
This report was revised on 11/14/18 to change the units for the metals data to report in mg/Kg, as requested. Also, sample IDs were revised as requested.

Receipt
The samples were received on 8/23/2018 3:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 1.9º C, 2.6º C and 3.1º C.

Receipt Exceptions
Samples DUP-04, DG-H6S-0.5-1 and DG-H6S-3.5-4 were received in pre-weighed containers with a label that was added in the field. The label weight was approximately 0.15 g which does not significantly bias the final results.

The following samples were submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): DG-H6S-0.5-1 8/22/18 @ 14:55 (6-Terra cores, 2x8oz and 2x4oz jars) and DG-H6S-3.5-4 8/22/18 @ 14:55 (3-Terra cores, 2x8oz and 2x4oz jars). The client directed the lab to proceed with analysis of VOCs, DRO, CAM 17 Metals, PAHs, PCBs and Asbestos. Also, sample DG-H6S-0.5-1 should be analyzed for 1,2,3-Trichloropropane and 1,2-Dibromo-3-Chloropropane by 8260B.

Collection times for "DUP-" samples are not indicated on the COC.

GC/MS VOA
Method(s) 8260B: Internal standard (ISTD) response for the following sample was outside control limits: DG-A5S-19.5-20 (720-88217-5). The sample was re-extracted and/or re-analyzed, using the sample collected in the field container, with concurring results for the internal standards, and the original set of data has been reported. There were no reportable data in the analysis of one of the terracores.

Method(s) 8260B: The Gasoline Range Organics (GRO) concentration reported for the following sample is due to the presence of discrete peaks: DG-A5S-19.5-20 (720-88217-5). cis-1,2-Dichloroethene, Trichloroethene and trans-1,2-Dichloroethene

Method(s) 8260B: Internal standard (ISTD) response for the following sample was outside control limits: DUP-04 (720-88217-2). The sample(s) was re-extracted and/or re-analyzed with concurring results, and the original set of data has been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250622 recovered outside control limits for the following analytes: Carbon disulfide and 1,1-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250320 and analytical batch 720-250622 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 720-250645 recovered outside control limits for the following analytes: 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: Reanalysis of the following samples were performed outside of the analytical holding time due to internal standard failure in the original analysis. Initial analysis was also performed outside of holding time due to a login error: DG-H6S-0.5-1 (720-88217-6) and DG-H6S-3.5-4 (720-88217-7).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270C SIM: The following samples were diluted due to the abundance of non-target analytes: DUP-04 (720-88217-2) and DG-H6S-0.5-1 (720-88217-6). Elevated reporting limits (RLs) are provided.

Job ID: 720-88217-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: DUP-04 (720-88217-2).

Method(s) 8015B: The method blank for preparation batch 720-250263 and analytical batch 720-250252 contained Diesel Range Organics [C10-C28] above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 8015B: The following sample required a dilution due to the nature of the sample matrix: DG-H6S-0.5-1 (720-88217-6). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batches 720-250242, 720-250235, and 720-250310 and analytical batches 720-250349, 720-250353, and 720-250437 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The post digestion spike % recovery for Barium associated with batch 720-250349 was outside of control limits.

Barium recovery 126%; (Control limits 75-125%.)

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250349 was outside control limits: (720-88217-A-4-C SD)

Analyte:	% D:
Barium	33%
Cobalt	26%
Chromium	29%
Nickel	25%
Vanadium	27%

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DUP-03 (720-88217-1), DUP-04 (720-88217-2), DG-A5S-0.5-1 (720-88217-3), DG-A5S-3.5-4 (720-88217-4),DG-A5S-19.5-20 (720-88217-5), DG-H6S-0.5-1 (720-88217-6) and DG-H6S-3.5-4 (720-88217-7). Elevated reporting limits (RLs) are provided.

Method(s) 7471A: The matrix spike duplicate (MSD) recoveries for preparation batch 720-250416 and analytical batch 720-250599 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Subcontract Work

Method Asbestos - CARB 435: This method was subcontracted to ASBESTOS TEM LABORATORIES, INC.. The subcontract laboratory certification is different from that of the facility issuing the final report.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88217-1

Client Sample ID: DUP-03 — Lab Sample ID: 720-88217-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.6		1.3	0.21	mg/Kg	4		6010B	Total/NA
Arsenic	120		2.6	0.22	mg/Kg	4		6010B	Total/NA
Barium	88	B	1.3	0.18	mg/Kg	4		6010B	Total/NA
Beryllium	0.22	J	0.26	0.084	mg/Kg	4		6010B	Total/NA
Cadmium	0.13	J	0.32	0.032	mg/Kg	4		6010B	Total/NA
Chromium	41		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	5.2		0.52	0.052	mg/Kg	4		6010B	Total/NA
Copper	25		3.9	1.8	mg/Kg	4		6010B	Total/NA
Lead	79		1.3	0.27	mg/Kg	4		6010B	Total/NA
Nickel	29		1.3	0.13	mg/Kg	4		6010B	Total/NA
Thallium	0.39	J	1.3	0.37	mg/Kg	4		6010B	Total/NA
Vanadium	28		1.3	0.18	mg/Kg	4		6010B	Total/NA
Zinc	160		3.9	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.085		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-04 — Lab Sample ID: 720-88217-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	85		34	26	ug/Kg	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.76	J	3.4	0.47	ug/Kg	1		8260B	Total/NA
Vinyl chloride	0.88	J	3.4	0.50	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	53		19	9.4	ug/Kg	2		8270C SIM	Total/NA
Acenaphthene	6.0	J	9.4	5.3	ug/Kg	2		8270C SIM	Total/NA
Acenaphthylene	59		9.4	4.5	ug/Kg	2		8270C SIM	Total/NA
Anthracene	61		9.4	3.8	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	260		9.4	2.8	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	320		9.4	3.6	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	520		9.4	4.0	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	150		9.4	8.1	ug/Kg	2		8270C SIM	Total/NA
Chrysene	330	B	9.4	2.6	ug/Kg	2		8270C SIM	Total/NA
Dibenz(a,h)anthracene	44		9.4	6.6	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	370		9.4	2.6	ug/Kg	2		8270C SIM	Total/NA
Fluorene	17		9.4	4.2	ug/Kg	2		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	120		9.4	7.9	ug/Kg	2		8270C SIM	Total/NA
Naphthalene	59		9.4	6.6	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	260		9.4	3.4	ug/Kg	2		8270C SIM	Total/NA
Pyrene	560		9.4	3.2	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	110000	B	1900	720	ug/Kg	1		8015B	Total/NA
Antimony	1.8		1.5	0.24	mg/Kg	4		6010B	Total/NA
Arsenic	22		2.9	0.25	mg/Kg	4		6010B	Total/NA
Barium	85	B	1.5	0.21	mg/Kg	4		6010B	Total/NA
Beryllium	0.12	J	0.29	0.096	mg/Kg	4		6010B	Total/NA
Cadmium	0.43		0.37	0.036	mg/Kg	4		6010B	Total/NA
Chromium	10		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.59	0.059	mg/Kg	4		6010B	Total/NA
Copper	130		4.4	2.1	mg/Kg	4		6010B	Total/NA
Lead	300		1.5	0.31	mg/Kg	4		6010B	Total/NA
Molybdenum	0.26	J	1.5	0.19	mg/Kg	4		6010B	Total/NA
Nickel	7.1		1.5	0.15	mg/Kg	4		6010B	Total/NA
Thallium	1.2	J	1.5	0.43	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-04 (Continued) — Lab Sample ID: 720-88217-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	78		1.5	0.20	mg/Kg	4		6010B	Total/NA
Zinc	240		4.4	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.095		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-A5S-0.5-1 — Lab Sample ID: 720-88217-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.4		1.4	0.24	mg/Kg	4		6010B	Total/NA
Arsenic	8.9		2.9	0.25	mg/Kg	4		6010B	Total/NA
Barium	71	B	1.4	0.21	mg/Kg	4		6010B	Total/NA
Beryllium	0.10	J	0.29	0.094	mg/Kg	4		6010B	Total/NA
Cadmium	0.34	J	0.36	0.036	mg/Kg	4		6010B	Total/NA
Chromium	33		1.4	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.58	0.058	mg/Kg	4		6010B	Total/NA
Copper	170		4.3	2.1	mg/Kg	4		6010B	Total/NA
Lead	220		1.4	0.30	mg/Kg	4		6010B	Total/NA
Molybdenum	0.47	J	1.4	0.19	mg/Kg	4		6010B	Total/NA
Nickel	16		1.4	0.15	mg/Kg	4		6010B	Total/NA
Silver	0.16	J	0.72	0.15	mg/Kg	4		6010B	Total/NA
Thallium	1.2	J	1.4	0.42	mg/Kg	4		6010B	Total/NA
Vanadium	100		1.4	0.20	mg/Kg	4		6010B	Total/NA
Zinc	160		4.3	1.8	mg/Kg	4		6010B	Total/NA
Mercury	0.38		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-A5S-3.5-4 — Lab Sample ID: 720-88217-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.80	J F1	1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	2.1	J B	3.1	0.26	mg/Kg	4		6010B	Total/NA
Barium	83	F1	1.5	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.12	J	0.31	0.099	mg/Kg	4		6010B	Total/NA
Chromium	96		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	30		0.61	0.061	mg/Kg	4		6010B	Total/NA
Copper	45	F1	4.6	2.2	mg/Kg	4		6010B	Total/NA
Lead	2.7		1.5	0.32	mg/Kg	4		6010B	Total/NA
Molybdenum	0.22	J	1.5	0.20	mg/Kg	4		6010B	Total/NA
Nickel	68		1.5	0.16	mg/Kg	4		6010B	Total/NA
Thallium	1.6		1.5	0.44	mg/Kg	4		6010B	Total/NA
Vanadium	100	F1	1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	68		4.6	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.13		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-A5S-19.5-20 — Lab Sample ID: 720-88217-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	55	*	40	30	ug/Kg	1		8260B	Total/NA
1,1-Dichloroethene	1.8	J *	4.0	0.49	ug/Kg	1		8260B	Total/NA
cis-1,2-Dichloroethene	120	*	4.0	0.54	ug/Kg	1		8260B	Total/NA
trans-1,2-Dichloroethene	15	*	4.0	0.60	ug/Kg	1		8260B	Total/NA
Trichloroethene	38	*	4.0	0.50	ug/Kg	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-A5S-19.5-20 (Continued) — Lab Sample ID: 720-88217-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) -C4-C12	140	J *	200	80	ug/Kg	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	7900	B	2000	740	ug/Kg	1		8015B	Total/NA
Antimony	0.68	J	1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	2.1	J B	3.0	0.25	mg/Kg	4		6010B	Total/NA
Barium	39		1.5	0.21	mg/Kg	4		6010B	Total/NA
Chromium	89		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	4.8		0.60	0.060	mg/Kg	4		6010B	Total/NA
Copper	6.4		4.5	2.1	mg/Kg	4		6010B	Total/NA
Lead	1.4	J	1.5	0.31	mg/Kg	4		6010B	Total/NA
Nickel	18		1.5	0.15	mg/Kg	4		6010B	Total/NA
Selenium	0.50	J	3.0	0.45	mg/Kg	4		6010B	Total/NA
Thallium	0.81	J	1.5	0.43	mg/Kg	4		6010B	Total/NA
Vanadium	80		1.5	0.20	mg/Kg	4		6010B	Total/NA
Zinc	18		4.5	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.0067	J	0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H6S-0.5-1 — Lab Sample ID: 720-88217-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	5.6	J	9.4	4.5	ug/Kg	2		8270C SIM	Total/NA
Anthracene	8.1	J	9.4	3.8	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	29		9.4	2.8	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	51		9.4	3.6	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	69		9.4	4.0	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	24		9.4	8.1	ug/Kg	2		8270C SIM	Total/NA
Chrysene	39		9.4	2.6	ug/Kg	2		8270C SIM	Total/NA
Dibenz(a,h)anthracene	9.1	J	9.4	6.6	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	30	B	9.4	2.6	ug/Kg	2		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	20		9.4	7.9	ug/Kg	2		8270C SIM	Total/NA
Naphthalene	8.6	J	9.4	6.6	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	24		9.4	3.4	ug/Kg	2		8270C SIM	Total/NA
Pyrene	49	B	9.4	3.2	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	540000		19000	7300	ug/Kg	10		8015B	Total/NA
Antimony	1.6		1.6	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	8.5		3.1	0.26	mg/Kg	4		6010B	Total/NA
Barium	100		1.6	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.15	J	0.31	0.10	mg/Kg	4		6010B	Total/NA
Cadmium	0.16	J	0.39	0.038	mg/Kg	4		6010B	Total/NA
Chromium	88		1.6	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.62	0.062	mg/Kg	4		6010B	Total/NA
Copper	48		4.7	2.2	mg/Kg	4		6010B	Total/NA
Lead	110		1.6	0.33	mg/Kg	4		6010B	Total/NA
Molybdenum	0.22	J	1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	51		1.6	0.16	mg/Kg	4		6010B	Total/NA
Selenium	0.66	J	3.1	0.47	mg/Kg	4		6010B	Total/NA
Silver	0.39	J	0.78	0.16	mg/Kg	4		6010B	Total/NA
Thallium	0.89	J	1.6	0.45	mg/Kg	4		6010B	Total/NA
Vanadium	64		1.6	0.21	mg/Kg	4		6010B	Total/NA
Zinc	120		4.7	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.34		0.014	0.0021	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88217-1

Client Sample ID: DG-H6S-3.5-4

Lab Sample ID: 720-88217-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	43	H	38	29	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	11		9.8	4.9	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	2.6	J	4.9	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	4.4	J	4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	14		4.9	1.5	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	16		4.9	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	27		4.9	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	7.6		4.9	4.2	ug/Kg	1		8270C SIM	Total/NA
Chrysene	17		4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	3.5	J	4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	20	B	4.9	1.4	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	7.2		4.9	4.1	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	9.8		4.9	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	19		4.9	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	24	B	4.9	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	110000		2000	740	ug/Kg	1		8015B	Total/NA
Antimony	1.1	J	1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	4.5		3.0	0.26	mg/Kg	4		6010B	Total/NA
Barium	87		1.5	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.11	J	0.30	0.098	mg/Kg	4		6010B	Total/NA
Cadmium	0.17	J	0.38	0.038	mg/Kg	4		6010B	Total/NA
Chromium	74		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	8.7		0.61	0.061	mg/Kg	4		6010B	Total/NA
Copper	43		4.5	2.2	mg/Kg	4		6010B	Total/NA
Lead	820		1.5	0.32	mg/Kg	4		6010B	Total/NA
Nickel	44		1.5	0.15	mg/Kg	4		6010B	Total/NA
Silver	0.37	J	0.76	0.15	mg/Kg	4		6010B	Total/NA
Thallium	0.95	J	1.5	0.44	mg/Kg	4		6010B	Total/NA
Vanadium	62		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	130		4.5	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.15		0.017	0.0025	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88217-1

Client Sample ID: DUP-03
Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88217-1
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.6		1.3	0.21	mg/Kg		08/25/18 12:57	08/27/18 23:02	4
Arsenic	120		2.6	0.22	mg/Kg		08/25/18 12:57	08/27/18 23:02	4
Barium	88	B	1.3	0.18	mg/Kg		08/25/18 12:57	08/27/18 23:02	4
Beryllium	0.22	J	0.26	0.084	mg/Kg		08/25/18 12:57	08/27/18 23:02	4
Cadmium	0.13	J	0.32	0.032	mg/Kg		08/25/18 12:57	08/27/18 23:02	4
Chromium	41		1.3	0.14	mg/Kg		08/25/18 12:57	08/27/18 23:02	4
Cobalt	5.2		0.52	0.052	mg/Kg		08/25/18 12:57	08/27/18 23:02	4
Copper	25		3.9	1.8	mg/Kg		08/25/18 12:57	08/27/18 23:02	4
Lead	79		1.3	0.27	mg/Kg		08/25/18 12:57	08/27/18 23:02	4
Molybdenum	ND		1.3	0.17	mg/Kg		08/25/18 12:57	08/27/18 23:02	4
Nickel	29		1.3	0.13	mg/Kg		08/25/18 12:57	08/27/18 23:02	4
Selenium	ND		2.6	0.39	mg/Kg		08/25/18 12:57	08/27/18 23:02	4
Silver	ND		0.65	0.13	mg/Kg		08/25/18 12:57	08/27/18 23:02	4
Thallium	0.39	J	1.3	0.37	mg/Kg		08/25/18 12:57	08/27/18 23:02	4
Vanadium	28		1.3	0.18	mg/Kg		08/25/18 12:57	08/27/18 23:02	4
Zinc	160		3.9	1.6	mg/Kg		08/25/18 12:57	08/27/18 23:02	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.085		0.016	0.0023	mg/Kg		08/28/18 15:53	08/30/18 12:24	1

Client Sample ID: DUP-04

Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88217-2

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.4	0.82	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Acetone	**85**		34	26	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Benzene	ND		3.4	0.44	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Dichlorobromomethane	ND		3.4	0.49	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Bromobenzene	ND	*	3.4	0.54	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Chlorobromomethane	ND		14	0.49	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Bromoform	ND		3.4	1.4	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Bromomethane	ND		6.8	0.54	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
2-Butanone (MEK)	ND		34	14	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
n-Butylbenzene	ND	*	3.4	0.68	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
sec-Butylbenzene	ND	*	3.4	0.49	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
tert-Butylbenzene	ND	*	3.4	0.50	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Carbon disulfide	ND		3.4	1.4	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Carbon tetrachloride	ND		3.4	0.42	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Chlorobenzene	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Chloroethane	ND		6.8	0.38	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Chloroform	ND		3.4	0.45	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Chloromethane	ND		6.8	0.54	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
2-Chlorotoluene	ND	*	3.4	0.44	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
4-Chlorotoluene	ND	*	3.4	0.47	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Chlorodibromomethane	ND		3.4	0.49	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
1,2-Dichlorobenzene	ND	*	3.4	0.47	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
1,3-Dichlorobenzene	ND	*	3.4	0.49	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
1,4-Dichlorobenzene	ND	*	3.4	0.49	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
1,3-Dichloropropane	ND		3.4	0.50	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
1,1-Dichloropropene	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
1,2-Dibromo-3-Chloropropane	ND	*	6.8	1.2	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Ethylene Dibromide	ND		3.4	0.98	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Dibromomethane	ND		6.8	0.59	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Dichlorodifluoromethane	ND		6.8	0.54	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
1,1-Dichloroethane	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
1,2-Dichloroethane	ND		3.4	0.52	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
1,1-Dichloroethene	ND		3.4	0.42	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
cis-1,2-Dichloroethene	**0.76**	**J**	3.4	0.47	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
trans-1,2-Dichloroethene	ND		3.4	0.51	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
1,2-Dichloropropane	ND		3.4	0.43	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
cis-1,3-Dichloropropene	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
trans-1,3-Dichloropropene	ND		3.4	0.46	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Ethylbenzene	ND		3.4	0.51	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Hexachlorobutadiene	ND	*	3.4	0.62	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
2-Hexanone	ND		34	6.8	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Isopropylbenzene	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
4-Isopropyltoluene	ND	*	3.4	1.7	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Methylene Chloride	ND		6.8	3.8	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
4-Methyl-2-pentanone (MIBK)	ND		34	6.8	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Naphthalene	ND	*	6.8	1.0	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
N-Propylbenzene	ND	*	3.4	0.45	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Styrene	ND		3.4	0.43	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
1,1,1,2-Tetrachloroethane	ND		3.4	0.52	ug/Kg		08/24/18 02:25	08/28/18 16:56	1

Client Sample ID: DUP-04
Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88217-2
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	3.4	0.51	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Tetrachloroethene	ND		3.4	0.46	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Toluene	ND		3.4	0.49	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
1,2,3-Trichlorobenzene	ND	*	3.4	0.51	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
1,2,4-Trichlorobenzene	ND	*	3.4	0.49	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
1,1,1-Trichloroethane	ND		3.4	0.42	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
1,1,2-Trichloroethane	ND		3.4	0.48	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Trichloroethene	ND		3.4	0.43	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Trichlorofluoromethane	ND		3.4	0.38	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
1,2,3-Trichloropropane	ND	*	3.4	0.53	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.4	1.4	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
1,2,4-Trimethylbenzene	ND	*	3.4	1.1	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
1,3,5-Trimethylbenzene	ND	*	3.4	0.44	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Vinyl acetate	ND		14	3.4	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Vinyl chloride	**0.88**	**J**	3.4	0.50	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Xylenes, Total	ND		3.4	0.84	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
2,2-Dichloropropane	ND		3.4	1.4	ug/Kg		08/24/18 02:25	08/28/18 16:56	1
Gasoline Range Organics (GRO) -C4-C12	ND		170	68	ug/Kg		08/24/18 02:25	08/28/18 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*45 - 131*	*08/24/18 02:25*	*08/28/18 16:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*	*08/24/18 02:25*	*08/28/18 16:56*	*1*
Toluene-d8 (Surr)	*89*		*58 - 140*	*08/24/18 02:25*	*08/28/18 16:56*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**53**		19	9.4	ug/Kg		08/24/18 15:31	08/30/18 00:40	2
Acenaphthene	**6.0**	**J**	9.4	5.3	ug/Kg		08/24/18 15:31	08/30/18 00:40	2
Acenaphthylene	**59**		9.4	4.5	ug/Kg		08/24/18 15:31	08/30/18 00:40	2
Anthracene	**61**		9.4	3.8	ug/Kg		08/24/18 15:31	08/30/18 00:40	2
Benzo[a]anthracene	**260**		9.4	2.8	ug/Kg		08/24/18 15:31	08/30/18 00:40	2
Benzo[a]pyrene	**320**		9.4	3.6	ug/Kg		08/24/18 15:31	08/30/18 00:40	2
Benzo[b]fluoranthene	**520**		9.4	4.0	ug/Kg		08/24/18 15:31	08/30/18 00:40	2
Benzo[g,h,i]perylene	**150**		9.4	8.1	ug/Kg		08/24/18 15:31	08/30/18 00:40	2
Benzo[k]fluoranthene	ND		9.4	4.0	ug/Kg		08/24/18 15:31	08/30/18 00:40	2
Chrysene	**330**	**B**	9.4	2.6	ug/Kg		08/24/18 15:31	08/30/18 00:40	2
Dibenz(a,h)anthracene	**44**		9.4	6.6	ug/Kg		08/24/18 15:31	08/30/18 00:40	2
Fluoranthene	**370**		9.4	2.6	ug/Kg		08/24/18 15:31	08/30/18 00:40	2
Fluorene	**17**		9.4	4.2	ug/Kg		08/24/18 15:31	08/30/18 00:40	2
Indeno[1,2,3-cd]pyrene	**120**		9.4	7.9	ug/Kg		08/24/18 15:31	08/30/18 00:40	2
Naphthalene	**59**		9.4	6.6	ug/Kg		08/24/18 15:31	08/30/18 00:40	2
Phenanthrene	**260**		9.4	3.4	ug/Kg		08/24/18 15:31	08/30/18 00:40	2
Pyrene	**560**		9.4	3.2	ug/Kg		08/24/18 15:31	08/30/18 00:40	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*33 - 120*	*08/24/18 15:31*	*08/30/18 00:40*	*2*
Terphenyl-d14	*98*		*35 - 146*	*08/24/18 15:31*	*08/30/18 00:40*	*2*

Client Sample ID: DUP-04
Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88217-2
Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	110000	B	1900	720	ug/Kg		08/27/18 08:59	08/28/18 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*72*		*40 - 130*	*08/27/18 08:59*	*08/28/18 22:45*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
Aldrin	ND		2.0	0.50	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
Endrin	ND		2.0	0.46	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
Toxaphene	ND		40	6.7	ug/Kg		08/24/18 11:26	08/29/18 11:12	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/24/18 11:26	08/29/18 11:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*81*		*21 - 136*	*08/24/18 11:26*	*08/29/18 11:12*	*1*
Tetrachloro-m-xylene	*85*		*21 - 145*	*08/24/18 11:26*	*08/29/18 11:12*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/27/18 11:05	08/28/18 19:49	1
Aroclor-1221	ND		51	24	ug/Kg		08/27/18 11:05	08/28/18 19:49	1
Aroclor-1232	ND		51	23	ug/Kg		08/27/18 11:05	08/28/18 19:49	1
Aroclor-1242	ND		51	19	ug/Kg		08/27/18 11:05	08/28/18 19:49	1
Aroclor-1248	ND		51	24	ug/Kg		08/27/18 11:05	08/28/18 19:49	1
Aroclor-1254	ND		51	23	ug/Kg		08/27/18 11:05	08/28/18 19:49	1
Aroclor-1260	ND		51	22	ug/Kg		08/27/18 11:05	08/28/18 19:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*94*		*14 - 128*	*08/27/18 11:05*	*08/28/18 19:49*	*1*
DCB Decachlorobiphenyl	*105*		*10 - 132*	*08/27/18 11:05*	*08/28/18 19:49*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.8		1.5	0.24	mg/Kg		08/25/18 12:57	08/27/18 23:16	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88217-1

Client Sample ID: DUP-04
Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88217-2
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	22		2.9	0.25	mg/Kg		08/25/18 12:57	08/27/18 23:16	4
Barium	85	B	1.5	0.21	mg/Kg		08/25/18 12:57	08/27/18 23:16	4
Beryllium	0.12	J	0.29	0.096	mg/Kg		08/25/18 12:57	08/27/18 23:16	4
Cadmium	0.43		0.37	0.036	mg/Kg		08/25/18 12:57	08/27/18 23:16	4
Chromium	10		1.5	0.16	mg/Kg		08/25/18 12:57	08/27/18 23:16	4
Cobalt	11		0.59	0.059	mg/Kg		08/25/18 12:57	08/27/18 23:16	4
Copper	130		4.4	2.1	mg/Kg		08/25/18 12:57	08/27/18 23:16	4
Lead	300		1.5	0.31	mg/Kg		08/25/18 12:57	08/27/18 23:16	4
Molybdenum	0.26	J	1.5	0.19	mg/Kg		08/25/18 12:57	08/27/18 23:16	4
Nickel	7.1		1.5	0.15	mg/Kg		08/25/18 12:57	08/27/18 23:16	4
Selenium	ND		2.9	0.44	mg/Kg		08/25/18 12:57	08/27/18 23:16	4
Silver	ND		0.74	0.15	mg/Kg		08/25/18 12:57	08/27/18 23:16	4
Thallium	1.2	J	1.5	0.43	mg/Kg		08/25/18 12:57	08/27/18 23:16	4
Vanadium	78		1.5	0.20	mg/Kg		08/25/18 12:57	08/27/18 23:16	4
Zinc	240		4.4	1.9	mg/Kg		08/25/18 12:57	08/27/18 23:16	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.095		0.015	0.0022	mg/Kg		08/28/18 15:53	08/30/18 12:27	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88217-1

Client Sample ID: DG-A5S-0.5-1
Date Collected: 08/23/18 12:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88217-3
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.4		1.4	0.24	mg/Kg		08/25/18 12:57	08/28/18 15:29	4
Arsenic	8.9		2.9	0.25	mg/Kg		08/25/18 12:57	08/27/18 23:21	4
Barium	71	B	1.4	0.21	mg/Kg		08/25/18 12:57	08/27/18 23:21	4
Beryllium	0.10	J	0.29	0.094	mg/Kg		08/25/18 12:57	08/27/18 23:21	4
Cadmium	0.34	J	0.36	0.036	mg/Kg		08/25/18 12:57	08/27/18 23:21	4
Chromium	33		1.4	0.15	mg/Kg		08/25/18 12:57	08/27/18 23:21	4
Cobalt	15		0.58	0.058	mg/Kg		08/25/18 12:57	08/27/18 23:21	4
Copper	170		4.3	2.1	mg/Kg		08/25/18 12:57	08/27/18 23:21	4
Lead	220		1.4	0.30	mg/Kg		08/25/18 12:57	08/27/18 23:21	4
Molybdenum	0.47	J	1.4	0.19	mg/Kg		08/25/18 12:57	08/27/18 23:21	4
Nickel	16		1.4	0.15	mg/Kg		08/25/18 12:57	08/27/18 23:21	4
Selenium	ND		2.9	0.43	mg/Kg		08/25/18 12:57	08/27/18 23:21	4
Silver	0.16	J	0.72	0.15	mg/Kg		08/25/18 12:57	08/27/18 23:21	4
Thallium	1.2	J	1.4	0.42	mg/Kg		08/25/18 12:57	08/27/18 23:21	4
Vanadium	100		1.4	0.20	mg/Kg		08/25/18 12:57	08/27/18 23:21	4
Zinc	160		4.3	1.8	mg/Kg		08/25/18 12:57	08/27/18 23:21	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.38		0.015	0.0023	mg/Kg		08/28/18 15:53	08/30/18 12:34	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88217-1

Client Sample ID: DG-A5S-3.5-4
Date Collected: 08/23/18 12:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88217-4
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.80	J F1	1.5	0.25	mg/Kg		08/25/18 14:28	08/27/18 18:59	4
Arsenic	2.1	J B	3.1	0.26	mg/Kg		08/25/18 14:28	08/27/18 18:59	4
Barium	83	F1	1.5	0.22	mg/Kg		08/25/18 14:28	08/27/18 18:59	4
Beryllium	0.12	J	0.31	0.099	mg/Kg		08/25/18 14:28	08/27/18 18:59	4
Cadmium	ND		0.38	0.038	mg/Kg		08/25/18 14:28	08/27/18 18:59	4
Chromium	96		1.5	0.16	mg/Kg		08/25/18 14:28	08/27/18 18:59	4
Cobalt	30		0.61	0.061	mg/Kg		08/25/18 14:28	08/27/18 18:59	4
Copper	45	F1	4.6	2.2	mg/Kg		08/25/18 14:28	08/27/18 18:59	4
Lead	2.7		1.5	0.32	mg/Kg		08/25/18 14:28	08/27/18 18:59	4
Molybdenum	0.22	J	1.5	0.20	mg/Kg		08/25/18 14:28	08/27/18 18:59	4
Nickel	68		1.5	0.16	mg/Kg		08/25/18 14:28	08/27/18 18:59	4
Selenium	ND		3.1	0.46	mg/Kg		08/25/18 14:28	08/27/18 18:59	4
Silver	ND	F1	0.76	0.15	mg/Kg		08/25/18 14:28	08/27/18 18:59	4
Thallium	1.6		1.5	0.44	mg/Kg		08/25/18 14:28	08/27/18 18:59	4
Vanadium	100	F1	1.5	0.21	mg/Kg		08/25/18 14:28	08/27/18 18:59	4
Zinc	68		4.6	1.9	mg/Kg		08/25/18 14:28	08/27/18 18:59	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13		0.016	0.0024	mg/Kg		08/28/18 15:53	08/30/18 12:36	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88217-1

Client Sample ID: DG-A5S-19.5-20
Date Collected: 08/23/18 12:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88217-5
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	*	4.0	0.95	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Acetone	**55**	*	40	30	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Benzene	ND	*	4.0	0.52	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Dichlorobromomethane	ND	*	4.0	0.57	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Bromobenzene	ND	*	4.0	0.63	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Chlorobromomethane	ND	*	16	0.57	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Bromoform	ND	*	4.0	1.6	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Bromomethane	ND	*	8.0	0.63	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
2-Butanone (MEK)	ND	*	40	17	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
n-Butylbenzene	ND	*	4.0	0.80	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
sec-Butylbenzene	ND	*	4.0	0.57	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
tert-Butylbenzene	ND	*	4.0	0.58	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Carbon disulfide	ND	*	4.0	1.6	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Carbon tetrachloride	ND	*	4.0	0.49	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Chlorobenzene	ND	*	4.0	0.55	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Chloroethane	ND	*	8.0	0.45	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Chloroform	ND	*	4.0	0.53	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Chloromethane	ND	*	8.0	0.63	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
2-Chlorotoluene	ND	*	4.0	0.52	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
4-Chlorotoluene	ND	*	4.0	0.54	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Chlorodibromomethane	ND	*	4.0	0.57	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
1,2-Dichlorobenzene	ND	*	4.0	0.54	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
1,3-Dichlorobenzene	ND	*	4.0	0.57	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
1,4-Dichlorobenzene	ND	*	4.0	0.57	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
1,3-Dichloropropane	ND	*	4.0	0.58	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
1,1-Dichloropropene	ND	*	4.0	0.55	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
1,2-Dibromo-3-Chloropropane	ND	*	8.0	1.4	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Ethylene Dibromide	ND	*	4.0	1.1	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Dibromomethane	ND	*	8.0	0.68	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Dichlorodifluoromethane	ND	*	8.0	0.63	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
1,1-Dichloroethane	ND	*	4.0	0.54	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
1,2-Dichloroethane	ND	*	4.0	0.60	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
1,1-Dichloroethene	**1.8**	**J ***	4.0	0.49	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
cis-1,2-Dichloroethene	**120**	*	4.0	0.54	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
trans-1,2-Dichloroethene	**15**	*	4.0	0.60	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
1,2-Dichloropropane	ND	*	4.0	0.50	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
cis-1,3-Dichloropropene	ND	*	4.0	0.55	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
trans-1,3-Dichloropropene	ND	*	4.0	0.53	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Ethylbenzene	ND	*	4.0	0.60	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Hexachlorobutadiene	ND	*	4.0	0.72	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
2-Hexanone	ND	*	40	8.0	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Isopropylbenzene	ND	*	4.0	0.54	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
4-Isopropyltoluene	ND	*	4.0	2.0	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Methylene Chloride	ND	*	8.0	4.5	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
4-Methyl-2-pentanone (MIBK)	ND	*	40	8.0	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Naphthalene	ND	*	8.0	1.2	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
N-Propylbenzene	ND	*	4.0	0.53	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Styrene	ND	*	4.0	0.50	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
1,1,1,2-Tetrachloroethane	ND	*	4.0	0.60	ug/Kg		08/24/18 02:25	08/28/18 17:29	1

Client Sample ID: DG-A5S-19.5-20

Date Collected: 08/23/18 12:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88217-5

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.0	0.60	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Tetrachloroethene	ND	*	4.0	0.53	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Toluene	ND	*	4.0	0.57	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
1,2,3-Trichlorobenzene	ND	*	4.0	0.59	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
1,2,4-Trichlorobenzene	ND	*	4.0	0.57	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
1,1,1-Trichloroethane	ND	*	4.0	0.49	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
1,1,2-Trichloroethane	ND	*	4.0	0.56	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Trichloroethene	**38**	*	4.0	0.50	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Trichlorofluoromethane	ND	*	4.0	0.45	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
1,2,3-Trichloropropane	ND	*	4.0	0.61	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.0	1.7	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
1,2,4-Trimethylbenzene	ND	*	4.0	1.3	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
1,3,5-Trimethylbenzene	ND	*	4.0	0.52	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Vinyl acetate	ND	*	16	4.0	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Vinyl chloride	ND	*	4.0	0.58	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Xylenes, Total	ND		4.0	0.97	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
2,2-Dichloropropane	ND	*	4.0	1.6	ug/Kg		08/24/18 02:25	08/28/18 17:29	1
Gasoline Range Organics (GRO) -C4-C12	**140**	**J ***	200	80	ug/Kg		08/24/18 02:25	08/28/18 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*	*	*45 - 131*	*08/24/18 02:25*	*08/28/18 17:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*	*	*60 - 140*	*08/24/18 02:25*	*08/28/18 17:29*	*1*
Toluene-d8 (Surr)	*85*	*	*58 - 140*	*08/24/18 02:25*	*08/28/18 17:29*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.5	4.8	ug/Kg		08/24/18 15:31	08/29/18 21:54	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/24/18 15:31	08/29/18 21:54	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		08/24/18 15:31	08/29/18 21:54	1
Anthracene	ND		4.8	1.9	ug/Kg		08/24/18 15:31	08/29/18 21:54	1
Benzo[a]anthracene	ND		4.8	1.4	ug/Kg		08/24/18 15:31	08/29/18 21:54	1
Benzo[a]pyrene	ND		4.8	1.8	ug/Kg		08/24/18 15:31	08/29/18 21:54	1
Benzo[b]fluoranthene	ND		4.8	2.0	ug/Kg		08/24/18 15:31	08/29/18 21:54	1
Benzo[g,h,i]perylene	ND		4.8	4.1	ug/Kg		08/24/18 15:31	08/29/18 21:54	1
Benzo[k]fluoranthene	ND		4.8	2.0	ug/Kg		08/24/18 15:31	08/29/18 21:54	1
Chrysene	ND		4.8	1.3	ug/Kg		08/24/18 15:31	08/29/18 21:54	1
Dibenz(a,h)anthracene	ND		4.8	3.3	ug/Kg		08/24/18 15:31	08/29/18 21:54	1
Fluoranthene	ND		4.8	1.3	ug/Kg		08/24/18 15:31	08/29/18 21:54	1
Fluorene	ND		4.8	2.1	ug/Kg		08/24/18 15:31	08/29/18 21:54	1
Indeno[1,2,3-cd]pyrene	ND		4.8	4.0	ug/Kg		08/24/18 15:31	08/29/18 21:54	1
Naphthalene	ND		4.8	3.3	ug/Kg		08/24/18 15:31	08/29/18 21:54	1
Phenanthrene	ND		4.8	1.7	ug/Kg		08/24/18 15:31	08/29/18 21:54	1
Pyrene	ND		4.8	1.6	ug/Kg		08/24/18 15:31	08/29/18 21:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*33 - 120*	*08/24/18 15:31*	*08/29/18 21:54*	*1*
Terphenyl-d14	*85*		*35 - 146*	*08/24/18 15:31*	*08/29/18 21:54*	*1*

Client Sample ID: DG-A5S-19.5-20

Date Collected: 08/23/18 12:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88217-5

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	7900	B	2000	740	ug/Kg		08/27/18 08:59	08/28/18 21:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*85*		*40 - 130*	*08/27/18 08:59*	*08/28/18 21:32*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
Aldrin	ND		1.9	0.48	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
Endrin	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
Toxaphene	ND		38	6.5	ug/Kg		08/24/18 11:26	08/29/18 11:30	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/29/18 11:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*84*		*21 - 136*	*08/24/18 11:26*	*08/29/18 11:30*	*1*
Tetrachloro-m-xylene	*73*		*21 - 145*	*08/24/18 11:26*	*08/29/18 11:30*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		52	23	ug/Kg		08/27/18 11:05	08/28/18 20:11	1
Aroclor-1221	ND		52	25	ug/Kg		08/27/18 11:05	08/28/18 20:11	1
Aroclor-1232	ND		52	24	ug/Kg		08/27/18 11:05	08/28/18 20:11	1
Aroclor-1242	ND		52	20	ug/Kg		08/27/18 11:05	08/28/18 20:11	1
Aroclor-1248	ND		52	25	ug/Kg		08/27/18 11:05	08/28/18 20:11	1
Aroclor-1254	ND		52	24	ug/Kg		08/27/18 11:05	08/28/18 20:11	1
Aroclor-1260	ND		52	23	ug/Kg		08/27/18 11:05	08/28/18 20:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*14 - 128*	*08/27/18 11:05*	*08/28/18 20:11*	*1*
DCB Decachlorobiphenyl	*71*		*10 - 132*	*08/27/18 11:05*	*08/28/18 20:11*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.68	J	1.5	0.25	mg/Kg		08/25/18 14:28	08/27/18 19:04	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88217-1

Client Sample ID: DG-A5S-19.5-20
Date Collected: 08/23/18 12:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88217-5
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.1	J B	3.0	0.25	mg/Kg		08/25/18 14:28	08/27/18 19:04	4
Barium	39		1.5	0.21	mg/Kg		08/25/18 14:28	08/27/18 19:04	4
Beryllium	ND		0.30	0.097	mg/Kg		08/25/18 14:28	08/27/18 19:04	4
Cadmium	ND		0.37	0.037	mg/Kg		08/25/18 14:28	08/27/18 19:04	4
Chromium	89		1.5	0.16	mg/Kg		08/25/18 14:28	08/27/18 19:04	4
Cobalt	4.8		0.60	0.060	mg/Kg		08/25/18 14:28	08/27/18 19:04	4
Copper	6.4		4.5	2.1	mg/Kg		08/25/18 14:28	08/27/18 19:04	4
Lead	1.4	J	1.5	0.31	mg/Kg		08/25/18 14:28	08/27/18 19:04	4
Molybdenum	ND		1.5	0.19	mg/Kg		08/25/18 14:28	08/27/18 19:04	4
Nickel	18		1.5	0.15	mg/Kg		08/25/18 14:28	08/27/18 19:04	4
Selenium	0.50	J	3.0	0.45	mg/Kg		08/25/18 14:28	08/27/18 19:04	4
Silver	ND		0.75	0.15	mg/Kg		08/25/18 14:28	08/27/18 19:04	4
Thallium	0.81	J	1.5	0.43	mg/Kg		08/25/18 14:28	08/27/18 19:04	4
Vanadium	80		1.5	0.20	mg/Kg		08/25/18 14:28	08/27/18 19:04	4
Zinc	18		4.5	1.9	mg/Kg		08/25/18 14:28	08/27/18 19:04	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0067	J	0.015	0.0023	mg/Kg		08/28/18 15:53	08/30/18 12:39	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88217-1

Client Sample ID: DG-H6S-0.5-1
Date Collected: 08/23/18 14:55
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88217-6
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	H	4.4	1.1	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Acetone	ND	H	44	34	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Benzene	ND	H	4.4	0.57	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,2,3-Trichloropropane	ND		0.0015	0.00042	mg/Kg		08/23/18 16:55	08/30/18 02:58	1
Dichlorobromomethane	ND	H	4.4	0.64	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,2-Dibromo-3-Chloropropane	ND		0.0038	0.00054	mg/Kg		08/23/18 16:55	08/30/18 02:58	1
Bromobenzene	ND	H	4.4	0.70	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Chlorobromomethane	ND	H	18	0.64	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Bromoform	ND	H	4.4	1.8	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Bromomethane	ND	H	8.8	0.70	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
2-Butanone (MEK)	ND	H	44	19	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
n-Butylbenzene	ND	H	4.4	0.88	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
sec-Butylbenzene	ND	H	4.4	0.64	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
tert-Butylbenzene	ND	H	4.4	0.64	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Carbon disulfide	ND	H	4.4	1.8	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Carbon tetrachloride	ND	H	4.4	0.55	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Chlorobenzene	ND	H	4.4	0.61	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Chloroethane	ND	H	8.8	0.49	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Chloroform	ND	H	4.4	0.58	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Chloromethane	ND	H	8.8	0.70	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
2-Chlorotoluene	ND	H	4.4	0.57	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
4-Chlorotoluene	ND	H	4.4	0.60	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Chlorodibromomethane	ND	H	4.4	0.63	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,2-Dichlorobenzene	ND	H	4.4	0.60	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,3-Dichlorobenzene	ND	H	4.4	0.64	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,4-Dichlorobenzene	ND	H	4.4	0.63	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,3-Dichloropropane	ND	H	4.4	0.64	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,1-Dichloropropene	ND	H	4.4	0.61	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,2-Dibromo-3-Chloropropane	ND	H	8.8	1.5	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Ethylene Dibromide	ND	H	4.4	1.3	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Dibromomethane	ND	H	8.8	0.76	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Dichlorodifluoromethane	ND	H	8.8	0.70	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,1-Dichloroethane	ND	H	4.4	0.60	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,2-Dichloroethane	ND	H	4.4	0.67	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,1-Dichloroethene	ND	H *	4.4	0.55	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
cis-1,2-Dichloroethene	ND	H	4.4	0.60	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
trans-1,2-Dichloroethene	ND	H	4.4	0.66	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,2-Dichloropropane	ND	H	4.4	0.56	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
cis-1,3-Dichloropropene	ND	H	4.4	0.61	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
trans-1,3-Dichloropropene	ND	H	4.4	0.59	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Ethylbenzene	ND	H	4.4	0.66	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Hexachlorobutadiene	ND	H	4.4	0.79	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
2-Hexanone	ND	H	44	8.8	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Isopropylbenzene	ND	H	4.4	0.60	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
4-Isopropyltoluene	ND	H	4.4	2.2	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Methylene Chloride	ND	H	8.8	4.9	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
4-Methyl-2-pentanone (MIBK)	ND	H	44	8.8	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Naphthalene	ND	H	8.8	1.3	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
N-Propylbenzene	ND	H	4.4	0.58	ug/Kg		08/24/18 02:25	08/31/18 11:17	1

Client Sample ID: DG-H6S-0.5-1
Date Collected: 08/23/18 14:55
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88217-6
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND	H	4.4	0.56	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,1,1,2-Tetrachloroethane	ND	H	4.4	0.67	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,1,2,2-Tetrachloroethane	ND	H	4.4	0.66	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Tetrachloroethene	ND	H	4.4	0.59	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Toluene	ND	H	4.4	0.63	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,2,3-Trichlorobenzene	ND	H	4.4	0.65	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,2,4-Trichlorobenzene	ND	H	4.4	0.63	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,1,1-Trichloroethane	ND	H	4.4	0.54	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,1,2-Trichloroethane	ND	H	4.4	0.62	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Trichloroethene	ND	H	4.4	0.56	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Trichlorofluoromethane	ND	H	4.4	0.49	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,2,3-Trichloropropane	ND	H	4.4	0.68	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	H *	4.4	1.8	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,2,4-Trimethylbenzene	ND	H	4.4	1.4	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
1,3,5-Trimethylbenzene	ND	H	4.4	0.57	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Vinyl acetate	ND	H	18	4.4	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Vinyl chloride	ND	H	4.4	0.64	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Xylenes, Total	ND	H	4.4	1.1	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
2,2-Dichloropropane	ND	H	4.4	1.8	ug/Kg		08/24/18 02:25	08/31/18 11:17	1
Gasoline Range Organics (GRO) -C4-C12	ND	H	220	88	ug/Kg		08/24/18 02:25	08/31/18 11:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*70 - 130*	*08/23/18 16:55*	*08/30/18 02:58*	*1*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*08/23/18 16:55*	*08/30/18 02:58*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*	*08/23/18 16:55*	*08/30/18 02:58*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*08/23/18 16:55*	*08/30/18 02:58*	*1*
4-Bromofluorobenzene	*82*		*45 - 131*	*08/24/18 02:25*	*08/31/18 11:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*60 - 140*	*08/24/18 02:25*	*08/31/18 11:17*	*1*
Toluene-d8 (Surr)	*90*		*58 - 140*	*08/24/18 02:25*	*08/31/18 11:17*	*1*

Method: 8270C SIM - Semivolatile Org Compounds by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		19	9.4	ug/Kg		08/27/18 12:37	08/29/18 23:52	2
Acenaphthene	ND		9.4	5.3	ug/Kg		08/27/18 12:37	08/29/18 23:52	2
Acenaphthylene	**5.6**	**J**	9.4	4.5	ug/Kg		08/27/18 12:37	08/29/18 23:52	2
Anthracene	**8.1**	**J**	9.4	3.8	ug/Kg		08/27/18 12:37	08/29/18 23:52	2
Benzo[a]anthracene	**29**		9.4	2.8	ug/Kg		08/27/18 12:37	08/29/18 23:52	2
Benzo[a]pyrene	**51**		9.4	3.6	ug/Kg		08/27/18 12:37	08/29/18 23:52	2
Benzo[b]fluoranthene	**69**		9.4	4.0	ug/Kg		08/27/18 12:37	08/29/18 23:52	2
Benzo[g,h,i]perylene	**24**		9.4	8.1	ug/Kg		08/27/18 12:37	08/29/18 23:52	2
Benzo[k]fluoranthene	ND		9.4	4.0	ug/Kg		08/27/18 12:37	08/29/18 23:52	2
Chrysene	**39**		9.4	2.6	ug/Kg		08/27/18 12:37	08/29/18 23:52	2
Dibenz(a,h)anthracene	**9.1**	**J**	9.4	6.6	ug/Kg		08/27/18 12:37	08/29/18 23:52	2
Fluoranthene	**30**	**B**	9.4	2.6	ug/Kg		08/27/18 12:37	08/29/18 23:52	2
Fluorene	ND		9.4	4.2	ug/Kg		08/27/18 12:37	08/29/18 23:52	2
Indeno[1,2,3-cd]pyrene	**20**		9.4	7.9	ug/Kg		08/27/18 12:37	08/29/18 23:52	2
Naphthalene	**8.6**	**J**	9.4	6.6	ug/Kg		08/27/18 12:37	08/29/18 23:52	2
Phenanthrene	**24**		9.4	3.4	ug/Kg		08/27/18 12:37	08/29/18 23:52	2
Pyrene	**49**	**B**	9.4	3.2	ug/Kg		08/27/18 12:37	08/29/18 23:52	2

Client Sample ID: DG-H6S-0.5-1

Date Collected: 08/23/18 14:55
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88217-6

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	68		33 - 120	08/27/18 12:37	08/29/18 23:52	2
Terphenyl-d14	90		35 - 146	08/27/18 12:37	08/29/18 23:52	2

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	540000		19000	7300	ug/Kg		08/28/18 08:52	08/30/18 06:06	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	0	D X	40 - 130	08/28/18 08:52	08/30/18 06:06	10

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	23	ug/Kg		08/29/18 14:50	08/31/18 07:23	1
Aroclor-1221	ND		51	25	ug/Kg		08/29/18 14:50	08/31/18 07:23	1
Aroclor-1232	ND		51	24	ug/Kg		08/29/18 14:50	08/31/18 07:23	1
Aroclor-1242	ND		51	20	ug/Kg		08/29/18 14:50	08/31/18 07:23	1
Aroclor-1248	ND		51	25	ug/Kg		08/29/18 14:50	08/31/18 07:23	1
Aroclor-1254	ND		51	24	ug/Kg		08/29/18 14:50	08/31/18 07:23	1
Aroclor-1260	ND		51	23	ug/Kg		08/29/18 14:50	08/31/18 07:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	88		14 - 128	08/29/18 14:50	08/31/18 07:23	1
DCB Decachlorobiphenyl	97		10 - 132	08/29/18 14:50	08/31/18 07:23	1

Method: 6010B - Metales (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.6		1.6	0.26	mg/Kg		08/27/18 14:52	08/28/18 17:10	4
Arsenic	8.5		3.1	0.26	mg/Kg		08/27/18 14:52	08/28/18 17:10	4
Barium	100		1.6	0.22	mg/Kg		08/27/18 14:52	08/28/18 17:10	4
Beryllium	0.15	J	0.31	0.10	mg/Kg		08/27/18 14:52	08/28/18 17:10	4
Cadmium	0.16	J	0.39	0.038	mg/Kg		08/27/18 14:52	08/28/18 17:10	4
Chromium	88		1.6	0.16	mg/Kg		08/27/18 14:52	08/28/18 17:10	4
Cobalt	13		0.62	0.062	mg/Kg		08/27/18 14:52	08/28/18 17:10	4
Copper	48		4.7	2.2	mg/Kg		08/27/18 14:52	08/28/18 17:10	4
Lead	110		1.6	0.33	mg/Kg		08/27/18 14:52	08/28/18 17:10	4
Molybdenum	0.22	J	1.6	0.20	mg/Kg		08/27/18 14:52	08/28/18 17:10	4
Nickel	51		1.6	0.16	mg/Kg		08/27/18 14:52	08/28/18 17:10	4
Selenium	0.66	J	3.1	0.47	mg/Kg		08/27/18 14:52	08/28/18 17:10	4
Silver	0.39	J	0.78	0.16	mg/Kg		08/27/18 14:52	08/28/18 17:10	4
Thallium	0.89	J	1.6	0.45	mg/Kg		08/27/18 14:52	08/28/18 17:10	4
Vanadium	64		1.6	0.21	mg/Kg		08/27/18 14:52	08/28/18 17:10	4
Zinc	120		4.7	2.0	mg/Kg		08/27/18 14:52	08/28/18 17:10	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.34		0.014	0.0021	mg/Kg		08/28/18 15:53	08/30/18 12:41	1

Client Sample ID: DG-H6S-3.5-4
Date Collected: 08/23/18 14:55
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88217-7
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	H	3.8	0.92	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Acetone	**43**	**H**	38	29	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Benzene	ND	H	3.8	0.50	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Dichlorobromomethane	ND	H	3.8	0.55	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Bromobenzene	ND	H	3.8	0.60	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Chlorobromomethane	ND	H	15	0.55	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Bromoform	ND	H	3.8	1.5	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Bromomethane	ND	H	7.7	0.60	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
2-Butanone (MEK)	ND	H	38	16	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
n-Butylbenzene	ND	H	3.8	0.77	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
sec-Butylbenzene	ND	H	3.8	0.55	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
tert-Butylbenzene	ND	H	3.8	0.56	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Carbon disulfide	ND	H	3.8	1.5	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Carbon tetrachloride	ND	H	3.8	0.47	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Chlorobenzene	ND	H	3.8	0.53	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Chloroethane	ND	H	7.7	0.43	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Chloroform	ND	H	3.8	0.51	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Chloromethane	ND	H	7.7	0.60	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
2-Chlorotoluene	ND	H	3.8	0.50	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
4-Chlorotoluene	ND	H	3.8	0.52	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Chlorodibromomethane	ND	H	3.8	0.54	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
1,2-Dichlorobenzene	ND	H	3.8	0.52	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
1,3-Dichlorobenzene	ND	H	3.8	0.55	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
1,4-Dichlorobenzene	ND	H	3.8	0.54	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
1,3-Dichloropropane	ND	H	3.8	0.56	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
1,1-Dichloropropene	ND	H	3.8	0.53	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
1,2-Dibromo-3-Chloropropane	ND	H	7.7	1.3	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Ethylene Dibromide	ND	H	3.8	1.1	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Dibromomethane	ND	H	7.7	0.66	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Dichlorodifluoromethane	ND	H	7.7	0.60	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
1,1-Dichloroethane	ND	H	3.8	0.52	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
1,2-Dichloroethane	ND	H	3.8	0.58	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
1,1-Dichloroethene	ND	H *	3.8	0.47	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
cis-1,2-Dichloroethene	ND	H	3.8	0.52	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
trans-1,2-Dichloroethene	ND	H	3.8	0.57	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
1,2-Dichloropropane	ND	H	3.8	0.48	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
cis-1,3-Dichloropropene	ND	H	3.8	0.53	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
trans-1,3-Dichloropropene	ND	H	3.8	0.51	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Ethylbenzene	ND	H	3.8	0.57	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Hexachlorobutadiene	ND	H	3.8	0.69	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
2-Hexanone	ND	H	38	7.7	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Isopropylbenzene	ND	H	3.8	0.52	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
4-Isopropyltoluene	ND	H	3.8	1.9	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Methylene Chloride	ND	H	7.7	4.3	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
4-Methyl-2-pentanone (MIBK)	ND	H	38	7.7	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Naphthalene	ND	H	7.7	1.1	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
N-Propylbenzene	ND	H	3.8	0.51	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Styrene	ND	H	3.8	0.48	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
1,1,1,2-Tetrachloroethane	ND	H	3.8	0.58	ug/Kg		08/24/18 02:25	08/31/18 11:46	1

Client Sample ID: DG-H6S-3.5-4
Date Collected: 08/23/18 14:55
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88217-7
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	H	3.8	0.57	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Tetrachloroethene	ND	H	3.8	0.51	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Toluene	ND	H	3.8	0.54	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
1,2,3-Trichlorobenzene	ND	H	3.8	0.57	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
1,2,4-Trichlorobenzene	ND	H	3.8	0.54	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
1,1,1-Trichloroethane	ND	H	3.8	0.47	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
1,1,2-Trichloroethane	ND	H	3.8	0.54	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Trichloroethene	ND	H	3.8	0.48	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Trichlorofluoromethane	ND	H	3.8	0.43	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
1,2,3-Trichloropropane	ND	H	3.8	0.59	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	H *	3.8	1.6	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
1,2,4-Trimethylbenzene	ND	H	3.8	1.3	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
1,3,5-Trimethylbenzene	ND	H	3.8	0.50	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Vinyl acetate	ND	H	15	3.8	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Vinyl chloride	ND	H	3.8	0.56	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Xylenes, Total	ND	H	3.8	0.93	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
2,2-Dichloropropane	ND	H	3.8	1.5	ug/Kg		08/24/18 02:25	08/31/18 11:46	1
Gasoline Range Organics (GRO) -C4-C12	ND	H	190	77	ug/Kg		08/24/18 02:25	08/31/18 11:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*45 - 131*	*08/24/18 02:25*	*08/31/18 11:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*60 - 140*	*08/24/18 02:25*	*08/31/18 11:46*	*1*
Toluene-d8 (Surr)	*93*		*58 - 140*	*08/24/18 02:25*	*08/31/18 11:46*	*1*

Method: 8270C SIM - Semivolatile Org Compounds by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**11**		9.8	4.9	ug/Kg		08/27/18 12:37	08/29/18 20:43	1
Acenaphthene	ND		4.9	2.7	ug/Kg		08/27/18 12:37	08/29/18 20:43	1
Acenaphthylene	**2.6**	**J**	4.9	2.3	ug/Kg		08/27/18 12:37	08/29/18 20:43	1
Anthracene	**4.4**	**J**	4.9	2.0	ug/Kg		08/27/18 12:37	08/29/18 20:43	1
Benzo[a]anthracene	**14**		4.9	1.5	ug/Kg		08/27/18 12:37	08/29/18 20:43	1
Benzo[a]pyrene	**16**		4.9	1.9	ug/Kg		08/27/18 12:37	08/29/18 20:43	1
Benzo[b]fluoranthene	**27**		4.9	2.0	ug/Kg		08/27/18 12:37	08/29/18 20:43	1
Benzo[g,h,i]perylene	**7.6**		4.9	4.2	ug/Kg		08/27/18 12:37	08/29/18 20:43	1
Benzo[k]fluoranthene	ND		4.9	2.0	ug/Kg		08/27/18 12:37	08/29/18 20:43	1
Chrysene	**17**		4.9	1.4	ug/Kg		08/27/18 12:37	08/29/18 20:43	1
Dibenz(a,h)anthracene	**3.5**	**J**	4.9	3.4	ug/Kg		08/27/18 12:37	08/29/18 20:43	1
Fluoranthene	**20**	**B**	4.9	1.4	ug/Kg		08/27/18 12:37	08/29/18 20:43	1
Fluorene	ND		4.9	2.1	ug/Kg		08/27/18 12:37	08/29/18 20:43	1
Indeno[1,2,3-cd]pyrene	**7.2**		4.9	4.1	ug/Kg		08/27/18 12:37	08/29/18 20:43	1
Naphthalene	**9.8**		4.9	3.4	ug/Kg		08/27/18 12:37	08/29/18 20:43	1
Phenanthrene	**19**		4.9	1.8	ug/Kg		08/27/18 12:37	08/29/18 20:43	1
Pyrene	**24**	**B**	4.9	1.7	ug/Kg		08/27/18 12:37	08/29/18 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*50*		*33 - 120*	*08/27/18 12:37*	*08/29/18 20:43*	*1*
Terphenyl-d14	*79*		*35 - 146*	*08/27/18 12:37*	*08/29/18 20:43*	*1*

Client Sample ID: DG-H6S-3.5-4

Date Collected: 08/23/18 14:55
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88217-7

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	110000		2000	740	ug/Kg		08/28/18 08:52	08/30/18 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*106*		*40 - 130*	*08/28/18 08:52*	*08/30/18 12:49*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 07:40	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 07:40	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 07:40	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:50	08/31/18 07:40	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 07:40	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 07:40	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 07:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*88*		*14 - 128*	*08/29/18 14:50*	*08/31/18 07:40*	*1*
DCB Decachlorobiphenyl	*89*		*10 - 132*	*08/29/18 14:50*	*08/31/18 07:40*	*1*

Method: 6010B - Metales (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.1	J	1.5	0.25	mg/Kg		08/27/18 14:52	08/28/18 17:14	4
Arsenic	4.5		3.0	0.26	mg/Kg		08/27/18 14:52	08/28/18 17:14	4
Barium	87		1.5	0.22	mg/Kg		08/27/18 14:52	08/28/18 17:14	4
Beryllium	0.11	J	0.30	0.098	mg/Kg		08/27/18 14:52	08/28/18 17:14	4
Cadmium	0.17	J	0.38	0.038	mg/Kg		08/27/18 14:52	08/28/18 17:14	4
Chromium	74		1.5	0.16	mg/Kg		08/27/18 14:52	08/28/18 17:14	4
Cobalt	8.7		0.61	0.061	mg/Kg		08/27/18 14:52	08/28/18 17:14	4
Copper	43		4.5	2.2	mg/Kg		08/27/18 14:52	08/28/18 17:14	4
Lead	820		1.5	0.32	mg/Kg		08/27/18 14:52	08/28/18 17:14	4
Molybdenum	ND		1.5	0.19	mg/Kg		08/27/18 14:52	08/28/18 17:14	4
Nickel	44		1.5	0.15	mg/Kg		08/27/18 14:52	08/28/18 17:14	4
Selenium	ND		3.0	0.45	mg/Kg		08/27/18 14:52	08/28/18 17:14	4
Silver	0.37	J	0.76	0.15	mg/Kg		08/27/18 14:52	08/28/18 17:14	4
Thallium	0.95	J	1.5	0.44	mg/Kg		08/27/18 14:52	08/28/18 17:14	4
Vanadium	62		1.5	0.21	mg/Kg		08/27/18 14:52	08/28/18 17:14	4
Zinc	130		4.5	1.9	mg/Kg		08/27/18 14:52	08/28/18 17:14	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15		0.017	0.0025	mg/Kg		08/28/18 15:53	08/30/18 12:43	1

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88217-1

SDG No.:

Client Sample ID: DUP-04 Lab Sample ID: 720-88217-2

Matrix: Solid Lab File ID: FID2000023.D

Analysis Method: 8015B Date Collected: 08/22/2018 00:00

Extraction Method: 3546 Date Extracted: 08/27/2018 08:59

Sample wt/vol: 15.61(g) Date Analyzed: 08/28/2018 22:45

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250356 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	110000	B	1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	72		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000023.D
Lims ID: 720-88217-D-2-D
Client ID: DUP-04
Sample Type: Client
Inject. Date: 28-Aug-2018 22:45:35 ALS Bottle#: 73 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053519-023
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\DRO6_B.m
Limit Group: DRO
Last Update: 29-Aug-2018 12:11:54 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 12:11:54

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.314			ND	
	23 n-Decane	2.187	2.177	0.010	432872	NC	M
A	1 C9-C13	2.782	(1.314-4.250)		8188079	3.75	M
A	21 Stoddard Solvent	2.782	(1.314-4.250)		8188079	NC	M
A	57 C10-C12	2.906	(2.177-3.636)		5290522	10.3	M
	24 Dodecane	3.618	3.636	-0.018	225218	NC	M
A	3 C9 - C17	3.813	(1.314-6.312)		38208022	16.7	M
A	60 C10-C16	4.006	(2.177-5.836)		26414474	13.0	M
A	47 C9 - C18	4.034	(1.314-6.755)		58764010	31.0	M
A	25 C9-C19	4.246	(1.314-7.179)		98831368	42.9	M
A	15 Kerosene	4.246	(1.314-7.179)		98831368	52.1	M
	26 C13		4.250			ND	
$	27 n-Decanoic Acid (Surr)		4.632			ND	U
A	59 C12-C16	4.736	(3.636-5.836)		21349170	19.4	M
A	61 C10-C20	4.882	(2.177-7.586)		197286403	119.0	M
A	28 C9-C24	5.184	(1.314-9.055)		722218153	416.2	M
A	29 C9-C25	5.351	(1.314-9.388)		827144310	475.6	M
A	54 C10-C23	5.443	(2.177-8.709)		540088309	313.1	M
A	4 C10-C24	5.616	(2.177-9.055)		721171282	415.6	M
A	16 C10-C25	5.783	(2.177-9.388)		826097439	475.1	M
	45 Hexadecane	5.845	5.836	0.009	3255934	NC	M
A	14 C10-C26	5.943	(2.177-9.709)		963377325	552.8	M
A	67 C12-C22	5.993	(3.636-8.350)		452855264	263.7	M
A	32 C10-C28	6.249	(2.177-10.320)		1446206369	826.2	M
A	5 Diesel	6.249	(2.177-10.320)		1446206369	826.2	M
A	12 Unknown Hydrocarbons	6.249	(2.177-10.320)		1446206369	NC	M
A	30 C13-C22	6.300	(4.250-8.350)		450779360	262.5	M
	44 Heptadecane	6.340	6.312	0.028	8457597	NC	M
A	31 C12-C24	6.345	(3.636-9.055)		716105978	412.8	M
	49 n-Octadecane	6.803	6.755	0.048	15116506	NC	M
A	9 Crude Oil Range Organics (	6.862	(1.314-12.410)		2950416265	NC	M
A	11 Bunker Range Organics (C9-	6.862	(1.314-12.410)		2950416265	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.862	(1.314-12.410)		2950416265	1397.6	M
33 C19	7.179	7.179	0.000	15516243	NC	M
A 64 C13-C28	7.285	(4.250-10.320)		1439065161	822.1	M
A 17 C10-C36	7.294	(2.177-12.410)		2949369394	1677.3	M
A 68 Crude Oil Range Organics (	7.353	(1.314-13.392)		3433827644	NC	M
A 13 C9-C40	7.353	(1.314-13.392)		3433827644	2197.9	M
A 58 C16-C24	7.445	(5.836-9.055)		694756808	400.7	M
62 icosane	7.576	7.586	-0.010	37705804	NC	M
A 6 C10-C40	7.785	(2.177-13.392)		3432780773	2199.6	M
$ 34 p-Terphenyl	8.061	8.080	-0.019	36633680	18.0	
35 n-Docosane	8.348	8.350	-0.002	47358140	NC	M
A 18 C12-C40	8.514	(3.636-13.392)		3427715469	2202.6	M
36 Tricosane	8.771	8.709	0.062	85935489	NC	M
A 66 C13-C40	8.821	(4.250-13.392)		3425639565	2203.7	M
37 n-Tetracosane	9.063	9.055	0.008	36152620	NC	M
A 2 C16-C36 ORO	9.123	(5.836-12.410)		2922954920	2472.0	M
38 C25	9.408	9.388	0.020	98087627	NC	M
A 19 C16-C40	9.614	(5.836-13.392)		3406366299	2198.5	M
46 n-Hexacosane	9.752	9.709	0.043	140794674	NC	M
A 20 C19-C36	9.794	(7.179-12.410)		2316690767	1701.8	
A 55 C23-C32	10.068	(8.709-11.426)		1795721531	2320.4	M
39 n-Octacosane	10.378	10.320	0.058	98108578	NC	M
65 C29	10.619	10.610	0.009	92074030	NC	M
A 40 C24-C36	10.732	(9.055-12.410)		2113915825	2156.2	M
A 7 Motor Oil	10.732	(9.055-12.410)		1898755229	1936.7	
A 10 C22-C40	10.871	(8.350-13.392)		2497167450	1796.5	
A 50 C25-C36	10.899	(9.388-12.410)		1726814537	1874.5	
A 41 C23-C40	11.050	(8.709-13.392)		2387471268	1746.9	
A 8 C24-C40	11.223	(9.055-13.392)		2286258299	1704.6	
56 Dotriacontane	11.367	11.426	-0.059	145627734	NC	M
A 51 C28-C40	11.856	(10.320-13.392)		1657501418	1528.0	
A 63 C29-C40	12.001	(10.610-13.392)		1460595332	1461.6	
42 n-Hexatriacontane	12.363	12.410	-0.047	148173361	NC	M
43 C40	13.383	13.392	-0.009	116559604	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

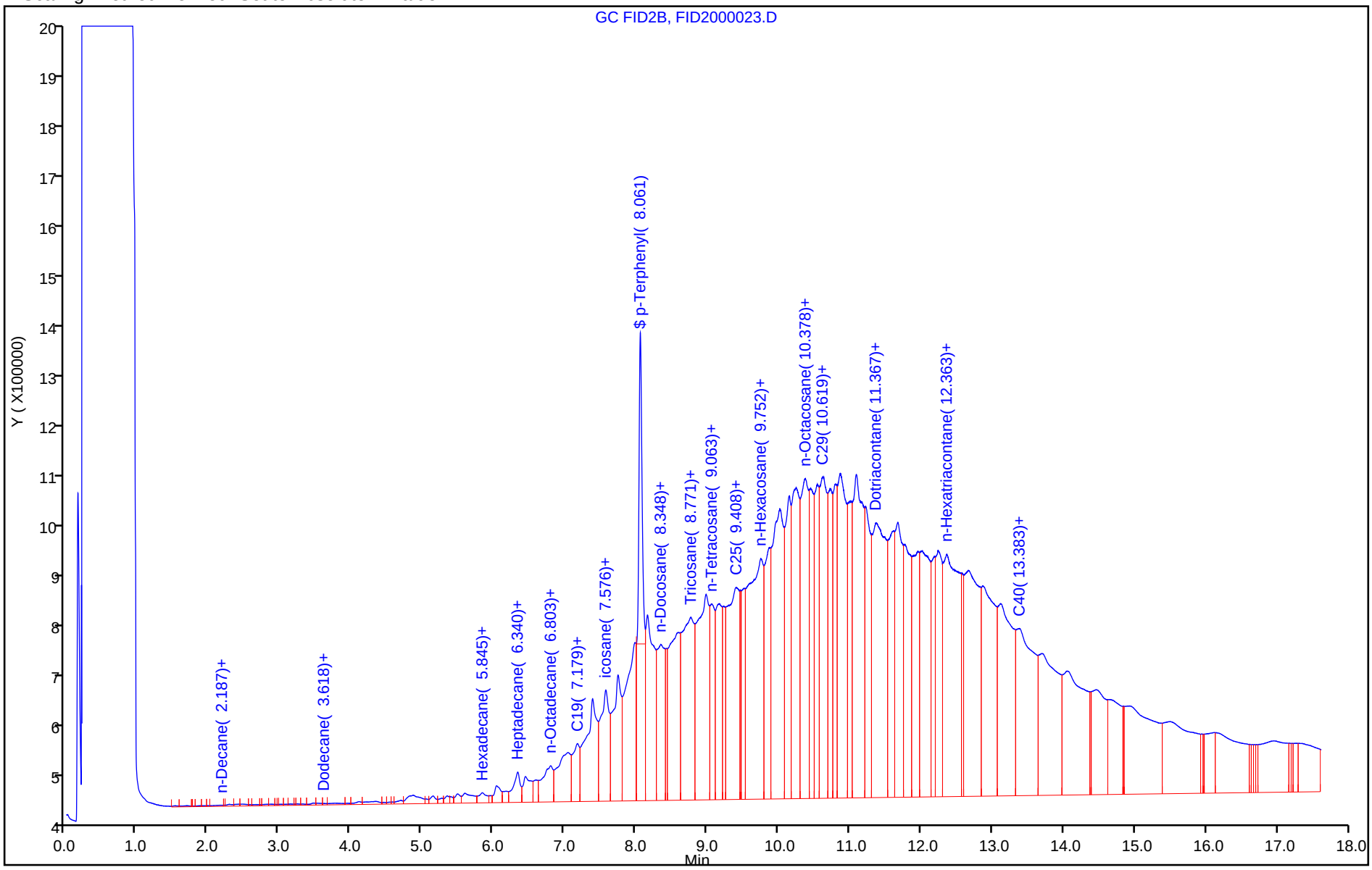
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 29-Aug-2018 12:11:55 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000023.D				
Injection Date:	28-Aug-2018 22:45:35	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88217-D-2-D	Lab Sample ID:	720-88217-2	Worklist Smp#:	23
Client ID:	DUP-04				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	73
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000023.D				
Lims ID:	720-88217-D-2-D				
Client ID:	DUP-04				
Sample Type:	Client				
Inject. Date:	28-Aug-2018 22:45:35	ALS Bottle#:	73	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053519-023				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	29-Aug-2018 12:11:54	Calib Date:	28-Aug-2018 10:16:50		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK008				
First Level Reviewer: luj		Date:	29-Aug-2018 12:11:54		

Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	18.0	72.06

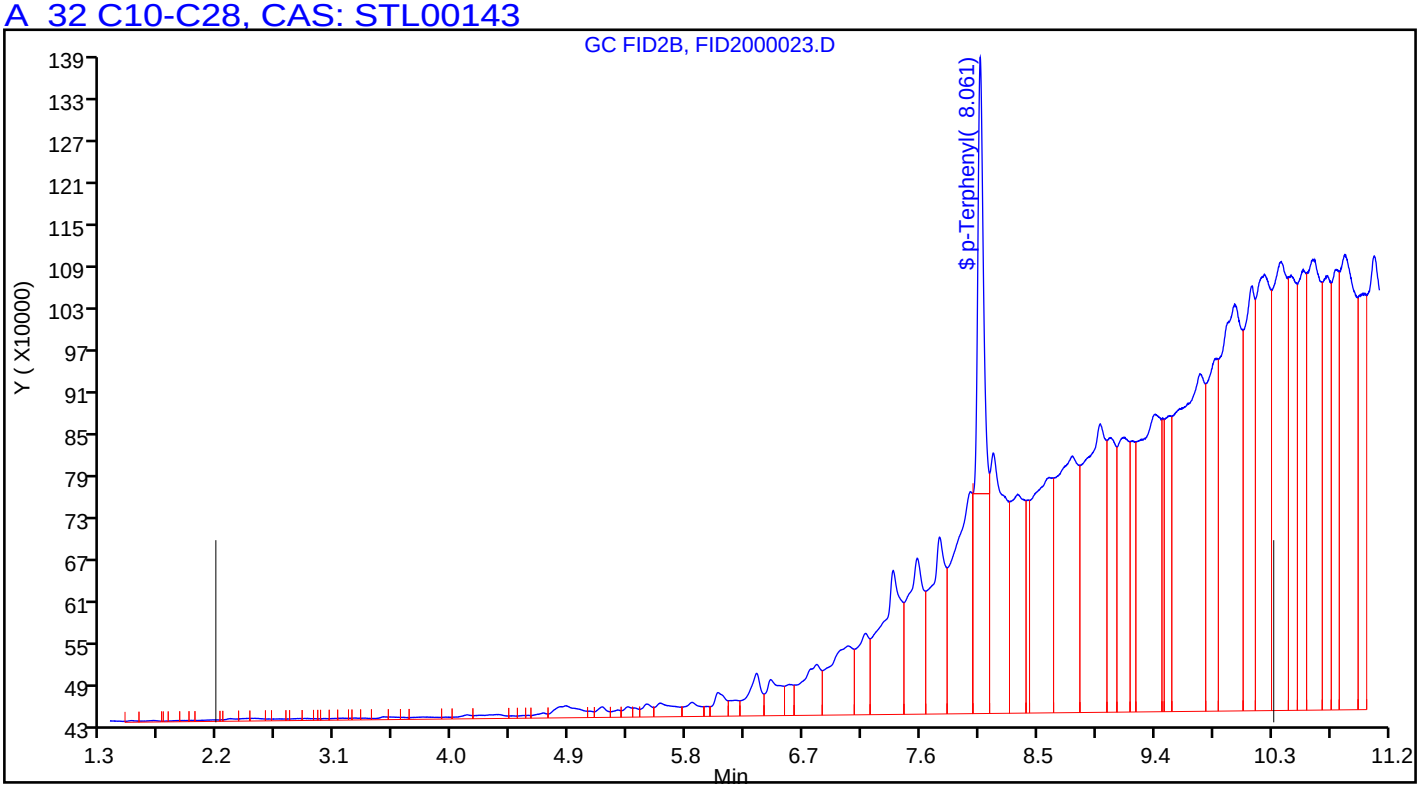
Report Date: 29-Aug-2018 12:12:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000023.D

Injection Date:	28-Aug-2018 22:45:35	Instrument ID:	CHDRO6		
Lims ID:	720-88217-D-2-D	Lab Sample ID:	720-88217-2		
Client ID:	DUP-04				
Operator ID:	DCH	ALS Bottle#:	73	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

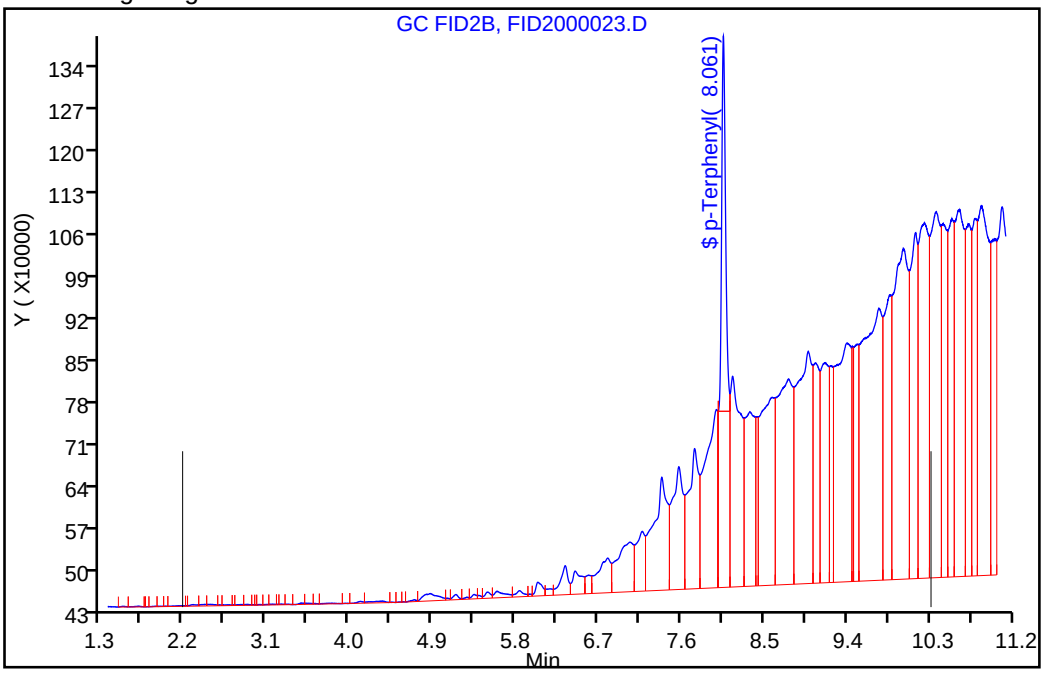
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000023.D				
Injection Date:	28-Aug-2018 22:45:35	Instrument ID:	CHDRO6		
Lims ID:	720-88217-D-2-D	Lab Sample ID:	720-88217-2		
Client ID:	DUP-04				
Operator ID:	DCH	ALS Bottle#:	73	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.249, CAS: STL00143

Signal: 1

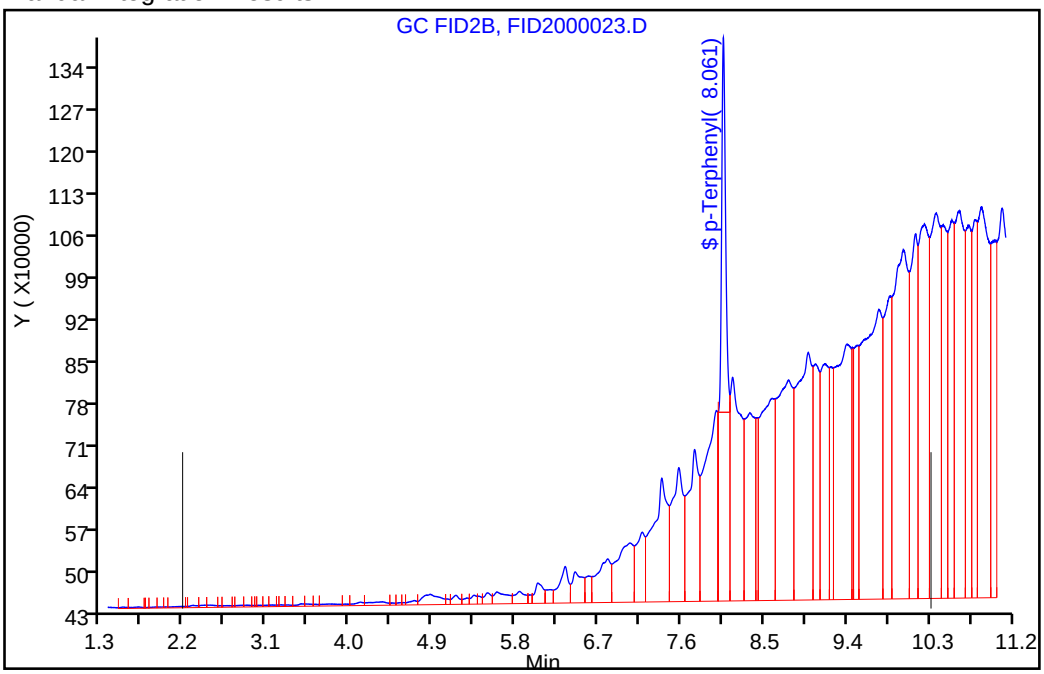
Processing Integration Results

RT: 6.25
Response: 1307116142
Amount: 747.4152



Manual Integration Results

RT: 6.25
Response: 1446206369
Amount: 826.1710



Reviewer: luj, 29-Aug-2018 12:11:43

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88217-1

SDG No.:

Client Sample ID: DG-A5S-19.5-20 Lab Sample ID: 720-88217-5

Matrix: Solid Lab File ID: FID2000020.D

Analysis Method: 8015B Date Collected: 08/22/2018 12:45

Extraction Method: 3546 Date Extracted: 08/27/2018 08:59

Sample wt/vol: 15.14(g) Date Analyzed: 08/28/2018 21:32

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250356 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	7900	B	2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	85		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000020.D
Lims ID: 720-88217-D-5-B
Client ID: DG-A5S-19.5-20
Sample Type: Client
Inject. Date: 28-Aug-2018 21:32:38 ALS Bottle#: 70 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053519-020
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\DRO6_B.m
Limit Group: DRO
Last Update: 29-Aug-2018 11:32:13 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 11:32:13

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.314			ND	
	23 n-Decane	2.156	2.177	-0.021	107108	NC	
A	1 C9-C13	2.782	(1.314-4.250)		3798487	1.74	
A	21 Stoddard Solvent	2.782	(1.314-4.250)		3798487	NC	
A	57 C10-C12	2.906	(2.177-3.636)		2790411	8.88	
	24 Dodecane	3.642	3.636	0.006	500021	NC	
A	3 C9 - C17	3.813	(1.314-6.312)		4287465	1.88	
A	60 C10-C16	4.006	(2.177-5.836)		4190905	2.07	
A	47 C9 - C18	4.034	(1.314-6.755)		5464170	2.89	
A	25 C9-C19	4.246	(1.314-7.179)		6357998	2.76	
A	15 Kerosene	4.246	(1.314-7.179)		6357998	3.35	
	26 C13		4.250			ND	
$	27 n-Decanoic Acid (Surr)		4.632			ND	U
A	59 C12-C16	4.736	(3.636-5.836)		1400494	8.09	
A	61 C10-C20	4.882	(2.177-7.586)		10059074	13.0	
A	28 C9-C24	5.184	(1.314-9.055)		30463115	24.5	
A	29 C9-C25	5.351	(1.314-9.388)		47953726	34.5	
A	54 C10-C23	5.443	(2.177-8.709)		24966680	21.4	
A	4 C10-C24	5.616	(2.177-9.055)		30386826	24.5	
A	16 C10-C25	5.783	(2.177-9.388)		47877437	34.4	
	45 Hexadecane	5.758	5.836	-0.078	22221	NC	
A	14 C10-C26	5.943	(2.177-9.709)		49725969	35.5	
A	67 C12-C22	5.993	(3.636-8.350)		22176269	19.9	
A	32 C10-C28	6.249	(2.177-10.320)		92665645	59.8	
A	5 Diesel	6.249	(2.177-10.320)		92665645	59.8	
A	12 Unknown Hydrocarbons	6.249	(2.177-10.320)		92665645	NC	
A	30 C13-C22	6.300	(4.250-8.350)		21676248	19.6	
	44 Heptadecane	6.361	6.312	0.049	606317	NC	
A	31 C12-C24	6.345	(3.636-9.055)		27596415	22.9	
	49 n-Octadecane	6.800	6.755	0.045	356023	NC	
A	9 Crude Oil Range Organics (	6.862	(1.314-12.410)		467987517	NC	
A	11 Bunker Range Organics (C9-	6.862	(1.314-12.410)		467987517	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.862	(1.314-12.410)		467987517	221.7	
33 C19	7.193	7.179	0.013	1481244	NC	
A 64 C13-C28	7.285	(4.250-10.320)		89375213	57.9	
A 17 C10-C36	7.294	(2.177-12.410)		467911228	272.2	
A 68 Crude Oil Range Organics (	7.353	(1.314-13.392)		686535920	NC	
A 13 C9-C40	7.353	(1.314-13.392)		686535920	439.4	
A 58 C16-C24	7.445	(5.836-9.055)		26195921	22.1	
62 icosane		7.586			ND	
A 6 C10-C40	7.785	(2.177-13.392)		686459631	439.9	
$ 34 p-Terphenyl	8.069	8.080	-0.011	43060016	21.2	M
35 n-Docosane		8.350			ND	
A 18 C12-C40	8.514	(3.636-13.392)		683669220	439.3	
36 Tricosane	8.714	8.709	0.005	3704445	NC	
A 66 C13-C40	8.821	(4.250-13.392)		683169199	439.5	
37 n-Tetracosane	9.066	9.055	0.011	3356581	NC	
A 2 C16-C36 ORO	9.123	(5.836-12.410)		463720323	392.2	
38 C25	9.376	9.388	-0.012	11635945	NC	
A 19 C16-C40	9.614	(5.836-13.392)		682268726	440.3	
46 n-Hexacosane	9.713	9.709	0.004	2881608	NC	
A 20 C19-C36	9.794	(7.179-12.410)		370760660	272.3	
A 55 C23-C32	10.068	(8.709-11.426)		199120240	257.3	
39 n-Octacosane	10.319	10.320	-0.001	11868044	NC	
65 C29	10.611	10.610	0.001	35913055	NC	
A 40 C24-C36	10.732	(9.055-12.410)		398820547	406.8	
A 7 Motor Oil	10.732	(9.055-12.410)		398820547	406.8	
A 10 C22-C40	10.871	(8.350-13.392)		532154431	382.8	
A 50 C25-C36	10.899	(9.388-12.410)		389313141	422.6	
A 41 C23-C40	11.050	(8.709-13.392)		593395700	434.2	
A 8 C24-C40	11.223	(9.055-13.392)		603347066	449.8	
56 Dotriacontane	11.522	11.426	0.096	45118289	NC	
A 51 C28-C40	11.856	(10.320-13.392)		571366329	526.7	
A 63 C29-C40	12.001	(10.610-13.392)		549395149	549.8	
42 n-Hexatriacontane	12.434	12.410	0.024	40304469	NC	
43 C40	13.485	13.392	0.093	50015373	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

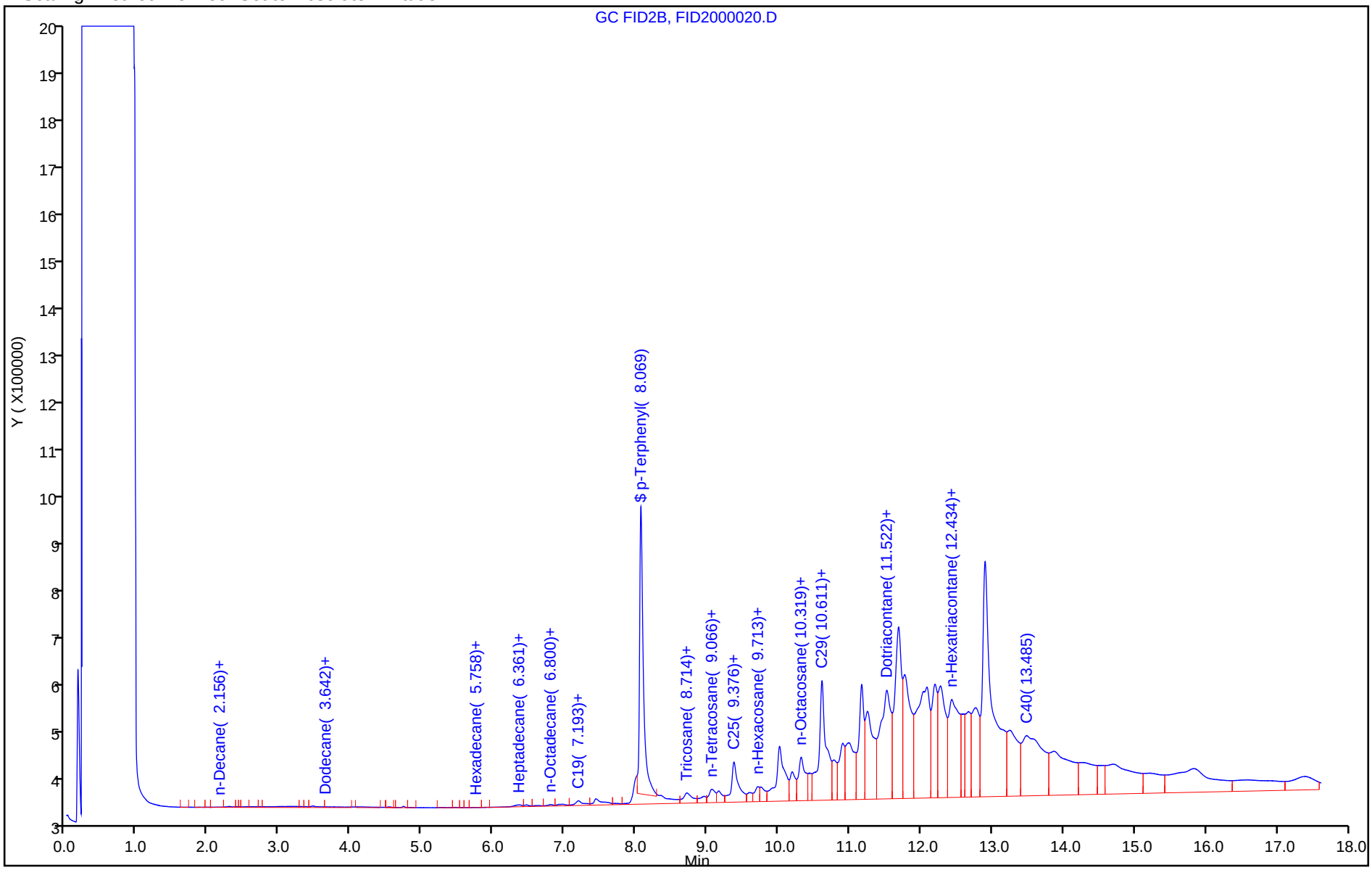
Report Date: 29-Aug-2018 11:32:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000020.D

Injection Date:	28-Aug-2018 21:32:38	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88217-D-5-B	Lab Sample ID:	720-88217-5	Worklist Smp#:	20
Client ID:	DG-A5S-19.5-20				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	70
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000020.D				
Lims ID:	720-88217-D-5-B				
Client ID:	DG-A5S-19.5-20				
Sample Type:	Client				
Inject. Date:	28-Aug-2018 21:32:38	ALS Bottle#:	70	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053519-020				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	29-Aug-2018 11:32:13	Calib Date:	28-Aug-2018 10:16:50		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK008				
First Level Reviewer: luj		Date:	29-Aug-2018 11:32:13		

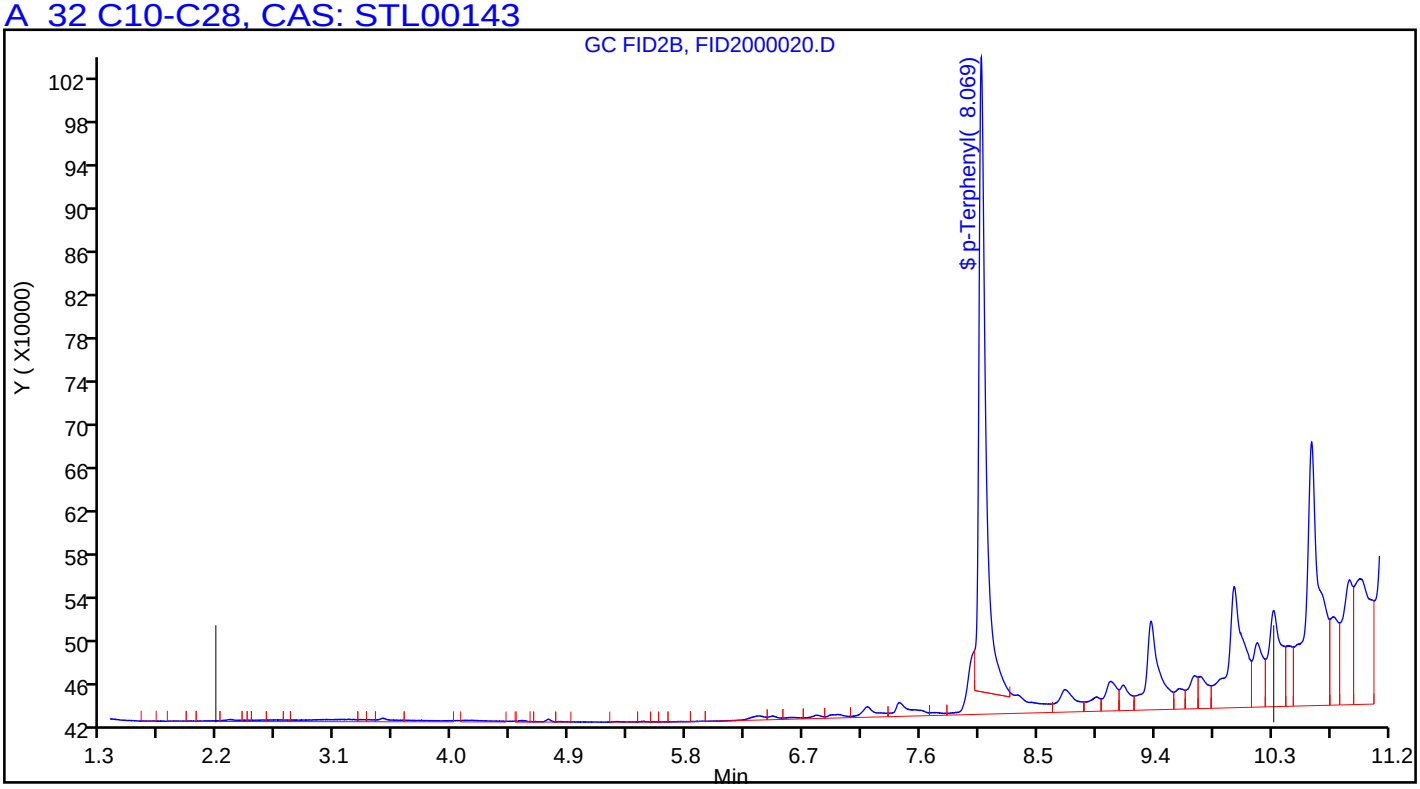
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	21.2	84.71

Report Date: 29-Aug-2018 11:32:15 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000020.D				
Injection Date:	28-Aug-2018 21:32:38	Instrument ID:	CHDRO6		
Lims ID:	720-88217-D-5-B	Lab Sample ID:	720-88217-5		
Client ID:	DG-A5S-19.5-20				
Operator ID:	DCH	ALS Bottle#:	70	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

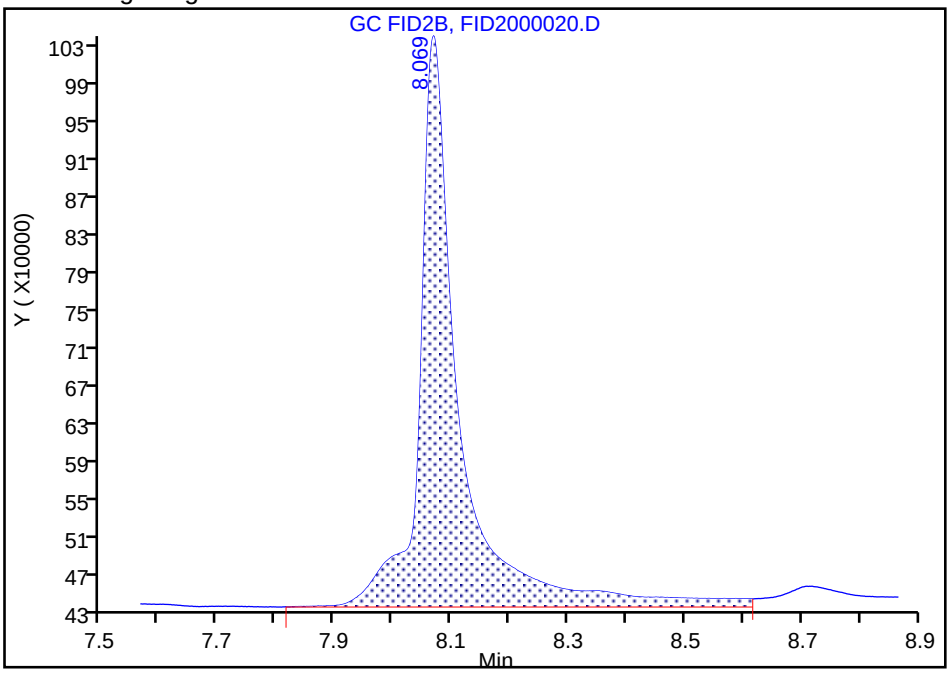
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000020.D				
Injection Date:	28-Aug-2018 21:32:38	Instrument ID:	CHDRO6		
Lims ID:	720-88217-D-5-B	Lab Sample ID:	720-88217-5		
Client ID:	DG-A5S-19.5-20				
Operator ID:	DCH	ALS Bottle#:	70	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

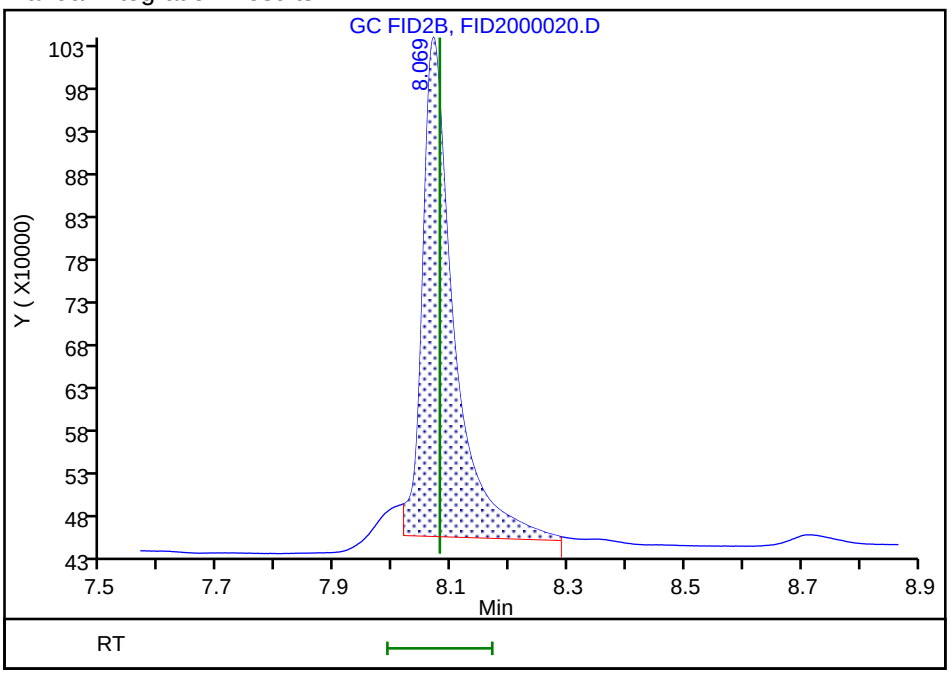
Processing Integration Results

RT: 8.07
Area: 57354776
Amount: 28.206517
Amount Units: mg/L



Manual Integration Results

RT: 8.07
Area: 43060016
Amount: 21.176494
Amount Units: mg/L



Reviewer: luj, 29-Aug-2018 11:32:03

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88217-1

SDG No.:

Client Sample ID: DG-H6S-0.5-1.0 Lab Sample ID: 720-88217-6

Matrix: Solid Lab File ID: FID2000044.D

Analysis Method: 8015B Date Collected: 08/22/2018 14:55

Extraction Method: 3546 Date Extracted: 08/28/2018 08:52

Sample wt/vol: 15.48(g) Date Analyzed: 08/30/2018 06:06

Con. Extract Vol.: 2(mL) Dilution Factor: 10

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250546 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	540000		19000	7300

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	D X	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180829-53562.b\FID2000044.D
Lims ID: 720-88217-G-6-B
Client ID: DG-H6S-0.5-1.0
Sample Type: Client
Inject. Date: 30-Aug-2018 06:06:44 ALS Bottle#: 94 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Sample Info: 720-0053562-021
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180829-53562.b\DRO6_B.m
Limit Group: DRO
Last Update: 30-Aug-2018 14:27:39 Calib Date: 30-Aug-2018 00:50:31
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180829-53562.b\FID2000031.D

Column 1 : Det: GC FID1A
Process Host: XAWRK001

First Level Reviewer: luj Date: 30-Aug-2018 14:27:39

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.314			ND	
23 n-Decane		2.179			ND	
A 1 C9-C13	2.784	(1.314-4.253)		4081022	1.87	M
A 21 Stoddard Solvent	2.784	(1.314-4.253)		4081022	NC	M
A 57 C10-C12	2.908	(2.179-3.638)		2644711	8.80	M
24 Dodecane	3.622	3.638	-0.016	135214	NC	M
A 3 C9 - C17	3.826	(1.314-6.337)		28150175	12.3	M
A 60 C10-C16	4.008	(2.179-5.838)		16155577	7.97	M
A 47 C9 - C18	4.035	(1.314-6.757)		39806199	21.0	M
A 25 C9-C19	4.247	(1.314-7.180)		63587445	27.6	M
A 15 Kerosene	4.247	(1.314-7.180)		63587445	33.5	M
26 C13	4.189	4.253	-0.064	120536	NC	M
$ 27 n-Decanoic Acid (Surr)		4.652			ND	U
A 59 C12-C16	4.738	(3.638-5.838)		13646080	15.0	M
A 61 C10-C20	4.884	(2.179-7.588)		98505561	63.1	M
A 28 C9-C24	5.186	(1.314-9.058)		318783033	187.8	M
A 29 C9-C25	5.352	(1.314-9.391)		359554577	210.9	M
A 54 C10-C23	5.445	(2.179-8.712)		237825160	142.0	M
A 4 C10-C24	5.618	(2.179-9.058)		318616355	187.7	M
A 16 C10-C25	5.785	(2.179-9.391)		359387899	210.8	M
45 Hexadecane	5.815	5.838	-0.023	1166160	NC	M
A 14 C10-C26	5.946	(2.179-9.712)		429856846	250.7	M
A 67 C12-C22	5.995	(3.638-8.352)		196341316	118.5	M
A 32 C10-C28	6.251	(2.179-10.323)		723718359	417.1	M
A 5 Diesel	6.251	(2.179-10.323)		723718359	417.1	M
A 12 Unknown Hydrocarbons	6.251	(2.179-10.323)		723718359	NC	M
A 30 C13-C22	6.303	(4.253-8.352)		194936469	117.7	M
44 Heptadecane	6.323	6.337	-0.014	6037241	NC	M
A 31 C12-C24	6.348	(3.638-9.058)		316106858	186.3	M
49 n-Octadecane	6.713	6.757	-0.044	7334786	NC	M
A 9 Crude Oil Range Organics (	6.865	(1.314-12.416)		1756361056	NC	M
A 11 Bunker Range Organics (C9-	6.865	(1.314-12.416)		1756361056	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.865	(1.314-12.416)		1756361056	832.0	M
33 C19	7.175	7.180	-0.005	5897952	NC	M
A 64 C13-C28	7.288	(4.253-10.323)		719804015	414.9	M
A 17 C10-C36	7.297	(2.179-12.416)		1756194378	1001.7	M
A 68 Crude Oil Range Organics (	7.356	(1.314-13.397)		3581437171	NC	M
A 13 C9-C40	7.356	(1.314-13.397)		3581437171	2292.4	M
A 58 C16-C24	7.448	(5.838-9.058)		303626938	179.2	M
62 icosane	7.588	7.588	0.000	25739735	NC	M
A 6 C10-C40	7.788	(2.179-13.397)		3581270493	2294.8	M
$ 34 p-Terphenyl		8.121			ND	U
35 n-Docosane	8.303	8.352	-0.049	27044858	NC	M
A 18 C12-C40	8.518	(3.638-13.397)		3578760996	2299.6	M
36 Tricosane	8.757	8.712	0.045	19111401	NC	M
A 66 C13-C40	8.825	(4.253-13.397)		3577356149	2301.3	M
37 n-Tetracosane	9.043	9.058	-0.015	61679794	NC	M
A 2 C16-C36 ORO	9.127	(5.838-12.416)		1741204961	1472.5	M
38 C25	9.401	9.391	0.010	39971620	NC	M
A 19 C16-C40	9.617	(5.838-13.397)		3566281076	2301.7	M
46 n-Hexacosane		9.712			ND	
A 20 C19-C36	9.798	(7.180-12.416)		1388627539	1020.0	
A 55 C23-C32	10.071	(8.712-11.431)		1160000900	1498.9	M
39 n-Octacosane	10.267	10.323	-0.056	109483543	NC	M
65 C29	10.637	10.613	0.024	231814652	NC	M
A 40 C24-C36	10.737	(9.058-12.416)		2104882779	2147.0	M
A 7 Motor Oil	10.737	(9.058-12.416)		1534865115	1565.6	
A 10 C22-C40	10.875	(8.352-13.397)		2343213600	1685.8	
A 50 C25-C36	10.903	(9.391-12.416)		1446853116	1570.6	
A 41 C23-C40	11.054	(8.712-13.397)		2358727791	1725.8	
A 8 C24-C40	11.227	(9.058-13.397)		2443842302	1822.1	
56 Dotriacontane		11.431			ND	
A 51 C28-C40	11.860	(10.323-13.397)		2240219363	2065.2	
A 63 C29-C40	12.005	(10.613-13.397)		2118082052	2119.5	
42 n-Hexatriacontane		12.416			ND	
43 C40		13.397			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

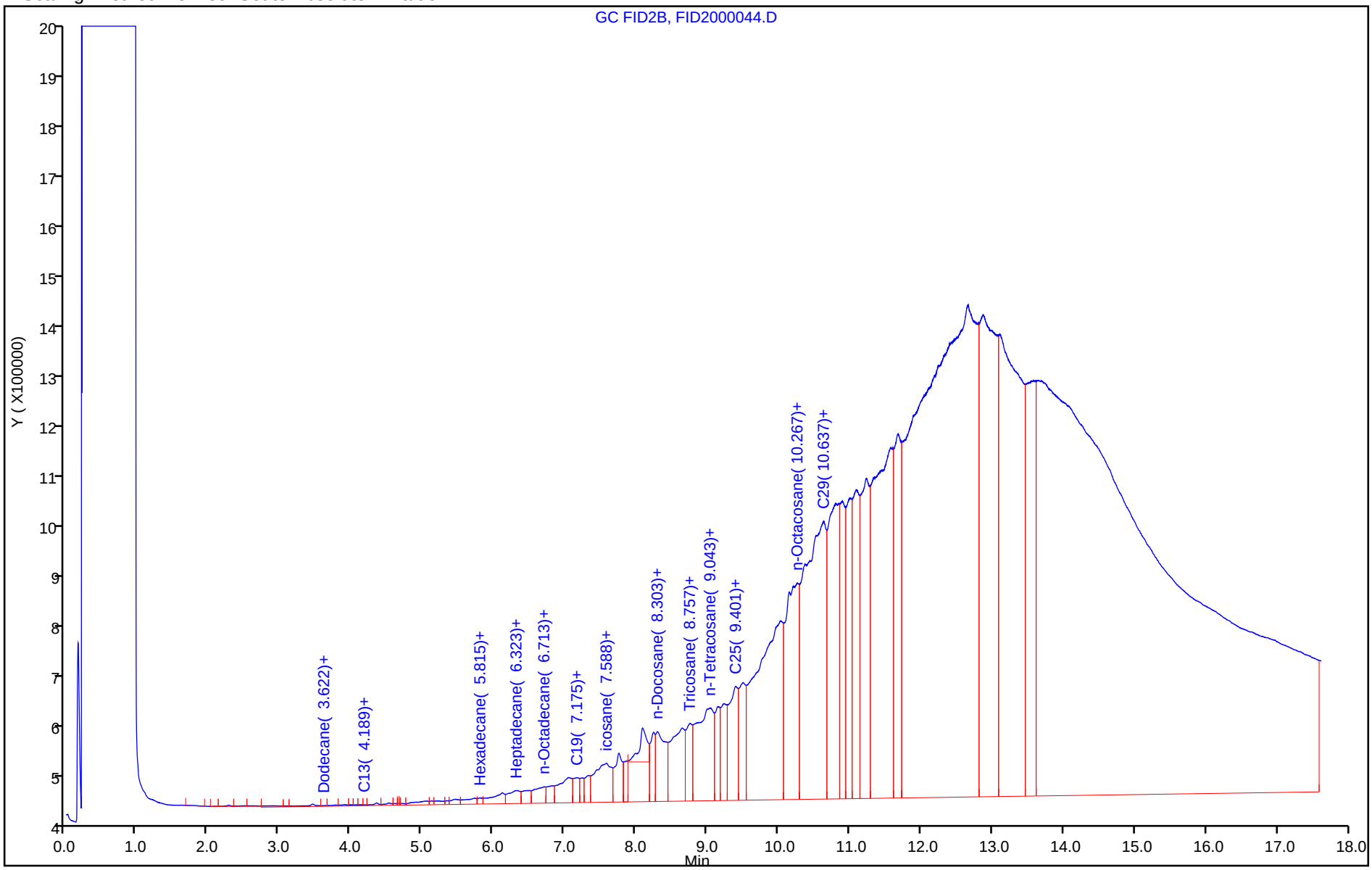
Report Date: 30-Aug-2018 14:27:40 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180829-53562.b\FID2000044.D

Injection Date:	30-Aug-2018 06:06:44	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88217-G-6-B	Lab Sample ID:	720-88217-6	Worklist Smp#:	21
Client ID:	DG-H6S-0.5-1.0				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	94
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



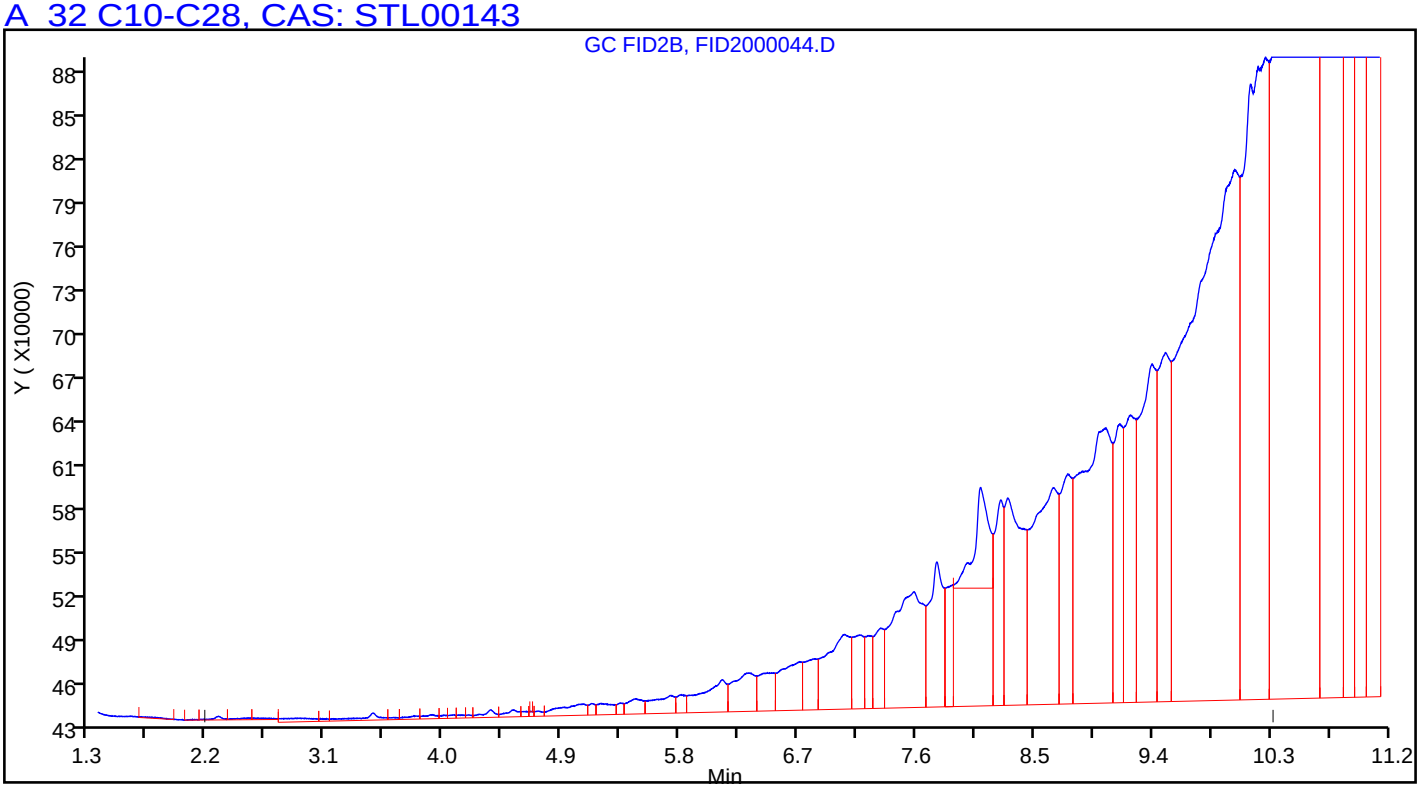
11/14/2018 (Rev. 1)

Report Date: 30-Aug-2018 14:27:42 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180829-53562.b\FID2000044.D				
Injection Date:	30-Aug-2018 06:06:44	Instrument ID:	CHDRO6		
Lims ID:	720-88217-G-6-B	Lab Sample ID:	720-88217-6		
Client ID:	DG-H6S-0.5-1.0				
Operator ID:	DCH	ALS Bottle#:	94	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

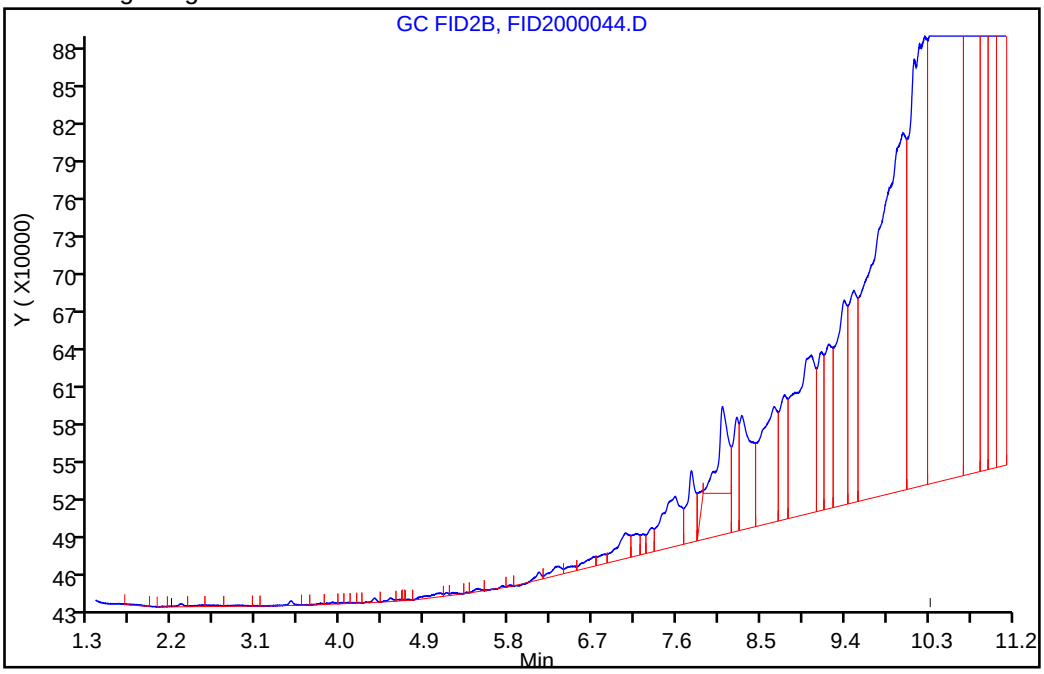
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180829-53562.b\FID2000044.D				
Injection Date:	30-Aug-2018 06:06:44	Instrument ID:	CHDRO6		
Lims ID:	720-88217-G-6-B	Lab Sample ID:	720-88217-6		
Client ID:	DG-H6S-0.5-1.0				
Operator ID:	DCH	ALS Bottle#:	94	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.251, CAS: STL00143

Signal: 1

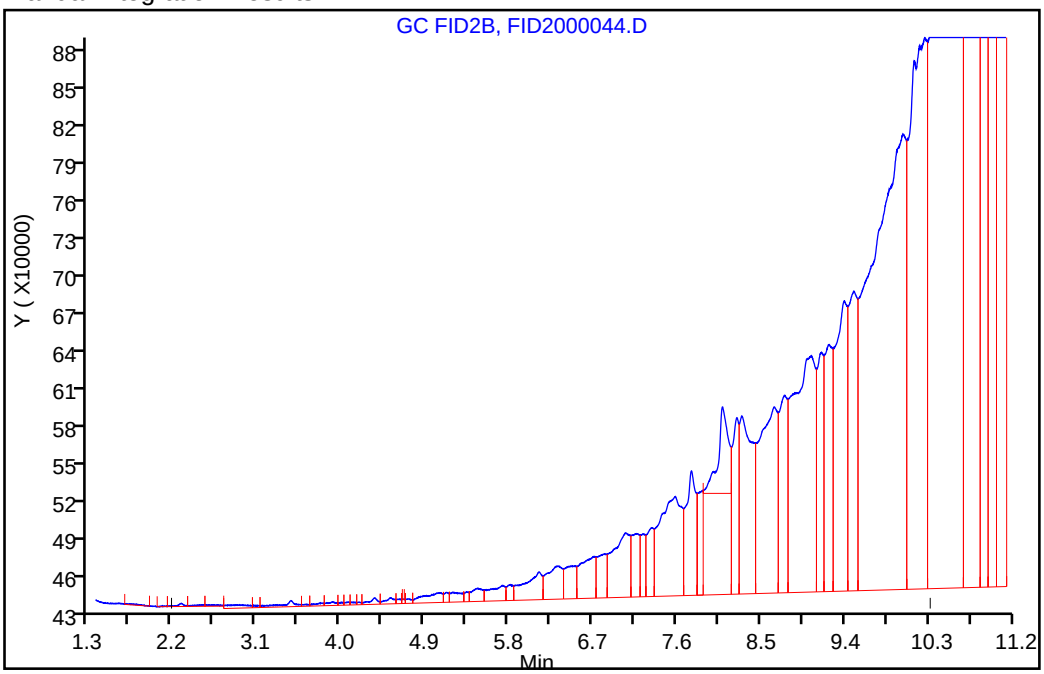
Processing Integration Results

RT: 6.25
Response: 449613764
Amount: 261.8798



Manual Integration Results

RT: 6.25
Response: 723718359
Amount: 417.0834



Reviewer: luj, 30-Aug-2018 14:27:31

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

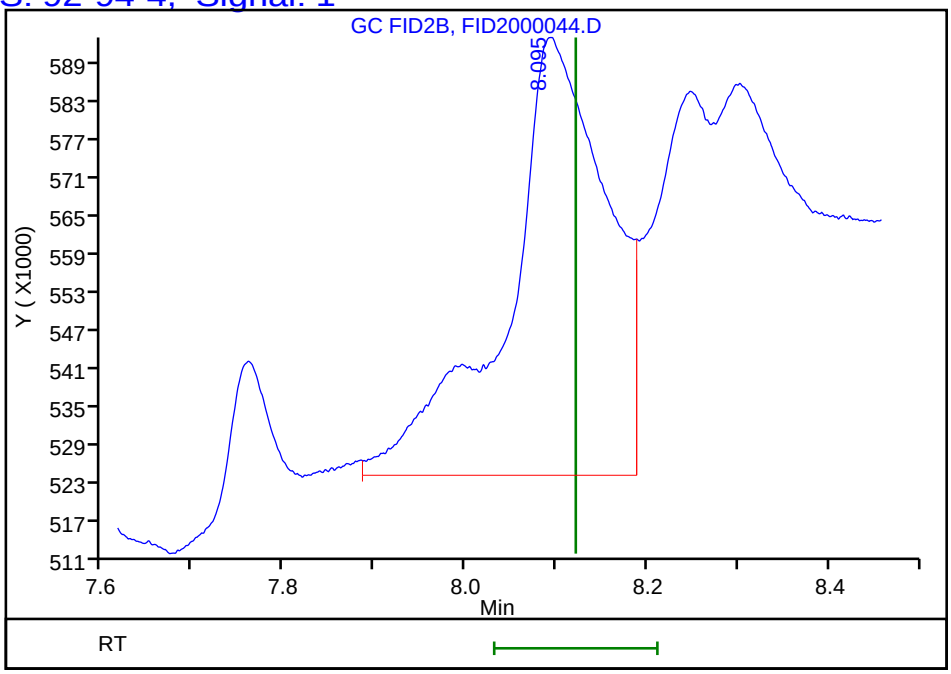
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180829-53562.b\FID2000044.D				
Injection Date:	30-Aug-2018 06:06:44	Instrument ID:	CHDRO6		
Lims ID:	720-88217-G-6-B	Lab Sample ID:	720-88217-6		
Client ID:	DG-H6S-0.5-1.0				
Operator ID:	DCH	ALS Bottle#:	94	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.10
Response: 10563737
Amount: 6.098164



Reviewer: luj, 30-Aug-2018 14:27:39
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88217-1

SDG No.:

Client Sample ID: DG-H6S-3.5-4.0 Lab Sample ID: 720-88217-7

Matrix: Solid Lab File ID: FID2000008.D

Analysis Method: 8015B Date Collected: 08/22/2018 14:55

Extraction Method: 3546 Date Extracted: 08/28/2018 08:52

Sample wt/vol: 15.24(g) Date Analyzed: 08/30/2018 12:49

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250569 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	110000		2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	106		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000008.D
Lims ID: 720-88217-D-7-C
Client ID: DG-H6S-3.5-4.0
Sample Type: Client
Inject. Date: 30-Aug-2018 12:49:36 ALS Bottle#: 58 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-008
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 30-Aug-2018 14:42:14 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK001

First Level Reviewer: luj Date: 30-Aug-2018 14:42:14

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.310			ND	
	23 n-Decane	2.189	2.172	0.017	23945	NC	
A	1 C9-C13	2.778	(1.310-4.246)		3199174	1.47	M
A	21 Stoddard Solvent	2.778	(1.310-4.246)		3199174	NC	M
A	57 C10-C12	2.901	(2.172-3.631)		2135532	8.51	
	24 Dodecane	3.644	3.631	0.013	47740	NC	
A	3 C9 - C17	3.809	(1.310-6.309)		14781453	6.47	M
A	60 C10-C16	4.002	(2.172-5.833)		8752650	4.32	M
A	47 C9 - C18	4.031	(1.310-6.752)		24111755	12.7	M
A	25 C9-C19	4.243	(1.310-7.176)		43717892	19.0	M
A	15 Kerosene	4.243	(1.310-7.176)		43717892	23.0	M
	26 C13	4.236	4.246	-0.010	174298	NC	M
$	27 n-Decanoic Acid (Surr)		4.639			ND	MU
A	59 C12-C16	4.732	(3.631-5.833)		6617118	11.0	M
A	61 C10-C20	4.878	(2.172-7.583)		123202112	77.1	M
A	28 C9-C24	5.181	(1.310-9.053)		712631635	410.8	M
A	29 C9-C25	5.348	(1.310-9.386)		856150082	492.1	M
A	54 C10-C23	5.440	(2.172-8.707)		558764313	323.7	M
A	4 C10-C24	5.612	(2.172-9.053)		712436714	410.7	M
A	16 C10-C25	5.779	(2.172-9.386)		855955161	492.0	M
	45 Hexadecane		5.833			ND	
A	14 C10-C26	5.940	(2.172-9.707)		963502822	552.9	M
A	67 C12-C22	5.989	(3.631-8.348)		368924640	216.2	M
A	32 C10-C28	6.245	(2.172-10.317)		1532219656	874.9	M
A	5 Diesel	6.245	(2.172-10.317)		1532219656	874.9	M
A	12 Unknown Hydrocarbons	6.245	(2.172-10.317)		1532219656	NC	M
A	30 C13-C22	6.297	(4.246-8.348)		368055919	215.7	M
	44 Heptadecane	6.341	6.309	0.032	6723538	NC	M
A	31 C12-C24	6.342	(3.631-9.053)		710301182	409.5	M
	49 n-Octadecane	6.799	6.752	0.047	19606137	NC	M
A	9 Crude Oil Range Organics (	6.859	(1.310-12.408)		3015186354	NC	M
A	11 Bunker Range Organics (C9-	6.859	(1.310-12.408)		3015186354	NC	M

Report Date: 30-Aug-2018 14:42:15 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000008.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.310-12.408)		3015186354	1428.3	M
33 C19	7.182	7.176	0.006	36296374	NC	M
A 64 C13-C28	7.282	(4.246-10.317)		1529215403	873.2	M
A 17 C10-C36	7.290	(2.172-12.408)		3014991433	1714.4	M
A 68 Crude Oil Range Organics (	7.349	(1.310-13.389)		4095234378	NC	M
A 13 C9-C40	7.349	(1.310-13.389)		4095234378	2621.3	M
A 58 C16-C24	7.443	(5.833-9.053)		703684064	405.7	M
62 icosane		7.583			ND	
A 6 C10-C40	7.780	(2.172-13.389)		4095039457	2624.0	M
$ 34 p-Terphenyl	8.063	8.084	-0.021	45953628	26.5	M
35 n-Docosane	8.424	8.348	0.076	57568037	NC	M
A 18 C12-C40	8.510	(3.631-13.389)		4092903925	2630.0	M
36 Tricosane	8.695	8.707	-0.012	49000247	NC	M
A 66 C13-C40	8.817	(4.246-13.389)		4092035204	2632.4	M
37 n-Tetracosane	9.063	9.053	0.010	58602872	NC	M
A 2 C16-C36 ORO	9.121	(5.833-12.408)		3006238783	2542.4	M
38 C25	9.409	9.386	0.023	107547661	NC	M
A 19 C16-C40	9.611	(5.833-13.389)		4086286807	2637.4	M
46 n-Hexacosane	9.749	9.707	0.042	192506157	NC	M
A 20 C19-C36	9.792	(7.176-12.408)		2594267397	1905.6	
A 55 C23-C32	10.066	(8.707-11.425)		1951824015	2522.1	M
39 n-Octacosane	10.260	10.317	-0.057	94627391	NC	M
65 C29	10.620	10.607	0.013	106988648	NC	M
A 40 C24-C36	10.731	(9.053-12.408)		2275325014	2320.8	M
A 7 Motor Oil	10.731	(9.053-12.408)		2110954418	2153.2	
A 10 C22-C40	10.868	(8.348-13.389)		2785231260	2003.8	
A 50 C25-C36	10.897	(9.386-12.408)		1899678970	2062.2	
A 41 C23-C40	11.048	(8.707-13.389)		2643452438	1934.2	
A 8 C24-C40	11.221	(9.053-13.389)		2516312727	1876.1	
56 Dotriacontane	11.366	11.425	-0.059	138720271	NC	M
A 51 C28-C40	11.853	(10.317-13.389)		1780078523	1641.0	
A 63 C29-C40	11.998	(10.607-13.389)		1548961210	1550.0	
42 n-Hexatriacontane	12.430	12.408	0.022	80103335	NC	M
43 C40		13.389			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

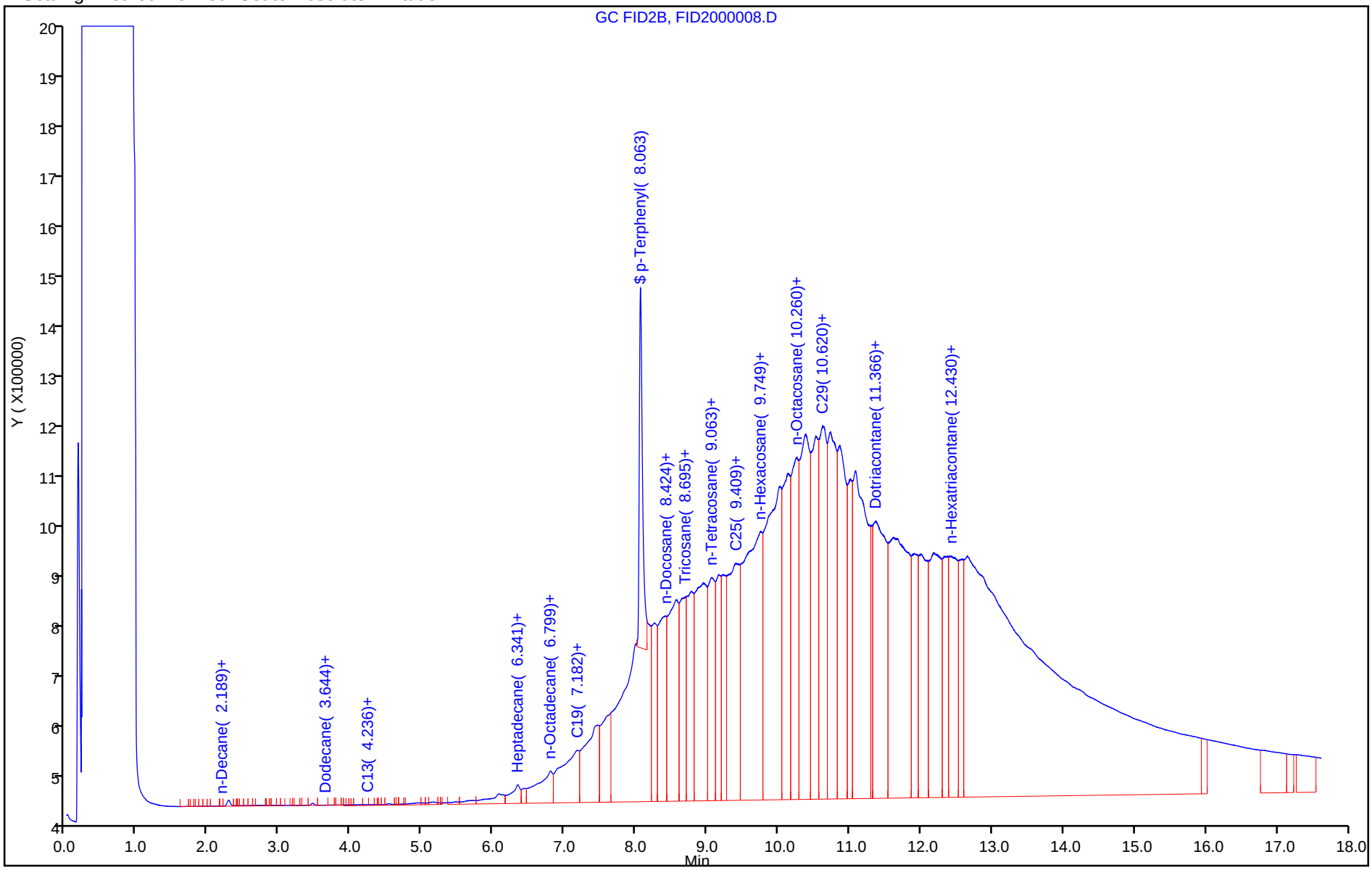
Report Date: 30-Aug-2018 14:42:15 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000008.D

Injection Date:	30-Aug-2018 12:49:36	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88217-D-7-C	Lab Sample ID:	720-88217-7	Worklist Smp#:	8
Client ID:	DG-H6S-3.5-4.0				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	58
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000008.D				
Lims ID:	720-88217-D-7-C				
Client ID:	DG-H6S-3.5-4.0				
Sample Type:	Client				
Inject. Date:	30-Aug-2018 12:49:36	ALS Bottle#:	58	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053574-008				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	30-Aug-2018 14:42:14	Calib Date:	30-Aug-2018 10:14:10		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK001				
First Level Reviewer: luj		Date:	30-Aug-2018 14:42:14		

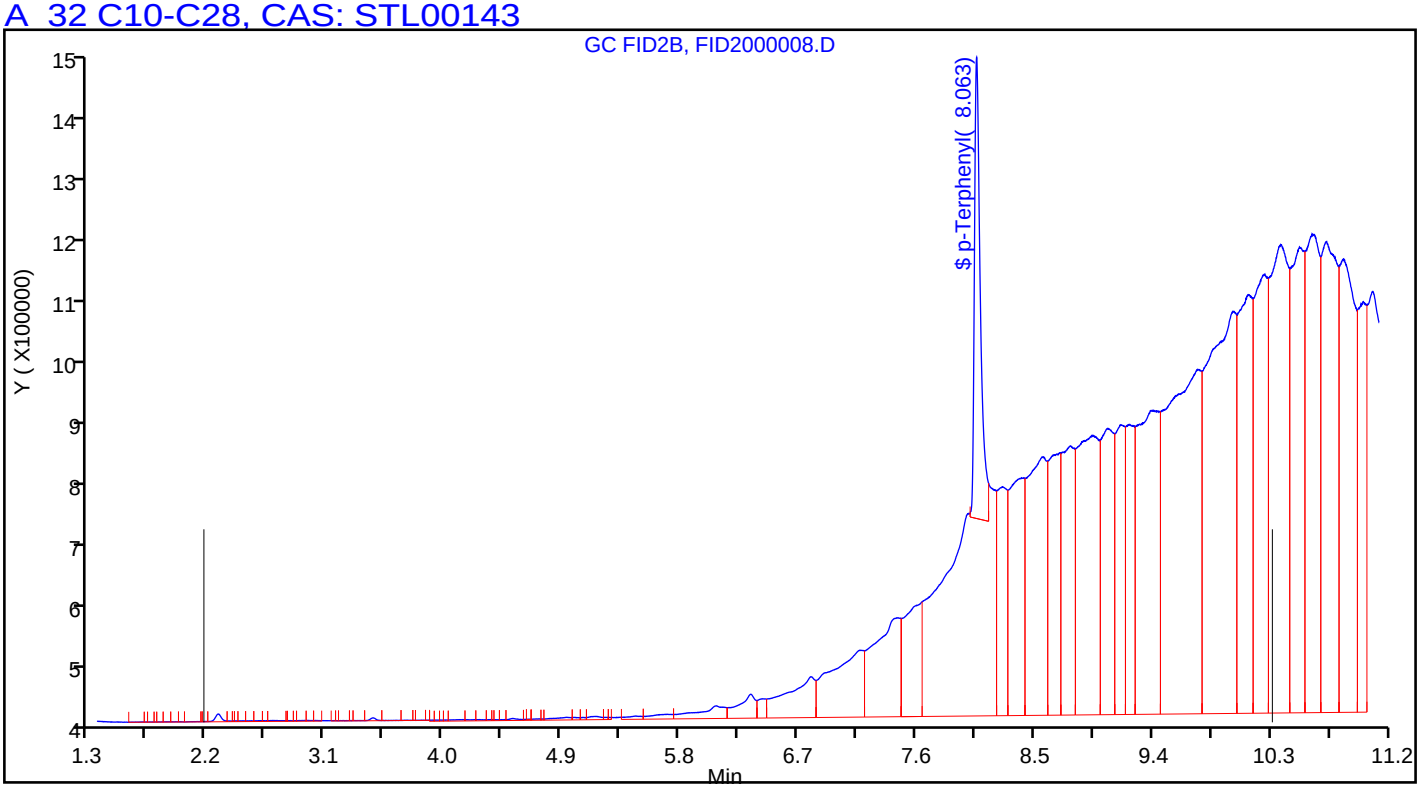
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	26.5	106.11

Report Date: 30-Aug-2018 14:42:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000008.D				
Injection Date:	30-Aug-2018 12:49:36	Instrument ID:	CHDRO6		
Lims ID:	720-88217-D-7-C	Lab Sample ID:	720-88217-7		
Client ID:	DG-H6S-3.5-4.0				
Operator ID:	DCH	ALS Bottle#:	58	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

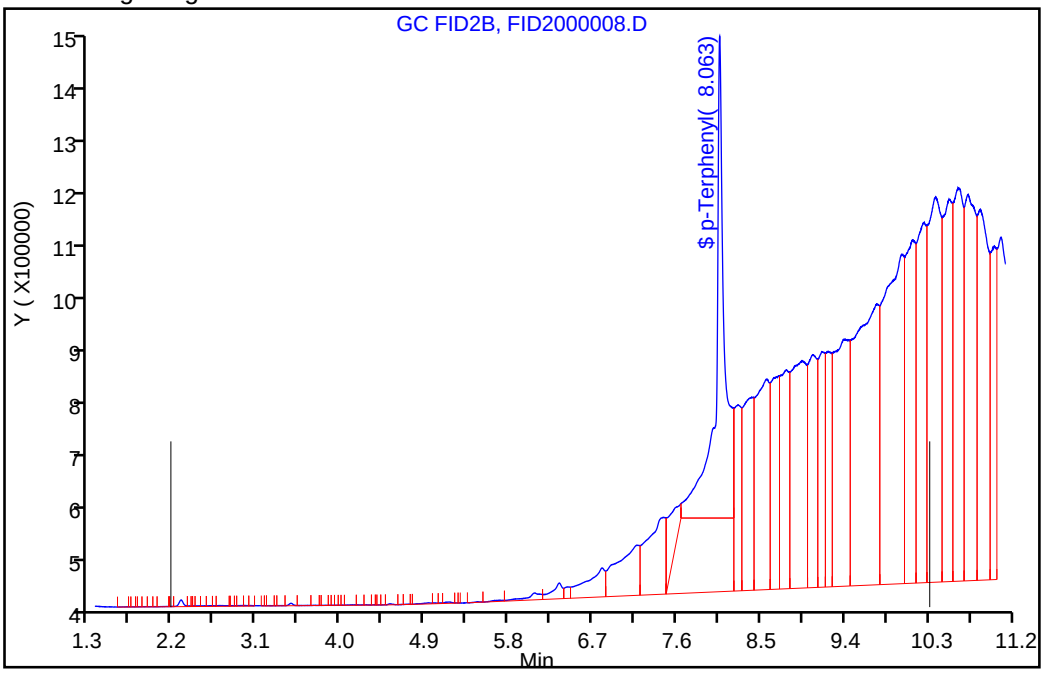
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000008.D				
Injection Date:	30-Aug-2018 12:49:36	Instrument ID:	CHDRO6		
Lims ID:	720-88217-D-7-C	Lab Sample ID:	720-88217-7		
Client ID:	DG-H6S-3.5-4.0				
Operator ID:	DCH	ALS Bottle#:	58	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.245, CAS: STL00143

Signal: 1

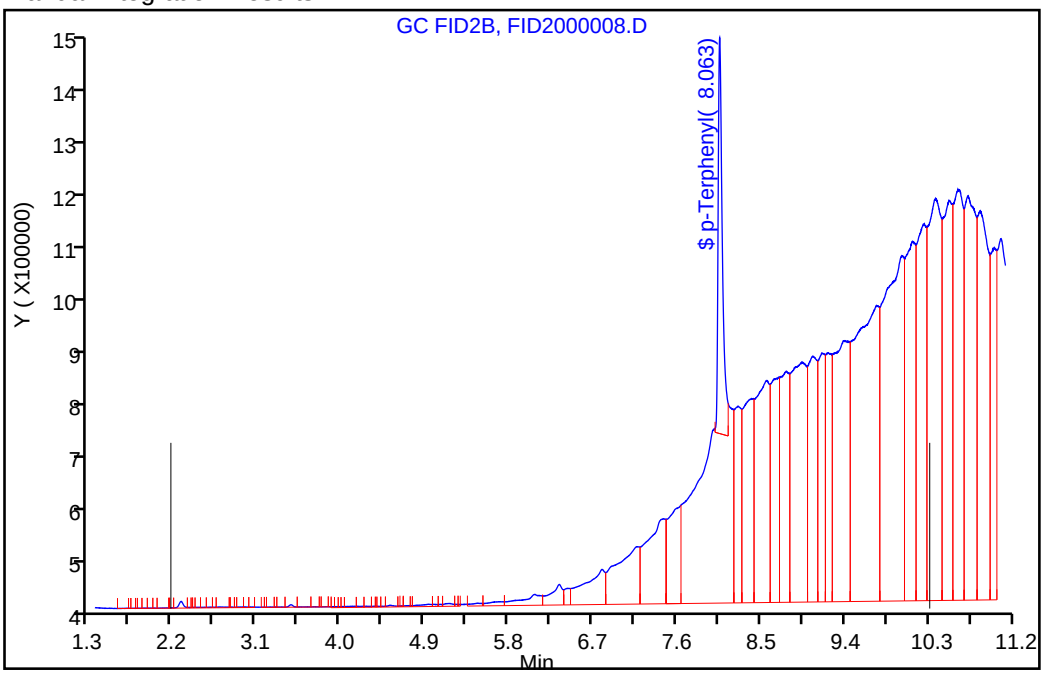
Processing Integration Results

RT: 6.24
Response: 1363870056
Amount: 779.5504



Manual Integration Results

RT: 6.24
Response: 1532219656
Amount: 874.8734



Reviewer: luj, 30-Aug-2018 14:41:41

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

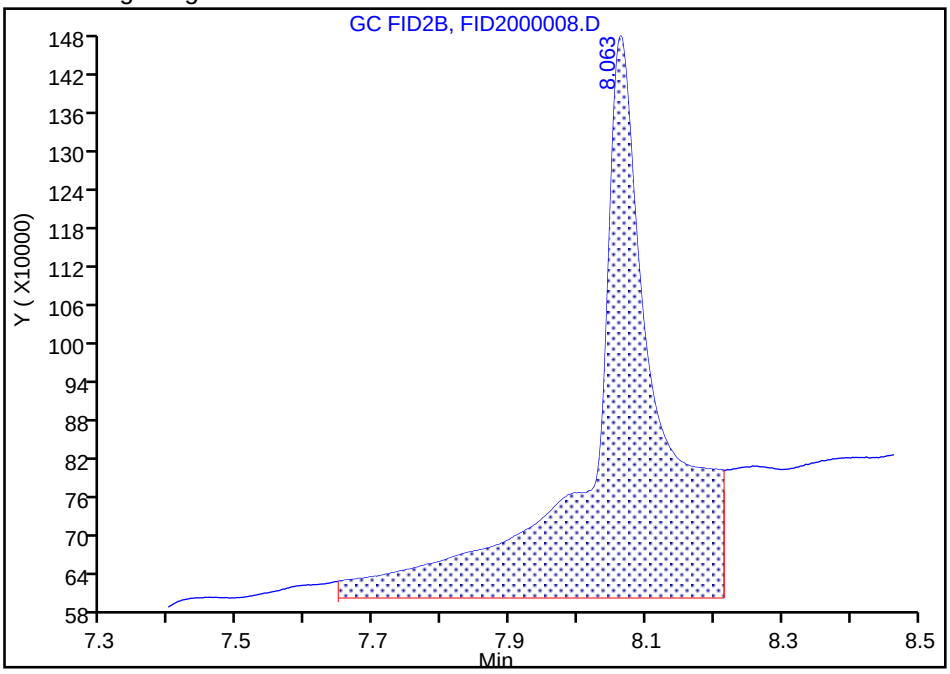
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000008.D				
Injection Date:	30-Aug-2018 12:49:36	Instrument ID:	CHDRO6		
Lims ID:	720-88217-D-7-C	Lab Sample ID:	720-88217-7		
Client ID:	DG-H6S-3.5-4.0				
Operator ID:	DCH	ALS Bottle#:	58	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

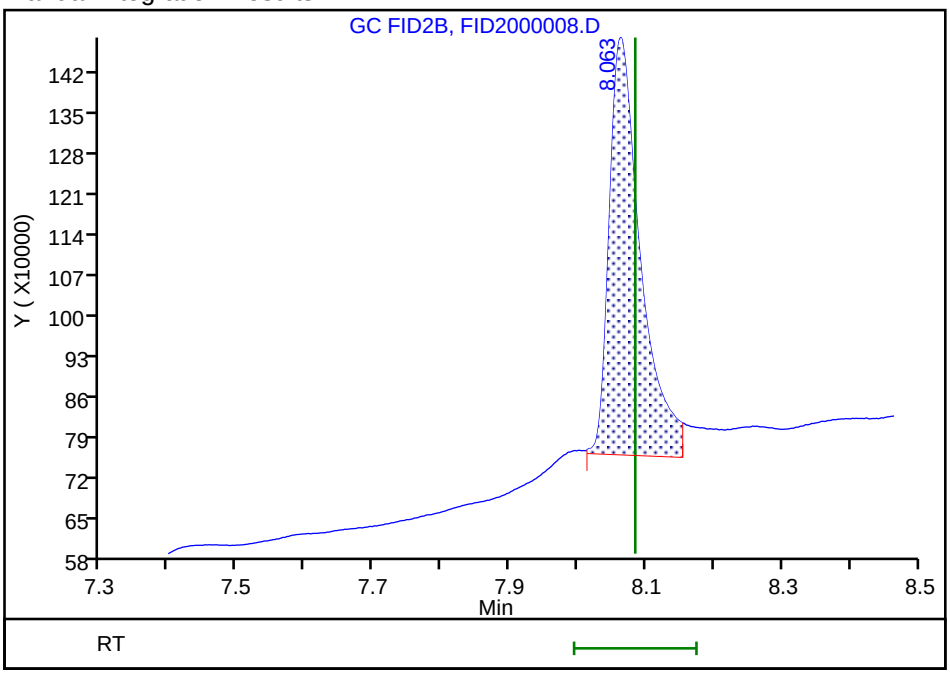
Processing Integration Results

RT: 8.06
Area: 121296520
Amount: 70.021254
Amount Units: mg/L



Manual Integration Results

RT: 8.06
Area: 45953628
Amount: 26.527807
Amount Units: mg/L



Reviewer: luj, 30-Aug-2018 14:41:58

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88217-1

SDG No.:

Client Sample ID: DUP-04 Lab Sample ID: 720-88217-2

Matrix: Solid Lab File ID: 08281819.D

Analysis Method: 8260B Date Collected: 08/22/2018 00:00

Sample wt/vol: 7.304(g) Date Analyzed: 08/28/2018 16:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.4	0.82
67-64-1	Acetone	85		34	26
71-43-2	Benzene	ND		3.4	0.44
75-27-4	Dichlorobromomethane	ND		3.4	0.49
108-86-1	Bromobenzene	ND	*	3.4	0.54
74-97-5	Chlorobromomethane	ND		14	0.49
75-25-2	Bromoform	ND		3.4	1.4
74-83-9	Bromomethane	ND		6.8	0.54
78-93-3	2-Butanone (MEK)	ND		34	14
104-51-8	n-Butylbenzene	ND	*	3.4	0.68
135-98-8	sec-Butylbenzene	ND	*	3.4	0.49
98-06-6	tert-Butylbenzene	ND	*	3.4	0.50
75-15-0	Carbon disulfide	ND		3.4	1.4
56-23-5	Carbon tetrachloride	ND		3.4	0.42
108-90-7	Chlorobenzene	ND		3.4	0.47
75-00-3	Chloroethane	ND		6.8	0.38
67-66-3	Chloroform	ND		3.4	0.45
74-87-3	Chloromethane	ND		6.8	0.54
95-49-8	2-Chlorotoluene	ND	*	3.4	0.44
106-43-4	4-Chlorotoluene	ND	*	3.4	0.47
124-48-1	Chlorodibromomethane	ND		3.4	0.49
95-50-1	1,2-Dichlorobenzene	ND	*	3.4	0.47
541-73-1	1,3-Dichlorobenzene	ND	*	3.4	0.49
106-46-7	1,4-Dichlorobenzene	ND	*	3.4	0.49
142-28-9	1,3-Dichloropropane	ND		3.4	0.50
563-58-6	1,1-Dichloropropene	ND		3.4	0.47
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	6.8	1.2
106-93-4	Ethylene Dibromide	ND		3.4	0.98
74-95-3	Dibromomethane	ND		6.8	0.59
75-71-8	Dichlorodifluoromethane	ND		6.8	0.54
75-34-3	1,1-Dichloroethane	ND		3.4	0.47
107-06-2	1,2-Dichloroethane	ND		3.4	0.52
75-35-4	1,1-Dichloroethene	ND		3.4	0.42
156-59-2	cis-1,2-Dichloroethene	0.76	J	3.4	0.47
156-60-5	trans-1,2-Dichloroethene	ND		3.4	0.51
78-87-5	1,2-Dichloropropane	ND		3.4	0.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88217-1

SDG No.:

Client Sample ID: DUP-04 Lab Sample ID: 720-88217-2

Matrix: Solid Lab File ID: 08281819.D

Analysis Method: 8260B Date Collected: 08/22/2018 00:00

Sample wt/vol: 7.304(g) Date Analyzed: 08/28/2018 16:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.4	0.47
10061-02-6	trans-1,3-Dichloropropene	ND		3.4	0.46
100-41-4	Ethylbenzene	ND		3.4	0.51
87-68-3	Hexachlorobutadiene	ND	*	3.4	0.62
591-78-6	2-Hexanone	ND		34	6.8
98-82-8	Isopropylbenzene	ND		3.4	0.47
99-87-6	4-Isopropyltoluene	ND	*	3.4	1.7
75-09-2	Methylene Chloride	ND		6.8	3.8
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		34	6.8
91-20-3	Naphthalene	ND	*	6.8	1.0
103-65-1	N-Propylbenzene	ND	*	3.4	0.45
100-42-5	Styrene	ND		3.4	0.43
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.4	0.52
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	3.4	0.51
127-18-4	Tetrachloroethene	ND		3.4	0.46
108-88-3	Toluene	ND		3.4	0.49
87-61-6	1,2,3-Trichlorobenzene	ND	*	3.4	0.51
120-82-1	1,2,4-Trichlorobenzene	ND	*	3.4	0.49
71-55-6	1,1,1-Trichloroethane	ND		3.4	0.42
79-00-5	1,1,2-Trichloroethane	ND		3.4	0.48
79-01-6	Trichloroethene	ND		3.4	0.43
75-69-4	Trichlorofluoromethane	ND		3.4	0.38
96-18-4	1,2,3-Trichloropropane	ND	*	3.4	0.53
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.4	1.4
95-63-6	1,2,4-Trimethylbenzene	ND	*	3.4	1.1
108-67-8	1,3,5-Trimethylbenzene	ND	*	3.4	0.44
108-05-4	Vinyl acetate	ND		14	3.4
75-01-4	Vinyl chloride	0.88	J	3.4	0.50
1330-20-7	Xylenes, Total	ND		3.4	0.84
594-20-7	2,2-Dichloropropane	ND		3.4	1.4
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		170	68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88217-1

SDG No.:

Client Sample ID: DUP-04 Lab Sample ID: 720-88217-2

Matrix: Solid Lab File ID: 08281819.D

Analysis Method: 8260B Date Collected: 08/22/2018 00:00

Sample wt/vol: 7.304(g) Date Analyzed: 08/28/2018 16:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	88		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		60-140
2037-26-5	Toluene-d8 (Surr)	89		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281819.D
Lims ID: 720-88217-A-2-A
Client ID: DUP-04
Sample Type: Client
Inject. Date: 28-Aug-2018 16:56:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88217-A-2
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:25:16 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:25:16

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.813	6.825	-0.012	0	273152	250.0	
* 2 Fluorobenzene	96	10.598	10.605	-0.007	98	650891	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	86	406137	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.591	-0.012	95	166124	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.190	9.191	-0.006	94	57002	7.80	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.702	9.709	-0.013	0	69304	7.57	
$ 10 Toluene-d8 (Surr)	98	12.708	12.707	-0.006	93	176623	6.71	
$ 11 4-Bromofluorobenzene	95	15.933	15.932	-0.006	94	52022	6.59	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	-0.006	84	48808	7.59	
19 Vinyl chloride	62	4.764	4.774	-0.013	31	4997	0.6428	
28 Acetone	58	6.368	6.370	-0.006	100	47650	62.4	
38 trans-1,2-Dichloroethene	96	7.873	7.875	-0.007	93	1391	0.2164	
45 2-Butanone (MEK)	72	8.642	8.637	0.000	99	6659	7.64	
49 cis-1,2-Dichloroethene	61	8.812	8.813	-0.007	80	5975	0.5583	
140 Ethyl acetate	43	9.007	9.002	-0.001	99	11420	1.32	
59 Benzene	78	10.373	10.373	-0.006	97	6424	0.2319	
145 Methylcyclohexane	83	11.690	11.696	-0.006	91	1595	0.1446	
75 Toluene	92	12.793	12.794	-0.006	96	3039	0.2276	
84 Ethylbenzene	91	14.707	14.707	-0.007	92	1426	0.0549	
85 m-Xylene & p-Xylene	91	14.927	14.933	-0.012	0	4341	0.2118	
101 1,2,4-Trimethylbenzene	105	17.280	17.274	-0.006	91	1728	0.0965	
20 Butane	58	4.886	4.862	0.024	1	132	NR	
29 Pentane	43	6.368	6.410	-0.042	73	152347	NR	
131 n-Octane	43	13.110	13.110	0.000	86	1569	NR	
135 n-Nonane	57	15.055	15.055	0.000	67	499	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	1294284	21.7	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	317287	5.32	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	403478	6.76	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1406427	23.6	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	486861	8.16	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	1264861	21.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 120 C6-C12	1	14.281	(8.556-20.005)		0	599004	10.0	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	174463	2.92	
A 121 C7-C12	1	15.454	(10.903-20.005)		0	413478	6.93	
S 122 Xylenes, Total	1				0		0.2118	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

s - Failed ISTD Recovery Test

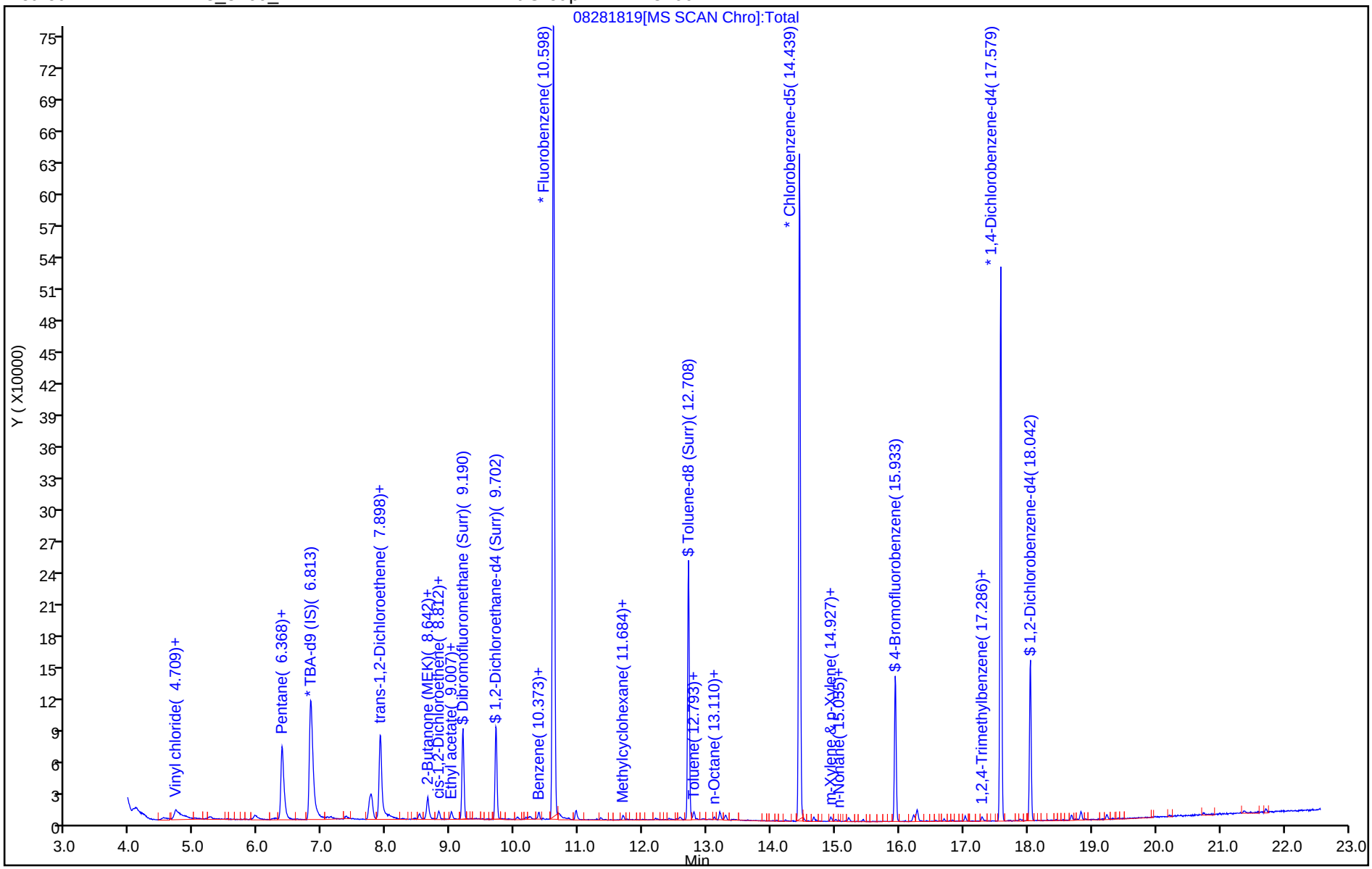
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:25:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281819.D				
Injection Date:	28-Aug-2018 16:56:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88217-A-2-A	Lab Sample ID:	720-88217-2	Worklist Smp#:	19
Client ID:	DUP-04				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281819.D
Lims ID: 720-88217-A-2-A
Client ID: DUP-04
Sample Type: Client
Inject. Date: 28-Aug-2018 16:56:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88217-A-2
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:25:16 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

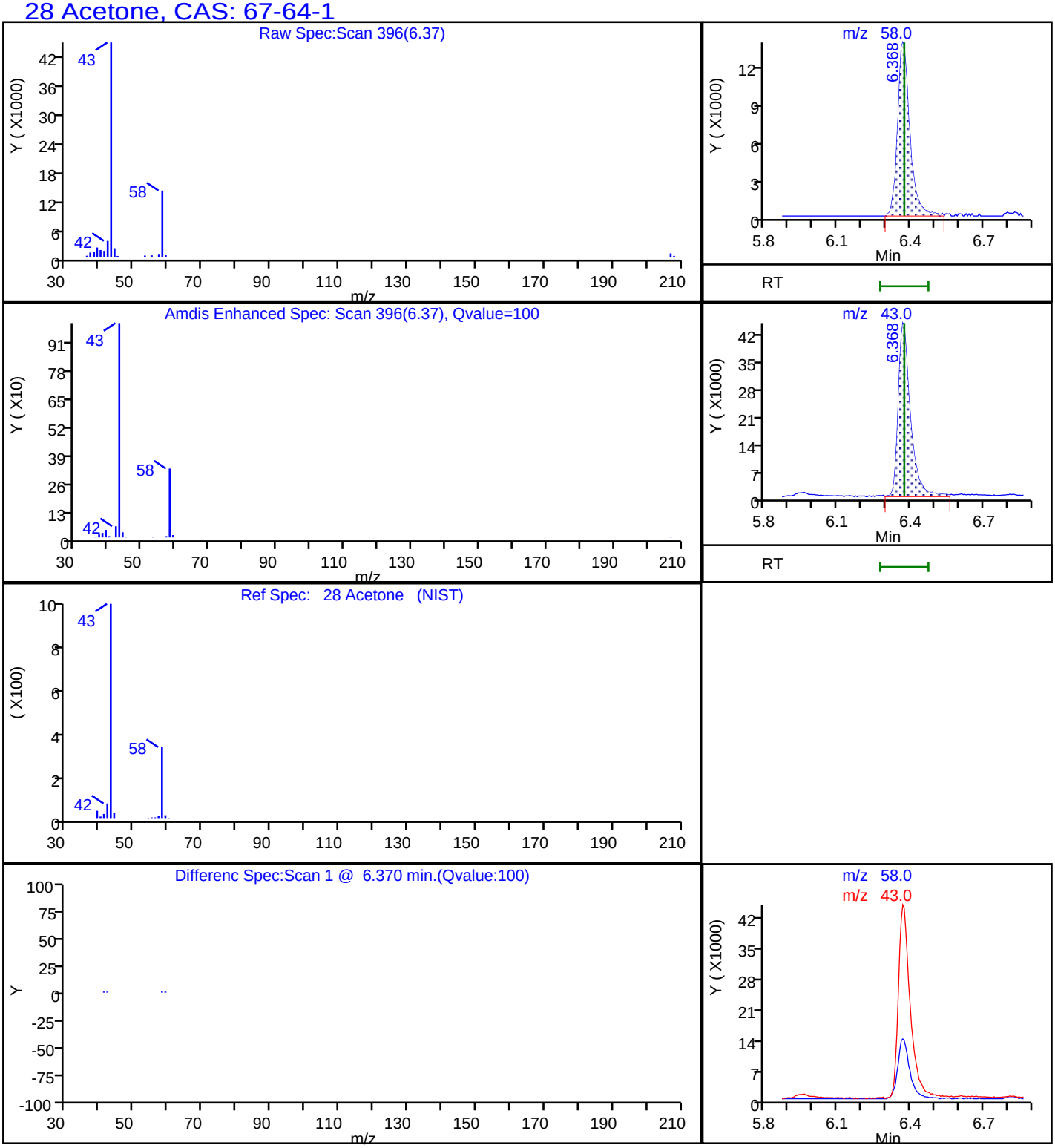
First Level Reviewer: chaijita Date: 29-Aug-2018 09:25:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.57	100.97
$ 10 Toluene-d8 (Surr)	7.50	6.71	89.46
$ 11 4-Bromofluorobenzene	7.50	6.59	87.82
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281819.D

Injection Date:	28-Aug-2018 16:56:30	Instrument ID:	HP13		
Lims ID:	720-88217-A-2-A	Lab Sample ID:	720-88217-2		
Client ID:	DUP-04				
Operator ID:	VOA	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



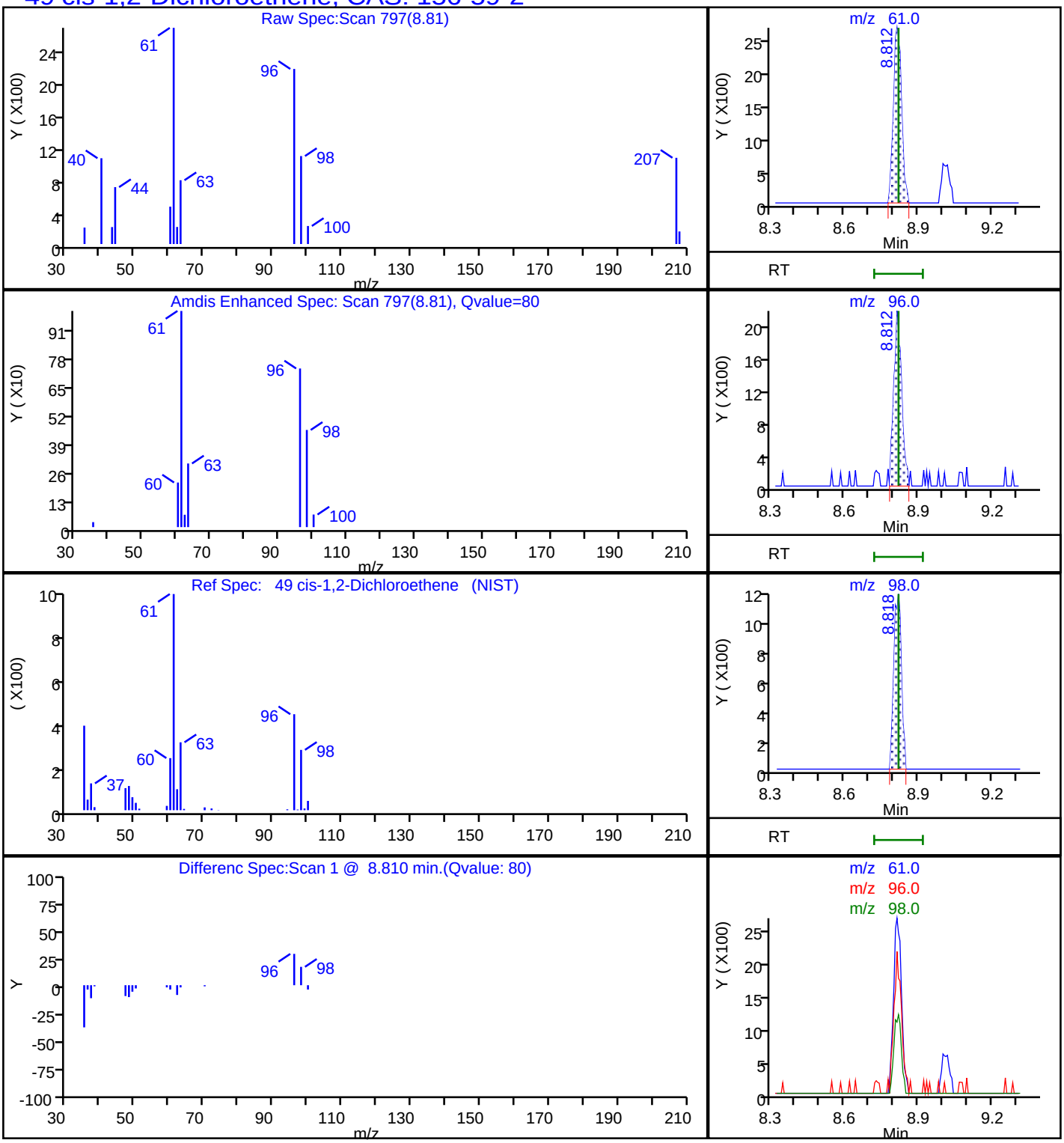
Report Date: 29-Aug-2018 09:25:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281819.D

Injection Date:	28-Aug-2018 16:56:30	Instrument ID:	HP13		
Lims ID:	720-88217-A-2-A	Lab Sample ID:	720-88217-2		
Client ID:	DUP-04				
Operator ID:	VOA	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

49 cis-1,2-Dichloroethene, CAS: 156-59-2



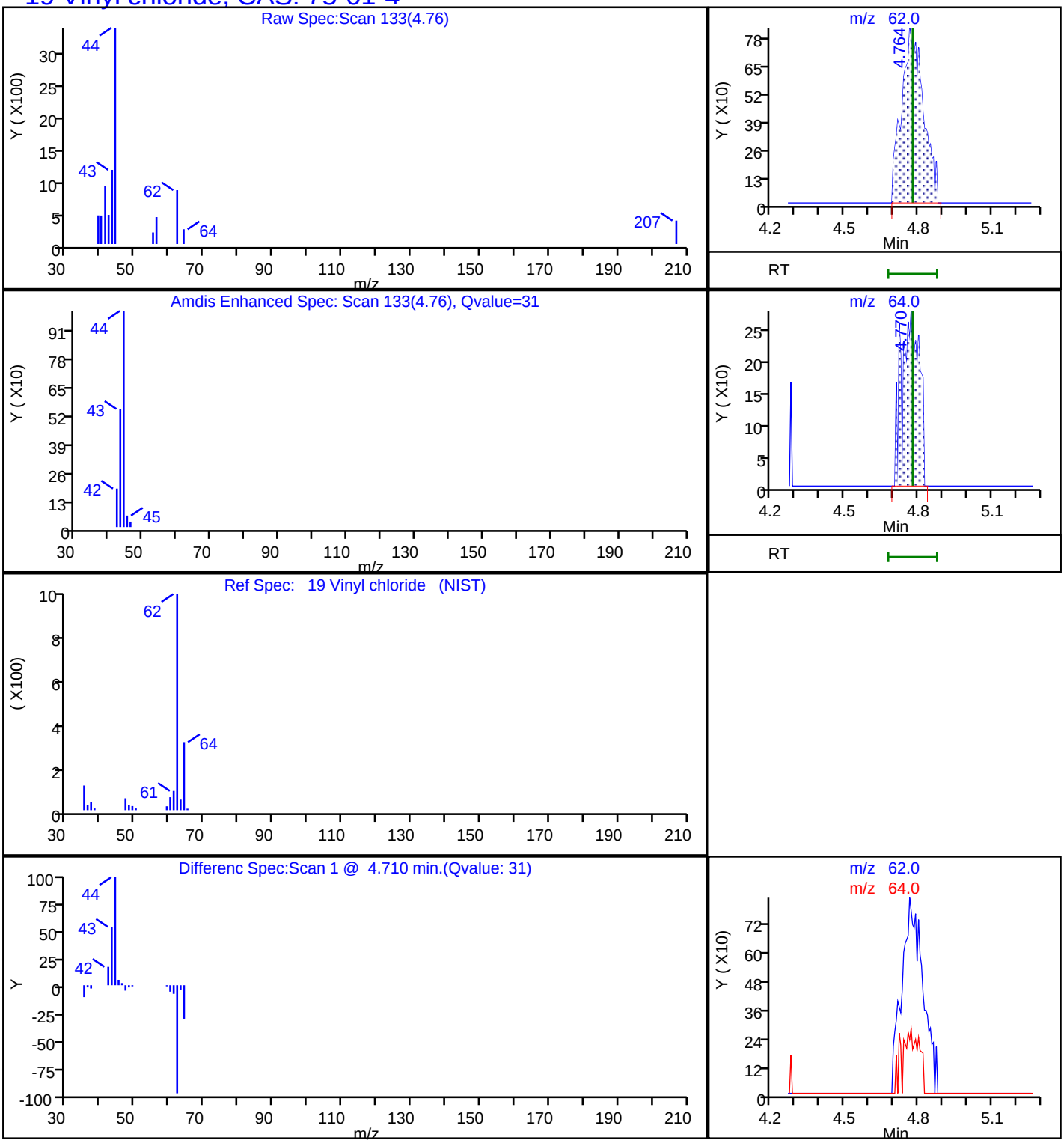
Report Date: 29-Aug-2018 09:25:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281819.D

Injection Date:	28-Aug-2018 16:56:30	Instrument ID:	HP13		
Lims ID:	720-88217-A-2-A	Lab Sample ID:	720-88217-2		
Client ID:	DUP-04				
Operator ID:	VOA	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

19 Vinyl chloride, CAS: 75-01-4

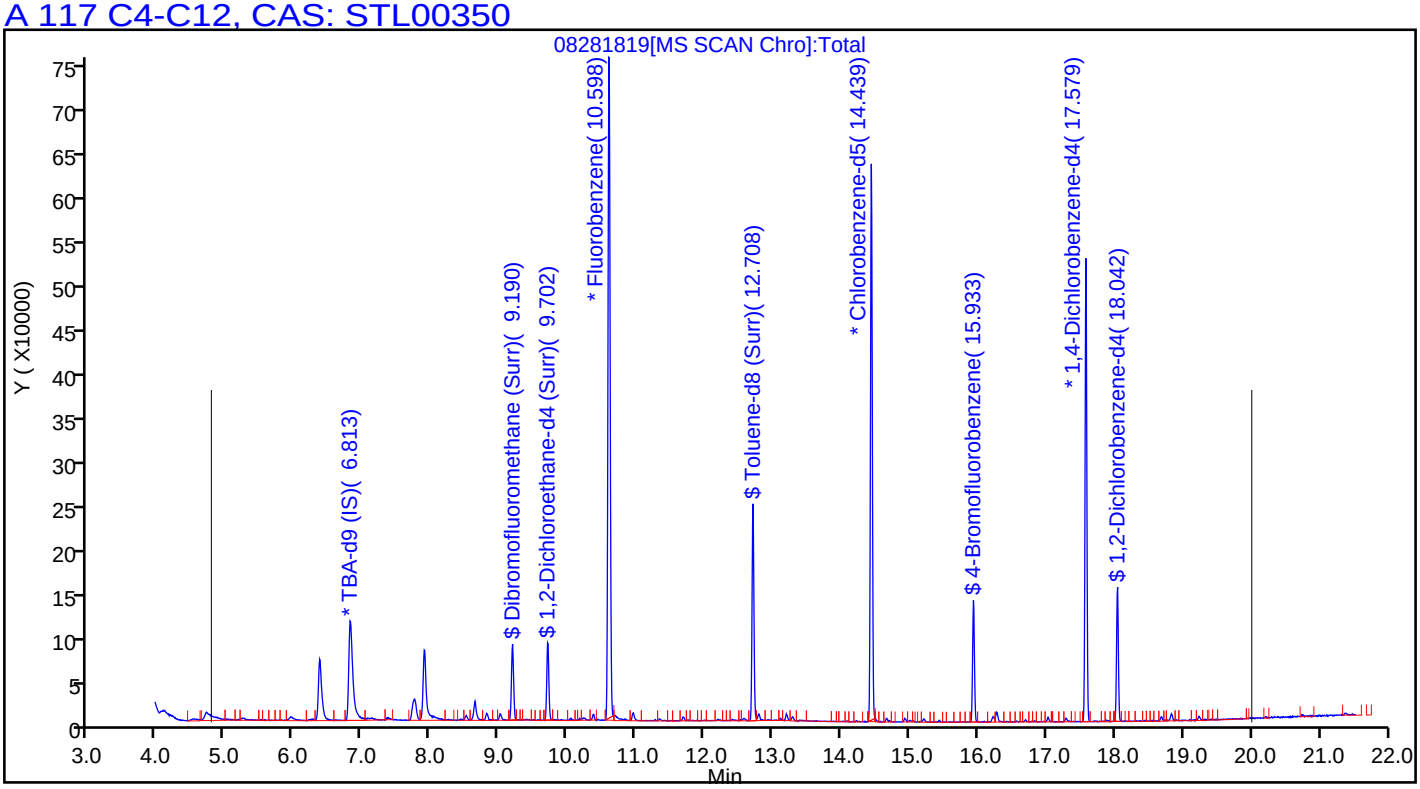


Report Date: 29-Aug-2018 09:25:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281819.D				
Injection Date:	28-Aug-2018 16:56:30	Instrument ID:	HP13		
Lims ID:	720-88217-A-2-A	Lab Sample ID:	720-88217-2		
Client ID:	DUP-04				
Operator ID:	VOA	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88217-1

SDG No.:

Client Sample ID: DG-A5S-19.5-20 Lab Sample ID: 720-88217-5

Matrix: Solid Lab File ID: 08281820.D

Analysis Method: 8260B Date Collected: 08/22/2018 12:45

Sample wt/vol: 6.283(g) Date Analyzed: 08/28/2018 17:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND	*	4.0	0.95
67-64-1	Acetone	55	*	40	30
71-43-2	Benzene	ND	*	4.0	0.52
75-27-4	Dichlorobromomethane	ND	*	4.0	0.57
108-86-1	Bromobenzene	ND	*	4.0	0.63
74-97-5	Chlorobromomethane	ND	*	16	0.57
75-25-2	Bromoform	ND	*	4.0	1.6
74-83-9	Bromomethane	ND	*	8.0	0.63
78-93-3	2-Butanone (MEK)	ND	*	40	17
104-51-8	n-Butylbenzene	ND	*	4.0	0.80
135-98-8	sec-Butylbenzene	ND	*	4.0	0.57
98-06-6	tert-Butylbenzene	ND	*	4.0	0.58
75-15-0	Carbon disulfide	ND	*	4.0	1.6
56-23-5	Carbon tetrachloride	ND	*	4.0	0.49
108-90-7	Chlorobenzene	ND	*	4.0	0.55
75-00-3	Chloroethane	ND	*	8.0	0.45
67-66-3	Chloroform	ND	*	4.0	0.53
74-87-3	Chloromethane	ND	*	8.0	0.63
95-49-8	2-Chlorotoluene	ND	*	4.0	0.52
106-43-4	4-Chlorotoluene	ND	*	4.0	0.54
124-48-1	Chlorodibromomethane	ND	*	4.0	0.57
95-50-1	1,2-Dichlorobenzene	ND	*	4.0	0.54
541-73-1	1,3-Dichlorobenzene	ND	*	4.0	0.57
106-46-7	1,4-Dichlorobenzene	ND	*	4.0	0.57
142-28-9	1,3-Dichloropropane	ND	*	4.0	0.58
563-58-6	1,1-Dichloropropene	ND	*	4.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	8.0	1.4
106-93-4	Ethylene Dibromide	ND	*	4.0	1.1
74-95-3	Dibromomethane	ND	*	8.0	0.68
75-71-8	Dichlorodifluoromethane	ND	*	8.0	0.63
75-34-3	1,1-Dichloroethane	ND	*	4.0	0.54
107-06-2	1,2-Dichloroethane	ND	*	4.0	0.60
75-35-4	1,1-Dichloroethene	1.8	J *	4.0	0.49
156-59-2	cis-1,2-Dichloroethene	120	*	4.0	0.54
156-60-5	trans-1,2-Dichloroethene	15	*	4.0	0.60
78-87-5	1,2-Dichloropropane	ND	*	4.0	0.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88217-1

SDG No.:

Client Sample ID: DG-A5S-19.5-20 Lab Sample ID: 720-88217-5

Matrix: Solid Lab File ID: 08281820.D

Analysis Method: 8260B Date Collected: 08/22/2018 12:45

Sample wt/vol: 6.283(g) Date Analyzed: 08/28/2018 17:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND	*	4.0	0.55
10061-02-6	trans-1,3-Dichloropropene	ND	*	4.0	0.53
100-41-4	Ethylbenzene	ND	*	4.0	0.60
87-68-3	Hexachlorobutadiene	ND	*	4.0	0.72
591-78-6	2-Hexanone	ND	*	40	8.0
98-82-8	Isopropylbenzene	ND	*	4.0	0.54
99-87-6	4-Isopropyltoluene	ND	*	4.0	2.0
75-09-2	Methylene Chloride	ND	*	8.0	4.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	*	40	8.0
91-20-3	Naphthalene	ND	*	8.0	1.2
103-65-1	N-Propylbenzene	ND	*	4.0	0.53
100-42-5	Styrene	ND	*	4.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND	*	4.0	0.60
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.0	0.60
127-18-4	Tetrachloroethene	ND	*	4.0	0.53
108-88-3	Toluene	ND	*	4.0	0.57
87-61-6	1,2,3-Trichlorobenzene	ND	*	4.0	0.59
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.0	0.57
71-55-6	1,1,1-Trichloroethane	ND	*	4.0	0.49
79-00-5	1,1,2-Trichloroethane	ND	*	4.0	0.56
79-01-6	Trichloroethene	38	*	4.0	0.50
75-69-4	Trichlorofluoromethane	ND	*	4.0	0.45
96-18-4	1,2,3-Trichloropropane	ND	*	4.0	0.61
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.0	1.7
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.0	1.3
108-67-8	1,3,5-Trimethylbenzene	ND	*	4.0	0.52
108-05-4	Vinyl acetate	ND	*	16	4.0
75-01-4	Vinyl chloride	ND	*	4.0	0.58
1330-20-7	Xylenes, Total	ND		4.0	0.97
594-20-7	2,2-Dichloropropane	ND	*	4.0	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	140	J *	200	80

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88217-1

SDG No.:

Client Sample ID: DG-A5S-19.5-20 Lab Sample ID: 720-88217-5

Matrix: Solid Lab File ID: 08281820.D

Analysis Method: 8260B Date Collected: 08/22/2018 12:45

Sample wt/vol: 6.283(g) Date Analyzed: 08/28/2018 17:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	81	*	45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87	*	60-140
2037-26-5	Toluene-d8 (Surr)	85	*	58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281820.D
Lims ID: 720-88217-A-5-A
Client ID: DG-A5S-19.5-20
Sample Type: Client
Inject. Date: 28-Aug-2018 17:29:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88217-A-5
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:31:45 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:31:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.825	-0.006	0	129717	250.0	
* 2 Fluorobenzene	96	10.599	10.605	-0.006	98	410647	25.0	s
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	86	253894	25.0	s
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.591	-0.012	95	97593	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.190	9.191	-0.006	93	32915	7.14	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.709	9.709	-0.006	0	37727	6.53	
$ 10 Toluene-d8 (Surr)	98	12.708	12.707	-0.006	94	106001	6.38	
$ 11 4-Bromofluorobenzene	95	15.933	15.932	-0.006	91	30150	6.11	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	-0.006	85	21782	5.76	
$ 6 BFB	95	7.874	6.440	1.434	0	1697	NR	
28 Acetone	58	6.374	6.370	0.000	100	16608	34.5	
31 1,1-Dichloroethene	96	6.904	6.906	-0.006	94	3496	1.12	
34 Methylene Chloride	84	7.069	7.081	-0.012	86	748	0.1683	
37 Carbon disulfide	76	7.368	7.369	-0.006	98	3743	0.3881	
38 trans-1,2-Dichloroethene	96	7.874	7.875	-0.006	96	38584	9.51	
45 2-Butanone (MEK)	72	8.642	8.637	0.000	99	2507	4.56	
49 cis-1,2-Dichloroethene	61	8.812	8.813	-0.007	82	524537	77.7	
140 Ethyl acetate	43	9.014	9.002	0.006	99	11212	2.06	
66 Trichloroethene	132	11.092	11.092	-0.007	96	107130	23.7	
75 Toluene	92	12.793	12.794	-0.006	96	1614	0.1934	
128 Butyl Ether	87	14.665	14.659	0.000	96	826	0.3270	
85 m-Xylene & p-Xylene	91	14.927	14.933	-0.012	0	1888	0.1473	
29 Pentane	43	6.380	6.410	-0.030	69	58786	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	3278458	87.1	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	2394268	63.6	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	2452689	65.1	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	3341060	88.7	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	2498359	66.4	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	3255863	86.5	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	2560961	68.0	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	106616	2.83	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 121 C7-C12	1	15.454	(10.903-20.005)		0	788522	20.9	
S 122 Xylenes, Total	1				0		0.1473	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

s - Failed ISTD Recovery Test

Reagents:

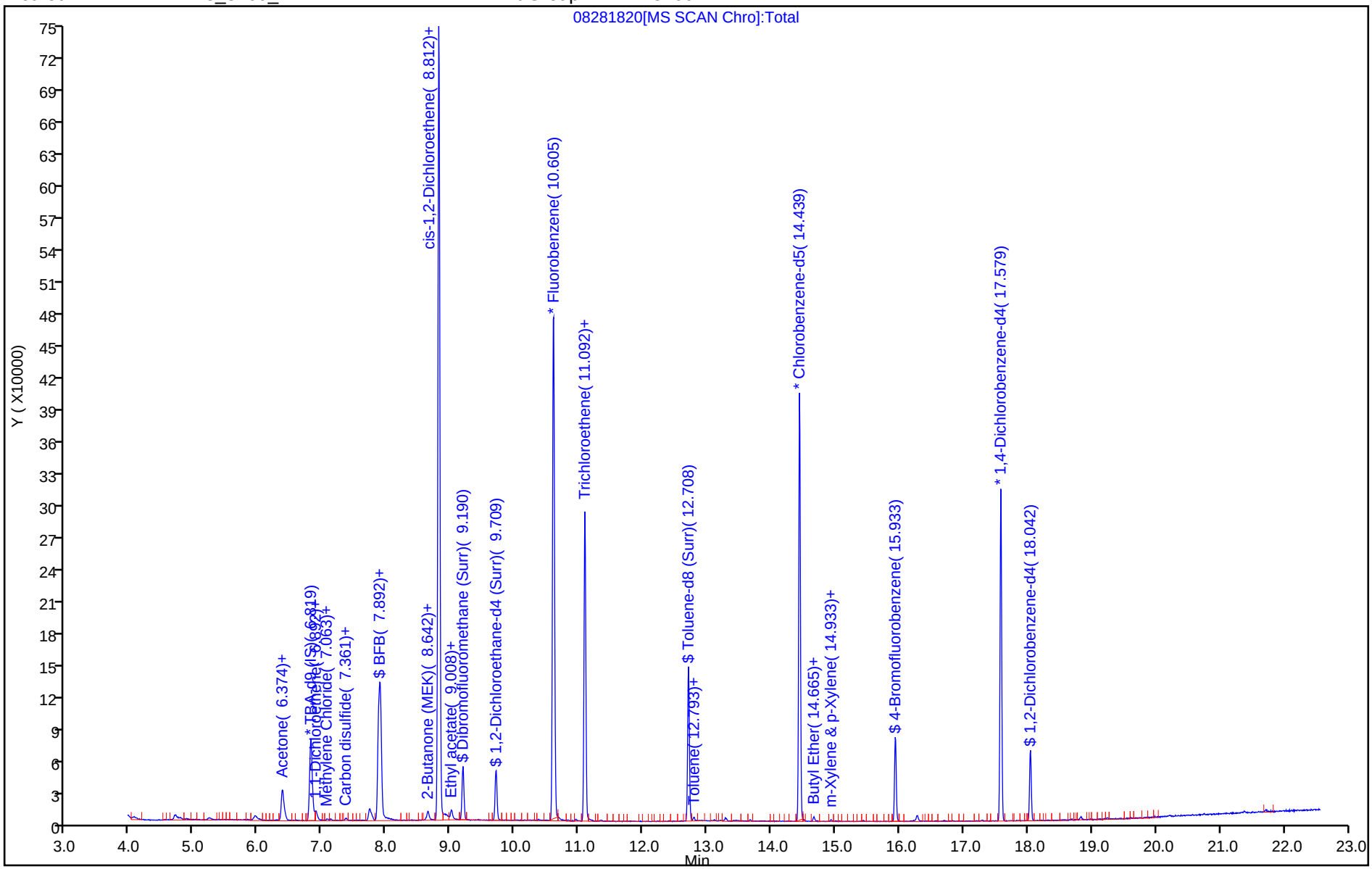
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:31:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281820.D

Injection Date:	28-Aug-2018 17:29:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88217-A-5-A	Lab Sample ID:	720-88217-5	Worklist Smp#:	20
Client ID:	DG-A5S-19.5-20				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281820.D
Lims ID: 720-88217-A-5-A
Client ID: DG-A5S-19.5-20
Sample Type: Client
Inject. Date: 28-Aug-2018 17:29:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88217-A-5
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:31:45 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:31:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	6.53	87.12
$ 10 Toluene-d8 (Surr)	7.50	6.38	85.10
$ 11 4-Bromofluorobenzene	7.50	6.11	81.42
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

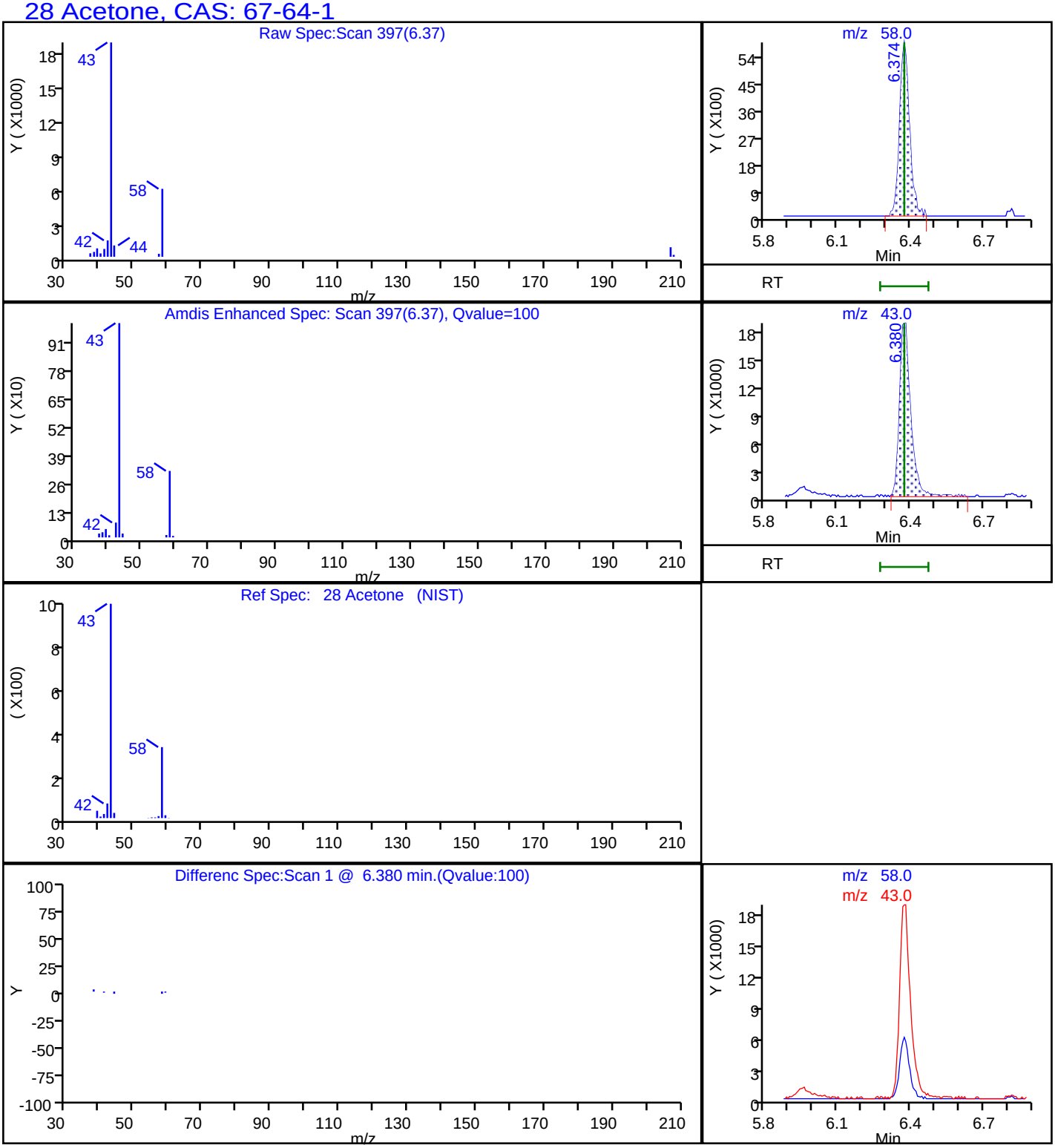
Report Date: 29-Aug-2018 09:31:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281820.D

Injection Date:	28-Aug-2018 17:29:30	Instrument ID:	HP13		
Lims ID:	720-88217-A-5-A	Lab Sample ID:	720-88217-5		
Client ID:	DG-A5S-19.5-20				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



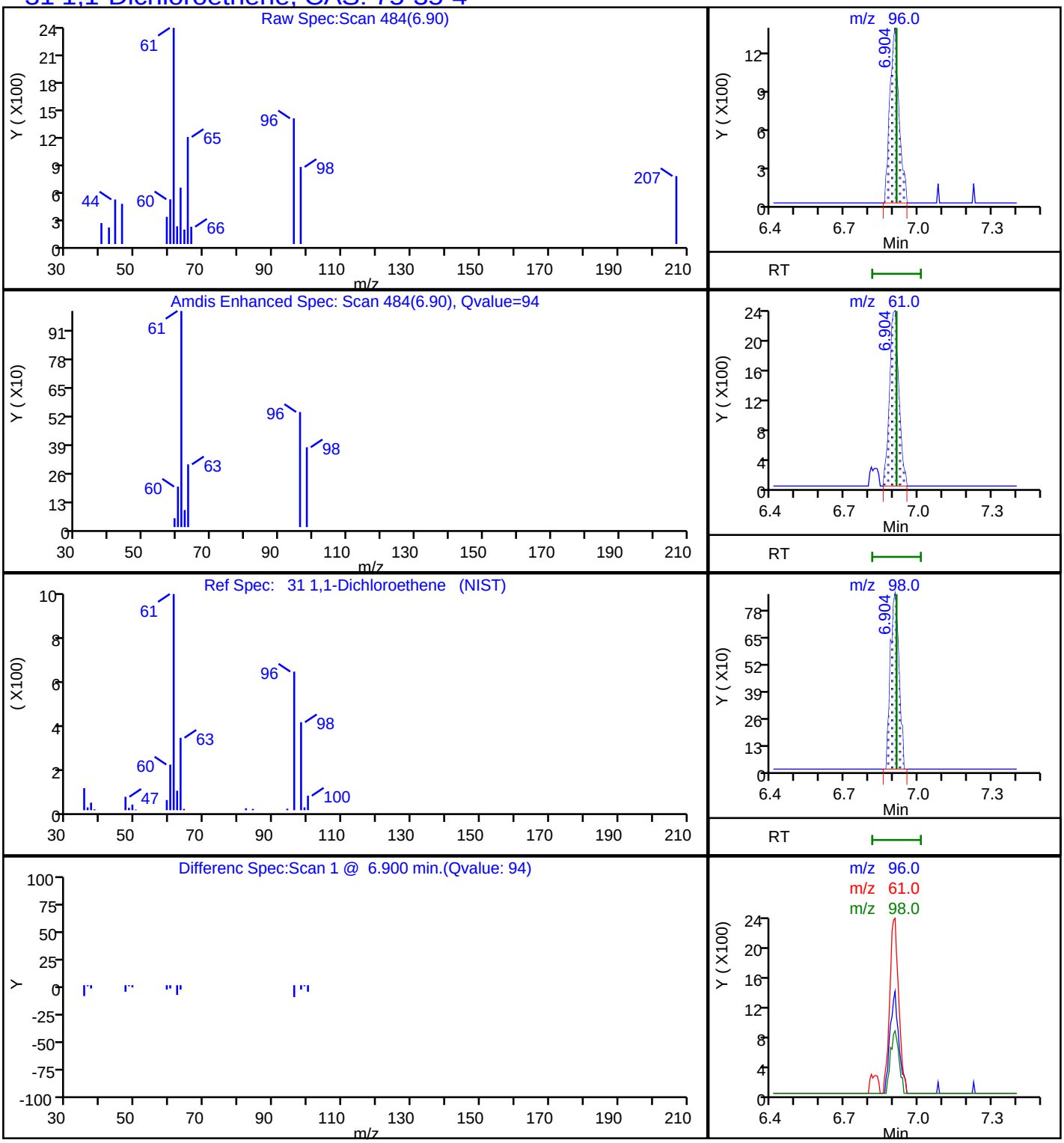
Report Date: 29-Aug-2018 09:31:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281820.D

Injection Date:	28-Aug-2018 17:29:30	Instrument ID:	HP13		
Lims ID:	720-88217-A-5-A	Lab Sample ID:	720-88217-5		
Client ID:	DG-A5S-19.5-20				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

31 1,1-Dichloroethene, CAS: 75-35-4



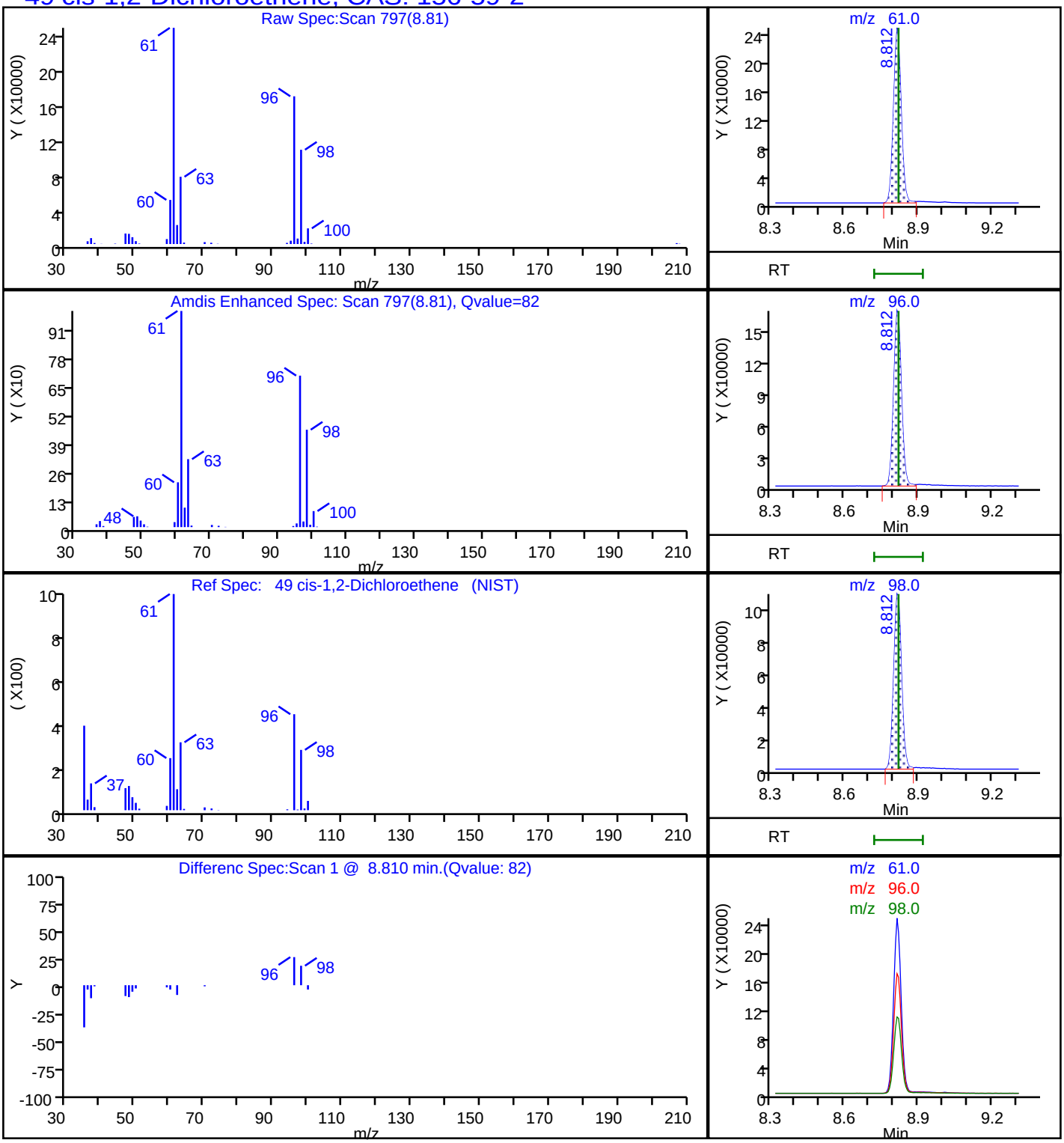
Report Date: 29-Aug-2018 09:31:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281820.D

Injection Date:	28-Aug-2018 17:29:30	Instrument ID:	HP13		
Lims ID:	720-88217-A-5-A	Lab Sample ID:	720-88217-5		
Client ID:	DG-A5S-19.5-20				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

49 cis-1,2-Dichloroethene, CAS: 156-59-2



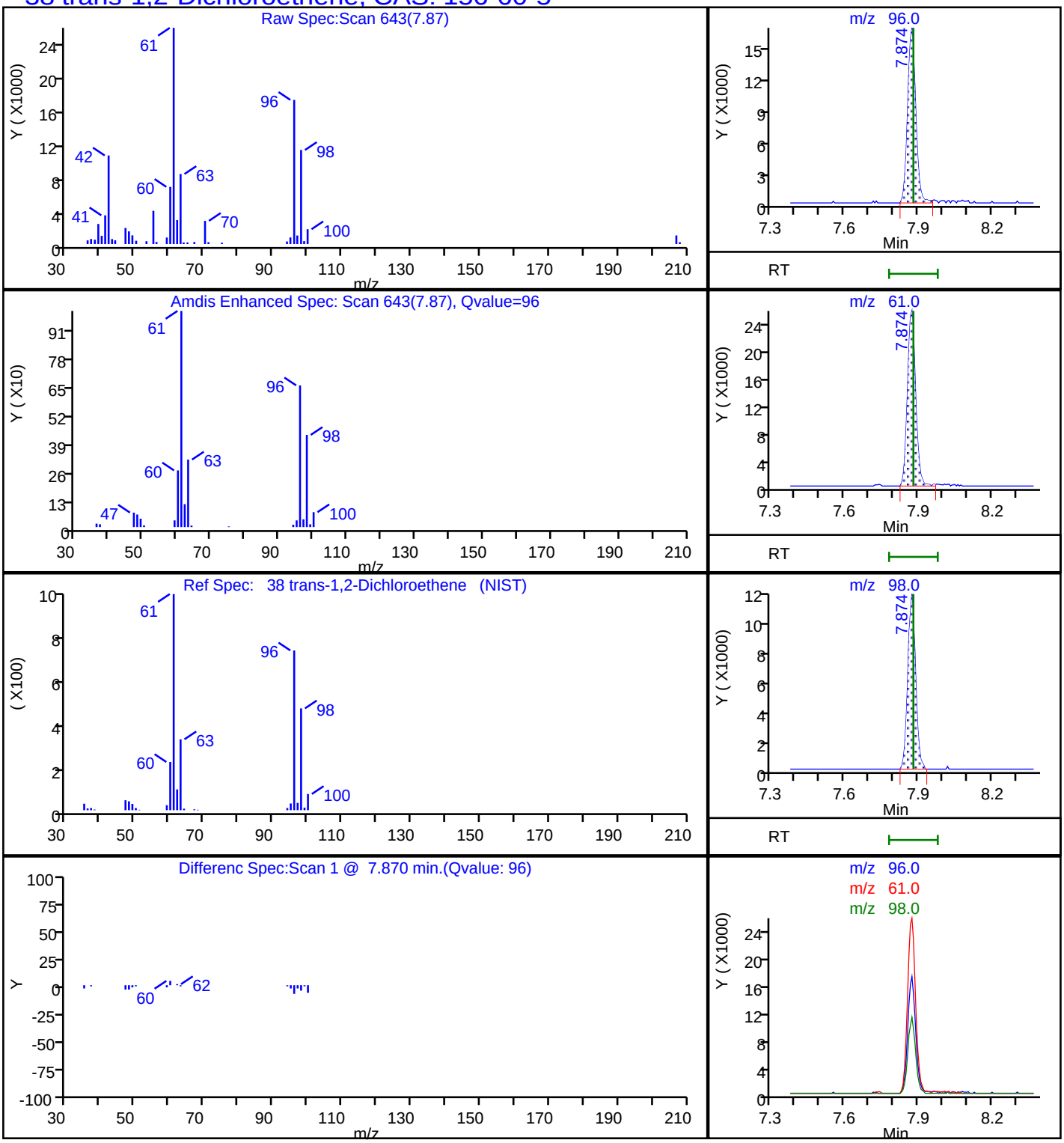
Report Date: 29-Aug-2018 09:31:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281820.D

Injection Date:	28-Aug-2018 17:29:30	Instrument ID:	HP13		
Lims ID:	720-88217-A-5-A	Lab Sample ID:	720-88217-5		
Client ID:	DG-A5S-19.5-20				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

38 trans-1,2-Dichloroethene, CAS: 156-60-5



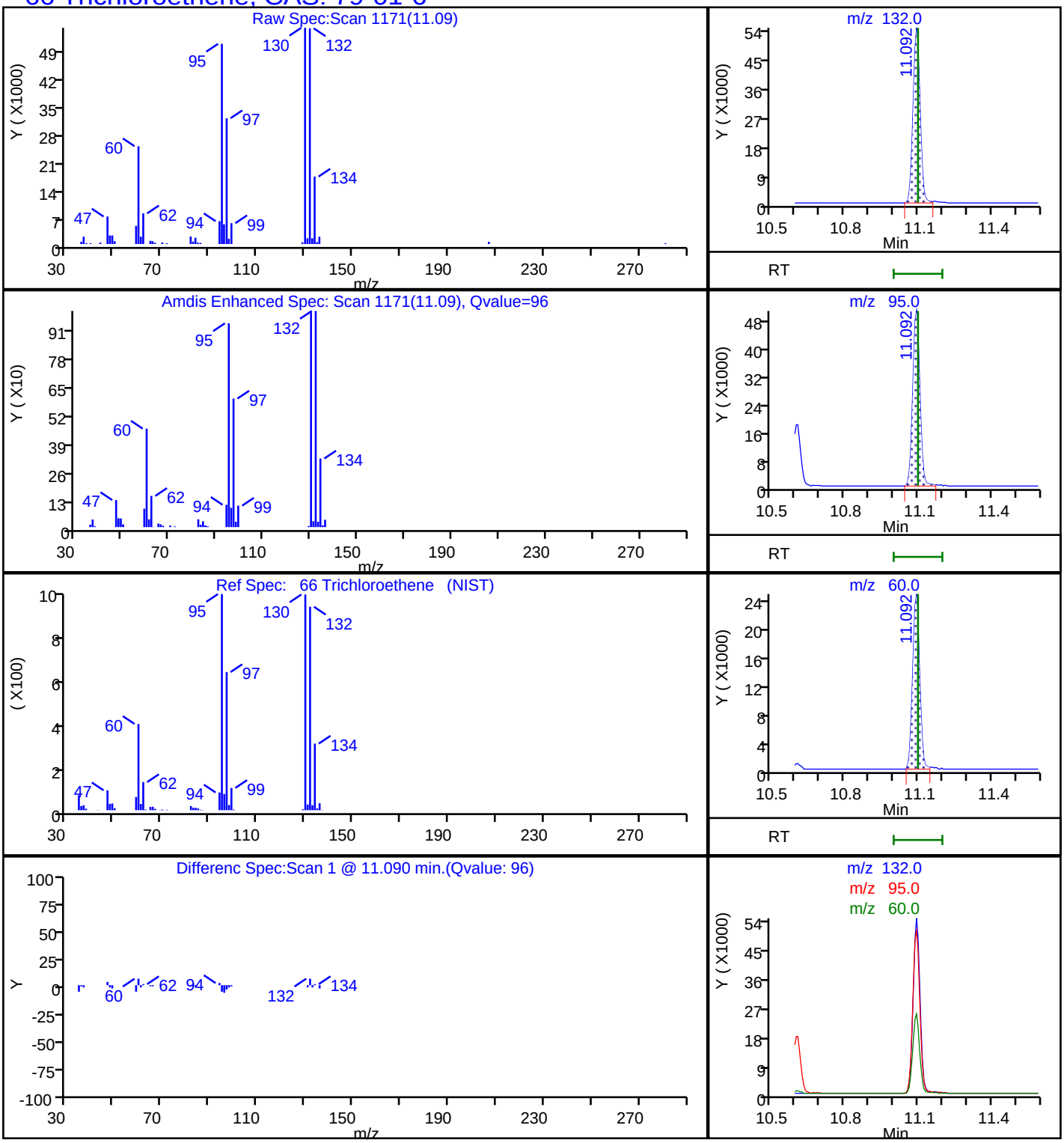
Report Date: 29-Aug-2018 09:31:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281820.D

Injection Date:	28-Aug-2018 17:29:30	Instrument ID:	HP13		
Lims ID:	720-88217-A-5-A	Lab Sample ID:	720-88217-5		
Client ID:	DG-A5S-19.5-20				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

66 Trichloroethene, CAS: 79-01-6



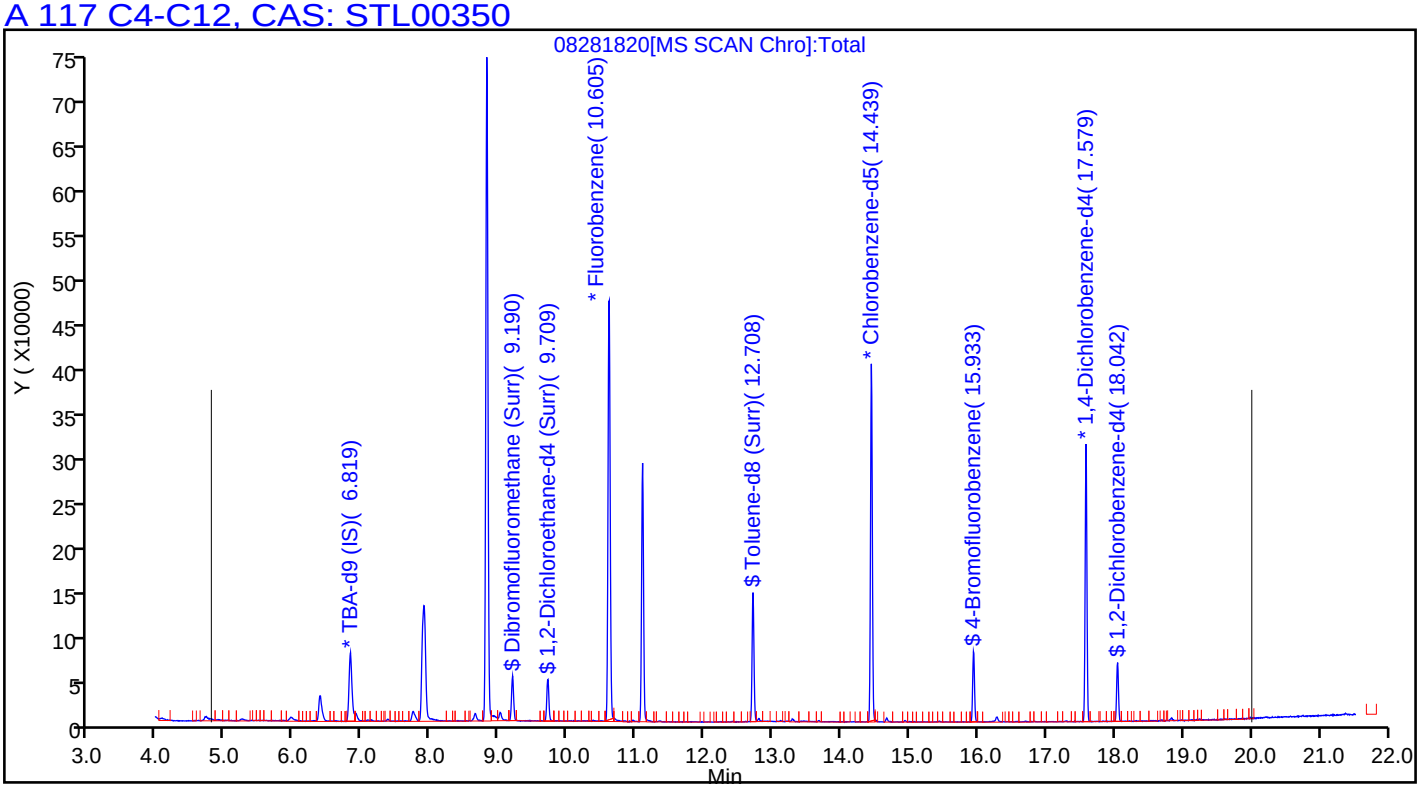
Report Date: 29-Aug-2018 09:31:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281820.D

Injection Date:	28-Aug-2018 17:29:30	Instrument ID:	HP13		
Lims ID:	720-88217-A-5-A	Lab Sample ID:	720-88217-5		
Client ID:	DG-A5S-19.5-20				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



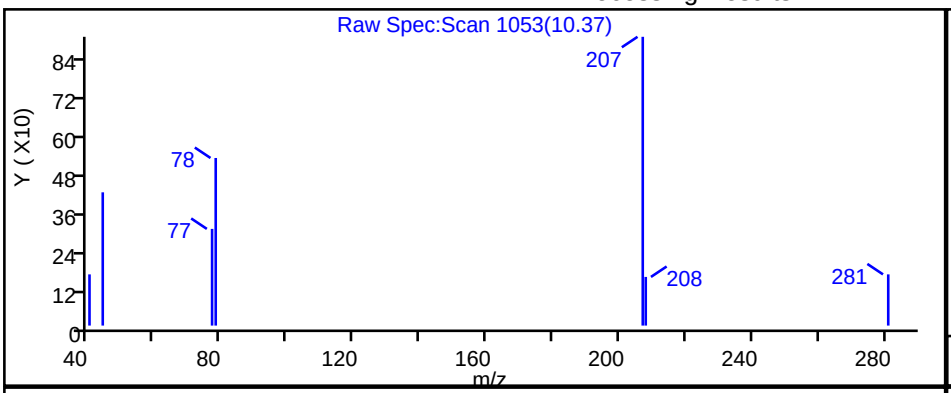
User Disabled Compound Report

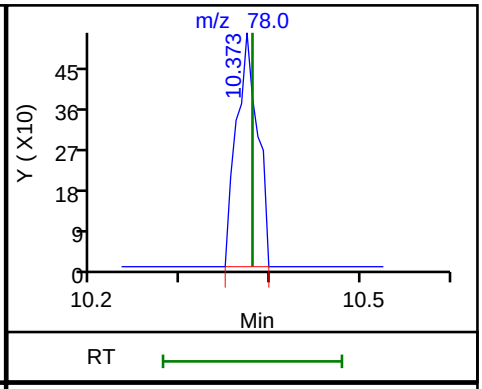
TestAmerica Pleasanton

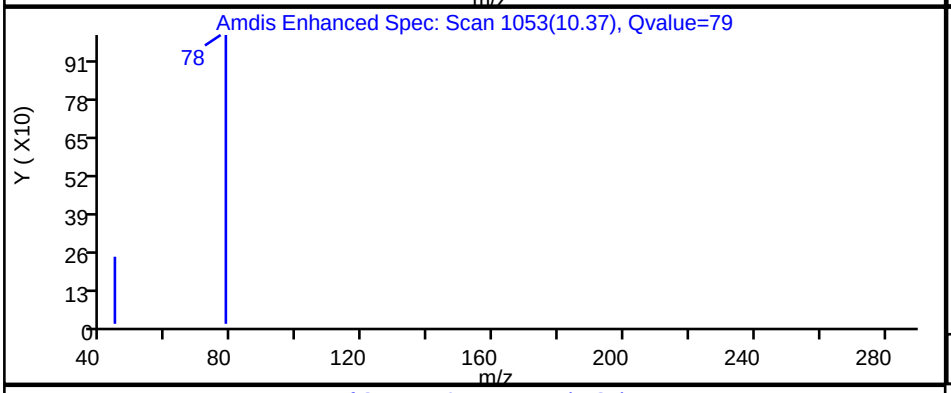
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281820.D				
Injection Date:	28-Aug-2018 17:29:30	Instrument ID:	HP13		
Lims ID:	720-88217-A-5-A	Lab Sample ID:	720-88217-5		
Client ID:	DG-A5S-19.5-20				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

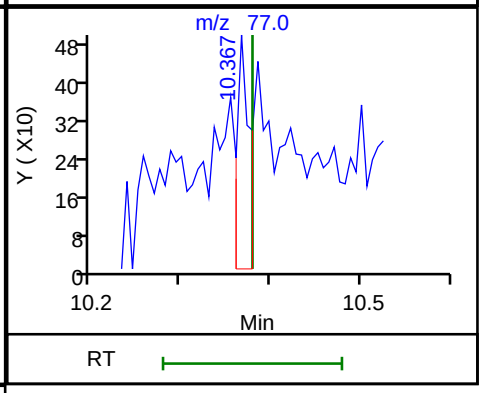
59 Benzene, CAS: 71-43-2

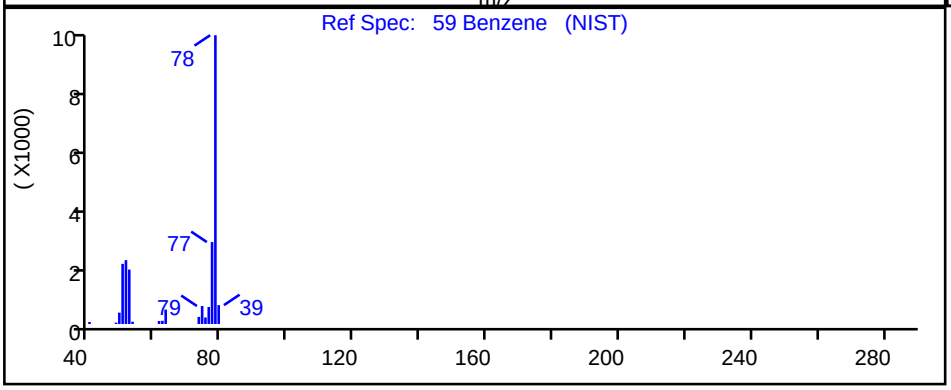
Processing Results











RT	Mass	Response	Amount
10.37	78.00	864	0.049444
10.37	77.00	486	

Reviewer: chaijita, 29-Aug-2018 09:25:52

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

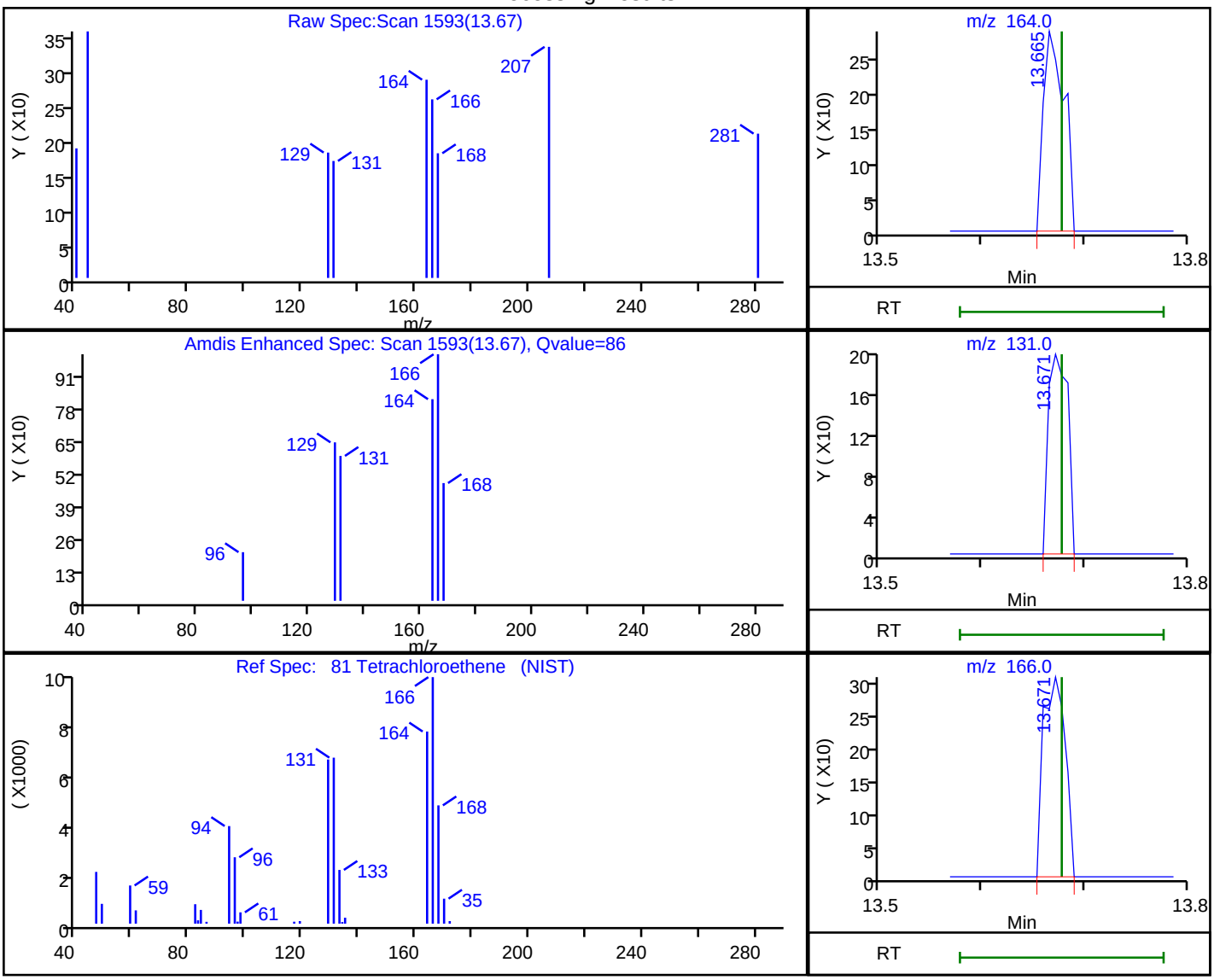
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281820.D				
Injection Date:	28-Aug-2018 17:29:30	Instrument ID:	HP13		
Lims ID:	720-88217-A-5-A	Lab Sample ID:	720-88217-5		
Client ID:	DG-A5S-19.5-20				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

81 Tetrachloroethene, CAS: 127-18-4

Processing Results



RT	Mass	Response	Amount
13.67	164.00	397	0.100072
13.67	131.00	258	
13.67	166.00	451	

Reviewer: chaijita, 29-Aug-2018 09:26:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88217-1

SDG No.:

Client Sample ID: DG-H6S-0.5-1.0 Lab Sample ID: 720-88217-6

Matrix: Solid Lab File ID: 08311811.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:55

Sample wt/vol: 5.662(g) Date Analyzed: 08/31/2018 11:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250645 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND	H	4.4	1.1
67-64-1	Acetone	ND	H	44	34
71-43-2	Benzene	ND	H	4.4	0.57
75-27-4	Dichlorobromomethane	ND	H	4.4	0.64
108-86-1	Bromobenzene	ND	H	4.4	0.70
74-97-5	Chlorobromomethane	ND	H	18	0.64
75-25-2	Bromoform	ND	H	4.4	1.8
74-83-9	Bromomethane	ND	H	8.8	0.70
78-93-3	2-Butanone (MEK)	ND	H	44	19
104-51-8	n-Butylbenzene	ND	H	4.4	0.88
135-98-8	sec-Butylbenzene	ND	H	4.4	0.64
98-06-6	tert-Butylbenzene	ND	H	4.4	0.64
75-15-0	Carbon disulfide	ND	H	4.4	1.8
56-23-5	Carbon tetrachloride	ND	H	4.4	0.55
108-90-7	Chlorobenzene	ND	H	4.4	0.61
75-00-3	Chloroethane	ND	H	8.8	0.49
67-66-3	Chloroform	ND	H	4.4	0.58
74-87-3	Chloromethane	ND	H	8.8	0.70
95-49-8	2-Chlorotoluene	ND	H	4.4	0.57
106-43-4	4-Chlorotoluene	ND	H	4.4	0.60
124-48-1	Chlorodibromomethane	ND	H	4.4	0.63
95-50-1	1,2-Dichlorobenzene	ND	H	4.4	0.60
541-73-1	1,3-Dichlorobenzene	ND	H	4.4	0.64
106-46-7	1,4-Dichlorobenzene	ND	H	4.4	0.63
142-28-9	1,3-Dichloropropane	ND	H	4.4	0.64
563-58-6	1,1-Dichloropropene	ND	H	4.4	0.61
96-12-8	1,2-Dibromo-3-Chloropropane	ND	H	8.8	1.5
106-93-4	Ethylene Dibromide	ND	H	4.4	1.3
74-95-3	Dibromomethane	ND	H	8.8	0.76
75-71-8	Dichlorodifluoromethane	ND	H	8.8	0.70
75-34-3	1,1-Dichloroethane	ND	H	4.4	0.60
107-06-2	1,2-Dichloroethane	ND	H	4.4	0.67
75-35-4	1,1-Dichloroethene	ND	H *	4.4	0.55
156-59-2	cis-1,2-Dichloroethene	ND	H	4.4	0.60
156-60-5	trans-1,2-Dichloroethene	ND	H	4.4	0.66
78-87-5	1,2-Dichloropropane	ND	H	4.4	0.56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88217-1

SDG No.:

Client Sample ID: DG-H6S-0.5-1.0 Lab Sample ID: 720-88217-6

Matrix: Solid Lab File ID: 08311811.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:55

Sample wt/vol: 5.662(g) Date Analyzed: 08/31/2018 11:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250645 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND	H	4.4	0.61
10061-02-6	trans-1,3-Dichloropropene	ND	H	4.4	0.59
100-41-4	Ethylbenzene	ND	H	4.4	0.66
87-68-3	Hexachlorobutadiene	ND	H	4.4	0.79
591-78-6	2-Hexanone	ND	H	44	8.8
98-82-8	Isopropylbenzene	ND	H	4.4	0.60
99-87-6	4-Isopropyltoluene	ND	H	4.4	2.2
75-09-2	Methylene Chloride	ND	H	8.8	4.9
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	H	44	8.8
91-20-3	Naphthalene	ND	H	8.8	1.3
103-65-1	N-Propylbenzene	ND	H	4.4	0.58
100-42-5	Styrene	ND	H	4.4	0.56
630-20-6	1,1,1,2-Tetrachloroethane	ND	H	4.4	0.67
79-34-5	1,1,2,2-Tetrachloroethane	ND	H	4.4	0.66
127-18-4	Tetrachloroethene	ND	H	4.4	0.59
108-88-3	Toluene	ND	H	4.4	0.63
87-61-6	1,2,3-Trichlorobenzene	ND	H	4.4	0.65
120-82-1	1,2,4-Trichlorobenzene	ND	H	4.4	0.63
71-55-6	1,1,1-Trichloroethane	ND	H	4.4	0.54
79-00-5	1,1,2-Trichloroethane	ND	H	4.4	0.62
79-01-6	Trichloroethene	ND	H	4.4	0.56
75-69-4	Trichlorofluoromethane	ND	H	4.4	0.49
96-18-4	1,2,3-Trichloropropane	ND	H	4.4	0.68
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	H *	4.4	1.8
95-63-6	1,2,4-Trimethylbenzene	ND	H	4.4	1.4
108-67-8	1,3,5-Trimethylbenzene	ND	H	4.4	0.57
108-05-4	Vinyl acetate	ND	H	18	4.4
75-01-4	Vinyl chloride	ND	H	4.4	0.64
1330-20-7	Xylenes, Total	ND	H	4.4	1.1
594-20-7	2,2-Dichloropropane	ND	H	4.4	1.8
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND	H	220	88

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88217-1

SDG No.:

Client Sample ID: DG-H6S-0.5-1.0 Lab Sample ID: 720-88217-6

Matrix: Solid Lab File ID: 08311811.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:55

Sample wt/vol: 5.662(g) Date Analyzed: 08/31/2018 11:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250645 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	82		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		60-140
2037-26-5	Toluene-d8 (Surr)	90		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311811.D
Lims ID: 720-88217-B-6-A
Client ID: DG-H6S-0.5-1.0
Sample Type: Client
Inject. Date: 31-Aug-2018 11:17:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88217-B-6 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 13:38:52 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 14:06:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	166646	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	981013	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	85	719452	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	264918	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.304	9.304	0.000	92	64495	7.76	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.811	0.011	0	74360	8.33	
$ 10 Toluene-d8 (Surr)	98	12.821	12.821	0.000	94	264099	6.78	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	92	68966	6.16	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	83	51730	5.58	
28 Acetone	58	6.485	6.474	0.011	96	3143	4.17	
34 Methylene Chloride	84	7.192	7.203	-0.011	79	1641	0.2216	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	306639	4.05	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	76379	1.01	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	98956	1.31	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	362537	4.79	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	111227	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	111227	1.47	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	306020	4.04	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	165601	2.19	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	51351	0.6783	
A 121 C7-C12	1	15.567	(11.005-20.130)		0	118574	1.57	

QC Flag Legend

Processing Flags
NC - Not Calibrated

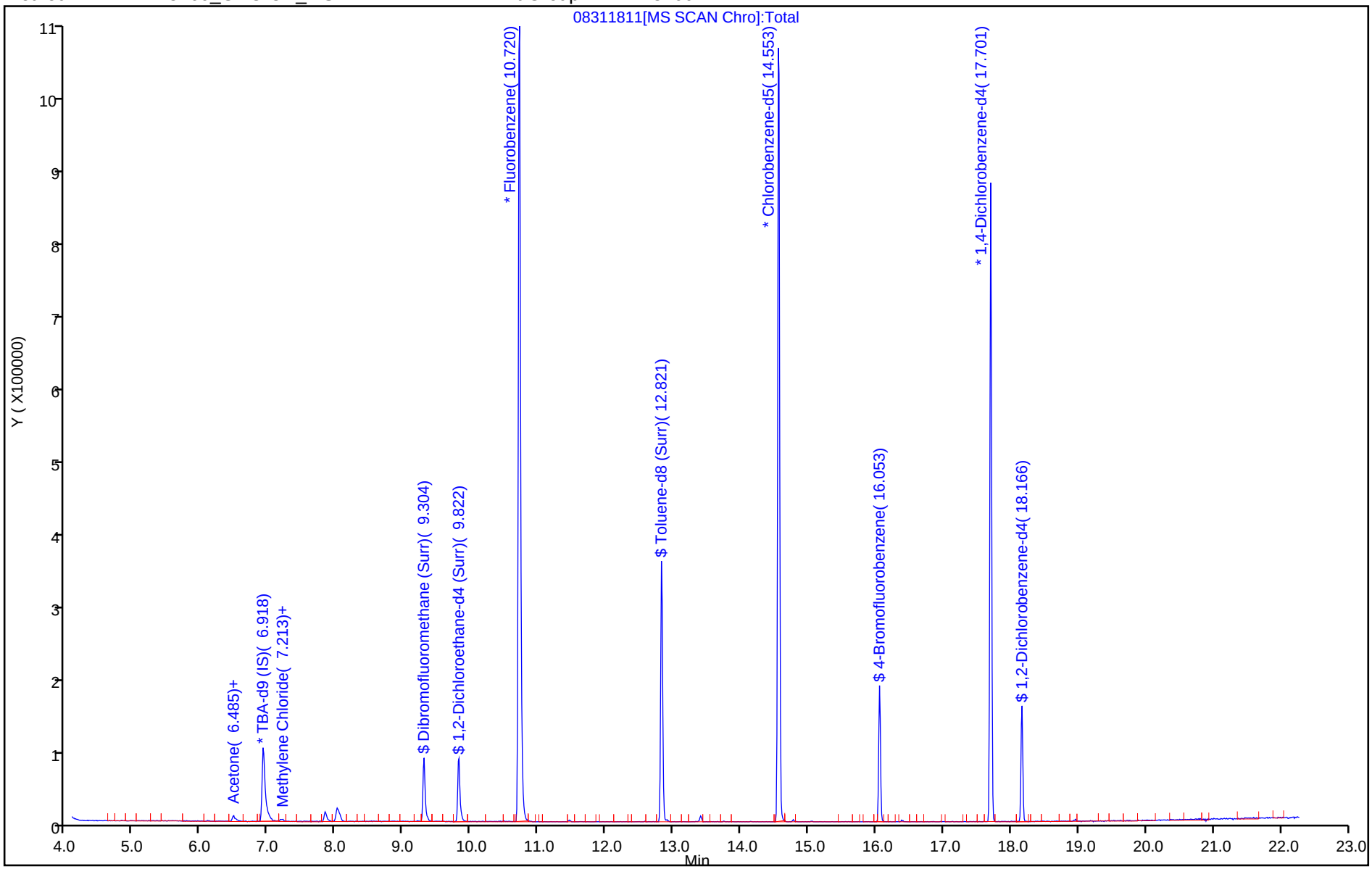
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 14:06:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311811.D				
Injection Date:	31-Aug-2018 11:17:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88217-B-6-A	Lab Sample ID:	720-88217-6	Worklist Smp#:	11
Client ID:	DG-H6S-0.5-1.0				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311811.D
Lims ID: 720-88217-B-6-A
Client ID: DG-H6S-0.5-1.0
Sample Type: Client
Inject. Date: 31-Aug-2018 11:17:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88217-B-6 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 13:38:52 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 14:06:15

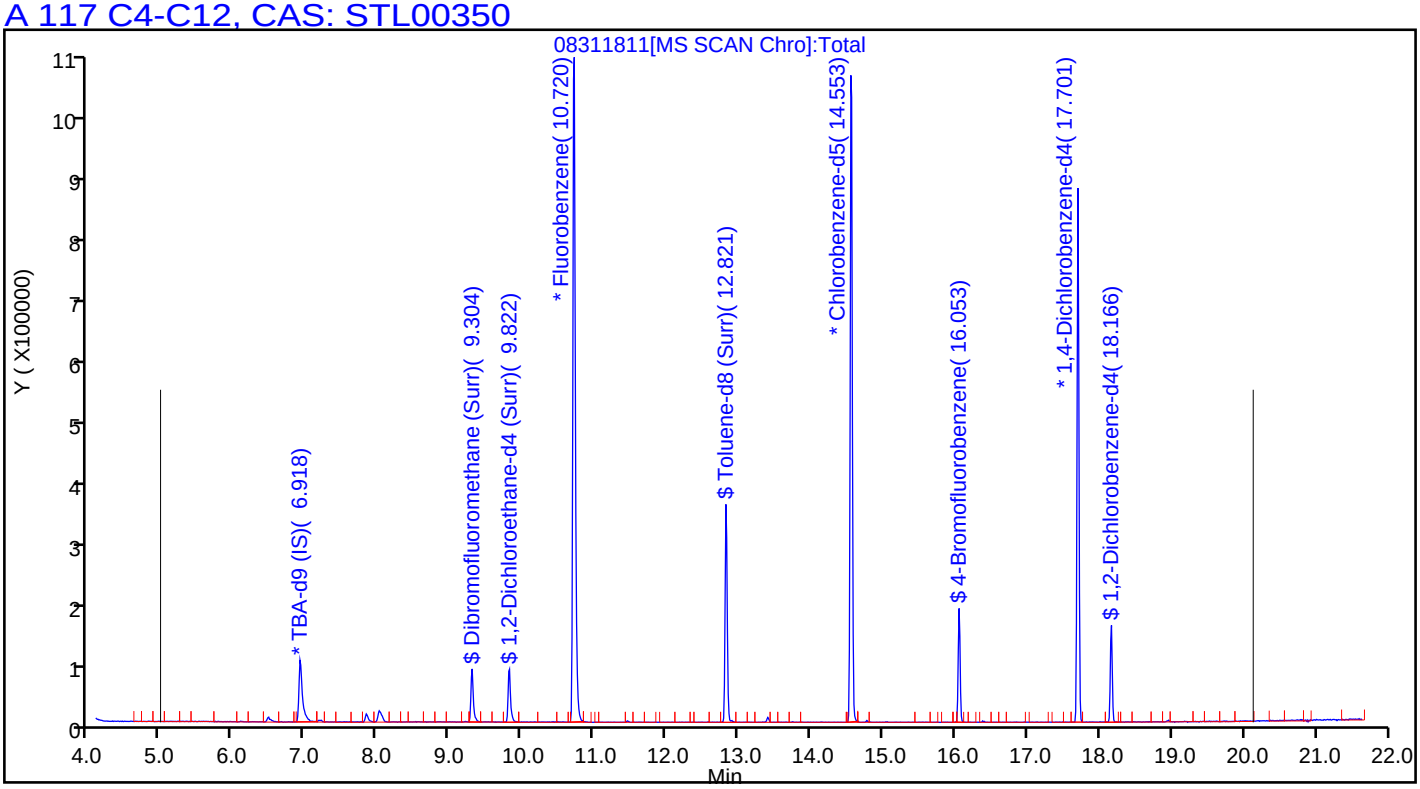
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.33	111.06
$ 10 Toluene-d8 (Surr)	7.50	6.78	90.40
$ 11 4-Bromofluorobenzene	7.50	6.16	82.08
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 14:06:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311811.D				
Injection Date:	31-Aug-2018 11:17:30	Instrument ID:	CHMSV2		
Lims ID:	720-88217-B-6-A	Lab Sample ID:	720-88217-6		
Client ID:	DG-H6S-0.5-1.0				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88217-1

SDG No.:

Client Sample ID: DG-H6S-3.5-4.0 Lab Sample ID: 720-88217-7

Matrix: Solid Lab File ID: 08311812.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:55

Sample wt/vol: 6.529(g) Date Analyzed: 08/31/2018 11:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250645 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND	H	3.8	0.92
67-64-1	Acetone	43	H	38	29
71-43-2	Benzene	ND	H	3.8	0.50
75-27-4	Dichlorobromomethane	ND	H	3.8	0.55
108-86-1	Bromobenzene	ND	H	3.8	0.60
74-97-5	Chlorobromomethane	ND	H	15	0.55
75-25-2	Bromoform	ND	H	3.8	1.5
74-83-9	Bromomethane	ND	H	7.7	0.60
78-93-3	2-Butanone (MEK)	ND	H	38	16
104-51-8	n-Butylbenzene	ND	H	3.8	0.77
135-98-8	sec-Butylbenzene	ND	H	3.8	0.55
98-06-6	tert-Butylbenzene	ND	H	3.8	0.56
75-15-0	Carbon disulfide	ND	H	3.8	1.5
56-23-5	Carbon tetrachloride	ND	H	3.8	0.47
108-90-7	Chlorobenzene	ND	H	3.8	0.53
75-00-3	Chloroethane	ND	H	7.7	0.43
67-66-3	Chloroform	ND	H	3.8	0.51
74-87-3	Chloromethane	ND	H	7.7	0.60
95-49-8	2-Chlorotoluene	ND	H	3.8	0.50
106-43-4	4-Chlorotoluene	ND	H	3.8	0.52
124-48-1	Chlorodibromomethane	ND	H	3.8	0.54
95-50-1	1,2-Dichlorobenzene	ND	H	3.8	0.52
541-73-1	1,3-Dichlorobenzene	ND	H	3.8	0.55
106-46-7	1,4-Dichlorobenzene	ND	H	3.8	0.54
142-28-9	1,3-Dichloropropane	ND	H	3.8	0.56
563-58-6	1,1-Dichloropropene	ND	H	3.8	0.53
96-12-8	1,2-Dibromo-3-Chloropropane	ND	H	7.7	1.3
106-93-4	Ethylene Dibromide	ND	H	3.8	1.1
74-95-3	Dibromomethane	ND	H	7.7	0.66
75-71-8	Dichlorodifluoromethane	ND	H	7.7	0.60
75-34-3	1,1-Dichloroethane	ND	H	3.8	0.52
107-06-2	1,2-Dichloroethane	ND	H	3.8	0.58
75-35-4	1,1-Dichloroethene	ND	H *	3.8	0.47
156-59-2	cis-1,2-Dichloroethene	ND	H	3.8	0.52
156-60-5	trans-1,2-Dichloroethene	ND	H	3.8	0.57
78-87-5	1,2-Dichloropropane	ND	H	3.8	0.48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88217-1

SDG No.:

Client Sample ID: DG-H6S-3.5-4.0 Lab Sample ID: 720-88217-7

Matrix: Solid Lab File ID: 08311812.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:55

Sample wt/vol: 6.529(g) Date Analyzed: 08/31/2018 11:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250645 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND	H	3.8	0.53
10061-02-6	trans-1,3-Dichloropropene	ND	H	3.8	0.51
100-41-4	Ethylbenzene	ND	H	3.8	0.57
87-68-3	Hexachlorobutadiene	ND	H	3.8	0.69
591-78-6	2-Hexanone	ND	H	38	7.7
98-82-8	Isopropylbenzene	ND	H	3.8	0.52
99-87-6	4-Isopropyltoluene	ND	H	3.8	1.9
75-09-2	Methylene Chloride	ND	H	7.7	4.3
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	H	38	7.7
91-20-3	Naphthalene	ND	H	7.7	1.1
103-65-1	N-Propylbenzene	ND	H	3.8	0.51
100-42-5	Styrene	ND	H	3.8	0.48
630-20-6	1,1,1,2-Tetrachloroethane	ND	H	3.8	0.58
79-34-5	1,1,2,2-Tetrachloroethane	ND	H	3.8	0.57
127-18-4	Tetrachloroethene	ND	H	3.8	0.51
108-88-3	Toluene	ND	H	3.8	0.54
87-61-6	1,2,3-Trichlorobenzene	ND	H	3.8	0.57
120-82-1	1,2,4-Trichlorobenzene	ND	H	3.8	0.54
71-55-6	1,1,1-Trichloroethane	ND	H	3.8	0.47
79-00-5	1,1,2-Trichloroethane	ND	H	3.8	0.54
79-01-6	Trichloroethene	ND	H	3.8	0.48
75-69-4	Trichlorofluoromethane	ND	H	3.8	0.43
96-18-4	1,2,3-Trichloropropane	ND	H	3.8	0.59
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	H *	3.8	1.6
95-63-6	1,2,4-Trimethylbenzene	ND	H	3.8	1.3
108-67-8	1,3,5-Trimethylbenzene	ND	H	3.8	0.50
108-05-4	Vinyl acetate	ND	H	15	3.8
75-01-4	Vinyl chloride	ND	H	3.8	0.56
1330-20-7	Xylenes, Total	ND	H	3.8	0.93
594-20-7	2,2-Dichloropropane	ND	H	3.8	1.5
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND	H	190	77

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88217-1

SDG No.:

Client Sample ID: DG-H6S-3.5-4.0 Lab Sample ID: 720-88217-7

Matrix: Solid Lab File ID: 08311812.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:55

Sample wt/vol: 6.529(g) Date Analyzed: 08/31/2018 11:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250645 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	87		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		60-140
2037-26-5	Toluene-d8 (Surr)	93		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311812.D
Lims ID: 720-88217-B-7-A
Client ID: DG-H6S-3.5-4.0
Sample Type: Client
Inject. Date: 31-Aug-2018 11:46:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88217-B-7 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 13:38:52 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 14:06:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	161904	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	1005919	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	85	805059	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	341697	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.304	0.001	91	64643	7.59	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.812	9.811	0.001	0	75046	8.20	
$ 10 Toluene-d8 (Surr)	98	12.822	12.821	0.001	94	278811	6.98	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	92	81713	6.52	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	69573	5.82	
28 Acetone	58	6.474	6.474	0.000	97	21518	27.8	
34 Methylene Chloride	84	7.182	7.203	-0.021	38	176	0.0232	
59 Benzene	78	10.488	10.487	0.001	1	693	0.0191	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	502704	6.48	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	97212	1.25	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	121214	1.56	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	564770	7.27	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	128522	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	128522	1.66	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	523382	6.74	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	184854	2.38	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	51688	0.6658	
A 121 C7-C12	1	15.567	(11.005-20.130)		0	121324	1.56	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

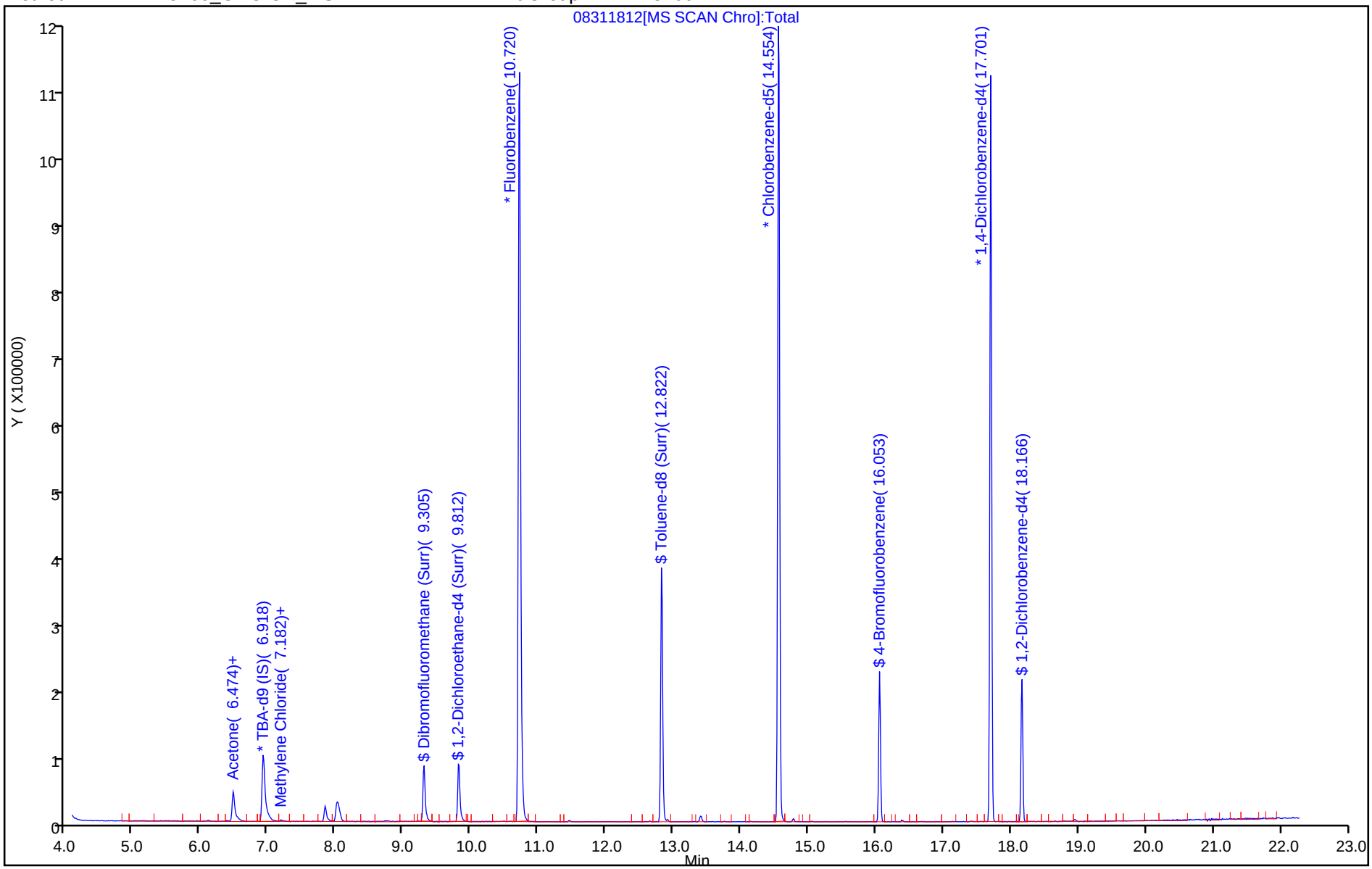
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 14:06:22 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311812.D

Injection Date:	31-Aug-2018 11:46:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88217-B-7-A	Lab Sample ID:	720-88217-7	Worklist Smp#:	12
Client ID:	DG-H6S-3.5-4.0				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311812.D
Lims ID: 720-88217-B-7-A
Client ID: DG-H6S-3.5-4.0
Sample Type: Client
Inject. Date: 31-Aug-2018 11:46:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88217-B-7 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 13:38:52 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 14:06:21

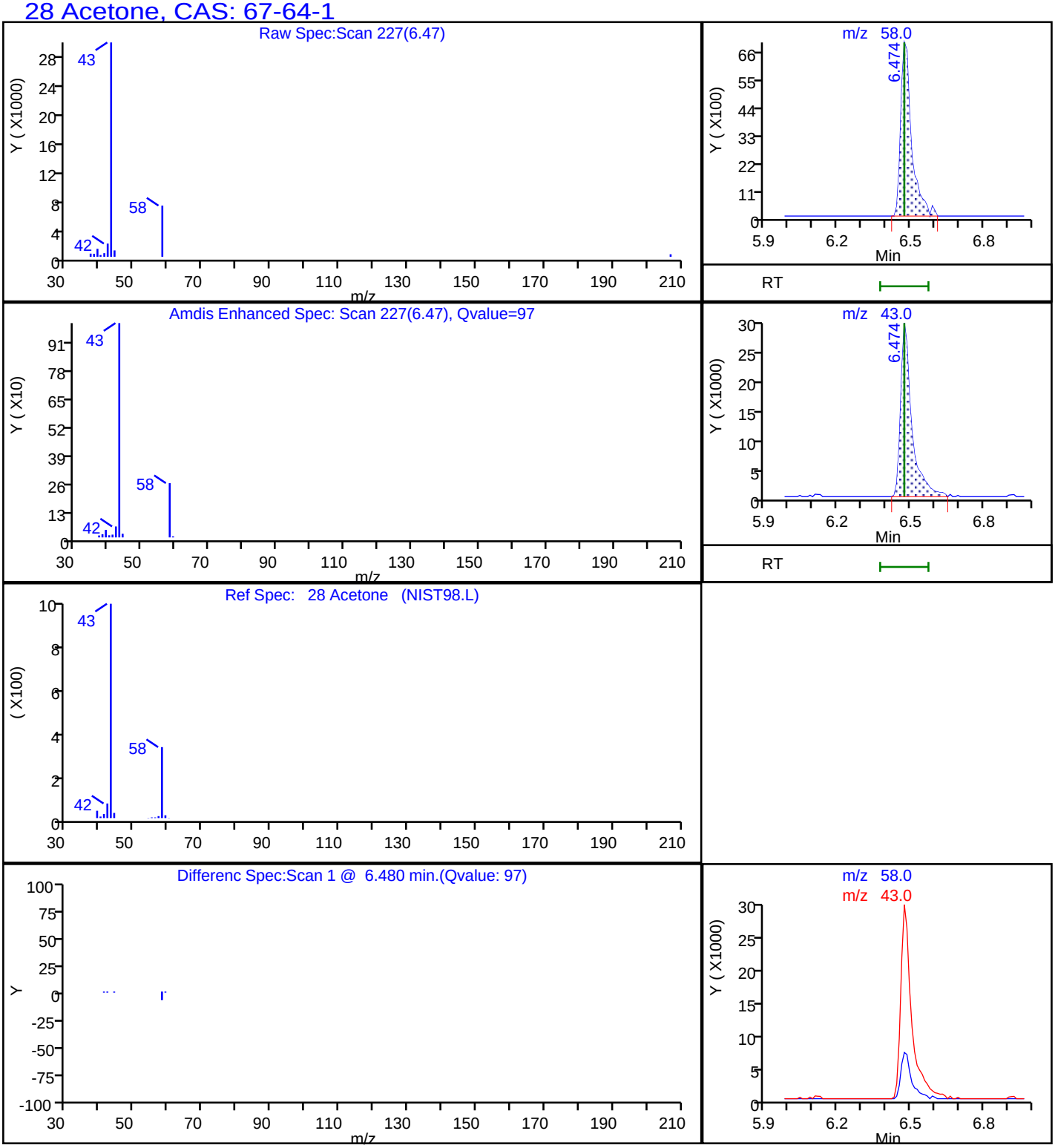
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.20	109.31
$ 10 Toluene-d8 (Surr)	7.50	6.98	93.07
$ 11 4-Bromofluorobenzene	7.50	6.52	86.91
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 14:06:22 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311812.D				
Injection Date:	31-Aug-2018 11:46:30	Instrument ID:	CHMSV2		
Lims ID:	720-88217-B-7-A	Lab Sample ID:	720-88217-7		
Client ID:	DG-H6S-3.5-4.0				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



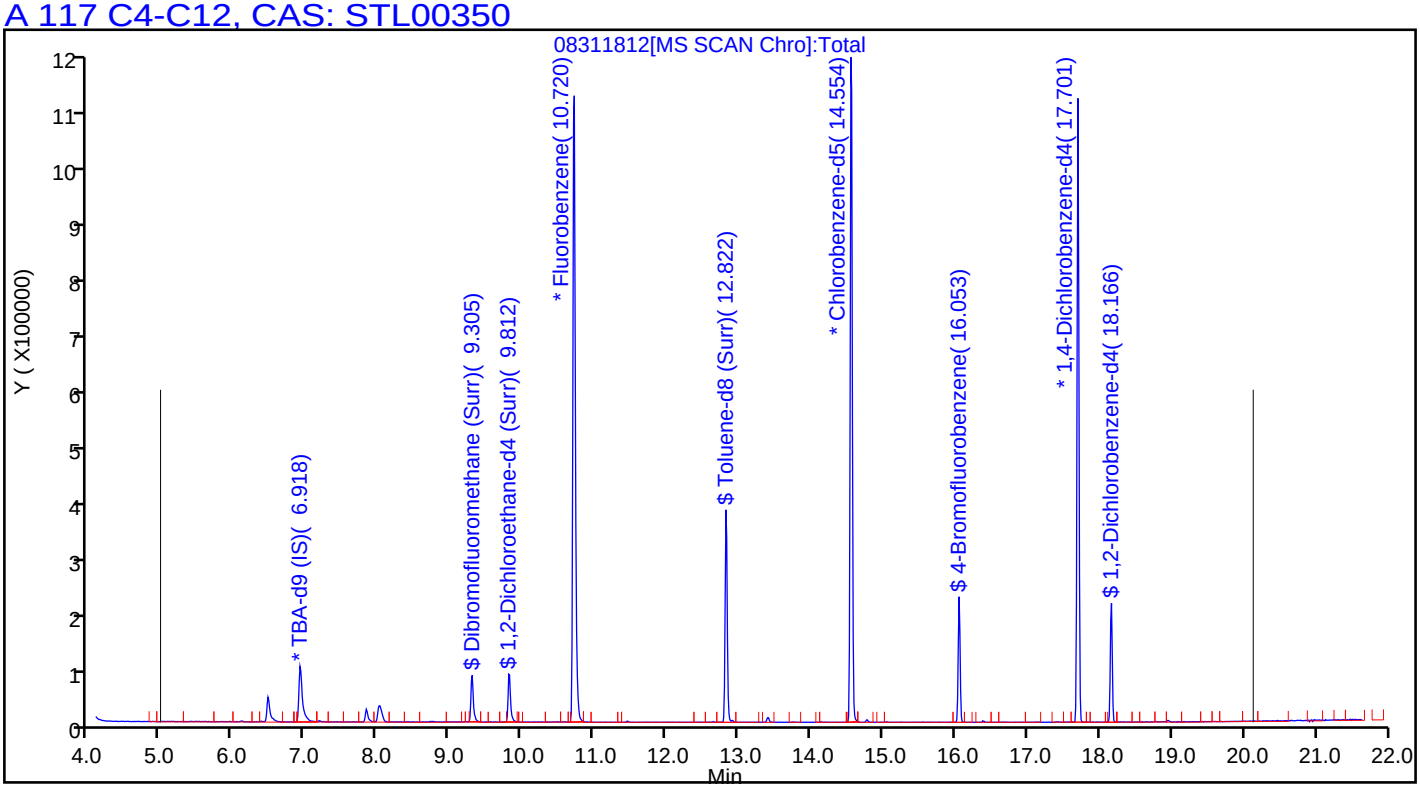
Report Date: 31-Aug-2018 14:06:23 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180831-53597.b\08311812.D

Injection Date:	31-Aug-2018 11:46:30	Instrument ID:	CHMSV2		
Lims ID:	720-88217-B-7-A	Lab Sample ID:	720-88217-7		
Client ID:	DG-H6S-3.5-4.0				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88217-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(45-131)	(60-140)	(58-140)
720-88217-2	DUP-04	88	101	89
720-88217-5	DG-A5S-19.5-20	81 *	87 *	85 *
720-88217-6	DG-H6S-0.5-1	82	111	90
720-88217-7	DG-H6S-3.5-4	87	109	93
LCS 720-250350/5	Lab Control Sample	99	95	99
LCS 720-250350/7	Lab Control Sample	99	94	96
LCS 720-250645/5	Lab Control Sample	95	102	97
LCS 720-250645/7	Lab Control Sample	96	105	98
LCSD 720-250350/6	Lab Control Sample Dup	99	94	97
LCSD 720-250350/8	Lab Control Sample Dup	100	95	97
LCSD 720-250645/6	Lab Control Sample Dup	96	107	96
LCSD 720-250645/8	Lab Control Sample Dup	97	104	97
MB 720-250350/4	Method Blank	102	94	95
MB 720-250645/4	Method Blank	93	104	96

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
720-88217-6	DG-H6S-0.5-1	80	107	94	102
LCS 490-539562/3	Lab Control Sample	77	100	95	100
LCSD 490-539562/4	Lab Control Sample Dup	79	100	93	100
MB 490-539562/7	Method Blank	78	98	93	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270C SIM - Semivolatile Org Compounds by GCMS (SIM)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		FBP	TPHL
Lab Sample ID	Client Sample ID	(33-120)	(35-146)
720-88216-A-17-Q MS	Matrix Spike	66	91
720-88216-A-17-R MSD	Matrix Spike Duplicate	82	96
720-88217-6	DG-H6S-0.5-1	68	90
720-88217-7	DG-H6S-3.5-4	50	79
LCS 720-250290/2-A	Lab Control Sample	99	105
MB 720-250290/1-A	Method Blank	81	95

Surrogate Legend

FBP = 2-Fluorobiphenyl
TPHL = Terphenyl-d14

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		FBP	TPHL
Lab Sample ID	Client Sample ID	(33-120)	(35-146)
720-88216-A-9-F MS	Matrix Spike	68	86
720-88216-A-9-G MSD	Matrix Spike Duplicate	74	88
720-88217-2	DUP-04	63	98
720-88217-5	DG-A5S-19.5-20	57	85
LCS 720-250190/2-A	Lab Control Sample	86	106
MB 720-250190/1-A	Method Blank	98	96

Surrogate Legend

FBP = 2-Fluorobiphenyl
TPHL = Terphenyl-d14

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TPH1
Lab Sample ID	Client Sample ID	(40-130)
720-88216-A-9-V MS	Matrix Spike	55
720-88216-A-9-W MSD	Matrix Spike Duplicate	65
720-88216-A-17-L MS	Matrix Spike	112
720-88216-A-17-M MSD	Matrix Spike Duplicate	105
720-88217-2	DUP-04	72
720-88217-5	DG-A5S-19.5-20	85
720-88217-6	DG-H6S-0.5-1	0 D X
720-88217-7	DG-H6S-3.5-4	106
LCS 720-250263/2-A	Lab Control Sample	91
LCS 720-250358/2-A	Lab Control Sample	94
MB 720-250263/1-A	Method Blank	106
MB 720-250358/1-A	Method Blank	82

Surrogate Legend

TPH = p-Terphenyl

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCBP2	TCX2
Lab Sample ID	Client Sample ID	(21-136)	(21-145)
720-88216-A-17-F MS	Matrix Spike	92	82
720-88216-A-17-G MSD	Matrix Spike Duplicate	93	83
MB 720-250160/1-A	Method Blank	85	85

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88217-1

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCBP2	TCX1								
Lab Sample ID	Client Sample ID	(21-136)	(21-145)								
720-88217-2	DUP-04	81	85								
720-88217-5	DG-A5S-19.5-20	84	73								

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		DCBP1	TCX2								
Lab Sample ID	Client Sample ID	(21-136)	(21-145)								
LCS 720-250160/2-A	Lab Control Sample	89	86								

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		TCX2	DCBP2								
Lab Sample ID	Client Sample ID	(14-128)	(10-132)								
720-88217-2	DUP-04	94	105								
720-88217-5	DG-A5S-19.5-20	74	71								
720-88217-6	DG-H6S-0.5-1	88	97								
720-88217-7	DG-H6S-3.5-4	88	89								
720-88218-F-20-B MS	Matrix Spike	96	126								
720-88218-F-20-C MSD	Matrix Spike Duplicate	97	112								
720-88240-F-3-B MS	Matrix Spike	88	110								
720-88240-F-3-C MSD	Matrix Spike Duplicate	97	151 X								
LCS 240-342652/22-A	Lab Control Sample	71	86								
LCS 240-343099/24-A	Lab Control Sample	87	101								
MB 240-342652/21-A	Method Blank	80	95								
MB 240-343099/23-A	Method Blank	88	106								

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-250350/4
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 09:36	1
Acetone	ND		50	38	ug/Kg			08/28/18 09:36	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 09:36	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 09:36	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 09:36	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 09:36	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 09:36	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 09:36	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 09:36	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 09:36	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:36	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 09:36	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 09:36	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 09:36	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 09:36	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 09:36	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 09:36	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 09:36	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 09:36	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:36	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 09:36	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:36	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 09:36	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 09:36	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 09:36	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 09:36	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:36	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 09:36	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 09:36	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 09:36	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:36	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 09:36	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 09:36	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 09:36	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 09:36	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 09:36	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 09:36	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 09:36	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 09:36	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 09:36	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 09:36	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250350/4
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:36	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 09:36	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 09:36	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 09:36	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 09:36	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 09:36	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 09:36	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 09:36	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 09:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 09:36	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 09:36	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 09:36	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 09:36	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 09:36	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 09:36	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 09:36	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 09:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*45 - 131*		*08/28/18 09:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*		*08/28/18 09:36*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*		*08/28/18 09:36*	*1*

Lab Sample ID: LCS 720-250350/5
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	45.9		ug/Kg		92	70 - 144
Acetone	250	264		ug/Kg		105	30 - 162
Benzene	50.0	44.9		ug/Kg		90	70 - 130
Dichlorobromomethane	50.0	45.7		ug/Kg		91	70 - 140
Bromobenzene	50.0	43.2		ug/Kg		86	70 - 130
Chlorobromomethane	50.0	48.5		ug/Kg		97	70 - 130
Bromoform	50.0	48.6		ug/Kg		97	59 - 158
Bromomethane	50.0	55.6		ug/Kg		111	59 - 132
2-Butanone (MEK)	250	246		ug/Kg		99	59 - 159
n-Butylbenzene	50.0	46.6		ug/Kg		93	70 - 142
sec-Butylbenzene	50.0	43.9		ug/Kg		88	70 - 136
tert-Butylbenzene	50.0	43.6		ug/Kg		87	70 - 130
Carbon disulfide	50.0	55.6		ug/Kg		111	60 - 140
Carbon tetrachloride	50.0	47.8		ug/Kg		96	70 - 142
Chlorobenzene	50.0	45.6		ug/Kg		91	70 - 130
Chloroethane	50.0	52.3		ug/Kg		105	65 - 130
Chloroform	50.0	45.1		ug/Kg		90	77 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250350/5
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	57.1		ug/Kg		114	55 - 140
2-Chlorotoluene	50.0	41.6		ug/Kg		83	70 - 138
4-Chlorotoluene	50.0	42.0		ug/Kg		84	70 - 136
Chlorodibromomethane	50.0	48.6		ug/Kg		97	70 - 146
1,2-Dichlorobenzene	50.0	45.7		ug/Kg		91	70 - 130
1,3-Dichlorobenzene	50.0	44.2		ug/Kg		88	70 - 131
1,4-Dichlorobenzene	50.0	45.2		ug/Kg		90	70 - 130
1,3-Dichloropropane	50.0	46.3		ug/Kg		93	70 - 140
1,1-Dichloropropene	50.0	46.0		ug/Kg		92	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	50.7		ug/Kg		101	60 - 145
Ethylene Dibromide	50.0	48.1		ug/Kg		96	70 - 140
Dibromomethane	50.0	45.6		ug/Kg		91	70 - 139
Dichlorodifluoromethane	50.0	62.3		ug/Kg		125	37 - 158
1,1-Dichloroethane	50.0	45.7		ug/Kg		91	70 - 130
1,2-Dichloroethane	50.0	44.9		ug/Kg		90	70 - 130
1,1-Dichloroethene	50.0	51.9		ug/Kg		104	74 - 122
cis-1,2-Dichloroethene	50.0	45.3		ug/Kg		91	70 - 138
trans-1,2-Dichloroethene	50.0	49.1		ug/Kg		98	67 - 130
1,2-Dichloropropane	50.0	45.8		ug/Kg		92	73 - 127
cis-1,3-Dichloropropene	50.0	48.4		ug/Kg		97	68 - 147
trans-1,3-Dichloropropene	50.0	46.7		ug/Kg		93	70 - 155
Ethylbenzene	50.0	44.3		ug/Kg		89	80 - 137
Hexachlorobutadiene	50.0	50.4		ug/Kg		101	70 - 132
2-Hexanone	250	272		ug/Kg		109	62 - 158
Isopropylbenzene	50.0	46.2		ug/Kg		92	70 - 130
4-Isopropyltoluene	50.0	45.2		ug/Kg		90	70 - 133
Methylene Chloride	50.0	46.7		ug/Kg		93	70 - 134
4-Methyl-2-pentanone (MIBK)	250	272		ug/Kg		109	60 - 160
Naphthalene	50.0	48.2		ug/Kg		96	60 - 147
N-Propylbenzene	50.0	42.6		ug/Kg		85	70 - 130
Styrene	50.0	44.5		ug/Kg		89	70 - 130
1,1,1,2-Tetrachloroethane	50.0	47.1		ug/Kg		94	70 - 130
1,1,2,2-Tetrachloroethane	50.0	44.6		ug/Kg		89	70 - 146
Tetrachloroethene	50.0	48.2		ug/Kg		96	70 - 132
Toluene	50.0	44.7		ug/Kg		89	75 - 120
1,2,3-Trichlorobenzene	50.0	50.8		ug/Kg		102	60 - 140
1,2,4-Trichlorobenzene	50.0	49.8		ug/Kg		100	60 - 140
1,1,1-Trichloroethane	50.0	47.4		ug/Kg		95	70 - 130
1,1,2-Trichloroethane	50.0	48.0		ug/Kg		96	70 - 130
Trichloroethene	50.0	47.0		ug/Kg		94	70 - 133
Trichlorofluoromethane	50.0	57.5		ug/Kg		115	60 - 140
1,2,3-Trichloropropane	50.0	45.3		ug/Kg		91	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	59.8		ug/Kg		120	60 - 140
1,2,4-Trimethylbenzene	50.0	42.3		ug/Kg		85	70 - 130
1,3,5-Trimethylbenzene	50.0	42.3		ug/Kg		85	70 - 131
Vinyl acetate	50.0	51.9		ug/Kg		104	38 - 176
Vinyl chloride	50.0	53.8		ug/Kg		108	58 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250350/5
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	50.0	44.1		ug/Kg		88	70 - 146
o-Xylene	50.0	44.6		ug/Kg		89	70 - 140
2,2-Dichloropropane	50.0	47.6		ug/Kg		95	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Lab Sample ID: LCS 720-250350/7
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	985		ug/Kg		99	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250350/6
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	46.2		ug/Kg		92	70 - 144	1	20
Acetone	250	260		ug/Kg		104	30 - 162	2	30
Benzene	50.0	42.9		ug/Kg		86	70 - 130	5	20
Dichlorobromomethane	50.0	45.0		ug/Kg		90	70 - 140	2	20
Bromobenzene	50.0	43.3		ug/Kg		87	70 - 130	0	20
Chlorobromomethane	50.0	48.1		ug/Kg		96	70 - 130	1	20
Bromoform	50.0	47.8		ug/Kg		96	59 - 158	2	20
Bromomethane	50.0	54.0		ug/Kg		108	59 - 132	3	20
2-Butanone (MEK)	250	259		ug/Kg		103	59 - 159	5	20
n-Butylbenzene	50.0	45.2		ug/Kg		90	70 - 142	3	20
sec-Butylbenzene	50.0	42.7		ug/Kg		85	70 - 136	3	20
tert-Butylbenzene	50.0	42.5		ug/Kg		85	70 - 130	3	20
Carbon disulfide	50.0	51.7		ug/Kg		103	60 - 140	7	20
Carbon tetrachloride	50.0	44.8		ug/Kg		90	70 - 142	6	20
Chlorobenzene	50.0	44.8		ug/Kg		90	70 - 130	2	20
Chloroethane	50.0	50.5		ug/Kg		101	65 - 130	4	20
Chloroform	50.0	43.5		ug/Kg		87	77 - 127	4	20
Chloromethane	50.0	53.4		ug/Kg		107	55 - 140	7	20
2-Chlorotoluene	50.0	40.9		ug/Kg		82	70 - 138	2	20
4-Chlorotoluene	50.0	41.5		ug/Kg		83	70 - 136	1	20
Chlorodibromomethane	50.0	47.7		ug/Kg		95	70 - 146	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250350/6
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	50.0	45.5		ug/Kg		91	70 - 130	1	20
1,3-Dichlorobenzene	50.0	43.6		ug/Kg		87	70 - 131	1	20
1,4-Dichlorobenzene	50.0	44.2		ug/Kg		88	70 - 130	2	20
1,3-Dichloropropane	50.0	45.5		ug/Kg		91	70 - 140	2	20
1,1-Dichloropropene	50.0	43.8		ug/Kg		88	70 - 130	5	20
1,2-Dibromo-3-Chloropropane	50.0	50.9		ug/Kg		102	60 - 145	0	20
Ethylene Dibromide	50.0	47.2		ug/Kg		94	70 - 140	2	20
Dibromomethane	50.0	45.9		ug/Kg		92	70 - 139	1	20
Dichlorodifluoromethane	50.0	58.8		ug/Kg		118	37 - 158	6	20
1,1-Dichloroethane	50.0	45.0		ug/Kg		90	70 - 130	2	20
1,2-Dichloroethane	50.0	44.4		ug/Kg		89	70 - 130	1	20
1,1-Dichloroethene	50.0	50.3		ug/Kg		101	74 - 122	3	20
cis-1,2-Dichloroethene	50.0	43.6		ug/Kg		87	70 - 138	4	20
trans-1,2-Dichloroethene	50.0	45.9		ug/Kg		92	67 - 130	7	20
1,2-Dichloropropane	50.0	44.2		ug/Kg		88	73 - 127	4	20
cis-1,3-Dichloropropene	50.0	47.1		ug/Kg		94	68 - 147	3	20
trans-1,3-Dichloropropene	50.0	44.6		ug/Kg		89	70 - 155	5	20
Ethylbenzene	50.0	42.8		ug/Kg		86	80 - 137	4	20
Hexachlorobutadiene	50.0	47.8		ug/Kg		96	70 - 132	5	20
2-Hexanone	250	269		ug/Kg		108	62 - 158	1	20
Isopropylbenzene	50.0	44.7		ug/Kg		89	70 - 130	3	20
4-Isopropyltoluene	50.0	44.1		ug/Kg		88	70 - 133	2	20
Methylene Chloride	50.0	44.9		ug/Kg		90	70 - 134	4	20
4-Methyl-2-pentanone (MIBK)	250	269		ug/Kg		107	60 - 160	1	20
Naphthalene	50.0	49.1		ug/Kg		98	60 - 147	2	20
N-Propylbenzene	50.0	41.5		ug/Kg		83	70 - 130	3	20
Styrene	50.0	43.9		ug/Kg		88	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	46.4		ug/Kg		93	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	44.5		ug/Kg		89	70 - 146	0	20
Tetrachloroethene	50.0	46.0		ug/Kg		92	70 - 132	5	20
Toluene	50.0	43.0		ug/Kg		86	75 - 120	4	20
1,2,3-Trichlorobenzene	50.0	50.8		ug/Kg		102	60 - 140	0	20
1,2,4-Trichlorobenzene	50.0	50.0		ug/Kg		100	60 - 140	0	20
1,1,1-Trichloroethane	50.0	44.9		ug/Kg		90	70 - 130	5	20
1,1,2-Trichloroethane	50.0	46.5		ug/Kg		93	70 - 130	3	20
Trichloroethene	50.0	45.6		ug/Kg		91	70 - 133	3	20
Trichlorofluoromethane	50.0	55.4		ug/Kg		111	60 - 140	4	20
1,2,3-Trichloropropane	50.0	45.8		ug/Kg		92	70 - 146	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	55.0		ug/Kg		110	60 - 140	8	20
1,2,4-Trimethylbenzene	50.0	42.1		ug/Kg		84	70 - 130	1	20
1,3,5-Trimethylbenzene	50.0	41.7		ug/Kg		83	70 - 131	1	20
Vinyl acetate	50.0	52.9		ug/Kg		106	38 - 176	2	20
Vinyl chloride	50.0	51.5		ug/Kg		103	58 - 125	4	20
m-Xylene & p-Xylene	50.0	42.6		ug/Kg		85	70 - 146	3	20
o-Xylene	50.0	43.4		ug/Kg		87	70 - 140	3	20
2,2-Dichloropropane	50.0	44.4		ug/Kg		89	70 - 162	7	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250350/6
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250350/8
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	976		ug/Kg		98	70 - 122	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: MB 720-250645/4
Matrix: Solid
Analysis Batch: 250645

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/31/18 07:58	1
Acetone	ND		50	38	ug/Kg			08/31/18 07:58	1
Benzene	ND		5.0	0.65	ug/Kg			08/31/18 07:58	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/31/18 07:58	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/31/18 07:58	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/31/18 07:58	1
Bromoform	ND		5.0	2.0	ug/Kg			08/31/18 07:58	1
Bromomethane	ND		10	0.79	ug/Kg			08/31/18 07:58	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/31/18 07:58	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/31/18 07:58	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/31/18 07:58	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/31/18 07:58	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/31/18 07:58	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/31/18 07:58	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/31/18 07:58	1
Chloroethane	ND		10	0.56	ug/Kg			08/31/18 07:58	1
Chloroform	ND		5.0	0.66	ug/Kg			08/31/18 07:58	1
Chloromethane	ND		10	0.79	ug/Kg			08/31/18 07:58	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/31/18 07:58	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/31/18 07:58	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/31/18 07:58	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/31/18 07:58	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/31/18 07:58	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/31/18 07:58	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/31/18 07:58	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/31/18 07:58	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250645/4
Matrix: Solid
Analysis Batch: 250645

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/31/18 07:58	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/31/18 07:58	1
Dibromomethane	ND		10	0.86	ug/Kg			08/31/18 07:58	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/31/18 07:58	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/31/18 07:58	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/31/18 07:58	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/31/18 07:58	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/31/18 07:58	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/31/18 07:58	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/31/18 07:58	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/31/18 07:58	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/31/18 07:58	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/31/18 07:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/31/18 07:58	1
2-Hexanone	ND		50	10	ug/Kg			08/31/18 07:58	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/31/18 07:58	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/31/18 07:58	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/31/18 07:58	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/31/18 07:58	1
Naphthalene	ND		10	1.5	ug/Kg			08/31/18 07:58	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/31/18 07:58	1
Styrene	ND		5.0	0.63	ug/Kg			08/31/18 07:58	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/31/18 07:58	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/31/18 07:58	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/31/18 07:58	1
Toluene	ND		5.0	0.71	ug/Kg			08/31/18 07:58	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/31/18 07:58	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/31/18 07:58	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/31/18 07:58	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/31/18 07:58	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/31/18 07:58	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/31/18 07:58	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/31/18 07:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/31/18 07:58	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/31/18 07:58	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/31/18 07:58	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/31/18 07:58	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/31/18 07:58	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/31/18 07:58	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/31/18 07:58	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/31/18 07:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*45 - 131*		*08/31/18 07:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*60 - 140*		*08/31/18 07:58*	*1*
Toluene-d8 (Surr)	*96*		*58 - 140*		*08/31/18 07:58*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250645/5
Matrix: Solid
Analysis Batch: 250645

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	55.0		ug/Kg		110	70 - 144
Acetone	250	190		ug/Kg		76	30 - 162
Benzene	50.0	50.2		ug/Kg		100	70 - 130
Dichlorobromomethane	50.0	55.2		ug/Kg		110	70 - 140
Bromobenzene	50.0	48.9		ug/Kg		98	70 - 130
Chlorobromomethane	50.0	58.3		ug/Kg		117	70 - 130
Bromoform	50.0	53.4		ug/Kg		107	59 - 158
Bromomethane	50.0	47.1		ug/Kg		94	59 - 132
2-Butanone (MEK)	250	211		ug/Kg		84	59 - 159
n-Butylbenzene	50.0	47.5		ug/Kg		95	70 - 142
sec-Butylbenzene	50.0	47.0		ug/Kg		94	70 - 136
tert-Butylbenzene	50.0	48.0		ug/Kg		96	70 - 130
Carbon disulfide	50.0	66.1		ug/Kg		132	60 - 140
Carbon tetrachloride	50.0	61.2		ug/Kg		122	70 - 142
Chlorobenzene	50.0	50.8		ug/Kg		102	70 - 130
Chloroethane	50.0	41.5		ug/Kg		83	65 - 130
Chloroform	50.0	54.3		ug/Kg		109	77 - 127
Chloromethane	50.0	35.9		ug/Kg		72	55 - 140
2-Chlorotoluene	50.0	47.4		ug/Kg		95	70 - 138
4-Chlorotoluene	50.0	47.9		ug/Kg		96	70 - 136
Chlorodibromomethane	50.0	56.8		ug/Kg		114	70 - 146
1,2-Dichlorobenzene	50.0	50.5		ug/Kg		101	70 - 130
1,3-Dichlorobenzene	50.0	51.7		ug/Kg		103	70 - 131
1,4-Dichlorobenzene	50.0	50.4		ug/Kg		101	70 - 130
1,3-Dichloropropane	50.0	51.0		ug/Kg		102	70 - 140
1,1-Dichloropropene	50.0	53.8		ug/Kg		108	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	48.2		ug/Kg		96	60 - 145
Ethylene Dibromide	50.0	55.3		ug/Kg		111	70 - 140
Dibromomethane	50.0	53.2		ug/Kg		106	70 - 139
Dichlorodifluoromethane	50.0	35.4		ug/Kg		71	37 - 158
1,1-Dichloroethane	50.0	51.9		ug/Kg		104	70 - 130
1,2-Dichloroethane	50.0	56.8		ug/Kg		114	70 - 130
1,1-Dichloroethene	50.0	64.6	*	ug/Kg		129	74 - 122
cis-1,2-Dichloroethene	50.0	52.3		ug/Kg		105	70 - 138
trans-1,2-Dichloroethene	50.0	58.6		ug/Kg		117	67 - 130
1,2-Dichloropropane	50.0	49.5		ug/Kg		99	73 - 127
cis-1,3-Dichloropropene	50.0	53.2		ug/Kg		106	68 - 147
trans-1,3-Dichloropropene	50.0	51.8		ug/Kg		104	70 - 155
Ethylbenzene	50.0	49.5		ug/Kg		99	80 - 137
Hexachlorobutadiene	50.0	53.4		ug/Kg		107	70 - 132
2-Hexanone	250	212		ug/Kg		85	62 - 158
Isopropylbenzene	50.0	52.4		ug/Kg		105	70 - 130
4-Isopropyltoluene	50.0	49.8		ug/Kg		100	70 - 133
Methylene Chloride	50.0	50.1		ug/Kg		100	70 - 134
4-Methyl-2-pentanone (MIBK)	250	213		ug/Kg		85	60 - 160
Naphthalene	50.0	48.8		ug/Kg		98	60 - 147
N-Propylbenzene	50.0	46.5		ug/Kg		93	70 - 130
Styrene	50.0	47.8		ug/Kg		96	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250645/5
Matrix: Solid
Analysis Batch: 250645

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	55.8		ug/Kg		112	70 - 130
1,1,2,2-Tetrachloroethane	50.0	44.9		ug/Kg		90	70 - 146
Tetrachloroethene	50.0	57.4		ug/Kg		115	70 - 132
Toluene	50.0	48.3		ug/Kg		97	75 - 120
1,2,3-Trichlorobenzene	50.0	52.3		ug/Kg		105	60 - 140
1,2,4-Trichlorobenzene	50.0	53.3		ug/Kg		107	60 - 140
1,1,1-Trichloroethane	50.0	59.5		ug/Kg		119	70 - 130
1,1,2-Trichloroethane	50.0	51.5		ug/Kg		103	70 - 130
Trichloroethene	50.0	56.6		ug/Kg		113	70 - 133
Trichlorofluoromethane	50.0	52.5		ug/Kg		105	60 - 140
1,2,3-Trichloropropane	50.0	47.1		ug/Kg		94	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	70.5	*	ug/Kg		141	60 - 140
1,2,4-Trimethylbenzene	50.0	49.6		ug/Kg		99	70 - 130
1,3,5-Trimethylbenzene	50.0	49.5		ug/Kg		99	70 - 131
Vinyl acetate	50.0	44.0		ug/Kg		88	38 - 176
Vinyl chloride	50.0	41.3		ug/Kg		83	58 - 125
m-Xylene & p-Xylene	50.0	50.8		ug/Kg		102	70 - 146
o-Xylene	50.0	51.5		ug/Kg		103	70 - 140
2,2-Dichloropropane	50.0	63.7		ug/Kg		127	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*102*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCS 720-250645/7
Matrix: Solid
Analysis Batch: 250645

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1040		ug/Kg		104	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*105*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250645/6
Matrix: Solid
Analysis Batch: 250645

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	58.8		ug/Kg		118	70 - 144	7	20
Acetone	250	214		ug/Kg		85	30 - 162	12	30
Benzene	50.0	49.2		ug/Kg		98	70 - 130	2	20
Dichlorobromomethane	50.0	55.8		ug/Kg		112	70 - 140	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250645/6
Matrix: Solid
Analysis Batch: 250645

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	50.0	48.9		ug/Kg		98	70 - 130	0	20
Chlorobromomethane	50.0	57.9		ug/Kg		116	70 - 130	1	20
Bromoform	50.0	56.3		ug/Kg		113	59 - 158	5	20
Bromomethane	50.0	47.2		ug/Kg		94	59 - 132	0	20
2-Butanone (MEK)	250	241		ug/Kg		96	59 - 159	13	20
n-Butylbenzene	50.0	45.2		ug/Kg		90	70 - 142	5	20
sec-Butylbenzene	50.0	45.4		ug/Kg		91	70 - 136	3	20
tert-Butylbenzene	50.0	46.0		ug/Kg		92	70 - 130	4	20
Carbon disulfide	50.0	63.2		ug/Kg		126	60 - 140	5	20
Carbon tetrachloride	50.0	57.6		ug/Kg		115	70 - 142	6	20
Chlorobenzene	50.0	49.7		ug/Kg		99	70 - 130	2	20
Chloroethane	50.0	40.6		ug/Kg		81	65 - 130	2	20
Chloroform	50.0	53.6		ug/Kg		107	77 - 127	1	20
Chloromethane	50.0	36.2		ug/Kg		72	55 - 140	1	20
2-Chlorotoluene	50.0	46.2		ug/Kg		92	70 - 138	3	20
4-Chlorotoluene	50.0	46.5		ug/Kg		93	70 - 136	3	20
Chlorodibromomethane	50.0	58.5		ug/Kg		117	70 - 146	3	20
1,2-Dichlorobenzene	50.0	49.8		ug/Kg		100	70 - 130	1	20
1,3-Dichlorobenzene	50.0	50.5		ug/Kg		101	70 - 131	2	20
1,4-Dichlorobenzene	50.0	49.3		ug/Kg		99	70 - 130	2	20
1,3-Dichloropropane	50.0	52.8		ug/Kg		106	70 - 140	3	20
1,1-Dichloropropene	50.0	52.5		ug/Kg		105	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	50.0	52.5		ug/Kg		105	60 - 145	9	20
Ethylene Dibromide	50.0	57.5		ug/Kg		115	70 - 140	4	20
Dibromomethane	50.0	54.9		ug/Kg		110	70 - 139	3	20
Dichlorodifluoromethane	50.0	35.3		ug/Kg		71	37 - 158	0	20
1,1-Dichloroethane	50.0	51.4		ug/Kg		103	70 - 130	1	20
1,2-Dichloroethane	50.0	58.0		ug/Kg		116	70 - 130	2	20
1,1-Dichloroethene	50.0	61.2		ug/Kg		122	74 - 122	5	20
cis-1,2-Dichloroethene	50.0	51.2		ug/Kg		102	70 - 138	2	20
trans-1,2-Dichloroethene	50.0	56.3		ug/Kg		113	67 - 130	4	20
1,2-Dichloropropane	50.0	49.9		ug/Kg		100	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	54.3		ug/Kg		109	68 - 147	2	20
trans-1,3-Dichloropropene	50.0	54.3		ug/Kg		109	70 - 155	5	20
Ethylbenzene	50.0	48.1		ug/Kg		96	80 - 137	3	20
Hexachlorobutadiene	50.0	50.8		ug/Kg		102	70 - 132	5	20
2-Hexanone	250	245		ug/Kg		98	62 - 158	15	20
Isopropylbenzene	50.0	50.7		ug/Kg		101	70 - 130	3	20
4-Isopropyltoluene	50.0	47.3		ug/Kg		95	70 - 133	5	20
Methylene Chloride	50.0	49.6		ug/Kg		99	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	242		ug/Kg		97	60 - 160	13	20
Naphthalene	50.0	52.2		ug/Kg		104	60 - 147	7	20
N-Propylbenzene	50.0	44.8		ug/Kg		90	70 - 130	4	20
Styrene	50.0	47.0		ug/Kg		94	70 - 130	2	20
1,1,1,2-Tetrachloroethane	50.0	55.5		ug/Kg		111	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	48.2		ug/Kg		96	70 - 146	7	20
Tetrachloroethene	50.0	55.0		ug/Kg		110	70 - 132	4	20
Toluene	50.0	47.1		ug/Kg		94	75 - 120	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250645/6
Matrix: Solid
Analysis Batch: 250645

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene			50.0	53.0		ug/Kg		106	60 - 140	1	20
1,2,4-Trichlorobenzene			50.0	53.2		ug/Kg		106	60 - 140	0	20
1,1,1-Trichloroethane			50.0	56.8		ug/Kg		114	70 - 130	5	20
1,1,2-Trichloroethane			50.0	54.0		ug/Kg		108	70 - 130	5	20
Trichloroethene			50.0	54.9		ug/Kg		110	70 - 133	3	20
Trichlorofluoromethane			50.0	50.9		ug/Kg		102	60 - 140	3	20
1,2,3-Trichloropropane			50.0	51.9		ug/Kg		104	70 - 146	10	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	68.1		ug/Kg		136	60 - 140	3	20
1,2,4-Trimethylbenzene			50.0	48.0		ug/Kg		96	70 - 130	3	20
1,3,5-Trimethylbenzene			50.0	47.1		ug/Kg		94	70 - 131	5	20
Vinyl acetate			50.0	48.7		ug/Kg		97	38 - 176	10	20
Vinyl chloride			50.0	41.2		ug/Kg		82	58 - 125	0	20
m-Xylene & p-Xylene			50.0	49.8		ug/Kg		100	70 - 146	2	20
o-Xylene			50.0	50.6		ug/Kg		101	70 - 140	2	20
2,2-Dichloropropane			50.0	59.2		ug/Kg		118	70 - 162	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*107*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250645/8
Matrix: Solid
Analysis Batch: 250645

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1030		ug/Kg		103	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*104*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: MB 490-539562/7
Matrix: Solid
Analysis Batch: 539562

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0020	0.00055	mg/Kg			08/30/18 02:30	1
1,2-Dibromo-3-Chloropropane	ND		0.0050	0.00070	mg/Kg			08/30/18 02:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*70 - 130*		*08/30/18 02:30*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/30/18 02:30*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/30/18 02:30*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/30/18 02:30*	*1*

Lab Sample ID: LCS 490-539562/3
Matrix: Solid
Analysis Batch: 539562

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.0500	0.0389		mg/Kg		78	60 - 139		
1,2-Dibromo-3-Chloropropane			0.0500	0.0382		mg/Kg		76	47 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*77*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 490-539562/4
Matrix: Solid
Analysis Batch: 539562

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			0.0500	0.0355		mg/Kg		71	60 - 139	9	16
1,2-Dibromo-3-Chloropropane			0.0500	0.0347		mg/Kg		69	47 - 144	10	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 8270C SIM - Semivolatile Org Compounds by GCMS (SIM)

Lab Sample ID: MB 720-250290/1-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250290

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Anthracene	ND		5.0	2.0	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Chrysene	ND		5.0	1.4	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Fluoranthene	1.69	J	5.0	1.4	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Fluorene	ND		5.0	2.2	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Pyrene	1.85	J	5.0	1.7	ug/Kg		08/27/18 12:37	08/28/18 18:55	1

Method: 8270C SIM - Semivolatile Org Compounds by GCMS (SIM) (Continued)

Lab Sample ID: MB 720-250290/1-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250290

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	81		33 - 120	08/27/18 12:37	08/28/18 18:55	1
Terphenyl-d14	95		35 - 146	08/27/18 12:37	08/28/18 18:55	1

Lab Sample ID: LCS 720-250290/2-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250290

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	508		ug/Kg		76	46 - 110
Acenaphthene	667	529		ug/Kg		79	46 - 106
Acenaphthylene	667	519		ug/Kg		78	46 - 108
Anthracene	667	543		ug/Kg		81	55 - 103
Benzo[a]anthracene	667	650		ug/Kg		98	54 - 110
Benzo[a]pyrene	667	601		ug/Kg		90	62 - 111
Benzo[b]fluoranthene	667	581		ug/Kg		87	60 - 109
Benzo[g,h,i]perylene	667	611		ug/Kg		92	52 - 114
Benzo[k]fluoranthene	667	576		ug/Kg		86	58 - 109
Chrysene	667	644		ug/Kg		97	54 - 108
Dibenz(a,h)anthracene	667	622		ug/Kg		93	58 - 112
Fluoranthene	667	544		ug/Kg		82	59 - 109
Fluorene	667	539		ug/Kg		81	52 - 106
Indeno[1,2,3-cd]pyrene	667	634		ug/Kg		95	55 - 120
Naphthalene	667	489		ug/Kg		73	49 - 110
Phenanthrene	667	542		ug/Kg		81	57 - 110
Pyrene	667	672		ug/Kg		101	50 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	99		33 - 120
Terphenyl-d14	105		35 - 146

Lab Sample ID: 720-88216-A-17-Q MS
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250290

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	ND		657	415		ug/Kg		63	46 - 110
Acenaphthene	ND		657	479		ug/Kg		73	46 - 106
Acenaphthylene	ND		657	465		ug/Kg		71	46 - 108
Anthracene	2.3	J	657	526		ug/Kg		80	55 - 103
Benzo[a]anthracene	ND		657	585		ug/Kg		89	54 - 110
Benzo[a]pyrene	4.2	J	657	583		ug/Kg		88	62 - 111
Benzo[b]fluoranthene	4.6	J	657	592		ug/Kg		89	60 - 109
Benzo[g,h,i]perylene	7.4		657	523		ug/Kg		78	52 - 114
Benzo[k]fluoranthene	2.6	J	657	558		ug/Kg		84	58 - 109
Chrysene	3.4	J	657	584		ug/Kg		88	54 - 108
Dibenz(a,h)anthracene	ND		657	549		ug/Kg		84	58 - 112
Fluoranthene	4.6	J B	657	570		ug/Kg		86	59 - 109
Fluorene	ND		657	512		ug/Kg		78	52 - 106

Method: 8270C SIM - Semivolatile Org Compounds by GCMS (SIM) (Continued)

Lab Sample ID: 720-88216-A-17-Q MS
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250290

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Indeno[1,2,3-cd]pyrene	ND		657	549		ug/Kg		83	55 - 120
Naphthalene	ND		657	409		ug/Kg		62	49 - 110
Phenanthrene	5.9		657	539		ug/Kg		81	57 - 110
Pyrene	6.3	B	657	600		ug/Kg		90	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*33 - 120*
Terphenyl-d14	*91*		*35 - 146*

Lab Sample ID: 720-88216-A-17-R MSD
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250290

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	ND		658	442		ug/Kg		67	46 - 110	6	35
Acenaphthene	ND		658	501		ug/Kg		76	46 - 106	4	35
Acenaphthylene	ND		658	494		ug/Kg		75	46 - 108	6	35
Anthracene	2.3	J	658	538		ug/Kg		81	55 - 103	2	35
Benzo[a]anthracene	ND		658	640		ug/Kg		97	54 - 110	9	35
Benzo[a]pyrene	4.2	J	658	599		ug/Kg		90	62 - 111	3	35
Benzo[b]fluoranthene	4.6	J	658	629		ug/Kg		95	60 - 109	6	35
Benzo[g,h,i]perylene	7.4		658	475		ug/Kg		71	52 - 114	10	35
Benzo[k]fluoranthene	2.6	J	658	569		ug/Kg		86	58 - 109	2	35
Chrysene	3.4	J	658	614		ug/Kg		93	54 - 108	5	35
Dibenz(a,h)anthracene	ND		658	516		ug/Kg		78	58 - 112	6	35
Fluoranthene	4.6	J B	658	559		ug/Kg		84	59 - 109	2	35
Fluorene	ND		658	531		ug/Kg		81	52 - 106	4	35
Indeno[1,2,3-cd]pyrene	ND		658	518		ug/Kg		79	55 - 120	6	35
Naphthalene	ND		658	437		ug/Kg		66	49 - 110	7	35
Phenanthrene	5.9		658	548		ug/Kg		82	57 - 110	2	35
Pyrene	6.3	B	658	638		ug/Kg		96	50 - 120	6	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*82*		*33 - 120*
Terphenyl-d14	*96*		*35 - 146*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 720-250190/1-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250190

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Anthracene	ND		5.0	2.0	ug/Kg		08/24/18 15:31	08/28/18 19:42	1

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 720-250190/1-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250190

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Chrysene	2.59	J	5.0	1.4	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Fluorene	ND		5.0	2.2	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Pyrene	ND		5.0	1.7	ug/Kg		08/24/18 15:31	08/28/18 19:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*98*		*33 - 120*	*08/24/18 15:31*	*08/28/18 19:42*	*1*
Terphenyl-d14	*96*		*35 - 146*	*08/24/18 15:31*	*08/28/18 19:42*	*1*

Lab Sample ID: LCS 720-250190/2-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250190

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	470		ug/Kg		71	46 - 110
Acenaphthene	667	484		ug/Kg		73	46 - 106
Acenaphthylene	667	457		ug/Kg		69	46 - 108
Anthracene	667	562		ug/Kg		84	55 - 103
Benzo[a]anthracene	667	658		ug/Kg		99	54 - 110
Benzo[a]pyrene	667	619		ug/Kg		93	62 - 111
Benzo[b]fluoranthene	667	596		ug/Kg		89	60 - 109
Benzo[g,h,i]perylene	667	625		ug/Kg		94	52 - 114
Benzo[k]fluoranthene	667	583		ug/Kg		87	58 - 109
Chrysene	667	671		ug/Kg		101	54 - 108
Dibenz(a,h)anthracene	667	635		ug/Kg		95	58 - 112
Fluoranthene	667	576		ug/Kg		86	59 - 109
Fluorene	667	505		ug/Kg		76	52 - 106
Indeno[1,2,3-cd]pyrene	667	644		ug/Kg		97	55 - 120
Naphthalene	667	443		ug/Kg		67	49 - 110
Phenanthrene	667	554		ug/Kg		83	57 - 110
Pyrene	667	689		ug/Kg		103	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*86*		*33 - 120*
Terphenyl-d14	*106*		*35 - 146*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88216-A-9-F MS
Matrix: Solid
Analysis Batch: 250501

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250190

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	28	J	666	417		ug/Kg		59	46 - 110
Acenaphthene	ND		666	472		ug/Kg		71	46 - 106
Acenaphthylene	11	J	666	504		ug/Kg		74	46 - 108
Anthracene	20		666	528		ug/Kg		76	55 - 103
Benzo[a]anthracene	50		666	602		ug/Kg		83	54 - 110
Benzo[a]pyrene	75		666	571		ug/Kg		74	62 - 111
Benzo[b]fluoranthene	100		666	595		ug/Kg		74	60 - 109
Benzo[g,h,i]perylene	96		666	499		ug/Kg		60	52 - 114
Benzo[k]fluoranthene	42		666	537		ug/Kg		74	58 - 109
Chrysene	72	B	666	569		ug/Kg		75	54 - 108
Dibenz(a,h)anthracene	16	J	666	555		ug/Kg		81	58 - 112
Fluoranthene	96		666	546		ug/Kg		68	59 - 109
Fluorene	ND		666	510		ug/Kg		77	52 - 106
Indeno[1,2,3-cd]pyrene	51		666	560		ug/Kg		77	55 - 120
Naphthalene	29		666	406		ug/Kg		57	49 - 110
Phenanthrene	71		666	524		ug/Kg		68	57 - 110
Pyrene	110		666	591		ug/Kg		72	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*33 - 120*
Terphenyl-d14	*86*		*35 - 146*

Lab Sample ID: 720-88216-A-9-G MSD
Matrix: Solid
Analysis Batch: 250501

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250190

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	28	J	628	430		ug/Kg		64	46 - 110	3	35
Acenaphthene	ND		628	477		ug/Kg		76	46 - 106	1	35
Acenaphthylene	11	J	628	503		ug/Kg		78	46 - 108	0	35
Anthracene	20		628	513		ug/Kg		78	55 - 103	3	35
Benzo[a]anthracene	50		628	573		ug/Kg		83	54 - 110	5	35
Benzo[a]pyrene	75		628	555		ug/Kg		76	62 - 111	3	35
Benzo[b]fluoranthene	100		628	551		ug/Kg		71	60 - 109	8	35
Benzo[g,h,i]perylene	96		628	478		ug/Kg		61	52 - 114	4	35
Benzo[k]fluoranthene	42		628	518		ug/Kg		76	58 - 109	4	35
Chrysene	72	B	628	546		ug/Kg		75	54 - 108	4	35
Dibenz(a,h)anthracene	16	J	628	532		ug/Kg		82	58 - 112	4	35
Fluoranthene	96		628	530		ug/Kg		69	59 - 109	3	35
Fluorene	ND		628	513		ug/Kg		82	52 - 106	1	35
Indeno[1,2,3-cd]pyrene	51		628	536		ug/Kg		77	55 - 120	4	35
Naphthalene	29		628	430		ug/Kg		64	49 - 110	6	35
Phenanthrene	71		628	516		ug/Kg		71	57 - 110	2	35
Pyrene	110		628	571		ug/Kg		73	50 - 120	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*74*		*33 - 120*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88216-A-9-G MSD
Matrix: Solid
Analysis Batch: 250501

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250190

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Terphenyl-d14	88		35 - 146

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-250263/1-A
Matrix: Solid
Analysis Batch: 250252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250263

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1390	J	2000	750	ug/Kg		08/27/18 08:59	08/27/18 22:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	106		40 - 130	08/27/18 08:59	08/27/18 22:55	1

Lab Sample ID: LCS 720-250263/2-A
Matrix: Solid
Analysis Batch: 250252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250263

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	167000	164000		ug/Kg		98	50 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
p-Terphenyl	91		40 - 130

Lab Sample ID: 720-88216-A-17-L MS
Matrix: Solid
Analysis Batch: 250257

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250263

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	6600	B	165000	158000		ug/Kg		92	50 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
p-Terphenyl	112		40 - 130

Lab Sample ID: 720-88216-A-17-M MSD
Matrix: Solid
Analysis Batch: 250257

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250263

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	6600	B	165000	161000		ug/Kg		94	50 - 150	2	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
p-Terphenyl	105		40 - 130

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 720-250358/1-A
Matrix: Solid
Analysis Batch: 250458

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250358

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/28/18 08:21	08/29/18 15:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*82*		*40 - 130*	*08/28/18 08:21*	*08/29/18 15:52*	*1*

Lab Sample ID: LCS 720-250358/2-A
Matrix: Solid
Analysis Batch: 250459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250358

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	167000	140000		ug/Kg		84	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*94*		*40 - 130*

Lab Sample ID: 720-88216-A-9-V MS
Matrix: Solid
Analysis Batch: 250459

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250358

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	83000		158000	165000		ug/Kg		52	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*55*		*40 - 130*

Lab Sample ID: 720-88216-A-9-W MSD
Matrix: Solid
Analysis Batch: 250459

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250358

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	83000		158000	162000		ug/Kg		50	50 - 150	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*65*		*40 - 130*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-250160/1-A
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250160

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/24/18 11:26	08/28/18 05:07	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 720-250160/1-A
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250160

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Aldrin	ND		2.0	0.50	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Endrin	ND		2.0	0.46	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Toxaphene	ND		40	6.8	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/24/18 11:26	08/28/18 05:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*85*		*21 - 136*	*08/24/18 11:26*	*08/28/18 05:07*	*1*
Tetrachloro-m-xylene	*85*		*21 - 145*	*08/24/18 11:26*	*08/28/18 05:07*	*1*

Lab Sample ID: LCS 720-250160/2-A
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250160

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	13.9		ug/Kg		84	75 - 128
4,4'-DDE	16.7	13.7		ug/Kg		82	76 - 126
4,4'-DDT	16.7	13.7		ug/Kg		82	63 - 127
Aldrin	16.7	12.8		ug/Kg		77	65 - 120
alpha-BHC	16.7	12.5		ug/Kg		75	46 - 122
beta-BHC	16.7	16.3		ug/Kg		98	78 - 136
cis-Chlordane	16.7	14.5		ug/Kg		87	70 - 120
delta-BHC	16.7	12.7		ug/Kg		76	43 - 125
Dieldrin	16.7	13.8		ug/Kg		83	72 - 120
Endosulfan I	16.7	14.8		ug/Kg		89	62 - 120
Endosulfan II	16.7	15.3		ug/Kg		92	65 - 120
Endosulfan sulfate	16.7	14.7		ug/Kg		88	72 - 121
Endrin	16.7	14.9		ug/Kg		89	68 - 120
Endrin aldehyde	16.7	14.9		ug/Kg		89	68 - 120
Endrin ketone	16.7	15.2		ug/Kg		91	75 - 136
gamma-BHC (Lindane)	16.7	14.1		ug/Kg		85	72 - 120
Heptachlor	16.7	14.1		ug/Kg		85	69 - 120
Heptachlor epoxide	16.7	14.5		ug/Kg		87	68 - 120

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-250160/2-A
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250160

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methoxychlor			16.7	15.3		ug/Kg		92	71 - 132		
trans-Chlordane			16.7	13.8		ug/Kg		83	68 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*89*		*21 - 136*
Tetrachloro-m-xylene	*86*		*21 - 145*

Lab Sample ID: 720-88216-A-17-F MS
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250160

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
4,4'-DDD	ND		16.6	14.3		ug/Kg		86	40 - 120		
4,4'-DDE	ND		16.6	13.9		ug/Kg		83	40 - 120		
4,4'-DDT	ND		16.6	14.0		ug/Kg		84	17 - 144		
Aldrin	ND		16.6	13.5		ug/Kg		81	53 - 120		
alpha-BHC	ND		16.6	12.5		ug/Kg		75	40 - 120		
beta-BHC	ND	F1	16.6	17.0		ug/Kg		102	40 - 120		
cis-Chlordane	ND		16.6	14.8		ug/Kg		89	40 - 120		
delta-BHC	ND		16.6	13.3		ug/Kg		80	40 - 120		
Dieldrin	ND		16.6	14.1		ug/Kg		85	46 - 130		
Endosulfan I	ND		16.6	15.1		ug/Kg		91	40 - 120		
Endosulfan II	ND		16.6	15.6		ug/Kg		94	40 - 120		
Endosulfan sulfate	ND		16.6	14.7		ug/Kg		88	40 - 120		
Endrin	ND		16.6	15.1		ug/Kg		91	32 - 143		
Endrin aldehyde	ND		16.6	14.9		ug/Kg		90	40 - 120		
Endrin ketone	ND		16.6	15.1		ug/Kg		91	40 - 120		
gamma-BHC (Lindane)	ND		16.6	14.0		ug/Kg		84	58 - 120		
Heptachlor	ND		16.6	14.1		ug/Kg		85	52 - 120		
Heptachlor epoxide	ND		16.6	14.9		ug/Kg		90	40 - 120		
Methoxychlor	ND		16.6	15.6		ug/Kg		94	40 - 120		
trans-Chlordane	ND		16.6	14.2		ug/Kg		86	40 - 120		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*92*		*21 - 136*
Tetrachloro-m-xylene	*82*		*21 - 145*

Lab Sample ID: 720-88216-A-17-G MSD
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250160

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		16.0	14.4		ug/Kg		90	40 - 120	1	20
4,4'-DDE	ND		16.0	13.9		ug/Kg		87	40 - 120	0	20
4,4'-DDT	ND		16.0	14.1		ug/Kg		88	17 - 144	0	20
Aldrin	ND		16.0	13.3		ug/Kg		83	53 - 120	1	20
alpha-BHC	ND		16.0	12.3		ug/Kg		77	40 - 120	2	20
beta-BHC	ND	F1	16.0	16.6		ug/Kg		103	40 - 120	3	20

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88216-A-17-G MSD
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250160

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-Chlordane	ND		16.0	14.7		ug/Kg		92	40 - 120	1	20
delta-BHC	ND		16.0	13.0		ug/Kg		81	40 - 120	2	20
Dieldrin	ND		16.0	14.2		ug/Kg		89	46 - 130	1	20
Endosulfan I	ND		16.0	15.0		ug/Kg		93	40 - 120	0	20
Endosulfan II	ND		16.0	15.4		ug/Kg		96	40 - 120	1	30
Endosulfan sulfate	ND		16.0	15.1		ug/Kg		94	40 - 120	3	20
Endrin	ND		16.0	15.1		ug/Kg		94	32 - 143	0	20
Endrin aldehyde	ND		16.0	14.4		ug/Kg		90	40 - 120	4	20
Endrin ketone	ND		16.0	15.9		ug/Kg		99	40 - 120	5	20
gamma-BHC (Lindane)	ND		16.0	13.5		ug/Kg		84	58 - 120	4	20
Heptachlor	ND		16.0	14.0		ug/Kg		87	52 - 120	1	20
Heptachlor epoxide	ND		16.0	14.7		ug/Kg		92	40 - 120	1	20
Methoxychlor	ND		16.0	16.2		ug/Kg		101	40 - 120	4	20
trans-Chlordane	ND		16.0	14.2		ug/Kg		88	40 - 120	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*93*		*21 - 136*
Tetrachloro-m-xylene	*83*		*21 - 145*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-342652/21-A
Matrix: Solid
Analysis Batch: 342862

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 342652

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/27/18 11:05	08/29/18 02:00	1
Aroclor-1221	ND		50	24	ug/Kg		08/27/18 11:05	08/29/18 02:00	1
Aroclor-1232	ND		50	23	ug/Kg		08/27/18 11:05	08/29/18 02:00	1
Aroclor-1242	ND		50	19	ug/Kg		08/27/18 11:05	08/29/18 02:00	1
Aroclor-1248	ND		50	24	ug/Kg		08/27/18 11:05	08/29/18 02:00	1
Aroclor-1254	ND		50	23	ug/Kg		08/27/18 11:05	08/29/18 02:00	1
Aroclor-1260	ND		50	22	ug/Kg		08/27/18 11:05	08/29/18 02:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*14 - 128*	*08/27/18 11:05*	*08/29/18 02:00*	*1*
DCB Decachlorobiphenyl	*95*		*10 - 132*	*08/27/18 11:05*	*08/29/18 02:00*	*1*

Lab Sample ID: LCS 240-342652/22-A
Matrix: Solid
Analysis Batch: 342862

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 342652

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			1000	628		ug/Kg		63	47 - 120		
Aroclor-1260			1000	700		ug/Kg		70	46 - 120		

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 240-342652/22-A
Matrix: Solid
Analysis Batch: 342862

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 342652

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	71		14 - 128
DCB Decachlorobiphenyl	86		10 - 132

Lab Sample ID: 720-88218-F-20-B MS
Matrix: Solid
Analysis Batch: 342862

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 342652

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	ND		1030	867		ug/Kg		84	31 - 120
Aroclor-1260	ND		1030	986		ug/Kg		95	21 - 122

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	96		14 - 128
DCB Decachlorobiphenyl	126		10 - 132

Lab Sample ID: 720-88218-F-20-C MSD
Matrix: Solid
Analysis Batch: 342862

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 342652

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		1020	851		ug/Kg		83	31 - 120	2	30
Aroclor-1260	ND		1020	959		ug/Kg		94	21 - 122	3	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	97		14 - 128
DCB Decachlorobiphenyl	112		10 - 132

Lab Sample ID: MB 240-343099/23-A
Matrix: Solid
Analysis Batch: 343339

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 343099

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:50	08/31/18 08:41	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 14:50	08/31/18 08:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	88		14 - 128	08/29/18 14:50	08/31/18 08:41	1
DCB Decachlorobiphenyl	106		10 - 132	08/29/18 14:50	08/31/18 08:41	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 240-343099/24-A
Matrix: Solid
Analysis Batch: 343339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 343099

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	826		ug/Kg		83	47 - 120
Aroclor-1260	1000	986		ug/Kg		99	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*87*		*14 - 128*
DCB Decachlorobiphenyl	*101*		*10 - 132*

Lab Sample ID: 720-88240-F-3-B MS
Matrix: Solid
Analysis Batch: 343339

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 343099

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	ND		991	854		ug/Kg		86	31 - 120
Aroclor-1260	ND		991	968		ug/Kg		98	21 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*88*		*14 - 128*
DCB Decachlorobiphenyl	*110*		*10 - 132*

Lab Sample ID: 720-88240-F-3-C MSD
Matrix: Solid
Analysis Batch: 343339

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 343099

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		997	944		ug/Kg		95	31 - 120	10	30
Aroclor-1260	ND		997	1150		ug/Kg		116	21 - 122	18	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*97*		*14 - 128*
DCB Decachlorobiphenyl	*151*	*X*	*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250235/1-A
Matrix: Solid
Analysis Batch: 250353

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250235

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Arsenic	ND		1.0	0.085	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Barium	0.0875	J	0.50	0.071	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Beryllium	ND		0.10	0.033	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Cadmium	ND		0.13	0.012	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Chromium	ND		0.50	0.053	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Cobalt	ND		0.20	0.020	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Copper	ND		1.5	0.71	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Lead	ND		0.50	0.11	mg/Kg		08/25/18 12:57	08/27/18 20:53	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250235/1-A
Matrix: Solid
Analysis Batch: 250353

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250235

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.50	0.064	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Nickel	ND		0.50	0.051	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Selenium	ND		1.0	0.15	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Silver	ND		0.25	0.051	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Thallium	ND		0.50	0.15	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Vanadium	ND		0.50	0.068	mg/Kg		08/25/18 12:57	08/27/18 20:53	1
Zinc	ND		1.5	0.64	mg/Kg		08/25/18 12:57	08/27/18 20:53	1

Lab Sample ID: LCS 720-250235/2-A
Matrix: Solid
Analysis Batch: 250353

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250235

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	46.8		mg/Kg		94	80 - 120
Arsenic	50.0	46.8		mg/Kg		94	80 - 120
Barium	50.0	54.4		mg/Kg		109	80 - 120
Beryllium	50.0	52.6		mg/Kg		105	80 - 120
Cadmium	50.0	47.3		mg/Kg		95	80 - 120
Chromium	50.0	46.4		mg/Kg		93	80 - 120
Cobalt	50.0	48.5		mg/Kg		97	80 - 120
Copper	50.0	47.3		mg/Kg		95	80 - 120
Lead	50.0	48.0		mg/Kg		96	80 - 120
Molybdenum	50.0	48.2		mg/Kg		96	80 - 120
Nickel	50.0	47.6		mg/Kg		95	80 - 120
Selenium	50.0	46.0		mg/Kg		92	80 - 120
Silver	25.0	24.6		mg/Kg		98	80 - 120
Thallium	50.0	48.2		mg/Kg		96	80 - 120
Vanadium	50.0	48.5		mg/Kg		97	80 - 120
Zinc	50.0	47.6		mg/Kg		95	80 - 120

Lab Sample ID: 720-88197-A-1-B MS
Matrix: Solid
Analysis Batch: 250353

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250235

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND	F1	31.4	10.7	F1	mg/Kg		34	75 - 125
Arsenic	5.6		31.4	39.6		mg/Kg		108	75 - 125
Barium	190	B	31.4	273	4	mg/Kg		265	75 - 125
Beryllium	0.37		31.4	36.3		mg/Kg		114	75 - 125
Cadmium	0.12	J	31.4	32.8		mg/Kg		104	75 - 125
Chromium	39	F1	31.4	79.3	F1	mg/Kg		127	75 - 125
Cobalt	12	F1 F2	31.4	42.8		mg/Kg		99	75 - 125
Copper	20	F1	31.4	56.9		mg/Kg		118	75 - 125
Lead	6.6		31.4	39.6		mg/Kg		105	75 - 125
Molybdenum	0.20	J	31.4	28.8		mg/Kg		91	75 - 125
Nickel	110	F1	31.4	85.8	F1	mg/Kg		-79	75 - 125
Selenium	ND		31.4	31.0		mg/Kg		99	75 - 125
Silver	ND		15.7	18.6		mg/Kg		118	75 - 125
Thallium	0.50	J	31.4	31.6		mg/Kg		99	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88197-A-1-B MS
Matrix: Solid
Analysis Batch: 250353

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250235

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	31	F1	31.4	69.7		mg/Kg		122	75 - 125
Zinc	41		31.4	80.2		mg/Kg		123	75 - 125

Lab Sample ID: 720-88197-A-1-C MSD
Matrix: Solid
Analysis Batch: 250353

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250235

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND	F1	31.4	10.7	F1	mg/Kg		34	75 - 125	0	20
Arsenic	5.6		31.4	40.4		mg/Kg		111	75 - 125	2	20
Barium	190	B	31.4	282	4	mg/Kg		294	75 - 125	3	20
Beryllium	0.37		31.4	39.5		mg/Kg		124	75 - 125	8	20
Cadmium	0.12	J	31.4	34.5		mg/Kg		109	75 - 125	5	20
Chromium	39	F1	31.4	77.6		mg/Kg		122	75 - 125	2	20
Cobalt	12	F1 F2	31.4	60.6	F1 F2	mg/Kg		156	75 - 125	34	20
Copper	20	F1	31.4	62.5	F1	mg/Kg		136	75 - 125	9	20
Lead	6.6		31.4	41.3		mg/Kg		110	75 - 125	4	20
Molybdenum	0.20	J	31.4	31.2		mg/Kg		98	75 - 125	8	20
Nickel	110	F1	31.4	95.1	F1	mg/Kg		-49	75 - 125	10	20
Selenium	ND		31.4	33.1		mg/Kg		105	75 - 125	7	20
Silver	ND		15.7	19.4		mg/Kg		124	75 - 125	4	20
Thallium	0.50	J	31.4	33.4		mg/Kg		105	75 - 125	5	20
Vanadium	31	F1	31.4	71.9	F1	mg/Kg		129	75 - 125	3	20
Zinc	41		31.4	80.9		mg/Kg		125	75 - 125	1	20

Lab Sample ID: MB 720-250242/1-A
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250242

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Arsenic	0.0855	J	1.0	0.085	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Barium	ND		0.50	0.071	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Beryllium	ND		0.10	0.033	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Cadmium	ND		0.13	0.012	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Chromium	ND		0.50	0.053	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Cobalt	ND		0.20	0.020	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Copper	ND		1.5	0.71	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Lead	ND		0.50	0.11	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Nickel	ND		0.50	0.051	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Selenium	ND		1.0	0.15	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Silver	ND		0.25	0.051	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Thallium	ND		0.50	0.15	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Vanadium	ND		0.50	0.068	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Zinc	ND		1.5	0.64	mg/Kg		08/25/18 14:28	08/27/18 18:31	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-250242/2-A
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	48.2		mg/Kg		96	80 - 120
Arsenic	50.0	48.3		mg/Kg		97	80 - 120
Barium	50.0	52.4		mg/Kg		105	80 - 120
Beryllium	50.0	50.9		mg/Kg		102	80 - 120
Cadmium	50.0	48.4		mg/Kg		97	80 - 120
Chromium	50.0	47.6		mg/Kg		95	80 - 120
Cobalt	50.0	50.2		mg/Kg		100	80 - 120
Copper	50.0	48.6		mg/Kg		97	80 - 120
Lead	50.0	49.3		mg/Kg		99	80 - 120
Molybdenum	50.0	49.5		mg/Kg		99	80 - 120
Nickel	50.0	48.5		mg/Kg		97	80 - 120
Selenium	50.0	47.5		mg/Kg		95	80 - 120
Silver	25.0	26.4		mg/Kg		106	80 - 120
Thallium	50.0	49.6		mg/Kg		99	80 - 120
Vanadium	50.0	49.7		mg/Kg		99	80 - 120
Zinc	50.0	49.1		mg/Kg		98	80 - 120

Lab Sample ID: 720-88217-4 MS
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: DG-A5S-3.5-4
Prep Type: Total/NA
Prep Batch: 250242

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.80	J F1	38.8	12.4	F1	mg/Kg		30	75 - 125
Arsenic	2.1	J B	38.8	41.2		mg/Kg		101	75 - 125
Barium	83	F1	38.8	135	F1	mg/Kg		133	75 - 125
Beryllium	0.12	J	38.8	44.1		mg/Kg		113	75 - 125
Cadmium	ND		38.8	39.4		mg/Kg		102	75 - 125
Chromium	96		38.8	139		mg/Kg		112	75 - 125
Cobalt	30		38.8	73.1		mg/Kg		112	75 - 125
Copper	45	F1	38.8	97.5	F1	mg/Kg		135	75 - 125
Lead	2.7		38.8	41.1		mg/Kg		99	75 - 125
Molybdenum	0.22	J	38.8	33.9		mg/Kg		87	75 - 125
Nickel	68		38.8	110		mg/Kg		110	75 - 125
Selenium	ND		38.8	34.6		mg/Kg		89	75 - 125
Silver	ND	F1	19.4	24.4	F1	mg/Kg		126	75 - 125
Thallium	1.6		38.8	39.2		mg/Kg		97	75 - 125
Vanadium	100	F1	38.8	163	F1	mg/Kg		154	75 - 125
Zinc	68		38.8	114		mg/Kg		119	75 - 125

Lab Sample ID: 720-88217-4 MSD
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: DG-A5S-3.5-4
Prep Type: Total/NA
Prep Batch: 250242

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.80	J F1	38.2	11.0	F1	mg/Kg		27	75 - 125	12	20
Arsenic	2.1	J B	38.2	41.6		mg/Kg		103	75 - 125	1	20
Barium	83	F1	38.2	153	F1	mg/Kg		183	75 - 125	13	20
Beryllium	0.12	J	38.2	44.7		mg/Kg		117	75 - 125	1	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88217-4 MSD
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: DG-A5S-3.5-4
Prep Type: Total/NA
Prep Batch: 250242

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	ND		38.2	39.5		mg/Kg		104	75 - 125	0	20
Chromium	96		38.2	142		mg/Kg		122	75 - 125	2	20
Cobalt	30		38.2	70.5		mg/Kg		107	75 - 125	4	20
Copper	45	F1	38.2	92.8		mg/Kg		125	75 - 125	5	20
Lead	2.7		38.2	41.2		mg/Kg		101	75 - 125	0	20
Molybdenum	0.22	J	38.2	34.9		mg/Kg		91	75 - 125	3	20
Nickel	68		38.2	110		mg/Kg		111	75 - 125	0	20
Selenium	ND		38.2	35.5		mg/Kg		93	75 - 125	3	20
Silver	ND	F1	19.1	24.6	F1	mg/Kg		129	75 - 125	1	20
Thallium	1.6		38.2	38.7		mg/Kg		97	75 - 125	1	20
Vanadium	100	F1	38.2	160	F1	mg/Kg		148	75 - 125	2	20
Zinc	68		38.2	109		mg/Kg		108	75 - 125	5	20

Method: 6010B - Metales (ICP)

Lab Sample ID: MB 720-250310/1-A
Matrix: Solid
Analysis Batch: 250437

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250310

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Arsenic	ND		1.0	0.085	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Barium	ND		0.50	0.071	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Beryllium	ND		0.10	0.033	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Cadmium	ND		0.13	0.012	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Chromium	ND		0.50	0.053	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Cobalt	ND		0.20	0.020	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Copper	ND		1.5	0.71	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Lead	ND		0.50	0.11	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Nickel	ND		0.50	0.051	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Selenium	ND		1.0	0.15	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Silver	ND		0.25	0.051	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Thallium	ND		0.50	0.15	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Vanadium	ND		0.50	0.068	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Zinc	ND		1.5	0.64	mg/Kg		08/27/18 14:52	08/28/18 15:49	1

Lab Sample ID: LCS 720-250310/2-A
Matrix: Solid
Analysis Batch: 250437

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250310

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony			50.0	45.0		mg/Kg		90	80 - 120		
Arsenic			50.0	44.9		mg/Kg		90	80 - 120		
Barium			50.0	46.6		mg/Kg		93	80 - 120		
Beryllium			50.0	46.9		mg/Kg		94	80 - 120		
Cadmium			50.0	45.8		mg/Kg		92	80 - 120		
Chromium			50.0	45.9		mg/Kg		92	80 - 120		

Method: 6010B - Metales (ICP) (Continued)

Lab Sample ID: LCS 720-250310/2-A
Matrix: Solid
Analysis Batch: 250437

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250310

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	50.0	46.5		mg/Kg		93	80 - 120
Copper	50.0	46.7		mg/Kg		93	80 - 120
Lead	50.0	46.4		mg/Kg		93	80 - 120
Molybdenum	50.0	46.3		mg/Kg		93	80 - 120
Nickel	50.0	46.4		mg/Kg		93	80 - 120
Selenium	50.0	44.1		mg/Kg		88	80 - 120
Silver	25.0	23.0		mg/Kg		92	80 - 120
Thallium	50.0	46.7		mg/Kg		93	80 - 120
Vanadium	50.0	46.4		mg/Kg		93	80 - 120
Zinc	50.0	45.5		mg/Kg		91	80 - 120

Lab Sample ID: 720-88235-A-1-D MS
Matrix: Solid
Analysis Batch: 250437

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250310

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.9	F1	47.6	13.4	F1	mg/Kg		24	75 - 125
Arsenic	4.2		47.6	56.2		mg/Kg		109	75 - 125
Barium	44	F1	47.6	110	F1	mg/Kg		139	75 - 125
Beryllium	ND		47.6	55.3		mg/Kg		116	75 - 125
Cadmium	0.54		47.6	51.5		mg/Kg		107	75 - 125
Chromium	19		47.6	77.5		mg/Kg		123	75 - 125
Cobalt	12		47.6	65.9		mg/Kg		113	75 - 125
Copper	150	F1	47.6	232	F1	mg/Kg		177	75 - 125
Lead	140	F1	47.6	214	F1	mg/Kg		147	75 - 125
Molybdenum	1.5	J	47.6	50.9		mg/Kg		104	75 - 125
Nickel	15		47.6	63.6		mg/Kg		102	75 - 125
Selenium	ND		47.6	51.4		mg/Kg		108	75 - 125
Silver	0.66	J	23.8	28.1		mg/Kg		115	75 - 125
Thallium	1.4	J	47.6	49.8		mg/Kg		102	75 - 125
Vanadium	88	F1	47.6	161	F1	mg/Kg		151	75 - 125
Zinc	120	F1	47.6	208	F1	mg/Kg		175	75 - 125

Lab Sample ID: 720-88235-A-1-E MSD
Matrix: Solid
Analysis Batch: 250437

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250310

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.9	F1	48.1	13.0	F1	mg/Kg		23	75 - 125	3	20
Arsenic	4.2		48.1	56.4		mg/Kg		109	75 - 125	0	20
Barium	44	F1	48.1	107	F1	mg/Kg		133	75 - 125	2	20
Beryllium	ND		48.1	56.2		mg/Kg		117	75 - 125	2	20
Cadmium	0.54		48.1	51.5		mg/Kg		106	75 - 125	0	20
Chromium	19		48.1	72.8		mg/Kg		112	75 - 125	6	20
Cobalt	12		48.1	66.4		mg/Kg		113	75 - 125	1	20
Copper	150	F1	48.1	233	F1	mg/Kg		178	75 - 125	0	20
Lead	140	F1	48.1	207	F1	mg/Kg		132	75 - 125	3	20
Molybdenum	1.5	J	48.1	50.5		mg/Kg		102	75 - 125	1	20
Nickel	15		48.1	63.9		mg/Kg		101	75 - 125	0	20

Method: 6010B - Metales (ICP) (Continued)

Lab Sample ID: 720-88235-A-1-E MSD
Matrix: Solid
Analysis Batch: 250437

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250310

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Selenium	ND		48.1	50.9		mg/Kg		106	75 - 125	1	20
Silver	0.66	J	24.0	28.7		mg/Kg		117	75 - 125	2	20
Thallium	1.4	J	48.1	49.9		mg/Kg		101	75 - 125	0	20
Vanadium	88	F1	48.1	170	F1	mg/Kg		169	75 - 125	6	20
Zinc	120	F1	48.1	202	F1	mg/Kg		162	75 - 125	3	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250416/1-A
Matrix: Solid
Analysis Batch: 250599

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250416

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/28/18 15:53	08/30/18 12:05	1

Lab Sample ID: LCS 720-250416/2-A
Matrix: Solid
Analysis Batch: 250599

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250416

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.814		mg/Kg		98	80 - 120

Lab Sample ID: 720-88215-A-21-B MS
Matrix: Solid
Analysis Batch: 250599

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250416

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.52	F1	0.833	1.43		mg/Kg		109	75 - 125

Lab Sample ID: 720-88215-A-21-C MSD
Matrix: Solid
Analysis Batch: 250599

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250416

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.52	F1	0.833	1.61	F1	mg/Kg		131	75 - 125	12	20

GC/MS VOA

Analysis Batch: 250350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-2	DUP-04	Total/NA	Solid	8260B	250367
720-88217-5	DG-A5S-19.5-20	Total/NA	Solid	8260B	250367
MB 720-250350/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250350/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250350/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250350/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250350/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-2	DUP-04	Total/NA	Solid	5035	
720-88217-5	DG-A5S-19.5-20	Total/NA	Solid	5035	

Analysis Batch: 250645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-6	DG-H6S-0.5-1	Total/NA	Solid	8260B	250670
720-88217-7	DG-H6S-3.5-4	Total/NA	Solid	8260B	250670
MB 720-250645/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250645/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250645/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250645/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250645/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-6	DG-H6S-0.5-1	Total/NA	Solid	5035	
720-88217-7	DG-H6S-3.5-4	Total/NA	Solid	5035	

Prep Batch: 539082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-6	DG-H6S-0.5-1	Total/NA	Solid	5035	

Analysis Batch: 539562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-6	DG-H6S-0.5-1	Total/NA	Solid	8260B	539082
MB 490-539562/7	Method Blank	Total/NA	Solid	8260B	
LCS 490-539562/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-539562/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 250190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-2	DUP-04	Total/NA	Solid	3546	
720-88217-5	DG-A5S-19.5-20	Total/NA	Solid	3546	
MB 720-250190/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250190/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-A-9-F MS	Matrix Spike	Total/NA	Solid	3546	
720-88216-A-9-G MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

GC/MS Semi VOA (Continued)

Prep Batch: 250290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-6	DG-H6S-0.5-1	Total/NA	Solid	3546	
720-88217-7	DG-H6S-3.5-4	Total/NA	Solid	3546	
MB 720-250290/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250290/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-A-17-Q MS	Matrix Spike	Total/NA	Solid	3546	
720-88216-A-17-R MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250190/1-A	Method Blank	Total/NA	Solid	8270C SIM	250190
MB 720-250290/1-A	Method Blank	Total/NA	Solid	8270C SIM	250290
LCS 720-250190/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250190
LCS 720-250290/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250290
720-88216-A-17-Q MS	Matrix Spike	Total/NA	Solid	8270C SIM	250290
720-88216-A-17-R MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250290

Analysis Batch: 250501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-2	DUP-04	Total/NA	Solid	8270C SIM	250190
720-88217-5	DG-A5S-19.5-20	Total/NA	Solid	8270C SIM	250190
720-88217-6	DG-H6S-0.5-1	Total/NA	Solid	8270C SIM	250290
720-88217-7	DG-H6S-3.5-4	Total/NA	Solid	8270C SIM	250290
720-88216-A-9-F MS	Matrix Spike	Total/NA	Solid	8270C SIM	250190
720-88216-A-9-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250190

GC Semi VOA

Prep Batch: 250160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-2	DUP-04	Total/NA	Solid	3546	
720-88217-5	DG-A5S-19.5-20	Total/NA	Solid	3546	
MB 720-250160/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250160/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-A-17-F MS	Matrix Spike	Total/NA	Solid	3546	
720-88216-A-17-G MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250263/1-A	Method Blank	Total/NA	Solid	8015B	250263
LCS 720-250263/2-A	Lab Control Sample	Total/NA	Solid	8015B	250263

Analysis Batch: 250257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-A-17-L MS	Matrix Spike	Total/NA	Solid	8015B	250263
720-88216-A-17-M MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	250263

Prep Batch: 250263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-2	DUP-04	Total/NA	Solid	3546	
720-88217-5	DG-A5S-19.5-20	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 250263 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250263/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250263/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-A-17-L MS	Matrix Spike	Total/NA	Solid	3546	
720-88216-A-17-M MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250160/1-A	Method Blank	Total/NA	Solid	8081A	250160
LCS 720-250160/2-A	Lab Control Sample	Total/NA	Solid	8081A	250160
720-88216-A-17-F MS	Matrix Spike	Total/NA	Solid	8081A	250160
720-88216-A-17-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	250160

Analysis Batch: 250356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-2	DUP-04	Total/NA	Solid	8015B	250263
720-88217-5	DG-A5S-19.5-20	Total/NA	Solid	8015B	250263

Prep Batch: 250358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-6	DG-H6S-0.5-1	Total/NA	Solid	3546	
720-88217-7	DG-H6S-3.5-4	Total/NA	Solid	3546	
MB 720-250358/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250358/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-A-9-V MS	Matrix Spike	Total/NA	Solid	3546	
720-88216-A-9-W MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-2	DUP-04	Total/NA	Solid	8081A	250160
720-88217-5	DG-A5S-19.5-20	Total/NA	Solid	8081A	250160

Analysis Batch: 250458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250358/1-A	Method Blank	Total/NA	Solid	8015B	250358

Analysis Batch: 250459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-250358/2-A	Lab Control Sample	Total/NA	Solid	8015B	250358
720-88216-A-9-V MS	Matrix Spike	Total/NA	Solid	8015B	250358
720-88216-A-9-W MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	250358

Analysis Batch: 250546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-6	DG-H6S-0.5-1	Total/NA	Solid	8015B	250358

Analysis Batch: 250569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-7	DG-H6S-3.5-4	Total/NA	Solid	8015B	250358

GC Semi VOA (Continued)

Prep Batch: 342652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-2	DUP-04	Total/NA	Solid	3540C	
720-88217-5	DG-A5S-19.5-20	Total/NA	Solid	3540C	
MB 240-342652/21-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-342652/22-A	Lab Control Sample	Total/NA	Solid	3540C	
720-88218-F-20-B MS	Matrix Spike	Total/NA	Solid	3540C	
720-88218-F-20-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3540C	

Analysis Batch: 342862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-2	DUP-04	Total/NA	Solid	8082	342652
720-88217-5	DG-A5S-19.5-20	Total/NA	Solid	8082	342652
MB 240-342652/21-A	Method Blank	Total/NA	Solid	8082	342652
LCS 240-342652/22-A	Lab Control Sample	Total/NA	Solid	8082	342652
720-88218-F-20-B MS	Matrix Spike	Total/NA	Solid	8082	342652
720-88218-F-20-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8082	342652

Prep Batch: 343099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-6	DG-H6S-0.5-1	Total/NA	Solid	3540C	
720-88217-7	DG-H6S-3.5-4	Total/NA	Solid	3540C	
MB 240-343099/23-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-343099/24-A	Lab Control Sample	Total/NA	Solid	3540C	
720-88240-F-3-B MS	Matrix Spike	Total/NA	Solid	3540C	
720-88240-F-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3540C	

Analysis Batch: 343336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-6	DG-H6S-0.5-1	Total/NA	Solid	8082	343099
720-88217-7	DG-H6S-3.5-4	Total/NA	Solid	8082	343099

Analysis Batch: 343339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-343099/23-A	Method Blank	Total/NA	Solid	8082	343099
LCS 240-343099/24-A	Lab Control Sample	Total/NA	Solid	8082	343099
720-88240-F-3-B MS	Matrix Spike	Total/NA	Solid	8082	343099
720-88240-F-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8082	343099

Metals

Prep Batch: 250235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-1	DUP-03	Total/NA	Solid	3050B	
720-88217-2	DUP-04	Total/NA	Solid	3050B	
720-88217-3	DG-A5S-0.5-1	Total/NA	Solid	3050B	
MB 720-250235/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250235/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88197-A-1-B MS	Matrix Spike	Total/NA	Solid	3050B	
720-88197-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 250242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-4	DG-A5S-3.5-4	Total/NA	Solid	3050B	
720-88217-5	DG-A5S-19.5-20	Total/NA	Solid	3050B	
MB 720-250242/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250242/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88217-4 MS	DG-A5S-3.5-4	Total/NA	Solid	3050B	
720-88217-4 MSD	DG-A5S-3.5-4	Total/NA	Solid	3050B	

Prep Batch: 250310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-6	DG-H6S-0.5-1	Total/NA	Solid	3050B	
720-88217-7	DG-H6S-3.5-4	Total/NA	Solid	3050B	
MB 720-250310/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250310/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88235-A-1-D MS	Matrix Spike	Total/NA	Solid	3050B	
720-88235-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 250349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-4	DG-A5S-3.5-4	Total/NA	Solid	6010B	250242
720-88217-5	DG-A5S-19.5-20	Total/NA	Solid	6010B	250242
MB 720-250242/1-A	Method Blank	Total/NA	Solid	6010B	250242
LCS 720-250242/2-A	Lab Control Sample	Total/NA	Solid	6010B	250242
720-88217-4 MS	DG-A5S-3.5-4	Total/NA	Solid	6010B	250242
720-88217-4 MSD	DG-A5S-3.5-4	Total/NA	Solid	6010B	250242

Analysis Batch: 250353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-1	DUP-03	Total/NA	Solid	6010B	250235
720-88217-2	DUP-04	Total/NA	Solid	6010B	250235
720-88217-3	DG-A5S-0.5-1	Total/NA	Solid	6010B	250235
MB 720-250235/1-A	Method Blank	Total/NA	Solid	6010B	250235
LCS 720-250235/2-A	Lab Control Sample	Total/NA	Solid	6010B	250235
720-88197-A-1-B MS	Matrix Spike	Total/NA	Solid	6010B	250235
720-88197-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250235

Prep Batch: 250416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-1	DUP-03	Total/NA	Solid	7471A	
720-88217-2	DUP-04	Total/NA	Solid	7471A	
720-88217-3	DG-A5S-0.5-1	Total/NA	Solid	7471A	
720-88217-4	DG-A5S-3.5-4	Total/NA	Solid	7471A	
720-88217-5	DG-A5S-19.5-20	Total/NA	Solid	7471A	
720-88217-6	DG-H6S-0.5-1	Total/NA	Solid	7471A	
720-88217-7	DG-H6S-3.5-4	Total/NA	Solid	7471A	
MB 720-250416/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250416/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88215-A-21-B MS	Matrix Spike	Total/NA	Solid	7471A	
720-88215-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Metals (Continued)

Analysis Batch: 250436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-3	DG-A5S-0.5-1	Total/NA	Solid	6010B	250235

Analysis Batch: 250437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-6	DG-H6S-0.5-1	Total/NA	Solid	6010B	250310
720-88217-7	DG-H6S-3.5-4	Total/NA	Solid	6010B	250310
MB 720-250310/1-A	Method Blank	Total/NA	Solid	6010B	250310
LCS 720-250310/2-A	Lab Control Sample	Total/NA	Solid	6010B	250310
720-88235-A-1-D MS	Matrix Spike	Total/NA	Solid	6010B	250310
720-88235-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250310

Analysis Batch: 250599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88217-1	DUP-03	Total/NA	Solid	7471A	250416
720-88217-2	DUP-04	Total/NA	Solid	7471A	250416
720-88217-3	DG-A5S-0.5-1	Total/NA	Solid	7471A	250416
720-88217-4	DG-A5S-3.5-4	Total/NA	Solid	7471A	250416
720-88217-5	DG-A5S-19.5-20	Total/NA	Solid	7471A	250416
720-88217-6	DG-H6S-0.5-1	Total/NA	Solid	7471A	250416
720-88217-7	DG-H6S-3.5-4	Total/NA	Solid	7471A	250416
MB 720-250416/1-A	Method Blank	Total/NA	Solid	7471A	250416
LCS 720-250416/2-A	Lab Control Sample	Total/NA	Solid	7471A	250416
720-88215-A-21-B MS	Matrix Spike	Total/NA	Solid	7471A	250416
720-88215-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250416

Client Sample ID: DUP-03

Lab Sample ID: 720-88217-1

Date Collected: 08/22/18 00:00

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250353	08/27/18 23:02	OBI	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250599	08/30/18 12:24	OBI	TAL PLS

Client Sample ID: DUP-04

Lab Sample ID: 720-88217-2

Date Collected: 08/22/18 00:00

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250367	08/24/18 02:25	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250350	08/28/18 16:56	A1C	TAL PLS
Total/NA	Prep	3546			250190	08/24/18 15:31	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250501	08/30/18 00:40	LPL	TAL PLS
Total/NA	Prep	3546			250263	08/27/18 08:59	WGR	TAL PLS
Total/NA	Analysis	8015B		1	250356	08/28/18 22:45	JXL	TAL PLS
Total/NA	Prep	3546			250160	08/24/18 11:26	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250445	08/29/18 11:12	MQL	TAL PLS
Total/NA	Prep	3540C			342652	08/27/18 11:05	DVT	TAL CAN
Total/NA	Analysis	8082		1	342862	08/28/18 19:49	CSC	TAL CAN
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250353	08/27/18 23:16	OBI	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250599	08/30/18 12:27	OBI	TAL PLS

Client Sample ID: DG-A5S-0.5-1

Lab Sample ID: 720-88217-3

Date Collected: 08/23/18 12:00

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250353	08/27/18 23:21	OBI	TAL PLS
Total/NA	Prep	3050B			250235	08/25/18 12:57	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250436	08/28/18 15:29	OBI	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250599	08/30/18 12:34	OBI	TAL PLS

Client Sample ID: DG-A5S-3.5-4

Lab Sample ID: 720-88217-4

Date Collected: 08/23/18 12:00

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS

Client Sample ID: DG-A5S-3.5-4

Lab Sample ID: 720-88217-4

Date Collected: 08/23/18 12:00

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		4	250349	08/27/18 18:59	OBI	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250599	08/30/18 12:36	OBI	TAL PLS

Client Sample ID: DG-A5S-19.5-20

Lab Sample ID: 720-88217-5

Date Collected: 08/23/18 12:45

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250367	08/24/18 02:25	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250350	08/28/18 17:29	A1C	TAL PLS
Total/NA	Prep	3546			250190	08/24/18 15:31	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250501	08/29/18 21:54	LPL	TAL PLS
Total/NA	Prep	3546			250263	08/27/18 08:59	WGR	TAL PLS
Total/NA	Analysis	8015B		1	250356	08/28/18 21:32	JXL	TAL PLS
Total/NA	Prep	3546			250160	08/24/18 11:26	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250445	08/29/18 11:30	MQL	TAL PLS
Total/NA	Prep	3540C			342652	08/27/18 11:05	DVT	TAL CAN
Total/NA	Analysis	8082		1	342862	08/28/18 20:11	CSC	TAL CAN
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250349	08/27/18 19:04	OBI	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250599	08/30/18 12:39	OBI	TAL PLS

Client Sample ID: DG-H6S-0.5-1

Lab Sample ID: 720-88217-6

Date Collected: 08/23/18 14:55

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250670	08/24/18 02:25	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250645	08/31/18 11:17	JRM	TAL PLS
Total/NA	Prep	5035			539082	08/23/18 16:55	DHC	TAL NSH
Total/NA	Analysis	8260B		1	539562	08/30/18 02:58	PN	TAL NSH
Total/NA	Prep	3546			250290	08/27/18 12:37	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250501	08/29/18 23:52	LPL	TAL PLS
Total/NA	Prep	3546			250358	08/28/18 08:52	MAB	TAL PLS
Total/NA	Analysis	8015B		10	250546	08/30/18 06:06	JXL	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		1	343336	08/31/18 07:23	LSH	TAL CAN
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250437	08/28/18 17:10	BKR	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250599	08/30/18 12:41	OBI	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88217-1

Client Sample ID: DG-H6S-3.5-4

Date Collected: 08/23/18 14:55
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88217-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250670	08/24/18 02:25	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250645	08/31/18 11:46	JRM	TAL PLS
Total/NA	Prep	3546			250290	08/27/18 12:37	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250501	08/29/18 20:43	LPL	TAL PLS
Total/NA	Prep	3546			250358	08/28/18 08:52	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250569	08/30/18 12:49	JXL	TAL PLS
Total/NA	Prep	3540C			343099	08/29/18 14:50	AMT	TAL CAN
Total/NA	Analysis	8082		1	343336	08/31/18 07:40	LSH	TAL CAN
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250437	08/28/18 17:14	BKR	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250599	08/30/18 12:43	OBI	TAL PLS

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88217-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-17-9	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-19
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-19
California	State Program	9	2938	10-31-18 *
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-19
Georgia	State Program	4	NA: NELAP & A2LA	12-31-19
Illinois	NELAP	5	200010	12-09-18
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-18 *
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-18
Louisiana	NELAP	6	30613	06-30-19
Maine	State Program	1	TN00032	11-03-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88217-1

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-19
Minnesota	NELAP	5	047-999-345	12-31-18
Mississippi	State Program	4	N/A	06-30-19
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-19
New Hampshire	NELAP	1	2963	10-09-18 *
New Jersey	NELAP	2	TN965	06-30-19
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-18
North Dakota	State Program	8	R-146	06-30-19
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-19
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	07-31-19
Rhode Island	State Program	1	LAO00268	12-30-18
South Carolina	State Program	4	84009 (001)	02-28-19
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-19
Washington	State Program	10	C789	07-19-19
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-19
Wyoming (UST)	A2LA	8	453.07	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88217-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8270C SIM	Semivolatile Org Compounds by GCMS (SIM)	SW846	TAL PLS
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metales (ICP)	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
Subcontract	Asbestos - CARB 435	None	
3050B	Preparation, Metals	SW846	TAL PLS
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL PLS
5035	Closed System Purge and Trap	SW846	TAL NSH
5035	Closed System Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88217-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88217-1	DUP-03	Solid	08/22/18 00:00	08/23/18 15:40
720-88217-2	DUP-04	Solid	08/22/18 00:00	08/23/18 15:40
720-88217-3	DG-A5S-0.5-1	Solid	08/23/18 12:00	08/23/18 15:40
720-88217-4	DG-A5S-3.5-4	Solid	08/23/18 12:00	08/23/18 15:40
720-88217-5	DG-A5S-19.5-20	Solid	08/23/18 12:45	08/23/18 15:40
720-88217-6	DG-H6S-0.5-1	Solid	08/23/18 14:55	08/23/18 15:40
720-88217-7	DG-H6S-3.5-4	Solid	08/23/18 14:55	08/23/18 15:40

ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01199

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Aug/30/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01199
Polarized light microscopy analytical results for 2 bulk sample(s).
Job Site: 720-88217-1
Job No.: UPC-OU-SM

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 2

Samples Analyzed: 2

Job Site / No. UPC-OU-SM
720-88217-1

Report No. **359850**
Date Submitted: Aug-24-18
Date Reported: Aug-30-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DUP-04		**<0.25%**	**None Detected**	720-88217-2
Lab ID # 1283-01199-001	**400** - Total Points			No Asbestos Detected
dg-A5S-19.5-20		**<0.25%**	**None Detected**	720-88217-5
Lab ID # 1283-01199-002	**400** - Total Points			No Asbestos Detected
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			

QC Reviewer R mc B

Analys Jo Ann Hewitt

359850

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39406.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88217-1
Address: 630 BANCROFT WAY, ,	Due Date Requested: 8/30/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC-OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DUP-04 (720-88217-2)	8/22/18	Pacific		Solid			X	1	
DG-A5S-19.5-20 (720-88217-5)	8/22/18	12:45 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

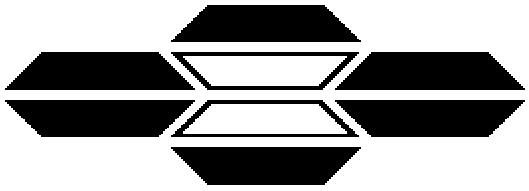
Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
←	8/24/18 1215	TA			
Relinquished by:	Date/Time:	Company	Received by: Atom/RJ	Date/Time: AUG24 '18 12:13PM	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016



ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01207

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Aug/30/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01207
Polarized light microscopy analytical results for 2 bulk sample(s).
Job Site: 720-88217-1
Job No.: UPC-OU-SM

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 2

Samples Analyzed: 2

Job Site / No. UPC-OU-SM
720-88217-1

Report No. **359918**
Date Submitted: Aug-28-18
Date Reported: Aug-30-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DG-H6S-0.5-1.0 (720-88217-6) Lab ID # 1283-01207-001	**400** - Total Points	**<0.25%**	**None Detected**	No Asbestos Detected
DG-H6S-3.5-4.0 (720-88217-7) Lab ID # 1283-01207-002	**400** - Total Points	**<0.25%**	**None Detected**	No Asbestos Detected
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			

QC Reviewer _____ **Analys** _____

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

359918

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39429.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88217-1
Address: 630 BANCROFT WAY,	Due Date Requested: 8/30/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC-OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Wewater, SPSolid, Oilwaste, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-H6S-0.5-1.0 (720-88217-6)	8/22/18	14:55 Pacific		Solid			X	1	
DG-H6S-3.5-4.0 (720-88217-7)	8/22/18	14:55 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	8/22/18 1245	TA	MB	AUG23 '18 12:48PM	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88217

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: 16508&9

Date 8/23 Page 1 of 1

11/14/2018 (Rev. 1)

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
Bill To: GEOSYNTEC
Sampled By: M. KAHRILAS
Attn: A. SMITH
Phone: 847-530-7602

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☑ EPA 8260B TGRO	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☒ 8270C SIM	Oil and Grease ☐ Petroleum (EPA 1664/9071) ☐ Total	Pesticides ☒ EPA 8081 PCBs ☒ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)
DUP-03	8/22												X										
DUP-04	8/22				X			X		X		X	X									X	
DG-ASS-0.5-1	8/23	1200											X										
DG-ASS-3.5-4	8/23	1200											X										
DG-ASS-19.5-20	8/23	1245			X			X		X		X	X									X	

Project Info.

Project Name/ #: VPC DV-SM1
PO#: W625651/02
Credit Card Y/N: If yes, please call with payment information ASAP

TAT: 10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID ___

See Terms and Conditions on reverse

Sample Receipt

of Containers:
Head Space:
Temp: 3.1, 1.9, 2.6°C

1) Relinquished by:
Signature: [illegible] Time: 1305
Printed Name: MIRANDA KAHRILAS Date: 8/23
Company: GEO

1) Received by:
Signature: [illegible] Time: 1307
Printed Name: TA 720 Date: 8/23
Company: TA 720

2) Relinquished by:
Signature: [illegible] Time: 1540
Printed Name: TA 720 Date: 8/23/18
Company: TA 720

2) Received by:
Signature: [illegible] Time: 1540
Printed Name: T Bullock Date: 8/23/18
Company: TA-720

3) Relinquished by:
Signature: ___ Time: ___
Printed Name: ___ Date: ___

720-88217 Chain of Custody

Printed Name: ___ Date: ___
Company: 3.1 / 1.9 / 2.6°C

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

4.21(4.2

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39409.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88217-1
Address: 4101 Shuffel Street NW, ,	Due Date Requested: 8/30/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC-OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

C206

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DUP-04 (720-88217-2)	8/22/18	Pacific		Solid			X	1	
DG-A5S-19.5-20 (720-88217-5)	8/22/18	12:45 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by:	8/24/18 1734	TMO	Received by:	8/25/18 1145	TK
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client TA Pleasanton Site Name _____ Cooler unpacked by: DO

Cooler Received on 8/25/18 Opened on 8/27/18

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 4.2 °C Corrected Cooler Temp. 4.2 °C
   IR GUN #36 (CF -0.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC849151**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

1.4/1.4

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39428.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88217-1
Address: 4101 Shuffel Street NW,	Due Date Requested: 8/30/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC-OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

CD07

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-H6S-0.5-1.0 (720-88217-6)	8/22/18	14:55 Pacific		Solid			X	1	
DG-H6S-3.5-4.0 (720-88217-7)	8/22/18	14:55 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	8-27-18 1600	PCDS	[signature]	8/29/18 935	TAL
2	Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____

Canton Facility

Client TA Pleasanton Site Name _____ Cooler unpacked by: SC

Cooler Received on 8/29/18 Opened on 8/29/18

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 1.4 °C Corrected Cooler Temp. 1.4 °C

IR GUN #36 (CF -0.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   - -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   - -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   - -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No

    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC849151**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

_____

_____

_____

_____

_____

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

720-88217 Chain of Custody

Cooler Received/Opened On 8/28/2018@ 0715

Time Samples Removed From Cooler_____ Time Samples Placed In Storage_____ (2 Hour Window)

1. Tracking # 4471 9852 5682 (last 4 digits, FedEx) Courier: FedEx First Overnight

IR Gun ID_31470368 _____ pH Strip Lot_____ Chlorine Strip Lot_____

2. Temperature of rep. sample or temp blank when opened: 2.6 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) EM

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # NA

I certify that I unloaded the cooler and answered questions 7-14 (intial) EM

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) EM

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) EM

I certify that I attached a label with the unique LIMS number to each container (intial) EM

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES..NO...#_____

BIS = Broken in shipment

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

Loc: 720
88217

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carri	COC No: 720-39431.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California		Job #: 720-88217-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 8/29/2018			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC-OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B/5035LP_Calc 1,2,3-TCP and 1,2-Dibromo-3-chloropropane	8260B/5035A_M_Calc 1,2,3-TCP and 1,2-Dibromo-3-chloropropane	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
DG-H6S-0.5-1.0 (720-88217-6)	8/22/18	14:55 Pacific		Solid			X	X	3	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		8/27/18 1615	TAL SD			
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 8-28-18 715	Company TA-MAS

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.4

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88217-1

Login Number: 88217
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88218-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/21/2018 6:14:06 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 5
Detection Summary 9
Client Sample Results 22
Surrogate Summary 310
QC Sample Results 315
QC Association Summary 383
Lab Chronicle 394
Certification Summary 403
Method Summary 404
Sample Summary 405
Subcontract Data 406
Chain of Custody 417
Receipt Checklists 424

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	ISTD response or retention time outside acceptable limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
B	Compound was found in the blank and sample.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F4	MS/MSD RPD exceeds control limits due to sample size difference.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88218-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88218-1

Comments
This report was revised on 11/21/18 to change the units for the metals data to report in mg/Kg, as requested.

Receipt
The samples were received on 8/23/2018 3:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 1.9º C, 2.6º C and 3.1º C.

Receipt Exceptions
All Terra Cores samples with an exception of these two samples: DG-F5S-3.5-4 and DG-C5S-9-9.5 were received in pre-weighed containers with a label that was added in the field. The label weight was approximately 0.15 g which does not significantly bias the final results.

The following sample was submitted for analysis; However, it was not listed on the Chain-of-Custody (COC): DG-E5S-9.0-9.5 (received 3 Terra Cores, 2x8oz and 2x4oz jars). As requested this sample was logged in for analysis of VOCs, Diesel Range Organics, CAM17 Metals, PAHs, Pesticides, PCBs and Asbestos.

The container labels for the following sample did not match the information listed on the Chain-of-Custody (COC): DG-F5S-0.5-1 (time 15:45). Each of the containers lists a different sample number but all containers have the same sample depth and same collection time. This sample was logged in as sample DG-F5S-0.5-1 (time 15:45) and matched up based on sample depth and sample collection time.

The container labels for the following sample did not match the information listed on the Chain-of-Custody (COC): DG-F5S-3.5-4 (time 15:45). Each of the containers lists a different sample number but all containers have the same sample depth and same collection time. This sample was logged in as sample DG-F5S-3.5-4 (time 15:45) and matched up based on sample depth and sample collection time.

The container labels list DG-B5S-9-9.5, while the COC lists DG-C5S-9-9.5 (time 11:30). This sample was logged in based on the ID listed on the COC and matched up with the sample collection time of 11:30 and the depth.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250407 recovered outside control limits for the following analytes: Carbon disulfide and 1,1-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 720-250405 recovered outside control limits for the following analyte: 1,1-Dichloroethene. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample duplicate (LCSD) for analytical batch 720-250405 recovered outside control limits for the following analytes: 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250450 recovered outside control limits for the following analytes: 1,1-Dichloroethene and Carbon disulfide. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: Internal standard (ISTD) response for the following samples were outside control limits: DG-H5S-0.5-1 (720-88218-6) and DG-F5S-3.5-4 (720-88218-11). The samples were re-extracted and/or re-analyzed with concurring results, and the second set of data has been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250453 recovered outside control limits for the following analytes: Carbon disulfide, 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Job ID: 720-88218-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250488 and analytical batch 720-250450 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method(s) 8260B: The Gasoline Range Organics (GRO) concentration reported for the following sample is due to the presence of discrete peaks: DG-B5S-3.5-4 (720-88218-20). Trichloroethene

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250625 recovered outside control limits for the following analytes: 1,1-Dichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The Gasoline Range Organics (GRO) concentration reported for the following sample is due to the presence of discrete peaks: DG-C5S-9-9.5 (720-88218-18). cis-1,2-Dichloroethene and Trichloroethene

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250642 recovered outside control limits for the following analyte: Carbon disulfide. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: Internal standard (ISTD) response for the following sample was outside control limits: DG-C5S-9-9.5 (720-88218-18). The sample was re-extracted and/or re-analyzed with concurring ND results, and the original set of data has been reported.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250667 and analytical batch 720-250642 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method(s) 8260B: Reportable data was not available in the analysis of low level terracores due to sample matrix and issues with sample container causing loss of sample at the time of purging; therefore, the following sample was analyzed and reported using the samples collected in the field container: DG-D5S-3.5-4 (720-88218-15).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method(s) 8270C SIM: The following samples were diluted due to the abundance of non-target analytes: DG-J5S-0.5-1 (720-88218-1) and DG-B5S-0.5-1 (720-88218-19). Elevated reporting limits (RLs) are provided.

Method(s) 8270C SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250376 and analytical batch 720-250578 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270C SIM: The following samples were diluted due to the abundance of non-target analytes: DG-J5S-3.5-4 (720-88218-2), DG-F5S-0.5-1 (720-88218-10) and DG-D5S-0.5-1 (720-88218-14). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method(s) 8082: Surrogate recovery for the following samples was outside control limits: DG-J5S-0.5-1 (720-88218-1), DG-J5S-3.5-4 (720-88218-2) and DG-H5S-0.5-1 (720-88218-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis were not performed.

Method(s) 8082: The following samples appear to contain polychlorinated biphenyls (PCBs); however, due to weathering, other environmental processes and/or contributions from the presence of multiple Aroclors, resulting in overlapping PCB patterns, the PCBs in the samples do not directly match any of the laboratory's Aroclor standards used for instrument calibration: DG-J5S-0.5-1 (720-88218-1) and DG-D5S-0.5-1 (720-88218-14). The samples have been quantified and reported using the best overall Aroclor standard pattern match.

Job ID: 720-88218-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: DG-J5S-0.5-1 (720-88218-1), DG-J5S-3.5-4 (720-88218-2), DG-J5S-7-7.5 (720-88218-3), DG-H5S-3.5-4 (720-88218-7), DG-F5S-3.5-4 (720-88218-11), DG-D5S-0.5-1 (720-88218-14), DG-C5S-9-9.5 (720-88218-18), DG-E5S-9.0-9.5 (720-88218-21), (720-88218-F-21-B MS) and (720-88218-F-21-C MSD).

Method(s) 8081A: Surrogate recovery for the following samples was outside control limits: DG-J5S-0.5-1 (720-88218-1), DG-J5S-3.5-4 (720-88218-2) and DG-H5S-0.5-1 (720-88218-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis were not performed.

Method(s) 8081A: The following samples were diluted due to the abundance of non-target analytes: DG-J5S-0.5-1 (720-88218-1) and DG-F5S-0.5-1 (720-88218-10). Elevated reporting limits (RLs) are provided.

Method(s) 8015B: The following samples required a dilution due to the nature of the sample matrix: DG-J5S-0.5-1 (720-88218-1), DG-H5S-0.5-1 (720-88218-6), DG-F5S-0.5-1 (720-88218-10) and DG-D5S-0.5-1 (720-88218-14). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8015B: The method blank for preparation batch 720-250263 and analytical batch 720-250252 contained Diesel Range Organics [C10-C28] above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 8081A: The %RPD between the primary and confirmation column exceeded 40% for cis-Chlordane for the following sample: DG-B5S-0.5-1 (720-88218-19). The lower value has been reported and qualified in accordance with the laboratory's SOP.

Method(s) 8081A: The %RPD between the primary and confirmation column exceeded 40% for 4,4'-DDT for the following sample: DG-D5S-0.5-1 (720-88218-14). The lower value has been reported and qualified in accordance with the laboratory's SOP.

Method(s) 8081A: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 720-250393 and analytical batch 720-250609 was outside control limits. Sample matrix interference is suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DG-J5S-0.5-1 (720-88218-1), DG-J5S-3.5-4 (720-88218-2), DG-J5S-7-7.5 (720-88218-3), DG-I5S-0.5-1 (720-88218-4), DG-I5S-3.5-4 (720-88218-5), DG-H5S-0.5-1 (720-88218-6), DG-H5S-3.5-4 (720-88218-7), DG-G5S-0.5-1 (720-88218-8), DG-G5S-3.5-4 (720-88218-9), DG-F5S-0.5-1 (720-88218-10), DG-F5S-3.5-4 (720-88218-11), DG-E5S-0.5-1 (720-88218-12), DG-E5S-3.5-4 (720-88218-13), DG-D5S-0.5-1 (720-88218-14), DG-D5S-3.5-4 (720-88218-15), DG-C5S-0.5-1 (720-88218-16), DG-C5S-3.5-4 (720-88218-17), DG-C5S-9-9.5 (720-88218-18), DG-B5S-0.5-1 (720-88218-19), DG-B5S-3.5-4 (720-88218-20) and DG-E5S-9.0-9.5 (720-88218-21). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250242 and analytical batch 720-250349 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250280 and analytical batch 720-250454 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250262 and analytical batch 720-250431 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The post digestion spike % recovery associated with batch 720-250431 was outside of 75-125% control limits: (720-88218-A-16-C PDS)

Job ID: 720-88218-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

Analyte	Recovery
Barium	128%
Copper	136%
Lead	133%
Vanadium	126%
Zinc	131%

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250431 was outside of the 10% control limits: (720-88218-A-16-C SD)

Analyte	Recovery
Barium	22%
Cobalt	18%
Chromium	27%
Copper	29%
Nickel	16%
Lead	14%
Vanadium	28%
Zinc	16%

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-250262 and analytical batch 720-250558 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 7471A: Due to the high concentration of Hg, the matrix spike duplicate (MSD) for preparation batch 720-250416 and analytical batch 720-250599 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method(s) 3546: The following samples could not be concentrated down to the final required volume for 8270C SIM: DG-H5S-0.5-1 (720-88218-6) and DG-F5S-0.5-1 (720-88218-10).

No additional analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Subcontract Work

Method Asbestos - CARB 435: This method was subcontracted to ASBESTOS TEM LABORATORIES, INC. The subcontract laboratory certification is different from that of the facility issuing the final report.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-J5S-0.5-1 — Lab Sample ID: 720-88218-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	56		35	27	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	38	J	49	25	ug/Kg	5		8270C SIM	Total/NA
Acenaphthene	16	J	25	14	ug/Kg	5		8270C SIM	Total/NA
Acenaphthylene	29		25	12	ug/Kg	5		8270C SIM	Total/NA
Anthracene	64		25	9.8	ug/Kg	5		8270C SIM	Total/NA
Benzo[a]anthracene	350		25	7.4	ug/Kg	5		8270C SIM	Total/NA
Benzo[a]pyrene	570		25	9.3	ug/Kg	5		8270C SIM	Total/NA
Benzo[b]fluoranthene	930		25	10	ug/Kg	5		8270C SIM	Total/NA
Benzo[g,h,i]perylene	1600		25	21	ug/Kg	5		8270C SIM	Total/NA
Chrysene	450	B	25	6.9	ug/Kg	5		8270C SIM	Total/NA
Dibenz(a,h)anthracene	66		25	17	ug/Kg	5		8270C SIM	Total/NA
Fluoranthene	590		25	6.9	ug/Kg	5		8270C SIM	Total/NA
Fluorene	15	J	25	11	ug/Kg	5		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	310		25	21	ug/Kg	5		8270C SIM	Total/NA
Naphthalene	26		25	17	ug/Kg	5		8270C SIM	Total/NA
Phenanthrene	280		25	8.8	ug/Kg	5		8270C SIM	Total/NA
Pyrene	990		25	8.3	ug/Kg	5		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	200000	B	19000	7200	ug/Kg	10		8015B	Total/NA
Aroclor-1254	590		51	23	ug/Kg	1		8082	Total/NA
Aroclor-1260	420		51	22	ug/Kg	1		8082	Total/NA
Antimony	8.1		1.4	0.23	mg/Kg	4		6010B	Total/NA
Arsenic	7.4	B	2.8	0.23	mg/Kg	4		6010B	Total/NA
Barium	640		1.4	0.20	mg/Kg	4		6010B	Total/NA
Cadmium	4.8		0.34	0.034	mg/Kg	4		6010B	Total/NA
Chromium	45		1.4	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.55	0.055	mg/Kg	4		6010B	Total/NA
Copper	470		4.1	2.0	mg/Kg	4		6010B	Total/NA
Lead	2000		1.4	0.29	mg/Kg	4		6010B	Total/NA
Molybdenum	13		1.4	0.18	mg/Kg	4		6010B	Total/NA
Nickel	33		1.4	0.14	mg/Kg	4		6010B	Total/NA
Silver	0.67	J	0.69	0.14	mg/Kg	4		6010B	Total/NA
Thallium	1.5		1.4	0.40	mg/Kg	4		6010B	Total/NA
Vanadium	97		1.4	0.19	mg/Kg	4		6010B	Total/NA
Zinc	1500		4.1	1.8	mg/Kg	4		6010B	Total/NA
Mercury	0.23		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-J5S-3.5-4 — Lab Sample ID: 720-88218-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	31	J	49	25	ug/Kg	5		8270C SIM	Total/NA
Acenaphthylene	57		25	12	ug/Kg	5		8270C SIM	Total/NA
Anthracene	73		25	9.9	ug/Kg	5		8270C SIM	Total/NA
Benzo[a]anthracene	220		25	7.4	ug/Kg	5		8270C SIM	Total/NA
Benzo[a]pyrene	330		25	9.4	ug/Kg	5		8270C SIM	Total/NA
Benzo[b]fluoranthene	410		25	10	ug/Kg	5		8270C SIM	Total/NA
Benzo[g,h,i]perylene	190		25	21	ug/Kg	5		8270C SIM	Total/NA
Benzo[k]fluoranthene	170		25	10	ug/Kg	5		8270C SIM	Total/NA
Chrysene	310	B	25	6.9	ug/Kg	5		8270C SIM	Total/NA
Dibenz(a,h)anthracene	42		25	17	ug/Kg	5		8270C SIM	Total/NA
Fluoranthene	420		25	6.9	ug/Kg	5		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

Client Sample ID: DG-J5S-3.5-4 (Continued) — Lab Sample ID: 720-88218-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluorene	11	J	25	11	ug/Kg	5		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	150		25	21	ug/Kg	5		8270C SIM	Total/NA
Naphthalene	46		25	17	ug/Kg	5		8270C SIM	Total/NA
Phenanthrene	260		25	8.9	ug/Kg	5		8270C SIM	Total/NA
Pyrene	580		25	8.4	ug/Kg	5		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	190000	B	5800	2200	ug/Kg	3		8015B	Total/NA
Aroclor-1260	38	J	51	23	ug/Kg	1		8082	Total/NA
Antimony	15		1.5	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	65	B	3.1	0.26	mg/Kg	4		6010B	Total/NA
Barium	390		1.5	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.24	J	0.31	0.10	mg/Kg	4		6010B	Total/NA
Cadmium	2.3		0.38	0.038	mg/Kg	4		6010B	Total/NA
Chromium	57		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.62	0.062	mg/Kg	4		6010B	Total/NA
Copper	360		4.6	2.2	mg/Kg	4		6010B	Total/NA
Lead	1100		1.5	0.32	mg/Kg	4		6010B	Total/NA
Molybdenum	1.4	J	1.5	0.20	mg/Kg	4		6010B	Total/NA
Nickel	54		1.5	0.16	mg/Kg	4		6010B	Total/NA
Silver	1.1		0.77	0.16	mg/Kg	4		6010B	Total/NA
Thallium	1.0	J	1.5	0.45	mg/Kg	4		6010B	Total/NA
Vanadium	48		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	770		4.6	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.36		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-J5S-7-7.5 — Lab Sample ID: 720-88218-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	5.4		3.4	0.47	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	7.0	J	9.6	4.8	ug/Kg	1		8270C SIM	Total/NA
Anthracene	2.6	J	4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	4.4	J	4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	5.7		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	39		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	6.5		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	31	B	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	3.6	J	4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	13		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluorene	4.1	J	4.8	2.1	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	5.3		4.8	4.0	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	16		4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	47		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	16		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	5500	B	2000	740	ug/Kg	1		8015B	Total/NA
Antimony	1.9		1.3	0.21	mg/Kg	4		6010B	Total/NA
Arsenic	12	B	2.5	0.22	mg/Kg	4		6010B	Total/NA
Barium	150		1.3	0.18	mg/Kg	4		6010B	Total/NA
Beryllium	0.89		0.25	0.082	mg/Kg	4		6010B	Total/NA
Cadmium	0.12	J	0.32	0.031	mg/Kg	4		6010B	Total/NA
Chromium	32		1.3	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.51	0.051	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-J5S-7-7.5 (Continued) — Lab Sample ID: 720-88218-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	65		3.8	1.8	mg/Kg	4		6010B	Total/NA
Lead	210		1.3	0.27	mg/Kg	4		6010B	Total/NA
Molybdenum	0.30	J	1.3	0.16	mg/Kg	4		6010B	Total/NA
Nickel	34		1.3	0.13	mg/Kg	4		6010B	Total/NA
Silver	0.60	J	0.63	0.13	mg/Kg	4		6010B	Total/NA
Thallium	0.82	J	1.3	0.37	mg/Kg	4		6010B	Total/NA
Vanadium	40		1.3	0.17	mg/Kg	4		6010B	Total/NA
Zinc	240		3.8	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.081		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I5S-0.5-1 — Lab Sample ID: 720-88218-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	3.3		1.4	0.24	mg/Kg	4		6010B	Total/NA
Arsenic	14	B	2.9	0.25	mg/Kg	4		6010B	Total/NA
Barium	170		1.4	0.21	mg/Kg	4		6010B	Total/NA
Beryllium	0.097	J	0.29	0.094	mg/Kg	4		6010B	Total/NA
Cadmium	2.5		0.36	0.036	mg/Kg	4		6010B	Total/NA
Chromium	42		1.4	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	17		0.58	0.058	mg/Kg	4		6010B	Total/NA
Copper	240		4.3	2.1	mg/Kg	4		6010B	Total/NA
Lead	380		1.4	0.30	mg/Kg	4		6010B	Total/NA
Molybdenum	3.6		1.4	0.19	mg/Kg	4		6010B	Total/NA
Nickel	25		1.4	0.15	mg/Kg	4		6010B	Total/NA
Silver	0.55	J	0.72	0.15	mg/Kg	4		6010B	Total/NA
Thallium	1.3	J	1.4	0.42	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.4	0.20	mg/Kg	4		6010B	Total/NA
Zinc	580		4.3	1.8	mg/Kg	4		6010B	Total/NA
Mercury	0.57		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I5S-3.5-4 — Lab Sample ID: 720-88218-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	35		1.1	0.19	mg/Kg	4		6010B	Total/NA
Arsenic	740	B	2.2	0.19	mg/Kg	4		6010B	Total/NA
Barium	1200		1.1	0.16	mg/Kg	4		6010B	Total/NA
Beryllium	0.82		0.22	0.073	mg/Kg	4		6010B	Total/NA
Cadmium	2.3		0.28	0.028	mg/Kg	4		6010B	Total/NA
Chromium	35		1.1	0.12	mg/Kg	4		6010B	Total/NA
Cobalt	5.6		0.45	0.045	mg/Kg	4		6010B	Total/NA
Copper	380		3.4	1.6	mg/Kg	4		6010B	Total/NA
Lead	2600		1.1	0.23	mg/Kg	4		6010B	Total/NA
Molybdenum	0.74	J	1.1	0.14	mg/Kg	4		6010B	Total/NA
Nickel	30		1.1	0.11	mg/Kg	4		6010B	Total/NA
Silver	6.7		0.56	0.11	mg/Kg	4		6010B	Total/NA
Thallium	0.79	J	1.1	0.32	mg/Kg	4		6010B	Total/NA
Vanadium	36		1.1	0.15	mg/Kg	4		6010B	Total/NA
Zinc	1400		3.4	1.4	mg/Kg	4		6010B	Total/NA
Mercury	0.31		0.017	0.0025	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-H5S-0.5-1 — Lab Sample ID: 720-88218-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	36	J	41	31	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	94	J	95	48	ug/Kg	5		8270C SIM	Total/NA
Acenaphthene	33	J	48	27	ug/Kg	5		8270C SIM	Total/NA
Acenaphthylene	2000		48	23	ug/Kg	5		8270C SIM	Total/NA
Anthracene	500		48	19	ug/Kg	5		8270C SIM	Total/NA
Benzo[a]anthracene	3800		48	14	ug/Kg	5		8270C SIM	Total/NA
Benzo[a]pyrene	6900		48	18	ug/Kg	5		8270C SIM	Total/NA
Benzo[b]fluoranthene	7400		48	20	ug/Kg	5		8270C SIM	Total/NA
Benzo[g,h,i]perylene	2800		48	41	ug/Kg	5		8270C SIM	Total/NA
Benzo[k]fluoranthene	3700		48	20	ug/Kg	5		8270C SIM	Total/NA
Chrysene	4500	B	48	13	ug/Kg	5		8270C SIM	Total/NA
Dibenz(a,h)anthracene	910		48	33	ug/Kg	5		8270C SIM	Total/NA
Fluoranthene	2600		48	13	ug/Kg	5		8270C SIM	Total/NA
Fluorene	39	J	48	21	ug/Kg	5		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	2500		48	40	ug/Kg	5		8270C SIM	Total/NA
Naphthalene	310		48	33	ug/Kg	5		8270C SIM	Total/NA
Phenanthrene	1100		48	17	ug/Kg	5		8270C SIM	Total/NA
Pyrene	6600		48	16	ug/Kg	5		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	240000	B	9600	3600	ug/Kg	5		8015B	Total/NA
4,4'-DDE	24		1.9	0.40	ug/Kg	1		8081A	Total/NA
4,4'-DDT	73		1.9	0.39	ug/Kg	1		8081A	Total/NA
Aroclor-1260	24	J	50	22	ug/Kg	1		8082	Total/NA
Antimony	8.6		1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	67	B	3.8	0.33	mg/Kg	4		6010B	Total/NA
Barium	300		1.9	0.27	mg/Kg	4		6010B	Total/NA
Beryllium	0.26	J	0.38	0.13	mg/Kg	4		6010B	Total/NA
Cadmium	2.9		0.48	0.048	mg/Kg	4		6010B	Total/NA
Chromium	40		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.77	0.077	mg/Kg	4		6010B	Total/NA
Copper	310		5.8	2.7	mg/Kg	4		6010B	Total/NA
Lead	990		1.9	0.40	mg/Kg	4		6010B	Total/NA
Molybdenum	1.8	J	1.9	0.25	mg/Kg	4		6010B	Total/NA
Nickel	31		1.9	0.20	mg/Kg	4		6010B	Total/NA
Silver	0.44	J	0.96	0.19	mg/Kg	4		6010B	Total/NA
Thallium	1.4	J	1.9	0.56	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	850		5.8	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.27		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H5S-3.5-4 — Lab Sample ID: 720-88218-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	24	J	31	24	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	8.2	J	9.5	4.8	ug/Kg	1		8270C SIM	Total/NA
Acenaphthene	11		4.8	2.7	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	16		4.8	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	61		4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	290		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	280		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	400		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-H5S-3.5-4 (Continued) — Lab Sample ID: 720-88218-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	100		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	260	B	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	39		4.8	3.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	360		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluorene	13		4.8	2.1	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	100		4.8	4.0	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	29		4.8	3.3	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	260		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	590		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	18000	B	1900	720	ug/Kg	1		8015B	Total/NA
4,4'-DDT	1.2	J	1.9	0.39	ug/Kg	1		8081A	Total/NA
Antimony	4.4		1.2	0.20	mg/Kg	4		6010B	Total/NA
Arsenic	160	B	2.5	0.21	mg/Kg	4		6010B	Total/NA
Barium	200		1.2	0.17	mg/Kg	4		6010B	Total/NA
Beryllium	0.47		0.25	0.080	mg/Kg	4		6010B	Total/NA
Cadmium	0.097	J	0.31	0.030	mg/Kg	4		6010B	Total/NA
Chromium	74		1.2	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.49	0.049	mg/Kg	4		6010B	Total/NA
Copper	100		3.7	1.7	mg/Kg	4		6010B	Total/NA
Lead	400		1.2	0.26	mg/Kg	4		6010B	Total/NA
Molybdenum	0.41	J	1.2	0.16	mg/Kg	4		6010B	Total/NA
Nickel	50		1.2	0.13	mg/Kg	4		6010B	Total/NA
Silver	0.42	J	0.61	0.12	mg/Kg	4		6010B	Total/NA
Thallium	1.0	J	1.2	0.36	mg/Kg	4		6010B	Total/NA
Vanadium	61		1.2	0.17	mg/Kg	4		6010B	Total/NA
Zinc	310		3.7	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.27		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-G5S-0.5-1 — Lab Sample ID: 720-88218-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	17	B	3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	50		1.6	0.23	mg/Kg	4		6010B	Total/NA
Cadmium	0.13	J	0.41	0.040	mg/Kg	4		6010B	Total/NA
Chromium	25		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	14		0.65	0.065	mg/Kg	4		6010B	Total/NA
Copper	110		4.9	2.3	mg/Kg	4		6010B	Total/NA
Lead	48		1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	2.3		1.6	0.21	mg/Kg	4		6010B	Total/NA
Nickel	12		1.6	0.17	mg/Kg	4		6010B	Total/NA
Thallium	1.3	J	1.6	0.47	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	100		4.9	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.095		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-G5S-3.5-4 — Lab Sample ID: 720-88218-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.2		1.0	0.17	mg/Kg	4		6010B	Total/NA
Arsenic	5.3	B	2.1	0.18	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-G5S-3.5-4 (Continued) — Lab Sample ID: 720-88218-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	110		1.0	0.15	mg/Kg	4		6010B	Total/NA
Beryllium	0.24		0.21	0.067	mg/Kg	4		6010B	Total/NA
Cadmium	0.76		0.26	0.026	mg/Kg	4		6010B	Total/NA
Chromium	72		1.0	0.11	mg/Kg	4		6010B	Total/NA
Cobalt	9.7		0.41	0.041	mg/Kg	4		6010B	Total/NA
Copper	74		3.1	1.5	mg/Kg	4		6010B	Total/NA
Lead	200		1.0	0.22	mg/Kg	4		6010B	Total/NA
Nickel	51		1.0	0.11	mg/Kg	4		6010B	Total/NA
Thallium	0.61	J	1.0	0.30	mg/Kg	4		6010B	Total/NA
Vanadium	55		1.0	0.14	mg/Kg	4		6010B	Total/NA
Zinc	260		3.1	1.3	mg/Kg	4		6010B	Total/NA
Mercury	0.33		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-F5S-0.5-1 — Lab Sample ID: 720-88218-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	39	J	99	38	ug/Kg	10		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	68000	B	19000	7300	ug/Kg	10		8015B	Total/NA
Antimony	8.8		1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	1.7	J B	3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	33		1.7	0.24	mg/Kg	4		6010B	Total/NA
Beryllium	0.11	J	0.34	0.11	mg/Kg	4		6010B	Total/NA
Chromium	8.1		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.68	0.068	mg/Kg	4		6010B	Total/NA
Copper	150		5.1	2.4	mg/Kg	4		6010B	Total/NA
Lead	270		1.7	0.36	mg/Kg	4		6010B	Total/NA
Nickel	6.9		1.7	0.17	mg/Kg	4		6010B	Total/NA
Thallium	1.3	J	1.7	0.49	mg/Kg	4		6010B	Total/NA
Vanadium	73		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	46		5.1	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.049		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-F5S-3.5-4 — Lab Sample ID: 720-88218-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	58	*	58	44	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	30		9.6	4.8	ug/Kg	1		8270C SIM	Total/NA
Acenaphthylene	9.3		4.8	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	17		4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	41		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	50		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	81		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	24		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	64	B	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	5.4		4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	110		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluorene	7.9		4.8	2.1	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	21		4.8	4.0	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	39		4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	110		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-F5S-3.5-4 (Continued) — Lab Sample ID: 720-88218-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	150		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	72000	B	1900	720	ug/Kg	1		8015B	Total/NA
Antimony	13		2.6	0.42	mg/Kg	10		6010B	Total/NA
Arsenic	18	B	5.1	0.43	mg/Kg	10		6010B	Total/NA
Barium	1400		1.0	0.14	mg/Kg	4		6010B	Total/NA
Beryllium	0.57		0.20	0.066	mg/Kg	4		6010B	Total/NA
Cadmium	2.8		0.64	0.063	mg/Kg	10		6010B	Total/NA
Chromium	43		2.6	0.27	mg/Kg	10		6010B	Total/NA
Cobalt	7.4		1.0	0.10	mg/Kg	10		6010B	Total/NA
Copper	800		7.7	3.6	mg/Kg	10		6010B	Total/NA
Lead	2600		2.6	0.54	mg/Kg	10		6010B	Total/NA
Molybdenum	0.67	J	1.0	0.13	mg/Kg	4		6010B	Total/NA
Nickel	29		2.6	0.26	mg/Kg	10		6010B	Total/NA
Selenium	1.4	J	5.1	0.77	mg/Kg	10		6010B	Total/NA
Silver	6.0		1.3	0.26	mg/Kg	10		6010B	Total/NA
Thallium	1.3	J	2.6	0.74	mg/Kg	10		6010B	Total/NA
Vanadium	45		2.6	0.35	mg/Kg	10		6010B	Total/NA
Zinc	2300		7.7	3.2	mg/Kg	10		6010B	Total/NA
Mercury	0.31		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E5S-0.5-1 — Lab Sample ID: 720-88218-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.4	J B	3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	80		1.8	0.25	mg/Kg	4		6010B	Total/NA
Cadmium	0.14	J	0.44	0.044	mg/Kg	4		6010B	Total/NA
Chromium	10		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	10		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	130		5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	76		1.8	0.37	mg/Kg	4		6010B	Total/NA
Molybdenum	0.48	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	5.3		1.8	0.18	mg/Kg	4		6010B	Total/NA
Thallium	1.0	J	1.8	0.51	mg/Kg	4		6010B	Total/NA
Vanadium	97		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	100		5.3	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.14		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E5S-3.5-4 — Lab Sample ID: 720-88218-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	71		1.6	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	22	B	3.1	0.27	mg/Kg	4		6010B	Total/NA
Barium	150		1.6	0.22	mg/Kg	4		6010B	Total/NA
Cadmium	0.44		0.39	0.039	mg/Kg	4		6010B	Total/NA
Chromium	18		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	9.8		0.63	0.063	mg/Kg	4		6010B	Total/NA
Copper	300		4.7	2.2	mg/Kg	4		6010B	Total/NA
Lead	3300		1.6	0.33	mg/Kg	4		6010B	Total/NA
Molybdenum	0.42	J	1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	13		1.6	0.16	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-E5S-3.5-4 (Continued) — Lab Sample ID: 720-88218-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	0.72	J	0.79	0.16	mg/Kg	4		6010B	Total/NA
Thallium	1.1	J	1.6	0.46	mg/Kg	4		6010B	Total/NA
Vanadium	71		1.6	0.21	mg/Kg	4		6010B	Total/NA
Zinc	350		4.7	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.070		0.015	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-D5S-0.5-1 — Lab Sample ID: 720-88218-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	39	J	45	34	ug/Kg	1		8260B	Total/NA
Trichloroethene	0.57	J	4.5	0.56	ug/Kg	1		8260B	Total/NA
Acenaphthylene	13	J	25	12	ug/Kg	5		8270C SIM	Total/NA
Anthracene	14	J	25	9.8	ug/Kg	5		8270C SIM	Total/NA
Benzo[a]anthracene	38		25	7.4	ug/Kg	5		8270C SIM	Total/NA
Benzo[a]pyrene	60		25	9.3	ug/Kg	5		8270C SIM	Total/NA
Benzo[b]fluoranthene	60		25	10	ug/Kg	5		8270C SIM	Total/NA
Benzo[g,h,i]perylene	29		25	21	ug/Kg	5		8270C SIM	Total/NA
Benzo[k]fluoranthene	33		25	10	ug/Kg	5		8270C SIM	Total/NA
Chrysene	58	B	25	6.9	ug/Kg	5		8270C SIM	Total/NA
Fluoranthene	55		25	6.9	ug/Kg	5		8270C SIM	Total/NA
Phenanthrene	33		25	8.9	ug/Kg	5		8270C SIM	Total/NA
Pyrene	98		25	8.4	ug/Kg	5		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	370000	B	9500	3500	ug/Kg	5		8015B	Total/NA
4,4'-DDE	1.5	J	3.9	0.82	ug/Kg	2		8081A	Total/NA
4,4'-DDT	2.1	J p	3.9	0.80	ug/Kg	2		8081A	Total/NA
trans-Chlordane	0.93	J	3.9	0.89	ug/Kg	2		8081A	Total/NA
Aroclor-1254	60		51	23	ug/Kg	1		8082	Total/NA
Aroclor-1260	37	J	51	22	ug/Kg	1		8082	Total/NA
Antimony	6.9		1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	12	B	3.1	0.26	mg/Kg	4		6010B	Total/NA
Barium	180		1.5	0.22	mg/Kg	4		6010B	Total/NA
Cadmium	5.2		0.38	0.038	mg/Kg	4		6010B	Total/NA
Chromium	78		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	18		0.61	0.061	mg/Kg	4		6010B	Total/NA
Copper	330		4.6	2.2	mg/Kg	4		6010B	Total/NA
Lead	620		1.5	0.32	mg/Kg	4		6010B	Total/NA
Molybdenum	3.9		1.5	0.20	mg/Kg	4		6010B	Total/NA
Nickel	45		1.5	0.16	mg/Kg	4		6010B	Total/NA
Selenium	1.1	J	3.1	0.46	mg/Kg	4		6010B	Total/NA
Silver	0.24	J	0.76	0.15	mg/Kg	4		6010B	Total/NA
Vanadium	77		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	850		4.6	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.19		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-D5S-3.5-4 — Lab Sample ID: 720-88218-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	3.5	J	4.8	2.3	ug/Kg	1		8270C SIM	Total/NA
Anthracene	6.2		4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	35		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-D5S-3.5-4 (Continued) — Lab Sample ID: 720-88218-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	35		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	54		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	14		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	41	B	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	4.2	J	4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	44		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	13		4.8	4.0	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	3.6	J	4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	37		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	74		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	11000		1900	720	ug/Kg	1		8015B	Total/NA
Arsenic	2.9	B	2.7	0.23	mg/Kg	4		6010B	Total/NA
Barium	48		1.3	0.19	mg/Kg	4		6010B	Total/NA
Cadmium	0.49		0.33	0.033	mg/Kg	4		6010B	Total/NA
Chromium	12		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	14		0.53	0.053	mg/Kg	4		6010B	Total/NA
Copper	110		4.0	1.9	mg/Kg	4		6010B	Total/NA
Lead	58		1.3	0.28	mg/Kg	4		6010B	Total/NA
Molybdenum	0.71	J	1.3	0.17	mg/Kg	4		6010B	Total/NA
Nickel	6.7		1.3	0.14	mg/Kg	4		6010B	Total/NA
Selenium	1.1	J	2.7	0.40	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.3	0.18	mg/Kg	4		6010B	Total/NA
Zinc	97		4.0	1.7	mg/Kg	4		6010B	Total/NA
Mercury	0.32		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-C5S-0.5-1 — Lab Sample ID: 720-88218-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.1	B	2.3	0.19	mg/Kg	4		6010B	Total/NA
Barium	53	F1	1.1	0.16	mg/Kg	4		6010B	Total/NA
Beryllium	0.11	J	0.23	0.074	mg/Kg	4		6010B	Total/NA
Cadmium	0.51	F1	0.29	0.028	mg/Kg	4		6010B	Total/NA
Chromium	15	F1	1.1	0.12	mg/Kg	4		6010B	Total/NA
Cobalt	11	F1	0.46	0.046	mg/Kg	4		6010B	Total/NA
Copper	140		3.4	1.6	mg/Kg	4		6010B	Total/NA
Lead	130	F1	1.1	0.24	mg/Kg	4		6010B	Total/NA
Molybdenum	1.1		1.1	0.15	mg/Kg	4		6010B	Total/NA
Nickel	9.4	F1	1.1	0.12	mg/Kg	4		6010B	Total/NA
Selenium	0.72	J	2.3	0.34	mg/Kg	4		6010B	Total/NA
Vanadium	94	F1	1.1	0.16	mg/Kg	4		6010B	Total/NA
Zinc	130	F1	3.4	1.5	mg/Kg	4		6010B	Total/NA
Mercury	0.28		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-C5S-3.5-4 — Lab Sample ID: 720-88218-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	3.1		1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	9.3	B	3.2	0.27	mg/Kg	4		6010B	Total/NA
Barium	210		1.6	0.23	mg/Kg	4		6010B	Total/NA
Beryllium	0.32		0.32	0.10	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-C5S-3.5-4 (Continued) — Lab Sample ID: 720-88218-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.68		0.40	0.040	mg/Kg	4		6010B	Total/NA
Chromium	44		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	10		0.64	0.064	mg/Kg	4		6010B	Total/NA
Copper	260		4.8	2.3	mg/Kg	4		6010B	Total/NA
Lead	410		1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	1.2	J	1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	41		1.6	0.16	mg/Kg	4		6010B	Total/NA
Selenium	0.72	J	3.2	0.48	mg/Kg	4		6010B	Total/NA
Vanadium	46		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	530		4.8	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.47		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-C5S-9-9.5 — Lab Sample ID: 720-88218-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	87		3.5	0.47	ug/Kg	1		8260B	Total/NA
trans-1,2-Dichloroethene	1.7	J	3.5	0.52	ug/Kg	1		8260B	Total/NA
Trichloroethene	120		3.5	0.44	ug/Kg	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	150	J	170	70	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	35		9.6	4.8	ug/Kg	1		8270C SIM	Total/NA
Anthracene	7.3		4.8	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	14		4.8	1.4	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	8.9		4.8	1.8	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	18		4.8	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	6.2		4.8	4.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	17	B	4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	12		4.8	1.3	ug/Kg	1		8270C SIM	Total/NA
Fluorene	19		4.8	2.1	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	4.7	J	4.8	4.0	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	20		4.8	3.4	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	70		4.8	1.7	ug/Kg	1		8270C SIM	Total/NA
Pyrene	20		4.8	1.6	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	14000		1900	710	ug/Kg	1		8015B	Total/NA
Arsenic	10	B	4.0	0.34	mg/Kg	4		6010B	Total/NA
Barium	370		2.0	0.28	mg/Kg	4		6010B	Total/NA
Beryllium	0.58		0.40	0.13	mg/Kg	4		6010B	Total/NA
Cadmium	0.12	J	0.50	0.050	mg/Kg	4		6010B	Total/NA
Chromium	48		2.0	0.21	mg/Kg	4		6010B	Total/NA
Cobalt	18		0.80	0.080	mg/Kg	4		6010B	Total/NA
Copper	39		6.0	2.8	mg/Kg	4		6010B	Total/NA
Lead	15		2.0	0.42	mg/Kg	4		6010B	Total/NA
Molybdenum	0.85	J	2.0	0.26	mg/Kg	4		6010B	Total/NA
Nickel	51		2.0	0.20	mg/Kg	4		6010B	Total/NA
Selenium	2.5	J	4.0	0.60	mg/Kg	4		6010B	Total/NA
Vanadium	70		2.0	0.27	mg/Kg	4		6010B	Total/NA
Zinc	85		6.0	2.5	mg/Kg	4		6010B	Total/NA
Mercury	0.28		0.015	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B5S-0.5-1 — Lab Sample ID: 720-88218-19

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-B5S-0.5-1 (Continued) — Lab Sample ID: 720-88218-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	35	J	40	30	ug/Kg	1		8260B	Total/NA
1,2,3-Trichlorobenzene	0.68	J	4.0	0.59	ug/Kg	1		8260B	Total/NA
Trichloroethene	1.1	J	4.0	0.51	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	13	J	19	9.6	ug/Kg	2		8270C SIM	Total/NA
Acenaphthylene	14		9.6	4.6	ug/Kg	2		8270C SIM	Total/NA
Anthracene	17		9.6	3.8	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	35		9.6	2.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	51		9.6	3.6	ug/Kg	2		8270C SIM	Total/NA
Benzo[b]fluoranthene	98		9.6	4.0	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	31		9.6	8.2	ug/Kg	2		8270C SIM	Total/NA
Chrysene	50		9.6	2.7	ug/Kg	2		8270C SIM	Total/NA
Dibenz(a,h)anthracene	9.2	J	9.6	6.7	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	53	B	9.6	2.7	ug/Kg	2		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	22		9.6	8.1	ug/Kg	2		8270C SIM	Total/NA
Naphthalene	13		9.6	6.7	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	41		9.6	3.5	ug/Kg	2		8270C SIM	Total/NA
Pyrene	94	B	9.6	3.3	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	130000		3800	1400	ug/Kg	2		8015B	Total/NA
Chlordane (technical)	14	J	38	3.1	ug/Kg	1		8081A	Total/NA
cis-Chlordane	0.52	J p	1.9	0.38	ug/Kg	1		8081A	Total/NA
Antimony	1.5		1.0	0.17	mg/Kg	4		6010B	Total/NA
Arsenic	16	B	2.0	0.17	mg/Kg	4		6010B	Total/NA
Barium	82		1.0	0.14	mg/Kg	4		6010B	Total/NA
Beryllium	0.18	J	0.20	0.066	mg/Kg	4		6010B	Total/NA
Cadmium	0.71		0.25	0.025	mg/Kg	4		6010B	Total/NA
Chromium	34		1.0	0.11	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.41	0.041	mg/Kg	4		6010B	Total/NA
Copper	190		3.0	1.4	mg/Kg	4		6010B	Total/NA
Lead	95		1.0	0.21	mg/Kg	4		6010B	Total/NA
Molybdenum	2.4		1.0	0.13	mg/Kg	4		6010B	Total/NA
Nickel	39		1.0	0.10	mg/Kg	4		6010B	Total/NA
Selenium	1.1	J	2.0	0.30	mg/Kg	4		6010B	Total/NA
Vanadium	88		1.0	0.14	mg/Kg	4		6010B	Total/NA
Zinc	190		3.0	1.3	mg/Kg	4		6010B	Total/NA
Mercury	0.41		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B5S-3.5-4 — Lab Sample ID: 720-88218-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	40		38	29	ug/Kg	1		8260B	Total/NA
cis-1,2-Dichloroethene	2.3	J	3.8	0.51	ug/Kg	1		8260B	Total/NA
Tetrachloroethene	9.1		3.8	0.50	ug/Kg	1		8260B	Total/NA
Trichloroethene	76		3.8	0.47	ug/Kg	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	76	J	190	75	ug/Kg	1		8260B	Total/NA
2-Methylnaphthalene	70		20	9.8	ug/Kg	2		8270C SIM	Total/NA
Acenaphthene	66		9.8	5.5	ug/Kg	2		8270C SIM	Total/NA
Acenaphthylene	230		9.8	4.7	ug/Kg	2		8270C SIM	Total/NA
Anthracene	220		9.8	3.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]anthracene	690		9.8	2.9	ug/Kg	2		8270C SIM	Total/NA
Benzo[a]pyrene	770		9.8	3.7	ug/Kg	2		8270C SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-B5S-3.5-4 (Continued) — Lab Sample ID: 720-88218-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	960		9.8	4.1	ug/Kg	2		8270C SIM	Total/NA
Benzo[g,h,i]perylene	210		9.8	8.4	ug/Kg	2		8270C SIM	Total/NA
Benzo[k]fluoranthene	410		9.8	4.1	ug/Kg	2		8270C SIM	Total/NA
Chrysene	770		9.8	2.7	ug/Kg	2		8270C SIM	Total/NA
Dibenz(a,h)anthracene	91		9.8	6.8	ug/Kg	2		8270C SIM	Total/NA
Fluoranthene	850		9.8	2.7	ug/Kg	2		8270C SIM	Total/NA
Fluorene	88		9.8	4.3	ug/Kg	2		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	200		9.8	8.2	ug/Kg	2		8270C SIM	Total/NA
Naphthalene	69		9.8	6.8	ug/Kg	2		8270C SIM	Total/NA
Phenanthrene	1000		9.8	3.5	ug/Kg	2		8270C SIM	Total/NA
Pyrene	1500		9.8	3.3	ug/Kg	2		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	180000		2000	750	ug/Kg	1		8015B	Total/NA
Arsenic	4.1	B	2.6	0.23	mg/Kg	4		6010B	Total/NA
Barium	160		1.3	0.19	mg/Kg	4		6010B	Total/NA
Beryllium	0.24	J	0.26	0.086	mg/Kg	4		6010B	Total/NA
Cadmium	0.27	J	0.33	0.033	mg/Kg	4		6010B	Total/NA
Chromium	210		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	28		0.53	0.053	mg/Kg	4		6010B	Total/NA
Copper	230		4.0	1.9	mg/Kg	4		6010B	Total/NA
Lead	170		1.3	0.28	mg/Kg	4		6010B	Total/NA
Molybdenum	0.81	J	1.3	0.17	mg/Kg	4		6010B	Total/NA
Nickel	230		1.3	0.14	mg/Kg	4		6010B	Total/NA
Selenium	1.2	J	2.6	0.40	mg/Kg	4		6010B	Total/NA
Silver	0.25	J	0.66	0.13	mg/Kg	4		6010B	Total/NA
Vanadium	92		1.3	0.18	mg/Kg	4		6010B	Total/NA
Zinc	280		4.0	1.7	mg/Kg	4		6010B	Total/NA
Mercury	0.12		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E5S-9.0-9.5 — Lab Sample ID: 720-88218-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	64		37	28	ug/Kg	1		8260B	Total/NA
cis-1,2-Dichloroethene	5.7		3.7	0.50	ug/Kg	1		8260B	Total/NA
Vinyl chloride	0.85	J	3.7	0.54	ug/Kg	1		8260B	Total/NA
Acenaphthylene	6.2		5.0	2.4	ug/Kg	1		8270C SIM	Total/NA
Anthracene	3.5	J	5.0	2.0	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]anthracene	17		5.0	1.5	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	26		5.0	1.9	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	35		5.0	2.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	8.8		5.0	4.3	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	6.8		5.0	2.1	ug/Kg	1		8270C SIM	Total/NA
Chrysene	20		5.0	1.4	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	25		5.0	1.4	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	8.4		5.0	4.2	ug/Kg	1		8270C SIM	Total/NA
Naphthalene	4.6	J	5.0	3.5	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	15		5.0	1.8	ug/Kg	1		8270C SIM	Total/NA
Pyrene	46		5.0	1.7	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	1800	J	2000	730	ug/Kg	1		8015B	Total/NA
Antimony	1.8		1.1	0.18	mg/Kg	4		6010B	Total/NA
Arsenic	3.2		2.2	0.18	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-E5S-9.0-9.5 (Continued)

Lab Sample ID: 720-88218-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	73		1.1	0.15	mg/Kg	4		6010B	Total/NA
Beryllium	0.34		0.22	0.070	mg/Kg	4		6010B	Total/NA
Chromium	60		1.1	0.11	mg/Kg	4		6010B	Total/NA
Cobalt	9.1		0.43	0.043	mg/Kg	4		6010B	Total/NA
Copper	20		3.2	1.5	mg/Kg	4		6010B	Total/NA
Lead	30		1.1	0.23	mg/Kg	4		6010B	Total/NA
Nickel	40		1.1	0.11	mg/Kg	4		6010B	Total/NA
Selenium	0.84	J	2.2	0.32	mg/Kg	4		6010B	Total/NA
Silver	0.16	J	0.54	0.11	mg/Kg	4		6010B	Total/NA
Thallium	0.43	J	1.1	0.31	mg/Kg	4		6010B	Total/NA
Vanadium	60		1.1	0.15	mg/Kg	4		6010B	Total/NA
Zinc	41		3.2	1.4	mg/Kg	4		6010B	Total/NA
Mercury	0.057		0.014	0.0021	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-J5S-0.5-1
Date Collected: 08/22/18 14:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-1
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.5	0.85	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Acetone	**56**		35	27	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Benzene	ND		3.5	0.46	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Dichlorobromomethane	ND		3.5	0.51	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Bromobenzene	ND		3.5	0.56	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Chlorobromomethane	ND		14	0.51	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Bromoform	ND		3.5	1.4	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Bromomethane	ND		7.1	0.56	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
2-Butanone (MEK)	ND		35	15	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
n-Butylbenzene	ND		3.5	0.71	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
sec-Butylbenzene	ND		3.5	0.51	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
tert-Butylbenzene	ND		3.5	0.52	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Carbon disulfide	ND		3.5	1.4	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Carbon tetrachloride	ND		3.5	0.44	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Chlorobenzene	ND		3.5	0.49	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Chloroethane	ND		7.1	0.40	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Chloroform	ND		3.5	0.47	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Chloromethane	ND		7.1	0.56	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
2-Chlorotoluene	ND		3.5	0.46	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
4-Chlorotoluene	ND		3.5	0.48	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Chlorodibromomethane	ND		3.5	0.50	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
1,2-Dichlorobenzene	ND		3.5	0.48	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
1,3-Dichlorobenzene	ND		3.5	0.51	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
1,4-Dichlorobenzene	ND		3.5	0.50	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
1,3-Dichloropropane	ND		3.5	0.52	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
1,1-Dichloropropene	ND		3.5	0.49	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
1,2-Dibromo-3-Chloropropane	ND		7.1	1.2	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Ethylene Dibromide	ND		3.5	1.0	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Dibromomethane	ND		7.1	0.61	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Dichlorodifluoromethane	ND		7.1	0.56	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
1,1-Dichloroethane	ND		3.5	0.48	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
1,2-Dichloroethane	ND		3.5	0.54	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
1,1-Dichloroethene	ND		3.5	0.44	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
cis-1,2-Dichloroethene	ND		3.5	0.48	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
trans-1,2-Dichloroethene	ND		3.5	0.53	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
1,2-Dichloropropane	ND		3.5	0.44	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
cis-1,3-Dichloropropene	ND		3.5	0.49	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
trans-1,3-Dichloropropene	ND		3.5	0.47	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Ethylbenzene	ND		3.5	0.53	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Hexachlorobutadiene	ND		3.5	0.64	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
2-Hexanone	ND		35	7.1	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Isopropylbenzene	ND		3.5	0.48	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
4-Isopropyltoluene	ND		3.5	1.8	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Methylene Chloride	ND		7.1	4.0	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
4-Methyl-2-pentanone (MIBK)	ND		35	7.1	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Naphthalene	ND		7.1	1.1	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
N-Propylbenzene	ND		3.5	0.47	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Styrene	ND		3.5	0.44	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
1,1,1,2-Tetrachloroethane	ND		3.5	0.54	ug/Kg		08/24/18 02:25	08/28/18 14:47	1

Client Sample ID: DG-J5S-0.5-1

Date Collected: 08/22/18 14:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-1

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.5	0.53	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Tetrachloroethene	ND		3.5	0.47	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Toluene	ND		3.5	0.50	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
1,2,3-Trichlorobenzene	ND		3.5	0.52	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
1,2,4-Trichlorobenzene	ND		3.5	0.50	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
1,1,1-Trichloroethane	ND		3.5	0.43	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
1,1,2-Trichloroethane	ND		3.5	0.49	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Trichloroethene	ND		3.5	0.44	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Trichlorofluoromethane	ND		3.5	0.40	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
1,2,3-Trichloropropane	ND		3.5	0.54	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.5	1.5	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
1,2,4-Trimethylbenzene	ND		3.5	1.2	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
1,3,5-Trimethylbenzene	ND		3.5	0.46	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Vinyl acetate	ND		14	3.5	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Vinyl chloride	ND		3.5	0.52	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Xylenes, Total	ND		3.5	0.86	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
2,2-Dichloropropane	ND		3.5	1.4	ug/Kg		08/24/18 02:25	08/28/18 14:47	1
Gasoline Range Organics (GRO) -C4-C12	ND		180	71	ug/Kg		08/24/18 02:25	08/28/18 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*45 - 131*	*08/24/18 02:25*	*08/28/18 14:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*60 - 140*	*08/24/18 02:25*	*08/28/18 14:47*	*1*
Toluene-d8 (Surr)	*92*		*58 - 140*	*08/24/18 02:25*	*08/28/18 14:47*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**38**	**J**	49	25	ug/Kg		08/24/18 15:31	08/30/18 01:03	5
Acenaphthene	**16**	**J**	25	14	ug/Kg		08/24/18 15:31	08/30/18 01:03	5
Acenaphthylene	**29**		25	12	ug/Kg		08/24/18 15:31	08/30/18 01:03	5
Anthracene	**64**		25	9.8	ug/Kg		08/24/18 15:31	08/30/18 01:03	5
Benzo[a]anthracene	**350**		25	7.4	ug/Kg		08/24/18 15:31	08/30/18 01:03	5
Benzo[a]pyrene	**570**		25	9.3	ug/Kg		08/24/18 15:31	08/30/18 01:03	5
Benzo[b]fluoranthene	**930**		25	10	ug/Kg		08/24/18 15:31	08/30/18 01:03	5
Benzo[g,h,i]perylene	**1600**		25	21	ug/Kg		08/24/18 15:31	08/30/18 01:03	5
Benzo[k]fluoranthene	ND		25	10	ug/Kg		08/24/18 15:31	08/30/18 01:03	5
Chrysene	**450**	**B**	25	6.9	ug/Kg		08/24/18 15:31	08/30/18 01:03	5
Dibenz(a,h)anthracene	**66**		25	17	ug/Kg		08/24/18 15:31	08/30/18 01:03	5
Fluoranthene	**590**		25	6.9	ug/Kg		08/24/18 15:31	08/30/18 01:03	5
Fluorene	**15**	**J**	25	11	ug/Kg		08/24/18 15:31	08/30/18 01:03	5
Indeno[1,2,3-cd]pyrene	**310**		25	21	ug/Kg		08/24/18 15:31	08/30/18 01:03	5
Naphthalene	**26**		25	17	ug/Kg		08/24/18 15:31	08/30/18 01:03	5
Phenanthrene	**280**		25	8.8	ug/Kg		08/24/18 15:31	08/30/18 01:03	5
Pyrene	**990**		25	8.3	ug/Kg		08/24/18 15:31	08/30/18 01:03	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*33 - 120*	*08/24/18 15:31*	*08/30/18 01:03*	*5*
Terphenyl-d14	*100*		*35 - 146*	*08/24/18 15:31*	*08/30/18 01:03*	*5*

Client Sample ID: DG-J5S-0.5-1

Date Collected: 08/22/18 14:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-1

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**200000**	**B**	19000	7200	ug/Kg		08/27/18 08:59	08/29/18 02:00	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*X D*	*40 - 130*	*08/27/18 08:59*	*08/29/18 02:00*	*10*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.9	1.2	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
4,4'-DDE	ND		3.9	0.82	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
4,4'-DDT	ND		3.9	0.80	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
Aldrin	ND		3.9	0.97	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
alpha-BHC	ND		3.9	1.1	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
beta-BHC	ND		3.9	0.70	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
Chlordane (technical)	ND		78	6.2	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
cis-Chlordane	ND		3.9	0.78	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
delta-BHC	ND		3.9	0.86	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
Dieldrin	ND		3.9	1.2	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
Endosulfan I	ND		3.9	0.62	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
Endosulfan II	ND		3.9	0.96	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
Endosulfan sulfate	ND		3.9	0.74	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
Endrin	ND		3.9	0.90	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
Endrin aldehyde	ND		3.9	1.2	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
Endrin ketone	ND		3.9	0.64	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
gamma-BHC (Lindane)	ND		3.9	1.2	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
Heptachlor	ND		3.9	0.90	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
Heptachlor epoxide	ND		3.9	0.68	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
Methoxychlor	ND		3.9	1.3	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
Toxaphene	ND		78	13	ug/Kg		08/24/18 11:26	08/29/18 10:01	2
trans-Chlordane	ND		3.9	0.90	ug/Kg		08/24/18 11:26	08/29/18 10:01	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*155*	*p X*	*21 - 136*	*08/24/18 11:26*	*08/29/18 10:01*	*2*
Tetrachloro-m-xylene	*77*		*21 - 145*	*08/24/18 11:26*	*08/29/18 10:01*	*2*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/27/18 11:05	08/28/18 22:00	1
Aroclor-1221	ND		51	24	ug/Kg		08/27/18 11:05	08/28/18 22:00	1
Aroclor-1232	ND		51	23	ug/Kg		08/27/18 11:05	08/28/18 22:00	1
Aroclor-1242	ND		51	19	ug/Kg		08/27/18 11:05	08/28/18 22:00	1
Aroclor-1248	ND		51	24	ug/Kg		08/27/18 11:05	08/28/18 22:00	1
Aroclor-1254	**590**		51	23	ug/Kg		08/27/18 11:05	08/28/18 22:00	1
Aroclor-1260	**420**		51	22	ug/Kg		08/27/18 11:05	08/28/18 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*101*		*14 - 128*	*08/27/18 11:05*	*08/28/18 22:00*	*1*
DCB Decachlorobiphenyl	*161*	*X*	*10 - 132*	*08/27/18 11:05*	*08/28/18 22:00*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**8.1**		1.4	0.23	mg/Kg		08/25/18 14:28	08/27/18 19:09	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-J5S-0.5-1
Date Collected: 08/22/18 14:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-1
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.4	B	2.8	0.23	mg/Kg		08/25/18 14:28	08/27/18 19:09	4
Barium	640		1.4	0.20	mg/Kg		08/25/18 14:28	08/27/18 19:09	4
Beryllium	ND		0.28	0.090	mg/Kg		08/25/18 14:28	08/27/18 19:09	4
Cadmium	4.8		0.34	0.034	mg/Kg		08/25/18 14:28	08/27/18 19:09	4
Chromium	45		1.4	0.15	mg/Kg		08/25/18 14:28	08/27/18 19:09	4
Cobalt	15		0.55	0.055	mg/Kg		08/25/18 14:28	08/27/18 19:09	4
Copper	470		4.1	2.0	mg/Kg		08/25/18 14:28	08/27/18 19:09	4
Lead	2000		1.4	0.29	mg/Kg		08/25/18 14:28	08/27/18 19:09	4
Molybdenum	13		1.4	0.18	mg/Kg		08/25/18 14:28	08/27/18 19:09	4
Nickel	33		1.4	0.14	mg/Kg		08/25/18 14:28	08/27/18 19:09	4
Selenium	ND		2.8	0.41	mg/Kg		08/25/18 14:28	08/27/18 19:09	4
Silver	0.67	J	0.69	0.14	mg/Kg		08/25/18 14:28	08/27/18 19:09	4
Thallium	1.5		1.4	0.40	mg/Kg		08/25/18 14:28	08/27/18 19:09	4
Vanadium	97		1.4	0.19	mg/Kg		08/25/18 14:28	08/27/18 19:09	4
Zinc	1500		4.1	1.8	mg/Kg		08/25/18 14:28	08/27/18 19:09	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.23		0.017	0.0025	mg/Kg		08/27/18 09:58	08/30/18 17:14	1

Client Sample ID: DG-J5S-3.5-4
Date Collected: 08/22/18 14:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-2
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.9	0.94	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Acetone	ND		39	30	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Benzene	ND		3.9	0.51	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Dichlorobromomethane	ND		3.9	0.56	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Bromobenzene	ND		3.9	0.62	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Chlorobromomethane	ND		16	0.56	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Bromoform	ND		3.9	1.6	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Bromomethane	ND		7.8	0.62	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
2-Butanone (MEK)	ND		39	16	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
n-Butylbenzene	ND		3.9	0.78	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
sec-Butylbenzene	ND		3.9	0.56	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
tert-Butylbenzene	ND		3.9	0.57	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Carbon disulfide	ND		3.9	1.6	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Carbon tetrachloride	ND		3.9	0.48	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Chlorobenzene	ND		3.9	0.54	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Chloroethane	ND		7.8	0.44	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Chloroform	ND		3.9	0.51	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Chloromethane	ND		7.8	0.62	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
2-Chlorotoluene	ND		3.9	0.51	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
4-Chlorotoluene	ND		3.9	0.53	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Chlorodibromomethane	ND		3.9	0.55	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
1,2-Dichlorobenzene	ND		3.9	0.53	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
1,3-Dichlorobenzene	ND		3.9	0.56	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
1,4-Dichlorobenzene	ND		3.9	0.55	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
1,3-Dichloropropane	ND		3.9	0.57	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
1,1-Dichloropropene	ND		3.9	0.54	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
1,2-Dibromo-3-Chloropropane	ND		7.8	1.3	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Ethylene Dibromide	ND		3.9	1.1	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Dibromomethane	ND		7.8	0.67	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Dichlorodifluoromethane	ND		7.8	0.62	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
1,1-Dichloroethane	ND		3.9	0.53	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
1,2-Dichloroethane	ND		3.9	0.59	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
1,1-Dichloroethene	ND		3.9	0.48	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
cis-1,2-Dichloroethene	ND		3.9	0.53	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
trans-1,2-Dichloroethene	ND		3.9	0.58	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
1,2-Dichloropropane	ND		3.9	0.49	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
cis-1,3-Dichloropropene	ND		3.9	0.54	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
trans-1,3-Dichloropropene	ND		3.9	0.52	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Ethylbenzene	ND		3.9	0.58	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Hexachlorobutadiene	ND		3.9	0.70	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
2-Hexanone	ND		39	7.8	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Isopropylbenzene	ND		3.9	0.53	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
4-Isopropyltoluene	ND		3.9	1.9	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Methylene Chloride	ND		7.8	4.4	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
4-Methyl-2-pentanone (MIBK)	ND		39	7.8	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Naphthalene	ND		7.8	1.2	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
N-Propylbenzene	ND		3.9	0.51	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Styrene	ND		3.9	0.49	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
1,1,1,2-Tetrachloroethane	ND		3.9	0.59	ug/Kg		08/24/18 02:25	08/28/18 15:19	1

Client Sample ID: DG-J5S-3.5-4

Date Collected: 08/22/18 14:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-2

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.9	0.58	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Tetrachloroethene	ND		3.9	0.52	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Toluene	ND		3.9	0.55	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
1,2,3-Trichlorobenzene	ND		3.9	0.58	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
1,2,4-Trichlorobenzene	ND		3.9	0.55	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
1,1,1-Trichloroethane	ND		3.9	0.48	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
1,1,2-Trichloroethane	ND		3.9	0.55	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Trichloroethene	ND		3.9	0.49	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Trichlorofluoromethane	ND		3.9	0.44	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
1,2,3-Trichloropropane	ND		3.9	0.60	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.9	1.6	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
1,2,4-Trimethylbenzene	ND		3.9	1.3	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
1,3,5-Trimethylbenzene	ND		3.9	0.51	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Vinyl acetate	ND		16	3.9	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Vinyl chloride	ND		3.9	0.57	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Xylenes, Total	ND		3.9	0.95	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
2,2-Dichloropropane	ND		3.9	1.6	ug/Kg		08/24/18 02:25	08/28/18 15:19	1
Gasoline Range Organics (GRO) -C4-C12	ND		190	78	ug/Kg		08/24/18 02:25	08/28/18 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*45 - 131*	*08/24/18 02:25*	*08/28/18 15:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*60 - 140*	*08/24/18 02:25*	*08/28/18 15:19*	*1*
Toluene-d8 (Surr)	*92*		*58 - 140*	*08/24/18 02:25*	*08/28/18 15:19*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**31**	**J**	49	25	ug/Kg		08/24/18 15:31	08/30/18 16:18	5
Acenaphthene	ND		25	14	ug/Kg		08/24/18 15:31	08/30/18 16:18	5
Acenaphthylene	**57**		25	12	ug/Kg		08/24/18 15:31	08/30/18 16:18	5
Anthracene	**73**		25	9.9	ug/Kg		08/24/18 15:31	08/30/18 16:18	5
Benzo[a]anthracene	**220**		25	7.4	ug/Kg		08/24/18 15:31	08/30/18 16:18	5
Benzo[a]pyrene	**330**		25	9.4	ug/Kg		08/24/18 15:31	08/30/18 16:18	5
Benzo[b]fluoranthene	**410**		25	10	ug/Kg		08/24/18 15:31	08/30/18 16:18	5
Benzo[g,h,i]perylene	**190**		25	21	ug/Kg		08/24/18 15:31	08/30/18 16:18	5
Benzo[k]fluoranthene	**170**		25	10	ug/Kg		08/24/18 15:31	08/30/18 16:18	5
Chrysene	**310**	**B**	25	6.9	ug/Kg		08/24/18 15:31	08/30/18 16:18	5
Dibenz(a,h)anthracene	**42**		25	17	ug/Kg		08/24/18 15:31	08/30/18 16:18	5
Fluoranthene	**420**		25	6.9	ug/Kg		08/24/18 15:31	08/30/18 16:18	5
Fluorene	**11**	**J**	25	11	ug/Kg		08/24/18 15:31	08/30/18 16:18	5
Indeno[1,2,3-cd]pyrene	**150**		25	21	ug/Kg		08/24/18 15:31	08/30/18 16:18	5
Naphthalene	**46**		25	17	ug/Kg		08/24/18 15:31	08/30/18 16:18	5
Phenanthrene	**260**		25	8.9	ug/Kg		08/24/18 15:31	08/30/18 16:18	5
Pyrene	**580**		25	8.4	ug/Kg		08/24/18 15:31	08/30/18 16:18	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*33 - 120*	*08/24/18 15:31*	*08/30/18 16:18*	*5*
Terphenyl-d14	*88*		*35 - 146*	*08/24/18 15:31*	*08/30/18 16:18*	*5*

Client Sample ID: DG-J5S-3.5-4

Date Collected: 08/22/18 14:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-2

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	190000	B	5800	2200	ug/Kg		08/27/18 08:59	08/29/18 01:11	3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*81*		*40 - 130*	*08/27/18 08:59*	*08/29/18 01:11*	*3*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.59	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
4,4'-DDE	ND		2.0	0.41	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
4,4'-DDT	ND		2.0	0.40	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
Aldrin	ND		2.0	0.49	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
beta-BHC	ND		2.0	0.35	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
Chlordane (technical)	ND		39	3.1	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
cis-Chlordane	ND		2.0	0.39	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
Endosulfan I	ND		2.0	0.31	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
Endosulfan sulfate	ND		2.0	0.37	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
Endrin	ND		2.0	0.45	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
Endrin aldehyde	ND		2.0	0.61	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
Endrin ketone	ND		2.0	0.32	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
gamma-BHC (Lindane)	ND		2.0	0.61	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
Heptachlor epoxide	ND		2.0	0.34	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
Methoxychlor	ND		2.0	0.66	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
Toxaphene	ND		39	6.6	ug/Kg		08/24/18 11:26	08/29/18 11:47	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		08/24/18 11:26	08/29/18 11:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*150*	*X*	*21 - 136*	*08/24/18 11:26*	*08/29/18 11:47*	*1*
Tetrachloro-m-xylene	*88*		*21 - 145*	*08/24/18 11:26*	*08/29/18 11:47*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	23	ug/Kg		08/27/18 11:05	08/28/18 22:22	1
Aroclor-1221	ND		51	25	ug/Kg		08/27/18 11:05	08/28/18 22:22	1
Aroclor-1232	ND		51	24	ug/Kg		08/27/18 11:05	08/28/18 22:22	1
Aroclor-1242	ND		51	20	ug/Kg		08/27/18 11:05	08/28/18 22:22	1
Aroclor-1248	ND		51	25	ug/Kg		08/27/18 11:05	08/28/18 22:22	1
Aroclor-1254	ND		51	24	ug/Kg		08/27/18 11:05	08/28/18 22:22	1
Aroclor-1260	38	J	51	23	ug/Kg		08/27/18 11:05	08/28/18 22:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*96*		*14 - 128*	*08/27/18 11:05*	*08/28/18 22:22*	*1*
DCB Decachlorobiphenyl	*152*	*X*	*10 - 132*	*08/27/18 11:05*	*08/28/18 22:22*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	15		1.5	0.26	mg/Kg		08/25/18 14:28	08/27/18 19:13	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-J5S-3.5-4
Date Collected: 08/22/18 14:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-2
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	65	B	3.1	0.26	mg/Kg		08/25/18 14:28	08/27/18 19:13	4
Barium	390		1.5	0.22	mg/Kg		08/25/18 14:28	08/27/18 19:13	4
Beryllium	0.24	J	0.31	0.10	mg/Kg		08/25/18 14:28	08/27/18 19:13	4
Cadmium	2.3		0.38	0.038	mg/Kg		08/25/18 14:28	08/27/18 19:13	4
Chromium	57		1.5	0.16	mg/Kg		08/25/18 14:28	08/27/18 19:13	4
Cobalt	12		0.62	0.062	mg/Kg		08/25/18 14:28	08/27/18 19:13	4
Copper	360		4.6	2.2	mg/Kg		08/25/18 14:28	08/27/18 19:13	4
Lead	1100		1.5	0.32	mg/Kg		08/25/18 14:28	08/27/18 19:13	4
Molybdenum	1.4	J	1.5	0.20	mg/Kg		08/25/18 14:28	08/27/18 19:13	4
Nickel	54		1.5	0.16	mg/Kg		08/25/18 14:28	08/27/18 19:13	4
Selenium	ND		3.1	0.46	mg/Kg		08/25/18 14:28	08/27/18 19:13	4
Silver	1.1		0.77	0.16	mg/Kg		08/25/18 14:28	08/27/18 19:13	4
Thallium	1.0	J	1.5	0.45	mg/Kg		08/25/18 14:28	08/27/18 19:13	4
Vanadium	48		1.5	0.21	mg/Kg		08/25/18 14:28	08/27/18 19:13	4
Zinc	770		4.6	2.0	mg/Kg		08/25/18 14:28	08/27/18 19:13	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.36		0.017	0.0025	mg/Kg		08/27/18 09:58	08/30/18 17:16	1

Client Sample ID: DG-J5S-7-7.5

Date Collected: 08/22/18 14:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-3

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.4	0.82	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Acetone	ND		34	26	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Benzene	ND		3.4	0.45	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Dichlorobromomethane	ND		3.4	0.49	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Bromobenzene	ND		3.4	0.54	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Chlorobromomethane	ND		14	0.49	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Bromoform	ND		3.4	1.4	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Bromomethane	ND		6.9	0.54	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
2-Butanone (MEK)	ND		34	14	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
n-Butylbenzene	ND		3.4	0.69	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
sec-Butylbenzene	ND		3.4	0.49	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
tert-Butylbenzene	ND		3.4	0.50	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Carbon disulfide	ND	*	3.4	1.4	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Carbon tetrachloride	ND		3.4	0.43	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Chlorobenzene	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Chloroethane	ND		6.9	0.38	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Chloroform	ND		3.4	0.45	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Chloromethane	ND		6.9	0.54	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
2-Chlorotoluene	ND		3.4	0.45	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
4-Chlorotoluene	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Chlorodibromomethane	ND		3.4	0.49	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
1,2-Dichlorobenzene	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
1,3-Dichlorobenzene	ND		3.4	0.49	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
1,4-Dichlorobenzene	ND		3.4	0.49	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
1,3-Dichloropropane	ND		3.4	0.50	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
1,1-Dichloropropene	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
1,2-Dibromo-3-Chloropropane	ND		6.9	1.2	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Ethylene Dibromide	ND		3.4	0.98	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Dibromomethane	ND		6.9	0.59	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Dichlorodifluoromethane	ND		6.9	0.54	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
1,1-Dichloroethane	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
1,2-Dichloroethane	ND		3.4	0.52	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
1,1-Dichloroethene	ND	*	3.4	0.43	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
cis-1,2-Dichloroethene	**5.4**		3.4	0.47	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
trans-1,2-Dichloroethene	ND		3.4	0.51	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
1,2-Dichloropropane	ND		3.4	0.43	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
cis-1,3-Dichloropropene	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
trans-1,3-Dichloropropene	ND		3.4	0.46	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Ethylbenzene	ND		3.4	0.51	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Hexachlorobutadiene	ND		3.4	0.62	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
2-Hexanone	ND		34	6.9	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Isopropylbenzene	ND		3.4	0.47	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
4-Isopropyltoluene	ND		3.4	1.7	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Methylene Chloride	ND		6.9	3.8	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
4-Methyl-2-pentanone (MIBK)	ND		34	6.9	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Naphthalene	ND		6.9	1.0	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
N-Propylbenzene	ND		3.4	0.45	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Styrene	ND		3.4	0.43	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
1,1,1,2-Tetrachloroethane	ND		3.4	0.52	ug/Kg		08/24/18 02:25	08/29/18 00:52	1

Client Sample ID: DG-J5S-7-7.5
Date Collected: 08/22/18 14:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-3
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.4	0.51	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Tetrachloroethene	ND		3.4	0.46	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Toluene	ND		3.4	0.49	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
1,2,3-Trichlorobenzene	ND		3.4	0.51	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
1,2,4-Trichlorobenzene	ND		3.4	0.49	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
1,1,1-Trichloroethane	ND		3.4	0.42	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
1,1,2-Trichloroethane	ND		3.4	0.48	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Trichloroethene	ND		3.4	0.43	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Trichlorofluoromethane	ND		3.4	0.38	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
1,2,3-Trichloropropane	ND		3.4	0.53	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.4	1.4	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
1,2,4-Trimethylbenzene	ND		3.4	1.1	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
1,3,5-Trimethylbenzene	ND		3.4	0.45	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Vinyl acetate	ND		14	3.4	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Vinyl chloride	ND		3.4	0.50	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Xylenes, Total	ND		3.4	0.84	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
2,2-Dichloropropane	ND		3.4	1.4	ug/Kg		08/24/18 02:25	08/29/18 00:52	1
Gasoline Range Organics (GRO) -C4-C12	ND		170	69	ug/Kg		08/24/18 02:25	08/29/18 00:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*45 - 131*	*08/24/18 02:25*	*08/29/18 00:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*60 - 140*	*08/24/18 02:25*	*08/29/18 00:52*	*1*
Toluene-d8 (Surr)	*96*		*58 - 140*	*08/24/18 02:25*	*08/29/18 00:52*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**7.0**	**J**	9.6	4.8	ug/Kg		08/24/18 15:31	08/29/18 22:18	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/24/18 15:31	08/29/18 22:18	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		08/24/18 15:31	08/29/18 22:18	1
Anthracene	**2.6**	**J**	4.8	1.9	ug/Kg		08/24/18 15:31	08/29/18 22:18	1
Benzo[a]anthracene	**4.4**	**J**	4.8	1.4	ug/Kg		08/24/18 15:31	08/29/18 22:18	1
Benzo[a]pyrene	**5.7**		4.8	1.8	ug/Kg		08/24/18 15:31	08/29/18 22:18	1
Benzo[b]fluoranthene	**39**		4.8	2.0	ug/Kg		08/24/18 15:31	08/29/18 22:18	1
Benzo[g,h,i]perylene	**6.5**		4.8	4.1	ug/Kg		08/24/18 15:31	08/29/18 22:18	1
Benzo[k]fluoranthene	ND		4.8	2.0	ug/Kg		08/24/18 15:31	08/29/18 22:18	1
Chrysene	**31**	**B**	4.8	1.3	ug/Kg		08/24/18 15:31	08/29/18 22:18	1
Dibenz(a,h)anthracene	**3.6**	**J**	4.8	3.4	ug/Kg		08/24/18 15:31	08/29/18 22:18	1
Fluoranthene	**13**		4.8	1.3	ug/Kg		08/24/18 15:31	08/29/18 22:18	1
Fluorene	**4.1**	**J**	4.8	2.1	ug/Kg		08/24/18 15:31	08/29/18 22:18	1
Indeno[1,2,3-cd]pyrene	**5.3**		4.8	4.0	ug/Kg		08/24/18 15:31	08/29/18 22:18	1
Naphthalene	**16**		4.8	3.4	ug/Kg		08/24/18 15:31	08/29/18 22:18	1
Phenanthrene	**47**		4.8	1.7	ug/Kg		08/24/18 15:31	08/29/18 22:18	1
Pyrene	**16**		4.8	1.6	ug/Kg		08/24/18 15:31	08/29/18 22:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*52*		*33 - 120*	*08/24/18 15:31*	*08/29/18 22:18*	*1*
Terphenyl-d14	*82*		*35 - 146*	*08/24/18 15:31*	*08/29/18 22:18*	*1*

Client Sample ID: DG-J5S-7-7.5
Date Collected: 08/22/18 14:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-3
Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	5500	B	2000	740	ug/Kg		08/27/18 08:59	08/28/18 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*91*		*40 - 130*	*08/27/18 08:59*	*08/28/18 21:08*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
Aldrin	ND		1.9	0.48	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
Endrin	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
Toxaphene	ND		38	6.5	ug/Kg		08/24/18 11:26	08/29/18 12:05	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/29/18 12:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*84*		*21 - 136*	*08/24/18 11:26*	*08/29/18 12:05*	*1*
Tetrachloro-m-xylene	*80*		*21 - 145*	*08/24/18 11:26*	*08/29/18 12:05*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		48	21	ug/Kg		08/27/18 11:05	08/28/18 22:44	1
Aroclor-1221	ND		48	23	ug/Kg		08/27/18 11:05	08/28/18 22:44	1
Aroclor-1232	ND		48	22	ug/Kg		08/27/18 11:05	08/28/18 22:44	1
Aroclor-1242	ND		48	18	ug/Kg		08/27/18 11:05	08/28/18 22:44	1
Aroclor-1248	ND		48	23	ug/Kg		08/27/18 11:05	08/28/18 22:44	1
Aroclor-1254	ND		48	22	ug/Kg		08/27/18 11:05	08/28/18 22:44	1
Aroclor-1260	ND		48	21	ug/Kg		08/27/18 11:05	08/28/18 22:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*14 - 128*	*08/27/18 11:05*	*08/28/18 22:44*	*1*
DCB Decachlorobiphenyl	*82*		*10 - 132*	*08/27/18 11:05*	*08/28/18 22:44*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.9		1.3	0.21	mg/Kg		08/25/18 14:28	08/27/18 19:28	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-J5S-7-7.5
Date Collected: 08/22/18 14:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-3
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12	B	2.5	0.22	mg/Kg		08/25/18 14:28	08/27/18 19:28	4
Barium	150		1.3	0.18	mg/Kg		08/25/18 14:28	08/27/18 19:28	4
Beryllium	0.89		0.25	0.082	mg/Kg		08/25/18 14:28	08/27/18 19:28	4
Cadmium	0.12	J	0.32	0.031	mg/Kg		08/25/18 14:28	08/27/18 19:28	4
Chromium	32		1.3	0.13	mg/Kg		08/25/18 14:28	08/27/18 19:28	4
Cobalt	13		0.51	0.051	mg/Kg		08/25/18 14:28	08/27/18 19:28	4
Copper	65		3.8	1.8	mg/Kg		08/25/18 14:28	08/27/18 19:28	4
Lead	210		1.3	0.27	mg/Kg		08/25/18 14:28	08/27/18 19:28	4
Molybdenum	0.30	J	1.3	0.16	mg/Kg		08/25/18 14:28	08/27/18 19:28	4
Nickel	34		1.3	0.13	mg/Kg		08/25/18 14:28	08/27/18 19:28	4
Selenium	ND		2.5	0.38	mg/Kg		08/25/18 14:28	08/27/18 19:28	4
Silver	0.60	J	0.63	0.13	mg/Kg		08/25/18 14:28	08/27/18 19:28	4
Thallium	0.82	J	1.3	0.37	mg/Kg		08/25/18 14:28	08/27/18 19:28	4
Vanadium	40		1.3	0.17	mg/Kg		08/25/18 14:28	08/27/18 19:28	4
Zinc	240		3.8	1.6	mg/Kg		08/25/18 14:28	08/27/18 19:28	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.081		0.016	0.0023	mg/Kg		08/27/18 09:58	08/30/18 17:18	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-I5S-0.5-1
Date Collected: 08/22/18 14:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-4
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.3		1.4	0.24	mg/Kg		08/25/18 14:28	08/27/18 19:32	4
Arsenic	14	B	2.9	0.25	mg/Kg		08/25/18 14:28	08/27/18 19:32	4
Barium	170		1.4	0.21	mg/Kg		08/25/18 14:28	08/27/18 19:32	4
Beryllium	0.097	J	0.29	0.094	mg/Kg		08/25/18 14:28	08/27/18 19:32	4
Cadmium	2.5		0.36	0.036	mg/Kg		08/25/18 14:28	08/27/18 19:32	4
Chromium	42		1.4	0.15	mg/Kg		08/25/18 14:28	08/27/18 19:32	4
Cobalt	17		0.58	0.058	mg/Kg		08/25/18 14:28	08/27/18 19:32	4
Copper	240		4.3	2.1	mg/Kg		08/25/18 14:28	08/27/18 19:32	4
Lead	380		1.4	0.30	mg/Kg		08/25/18 14:28	08/27/18 19:32	4
Molybdenum	3.6		1.4	0.19	mg/Kg		08/25/18 14:28	08/27/18 19:32	4
Nickel	25		1.4	0.15	mg/Kg		08/25/18 14:28	08/27/18 19:32	4
Selenium	ND		2.9	0.43	mg/Kg		08/25/18 14:28	08/27/18 19:32	4
Silver	0.55	J	0.72	0.15	mg/Kg		08/25/18 14:28	08/27/18 19:32	4
Thallium	1.3	J	1.4	0.42	mg/Kg		08/25/18 14:28	08/27/18 19:32	4
Vanadium	110		1.4	0.20	mg/Kg		08/25/18 14:28	08/27/18 19:32	4
Zinc	580		4.3	1.8	mg/Kg		08/25/18 14:28	08/27/18 19:32	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.57		0.015	0.0023	mg/Kg		08/27/18 09:58	08/30/18 17:21	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-I5S-3.5-4
Date Collected: 08/22/18 14:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-5
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	35		1.1	0.19	mg/Kg		08/25/18 14:28	08/27/18 19:37	4
Arsenic	740	B	2.2	0.19	mg/Kg		08/25/18 14:28	08/27/18 19:37	4
Barium	1200		1.1	0.16	mg/Kg		08/25/18 14:28	08/27/18 19:37	4
Beryllium	0.82		0.22	0.073	mg/Kg		08/25/18 14:28	08/27/18 19:37	4
Cadmium	2.3		0.28	0.028	mg/Kg		08/25/18 14:28	08/27/18 19:37	4
Chromium	35		1.1	0.12	mg/Kg		08/25/18 14:28	08/27/18 19:37	4
Cobalt	5.6		0.45	0.045	mg/Kg		08/25/18 14:28	08/27/18 19:37	4
Copper	380		3.4	1.6	mg/Kg		08/25/18 14:28	08/27/18 19:37	4
Lead	2600		1.1	0.23	mg/Kg		08/25/18 14:28	08/27/18 19:37	4
Molybdenum	0.74	J	1.1	0.14	mg/Kg		08/25/18 14:28	08/27/18 19:37	4
Nickel	30		1.1	0.11	mg/Kg		08/25/18 14:28	08/27/18 19:37	4
Selenium	ND		2.2	0.34	mg/Kg		08/25/18 14:28	08/27/18 19:37	4
Silver	6.7		0.56	0.11	mg/Kg		08/25/18 14:28	08/27/18 19:37	4
Thallium	0.79	J	1.1	0.32	mg/Kg		08/25/18 14:28	08/27/18 19:37	4
Vanadium	36		1.1	0.15	mg/Kg		08/25/18 14:28	08/27/18 19:37	4
Zinc	1400		3.4	1.4	mg/Kg		08/25/18 14:28	08/27/18 19:37	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.31		0.017	0.0025	mg/Kg		08/27/18 09:58	08/30/18 17:23	1

Client Sample ID: DG-H5S-0.5-1

Date Collected: 08/22/18 14:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-6

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.1	0.98	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Acetone	**36**	**J**	41	31	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Benzene	ND		4.1	0.53	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Dichlorobromomethane	ND		4.1	0.59	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Bromobenzene	ND	*	4.1	0.64	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Chlorobromomethane	ND		16	0.59	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Bromoform	ND		4.1	1.6	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Bromomethane	ND		8.1	0.64	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
2-Butanone (MEK)	ND		41	17	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
n-Butylbenzene	ND	*	4.1	0.81	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
sec-Butylbenzene	ND	*	4.1	0.59	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
tert-Butylbenzene	ND	*	4.1	0.59	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Carbon disulfide	ND	*	4.1	1.6	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Carbon tetrachloride	ND		4.1	0.50	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Chlorobenzene	ND		4.1	0.56	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Chloroethane	ND		8.1	0.46	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Chloroform	ND		4.1	0.54	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Chloromethane	ND		8.1	0.64	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
2-Chlorotoluene	ND	*	4.1	0.53	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
4-Chlorotoluene	ND	*	4.1	0.55	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Chlorodibromomethane	ND		4.1	0.58	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
1,2-Dichlorobenzene	ND	*	4.1	0.55	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
1,3-Dichlorobenzene	ND	*	4.1	0.59	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
1,4-Dichlorobenzene	ND	*	4.1	0.58	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
1,3-Dichloropropane	ND		4.1	0.59	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
1,1-Dichloropropene	ND		4.1	0.56	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
1,2-Dibromo-3-Chloropropane	ND	*	8.1	1.4	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Ethylene Dibromide	ND		4.1	1.2	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Dibromomethane	ND		8.1	0.70	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Dichlorodifluoromethane	ND		8.1	0.64	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
1,1-Dichloroethane	ND		4.1	0.55	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
1,2-Dichloroethane	ND		4.1	0.62	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
1,1-Dichloroethene	ND	*	4.1	0.50	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
cis-1,2-Dichloroethene	ND		4.1	0.55	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
trans-1,2-Dichloroethene	ND		4.1	0.61	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
1,2-Dichloropropane	ND		4.1	0.51	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
cis-1,3-Dichloropropene	ND		4.1	0.56	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
trans-1,3-Dichloropropene	ND		4.1	0.55	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Ethylbenzene	ND		4.1	0.61	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Hexachlorobutadiene	ND	*	4.1	0.73	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
2-Hexanone	ND		41	8.1	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Isopropylbenzene	ND		4.1	0.55	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
4-Isopropyltoluene	ND	*	4.1	2.0	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Methylene Chloride	ND		8.1	4.6	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
4-Methyl-2-pentanone (MIBK)	ND		41	8.1	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Naphthalene	ND	*	8.1	1.2	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
N-Propylbenzene	ND	*	4.1	0.54	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Styrene	ND		4.1	0.51	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
1,1,1,2-Tetrachloroethane	ND		4.1	0.62	ug/Kg		08/24/18 02:25	08/29/18 15:42	1

Client Sample ID: DG-H5S-0.5-1
Date Collected: 08/22/18 14:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-6
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.1	0.61	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Tetrachloroethene	ND		4.1	0.55	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Toluene	ND		4.1	0.58	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
1,2,3-Trichlorobenzene	ND	*	4.1	0.60	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
1,2,4-Trichlorobenzene	ND	*	4.1	0.58	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
1,1,1-Trichloroethane	ND		4.1	0.50	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
1,1,2-Trichloroethane	ND		4.1	0.57	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Trichloroethene	ND		4.1	0.51	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Trichlorofluoromethane	ND		4.1	0.46	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
1,2,3-Trichloropropane	ND	*	4.1	0.63	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.1	1.7	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
1,2,4-Trimethylbenzene	ND	*	4.1	1.3	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
1,3,5-Trimethylbenzene	ND	*	4.1	0.53	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Vinyl acetate	ND		16	4.1	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Vinyl chloride	ND		4.1	0.59	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Xylenes, Total	ND		4.1	0.99	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
2,2-Dichloropropane	ND		4.1	1.6	ug/Kg		08/24/18 02:25	08/29/18 15:42	1
Gasoline Range Organics (GRO) -C4-C12	ND		200	81	ug/Kg		08/24/18 02:25	08/29/18 15:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*45 - 131*	*08/24/18 02:25*	*08/29/18 15:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*124*		*60 - 140*	*08/24/18 02:25*	*08/29/18 15:42*	*1*
Toluene-d8 (Surr)	*87*		*58 - 140*	*08/24/18 02:25*	*08/29/18 15:42*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**94**	**J**	95	48	ug/Kg		08/24/18 15:31	08/30/18 16:42	5
Acenaphthene	**33**	**J**	48	27	ug/Kg		08/24/18 15:31	08/30/18 16:42	5
Acenaphthylene	**2000**		48	23	ug/Kg		08/24/18 15:31	08/30/18 16:42	5
Anthracene	**500**		48	19	ug/Kg		08/24/18 15:31	08/30/18 16:42	5
Benzo[a]anthracene	**3800**		48	14	ug/Kg		08/24/18 15:31	08/30/18 16:42	5
Benzo[a]pyrene	**6900**		48	18	ug/Kg		08/24/18 15:31	08/30/18 16:42	5
Benzo[b]fluoranthene	**7400**		48	20	ug/Kg		08/24/18 15:31	08/30/18 16:42	5
Benzo[g,h,i]perylene	**2800**		48	41	ug/Kg		08/24/18 15:31	08/30/18 16:42	5
Benzo[k]fluoranthene	**3700**		48	20	ug/Kg		08/24/18 15:31	08/30/18 16:42	5
Chrysene	**4500**	**B**	48	13	ug/Kg		08/24/18 15:31	08/30/18 16:42	5
Dibenz(a,h)anthracene	**910**		48	33	ug/Kg		08/24/18 15:31	08/30/18 16:42	5
Fluoranthene	**2600**		48	13	ug/Kg		08/24/18 15:31	08/30/18 16:42	5
Fluorene	**39**	**J**	48	21	ug/Kg		08/24/18 15:31	08/30/18 16:42	5
Indeno[1,2,3-cd]pyrene	**2500**		48	40	ug/Kg		08/24/18 15:31	08/30/18 16:42	5
Naphthalene	**310**		48	33	ug/Kg		08/24/18 15:31	08/30/18 16:42	5
Phenanthrene	**1100**		48	17	ug/Kg		08/24/18 15:31	08/30/18 16:42	5
Pyrene	**6600**		48	16	ug/Kg		08/24/18 15:31	08/30/18 16:42	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*33 - 120*	*08/24/18 15:31*	*08/30/18 16:42*	*5*
Terphenyl-d14	*94*		*35 - 146*	*08/24/18 15:31*	*08/30/18 16:42*	*5*

Client Sample ID: DG-H5S-0.5-1

Date Collected: 08/22/18 14:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-6

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**240000**	**B**	9600	3600	ug/Kg		08/27/18 08:59	08/28/18 23:58	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*X D*	*40 - 130*	*08/27/18 08:59*	*08/28/18 23:58*	*5*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
4,4'-DDE	**24**		1.9	0.40	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
4,4'-DDT	**73**		1.9	0.39	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
Aldrin	ND		1.9	0.48	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
Endrin	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
Toxaphene	ND		38	6.6	ug/Kg		08/24/18 11:26	08/29/18 12:23	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/29/18 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*198*	*p X*	*21 - 136*	*08/24/18 11:26*	*08/29/18 12:23*	*1*
Tetrachloro-m-xylene	*74*		*21 - 145*	*08/24/18 11:26*	*08/29/18 12:23*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/27/18 11:05	08/28/18 23:05	1
Aroclor-1221	ND		50	24	ug/Kg		08/27/18 11:05	08/28/18 23:05	1
Aroclor-1232	ND		50	23	ug/Kg		08/27/18 11:05	08/28/18 23:05	1
Aroclor-1242	ND		50	19	ug/Kg		08/27/18 11:05	08/28/18 23:05	1
Aroclor-1248	ND		50	24	ug/Kg		08/27/18 11:05	08/28/18 23:05	1
Aroclor-1254	ND		50	23	ug/Kg		08/27/18 11:05	08/28/18 23:05	1
Aroclor-1260	**24**	**J**	50	22	ug/Kg		08/27/18 11:05	08/28/18 23:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*87*		*14 - 128*	*08/27/18 11:05*	*08/28/18 23:05*	*1*
DCB Decachlorobiphenyl	*438*	*X*	*10 - 132*	*08/27/18 11:05*	*08/28/18 23:05*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**8.6**		1.9	0.32	mg/Kg		08/25/18 14:28	08/27/18 19:42	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-H5S-0.5-1
Date Collected: 08/22/18 14:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-6
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	67	B	3.8	0.33	mg/Kg		08/25/18 14:28	08/27/18 19:42	4
Barium	300		1.9	0.27	mg/Kg		08/25/18 14:28	08/27/18 19:42	4
Beryllium	0.26	J	0.38	0.13	mg/Kg		08/25/18 14:28	08/27/18 19:42	4
Cadmium	2.9		0.48	0.048	mg/Kg		08/25/18 14:28	08/27/18 19:42	4
Chromium	40		1.9	0.20	mg/Kg		08/25/18 14:28	08/27/18 19:42	4
Cobalt	15		0.77	0.077	mg/Kg		08/25/18 14:28	08/27/18 19:42	4
Copper	310		5.8	2.7	mg/Kg		08/25/18 14:28	08/27/18 19:42	4
Lead	990		1.9	0.40	mg/Kg		08/25/18 14:28	08/27/18 19:42	4
Molybdenum	1.8	J	1.9	0.25	mg/Kg		08/25/18 14:28	08/27/18 19:42	4
Nickel	31		1.9	0.20	mg/Kg		08/25/18 14:28	08/27/18 19:42	4
Selenium	ND		3.8	0.58	mg/Kg		08/25/18 14:28	08/27/18 19:42	4
Silver	0.44	J	0.96	0.19	mg/Kg		08/25/18 14:28	08/27/18 19:42	4
Thallium	1.4	J	1.9	0.56	mg/Kg		08/25/18 14:28	08/27/18 19:42	4
Vanadium	110		1.9	0.26	mg/Kg		08/25/18 14:28	08/27/18 19:42	4
Zinc	850		5.8	2.4	mg/Kg		08/25/18 14:28	08/27/18 19:42	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.27		0.016	0.0023	mg/Kg		08/27/18 09:58	08/30/18 17:26	1

Client Sample ID: DG-H5S-3.5-4

Date Collected: 08/22/18 14:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-7

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.1	0.75	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Acetone	**24**	**J**	31	24	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Benzene	ND		3.1	0.41	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Dichlorobromomethane	ND		3.1	0.45	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Bromobenzene	ND		3.1	0.49	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Chlorobromomethane	ND		13	0.45	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Bromoform	ND		3.1	1.3	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Bromomethane	ND		6.3	0.49	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
2-Butanone (MEK)	ND		31	13	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
n-Butylbenzene	ND		3.1	0.63	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
sec-Butylbenzene	ND		3.1	0.45	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
tert-Butylbenzene	ND		3.1	0.46	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Carbon disulfide	ND		3.1	1.3	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Carbon tetrachloride	ND		3.1	0.39	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Chlorobenzene	ND		3.1	0.43	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Chloroethane	ND		6.3	0.35	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Chloroform	ND		3.1	0.41	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Chloromethane	ND		6.3	0.49	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
2-Chlorotoluene	ND		3.1	0.41	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
4-Chlorotoluene	ND		3.1	0.43	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Chlorodibromomethane	ND		3.1	0.44	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
1,2-Dichlorobenzene	ND		3.1	0.43	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
1,3-Dichlorobenzene	ND		3.1	0.45	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
1,4-Dichlorobenzene	ND		3.1	0.44	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
1,3-Dichloropropane	ND		3.1	0.46	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
1,1-Dichloropropene	ND		3.1	0.43	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
1,2-Dibromo-3-Chloropropane	ND		6.3	1.1	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Ethylene Dibromide	ND		3.1	0.89	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Dibromomethane	ND		6.3	0.54	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Dichlorodifluoromethane	ND		6.3	0.49	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
1,1-Dichloroethane	ND		3.1	0.43	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
1,2-Dichloroethane	ND		3.1	0.48	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
1,1-Dichloroethene	ND	*	3.1	0.39	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
cis-1,2-Dichloroethene	ND		3.1	0.43	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
trans-1,2-Dichloroethene	ND		3.1	0.47	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
1,2-Dichloropropane	ND		3.1	0.39	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
cis-1,3-Dichloropropene	ND		3.1	0.43	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
trans-1,3-Dichloropropene	ND		3.1	0.42	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Ethylbenzene	ND		3.1	0.47	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Hexachlorobutadiene	ND		3.1	0.56	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
2-Hexanone	ND		31	6.3	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Isopropylbenzene	ND		3.1	0.43	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
4-Isopropyltoluene	ND		3.1	1.6	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Methylene Chloride	ND		6.3	3.5	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
4-Methyl-2-pentanone (MIBK)	ND		31	6.3	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Naphthalene	ND		6.3	0.94	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
N-Propylbenzene	ND		3.1	0.41	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Styrene	ND		3.1	0.39	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
1,1,1,2-Tetrachloroethane	ND		3.1	0.48	ug/Kg		08/24/18 02:25	08/29/18 00:07	1

Client Sample ID: DG-H5S-3.5-4
Date Collected: 08/22/18 14:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-7
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.1	0.47	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Tetrachloroethene	ND		3.1	0.42	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Toluene	ND		3.1	0.44	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
1,2,3-Trichlorobenzene	ND		3.1	0.46	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
1,2,4-Trichlorobenzene	ND		3.1	0.44	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
1,1,1-Trichloroethane	ND		3.1	0.38	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
1,1,2-Trichloroethane	ND		3.1	0.44	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Trichloroethene	ND		3.1	0.39	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Trichlorofluoromethane	ND		3.1	0.35	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
1,2,3-Trichloropropane	ND		3.1	0.48	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.1	1.3	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
1,2,4-Trimethylbenzene	ND		3.1	1.0	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
1,3,5-Trimethylbenzene	ND		3.1	0.41	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Vinyl acetate	ND		13	3.1	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Vinyl chloride	ND		3.1	0.46	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Xylenes, Total	ND		3.1	0.76	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
2,2-Dichloropropane	ND		3.1	1.3	ug/Kg		08/24/18 02:25	08/29/18 00:07	1
Gasoline Range Organics (GRO) -C4-C12	ND		160	63	ug/Kg		08/24/18 02:25	08/29/18 00:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*45 - 131*	*08/24/18 02:25*	*08/29/18 00:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*	*08/24/18 02:25*	*08/29/18 00:07*	*1*
Toluene-d8 (Surr)	*94*		*58 - 140*	*08/24/18 02:25*	*08/29/18 00:07*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**8.2**	**J**	9.5	4.8	ug/Kg		08/24/18 15:31	08/29/18 22:41	1
Acenaphthene	**11**		4.8	2.7	ug/Kg		08/24/18 15:31	08/29/18 22:41	1
Acenaphthylene	**16**		4.8	2.3	ug/Kg		08/24/18 15:31	08/29/18 22:41	1
Anthracene	**61**		4.8	1.9	ug/Kg		08/24/18 15:31	08/29/18 22:41	1
Benzo[a]anthracene	**290**		4.8	1.4	ug/Kg		08/24/18 15:31	08/29/18 22:41	1
Benzo[a]pyrene	**280**		4.8	1.8	ug/Kg		08/24/18 15:31	08/29/18 22:41	1
Benzo[b]fluoranthene	**400**		4.8	2.0	ug/Kg		08/24/18 15:31	08/29/18 22:41	1
Benzo[g,h,i]perylene	**100**		4.8	4.1	ug/Kg		08/24/18 15:31	08/29/18 22:41	1
Benzo[k]fluoranthene	ND		4.8	2.0	ug/Kg		08/24/18 15:31	08/29/18 22:41	1
Chrysene	**260**	**B**	4.8	1.3	ug/Kg		08/24/18 15:31	08/29/18 22:41	1
Dibenz(a,h)anthracene	**39**		4.8	3.3	ug/Kg		08/24/18 15:31	08/29/18 22:41	1
Fluoranthene	**360**		4.8	1.3	ug/Kg		08/24/18 15:31	08/29/18 22:41	1
Fluorene	**13**		4.8	2.1	ug/Kg		08/24/18 15:31	08/29/18 22:41	1
Indeno[1,2,3-cd]pyrene	**100**		4.8	4.0	ug/Kg		08/24/18 15:31	08/29/18 22:41	1
Naphthalene	**29**		4.8	3.3	ug/Kg		08/24/18 15:31	08/29/18 22:41	1
Phenanthrene	**260**		4.8	1.7	ug/Kg		08/24/18 15:31	08/29/18 22:41	1
Pyrene	**590**		4.8	1.6	ug/Kg		08/24/18 15:31	08/29/18 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*51*		*33 - 120*	*08/24/18 15:31*	*08/29/18 22:41*	*1*
Terphenyl-d14	*83*		*35 - 146*	*08/24/18 15:31*	*08/29/18 22:41*	*1*

Client Sample ID: DG-H5S-3.5-4

Date Collected: 08/22/18 14:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-7

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	18000	B	1900	720	ug/Kg		08/27/18 08:59	08/28/18 22:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*86*		*40 - 130*	*08/27/18 08:59*	*08/28/18 22:21*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
4,4'-DDT	1.2	J	1.9	0.39	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
Aldrin	ND		1.9	0.48	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
Endrin	ND		1.9	0.44	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
Toxaphene	ND		38	6.5	ug/Kg		08/28/18 13:36	08/31/18 01:27	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/28/18 13:36	08/31/18 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*96*		*21 - 136*	*08/28/18 13:36*	*08/31/18 01:27*	*1*
Tetrachloro-m-xylene	*71*		*21 - 145*	*08/28/18 13:36*	*08/31/18 01:27*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	22	ug/Kg		08/27/18 11:05	08/28/18 23:27	1
Aroclor-1221	ND		49	24	ug/Kg		08/27/18 11:05	08/28/18 23:27	1
Aroclor-1232	ND		49	23	ug/Kg		08/27/18 11:05	08/28/18 23:27	1
Aroclor-1242	ND		49	19	ug/Kg		08/27/18 11:05	08/28/18 23:27	1
Aroclor-1248	ND		49	24	ug/Kg		08/27/18 11:05	08/28/18 23:27	1
Aroclor-1254	ND		49	23	ug/Kg		08/27/18 11:05	08/28/18 23:27	1
Aroclor-1260	ND		49	22	ug/Kg		08/27/18 11:05	08/28/18 23:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*98*		*14 - 128*	*08/27/18 11:05*	*08/28/18 23:27*	*1*
DCB Decachlorobiphenyl	*100*		*10 - 132*	*08/27/18 11:05*	*08/28/18 23:27*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.4		1.2	0.20	mg/Kg		08/25/18 14:28	08/27/18 19:46	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-H5S-3.5-4
Date Collected: 08/22/18 14:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-7
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	160	B	2.5	0.21	mg/Kg		08/25/18 14:28	08/27/18 19:46	4
Barium	200		1.2	0.17	mg/Kg		08/25/18 14:28	08/27/18 19:46	4
Beryllium	0.47		0.25	0.080	mg/Kg		08/25/18 14:28	08/27/18 19:46	4
Cadmium	0.097	J	0.31	0.030	mg/Kg		08/25/18 14:28	08/27/18 19:46	4
Chromium	74		1.2	0.13	mg/Kg		08/25/18 14:28	08/27/18 19:46	4
Cobalt	15		0.49	0.049	mg/Kg		08/25/18 14:28	08/27/18 19:46	4
Copper	100		3.7	1.7	mg/Kg		08/25/18 14:28	08/27/18 19:46	4
Lead	400		1.2	0.26	mg/Kg		08/25/18 14:28	08/27/18 19:46	4
Molybdenum	0.41	J	1.2	0.16	mg/Kg		08/25/18 14:28	08/27/18 19:46	4
Nickel	50		1.2	0.13	mg/Kg		08/25/18 14:28	08/27/18 19:46	4
Selenium	ND		2.5	0.37	mg/Kg		08/25/18 14:28	08/27/18 19:46	4
Silver	0.42	J	0.61	0.12	mg/Kg		08/25/18 14:28	08/27/18 19:46	4
Thallium	1.0	J	1.2	0.36	mg/Kg		08/25/18 14:28	08/27/18 19:46	4
Vanadium	61		1.2	0.17	mg/Kg		08/25/18 14:28	08/27/18 19:46	4
Zinc	310		3.7	1.6	mg/Kg		08/25/18 14:28	08/27/18 19:46	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.27		0.016	0.0024	mg/Kg		08/27/18 09:58	08/30/18 17:33	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-G5S-0.5-1
Date Collected: 08/22/18 15:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-8
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.6	0.27	mg/Kg		08/25/18 14:28	08/27/18 19:51	4
Arsenic	**17**	**B**	3.3	0.28	mg/Kg		08/25/18 14:28	08/27/18 19:51	4
Barium	**50**		1.6	0.23	mg/Kg		08/25/18 14:28	08/27/18 19:51	4
Beryllium	ND		0.33	0.11	mg/Kg		08/25/18 14:28	08/27/18 19:51	4
Cadmium	**0.13**	**J**	0.41	0.040	mg/Kg		08/25/18 14:28	08/27/18 19:51	4
Chromium	**25**		1.6	0.17	mg/Kg		08/25/18 14:28	08/27/18 19:51	4
Cobalt	**14**		0.65	0.065	mg/Kg		08/25/18 14:28	08/27/18 19:51	4
Copper	**110**		4.9	2.3	mg/Kg		08/25/18 14:28	08/27/18 19:51	4
Lead	**48**		1.6	0.34	mg/Kg		08/25/18 14:28	08/27/18 19:51	4
Molybdenum	**2.3**		1.6	0.21	mg/Kg		08/25/18 14:28	08/27/18 19:51	4
Nickel	**12**		1.6	0.17	mg/Kg		08/25/18 14:28	08/27/18 19:51	4
Selenium	ND		3.3	0.49	mg/Kg		08/25/18 14:28	08/27/18 19:51	4
Silver	ND		0.81	0.16	mg/Kg		08/25/18 14:28	08/27/18 19:51	4
Thallium	**1.3**	**J**	1.6	0.47	mg/Kg		08/25/18 14:28	08/27/18 19:51	4
Vanadium	**110**		1.6	0.22	mg/Kg		08/25/18 14:28	08/27/18 19:51	4
Zinc	**100**		4.9	2.1	mg/Kg		08/25/18 14:28	08/27/18 19:51	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.095**		0.015	0.0023	mg/Kg		08/27/18 09:58	08/30/18 17:35	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-G5S-3.5-4
Date Collected: 08/22/18 15:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-9
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.2		1.0	0.17	mg/Kg		08/25/18 14:28	08/27/18 19:56	4
Arsenic	5.3	B	2.1	0.18	mg/Kg		08/25/18 14:28	08/27/18 19:56	4
Barium	110		1.0	0.15	mg/Kg		08/25/18 14:28	08/27/18 19:56	4
Beryllium	0.24		0.21	0.067	mg/Kg		08/25/18 14:28	08/27/18 19:56	4
Cadmium	0.76		0.26	0.026	mg/Kg		08/25/18 14:28	08/27/18 19:56	4
Chromium	72		1.0	0.11	mg/Kg		08/25/18 14:28	08/27/18 19:56	4
Cobalt	9.7		0.41	0.041	mg/Kg		08/25/18 14:28	08/27/18 19:56	4
Copper	74		3.1	1.5	mg/Kg		08/25/18 14:28	08/27/18 19:56	4
Lead	200		1.0	0.22	mg/Kg		08/25/18 14:28	08/27/18 19:56	4
Molybdenum	ND		1.0	0.13	mg/Kg		08/25/18 14:28	08/27/18 19:56	4
Nickel	51		1.0	0.11	mg/Kg		08/25/18 14:28	08/27/18 19:56	4
Selenium	ND		2.1	0.31	mg/Kg		08/25/18 14:28	08/27/18 19:56	4
Silver	ND		0.52	0.10	mg/Kg		08/25/18 14:28	08/27/18 19:56	4
Thallium	0.61	J	1.0	0.30	mg/Kg		08/25/18 14:28	08/27/18 19:56	4
Vanadium	55		1.0	0.14	mg/Kg		08/25/18 14:28	08/27/18 19:56	4
Zinc	260		3.1	1.3	mg/Kg		08/25/18 14:28	08/27/18 19:56	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.33		0.015	0.0023	mg/Kg		08/27/18 09:58	08/30/18 17:37	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-F5S-0.5-1
Date Collected: 08/22/18 15:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-10
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.4	1.3	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Acetone	ND		54	41	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Benzene	ND		5.4	0.70	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Dichlorobromomethane	ND		5.4	0.77	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Bromobenzene	ND		5.4	0.85	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Chlorobromomethane	ND		21	0.77	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Bromoform	ND		5.4	2.1	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Bromomethane	ND		11	0.85	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
2-Butanone (MEK)	ND		54	23	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
n-Butylbenzene	ND		5.4	1.1	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
sec-Butylbenzene	ND		5.4	0.77	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
tert-Butylbenzene	ND		5.4	0.78	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Carbon disulfide	ND		5.4	2.1	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Carbon tetrachloride	ND		5.4	0.66	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Chlorobenzene	ND		5.4	0.74	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Chloroethane	ND		11	0.60	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Chloroform	ND		5.4	0.71	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Chloromethane	ND		11	0.85	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
2-Chlorotoluene	ND		5.4	0.70	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
4-Chlorotoluene	ND		5.4	0.73	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Chlorodibromomethane	ND		5.4	0.76	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
1,2-Dichlorobenzene	ND		5.4	0.73	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
1,3-Dichlorobenzene	ND		5.4	0.77	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
1,4-Dichlorobenzene	ND		5.4	0.76	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
1,3-Dichloropropane	ND		5.4	0.78	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
1,1-Dichloropropene	ND		5.4	0.74	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
1,2-Dibromo-3-Chloropropane	ND		11	1.8	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Ethylene Dibromide	ND		5.4	1.5	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Dibromomethane	ND		11	0.92	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Dichlorodifluoromethane	ND		11	0.85	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
1,1-Dichloroethane	ND		5.4	0.73	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
1,2-Dichloroethane	ND		5.4	0.81	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
1,1-Dichloroethene	ND	*	5.4	0.66	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
cis-1,2-Dichloroethene	ND		5.4	0.73	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
trans-1,2-Dichloroethene	ND		5.4	0.80	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
1,2-Dichloropropane	ND		5.4	0.68	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
cis-1,3-Dichloropropene	ND		5.4	0.74	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
trans-1,3-Dichloropropene	ND		5.4	0.72	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Ethylbenzene	ND		5.4	0.80	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Hexachlorobutadiene	ND		5.4	0.96	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
2-Hexanone	ND		54	11	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Isopropylbenzene	ND		5.4	0.73	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
4-Isopropyltoluene	ND		5.4	2.7	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Methylene Chloride	ND		11	6.0	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
4-Methyl-2-pentanone (MIBK)	ND		54	11	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Naphthalene	ND		11	1.6	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
N-Propylbenzene	ND		5.4	0.71	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Styrene	ND		5.4	0.68	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
1,1,1,2-Tetrachloroethane	ND		5.4	0.81	ug/Kg		08/24/18 02:25	08/29/18 00:37	1

Client Sample ID: DG-F5S-0.5-1
Date Collected: 08/22/18 15:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-10
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		5.4	0.80	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Tetrachloroethene	ND		5.4	0.72	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Toluene	ND		5.4	0.76	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
1,2,3-Trichlorobenzene	ND		5.4	0.79	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
1,2,4-Trichlorobenzene	ND		5.4	0.76	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
1,1,1-Trichloroethane	ND		5.4	0.65	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
1,1,2-Trichloroethane	ND		5.4	0.75	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Trichloroethene	ND		5.4	0.68	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Trichlorofluoromethane	ND		5.4	0.60	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
1,2,3-Trichloropropane	ND		5.4	0.83	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	5.4	2.2	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
1,2,4-Trimethylbenzene	ND		5.4	1.8	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
1,3,5-Trimethylbenzene	ND		5.4	0.70	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Vinyl acetate	ND		21	5.4	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Vinyl chloride	ND		5.4	0.78	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Xylenes, Total	ND		5.4	1.3	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
2,2-Dichloropropane	ND		5.4	2.1	ug/Kg		08/24/18 02:25	08/29/18 00:37	1
Gasoline Range Organics (GRO) -C4-C12	ND		270	110	ug/Kg		08/24/18 02:25	08/29/18 00:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*45 - 131*	*08/24/18 02:25*	*08/29/18 00:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*	*08/24/18 02:25*	*08/29/18 00:37*	*1*
Toluene-d8 (Surr)	*92*		*58 - 140*	*08/24/18 02:25*	*08/29/18 00:37*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		200	99	ug/Kg		08/24/18 15:31	08/30/18 17:06	10
Acenaphthene	ND		99	56	ug/Kg		08/24/18 15:31	08/30/18 17:06	10
Acenaphthylene	ND		99	48	ug/Kg		08/24/18 15:31	08/30/18 17:06	10
Anthracene	ND		99	40	ug/Kg		08/24/18 15:31	08/30/18 17:06	10
Benzo[a]anthracene	ND		99	30	ug/Kg		08/24/18 15:31	08/30/18 17:06	10
Benzo[a]pyrene	**39**	**J**	99	38	ug/Kg		08/24/18 15:31	08/30/18 17:06	10
Benzo[b]fluoranthene	ND		99	42	ug/Kg		08/24/18 15:31	08/30/18 17:06	10
Benzo[g,h,i]perylene	ND		99	85	ug/Kg		08/24/18 15:31	08/30/18 17:06	10
Benzo[k]fluoranthene	ND		99	42	ug/Kg		08/24/18 15:31	08/30/18 17:06	10
Chrysene	ND		99	28	ug/Kg		08/24/18 15:31	08/30/18 17:06	10
Dibenz(a,h)anthracene	ND		99	69	ug/Kg		08/24/18 15:31	08/30/18 17:06	10
Fluoranthene	ND		99	28	ug/Kg		08/24/18 15:31	08/30/18 17:06	10
Fluorene	ND		99	44	ug/Kg		08/24/18 15:31	08/30/18 17:06	10
Indeno[1,2,3-cd]pyrene	ND		99	83	ug/Kg		08/24/18 15:31	08/30/18 17:06	10
Naphthalene	ND		99	69	ug/Kg		08/24/18 15:31	08/30/18 17:06	10
Phenanthrene	ND		99	36	ug/Kg		08/24/18 15:31	08/30/18 17:06	10
Pyrene	ND		99	34	ug/Kg		08/24/18 15:31	08/30/18 17:06	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*33 - 120*	*08/24/18 15:31*	*08/30/18 17:06*	*10*
Terphenyl-d14	*96*		*35 - 146*	*08/24/18 15:31*	*08/30/18 17:06*	*10*

Client Sample ID: DG-F5S-0.5-1

Date Collected: 08/22/18 15:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-10

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	68000	B	19000	7300	ug/Kg		08/27/18 08:59	08/29/18 00:47	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*X D*	*40 - 130*	*08/27/18 08:59*	*08/29/18 00:47*	*10*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		10	3.0	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
4,4'-DDE	ND		10	2.1	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
4,4'-DDT	ND		10	2.0	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
Aldrin	ND		10	2.5	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
alpha-BHC	ND		10	2.7	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
beta-BHC	ND		10	1.8	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
Chlordane (technical)	ND		200	16	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
cis-Chlordane	ND		10	2.0	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
delta-BHC	ND		10	2.2	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
Dieldrin	ND		10	2.9	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
Endosulfan I	ND		10	1.6	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
Endosulfan II	ND		10	2.4	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
Endosulfan sulfate	ND		10	1.9	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
Endrin	ND		10	2.3	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
Endrin aldehyde	ND		10	3.1	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
Endrin ketone	ND		10	1.6	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
gamma-BHC (Lindane)	ND		10	3.1	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
Heptachlor	ND		10	2.3	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
Heptachlor epoxide	ND		10	1.7	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
Methoxychlor	ND		10	3.4	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
Toxaphene	ND		200	34	ug/Kg		08/24/18 11:26	08/29/18 12:40	5
trans-Chlordane	ND		10	2.3	ug/Kg		08/24/18 11:26	08/29/18 12:40	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*54*	*p*	*21 - 136*	*08/24/18 11:26*	*08/29/18 12:40*	*5*
Tetrachloro-m-xylene	*63*		*21 - 145*	*08/24/18 11:26*	*08/29/18 12:40*	*5*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		52	23	ug/Kg		08/27/18 11:05	08/28/18 23:49	1
Aroclor-1221	ND		52	25	ug/Kg		08/27/18 11:05	08/28/18 23:49	1
Aroclor-1232	ND		52	24	ug/Kg		08/27/18 11:05	08/28/18 23:49	1
Aroclor-1242	ND		52	20	ug/Kg		08/27/18 11:05	08/28/18 23:49	1
Aroclor-1248	ND		52	25	ug/Kg		08/27/18 11:05	08/28/18 23:49	1
Aroclor-1254	ND		52	24	ug/Kg		08/27/18 11:05	08/28/18 23:49	1
Aroclor-1260	ND		52	23	ug/Kg		08/27/18 11:05	08/28/18 23:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*104*		*14 - 128*	*08/27/18 11:05*	*08/28/18 23:49*	*1*
DCB Decachlorobiphenyl	*126*		*10 - 132*	*08/27/18 11:05*	*08/28/18 23:49*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	8.8		1.7	0.28	mg/Kg		08/25/18 14:28	08/27/18 20:01	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-F5S-0.5-1
Date Collected: 08/22/18 15:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-10
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7	J B	3.4	0.29	mg/Kg		08/25/18 14:28	08/27/18 20:01	4
Barium	33		1.7	0.24	mg/Kg		08/25/18 14:28	08/27/18 20:01	4
Beryllium	0.11	J	0.34	0.11	mg/Kg		08/25/18 14:28	08/27/18 20:01	4
Cadmium	ND		0.42	0.042	mg/Kg		08/25/18 14:28	08/27/18 20:01	4
Chromium	8.1		1.7	0.18	mg/Kg		08/25/18 14:28	08/27/18 20:01	4
Cobalt	11		0.68	0.068	mg/Kg		08/25/18 14:28	08/27/18 20:01	4
Copper	150		5.1	2.4	mg/Kg		08/25/18 14:28	08/27/18 20:01	4
Lead	270		1.7	0.36	mg/Kg		08/25/18 14:28	08/27/18 20:01	4
Molybdenum	ND		1.7	0.22	mg/Kg		08/25/18 14:28	08/27/18 20:01	4
Nickel	6.9		1.7	0.17	mg/Kg		08/25/18 14:28	08/27/18 20:01	4
Selenium	ND		3.4	0.51	mg/Kg		08/25/18 14:28	08/27/18 20:01	4
Silver	ND		0.85	0.17	mg/Kg		08/25/18 14:28	08/27/18 20:01	4
Thallium	1.3	J	1.7	0.49	mg/Kg		08/25/18 14:28	08/27/18 20:01	4
Vanadium	73		1.7	0.23	mg/Kg		08/25/18 14:28	08/27/18 20:01	4
Zinc	46		5.1	2.2	mg/Kg		08/25/18 14:28	08/27/18 20:01	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.049		0.015	0.0022	mg/Kg		08/27/18 09:58	08/30/18 17:40	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-F5S-3.5-4
Date Collected: 08/22/18 15:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-11
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND	*	5.8	1.4	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Acetone	**58**	*	58	44	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Benzene	ND	*	5.8	0.76	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Dichlorobromomethane	ND	*	5.8	0.84	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Bromobenzene	ND	*	5.8	0.92	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Chlorobromomethane	ND	*	23	0.84	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Bromoform	ND	*	5.8	2.3	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Bromomethane	ND	*	12	0.92	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
2-Butanone (MEK)	ND	*	58	24	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
n-Butylbenzene	ND	*	5.8	1.2	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
sec-Butylbenzene	ND	*	5.8	0.84	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
tert-Butylbenzene	ND	*	5.8	0.85	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Carbon disulfide	ND	*	5.8	2.3	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Carbon tetrachloride	ND	*	5.8	0.72	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Chlorobenzene	ND	*	5.8	0.80	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Chloroethane	ND	*	12	0.65	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Chloroform	ND	*	5.8	0.77	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Chloromethane	ND	*	12	0.92	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
2-Chlorotoluene	ND	*	5.8	0.76	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
4-Chlorotoluene	ND	*	5.8	0.79	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Chlorodibromomethane	ND	*	5.8	0.83	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
1,2-Dichlorobenzene	ND	*	5.8	0.79	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
1,3-Dichlorobenzene	ND	*	5.8	0.84	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
1,4-Dichlorobenzene	ND	*	5.8	0.83	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
1,3-Dichloropropane	ND	*	5.8	0.85	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
1,1-Dichloropropene	ND	*	5.8	0.80	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
1,2-Dibromo-3-Chloropropane	ND	*	12	2.0	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Ethylene Dibromide	ND	*	5.8	1.7	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Dibromomethane	ND	*	12	1.0	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Dichlorodifluoromethane	ND	*	12	0.92	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
1,1-Dichloroethane	ND	*	5.8	0.79	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
1,2-Dichloroethane	ND	*	5.8	0.88	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
1,1-Dichloroethene	ND	*	5.8	0.72	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
cis-1,2-Dichloroethene	ND	*	5.8	0.79	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
trans-1,2-Dichloroethene	ND	*	5.8	0.87	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
1,2-Dichloropropane	ND	*	5.8	0.73	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
cis-1,3-Dichloropropene	ND	*	5.8	0.80	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
trans-1,3-Dichloropropene	ND	*	5.8	0.78	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Ethylbenzene	ND	*	5.8	0.87	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Hexachlorobutadiene	ND	*	5.8	1.0	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
2-Hexanone	ND	*	58	12	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Isopropylbenzene	ND	*	5.8	0.79	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
4-Isopropyltoluene	ND	*	5.8	2.9	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Methylene Chloride	ND	*	12	6.5	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
4-Methyl-2-pentanone (MIBK)	ND	*	58	12	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Naphthalene	ND	*	12	1.7	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
N-Propylbenzene	ND	*	5.8	0.77	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Styrene	ND	*	5.8	0.73	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
1,1,1,2-Tetrachloroethane	ND	*	5.8	0.88	ug/Kg		08/24/18 02:25	08/29/18 16:10	1

Client Sample ID: DG-F5S-3.5-4
Date Collected: 08/22/18 15:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-11
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	5.8	0.87	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Tetrachloroethene	ND	*	5.8	0.78	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Toluene	ND	*	5.8	0.83	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
1,2,3-Trichlorobenzene	ND	*	5.8	0.86	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
1,2,4-Trichlorobenzene	ND	*	5.8	0.83	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
1,1,1-Trichloroethane	ND	*	5.8	0.71	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
1,1,2-Trichloroethane	ND	*	5.8	0.81	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Trichloroethene	ND	*	5.8	0.73	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Trichlorofluoromethane	ND	*	5.8	0.65	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
1,2,3-Trichloropropane	ND	*	5.8	0.90	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	5.8	2.4	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
1,2,4-Trimethylbenzene	ND	*	5.8	1.9	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
1,3,5-Trimethylbenzene	ND	*	5.8	0.76	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Vinyl acetate	ND	*	23	5.8	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Vinyl chloride	ND	*	5.8	0.85	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Xylenes, Total	ND		5.8	1.4	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
2,2-Dichloropropane	ND	*	5.8	2.3	ug/Kg		08/24/18 02:25	08/29/18 16:10	1
Gasoline Range Organics (GRO) -C4-C12	ND	*	290	120	ug/Kg		08/24/18 02:25	08/29/18 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*	*	*45 - 131*	*08/24/18 02:25*	*08/29/18 16:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*	*	*60 - 140*	*08/24/18 02:25*	*08/29/18 16:10*	*1*
Toluene-d8 (Surr)	*91*	*	*58 - 140*	*08/24/18 02:25*	*08/29/18 16:10*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**30**		9.6	4.8	ug/Kg		08/24/18 15:31	08/29/18 23:05	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/24/18 15:31	08/29/18 23:05	1
Acenaphthylene	**9.3**		4.8	2.3	ug/Kg		08/24/18 15:31	08/29/18 23:05	1
Anthracene	**17**		4.8	1.9	ug/Kg		08/24/18 15:31	08/29/18 23:05	1
Benzo[a]anthracene	**41**		4.8	1.4	ug/Kg		08/24/18 15:31	08/29/18 23:05	1
Benzo[a]pyrene	**50**		4.8	1.8	ug/Kg		08/24/18 15:31	08/29/18 23:05	1
Benzo[b]fluoranthene	**81**		4.8	2.0	ug/Kg		08/24/18 15:31	08/29/18 23:05	1
Benzo[g,h,i]perylene	**24**		4.8	4.1	ug/Kg		08/24/18 15:31	08/29/18 23:05	1
Benzo[k]fluoranthene	ND		4.8	2.0	ug/Kg		08/24/18 15:31	08/29/18 23:05	1
Chrysene	**64**	**B**	4.8	1.3	ug/Kg		08/24/18 15:31	08/29/18 23:05	1
Dibenz(a,h)anthracene	**5.4**		4.8	3.4	ug/Kg		08/24/18 15:31	08/29/18 23:05	1
Fluoranthene	**110**		4.8	1.3	ug/Kg		08/24/18 15:31	08/29/18 23:05	1
Fluorene	**7.9**		4.8	2.1	ug/Kg		08/24/18 15:31	08/29/18 23:05	1
Indeno[1,2,3-cd]pyrene	**21**		4.8	4.0	ug/Kg		08/24/18 15:31	08/29/18 23:05	1
Naphthalene	**39**		4.8	3.4	ug/Kg		08/24/18 15:31	08/29/18 23:05	1
Phenanthrene	**110**		4.8	1.7	ug/Kg		08/24/18 15:31	08/29/18 23:05	1
Pyrene	**150**		4.8	1.6	ug/Kg		08/24/18 15:31	08/29/18 23:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*33 - 120*	*08/24/18 15:31*	*08/29/18 23:05*	*1*
Terphenyl-d14	*67*		*35 - 146*	*08/24/18 15:31*	*08/29/18 23:05*	*1*

Client Sample ID: DG-F5S-3.5-4
Date Collected: 08/22/18 15:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-11
Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	72000	B	1900	720	ug/Kg		08/27/18 08:59	08/28/18 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*63*		*40 - 130*	*08/27/18 08:59*	*08/28/18 21:56*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
Aldrin	ND		1.9	0.48	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
Endrin	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
Toxaphene	ND		38	6.5	ug/Kg		08/24/18 11:26	08/29/18 12:58	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/29/18 12:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*70*	*p*	*21 - 136*	*08/24/18 11:26*	*08/29/18 12:58*	*1*
Tetrachloro-m-xylene	*73*		*21 - 145*	*08/24/18 11:26*	*08/29/18 12:58*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	22	ug/Kg		08/27/18 11:05	08/29/18 00:10	1
Aroclor-1221	ND		49	24	ug/Kg		08/27/18 11:05	08/29/18 00:10	1
Aroclor-1232	ND		49	23	ug/Kg		08/27/18 11:05	08/29/18 00:10	1
Aroclor-1242	ND		49	19	ug/Kg		08/27/18 11:05	08/29/18 00:10	1
Aroclor-1248	ND		49	24	ug/Kg		08/27/18 11:05	08/29/18 00:10	1
Aroclor-1254	ND		49	23	ug/Kg		08/27/18 11:05	08/29/18 00:10	1
Aroclor-1260	ND		49	22	ug/Kg		08/27/18 11:05	08/29/18 00:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*14 - 128*	*08/27/18 11:05*	*08/29/18 00:10*	*1*
DCB Decachlorobiphenyl	*86*		*10 - 132*	*08/27/18 11:05*	*08/29/18 00:10*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	13		2.6	0.42	mg/Kg		08/25/18 14:28	08/28/18 15:20	10

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-F5S-3.5-4
Date Collected: 08/22/18 15:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-11
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	18	B	5.1	0.43	mg/Kg		08/25/18 14:28	08/28/18 15:20	10
Barium	1400		1.0	0.14	mg/Kg		08/25/18 14:28	08/27/18 20:05	4
Beryllium	0.57		0.20	0.066	mg/Kg		08/25/18 14:28	08/27/18 20:05	4
Cadmium	2.8		0.64	0.063	mg/Kg		08/25/18 14:28	08/28/18 15:20	10
Chromium	43		2.6	0.27	mg/Kg		08/25/18 14:28	08/28/18 15:20	10
Cobalt	7.4		1.0	0.10	mg/Kg		08/25/18 14:28	08/28/18 15:20	10
Copper	800		7.7	3.6	mg/Kg		08/25/18 14:28	08/28/18 15:20	10
Lead	2600		2.6	0.54	mg/Kg		08/25/18 14:28	08/28/18 15:20	10
Molybdenum	0.67	J	1.0	0.13	mg/Kg		08/25/18 14:28	08/27/18 20:05	4
Nickel	29		2.6	0.26	mg/Kg		08/25/18 14:28	08/28/18 15:20	10
Selenium	1.4	J	5.1	0.77	mg/Kg		08/25/18 14:28	08/28/18 15:20	10
Silver	6.0		1.3	0.26	mg/Kg		08/25/18 14:28	08/28/18 15:20	10
Thallium	1.3	J	2.6	0.74	mg/Kg		08/25/18 14:28	08/28/18 15:20	10
Vanadium	45		2.6	0.35	mg/Kg		08/25/18 14:28	08/28/18 15:20	10
Zinc	2300		7.7	3.2	mg/Kg		08/25/18 14:28	08/28/18 15:20	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.31		0.015	0.0022	mg/Kg		08/27/18 09:58	08/30/18 17:42	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-E5S-0.5-1
Date Collected: 08/22/18 16:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-12
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.8	0.29	mg/Kg		08/25/18 14:28	08/27/18 20:10	4
Arsenic	**2.4**	**J B**	3.5	0.30	mg/Kg		08/25/18 14:28	08/27/18 20:10	4
Barium	**80**		1.8	0.25	mg/Kg		08/25/18 14:28	08/27/18 20:10	4
Beryllium	ND		0.35	0.12	mg/Kg		08/25/18 14:28	08/27/18 20:10	4
Cadmium	**0.14**	**J**	0.44	0.044	mg/Kg		08/25/18 14:28	08/27/18 20:10	4
Chromium	**10**		1.8	0.19	mg/Kg		08/25/18 14:28	08/27/18 20:10	4
Cobalt	**10**		0.71	0.071	mg/Kg		08/25/18 14:28	08/27/18 20:10	4
Copper	**130**		5.3	2.5	mg/Kg		08/25/18 14:28	08/27/18 20:10	4
Lead	**76**		1.8	0.37	mg/Kg		08/25/18 14:28	08/27/18 20:10	4
Molybdenum	**0.48**	**J**	1.8	0.23	mg/Kg		08/25/18 14:28	08/27/18 20:10	4
Nickel	**5.3**		1.8	0.18	mg/Kg		08/25/18 14:28	08/27/18 20:10	4
Selenium	ND		3.5	0.53	mg/Kg		08/25/18 14:28	08/27/18 20:10	4
Silver	ND		0.88	0.18	mg/Kg		08/25/18 14:28	08/27/18 20:10	4
Thallium	**1.0**	**J**	1.8	0.51	mg/Kg		08/25/18 14:28	08/27/18 20:10	4
Vanadium	**97**		1.8	0.24	mg/Kg		08/25/18 14:28	08/27/18 20:10	4
Zinc	**100**		5.3	2.2	mg/Kg		08/25/18 14:28	08/27/18 20:10	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.14**		0.015	0.0022	mg/Kg		08/27/18 09:58	08/30/18 17:44	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-E5S-3.5-4
Date Collected: 08/22/18 16:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-13
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	71		1.6	0.26	mg/Kg		08/25/18 14:28	08/27/18 20:24	4
Arsenic	22	B	3.1	0.27	mg/Kg		08/25/18 14:28	08/27/18 20:24	4
Barium	150		1.6	0.22	mg/Kg		08/25/18 14:28	08/27/18 20:24	4
Beryllium	ND		0.31	0.10	mg/Kg		08/25/18 14:28	08/27/18 20:24	4
Cadmium	0.44		0.39	0.039	mg/Kg		08/25/18 14:28	08/27/18 20:24	4
Chromium	18		1.6	0.17	mg/Kg		08/25/18 14:28	08/27/18 20:24	4
Cobalt	9.8		0.63	0.063	mg/Kg		08/25/18 14:28	08/27/18 20:24	4
Copper	300		4.7	2.2	mg/Kg		08/25/18 14:28	08/27/18 20:24	4
Lead	3300		1.6	0.33	mg/Kg		08/25/18 14:28	08/27/18 20:24	4
Molybdenum	0.42	J	1.6	0.20	mg/Kg		08/25/18 14:28	08/27/18 20:24	4
Nickel	13		1.6	0.16	mg/Kg		08/25/18 14:28	08/27/18 20:24	4
Selenium	ND		3.1	0.47	mg/Kg		08/25/18 14:28	08/27/18 20:24	4
Silver	0.72	J	0.79	0.16	mg/Kg		08/25/18 14:28	08/27/18 20:24	4
Thallium	1.1	J	1.6	0.46	mg/Kg		08/25/18 14:28	08/27/18 20:24	4
Vanadium	71		1.6	0.21	mg/Kg		08/25/18 14:28	08/27/18 20:24	4
Zinc	350		4.7	2.0	mg/Kg		08/25/18 14:28	08/27/18 20:24	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.070		0.015	0.0021	mg/Kg		08/27/18 09:58	08/30/18 17:47	1

Client Sample ID: DG-D5S-0.5-1
Date Collected: 08/22/18 16:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-14
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.5	1.1	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Acetone	**39**	**J**	45	34	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Benzene	ND		4.5	0.58	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Dichlorobromomethane	ND		4.5	0.64	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Bromobenzene	ND		4.5	0.71	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Chlorobromomethane	ND		18	0.64	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Bromoform	ND		4.5	1.8	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Bromomethane	ND		8.9	0.71	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
2-Butanone (MEK)	ND		45	19	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
n-Butylbenzene	ND		4.5	0.89	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
sec-Butylbenzene	ND		4.5	0.64	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
tert-Butylbenzene	ND		4.5	0.65	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Carbon disulfide	ND		4.5	1.8	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Carbon tetrachloride	ND		4.5	0.55	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Chlorobenzene	ND		4.5	0.62	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Chloroethane	ND		8.9	0.50	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Chloroform	ND		4.5	0.59	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Chloromethane	ND		8.9	0.71	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
2-Chlorotoluene	ND		4.5	0.58	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
4-Chlorotoluene	ND		4.5	0.61	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Chlorodibromomethane	ND		4.5	0.63	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
1,2-Dichlorobenzene	ND		4.5	0.61	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
1,3-Dichlorobenzene	ND		4.5	0.64	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
1,4-Dichlorobenzene	ND		4.5	0.63	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
1,3-Dichloropropane	ND		4.5	0.65	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
1,1-Dichloropropene	ND		4.5	0.62	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
1,2-Dibromo-3-Chloropropane	ND		8.9	1.5	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Ethylene Dibromide	ND		4.5	1.3	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Dibromomethane	ND		8.9	0.77	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Dichlorodifluoromethane	ND		8.9	0.71	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
1,1-Dichloroethane	ND		4.5	0.61	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
1,2-Dichloroethane	ND		4.5	0.68	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
1,1-Dichloroethene	ND	*	4.5	0.55	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
cis-1,2-Dichloroethene	ND		4.5	0.61	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
trans-1,2-Dichloroethene	ND		4.5	0.67	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
1,2-Dichloropropane	ND		4.5	0.56	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
cis-1,3-Dichloropropene	ND		4.5	0.62	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
trans-1,3-Dichloropropene	ND		4.5	0.60	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Ethylbenzene	ND		4.5	0.67	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Hexachlorobutadiene	ND		4.5	0.80	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
2-Hexanone	ND		45	8.9	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Isopropylbenzene	ND		4.5	0.61	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
4-Isopropyltoluene	ND		4.5	2.2	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Methylene Chloride	ND		8.9	5.0	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
4-Methyl-2-pentanone (MIBK)	ND		45	8.9	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Naphthalene	ND		8.9	1.3	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
N-Propylbenzene	ND		4.5	0.59	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Styrene	ND		4.5	0.56	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
1,1,1,2-Tetrachloroethane	ND		4.5	0.68	ug/Kg		08/24/18 02:25	08/29/18 01:39	1

Client Sample ID: DG-D5S-0.5-1
Date Collected: 08/22/18 16:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-14
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.5	0.67	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Tetrachloroethene	ND		4.5	0.60	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Toluene	ND		4.5	0.63	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
1,2,3-Trichlorobenzene	ND		4.5	0.66	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
1,2,4-Trichlorobenzene	ND		4.5	0.63	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
1,1,1-Trichloroethane	ND		4.5	0.55	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
1,1,2-Trichloroethane	ND		4.5	0.63	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Trichloroethene	**0.57**	**J**	4.5	0.56	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Trichlorofluoromethane	ND		4.5	0.50	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
1,2,3-Trichloropropane	ND		4.5	0.69	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.5	1.9	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
1,2,4-Trimethylbenzene	ND		4.5	1.5	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
1,3,5-Trimethylbenzene	ND		4.5	0.58	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Vinyl acetate	ND		18	4.5	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Vinyl chloride	ND		4.5	0.65	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Xylenes, Total	ND		4.5	1.1	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
2,2-Dichloropropane	ND		4.5	1.8	ug/Kg		08/24/18 02:25	08/29/18 01:39	1
Gasoline Range Organics (GRO) -C4-C12	ND		220	89	ug/Kg		08/24/18 02:25	08/29/18 01:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*45 - 131*	*08/24/18 02:25*	*08/29/18 01:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*60 - 140*	*08/24/18 02:25*	*08/29/18 01:39*	*1*
Toluene-d8 (Surr)	*94*		*58 - 140*	*08/24/18 02:25*	*08/29/18 01:39*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		49	25	ug/Kg		08/24/18 15:31	08/30/18 17:29	5
Acenaphthene	ND		25	14	ug/Kg		08/24/18 15:31	08/30/18 17:29	5
Acenaphthylene	**13**	**J**	25	12	ug/Kg		08/24/18 15:31	08/30/18 17:29	5
Anthracene	**14**	**J**	25	9.8	ug/Kg		08/24/18 15:31	08/30/18 17:29	5
Benzo[a]anthracene	**38**		25	7.4	ug/Kg		08/24/18 15:31	08/30/18 17:29	5
Benzo[a]pyrene	**60**		25	9.3	ug/Kg		08/24/18 15:31	08/30/18 17:29	5
Benzo[b]fluoranthene	**60**		25	10	ug/Kg		08/24/18 15:31	08/30/18 17:29	5
Benzo[g,h,i]perylene	**29**		25	21	ug/Kg		08/24/18 15:31	08/30/18 17:29	5
Benzo[k]fluoranthene	**33**		25	10	ug/Kg		08/24/18 15:31	08/30/18 17:29	5
Chrysene	**58**	**B**	25	6.9	ug/Kg		08/24/18 15:31	08/30/18 17:29	5
Dibenz(a,h)anthracene	ND		25	17	ug/Kg		08/24/18 15:31	08/30/18 17:29	5
Fluoranthene	**55**		25	6.9	ug/Kg		08/24/18 15:31	08/30/18 17:29	5
Fluorene	ND		25	11	ug/Kg		08/24/18 15:31	08/30/18 17:29	5
Indeno[1,2,3-cd]pyrene	ND		25	21	ug/Kg		08/24/18 15:31	08/30/18 17:29	5
Naphthalene	ND		25	17	ug/Kg		08/24/18 15:31	08/30/18 17:29	5
Phenanthrene	**33**		25	8.9	ug/Kg		08/24/18 15:31	08/30/18 17:29	5
Pyrene	**98**		25	8.4	ug/Kg		08/24/18 15:31	08/30/18 17:29	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*33 - 120*	*08/24/18 15:31*	*08/30/18 17:29*	*5*
Terphenyl-d14	*88*		*35 - 146*	*08/24/18 15:31*	*08/30/18 17:29*	*5*

Client Sample ID: DG-D5S-0.5-1

Date Collected: 08/22/18 16:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-14

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**370000**	**B**	9500	3500	ug/Kg		08/27/18 08:59	08/29/18 01:35	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*X D*	*40 - 130*	*08/27/18 08:59*	*08/29/18 01:35*	*5*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.9	1.2	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
4,4'-DDE	**1.5**	**J**	3.9	0.82	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
4,4'-DDT	**2.1**	**J p**	3.9	0.80	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
Aldrin	ND		3.9	0.97	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
alpha-BHC	ND		3.9	1.1	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
beta-BHC	ND		3.9	0.70	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
Chlordane (technical)	ND		78	6.2	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
cis-Chlordane	ND		3.9	0.78	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
delta-BHC	ND		3.9	0.85	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
Dieldrin	ND		3.9	1.1	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
Endosulfan I	ND		3.9	0.62	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
Endosulfan II	ND		3.9	0.95	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
Endosulfan sulfate	ND		3.9	0.74	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
Endrin	ND		3.9	0.89	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
Endrin aldehyde	ND		3.9	1.2	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
Endrin ketone	ND		3.9	0.64	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
gamma-BHC (Lindane)	ND		3.9	1.2	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
Heptachlor	ND		3.9	0.89	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
Heptachlor epoxide	ND		3.9	0.68	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
Methoxychlor	ND		3.9	1.3	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
Toxaphene	ND		78	13	ug/Kg		08/24/18 11:26	08/30/18 12:22	2
trans-Chlordane	**0.93**	**J**	3.9	0.89	ug/Kg		08/24/18 11:26	08/30/18 12:22	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*72*		*21 - 136*	*08/24/18 11:26*	*08/30/18 12:22*	*2*
Tetrachloro-m-xylene	*88*		*21 - 145*	*08/24/18 11:26*	*08/30/18 12:22*	*2*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/27/18 11:05	08/29/18 00:32	1
Aroclor-1221	ND		51	24	ug/Kg		08/27/18 11:05	08/29/18 00:32	1
Aroclor-1232	ND		51	23	ug/Kg		08/27/18 11:05	08/29/18 00:32	1
Aroclor-1242	ND		51	19	ug/Kg		08/27/18 11:05	08/29/18 00:32	1
Aroclor-1248	ND		51	24	ug/Kg		08/27/18 11:05	08/29/18 00:32	1
Aroclor-1254	**60**		51	23	ug/Kg		08/27/18 11:05	08/29/18 00:32	1
Aroclor-1260	**37**	**J**	51	22	ug/Kg		08/27/18 11:05	08/29/18 00:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*64*		*14 - 128*	*08/27/18 11:05*	*08/29/18 00:32*	*1*
DCB Decachlorobiphenyl	*74*		*10 - 132*	*08/27/18 11:05*	*08/29/18 00:32*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**6.9**		1.5	0.25	mg/Kg		08/27/18 09:53	08/28/18 15:56	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-D5S-0.5-1
Date Collected: 08/22/18 16:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-14
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12	B	3.1	0.26	mg/Kg		08/27/18 09:53	08/28/18 15:56	4
Barium	180		1.5	0.22	mg/Kg		08/27/18 09:53	08/28/18 15:56	4
Beryllium	ND		0.31	0.099	mg/Kg		08/27/18 09:53	08/29/18 22:45	4
Cadmium	5.2		0.38	0.038	mg/Kg		08/27/18 09:53	08/28/18 15:56	4
Chromium	78		1.5	0.16	mg/Kg		08/27/18 09:53	08/28/18 15:56	4
Cobalt	18		0.61	0.061	mg/Kg		08/27/18 09:53	08/28/18 15:56	4
Copper	330		4.6	2.2	mg/Kg		08/27/18 09:53	08/28/18 15:56	4
Lead	620		1.5	0.32	mg/Kg		08/27/18 09:53	08/28/18 15:56	4
Molybdenum	3.9		1.5	0.20	mg/Kg		08/27/18 09:53	08/28/18 15:56	4
Nickel	45		1.5	0.16	mg/Kg		08/27/18 09:53	08/28/18 15:56	4
Selenium	1.1	J	3.1	0.46	mg/Kg		08/27/18 09:53	08/28/18 15:56	4
Silver	0.24	J	0.76	0.15	mg/Kg		08/27/18 09:53	08/28/18 15:56	4
Thallium	ND		1.5	0.44	mg/Kg		08/27/18 09:53	08/28/18 15:56	4
Vanadium	77		1.5	0.21	mg/Kg		08/27/18 09:53	08/28/18 15:56	4
Zinc	850		4.6	1.9	mg/Kg		08/27/18 09:53	08/28/18 15:56	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19		0.017	0.0025	mg/Kg		08/27/18 09:58	08/30/18 17:49	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-D5S-3.5-4
Date Collected: 08/22/18 16:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-15
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.7	1.1	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Acetone	ND	F2	47	36	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Benzene	ND		4.7	0.62	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Dichlorobromomethane	ND		4.7	0.68	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Bromobenzene	ND		4.7	0.75	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Chlorobromomethane	ND		19	0.68	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Bromoform	ND		4.7	1.9	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Bromomethane	ND		9.5	0.75	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
2-Butanone (MEK)	ND		47	20	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
n-Butylbenzene	ND		4.7	0.95	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
sec-Butylbenzene	ND		4.7	0.68	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
tert-Butylbenzene	ND		4.7	0.69	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Carbon disulfide	ND	*	4.7	1.9	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Carbon tetrachloride	ND		4.7	0.59	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Chlorobenzene	ND		4.7	0.65	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Chloroethane	ND		9.5	0.53	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Chloroform	ND		4.7	0.62	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Chloromethane	ND		9.5	0.75	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
2-Chlorotoluene	ND		4.7	0.62	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
4-Chlorotoluene	ND		4.7	0.64	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Chlorodibromomethane	ND		4.7	0.67	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
1,2-Dichlorobenzene	ND		4.7	0.64	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
1,3-Dichlorobenzene	ND		4.7	0.68	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
1,4-Dichlorobenzene	ND		4.7	0.67	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
1,3-Dichloropropane	ND		4.7	0.69	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
1,1-Dichloropropene	ND		4.7	0.65	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
1,2-Dibromo-3-Chloropropane	ND		9.5	1.6	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Ethylene Dibromide	ND		4.7	1.4	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Dibromomethane	ND		9.5	0.81	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Dichlorodifluoromethane	ND		9.5	0.75	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
1,1-Dichloroethane	ND		4.7	0.64	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
1,2-Dichloroethane	ND		4.7	0.72	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
1,1-Dichloroethene	ND		4.7	0.59	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
cis-1,2-Dichloroethene	ND		4.7	0.64	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
trans-1,2-Dichloroethene	ND		4.7	0.71	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
1,2-Dichloropropane	ND		4.7	0.60	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
cis-1,3-Dichloropropene	ND		4.7	0.65	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
trans-1,3-Dichloropropene	ND		4.7	0.63	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Ethylbenzene	ND		4.7	0.71	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Hexachlorobutadiene	ND		4.7	0.85	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
2-Hexanone	ND		47	9.5	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Isopropylbenzene	ND		4.7	0.64	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
4-Isopropyltoluene	ND		4.7	2.4	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Methylene Chloride	ND		9.5	5.3	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
4-Methyl-2-pentanone (MIBK)	ND		47	9.5	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Naphthalene	ND		9.5	1.4	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
N-Propylbenzene	ND		4.7	0.62	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Styrene	ND		4.7	0.60	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
1,1,1,2-Tetrachloroethane	ND		4.7	0.72	ug/Kg		08/31/18 09:19	08/31/18 10:33	1

Client Sample ID: DG-D5S-3.5-4
Date Collected: 08/22/18 16:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-15
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	F1 F2	4.7	0.71	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Tetrachloroethene	ND		4.7	0.63	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Toluene	ND		4.7	0.67	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
1,2,3-Trichlorobenzene	ND		4.7	0.70	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
1,2,4-Trichlorobenzene	ND		4.7	0.67	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
1,1,1-Trichloroethane	ND		4.7	0.58	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
1,1,2-Trichloroethane	ND		4.7	0.66	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Trichloroethene	ND	F1	4.7	0.60	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Trichlorofluoromethane	ND		4.7	0.53	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
1,2,3-Trichloropropane	ND		4.7	0.73	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1	4.7	2.0	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
1,2,4-Trimethylbenzene	ND		4.7	1.6	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
1,3,5-Trimethylbenzene	ND		4.7	0.62	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Vinyl acetate	ND	F1	19	4.7	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Vinyl chloride	ND		4.7	0.69	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Xylenes, Total	ND		4.7	1.2	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
2,2-Dichloropropane	ND		4.7	1.9	ug/Kg		08/31/18 09:19	08/31/18 10:33	1
Gasoline Range Organics (GRO) -C4-C12	ND		240	95	ug/Kg		08/31/18 09:19	08/31/18 10:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*45 - 131*	*08/31/18 09:19*	*08/31/18 10:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*	*08/31/18 09:19*	*08/31/18 10:33*	*1*
Toluene-d8 (Surr)	*100*		*58 - 140*	*08/31/18 09:19*	*08/31/18 10:33*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.6	4.8	ug/Kg		08/24/18 15:31	08/29/18 23:29	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/24/18 15:31	08/29/18 23:29	1
Acenaphthylene	**3.5**	**J**	4.8	2.3	ug/Kg		08/24/18 15:31	08/29/18 23:29	1
Anthracene	**6.2**		4.8	1.9	ug/Kg		08/24/18 15:31	08/29/18 23:29	1
Benzo[a]anthracene	**35**		4.8	1.4	ug/Kg		08/24/18 15:31	08/29/18 23:29	1
Benzo[a]pyrene	**35**		4.8	1.8	ug/Kg		08/24/18 15:31	08/29/18 23:29	1
Benzo[b]fluoranthene	**54**		4.8	2.0	ug/Kg		08/24/18 15:31	08/29/18 23:29	1
Benzo[g,h,i]perylene	**14**		4.8	4.1	ug/Kg		08/24/18 15:31	08/29/18 23:29	1
Benzo[k]fluoranthene	ND		4.8	2.0	ug/Kg		08/24/18 15:31	08/29/18 23:29	1
Chrysene	**41**	**B**	4.8	1.3	ug/Kg		08/24/18 15:31	08/29/18 23:29	1
Dibenz(a,h)anthracene	**4.2**	**J**	4.8	3.4	ug/Kg		08/24/18 15:31	08/29/18 23:29	1
Fluoranthene	**44**		4.8	1.3	ug/Kg		08/24/18 15:31	08/29/18 23:29	1
Fluorene	ND		4.8	2.1	ug/Kg		08/24/18 15:31	08/29/18 23:29	1
Indeno[1,2,3-cd]pyrene	**13**		4.8	4.0	ug/Kg		08/24/18 15:31	08/29/18 23:29	1
Naphthalene	**3.6**	**J**	4.8	3.4	ug/Kg		08/24/18 15:31	08/29/18 23:29	1
Phenanthrene	**37**		4.8	1.7	ug/Kg		08/24/18 15:31	08/29/18 23:29	1
Pyrene	**74**		4.8	1.6	ug/Kg		08/24/18 15:31	08/29/18 23:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*33 - 120*	*08/24/18 15:31*	*08/29/18 23:29*	*1*
Terphenyl-d14	*85*		*35 - 146*	*08/24/18 15:31*	*08/29/18 23:29*	*1*

Client Sample ID: DG-D5S-3.5-4

Date Collected: 08/22/18 16:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-15

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	11000		1900	720	ug/Kg		08/28/18 08:52	08/30/18 12:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*122*		*40 - 130*	*08/28/18 08:52*	*08/30/18 12:25*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
Aldrin	ND		1.9	0.48	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
Chlordane (technical)	ND		38	3.1	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
Endrin	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
Toxaphene	ND		38	6.5	ug/Kg		08/24/18 11:26	08/30/18 12:39	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/24/18 11:26	08/30/18 12:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*72*		*21 - 136*	*08/24/18 11:26*	*08/30/18 12:39*	*1*
Tetrachloro-m-xylene	*80*		*21 - 145*	*08/24/18 11:26*	*08/30/18 12:39*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		51	22	ug/Kg		08/27/18 11:05	08/29/18 00:54	1
Aroclor-1221	ND		51	24	ug/Kg		08/27/18 11:05	08/29/18 00:54	1
Aroclor-1232	ND		51	23	ug/Kg		08/27/18 11:05	08/29/18 00:54	1
Aroclor-1242	ND		51	19	ug/Kg		08/27/18 11:05	08/29/18 00:54	1
Aroclor-1248	ND		51	24	ug/Kg		08/27/18 11:05	08/29/18 00:54	1
Aroclor-1254	ND		51	23	ug/Kg		08/27/18 11:05	08/29/18 00:54	1
Aroclor-1260	ND		51	22	ug/Kg		08/27/18 11:05	08/29/18 00:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*100*		*14 - 128*	*08/27/18 11:05*	*08/29/18 00:54*	*1*
DCB Decachlorobiphenyl	*114*		*10 - 132*	*08/27/18 11:05*	*08/29/18 00:54*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.3	0.22	mg/Kg		08/27/18 09:53	08/28/18 16:01	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-D5S-3.5-4
Date Collected: 08/22/18 16:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-15
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.9	B	2.7	0.23	mg/Kg		08/27/18 09:53	08/28/18 16:01	4
Barium	48		1.3	0.19	mg/Kg		08/27/18 09:53	08/28/18 16:01	4
Beryllium	ND		0.27	0.087	mg/Kg		08/27/18 09:53	08/29/18 22:49	4
Cadmium	0.49		0.33	0.033	mg/Kg		08/27/18 09:53	08/28/18 16:01	4
Chromium	12		1.3	0.14	mg/Kg		08/27/18 09:53	08/28/18 16:01	4
Cobalt	14		0.53	0.053	mg/Kg		08/27/18 09:53	08/28/18 16:01	4
Copper	110		4.0	1.9	mg/Kg		08/27/18 09:53	08/28/18 16:01	4
Lead	58		1.3	0.28	mg/Kg		08/27/18 09:53	08/28/18 16:01	4
Molybdenum	0.71	J	1.3	0.17	mg/Kg		08/27/18 09:53	08/28/18 16:01	4
Nickel	6.7		1.3	0.14	mg/Kg		08/27/18 09:53	08/28/18 16:01	4
Selenium	1.1	J	2.7	0.40	mg/Kg		08/27/18 09:53	08/28/18 16:01	4
Silver	ND		0.67	0.13	mg/Kg		08/27/18 09:53	08/28/18 16:01	4
Thallium	ND		1.3	0.39	mg/Kg		08/27/18 09:53	08/28/18 16:01	4
Vanadium	110		1.3	0.18	mg/Kg		08/27/18 09:53	08/28/18 16:01	4
Zinc	97		4.0	1.7	mg/Kg		08/27/18 09:53	08/28/18 16:01	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.32		0.015	0.0022	mg/Kg		08/27/18 09:58	08/30/18 17:51	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-C5S-0.5-1
Date Collected: 08/23/18 11:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-16
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	F1	1.1	0.19	mg/Kg		08/27/18 09:53	08/28/18 15:52	4
Arsenic	**3.1**	**B**	2.3	0.19	mg/Kg		08/27/18 09:53	08/28/18 15:52	4
Barium	**53**	**F1**	1.1	0.16	mg/Kg		08/27/18 09:53	08/28/18 15:52	4
Beryllium	**0.11**	**J**	0.23	0.074	mg/Kg		08/27/18 09:53	08/29/18 22:40	4
Cadmium	**0.51**	**F1**	0.29	0.028	mg/Kg		08/27/18 09:53	08/28/18 15:52	4
Chromium	**15**	**F1**	1.1	0.12	mg/Kg		08/27/18 09:53	08/28/18 15:52	4
Cobalt	**11**	**F1**	0.46	0.046	mg/Kg		08/27/18 09:53	08/28/18 15:52	4
Copper	**140**		3.4	1.6	mg/Kg		08/27/18 09:53	08/28/18 15:52	4
Lead	**130**	**F1**	1.1	0.24	mg/Kg		08/27/18 09:53	08/28/18 15:52	4
Molybdenum	**1.1**		1.1	0.15	mg/Kg		08/27/18 09:53	08/28/18 15:52	4
Nickel	**9.4**	**F1**	1.1	0.12	mg/Kg		08/27/18 09:53	08/28/18 15:52	4
Selenium	**0.72**	**J**	2.3	0.34	mg/Kg		08/27/18 09:53	08/28/18 15:52	4
Silver	ND	F1	0.57	0.12	mg/Kg		08/27/18 09:53	08/28/18 15:52	4
Thallium	ND		1.1	0.33	mg/Kg		08/27/18 09:53	08/28/18 15:52	4
Vanadium	**94**	**F1**	1.1	0.16	mg/Kg		08/27/18 09:53	08/28/18 15:52	4
Zinc	**130**	**F1**	3.4	1.5	mg/Kg		08/27/18 09:53	08/28/18 15:52	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.28**		0.016	0.0023	mg/Kg		08/27/18 09:58	08/30/18 17:54	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-C5S-3.5-4
Date Collected: 08/23/18 11:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-17
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.1		1.6	0.27	mg/Kg		08/27/18 09:53	08/28/18 16:06	4
Arsenic	9.3	B	3.2	0.27	mg/Kg		08/27/18 09:53	08/28/18 16:06	4
Barium	210		1.6	0.23	mg/Kg		08/27/18 09:53	08/28/18 16:06	4
Beryllium	0.32		0.32	0.10	mg/Kg		08/27/18 09:53	08/29/18 22:54	4
Cadmium	0.68		0.40	0.040	mg/Kg		08/27/18 09:53	08/28/18 16:06	4
Chromium	44		1.6	0.17	mg/Kg		08/27/18 09:53	08/28/18 16:06	4
Cobalt	10		0.64	0.064	mg/Kg		08/27/18 09:53	08/28/18 16:06	4
Copper	260		4.8	2.3	mg/Kg		08/27/18 09:53	08/28/18 16:06	4
Lead	410		1.6	0.34	mg/Kg		08/27/18 09:53	08/28/18 16:06	4
Molybdenum	1.2	J	1.6	0.20	mg/Kg		08/27/18 09:53	08/28/18 16:06	4
Nickel	41		1.6	0.16	mg/Kg		08/27/18 09:53	08/28/18 16:06	4
Selenium	0.72	J	3.2	0.48	mg/Kg		08/27/18 09:53	08/28/18 16:06	4
Silver	ND		0.80	0.16	mg/Kg		08/27/18 09:53	08/28/18 16:06	4
Thallium	ND		1.6	0.46	mg/Kg		08/27/18 09:53	08/28/18 16:06	4
Vanadium	46		1.6	0.22	mg/Kg		08/27/18 09:53	08/28/18 16:06	4
Zinc	530		4.8	2.0	mg/Kg		08/27/18 09:53	08/28/18 16:06	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.47		0.016	0.0023	mg/Kg		08/27/18 09:58	08/30/18 18:01	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-C5S-9-9.5
Date Collected: 08/23/18 11:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-18
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.5	0.84	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Acetone	ND		35	26	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Benzene	ND		3.5	0.45	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Dichlorobromomethane	ND		3.5	0.50	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Bromobenzene	ND		3.5	0.55	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Chlorobromomethane	ND		14	0.50	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Bromoform	ND		3.5	1.4	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Bromomethane	ND		7.0	0.55	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
2-Butanone (MEK)	ND		35	15	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
n-Butylbenzene	ND		3.5	0.70	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
sec-Butylbenzene	ND		3.5	0.50	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
tert-Butylbenzene	ND		3.5	0.51	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Carbon disulfide	ND		3.5	1.4	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Carbon tetrachloride	ND		3.5	0.43	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Chlorobenzene	ND		3.5	0.48	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Chloroethane	ND		7.0	0.39	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Chloroform	ND		3.5	0.46	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Chloromethane	ND		7.0	0.55	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
2-Chlorotoluene	ND		3.5	0.45	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
4-Chlorotoluene	ND		3.5	0.47	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Chlorodibromomethane	ND		3.5	0.49	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
1,2-Dichlorobenzene	ND		3.5	0.47	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
1,3-Dichlorobenzene	ND		3.5	0.50	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
1,4-Dichlorobenzene	ND		3.5	0.49	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
1,3-Dichloropropane	ND		3.5	0.51	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
1,1-Dichloropropene	ND		3.5	0.48	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
1,2-Dibromo-3-Chloropropane	ND		7.0	1.2	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Ethylene Dibromide	ND		3.5	1.0	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Dibromomethane	ND		7.0	0.60	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Dichlorodifluoromethane	ND		7.0	0.55	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
1,1-Dichloroethane	ND		3.5	0.47	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
1,2-Dichloroethane	ND		3.5	0.53	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
1,1-Dichloroethene	ND	*	3.7	0.46	ug/Kg		08/24/18 02:25	08/29/18 10:43	1
cis-1,2-Dichloroethene	**87**		3.5	0.47	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
trans-1,2-Dichloroethene	**1.7**	**J**	3.5	0.52	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
1,2-Dichloropropane	ND		3.5	0.44	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
cis-1,3-Dichloropropene	ND		3.5	0.48	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
trans-1,3-Dichloropropene	ND		3.5	0.47	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Ethylbenzene	ND		3.5	0.52	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Hexachlorobutadiene	ND		3.5	0.63	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
2-Hexanone	ND		35	7.0	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Isopropylbenzene	ND		3.5	0.47	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
4-Isopropyltoluene	ND		3.5	1.7	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Methylene Chloride	ND		7.0	3.9	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
4-Methyl-2-pentanone (MIBK)	ND		35	7.0	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Naphthalene	ND		7.0	1.0	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
N-Propylbenzene	ND		3.5	0.46	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Styrene	ND		3.5	0.44	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
1,1,1,2-Tetrachloroethane	ND		3.5	0.53	ug/Kg		08/24/18 02:25	08/30/18 22:03	1

Client Sample ID: DG-C5S-9-9.5
Date Collected: 08/23/18 11:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-18
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.5	0.52	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Tetrachloroethene	ND		3.5	0.47	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Toluene	ND		3.5	0.49	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
1,2,3-Trichlorobenzene	ND		3.5	0.52	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
1,2,4-Trichlorobenzene	ND		3.5	0.49	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
1,1,1-Trichloroethane	ND		3.5	0.42	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
1,1,2-Trichloroethane	ND		3.5	0.49	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Trichloroethene	**120**		3.5	0.44	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Trichlorofluoromethane	ND		3.5	0.39	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
1,2,3-Trichloropropane	ND		3.5	0.54	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.5	1.4	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
1,2,4-Trimethylbenzene	ND		3.5	1.1	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
1,3,5-Trimethylbenzene	ND		3.5	0.45	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Vinyl acetate	ND		14	3.5	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Vinyl chloride	ND		3.5	0.51	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Xylenes, Total	ND		3.5	0.85	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
2,2-Dichloropropane	ND		3.5	1.4	ug/Kg		08/24/18 02:25	08/30/18 22:03	1
Gasoline Range Organics (GRO) -C4-C12	**150**	**J**	170	70	ug/Kg		08/24/18 02:25	08/30/18 22:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*65*	*	*45 - 131*	*08/24/18 02:25*	*08/29/18 10:43*	*1*
4-Bromofluorobenzene	*85*		*45 - 131*	*08/24/18 02:25*	*08/30/18 22:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*60 - 140*	*08/24/18 02:25*	*08/29/18 10:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*60 - 140*	*08/24/18 02:25*	*08/30/18 22:03*	*1*
Toluene-d8 (Surr)	*80*		*58 - 140*	*08/24/18 02:25*	*08/29/18 10:43*	*1*
Toluene-d8 (Surr)	*93*		*58 - 140*	*08/24/18 02:25*	*08/30/18 22:03*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**35**		9.6	4.8	ug/Kg		08/24/18 15:31	08/29/18 21:30	1
Acenaphthene	ND		4.8	2.7	ug/Kg		08/24/18 15:31	08/29/18 21:30	1
Acenaphthylene	ND		4.8	2.3	ug/Kg		08/24/18 15:31	08/29/18 21:30	1
Anthracene	**7.3**		4.8	1.9	ug/Kg		08/24/18 15:31	08/29/18 21:30	1
Benzo[a]anthracene	**14**		4.8	1.4	ug/Kg		08/24/18 15:31	08/29/18 21:30	1
Benzo[a]pyrene	**8.9**		4.8	1.8	ug/Kg		08/24/18 15:31	08/29/18 21:30	1
Benzo[b]fluoranthene	**18**		4.8	2.0	ug/Kg		08/24/18 15:31	08/29/18 21:30	1
Benzo[g,h,i]perylene	**6.2**		4.8	4.1	ug/Kg		08/24/18 15:31	08/29/18 21:30	1
Benzo[k]fluoranthene	ND		4.8	2.0	ug/Kg		08/24/18 15:31	08/29/18 21:30	1
Chrysene	**17**	**B**	4.8	1.3	ug/Kg		08/24/18 15:31	08/29/18 21:30	1
Dibenz(a,h)anthracene	ND		4.8	3.4	ug/Kg		08/24/18 15:31	08/29/18 21:30	1
Fluoranthene	**12**		4.8	1.3	ug/Kg		08/24/18 15:31	08/29/18 21:30	1
Fluorene	**19**		4.8	2.1	ug/Kg		08/24/18 15:31	08/29/18 21:30	1
Indeno[1,2,3-cd]pyrene	**4.7**	**J**	4.8	4.0	ug/Kg		08/24/18 15:31	08/29/18 21:30	1
Naphthalene	**20**		4.8	3.4	ug/Kg		08/24/18 15:31	08/29/18 21:30	1
Phenanthrene	**70**		4.8	1.7	ug/Kg		08/24/18 15:31	08/29/18 21:30	1
Pyrene	**20**		4.8	1.6	ug/Kg		08/24/18 15:31	08/29/18 21:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*33 - 120*	*08/24/18 15:31*	*08/29/18 21:30*	*1*

Client Sample ID: DG-C5S-9-9.5
Date Collected: 08/23/18 11:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-18
Matrix: Solid

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*77*		*35 - 146*	*08/24/18 15:31*	*08/29/18 21:30*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**14000**		1900	710	ug/Kg		08/28/18 11:24	08/30/18 00:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	*91*		*40 - 130*	*08/28/18 11:24*	*08/30/18 00:28*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
4,4'-DDE	ND		2.0	0.41	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
4,4'-DDT	ND		2.0	0.40	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
Aldrin	ND		2.0	0.49	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
Chlordane (technical)	ND		39	3.2	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
cis-Chlordane	ND		2.0	0.39	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
Endrin	ND		2.0	0.45	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
Toxaphene	ND		39	6.7	ug/Kg		08/24/18 11:26	08/30/18 12:57	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		08/24/18 11:26	08/30/18 12:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*72*		*21 - 136*	*08/24/18 11:26*	*08/30/18 12:57*	*1*
Tetrachloro-m-xylene	*73*		*21 - 145*	*08/24/18 11:26*	*08/30/18 12:57*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		52	23	ug/Kg		08/27/18 11:05	08/29/18 01:16	1
Aroclor-1221	ND		52	25	ug/Kg		08/27/18 11:05	08/29/18 01:16	1
Aroclor-1232	ND		52	24	ug/Kg		08/27/18 11:05	08/29/18 01:16	1
Aroclor-1242	ND		52	20	ug/Kg		08/27/18 11:05	08/29/18 01:16	1
Aroclor-1248	ND		52	25	ug/Kg		08/27/18 11:05	08/29/18 01:16	1
Aroclor-1254	ND		52	24	ug/Kg		08/27/18 11:05	08/29/18 01:16	1
Aroclor-1260	ND		52	23	ug/Kg		08/27/18 11:05	08/29/18 01:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*68*		*14 - 128*	*08/27/18 11:05*	*08/29/18 01:16*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-C5S-9-9.5
Date Collected: 08/23/18 11:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-18
Matrix: Solid

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	75		10 - 132	08/27/18 11:05	08/29/18 01:16	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.33	mg/Kg		08/27/18 09:53	08/28/18 16:20	4
Arsenic	**10**	**B**	4.0	0.34	mg/Kg		08/27/18 09:53	08/28/18 16:20	4
Barium	**370**		2.0	0.28	mg/Kg		08/27/18 09:53	08/28/18 16:20	4
Beryllium	**0.58**		0.40	0.13	mg/Kg		08/27/18 09:53	08/29/18 22:59	4
Cadmium	**0.12**	**J**	0.50	0.050	mg/Kg		08/27/18 09:53	08/28/18 16:20	4
Chromium	**48**		2.0	0.21	mg/Kg		08/27/18 09:53	08/28/18 16:20	4
Cobalt	**18**		0.80	0.080	mg/Kg		08/27/18 09:53	08/28/18 16:20	4
Copper	**39**		6.0	2.8	mg/Kg		08/27/18 09:53	08/28/18 16:20	4
Lead	**15**		2.0	0.42	mg/Kg		08/27/18 09:53	08/28/18 16:20	4
Molybdenum	**0.85**	**J**	2.0	0.26	mg/Kg		08/27/18 09:53	08/28/18 16:20	4
Nickel	**51**		2.0	0.20	mg/Kg		08/27/18 09:53	08/28/18 16:20	4
Selenium	**2.5**	**J**	4.0	0.60	mg/Kg		08/27/18 09:53	08/28/18 16:20	4
Silver	ND		1.0	0.20	mg/Kg		08/27/18 09:53	08/28/18 16:20	4
Thallium	ND		2.0	0.58	mg/Kg		08/27/18 09:53	08/28/18 16:20	4
Vanadium	**70**		2.0	0.27	mg/Kg		08/27/18 09:53	08/28/18 16:20	4
Zinc	**85**		6.0	2.5	mg/Kg		08/27/18 09:53	08/28/18 16:20	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.28**		0.015	0.0021	mg/Kg		08/27/18 09:58	08/30/18 18:03	1

Client Sample ID: DG-B5S-0.5-1
Date Collected: 08/23/18 11:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-19
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.0	0.96	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Acetone	**35**	**J**	40	30	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Benzene	ND		4.0	0.52	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Dichlorobromomethane	ND		4.0	0.58	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Bromobenzene	ND		4.0	0.63	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Chlorobromomethane	ND		16	0.58	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Bromoform	ND		4.0	1.6	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Bromomethane	ND		8.0	0.63	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
2-Butanone (MEK)	ND		40	17	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
n-Butylbenzene	ND		4.0	0.80	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
sec-Butylbenzene	ND		4.0	0.58	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
tert-Butylbenzene	ND		4.0	0.59	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Carbon disulfide	ND	*	4.0	1.6	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Carbon tetrachloride	ND		4.0	0.50	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Chlorobenzene	ND		4.0	0.55	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Chloroethane	ND		8.0	0.45	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Chloroform	ND		4.0	0.53	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Chloromethane	ND		8.0	0.63	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
2-Chlorotoluene	ND		4.0	0.52	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
4-Chlorotoluene	ND		4.0	0.55	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Chlorodibromomethane	ND		4.0	0.57	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
1,2-Dichlorobenzene	ND		4.0	0.55	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
1,3-Dichlorobenzene	ND		4.0	0.58	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
1,4-Dichlorobenzene	ND		4.0	0.57	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
1,3-Dichloropropane	ND		4.0	0.59	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
1,1-Dichloropropene	ND		4.0	0.55	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
1,2-Dibromo-3-Chloropropane	ND		8.0	1.4	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Ethylene Dibromide	ND		4.0	1.1	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Dibromomethane	ND		8.0	0.69	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Dichlorodifluoromethane	ND		8.0	0.63	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
1,1-Dichloroethane	ND		4.0	0.55	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
1,2-Dichloroethane	ND		4.0	0.61	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
1,1-Dichloroethene	ND	*	4.0	0.50	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
cis-1,2-Dichloroethene	ND		4.0	0.55	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
trans-1,2-Dichloroethene	ND		4.0	0.60	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
1,2-Dichloropropane	ND		4.0	0.51	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
cis-1,3-Dichloropropene	ND		4.0	0.55	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
trans-1,3-Dichloropropene	ND		4.0	0.54	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Ethylbenzene	ND		4.0	0.60	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Hexachlorobutadiene	ND		4.0	0.72	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
2-Hexanone	ND		40	8.0	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Isopropylbenzene	ND		4.0	0.55	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
4-Isopropyltoluene	ND		4.0	2.0	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Methylene Chloride	ND		8.0	4.5	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
4-Methyl-2-pentanone (MIBK)	ND		40	8.0	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Naphthalene	ND		8.0	1.2	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
N-Propylbenzene	ND		4.0	0.53	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Styrene	ND		4.0	0.51	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
1,1,1,2-Tetrachloroethane	ND		4.0	0.61	ug/Kg		08/24/18 02:25	08/29/18 17:06	1

Client Sample ID: DG-B5S-0.5-1
Date Collected: 08/23/18 11:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-19
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.0	0.60	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Tetrachloroethene	ND		4.0	0.54	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Toluene	ND		4.0	0.57	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
1,2,3-Trichlorobenzene	**0.68**	**J**	4.0	0.59	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
1,2,4-Trichlorobenzene	ND		4.0	0.57	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
1,1,1-Trichloroethane	ND		4.0	0.49	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
1,1,2-Trichloroethane	ND		4.0	0.56	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Trichloroethene	**1.1**	**J**	4.0	0.51	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Trichlorofluoromethane	ND		4.0	0.45	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
1,2,3-Trichloropropane	ND		4.0	0.62	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.7	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
1,2,4-Trimethylbenzene	ND		4.0	1.3	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
1,3,5-Trimethylbenzene	ND		4.0	0.52	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Vinyl acetate	ND		16	4.0	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Vinyl chloride	ND		4.0	0.59	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Xylenes, Total	ND		4.0	0.98	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
2,2-Dichloropropane	ND		4.0	1.6	ug/Kg		08/24/18 02:25	08/29/18 17:06	1
Gasoline Range Organics (GRO) -C4-C12	ND		200	80	ug/Kg		08/24/18 02:25	08/29/18 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*45 - 131*	*08/24/18 02:25*	*08/29/18 17:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*60 - 140*	*08/24/18 02:25*	*08/29/18 17:06*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*	*08/24/18 02:25*	*08/29/18 17:06*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**13**	**J**	19	9.6	ug/Kg		08/27/18 12:37	08/30/18 00:16	2
Acenaphthene	ND		9.6	5.4	ug/Kg		08/27/18 12:37	08/30/18 00:16	2
Acenaphthylene	**14**		9.6	4.6	ug/Kg		08/27/18 12:37	08/30/18 00:16	2
Anthracene	**17**		9.6	3.8	ug/Kg		08/27/18 12:37	08/30/18 00:16	2
Benzo[a]anthracene	**35**		9.6	2.9	ug/Kg		08/27/18 12:37	08/30/18 00:16	2
Benzo[a]pyrene	**51**		9.6	3.6	ug/Kg		08/27/18 12:37	08/30/18 00:16	2
Benzo[b]fluoranthene	**98**		9.6	4.0	ug/Kg		08/27/18 12:37	08/30/18 00:16	2
Benzo[g,h,i]perylene	**31**		9.6	8.2	ug/Kg		08/27/18 12:37	08/30/18 00:16	2
Benzo[k]fluoranthene	ND		9.6	4.0	ug/Kg		08/27/18 12:37	08/30/18 00:16	2
Chrysene	**50**		9.6	2.7	ug/Kg		08/27/18 12:37	08/30/18 00:16	2
Dibenz(a,h)anthracene	**9.2**	**J**	9.6	6.7	ug/Kg		08/27/18 12:37	08/30/18 00:16	2
Fluoranthene	**53**	**B**	9.6	2.7	ug/Kg		08/27/18 12:37	08/30/18 00:16	2
Fluorene	ND		9.6	4.2	ug/Kg		08/27/18 12:37	08/30/18 00:16	2
Indeno[1,2,3-cd]pyrene	**22**		9.6	8.1	ug/Kg		08/27/18 12:37	08/30/18 00:16	2
Naphthalene	**13**		9.6	6.7	ug/Kg		08/27/18 12:37	08/30/18 00:16	2
Phenanthrene	**41**		9.6	3.5	ug/Kg		08/27/18 12:37	08/30/18 00:16	2
Pyrene	**94**	**B**	9.6	3.3	ug/Kg		08/27/18 12:37	08/30/18 00:16	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*33 - 120*	*08/27/18 12:37*	*08/30/18 00:16*	*2*
Terphenyl-d14	*96*		*35 - 146*	*08/27/18 12:37*	*08/30/18 00:16*	*2*

Client Sample ID: DG-B5S-0.5-1
Date Collected: 08/23/18 11:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-19
Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	130000		3800	1400	ug/Kg		08/28/18 11:24	08/30/18 01:56	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*59*		*40 - 130*	*08/28/18 11:24*	*08/30/18 01:56*	*2*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.59	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
Aldrin	ND		1.9	0.48	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
alpha-BHC	ND		1.9	0.53	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
beta-BHC	ND		1.9	0.35	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
Chlordane (technical)	14	J	38	3.1	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
cis-Chlordane	0.52	J p	1.9	0.38	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
Dieldrin	ND		1.9	0.57	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
Endosulfan I	ND		1.9	0.31	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
Endrin	ND		1.9	0.44	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
Endrin aldehyde	ND		1.9	0.61	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
Endrin ketone	ND		1.9	0.32	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
Toxaphene	ND		38	6.6	ug/Kg		08/27/18 13:33	08/30/18 09:06	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/27/18 13:33	08/30/18 09:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*96*		*21 - 136*	*08/27/18 13:33*	*08/30/18 09:06*	*1*
Tetrachloro-m-xylene	*82*		*21 - 145*	*08/27/18 13:33*	*08/30/18 09:06*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	22	ug/Kg		08/27/18 11:05	08/29/18 01:38	1
Aroclor-1221	ND		49	24	ug/Kg		08/27/18 11:05	08/29/18 01:38	1
Aroclor-1232	ND		49	23	ug/Kg		08/27/18 11:05	08/29/18 01:38	1
Aroclor-1242	ND		49	19	ug/Kg		08/27/18 11:05	08/29/18 01:38	1
Aroclor-1248	ND		49	24	ug/Kg		08/27/18 11:05	08/29/18 01:38	1
Aroclor-1254	ND		49	23	ug/Kg		08/27/18 11:05	08/29/18 01:38	1
Aroclor-1260	ND		49	22	ug/Kg		08/27/18 11:05	08/29/18 01:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*14 - 128*	*08/27/18 11:05*	*08/29/18 01:38*	*1*
DCB Decachlorobiphenyl	*107*		*10 - 132*	*08/27/18 11:05*	*08/29/18 01:38*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.5		1.0	0.17	mg/Kg		08/27/18 09:53	08/28/18 16:25	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-B5S-0.5-1
Date Collected: 08/23/18 11:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-19
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	16	B	2.0	0.17	mg/Kg		08/27/18 09:53	08/28/18 16:25	4
Barium	82		1.0	0.14	mg/Kg		08/27/18 09:53	08/28/18 16:25	4
Beryllium	0.18	J	0.20	0.066	mg/Kg		08/27/18 09:53	08/29/18 23:04	4
Cadmium	0.71		0.25	0.025	mg/Kg		08/27/18 09:53	08/28/18 16:25	4
Chromium	34		1.0	0.11	mg/Kg		08/27/18 09:53	08/28/18 16:25	4
Cobalt	13		0.41	0.041	mg/Kg		08/27/18 09:53	08/28/18 16:25	4
Copper	190		3.0	1.4	mg/Kg		08/27/18 09:53	08/28/18 16:25	4
Lead	95		1.0	0.21	mg/Kg		08/27/18 09:53	08/28/18 16:25	4
Molybdenum	2.4		1.0	0.13	mg/Kg		08/27/18 09:53	08/28/18 16:25	4
Nickel	39		1.0	0.10	mg/Kg		08/27/18 09:53	08/28/18 16:25	4
Selenium	1.1	J	2.0	0.30	mg/Kg		08/27/18 09:53	08/28/18 16:25	4
Silver	ND		0.51	0.10	mg/Kg		08/27/18 09:53	08/28/18 16:25	4
Thallium	ND		1.0	0.29	mg/Kg		08/27/18 09:53	08/28/18 16:25	4
Vanadium	88		1.0	0.14	mg/Kg		08/27/18 09:53	08/28/18 16:25	4
Zinc	190		3.0	1.3	mg/Kg		08/27/18 09:53	08/28/18 16:25	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.41		0.016	0.0023	mg/Kg		08/27/18 09:58	08/30/18 18:05	1

Client Sample ID: DG-B5S-3.5-4

Date Collected: 08/23/18 11:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-20

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.8	0.90	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Acetone	**40**		38	29	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Benzene	ND		3.8	0.49	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Dichlorobromomethane	ND		3.8	0.54	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Bromobenzene	ND		3.8	0.60	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Chlorobromomethane	ND		15	0.54	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Bromoform	ND		3.8	1.5	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Bromomethane	ND		7.5	0.60	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
2-Butanone (MEK)	ND		38	16	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
n-Butylbenzene	ND		3.8	0.75	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
sec-Butylbenzene	ND		3.8	0.54	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
tert-Butylbenzene	ND		3.8	0.55	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Carbon disulfide	ND	*	3.8	1.5	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Carbon tetrachloride	ND		3.8	0.47	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Chlorobenzene	ND		3.8	0.52	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Chloroethane	ND		7.5	0.42	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Chloroform	ND		3.8	0.50	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Chloromethane	ND		7.5	0.60	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
2-Chlorotoluene	ND		3.8	0.49	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
4-Chlorotoluene	ND		3.8	0.51	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Chlorodibromomethane	ND		3.8	0.53	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
1,2-Dichlorobenzene	ND		3.8	0.51	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
1,3-Dichlorobenzene	ND		3.8	0.54	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
1,4-Dichlorobenzene	ND		3.8	0.53	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
1,3-Dichloropropane	ND		3.8	0.55	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
1,1-Dichloropropene	ND		3.8	0.52	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
1,2-Dibromo-3-Chloropropane	ND		7.5	1.3	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Ethylene Dibromide	ND		3.8	1.1	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Dibromomethane	ND		7.5	0.65	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Dichlorodifluoromethane	ND		7.5	0.60	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
1,1-Dichloroethane	ND		3.8	0.51	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
1,2-Dichloroethane	ND		3.8	0.57	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
1,1-Dichloroethene	ND	*	3.8	0.47	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
cis-1,2-Dichloroethene	**2.3**	**J**	3.8	0.51	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
trans-1,2-Dichloroethene	ND		3.8	0.57	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
1,2-Dichloropropane	ND		3.8	0.47	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
cis-1,3-Dichloropropene	ND		3.8	0.52	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
trans-1,3-Dichloropropene	ND		3.8	0.50	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Ethylbenzene	ND		3.8	0.57	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Hexachlorobutadiene	ND		3.8	0.68	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
2-Hexanone	ND		38	7.5	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Isopropylbenzene	ND		3.8	0.51	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
4-Isopropyltoluene	ND		3.8	1.9	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Methylene Chloride	ND		7.5	4.2	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
4-Methyl-2-pentanone (MIBK)	ND		38	7.5	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Naphthalene	ND		7.5	1.1	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
N-Propylbenzene	ND		3.8	0.50	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Styrene	ND		3.8	0.47	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
1,1,1,2-Tetrachloroethane	ND		3.8	0.57	ug/Kg		08/24/18 02:25	08/29/18 17:36	1

Client Sample ID: DG-B5S-3.5-4
Date Collected: 08/23/18 11:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-20
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.8	0.57	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Tetrachloroethene	**9.1**		3.8	0.50	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Toluene	ND		3.8	0.53	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
1,2,3-Trichlorobenzene	ND		3.8	0.56	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
1,2,4-Trichlorobenzene	ND		3.8	0.53	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
1,1,1-Trichloroethane	ND		3.8	0.46	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
1,1,2-Trichloroethane	ND		3.8	0.53	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Trichloroethene	**76**		3.8	0.47	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Trichlorofluoromethane	ND		3.8	0.42	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
1,2,3-Trichloropropane	ND		3.8	0.58	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.8	1.6	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
1,2,4-Trimethylbenzene	ND		3.8	1.2	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
1,3,5-Trimethylbenzene	ND		3.8	0.49	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Vinyl acetate	ND		15	3.8	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Vinyl chloride	ND		3.8	0.55	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Xylenes, Total	ND		3.8	0.92	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
2,2-Dichloropropane	ND		3.8	1.5	ug/Kg		08/24/18 02:25	08/29/18 17:36	1
Gasoline Range Organics (GRO) -C4-C12	**76**	**J**	190	75	ug/Kg		08/24/18 02:25	08/29/18 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*45 - 131*	*08/24/18 02:25*	*08/29/18 17:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*60 - 140*	*08/24/18 02:25*	*08/29/18 17:36*	*1*
Toluene-d8 (Surr)	*94*		*58 - 140*	*08/24/18 02:25*	*08/29/18 17:36*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**70**		20	9.8	ug/Kg		08/28/18 10:30	08/30/18 19:04	2
Acenaphthene	**66**		9.8	5.5	ug/Kg		08/28/18 10:30	08/30/18 19:04	2
Acenaphthylene	**230**		9.8	4.7	ug/Kg		08/28/18 10:30	08/30/18 19:04	2
Anthracene	**220**		9.8	3.9	ug/Kg		08/28/18 10:30	08/30/18 19:04	2
Benzo[a]anthracene	**690**		9.8	2.9	ug/Kg		08/28/18 10:30	08/30/18 19:04	2
Benzo[a]pyrene	**770**		9.8	3.7	ug/Kg		08/28/18 10:30	08/30/18 19:04	2
Benzo[b]fluoranthene	**960**		9.8	4.1	ug/Kg		08/28/18 10:30	08/30/18 19:04	2
Benzo[g,h,i]perylene	**210**		9.8	8.4	ug/Kg		08/28/18 10:30	08/30/18 19:04	2
Benzo[k]fluoranthene	**410**		9.8	4.1	ug/Kg		08/28/18 10:30	08/30/18 19:04	2
Chrysene	**770**		9.8	2.7	ug/Kg		08/28/18 10:30	08/30/18 19:04	2
Dibenz(a,h)anthracene	**91**		9.8	6.8	ug/Kg		08/28/18 10:30	08/30/18 19:04	2
Fluoranthene	**850**		9.8	2.7	ug/Kg		08/28/18 10:30	08/30/18 19:04	2
Fluorene	**88**		9.8	4.3	ug/Kg		08/28/18 10:30	08/30/18 19:04	2
Indeno[1,2,3-cd]pyrene	**200**		9.8	8.2	ug/Kg		08/28/18 10:30	08/30/18 19:04	2
Naphthalene	**69**		9.8	6.8	ug/Kg		08/28/18 10:30	08/30/18 19:04	2
Phenanthrene	**1000**		9.8	3.5	ug/Kg		08/28/18 10:30	08/30/18 19:04	2
Pyrene	**1500**		9.8	3.3	ug/Kg		08/28/18 10:30	08/30/18 19:04	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*64*		*33 - 120*	*08/28/18 10:30*	*08/30/18 19:04*	*2*
Terphenyl-d14	*98*		*35 - 146*	*08/28/18 10:30*	*08/30/18 19:04*	*2*

Client Sample ID: DG-B5S-3.5-4

Date Collected: 08/23/18 11:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-20

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	180000		2000	750	ug/Kg		08/28/18 11:24	08/30/18 01:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*59*		*40 - 130*	*08/28/18 11:24*	*08/30/18 01:26*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.58	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
Aldrin	ND		1.9	0.48	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
alpha-BHC	ND		1.9	0.52	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
beta-BHC	ND		1.9	0.34	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
Chlordane (technical)	ND		38	3.0	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
delta-BHC	ND		1.9	0.42	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
Dieldrin	ND		1.9	0.56	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
Endosulfan I	ND		1.9	0.30	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
Endosulfan II	ND		1.9	0.47	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
Endrin	ND		1.9	0.44	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
Endrin aldehyde	ND		1.9	0.60	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
Endrin ketone	ND		1.9	0.31	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
Heptachlor	ND		1.9	0.44	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
Methoxychlor	ND		1.9	0.65	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
Toxaphene	ND		38	6.5	ug/Kg		08/27/18 13:33	08/30/18 11:28	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		08/27/18 13:33	08/30/18 11:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*66*		*21 - 136*	*08/27/18 13:33*	*08/30/18 11:28*	*1*
Tetrachloro-m-xylene	*88*		*21 - 145*	*08/27/18 13:33*	*08/30/18 11:28*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		52	23	ug/Kg		08/27/18 11:05	08/29/18 03:06	1
Aroclor-1221	ND		52	25	ug/Kg		08/27/18 11:05	08/29/18 03:06	1
Aroclor-1232	ND		52	24	ug/Kg		08/27/18 11:05	08/29/18 03:06	1
Aroclor-1242	ND		52	20	ug/Kg		08/27/18 11:05	08/29/18 03:06	1
Aroclor-1248	ND		52	25	ug/Kg		08/27/18 11:05	08/29/18 03:06	1
Aroclor-1254	ND		52	24	ug/Kg		08/27/18 11:05	08/29/18 03:06	1
Aroclor-1260	ND		52	23	ug/Kg		08/27/18 11:05	08/29/18 03:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*92*		*14 - 128*	*08/27/18 11:05*	*08/29/18 03:06*	*1*
DCB Decachlorobiphenyl	*115*		*10 - 132*	*08/27/18 11:05*	*08/29/18 03:06*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.3	0.22	mg/Kg		08/27/18 09:53	08/28/18 16:30	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-B5S-3.5-4
Date Collected: 08/23/18 11:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-20
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.1	B	2.6	0.23	mg/Kg		08/27/18 09:53	08/28/18 16:30	4
Barium	160		1.3	0.19	mg/Kg		08/27/18 09:53	08/28/18 16:30	4
Beryllium	0.24	J	0.26	0.086	mg/Kg		08/27/18 09:53	08/29/18 23:09	4
Cadmium	0.27	J	0.33	0.033	mg/Kg		08/27/18 09:53	08/28/18 16:30	4
Chromium	210		1.3	0.14	mg/Kg		08/27/18 09:53	08/28/18 16:30	4
Cobalt	28		0.53	0.053	mg/Kg		08/27/18 09:53	08/28/18 16:30	4
Copper	230		4.0	1.9	mg/Kg		08/27/18 09:53	08/28/18 16:30	4
Lead	170		1.3	0.28	mg/Kg		08/27/18 09:53	08/28/18 16:30	4
Molybdenum	0.81	J	1.3	0.17	mg/Kg		08/27/18 09:53	08/28/18 16:30	4
Nickel	230		1.3	0.14	mg/Kg		08/27/18 09:53	08/28/18 16:30	4
Selenium	1.2	J	2.6	0.40	mg/Kg		08/27/18 09:53	08/28/18 16:30	4
Silver	0.25	J	0.66	0.13	mg/Kg		08/27/18 09:53	08/28/18 16:30	4
Thallium	ND		1.3	0.38	mg/Kg		08/27/18 09:53	08/28/18 16:30	4
Vanadium	92		1.3	0.18	mg/Kg		08/27/18 09:53	08/28/18 16:30	4
Zinc	280		4.0	1.7	mg/Kg		08/27/18 09:53	08/28/18 16:30	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.015	0.0023	mg/Kg		08/27/18 09:58	08/30/18 18:08	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-E5S-9.0-9.5
Date Collected: 08/22/18 16:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-21
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		3.7	0.88	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Acetone	**64**		37	28	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Benzene	ND		3.7	0.48	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Dichlorobromomethane	ND		3.7	0.53	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Bromobenzene	ND		3.7	0.58	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Chlorobromomethane	ND		15	0.53	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Bromoform	ND		3.7	1.5	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Bromomethane	ND		7.4	0.58	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
2-Butanone (MEK)	ND		37	15	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
n-Butylbenzene	ND		3.7	0.74	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
sec-Butylbenzene	ND		3.7	0.53	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
tert-Butylbenzene	ND		3.7	0.54	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Carbon disulfide	ND		3.7	1.5	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Carbon tetrachloride	ND		3.7	0.46	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Chlorobenzene	ND		3.7	0.51	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Chloroethane	ND		7.4	0.41	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Chloroform	ND		3.7	0.49	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Chloromethane	ND		7.4	0.58	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
2-Chlorotoluene	ND		3.7	0.48	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
4-Chlorotoluene	ND		3.7	0.50	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Chlorodibromomethane	ND		3.7	0.52	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
1,2-Dichlorobenzene	ND		3.7	0.50	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
1,3-Dichlorobenzene	ND		3.7	0.53	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
1,4-Dichlorobenzene	ND		3.7	0.52	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
1,3-Dichloropropane	ND		3.7	0.54	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
1,1-Dichloropropene	ND		3.7	0.51	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
1,2-Dibromo-3-Chloropropane	ND		7.4	1.3	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Ethylene Dibromide	ND		3.7	1.1	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Dibromomethane	ND		7.4	0.63	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Dichlorodifluoromethane	ND		7.4	0.58	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
1,1-Dichloroethane	ND		3.7	0.50	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
1,2-Dichloroethane	ND		3.7	0.56	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
1,1-Dichloroethene	ND	*	3.7	0.46	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
cis-1,2-Dichloroethene	**5.7**		3.7	0.50	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
trans-1,2-Dichloroethene	ND		3.7	0.55	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
1,2-Dichloropropane	ND		3.7	0.46	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
cis-1,3-Dichloropropene	ND		3.7	0.51	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
trans-1,3-Dichloropropene	ND		3.7	0.49	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Ethylbenzene	ND		3.7	0.55	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Hexachlorobutadiene	ND		3.7	0.66	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
2-Hexanone	ND		37	7.4	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Isopropylbenzene	ND		3.7	0.50	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
4-Isopropyltoluene	ND		3.7	1.8	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Methylene Chloride	ND		7.4	4.1	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
4-Methyl-2-pentanone (MIBK)	ND		37	7.4	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Naphthalene	ND		7.4	1.1	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
N-Propylbenzene	ND		3.7	0.49	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Styrene	ND		3.7	0.46	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
1,1,1,2-Tetrachloroethane	ND		3.7	0.56	ug/Kg		08/24/18 02:25	08/29/18 02:43	1

Client Sample ID: DG-E5S-9.0-9.5
Date Collected: 08/22/18 16:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-21
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		3.7	0.55	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Tetrachloroethene	ND		3.7	0.49	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Toluene	ND		3.7	0.52	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
1,2,3-Trichlorobenzene	ND		3.7	0.54	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
1,2,4-Trichlorobenzene	ND		3.7	0.52	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
1,1,1-Trichloroethane	ND		3.7	0.45	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
1,1,2-Trichloroethane	ND		3.7	0.52	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Trichloroethene	ND		3.7	0.46	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Trichlorofluoromethane	ND		3.7	0.41	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
1,2,3-Trichloropropane	ND		3.7	0.57	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.7	1.5	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
1,2,4-Trimethylbenzene	ND		3.7	1.2	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
1,3,5-Trimethylbenzene	ND		3.7	0.48	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Vinyl acetate	ND		15	3.7	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Vinyl chloride	**0.85**	**J**	3.7	0.54	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Xylenes, Total	ND		3.7	0.90	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
2,2-Dichloropropane	ND		3.7	1.5	ug/Kg		08/24/18 02:25	08/29/18 02:43	1
Gasoline Range Organics (GRO) -C4-C12	ND		180	74	ug/Kg		08/24/18 02:25	08/29/18 02:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*45 - 131*	*08/24/18 02:25*	*08/29/18 02:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*	*08/24/18 02:25*	*08/29/18 02:43*	*1*
Toluene-d8 (Surr)	*92*		*58 - 140*	*08/24/18 02:25*	*08/29/18 02:43*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		9.9	5.0	ug/Kg		08/28/18 10:30	08/30/18 19:28	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/28/18 10:30	08/30/18 19:28	1
Acenaphthylene	**6.2**		5.0	2.4	ug/Kg		08/28/18 10:30	08/30/18 19:28	1
Anthracene	**3.5**	**J**	5.0	2.0	ug/Kg		08/28/18 10:30	08/30/18 19:28	1
Benzo[a]anthracene	**17**		5.0	1.5	ug/Kg		08/28/18 10:30	08/30/18 19:28	1
Benzo[a]pyrene	**26**		5.0	1.9	ug/Kg		08/28/18 10:30	08/30/18 19:28	1
Benzo[b]fluoranthene	**35**		5.0	2.1	ug/Kg		08/28/18 10:30	08/30/18 19:28	1
Benzo[g,h,i]perylene	**8.8**		5.0	4.3	ug/Kg		08/28/18 10:30	08/30/18 19:28	1
Benzo[k]fluoranthene	**6.8**		5.0	2.1	ug/Kg		08/28/18 10:30	08/30/18 19:28	1
Chrysene	**20**		5.0	1.4	ug/Kg		08/28/18 10:30	08/30/18 19:28	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/28/18 10:30	08/30/18 19:28	1
Fluoranthene	**25**		5.0	1.4	ug/Kg		08/28/18 10:30	08/30/18 19:28	1
Fluorene	ND		5.0	2.2	ug/Kg		08/28/18 10:30	08/30/18 19:28	1
Indeno[1,2,3-cd]pyrene	**8.4**		5.0	4.2	ug/Kg		08/28/18 10:30	08/30/18 19:28	1
Naphthalene	**4.6**	**J**	5.0	3.5	ug/Kg		08/28/18 10:30	08/30/18 19:28	1
Phenanthrene	**15**		5.0	1.8	ug/Kg		08/28/18 10:30	08/30/18 19:28	1
Pyrene	**46**		5.0	1.7	ug/Kg		08/28/18 10:30	08/30/18 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*33 - 120*	*08/28/18 10:30*	*08/30/18 19:28*	*1*
Terphenyl-d14	*85*		*35 - 146*	*08/28/18 10:30*	*08/30/18 19:28*	*1*

Client Sample ID: DG-E5S-9.0-9.5

Date Collected: 08/22/18 16:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-21

Matrix: Solid

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1800	J	2000	730	ug/Kg		08/28/18 08:21	08/30/18 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*94*		*40 - 130*	*08/28/18 08:21*	*08/30/18 12:49*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.60	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
4,4'-DDE	ND		2.0	0.41	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
4,4'-DDT	ND		2.0	0.40	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
Aldrin	ND		2.0	0.49	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
alpha-BHC	ND		2.0	0.54	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
beta-BHC	ND		2.0	0.35	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
Chlordane (technical)	ND		39	3.2	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
cis-Chlordane	ND		2.0	0.39	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
delta-BHC	ND		2.0	0.43	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
Dieldrin	ND		2.0	0.58	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
Endosulfan II	ND		2.0	0.48	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
Endosulfan sulfate	ND		2.0	0.37	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
Endrin	ND		2.0	0.45	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
Endrin aldehyde	ND		2.0	0.62	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
Heptachlor	ND		2.0	0.45	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
Heptachlor epoxide	ND		2.0	0.34	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
Methoxychlor	ND		2.0	0.67	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
Toxaphene	ND		39	6.7	ug/Kg		08/27/18 13:33	08/30/18 11:46	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		08/27/18 13:33	08/30/18 11:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*87*		*21 - 136*	*08/27/18 13:33*	*08/30/18 11:46*	*1*
Tetrachloro-m-xylene	*84*		*21 - 145*	*08/27/18 13:33*	*08/30/18 11:46*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		49	21	ug/Kg		08/29/18 14:18	08/31/18 10:49	1
Aroclor-1221	ND		49	23	ug/Kg		08/29/18 14:18	08/31/18 10:49	1
Aroclor-1232	ND		49	22	ug/Kg		08/29/18 14:18	08/31/18 10:49	1
Aroclor-1242	ND		49	19	ug/Kg		08/29/18 14:18	08/31/18 10:49	1
Aroclor-1248	ND		49	23	ug/Kg		08/29/18 14:18	08/31/18 10:49	1
Aroclor-1254	ND		49	22	ug/Kg		08/29/18 14:18	08/31/18 10:49	1
Aroclor-1260	ND		49	21	ug/Kg		08/29/18 14:18	08/31/18 10:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*59*		*14 - 128*	*08/29/18 14:18*	*08/31/18 10:49*	*1*
DCB Decachlorobiphenyl	*54*		*10 - 132*	*08/29/18 14:18*	*08/31/18 10:49*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.8		1.1	0.18	mg/Kg		08/27/18 12:20	08/28/18 21:59	4

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-E5S-9.0-9.5
Date Collected: 08/22/18 16:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-21
Matrix: Solid

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.2		2.2	0.18	mg/Kg		08/27/18 12:20	08/28/18 21:59	4
Barium	73		1.1	0.15	mg/Kg		08/27/18 12:20	08/28/18 21:59	4
Beryllium	0.34		0.22	0.070	mg/Kg		08/27/18 12:20	08/28/18 21:59	4
Cadmium	ND		0.27	0.027	mg/Kg		08/27/18 12:20	08/28/18 21:59	4
Chromium	60		1.1	0.11	mg/Kg		08/27/18 12:20	08/28/18 21:59	4
Cobalt	9.1		0.43	0.043	mg/Kg		08/27/18 12:20	08/28/18 21:59	4
Copper	20		3.2	1.5	mg/Kg		08/27/18 12:20	08/28/18 21:59	4
Lead	30		1.1	0.23	mg/Kg		08/27/18 12:20	08/28/18 21:59	4
Molybdenum	ND		1.1	0.14	mg/Kg		08/27/18 12:20	08/28/18 21:59	4
Nickel	40		1.1	0.11	mg/Kg		08/27/18 12:20	08/28/18 21:59	4
Selenium	0.84	J	2.2	0.32	mg/Kg		08/27/18 12:20	08/28/18 21:59	4
Silver	0.16	J	0.54	0.11	mg/Kg		08/27/18 12:20	08/28/18 21:59	4
Thallium	0.43	J	1.1	0.31	mg/Kg		08/27/18 12:20	08/28/18 21:59	4
Vanadium	60		1.1	0.15	mg/Kg		08/27/18 12:20	08/28/18 21:59	4
Zinc	41		3.2	1.4	mg/Kg		08/27/18 12:20	08/28/18 21:59	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.057		0.014	0.0021	mg/Kg		08/28/18 15:53	08/30/18 13:09	1

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-J5S-0.5-1 Lab Sample ID: 720-88218-1

Matrix: Solid Lab File ID: FID2000031.D

Analysis Method: 8015B Date Collected: 08/22/2018 14:00

Extraction Method: 3546 Date Extracted: 08/27/2018 08:59

Sample wt/vol: 15.65(g) Date Analyzed: 08/29/2018 02:00

Con. Extract Vol.: 2(mL) Dilution Factor: 10

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250356 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	200000	B	19000	7200

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	X D	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000031.D
Lims ID: 720-88218-D-1-F
Client ID: DG-J5S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 02:00:08 ALS Bottle#: 81 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Sample Info: 720-0053519-031
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\DRO6_B.m
Limit Group: DRO
Last Update: 29-Aug-2018 13:27:47 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 13:27:47

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.314			ND	
	23 n-Decane	2.205	2.177	0.028	19168	NC	
A	1 C9-C13	2.782	(1.314-4.250)		2331317	1.07	
A	21 Stoddard Solvent	2.782	(1.314-4.250)		2331317	NC	
A	57 C10-C12	2.906	(2.177-3.636)		1644325	8.23	
	24 Dodecane	3.692	3.636	0.056	26585	NC	
A	3 C9 - C17	3.813	(1.314-6.312)		5052209	2.21	M
A	60 C10-C16	4.006	(2.177-5.836)		3580278	1.77	M
A	47 C9 - C18	4.034	(1.314-6.755)		7568999	4.00	M
A	25 C9-C19	4.246	(1.314-7.179)		9513213	4.13	M
A	15 Kerosene	4.246	(1.314-7.179)		9513213	5.01	M
	26 C13	4.346	4.250	0.096	48637	NC	
$	27 n-Decanoic Acid (Surr)		4.632			ND	U
A	59 C12-C16	4.736	(3.636-5.836)		1935953	8.40	M
A	61 C10-C20	4.882	(2.177-7.586)		21042732	19.2	M
A	28 C9-C24	5.184	(1.314-9.055)		95296647	61.3	M
A	29 C9-C25	5.351	(1.314-9.388)		131811941	81.9	M
A	54 C10-C23	5.443	(2.177-8.709)		79713170	52.4	M
A	4 C10-C24	5.616	(2.177-9.055)		94949937	61.1	M
A	16 C10-C25	5.783	(2.177-9.388)		131465231	81.7	M
	45 Hexadecane	5.857	5.836	0.021	517665	NC	M
A	14 C10-C26	5.943	(2.177-9.709)		151672188	93.2	M
A	67 C12-C22	5.993	(3.636-8.350)		58978012	40.7	M
A	32 C10-C28	6.249	(2.177-10.320)		269516346	159.9	M
A	5 Diesel	6.249	(2.177-10.320)		269516346	159.9	M
A	12 Unknown Hydrocarbons	6.249	(2.177-10.320)		269516346	NC	M
A	30 C13-C22	6.300	(4.250-8.350)		58637730	40.5	M
	44 Heptadecane	6.346	6.312	0.034	1050408	NC	M
A	31 C12-C24	6.345	(3.636-9.055)		93305612	60.1	M
	49 n-Octadecane	6.802	6.755	0.047	1944214	NC	M
A	9 Crude Oil Range Organics (	6.862	(1.314-12.410)		779002686	NC	M
A	11 Bunker Range Organics (C9-	6.862	(1.314-12.410)		779002686	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.862	(1.314-12.410)		779002686	369.0	M
33 C19	7.185	7.179	0.006	4971722	NC	M
A 64 C13-C28	7.285	(4.250-10.320)		267531739	158.8	M
A 17 C10-C36	7.294	(2.177-12.410)		778655976	448.2	M
A 68 Crude Oil Range Organics (	7.353	(1.314-13.392)		1250282826	NC	M
A 13 C9-C40	7.353	(1.314-13.392)		1250282826	800.3	M
A 58 C16-C24	7.445	(5.836-9.055)		91369659	59.0	M
62 icosane	7.598	7.586	0.012	6610169	NC	M
A 6 C10-C40	7.785	(2.177-13.392)		1249936116	800.9	M
$ 34 p-Terphenyl		8.080			ND	U
35 n-Docosane	8.361	8.350	0.011	7976799	NC	M
A 18 C12-C40	8.514	(3.636-13.392)		1248291791	802.1	M
36 Tricosane	8.781	8.709	0.072	15236767	NC	M
A 66 C13-C40	8.821	(4.250-13.392)		1247951509	802.8	M
37 n-Tetracosane	9.063	9.055	0.008	22577071	NC	M
A 2 C16-C36 ORO	9.123	(5.836-12.410)		775075698	655.5	M
38 C25	9.397	9.388	0.009	20206957	NC	M
A 19 C16-C40	9.614	(5.836-13.392)		1246355838	804.4	M
46 n-Hexacosane	9.755	9.709	0.046	38556944	NC	M
A 20 C19-C36	9.794	(7.179-12.410)		157257593	115.5	
A 55 C23-C32	10.068	(8.709-11.426)		464943088	600.8	M
39 n-Octacosane	10.251	10.320	-0.069	21212787	NC	M
65 C29	10.631	10.610	0.021	52335062	NC	M
A 40 C24-C36	10.732	(9.055-12.410)		690779760	704.6	M
A 7 Motor Oil	10.732	(9.055-12.410)		310614852	316.8	
A 10 C22-C40	10.871	(8.350-13.392)		523660562	376.7	
A 50 C25-C36	10.899	(9.388-12.410)		296428449	321.8	
A 41 C23-C40	11.050	(8.709-13.392)		547313899	400.5	
A 8 C24-C40	11.223	(9.055-13.392)		601022364	448.1	
56 Dotriacontane	11.377	11.426	-0.049	43172583	NC	M
A 51 C28-C40	11.856	(10.320-13.392)		592112687	545.9	
A 63 C29-C40	12.001	(10.610-13.392)		566008580	566.4	
42 n-Hexatriacontane		12.410			ND	
43 C40		13.392			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

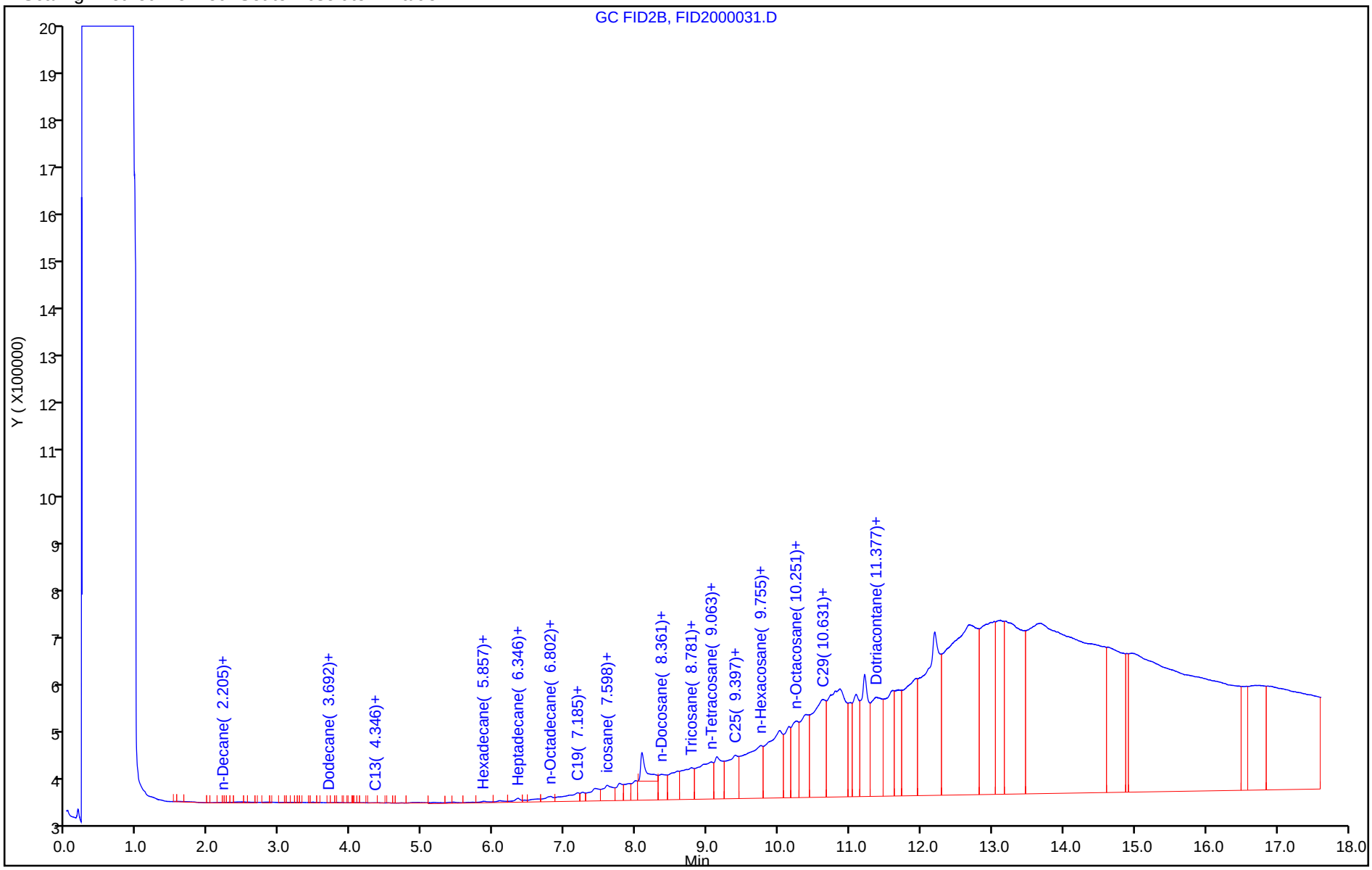
Report Date: 29-Aug-2018 13:27:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000031.D

Injection Date:	29-Aug-2018 02:00:08	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88218-D-1-F	Lab Sample ID:	720-88218-1	Worklist Smp#:	31
Client ID:	DG-J5S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	81
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

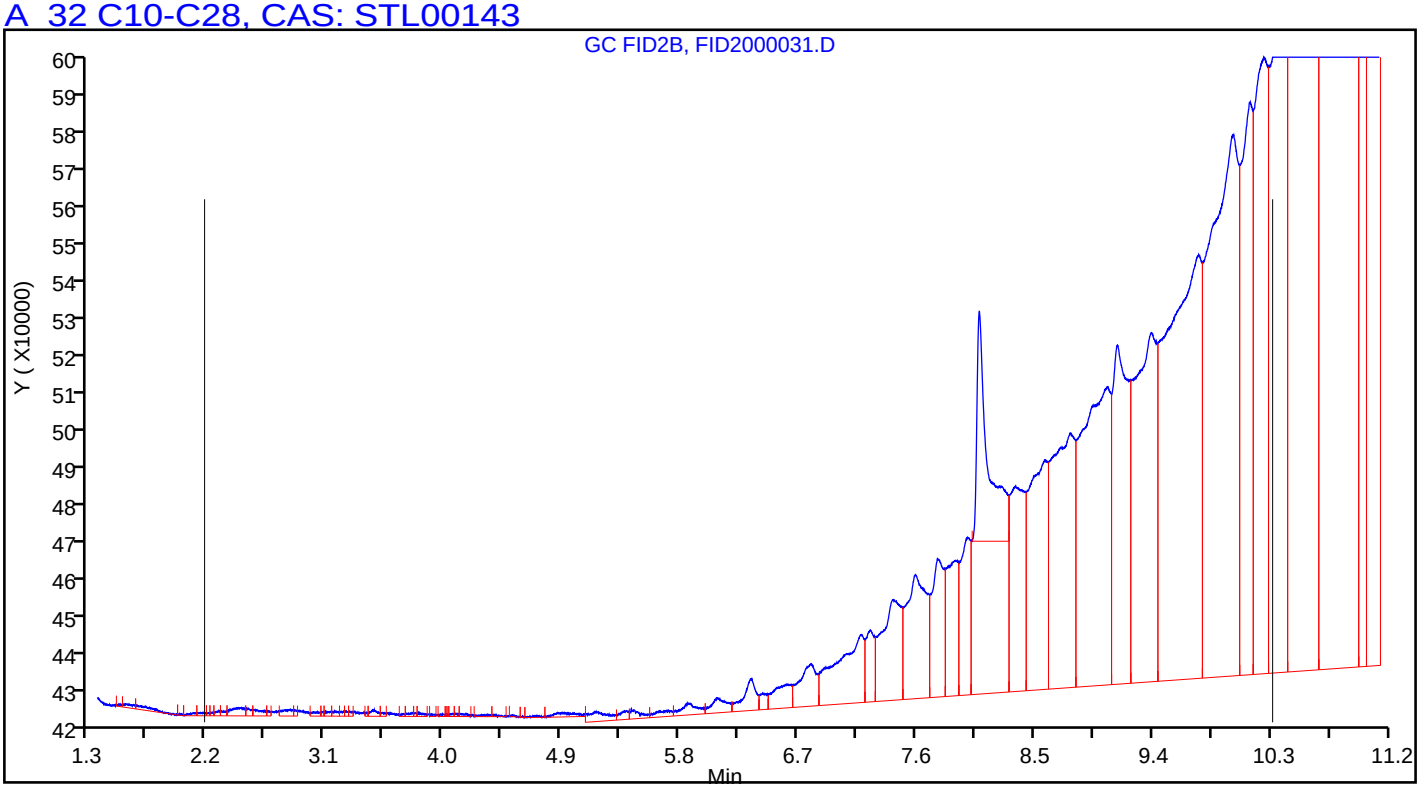


Report Date: 29-Aug-2018 13:27:52 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000031.D				
Injection Date:	29-Aug-2018 02:00:08	Instrument ID:	CHDRO6		
Lims ID:	720-88218-D-1-F	Lab Sample ID:	720-88218-1		
Client ID:	DG-J5S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	81	Worklist Smp#:	31
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

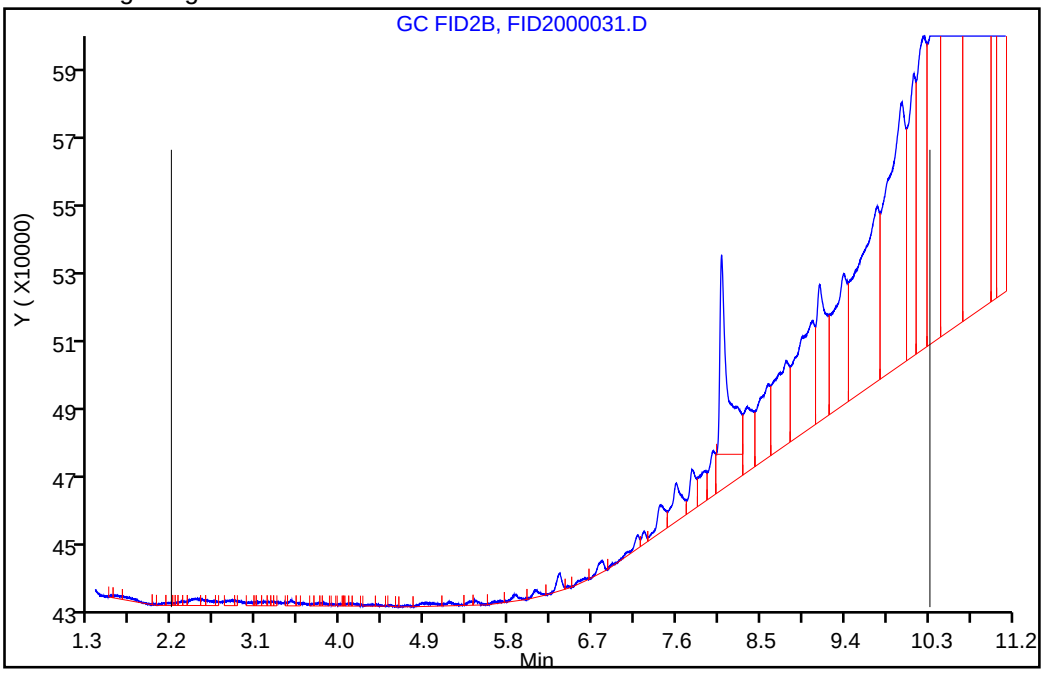
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000031.D				
Injection Date:	29-Aug-2018 02:00:08	Instrument ID:	CHDRO6		
Lims ID:	720-88218-D-1-F	Lab Sample ID:	720-88218-1		
Client ID:	DG-J5S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	81	Worklist Smp#:	31
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.249, CAS: STL00143

Signal: 1

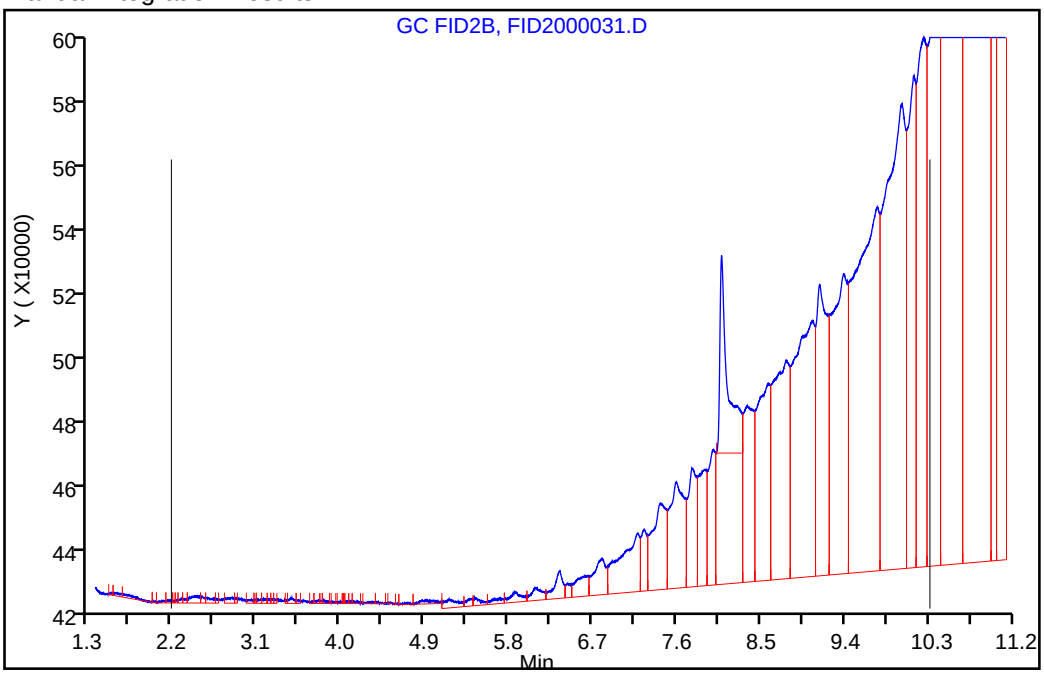
Processing Integration Results

RT: 6.25
Response: 107589394
Amount: 68.218616



Manual Integration Results

RT: 6.25
Response: 269516346
Amount: 159.9050



Reviewer: luj, 29-Aug-2018 13:27:39

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

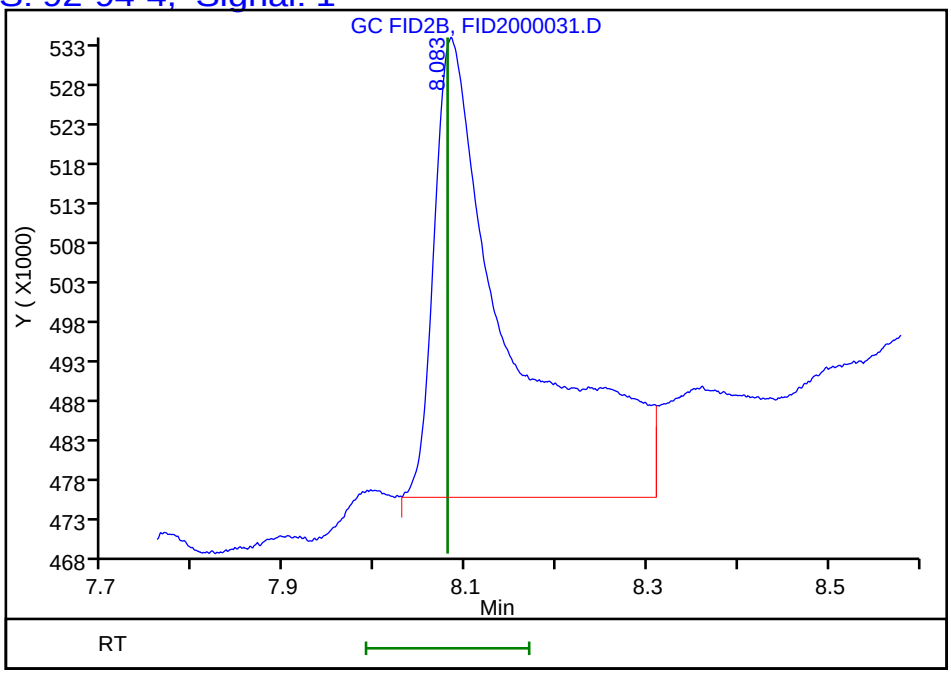
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000031.D				
Injection Date:	29-Aug-2018 02:00:08	Instrument ID:	CHDRO6		
Lims ID:	720-88218-D-1-F	Lab Sample ID:	720-88218-1		
Client ID:	DG-J5S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	81	Worklist Smp#:	31
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.08
Response: 6872286
Amount: 3.379723



Reviewer: luj, 29-Aug-2018 13:27:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-J5S-3.5-4 Lab Sample ID: 720-88218-2

Matrix: Solid Lab File ID: FID2000029.D

Analysis Method: 8015B Date Collected: 08/22/2018 14:00

Extraction Method: 3546 Date Extracted: 08/27/2018 08:59

Sample wt/vol: 15.59(g) Date Analyzed: 08/29/2018 01:11

Con. Extract Vol.: 2(mL) Dilution Factor: 3

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250356 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	190000	B	5800	2200

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	81		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000029.D
Lims ID: 720-88218-E-2-D
Client ID: DG-J5S--3.5-4
Sample Type: Client
Inject. Date: 29-Aug-2018 01:11:23 ALS Bottle#: 79 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 3.0000
Sample Info: 720-0053519-029
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\DRO6_B.m
Limit Group: DRO
Last Update: 29-Aug-2018 13:07:52 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 13:07:52

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.314			ND	
	23 n-Decane	2.152	2.177	-0.025	172006	NC	M
A	1 C9-C13	2.782	(1.314-4.250)		4608623	2.11	M
A	21 Stoddard Solvent	2.782	(1.314-4.250)		4608623	NC	M
A	57 C10-C12	2.906	(2.177-3.636)		3106021	9.06	M
	24 Dodecane	3.658	3.636	0.022	16490	NC	M
A	3 C9 - C17	3.813	(1.314-6.312)		17797233	7.80	M
A	60 C10-C16	4.006	(2.177-5.836)		10741043	5.30	M
A	47 C9 - C18	4.034	(1.314-6.755)		29727700	15.7	M
A	25 C9-C19	4.246	(1.314-7.179)		59331036	25.8	M
A	15 Kerosene	4.246	(1.314-7.179)		59331036	31.3	M
	26 C13	4.223	4.250	-0.027	27945	NC	M
$	27 n-Decanoic Acid (Surr)		4.632			ND	U
A	59 C12-C16	4.736	(3.636-5.836)		7753140	11.7	M
A	61 C10-C20	4.882	(2.177-7.586)		116546610	73.3	M
A	28 C9-C24	5.184	(1.314-9.055)		415133573	242.4	M
A	29 C9-C25	5.351	(1.314-9.388)		463413650	269.7	M
A	54 C10-C23	5.443	(2.177-8.709)		291848537	172.5	M
A	4 C10-C24	5.616	(2.177-9.055)		414387115	241.9	M
A	16 C10-C25	5.783	(2.177-9.388)		462667192	269.3	M
	45 Hexadecane	5.849	5.836	0.013	2116471	NC	M
A	14 C10-C26	5.943	(2.177-9.709)		538704482	312.3	M
A	67 C12-C22	5.993	(3.636-8.350)		227519971	136.1	M
A	32 C10-C28	6.249	(2.177-10.320)		840971526	483.5	M
A	5 Diesel	6.249	(2.177-10.320)		840971526	483.5	M
A	12 Unknown Hydrocarbons	6.249	(2.177-10.320)		840971526	NC	M
A	30 C13-C22	6.300	(4.250-8.350)		226645709	135.6	M
	44 Heptadecane	6.342	6.312	0.030	6539305	NC	M
A	31 C12-C24	6.345	(3.636-9.055)		411399212	240.2	M
	49 n-Octadecane	6.803	6.755	0.048	13293785	NC	M
A	9 Crude Oil Range Organics (	6.862	(1.314-12.410)		2123259547	NC	M
A	11 Bunker Range Organics (C9-	6.862	(1.314-12.410)		2123259547	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.862	(1.314-12.410)		2123259547	1005.8	M
33 C19	7.183	7.179	0.004	8961394	NC	M
A 64 C13-C28	7.285	(4.250-10.320)		837109361	481.3	M
A 17 C10-C36	7.294	(2.177-12.410)		2122513089	1209.1	M
A 68 Crude Oil Range Organics (	7.353	(1.314-13.392)		2855539943	NC	M
A 13 C9-C40	7.353	(1.314-13.392)		2855539943	1827.8	M
A 58 C16-C24	7.445	(5.836-9.055)		403646072	235.9	M
62 icosane	7.571	7.586	-0.015	20611967	NC	M
A 6 C10-C40	7.785	(2.177-13.392)		2854793485	1829.3	M
$ 34 p-Terphenyl	8.065	8.080	-0.015	13663789	6.72	
35 n-Docosane	8.367	8.350	0.017	17158102	NC	M
A 18 C12-C40	8.514	(3.636-13.392)		2851805582	1832.5	M
36 Tricosane	8.777	8.709	0.068	49622208	NC	M
A 66 C13-C40	8.821	(4.250-13.392)		2850931320	1834.0	M
37 n-Tetracosane	9.052	9.055	-0.003	20811394	NC	M
A 2 C16-C36 ORO	9.123	(5.836-12.410)		2111772046	1785.9	M
38 C25	9.393	9.388	0.005	49883272	NC	M
A 19 C16-C40	9.614	(5.836-13.392)		2844052442	1835.6	M
46 n-Hexacosane	9.766	9.709	0.057	85232781	NC	M
A 20 C19-C36	9.794	(7.179-12.410)		1314009116	965.2	
A 55 C23-C32	10.068	(8.709-11.426)		1187739352	1534.8	M
39 n-Octacosane	10.250	10.320	-0.070	56399064	NC	M
65 C29	10.618	10.610	0.008	154590019	NC	M
A 40 C24-C36	10.732	(9.055-12.410)		1696697062	1730.6	M
A 7 Motor Oil	10.732	(9.055-12.410)		1288296843	1314.1	
A 10 C22-C40	10.871	(8.350-13.392)		1800360112	1295.2	
A 50 C25-C36	10.899	(9.388-12.410)		1180009411	1281.0	
A 41 C23-C40	11.050	(8.709-13.392)		1775788606	1299.3	
A 8 C24-C40	11.223	(9.055-13.392)		1790260540	1334.8	
56 Dotriacontane	11.427	11.426	0.001	48070922	NC	M
A 51 C28-C40	11.856	(10.320-13.392)		1510788430	1392.8	
A 63 C29-C40	12.001	(10.610-13.392)		1393062045	1394.0	
42 n-Hexatriacontane	12.362	12.410	-0.048	93531777	NC	M
43 C40		13.392			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

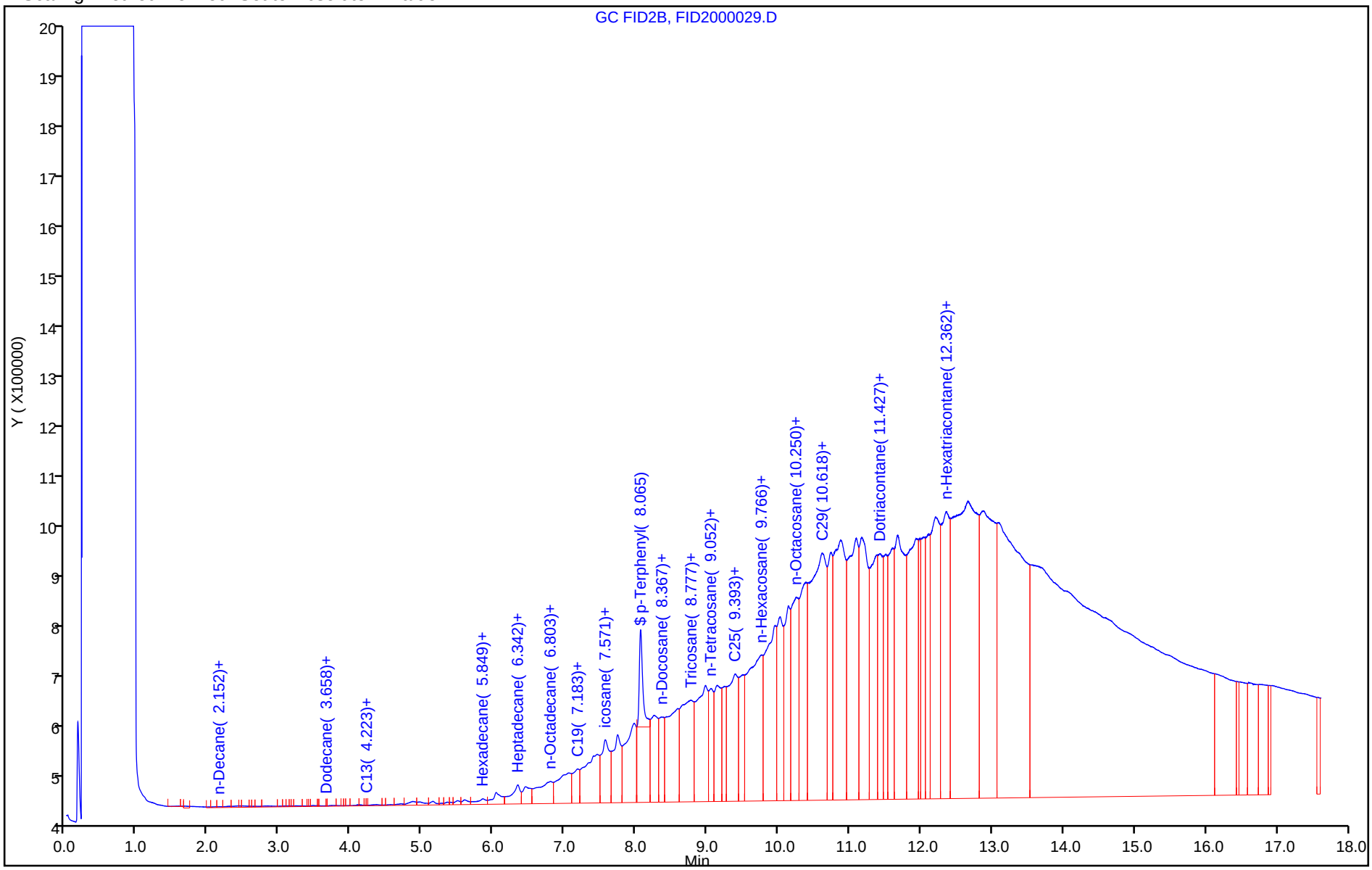
Report Date: 29-Aug-2018 13:07:53 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000029.D

Injection Date:	29-Aug-2018 01:11:23	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88218-E-2-D	Lab Sample ID:	720-88218-2	Worklist Smp#:	29
Client ID:	DG-J5S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	3.0000	ALS Bottle#:	79
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000029.D				
Lims ID:	720-88218-E-2-D				
Client ID:	DG-J5S--3.5-4				
Sample Type:	Client				
Inject. Date:	29-Aug-2018 01:11:23	ALS Bottle#:	79	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	3.0000		
Sample Info:	720-0053519-029				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	29-Aug-2018 13:07:52	Calib Date:	28-Aug-2018 10:16:50		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK008				
First Level Reviewer: luj		Date:	29-Aug-2018 13:07:52		

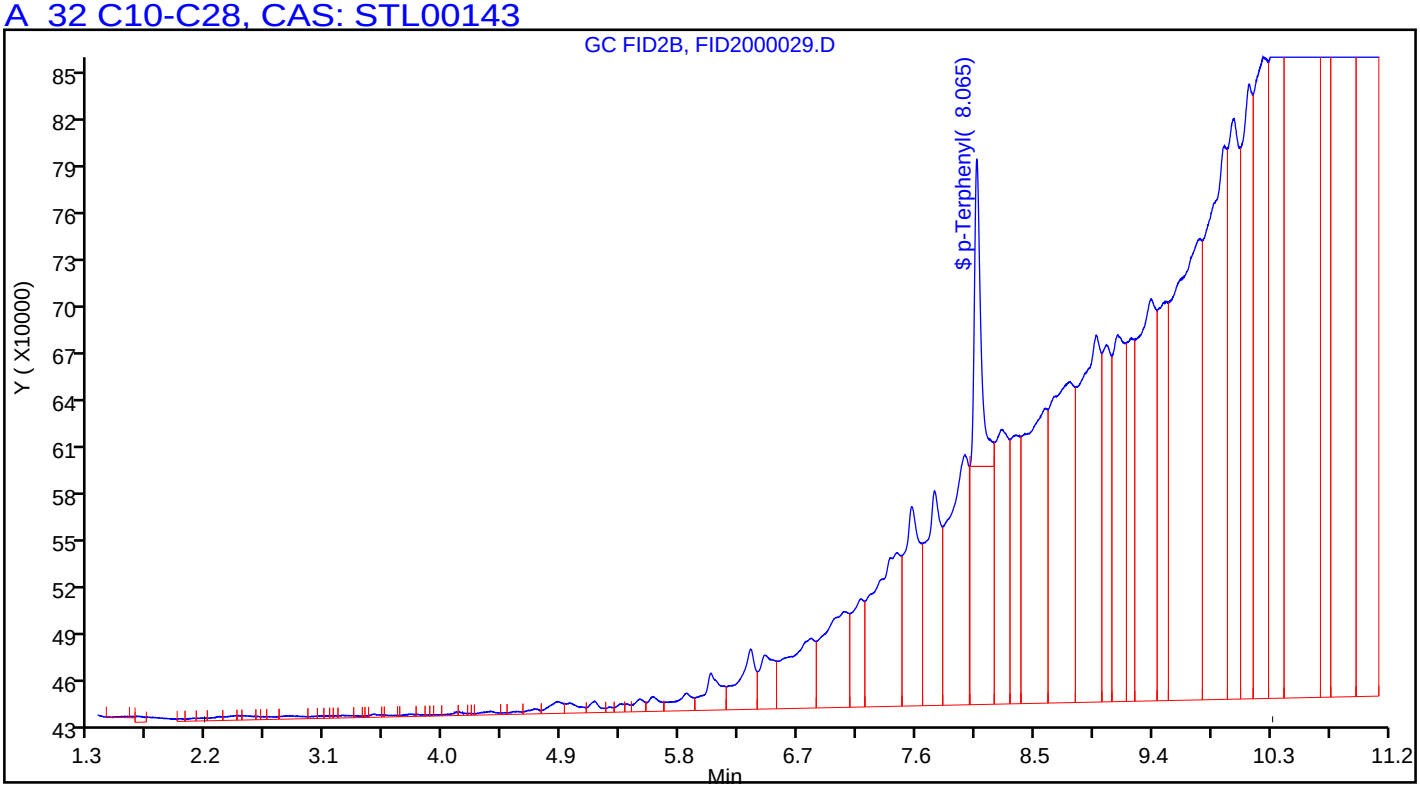
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	6.72	26.88

Report Date: 29-Aug-2018 13:07:57 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000029.D				
Injection Date:	29-Aug-2018 01:11:23	Instrument ID:	CHDRO6		
Lims ID:	720-88218-E-2-D	Lab Sample ID:	720-88218-2		
Client ID:	DG-J5S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	79	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	3.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

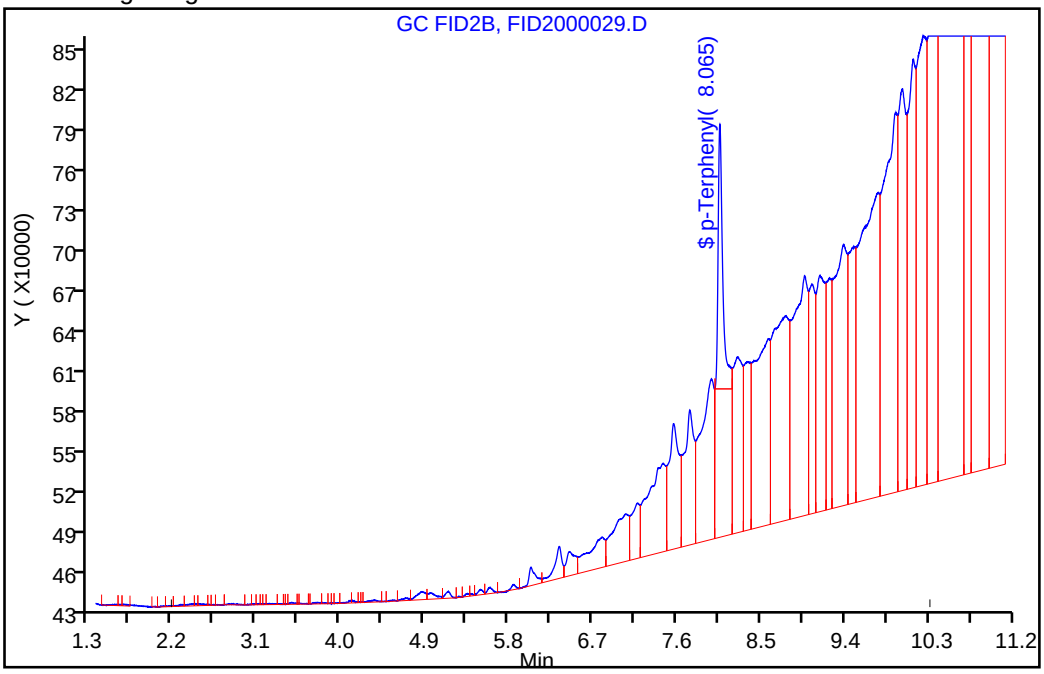
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000029.D				
Injection Date:	29-Aug-2018 01:11:23	Instrument ID:	CHDRO6		
Lims ID:	720-88218-E-2-D	Lab Sample ID:	720-88218-2		
Client ID:	DG-J5S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	79	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	3.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.249, CAS: STL00143

Signal: 1

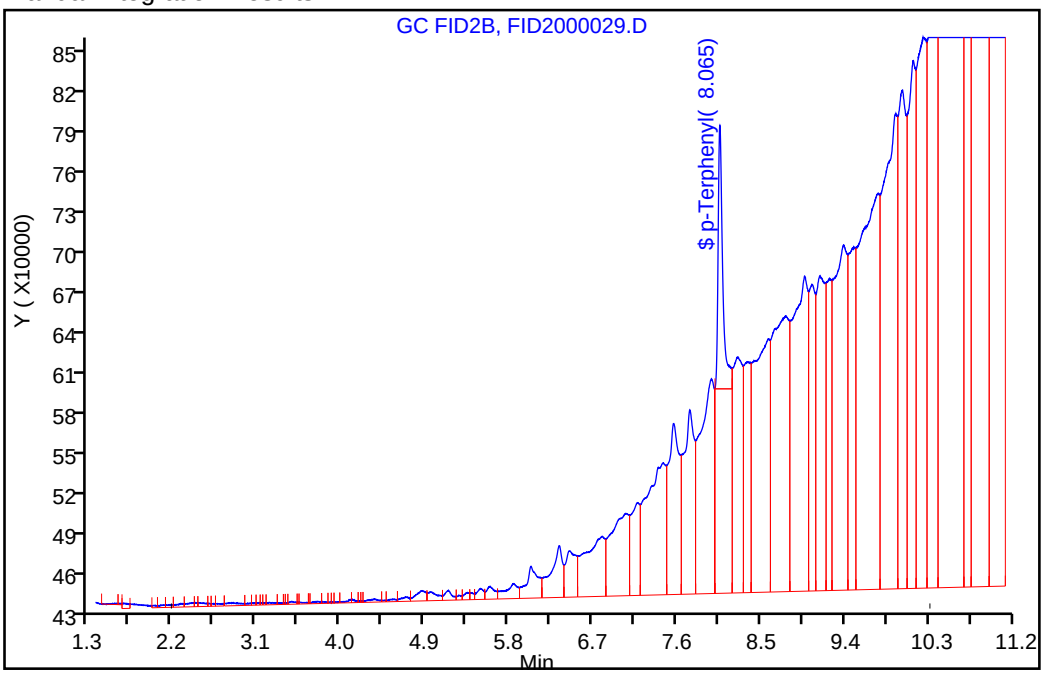
Processing Integration Results

RT: 6.25
Response: 604597662
Amount: 349.6349



Manual Integration Results

RT: 6.25
Response: 840971526
Amount: 483.4746



Reviewer: luj, 29-Aug-2018 13:07:33

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-J5S-7-7.5 Lab Sample ID: 720-88218-3

Matrix: Solid Lab File ID: FID2000019.D

Analysis Method: 8015B Date Collected: 08/22/2018 14:00

Extraction Method: 3546 Date Extracted: 08/27/2018 08:59

Sample wt/vol: 15.12(g) Date Analyzed: 08/28/2018 21:08

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250356 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	5500	B	2000	740

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	91		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000019.D
Lims ID: 720-88218-D-3-A
Client ID: DG-J5S--7-7.5
Sample Type: Client
Inject. Date: 28-Aug-2018 21:08:21 ALS Bottle#: 69 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053519-019
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\DRO6_B.m
Limit Group: DRO
Last Update: 29-Aug-2018 11:30:47 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 11:30:47

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane		1.314			ND	
23 n-Decane	2.122	2.177	-0.055	41995	NC	
A 1 C9-C13	2.782	(1.314-4.250)		1887493	0.8653	
A 21 Stoddard Solvent	2.782	(1.314-4.250)		1887493	NC	
A 57 C10-C12	2.906	(2.177-3.636)		1521007	8.16	
24 Dodecane	3.612	3.636	-0.024	31039	NC	
A 3 C9 - C17	3.813	(1.314-6.312)		3988764	1.75	M
A 60 C10-C16	4.006	(2.177-5.836)		2954936	1.46	M
A 47 C9 - C18	4.034	(1.314-6.755)		5185025	2.74	M
A 25 C9-C19	4.246	(1.314-7.179)		7188455	3.12	M
A 15 Kerosene	4.246	(1.314-7.179)		7188455	3.79	M
26 C13	4.251	4.250	0.001	17482	NC	
$ 27 n-Decanoic Acid (Surr)		4.632			ND	U
A 59 C12-C16	4.736	(3.636-5.836)		1464968	8.13	M
A 61 C10-C20	4.882	(2.177-7.586)		9021134	12.4	M
A 28 C9-C24	5.184	(1.314-9.055)		31994052	25.4	M
A 29 C9-C25	5.351	(1.314-9.388)		38424376	29.1	M
A 54 C10-C23	5.443	(2.177-8.709)		26187841	22.1	M
A 4 C10-C24	5.616	(2.177-9.055)		31902780	25.4	M
A 16 C10-C25	5.783	(2.177-9.388)		38333104	29.0	M
45 Hexadecane	5.835	5.836	-0.001	143702	NC	M
A 14 C10-C26	5.943	(2.177-9.709)		45315241	33.0	M
A 67 C12-C22	5.993	(3.636-8.350)		24098879	20.9	M
A 32 C10-C28	6.249	(2.177-10.320)		60269816	41.4	M
A 5 Diesel	6.249	(2.177-10.320)		60269816	41.4	M
A 12 Unknown Hydrocarbons	6.249	(2.177-10.320)		60269816	NC	M
A 30 C13-C22	6.300	(4.250-8.350)		23792626	20.8	M
44 Heptadecane	6.261	6.312	-0.051	50519	NC	M
A 31 C12-C24	6.345	(3.636-9.055)		30412812	24.5	M
49 n-Octadecane	6.706	6.755	-0.049	224942	NC	M
A 9 Crude Oil Range Organics (	6.862	(1.314-12.410)		127346883	NC	M
A 11 Bunker Range Organics (C9-	6.862	(1.314-12.410)		127346883	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.862	(1.314-12.410)		127346883	60.3	M
33 C19	7.155	7.179	-0.024	127168	NC	M
A 64 C13-C28	7.285	(4.250-10.320)		58473595	40.4	M
A 17 C10-C36	7.294	(2.177-12.410)		127255611	79.4	M
A 68 Crude Oil Range Organics (	7.353	(1.314-13.392)		154995104	NC	M
A 13 C9-C40	7.353	(1.314-13.392)		154995104	99.2	M
A 58 C16-C24	7.445	(5.836-9.055)		29091546	23.8	M
62 icosane	7.631	7.586	0.045	1441437	NC	M
A 6 C10-C40	7.785	(2.177-13.392)		154903832	99.3	M
$ 34 p-Terphenyl	8.074	8.080	-0.006	46320846	22.8	
35 n-Docosane		8.350			ND	
A 18 C12-C40	8.514	(3.636-13.392)		153413864	98.6	M
36 Tricosane	8.737	8.709	0.028	3801540	NC	M
A 66 C13-C40	8.821	(4.250-13.392)		153107611	98.5	M
37 n-Tetracosane	9.074	9.055	0.019	2520733	NC	M
A 2 C16-C36 ORO	9.123	(5.836-12.410)		124444377	105.2	M
38 C25	9.405	9.388	0.017	4151169	NC	M
A 19 C16-C40	9.614	(5.836-13.392)		152092598	98.2	M
46 n-Hexacosane	9.728	9.709	0.019	3901110	NC	M
A 20 C19-C36	9.794	(7.179-12.410)		95388137	70.1	
A 55 C23-C32	10.068	(8.709-11.426)		68723864	88.8	M
39 n-Octacosane	10.334	10.320	0.014	6073429	NC	M
65 C29	10.622	10.610	0.012	6591969	NC	M
A 40 C24-C36	10.732	(9.055-12.410)		85580650	87.3	
A 7 Motor Oil	10.732	(9.055-12.410)		85580650	87.3	
A 10 C22-C40	10.871	(8.350-13.392)		117419697	84.5	
A 50 C25-C36	10.899	(9.388-12.410)		77926916	84.6	
A 41 C23-C40	11.050	(8.709-13.392)		112317532	82.2	
A 8 C24-C40	11.223	(9.055-13.392)		109357432	81.5	
56 Dotriacontane	11.440	11.426	0.014	4774896	NC	M
A 51 C28-C40	11.856	(10.320-13.392)		86295291	79.6	
A 63 C29-C40	12.001	(10.610-13.392)		78666043	78.7	
42 n-Hexatriacontane	12.347	12.410	-0.063	4852787	NC	M
43 C40	13.377	13.392	-0.015	3837579	NC	M
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

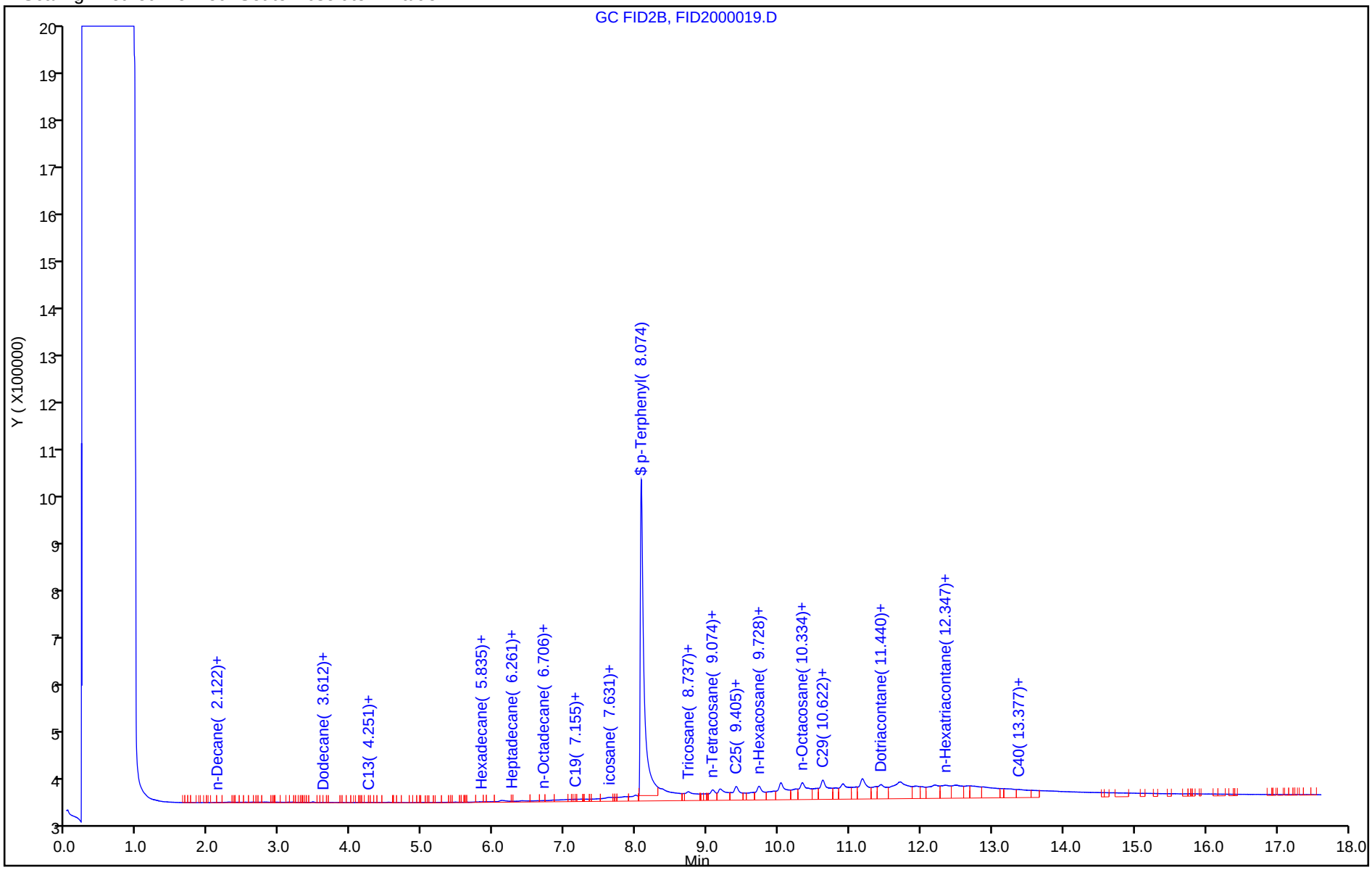
Report Date: 29-Aug-2018 11:30:49 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000019.D

Injection Date:	28-Aug-2018 21:08:21	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88218-D-3-A	Lab Sample ID:	720-88218-3	Worklist Smp#:	19
Client ID:	DG-J5S--7-7.5				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	69
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000019.D				
Lims ID:	720-88218-D-3-A				
Client ID:	DG-J5S--7-7.5				
Sample Type:	Client				
Inject. Date:	28-Aug-2018 21:08:21	ALS Bottle#:	69	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053519-019				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	29-Aug-2018 11:30:47	Calib Date:	28-Aug-2018 10:16:50		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK008				
First Level Reviewer: luj		Date:	29-Aug-2018 11:30:47		

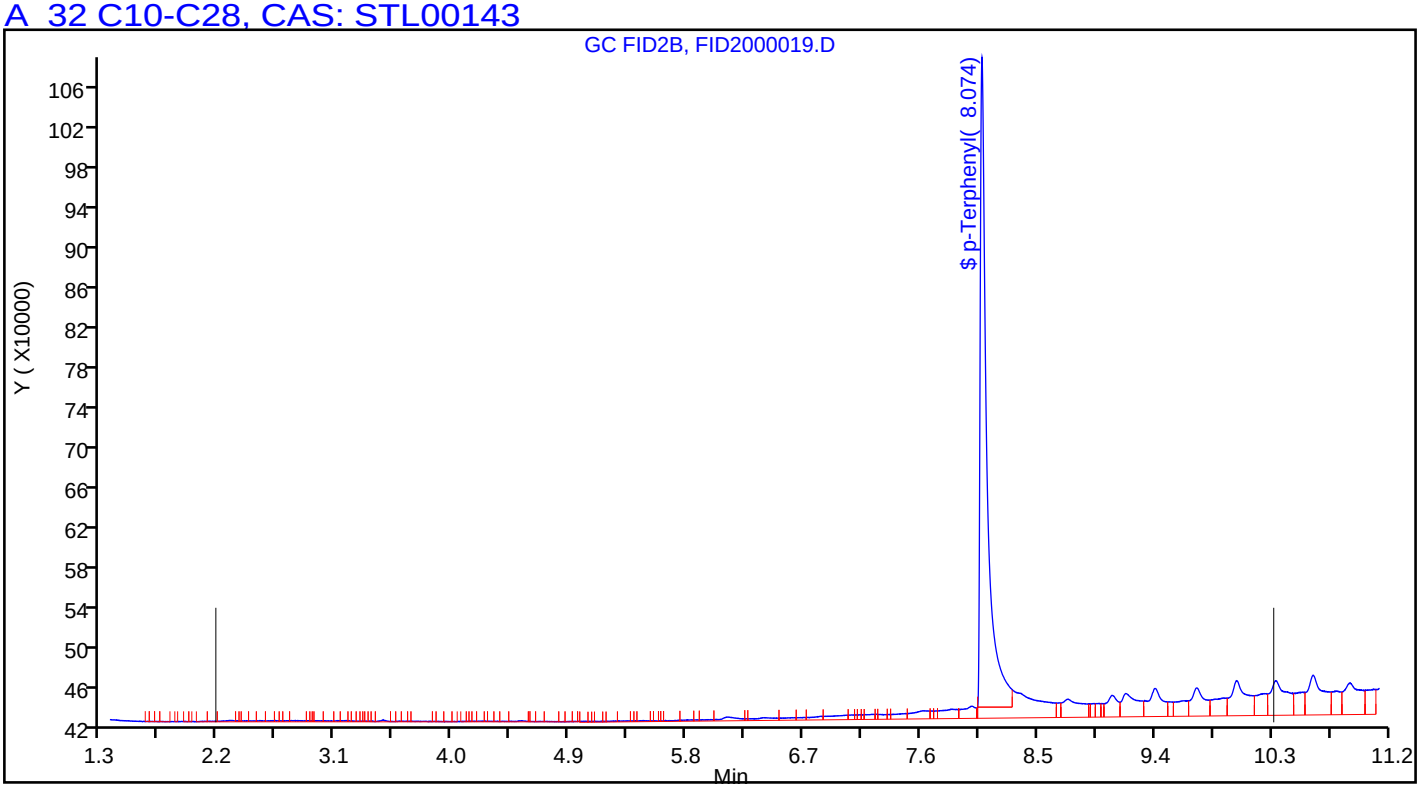
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	22.8	91.12

Report Date: 29-Aug-2018 11:30:54 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000019.D				
Injection Date:	28-Aug-2018 21:08:21	Instrument ID:	CHDRO6		
Lims ID:	720-88218-D-3-A	Lab Sample ID:	720-88218-3		
Client ID:	DG-J5S--7-7.5				
Operator ID:	DCH	ALS Bottle#:	69	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

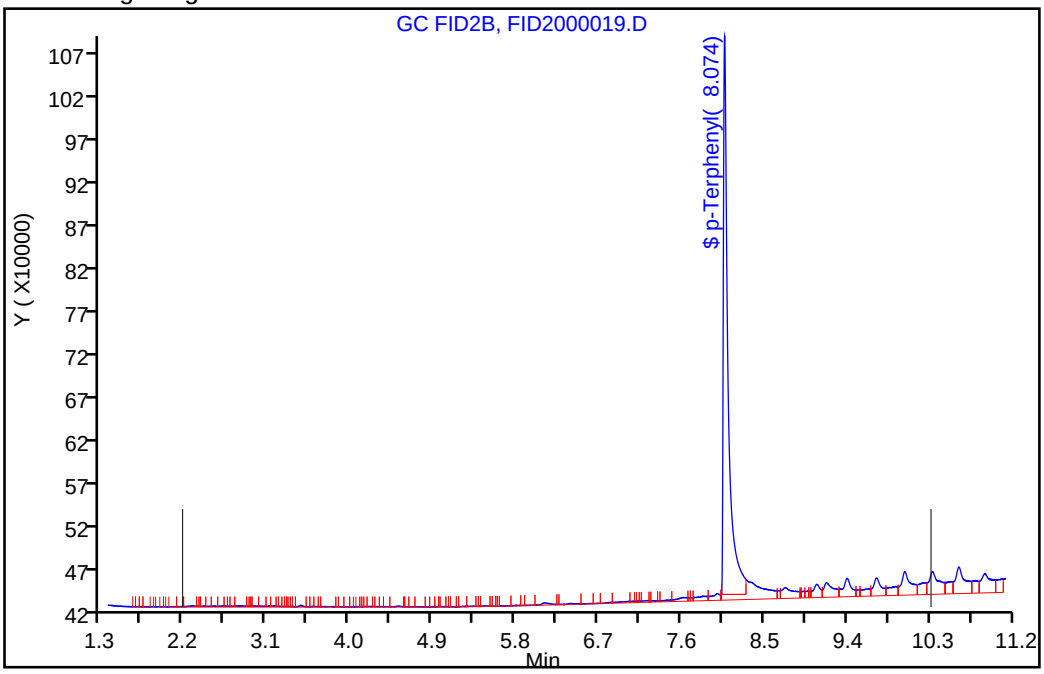
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000019.D				
Injection Date:	28-Aug-2018 21:08:21	Instrument ID:	CHDRO6		
Lims ID:	720-88218-D-3-A	Lab Sample ID:	720-88218-3		
Client ID:	DG-J5S--7-7.5				
Operator ID:	DCH	ALS Bottle#:	69	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.249, CAS: STL00143

Signal: 1

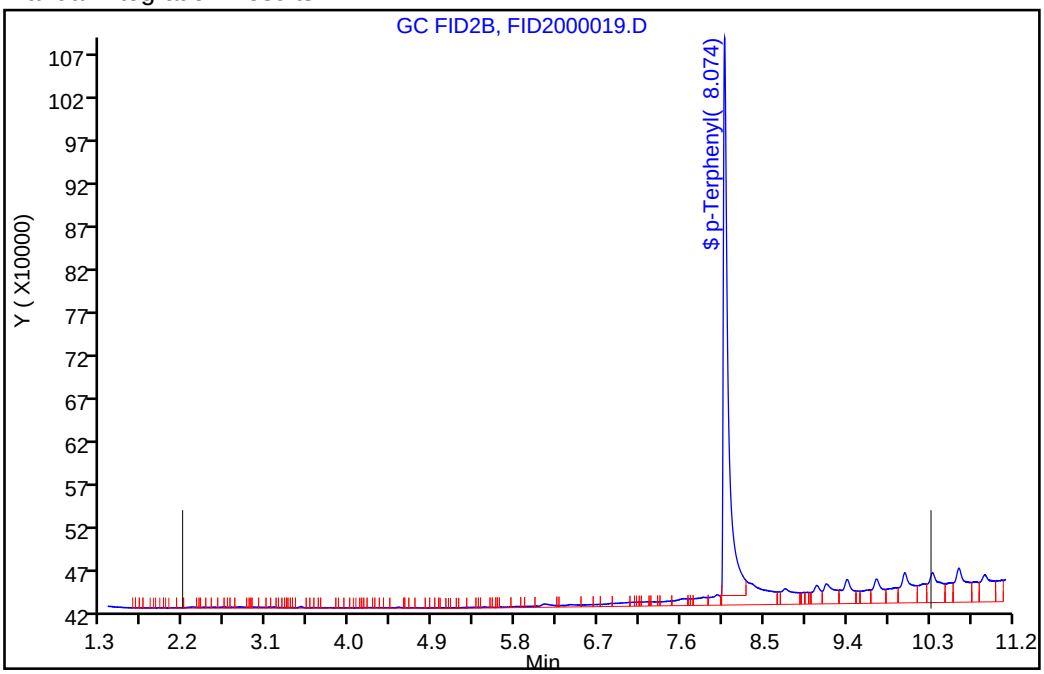
Processing Integration Results

RT: 6.25
Response: 36063418
Amount: 27.719144



Manual Integration Results

RT: 6.25
Response: 60269816
Amount: 41.425302



Reviewer: luj, 29-Aug-2018 11:30:23

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-H5S-0.5-1 Lab Sample ID: 720-88218-6

Matrix: Solid Lab File ID: FID2000026.D

Analysis Method: 8015B Date Collected: 08/22/2018 14:30

Extraction Method: 3546 Date Extracted: 08/27/2018 08:59

Sample wt/vol: 15.58(g) Date Analyzed: 08/28/2018 23:58

Con. Extract Vol.: 2(mL) Dilution Factor: 5

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250356 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	240000	B	9600	3600

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	X D	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000026.D
Lims ID: 720-88218-E-6-B
Client ID: DG-H5S--0.5-1
Sample Type: Client
Inject. Date: 28-Aug-2018 23:58:30 ALS Bottle#: 76 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 720-0053519-026
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\DRO6_B.m
Limit Group: DRO
Last Update: 29-Aug-2018 12:55:39 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 12:55:39

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.314			ND	
	23 n-Decane		2.177			ND	
A	1 C9-C13	2.782	(1.314-4.250)		1447639	0.6636	
A	21 Stoddard Solvent	2.782	(1.314-4.250)		1447639	NC	
A	57 C10-C12	2.906	(2.177-3.636)		786199	7.74	
	24 Dodecane		3.636			ND	
A	3 C9 - C17	3.813	(1.314-6.312)		16075273	7.04	M
A	60 C10-C16	4.006	(2.177-5.836)		14458644	7.13	M
A	47 C9 - C18	4.034	(1.314-6.755)		28933112	15.3	M
A	25 C9-C19	4.246	(1.314-7.179)		46684328	20.3	M
A	15 Kerosene	4.246	(1.314-7.179)		46684328	24.6	M
	26 C13	4.296	4.250	0.046	99409	NC	
$	27 n-Decanoic Acid (Surr)		4.632			ND	
A	59 C12-C16	4.736	(3.636-5.836)		14002428	15.2	M
A	61 C10-C20	4.882	(2.177-7.586)		87018142	56.6	M
A	28 C9-C24	5.184	(1.314-9.055)		322732526	190.0	M
A	29 C9-C25	5.351	(1.314-9.388)		334536456	196.7	M
A	54 C10-C23	5.443	(2.177-8.709)		219135802	131.4	M
A	4 C10-C24	5.616	(2.177-9.055)		322336317	189.8	M
A	16 C10-C25	5.783	(2.177-9.388)		334140247	196.5	M
	45 Hexadecane	5.852	5.836	0.016	510868	NC	M
A	14 C10-C26	5.943	(2.177-9.709)		403803191	235.9	M
A	67 C12-C22	5.993	(3.636-8.350)		190066664	114.9	M
A	32 C10-C28	6.249	(2.177-10.320)		641529113	370.5	M
A	5 Diesel	6.249	(2.177-10.320)		641529113	370.5	M
A	12 Unknown Hydrocarbons	6.249	(2.177-10.320)		641529113	NC	M
A	30 C13-C22	6.300	(4.250-8.350)		189471450	114.6	M
	44 Heptadecane	6.346	6.312	0.034	5111941	NC	M
A	31 C12-C24	6.345	(3.636-9.055)		321880101	189.6	M
	49 n-Octadecane	6.787	6.755	0.032	6049643	NC	M
A	9 Crude Oil Range Organics (	6.862	(1.314-12.410)		1526988949	NC	M
A	11 Bunker Range Organics (C9-	6.862	(1.314-12.410)		1526988949	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.862	(1.314-12.410)		1526988949	723.3	M
33 C19	7.266	7.179	0.087	7414849	NC	M
A 64 C13-C28	7.285	(4.250-10.320)		640477683	370.0	M
A 17 C10-C36	7.294	(2.177-12.410)		1526592740	871.7	M
A 68 Crude Oil Range Organics (	7.353	(1.314-13.392)		1976484010	NC	M
A 13 C9-C40	7.353	(1.314-13.392)		1976484010	1265.1	M
A 58 C16-C24	7.445	(5.836-9.055)		307877673	181.6	M
62 icosane	7.553	7.586	-0.033	33315174	NC	M
A 6 C10-C40	7.785	(2.177-13.392)		1976087801	1266.2	M
$ 34 p-Terphenyl		8.080			ND	U
35 n-Docosane	8.297	8.350	-0.053	17641554	NC	M
A 18 C12-C40	8.514	(3.636-13.392)		1975631585	1269.5	M
36 Tricosane	8.735	8.709	0.026	18657135	NC	M
A 66 C13-C40	8.821	(4.250-13.392)		1975036371	1270.5	M
37 n-Tetracosane		9.055			ND	
A 2 C16-C36 ORO	9.123	(5.836-12.410)		1512134096	1278.8	M
38 C25	9.395	9.388	0.007	24093724	NC	M
A 19 C16-C40	9.614	(5.836-13.392)		1961629157	1266.1	M
46 n-Hexacosane		9.709			ND	
A 20 C19-C36	9.794	(7.179-12.410)		959830901	705.1	
A 55 C23-C32	10.068	(8.709-11.426)		837757333	1082.5	M
39 n-Octacosane	10.356	10.320	0.036	22513834	NC	M
65 C29	10.594	10.610	-0.016	55161920	NC	M
A 40 C24-C36	10.732	(9.055-12.410)		1204907421	1229.0	M
A 7 Motor Oil	10.732	(9.055-12.410)		919644808	938.0	
A 10 C22-C40	10.871	(8.350-13.392)		1278797527	920.0	
A 50 C25-C36	10.899	(9.388-12.410)		863726852	937.6	
A 41 C23-C40	11.050	(8.709-13.392)		1278483519	935.4	
A 8 C24-C40	11.223	(9.055-13.392)		1280600879	954.8	
56 Dotriacontane	11.503	11.426	0.077	52227669	NC	M
A 51 C28-C40	11.856	(10.320-13.392)		1049774572	967.8	
A 63 C29-C40	12.001	(10.610-13.392)		984588491	985.2	
42 n-Hexatriacontane		12.410			ND	
43 C40		13.392			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

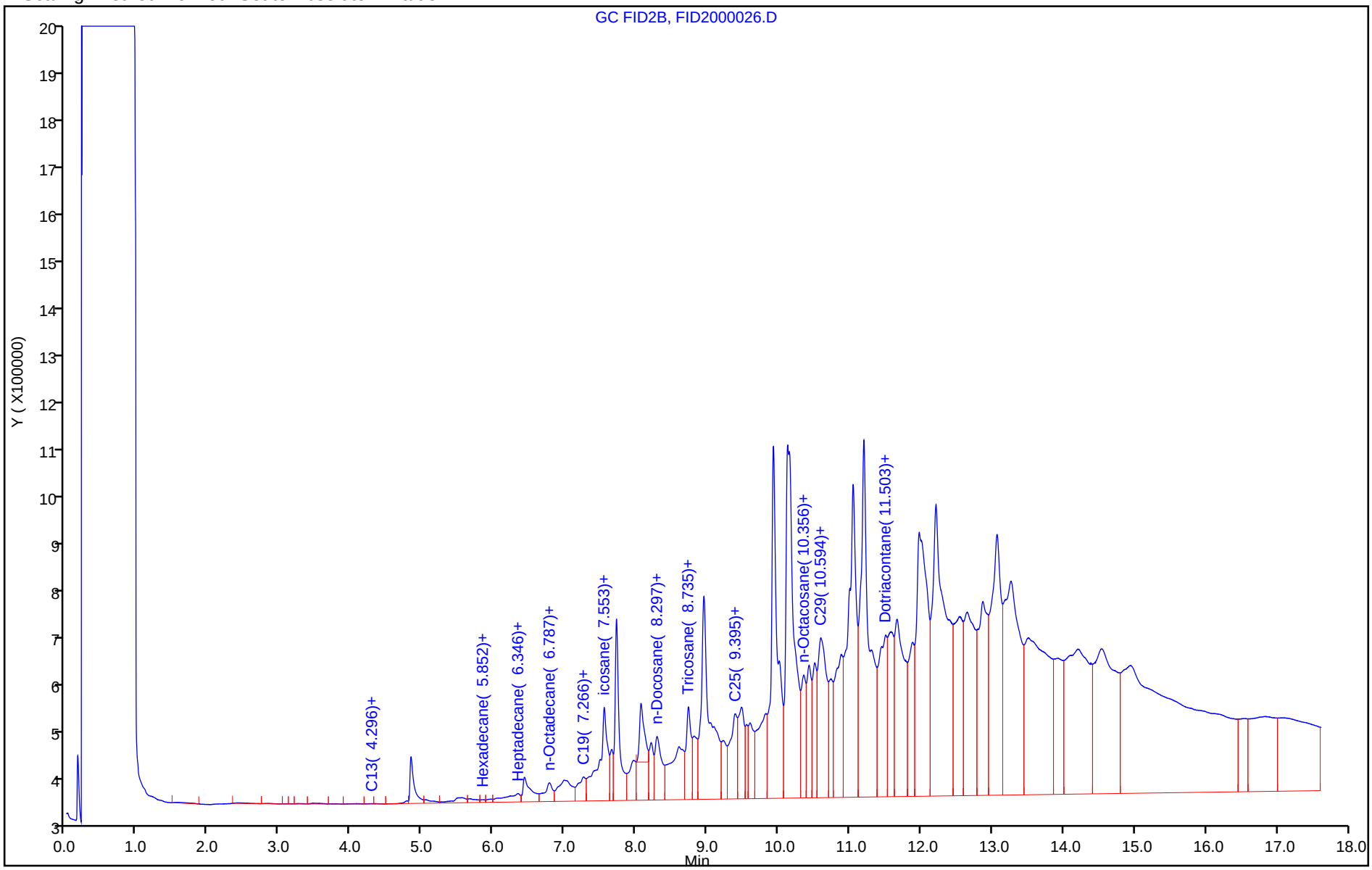
Report Date: 29-Aug-2018 12:55:40 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000026.D

Injection Date:	28-Aug-2018 23:58:30	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88218-E-6-B	Lab Sample ID:	720-88218-6	Worklist Smp#:	26
Client ID:	DG-H5S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	76
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

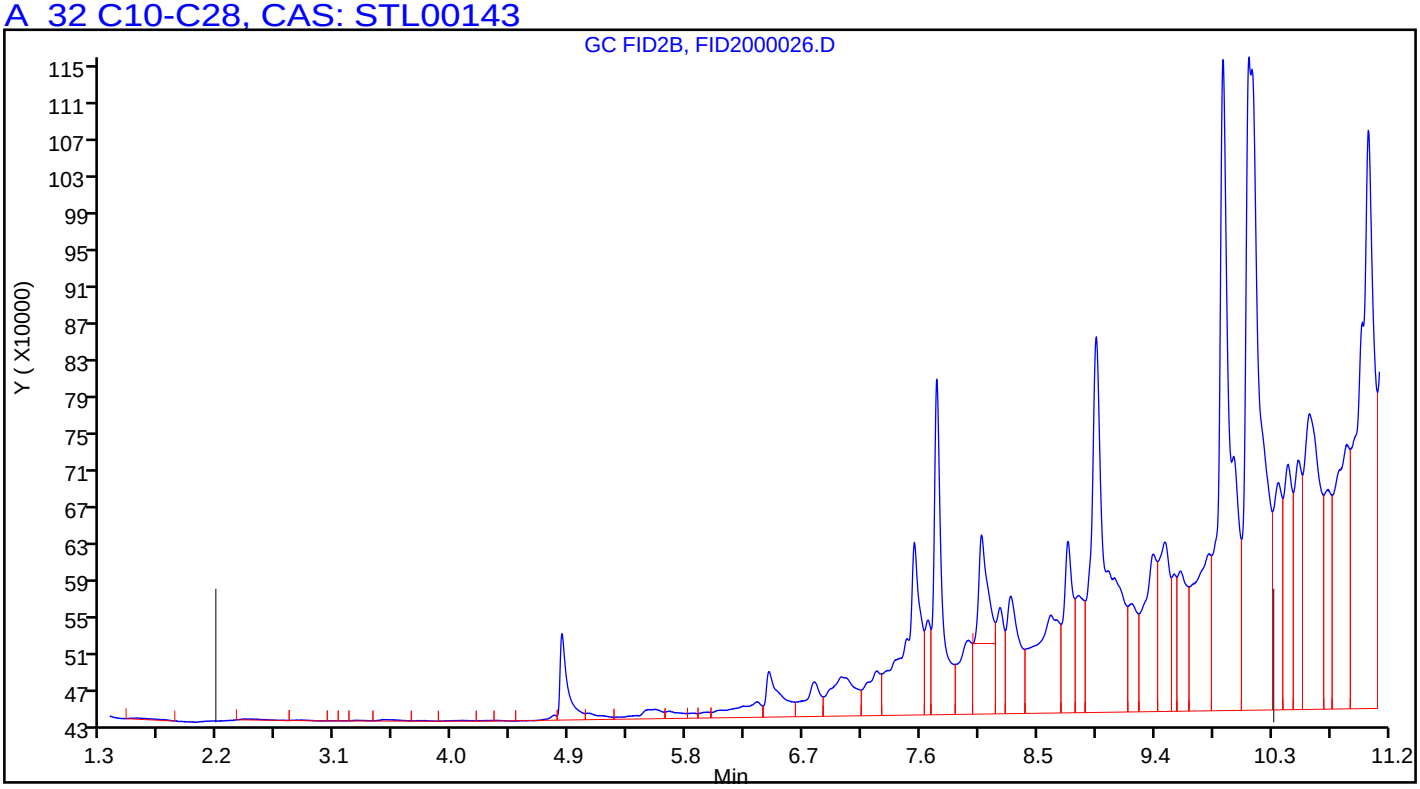


Report Date: 29-Aug-2018 12:55:43 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000026.D				
Injection Date:	28-Aug-2018 23:58:30	Instrument ID:	CHDRO6		
Lims ID:	720-88218-E-6-B	Lab Sample ID:	720-88218-6		
Client ID:	DG-H5S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	76	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

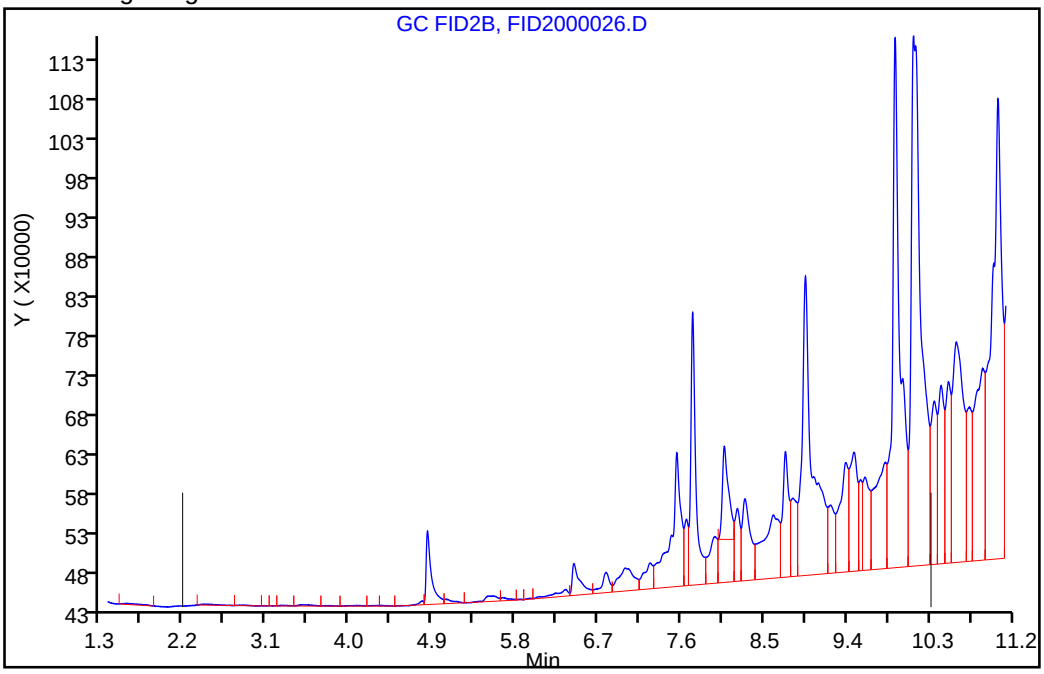
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000026.D				
Injection Date:	28-Aug-2018 23:58:30	Instrument ID:	CHDRO6		
Lims ID:	720-88218-E-6-B	Lab Sample ID:	720-88218-6		
Client ID:	DG-H5S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	76	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.249, CAS: STL00143

Signal: 1

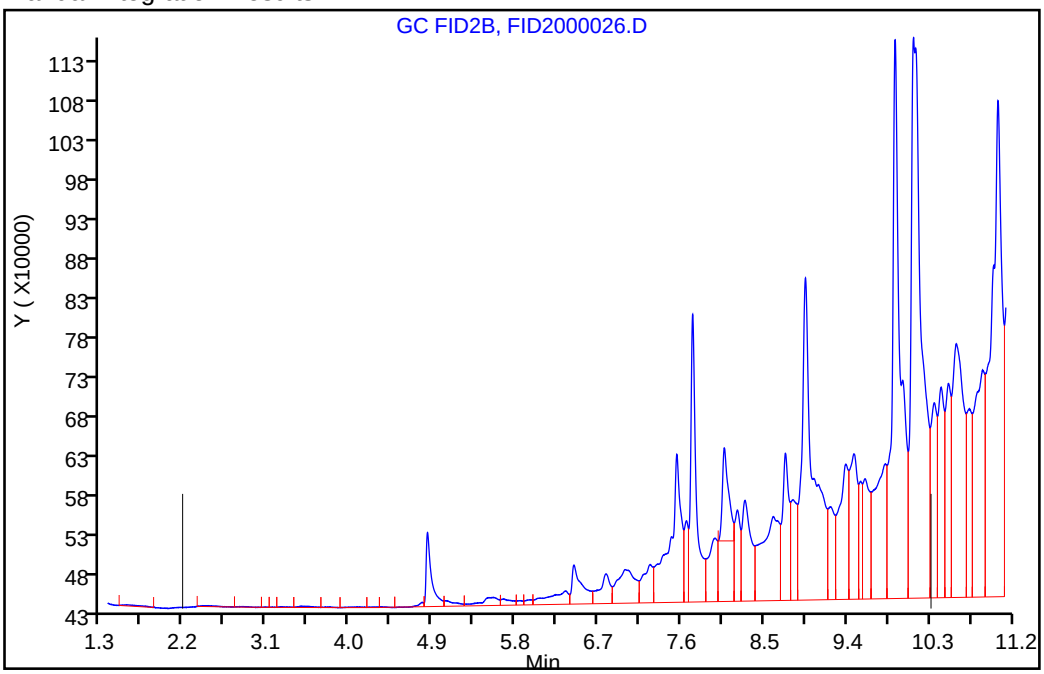
Processing Integration Results

RT: 6.25
Response: 505158666
Amount: 293.3305



Manual Integration Results

RT: 6.25
Response: 641529113
Amount: 370.5462



Reviewer: luj, 29-Aug-2018 12:55:31

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

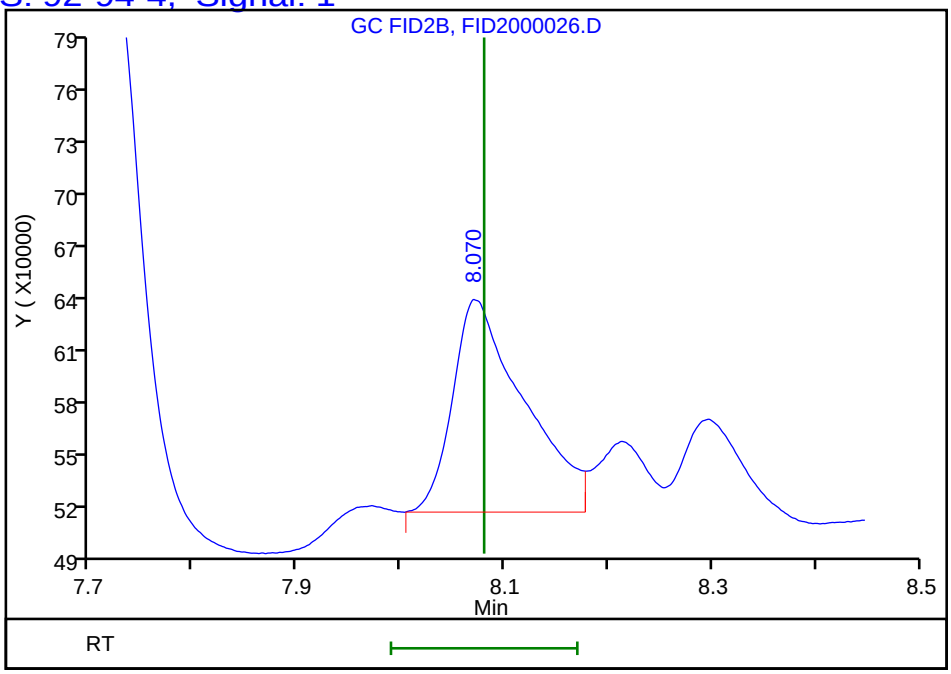
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000026.D				
Injection Date:	28-Aug-2018 23:58:30	Instrument ID:	CHDRO6		
Lims ID:	720-88218-E-6-B	Lab Sample ID:	720-88218-6		
Client ID:	DG-H5S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	76	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.07
Response: 11318057
Amount: 5.566109



Reviewer: luj, 29-Aug-2018 12:55:39
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-H5S-3.5-4 Lab Sample ID: 720-88218-7

Matrix: Solid Lab File ID: FID2000022.D

Analysis Method: 8015B Date Collected: 08/22/2018 14:30

Extraction Method: 3546 Date Extracted: 08/27/2018 08:59

Sample wt/vol: 15.66(g) Date Analyzed: 08/28/2018 22:21

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250356 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	18000	B	1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	86		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000022.D
Lims ID: 720-88218-D-7-C
Client ID: DG-H5S--3.5-4
Sample Type: Client
Inject. Date: 28-Aug-2018 22:21:20 ALS Bottle#: 72 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053519-022
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\DRO6_B.m
Limit Group: DRO
Last Update: 29-Aug-2018 12:03:20 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 12:03:20

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.314			ND	
	23 n-Decane	2.225	2.177	0.048	38294	NC	
A	1 C9-C13	2.782	(1.314-4.250)		3090195	1.42	
A	21 Stoddard Solvent	2.782	(1.314-4.250)		3090195	NC	
A	57 C10-C12	2.906	(2.177-3.636)		1530240	8.17	
	24 Dodecane	3.643	3.636	0.007	8048	NC	
A	3 C9 - C17	3.813	(1.314-6.312)		4919676	2.15	M
A	60 C10-C16	4.006	(2.177-5.836)		4272887	2.11	M
A	47 C9 - C18	4.034	(1.314-6.755)		7065062	3.73	M
A	25 C9-C19	4.246	(1.314-7.179)		9414108	4.09	M
A	15 Kerosene	4.246	(1.314-7.179)		9414108	4.96	M
	26 C13	4.299	4.250	0.049	35975	NC	
$	27 n-Decanoic Acid (Surr)		4.632			ND	U
A	59 C12-C16	4.736	(3.636-5.836)		2742647	8.85	M
A	61 C10-C20	4.882	(2.177-7.586)		23792047	20.8	M
A	28 C9-C24	5.184	(1.314-9.055)		112921692	71.2	M
A	29 C9-C25	5.351	(1.314-9.388)		133885739	83.1	M
A	54 C10-C23	5.443	(2.177-8.709)		88502764	57.4	M
A	4 C10-C24	5.616	(2.177-9.055)		112921692	71.2	M
A	16 C10-C25	5.783	(2.177-9.388)		133885739	83.1	M
	45 Hexadecane	5.884	5.836	0.048	106323	NC	M
A	14 C10-C26	5.943	(2.177-9.709)		165435956	101.0	M
A	67 C12-C22	5.993	(3.636-8.350)		69230480	46.5	M
A	32 C10-C28	6.249	(2.177-10.320)		242047228	144.4	M
A	5 Diesel	6.249	(2.177-10.320)		242047228	144.4	M
A	12 Unknown Hydrocarbons	6.249	(2.177-10.320)		242047228	NC	M
A	30 C13-C22	6.300	(4.250-8.350)		67912401	45.8	M
	44 Heptadecane	6.349	6.312	0.037	1220730	NC	M
A	31 C12-C24	6.345	(3.636-9.055)		111391452	70.4	M
	49 n-Octadecane	6.805	6.755	0.050	1595420	NC	M
A	9 Crude Oil Range Organics (	6.862	(1.314-12.410)		579405998	NC	M
A	11 Bunker Range Organics (C9-	6.862	(1.314-12.410)		579405998	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.862	(1.314-12.410)		579405998	274.5	M
33 C19	7.182	7.179	0.003	4067520	NC	M
A 64 C13-C28	7.285	(4.250-10.320)		239198909	142.7	M
A 17 C10-C36	7.294	(2.177-12.410)		579405998	335.4	M
A 68 Crude Oil Range Organics (	7.353	(1.314-13.392)		715069734	NC	M
A 13 C9-C40	7.353	(1.314-13.392)		715069734	457.7	M
A 58 C16-C24	7.445	(5.836-9.055)		108648805	68.8	M
62 icosane	7.623	7.586	0.037	6898078	NC	M
A 6 C10-C40	7.785	(2.177-13.392)		715069734	458.2	M
$ 34 p-Terphenyl	8.064	8.080	-0.016	43804117	21.5	M
35 n-Docosane	8.352	8.350	0.002	8975773	NC	M
A 18 C12-C40	8.514	(3.636-13.392)		713539494	458.5	M
36 Tricosane	8.714	8.709	0.005	8512679	NC	M
A 66 C13-C40	8.821	(4.250-13.392)		712221415	458.2	M
37 n-Tetracosane	9.067	9.055	0.012	10054849	NC	M
A 2 C16-C36 ORO	9.123	(5.836-12.410)		575133111	486.4	M
38 C25	9.389	9.388	0.001	20104836	NC	M
A 19 C16-C40	9.614	(5.836-13.392)		710796847	458.8	M
46 n-Hexacosane	9.751	9.709	0.042	17149846	NC	M
A 20 C19-C36	9.794	(7.179-12.410)		433313237	318.3	
A 55 C23-C32	10.068	(8.709-11.426)		319613349	413.0	M
39 n-Octacosane	10.356	10.320	0.036	26348544	NC	M
65 C29	10.620	10.610	0.010	33755365	NC	M
A 40 C24-C36	10.732	(9.055-12.410)		429539034	438.1	M
A 7 Motor Oil	10.732	(9.055-12.410)		382366756	390.0	
A 10 C22-C40	10.871	(8.350-13.392)		525841450	378.3	
A 50 C25-C36	10.899	(9.388-12.410)		352946740	383.1	
A 41 C23-C40	11.050	(8.709-13.392)		513376841	375.6	
A 8 C24-C40	11.223	(9.055-13.392)		507425258	378.3	
56 Dotriacontane	11.427	11.426	0.001	21190133	NC	M
A 51 C28-C40	11.856	(10.320-13.392)		405104874	373.5	
A 63 C29-C40	12.001	(10.610-13.392)		368174445	368.4	
42 n-Hexatriacontane	12.405	12.410	-0.005	27317662	NC	M
43 C40		13.392			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

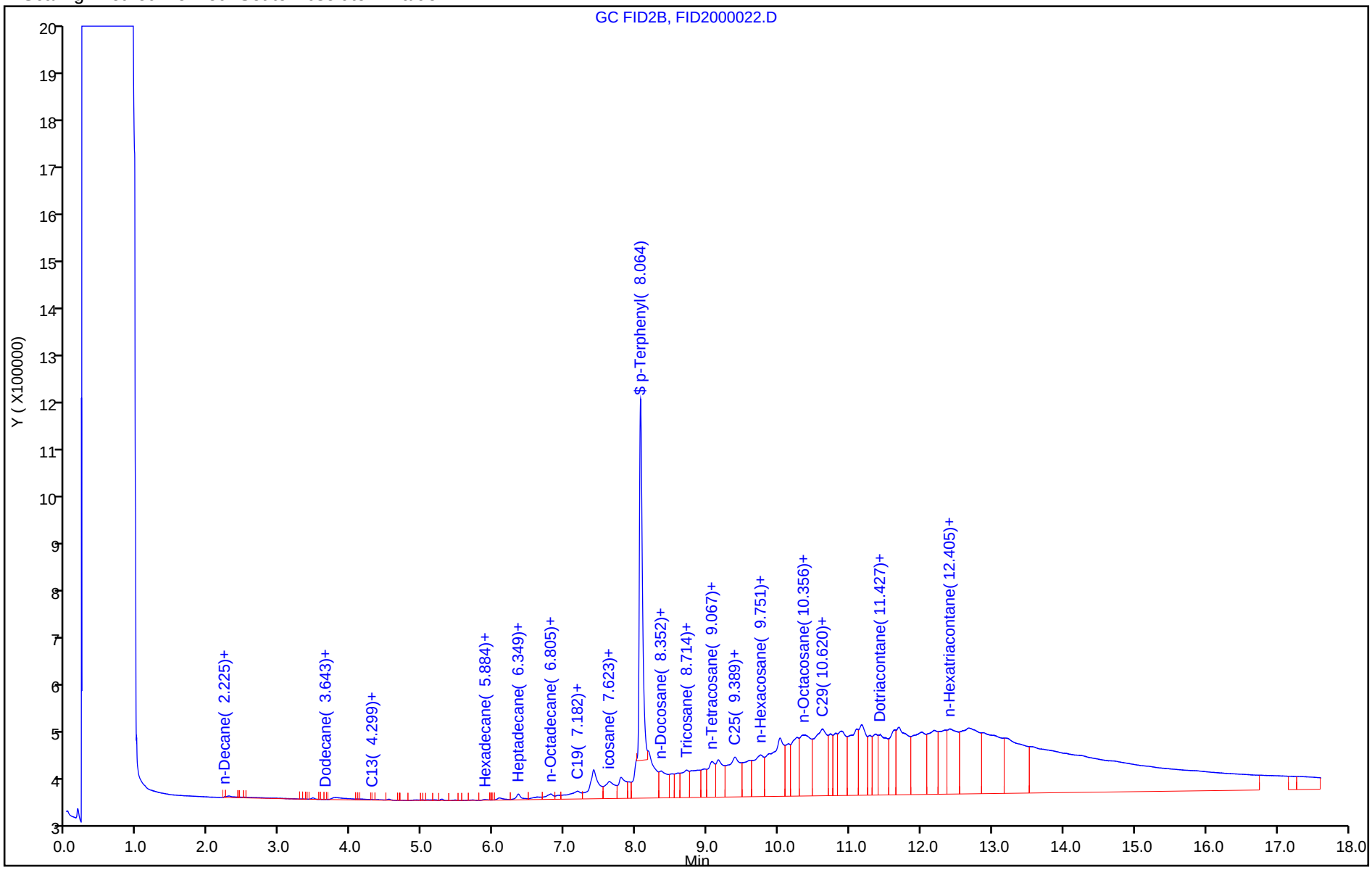
Report Date: 29-Aug-2018 12:03:21 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000022.D

Injection Date:	28-Aug-2018 22:21:20	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88218-D-7-C	Lab Sample ID:	720-88218-7	Worklist Smp#:	22
Client ID:	DG-H5S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	72
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000022.D				
Lims ID:	720-88218-D-7-C				
Client ID:	DG-H5S--3.5-4				
Sample Type:	Client				
Inject. Date:	28-Aug-2018 22:21:20	ALS Bottle#:	72	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053519-022				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	29-Aug-2018 12:03:20	Calib Date:	28-Aug-2018 10:16:50		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK008				
First Level Reviewer: luj		Date:	29-Aug-2018 12:03:20		

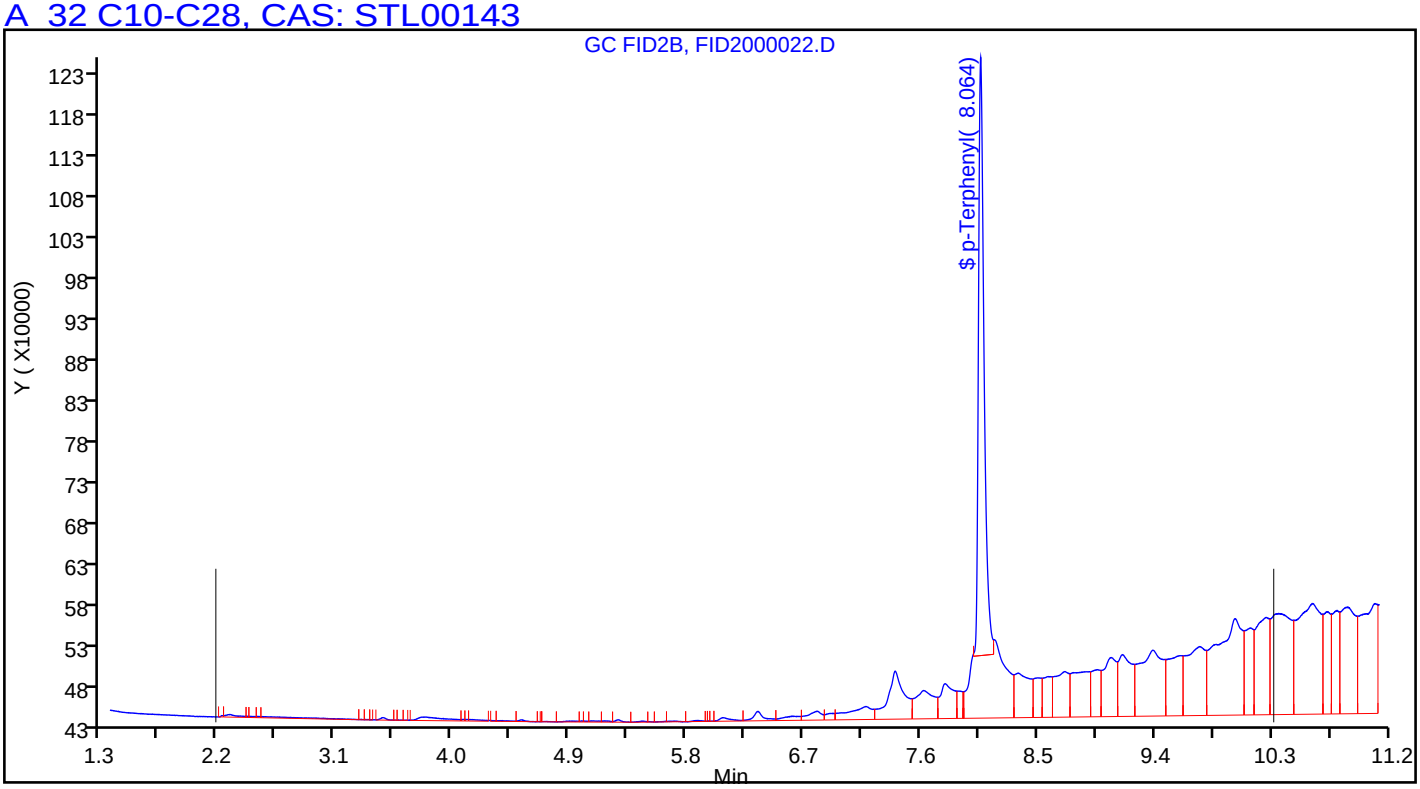
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	21.5	86.17

Report Date: 29-Aug-2018 12:03:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000022.D				
Injection Date:	28-Aug-2018 22:21:20	Instrument ID:	CHDRO6		
Lims ID:	720-88218-D-7-C	Lab Sample ID:	720-88218-7		
Client ID:	DG-H5S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	72	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

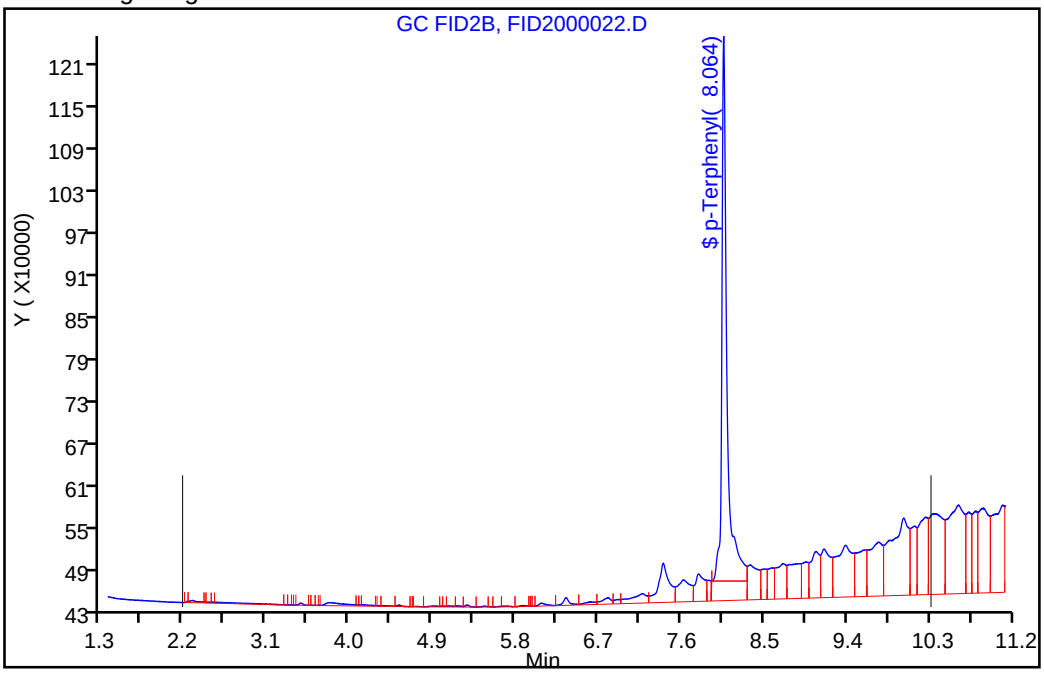
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000022.D				
Injection Date:	28-Aug-2018 22:21:20	Instrument ID:	CHDRO6		
Lims ID:	720-88218-D-7-C	Lab Sample ID:	720-88218-7		
Client ID:	DG-H5S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	72	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.249, CAS: STL00143

Signal: 1

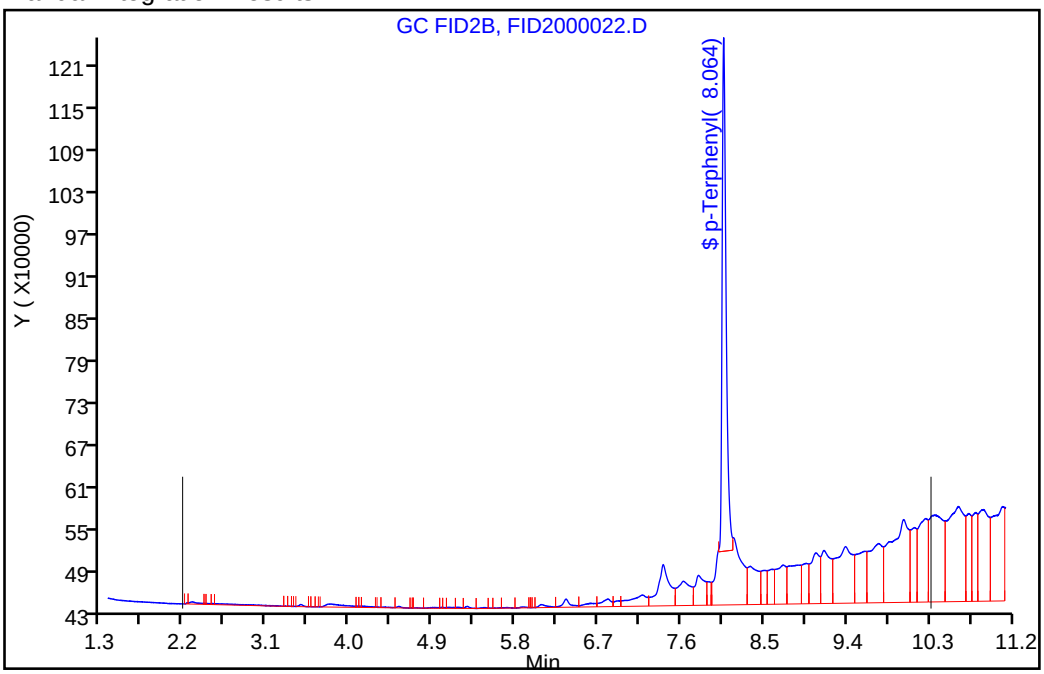
Processing Integration Results

RT: 6.25
Response: 201855473
Amount: 121.5940



Manual Integration Results

RT: 6.25
Response: 242047228
Amount: 144.3514



Reviewer: luj, 29-Aug-2018 12:02:38

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

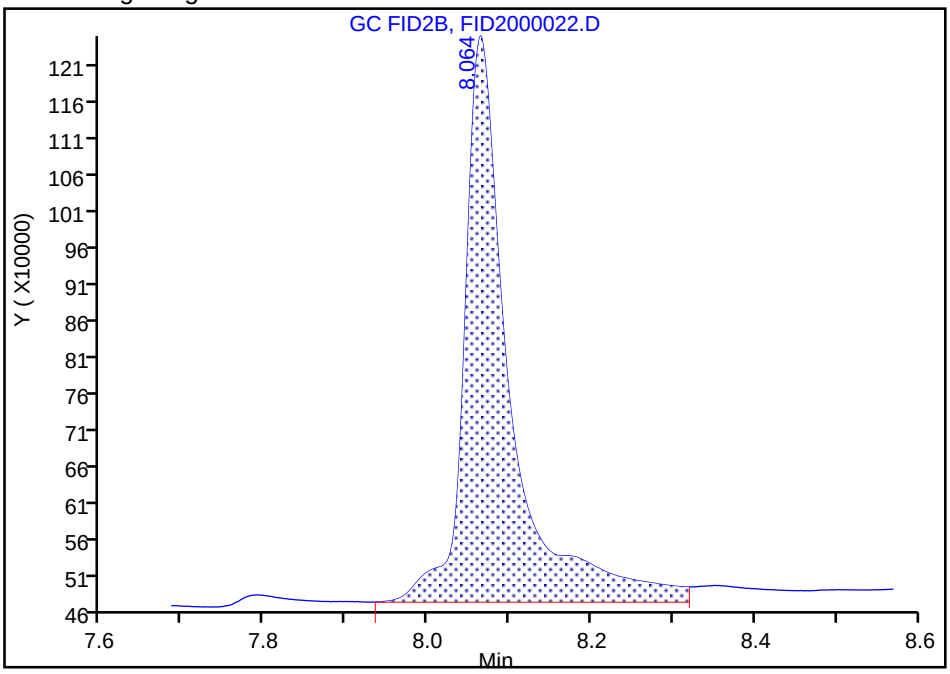
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000022.D				
Injection Date:	28-Aug-2018 22:21:20	Instrument ID:	CHDRO6		
Lims ID:	720-88218-D-7-C	Lab Sample ID:	720-88218-7		
Client ID:	DG-H5S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	72	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

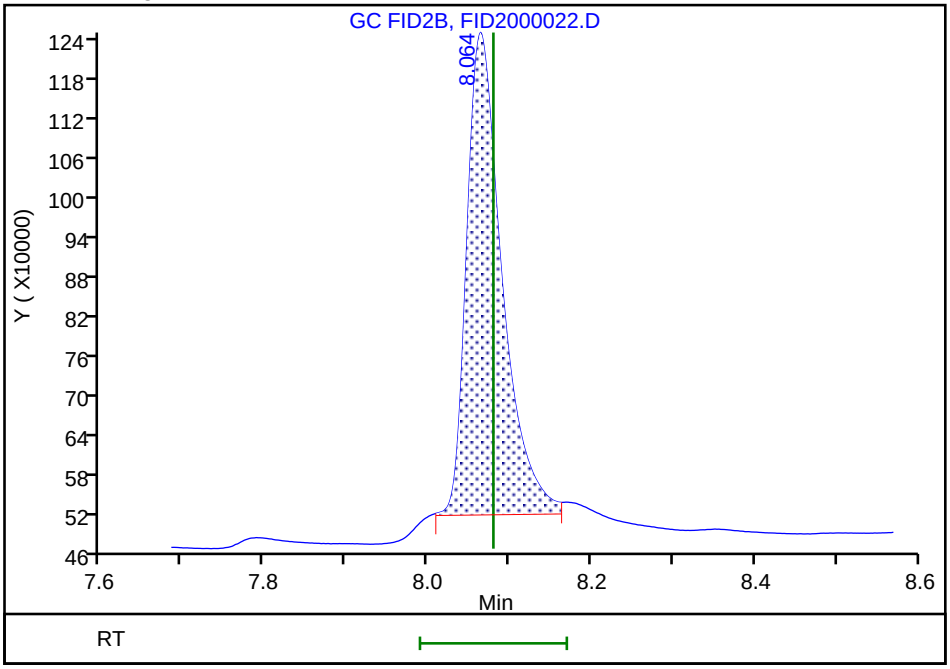
Processing Integration Results

RT: 8.06
Area: 60697404
Amount: 29.850388
Amount Units: mg/L



Manual Integration Results

RT: 8.06
Area: 43804117
Amount: 21.542435
Amount Units: mg/L



Reviewer: luj, 29-Aug-2018 12:02:57

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-F5S-0.5-1 Lab Sample ID: 720-88218-10

Matrix: Solid Lab File ID: FID2000028.D

Analysis Method: 8015B Date Collected: 08/22/2018 15:45

Extraction Method: 3546 Date Extracted: 08/27/2018 08:59

Sample wt/vol: 15.48(g) Date Analyzed: 08/29/2018 00:47

Con. Extract Vol.: 2(mL) Dilution Factor: 10

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250356 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	68000	B	19000	7300

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	X D	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000028.D
Lims ID: 720-88218-D-10-D
Client ID: DG-F5S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 00:47:08 ALS Bottle#: 78 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Sample Info: 720-0053519-028
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\DRO6_B.m
Limit Group: DRO
Last Update: 29-Aug-2018 10:35:14 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 10:35:14

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.314			ND	
	23 n-Decane	2.145	2.177	-0.032	230854	NC	
A	1 C9-C13	2.782	(1.314-4.250)		4427304	2.03	
A	21 Stoddard Solvent	2.782	(1.314-4.250)		4427304	NC	
A	57 C10-C12	2.906	(2.177-3.636)		3097646	9.05	
	24 Dodecane	3.580	3.636	-0.056	304931	NC	
A	3 C9 - C17	3.813	(1.314-6.312)		6634674	2.91	M
A	60 C10-C16	4.006	(2.177-5.836)		5023246	2.48	M
A	47 C9 - C18	4.034	(1.314-6.755)		7469972	3.94	M
A	25 C9-C19	4.246	(1.314-7.179)		9411621	4.09	M
A	15 Kerosene	4.246	(1.314-7.179)		9411621	4.96	M
	26 C13		4.250			ND	
$	27 n-Decanoic Acid (Surr)		4.632			ND	U
A	59 C12-C16	4.736	(3.636-5.836)		2230531	8.56	M
A	61 C10-C20	4.882	(2.177-7.586)		12442754	14.3	M
A	28 C9-C24	5.184	(1.314-9.055)		27934188	23.1	M
A	29 C9-C25	5.351	(1.314-9.388)		44357028	32.4	M
A	54 C10-C23	5.443	(2.177-8.709)		27550497	22.9	M
A	4 C10-C24	5.616	(2.177-9.055)		27550497	22.9	M
A	16 C10-C25	5.783	(2.177-9.388)		43973337	32.2	M
	45 Hexadecane		5.836			ND	
A	14 C10-C26	5.943	(2.177-9.709)		50695602	36.0	M
A	67 C12-C22	5.993	(3.636-8.350)		22510364	20.0	M
A	32 C10-C28	6.249	(2.177-10.320)		80429255	52.8	M
A	5 Diesel	6.249	(2.177-10.320)		80429255	52.8	M
A	12 Unknown Hydrocarbons	6.249	(2.177-10.320)		80429255	NC	M
A	30 C13-C22	6.300	(4.250-8.350)		21535998	19.5	M
	44 Heptadecane	6.342	6.312	0.030	479057	NC	M
A	31 C12-C24	6.345	(3.636-9.055)		24757782	21.3	M
	49 n-Octadecane	6.797	6.755	0.042	1228230	NC	M
A	9 Crude Oil Range Organics (	6.862	(1.314-12.410)		219459941	NC	M
A	11 Bunker Range Organics (C9-	6.862	(1.314-12.410)		219459941	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.862	(1.314-12.410)		219459941	104.0	M
33 C19	7.194	7.179	0.015	1474833	NC	M
A 64 C13-C28	7.285	(4.250-10.320)		76662174	50.7	M
A 17 C10-C36	7.294	(2.177-12.410)		219076250	131.3	M
A 68 Crude Oil Range Organics (	7.353	(1.314-13.392)		1230826450	NC	M
A 13 C9-C40	7.353	(1.314-13.392)		1230826450	787.8	M
A 58 C16-C24	7.445	(5.836-9.055)		22527251	20.1	M
62 icosane	7.598	7.586	0.012	1568679	NC	M
A 6 C10-C40	7.785	(2.177-13.392)		1230442759	788.4	M
$ 34 p-Terphenyl		8.080			ND	U
35 n-Docosane	8.364	8.350	0.014	2247418	NC	M
A 18 C12-C40	8.514	(3.636-13.392)		1227650044	788.9	M
36 Tricosane		8.709			ND	
A 66 C13-C40	8.821	(4.250-13.392)		1226675678	789.1	M
37 n-Tetracosane	9.140	9.055	0.085	16422840	NC	M
A 2 C16-C36 ORO	9.123	(5.836-12.410)		214053004	181.0	M
38 C25	9.418	9.388	0.030	6722265	NC	M
A 19 C16-C40	9.614	(5.836-13.392)		1225419513	790.9	M
46 n-Hexacosane		9.709			ND	
A 20 C19-C36						
A 55 C23-C32	10.068	(8.709-11.426)		191525753	247.5	M
39 n-Octacosane		10.320			ND	
65 C29		10.610			ND	
A 40 C24-C36	10.732	(9.055-12.410)		564756650	576.1	M
A 7 Motor Oil	10.732	(9.055-12.410)		131674949	134.3	
A 10 C22-C40	10.871	(8.350-13.392)		479725016	345.1	
A 50 C25-C36	10.899	(9.388-12.410)		155658333	169.0	
A 41 C23-C40	11.050	(8.709-13.392)		524636365	383.9	
A 8 C24-C40	11.223	(9.055-13.392)		532756615	397.2	
56 Dotriacontane		11.426			ND	
A 51 C28-C40	11.856	(10.320-13.392)		654614011	603.5	
A 63 C29-C40	12.001	(10.610-13.392)		663747203	664.2	
42 n-Hexatriacontane		12.410			ND	
43 C40		13.392			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- 7 - Failed Limit of Detection

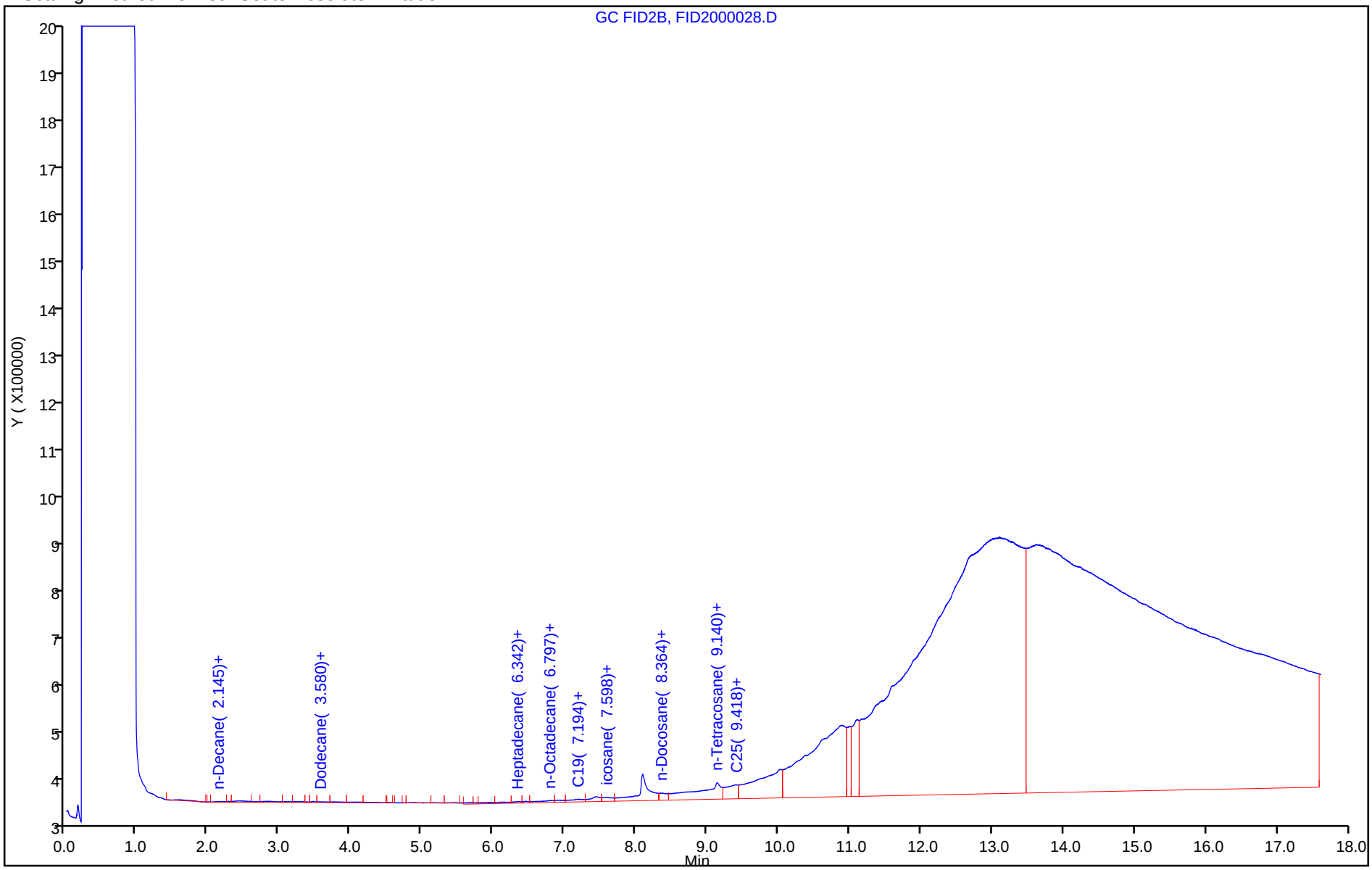
Review Flags
- M - Manually Integrated
- U - Marked Undetected

Report Date: 29-Aug-2018 10:35:15 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000028.D				
Injection Date:	29-Aug-2018 00:47:08	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88218-D-10-D	Lab Sample ID:	720-88218-10	Worklist Smp#:	28
Client ID:	DG-F5S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	78
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

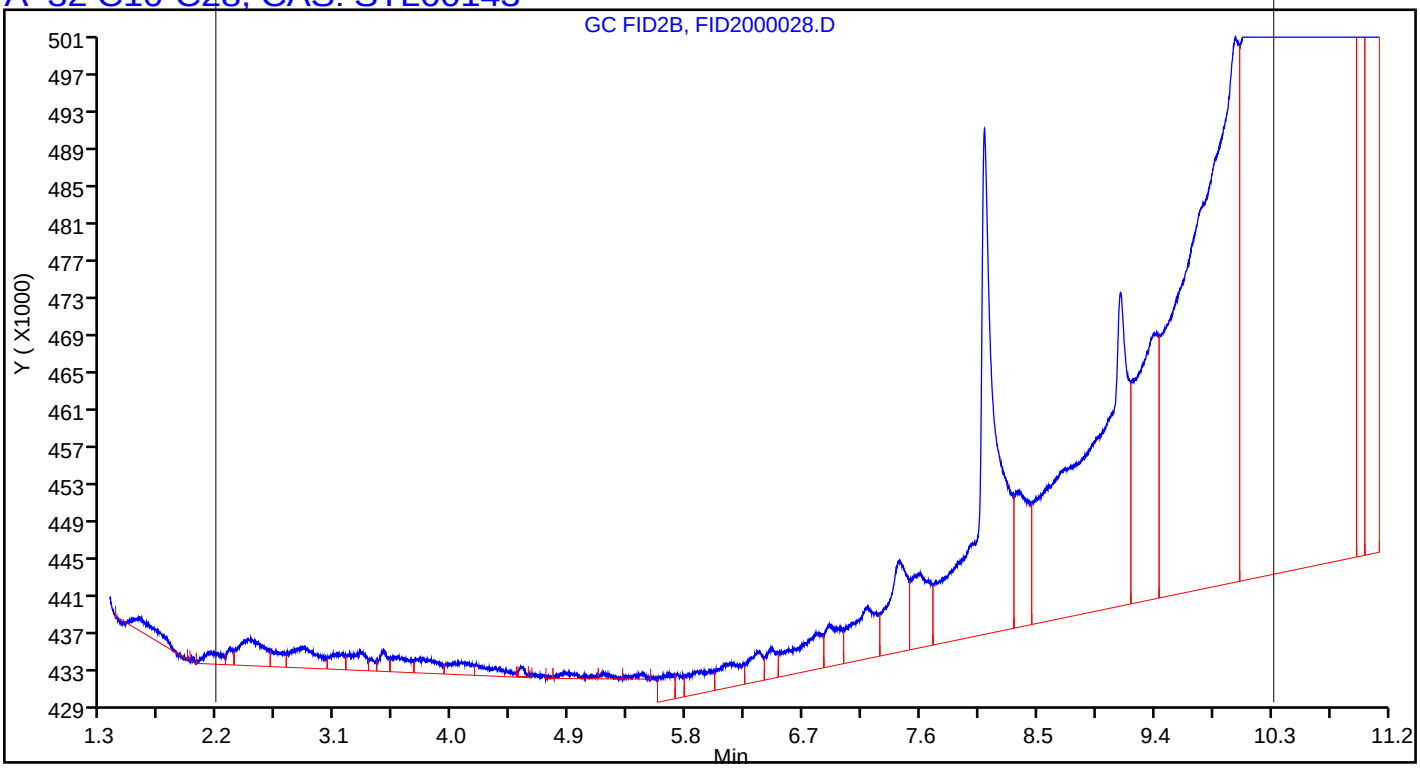


Report Date: 29-Aug-2018 10:35:21 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000028.D				
Injection Date:	29-Aug-2018 00:47:08	Instrument ID:	CHDRO6		
Lims ID:	720-88218-D-10-D	Lab Sample ID:	720-88218-10		
Client ID:	DG-F5S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	78	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

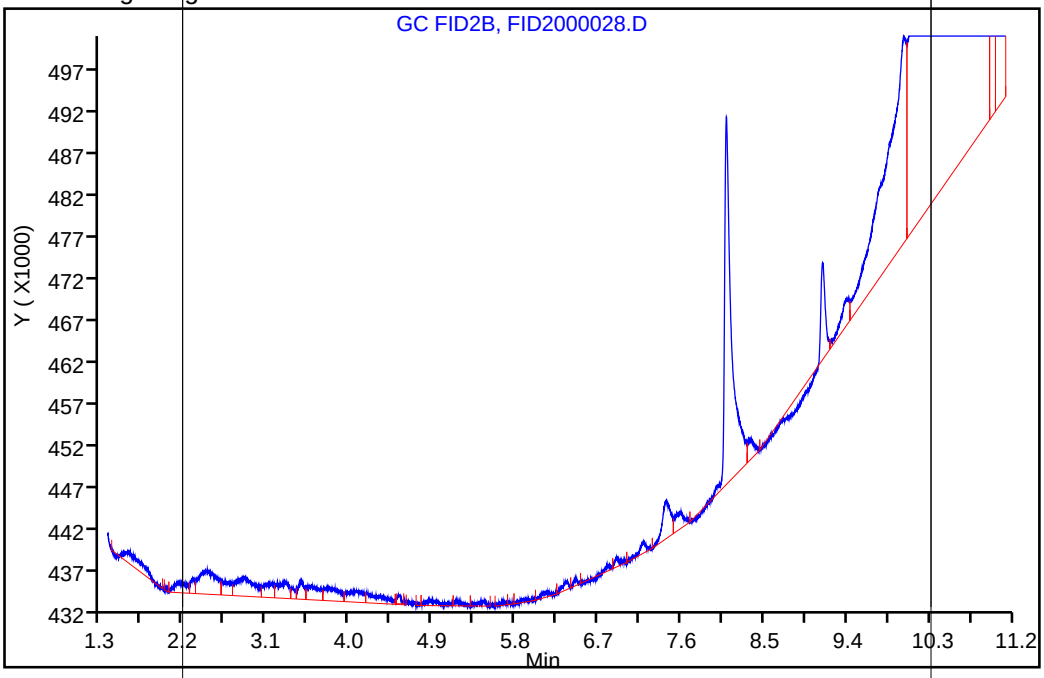
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000028.D				
Injection Date:	29-Aug-2018 00:47:08	Instrument ID:	CHDRO6		
Lims ID:	720-88218-D-10-D	Lab Sample ID:	720-88218-10		
Client ID:	DG-F5S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	78	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.249, CAS: STL00143

Signal: 1

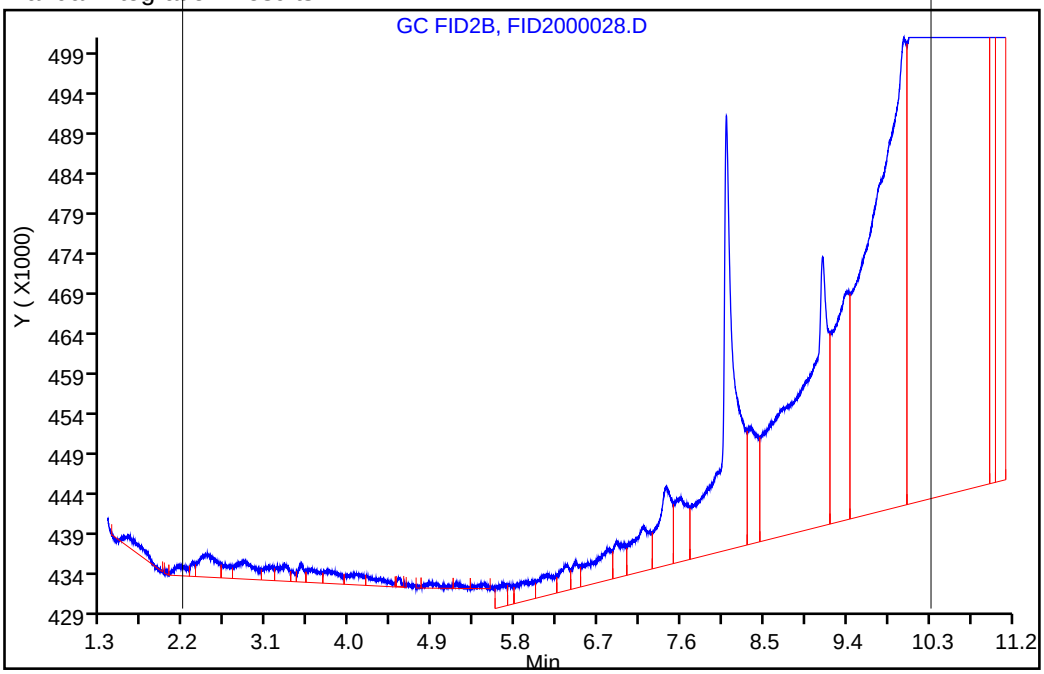
Processing Integration Results

RT: 6.25
Response: 14474594
Amount: 15.495110



Manual Integration Results

RT: 6.25
Response: 80429255
Amount: 52.839989



Reviewer: luj, 29-Aug-2018 10:35:04

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

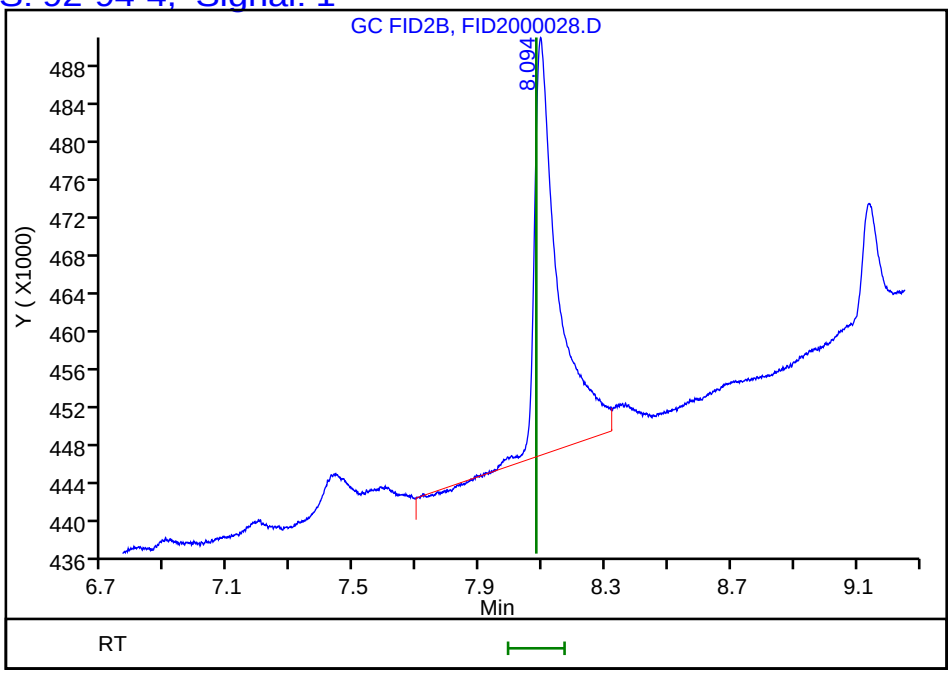
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000028.D				
Injection Date:	29-Aug-2018 00:47:08	Instrument ID:	CHDRO6		
Lims ID:	720-88218-D-10-D	Lab Sample ID:	720-88218-10		
Client ID:	DG-F5S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	78	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.09
Response: 4542584
Amount: 2.233998



Reviewer: luj, 29-Aug-2018 10:35:14
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-F5S-3.5-4 Lab Sample ID: 720-88218-11

Matrix: Solid Lab File ID: FID2000021.D

Analysis Method: 8015B Date Collected: 08/22/2018 15:45

Extraction Method: 3546 Date Extracted: 08/27/2018 08:59

Sample wt/vol: 15.73(g) Date Analyzed: 08/28/2018 21:56

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250356 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	72000	B	1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	63		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000021.D
Lims ID: 720-88218-E-11-A
Client ID: DG-F5S--3.5-4
Sample Type: Client
Inject. Date: 28-Aug-2018 21:56:55 ALS Bottle#: 71 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053519-021
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\DRO6_B.m
Limit Group: DRO
Last Update: 29-Aug-2018 12:01:36 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 12:01:36

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.314			ND	
	23 n-Decane	2.174	2.177	-0.003	126923	NC	M
A	1 C9-C13	2.782	(1.314-4.250)		9156293	4.20	M
A	21 Stoddard Solvent	2.782	(1.314-4.250)		9156293	NC	M
A	57 C10-C12	2.906	(2.177-3.636)		5167812	10.2	M
	24 Dodecane	3.623	3.636	-0.013	252699	NC	M
A	3 C9 - C17	3.813	(1.314-6.312)		56888353	24.9	M
A	60 C10-C16	4.006	(2.177-5.836)		34549811	17.0	M
A	47 C9 - C18	4.034	(1.314-6.755)		80850173	42.7	M
A	25 C9-C19	4.246	(1.314-7.179)		101827329	44.2	M
A	15 Kerosene	4.246	(1.314-7.179)		101827329	53.7	M
	26 C13	4.287	4.250	0.037	825655	NC	M
$	27 n-Decanoic Acid (Surr)		4.632			ND	U
A	59 C12-C16	4.736	(3.636-5.836)		29634698	24.1	M
A	61 C10-C20	4.882	(2.177-7.586)		192767019	116.4	M
A	28 C9-C24	5.184	(1.314-9.055)		583863128	337.9	M
A	29 C9-C25	5.351	(1.314-9.388)		690116195	398.1	M
A	54 C10-C23	5.443	(2.177-8.709)		527576430	306.0	M
A	4 C10-C24	5.616	(2.177-9.055)		583555942	337.7	M
A	16 C10-C25	5.783	(2.177-9.388)		689809009	397.9	M
	45 Hexadecane	5.840	5.836	0.004	3741457	NC	M
A	14 C10-C26	5.943	(2.177-9.709)		793156263	456.4	M
A	67 C12-C22	5.993	(3.636-8.350)		405112748	236.7	M
A	32 C10-C28	6.249	(2.177-10.320)		981197527	562.9	M
A	5 Diesel	6.249	(2.177-10.320)		981197527	562.9	M
A	12 Unknown Hydrocarbons	6.249	(2.177-10.320)		981197527	NC	M
A	30 C13-C22	6.300	(4.250-8.350)		401178754	234.5	M
	44 Heptadecane	6.309	6.312	-0.003	9055862	NC	M
A	31 C12-C24	6.345	(3.636-9.055)		578640829	334.9	M
	49 n-Octadecane	6.751	6.755	-0.004	9493781	NC	M
A	9 Crude Oil Range Organics (	6.862	(1.314-12.410)		1648121317	NC	M
A	11 Bunker Range Organics (C9-	6.862	(1.314-12.410)		1648121317	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.862	(1.314-12.410)		1648121317	780.7	M
33 C19	7.179	7.179	0.000	14102452	NC	M
A 64 C13-C28	7.285	(4.250-10.320)		972348420	557.9	M
A 17 C10-C36	7.294	(2.177-12.410)		1647814131	940.3	M
A 68 Crude Oil Range Organics (	7.353	(1.314-13.392)		1819316076	NC	M
A 13 C9-C40	7.353	(1.314-13.392)		1819316076	1164.5	M
A 58 C16-C24	7.445	(5.836-9.055)		549006131	318.2	M
62 icosane	7.583	7.586	-0.003	27527773	NC	M
A 6 C10-C40	7.785	(2.177-13.392)		1819008890	1165.6	M
$ 34 p-Terphenyl	8.063	8.080	-0.017	32028476	15.8	
35 n-Docosane	8.347	8.350	-0.003	56174927	NC	M
A 18 C12-C40	8.514	(3.636-13.392)		1814093777	1165.7	M
36 Tricosane	8.708	8.709	-0.001	68442306	NC	M
A 66 C13-C40	8.821	(4.250-13.392)		1810159783	1164.5	M
37 n-Tetracosane	9.055	9.055	0.000	53565738	NC	M
A 2 C16-C36 ORO	9.123	(5.836-12.410)		1613264320	1364.3	M
38 C25	9.389	9.388	0.001	64835845	NC	M
A 19 C16-C40	9.614	(5.836-13.392)		1784459079	1151.7	M
46 n-Hexacosane	9.712	9.709	0.003	53742254	NC	M
A 20 C19-C36	9.794	(7.179-12.410)		1289727501	947.4	
A 55 C23-C32	10.068	(8.709-11.426)		857429837	1108.0	M
39 n-Octacosane	10.323	10.320	0.003	58993097	NC	M
65 C29	10.614	10.610	0.004	54985560	NC	M
A 40 C24-C36	10.732	(9.055-12.410)		1007022340	1027.2	M
A 7 Motor Oil	10.732	(9.055-12.410)		914709405	933.0	
A 10 C22-C40	10.871	(8.350-13.392)		1210668024	871.0	
A 50 C25-C36	10.899	(9.388-12.410)		780591345	847.4	
A 41 C23-C40	11.050	(8.709-13.392)		1113710399	814.9	
A 8 C24-C40	11.223	(9.055-13.392)		1026703986	765.5	
56 Dotriacontane	11.432	11.426	0.006	43709790	NC	M
A 51 C28-C40	11.856	(10.320-13.392)		688786871	635.0	
A 63 C29-C40	12.001	(10.610-13.392)		612699276	613.1	
42 n-Hexatriacontane	12.407	12.410	-0.003	58490868	NC	M
43 C40		13.392			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

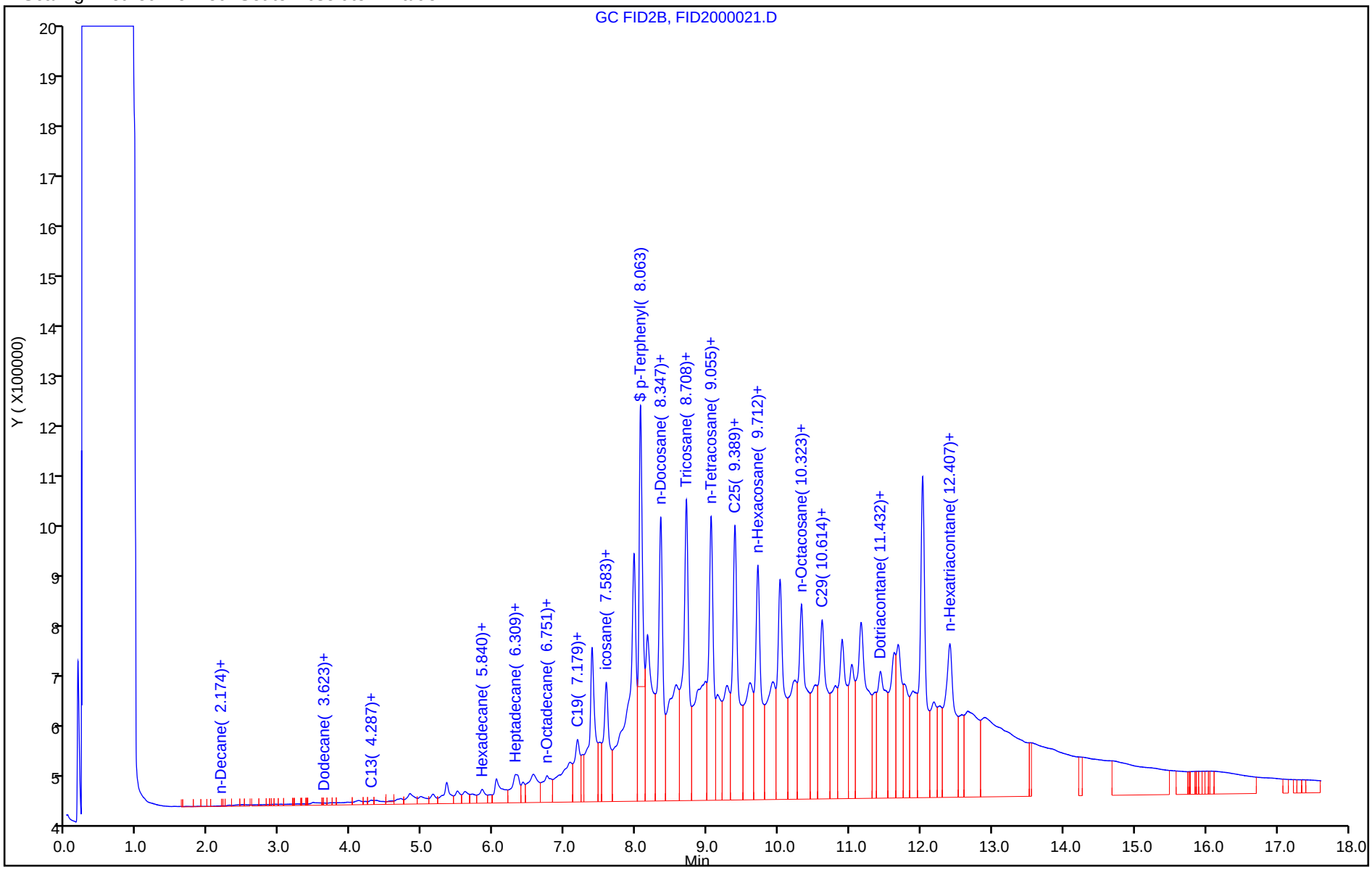
Report Date: 29-Aug-2018 12:01:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000021.D

Injection Date:	28-Aug-2018 21:56:55	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88218-E-11-A	Lab Sample ID:	720-88218-11	Worklist Smp#:	21
Client ID:	DG-F5S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	71
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000021.D				
Lims ID:	720-88218-E-11-A				
Client ID:	DG-F5S--3.5-4				
Sample Type:	Client				
Inject. Date:	28-Aug-2018 21:56:55	ALS Bottle#:	71	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053519-021				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	29-Aug-2018 12:01:36	Calib Date:	28-Aug-2018 10:16:50		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK008				
First Level Reviewer: luj		Date:	29-Aug-2018 12:01:36		

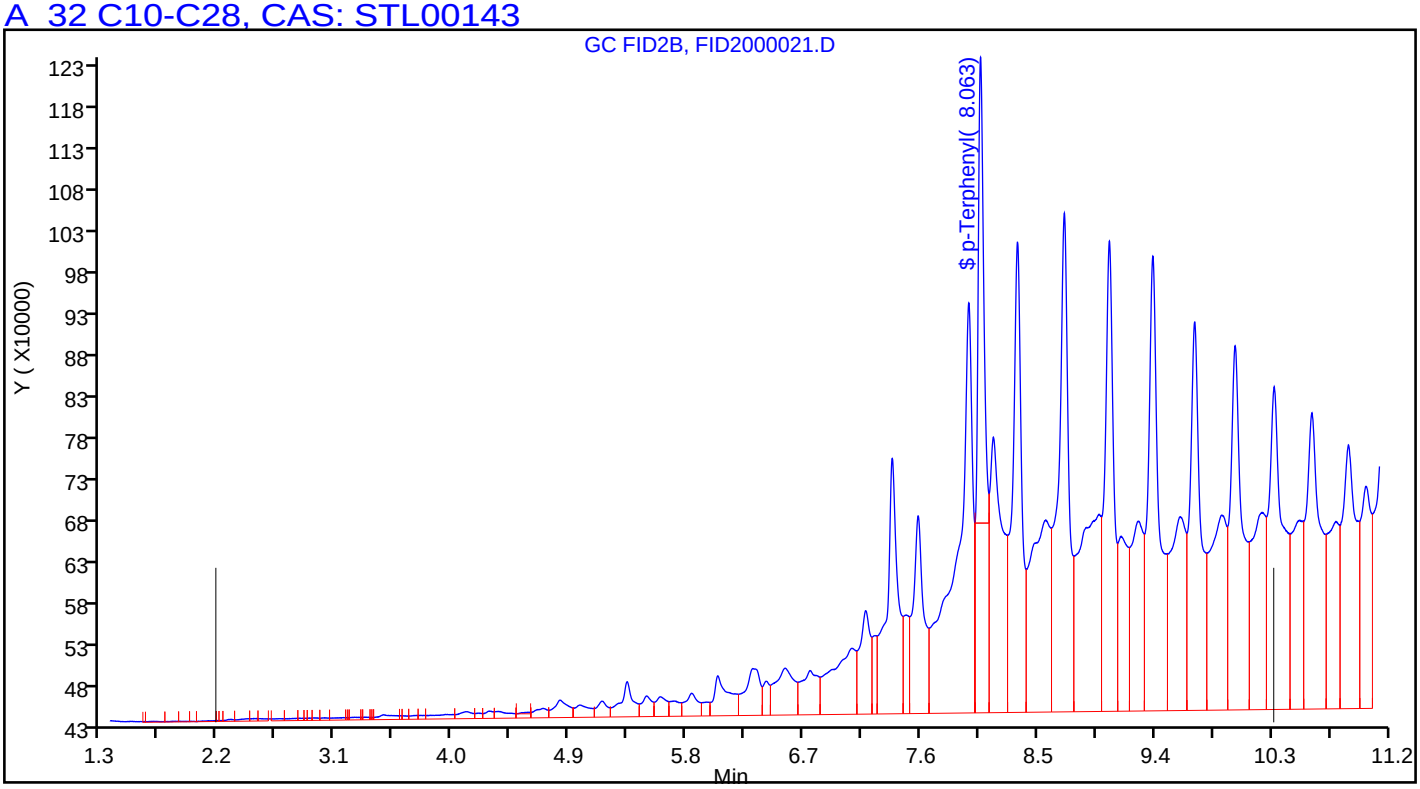
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	15.8	63.01

Report Date: 29-Aug-2018 12:01:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000021.D				
Injection Date:	28-Aug-2018 21:56:55	Instrument ID:	CHDRO6		
Lims ID:	720-88218-E-11-A	Lab Sample ID:	720-88218-11		
Client ID:	DG-F5S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	71	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

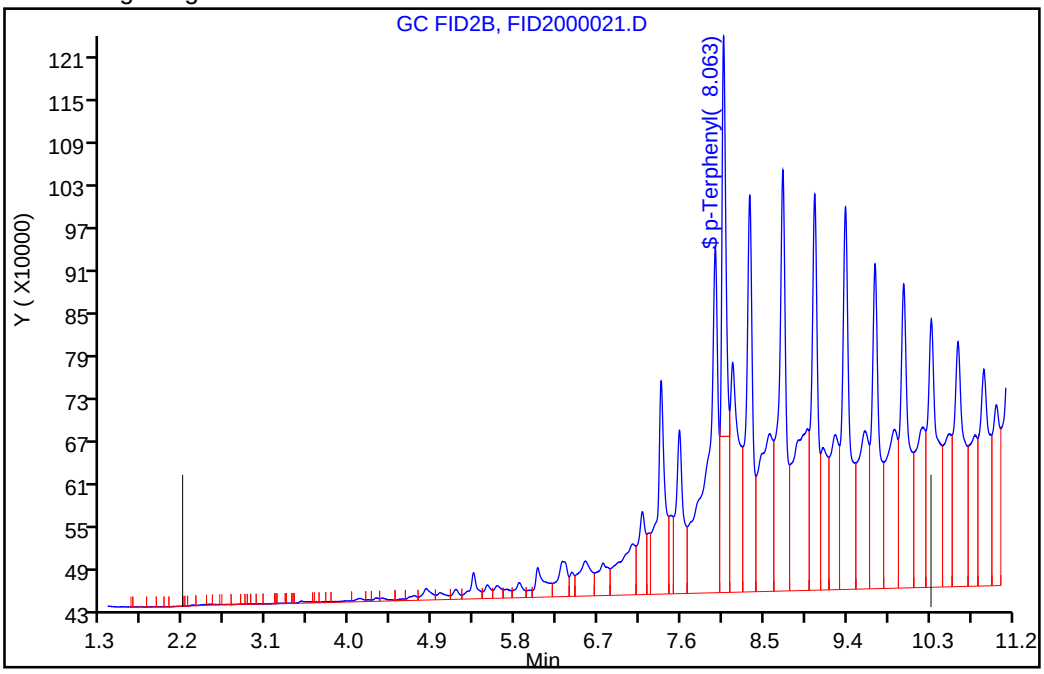
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000021.D				
Injection Date:	28-Aug-2018 21:56:55	Instrument ID:	CHDRO6		
Lims ID:	720-88218-E-11-A	Lab Sample ID:	720-88218-11		
Client ID:	DG-F5S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	71	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.249, CAS: STL00143

Signal: 1

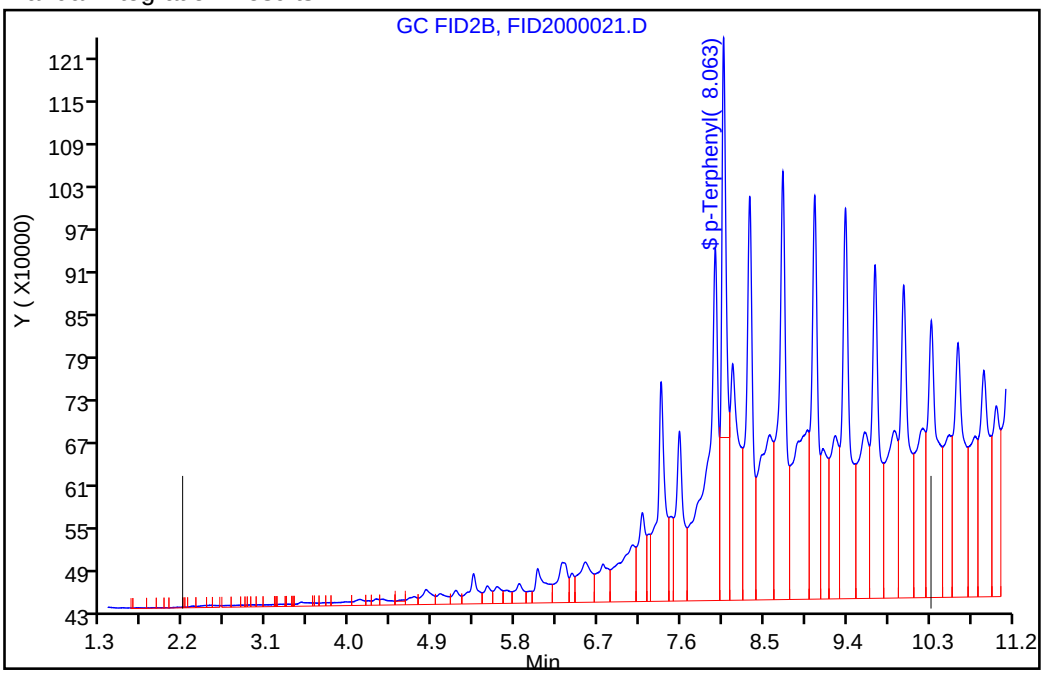
Processing Integration Results

RT: 6.25
Response: 909866086
Amount: 522.4841



Manual Integration Results

RT: 6.25
Response: 981197527
Amount: 562.8734



Reviewer: luj, 29-Aug-2018 12:01:26

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-D5S-0.5-1 Lab Sample ID: 720-88218-14

Matrix: Solid Lab File ID: FID2000030.D

Analysis Method: 8015B Date Collected: 08/22/2018 16:45

Extraction Method: 3546 Date Extracted: 08/27/2018 08:59

Sample wt/vol: 15.85(g) Date Analyzed: 08/29/2018 01:35

Con. Extract Vol.: 2(mL) Dilution Factor: 5

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250356 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	370000	B	9500	3500

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	0	X D	40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000030.D
Lims ID: 720-88218-E-14-C
Client ID: DG-D5S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 01:35:42 ALS Bottle#: 80 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 720-0053519-030
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\DRO6_B.m
Limit Group: DRO
Last Update: 29-Aug-2018 13:10:40 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK008

First Level Reviewer: luj Date: 29-Aug-2018 13:10:40

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.314			ND	
	23 n-Decane	2.184	2.177	0.007	16560	NC	
A	1 C9-C13	2.782	(1.314-4.250)		7987340	3.66	M
A	21 Stoddard Solvent	2.782	(1.314-4.250)		7987340	NC	M
A	57 C10-C12	2.906	(2.177-3.636)		2157011	8.52	M
	24 Dodecane	3.615	3.636	-0.021	347985	NC	M
A	3 C9 - C17	3.813	(1.314-6.312)		30766637	13.5	M
A	60 C10-C16	4.006	(2.177-5.836)		24131012	11.9	M
A	47 C9 - C18	4.034	(1.314-6.755)		39193579	20.7	M
A	25 C9-C19	4.246	(1.314-7.179)		51772914	22.5	M
A	15 Kerosene	4.246	(1.314-7.179)		51772914	27.3	M
	26 C13	4.305	4.250	0.055	1332261	NC	M
$	27 n-Decanoic Acid (Surr)		4.632			ND	U
A	59 C12-C16	4.736	(3.636-5.836)		22321986	19.9	M
A	61 C10-C20	4.882	(2.177-7.586)		56387280	39.2	M
A	28 C9-C24	5.184	(1.314-9.055)		266114696	158.0	M
A	29 C9-C25	5.351	(1.314-9.388)		425203327	248.1	M
A	54 C10-C23	5.443	(2.177-8.709)		265690518	157.7	M
A	4 C10-C24	5.616	(2.177-9.055)		265690518	157.7	M
A	16 C10-C25	5.783	(2.177-9.388)		424779149	247.8	M
	45 Hexadecane	5.846	5.836	0.010	2367987	NC	M
A	14 C10-C26	5.943	(2.177-9.709)		424779149	247.8	M
A	67 C12-C22	5.993	(3.636-8.350)		174908729	106.3	M
A	32 C10-C28	6.249	(2.177-10.320)		1034889491	593.3	M
A	5 Diesel	6.249	(2.177-10.320)		1034889491	593.3	M
A	12 Unknown Hydrocarbons	6.249	(2.177-10.320)		1034889491	NC	M
A	30 C13-C22	6.300	(4.250-8.350)		169154593	103.1	M
	44 Heptadecane	6.336	6.312	0.024	3325780	NC	M
A	31 C12-C24	6.345	(3.636-9.055)		263881492	156.7	M
	49 n-Octadecane	6.803	6.755	0.048	4807239	NC	M
A	9 Crude Oil Range Organics (	6.862	(1.314-12.410)		2427723646	NC	M
A	11 Bunker Range Organics (C9-	6.862	(1.314-12.410)		2427723646	NC	M

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.862	(1.314-12.410)		2427723646	1150.0	M
33 C19	7.188	7.179	0.009	5038544	NC	M
A 64 C13-C28	7.285	(4.250-10.320)		1027326329	589.0	M
A 17 C10-C36	7.294	(2.177-12.410)		2427299468	1381.7	M
A 68 Crude Oil Range Organics (	7.353	(1.314-13.392)		4303366643	NC	M
A 13 C9-C40	7.353	(1.314-13.392)		4303366643	2754.5	M
A 58 C16-C24	7.445	(5.836-9.055)		241559506	144.1	M
62 icosane	7.593	7.586	0.007	24899144	NC	M
A 6 C10-C40	7.785	(2.177-13.392)		4302942465	2757.2	M
$ 34 p-Terphenyl		8.080			ND	U
35 n-Docosane	8.255	8.350	-0.095	24910212	NC	M
A 18 C12-C40	8.514	(3.636-13.392)		4301133439	2763.8	M
36 Tricosane	8.662	8.709	-0.047	88972763	NC	M
A 66 C13-C40	8.821	(4.250-13.392)		4295379303	2763.2	M
37 n-Tetracosane	9.142	9.055	0.087	159088631	NC	M
A 2 C16-C36 ORO	9.123	(5.836-12.410)		2403168456	2032.4	M
38 C25		9.388			ND	
A 19 C16-C40	9.614	(5.836-13.392)		4278811453	2761.6	M
46 n-Hexacosane	9.761	9.709	0.052	273951547	NC	M
A 20 C19-C36	9.794	(7.179-12.410)		1663027056	1221.6	
A 55 C23-C32	10.068	(8.709-11.426)		1727486287	2232.2	M
39 n-Octacosane	10.259	10.320	-0.061	93626027	NC	M
65 C29	10.647	10.610	0.037	78420493	NC	M
A 40 C24-C36	10.732	(9.055-12.410)		2392223220	2440.1	M
A 7 Motor Oil	10.732	(9.055-12.410)		1768400650	1803.8	
A 10 C22-C40	10.871	(8.350-13.392)		2608516188	1876.6	
A 50 C25-C36	10.899	(9.388-12.410)		1648882501	1789.9	
A 41 C23-C40	11.050	(8.709-13.392)		2603874308	1905.2	
A 8 C24-C40	11.223	(9.055-13.392)		2660017066	1983.2	
56 Dotriacontane	11.372	11.426	-0.054	177494345	NC	M
A 51 C28-C40	11.856	(10.320-13.392)		2252271692	2076.3	
A 63 C29-C40	12.001	(10.610-13.392)		2082549560	2083.9	
42 n-Hexatriacontane		12.410			ND	
43 C40		13.392			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

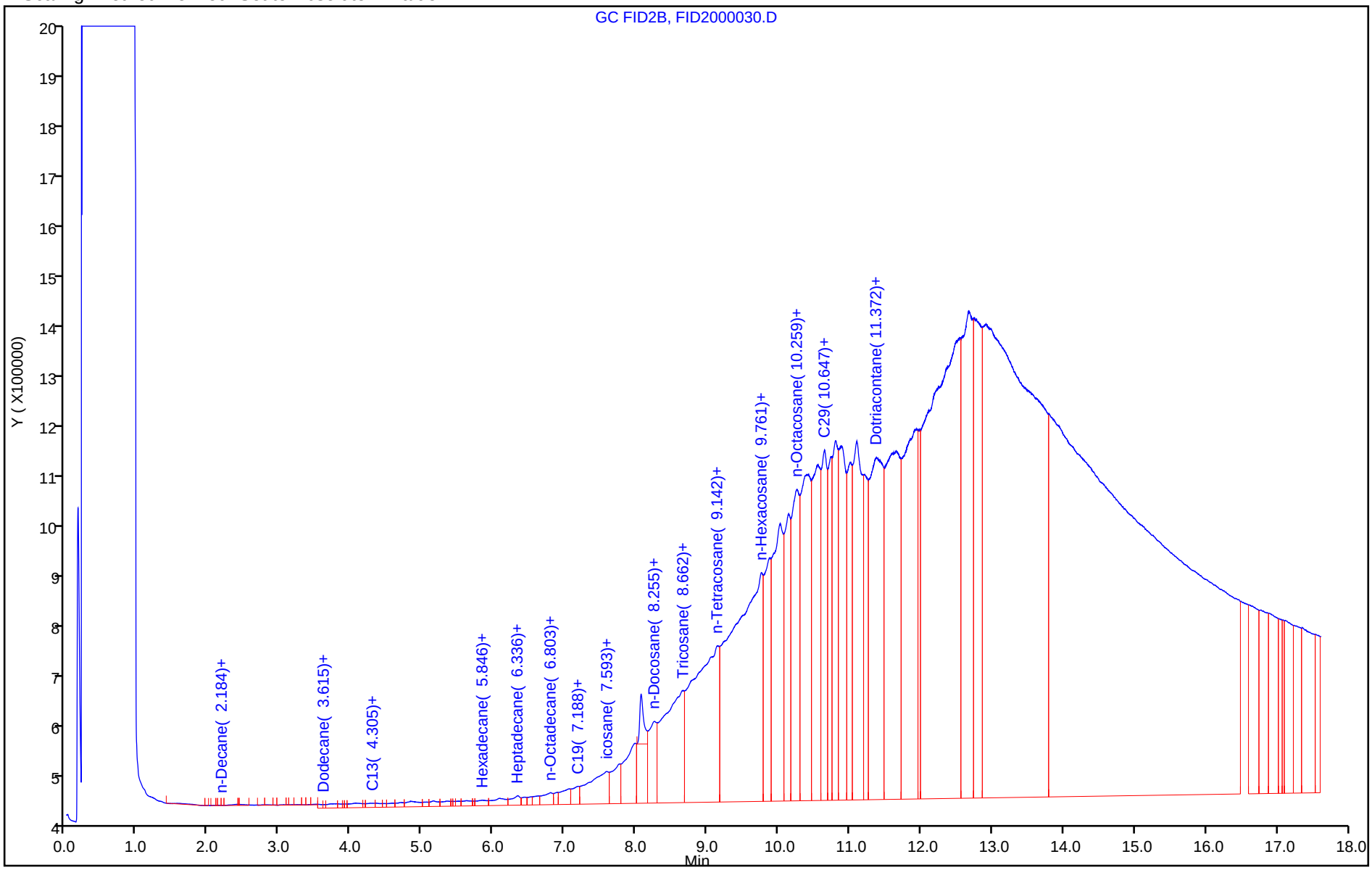
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 29-Aug-2018 13:10:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000030.D				
Injection Date:	29-Aug-2018 01:35:42	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88218-E-14-C	Lab Sample ID:	720-88218-14	Worklist Smp#:	30
Client ID:	DG-D5S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	80
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value

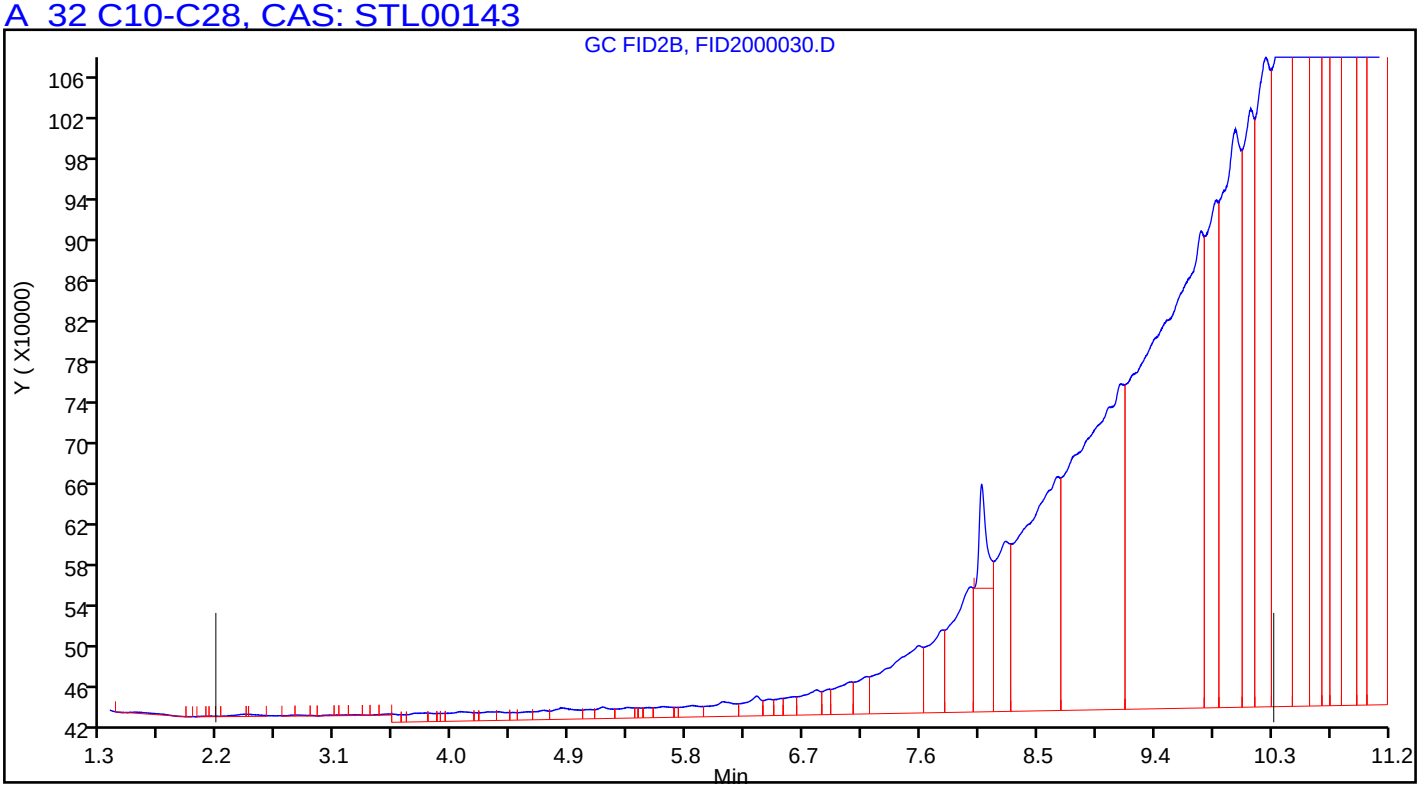


Report Date: 29-Aug-2018 13:10:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000030.D				
Injection Date:	29-Aug-2018 01:35:42	Instrument ID:	CHDRO6		
Lims ID:	720-88218-E-14-C	Lab Sample ID:	720-88218-14		
Client ID:	DG-D5S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	80	Worklist Smp#:	30
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A_32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

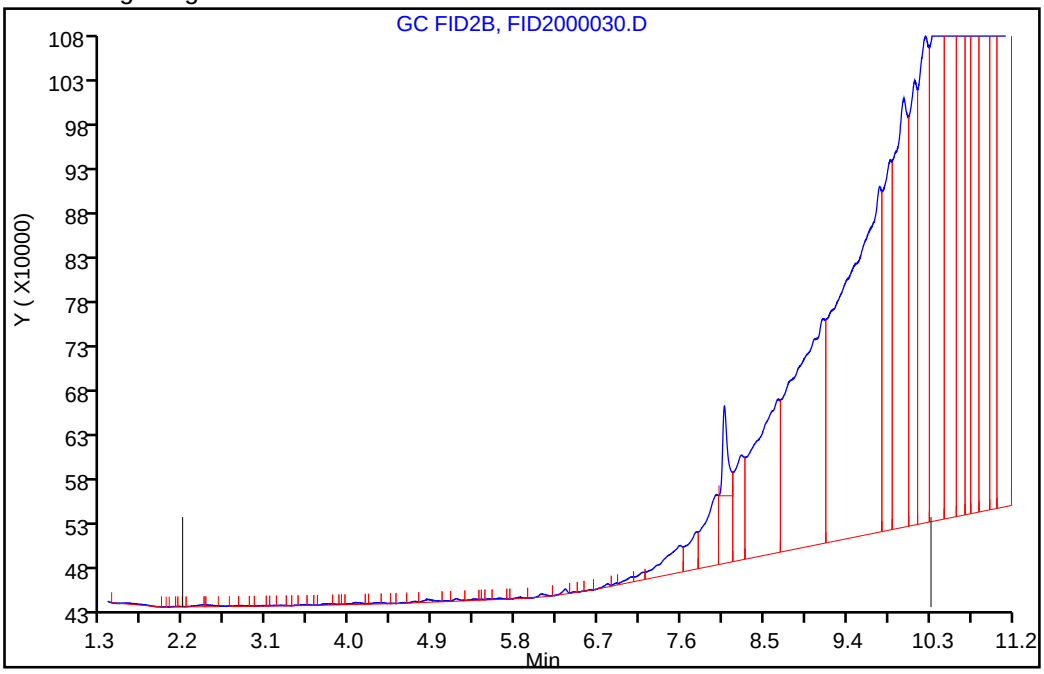
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000030.D				
Injection Date:	29-Aug-2018 01:35:42	Instrument ID:	CHDRO6		
Lims ID:	720-88218-E-14-C	Lab Sample ID:	720-88218-14		
Client ID:	DG-D5S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	80	Worklist Smp#:	30
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 6.249, CAS: STL00143

Signal: 1

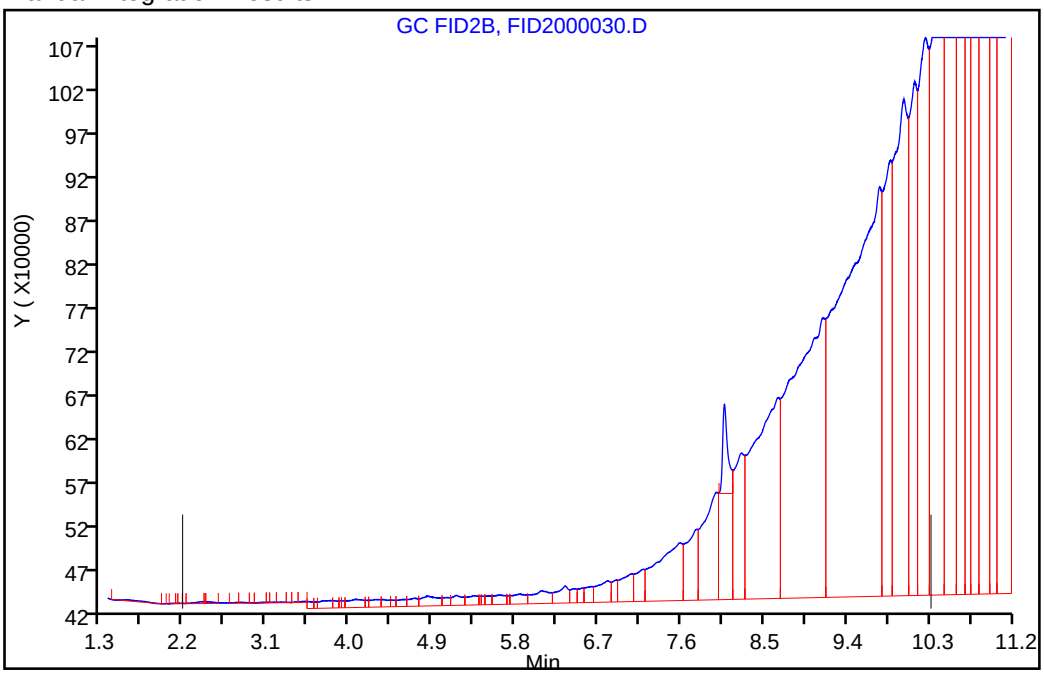
Processing Integration Results

RT: 6.25
Response: 764321851
Amount: 440.0740



Manual Integration Results

RT: 6.25
Response: 1034889491
Amount: 593.2749



Reviewer: luj, 29-Aug-2018 13:10:13

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

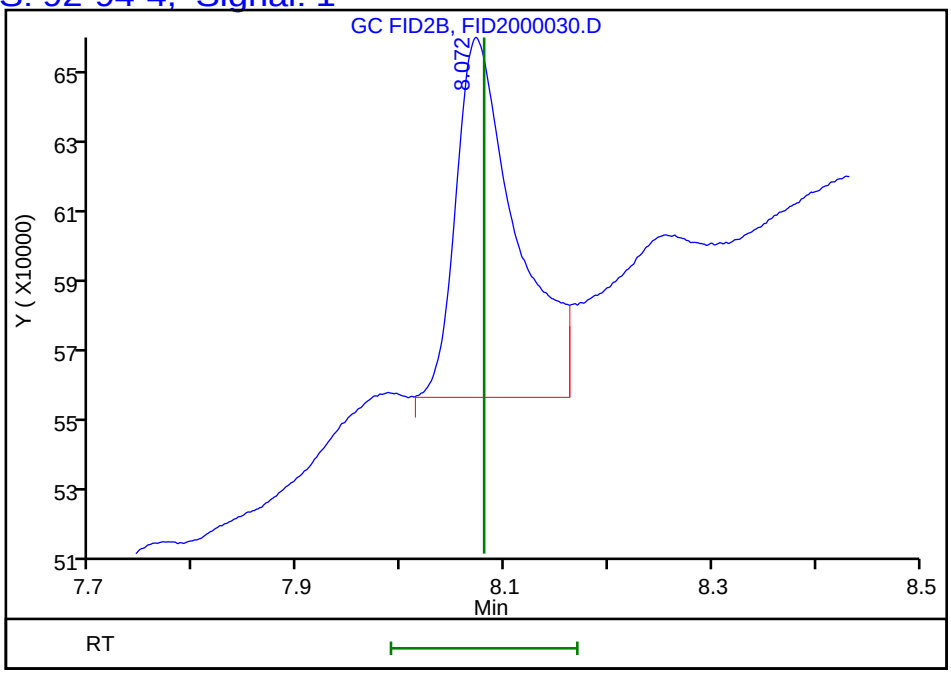
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53519.b\FID2000030.D				
Injection Date:	29-Aug-2018 01:35:42	Instrument ID:	CHDRO6		
Lims ID:	720-88218-E-14-C	Lab Sample ID:	720-88218-14		
Client ID:	DG-D5S--0.5-1				
Operator ID:	DCH	ALS Bottle#:	80	Worklist Smp#:	30
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4, Signal: 1

RT: 8.07
Response: 8047345
Amount: 3.957605



Reviewer: luj, 29-Aug-2018 13:10:40
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-D5S-3.5-4 Lab Sample ID: 720-88218-15

Matrix: Solid Lab File ID: FID2000007.D

Analysis Method: 8015B Date Collected: 08/22/2018 16:45

Extraction Method: 3546 Date Extracted: 08/28/2018 08:52

Sample wt/vol: 15.53(g) Date Analyzed: 08/30/2018 12:25

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250569 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	11000		1900	720

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	122		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000007.D
Lims ID: 720-88218-D-15-C
Client ID: DG-D5S--3.5-4
Sample Type: Client
Inject. Date: 30-Aug-2018 12:25:15 ALS Bottle#: 57 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053574-007
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m
Limit Group: DRO
Last Update: 30-Aug-2018 14:41:07 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK001

First Level Reviewer: luj Date: 30-Aug-2018 14:41:07

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.310			ND	
	23 n-Decane	2.153	2.172	-0.019	135166	NC	
A	1 C9-C13	2.778	(1.310-4.246)		13190037	6.05	
A	21 Stoddard Solvent	2.778	(1.310-4.246)		13190037	NC	
A	57 C10-C12	2.901	(2.172-3.631)		10442060	13.2	
	24 Dodecane	3.645	3.631	0.014	869656	NC	
A	3 C9 - C17	3.809	(1.310-6.309)		16538131	7.24	
A	60 C10-C16	4.002	(2.172-5.833)		13907753	6.86	
A	47 C9 - C18	4.031	(1.310-6.752)		21554269	11.4	
A	25 C9-C19	4.243	(1.310-7.176)		28133320	12.2	
A	15 Kerosene	4.243	(1.310-7.176)		28133320	14.8	
	26 C13	4.286	4.246	0.040	250276	NC	
$	27 n-Decanoic Acid (Surr)		4.639			ND	U
A	59 C12-C16	4.732	(3.631-5.833)		3465693	9.26	
A	61 C10-C20	4.878	(2.172-7.583)		32722217	25.8	
A	28 C9-C24	5.181	(1.310-9.053)		68303548	46.0	
A	29 C9-C25	5.348	(1.310-9.386)		97721710	62.6	
A	54 C10-C23	5.440	(2.172-8.707)		57122678	39.6	
A	4 C10-C24	5.612	(2.172-9.053)		67393266	45.5	
A	16 C10-C25	5.779	(2.172-9.386)		96811428	62.1	
	45 Hexadecane		5.833			ND	
A	14 C10-C26	5.940	(2.172-9.707)		101200341	64.6	
A	67 C12-C22	5.989	(3.631-8.348)		31421342	25.1	
A	32 C10-C28	6.245	(2.172-10.317)		143391782	88.5	
A	5 Diesel	6.245	(2.172-10.317)		143391782	88.5	
A	12 Unknown Hydrocarbons	6.245	(2.172-10.317)		143391782	NC	
A	30 C13-C22	6.297	(4.246-8.348)		30551686	24.6	
	44 Heptadecane	6.330	6.309	0.021	4339896	NC	
A	31 C12-C24	6.342	(3.631-9.053)		56951206	39.5	
	49 n-Octadecane	6.809	6.752	0.057	1056702	NC	
A	9 Crude Oil Range Organics (	6.859	(1.310-12.408)		382954026	NC	
A	11 Bunker Range Organics (C9-	6.859	(1.310-12.408)		382954026	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 52 Mineral oil	6.859	(1.310-12.408)		382954026	181.4	
33 C19	7.189	7.176	0.013	1805233	NC	
A 64 C13-C28	7.282	(4.246-10.317)		132080066	82.1	
A 17 C10-C36	7.290	(2.172-12.408)		382043744	223.6	
A 68 Crude Oil Range Organics (	7.349	(1.310-13.389)		485914870	NC	
A 13 C9-C40	7.349	(1.310-13.389)		485914870	311.0	
A 58 C16-C24	7.443	(5.833-9.053)		53485513	37.6	
62 icosane	7.601	7.583	0.018	2168686	NC	
A 6 C10-C40	7.780	(2.172-13.389)		485004588	310.8	
$ 34 p-Terphenyl	8.066	8.084	-0.018	52633179	30.4	
35 n-Docosane		8.348			ND	
A 18 C12-C40	8.510	(3.631-13.389)		474562528	304.9	
36 Tricosane	8.708	8.707	0.001	7248541	NC	
A 66 C13-C40	8.817	(4.246-13.389)		473692872	304.7	
37 n-Tetracosane	9.087	9.053	0.034	8062185	NC	
A 2 C16-C36 ORO	9.121	(5.833-12.408)		368135991	311.3	
38 C25	9.376	9.386	-0.010	15948836	NC	
A 19 C16-C40	9.611	(5.833-13.389)		471096835	304.1	
46 n-Hexacosane	9.743	9.707	0.036	10296113	NC	
A 20 C19-C36	9.792	(7.176-12.408)		298190170	219.0	
A 55 C23-C32	10.066	(8.707-11.425)		193363611	249.9	
39 n-Octacosane	10.331	10.317	0.014	17308482	NC	
65 C29	10.608	10.607	0.001	34165174	NC	
A 40 C24-C36	10.731	(9.053-12.408)		291702042	297.5	
A 7 Motor Oil	10.731	(9.053-12.408)		291702042	297.5	
A 10 C22-C40	10.868	(8.348-13.389)		334711736	240.8	
A 50 C25-C36	10.897	(9.386-12.408)		270319385	293.4	
A 41 C23-C40	11.048	(8.707-13.389)		381967815	279.5	
A 8 C24-C40	11.221	(9.053-13.389)		379383357	282.9	
56 Dotriacontane	11.485	11.425	0.060	26077627	NC	
A 51 C28-C40	11.853	(10.317-13.389)		317142930	292.4	
A 63 C29-C40	11.998	(10.607-13.389)		293403664	293.6	
42 n-Hexatriacontane	12.426	12.408	0.018	17414672	NC	
43 C40		13.389			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

U - Marked Undetected

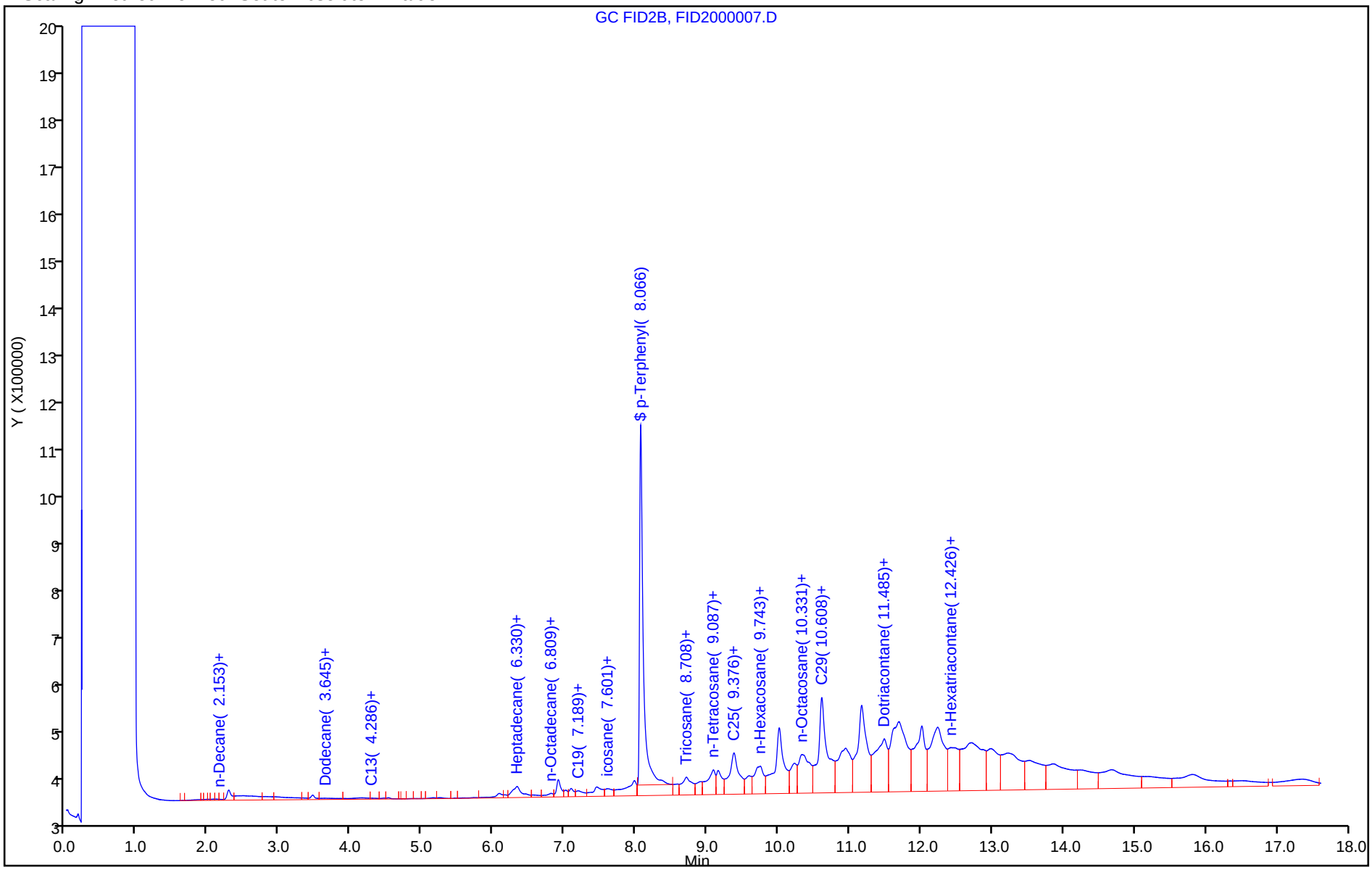
Report Date: 30-Aug-2018 14:41:08 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000007.D

Injection Date:	30-Aug-2018 12:25:15	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88218-D-15-C	Lab Sample ID:	720-88218-15	Worklist Smp#:	7
Client ID:	DG-D5S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	57
Method:	DRO6_B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000007.D				
Lims ID:	720-88218-D-15-C				
Client ID:	DG-D5S--3.5-4				
Sample Type:	Client				
Inject. Date:	30-Aug-2018 12:25:15	ALS Bottle#:	57	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053574-007				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\DRO6_B.m				
Limit Group:	DRO				
Last Update:	30-Aug-2018 14:41:07	Calib Date:	30-Aug-2018 10:14:10		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK001				
First Level Reviewer: luj		Date:	30-Aug-2018 14:41:07		

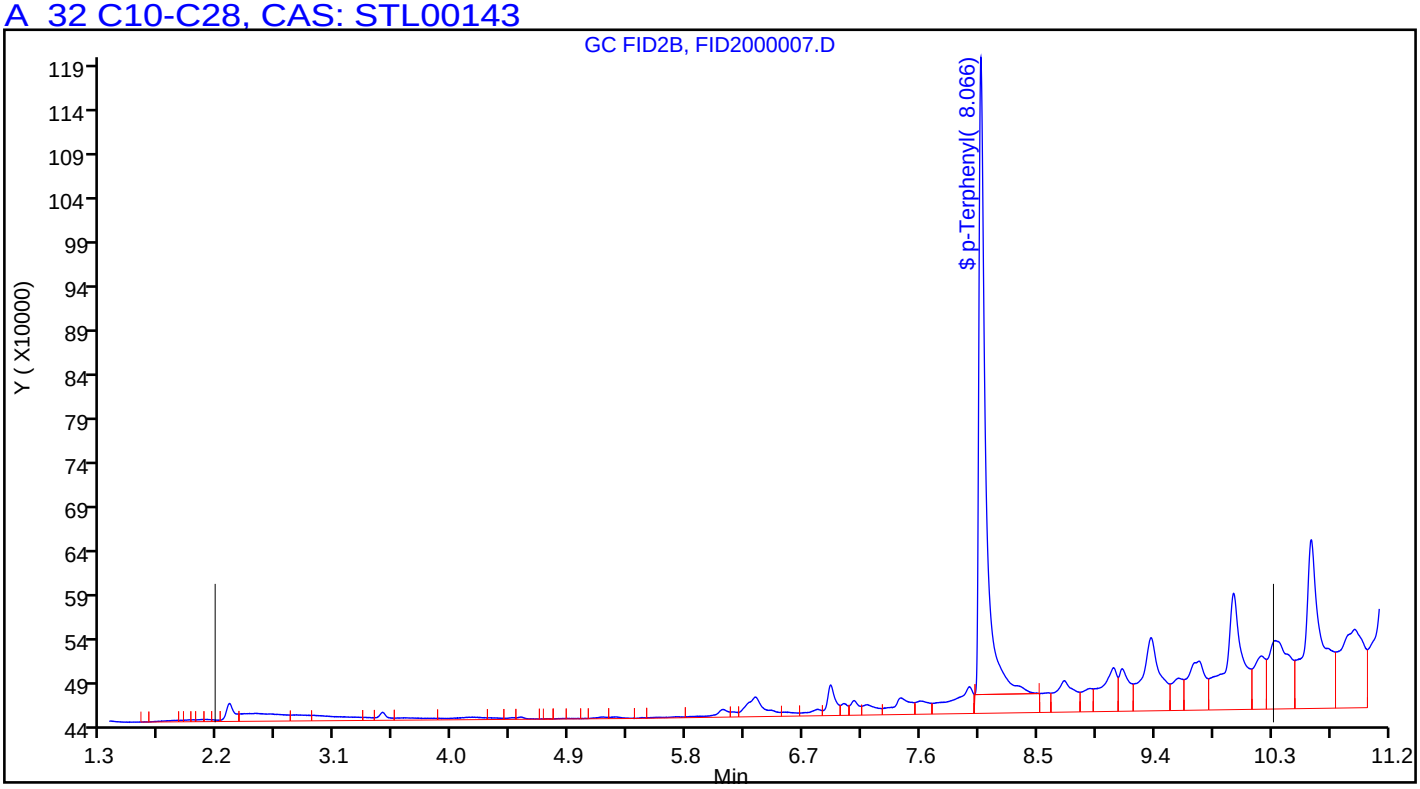
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	30.4	121.53

Report Date: 30-Aug-2018 14:41:09 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53574.b\FID2000007.D				
Injection Date:	30-Aug-2018 12:25:15	Instrument ID:	CHDRO6		
Lims ID:	720-88218-D-15-C	Lab Sample ID:	720-88218-15		
Client ID:	DG-D5S--3.5-4				
Operator ID:	DCH	ALS Bottle#:	57	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-C5S-9-9.5 Lab Sample ID: 720-88218-18

Matrix: Solid Lab File ID: 5a082918_023.d

Analysis Method: 8015B Date Collected: 08/23/2018 11:30

Extraction Method: 3546 Date Extracted: 08/28/2018 11:24

Sample wt/vol: 15.77(g) Date Analyzed: 08/30/2018 00:28

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250456 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	14000		1900	710

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	91		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_023.d
Lims ID: 720-88218-D-18-D
Client ID: DG-C5S--9-9.5
Sample Type: Client
Inject. Date: 30-Aug-2018 00:28:05 ALS Bottle#: 0 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 007 Name: 720-0053542-023
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\DRO5A.m
Limit Group: DRO
Last Update: 30-Aug-2018 14:30:39 Calib Date: 29-Aug-2018 09:16:57
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK001

First Level Reviewer: luj Date: 30-Aug-2018 14:30:39

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		2.353			ND	
	23 n-Decane		3.631			ND	
A	21 Stoddard Solvent	4.369	(2.353-6.384)		356228	34.1	M
A	1 C9-C13	4.369	(2.353-6.384)		356228	31.8	M
A	57 C10-C12	4.604	(3.631-5.578)		32937	3.36	M
	24 Dodecane	5.533	5.578	-0.045	6726	NC	M
A	3 C9 - C17	5.727	(2.353-9.102)		559592	44.4	M
A	47 C9 - C18	6.024	(2.353-9.695)		610309	57.6	M
A	60 C10-C16	6.050	(3.631-8.469)		208464	18.5	M
A	25 C9-C19	6.296	(2.353-10.239)		690118	54.2	M
A	15 Kerosene	6.296	(2.353-10.239)		690118	65.0	M
	26 C13		6.384			ND	
A	59 C12-C16	7.023	(5.578-8.469)		182253	18.6	M
$	27 n-Decanoic Acid (Surr)		7.115			ND	U
A	62 C10-C20	7.203	(3.631-10.776)		506272	51.7	M
A	28 C9-C24	7.529	(2.353-12.705)		1051876	107.4	M
A	29 C9-C25	7.747	(2.353-13.140)		1146419	117.1	M
A	54 C10-C23	7.941	(3.631-12.251)		673894	68.8	M
A	4 C10-C24	8.168	(3.631-12.705)		747453	76.3	M
A	16 C10-C25	8.386	(3.631-13.140)		841996	86.0	M
	45 Hexadecane		8.469			ND	
A	14 C10-C26	8.596	(3.631-13.561)		921866	94.2	M
A	67 C12-C22	8.678	(5.578-11.779)		563380	57.5	M
A	5 Diesel	8.995	(3.631-14.360)		1104599	112.8	M
A	32 C10-C28	8.995	(3.631-14.360)		1104599	112.8	M
A	12 Unknown Hydrocarbons	8.995	(3.631-14.360)		1104599	NC	M
A	30 C13-C22	9.082	(6.384-11.779)		542486	55.4	M
	44 Heptadecane	9.127	9.102	0.025	15969	NC	M
A	31 C12-C24	9.141	(5.578-12.705)		721242	73.7	M
	49 n-Octadecane	9.763	9.695	0.068	53548	NC	M
A	11 Bunker Range Organics (C9-	9.723	(2.353-17.094)		1818972	NC	M
A	52 Mineral oil	9.723	(2.353-17.094)		1659636	147.5	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	9.723	(2.353-17.094)		1659636	NC	
33 C19	10.257	10.239	0.018	13838	NC	M
A 17 C10-C36	10.362	(3.631-17.094)		1514549	154.7	M
A 64 C13-C28	10.372	(6.384-14.360)		1057494	108.0	M
A 68 Crude Oil Range Organics (	10.450	(2.353-18.548)		1890738	NC	
A 13 C9-C40	10.450	(2.353-18.548)		1890738	177.5	
A 58 C16-C24	10.587	(8.469-12.705)		538989	55.0	M
61 icosane		10.776			ND	
A 6 C10-C40	11.089	(3.631-18.548)		1882867	176.8	
35 n-Docosane		11.779			ND	
$ 34 p-Terphenyl	11.803	11.823	-0.020	297908	22.8	M
A 18 C12-C40	12.063	(5.578-18.548)		1851357	173.6	
36 Tricosane	12.260	12.251	0.009	73559	NC	M
A 66 C13-C40	12.466	(6.384-18.548)		1828038	171.1	
37 n-Tetracosane	12.713	12.705	0.008	94543	NC	M
A 2 C16-C36 ORO	12.781	(8.469-17.094)		1422856	176.3	
38 C25		13.140			ND	
A 19 C16-C40	13.508	(8.469-18.548)		1653958	152.3	
46 n-Hexacosane	13.563	13.561	0.002	27839	NC	M
A 20 C19-C36	13.666	(10.239-17.094)		1054016	135.5	
A 55 C23-C32	14.029	(12.251-15.807)		657542	134.8	
39 n-Octacosane	14.353	14.360	-0.007	78420	NC	M
65 C29	14.740	14.738	0.002	46905	NC	M
A 40 C24-C36	14.899	(12.705-17.094)		702103	110.6	
A 7 Motor Oil	14.899	(12.705-17.094)		702103	110.6	
A 50 C25-C36	15.117	(13.140-17.094)		634504	105.8	
A 10 C22-C40	15.163	(11.779-18.548)		1016035	110.9	
A 41 C23-C40	15.399	(12.251-18.548)		958703	107.2	
A 8 C24-C40	15.626	(12.705-18.548)		895055	103.5	
56 Dotriacontane	15.797	15.807	-0.010	37158	NC	M
A 51 C28-C40	16.454	(14.360-18.548)		629826	91.3	
A 63 C29-C40	16.643	(14.738-18.548)		566627	89.4	
42 n-Hexatriacontane	17.163	17.094	0.069	139938	NC	M
43 C40		18.548			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

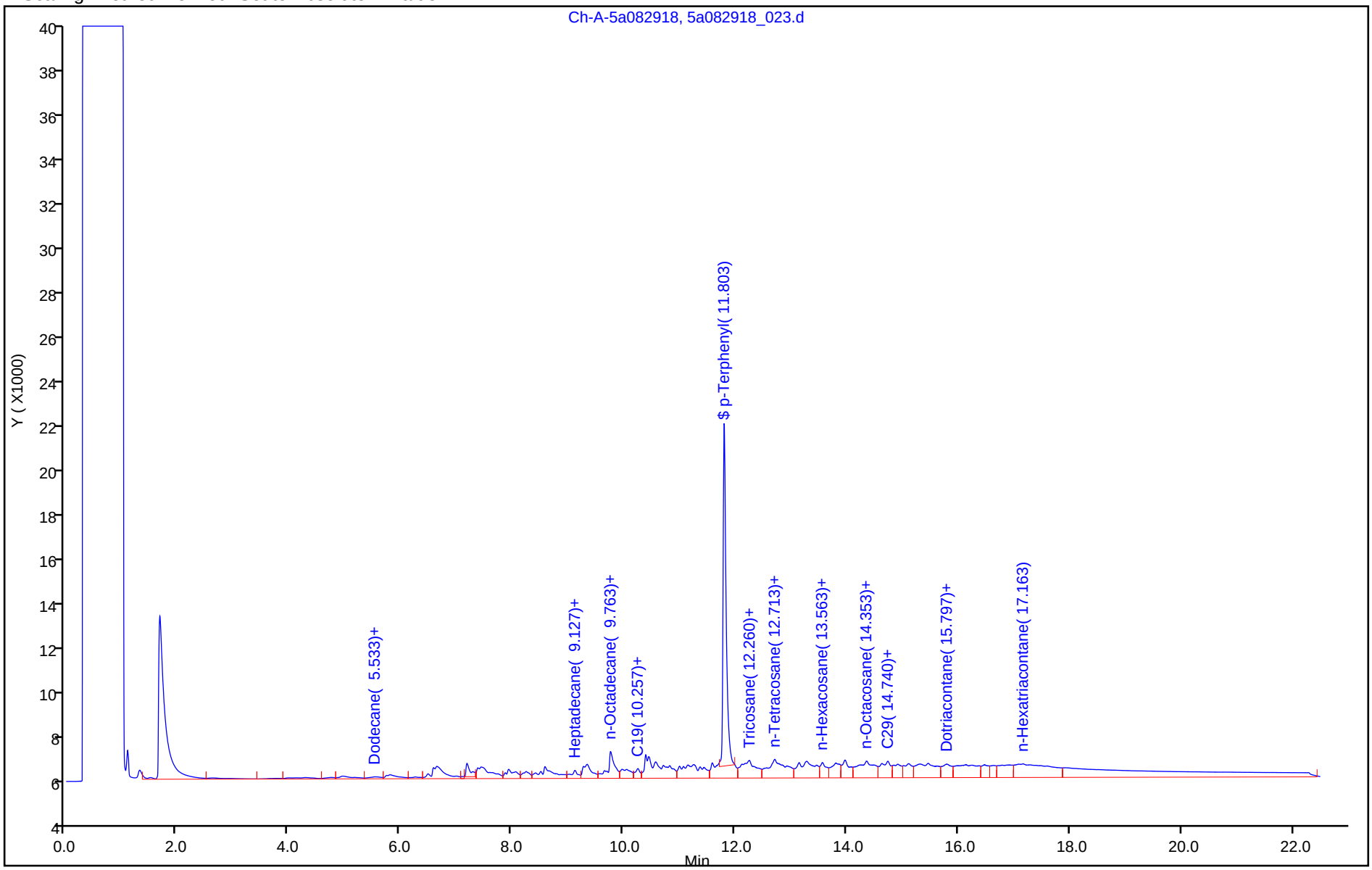
Report Date: 30-Aug-2018 14:30:39 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_023.d

Injection Date:	30-Aug-2018 00:28:05	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88218-D-18-D	Lab Sample ID:	720-88218-18	Worklist Smp#:	23
Client ID:	DG-C5S--9-9.5				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_023.d				
Lims ID:	720-88218-D-18-D				
Client ID:	DG-C5S--9-9.5				
Sample Type:	Client				
Inject. Date:	30-Aug-2018 00:28:05	ALS Bottle#:	0	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 007 Name: 720-0053542-023				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\DRO5A.m				
Limit Group:	DRO				
Last Update:	30-Aug-2018 14:30:39	Calib Date:	29-Aug-2018 09:16:57		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK001				

First Level Reviewer: luj Date: 30-Aug-2018 14:30:39

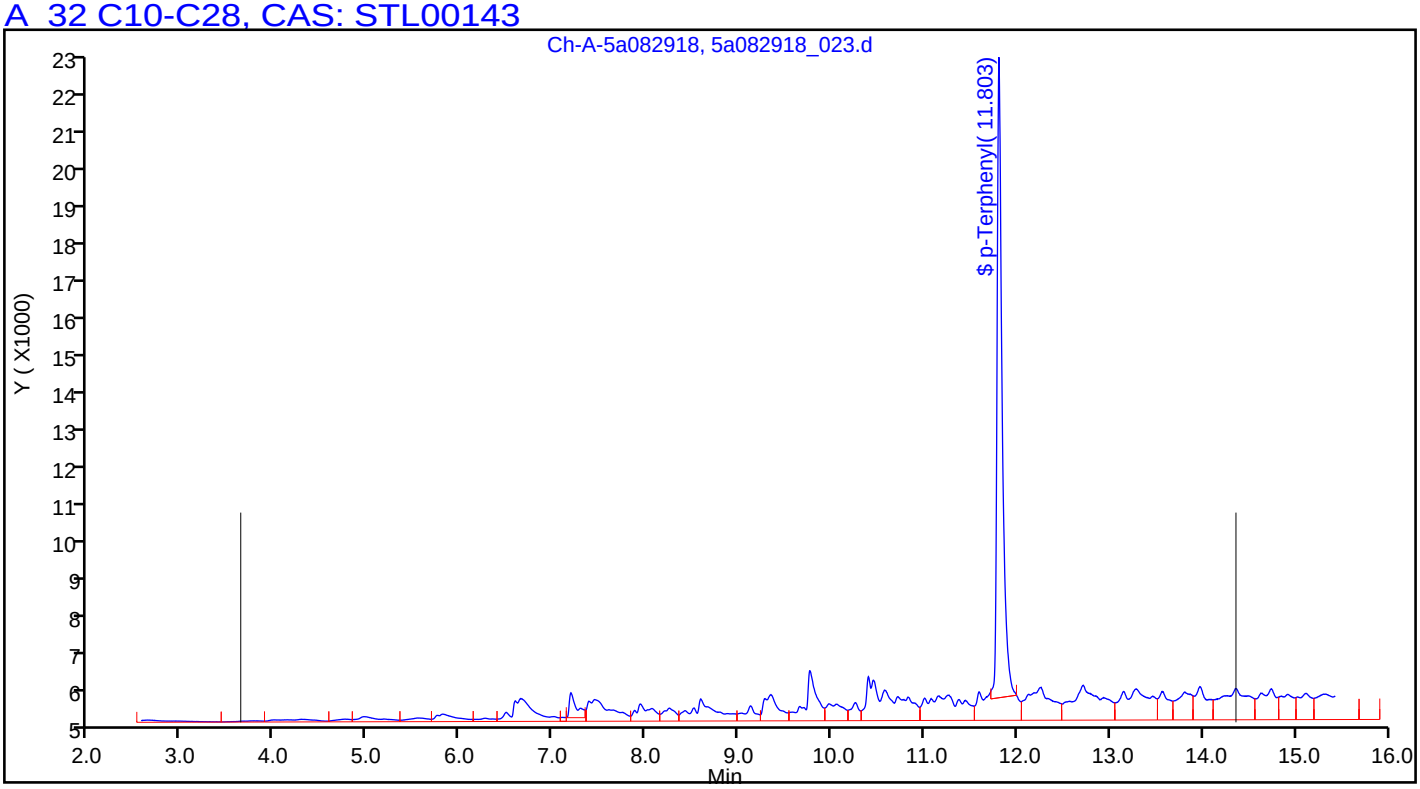
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	22.8	91.35

Report Date: 30-Aug-2018 14:30:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_023.d				
Injection Date:	30-Aug-2018 00:28:05	Instrument ID:	CHDRO5		
Lims ID:	720-88218-D-18-D	Lab Sample ID:	720-88218-18		
Client ID:	DG-C5S--9-9.5				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

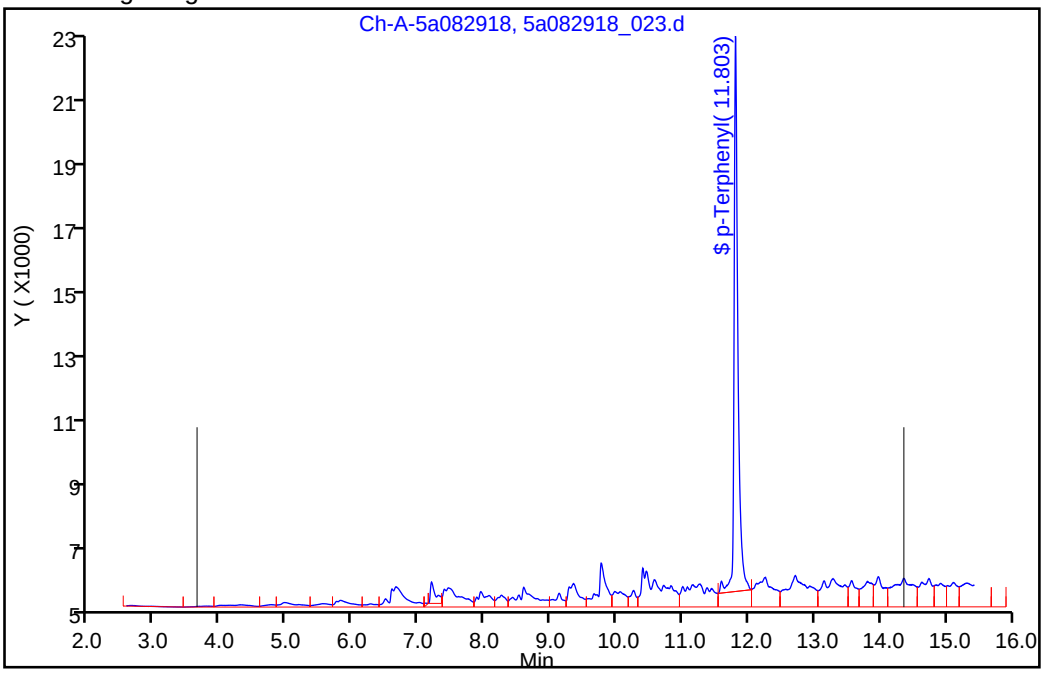
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_023.d				
Injection Date:	30-Aug-2018 00:28:05	Instrument ID:	CHDRO5		
Lims ID:	720-88218-D-18-D	Lab Sample ID:	720-88218-18		
Client ID:	DG-C5S--9-9.5				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 8.995, CAS: STL00143

Signal: 1

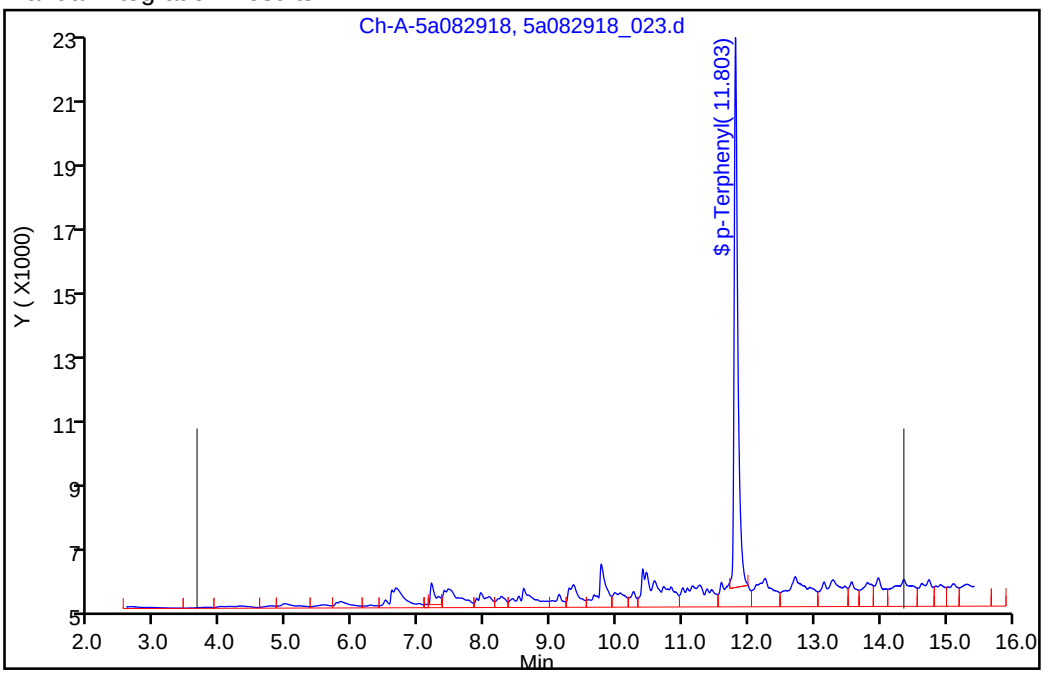
Processing Integration Results

RT: 9.00
Response: 1047238
Amount: 106.9574



Manual Integration Results

RT: 9.00
Response: 1104599
Amount: 112.8158



Reviewer: luj, 30-Aug-2018 14:30:13

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

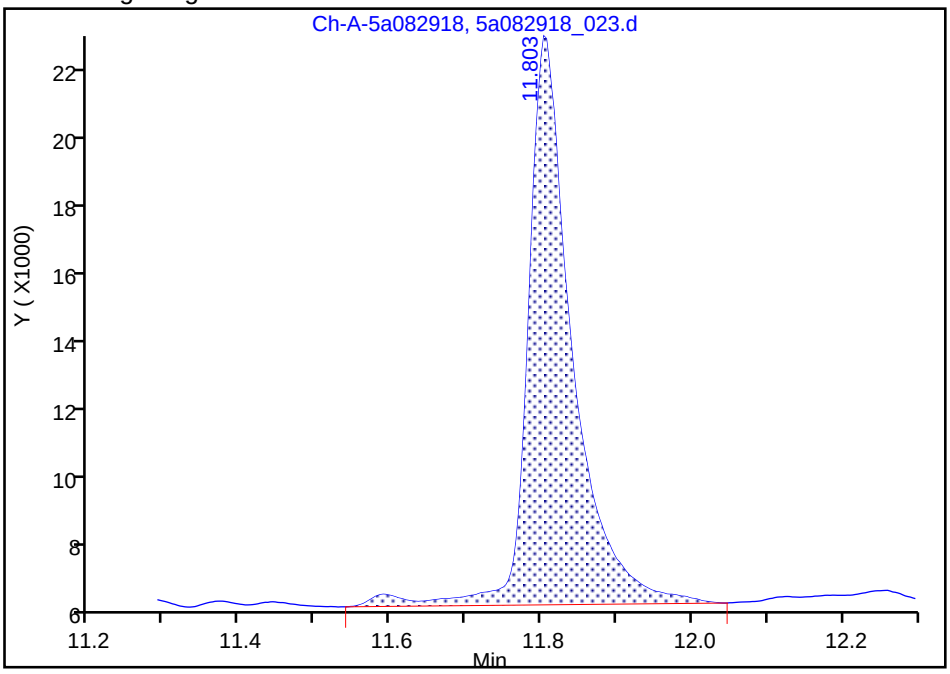
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_023.d				
Injection Date:	30-Aug-2018 00:28:05	Instrument ID:	CHDRO5		
Lims ID:	720-88218-D-18-D	Lab Sample ID:	720-88218-18		
Client ID:	DG-C5S--9-9.5				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

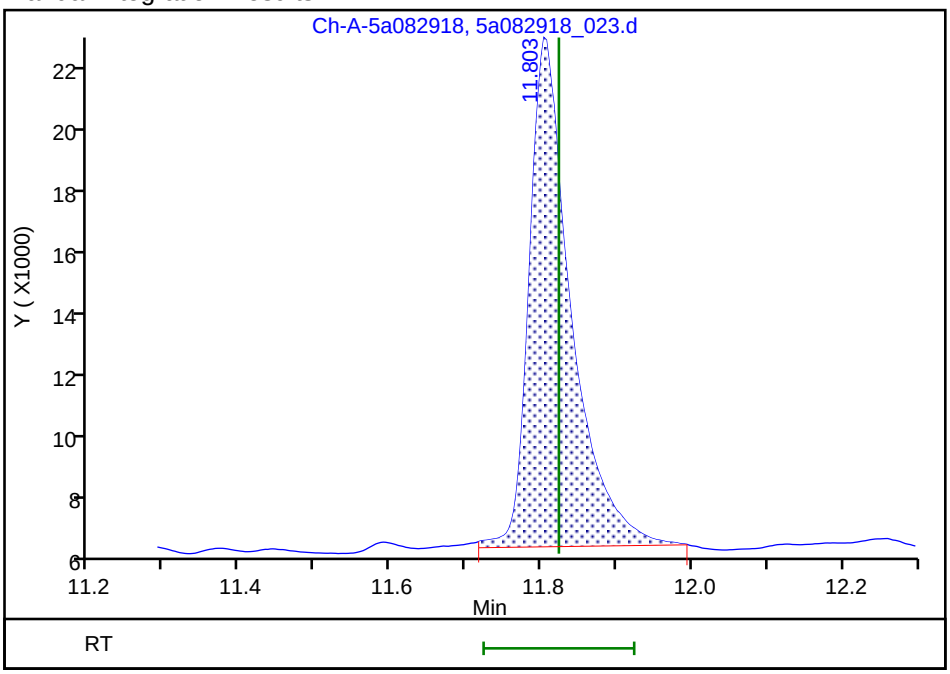
Processing Integration Results

RT: 11.80
Area: 321393
Amount: 24.638253
Amount Units: mg/L



Manual Integration Results

RT: 11.80
Area: 297908
Amount: 22.837874
Amount Units: mg/L



Reviewer: luj, 30-Aug-2018 14:30:35

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-B5S-0.5-1 Lab Sample ID: 720-88218-19

Matrix: Solid Lab File ID: 5a082918_026.d

Analysis Method: 8015B Date Collected: 08/23/2018 11:45

Extraction Method: 3546 Date Extracted: 08/28/2018 11:24

Sample wt/vol: 15.88(g) Date Analyzed: 08/30/2018 01:56

Con. Extract Vol.: 2(mL) Dilution Factor: 2

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250456 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	130000		3800	1400

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	59		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_026.d
Lims ID: 720-88218-E-19-G
Client ID: DG-B5S--0.5-1
Sample Type: Client
Inject. Date: 30-Aug-2018 01:56:01 ALS Bottle#: 0 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 2.0000
Sample Info: #: 007 Name: 720-0053542-026
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\DRO5A.m
Limit Group: DRO
Last Update: 30-Aug-2018 14:34:11 Calib Date: 29-Aug-2018 09:16:57
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK001

First Level Reviewer: luj Date: 30-Aug-2018 14:34:11

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		2.353			ND	
	23 n-Decane		3.631			ND	
A	21 Stoddard Solvent	4.369	(2.353-6.384)		79835	7.63	
A	1 C9-C13	4.369	(2.353-6.384)		79835	7.13	
A	57 C10-C12	4.604	(3.631-5.578)		9958	1.02	
	24 Dodecane		5.578			ND	
A	3 C9 - C17	5.727	(2.353-9.102)		207453	16.5	
A	47 C9 - C18	6.024	(2.353-9.695)		207453	19.6	
A	60 C10-C16	6.050	(3.631-8.469)		85707	7.62	
A	25 C9-C19	6.296	(2.353-10.239)		207453	16.3	
A	15 Kerosene	6.296	(2.353-10.239)		207453	19.5	
	26 C13	6.382	6.384	-0.002	1350	NC	
A	59 C12-C16	7.023	(5.578-8.469)		75749	7.74	
$	27 n-Decanoic Acid (Surr)		7.115			ND	
A	62 C10-C20	7.203	(3.631-10.776)		641135	65.5	
A	28 C9-C24	7.529	(2.353-12.705)		1664169	170.0	M
A	29 C9-C25	7.747	(2.353-13.140)		1664169	170.0	M
A	54 C10-C23	7.941	(3.631-12.251)		1597572	163.2	M
A	4 C10-C24	8.168	(3.631-12.705)		1597572	163.2	M
A	16 C10-C25	8.386	(3.631-13.140)		1597572	163.2	M
	45 Hexadecane	8.437	8.469	-0.032	33765	NC	
A	14 C10-C26	8.596	(3.631-13.561)		1597572	163.2	M
A	67 C12-C22	8.678	(5.578-11.779)		1431740	146.2	
A	5 Diesel	8.995	(3.631-14.360)		5186660	529.7	M
A	32 C10-C28	8.995	(3.631-14.360)		5186660	529.7	M
A	12 Unknown Hydrocarbons	8.995	(3.631-14.360)		5186660	NC	M
A	30 C13-C22	9.082	(6.384-11.779)		1429810	146.0	
	44 Heptadecane	9.090	9.102	-0.012	55149	NC	
A	31 C12-C24	9.141	(5.578-12.705)		1587614	162.1	M
	49 n-Octadecane		9.695			ND	
A	11 Bunker Range Organics (C9-	9.723	(2.353-17.094)		14458668	NC	M
A	52 Mineral oil	9.723	(2.353-17.094)		15383666	1367.2	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	9.723	(2.353-17.094)		15383666	NC	
33 C19		10.239			ND	
A 17 C10-C36	10.362	(3.631-17.094)		14392071	1469.9	M
A 64 C13-C28	10.372	(6.384-14.360)		5174772	528.5	M
A 68 Crude Oil Range Organics (	10.450	(2.353-18.548)		19393392	NC	
A 13 C9-C40	10.450	(2.353-18.548)		19393392	2112.1	
A 58 C16-C24	10.587	(8.469-12.705)		1545630	157.9	M
61 icosane		10.776			ND	
A 6 C10-C40	11.089	(3.631-18.548)		19390072	2111.9	
35 n-Docosane		11.779			ND	
$ 34 p-Terphenyl	11.800	11.823	-0.023	96079	7.37	M
A 18 C12-C40	12.063	(5.578-18.548)		19364059	2109.4	
36 Tricosane		12.251			ND	
A 66 C13-C40	12.466	(6.384-18.548)		19347909	2107.9	
37 n-Tetracosane		12.705			ND	
A 2 C16-C36 ORO	12.781	(8.469-17.094)		15208423	1884.6	
38 C25		13.140			ND	
A 19 C16-C40	13.508	(8.469-18.548)		19218149	2096.5	
46 n-Hexacosane		13.561			ND	
A 20 C19-C36	13.666	(10.239-17.094)		14488939	1862.0	
A 55 C23-C32	14.029	(12.251-15.807)		8568808	1756.2	
39 n-Octacosane		14.360			ND	
65 C29		14.738			ND	
A 40 C24-C36	14.899	(12.705-17.094)		12556827	1977.9	
A 7 Motor Oil	14.899	(12.705-17.094)		12556827	1977.9	
A 50 C25-C36	15.117	(13.140-17.094)		11973855	1996.7	
A 10 C22-C40	15.163	(11.779-18.548)		17430017	1901.6	
A 41 C23-C40	15.399	(12.251-18.548)		17000098	1900.1	
A 8 C24-C40	15.626	(12.705-18.548)		16492433	1906.7	
56 Dotriacontane	15.805	15.807	-0.002	489274	NC	
A 51 C28-C40	16.454	(14.360-18.548)		13443456	1949.0	
A 63 C29-C40	16.643	(14.738-18.548)		12325593	1943.9	
42 n-Hexatriacontane	17.149	17.094	0.055	7245435	NC	
43 C40		18.548			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

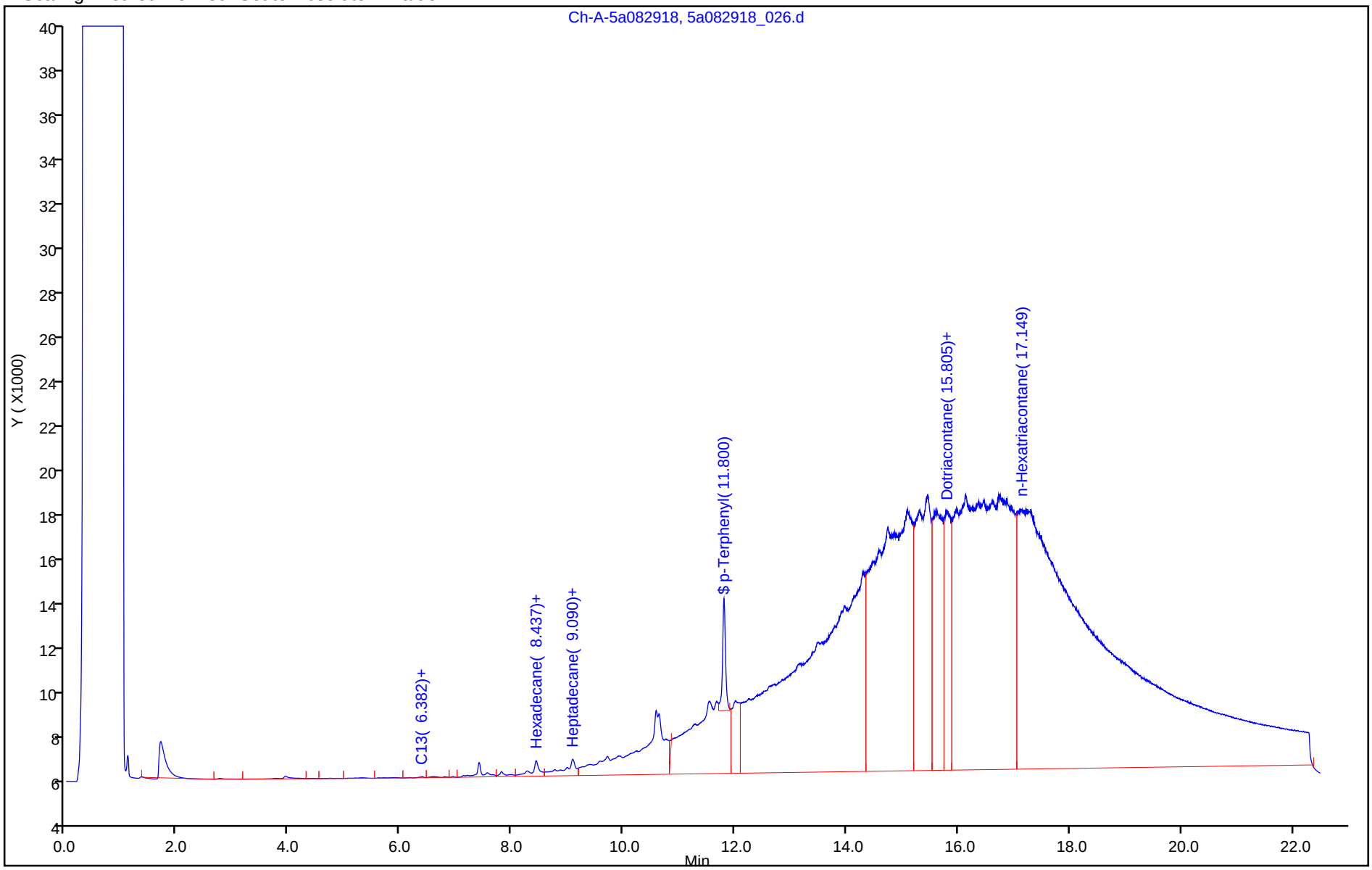
Report Date: 30-Aug-2018 14:34:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_026.d

Injection Date:	30-Aug-2018 01:56:01	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88218-E-19-G	Lab Sample ID:	720-88218-19	Worklist Smp#:	26
Client ID:	DG-B5S--0.5-1				
Injection Vol:	1.0 ul	Dil. Factor:	2.0000	ALS Bottle#:	0
Method:	DRO5A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



11/21/2018 (Rev. 1)

TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_026.d				
Lims ID:	720-88218-E-19-G				
Client ID:	DG-B5S--0.5-1				
Sample Type:	Client				
Inject. Date:	30-Aug-2018 01:56:01	ALS Bottle#:	0	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Sample Info:	#: 007 Name: 720-0053542-026				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\DRO5A.m				
Limit Group:	DRO				
Last Update:	30-Aug-2018 14:34:11	Calib Date:	29-Aug-2018 09:16:57		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK001				
First Level Reviewer: luj		Date:	30-Aug-2018 14:34:11		

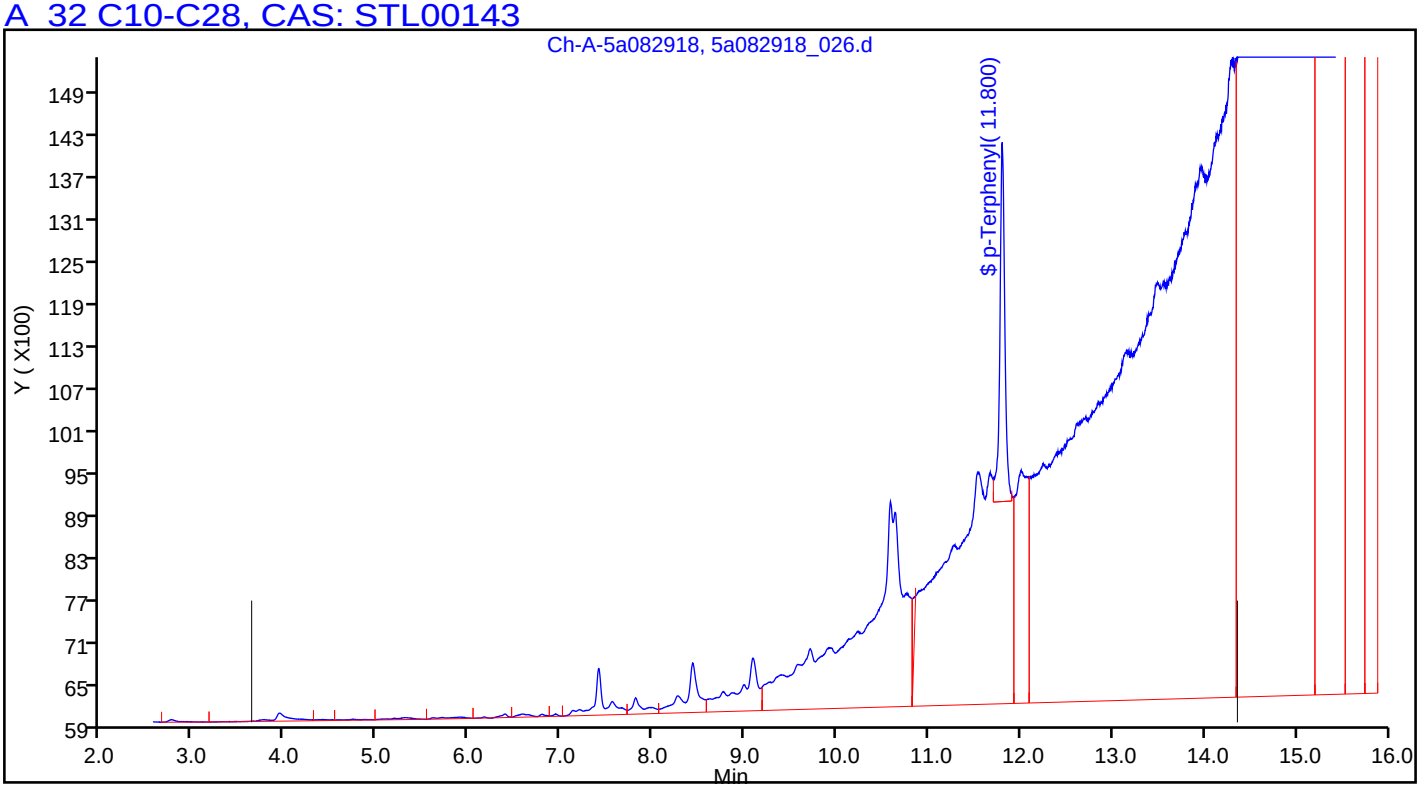
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	7.37	58.92

Report Date: 30-Aug-2018 14:34:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_026.d				
Injection Date:	30-Aug-2018 01:56:01	Instrument ID:	CHDRO5		
Lims ID:	720-88218-E-19-G	Lab Sample ID:	720-88218-19		
Client ID:	DG-B5S--0.5-1				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

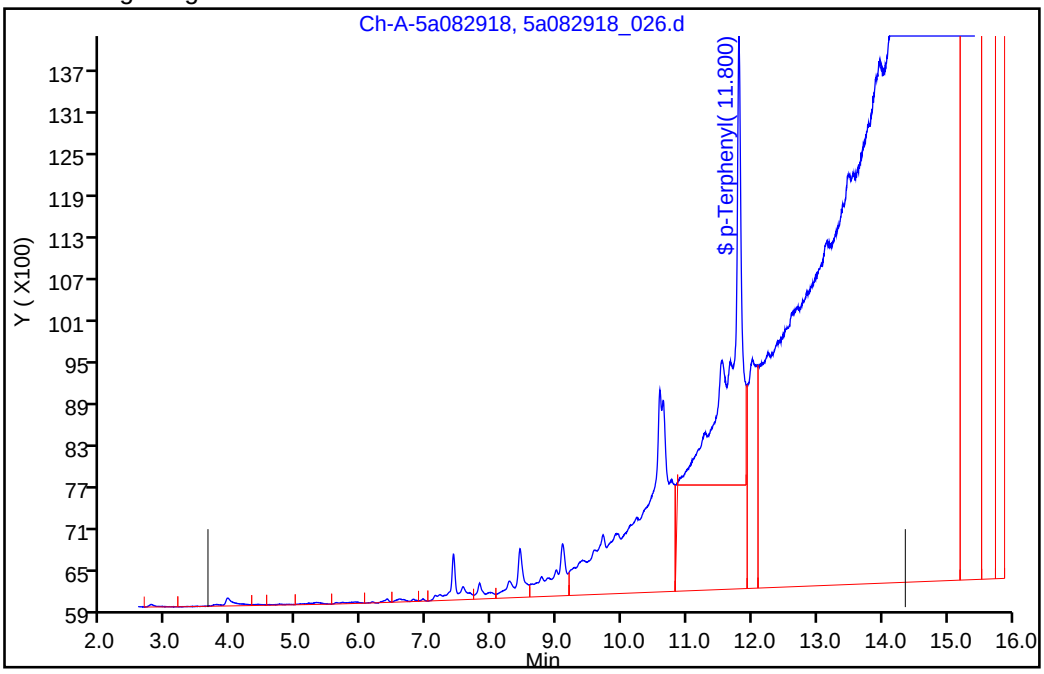
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_026.d				
Injection Date:	30-Aug-2018 01:56:01	Instrument ID:	CHDRO5		
Lims ID:	720-88218-E-19-G	Lab Sample ID:	720-88218-19		
Client ID:	DG-B5S--0.5-1				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 8.995, CAS: STL00143

Signal: 1

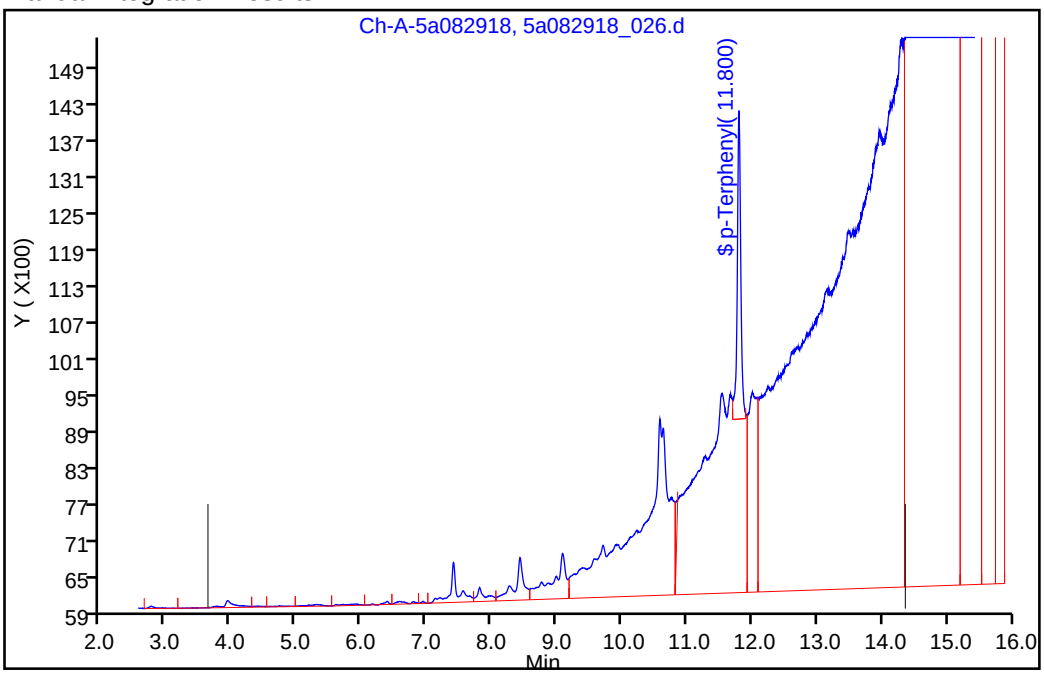
Processing Integration Results

RT: 9.00
Response: 1313308
Amount: 134.1319



Manual Integration Results

RT: 9.00
Response: 5186660
Amount: 529.7284



Reviewer: luj, 30-Aug-2018 14:33:47

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

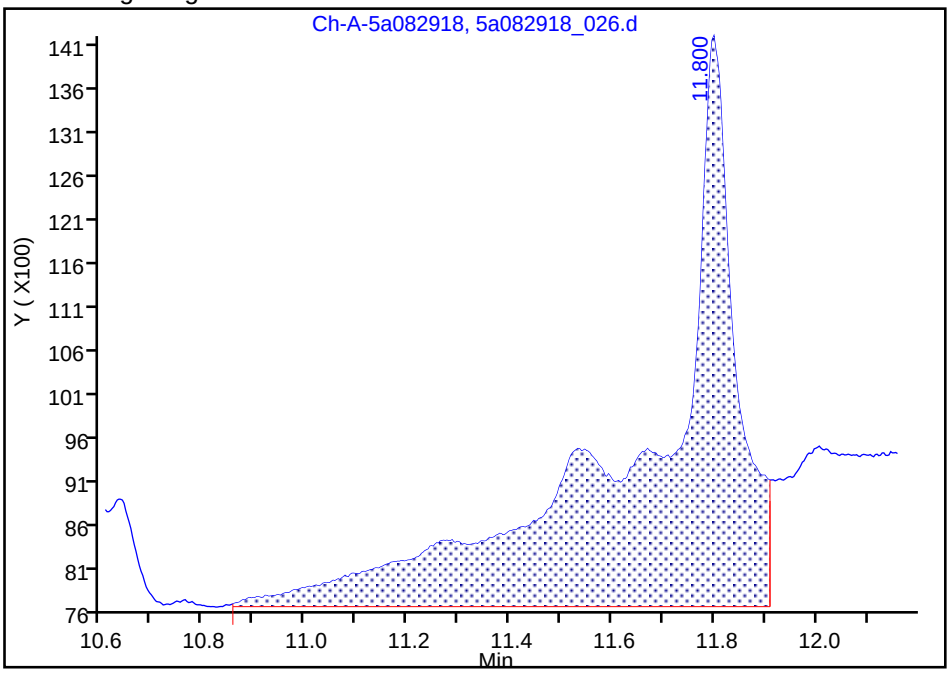
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_026.d				
Injection Date:	30-Aug-2018 01:56:01	Instrument ID:	CHDRO5		
Lims ID:	720-88218-E-19-G	Lab Sample ID:	720-88218-19		
Client ID:	DG-B5S--0.5-1				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

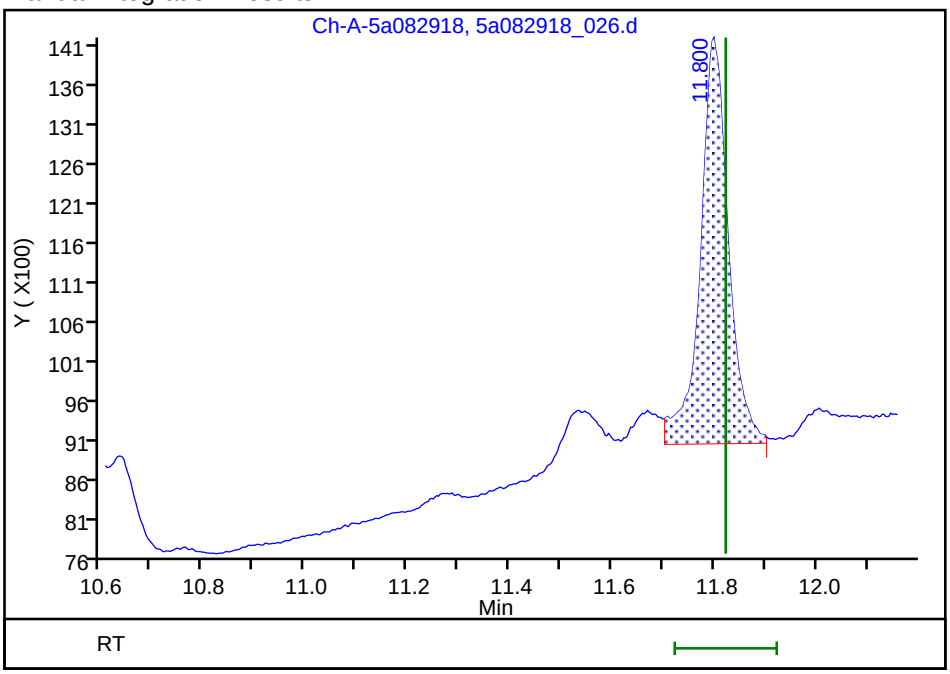
Processing Integration Results

RT: 11.80
Area: 380343
Amount: 29.157409
Amount Units: mg/L



Manual Integration Results

RT: 11.80
Area: 96079
Amount: 7.365496
Amount Units: mg/L



Reviewer: luj, 30-Aug-2018 14:34:04

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-B5S-3.5-4 Lab Sample ID: 720-88218-20

Matrix: Solid Lab File ID: 5a082918_025.d

Analysis Method: 8015B Date Collected: 08/23/2018 11:45

Extraction Method: 3546 Date Extracted: 08/28/2018 11:24

Sample wt/vol: 15.06(g) Date Analyzed: 08/30/2018 01:26

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250456 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	180000		2000	750

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	59		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_025.d
Lims ID: 720-88218-D-20-E
Client ID: DG-B5S--3.5-4
Sample Type: Client
Inject. Date: 30-Aug-2018 01:26:41 ALS Bottle#: 0 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 007 Name: 720-0053542-025
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\DRO5A.m
Limit Group: DRO
Last Update: 30-Aug-2018 14:33:22 Calib Date: 29-Aug-2018 09:16:57
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK001

First Level Reviewer: luj Date: 30-Aug-2018 14:33:22

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	2.408	2.353	0.055	976	NC	
	23 n-Decane	3.672	3.631	0.041	4501	NC	
A	21 Stoddard Solvent	4.369	(2.353-6.384)		239886	22.9	
A	1 C9-C13	4.369	(2.353-6.384)		239886	21.4	
A	57 C10-C12	4.604	(3.631-5.578)		110488	11.3	
	24 Dodecane		5.578			ND	
A	3 C9 - C17	5.727	(2.353-9.102)		1378362	109.3	
A	47 C9 - C18	6.024	(2.353-9.695)		2081787	196.4	
A	60 C10-C16	6.050	(3.631-8.469)		925777	82.3	
A	25 C9-C19	6.296	(2.353-10.239)		2081787	163.6	
A	15 Kerosene	6.296	(2.353-10.239)		2081787	196.0	
	26 C13	6.374	6.384	-0.010	99970	NC	
A	59 C12-C16	7.023	(5.578-8.469)		865639	88.4	
$	27 n-Decanoic Acid (Surr)		7.115			ND	
A	62 C10-C20	7.203	(3.631-10.776)		3413093	348.6	
A	28 C9-C24	7.529	(2.353-12.705)		8446919	862.7	
A	29 C9-C25	7.747	(2.353-13.140)		10374629	1059.6	
A	54 C10-C23	7.941	(3.631-12.251)		8105418	827.8	
A	4 C10-C24	8.168	(3.631-12.705)		8442567	862.3	
A	16 C10-C25	8.386	(3.631-13.140)		10370277	1059.1	
	45 Hexadecane	8.416	8.469	-0.053	271636	NC	
A	14 C10-C26	8.596	(3.631-13.561)		11041444	1127.7	
A	67 C12-C22	8.678	(5.578-11.779)		7017040	716.7	
A	5 Diesel	8.995	(3.631-14.360)		13375857	1366.1	M
A	32 C10-C28	8.995	(3.631-14.360)		13375857	1366.1	M
A	12 Unknown Hydrocarbons	8.995	(3.631-14.360)		13375857	NC	M
A	30 C13-C22	9.082	(6.384-11.779)		6941614	709.0	
	44 Heptadecane	9.097	9.102	-0.005	302604	NC	
A	31 C12-C24	9.141	(5.578-12.705)		8382429	856.1	
	49 n-Octadecane	9.619	9.695	-0.076	703425	NC	
A	11 Bunker Range Organics (C9-	9.723	(2.353-17.094)		26963336	NC	M
A	52 Mineral oil	9.723	(2.353-17.094)		22849182	2030.7	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	9.723	(2.353-17.094)		22849182	NC	
33 C19		10.239			ND	
A 17 C10-C36	10.362	(3.631-17.094)		26958984	2753.4	M
A 64 C13-C28	10.372	(6.384-14.360)		13240293	1352.3	M
A 68 Crude Oil Range Organics (	10.450	(2.353-18.548)		26218905	NC	
A 13 C9-C40	10.450	(2.353-18.548)		26218905	2866.5	
A 58 C16-C24	10.587	(8.469-12.705)		7788426	795.5	
61 icosane		10.776			ND	
A 6 C10-C40	11.089	(3.631-18.548)		26211255	2865.8	
35 n-Docosane		11.779			ND	
$ 34 p-Terphenyl	11.790	11.823	-0.033	193043	14.8	M
A 18 C12-C40	12.063	(5.578-18.548)		26125995	2856.8	
36 Tricosane	12.193	12.251	-0.058	656194	NC	
A 66 C13-C40	12.466	(6.384-18.548)		26038551	2847.6	
37 n-Tetracosane	12.717	12.705	0.012	942255	NC	
A 2 C16-C36 ORO	12.781	(8.469-17.094)		21949984	2720.0	
38 C25	13.081	13.140	-0.059	985455	NC	
A 19 C16-C40	13.508	(8.469-18.548)		25319707	2771.9	
46 n-Hexacosane	13.627	13.561	0.066	1003326	NC	
A 20 C19-C36	13.666	(10.239-17.094)		19424771	2496.3	
A 55 C23-C32	14.029	(12.251-15.807)		10780085	2209.4	
39 n-Octacosane	14.313	14.360	-0.047	842473	NC	M
65 C29	14.769	14.738	0.031	1391872	NC	
A 40 C24-C36	14.899	(12.705-17.094)		13562929	2136.4	
A 7 Motor Oil	14.899	(12.705-17.094)		13562929	2136.4	
A 50 C25-C36	15.117	(13.140-17.094)		12318072	2054.1	
A 10 C22-C40	15.163	(11.779-18.548)		18909044	2063.0	
A 41 C23-C40	15.399	(12.251-18.548)		17823985	1992.1	
A 8 C24-C40	15.626	(12.705-18.548)		16800108	1942.3	
56 Dotriacontane		15.807			ND	
A 51 C28-C40	16.454	(14.360-18.548)		12181096	1766.0	
A 63 C29-C40	16.643	(14.738-18.548)		10868995	1714.2	
42 n-Hexatriacontane	17.083	17.094	-0.011	4979233	NC	
43 C40		18.548			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

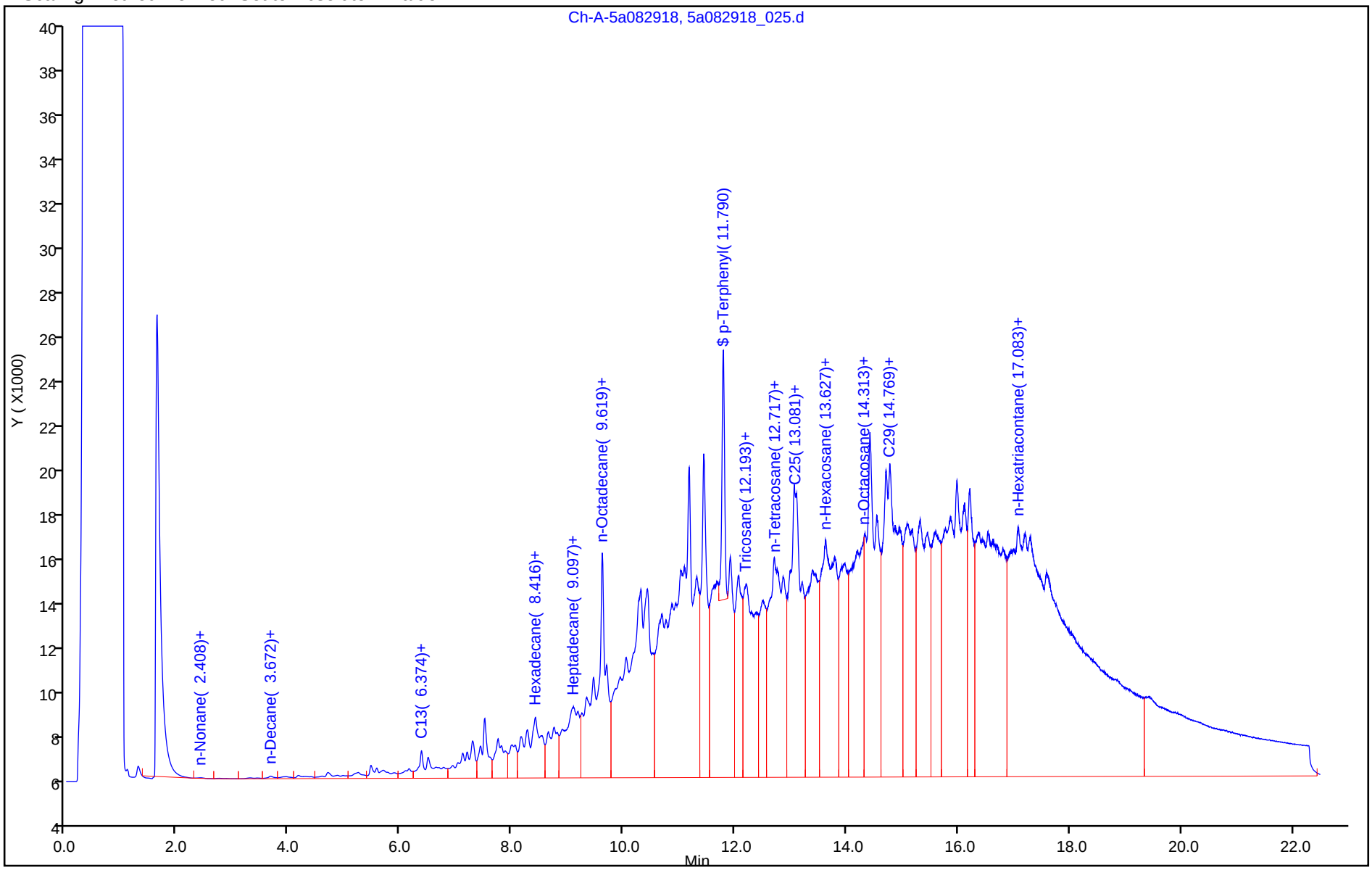
Report Date: 30-Aug-2018 14:33:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_025.d

Injection Date:	30-Aug-2018 01:26:41	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88218-D-20-E	Lab Sample ID:	720-88218-20	Worklist Smp#:	25
Client ID:	DG-B5S--3.5-4				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_025.d				
Lims ID:	720-88218-D-20-E				
Client ID:	DG-B5S--3.5-4				
Sample Type:	Client				
Inject. Date:	30-Aug-2018 01:26:41	ALS Bottle#:	0	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 007 Name: 720-0053542-025				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\DRO5A.m				
Limit Group:	DRO				
Last Update:	30-Aug-2018 14:33:22	Calib Date:	29-Aug-2018 09:16:57		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK001				

First Level Reviewer: luj Date: 30-Aug-2018 14:33:22

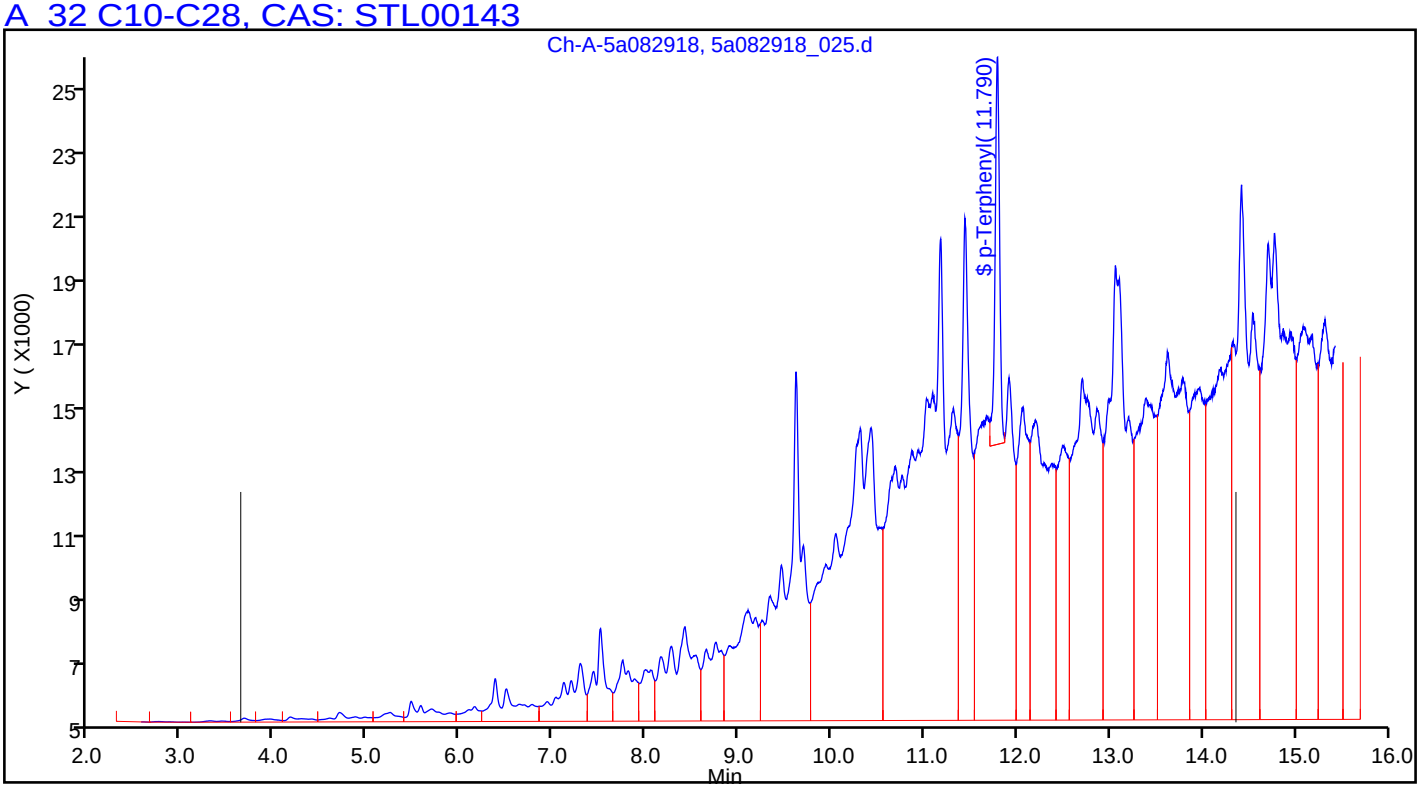
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	14.8	59.20

Report Date: 30-Aug-2018 14:33:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_025.d				
Injection Date:	30-Aug-2018 01:26:41	Instrument ID:	CHDRO5		
Lims ID:	720-88218-D-20-E	Lab Sample ID:	720-88218-20		
Client ID:	DG-B5S--3.5-4				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

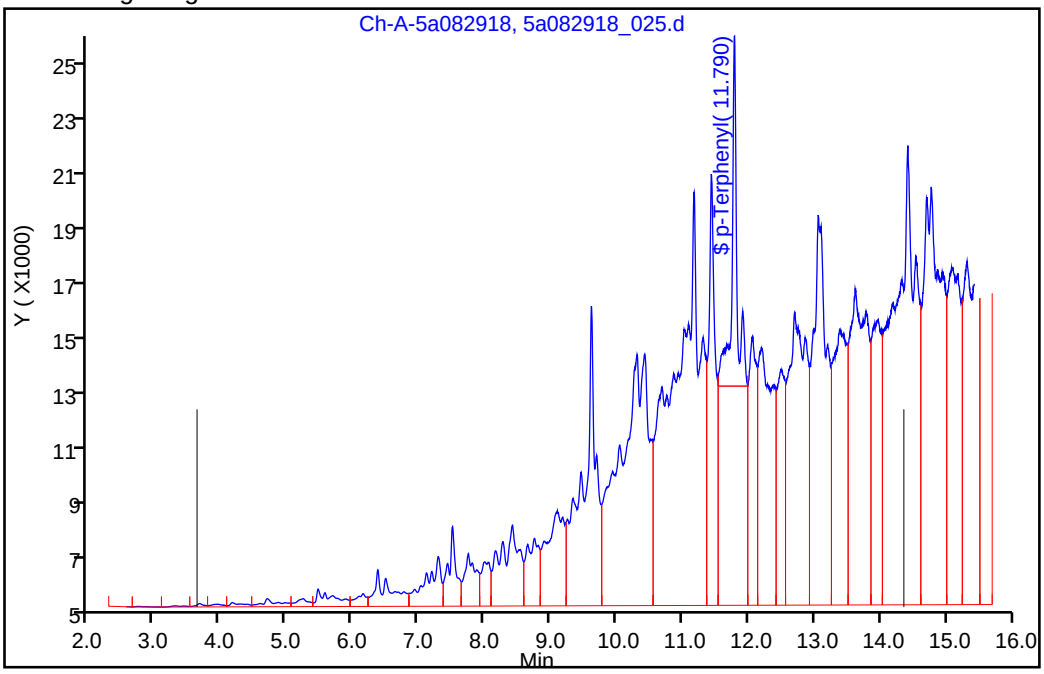
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_025.d				
Injection Date:	30-Aug-2018 01:26:41	Instrument ID:	CHDRO5		
Lims ID:	720-88218-D-20-E	Lab Sample ID:	720-88218-20		
Client ID:	DG-B5S--3.5-4				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 8.995, CAS: STL00143

Signal: 1

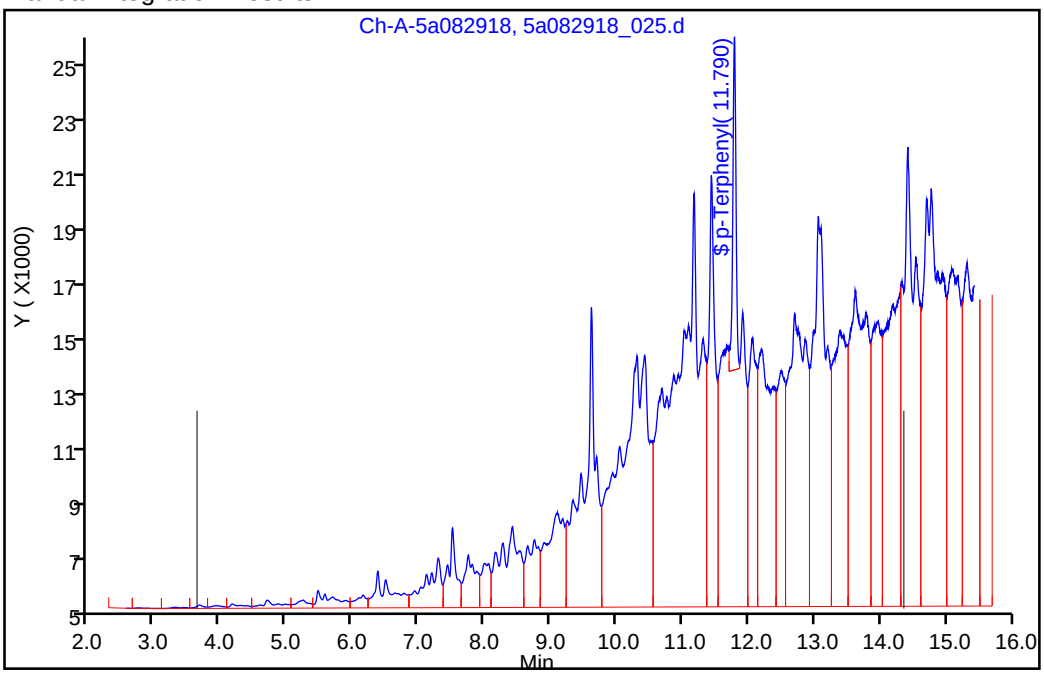
Processing Integration Results

RT: 9.00
Response: 12403941
Amount: 1266.8498



Manual Integration Results

RT: 9.00
Response: 13375857
Amount: 1366.1144



Reviewer: luj, 30-Aug-2018 14:33:00

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

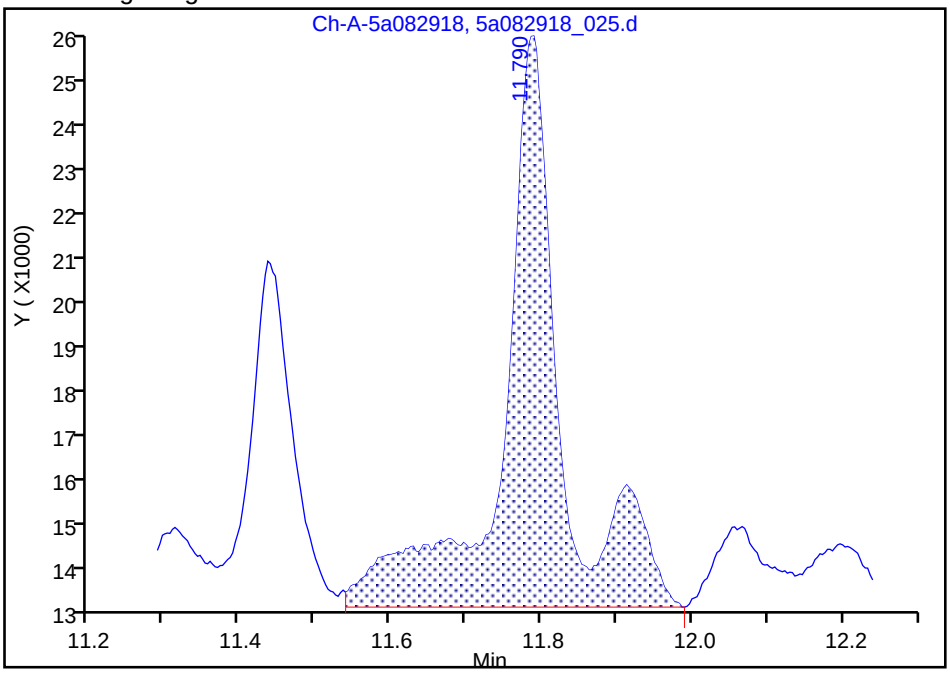
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180829-53542.b\5a082918_025.d				
Injection Date:	30-Aug-2018 01:26:41	Instrument ID:	CHDRO5		
Lims ID:	720-88218-D-20-E	Lab Sample ID:	720-88218-20		
Client ID:	DG-B5S--3.5-4				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

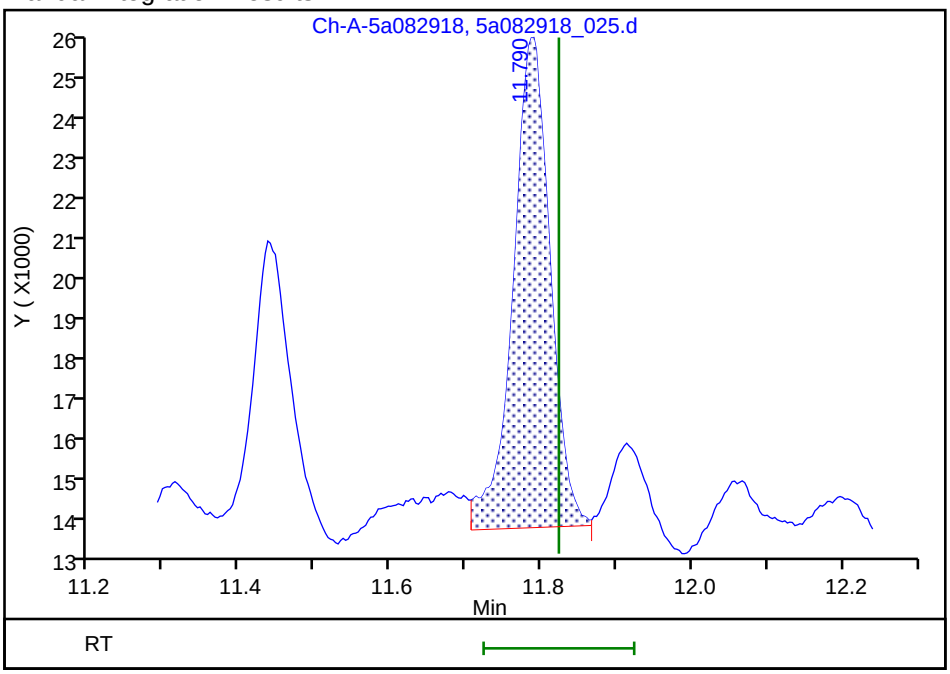
Processing Integration Results

RT: 11.79
Area: 322486
Amount: 24.722044
Amount Units: mg/L



Manual Integration Results

RT: 11.79
Area: 193043
Amount: 14.798836
Amount Units: mg/L



Reviewer: luj, 30-Aug-2018 14:33:13

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-E5S-9.0-9.5 Lab Sample ID: 720-88218-21

Matrix: Solid Lab File ID: FID1000008.D

Analysis Method: 8015B Date Collected: 08/22/2018 16:15

Extraction Method: 3546 Date Extracted: 08/28/2018 08:21

Sample wt/vol: 15.37(g) Date Analyzed: 08/30/2018 12:49

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250568 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	1800	J	2000	730

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	94		40-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000008.D
Lims ID: 720-88218-E-21-B
Client ID: DG-E5S--9.0-9.5
Sample Type: Client
Inject. Date: 30-Aug-2018 12:49:36 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053573-008
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\DRO6_A.m
Limit Group: DRO
Last Update: 30-Aug-2018 14:02:14 Calib Date: 30-Aug-2018 10:14:10
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK001

First Level Reviewer: luj Date: 30-Aug-2018 14:02:14

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.231			ND	
	23 n-Decane	2.114	2.118	-0.004	36928	NC	
A	21 Stoddard Solvent	2.735	(1.231-4.240)		2408676	1.35	
A	1 C9-C13	2.735	(1.231-4.240)		2408676	1.36	
A	57 C10-C12	2.866	(2.118-3.613)		1950398	1.26	
	24 Dodecane	3.653	3.613	0.040	8304	NC	
A	3 C9 - C17	3.780	(1.231-6.330)		3506093	1.80	
A	60 C10-C16	3.984	(2.118-5.849)		3056531	1.75	
A	47 C9 - C18	4.006	(1.231-6.780)		4117994	2.55	
A	25 C9-C19	4.220	(1.231-7.210)		4906684	2.50	
A	15 Kerosene	4.220	(1.231-7.210)		4906684	3.04	
	26 C13	4.245	4.240	0.005	81468	NC	
$	27 n-Decanoic Acid (Surr)		4.607			ND	U
A	59 C12-C16	4.731	(3.613-5.849)		1106133	0.7171	
A	62 C10-C20	4.871	(2.118-7.623)		7284443	4.72	
A	28 C9-C24	5.172	(1.231-9.113)		13286581	8.61	
A	29 C9-C25	5.341	(1.231-9.452)		15107258	9.79	
A	54 C10-C23	5.440	(2.118-8.762)		11040014	7.16	
A	4 C10-C24	5.616	(2.118-9.113)		13064923	8.47	
A	16 C10-C25	5.785	(2.118-9.452)		14885600	9.65	
	45 Hexadecane	5.906	5.849	0.057	43803	NC	
A	14 C10-C26	5.948	(2.118-9.778)		17449513	11.3	
A	67 C12-C22	6.005	(3.613-8.397)		5935483	3.85	
A	12 Unknown Hydrocarbons	6.258	(2.118-10.399)		21814111	NC	
A	5 Diesel	6.258	(2.118-10.399)		21814111	14.1	
A	32 C10-C28	6.258	(2.118-10.399)		21814111	14.1	
A	30 C13-C22	6.319	(4.240-8.397)		5698863	3.69	
	44 Heptadecane	6.367	6.330	0.037	373672	NC	
A	31 C12-C24	6.363	(3.613-9.113)		11114525	7.21	
	51 n-Octadecane	6.843	6.780	0.063	238179	NC	
A	52 Mineral oil	6.879	(1.231-12.528)		50992533	28.8	
A	11 Bunker Range Organics (C9-	6.879	(1.231-12.528)		50992533	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 9 Crude Oil Range Organics (	6.879	(1.231-12.528)		50992533	NC	
33 C19	7.283	7.210	0.073	298889	NC	
A 64 C13-C28	7.319	(4.240-10.399)		19627093	12.7	
A 17 C10-C36	7.323	(2.118-12.528)		50770875	32.9	
A 13 C9-C40	7.390	(1.231-13.549)		68302884	50.7	
A 68 Crude Oil Range Organics (	7.390	(1.231-13.549)		68302884	NC	
A 58 C16-C24	7.481	(5.849-9.113)		10008392	6.49	
61 icosane	7.615	7.623	-0.008	595311	NC	
A 6 C10-C40	7.834	(2.118-13.549)		68081226	50.5	
$ 34 p-Terphenyl	8.097	8.114	-0.017	44908977	23.4	
35 n-Docosane		8.397			ND	
A 18 C12-C40	8.581	(3.613-13.549)		66130828	49.2	
36 Tricosane	8.772	8.762	0.010	1572299	NC	
A 66 C13-C40	8.894	(4.240-13.549)		65894208	49.1	
37 n-Tetracosane	9.123	9.113	0.010	1820677	NC	
A 2 C16-C36 ORO	9.188	(5.849-12.528)		53864192	47.2	
38 C25	9.461	9.452	0.009	2137610	NC	
A 19 C16-C40	9.699	(5.849-13.549)		65024695	48.6	
46 n-Hexacosane	9.789	9.778	0.011	1670063	NC	
A 20 C19-C36	9.869	(7.210-12.528)		51665977	38.9	
A 55 C23-C32	10.144	(8.762-11.526)		23110022	33.3	
39 n-Octacosane	10.410	10.399	0.011	2597272	NC	
65 C29	10.705	10.694	0.011	3211680	NC	
A 7 Motor Oil	10.820	(9.113-12.528)		21696874	24.4	
A 40 C24-C36	10.820	(9.113-12.528)		21696874	24.4	
A 10 C22-C40		(8.397-13.549)			ND	
A 49 C25-C36	10.990	(9.452-12.528)		35885275	40.1	
A 41 C23-C40	11.156	(8.762-13.549)		57041212	44.6	
A 8 C24-C40	11.331	(9.113-13.549)		55016303	45.2	
56 Dotriacontane	11.538	11.526	0.012	2819453	NC	
A 50 C28-C40	11.974	(10.399-13.549)		46267115	48.7	
A 63 C29-C40	12.122	(10.694-13.549)		43669843	50.4	
42 n-Hexatriacontane	12.548	12.528	0.020	1764173	NC	
43 C40	13.483	13.549	-0.066	3019187	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

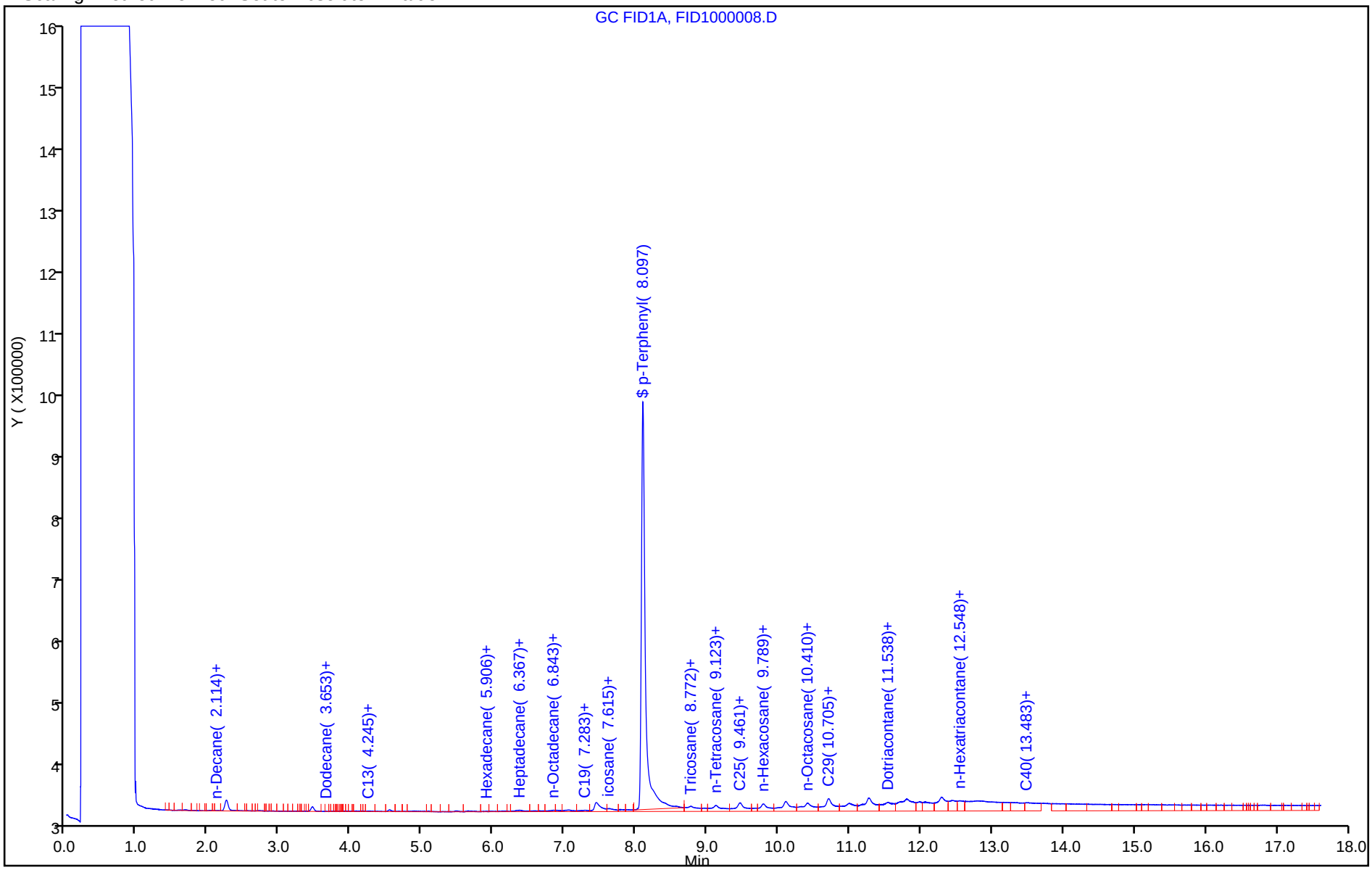
Report Date: 30-Aug-2018 14:02:15 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000008.D

Injection Date:	30-Aug-2018 12:49:36	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88218-E-21-B	Lab Sample ID:	720-88218-21	Worklist Smp#:	8
Client ID:	DG-E5S--9.0-9.5				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000008.D				
Lims ID:	720-88218-E-21-B				
Client ID:	DG-E5S--9.0-9.5				
Sample Type:	Client				
Inject. Date:	30-Aug-2018 12:49:36	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053573-008				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\DRO6_A.m				
Limit Group:	DRO				
Last Update:	30-Aug-2018 14:02:14	Calib Date:	30-Aug-2018 10:14:10		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK001				
First Level Reviewer: luj		Date:	30-Aug-2018 14:02:14		

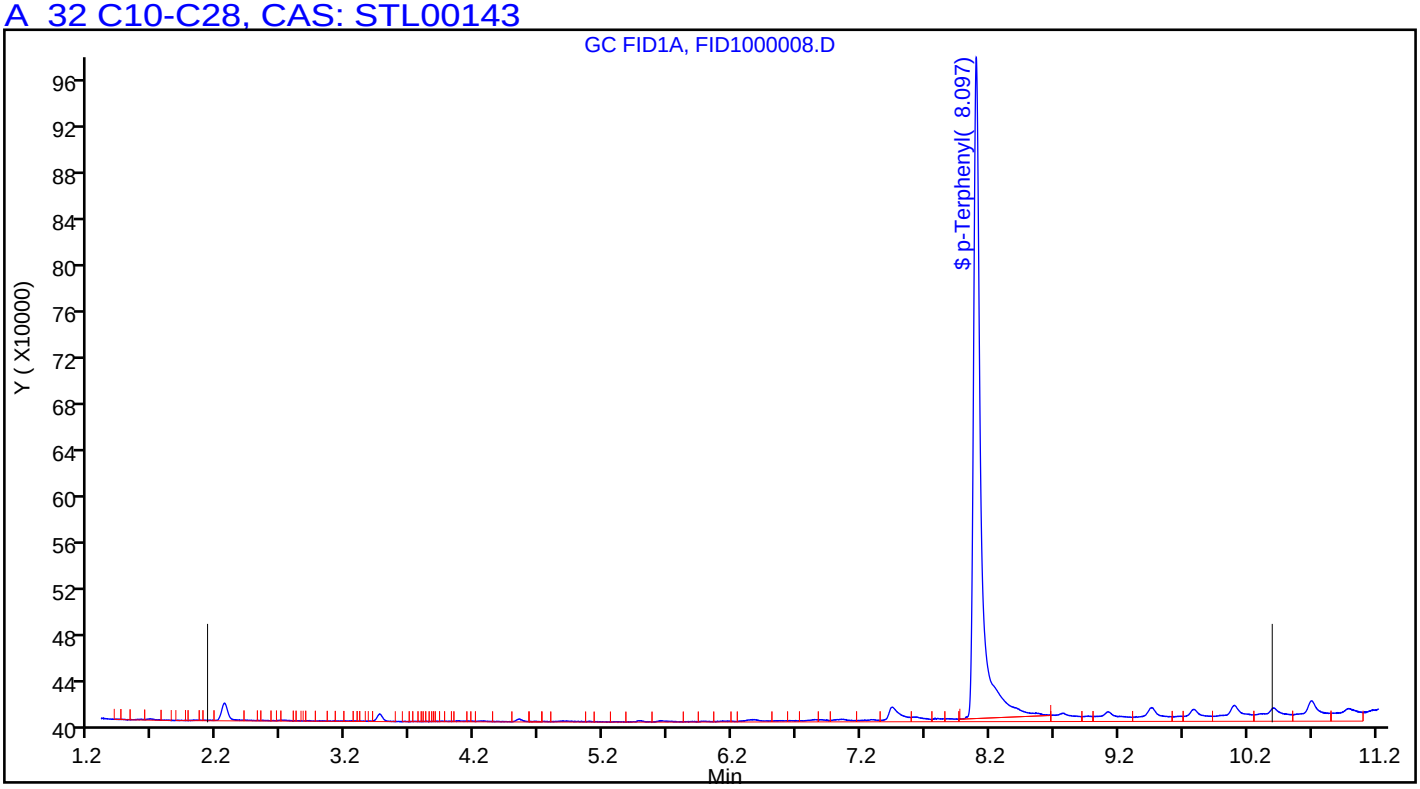
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	23.4	93.54

Report Date: 30-Aug-2018 14:02:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180830-53573.b\FID1000008.D				
Injection Date:	30-Aug-2018 12:49:36	Instrument ID:	CHDRO6		
Lims ID:	720-88218-E-21-B	Lab Sample ID:	720-88218-21		
Client ID:	DG-E5S--9.0-9.5				
Operator ID:	DCH	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-J5S-0.5-1 Lab Sample ID: 720-88218-1

Matrix: Solid Lab File ID: 08281815.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:00

Sample wt/vol: 7.085(g) Date Analyzed: 08/28/2018 14:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.5	0.85
67-64-1	Acetone	56		35	27
71-43-2	Benzene	ND		3.5	0.46
75-27-4	Dichlorobromomethane	ND		3.5	0.51
108-86-1	Bromobenzene	ND		3.5	0.56
74-97-5	Chlorobromomethane	ND		14	0.51
75-25-2	Bromoform	ND		3.5	1.4
74-83-9	Bromomethane	ND		7.1	0.56
78-93-3	2-Butanone (MEK)	ND		35	15
104-51-8	n-Butylbenzene	ND		3.5	0.71
135-98-8	sec-Butylbenzene	ND		3.5	0.51
98-06-6	tert-Butylbenzene	ND		3.5	0.52
75-15-0	Carbon disulfide	ND		3.5	1.4
56-23-5	Carbon tetrachloride	ND		3.5	0.44
108-90-7	Chlorobenzene	ND		3.5	0.49
75-00-3	Chloroethane	ND		7.1	0.40
67-66-3	Chloroform	ND		3.5	0.47
74-87-3	Chloromethane	ND		7.1	0.56
95-49-8	2-Chlorotoluene	ND		3.5	0.46
106-43-4	4-Chlorotoluene	ND		3.5	0.48
124-48-1	Chlorodibromomethane	ND		3.5	0.50
95-50-1	1,2-Dichlorobenzene	ND		3.5	0.48
541-73-1	1,3-Dichlorobenzene	ND		3.5	0.51
106-46-7	1,4-Dichlorobenzene	ND		3.5	0.50
142-28-9	1,3-Dichloropropane	ND		3.5	0.52
563-58-6	1,1-Dichloropropene	ND		3.5	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.1	1.2
106-93-4	Ethylene Dibromide	ND		3.5	1.0
74-95-3	Dibromomethane	ND		7.1	0.61
75-71-8	Dichlorodifluoromethane	ND		7.1	0.56
75-34-3	1,1-Dichloroethane	ND		3.5	0.48
107-06-2	1,2-Dichloroethane	ND		3.5	0.54
75-35-4	1,1-Dichloroethene	ND		3.5	0.44
156-59-2	cis-1,2-Dichloroethene	ND		3.5	0.48
156-60-5	trans-1,2-Dichloroethene	ND		3.5	0.53
78-87-5	1,2-Dichloropropane	ND		3.5	0.44

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-J5S-0.5-1 Lab Sample ID: 720-88218-1

Matrix: Solid Lab File ID: 08281815.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:00

Sample wt/vol: 7.085(g) Date Analyzed: 08/28/2018 14:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.5	0.49
10061-02-6	trans-1,3-Dichloropropene	ND		3.5	0.47
100-41-4	Ethylbenzene	ND		3.5	0.53
87-68-3	Hexachlorobutadiene	ND		3.5	0.64
591-78-6	2-Hexanone	ND		35	7.1
98-82-8	Isopropylbenzene	ND		3.5	0.48
99-87-6	4-Isopropyltoluene	ND		3.5	1.8
75-09-2	Methylene Chloride	ND		7.1	4.0
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		35	7.1
91-20-3	Naphthalene	ND		7.1	1.1
103-65-1	N-Propylbenzene	ND		3.5	0.47
100-42-5	Styrene	ND		3.5	0.44
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.5	0.54
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.5	0.53
127-18-4	Tetrachloroethene	ND		3.5	0.47
108-88-3	Toluene	ND		3.5	0.50
87-61-6	1,2,3-Trichlorobenzene	ND		3.5	0.52
120-82-1	1,2,4-Trichlorobenzene	ND		3.5	0.50
71-55-6	1,1,1-Trichloroethane	ND		3.5	0.43
79-00-5	1,1,2-Trichloroethane	ND		3.5	0.49
79-01-6	Trichloroethene	ND		3.5	0.44
75-69-4	Trichlorofluoromethane	ND		3.5	0.40
96-18-4	1,2,3-Trichloropropane	ND		3.5	0.54
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.5	1.5
95-63-6	1,2,4-Trimethylbenzene	ND		3.5	1.2
108-67-8	1,3,5-Trimethylbenzene	ND		3.5	0.46
108-05-4	Vinyl acetate	ND		14	3.5
75-01-4	Vinyl chloride	ND		3.5	0.52
1330-20-7	Xylenes, Total	ND		3.5	0.86
594-20-7	2,2-Dichloropropane	ND		3.5	1.4
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		180	71

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-J5S-0.5-1 Lab Sample ID: 720-88218-1

Matrix: Solid Lab File ID: 08281815.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:00

Sample wt/vol: 7.085(g) Date Analyzed: 08/28/2018 14:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	96		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		60-140
2037-26-5	Toluene-d8 (Surr)	92		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281815.D
Lims ID: 720-88218-A-1-A
Client ID: DG-J5S--0.5-1
Sample Type: Client
Inject. Date: 28-Aug-2018 14:47:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-A-1
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:29:18 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:29:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.825	-0.006	0	327529	250.0	
* 2 Fluorobenzene	96	10.598	10.605	-0.007	99	897931	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	86	675250	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.591	-0.012	95	334870	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.191	-0.006	94	76671	7.61	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.709	-0.007	0	97025	7.68	
$ 10 Toluene-d8 (Surr)	98	12.708	12.707	-0.006	93	250546	6.90	
$ 11 4-Bromofluorobenzene	95	15.933	15.932	-0.006	93	94502	7.20	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	-0.006	84	80643	6.22	
28 Acetone	58	6.380	6.370	0.006	99	41509	39.4	
32 2-Methyl-2-propanol	59	6.916	6.922	-0.007	98	6229	4.58	
34 Methylene Chloride	84	7.093	7.081	0.012	73	1282	0.1319	
45 2-Butanone (MEK)	72	8.648	8.637	0.006	97	1158	0.9628	
52 Tert-butyl ethyl ether	59	9.111	9.100	0.006	97	2005	0.0576	
150 t-Amyl alcohol	59	9.568	9.568	0.006	1	672	0.6000	M
59 Benzene	78	10.373	10.373	-0.006	94	3453	0.0904	
75 Toluene	92	12.793	12.794	-0.006	97	3768	0.1698	
128 Butyl Ether	87	14.665	14.659	0.000	96	1211	0.1802	
84 Ethylbenzene	91	14.707	14.707	-0.007	92	1548	0.0359	
85 m-Xylene & p-Xylene	91	14.927	14.933	-0.012	0	3998	0.1173	
88 o-Xylene	91	15.433	15.433	-0.006	92	1731	0.0489	
29 Pentane	43	6.374	6.410	-0.036	70	129138	NR	
131 n-Octane	43	13.110	13.110	0.000	89	1796	NR	
135 n-Nonane	57	15.055	15.055	0.000	88	460	NR	
99 n-Decane	57	16.829	16.829	0.000	89	717	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	937822	11.4	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	209170	2.54	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	306460	3.72	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1058926	12.9	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	374885	4.55	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	1004647	12.2	

Report Date: 29-Aug-2018 09:29:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281815.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 120 C6-C12	1	14.281	(8.556-20.005)		0	495989	6.02	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	172879	2.10	
A 121 C7-C12	1	15.454	(10.903-20.005)		0	374835	4.55	
S 122 Xylenes, Total	1				0		0.1662	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
Review Flags
M - Manually Integrated

Reagents:

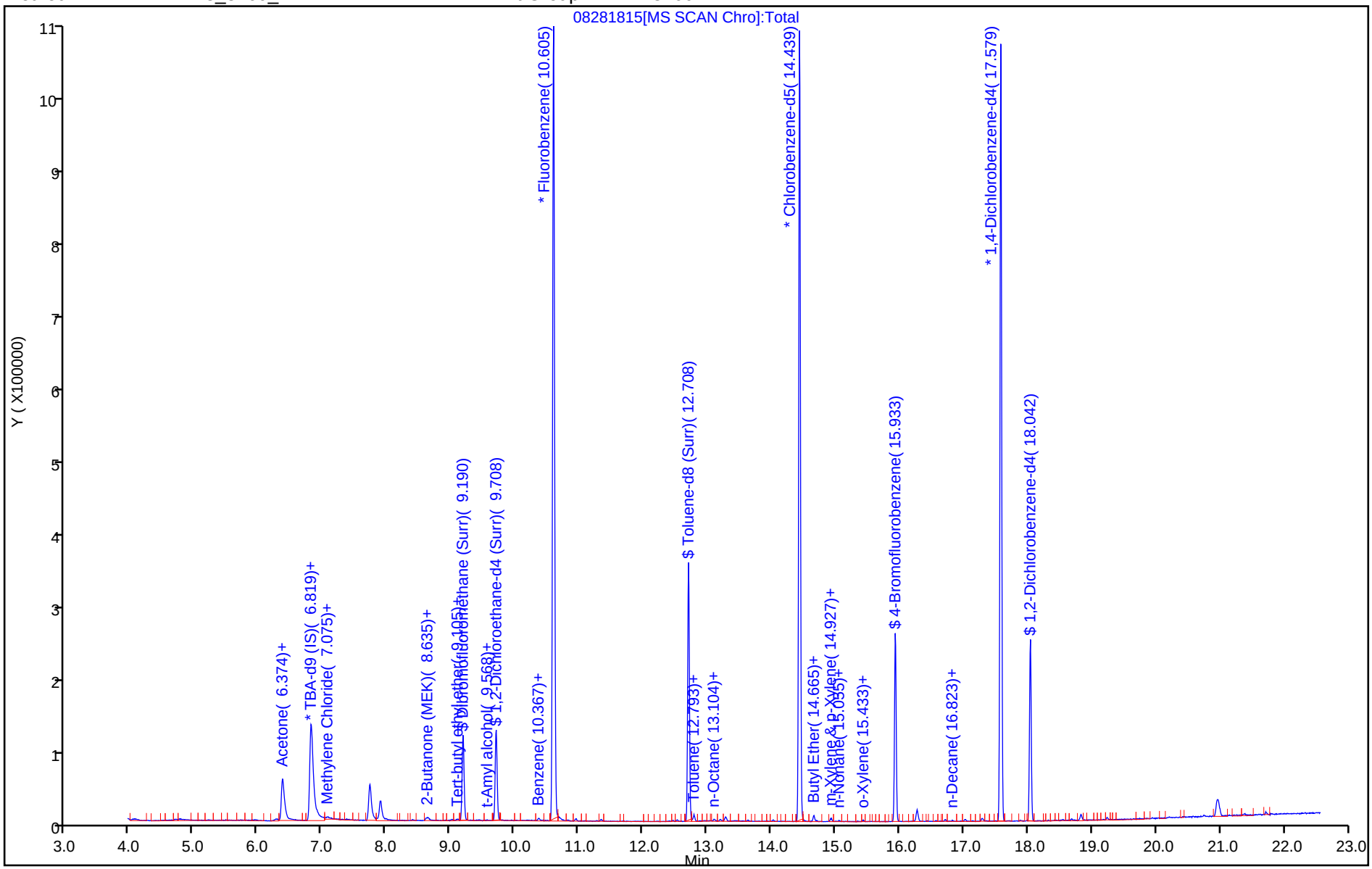
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:29:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281815.D

Injection Date:	28-Aug-2018 14:47:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88218-A-1-A	Lab Sample ID:	720-88218-1	Worklist Smp#:	15
Client ID:	DG-J5S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281815.D
Lims ID: 720-88218-A-1-A
Client ID: DG-J5S--0.5-1
Sample Type: Client
Inject. Date: 28-Aug-2018 14:47:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-A-1
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:29:18 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:29:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.68	102.46
$ 10 Toluene-d8 (Surr)	7.50	6.90	91.99
$ 11 4-Bromofluorobenzene	7.50	7.20	95.95
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

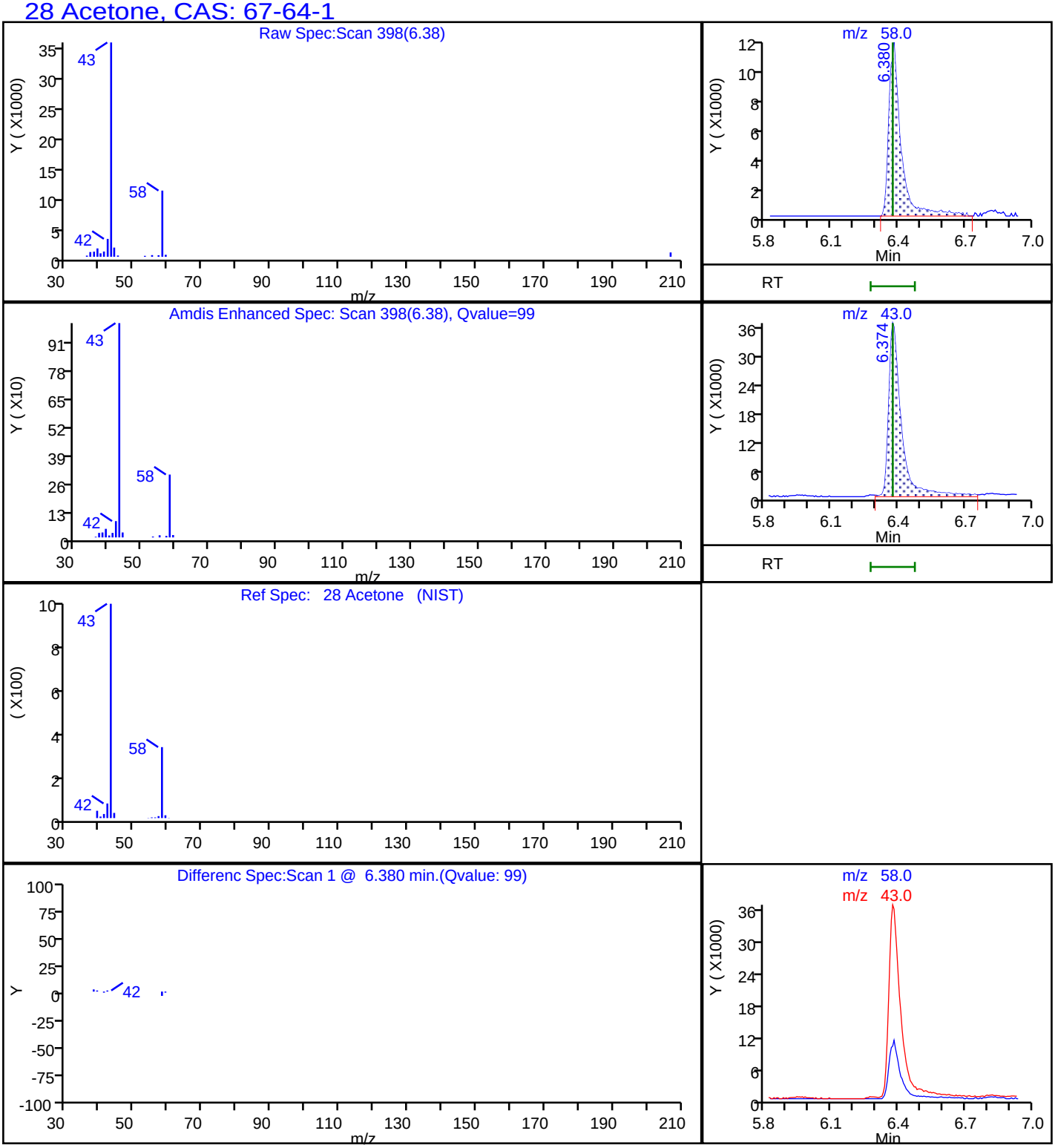
Report Date: 29-Aug-2018 09:29:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281815.D

Injection Date:	28-Aug-2018 14:47:30	Instrument ID:	HP13		
Lims ID:	720-88218-A-1-A	Lab Sample ID:	720-88218-1		
Client ID:	DG-J5S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



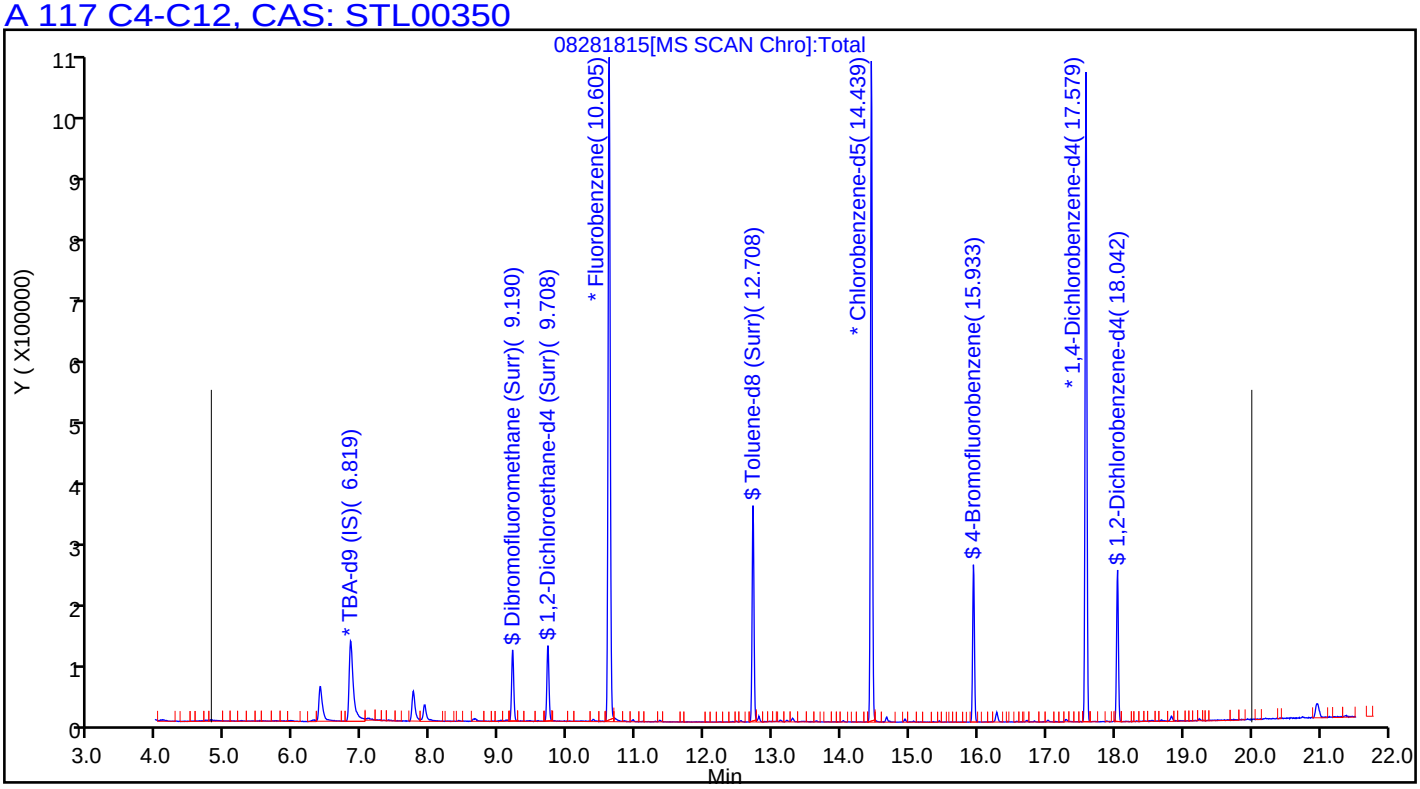
Report Date: 29-Aug-2018 09:29:20 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281815.D

Injection Date:	28-Aug-2018 14:47:30	Instrument ID:	HP13		
Lims ID:	720-88218-A-1-A	Lab Sample ID:	720-88218-1		
Client ID:	DG-J5S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



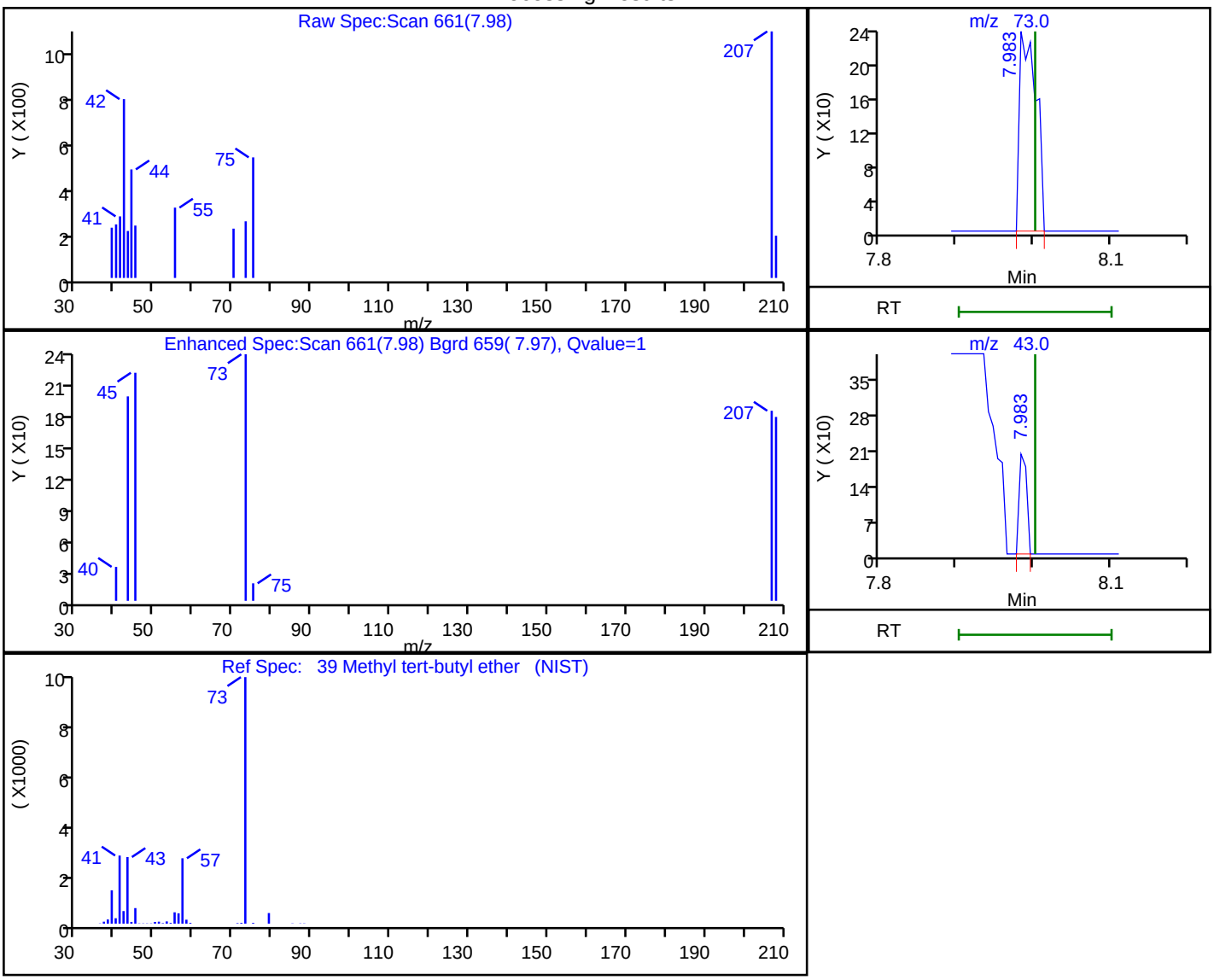
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281815.D				
Injection Date:	28-Aug-2018 14:47:30	Instrument ID:	HP13		
Lims ID:	720-88218-A-1-A	Lab Sample ID:	720-88218-1		
Client ID:	DG-J5S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

39 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
7.98	73.00	361	0.012601
7.98	43.00	137	

Reviewer: chaijita, 29-Aug-2018 09:28:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-J5S-3.5-4 Lab Sample ID: 720-88218-2

Matrix: Solid Lab File ID: 08281816.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:00

Sample wt/vol: 6.414(g) Date Analyzed: 08/28/2018 15:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.9	0.94
67-64-1	Acetone	ND		39	30
71-43-2	Benzene	ND		3.9	0.51
75-27-4	Dichlorobromomethane	ND		3.9	0.56
108-86-1	Bromobenzene	ND		3.9	0.62
74-97-5	Chlorobromomethane	ND		16	0.56
75-25-2	Bromoform	ND		3.9	1.6
74-83-9	Bromomethane	ND		7.8	0.62
78-93-3	2-Butanone (MEK)	ND		39	16
104-51-8	n-Butylbenzene	ND		3.9	0.78
135-98-8	sec-Butylbenzene	ND		3.9	0.56
98-06-6	tert-Butylbenzene	ND		3.9	0.57
75-15-0	Carbon disulfide	ND		3.9	1.6
56-23-5	Carbon tetrachloride	ND		3.9	0.48
108-90-7	Chlorobenzene	ND		3.9	0.54
75-00-3	Chloroethane	ND		7.8	0.44
67-66-3	Chloroform	ND		3.9	0.51
74-87-3	Chloromethane	ND		7.8	0.62
95-49-8	2-Chlorotoluene	ND		3.9	0.51
106-43-4	4-Chlorotoluene	ND		3.9	0.53
124-48-1	Chlorodibromomethane	ND		3.9	0.55
95-50-1	1,2-Dichlorobenzene	ND		3.9	0.53
541-73-1	1,3-Dichlorobenzene	ND		3.9	0.56
106-46-7	1,4-Dichlorobenzene	ND		3.9	0.55
142-28-9	1,3-Dichloropropane	ND		3.9	0.57
563-58-6	1,1-Dichloropropene	ND		3.9	0.54
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.8	1.3
106-93-4	Ethylene Dibromide	ND		3.9	1.1
74-95-3	Dibromomethane	ND		7.8	0.67
75-71-8	Dichlorodifluoromethane	ND		7.8	0.62
75-34-3	1,1-Dichloroethane	ND		3.9	0.53
107-06-2	1,2-Dichloroethane	ND		3.9	0.59
75-35-4	1,1-Dichloroethene	ND		3.9	0.48
156-59-2	cis-1,2-Dichloroethene	ND		3.9	0.53
156-60-5	trans-1,2-Dichloroethene	ND		3.9	0.58
78-87-5	1,2-Dichloropropane	ND		3.9	0.49

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-J5S-3.5-4 Lab Sample ID: 720-88218-2

Matrix: Solid Lab File ID: 08281816.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:00

Sample wt/vol: 6.414(g) Date Analyzed: 08/28/2018 15:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.9	0.54
10061-02-6	trans-1,3-Dichloropropene	ND		3.9	0.52
100-41-4	Ethylbenzene	ND		3.9	0.58
87-68-3	Hexachlorobutadiene	ND		3.9	0.70
591-78-6	2-Hexanone	ND		39	7.8
98-82-8	Isopropylbenzene	ND		3.9	0.53
99-87-6	4-Isopropyltoluene	ND		3.9	1.9
75-09-2	Methylene Chloride	ND		7.8	4.4
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		39	7.8
91-20-3	Naphthalene	ND		7.8	1.2
103-65-1	N-Propylbenzene	ND		3.9	0.51
100-42-5	Styrene	ND		3.9	0.49
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.9	0.59
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.9	0.58
127-18-4	Tetrachloroethene	ND		3.9	0.52
108-88-3	Toluene	ND		3.9	0.55
87-61-6	1,2,3-Trichlorobenzene	ND		3.9	0.58
120-82-1	1,2,4-Trichlorobenzene	ND		3.9	0.55
71-55-6	1,1,1-Trichloroethane	ND		3.9	0.48
79-00-5	1,1,2-Trichloroethane	ND		3.9	0.55
79-01-6	Trichloroethene	ND		3.9	0.49
75-69-4	Trichlorofluoromethane	ND		3.9	0.44
96-18-4	1,2,3-Trichloropropane	ND		3.9	0.60
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.9	1.6
95-63-6	1,2,4-Trimethylbenzene	ND		3.9	1.3
108-67-8	1,3,5-Trimethylbenzene	ND		3.9	0.51
108-05-4	Vinyl acetate	ND		16	3.9
75-01-4	Vinyl chloride	ND		3.9	0.57
1330-20-7	Xylenes, Total	ND		3.9	0.95
594-20-7	2,2-Dichloropropane	ND		3.9	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		190	78

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-J5S-3.5-4 Lab Sample ID: 720-88218-2

Matrix: Solid Lab File ID: 08281816.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:00

Sample wt/vol: 6.414(g) Date Analyzed: 08/28/2018 15:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250350 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	91		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		60-140
2037-26-5	Toluene-d8 (Surr)	92		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281816.D
Lims ID: 720-88218-A-2-A
Client ID: DG-J5S--3.5-4
Sample Type: Client
Inject. Date: 28-Aug-2018 15:19:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-A-2
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:29:18 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:29:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.825	-0.006	0	326751	250.0	
* 2 Fluorobenzene	96	10.598	10.605	-0.007	99	753898	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	86	531611	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.591	-0.012	95	242694	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.191	-0.006	93	68126	8.05	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.709	-0.007	0	86349	8.15	
$ 10 Toluene-d8 (Surr)	98	12.708	12.707	-0.006	93	211480	6.94	
$ 11 4-Bromofluorobenzene	95	15.933	15.932	-0.006	94	70627	6.83	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	-0.006	84	58367	6.21	
28 Acetone	58	6.374	6.370	0.000	99	14174	16.0	
34 Methylene Chloride	84	7.081	7.081	0.000	52	1044	0.1280	
59 Benzene	78	10.373	10.373	-0.006	96	4535	0.1414	
145 Methylcyclohexane	83	11.690	11.689	-0.006	83	650	0.0509	
75 Toluene	92	12.799	12.794	0.000	97	3024	0.1730	
128 Butyl Ether	87	14.665	14.659	0.000	94	408	0.0771	
84 Ethylbenzene	91	14.707	14.707	-0.007	92	1796	0.0528	
85 m-Xylene & p-Xylene	91	14.933	14.933	-0.006	0	3919	0.1461	
112 Naphthalene	128	20.749	20.741	-0.006	97	12837	0.5138	
29 Pentane	43	6.368	6.410	-0.042	69	51745	NR	
131 n-Octane	43	13.110	13.110	0.000	94	1665	NR	
135 n-Nonane	57	15.061	15.055	0.006	84	557	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	614814	8.89	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	195578	2.83	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	291525	4.22	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	700424	10.1	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	334679	4.84	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	655244	9.48	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	420289	6.08	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	148242	2.14	
A 121 C7-C12	1	15.454	(10.903-20.005)		0	294194	4.26	
S 122 Xylenes, Total	1				0		0.1461	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

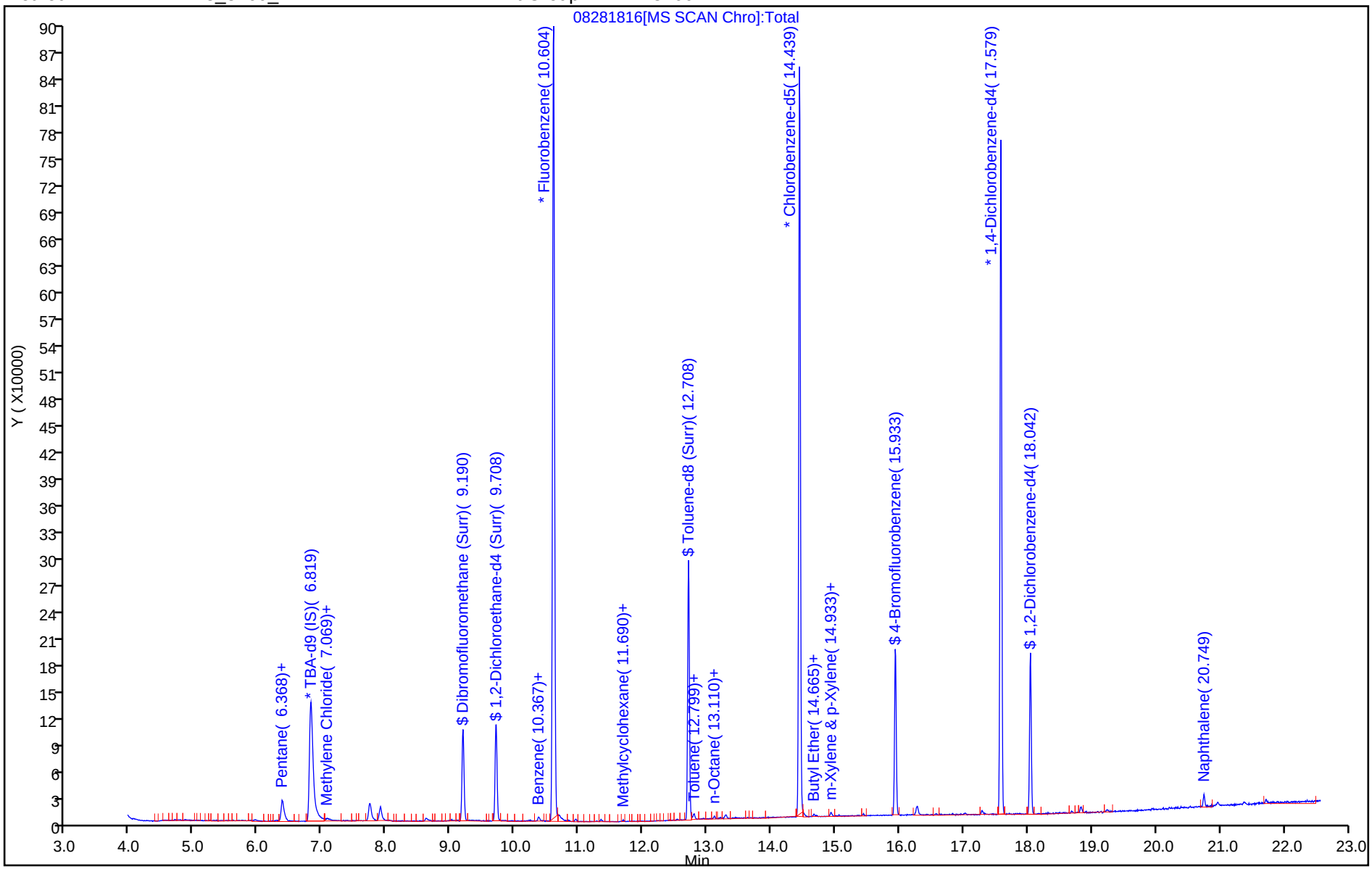
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:29:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281816.D				
Injection Date:	28-Aug-2018 15:19:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88218-A-2-A	Lab Sample ID:	720-88218-2	Worklist Smp#:	16
Client ID:	DG-J5S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281816.D
Lims ID: 720-88218-A-2-A
Client ID: DG-J5S--3.5-4
Sample Type: Client
Inject. Date: 28-Aug-2018 15:19:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-A-2
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:29:18 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: chaijita Date: 29-Aug-2018 09:29:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.15	108.61
$ 10 Toluene-d8 (Surr)	7.50	6.94	92.48
$ 11 4-Bromofluorobenzene	7.50	6.83	91.09
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

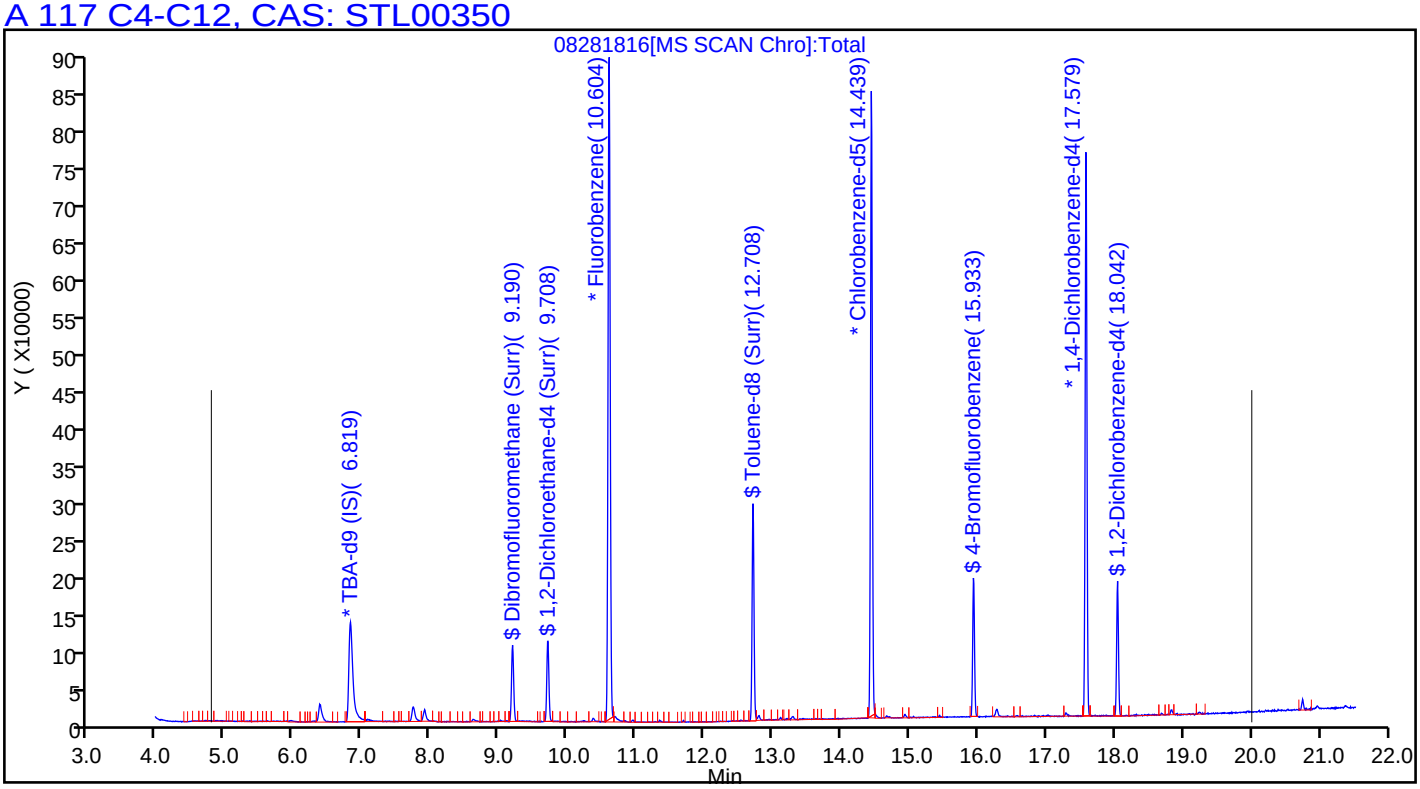
Report Date: 29-Aug-2018 09:29:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281816.D

Injection Date:	28-Aug-2018 15:19:30	Instrument ID:	HP13		
Lims ID:	720-88218-A-2-A	Lab Sample ID:	720-88218-2		
Client ID:	DG-J5S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



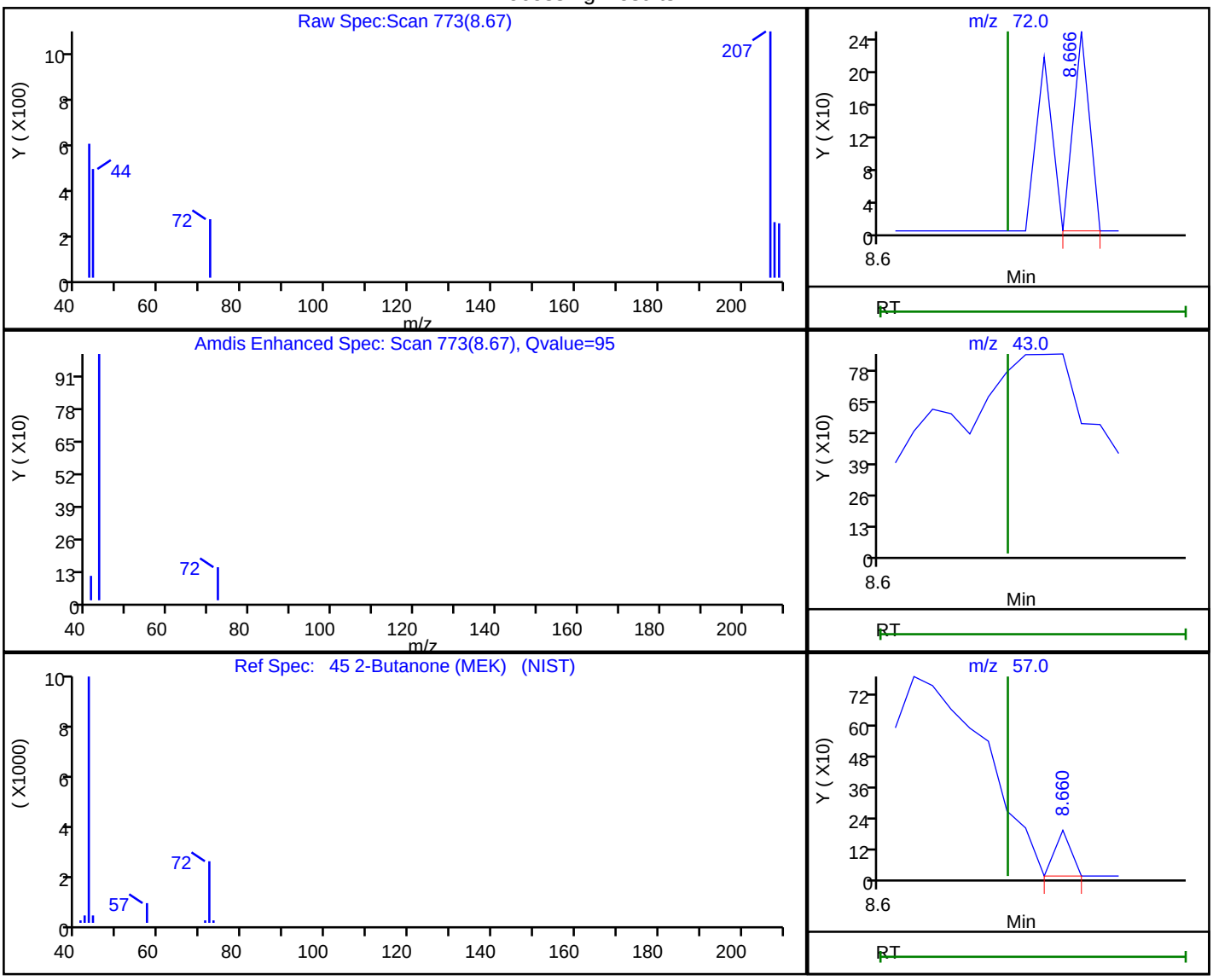
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53514.b\08281816.D				
Injection Date:	28-Aug-2018 15:19:30	Instrument ID:	HP13		
Lims ID:	720-88218-A-2-A	Lab Sample ID:	720-88218-2		
Client ID:	DG-J5S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

45 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
8.67	72.00	88	0.087146
8.66	43.00	2648	
8.66	57.00	66	

Reviewer: chaijita, 29-Aug-2018 09:14:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-J5S-7-7.5 Lab Sample ID: 720-88218-3

Matrix: Solid Lab File ID: 08281834.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:00

Sample wt/vol: 7.282(g) Date Analyzed: 08/29/2018 00:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.4	0.82
67-64-1	Acetone	ND		34	26
71-43-2	Benzene	ND		3.4	0.45
75-27-4	Dichlorobromomethane	ND		3.4	0.49
108-86-1	Bromobenzene	ND		3.4	0.54
74-97-5	Chlorobromomethane	ND		14	0.49
75-25-2	Bromoform	ND		3.4	1.4
74-83-9	Bromomethane	ND		6.9	0.54
78-93-3	2-Butanone (MEK)	ND		34	14
104-51-8	n-Butylbenzene	ND		3.4	0.69
135-98-8	sec-Butylbenzene	ND		3.4	0.49
98-06-6	tert-Butylbenzene	ND		3.4	0.50
75-15-0	Carbon disulfide	ND	*	3.4	1.4
56-23-5	Carbon tetrachloride	ND		3.4	0.43
108-90-7	Chlorobenzene	ND		3.4	0.47
75-00-3	Chloroethane	ND		6.9	0.38
67-66-3	Chloroform	ND		3.4	0.45
74-87-3	Chloromethane	ND		6.9	0.54
95-49-8	2-Chlorotoluene	ND		3.4	0.45
106-43-4	4-Chlorotoluene	ND		3.4	0.47
124-48-1	Chlorodibromomethane	ND		3.4	0.49
95-50-1	1,2-Dichlorobenzene	ND		3.4	0.47
541-73-1	1,3-Dichlorobenzene	ND		3.4	0.49
106-46-7	1,4-Dichlorobenzene	ND		3.4	0.49
142-28-9	1,3-Dichloropropane	ND		3.4	0.50
563-58-6	1,1-Dichloropropene	ND		3.4	0.47
96-12-8	1,2-Dibromo-3-Chloropropane	ND		6.9	1.2
106-93-4	Ethylene Dibromide	ND		3.4	0.98
74-95-3	Dibromomethane	ND		6.9	0.59
75-71-8	Dichlorodifluoromethane	ND		6.9	0.54
75-34-3	1,1-Dichloroethane	ND		3.4	0.47
107-06-2	1,2-Dichloroethane	ND		3.4	0.52
75-35-4	1,1-Dichloroethene	ND	*	3.4	0.43
156-59-2	cis-1,2-Dichloroethene	5.4		3.4	0.47
156-60-5	trans-1,2-Dichloroethene	ND		3.4	0.51
78-87-5	1,2-Dichloropropane	ND		3.4	0.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-J5S-7-7.5 Lab Sample ID: 720-88218-3

Matrix: Solid Lab File ID: 08281834.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:00

Sample wt/vol: 7.282(g) Date Analyzed: 08/29/2018 00:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.4	0.47
10061-02-6	trans-1,3-Dichloropropene	ND		3.4	0.46
100-41-4	Ethylbenzene	ND		3.4	0.51
87-68-3	Hexachlorobutadiene	ND		3.4	0.62
591-78-6	2-Hexanone	ND		34	6.9
98-82-8	Isopropylbenzene	ND		3.4	0.47
99-87-6	4-Isopropyltoluene	ND		3.4	1.7
75-09-2	Methylene Chloride	ND		6.9	3.8
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		34	6.9
91-20-3	Naphthalene	ND		6.9	1.0
103-65-1	N-Propylbenzene	ND		3.4	0.45
100-42-5	Styrene	ND		3.4	0.43
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.4	0.52
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.4	0.51
127-18-4	Tetrachloroethene	ND		3.4	0.46
108-88-3	Toluene	ND		3.4	0.49
87-61-6	1,2,3-Trichlorobenzene	ND		3.4	0.51
120-82-1	1,2,4-Trichlorobenzene	ND		3.4	0.49
71-55-6	1,1,1-Trichloroethane	ND		3.4	0.42
79-00-5	1,1,2-Trichloroethane	ND		3.4	0.48
79-01-6	Trichloroethene	ND		3.4	0.43
75-69-4	Trichlorofluoromethane	ND		3.4	0.38
96-18-4	1,2,3-Trichloropropane	ND		3.4	0.53
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.4	1.4
95-63-6	1,2,4-Trimethylbenzene	ND		3.4	1.1
108-67-8	1,3,5-Trimethylbenzene	ND		3.4	0.45
108-05-4	Vinyl acetate	ND		14	3.4
75-01-4	Vinyl chloride	ND		3.4	0.50
1330-20-7	Xylenes, Total	ND		3.4	0.84
594-20-7	2,2-Dichloropropane	ND		3.4	1.4
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		170	69

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-J5S-7-7.5 Lab Sample ID: 720-88218-3

Matrix: Solid Lab File ID: 08281834.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:00

Sample wt/vol: 7.282(g) Date Analyzed: 08/29/2018 00:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250407 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	88		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		60-140
2037-26-5	Toluene-d8 (Surr)	96		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281834.D
Lims ID: 720-88218-B-3-A
Client ID: DG-J5S--7-7.5
Sample Type: Client
Inject. Date: 29-Aug-2018 00:52:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-B-3 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:15:45 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 09:16:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.094	7.101	-0.007	98	201913	250.0	
* 2 Fluorobenzene	96	10.902	10.899	0.003	98	850421	25.0	
* 4 Chlorobenzene-d5	117	14.750	14.747	0.003	85	516357	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.879	17.886	-0.007	96	196038	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.494	9.491	0.003	54	58454	7.57	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.011	10.008	0.003	97	60307	7.96	
$ 10 Toluene-d8 (Surr)	98	13.008	13.005	0.003	93	220100	7.19	
$ 11 4-Bromofluorobenzene	95	16.238	16.235	0.003	90	61833	6.59	
$ 12 1,2-Dichlorobenzene-d4	152	18.344	18.331	0.003	77	49764	6.88	
28 Acetone	58	6.649	6.646	0.003	94	7885	15.0	
38 trans-1,2-Dichloroethene	96	8.168	8.165	0.003	40	1565	0.1979	
48 cis-1,2-Dichloroethene	61	9.109	9.116	-0.008	72	45964	3.94	
148 1-Chlorohexane	55	14.739	14.655	0.083	1	5239	0.5599	
29 Pentane	43	6.649	6.675	-0.026	37	29051	NR	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	601263	8.49	
A 153 C6-C8	1	11.156	(8.853-13.459)		0	373960	5.28	
A 154 C6-C9	1	12.113	(8.853-15.373)		0	398728	5.63	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	632365	8.93	
A 119 C6-C10	1	12.994	(8.853-17.135)		0	400998	5.66	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	590042	8.33	
A 120 C6-C12	1	14.554	(8.853-20.255)		0	429440	6.07	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	27038	0.3819	
A 121 C7-C12	1	15.724	(11.192-20.255)		0	95335	1.35	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

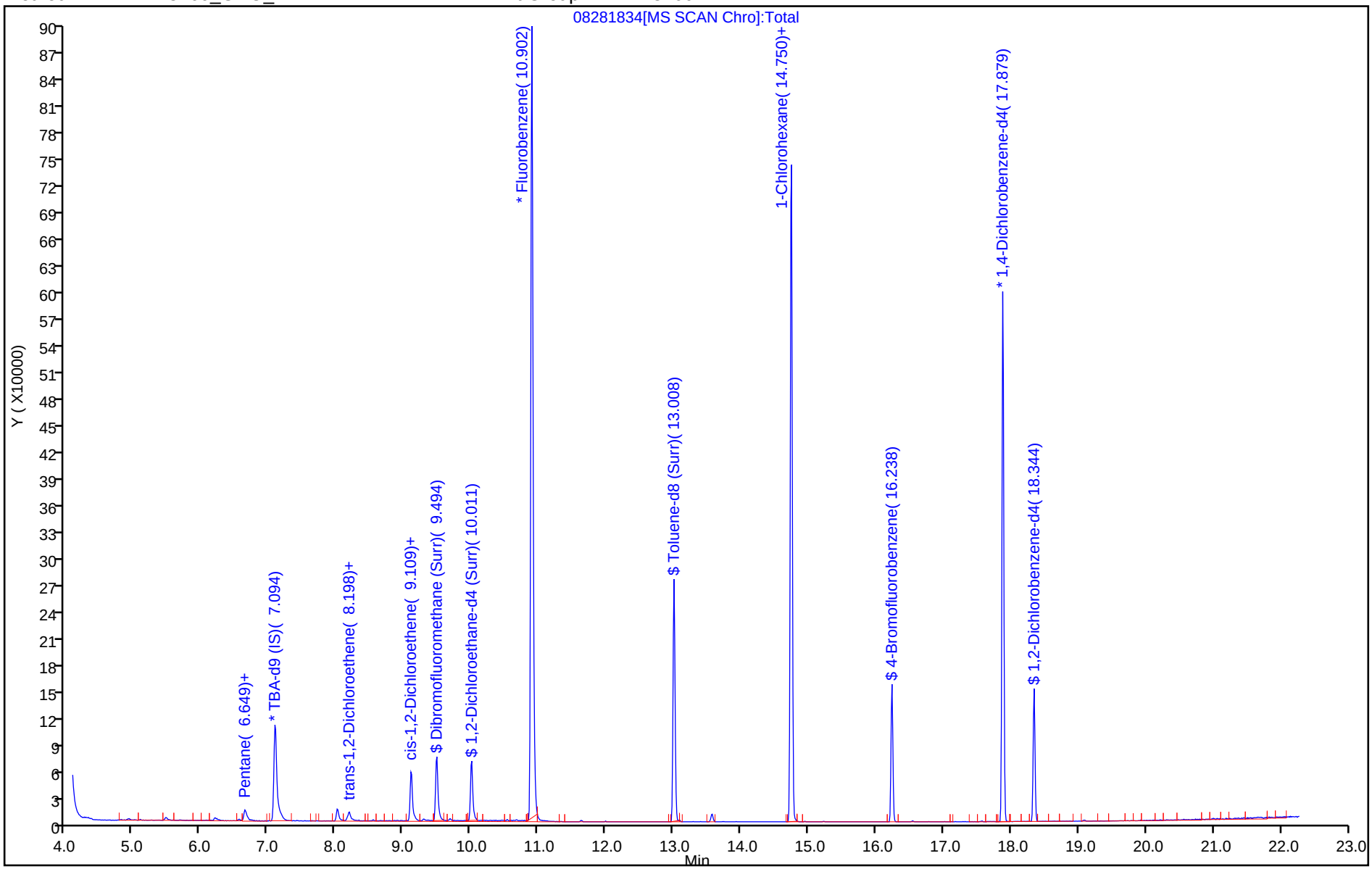
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 09:16:42 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281834.D				
Injection Date:	29-Aug-2018 00:52:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88218-B-3-A	Lab Sample ID:	720-88218-3	Worklist Smp#:	14
Client ID:	DG-J5S--7-7.5				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281834.D
Lims ID: 720-88218-B-3-A
Client ID: DG-J5S--7-7.5
Sample Type: Client
Inject. Date: 29-Aug-2018 00:52:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-B-3 RR
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 29-Aug-2018 09:15:45 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 09:16:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.96	106.18
$ 10 Toluene-d8 (Surr)	7.50	7.19	95.89
$ 11 4-Bromofluorobenzene	7.50	6.59	87.82
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

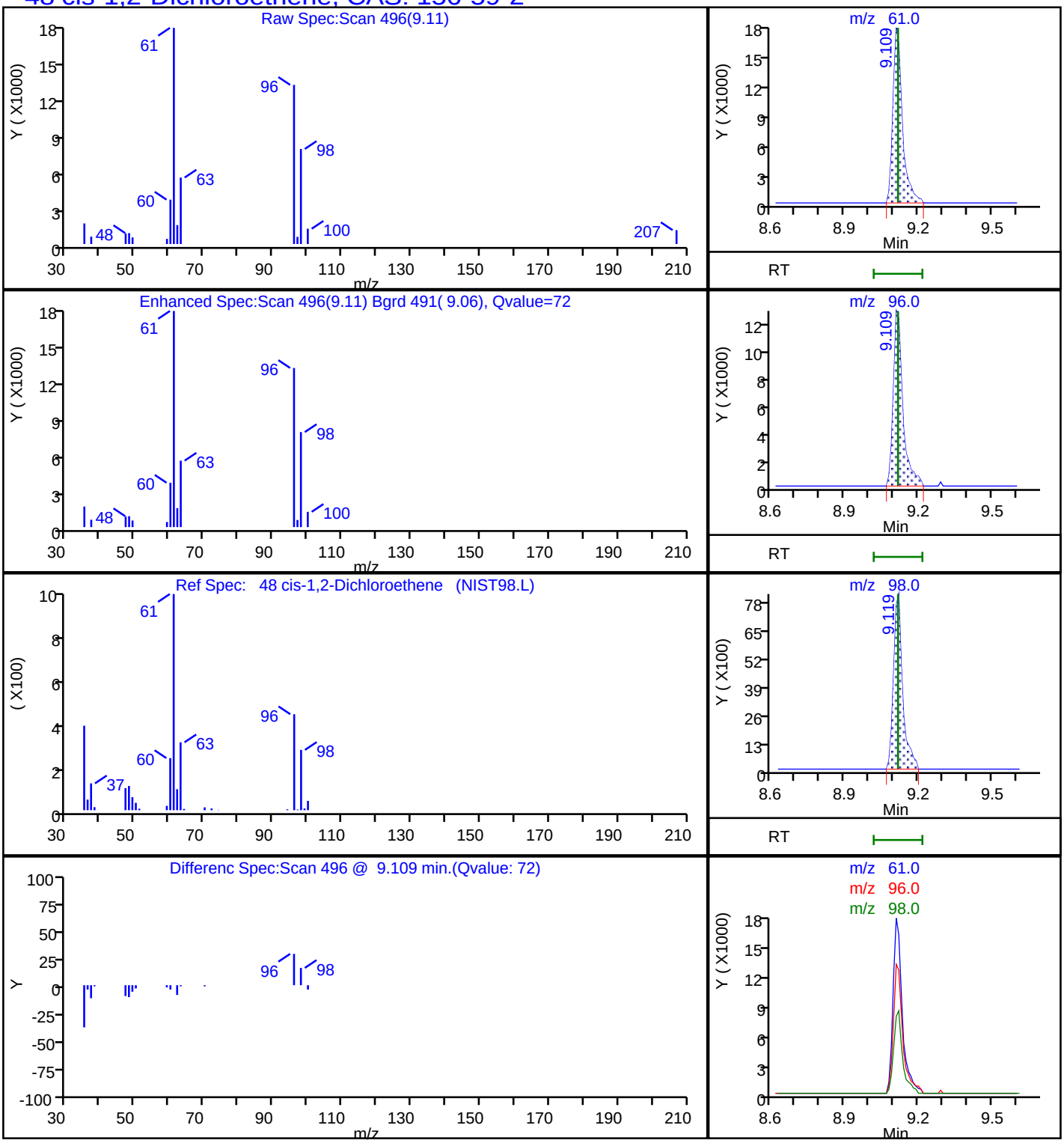
Report Date: 29-Aug-2018 09:16:43 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281834.D

Injection Date:	29-Aug-2018 00:52:30	Instrument ID:	HP7		
Lims ID:	720-88218-B-3-A	Lab Sample ID:	720-88218-3		
Client ID:	DG-J5S--7-7.5				
Operator ID:	SF	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

48 cis-1,2-Dichloroethene, CAS: 156-59-2

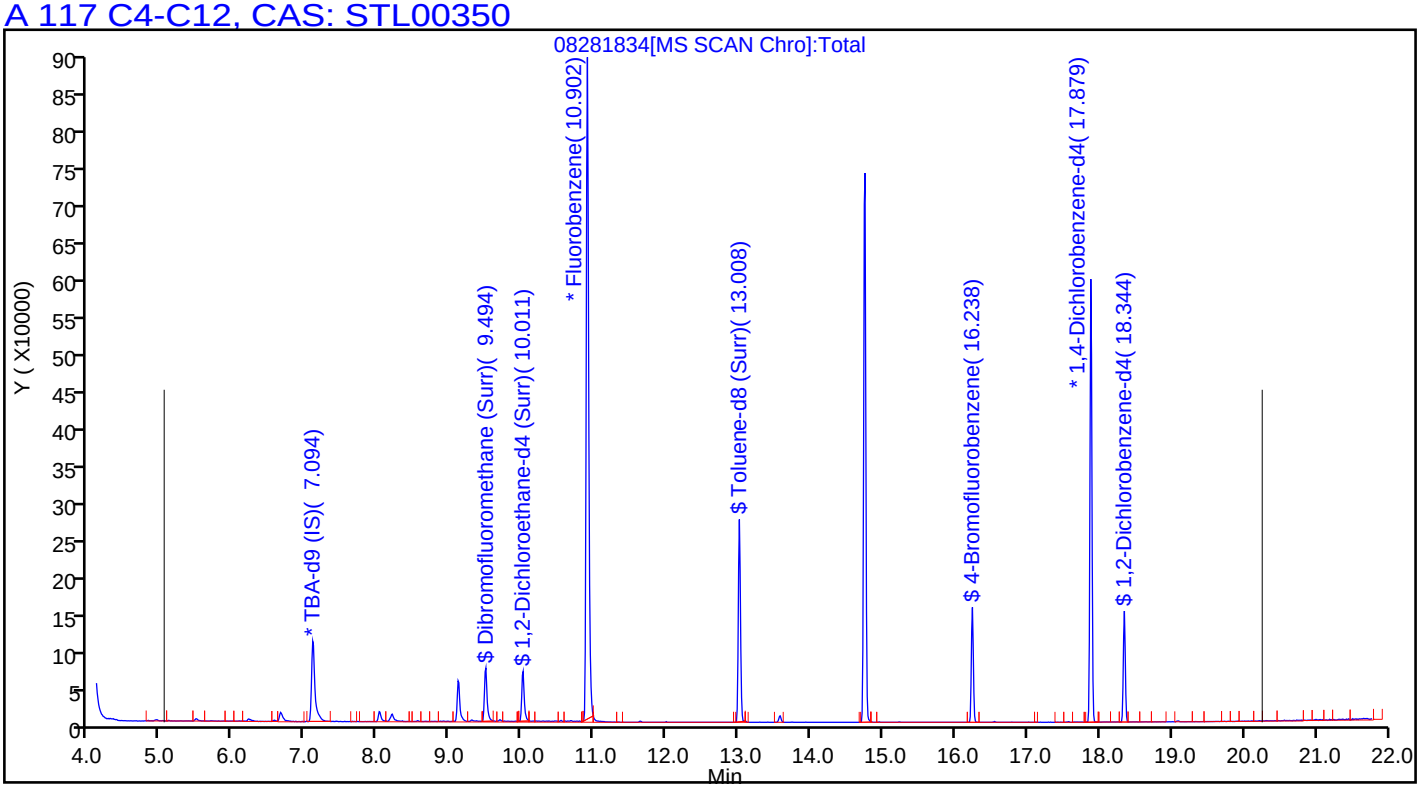


Report Date: 29-Aug-2018 09:16:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180828-53530.b\08281834.D				
Injection Date:	29-Aug-2018 00:52:30	Instrument ID:	HP7		
Lims ID:	720-88218-B-3-A	Lab Sample ID:	720-88218-3		
Client ID:	DG-J5S--7-7.5				
Operator ID:	SF	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-H5S-0.5-1 Lab Sample ID: 720-88218-6

Matrix: Solid Lab File ID: 08291821.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:30

Sample wt/vol: 6.145(g) Date Analyzed: 08/29/2018 15:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.1	0.98
67-64-1	Acetone	36	J	41	31
71-43-2	Benzene	ND		4.1	0.53
75-27-4	Dichlorobromomethane	ND		4.1	0.59
108-86-1	Bromobenzene	ND	*	4.1	0.64
74-97-5	Chlorobromomethane	ND		16	0.59
75-25-2	Bromoform	ND		4.1	1.6
74-83-9	Bromomethane	ND		8.1	0.64
78-93-3	2-Butanone (MEK)	ND		41	17
104-51-8	n-Butylbenzene	ND	*	4.1	0.81
135-98-8	sec-Butylbenzene	ND	*	4.1	0.59
98-06-6	tert-Butylbenzene	ND	*	4.1	0.59
75-15-0	Carbon disulfide	ND	*	4.1	1.6
56-23-5	Carbon tetrachloride	ND		4.1	0.50
108-90-7	Chlorobenzene	ND		4.1	0.56
75-00-3	Chloroethane	ND		8.1	0.46
67-66-3	Chloroform	ND		4.1	0.54
74-87-3	Chloromethane	ND		8.1	0.64
95-49-8	2-Chlorotoluene	ND	*	4.1	0.53
106-43-4	4-Chlorotoluene	ND	*	4.1	0.55
124-48-1	Chlorodibromomethane	ND		4.1	0.58
95-50-1	1,2-Dichlorobenzene	ND	*	4.1	0.55
541-73-1	1,3-Dichlorobenzene	ND	*	4.1	0.59
106-46-7	1,4-Dichlorobenzene	ND	*	4.1	0.58
142-28-9	1,3-Dichloropropane	ND		4.1	0.59
563-58-6	1,1-Dichloropropene	ND		4.1	0.56
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	8.1	1.4
106-93-4	Ethylene Dibromide	ND		4.1	1.2
74-95-3	Dibromomethane	ND		8.1	0.70
75-71-8	Dichlorodifluoromethane	ND		8.1	0.64
75-34-3	1,1-Dichloroethane	ND		4.1	0.55
107-06-2	1,2-Dichloroethane	ND		4.1	0.62
75-35-4	1,1-Dichloroethene	ND	*	4.1	0.50
156-59-2	cis-1,2-Dichloroethene	ND		4.1	0.55
156-60-5	trans-1,2-Dichloroethene	ND		4.1	0.61
78-87-5	1,2-Dichloropropane	ND		4.1	0.51

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-H5S-0.5-1 Lab Sample ID: 720-88218-6

Matrix: Solid Lab File ID: 08291821.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:30

Sample wt/vol: 6.145(g) Date Analyzed: 08/29/2018 15:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.1	0.56
10061-02-6	trans-1,3-Dichloropropene	ND		4.1	0.55
100-41-4	Ethylbenzene	ND		4.1	0.61
87-68-3	Hexachlorobutadiene	ND	*	4.1	0.73
591-78-6	2-Hexanone	ND		41	8.1
98-82-8	Isopropylbenzene	ND		4.1	0.55
99-87-6	4-Isopropyltoluene	ND	*	4.1	2.0
75-09-2	Methylene Chloride	ND		8.1	4.6
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		41	8.1
91-20-3	Naphthalene	ND	*	8.1	1.2
103-65-1	N-Propylbenzene	ND	*	4.1	0.54
100-42-5	Styrene	ND		4.1	0.51
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.1	0.62
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.1	0.61
127-18-4	Tetrachloroethene	ND		4.1	0.55
108-88-3	Toluene	ND		4.1	0.58
87-61-6	1,2,3-Trichlorobenzene	ND	*	4.1	0.60
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.1	0.58
71-55-6	1,1,1-Trichloroethane	ND		4.1	0.50
79-00-5	1,1,2-Trichloroethane	ND		4.1	0.57
79-01-6	Trichloroethene	ND		4.1	0.51
75-69-4	Trichlorofluoromethane	ND		4.1	0.46
96-18-4	1,2,3-Trichloropropane	ND	*	4.1	0.63
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.1	1.7
95-63-6	1,2,4-Trimethylbenzene	ND	*	4.1	1.3
108-67-8	1,3,5-Trimethylbenzene	ND	*	4.1	0.53
108-05-4	Vinyl acetate	ND		16	4.1
75-01-4	Vinyl chloride	ND		4.1	0.59
1330-20-7	Xylenes, Total	ND		4.1	0.99
594-20-7	2,2-Dichloropropane	ND		4.1	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		200	81

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-H5S-0.5-1 Lab Sample ID: 720-88218-6

Matrix: Solid Lab File ID: 08291821.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:30

Sample wt/vol: 6.145(g) Date Analyzed: 08/29/2018 15:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	79		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	124		60-140
2037-26-5	Toluene-d8 (Surr)	87		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291821.D
Lims ID: 720-88218-B-6-A
Client ID: DG-H5S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 15:42:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88217-B-6 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 30-Aug-2018 08:41:51 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 08:47:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	179846	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	813047	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	86	586667	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	95	186334	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.305	9.314	0.001	91	55947	8.12	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.821	0.011	0	68660	9.28	
$ 10 Toluene-d8 (Surr)	98	12.822	12.834	0.001	95	211806	6.56	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	92	53871	5.90	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	85	38858	5.96	
28 Acetone	58	6.474	6.480	0.000	98	13989	22.4	
59 Benzene	78	10.488	10.498	0.001	91	3731	0.1272	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	404959	6.45	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	182553	2.91	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	195168	3.11	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	480509	7.66	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	231418	3.69	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	231418	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	374696	5.97	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	310517	4.95	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	150037	2.39	
A 121 C7-C12	1	15.567	(11.005-20.130)		0	240416	3.83	

QC Flag Legend

Processing Flags
NC - Not Calibrated
s - Failed ISTD Recovery Test

Reagents:

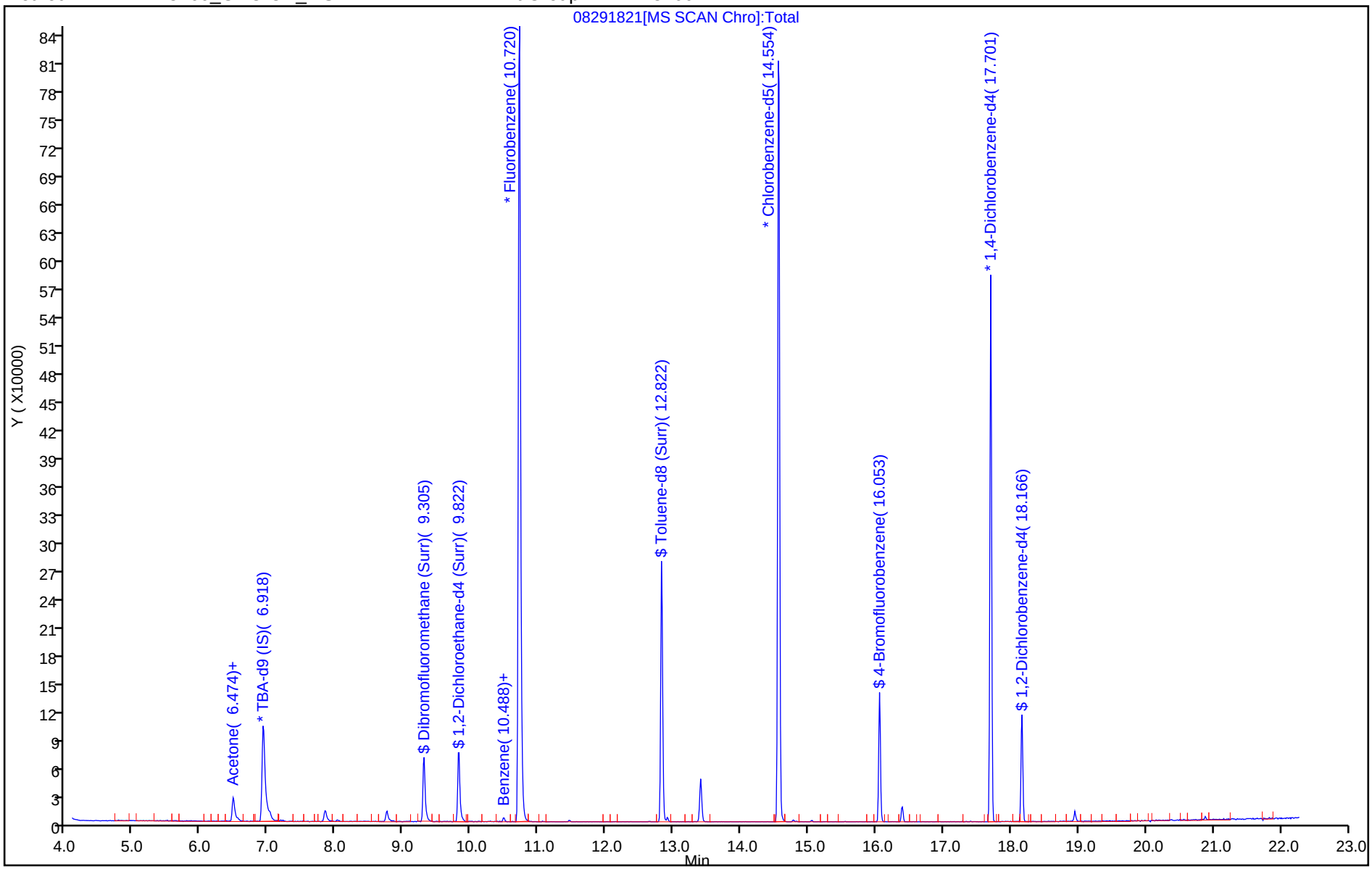
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 08:47:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291821.D

Injection Date:	29-Aug-2018 15:42:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88218-B-6-A	Lab Sample ID:	720-88218-6	Worklist Smp#:	19
Client ID:	DG-H5S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291821.D
Lims ID: 720-88218-B-6-A
Client ID: DG-H5S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 15:42:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88217-B-6 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 30-Aug-2018 08:41:51 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 08:47:03

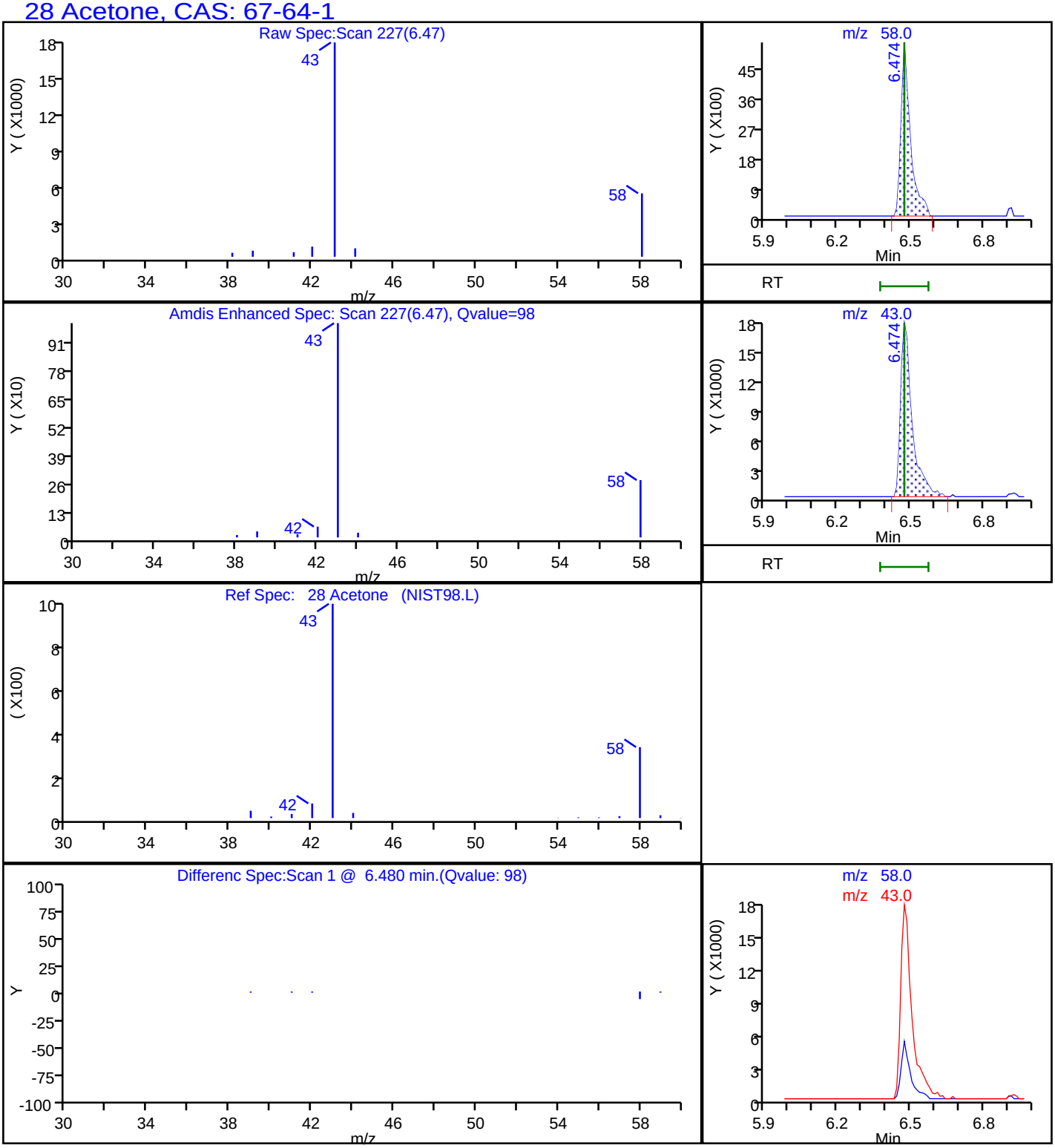
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	9.28	123.73
$ 10 Toluene-d8 (Surr)	7.50	6.56	87.48
$ 11 4-Bromofluorobenzene	7.50	5.90	78.63
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 30-Aug-2018 08:47:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291821.D				
Injection Date:	29-Aug-2018 15:42:30	Instrument ID:	CHMSV2		
Lims ID:	720-88218-B-6-A	Lab Sample ID:	720-88218-6		
Client ID:	DG-H5S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1

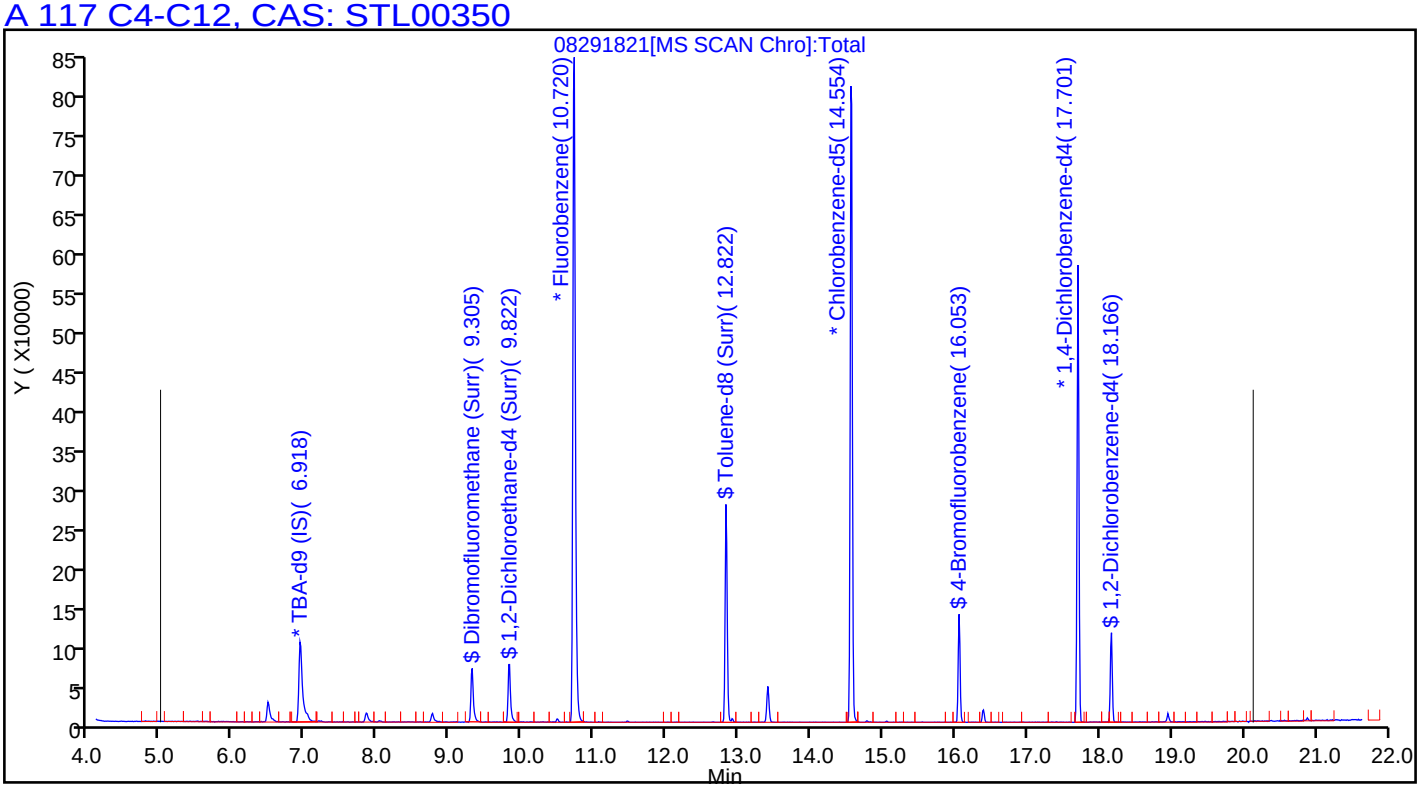


Report Date: 30-Aug-2018 08:47:06 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291821.D				
Injection Date:	29-Aug-2018 15:42:30	Instrument ID:	CHMSV2		
Lims ID:	720-88218-B-6-A	Lab Sample ID:	720-88218-6		
Client ID:	DG-H5S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-H5S-3.5-4 Lab Sample ID: 720-88218-7

Matrix: Solid Lab File ID: 08281834.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:30

Sample wt/vol: 7.995(g) Date Analyzed: 08/29/2018 00:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.1	0.75
67-64-1	Acetone	24	J	31	24
71-43-2	Benzene	ND		3.1	0.41
75-27-4	Dichlorobromomethane	ND		3.1	0.45
108-86-1	Bromobenzene	ND		3.1	0.49
74-97-5	Chlorobromomethane	ND		13	0.45
75-25-2	Bromoform	ND		3.1	1.3
74-83-9	Bromomethane	ND		6.3	0.49
78-93-3	2-Butanone (MEK)	ND		31	13
104-51-8	n-Butylbenzene	ND		3.1	0.63
135-98-8	sec-Butylbenzene	ND		3.1	0.45
98-06-6	tert-Butylbenzene	ND		3.1	0.46
75-15-0	Carbon disulfide	ND		3.1	1.3
56-23-5	Carbon tetrachloride	ND		3.1	0.39
108-90-7	Chlorobenzene	ND		3.1	0.43
75-00-3	Chloroethane	ND		6.3	0.35
67-66-3	Chloroform	ND		3.1	0.41
74-87-3	Chloromethane	ND		6.3	0.49
95-49-8	2-Chlorotoluene	ND		3.1	0.41
106-43-4	4-Chlorotoluene	ND		3.1	0.43
124-48-1	Chlorodibromomethane	ND		3.1	0.44
95-50-1	1,2-Dichlorobenzene	ND		3.1	0.43
541-73-1	1,3-Dichlorobenzene	ND		3.1	0.45
106-46-7	1,4-Dichlorobenzene	ND		3.1	0.44
142-28-9	1,3-Dichloropropane	ND		3.1	0.46
563-58-6	1,1-Dichloropropene	ND		3.1	0.43
96-12-8	1,2-Dibromo-3-Chloropropane	ND		6.3	1.1
106-93-4	Ethylene Dibromide	ND		3.1	0.89
74-95-3	Dibromomethane	ND		6.3	0.54
75-71-8	Dichlorodifluoromethane	ND		6.3	0.49
75-34-3	1,1-Dichloroethane	ND		3.1	0.43
107-06-2	1,2-Dichloroethane	ND		3.1	0.48
75-35-4	1,1-Dichloroethene	ND	*	3.1	0.39
156-59-2	cis-1,2-Dichloroethene	ND		3.1	0.43
156-60-5	trans-1,2-Dichloroethene	ND		3.1	0.47
78-87-5	1,2-Dichloropropane	ND		3.1	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-H5S-3.5-4 Lab Sample ID: 720-88218-7

Matrix: Solid Lab File ID: 08281834.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:30

Sample wt/vol: 7.995(g) Date Analyzed: 08/29/2018 00:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.1	0.43
10061-02-6	trans-1,3-Dichloropropene	ND		3.1	0.42
100-41-4	Ethylbenzene	ND		3.1	0.47
87-68-3	Hexachlorobutadiene	ND		3.1	0.56
591-78-6	2-Hexanone	ND		31	6.3
98-82-8	Isopropylbenzene	ND		3.1	0.43
99-87-6	4-Isopropyltoluene	ND		3.1	1.6
75-09-2	Methylene Chloride	ND		6.3	3.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		31	6.3
91-20-3	Naphthalene	ND		6.3	0.94
103-65-1	N-Propylbenzene	ND		3.1	0.41
100-42-5	Styrene	ND		3.1	0.39
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.1	0.48
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.1	0.47
127-18-4	Tetrachloroethene	ND		3.1	0.42
108-88-3	Toluene	ND		3.1	0.44
87-61-6	1,2,3-Trichlorobenzene	ND		3.1	0.46
120-82-1	1,2,4-Trichlorobenzene	ND		3.1	0.44
71-55-6	1,1,1-Trichloroethane	ND		3.1	0.38
79-00-5	1,1,2-Trichloroethane	ND		3.1	0.44
79-01-6	Trichloroethene	ND		3.1	0.39
75-69-4	Trichlorofluoromethane	ND		3.1	0.35
96-18-4	1,2,3-Trichloropropane	ND		3.1	0.48
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.1	1.3
95-63-6	1,2,4-Trimethylbenzene	ND		3.1	1.0
108-67-8	1,3,5-Trimethylbenzene	ND		3.1	0.41
108-05-4	Vinyl acetate	ND		13	3.1
75-01-4	Vinyl chloride	ND		3.1	0.46
1330-20-7	Xylenes, Total	ND		3.1	0.76
594-20-7	2,2-Dichloropropane	ND		3.1	1.3
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		160	63

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-H5S-3.5-4 Lab Sample ID: 720-88218-7

Matrix: Solid Lab File ID: 08281834.D

Analysis Method: 8260B Date Collected: 08/22/2018 14:30

Sample wt/vol: 7.995(g) Date Analyzed: 08/29/2018 00:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	95		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		60-140
2037-26-5	Toluene-d8 (Surr)	94		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281834.D
Lims ID: 720-88218-A-7-A
Client ID: DG-H5S--3.5-4
Sample Type: Client
Inject. Date: 29-Aug-2018 00:07:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-A-7
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:51 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 10:03:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.819	0.000	0	324380	250.0	
* 2 Fluorobenzene	96	10.605	10.599	0.006	98	952211	25.0	
* 4 Chlorobenzene-d5	117	14.445	14.439	0.006	86	724454	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.585	17.579	0.006	95	368921	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.190	0.000	94	82135	7.69	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.709	9.702	0.007	0	103607	7.74	
$ 10 Toluene-d8 (Surr)	98	12.708	12.708	0.000	93	271310	7.05	
$ 11 4-Bromofluorobenzene	95	15.939	15.933	0.006	94	100259	7.12	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.048	0.000	84	85992	6.02	
28 Acetone	58	6.380	6.368	0.012	99	21287	19.1	
34 Methylene Chloride	84	7.087	7.075	0.012	86	1334	0.1295	
45 2-Butanone (MEK)	72	8.648	8.635	0.013	99	1869	1.47	
49 cis-1,2-Dichloroethene	61	8.825	8.812	0.013	78	1342	0.0857	
59 Benzene	78	10.379	10.367	0.012	87	1362	0.0336	
66 Trichloroethene	132	11.099	11.092	0.006	93	1919	0.1828	
75 Toluene	92	12.799	12.787	0.012	96	1567	0.0658	
149 1-Chlorohexane	55	14.439	14.354	0.085	33	7490	0.6167	
128 Butyl Ether	87	14.665	14.659	0.006	95	431	0.0598	
29 Pentane	43	6.374	6.410	-0.036	71	72390	NR	
99 n-Decane	57	16.713	16.829	-0.116	86	2190	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	631484	7.23	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	169851	1.95	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	234379	2.68	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	710470	8.14	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	284127	3.25	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	665566	7.62	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	363113	4.16	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	122652	1.40	
A 121 C7-C12	1	15.448	(10.891-20.005)		0	262495	3.01	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

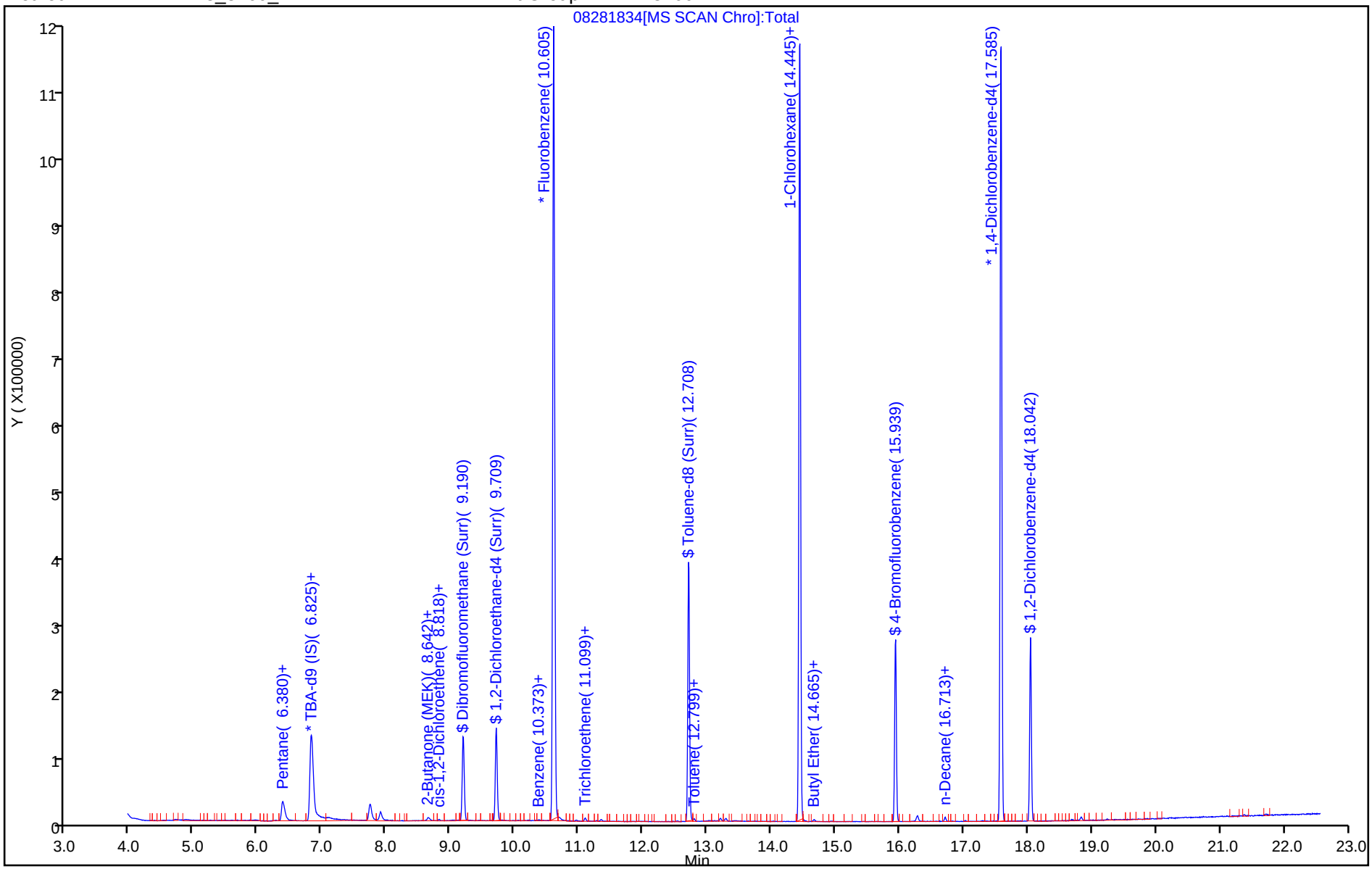
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 10:03:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281834.D

Injection Date:	29-Aug-2018 00:07:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88218-A-7-A	Lab Sample ID:	720-88218-7	Worklist Smp#:	13
Client ID:	DG-H5S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281834.D
Lims ID: 720-88218-A-7-A
Client ID: DG-H5S--3.5-4
Sample Type: Client
Inject. Date: 29-Aug-2018 00:07:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-A-7
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:51 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 10:03:11

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.74	103.18
$ 10 Toluene-d8 (Surr)	7.50	7.05	93.93
$ 11 4-Bromofluorobenzene	7.50	7.12	94.88
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

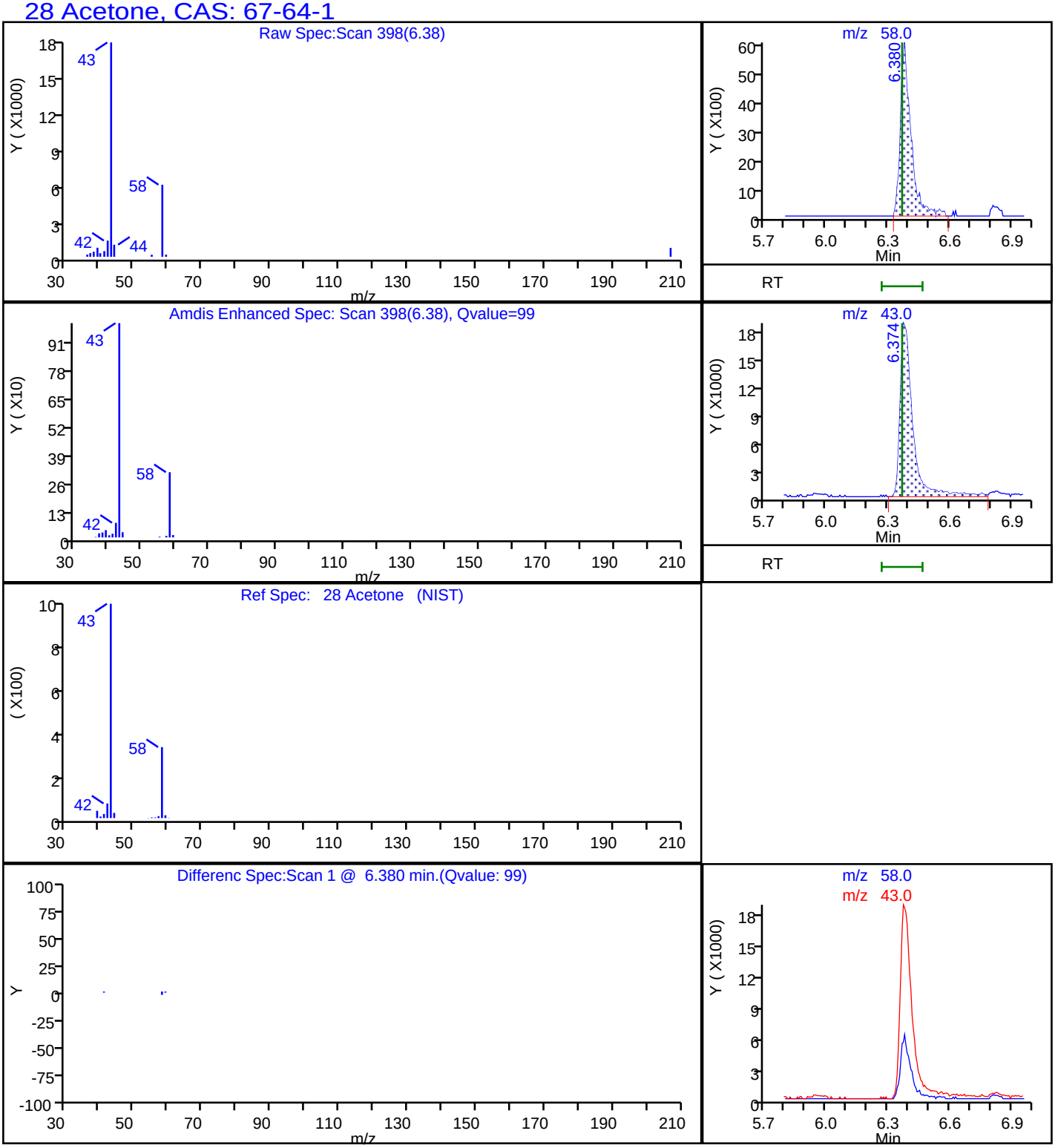
Report Date: 29-Aug-2018 10:03:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281834.D

Injection Date:	29-Aug-2018 00:07:30	Instrument ID:	HP13		
Lims ID:	720-88218-A-7-A	Lab Sample ID:	720-88218-7		
Client ID:	DG-H5S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



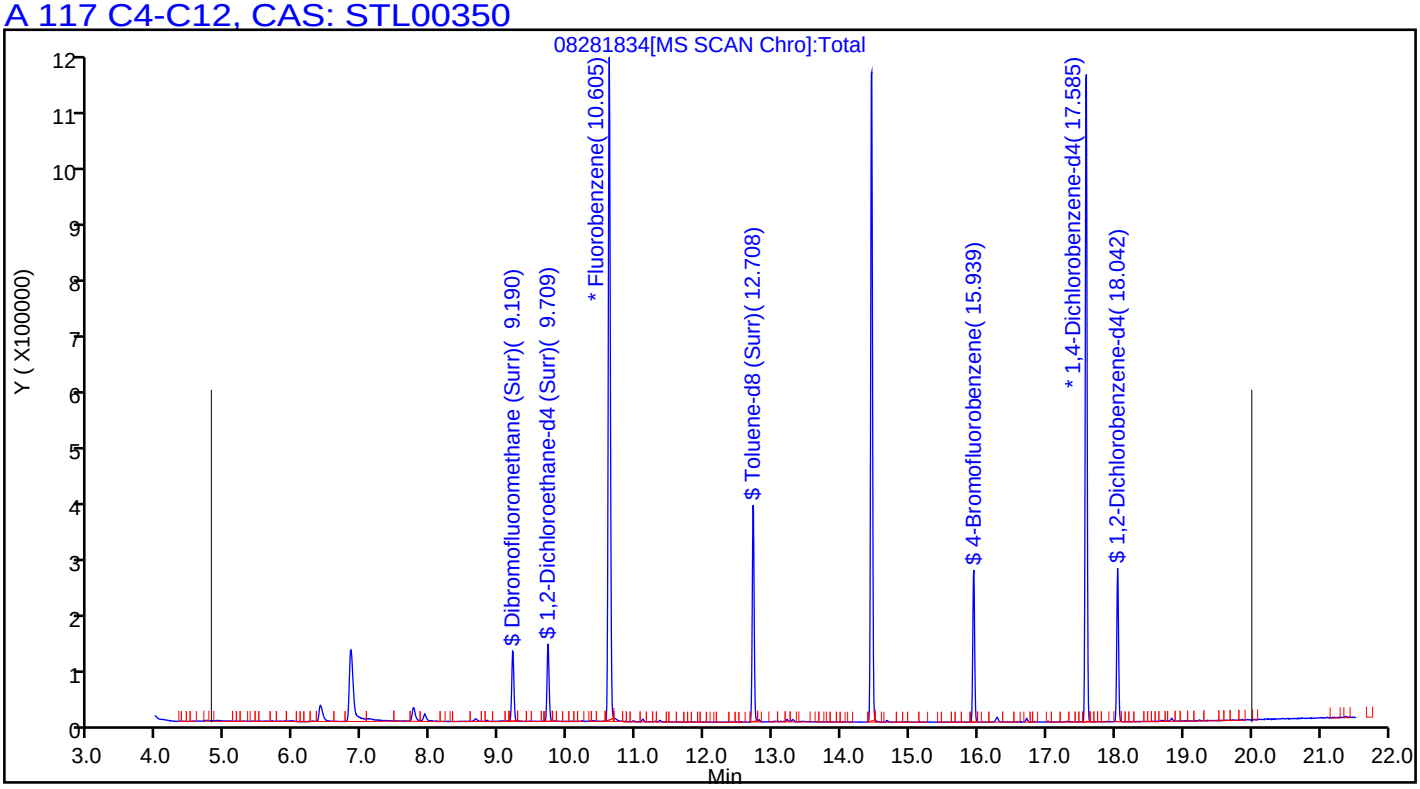
Report Date: 29-Aug-2018 10:03:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281834.D

Injection Date:	29-Aug-2018 00:07:30	Instrument ID:	HP13		
Lims ID:	720-88218-A-7-A	Lab Sample ID:	720-88218-7		
Client ID:	DG-H5S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-F5S-0.5-1 Lab Sample ID: 720-88218-10

Matrix: Solid Lab File ID: 08281835.D

Analysis Method: 8260B Date Collected: 08/22/2018 15:45

Sample wt/vol: 4.664(g) Date Analyzed: 08/29/2018 00:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		5.4	1.3
67-64-1	Acetone	ND		54	41
71-43-2	Benzene	ND		5.4	0.70
75-27-4	Dichlorobromomethane	ND		5.4	0.77
108-86-1	Bromobenzene	ND		5.4	0.85
74-97-5	Chlorobromomethane	ND		21	0.77
75-25-2	Bromoform	ND		5.4	2.1
74-83-9	Bromomethane	ND		11	0.85
78-93-3	2-Butanone (MEK)	ND		54	23
104-51-8	n-Butylbenzene	ND		5.4	1.1
135-98-8	sec-Butylbenzene	ND		5.4	0.77
98-06-6	tert-Butylbenzene	ND		5.4	0.78
75-15-0	Carbon disulfide	ND		5.4	2.1
56-23-5	Carbon tetrachloride	ND		5.4	0.66
108-90-7	Chlorobenzene	ND		5.4	0.74
75-00-3	Chloroethane	ND		11	0.60
67-66-3	Chloroform	ND		5.4	0.71
74-87-3	Chloromethane	ND		11	0.85
95-49-8	2-Chlorotoluene	ND		5.4	0.70
106-43-4	4-Chlorotoluene	ND		5.4	0.73
124-48-1	Chlorodibromomethane	ND		5.4	0.76
95-50-1	1,2-Dichlorobenzene	ND		5.4	0.73
541-73-1	1,3-Dichlorobenzene	ND		5.4	0.77
106-46-7	1,4-Dichlorobenzene	ND		5.4	0.76
142-28-9	1,3-Dichloropropane	ND		5.4	0.78
563-58-6	1,1-Dichloropropene	ND		5.4	0.74
96-12-8	1,2-Dibromo-3-Chloropropane	ND		11	1.8
106-93-4	Ethylene Dibromide	ND		5.4	1.5
74-95-3	Dibromomethane	ND		11	0.92
75-71-8	Dichlorodifluoromethane	ND		11	0.85
75-34-3	1,1-Dichloroethane	ND		5.4	0.73
107-06-2	1,2-Dichloroethane	ND		5.4	0.81
75-35-4	1,1-Dichloroethene	ND	*	5.4	0.66
156-59-2	cis-1,2-Dichloroethene	ND		5.4	0.73
156-60-5	trans-1,2-Dichloroethene	ND		5.4	0.80
78-87-5	1,2-Dichloropropane	ND		5.4	0.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-F5S-0.5-1 Lab Sample ID: 720-88218-10

Matrix: Solid Lab File ID: 08281835.D

Analysis Method: 8260B Date Collected: 08/22/2018 15:45

Sample wt/vol: 4.664(g) Date Analyzed: 08/29/2018 00:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		5.4	0.74
10061-02-6	trans-1,3-Dichloropropene	ND		5.4	0.72
100-41-4	Ethylbenzene	ND		5.4	0.80
87-68-3	Hexachlorobutadiene	ND		5.4	0.96
591-78-6	2-Hexanone	ND		54	11
98-82-8	Isopropylbenzene	ND		5.4	0.73
99-87-6	4-Isopropyltoluene	ND		5.4	2.7
75-09-2	Methylene Chloride	ND		11	6.0
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		54	11
91-20-3	Naphthalene	ND		11	1.6
103-65-1	N-Propylbenzene	ND		5.4	0.71
100-42-5	Styrene	ND		5.4	0.68
630-20-6	1,1,1,2-Tetrachloroethane	ND		5.4	0.81
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.4	0.80
127-18-4	Tetrachloroethene	ND		5.4	0.72
108-88-3	Toluene	ND		5.4	0.76
87-61-6	1,2,3-Trichlorobenzene	ND		5.4	0.79
120-82-1	1,2,4-Trichlorobenzene	ND		5.4	0.76
71-55-6	1,1,1-Trichloroethane	ND		5.4	0.65
79-00-5	1,1,2-Trichloroethane	ND		5.4	0.75
79-01-6	Trichloroethene	ND		5.4	0.68
75-69-4	Trichlorofluoromethane	ND		5.4	0.60
96-18-4	1,2,3-Trichloropropane	ND		5.4	0.83
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	5.4	2.2
95-63-6	1,2,4-Trimethylbenzene	ND		5.4	1.8
108-67-8	1,3,5-Trimethylbenzene	ND		5.4	0.70
108-05-4	Vinyl acetate	ND		21	5.4
75-01-4	Vinyl chloride	ND		5.4	0.78
1330-20-7	Xylenes, Total	ND		5.4	1.3
594-20-7	2,2-Dichloropropane	ND		5.4	2.1
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		270	110

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-F5S-0.5-1 Lab Sample ID: 720-88218-10

Matrix: Solid Lab File ID: 08281835.D

Analysis Method: 8260B Date Collected: 08/22/2018 15:45

Sample wt/vol: 4.664(g) Date Analyzed: 08/29/2018 00:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	94		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		60-140
2037-26-5	Toluene-d8 (Surr)	92		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281835.D
Lims ID: 720-88218-A-10-A
Client ID: DG-F5S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 00:37:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-A-10
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:51 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 10:03:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.819	0.006	0	311888	250.0	
* 2 Fluorobenzene	96	10.605	10.599	0.006	99	927042	25.0	
* 4 Chlorobenzene-d5	117	14.445	14.439	0.006	87	691594	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.585	17.579	0.006	95	335423	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.196	9.190	0.006	93	79535	7.65	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.702	0.006	0	98927	7.59	
$ 10 Toluene-d8 (Surr)	98	12.708	12.708	0.000	93	257385	6.86	
$ 11 4-Bromofluorobenzene	95	15.939	15.933	0.006	95	95050	7.07	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.048	0.000	84	79635	6.13	
28 Acetone	58	6.386	6.368	0.018	100	15470	14.2	
144 Methyl acetate	43	7.130	7.124	0.006	99	4263	0.5380	
45 2-Butanone (MEK)	72	8.660	8.635	0.025	64	1001	0.8061	
49 cis-1,2-Dichloroethene	61	8.818	8.812	0.006	78	470	0.0308	
59 Benzene	78	10.385	10.367	0.018	96	1470	0.0373	
75 Toluene	92	12.799	12.787	0.012	99	1836	0.0808	
149 1-Chlorohexane	55	14.439	14.354	0.085	45	7530	0.6368	
128 Butyl Ether	87	14.665	14.659	0.006	94	959	0.1394	
85 m-Xylene & p-Xylene	91	14.927	14.933	-0.006	0	1986	0.0569	
101 1,2,4-Trimethylbenzene	105	17.286	17.286	0.006	93	1987	0.0550	
105 4-Isopropyltoluene	119	17.646	17.646	0.006	92	1158	0.0310	
29 Pentane	43	6.380	6.410	-0.030	69	53718	NR	
131 n-Octane	43	13.110	13.110	0.000	86	4223	NR	
135 n-Nonane	57	15.067	15.055	0.012	94	1595	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	1004999	11.8	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	214419	2.52	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	320494	3.77	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1115903	13.1	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	388243	4.57	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	1065931	12.5	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	499147	5.87	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	188165	2.21	

Report Date: 29-Aug-2018 10:03:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281835.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 121 C7-C12	1	15.448	(10.891-20.005)		0	368855	4.34	
S 122 Xylenes, Total	1				0		0.0569	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

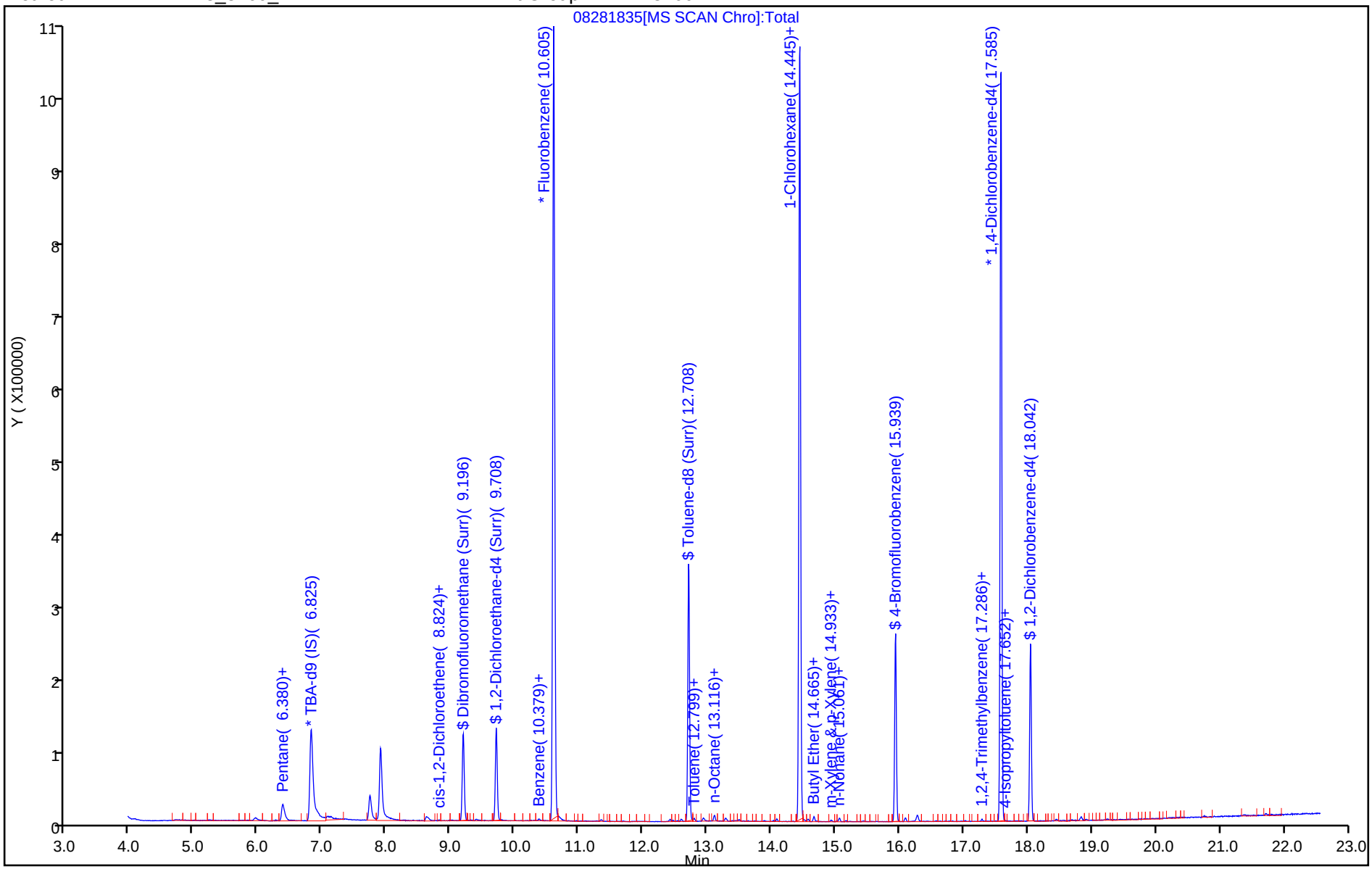
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 10:03:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281835.D

Injection Date:	29-Aug-2018 00:37:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88218-A-10-A	Lab Sample ID:	720-88218-10	Worklist Smp#:	14
Client ID:	DG-F5S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281835.D
Lims ID: 720-88218-A-10-A
Client ID: DG-F5S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 00:37:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-A-10
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:51 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 10:03:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.59	101.19
$ 10 Toluene-d8 (Surr)	7.50	6.86	91.53
$ 11 4-Bromofluorobenzene	7.50	7.07	94.23
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

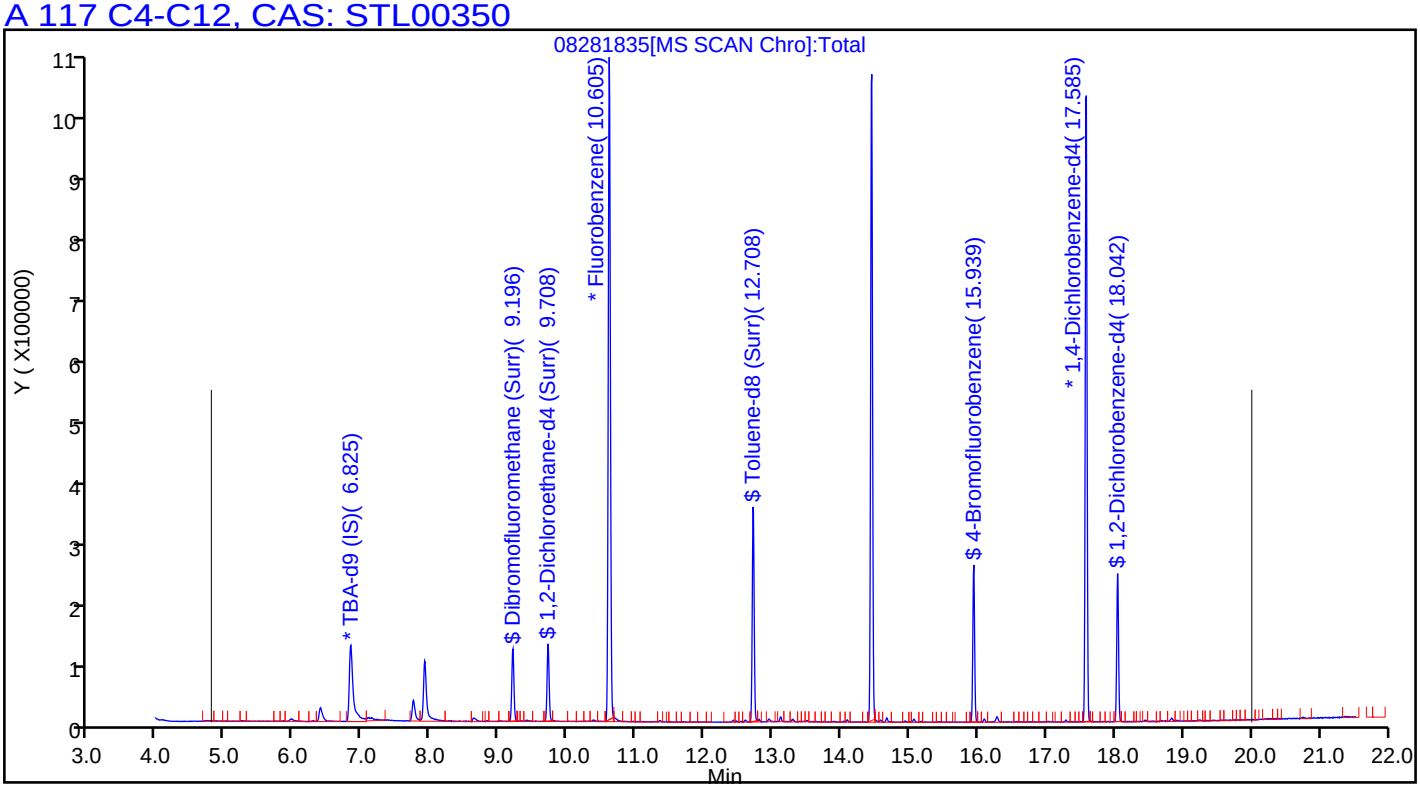
Report Date: 29-Aug-2018 10:03:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281835.D

Injection Date:	29-Aug-2018 00:37:30	Instrument ID:	HP13		
Lims ID:	720-88218-A-10-A	Lab Sample ID:	720-88218-10		
Client ID:	DG-F5S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-F5S-3.5-4 Lab Sample ID: 720-88218-11

Matrix: Solid Lab File ID: 08291822.D

Analysis Method: 8260B Date Collected: 08/22/2018 15:45

Sample wt/vol: 4.295(g) Date Analyzed: 08/29/2018 16:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND	*	5.8	1.4
67-64-1	Acetone	58	*	58	44
71-43-2	Benzene	ND	*	5.8	0.76
75-27-4	Dichlorobromomethane	ND	*	5.8	0.84
108-86-1	Bromobenzene	ND	*	5.8	0.92
74-97-5	Chlorobromomethane	ND	*	23	0.84
75-25-2	Bromoform	ND	*	5.8	2.3
74-83-9	Bromomethane	ND	*	12	0.92
78-93-3	2-Butanone (MEK)	ND	*	58	24
104-51-8	n-Butylbenzene	ND	*	5.8	1.2
135-98-8	sec-Butylbenzene	ND	*	5.8	0.84
98-06-6	tert-Butylbenzene	ND	*	5.8	0.85
75-15-0	Carbon disulfide	ND	*	5.8	2.3
56-23-5	Carbon tetrachloride	ND	*	5.8	0.72
108-90-7	Chlorobenzene	ND	*	5.8	0.80
75-00-3	Chloroethane	ND	*	12	0.65
67-66-3	Chloroform	ND	*	5.8	0.77
74-87-3	Chloromethane	ND	*	12	0.92
95-49-8	2-Chlorotoluene	ND	*	5.8	0.76
106-43-4	4-Chlorotoluene	ND	*	5.8	0.79
124-48-1	Chlorodibromomethane	ND	*	5.8	0.83
95-50-1	1,2-Dichlorobenzene	ND	*	5.8	0.79
541-73-1	1,3-Dichlorobenzene	ND	*	5.8	0.84
106-46-7	1,4-Dichlorobenzene	ND	*	5.8	0.83
142-28-9	1,3-Dichloropropane	ND	*	5.8	0.85
563-58-6	1,1-Dichloropropene	ND	*	5.8	0.80
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	12	2.0
106-93-4	Ethylene Dibromide	ND	*	5.8	1.7
74-95-3	Dibromomethane	ND	*	12	1.0
75-71-8	Dichlorodifluoromethane	ND	*	12	0.92
75-34-3	1,1-Dichloroethane	ND	*	5.8	0.79
107-06-2	1,2-Dichloroethane	ND	*	5.8	0.88
75-35-4	1,1-Dichloroethene	ND	*	5.8	0.72
156-59-2	cis-1,2-Dichloroethene	ND	*	5.8	0.79
156-60-5	trans-1,2-Dichloroethene	ND	*	5.8	0.87
78-87-5	1,2-Dichloropropane	ND	*	5.8	0.73

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-F5S-3.5-4 Lab Sample ID: 720-88218-11

Matrix: Solid Lab File ID: 08291822.D

Analysis Method: 8260B Date Collected: 08/22/2018 15:45

Sample wt/vol: 4.295(g) Date Analyzed: 08/29/2018 16:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND	*	5.8	0.80
10061-02-6	trans-1,3-Dichloropropene	ND	*	5.8	0.78
100-41-4	Ethylbenzene	ND	*	5.8	0.87
87-68-3	Hexachlorobutadiene	ND	*	5.8	1.0
591-78-6	2-Hexanone	ND	*	58	12
98-82-8	Isopropylbenzene	ND	*	5.8	0.79
99-87-6	4-Isopropyltoluene	ND	*	5.8	2.9
75-09-2	Methylene Chloride	ND	*	12	6.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	*	58	12
91-20-3	Naphthalene	ND	*	12	1.7
103-65-1	N-Propylbenzene	ND	*	5.8	0.77
100-42-5	Styrene	ND	*	5.8	0.73
630-20-6	1,1,1,2-Tetrachloroethane	ND	*	5.8	0.88
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	5.8	0.87
127-18-4	Tetrachloroethene	ND	*	5.8	0.78
108-88-3	Toluene	ND	*	5.8	0.83
87-61-6	1,2,3-Trichlorobenzene	ND	*	5.8	0.86
120-82-1	1,2,4-Trichlorobenzene	ND	*	5.8	0.83
71-55-6	1,1,1-Trichloroethane	ND	*	5.8	0.71
79-00-5	1,1,2-Trichloroethane	ND	*	5.8	0.81
79-01-6	Trichloroethene	ND	*	5.8	0.73
75-69-4	Trichlorofluoromethane	ND	*	5.8	0.65
96-18-4	1,2,3-Trichloropropane	ND	*	5.8	0.90
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	5.8	2.4
95-63-6	1,2,4-Trimethylbenzene	ND	*	5.8	1.9
108-67-8	1,3,5-Trimethylbenzene	ND	*	5.8	0.76
108-05-4	Vinyl acetate	ND	*	23	5.8
75-01-4	Vinyl chloride	ND	*	5.8	0.85
1330-20-7	Xylenes, Total	ND		5.8	1.4
594-20-7	2,2-Dichloropropane	ND	*	5.8	2.3
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND	*	290	120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-F5S-3.5-4 Lab Sample ID: 720-88218-11

Matrix: Solid Lab File ID: 08291822.D

Analysis Method: 8260B Date Collected: 08/22/2018 15:45

Sample wt/vol: 4.295(g) Date Analyzed: 08/29/2018 16:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	87	*	45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119	*	60-140
2037-26-5	Toluene-d8 (Surr)	91	*	58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291822.D
Lims ID: 720-88218-B-11-A
Client ID: DG-F5S--3.5-4
Sample Type: Client
Inject. Date: 29-Aug-2018 16:10:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-B-11 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 30-Aug-2018 08:49:35 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 08:49:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	119057	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	543666	25.0	s
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	86	411658	25.0	s
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	95	157828	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.305	9.314	0.001	91	37767	8.20	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.812	9.821	0.001	0	44194	8.93	
$ 10 Toluene-d8 (Surr)	98	12.822	12.834	0.001	95	146688	6.80	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	89	41718	6.51	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	38840	7.03	
28 Acetone	58	6.474	6.480	0.000	97	10401	24.9	
144 Ethyl acetate	43	9.114	9.113	0.010	97	33949	5.89	
124 Butane	43	5.006	4.996	0.010	1	903	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	923090	22.0	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	181533	4.33	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	196750	4.69	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	1000530	23.8	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	223900	5.34	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	223900	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	943706	22.5	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	301340	7.18	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	117448	2.80	
A 121 C7-C12	1	15.567	(11.005-20.130)		0	203667	4.85	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

s - Failed ISTD Recovery Test

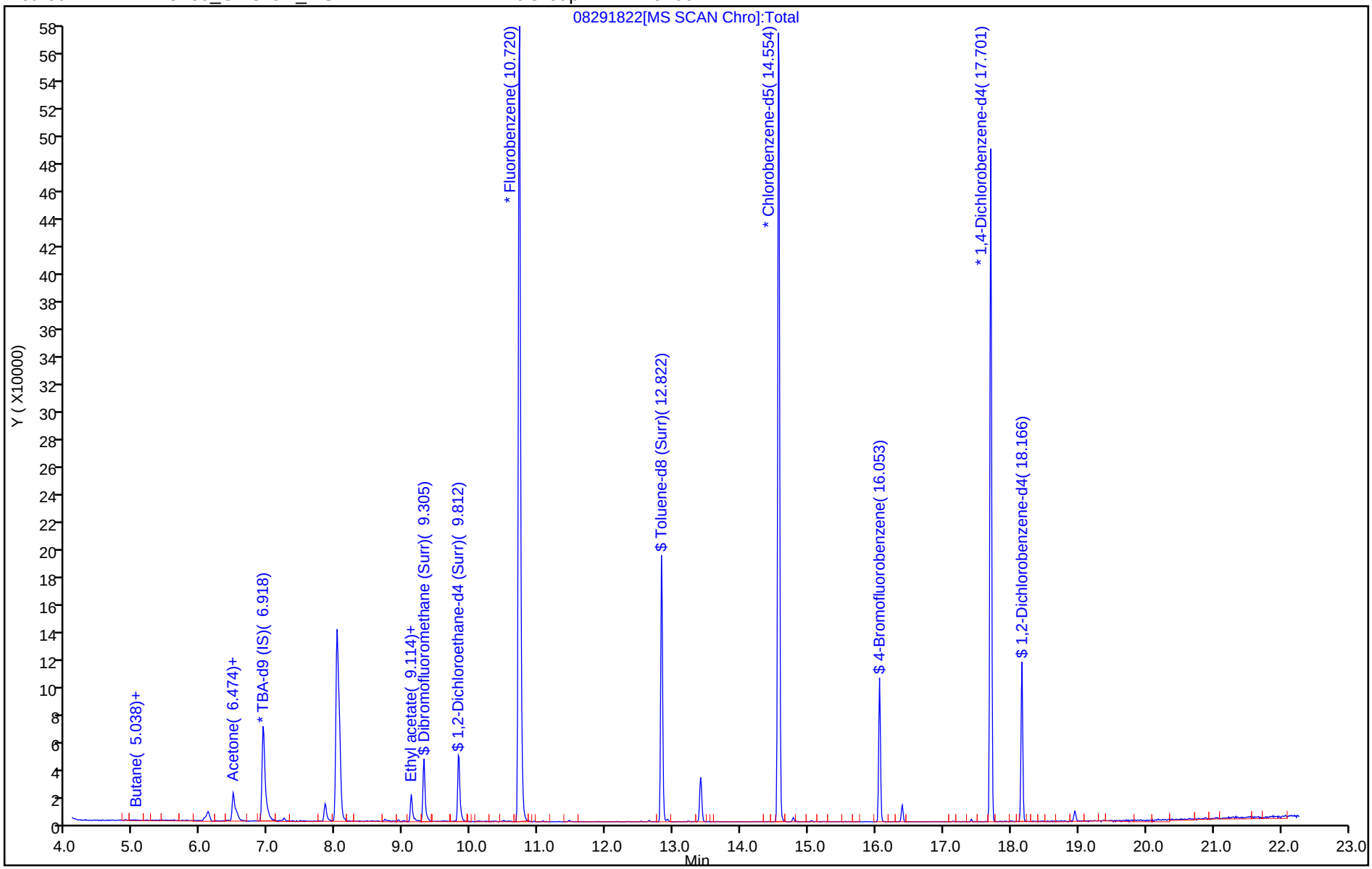
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 08:49:36 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291822.D				
Injection Date:	29-Aug-2018 16:10:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88218-B-11-A	Lab Sample ID:	720-88218-11	Worklist Smp#:	20
Client ID:	DG-F5S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291822.D
Lims ID: 720-88218-B-11-A
Client ID: DG-F5S--3.5-4
Sample Type: Client
Inject. Date: 29-Aug-2018 16:10:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-B-11 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 30-Aug-2018 08:49:35 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

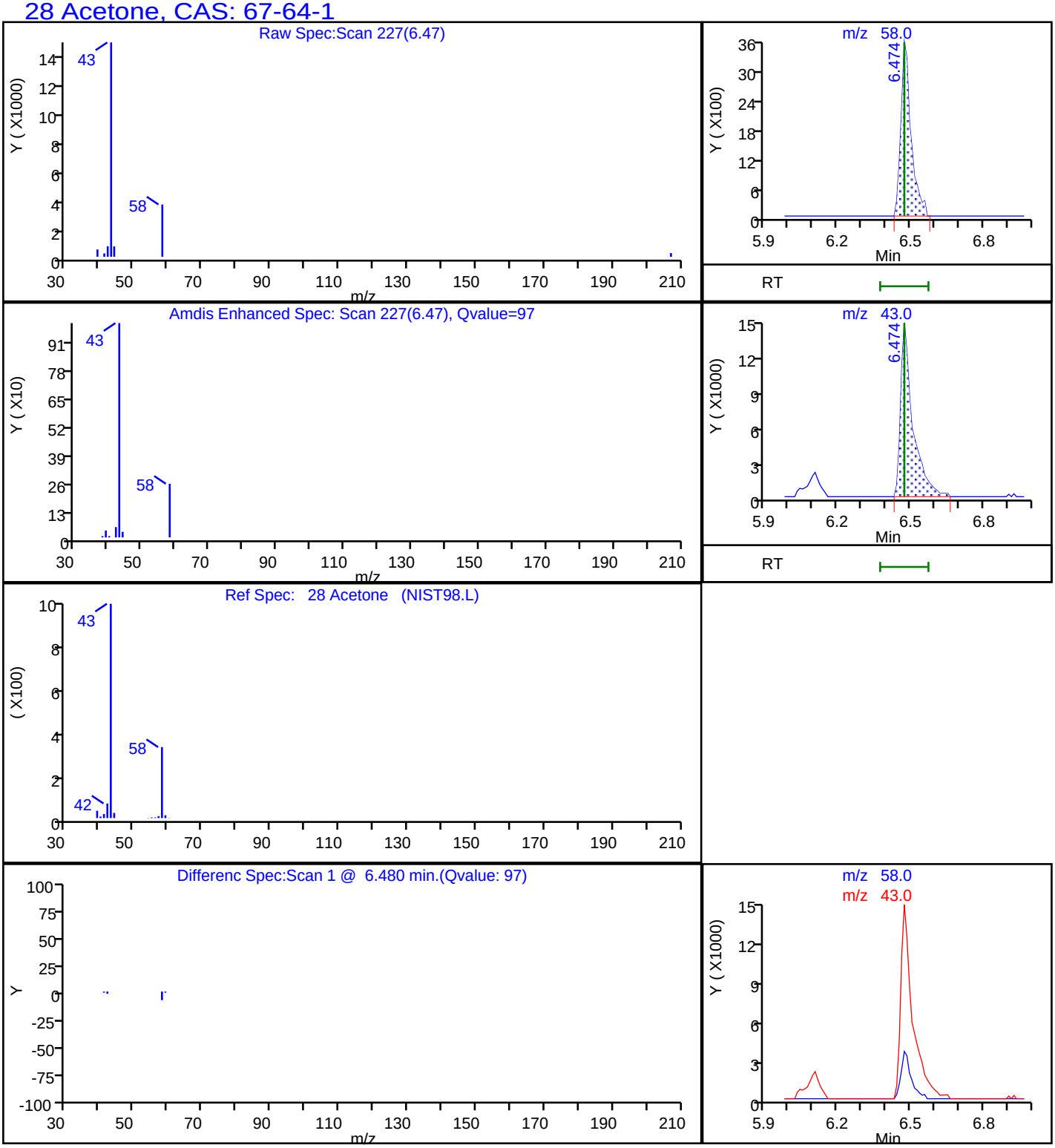
First Level Reviewer: chaijita Date: 30-Aug-2018 08:49:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.93	119.10
$ 10 Toluene-d8 (Surr)	7.50	6.80	90.60
$ 11 4-Bromofluorobenzene	7.50	6.51	86.77
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291822.D				
Injection Date:	29-Aug-2018 16:10:30	Instrument ID:	CHMSV2		
Lims ID:	720-88218-B-11-A	Lab Sample ID:	720-88218-11		
Client ID:	DG-F5S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



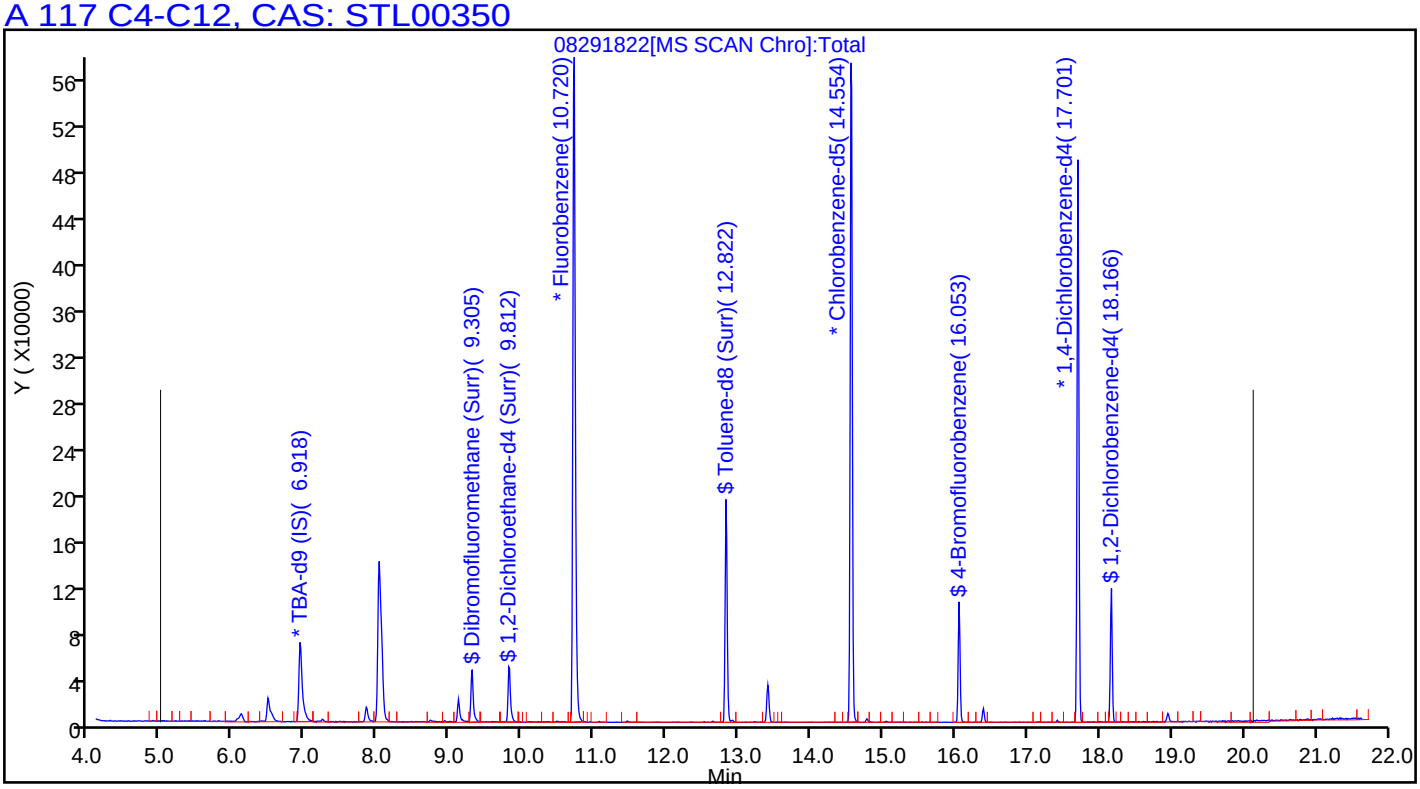
Report Date: 30-Aug-2018 08:49:36 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291822.D

Injection Date:	29-Aug-2018 16:10:30	Instrument ID:	CHMSV2		
Lims ID:	720-88218-B-11-A	Lab Sample ID:	720-88218-11		
Client ID:	DG-F5S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



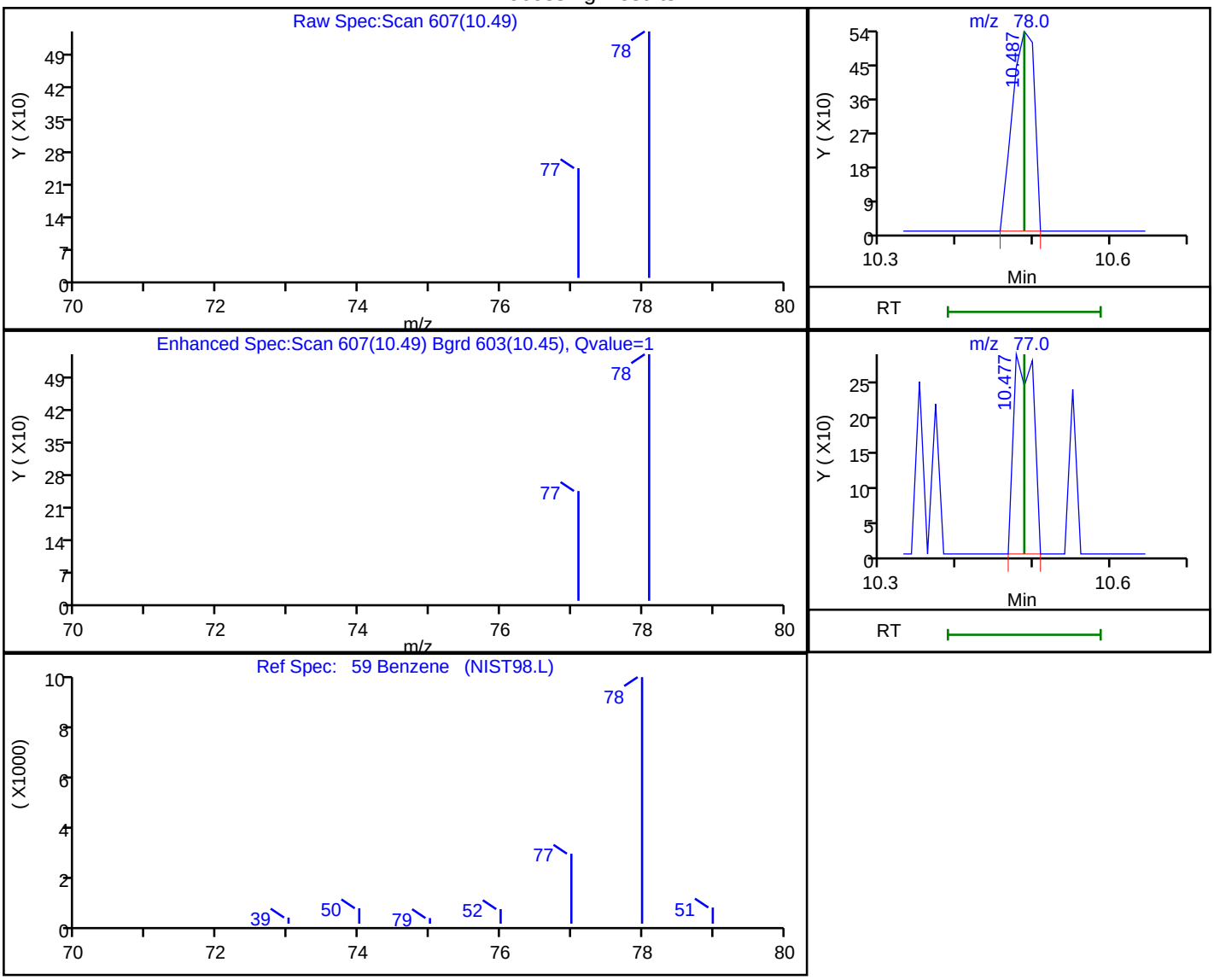
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291822.D				
Injection Date:	29-Aug-2018 16:10:30	Instrument ID:	CHMSV2		
Lims ID:	720-88218-B-11-A	Lab Sample ID:	720-88218-11		
Client ID:	DG-F5S--3.5-4				
Operator ID:	VOA	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

59 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
10.49	78.00	1076	0.054866
10.48	77.00	508	

Reviewer: chaijita, 30-Aug-2018 08:49:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-D5S-0.5-1 Lab Sample ID: 720-88218-14

Matrix: Solid Lab File ID: 08281837.D

Analysis Method: 8260B Date Collected: 08/22/2018 16:45

Sample wt/vol: 5.594(g) Date Analyzed: 08/29/2018 01:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.5	1.1
67-64-1	Acetone	39	J	45	34
71-43-2	Benzene	ND		4.5	0.58
75-27-4	Dichlorobromomethane	ND		4.5	0.64
108-86-1	Bromobenzene	ND		4.5	0.71
74-97-5	Chlorobromomethane	ND		18	0.64
75-25-2	Bromoform	ND		4.5	1.8
74-83-9	Bromomethane	ND		8.9	0.71
78-93-3	2-Butanone (MEK)	ND		45	19
104-51-8	n-Butylbenzene	ND		4.5	0.89
135-98-8	sec-Butylbenzene	ND		4.5	0.64
98-06-6	tert-Butylbenzene	ND		4.5	0.65
75-15-0	Carbon disulfide	ND		4.5	1.8
56-23-5	Carbon tetrachloride	ND		4.5	0.55
108-90-7	Chlorobenzene	ND		4.5	0.62
75-00-3	Chloroethane	ND		8.9	0.50
67-66-3	Chloroform	ND		4.5	0.59
74-87-3	Chloromethane	ND		8.9	0.71
95-49-8	2-Chlorotoluene	ND		4.5	0.58
106-43-4	4-Chlorotoluene	ND		4.5	0.61
124-48-1	Chlorodibromomethane	ND		4.5	0.63
95-50-1	1,2-Dichlorobenzene	ND		4.5	0.61
541-73-1	1,3-Dichlorobenzene	ND		4.5	0.64
106-46-7	1,4-Dichlorobenzene	ND		4.5	0.63
142-28-9	1,3-Dichloropropane	ND		4.5	0.65
563-58-6	1,1-Dichloropropene	ND		4.5	0.62
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.9	1.5
106-93-4	Ethylene Dibromide	ND		4.5	1.3
74-95-3	Dibromomethane	ND		8.9	0.77
75-71-8	Dichlorodifluoromethane	ND		8.9	0.71
75-34-3	1,1-Dichloroethane	ND		4.5	0.61
107-06-2	1,2-Dichloroethane	ND		4.5	0.68
75-35-4	1,1-Dichloroethene	ND	*	4.5	0.55
156-59-2	cis-1,2-Dichloroethene	ND		4.5	0.61
156-60-5	trans-1,2-Dichloroethene	ND		4.5	0.67
78-87-5	1,2-Dichloropropane	ND		4.5	0.56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-D5S-0.5-1 Lab Sample ID: 720-88218-14

Matrix: Solid Lab File ID: 08281837.D

Analysis Method: 8260B Date Collected: 08/22/2018 16:45

Sample wt/vol: 5.594(g) Date Analyzed: 08/29/2018 01:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.5	0.62
10061-02-6	trans-1,3-Dichloropropene	ND		4.5	0.60
100-41-4	Ethylbenzene	ND		4.5	0.67
87-68-3	Hexachlorobutadiene	ND		4.5	0.80
591-78-6	2-Hexanone	ND		45	8.9
98-82-8	Isopropylbenzene	ND		4.5	0.61
99-87-6	4-Isopropyltoluene	ND		4.5	2.2
75-09-2	Methylene Chloride	ND		8.9	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		45	8.9
91-20-3	Naphthalene	ND		8.9	1.3
103-65-1	N-Propylbenzene	ND		4.5	0.59
100-42-5	Styrene	ND		4.5	0.56
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.5	0.68
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.5	0.67
127-18-4	Tetrachloroethene	ND		4.5	0.60
108-88-3	Toluene	ND		4.5	0.63
87-61-6	1,2,3-Trichlorobenzene	ND		4.5	0.66
120-82-1	1,2,4-Trichlorobenzene	ND		4.5	0.63
71-55-6	1,1,1-Trichloroethane	ND		4.5	0.55
79-00-5	1,1,2-Trichloroethane	ND		4.5	0.63
79-01-6	Trichloroethene	0.57	J	4.5	0.56
75-69-4	Trichlorofluoromethane	ND		4.5	0.50
96-18-4	1,2,3-Trichloropropane	ND		4.5	0.69
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	4.5	1.9
95-63-6	1,2,4-Trimethylbenzene	ND		4.5	1.5
108-67-8	1,3,5-Trimethylbenzene	ND		4.5	0.58
108-05-4	Vinyl acetate	ND		18	4.5
75-01-4	Vinyl chloride	ND		4.5	0.65
1330-20-7	Xylenes, Total	ND		4.5	1.1
594-20-7	2,2-Dichloropropane	ND		4.5	1.8
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		220	89

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-D5S-0.5-1 Lab Sample ID: 720-88218-14

Matrix: Solid Lab File ID: 08281837.D

Analysis Method: 8260B Date Collected: 08/22/2018 16:45

Sample wt/vol: 5.594(g) Date Analyzed: 08/29/2018 01:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	95		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		60-140
2037-26-5	Toluene-d8 (Surr)	94		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281837.D
Lims ID: 720-88218-A-14-A
Client ID: DG-D5S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 01:39:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-A-14
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:51 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 10:03:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.831	6.819	0.012	0	300008	250.0	
* 2 Fluorobenzene	96	10.605	10.599	0.006	98	812302	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.439	0.000	87	625915	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.579	0.000	95	315668	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.196	9.190	0.006	94	69556	7.63	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.702	0.006	0	91458	8.01	
$ 10 Toluene-d8 (Surr)	98	12.708	12.708	0.000	94	231196	7.04	
$ 11 4-Bromofluorobenzene	95	15.933	15.933	0.000	94	86411	7.10	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.048	0.000	84	74449	6.09	
28 Acetone	58	6.380	6.368	0.012	99	20933	22.0	
34 Methylene Chloride	84	7.081	7.075	0.006	95	1781	0.2026	
144 Methyl acetate	43	7.136	7.124	0.012	96	2484	0.3578	
45 2-Butanone (MEK)	72	8.660	8.635	0.025	97	656	0.6029	
140 Ethyl acetate	43	9.020	9.001	0.019	98	5487	0.5101	
59 Benzene	78	10.379	10.367	0.012	84	1252	0.0362	
66 Trichloroethene	132	11.098	11.092	0.006	91	2853	0.3186	
75 Toluene	92	12.793	12.787	0.006	97	1811	0.0880	
149 1-Chlorohexane	55	14.439	14.354	0.085	33	6632	0.6401	
128 Butyl Ether	87	14.665	14.659	0.006	94	1563	0.2510	
29 Pentane	43	6.380	6.410	-0.030	70	73570	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	795882	10.7	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	138887	1.86	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	217232	2.92	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	874841	11.7	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	264477	3.55	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	823867	11.1	
A 120 C6-C12	1	14.281	(8.556-20.005)		0	340938	4.58	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	125590	1.69	
A 121 C7-C12	1	15.448	(10.891-20.005)		0	258537	3.47	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

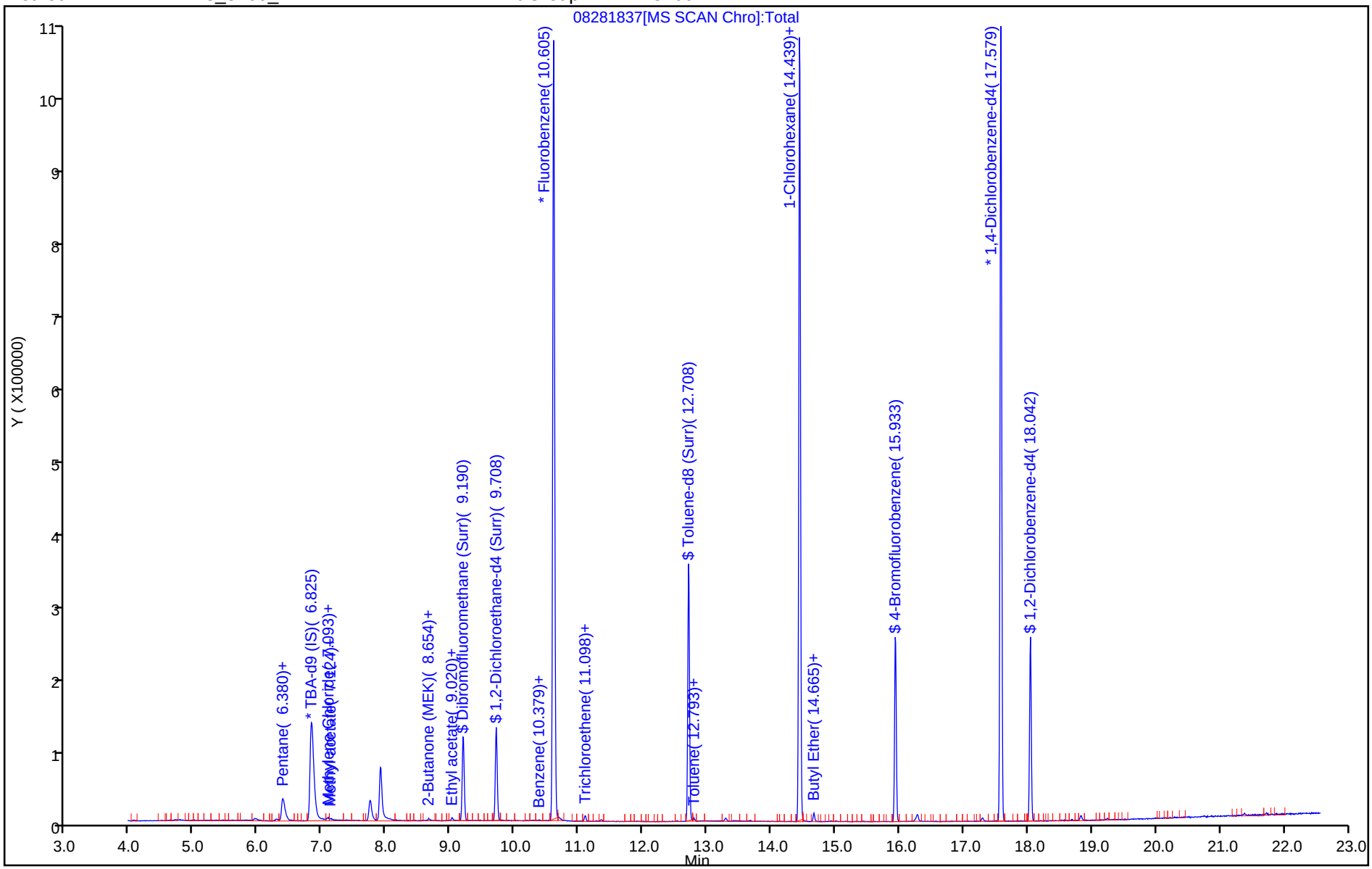
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 10:03:55 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281837.D

Injection Date:	29-Aug-2018 01:39:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88218-A-14-A	Lab Sample ID:	720-88218-14	Worklist Smp#:	16
Client ID:	DG-D5S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281837.D
Lims ID: 720-88218-A-14-A
Client ID: DG-D5S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 01:39:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-A-14
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:51 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 10:03:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.01	106.77
$ 10 Toluene-d8 (Surr)	7.50	7.04	93.83
$ 11 4-Bromofluorobenzene	7.50	7.10	94.65
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

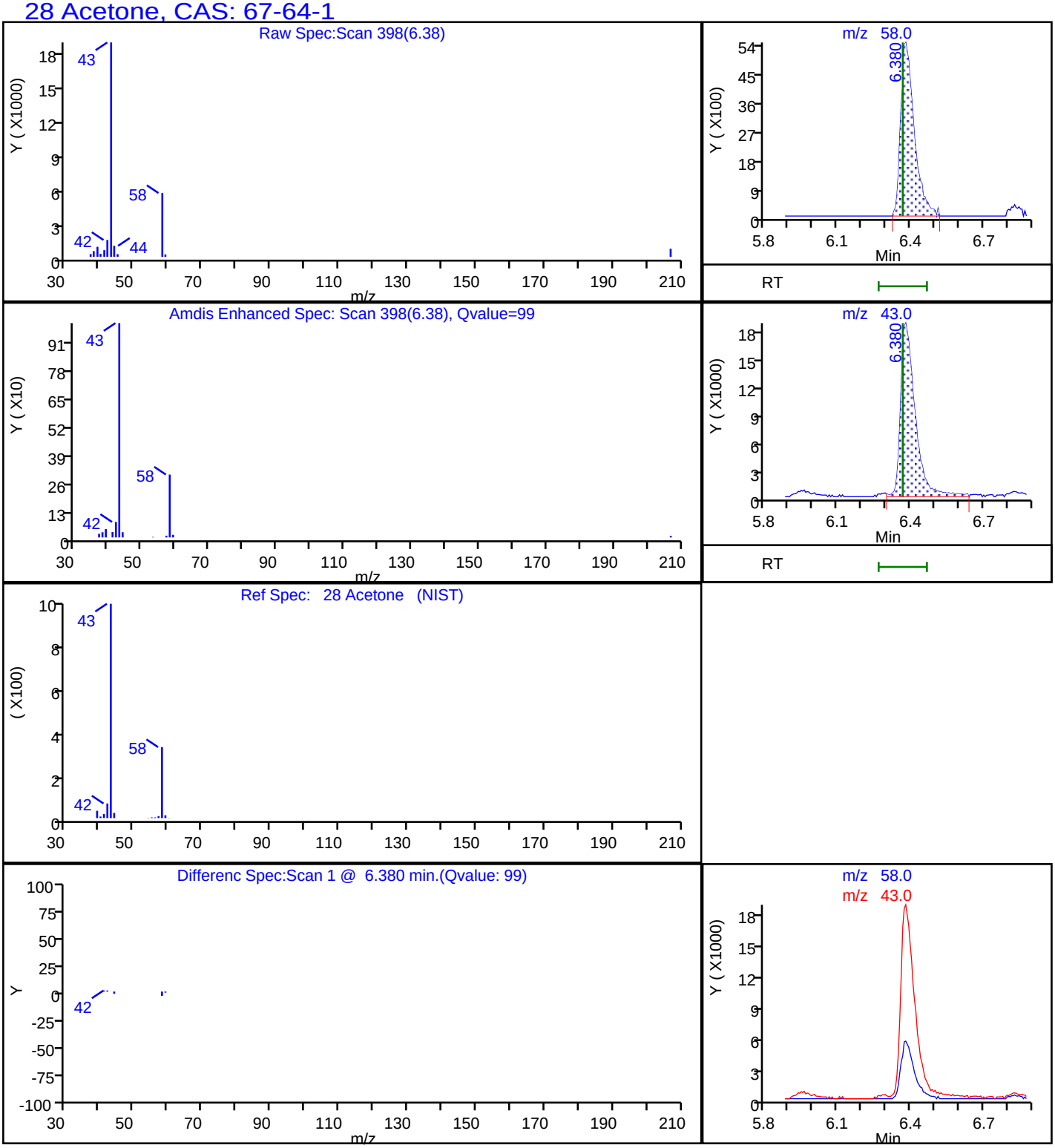
Report Date: 29-Aug-2018 10:03:55 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281837.D

Injection Date:	29-Aug-2018 01:39:30	Instrument ID:	HP13		
Lims ID:	720-88218-A-14-A	Lab Sample ID:	720-88218-14		
Client ID:	DG-D5S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



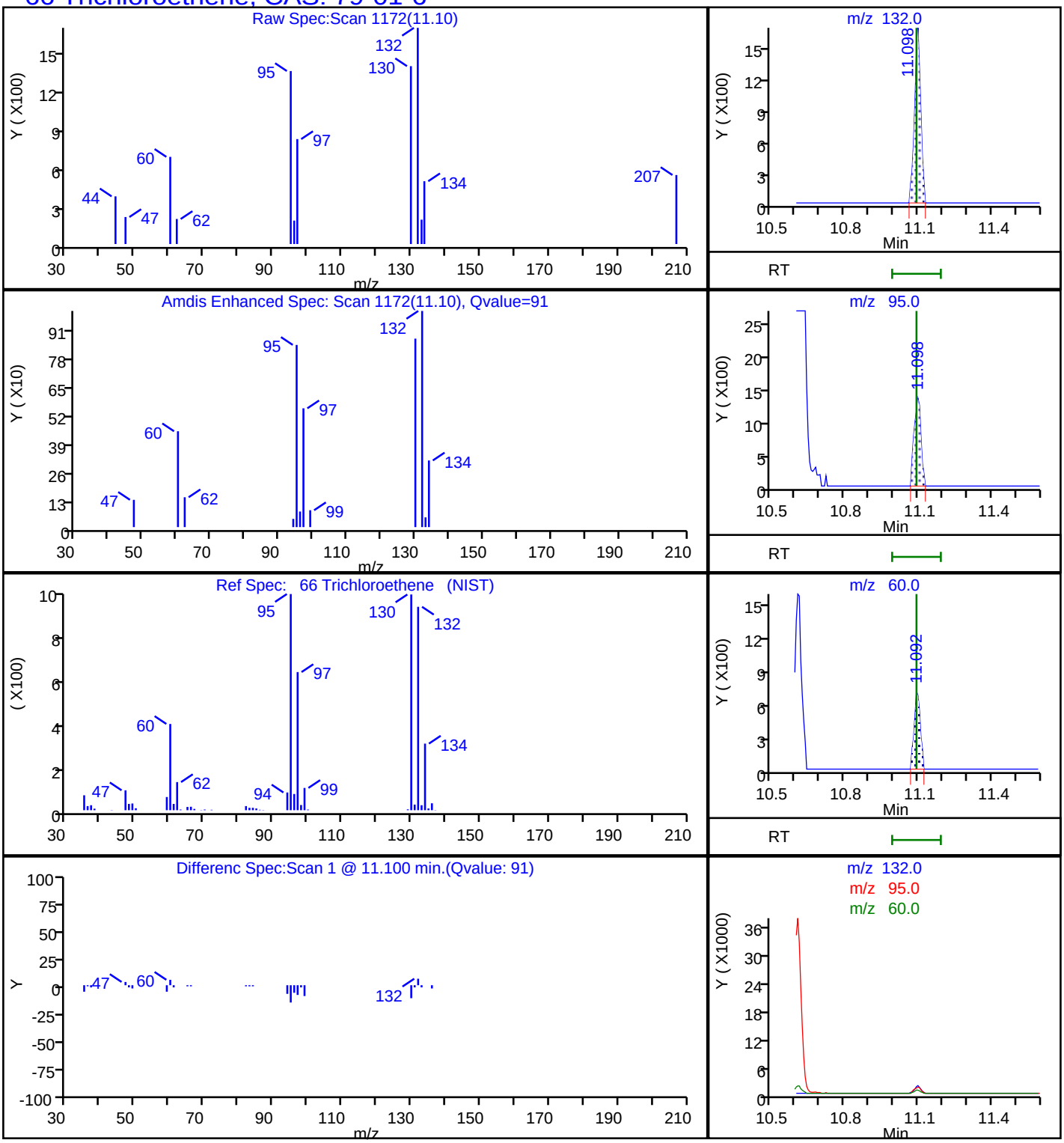
Report Date: 29-Aug-2018 10:03:55 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281837.D

Injection Date:	29-Aug-2018 01:39:30	Instrument ID:	HP13		
Lims ID:	720-88218-A-14-A	Lab Sample ID:	720-88218-14		
Client ID:	DG-D5S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

66 Trichloroethene, CAS: 79-01-6

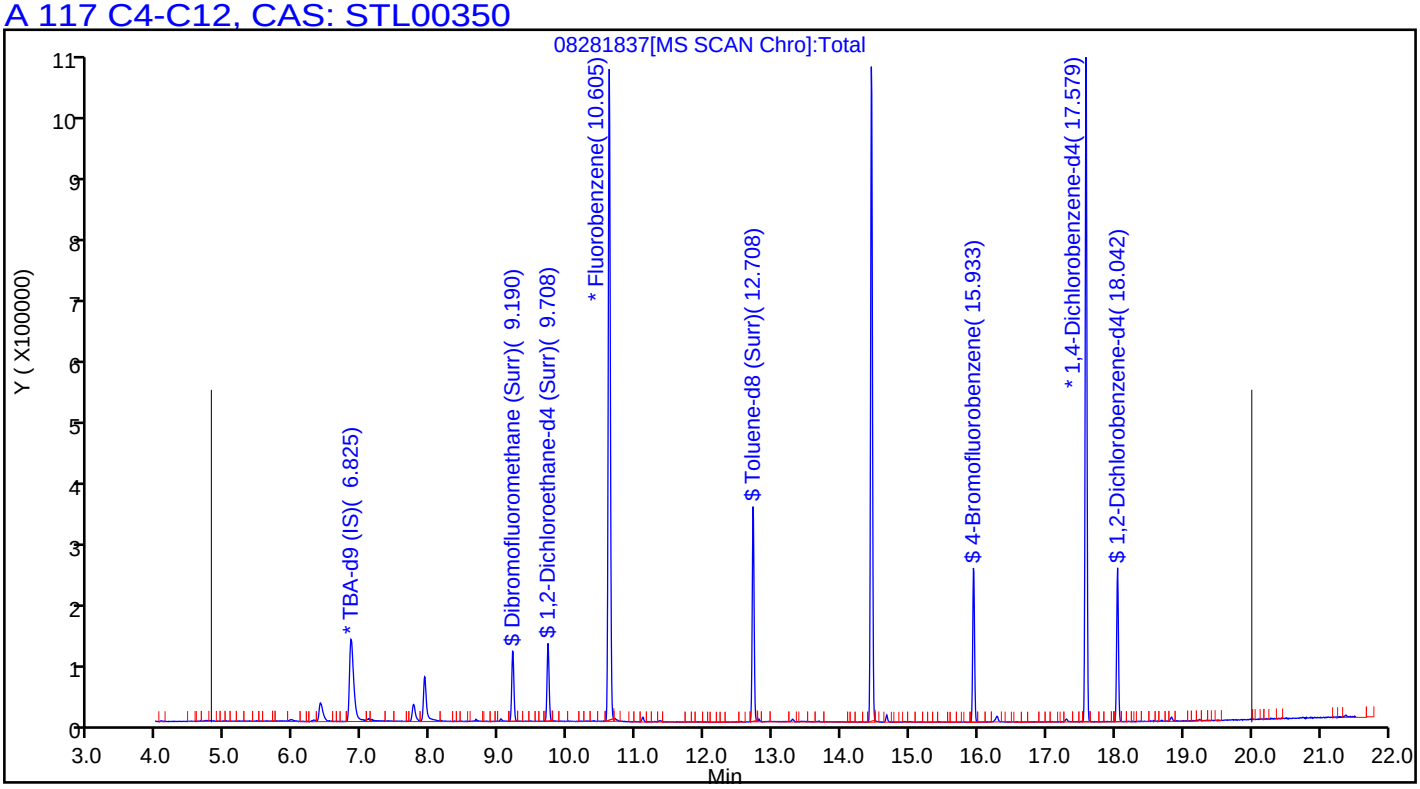


Report Date: 29-Aug-2018 10:03:55 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281837.D				
Injection Date:	29-Aug-2018 01:39:30	Instrument ID:	HP13		
Lims ID:	720-88218-A-14-A	Lab Sample ID:	720-88218-14		
Client ID:	DG-D5S--0.5-1				
Operator ID:	VOA	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-D5S-3.5-4 Lab Sample ID: 720-88218-15

Matrix: Solid Lab File ID: 08311810.D

Analysis Method: 8260B Date Collected: 08/22/2018 16:45

Sample wt/vol: 5.28(g) Date Analyzed: 08/31/2018 10:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250642 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.7	1.1
67-64-1	Acetone	ND	F2	47	36
71-43-2	Benzene	ND		4.7	0.62
75-27-4	Dichlorobromomethane	ND		4.7	0.68
108-86-1	Bromobenzene	ND		4.7	0.75
74-97-5	Chlorobromomethane	ND		19	0.68
75-25-2	Bromoform	ND		4.7	1.9
74-83-9	Bromomethane	ND		9.5	0.75
78-93-3	2-Butanone (MEK)	ND		47	20
104-51-8	n-Butylbenzene	ND		4.7	0.95
135-98-8	sec-Butylbenzene	ND		4.7	0.68
98-06-6	tert-Butylbenzene	ND		4.7	0.69
75-15-0	Carbon disulfide	ND	*	4.7	1.9
56-23-5	Carbon tetrachloride	ND		4.7	0.59
108-90-7	Chlorobenzene	ND		4.7	0.65
75-00-3	Chloroethane	ND		9.5	0.53
67-66-3	Chloroform	ND		4.7	0.62
74-87-3	Chloromethane	ND		9.5	0.75
95-49-8	2-Chlorotoluene	ND		4.7	0.62
106-43-4	4-Chlorotoluene	ND		4.7	0.64
124-48-1	Chlorodibromomethane	ND		4.7	0.67
95-50-1	1,2-Dichlorobenzene	ND		4.7	0.64
541-73-1	1,3-Dichlorobenzene	ND		4.7	0.68
106-46-7	1,4-Dichlorobenzene	ND		4.7	0.67
142-28-9	1,3-Dichloropropane	ND		4.7	0.69
563-58-6	1,1-Dichloropropene	ND		4.7	0.65
96-12-8	1,2-Dibromo-3-Chloropropane	ND		9.5	1.6
106-93-4	Ethylene Dibromide	ND		4.7	1.4
74-95-3	Dibromomethane	ND		9.5	0.81
75-71-8	Dichlorodifluoromethane	ND		9.5	0.75
75-34-3	1,1-Dichloroethane	ND		4.7	0.64
107-06-2	1,2-Dichloroethane	ND		4.7	0.72
75-35-4	1,1-Dichloroethene	ND		4.7	0.59
156-59-2	cis-1,2-Dichloroethene	ND		4.7	0.64
156-60-5	trans-1,2-Dichloroethene	ND		4.7	0.71
78-87-5	1,2-Dichloropropane	ND		4.7	0.60

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-D5S-3.5-4 Lab Sample ID: 720-88218-15

Matrix: Solid Lab File ID: 08311810.D

Analysis Method: 8260B Date Collected: 08/22/2018 16:45

Sample wt/vol: 5.28(g) Date Analyzed: 08/31/2018 10:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250642 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.7	0.65
10061-02-6	trans-1,3-Dichloropropene	ND		4.7	0.63
100-41-4	Ethylbenzene	ND		4.7	0.71
87-68-3	Hexachlorobutadiene	ND		4.7	0.85
591-78-6	2-Hexanone	ND		47	9.5
98-82-8	Isopropylbenzene	ND		4.7	0.64
99-87-6	4-Isopropyltoluene	ND		4.7	2.4
75-09-2	Methylene Chloride	ND		9.5	5.3
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		47	9.5
91-20-3	Naphthalene	ND		9.5	1.4
103-65-1	N-Propylbenzene	ND		4.7	0.62
100-42-5	Styrene	ND		4.7	0.60
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.7	0.72
79-34-5	1,1,2,2-Tetrachloroethane	ND	F1 F2	4.7	0.71
127-18-4	Tetrachloroethene	ND		4.7	0.63
108-88-3	Toluene	ND		4.7	0.67
87-61-6	1,2,3-Trichlorobenzene	ND		4.7	0.70
120-82-1	1,2,4-Trichlorobenzene	ND		4.7	0.67
71-55-6	1,1,1-Trichloroethane	ND		4.7	0.58
79-00-5	1,1,2-Trichloroethane	ND		4.7	0.66
79-01-6	Trichloroethene	ND	F1	4.7	0.60
75-69-4	Trichlorofluoromethane	ND		4.7	0.53
96-18-4	1,2,3-Trichloropropane	ND		4.7	0.73
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1	4.7	2.0
95-63-6	1,2,4-Trimethylbenzene	ND		4.7	1.6
108-67-8	1,3,5-Trimethylbenzene	ND		4.7	0.62
108-05-4	Vinyl acetate	ND	F1	19	4.7
75-01-4	Vinyl chloride	ND		4.7	0.69
1330-20-7	Xylenes, Total	ND		4.7	1.2
594-20-7	2,2-Dichloropropane	ND		4.7	1.9
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		240	95

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-D5S-3.5-4 Lab Sample ID: 720-88218-15

Matrix: Solid Lab File ID: 08311810.D

Analysis Method: 8260B Date Collected: 08/22/2018 16:45

Sample wt/vol: 5.28(g) Date Analyzed: 08/31/2018 10:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250642 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	96		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		60-140
2037-26-5	Toluene-d8 (Surr)	100		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180831-53594.b\08311810.D
Lims ID: 720-88218-D-15-E sleeve
Client ID:
Sample Type: Client
Inject. Date: 31-Aug-2018 10:33:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-D-15 RR SLEEVE
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180831-53594.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 31-Aug-2018 13:46:03 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 13:50:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.094	7.094	0.000	99	146113	250.0	
* 2 Fluorobenzene	96	10.891	10.892	-0.001	97	1071461	25.0	
* 4 Chlorobenzene-d5	117	14.739	14.740	-0.001	87	714561	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.878	17.879	-0.001	95	334693	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.484	9.492	0.000	55	66956	6.88	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.000	10.009	-0.001	98	67906	7.12	
$ 10 Toluene-d8 (Surr)	98	13.007	13.019	-0.001	92	289379	7.50	
$ 11 4-Bromofluorobenzene	95	16.238	16.238	0.010	93	93185	7.17	
$ 12 1,2-Dichlorobenzene-d4	152	18.344	18.343	0.000	78	70895	5.74	
28 Acetone	58	6.648	6.644	0.009	84	2881	4.34	
34 Methylene Chloride	84	7.347	7.364	-0.011	48	4073	0.4232	
65 Trichloroethene	132	11.397	11.397	0.009	42	2561	0.2212	
148 1-Chlorohexane	55	14.739	14.660	0.091	0	7459	0.6327	
126 Butyl Ether	87	14.952	14.951	0.010	43	447	0.0575	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	322710	3.62	
A 153 C6-C8	1	11.153	(8.846-13.459)		0	181528	2.04	
A 154 C6-C9	1	12.110	(8.846-15.373)		0	222764	2.50	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	397486	4.46	
A 119 C6-C10	1	12.991	(8.846-17.135)		0	227796	2.55	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	350816	3.93	
A 120 C6-C12	1	14.550	(8.846-20.255)		0	292581	3.28	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	48678	0.5457	
A 121 C7-C12	1	15.720	(11.185-20.255)		0	171436	1.92	

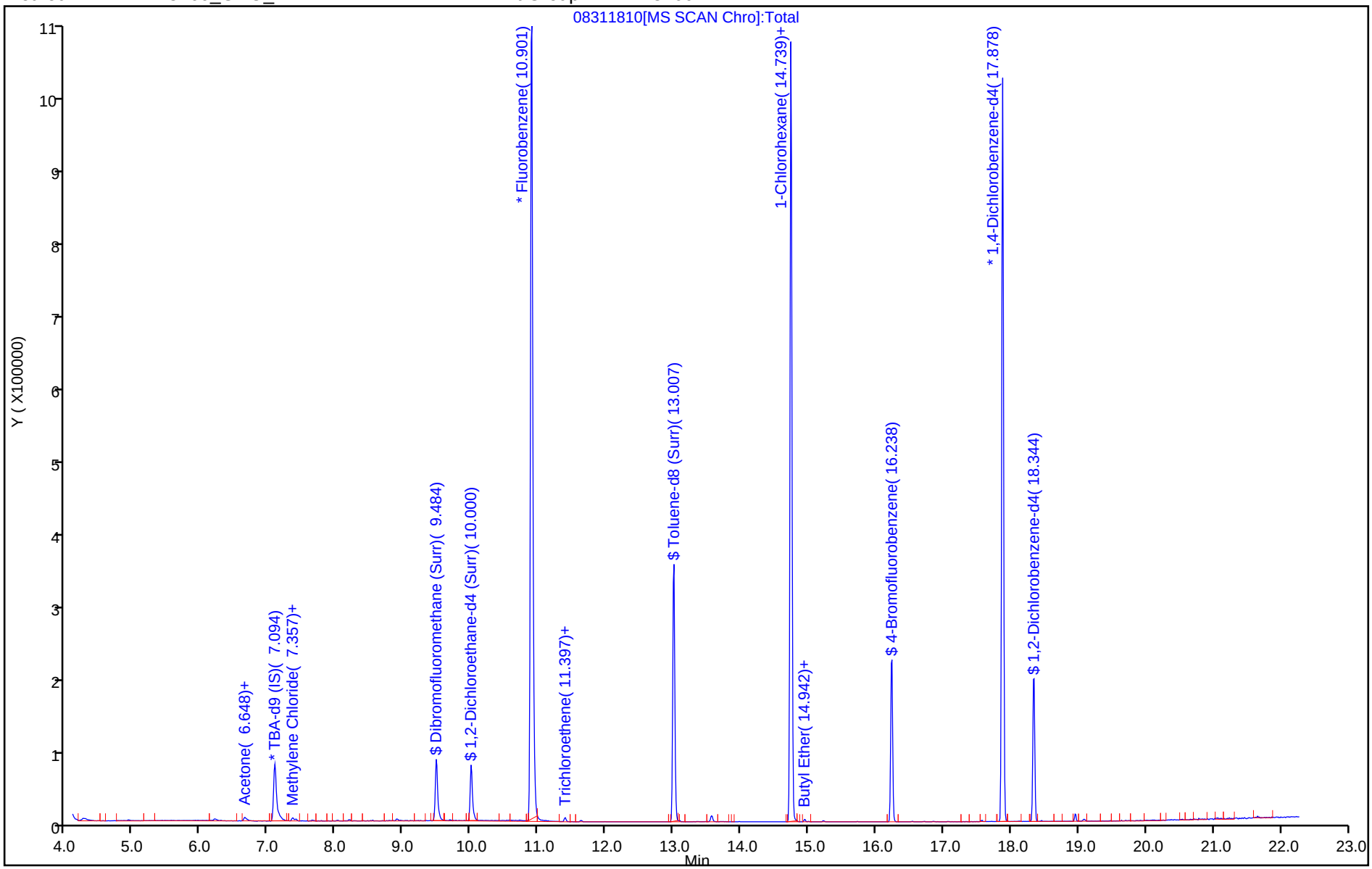
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 13:50:26 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180831-53594.b\08311810.D				
Injection Date:	31-Aug-2018 10:33:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88218-D-15-E sleeve	Lab Sample ID:	Client 720-250642/10-A	Worklist Smp#:	10
Client ID:					
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180831-53594.b\08311810.D
Lims ID: 720-88218-D-15-E sleeve
Client ID:
Sample Type: Client
Inject. Date: 31-Aug-2018 10:33:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-D-15 RR SLEEVE
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180831-53594.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 31-Aug-2018 13:46:03 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 13:50:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	6.88	91.76
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.12	94.89
$ 10 Toluene-d8 (Surr)	7.50	7.50	100.06
$ 11 4-Bromofluorobenzene	7.50	7.17	95.64
$ 12 1,2-Dichlorobenzene-d4	6.00	5.74	95.63

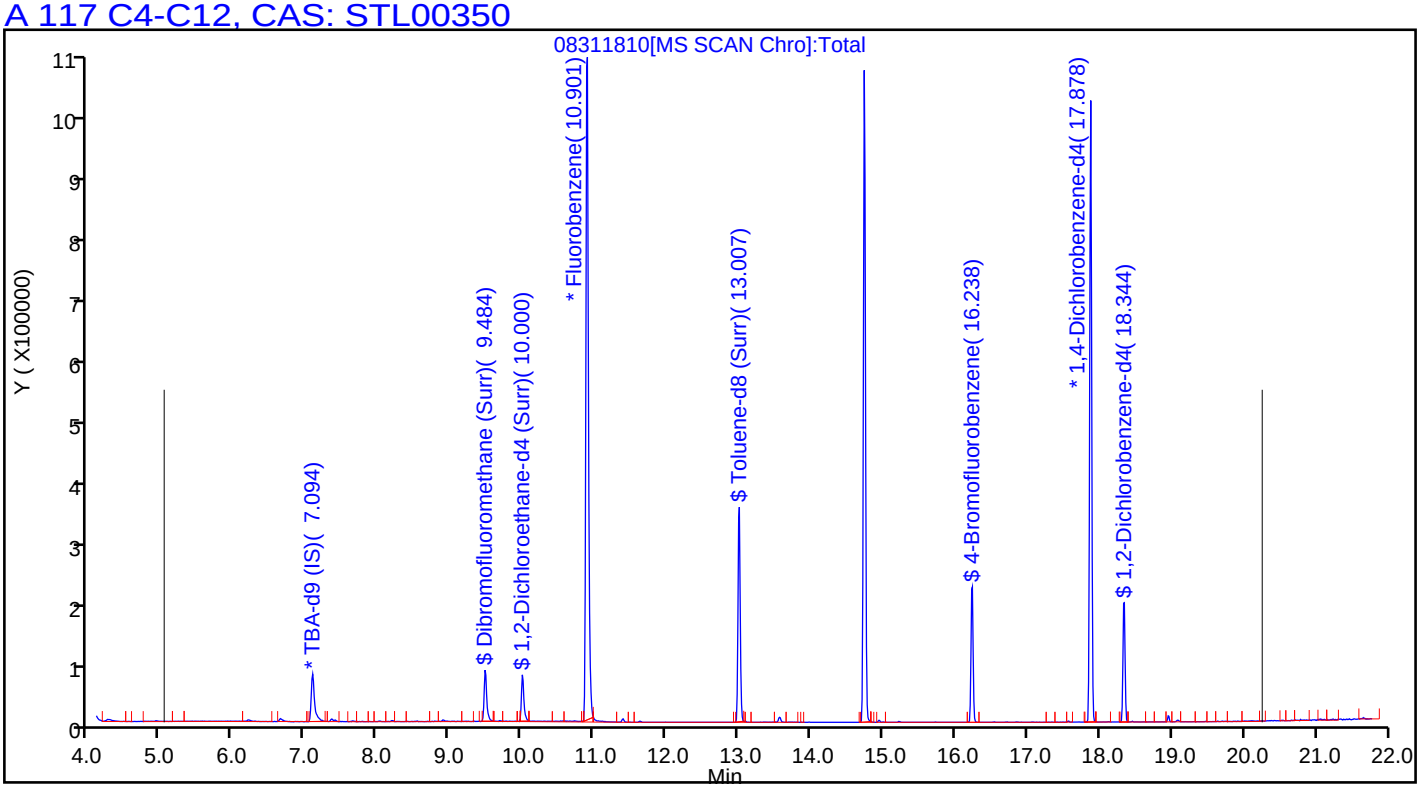
Report Date: 31-Aug-2018 13:50:27 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180831-53594.b\08311810.D

Injection Date:	31-Aug-2018 10:33:30	Instrument ID:	HP7		
Lims ID:	720-88218-D-15-E sleeve	Lab Sample ID:	Client 720-250642/10-A		
Client ID:					
Operator ID:	SF	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-C5S-9-9.5 Lab Sample ID: 720-88218-18

Matrix: Solid Lab File ID: 08291811.D

Analysis Method: 8260B Date Collected: 08/23/2018 11:30

Sample wt/vol: 6.802(g) Date Analyzed: 08/29/2018 10:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250453 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND	*	3.7	0.46

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	65	*	45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		60-140
2037-26-5	Toluene-d8 (Surr)	80		58-140

Report Date: 30-Aug-2018 08:35:04 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291811.D
Lims ID: 720-88218-A-18
Client ID: DG-C5S--9-9.5
Sample Type: Client
Inject. Date: 29-Aug-2018 10:43:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-A-18
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 29-Aug-2018 17:43:50 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 08:35:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	172201	250.0	
* 2 Fluorobenzene	96	10.709	10.709	0.000	98	764637	25.0	
* 4 Chlorobenzene-d5	117	14.564	14.564	0.000	86	398272	25.0	s
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	95	80537	25.0	s
$ 7 Dibromofluoromethane (Surr	113	9.305	9.314	0.001	93	53543	8.27	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.821	0.011	0	58852	8.46	
$ 10 Toluene-d8 (Surr)	98	12.822	12.834	0.001	95	182399	6.01	
$ 11 4-Bromofluorobenzene	95	16.053	16.053	0.000	89	30116	4.86	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	83	22657	8.04	
28 Acetone	58	6.474	6.480	0.000	96	4678	7.96	
38 trans-1,2-Dichloroethene	96	7.984	7.992	0.000	87	2794	0.4429	
48 cis-1,2-Dichloroethene	61	8.924	8.933	0.000	84	328301	26.8	
65 Trichloroethene	132	11.206	11.217	0.000	93	64408	7.58	
124 Butane	43	5.006	4.996	0.010	1	877	NR	
138 n-Nonane	43	15.166	15.198	-0.032	1	495	NR	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	2183141	37.0	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	1513975	25.7	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	1524747	25.8	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	2275122	38.6	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	1565205	26.5	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	1565205	NC	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	2158789	36.6	
A 120 C6-C12	1	14.400	(8.671-20.130)		0	1641550	27.8	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	145079	2.46	
A 121 C7-C12	1	15.567	(11.005-20.130)		0	600310	10.2	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard
NC - Not Calibrated
s - Failed ISTD Recovery Test

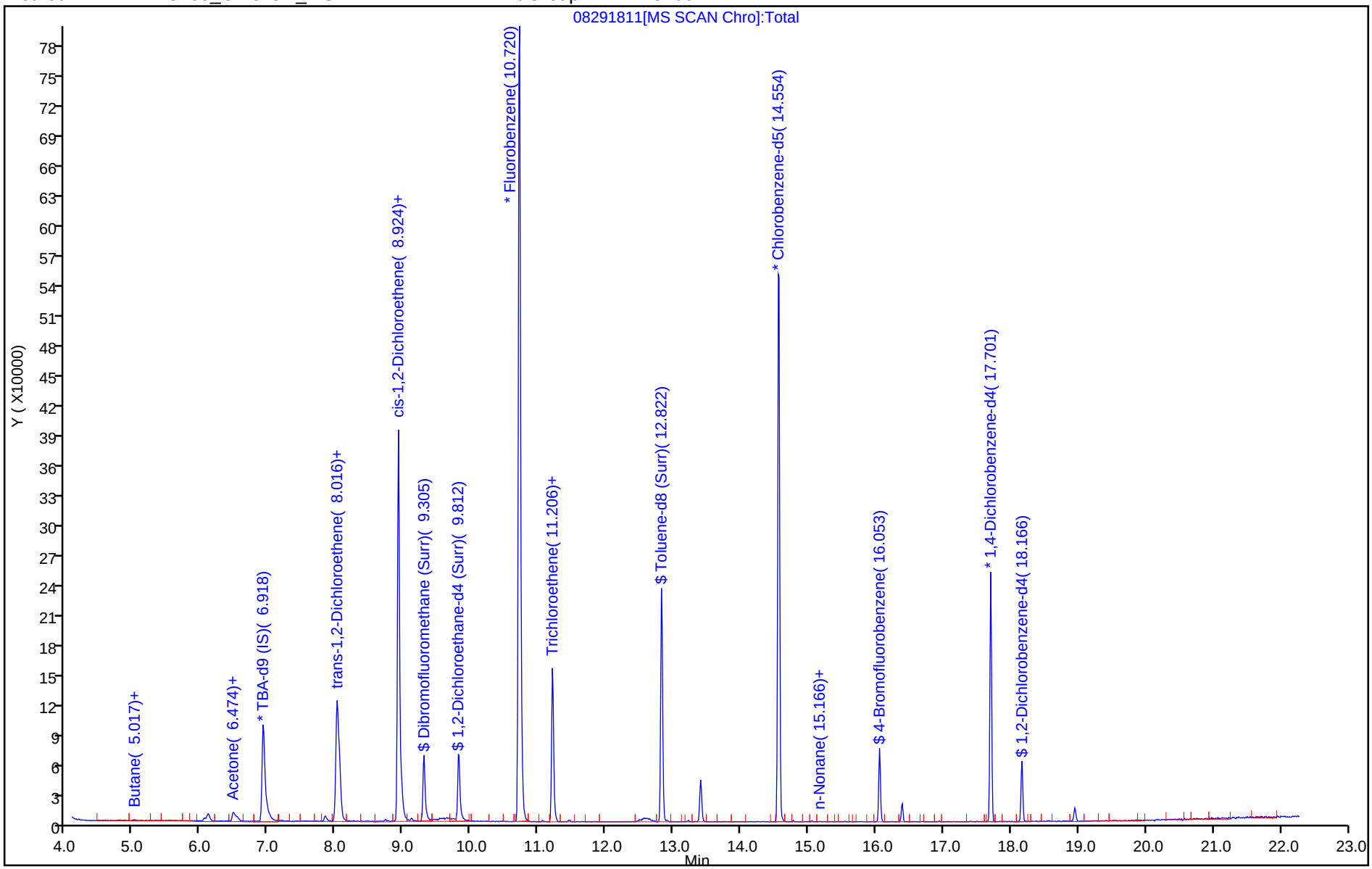
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 08:35:04 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291811.D				
Injection Date:	29-Aug-2018 10:43:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88218-A-18	Lab Sample ID:	720-88218-18	Worklist Smp#:	9
Client ID:	DG-C5S--9-9.5				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\08291811.D
Lims ID: 720-88218-A-18
Client ID: DG-C5S--9-9.5
Sample Type: Client
Inject. Date: 29-Aug-2018 10:43:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-A-18
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180829-53541.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 29-Aug-2018 17:43:50 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 08:35:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.46	112.77
$ 10 Toluene-d8 (Surr)	7.50	6.01	80.10
$ 11 4-Bromofluorobenzene	7.50	4.86	64.75
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-C5S-9-9.5 Lab Sample ID: 720-88218-18

Matrix: Solid Lab File ID: 08301831.D

Analysis Method: 8260B Date Collected: 08/23/2018 11:30

Sample wt/vol: 7.184(g) Date Analyzed: 08/30/2018 22:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.5	0.84
67-64-1	Acetone	ND		35	26
71-43-2	Benzene	ND		3.5	0.45
75-27-4	Dichlorobromomethane	ND		3.5	0.50
108-86-1	Bromobenzene	ND		3.5	0.55
74-97-5	Chlorobromomethane	ND		14	0.50
75-25-2	Bromoform	ND		3.5	1.4
74-83-9	Bromomethane	ND		7.0	0.55
78-93-3	2-Butanone (MEK)	ND		35	15
104-51-8	n-Butylbenzene	ND		3.5	0.70
135-98-8	sec-Butylbenzene	ND		3.5	0.50
98-06-6	tert-Butylbenzene	ND		3.5	0.51
75-15-0	Carbon disulfide	ND		3.5	1.4
56-23-5	Carbon tetrachloride	ND		3.5	0.43
108-90-7	Chlorobenzene	ND		3.5	0.48
75-00-3	Chloroethane	ND		7.0	0.39
67-66-3	Chloroform	ND		3.5	0.46
74-87-3	Chloromethane	ND		7.0	0.55
95-49-8	2-Chlorotoluene	ND		3.5	0.45
106-43-4	4-Chlorotoluene	ND		3.5	0.47
124-48-1	Chlorodibromomethane	ND		3.5	0.49
95-50-1	1,2-Dichlorobenzene	ND		3.5	0.47
541-73-1	1,3-Dichlorobenzene	ND		3.5	0.50
106-46-7	1,4-Dichlorobenzene	ND		3.5	0.49
142-28-9	1,3-Dichloropropane	ND		3.5	0.51
563-58-6	1,1-Dichloropropene	ND		3.5	0.48
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.0	1.2
106-93-4	Ethylene Dibromide	ND		3.5	1.0
74-95-3	Dibromomethane	ND		7.0	0.60
75-71-8	Dichlorodifluoromethane	ND		7.0	0.55
75-34-3	1,1-Dichloroethane	ND		3.5	0.47
107-06-2	1,2-Dichloroethane	ND		3.5	0.53
156-59-2	cis-1,2-Dichloroethene	87		3.5	0.47
156-60-5	trans-1,2-Dichloroethene	1.7	J	3.5	0.52
78-87-5	1,2-Dichloropropane	ND		3.5	0.44
10061-01-5	cis-1,3-Dichloropropene	ND		3.5	0.48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-C5S-9-9.5 Lab Sample ID: 720-88218-18

Matrix: Solid Lab File ID: 08301831.D

Analysis Method: 8260B Date Collected: 08/23/2018 11:30

Sample wt/vol: 7.184(g) Date Analyzed: 08/30/2018 22:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-02-6	trans-1,3-Dichloropropene	ND		3.5	0.47
100-41-4	Ethylbenzene	ND		3.5	0.52
87-68-3	Hexachlorobutadiene	ND		3.5	0.63
591-78-6	2-Hexanone	ND		35	7.0
98-82-8	Isopropylbenzene	ND		3.5	0.47
99-87-6	4-Isopropyltoluene	ND		3.5	1.7
75-09-2	Methylene Chloride	ND		7.0	3.9
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		35	7.0
91-20-3	Naphthalene	ND		7.0	1.0
103-65-1	N-Propylbenzene	ND		3.5	0.46
100-42-5	Styrene	ND		3.5	0.44
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.5	0.53
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.5	0.52
127-18-4	Tetrachloroethene	ND		3.5	0.47
108-88-3	Toluene	ND		3.5	0.49
87-61-6	1,2,3-Trichlorobenzene	ND		3.5	0.52
120-82-1	1,2,4-Trichlorobenzene	ND		3.5	0.49
71-55-6	1,1,1-Trichloroethane	ND		3.5	0.42
79-00-5	1,1,2-Trichloroethane	ND		3.5	0.49
79-01-6	Trichloroethene	120		3.5	0.44
75-69-4	Trichlorofluoromethane	ND		3.5	0.39
96-18-4	1,2,3-Trichloropropane	ND		3.5	0.54
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.5	1.4
95-63-6	1,2,4-Trimethylbenzene	ND		3.5	1.1
108-67-8	1,3,5-Trimethylbenzene	ND		3.5	0.45
108-05-4	Vinyl acetate	ND		14	3.5
75-01-4	Vinyl chloride	ND		3.5	0.51
1330-20-7	Xylenes, Total	ND		3.5	0.85
594-20-7	2,2-Dichloropropane	ND		3.5	1.4
STL00350	Gasoline Range Organics (GRO)-C4-C12	150	J	170	70

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-C5S-9-9.5 Lab Sample ID: 720-88218-18

Matrix: Solid Lab File ID: 08301831.D

Analysis Method: 8260B Date Collected: 08/23/2018 11:30

Sample wt/vol: 7.184(g) Date Analyzed: 08/30/2018 22:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250625 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	85		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		60-140
2037-26-5	Toluene-d8 (Surr)	93		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301831.D
Lims ID: 720-88218-B-18-A
Client ID: DG-C5S--9-9.5
Sample Type: Client
Inject. Date: 30-Aug-2018 22:03:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-B-18 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:50:10 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:32:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.918	6.918	0.000	0	199832	250.0	
* 2 Fluorobenzene	96	10.720	10.709	0.011	98	1077020	25.0	
* 4 Chlorobenzene-d5	117	14.554	14.554	0.000	85	786845	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.701	17.701	0.000	94	275356	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.305	9.303	0.011	93	73532	8.06	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.822	9.821	0.010	0	82403	8.41	
$ 10 Toluene-d8 (Surr)	98	12.822	12.834	0.000	94	296962	6.94	
$ 11 4-Bromofluorobenzene	95	16.053	16.065	0.000	91	78053	6.37	
$ 12 1,2-Dichlorobenzene-d4	152	18.166	18.166	0.000	84	67581	7.01	
28 Acetone	58	6.474	6.481	0.000	70	411	0.4966	
30 1,1-Dichloroethene	96	7.023	7.030	0.000	88	2770	0.3950	
38 trans-1,2-Dichloroethene	96	7.985	7.982	0.011	93	10538	1.19	
48 cis-1,2-Dichloroethene	61	8.924	8.933	0.000	84	1074321	62.2	
59 Benzene	78	10.488	10.498	0.000	1	1120	0.0288	
65 Trichloroethene	132	11.206	11.217	0.000	94	1058370	88.4	
81 Tetrachloroethene	164	13.793	13.796	0.010	92	3126	0.3339	
A 116 C4-C10	1	11.000	(4.985-17.014)		0	9015540	108.5	
A 158 C6-C8	1	11.047	(8.671-13.424)		0	8720533	104.9	
A 159 C6-C9	1	11.950	(8.671-15.230)		0	8759269	105.4	
A 117 C4-C12	1	12.558	(4.985-20.130)		0	9049954	108.9	
A 123 Aviation Gas	1	12.843	(8.671-17.014)		0	8769870	NC	
A 119 C6-C10	1	12.843	(8.671-17.014)		0	8769870	105.5	
A 118 C5-C12	1	13.397	(6.664-20.130)		0	9006018	108.3	
A 120 C6-C12	1	14.401	(8.671-20.130)		0	8804284	105.9	
A 160 C8-C10	1	15.108	(13.202-17.014)		0	72284	0.8696	
A 121 C7-C12	1	15.568	(11.005-20.130)		0	5640630	67.9	

QC Flag Legend

Processing Flags

NC - Not Calibrated

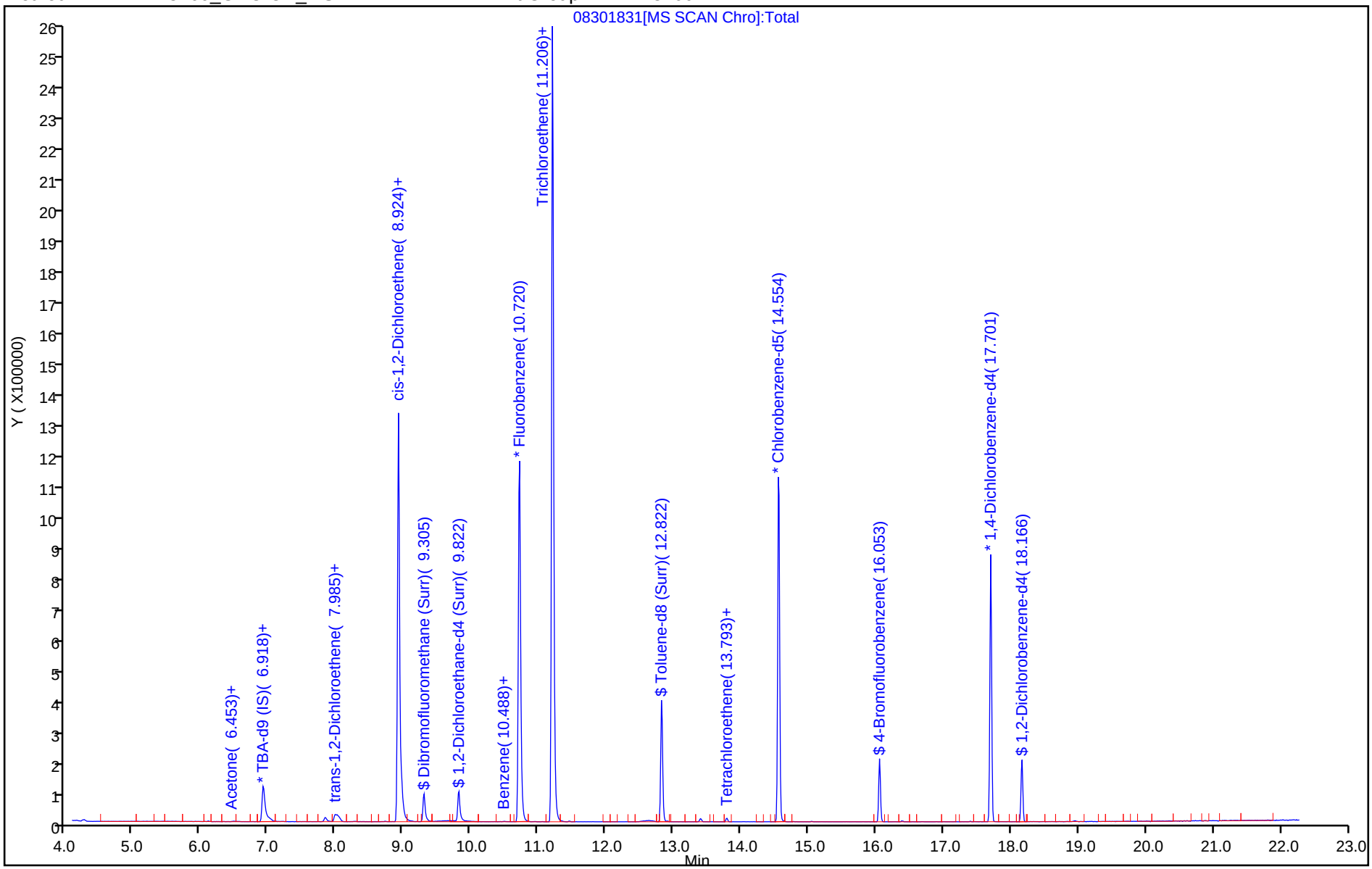
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 08:50:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301831.D				
Injection Date:	30-Aug-2018 22:03:30	Instrument ID:	CHMSV2	Operator ID:	VOA
Lims ID:	720-88218-B-18-A	Lab Sample ID:	720-88218-18	Worklist Smp#:	9
Client ID:	DG-C5S--9-9.5				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301831.D
Lims ID: 720-88218-B-18-A
Client ID: DG-C5S--9-9.5
Sample Type: Client
Inject. Date: 30-Aug-2018 22:03:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-B-18 RR
Misc. Info.: CHMSV2
Operator ID: VOA Instrument ID: CHMSV2

Method: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\8260_GRO CH_MSV2.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:50:10 Calib Date: 25-Aug-2018 14:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180825-53476.b\08251816.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 08:32:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.41	112.10
$ 10 Toluene-d8 (Surr)	7.50	6.94	92.59
$ 11 4-Bromofluorobenzene	7.50	6.37	84.94
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

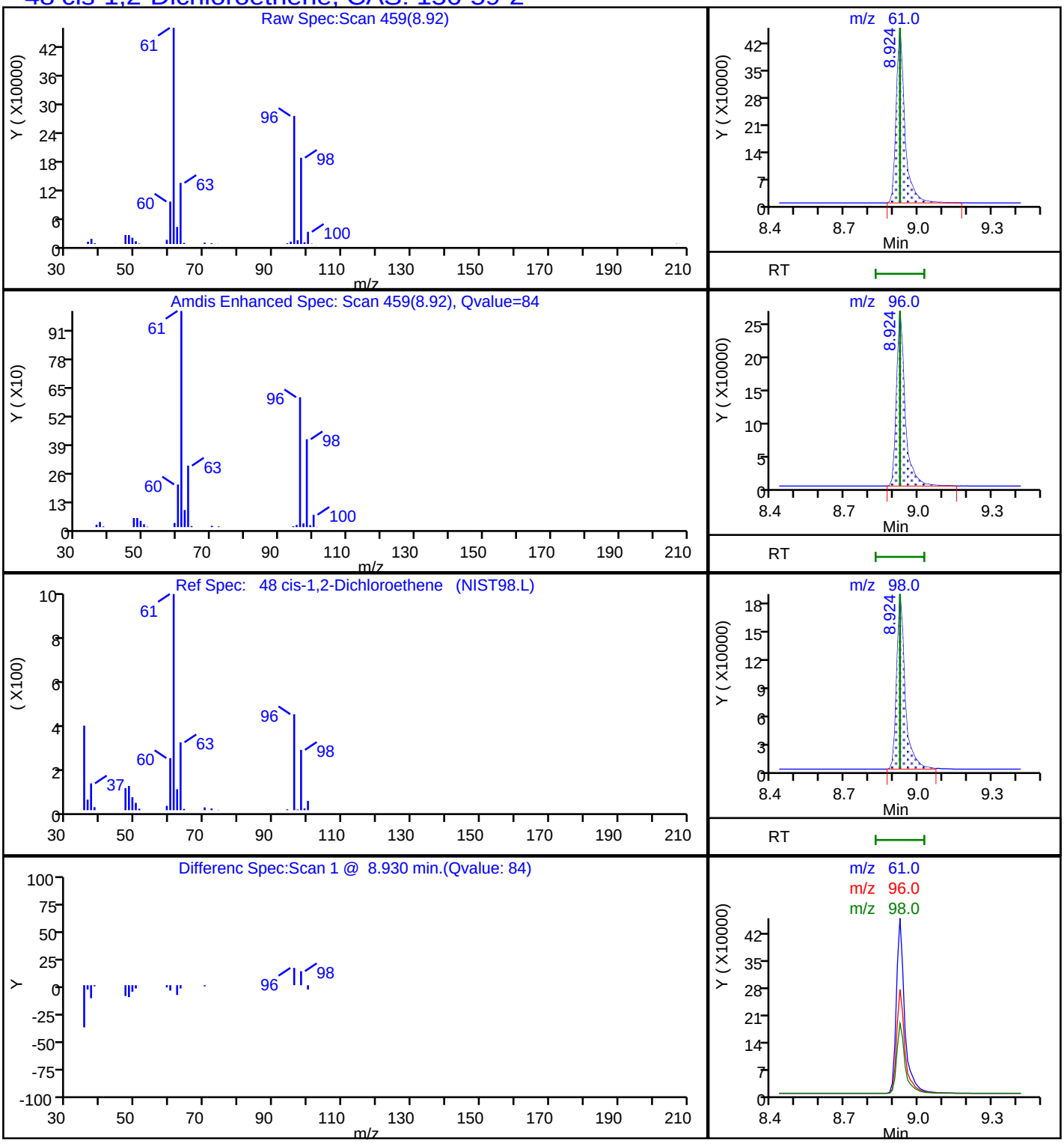
Report Date: 31-Aug-2018 08:50:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301831.D

Injection Date:	30-Aug-2018 22:03:30	Instrument ID:	CHMSV2		
Lims ID:	720-88218-B-18-A	Lab Sample ID:	720-88218-18		
Client ID:	DG-C5S--9-9.5				
Operator ID:	VOA	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

48 cis-1,2-Dichloroethene, CAS: 156-59-2



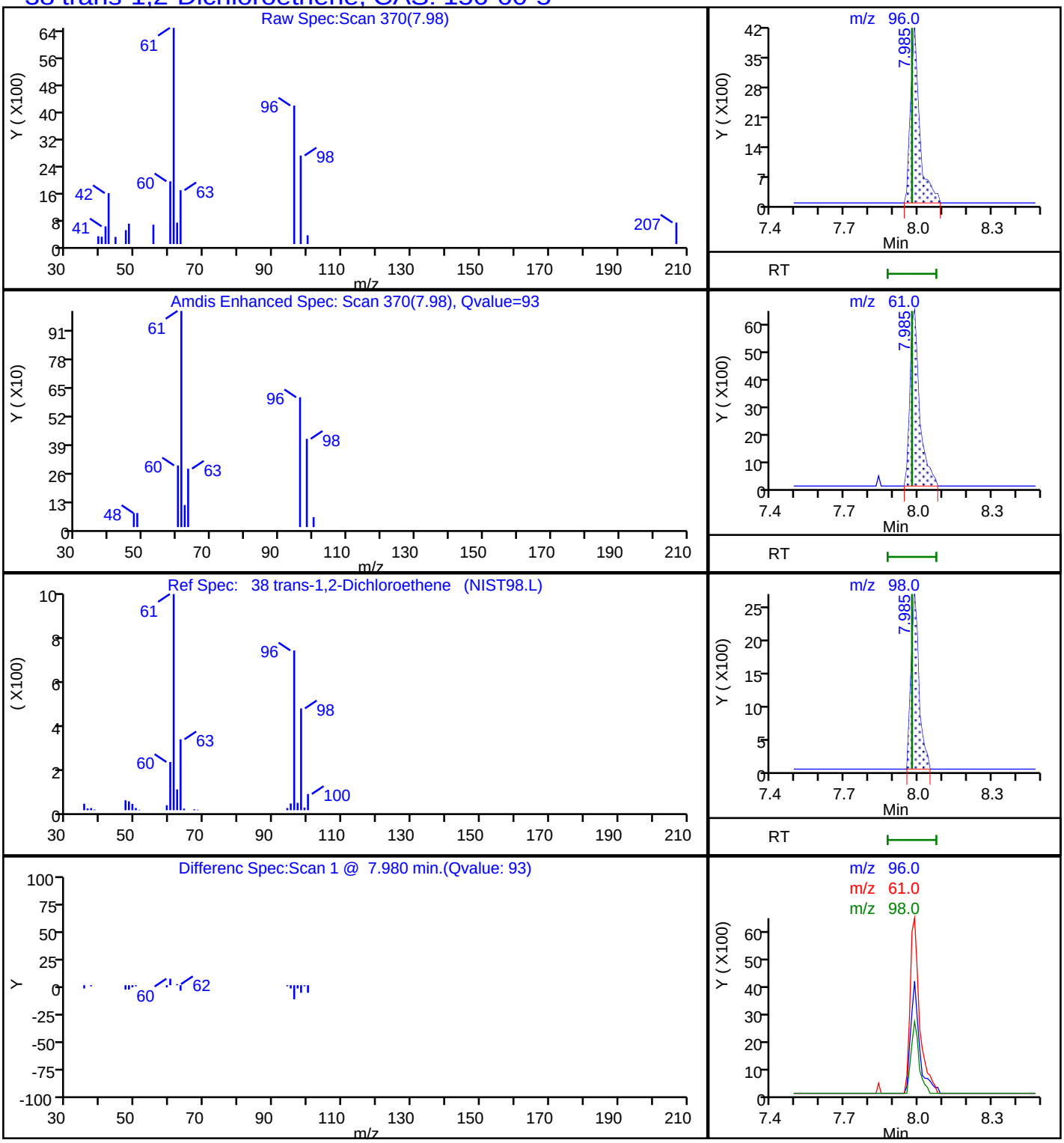
Report Date: 31-Aug-2018 08:50:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301831.D

Injection Date:	30-Aug-2018 22:03:30	Instrument ID:	CHMSV2		
Lims ID:	720-88218-B-18-A	Lab Sample ID:	720-88218-18		
Client ID:	DG-C5S--9-9.5				
Operator ID:	VOA	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

38 trans-1,2-Dichloroethene, CAS: 156-60-5

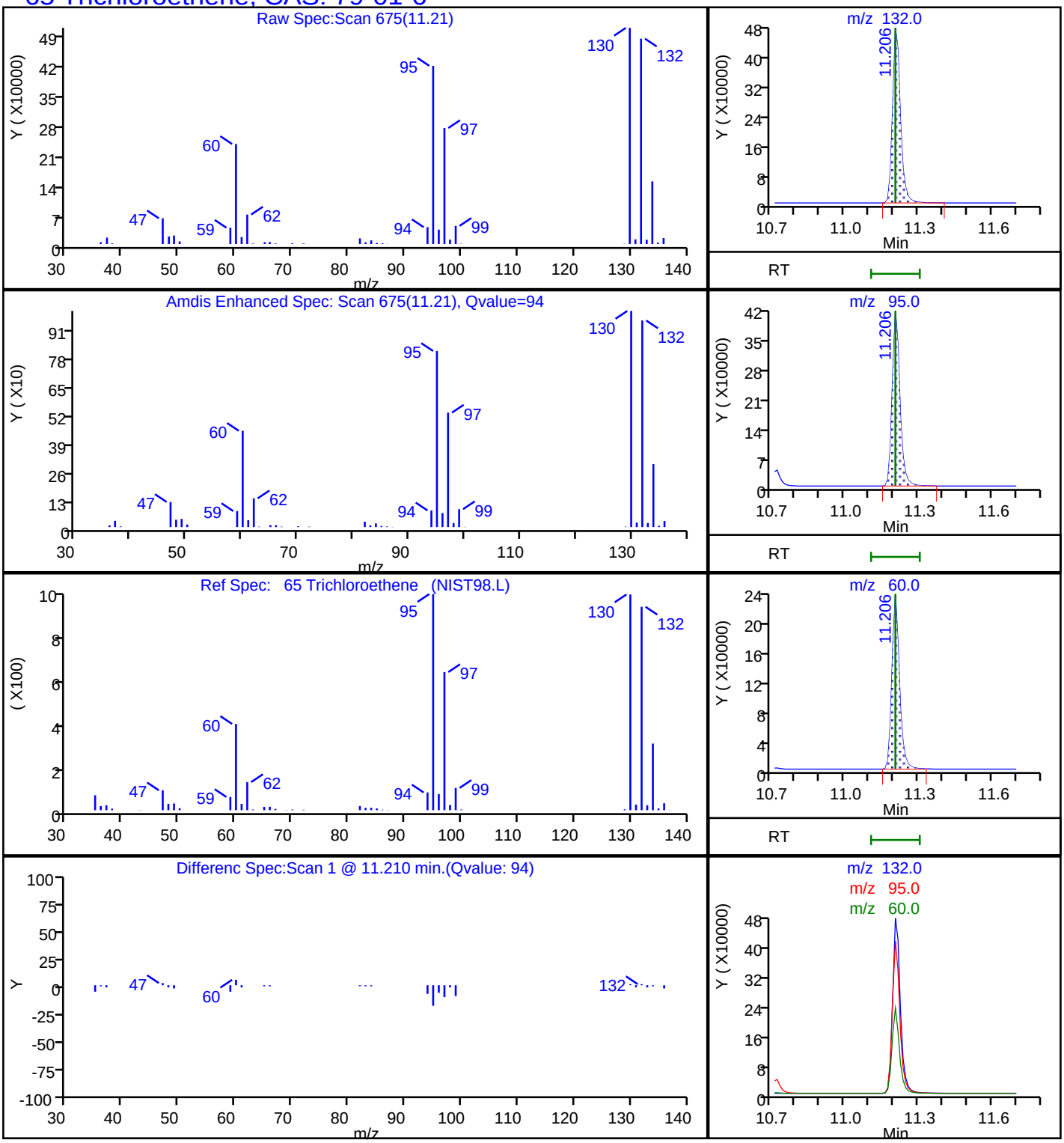


Report Date: 31-Aug-2018 08:50:12 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301831.D				
Injection Date:	30-Aug-2018 22:03:30	Instrument ID:	CHMSV2		
Lims ID:	720-88218-B-18-A	Lab Sample ID:	720-88218-18		
Client ID:	DG-C5S--9-9.5				
Operator ID:	VOA	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

65 Trichloroethene, CAS: 79-01-6

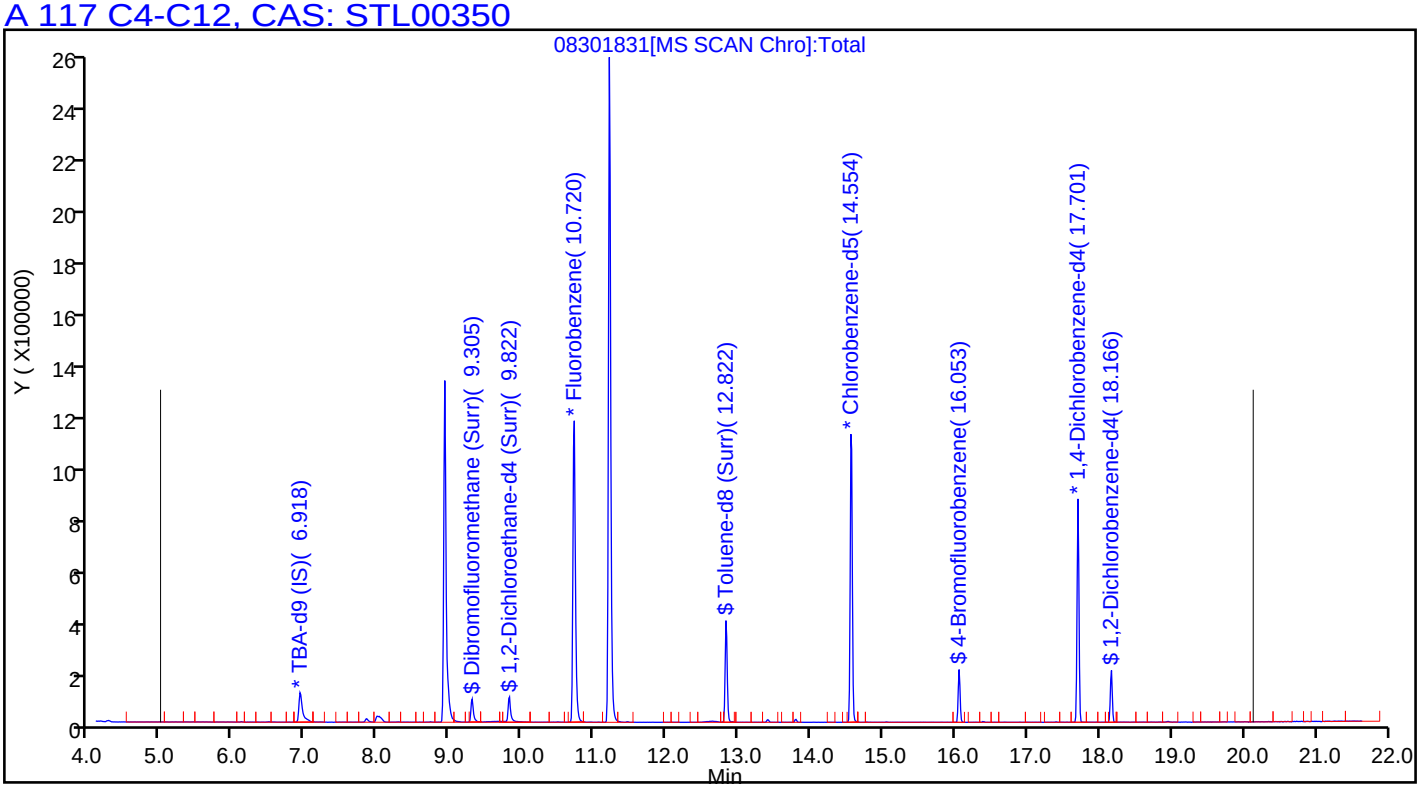


Report Date: 31-Aug-2018 08:50:13 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301831.D				
Injection Date:	30-Aug-2018 22:03:30	Instrument ID:	CHMSV2		
Lims ID:	720-88218-B-18-A	Lab Sample ID:	720-88218-18		
Client ID:	DG-C5S--9-9.5				
Operator ID:	VOA	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



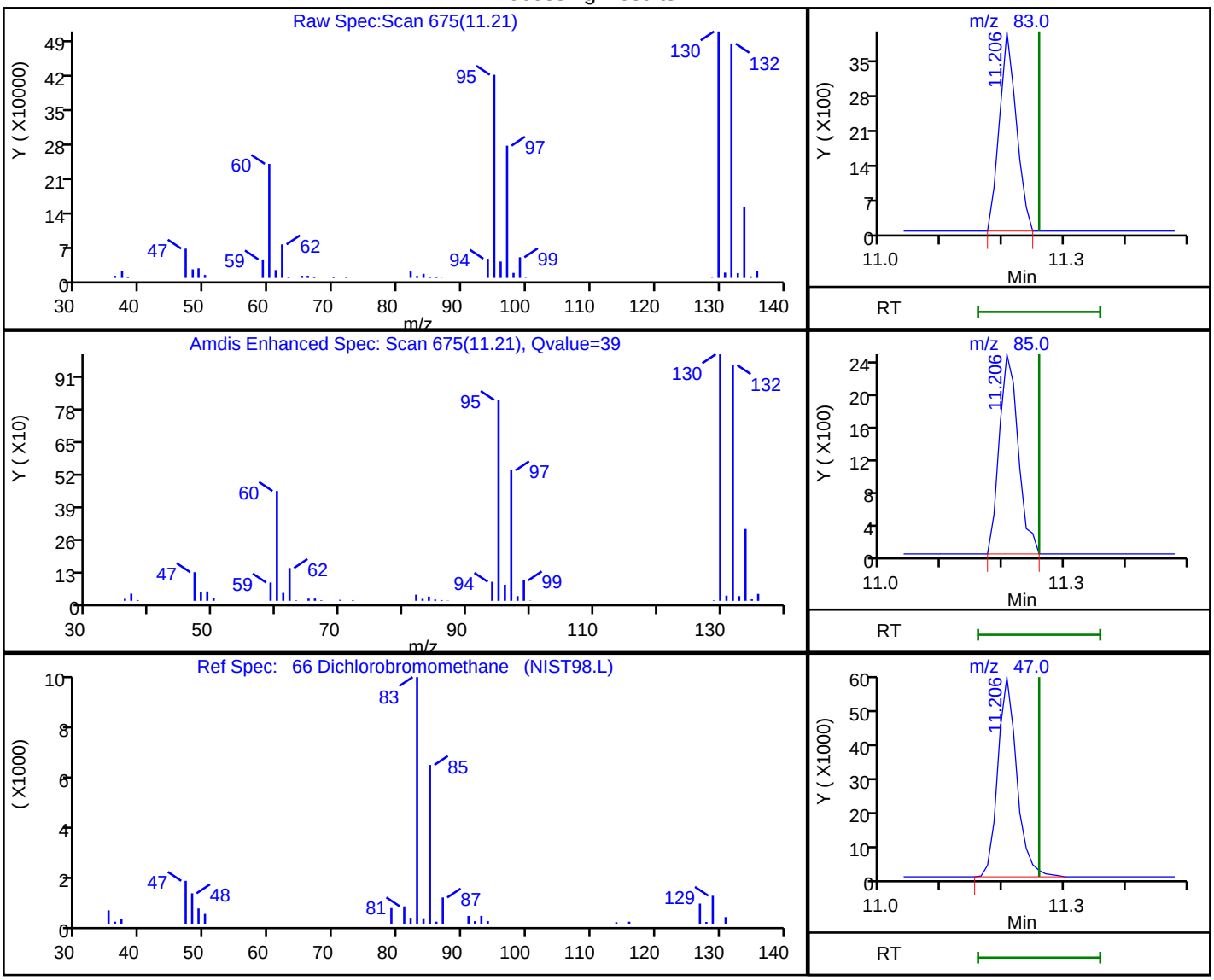
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHMSV2\20180830-53586.b\08301831.D				
Injection Date:	30-Aug-2018 22:03:30	Instrument ID:	CHMSV2		
Lims ID:	720-88218-B-18-A	Lab Sample ID:	720-88218-18		
Client ID:	DG-C5S--9-9.5				
Operator ID:	VOA	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO CH_MSV2	Limit Group:	8260B		
Column:		Detector	MS SCAN		

66 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
11.21	83.00	7669	0.646822
11.21	85.00	5194	
11.21	47.00	129291	

Reviewer: medinaj, 31-Aug-2018 08:50:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-B5S-0.5-1 Lab Sample ID: 720-88218-19

Matrix: Solid Lab File ID: 08291821.D

Analysis Method: 8260B Date Collected: 08/23/2018 11:45

Sample wt/vol: 6.231(g) Date Analyzed: 08/29/2018 17:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250450 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		4.0	0.96
67-64-1	Acetone	35	J	40	30
71-43-2	Benzene	ND		4.0	0.52
75-27-4	Dichlorobromomethane	ND		4.0	0.58
108-86-1	Bromobenzene	ND		4.0	0.63
74-97-5	Chlorobromomethane	ND		16	0.58
75-25-2	Bromoform	ND		4.0	1.6
74-83-9	Bromomethane	ND		8.0	0.63
78-93-3	2-Butanone (MEK)	ND		40	17
104-51-8	n-Butylbenzene	ND		4.0	0.80
135-98-8	sec-Butylbenzene	ND		4.0	0.58
98-06-6	tert-Butylbenzene	ND		4.0	0.59
75-15-0	Carbon disulfide	ND	*	4.0	1.6
56-23-5	Carbon tetrachloride	ND		4.0	0.50
108-90-7	Chlorobenzene	ND		4.0	0.55
75-00-3	Chloroethane	ND		8.0	0.45
67-66-3	Chloroform	ND		4.0	0.53
74-87-3	Chloromethane	ND		8.0	0.63
95-49-8	2-Chlorotoluene	ND		4.0	0.52
106-43-4	4-Chlorotoluene	ND		4.0	0.55
124-48-1	Chlorodibromomethane	ND		4.0	0.57
95-50-1	1,2-Dichlorobenzene	ND		4.0	0.55
541-73-1	1,3-Dichlorobenzene	ND		4.0	0.58
106-46-7	1,4-Dichlorobenzene	ND		4.0	0.57
142-28-9	1,3-Dichloropropane	ND		4.0	0.59
563-58-6	1,1-Dichloropropene	ND		4.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.0	1.4
106-93-4	Ethylene Dibromide	ND		4.0	1.1
74-95-3	Dibromomethane	ND		8.0	0.69
75-71-8	Dichlorodifluoromethane	ND		8.0	0.63
75-34-3	1,1-Dichloroethane	ND		4.0	0.55
107-06-2	1,2-Dichloroethane	ND		4.0	0.61
75-35-4	1,1-Dichloroethene	ND	*	4.0	0.50
156-59-2	cis-1,2-Dichloroethene	ND		4.0	0.55
156-60-5	trans-1,2-Dichloroethene	ND		4.0	0.60
78-87-5	1,2-Dichloropropane	ND		4.0	0.51

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-B5S-0.5-1 Lab Sample ID: 720-88218-19

Matrix: Solid Lab File ID: 08291821.D

Analysis Method: 8260B Date Collected: 08/23/2018 11:45

Sample wt/vol: 6.231(g) Date Analyzed: 08/29/2018 17:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250450 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		4.0	0.55
10061-02-6	trans-1,3-Dichloropropene	ND		4.0	0.54
100-41-4	Ethylbenzene	ND		4.0	0.60
87-68-3	Hexachlorobutadiene	ND		4.0	0.72
591-78-6	2-Hexanone	ND		40	8.0
98-82-8	Isopropylbenzene	ND		4.0	0.55
99-87-6	4-Isopropyltoluene	ND		4.0	2.0
75-09-2	Methylene Chloride	ND		8.0	4.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		40	8.0
91-20-3	Naphthalene	ND		8.0	1.2
103-65-1	N-Propylbenzene	ND		4.0	0.53
100-42-5	Styrene	ND		4.0	0.51
630-20-6	1,1,1,2-Tetrachloroethane	ND		4.0	0.61
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.0	0.60
127-18-4	Tetrachloroethene	ND		4.0	0.54
108-88-3	Toluene	ND		4.0	0.57
87-61-6	1,2,3-Trichlorobenzene	0.68	J	4.0	0.59
120-82-1	1,2,4-Trichlorobenzene	ND		4.0	0.57
71-55-6	1,1,1-Trichloroethane	ND		4.0	0.49
79-00-5	1,1,2-Trichloroethane	ND		4.0	0.56
79-01-6	Trichloroethene	1.1	J	4.0	0.51
75-69-4	Trichlorofluoromethane	ND		4.0	0.45
96-18-4	1,2,3-Trichloropropane	ND		4.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.7
95-63-6	1,2,4-Trimethylbenzene	ND		4.0	1.3
108-67-8	1,3,5-Trimethylbenzene	ND		4.0	0.52
108-05-4	Vinyl acetate	ND		16	4.0
75-01-4	Vinyl chloride	ND		4.0	0.59
1330-20-7	Xylenes, Total	ND		4.0	0.98
594-20-7	2,2-Dichloropropane	ND		4.0	1.6
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		200	80

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-B5S-0.5-1 Lab Sample ID: 720-88218-19

Matrix: Solid Lab File ID: 08291821.D

Analysis Method: 8260B Date Collected: 08/23/2018 11:45

Sample wt/vol: 6.231(g) Date Analyzed: 08/29/2018 17:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250450 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	92		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		60-140
2037-26-5	Toluene-d8 (Surr)	95		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291821.D
Lims ID: 720-88218-A-19-A
Client ID: DG-B5S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 17:06:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-A-19
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 30-Aug-2018 09:28:05 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 09:28:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.092	7.090	0.002	98	162475	250.0	
* 2 Fluorobenzene	96	10.899	10.898	0.001	98	896483	25.0	
* 4 Chlorobenzene-d5	117	14.747	14.746	0.001	86	554909	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.886	17.885	0.001	94	229826	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.491	9.490	0.001	56	61668	7.58	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.008	10.007	0.001	99	61974	7.76	
$ 10 Toluene-d8 (Surr)	98	13.005	13.004	0.001	92	228920	7.10	
$ 11 4-Bromofluorobenzene	95	16.235	16.234	0.001	88	69690	6.91	
$ 12 1,2-Dichlorobenzene-d4	152	18.342	18.341	0.002	79	50716	5.98	
28 Acetone	58	6.646	6.645	0.001	95	12146	21.9	
59 Benzene	78	10.676	10.675	0.001	1	2003	0.0573	
65 Trichloroethene	132	11.395	11.394	0.001	72	6577	0.6788	
144 Methylcyclohexane	83	11.993	11.992	0.002	1	1723	0.1000	
81 Tetrachloroethene	164	13.977	13.976	0.001	28	1079	0.1273	
126 Butyl Ether	87	14.949	14.948	0.001	65	2400	0.3978	
84 Ethylbenzene	91	15.000	14.999	0.001	1	4072	0.1110	
92 Isopropylbenzene	105	16.175	16.174	0.002	22	5592	0.1447	
94 N-Propylbenzene	91	16.721	16.720	0.001	24	8017	0.2341	
96 2-Chlorotoluene	91	16.863	16.852	0.011	1	2896	0.1433	
97 4-Chlorotoluene	91	16.954	16.953	0.001	1	3096	0.1506	
100 tert-Butylbenzene	119	17.440	17.439	0.001	1	4401	0.1964	
101 1,2,4-Trimethylbenzene	105	17.572	17.571	0.001	1	5613	0.2235	
102 sec-Butylbenzene	105	17.714	17.713	0.001	7	7752	0.2304	
103 1,3-Dichlorobenzene	146	17.835	17.834	0.001	1	2164	0.1506	
104 1,4-Dichlorobenzene	146	17.916	17.915	0.001	1	2394	0.1656	
105 4-Isopropyltoluene	119	17.937	17.936	0.002	10	16381	0.5765	
136 1,2,3-Trimethylbenzene	105	18.119	18.128	-0.009	1	4424	0.1721	
106 1,2-Dichlorobenzene	146	18.372	18.371	0.001	1	1880	0.1453	
107 n-Butylbenzene	91	18.453	18.452	0.001	34	7145	0.2792	
141 1,3,5-Trichlorobenzene	180	20.012	20.022	-0.009	0	2607	0.2265	
111 1,2,4-Trichlorobenzene	180	20.721	20.710	0.011	1	3167	0.3302	
112 Naphthalene	128	21.055	21.055	0.001	1	7755	0.4634	a

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
113 Hexachlorobutadiene	225	21.116	21.116	0.001	1	1698	0.2469	a
114 1,2,3-Trichlorobenzene	180	21.339	21.338	0.001	21	3657	0.4263	
132 n-Nonane	57	15.344	15.343	0.001	1	464	NR	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	937621	12.6	
A 153 C6-C8	1	11.156	(8.852-13.459)		0	187976	2.52	
A 154 C6-C9	1	12.113	(8.852-15.373)		0	293824	3.94	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	1043151	14.0	
A 119 C6-C10	1	12.994	(8.852-17.135)		0	363724	4.87	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	992953	13.3	
A 120 C6-C12	1	14.553	(8.852-20.255)		0	469254	6.29	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	177003	2.37	
A 121 C7-C12	1	15.723	(11.191-20.255)		0	370904	4.97	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

a - User Assigned ID

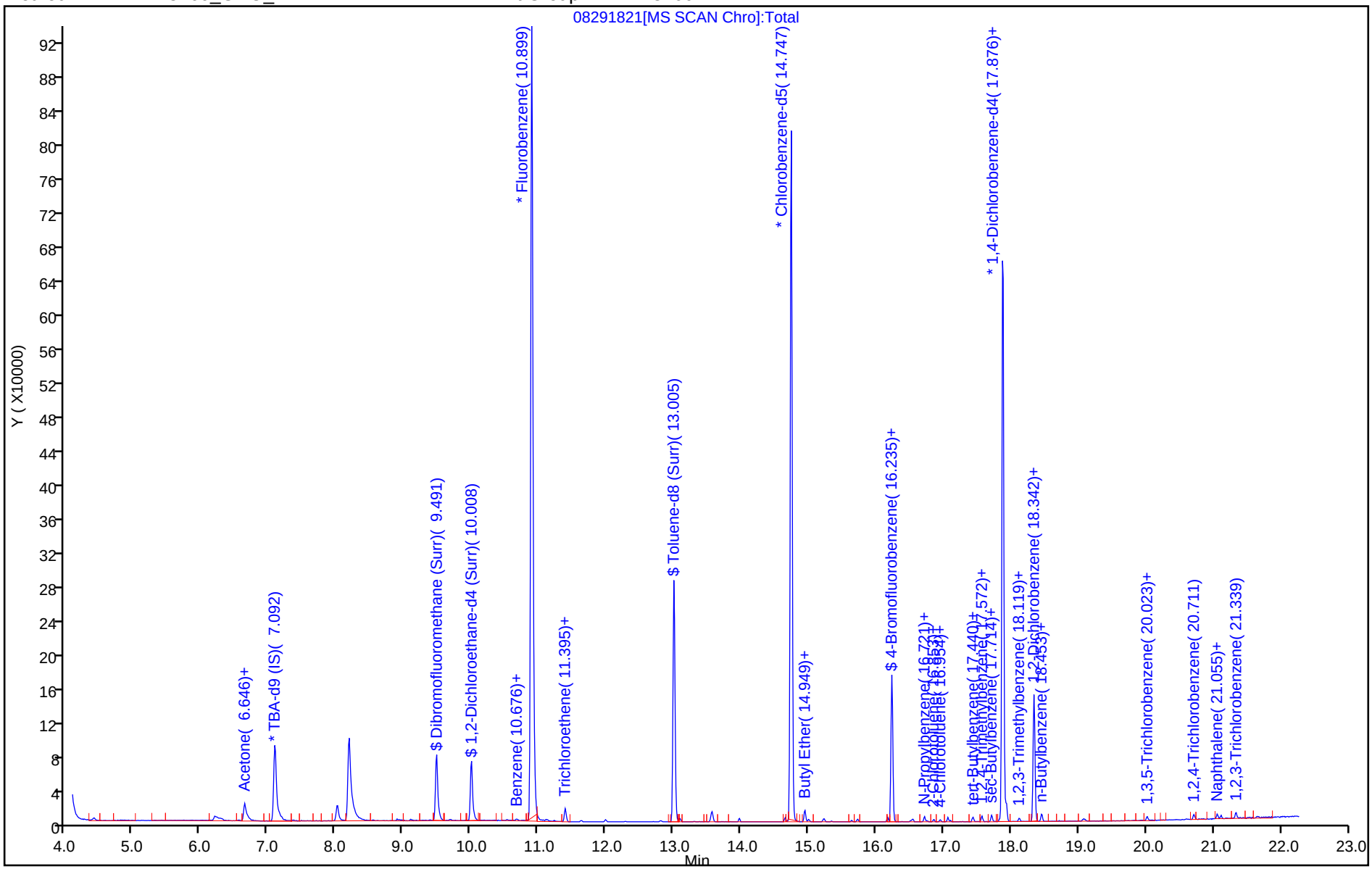
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 09:28:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291821.D				
Injection Date:	29-Aug-2018 17:06:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88218-A-19-A	Lab Sample ID:	720-88218-19	Worklist Smp#:	21
Client ID:	DG-B5S--0.5-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291821.D
Lims ID: 720-88218-A-19-A
Client ID: DG-B5S--0.5-1
Sample Type: Client
Inject. Date: 29-Aug-2018 17:06:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-A-19
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 30-Aug-2018 09:28:05 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 09:28:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.76	103.50
$ 10 Toluene-d8 (Surr)	7.50	7.10	94.61
$ 11 4-Bromofluorobenzene	7.50	6.91	92.11
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

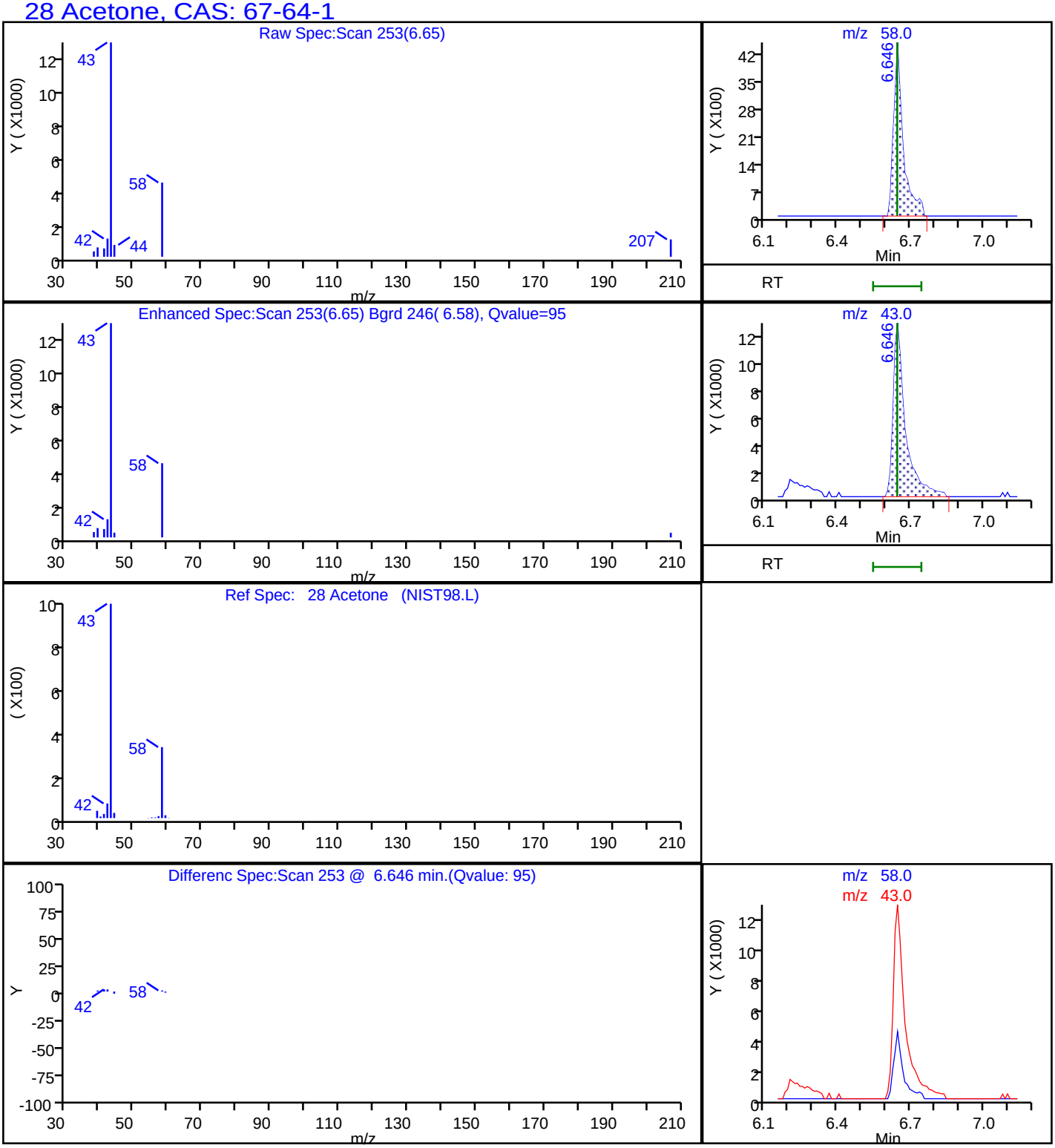
Report Date: 30-Aug-2018 09:28:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291821.D

Injection Date:	29-Aug-2018 17:06:30	Instrument ID:	HP7		
Lims ID:	720-88218-A-19-A	Lab Sample ID:	720-88218-19		
Client ID:	DG-B5S--0.5-1				
Operator ID:	SF	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



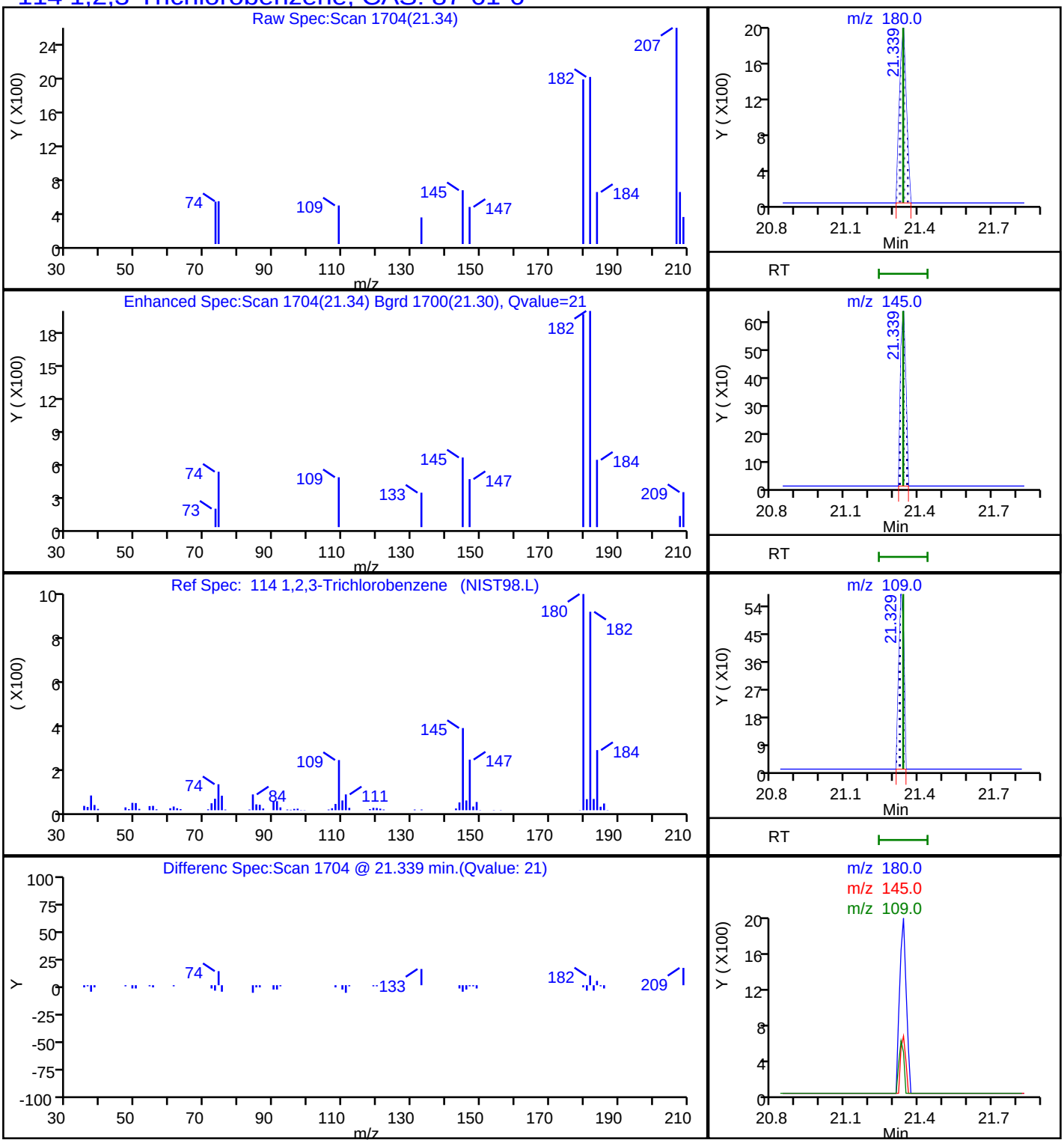
Report Date: 30-Aug-2018 09:28:06 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291821.D

Injection Date:	29-Aug-2018 17:06:30	Instrument ID:	HP7		
Lims ID:	720-88218-A-19-A	Lab Sample ID:	720-88218-19		
Client ID:	DG-B5S--0.5-1				
Operator ID:	SF	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

114 1,2,3-Trichlorobenzene, CAS: 87-61-6



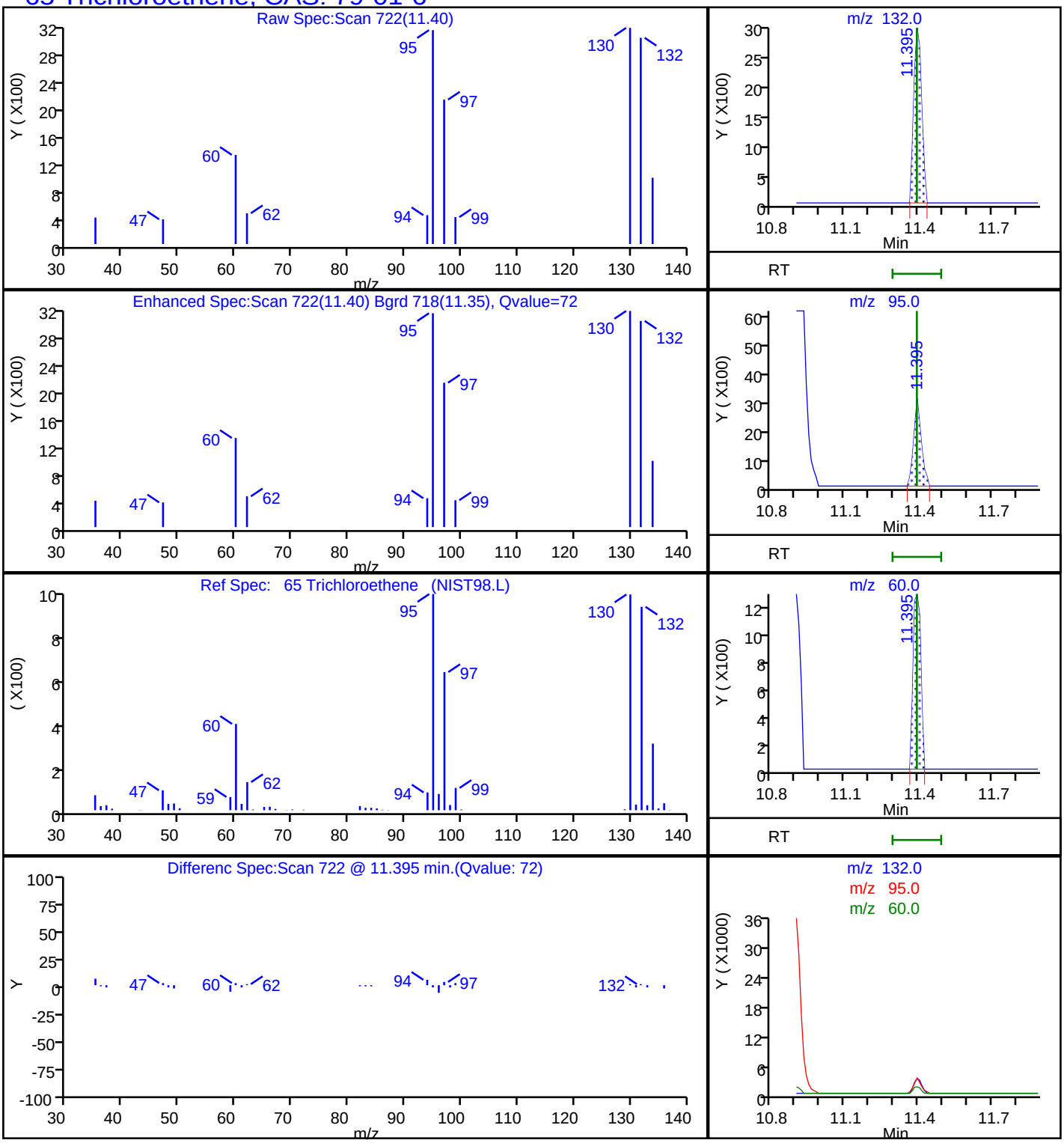
Report Date: 30-Aug-2018 09:28:05 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291821.D

Injection Date:	29-Aug-2018 17:06:30	Instrument ID:	HP7		
Lims ID:	720-88218-A-19-A	Lab Sample ID:	720-88218-19		
Client ID:	DG-B5S--0.5-1				
Operator ID:	SF	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

65 Trichloroethene, CAS: 79-01-6



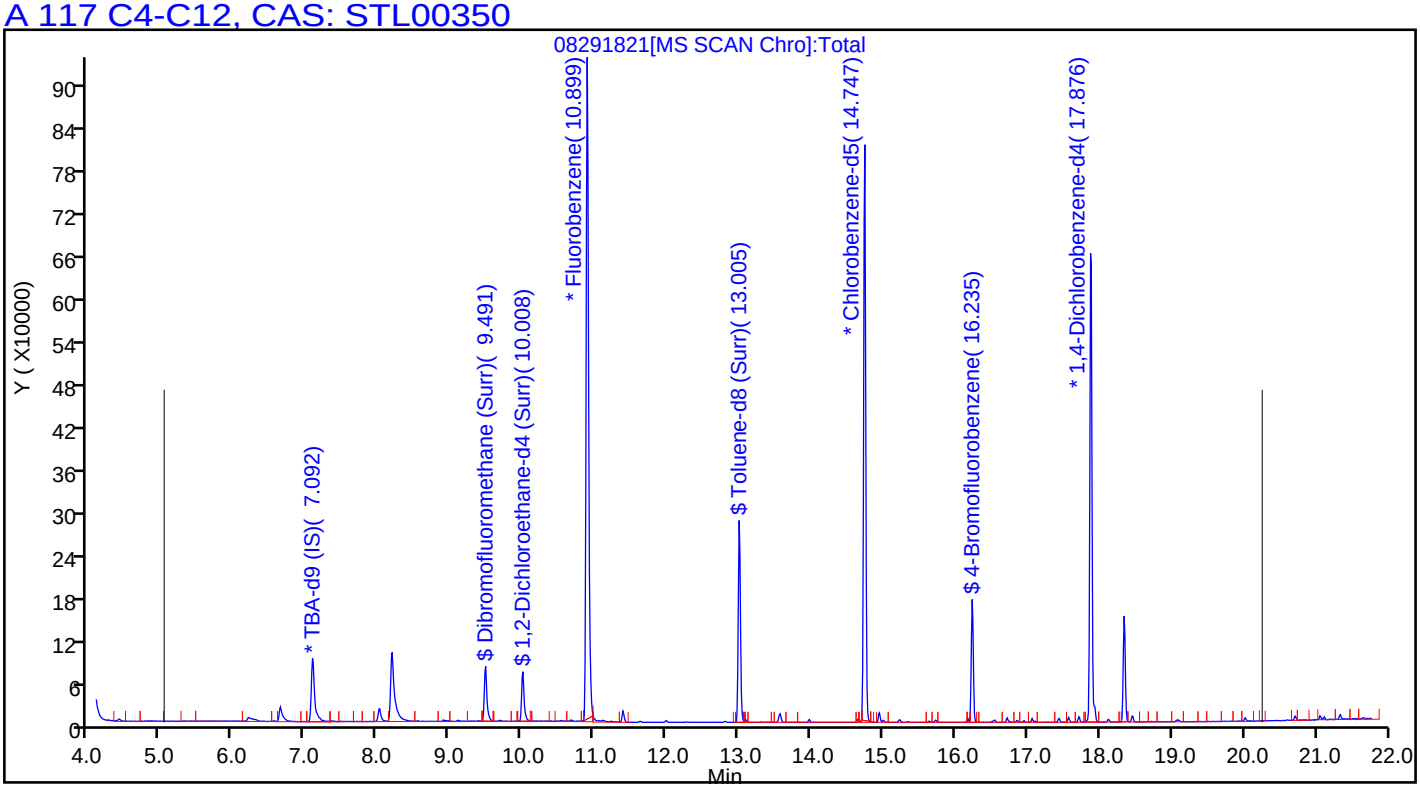
Report Date: 30-Aug-2018 09:28:06 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291821.D

Injection Date:	29-Aug-2018 17:06:30	Instrument ID:	HP7		
Lims ID:	720-88218-A-19-A	Lab Sample ID:	720-88218-19		
Client ID:	DG-B5S--0.5-1				
Operator ID:	SF	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

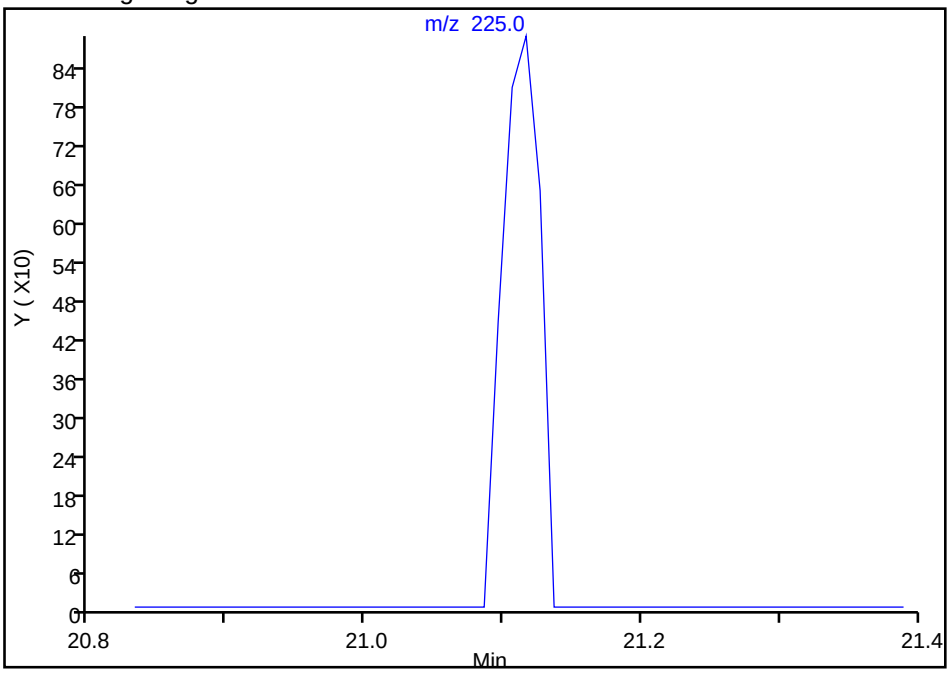
Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291821.D				
Injection Date:	29-Aug-2018 17:06:30	Instrument ID:	HP7		
Lims ID:	720-88218-A-19-A	Lab Sample ID:	720-88218-19		
Client ID:	DG-B5S--0.5-1				
Operator ID:	SF	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

113 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

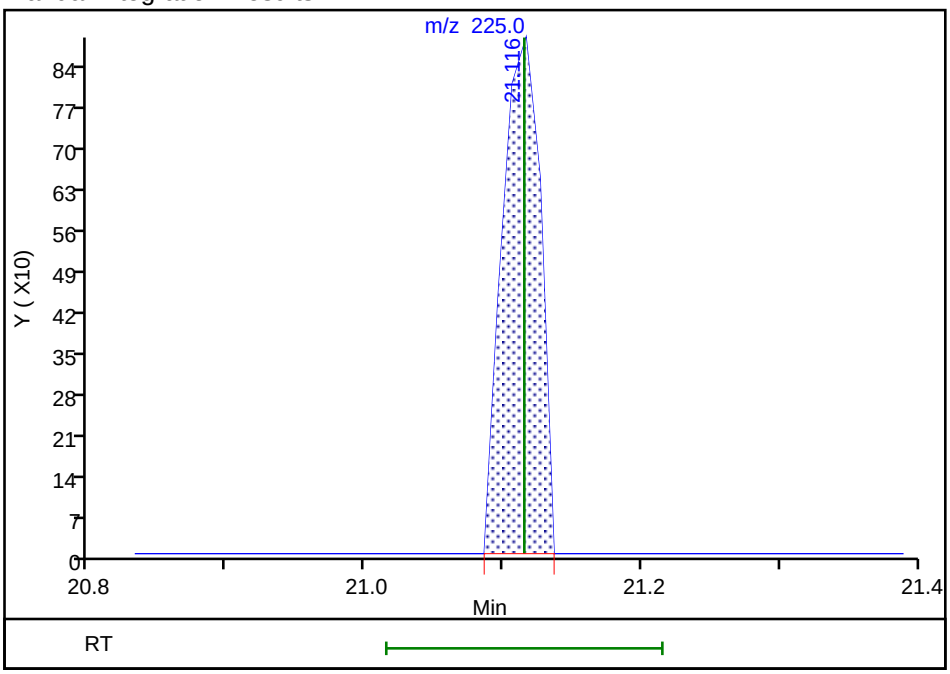
Not Detected
Expected RT: 21.11

Processing Integration Results



Manual Integration Results

RT: 21.12
Area: 1698
Amount: 0.246914
Amount Units: ug/L



Reviewer: chaijita, 30-Aug-2018 09:28:02
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

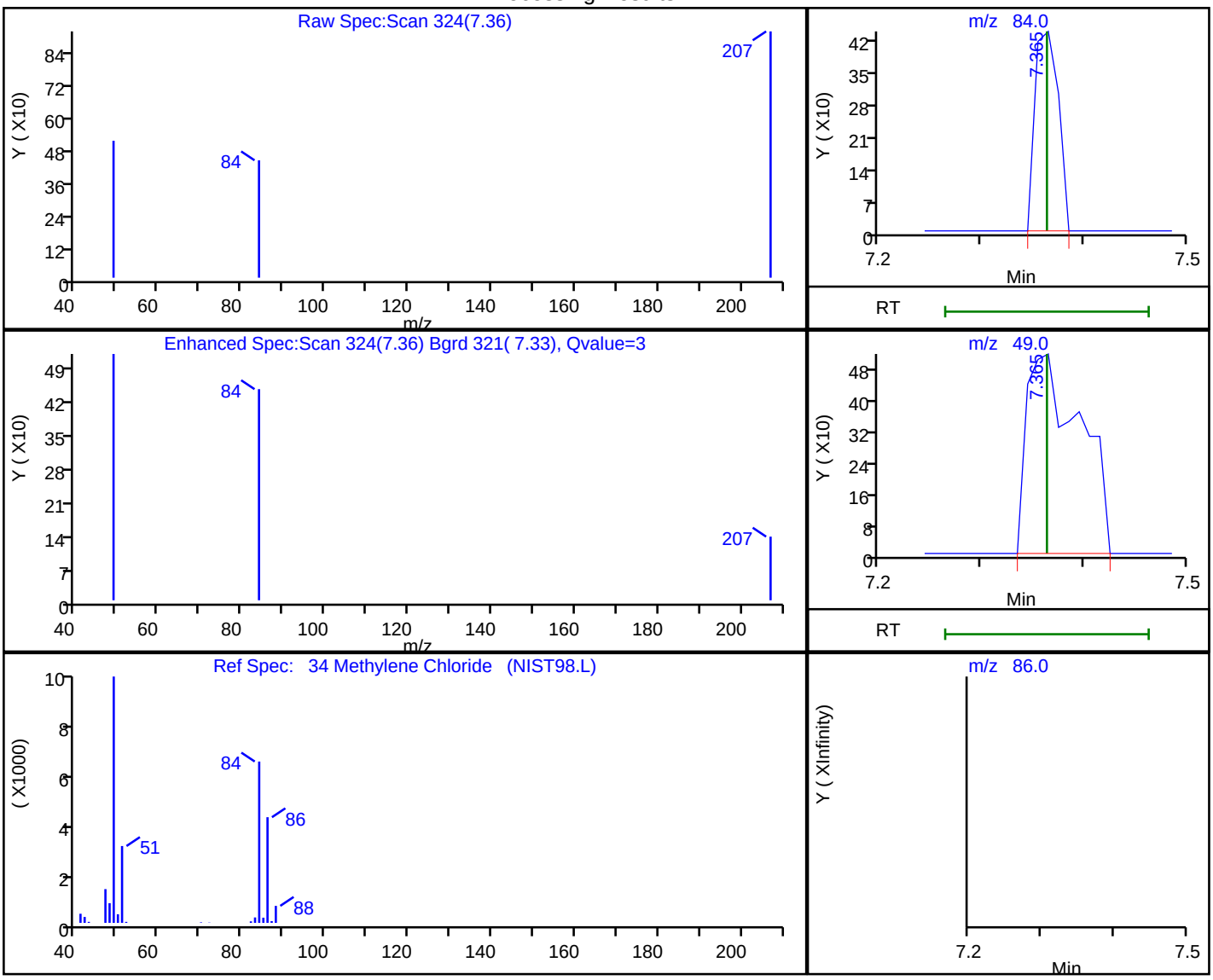
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291821.D				
Injection Date:	29-Aug-2018 17:06:30	Instrument ID:	HP7		
Lims ID:	720-88218-A-19-A	Lab Sample ID:	720-88218-19		
Client ID:	DG-B5S--0.5-1				
Operator ID:	SF	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

34 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
7.36	84.00	702	0.087169
7.36	49.00	1863	
7.36	86.00	0	

Reviewer: chaijita, 30-Aug-2018 09:27:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

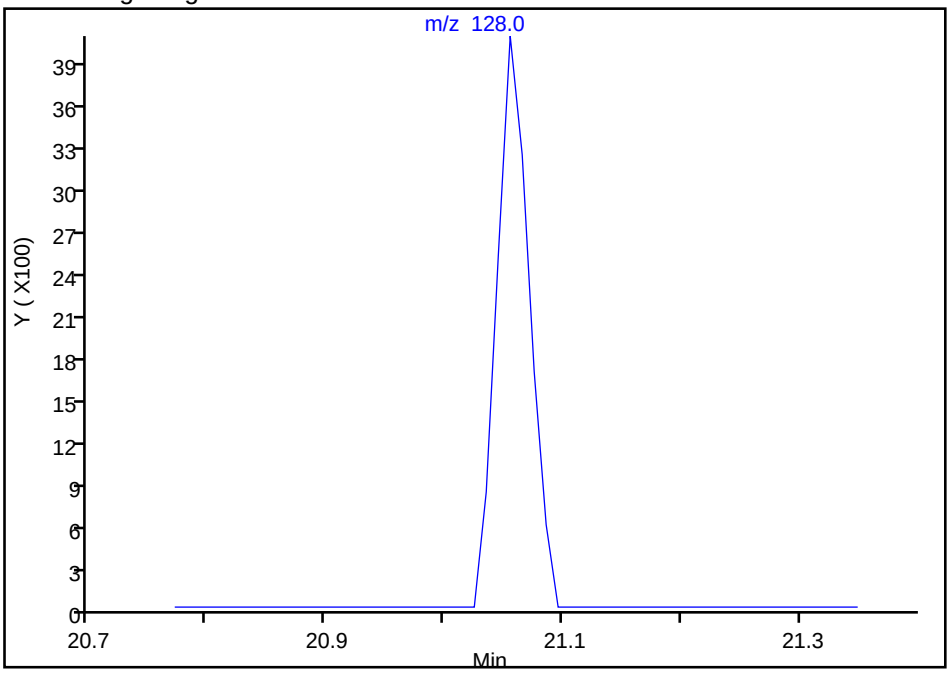
Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291821.D				
Injection Date:	29-Aug-2018 17:06:30	Instrument ID:	HP7		
Lims ID:	720-88218-A-19-A	Lab Sample ID:	720-88218-19		
Client ID:	DG-B5S--0.5-1				
Operator ID:	SF	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

112 Naphthalene, CAS: 91-20-3

Signal: 1

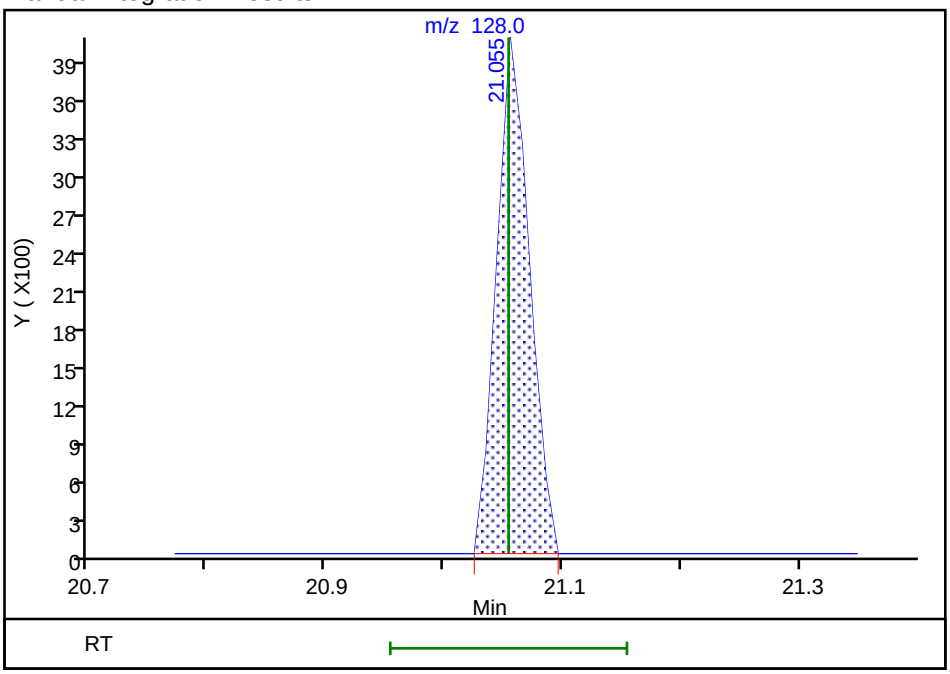
Not Detected
Expected RT: 21.05

Processing Integration Results



Manual Integration Results

RT: 21.06
Area: 7755
Amount: 0.463381
Amount Units: ug/L



Reviewer: chaijita, 30-Aug-2018 09:27:58
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-B5S-3.5-4 Lab Sample ID: 720-88218-20

Matrix: Solid Lab File ID: 08291822.D

Analysis Method: 8260B Date Collected: 08/23/2018 11:45

Sample wt/vol: 6.637(g) Date Analyzed: 08/29/2018 17:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250450 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.8	0.90
67-64-1	Acetone	40		38	29
71-43-2	Benzene	ND		3.8	0.49
75-27-4	Dichlorobromomethane	ND		3.8	0.54
108-86-1	Bromobenzene	ND		3.8	0.60
74-97-5	Chlorobromomethane	ND		15	0.54
75-25-2	Bromoform	ND		3.8	1.5
74-83-9	Bromomethane	ND		7.5	0.60
78-93-3	2-Butanone (MEK)	ND		38	16
104-51-8	n-Butylbenzene	ND		3.8	0.75
135-98-8	sec-Butylbenzene	ND		3.8	0.54
98-06-6	tert-Butylbenzene	ND		3.8	0.55
75-15-0	Carbon disulfide	ND	*	3.8	1.5
56-23-5	Carbon tetrachloride	ND		3.8	0.47
108-90-7	Chlorobenzene	ND		3.8	0.52
75-00-3	Chloroethane	ND		7.5	0.42
67-66-3	Chloroform	ND		3.8	0.50
74-87-3	Chloromethane	ND		7.5	0.60
95-49-8	2-Chlorotoluene	ND		3.8	0.49
106-43-4	4-Chlorotoluene	ND		3.8	0.51
124-48-1	Chlorodibromomethane	ND		3.8	0.53
95-50-1	1,2-Dichlorobenzene	ND		3.8	0.51
541-73-1	1,3-Dichlorobenzene	ND		3.8	0.54
106-46-7	1,4-Dichlorobenzene	ND		3.8	0.53
142-28-9	1,3-Dichloropropane	ND		3.8	0.55
563-58-6	1,1-Dichloropropene	ND		3.8	0.52
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.5	1.3
106-93-4	Ethylene Dibromide	ND		3.8	1.1
74-95-3	Dibromomethane	ND		7.5	0.65
75-71-8	Dichlorodifluoromethane	ND		7.5	0.60
75-34-3	1,1-Dichloroethane	ND		3.8	0.51
107-06-2	1,2-Dichloroethane	ND		3.8	0.57
75-35-4	1,1-Dichloroethene	ND	*	3.8	0.47
156-59-2	cis-1,2-Dichloroethene	2.3	J	3.8	0.51
156-60-5	trans-1,2-Dichloroethene	ND		3.8	0.57
78-87-5	1,2-Dichloropropane	ND		3.8	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-B5S-3.5-4 Lab Sample ID: 720-88218-20

Matrix: Solid Lab File ID: 08291822.D

Analysis Method: 8260B Date Collected: 08/23/2018 11:45

Sample wt/vol: 6.637(g) Date Analyzed: 08/29/2018 17:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250450 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.8	0.52
10061-02-6	trans-1,3-Dichloropropene	ND		3.8	0.50
100-41-4	Ethylbenzene	ND		3.8	0.57
87-68-3	Hexachlorobutadiene	ND		3.8	0.68
591-78-6	2-Hexanone	ND		38	7.5
98-82-8	Isopropylbenzene	ND		3.8	0.51
99-87-6	4-Isopropyltoluene	ND		3.8	1.9
75-09-2	Methylene Chloride	ND		7.5	4.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		38	7.5
91-20-3	Naphthalene	ND		7.5	1.1
103-65-1	N-Propylbenzene	ND		3.8	0.50
100-42-5	Styrene	ND		3.8	0.47
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.8	0.57
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.8	0.57
127-18-4	Tetrachloroethene	9.1		3.8	0.50
108-88-3	Toluene	ND		3.8	0.53
87-61-6	1,2,3-Trichlorobenzene	ND		3.8	0.56
120-82-1	1,2,4-Trichlorobenzene	ND		3.8	0.53
71-55-6	1,1,1-Trichloroethane	ND		3.8	0.46
79-00-5	1,1,2-Trichloroethane	ND		3.8	0.53
79-01-6	Trichloroethene	76		3.8	0.47
75-69-4	Trichlorofluoromethane	ND		3.8	0.42
96-18-4	1,2,3-Trichloropropane	ND		3.8	0.58
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.8	1.6
95-63-6	1,2,4-Trimethylbenzene	ND		3.8	1.2
108-67-8	1,3,5-Trimethylbenzene	ND		3.8	0.49
108-05-4	Vinyl acetate	ND		15	3.8
75-01-4	Vinyl chloride	ND		3.8	0.55
1330-20-7	Xylenes, Total	ND		3.8	0.92
594-20-7	2,2-Dichloropropane	ND		3.8	1.5
STL00350	Gasoline Range Organics (GRO)-C4-C12	76	J	190	75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-B5S-3.5-4 Lab Sample ID: 720-88218-20

Matrix: Solid Lab File ID: 08291822.D

Analysis Method: 8260B Date Collected: 08/23/2018 11:45

Sample wt/vol: 6.637(g) Date Analyzed: 08/29/2018 17:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250450 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	89		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		60-140
2037-26-5	Toluene-d8 (Surr)	94		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291822.D
Lims ID: 720-88218-A-20-A
Client ID: DG-B5S--3.5-4
Sample Type: Client
Inject. Date: 29-Aug-2018 17:36:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-A-20
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 30-Aug-2018 09:29:02 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 09:29:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.091	7.090	0.001	98	160947	250.0	
* 2 Fluorobenzene	96	10.898	10.898	0.000	98	827713	25.0	
* 4 Chlorobenzene-d5	117	14.746	14.746	0.000	86	497640	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.885	17.885	0.000	94	202641	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.490	9.490	0.000	53	57683	7.67	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.007	10.007	0.000	98	59437	8.06	
$ 10 Toluene-d8 (Surr)	98	13.004	13.004	0.000	92	211015	7.08	
$ 11 4-Bromofluorobenzene	95	16.234	16.234	0.000	88	60653	6.70	
$ 12 1,2-Dichlorobenzene-d4	152	18.341	18.341	0.001	78	47711	6.38	
28 Acetone	58	6.655	6.645	0.010	95	13645	26.6	
48 cis-1,2-Dichloroethene	61	9.116	9.116	0.001	54	17467	1.54	
65 Trichloroethene	132	11.394	11.394	0.000	97	450114	50.3	
81 Tetrachloroethene	164	13.976	13.976	0.000	97	47349	6.05	
126 Butyl Ether	87	14.959	14.948	0.010	41	682	0.1260	
105 4-Isopropyltoluene	119	17.936	17.936	0.001	4	11742	0.4687	
136 1,2,3-Trimethylbenzene	105	18.118	18.128	-0.010	1	1623	0.0716	
107 n-Butylbenzene	91	18.452	18.452	0.000	2	2646	0.1173	
141 1,3,5-Trichlorobenzene	180	20.022	20.022	0.001	1	925	0.0911	
A 116 C4-C10	1	11.085	(5.035-17.135)		0	3426467	49.7	
A 153 C6-C8	1	11.156	(8.852-13.459)		0	2658726	38.6	
A 154 C6-C9	1	12.113	(8.852-15.373)		0	3038692	44.1	
A 117 C4-C12	1	12.645	(5.035-20.255)		0	3476195	50.4	
A 119 C6-C10	1	12.994	(8.852-17.135)		0	3060748	44.4	
A 118 C5-C12	1	13.429	(6.604-20.255)		0	3453121	50.1	
A 120 C6-C12	1	14.553	(8.852-20.255)		0	3110476	45.1	
A 155 C8-C10	1	15.241	(13.348-17.135)		0	403170	5.85	
A 121 C7-C12	1	15.723	(11.191-20.255)		0	3000373	43.5	

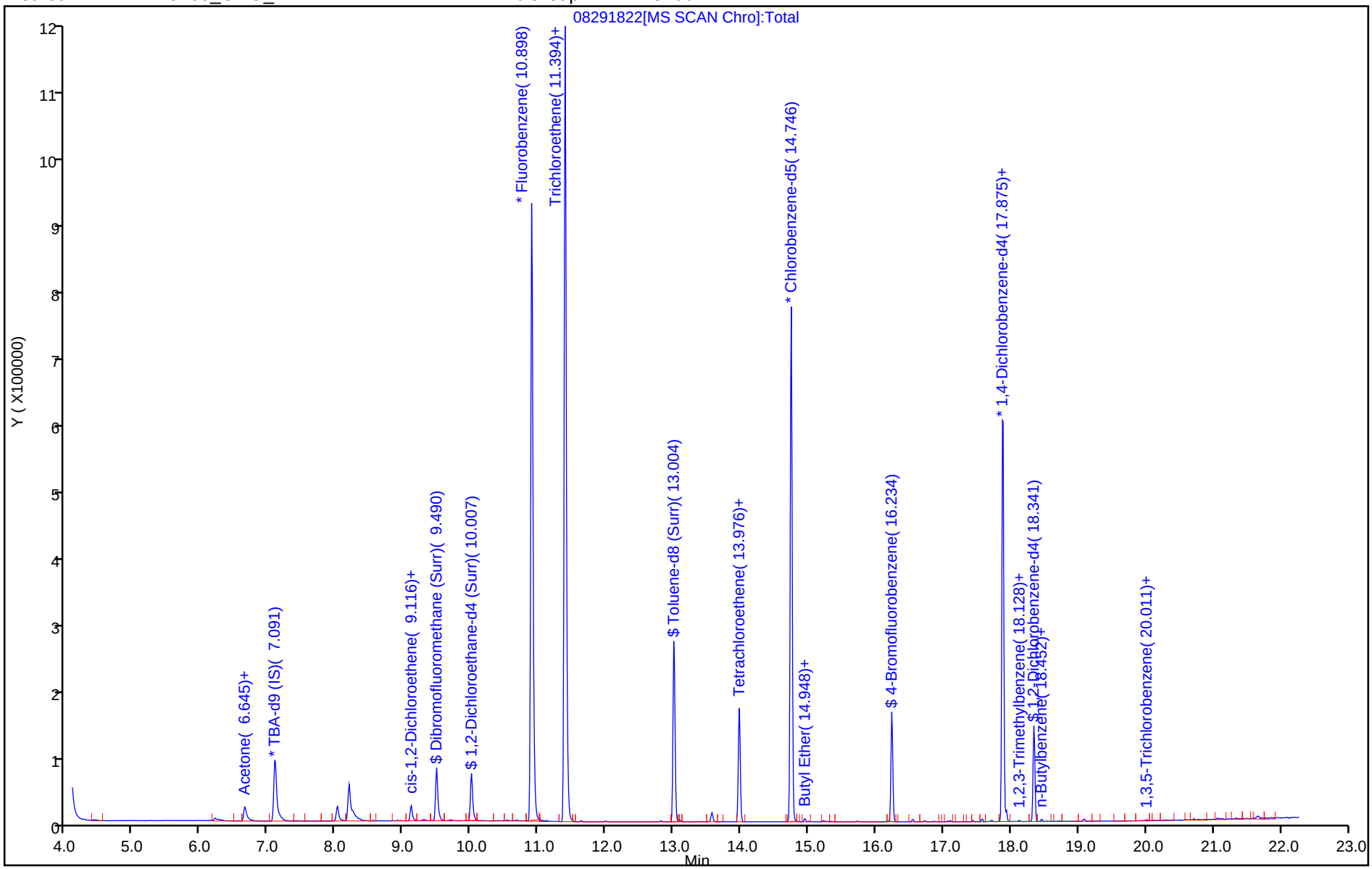
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 09:29:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291822.D				
Injection Date:	29-Aug-2018 17:36:30	Instrument ID:	HP7	Operator ID:	SF
Lims ID:	720-88218-A-20-A	Lab Sample ID:	720-88218-20	Worklist Smp#:	22
Client ID:	DG-B5S--3.5-4				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260_GRO_HP7	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291822.D
Lims ID: 720-88218-A-20-A
Client ID: DG-B5S--3.5-4
Sample Type: Client
Inject. Date: 29-Aug-2018 17:36:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-A-20
Operator ID: SF Instrument ID: HP7

Method: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\8260_GRO_HP7.m
Limit Group: 8260B
Last Update: 30-Aug-2018 09:29:02 Calib Date: 15-Aug-2018 20:14:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP7\20180815-53297.b\08151829.D

Column 1 : Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: chaijita Date: 30-Aug-2018 09:29:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	8.06	107.51
$ 10 Toluene-d8 (Surr)	7.50	7.08	94.45
$ 11 4-Bromofluorobenzene	7.50	6.70	89.39
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

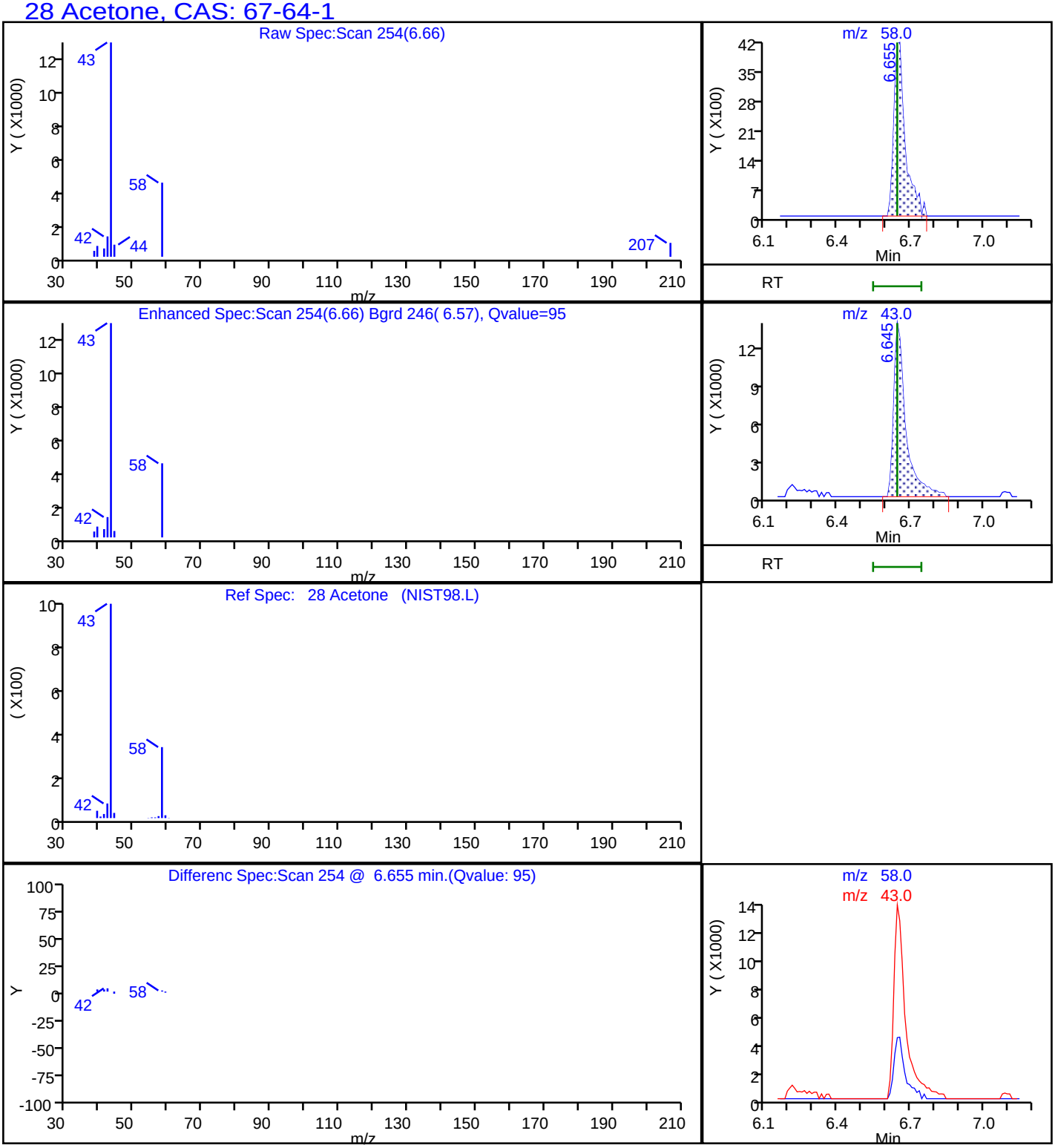
Report Date: 30-Aug-2018 09:29:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291822.D

Injection Date:	29-Aug-2018 17:36:30	Instrument ID:	HP7		
Lims ID:	720-88218-A-20-A	Lab Sample ID:	720-88218-20		
Client ID:	DG-B5S--3.5-4				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



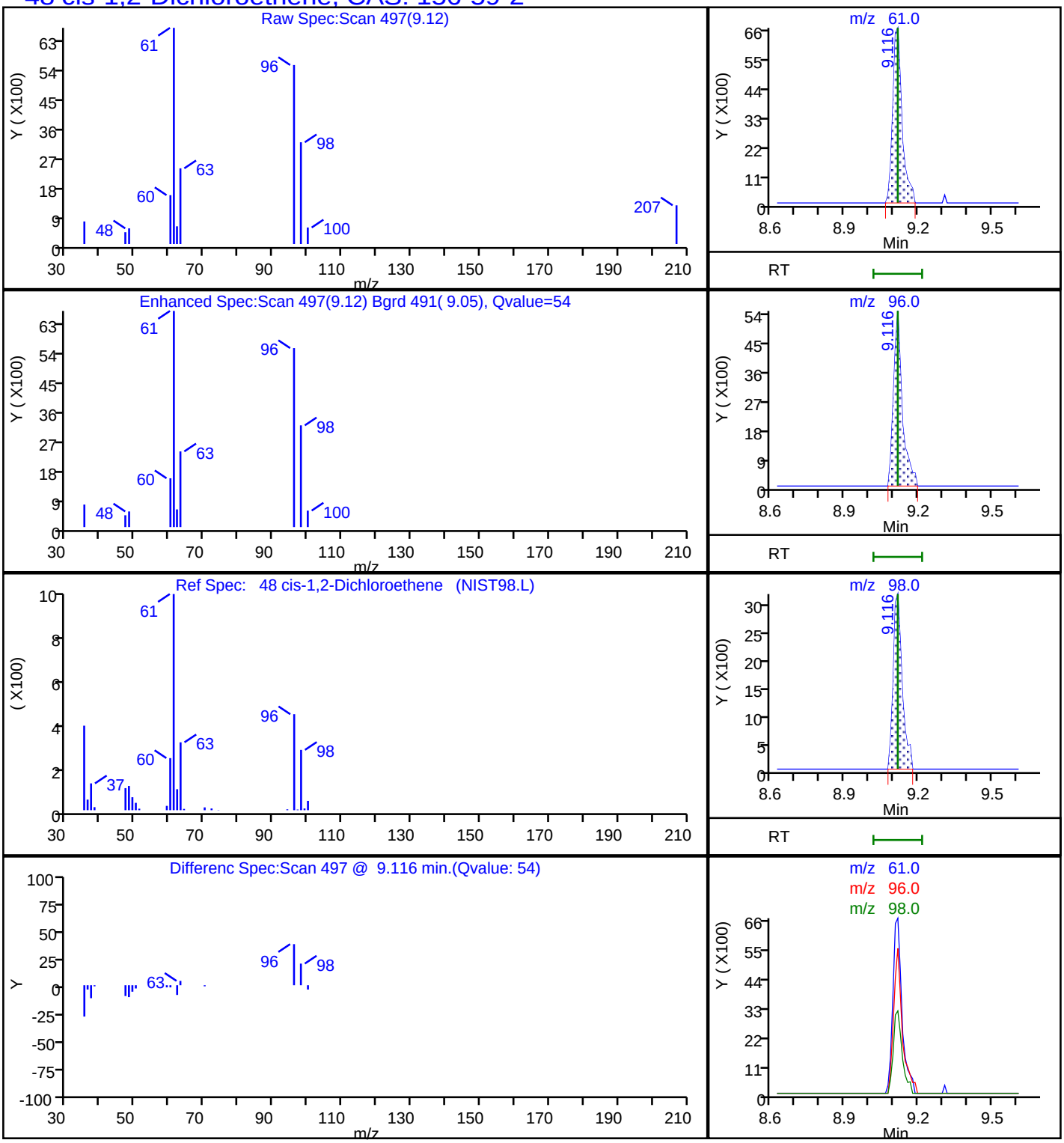
Report Date: 30-Aug-2018 09:29:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291822.D

Injection Date:	29-Aug-2018 17:36:30	Instrument ID:	HP7		
Lims ID:	720-88218-A-20-A	Lab Sample ID:	720-88218-20		
Client ID:	DG-B5S--3.5-4				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

48 cis-1,2-Dichloroethene, CAS: 156-59-2



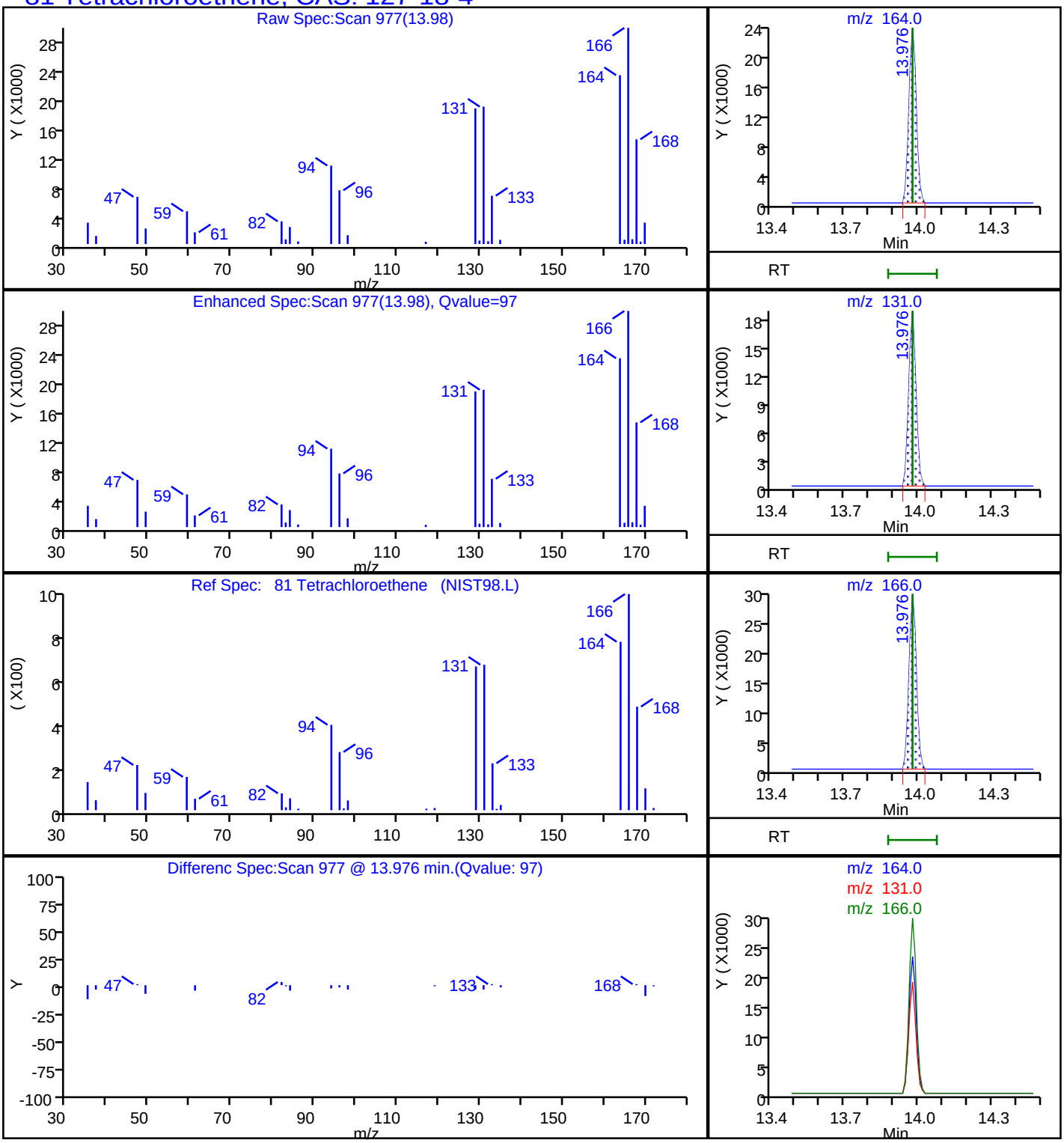
Report Date: 30-Aug-2018 09:29:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291822.D

Injection Date:	29-Aug-2018 17:36:30	Instrument ID:	HP7		
Lims ID:	720-88218-A-20-A	Lab Sample ID:	720-88218-20		
Client ID:	DG-B5S--3.5-4				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

81 Tetrachloroethene, CAS: 127-18-4



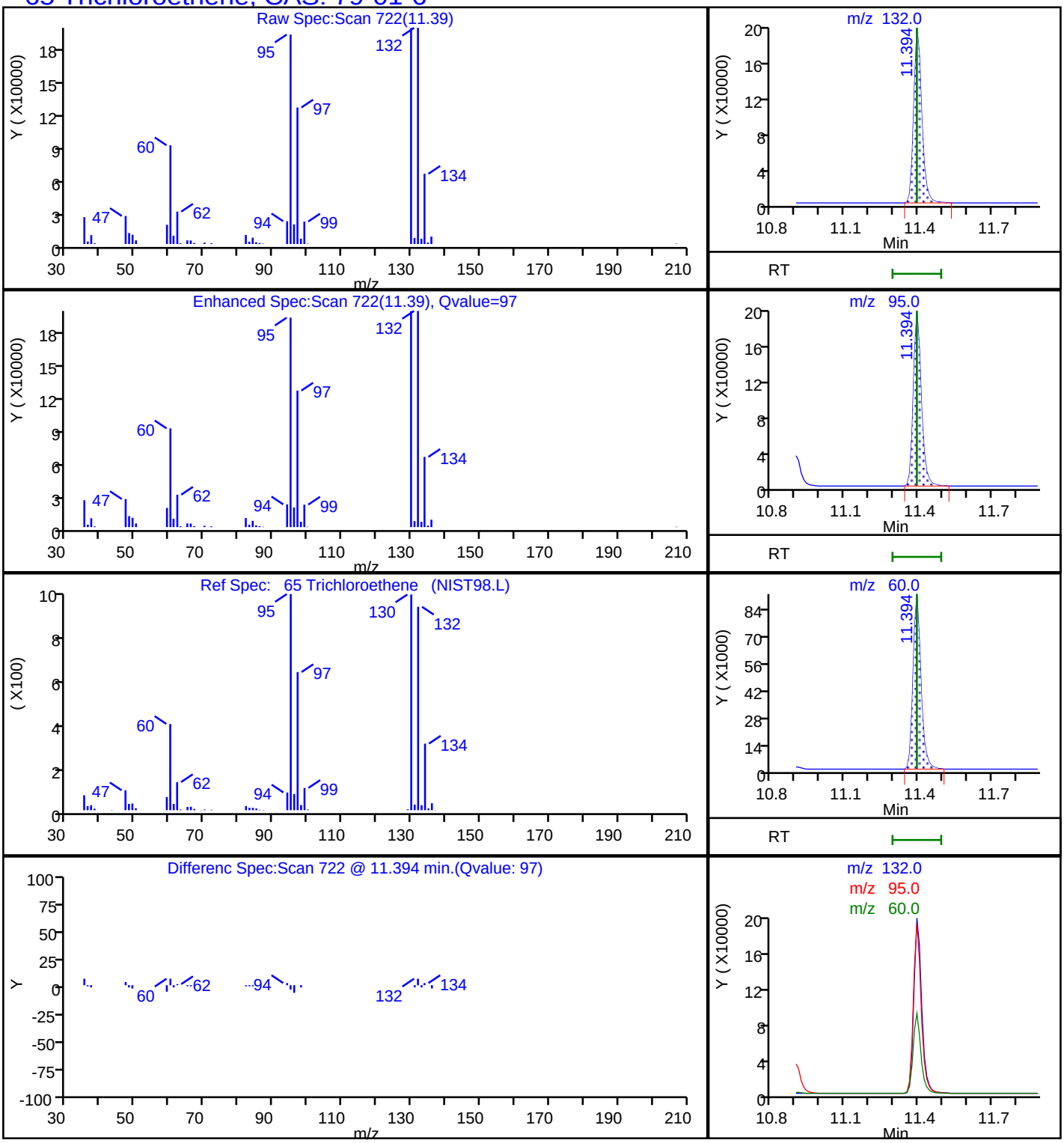
Report Date: 30-Aug-2018 09:29:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291822.D

Injection Date:	29-Aug-2018 17:36:30	Instrument ID:	HP7		
Lims ID:	720-88218-A-20-A	Lab Sample ID:	720-88218-20		
Client ID:	DG-B5S--3.5-4				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

65 Trichloroethene, CAS: 79-01-6



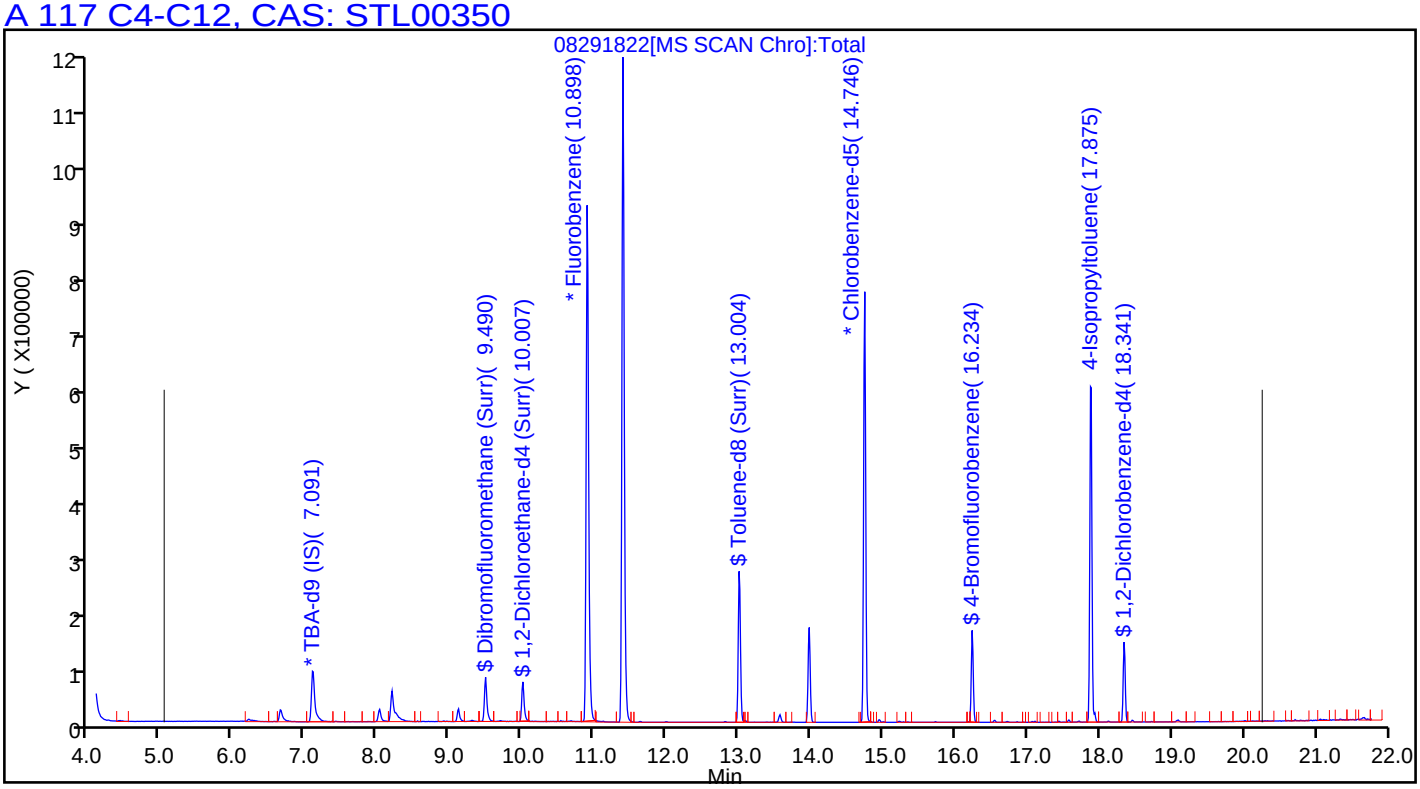
Report Date: 30-Aug-2018 09:29:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291822.D

Injection Date:	29-Aug-2018 17:36:30	Instrument ID:	HP7		
Lims ID:	720-88218-A-20-A	Lab Sample ID:	720-88218-20		
Client ID:	DG-B5S--3.5-4				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



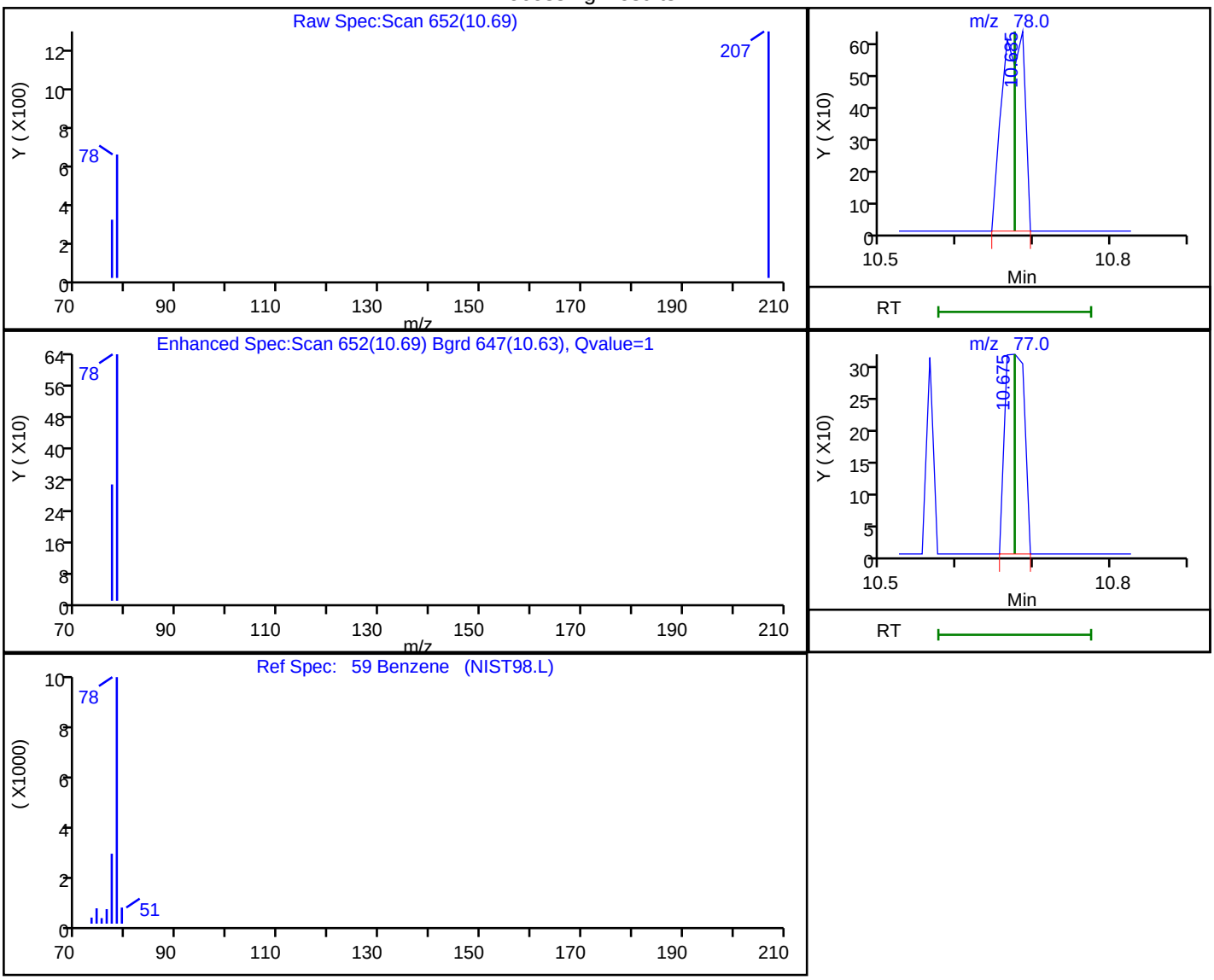
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291822.D				
Injection Date:	29-Aug-2018 17:36:30	Instrument ID:	HP7		
Lims ID:	720-88218-A-20-A	Lab Sample ID:	720-88218-20		
Client ID:	DG-B5S--3.5-4				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

59 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
10.69	78.00	1292	0.040049
10.68	77.00	568	

Reviewer: chaijita, 30-Aug-2018 09:28:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

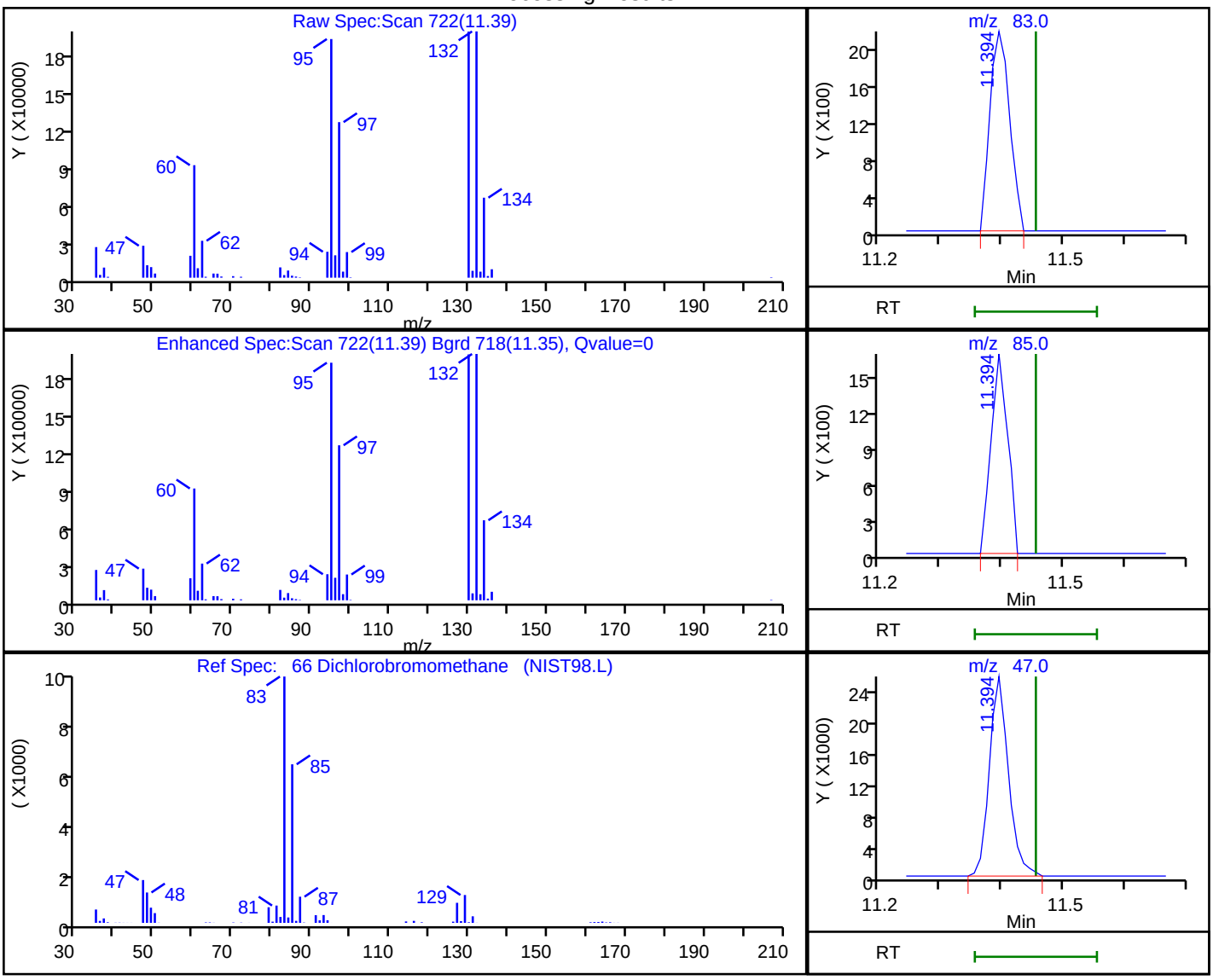
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP7\20180829-53537.b\08291822.D				
Injection Date:	29-Aug-2018 17:36:30	Instrument ID:	HP7		
Lims ID:	720-88218-A-20-A	Lab Sample ID:	720-88218-20		
Client ID:	DG-B5S--3.5-4				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260_GRO_HP7	Limit Group:	8260B		
Column:		Detector	MS SCAN		

66 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
11.39	83.00	4746	0.492654
11.39	85.00	3030	
11.39	47.00	56407	

Reviewer: chaijita, 30-Aug-2018 09:28:34

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-E5S-9.0-9.5 Lab Sample ID: 720-88218-21

Matrix: Solid Lab File ID: 08281839.D

Analysis Method: 8260B Date Collected: 08/22/2018 16:15

Sample wt/vol: 6.789(g) Date Analyzed: 08/29/2018 02:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	ND		3.7	0.88
67-64-1	Acetone	64		37	28
71-43-2	Benzene	ND		3.7	0.48
75-27-4	Dichlorobromomethane	ND		3.7	0.53
108-86-1	Bromobenzene	ND		3.7	0.58
74-97-5	Chlorobromomethane	ND		15	0.53
75-25-2	Bromoform	ND		3.7	1.5
74-83-9	Bromomethane	ND		7.4	0.58
78-93-3	2-Butanone (MEK)	ND		37	15
104-51-8	n-Butylbenzene	ND		3.7	0.74
135-98-8	sec-Butylbenzene	ND		3.7	0.53
98-06-6	tert-Butylbenzene	ND		3.7	0.54
75-15-0	Carbon disulfide	ND		3.7	1.5
56-23-5	Carbon tetrachloride	ND		3.7	0.46
108-90-7	Chlorobenzene	ND		3.7	0.51
75-00-3	Chloroethane	ND		7.4	0.41
67-66-3	Chloroform	ND		3.7	0.49
74-87-3	Chloromethane	ND		7.4	0.58
95-49-8	2-Chlorotoluene	ND		3.7	0.48
106-43-4	4-Chlorotoluene	ND		3.7	0.50
124-48-1	Chlorodibromomethane	ND		3.7	0.52
95-50-1	1,2-Dichlorobenzene	ND		3.7	0.50
541-73-1	1,3-Dichlorobenzene	ND		3.7	0.53
106-46-7	1,4-Dichlorobenzene	ND		3.7	0.52
142-28-9	1,3-Dichloropropane	ND		3.7	0.54
563-58-6	1,1-Dichloropropene	ND		3.7	0.51
96-12-8	1,2-Dibromo-3-Chloropropane	ND		7.4	1.3
106-93-4	Ethylene Dibromide	ND		3.7	1.1
74-95-3	Dibromomethane	ND		7.4	0.63
75-71-8	Dichlorodifluoromethane	ND		7.4	0.58
75-34-3	1,1-Dichloroethane	ND		3.7	0.50
107-06-2	1,2-Dichloroethane	ND		3.7	0.56
75-35-4	1,1-Dichloroethene	ND	*	3.7	0.46
156-59-2	cis-1,2-Dichloroethene	5.7		3.7	0.50
156-60-5	trans-1,2-Dichloroethene	ND		3.7	0.55
78-87-5	1,2-Dichloropropane	ND		3.7	0.46

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-E5S-9.0-9.5 Lab Sample ID: 720-88218-21

Matrix: Solid Lab File ID: 08281839.D

Analysis Method: 8260B Date Collected: 08/22/2018 16:15

Sample wt/vol: 6.789(g) Date Analyzed: 08/29/2018 02:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		3.7	0.51
10061-02-6	trans-1,3-Dichloropropene	ND		3.7	0.49
100-41-4	Ethylbenzene	ND		3.7	0.55
87-68-3	Hexachlorobutadiene	ND		3.7	0.66
591-78-6	2-Hexanone	ND		37	7.4
98-82-8	Isopropylbenzene	ND		3.7	0.50
99-87-6	4-Isopropyltoluene	ND		3.7	1.8
75-09-2	Methylene Chloride	ND		7.4	4.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		37	7.4
91-20-3	Naphthalene	ND		7.4	1.1
103-65-1	N-Propylbenzene	ND		3.7	0.49
100-42-5	Styrene	ND		3.7	0.46
630-20-6	1,1,1,2-Tetrachloroethane	ND		3.7	0.56
79-34-5	1,1,2,2-Tetrachloroethane	ND		3.7	0.55
127-18-4	Tetrachloroethene	ND		3.7	0.49
108-88-3	Toluene	ND		3.7	0.52
87-61-6	1,2,3-Trichlorobenzene	ND		3.7	0.54
120-82-1	1,2,4-Trichlorobenzene	ND		3.7	0.52
71-55-6	1,1,1-Trichloroethane	ND		3.7	0.45
79-00-5	1,1,2-Trichloroethane	ND		3.7	0.52
79-01-6	Trichloroethene	ND		3.7	0.46
75-69-4	Trichlorofluoromethane	ND		3.7	0.41
96-18-4	1,2,3-Trichloropropane	ND		3.7	0.57
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	3.7	1.5
95-63-6	1,2,4-Trimethylbenzene	ND		3.7	1.2
108-67-8	1,3,5-Trimethylbenzene	ND		3.7	0.48
108-05-4	Vinyl acetate	ND		15	3.7
75-01-4	Vinyl chloride	0.85	J	3.7	0.54
1330-20-7	Xylenes, Total	ND		3.7	0.90
594-20-7	2,2-Dichloropropane	ND		3.7	1.5
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		180	74

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88218-1

SDG No.:

Client Sample ID: DG-E5S-9.0-9.5 Lab Sample ID: 720-88218-21

Matrix: Solid Lab File ID: 08281839.D

Analysis Method: 8260B Date Collected: 08/22/2018 16:15

Sample wt/vol: 6.789(g) Date Analyzed: 08/29/2018 02:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250405 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	95		45-131
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		60-140
2037-26-5	Toluene-d8 (Surr)	92		58-140

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281839.D
Lims ID: 720-88218-A-21-A
Client ID: DG-E5--9.0-9.5
Sample Type: Client
Inject. Date: 29-Aug-2018 02:43:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-A-21
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:51 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: medinaj Date: 29-Aug-2018 10:04:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.819	0.006	0	275286	250.0	
* 2 Fluorobenzene	96	10.605	10.599	0.006	98	647739	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.439	0.000	87	490347	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.579	0.000	95	257922	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.190	0.000	94	54886	7.55	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.702	0.006	0	69262	7.60	
$ 10 Toluene-d8 (Surr)	98	12.708	12.708	0.000	93	181275	6.92	
$ 11 4-Bromofluorobenzene	95	15.933	15.933	0.000	95	67844	7.11	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.048	0.000	84	61686	6.18	
$ 6 BFB	95	8.825	6.434	2.390	0	576	NR	
19 Vinyl chloride	62	4.770	4.758	0.012	94	4473	0.5782	
24 Acrolein	56	6.209	6.215	-0.006	3	645	0.6157	
28 Acetone	58	6.374	6.368	0.006	99	32990	43.4	
34 Methylene Chloride	84	7.075	7.075	0.000	68	762	0.1087	
144 Methyl acetate	43	7.142	7.124	0.018	99	3316	0.5990	
38 trans-1,2-Dichloroethene	96	7.873	7.867	0.006	94	1693	0.2647	
45 2-Butanone (MEK)	72	8.648	8.635	0.013	99	2334	2.69	
49 cis-1,2-Dichloroethene	61	8.818	8.812	0.006	82	41027	3.85	
140 Ethyl acetate	43	9.007	9.001	0.006	100	41072	4.79	
59 Benzene	78	10.367	10.367	0.000	84	1338	0.0485	
66 Trichloroethene	132	11.098	11.092	0.006	94	1715	0.2402	
75 Toluene	92	12.799	12.787	0.012	96	1195	0.0741	
149 1-Chlorohexane	55	14.445	14.354	0.091	33	5137	0.6218	
128 Butyl Ether	87	14.671	14.659	0.012	96	739	0.1515	
29 Pentane	43	6.380	6.410	-0.030	70	105106	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	882472	14.9	
A 154 C6-C8	1	10.855	(8.556-13.153)		0	326085	5.49	
A 155 C6-C9	1	11.845	(8.556-15.134)		0	396651	6.68	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	962106	16.2	
A 119 C6-C10	1	12.735	(8.556-16.914)		0	434619	7.32	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	871930	14.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 120 C6-C12	1	14.281	(8.556-20.005)		0	514253	8.66	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	111581	1.88	
A 121 C7-C12	1	15.448	(10.891-20.005)		0	260391	4.38	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

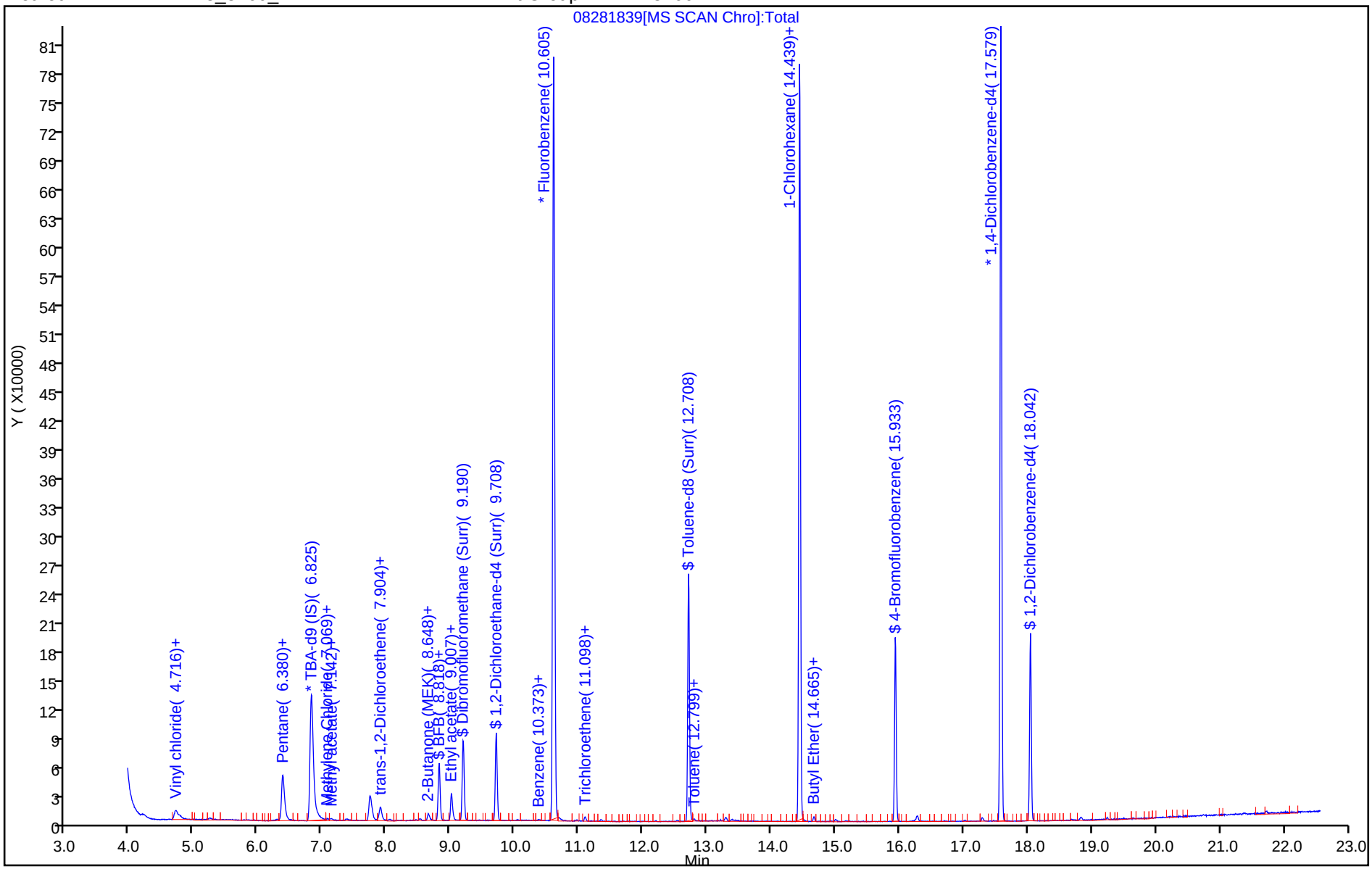
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 29-Aug-2018 10:04:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281839.D

Injection Date:	29-Aug-2018 02:43:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88218-A-21-A	Lab Sample ID:	720-88218-21	Worklist Smp#:	18
Client ID:	DG-E5--9.0-9.5				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281839.D
Lims ID: 720-88218-A-21-A
Client ID: DG-E5--9.0-9.5
Sample Type: Client
Inject. Date: 29-Aug-2018 02:43:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88218-A-21
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 29-Aug-2018 07:02:51 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

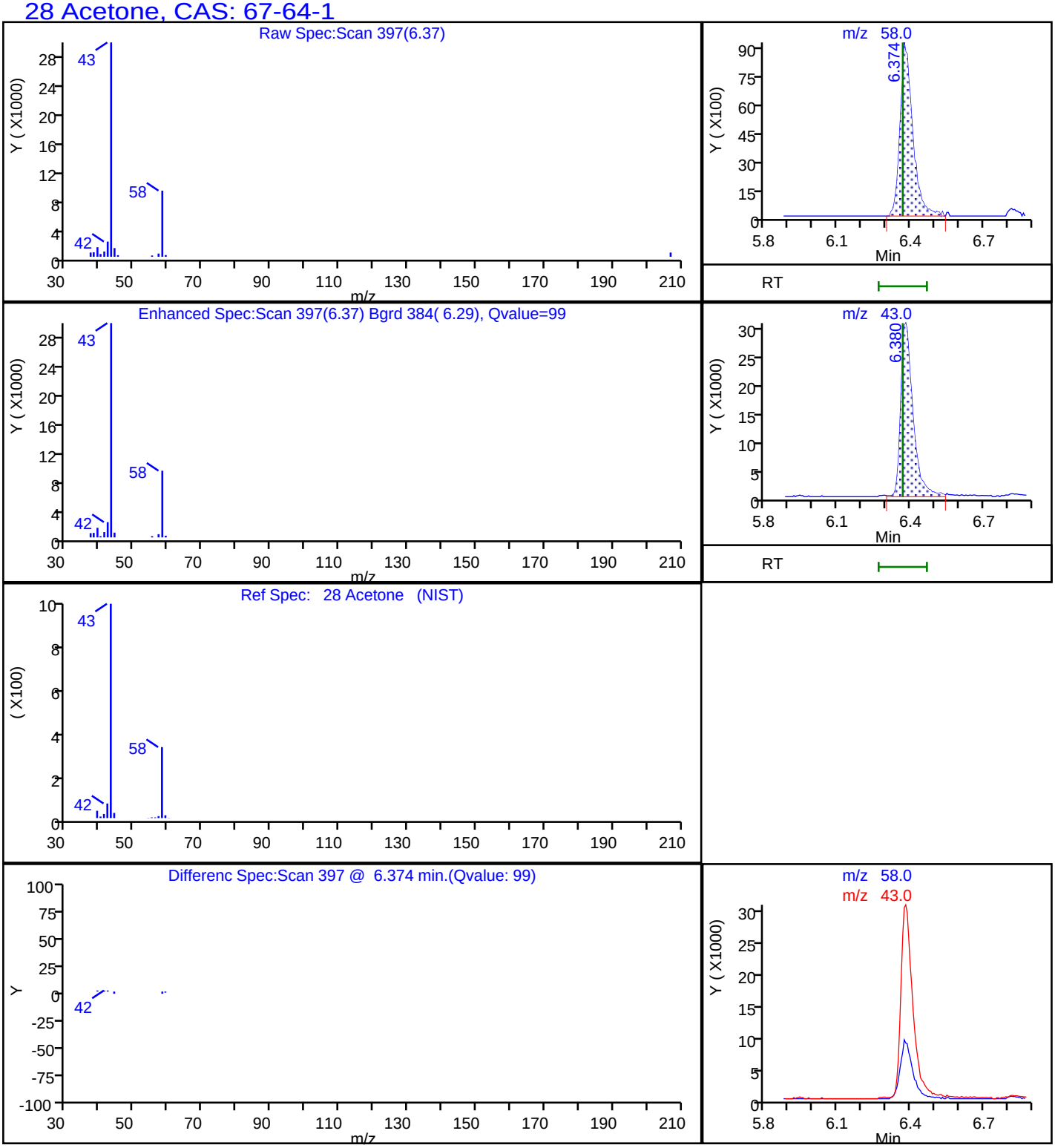
First Level Reviewer: medinaj Date: 29-Aug-2018 10:04:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.60	101.40
$ 10 Toluene-d8 (Surr)	7.50	6.92	92.26
$ 11 4-Bromofluorobenzene	7.50	7.11	94.86
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281839.D

Injection Date:	29-Aug-2018 02:43:30	Instrument ID:	HP13		
Lims ID:	720-88218-A-21-A	Lab Sample ID:	720-88218-21		
Client ID:	DG-E5--9.0-9.5				
Operator ID:	VOA	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1



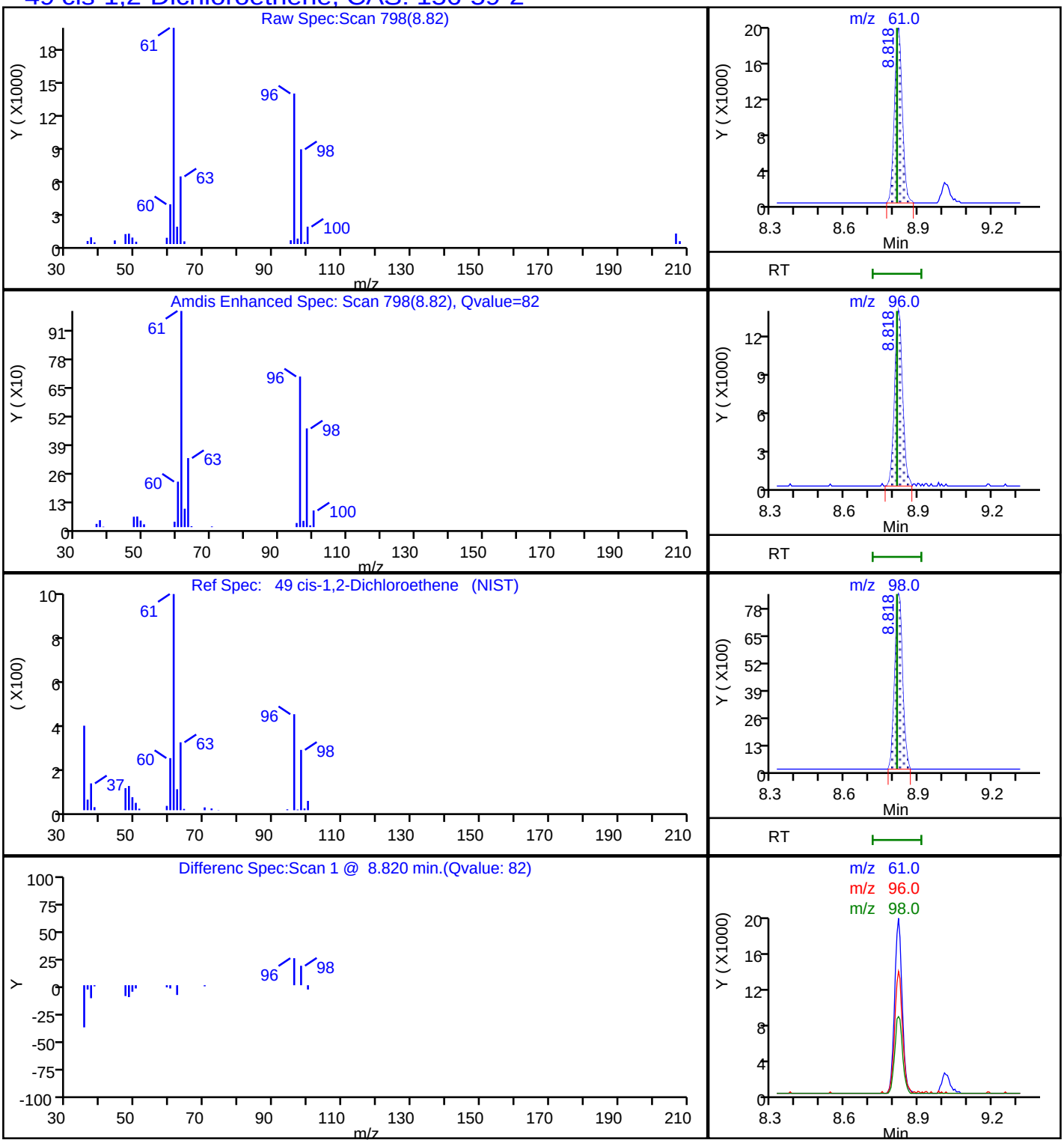
Report Date: 29-Aug-2018 10:04:27 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281839.D

Injection Date:	29-Aug-2018 02:43:30	Instrument ID:	HP13		
Lims ID:	720-88218-A-21-A	Lab Sample ID:	720-88218-21		
Client ID:	DG-E5--9.0-9.5				
Operator ID:	VOA	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

49 cis-1,2-Dichloroethene, CAS: 156-59-2



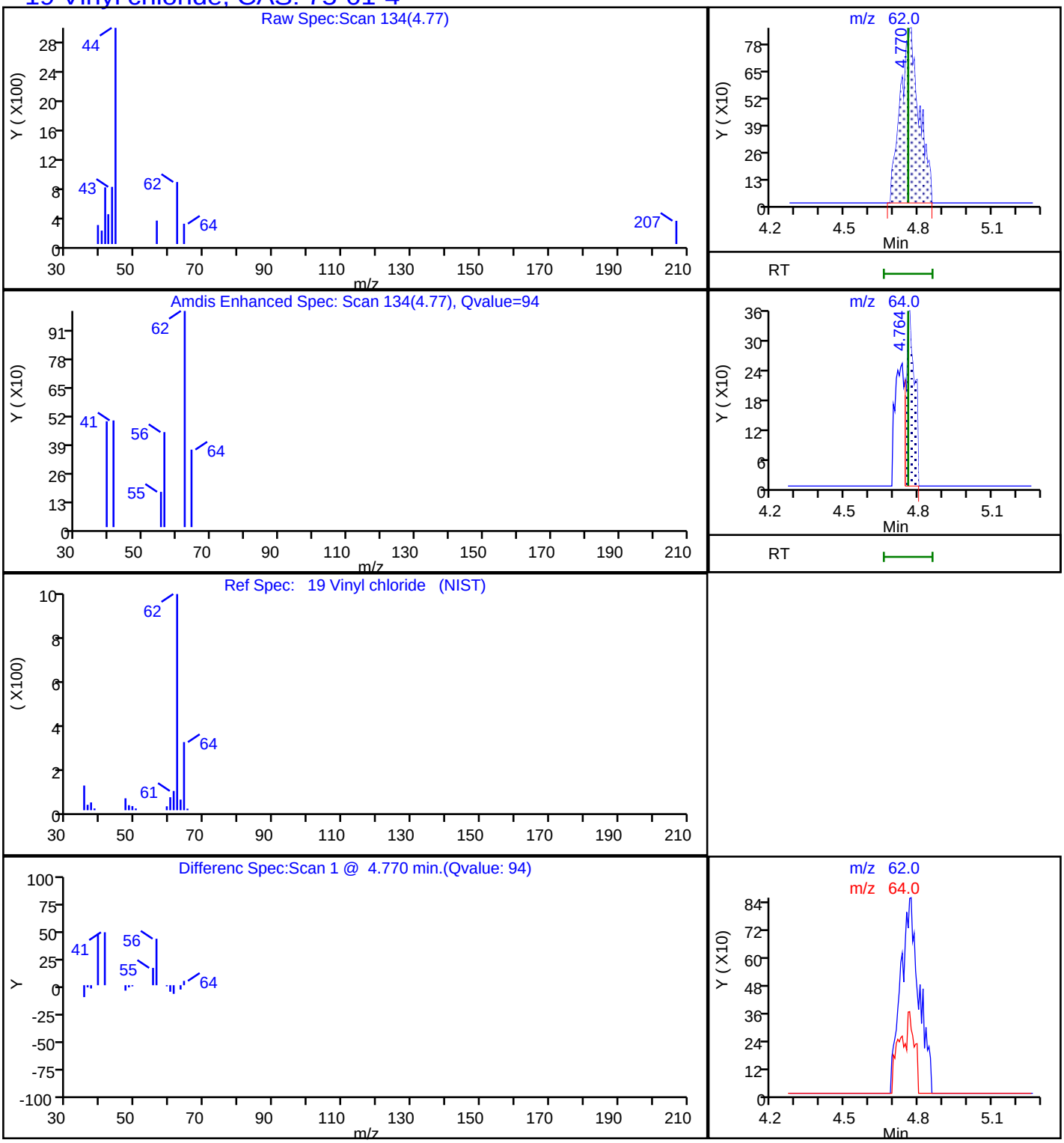
Report Date: 29-Aug-2018 10:04:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281839.D

Injection Date:	29-Aug-2018 02:43:30	Instrument ID:	HP13		
Lims ID:	720-88218-A-21-A	Lab Sample ID:	720-88218-21		
Client ID:	DG-E5--9.0-9.5				
Operator ID:	VOA	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

19 Vinyl chloride, CAS: 75-01-4



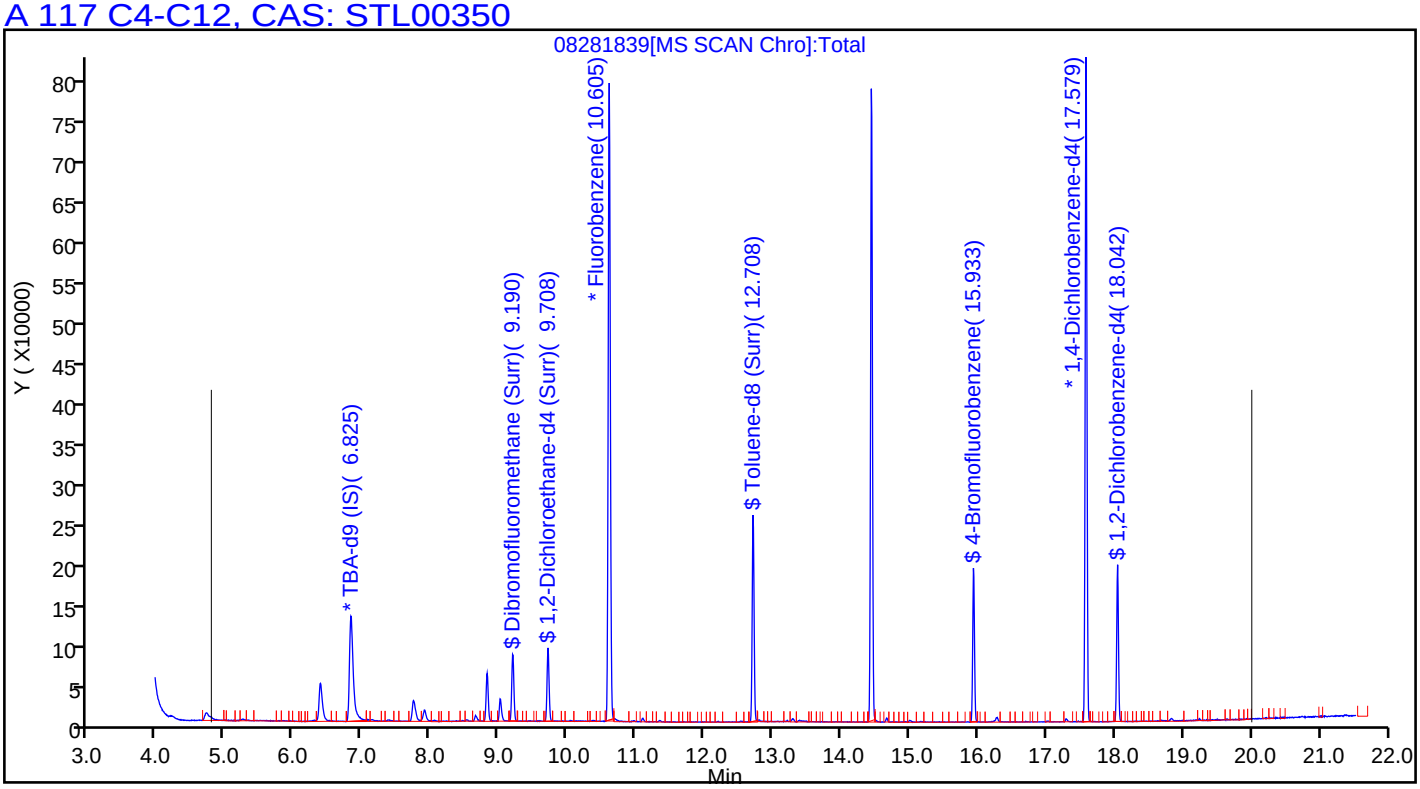
Report Date: 29-Aug-2018 10:04:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180828-53529.b\08281839.D

Injection Date:	29-Aug-2018 02:43:30	Instrument ID:	HP13		
Lims ID:	720-88218-A-21-A	Lab Sample ID:	720-88218-21		
Client ID:	DG-E5--9.0-9.5				
Operator ID:	VOA	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(45-131)	(60-140)	(58-140)
720-88218-1	DG-J5S-0.5-1	96	102	92
720-88218-2	DG-J5S-3.5-4	91	109	92
720-88218-3	DG-J5S-7-7.5	88	106	96
720-88218-6	DG-H5S-0.5-1	79	124	87
720-88218-7	DG-H5S-3.5-4	95	103	94
720-88218-10	DG-F5S-0.5-1	94	101	92
720-88218-11	DG-F5S-3.5-4	87 *	119 *	91 *
720-88218-14	DG-D5S-0.5-1	95	107	94
720-88218-15	DG-D5S-3.5-4	96	95	100
720-88218-15 MS	DG-D5S-3.5-4	103	96	99
720-88218-15 MSD	DG-D5S-3.5-4	97	94	101
720-88218-18	DG-C5S-9-9.5	65 *	113	80
720-88218-18	DG-C5S-9-9.5	85	112	93
720-88218-19	DG-B5S-0.5-1	92	104	95
720-88218-20	DG-B5S-3.5-4	89	108	94
720-88218-21	DG-E5S-9.0-9.5	95	101	92
LCS 720-250350/5	Lab Control Sample	99	95	99
LCS 720-250350/7	Lab Control Sample	99	94	96
LCS 720-250405/5	Lab Control Sample	95	95	99
LCS 720-250405/7	Lab Control Sample	97	92	97
LCS 720-250407/5	Lab Control Sample	99	94	100
LCS 720-250407/7	Lab Control Sample	100	103	102
LCS 720-250450/5	Lab Control Sample	98	90	100
LCS 720-250450/7	Lab Control Sample	100	97	102
LCS 720-250453/5	Lab Control Sample	95	98	96
LCS 720-250453/7	Lab Control Sample	97	96	98
LCS 720-250625/5	Lab Control Sample	94	98	96
LCS 720-250625/7	Lab Control Sample	98	99	98
LCS 720-250642/5	Lab Control Sample	99	94	101
LCS 720-250642/7	Lab Control Sample	102	102	102
LCSD 720-250350/6	Lab Control Sample Dup	99	94	97
LCSD 720-250350/8	Lab Control Sample Dup	100	95	97
LCSD 720-250405/6	Lab Control Sample Dup	98	92	98
LCSD 720-250405/8	Lab Control Sample Dup	95	95	96
LCSD 720-250407/6	Lab Control Sample Dup	101	97	101
LCSD 720-250407/8	Lab Control Sample Dup	100	103	102
LCSD 720-250450/6	Lab Control Sample Dup	99	94	100
LCSD 720-250450/8	Lab Control Sample Dup	100	99	101
LCSD 720-250453/6	Lab Control Sample Dup	93	96	96
LCSD 720-250453/8	Lab Control Sample Dup	99	101	97
LCSD 720-250625/6	Lab Control Sample Dup	97	100	98
LCSD 720-250625/8	Lab Control Sample Dup	97	99	97
LCSD 720-250642/6	Lab Control Sample Dup	100	95	101
LCSD 720-250642/8	Lab Control Sample Dup	103	103	103
MB 720-250350/4	Method Blank	102	94	95
MB 720-250405/4	Method Blank	100	94	97
MB 720-250407/4	Method Blank	99	103	102
MB 720-250450/4	Method Blank	96	96	100
MB 720-250453/4	Method Blank	95	100	96

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DCA	TOL
Lab Sample ID	Client Sample ID	(45-131)	(60-140)	(58-140)
MB 720-250625/4	Method Blank	96	104	97
MB 720-250642/4	Method Blank	98	92	101

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		FBP	TPHL
Lab Sample ID	Client Sample ID	(33-120)	(35-146)
720-88216-A-9-F MS	Matrix Spike	68	86
720-88216-A-9-G MSD	Matrix Spike Duplicate	74	88
720-88216-A-17-Q MS	Matrix Spike	66	91
720-88216-A-17-R MSD	Matrix Spike Duplicate	82	96
720-88218-1	DG-J5S-0.5-1	65	100
720-88218-2	DG-J5S-3.5-4	68	88
720-88218-3	DG-J5S-7-7.5	52	82
720-88218-6	DG-H5S-0.5-1	69	94
720-88218-7	DG-H5S-3.5-4	51	83
720-88218-10	DG-F5S-0.5-1	71	96
720-88218-11	DG-F5S-3.5-4	57	67
720-88218-14	DG-D5S-0.5-1	63	88
720-88218-15	DG-D5S-3.5-4	66	85
720-88218-18	DG-C5S-9-9.5	54	77
720-88218-19	DG-B5S-0.5-1	71	96
720-88218-20	DG-B5S-3.5-4	64	98
720-88218-21	DG-E5S-9.0-9.5	61	85
720-88265-D-10-A MS	Matrix Spike	61	89
720-88265-D-10-B MSD	Matrix Spike Duplicate	59	78
LCS 720-250190/2-A	Lab Control Sample	86	106
LCS 720-250290/2-A	Lab Control Sample	99	105
LCS 720-250376/2-A	Lab Control Sample	63	75
MB 720-250190/1-A	Method Blank	98	96
MB 720-250290/1-A	Method Blank	81	95
MB 720-250376/1-A	Method Blank	65	82

Surrogate Legend

FBP = 2-Fluorobiphenyl
TPHL = Terphenyl-d14

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	TPH1 (40-130)						
720-88216-A-9-V MS	Matrix Spike	55						
720-88216-A-9-W MSD	Matrix Spike Duplicate	65						
720-88216-A-17-L MS	Matrix Spike	112						
720-88216-A-17-M MSD	Matrix Spike Duplicate	105						
720-88218-1	DG-J5S-0.5-1	0 X D						
720-88218-2	DG-J5S-3.5-4	81						
720-88218-3	DG-J5S-7-7.5	91						
720-88218-6	DG-H5S-0.5-1	0 X D						
720-88218-7	DG-H5S-3.5-4	86						
720-88218-10	DG-F5S-0.5-1	0 X D						
720-88218-11	DG-F5S-3.5-4	63						
720-88218-14	DG-D5S-0.5-1	0 X D						
720-88218-15	DG-D5S-3.5-4	122						
720-88218-18	DG-C5S-9-9.5	91						
720-88218-19	DG-B5S-0.5-1	59						
720-88218-20	DG-B5S-3.5-4	59						
720-88218-21	DG-E5S-9.0-9.5	94						
720-88239-D-7-A MS	Matrix Spike	83						
720-88239-D-7-B MSD	Matrix Spike Duplicate	79						
LCS 720-250263/2-A	Lab Control Sample	91						
LCS 720-250358/2-A	Lab Control Sample	94						
LCS 720-250382/2-A	Lab Control Sample	81						
MB 720-250263/1-A	Method Blank	106						
MB 720-250358/1-A	Method Blank	82						
MB 720-250382/1-A	Method Blank	101						

Surrogate Legend

TPH = p-Terphenyl

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX2 (21-145)					
720-88216-A-9-S MS	Matrix Spike	90	76					
720-88216-A-9-T MSD	Matrix Spike Duplicate	100	82					
720-88216-A-17-F MS	Matrix Spike	92	82					
720-88216-A-17-G MSD	Matrix Spike Duplicate	93	83					
720-88218-1	DG-J5S-0.5-1	155 p X	77					
720-88218-2	DG-J5S-3.5-4	150 X	88					
720-88218-15	DG-D5S-3.5-4	72	80					
720-88218-19	DG-B5S-0.5-1	96	82					
720-88218-19 MS	DG-B5S-0.5-1	91	94					
720-88218-19 MSD	DG-B5S-0.5-1	106	83					
LCS 720-250294/2-A	Lab Control Sample	96	73					
LCS 720-250393/2-A	Lab Control Sample	95	84					
MB 720-250160/1-A	Method Blank	85	85					
MB 720-250294/1-A	Method Blank	106	84					

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX2 (21-145)
MB 720-250393/1-A	Method Blank	98	84

Surrogate Legend
DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP2 (21-136)	TCX1 (21-145)
720-88218-3	DG-J5S-7-7.5	84	80
720-88218-6	DG-H5S-0.5-1	198 p X	74
720-88218-10	DG-F5S-0.5-1	54 p	63
720-88218-21	DG-E5S-9.0-9.5	87	84

Surrogate Legend
DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP1 (21-136)	TCX2 (21-145)
720-88218-11	DG-F5S-3.5-4	70 p	73
720-88218-14	DG-D5S-0.5-1	72	88
720-88218-20	DG-B5S-3.5-4	66	88
LCS 720-250160/2-A	Lab Control Sample	89	86

Surrogate Legend
DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCBP1 (21-136)	TCX1 (21-145)
720-88218-7	DG-H5S-3.5-4	96	71
720-88218-18	DG-C5S-9-9.5	72	73

Surrogate Legend
DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX2 (14-128)	DCBP2 (10-132)
720-88218-1	DG-J5S-0.5-1	101	161 X
720-88218-2	DG-J5S-3.5-4	96	152 X
720-88218-3	DG-J5S-7-7.5	83	82
720-88218-6	DG-H5S-0.5-1	87	438 X
720-88218-7	DG-H5S-3.5-4	98	100
720-88218-10	DG-F5S-0.5-1	104	126
720-88218-11	DG-F5S-3.5-4	77	86
720-88218-14	DG-D5S-0.5-1	64	74
720-88218-15	DG-D5S-3.5-4	100	114
720-88218-18	DG-C5S-9-9.5	68	75
720-88218-19	DG-B5S-0.5-1	82	107
720-88218-20	DG-B5S-3.5-4	92	115
720-88218-20 MS	DG-B5S-3.5-4	96	126
720-88218-20 MSD	DG-B5S-3.5-4	97	112
720-88218-21	DG-E5S-9.0-9.5	59	54
720-88218-21 MS	DG-E5S-9.0-9.5	86	76
720-88218-21 MSD	DG-E5S-9.0-9.5	71	72
LCS 240-342652/22-A	Lab Control Sample	71	86
LCS 240-343096/24-A	Lab Control Sample	84	90
MB 240-342652/21-A	Method Blank	80	95
MB 240-343096/23-A	Method Blank	94	96

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-250350/4
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 09:36	1
Acetone	ND		50	38	ug/Kg			08/28/18 09:36	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 09:36	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 09:36	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 09:36	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 09:36	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 09:36	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 09:36	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 09:36	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 09:36	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:36	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 09:36	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 09:36	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 09:36	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 09:36	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 09:36	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 09:36	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 09:36	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 09:36	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 09:36	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 09:36	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:36	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 09:36	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 09:36	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 09:36	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 09:36	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:36	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 09:36	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 09:36	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 09:36	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 09:36	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 09:36	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 09:36	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 09:36	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 09:36	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 09:36	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 09:36	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 09:36	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 09:36	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 09:36	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 09:36	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 09:36	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250350/4
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 09:36	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 09:36	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 09:36	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 09:36	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 09:36	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 09:36	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 09:36	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 09:36	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 09:36	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 09:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 09:36	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 09:36	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 09:36	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 09:36	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 09:36	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 09:36	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 09:36	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 09:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*45 - 131*		*08/28/18 09:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*		*08/28/18 09:36*	*1*
Toluene-d8 (Surr)	*95*		*58 - 140*		*08/28/18 09:36*	*1*

Lab Sample ID: LCS 720-250350/5
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	45.9		ug/Kg		92	70 - 144
Acetone	250	264		ug/Kg		105	30 - 162
Benzene	50.0	44.9		ug/Kg		90	70 - 130
Dichlorobromomethane	50.0	45.7		ug/Kg		91	70 - 140
Bromobenzene	50.0	43.2		ug/Kg		86	70 - 130
Chlorobromomethane	50.0	48.5		ug/Kg		97	70 - 130
Bromoform	50.0	48.6		ug/Kg		97	59 - 158
Bromomethane	50.0	55.6		ug/Kg		111	59 - 132
2-Butanone (MEK)	250	246		ug/Kg		99	59 - 159
n-Butylbenzene	50.0	46.6		ug/Kg		93	70 - 142
sec-Butylbenzene	50.0	43.9		ug/Kg		88	70 - 136
tert-Butylbenzene	50.0	43.6		ug/Kg		87	70 - 130
Carbon disulfide	50.0	55.6		ug/Kg		111	60 - 140
Carbon tetrachloride	50.0	47.8		ug/Kg		96	70 - 142
Chlorobenzene	50.0	45.6		ug/Kg		91	70 - 130
Chloroethane	50.0	52.3		ug/Kg		105	65 - 130
Chloroform	50.0	45.1		ug/Kg		90	77 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250350/5
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	57.1		ug/Kg		114	55 - 140
2-Chlorotoluene	50.0	41.6		ug/Kg		83	70 - 138
4-Chlorotoluene	50.0	42.0		ug/Kg		84	70 - 136
Chlorodibromomethane	50.0	48.6		ug/Kg		97	70 - 146
1,2-Dichlorobenzene	50.0	45.7		ug/Kg		91	70 - 130
1,3-Dichlorobenzene	50.0	44.2		ug/Kg		88	70 - 131
1,4-Dichlorobenzene	50.0	45.2		ug/Kg		90	70 - 130
1,3-Dichloropropane	50.0	46.3		ug/Kg		93	70 - 140
1,1-Dichloropropene	50.0	46.0		ug/Kg		92	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	50.7		ug/Kg		101	60 - 145
Ethylene Dibromide	50.0	48.1		ug/Kg		96	70 - 140
Dibromomethane	50.0	45.6		ug/Kg		91	70 - 139
Dichlorodifluoromethane	50.0	62.3		ug/Kg		125	37 - 158
1,1-Dichloroethane	50.0	45.7		ug/Kg		91	70 - 130
1,2-Dichloroethane	50.0	44.9		ug/Kg		90	70 - 130
1,1-Dichloroethene	50.0	51.9		ug/Kg		104	74 - 122
cis-1,2-Dichloroethene	50.0	45.3		ug/Kg		91	70 - 138
trans-1,2-Dichloroethene	50.0	49.1		ug/Kg		98	67 - 130
1,2-Dichloropropane	50.0	45.8		ug/Kg		92	73 - 127
cis-1,3-Dichloropropene	50.0	48.4		ug/Kg		97	68 - 147
trans-1,3-Dichloropropene	50.0	46.7		ug/Kg		93	70 - 155
Ethylbenzene	50.0	44.3		ug/Kg		89	80 - 137
Hexachlorobutadiene	50.0	50.4		ug/Kg		101	70 - 132
2-Hexanone	250	272		ug/Kg		109	62 - 158
Isopropylbenzene	50.0	46.2		ug/Kg		92	70 - 130
4-Isopropyltoluene	50.0	45.2		ug/Kg		90	70 - 133
Methylene Chloride	50.0	46.7		ug/Kg		93	70 - 134
4-Methyl-2-pentanone (MIBK)	250	272		ug/Kg		109	60 - 160
Naphthalene	50.0	48.2		ug/Kg		96	60 - 147
N-Propylbenzene	50.0	42.6		ug/Kg		85	70 - 130
Styrene	50.0	44.5		ug/Kg		89	70 - 130
1,1,1,2-Tetrachloroethane	50.0	47.1		ug/Kg		94	70 - 130
1,1,2,2-Tetrachloroethane	50.0	44.6		ug/Kg		89	70 - 146
Tetrachloroethene	50.0	48.2		ug/Kg		96	70 - 132
Toluene	50.0	44.7		ug/Kg		89	75 - 120
1,2,3-Trichlorobenzene	50.0	50.8		ug/Kg		102	60 - 140
1,2,4-Trichlorobenzene	50.0	49.8		ug/Kg		100	60 - 140
1,1,1-Trichloroethane	50.0	47.4		ug/Kg		95	70 - 130
1,1,2-Trichloroethane	50.0	48.0		ug/Kg		96	70 - 130
Trichloroethene	50.0	47.0		ug/Kg		94	70 - 133
Trichlorofluoromethane	50.0	57.5		ug/Kg		115	60 - 140
1,2,3-Trichloropropane	50.0	45.3		ug/Kg		91	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	59.8		ug/Kg		120	60 - 140
1,2,4-Trimethylbenzene	50.0	42.3		ug/Kg		85	70 - 130
1,3,5-Trimethylbenzene	50.0	42.3		ug/Kg		85	70 - 131
Vinyl acetate	50.0	51.9		ug/Kg		104	38 - 176
Vinyl chloride	50.0	53.8		ug/Kg		108	58 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250350/5
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	50.0	44.1		ug/Kg		88	70 - 146
o-Xylene	50.0	44.6		ug/Kg		89	70 - 140
2,2-Dichloropropane	50.0	47.6		ug/Kg		95	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Lab Sample ID: LCS 720-250350/7
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	985		ug/Kg		99	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250350/6
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	46.2		ug/Kg		92	70 - 144	1	20
Acetone	250	260		ug/Kg		104	30 - 162	2	30
Benzene	50.0	42.9		ug/Kg		86	70 - 130	5	20
Dichlorobromomethane	50.0	45.0		ug/Kg		90	70 - 140	2	20
Bromobenzene	50.0	43.3		ug/Kg		87	70 - 130	0	20
Chlorobromomethane	50.0	48.1		ug/Kg		96	70 - 130	1	20
Bromoform	50.0	47.8		ug/Kg		96	59 - 158	2	20
Bromomethane	50.0	54.0		ug/Kg		108	59 - 132	3	20
2-Butanone (MEK)	250	259		ug/Kg		103	59 - 159	5	20
n-Butylbenzene	50.0	45.2		ug/Kg		90	70 - 142	3	20
sec-Butylbenzene	50.0	42.7		ug/Kg		85	70 - 136	3	20
tert-Butylbenzene	50.0	42.5		ug/Kg		85	70 - 130	3	20
Carbon disulfide	50.0	51.7		ug/Kg		103	60 - 140	7	20
Carbon tetrachloride	50.0	44.8		ug/Kg		90	70 - 142	6	20
Chlorobenzene	50.0	44.8		ug/Kg		90	70 - 130	2	20
Chloroethane	50.0	50.5		ug/Kg		101	65 - 130	4	20
Chloroform	50.0	43.5		ug/Kg		87	77 - 127	4	20
Chloromethane	50.0	53.4		ug/Kg		107	55 - 140	7	20
2-Chlorotoluene	50.0	40.9		ug/Kg		82	70 - 138	2	20
4-Chlorotoluene	50.0	41.5		ug/Kg		83	70 - 136	1	20
Chlorodibromomethane	50.0	47.7		ug/Kg		95	70 - 146	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250350/6
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	50.0	45.5		ug/Kg		91	70 - 130	1	20
1,3-Dichlorobenzene	50.0	43.6		ug/Kg		87	70 - 131	1	20
1,4-Dichlorobenzene	50.0	44.2		ug/Kg		88	70 - 130	2	20
1,3-Dichloropropane	50.0	45.5		ug/Kg		91	70 - 140	2	20
1,1-Dichloropropene	50.0	43.8		ug/Kg		88	70 - 130	5	20
1,2-Dibromo-3-Chloropropane	50.0	50.9		ug/Kg		102	60 - 145	0	20
Ethylene Dibromide	50.0	47.2		ug/Kg		94	70 - 140	2	20
Dibromomethane	50.0	45.9		ug/Kg		92	70 - 139	1	20
Dichlorodifluoromethane	50.0	58.8		ug/Kg		118	37 - 158	6	20
1,1-Dichloroethane	50.0	45.0		ug/Kg		90	70 - 130	2	20
1,2-Dichloroethane	50.0	44.4		ug/Kg		89	70 - 130	1	20
1,1-Dichloroethene	50.0	50.3		ug/Kg		101	74 - 122	3	20
cis-1,2-Dichloroethene	50.0	43.6		ug/Kg		87	70 - 138	4	20
trans-1,2-Dichloroethene	50.0	45.9		ug/Kg		92	67 - 130	7	20
1,2-Dichloropropane	50.0	44.2		ug/Kg		88	73 - 127	4	20
cis-1,3-Dichloropropene	50.0	47.1		ug/Kg		94	68 - 147	3	20
trans-1,3-Dichloropropene	50.0	44.6		ug/Kg		89	70 - 155	5	20
Ethylbenzene	50.0	42.8		ug/Kg		86	80 - 137	4	20
Hexachlorobutadiene	50.0	47.8		ug/Kg		96	70 - 132	5	20
2-Hexanone	250	269		ug/Kg		108	62 - 158	1	20
Isopropylbenzene	50.0	44.7		ug/Kg		89	70 - 130	3	20
4-Isopropyltoluene	50.0	44.1		ug/Kg		88	70 - 133	2	20
Methylene Chloride	50.0	44.9		ug/Kg		90	70 - 134	4	20
4-Methyl-2-pentanone (MIBK)	250	269		ug/Kg		107	60 - 160	1	20
Naphthalene	50.0	49.1		ug/Kg		98	60 - 147	2	20
N-Propylbenzene	50.0	41.5		ug/Kg		83	70 - 130	3	20
Styrene	50.0	43.9		ug/Kg		88	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	46.4		ug/Kg		93	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	44.5		ug/Kg		89	70 - 146	0	20
Tetrachloroethene	50.0	46.0		ug/Kg		92	70 - 132	5	20
Toluene	50.0	43.0		ug/Kg		86	75 - 120	4	20
1,2,3-Trichlorobenzene	50.0	50.8		ug/Kg		102	60 - 140	0	20
1,2,4-Trichlorobenzene	50.0	50.0		ug/Kg		100	60 - 140	0	20
1,1,1-Trichloroethane	50.0	44.9		ug/Kg		90	70 - 130	5	20
1,1,2-Trichloroethane	50.0	46.5		ug/Kg		93	70 - 130	3	20
Trichloroethene	50.0	45.6		ug/Kg		91	70 - 133	3	20
Trichlorofluoromethane	50.0	55.4		ug/Kg		111	60 - 140	4	20
1,2,3-Trichloropropane	50.0	45.8		ug/Kg		92	70 - 146	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	55.0		ug/Kg		110	60 - 140	8	20
1,2,4-Trimethylbenzene	50.0	42.1		ug/Kg		84	70 - 130	1	20
1,3,5-Trimethylbenzene	50.0	41.7		ug/Kg		83	70 - 131	1	20
Vinyl acetate	50.0	52.9		ug/Kg		106	38 - 176	2	20
Vinyl chloride	50.0	51.5		ug/Kg		103	58 - 125	4	20
m-Xylene & p-Xylene	50.0	42.6		ug/Kg		85	70 - 146	3	20
o-Xylene	50.0	43.4		ug/Kg		87	70 - 140	3	20
2,2-Dichloropropane	50.0	44.4		ug/Kg		89	70 - 162	7	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250350/6
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250350/8
Matrix: Solid
Analysis Batch: 250350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	976		ug/Kg		98	70 - 122	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: MB 720-250405/4
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 19:56	1
Acetone	ND		50	38	ug/Kg			08/28/18 19:56	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 19:56	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 19:56	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 19:56	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 19:56	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 19:56	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 19:56	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 19:56	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 19:56	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:56	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 19:56	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 19:56	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 19:56	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 19:56	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 19:56	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 19:56	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 19:56	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 19:56	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:56	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 19:56	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:56	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250405/4
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 19:56	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 19:56	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 19:56	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 19:56	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:56	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 19:56	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 19:56	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 19:56	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:56	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 19:56	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 19:56	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 19:56	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 19:56	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:56	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 19:56	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 19:56	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 19:56	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 19:56	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 19:56	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 19:56	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:56	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 19:56	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 19:56	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 19:56	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:56	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 19:56	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 19:56	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 19:56	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 19:56	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 19:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 19:56	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 19:56	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 19:56	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 19:56	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 19:56	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 19:56	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 19:56	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 19:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*45 - 131*		*08/28/18 19:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*		*08/28/18 19:56*	*1*
Toluene-d8 (Surr)	*97*		*58 - 140*		*08/28/18 19:56*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250405/5
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	50.0		ug/Kg		100	70 - 144
Acetone	250	226		ug/Kg		90	30 - 162
Benzene	50.0	50.5		ug/Kg		101	70 - 130
Dichlorobromomethane	50.0	50.2		ug/Kg		100	70 - 140
Bromobenzene	50.0	50.3		ug/Kg		101	70 - 130
Chlorobromomethane	50.0	53.9		ug/Kg		108	70 - 130
Bromoform	50.0	52.8		ug/Kg		106	59 - 158
Bromomethane	50.0	53.2		ug/Kg		106	59 - 132
2-Butanone (MEK)	250	239		ug/Kg		96	59 - 159
n-Butylbenzene	50.0	51.2		ug/Kg		102	70 - 142
sec-Butylbenzene	50.0	49.9		ug/Kg		100	70 - 136
tert-Butylbenzene	50.0	49.5		ug/Kg		99	70 - 130
Carbon disulfide	50.0	69.8		ug/Kg		140	60 - 140
Carbon tetrachloride	50.0	55.1		ug/Kg		110	70 - 142
Chlorobenzene	50.0	51.1		ug/Kg		102	70 - 130
Chloroethane	50.0	49.5		ug/Kg		99	65 - 130
Chloroform	50.0	51.2		ug/Kg		102	77 - 127
Chloromethane	50.0	53.9		ug/Kg		108	55 - 140
2-Chlorotoluene	50.0	48.0		ug/Kg		96	70 - 138
4-Chlorotoluene	50.0	48.3		ug/Kg		97	70 - 136
Chlorodibromomethane	50.0	53.0		ug/Kg		106	70 - 146
1,2-Dichlorobenzene	50.0	50.7		ug/Kg		101	70 - 130
1,3-Dichlorobenzene	50.0	50.1		ug/Kg		100	70 - 131
1,4-Dichlorobenzene	50.0	50.3		ug/Kg		101	70 - 130
1,3-Dichloropropane	50.0	49.5		ug/Kg		99	70 - 140
1,1-Dichloropropene	50.0	52.1		ug/Kg		104	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	51.4		ug/Kg		103	60 - 145
Ethylene Dibromide	50.0	51.5		ug/Kg		103	70 - 140
Dibromomethane	50.0	49.6		ug/Kg		99	70 - 139
Dichlorodifluoromethane	50.0	57.8		ug/Kg		116	37 - 158
1,1-Dichloroethane	50.0	53.0		ug/Kg		106	70 - 130
1,2-Dichloroethane	50.0	51.6		ug/Kg		103	70 - 130
1,1-Dichloroethene	50.0	64.5	*	ug/Kg		129	74 - 122
cis-1,2-Dichloroethene	50.0	51.7		ug/Kg		103	70 - 138
trans-1,2-Dichloroethene	50.0	56.0		ug/Kg		112	67 - 130
1,2-Dichloropropane	50.0	51.2		ug/Kg		102	73 - 127
cis-1,3-Dichloropropene	50.0	52.9		ug/Kg		106	68 - 147
trans-1,3-Dichloropropene	50.0	50.1		ug/Kg		100	70 - 155
Ethylbenzene	50.0	49.7		ug/Kg		99	80 - 137
Hexachlorobutadiene	50.0	52.5		ug/Kg		105	70 - 132
2-Hexanone	250	237		ug/Kg		95	62 - 158
Isopropylbenzene	50.0	51.4		ug/Kg		103	70 - 130
4-Isopropyltoluene	50.0	50.7		ug/Kg		101	70 - 133
Methylene Chloride	50.0	53.1		ug/Kg		106	70 - 134
4-Methyl-2-pentanone (MIBK)	250	235		ug/Kg		94	60 - 160
Naphthalene	50.0	49.1		ug/Kg		98	60 - 147
N-Propylbenzene	50.0	49.2		ug/Kg		98	70 - 130
Styrene	50.0	49.2		ug/Kg		98	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250405/5
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,1,2-Tetrachloroethane			50.0	52.7		ug/Kg		105	70 - 130		
1,1,2,2-Tetrachloroethane			50.0	47.1		ug/Kg		94	70 - 146		
Tetrachloroethene			50.0	54.4		ug/Kg		109	70 - 132		
Toluene			50.0	51.0		ug/Kg		102	75 - 120		
1,2,3-Trichlorobenzene			50.0	51.2		ug/Kg		102	60 - 140		
1,2,4-Trichlorobenzene			50.0	52.2		ug/Kg		104	60 - 140		
1,1,1-Trichloroethane			50.0	54.1		ug/Kg		108	70 - 130		
1,1,2-Trichloroethane			50.0	50.3		ug/Kg		101	70 - 130		
Trichloroethene			50.0	53.9		ug/Kg		108	70 - 133		
Trichlorofluoromethane			50.0	55.7		ug/Kg		111	60 - 140		
1,2,3-Trichloropropane			50.0	49.7		ug/Kg		99	70 - 146		
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	69.7		ug/Kg		139	60 - 140		
1,2,4-Trimethylbenzene			50.0	48.2		ug/Kg		96	70 - 130		
1,3,5-Trimethylbenzene			50.0	48.9		ug/Kg		98	70 - 131		
Vinyl acetate			50.0	47.6		ug/Kg		95	38 - 176		
Vinyl chloride			50.0	51.3		ug/Kg		103	58 - 125		
m-Xylene & p-Xylene			50.0	49.5		ug/Kg		99	70 - 146		
o-Xylene			50.0	49.8		ug/Kg		100	70 - 140		
2,2-Dichloropropane			50.0	51.9		ug/Kg		104	70 - 162		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Lab Sample ID: LCS 720-250405/7
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C4-C12			1000	920		ug/Kg		92	70 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: LCSD 720-250405/6
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether			50.0	50.2		ug/Kg		100	70 - 144	0	20
Acetone			250	202		ug/Kg		81	30 - 162	11	30
Benzene			50.0	49.4		ug/Kg		99	70 - 130	2	20
Dichlorobromomethane			50.0	49.9		ug/Kg		100	70 - 140	0	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250405/6
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	50.0	48.4		ug/Kg		97	70 - 130	4	20
Chlorobromomethane	50.0	53.7		ug/Kg		107	70 - 130	0	20
Bromoform	50.0	52.4		ug/Kg		105	59 - 158	1	20
Bromomethane	50.0	52.2		ug/Kg		104	59 - 132	2	20
2-Butanone (MEK)	250	224		ug/Kg		90	59 - 159	6	20
n-Butylbenzene	50.0	52.3		ug/Kg		105	70 - 142	2	20
sec-Butylbenzene	50.0	49.3		ug/Kg		99	70 - 136	1	20
tert-Butylbenzene	50.0	48.8		ug/Kg		98	70 - 130	1	20
Carbon disulfide	50.0	68.3		ug/Kg		137	60 - 140	2	20
Carbon tetrachloride	50.0	54.3		ug/Kg		109	70 - 142	1	20
Chlorobenzene	50.0	50.7		ug/Kg		101	70 - 130	1	20
Chloroethane	50.0	48.2		ug/Kg		96	65 - 130	3	20
Chloroform	50.0	49.8		ug/Kg		100	77 - 127	3	20
Chloromethane	50.0	52.8		ug/Kg		106	55 - 140	2	20
2-Chlorotoluene	50.0	46.5		ug/Kg		93	70 - 138	3	20
4-Chlorotoluene	50.0	46.8		ug/Kg		94	70 - 136	3	20
Chlorodibromomethane	50.0	52.0		ug/Kg		104	70 - 146	2	20
1,2-Dichlorobenzene	50.0	50.1		ug/Kg		100	70 - 130	1	20
1,3-Dichlorobenzene	50.0	49.0		ug/Kg		98	70 - 131	2	20
1,4-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130	1	20
1,3-Dichloropropane	50.0	48.4		ug/Kg		97	70 - 140	2	20
1,1-Dichloropropene	50.0	52.0		ug/Kg		104	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	50.0	50.6		ug/Kg		101	60 - 145	2	20
Ethylene Dibromide	50.0	50.0		ug/Kg		100	70 - 140	3	20
Dibromomethane	50.0	49.4		ug/Kg		99	70 - 139	0	20
Dichlorodifluoromethane	50.0	58.2		ug/Kg		116	37 - 158	1	20
1,1-Dichloroethane	50.0	51.1		ug/Kg		102	70 - 130	4	20
1,2-Dichloroethane	50.0	50.1		ug/Kg		100	70 - 130	3	20
1,1-Dichloroethene	50.0	61.9	*	ug/Kg		124	74 - 122	4	20
cis-1,2-Dichloroethene	50.0	50.3		ug/Kg		101	70 - 138	3	20
trans-1,2-Dichloroethene	50.0	55.4		ug/Kg		111	67 - 130	1	20
1,2-Dichloropropane	50.0	49.7		ug/Kg		99	73 - 127	3	20
cis-1,3-Dichloropropene	50.0	52.1		ug/Kg		104	68 - 147	1	20
trans-1,3-Dichloropropene	50.0	49.1		ug/Kg		98	70 - 155	2	20
Ethylbenzene	50.0	49.1		ug/Kg		98	80 - 137	1	20
Hexachlorobutadiene	50.0	55.2		ug/Kg		110	70 - 132	5	20
2-Hexanone	250	231		ug/Kg		92	62 - 158	3	20
Isopropylbenzene	50.0	51.2		ug/Kg		102	70 - 130	0	20
4-Isopropyltoluene	50.0	50.9		ug/Kg		102	70 - 133	0	20
Methylene Chloride	50.0	51.6		ug/Kg		103	70 - 134	3	20
4-Methyl-2-pentanone (MIBK)	250	231		ug/Kg		92	60 - 160	2	20
Naphthalene	50.0	49.4		ug/Kg		99	60 - 147	0	20
N-Propylbenzene	50.0	48.2		ug/Kg		96	70 - 130	2	20
Styrene	50.0	48.5		ug/Kg		97	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	52.6		ug/Kg		105	70 - 130	0	20
1,1,2,2-Tetrachloroethane	50.0	45.7		ug/Kg		91	70 - 146	3	20
Tetrachloroethene	50.0	53.5		ug/Kg		107	70 - 132	2	20
Toluene	50.0	49.8		ug/Kg		100	75 - 120	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250405/6
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene			50.0	52.8		ug/Kg		106	60 - 140	3	20
1,2,4-Trichlorobenzene			50.0	53.6		ug/Kg		107	60 - 140	3	20
1,1,1-Trichloroethane			50.0	53.3		ug/Kg		107	70 - 130	2	20
1,1,2-Trichloroethane			50.0	49.6		ug/Kg		99	70 - 130	1	20
Trichloroethene			50.0	53.0		ug/Kg		106	70 - 133	2	20
Trichlorofluoromethane			50.0	54.3		ug/Kg		109	60 - 140	3	20
1,2,3-Trichloropropane			50.0	47.4		ug/Kg		95	70 - 146	5	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	70.5	*	ug/Kg		141	60 - 140	1	20
1,2,4-Trimethylbenzene			50.0	47.3		ug/Kg		95	70 - 130	2	20
1,3,5-Trimethylbenzene			50.0	47.7		ug/Kg		95	70 - 131	3	20
Vinyl acetate			50.0	47.3		ug/Kg		95	38 - 176	1	20
Vinyl chloride			50.0	51.5		ug/Kg		103	58 - 125	1	20
m-Xylene & p-Xylene			50.0	48.9		ug/Kg		98	70 - 146	1	20
o-Xylene			50.0	49.5		ug/Kg		99	70 - 140	1	20
2,2-Dichloropropane			50.0	54.3		ug/Kg		109	70 - 162	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250405/8
Matrix: Solid
Analysis Batch: 250405

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	876		ug/Kg		88	70 - 122	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: MB 720-250407/4
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/28/18 19:46	1
Acetone	ND		50	38	ug/Kg			08/28/18 19:46	1
Benzene	ND		5.0	0.65	ug/Kg			08/28/18 19:46	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/28/18 19:46	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/28/18 19:46	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/28/18 19:46	1
Bromoform	ND		5.0	2.0	ug/Kg			08/28/18 19:46	1
Bromomethane	ND		10	0.79	ug/Kg			08/28/18 19:46	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250407/4
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		50	21	ug/Kg			08/28/18 19:46	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/28/18 19:46	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:46	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/28/18 19:46	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/28/18 19:46	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/28/18 19:46	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/28/18 19:46	1
Chloroethane	ND		10	0.56	ug/Kg			08/28/18 19:46	1
Chloroform	ND		5.0	0.66	ug/Kg			08/28/18 19:46	1
Chloromethane	ND		10	0.79	ug/Kg			08/28/18 19:46	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/28/18 19:46	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/28/18 19:46	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/28/18 19:46	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:46	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/28/18 19:46	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/28/18 19:46	1
Dibromomethane	ND		10	0.86	ug/Kg			08/28/18 19:46	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/28/18 19:46	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:46	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/28/18 19:46	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/28/18 19:46	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/28/18 19:46	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/28/18 19:46	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/28/18 19:46	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/28/18 19:46	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/28/18 19:46	1
2-Hexanone	ND		50	10	ug/Kg			08/28/18 19:46	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/28/18 19:46	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/28/18 19:46	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/28/18 19:46	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/28/18 19:46	1
Naphthalene	ND		10	1.5	ug/Kg			08/28/18 19:46	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/28/18 19:46	1
Styrene	ND		5.0	0.63	ug/Kg			08/28/18 19:46	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/28/18 19:46	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/28/18 19:46	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/28/18 19:46	1
Toluene	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/28/18 19:46	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/28/18 19:46	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/28/18 19:46	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/28/18 19:46	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250407/4
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		5.0	0.63	ug/Kg			08/28/18 19:46	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/28/18 19:46	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/28/18 19:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/28/18 19:46	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/28/18 19:46	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/28/18 19:46	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/28/18 19:46	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/28/18 19:46	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/28/18 19:46	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/28/18 19:46	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/28/18 19:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*45 - 131*		*08/28/18 19:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*		*08/28/18 19:46*	*1*
Toluene-d8 (Surr)	*102*		*58 - 140*		*08/28/18 19:46*	*1*

Lab Sample ID: LCS 720-250407/5
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	52.3		ug/Kg		105	70 - 144
Acetone	250	219		ug/Kg		88	30 - 162
Benzene	50.0	55.2		ug/Kg		110	70 - 130
Dichlorobromomethane	50.0	53.5		ug/Kg		107	70 - 140
Bromobenzene	50.0	51.1		ug/Kg		102	70 - 130
Chlorobromomethane	50.0	53.8		ug/Kg		108	70 - 130
Bromoform	50.0	49.7		ug/Kg		99	59 - 158
Bromomethane	50.0	51.3		ug/Kg		103	59 - 132
2-Butanone (MEK)	250	231		ug/Kg		92	59 - 159
n-Butylbenzene	50.0	55.0		ug/Kg		110	70 - 142
sec-Butylbenzene	50.0	56.8		ug/Kg		114	70 - 136
tert-Butylbenzene	50.0	55.0		ug/Kg		110	70 - 130
Carbon disulfide	50.0	74.6	*	ug/Kg		149	60 - 140
Carbon tetrachloride	50.0	56.6		ug/Kg		113	70 - 142
Chlorobenzene	50.0	51.4		ug/Kg		103	70 - 130
Chloroethane	50.0	50.8		ug/Kg		102	65 - 130
Chloroform	50.0	54.3		ug/Kg		109	77 - 127
Chloromethane	50.0	55.7		ug/Kg		111	55 - 140
2-Chlorotoluene	50.0	54.5		ug/Kg		109	70 - 138
4-Chlorotoluene	50.0	54.9		ug/Kg		110	70 - 136
Chlorodibromomethane	50.0	52.1		ug/Kg		104	70 - 146
1,2-Dichlorobenzene	50.0	51.0		ug/Kg		102	70 - 130
1,3-Dichlorobenzene	50.0	51.6		ug/Kg		103	70 - 131
1,4-Dichlorobenzene	50.0	51.4		ug/Kg		103	70 - 130
1,3-Dichloropropane	50.0	50.8		ug/Kg		102	70 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250407/5
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	50.0	56.5		ug/Kg		113	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	50.5		ug/Kg		101	60 - 145
Ethylene Dibromide	50.0	51.9		ug/Kg		104	70 - 140
Dibromomethane	50.0	51.2		ug/Kg		102	70 - 139
Dichlorodifluoromethane	50.0	51.4		ug/Kg		103	37 - 158
1,1-Dichloroethane	50.0	58.1		ug/Kg		116	70 - 130
1,2-Dichloroethane	50.0	51.4		ug/Kg		103	70 - 130
1,1-Dichloroethene	50.0	63.4	*	ug/Kg		127	74 - 122
cis-1,2-Dichloroethene	50.0	56.6		ug/Kg		113	70 - 138
trans-1,2-Dichloroethene	50.0	59.4		ug/Kg		119	67 - 130
1,2-Dichloropropane	50.0	56.8		ug/Kg		114	73 - 127
cis-1,3-Dichloropropene	50.0	56.4		ug/Kg		113	68 - 147
trans-1,3-Dichloropropene	50.0	53.1		ug/Kg		106	70 - 155
Ethylbenzene	50.0	54.7		ug/Kg		109	80 - 137
Hexachlorobutadiene	50.0	49.1		ug/Kg		98	70 - 132
2-Hexanone	250	248		ug/Kg		99	62 - 158
Isopropylbenzene	50.0	53.0		ug/Kg		106	70 - 130
4-Isopropyltoluene	50.0	55.5		ug/Kg		111	70 - 133
Methylene Chloride	50.0	54.3		ug/Kg		109	70 - 134
4-Methyl-2-pentanone (MIBK)	250	255		ug/Kg		102	60 - 160
Naphthalene	50.0	48.2		ug/Kg		96	60 - 147
N-Propylbenzene	50.0	57.1		ug/Kg		114	70 - 130
Styrene	50.0	51.9		ug/Kg		104	70 - 130
1,1,1,2-Tetrachloroethane	50.0	52.8		ug/Kg		106	70 - 130
1,1,2,2-Tetrachloroethane	50.0	51.3		ug/Kg		103	70 - 146
Tetrachloroethene	50.0	52.1		ug/Kg		104	70 - 132
Toluene	50.0	52.2		ug/Kg		104	75 - 120
1,2,3-Trichlorobenzene	50.0	47.3		ug/Kg		95	60 - 140
1,2,4-Trichlorobenzene	50.0	48.6		ug/Kg		97	60 - 140
1,1,1-Trichloroethane	50.0	55.6		ug/Kg		111	70 - 130
1,1,2-Trichloroethane	50.0	52.4		ug/Kg		105	70 - 130
Trichloroethene	50.0	51.4		ug/Kg		103	70 - 133
Trichlorofluoromethane	50.0	54.5		ug/Kg		109	60 - 140
1,2,3-Trichloropropane	50.0	50.8		ug/Kg		102	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	66.9		ug/Kg		134	60 - 140
1,2,4-Trimethylbenzene	50.0	54.2		ug/Kg		108	70 - 130
1,3,5-Trimethylbenzene	50.0	55.2		ug/Kg		110	70 - 131
Vinyl acetate	50.0	53.1		ug/Kg		106	38 - 176
Vinyl chloride	50.0	53.9		ug/Kg		108	58 - 125
m-Xylene & p-Xylene	50.0	53.0		ug/Kg		106	70 - 146
o-Xylene	50.0	53.4		ug/Kg		107	70 - 140
2,2-Dichloropropane	50.0	57.7		ug/Kg		115	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCS 720-250407/7
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C4-C12			1000	937		ug/Kg		94	70 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: LCSD 720-250407/6
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether			50.0	53.3		ug/Kg		107	70 - 144	2	20
Acetone			250	232		ug/Kg		93	30 - 162	6	30
Benzene			50.0	53.9		ug/Kg		108	70 - 130	2	20
Dichlorobromomethane			50.0	53.0		ug/Kg		106	70 - 140	1	20
Bromobenzene			50.0	49.7		ug/Kg		99	70 - 130	3	20
Chlorobromomethane			50.0	52.9		ug/Kg		106	70 - 130	2	20
Bromoform			50.0	51.5		ug/Kg		103	59 - 158	4	20
Bromomethane			50.0	51.5		ug/Kg		103	59 - 132	0	20
2-Butanone (MEK)			250	232		ug/Kg		93	59 - 159	1	20
n-Butylbenzene			50.0	54.6		ug/Kg		109	70 - 142	1	20
sec-Butylbenzene			50.0	55.2		ug/Kg		110	70 - 136	3	20
tert-Butylbenzene			50.0	53.7		ug/Kg		107	70 - 130	2	20
Carbon disulfide			50.0	72.7	*	ug/Kg		145	60 - 140	3	20
Carbon tetrachloride			50.0	54.8		ug/Kg		110	70 - 142	3	20
Chlorobenzene			50.0	51.6		ug/Kg		103	70 - 130	0	20
Chloroethane			50.0	51.0		ug/Kg		102	65 - 130	0	20
Chloroform			50.0	53.1		ug/Kg		106	77 - 127	2	20
Chloromethane			50.0	54.5		ug/Kg		109	55 - 140	2	20
2-Chlorotoluene			50.0	53.4		ug/Kg		107	70 - 138	2	20
4-Chlorotoluene			50.0	53.6		ug/Kg		107	70 - 136	2	20
Chlorodibromomethane			50.0	51.6		ug/Kg		103	70 - 146	1	20
1,2-Dichlorobenzene			50.0	50.3		ug/Kg		101	70 - 130	1	20
1,3-Dichlorobenzene			50.0	50.8		ug/Kg		102	70 - 131	2	20
1,4-Dichlorobenzene			50.0	50.4		ug/Kg		101	70 - 130	2	20
1,3-Dichloropropane			50.0	50.7		ug/Kg		101	70 - 140	0	20
1,1-Dichloropropene			50.0	55.3		ug/Kg		111	70 - 130	2	20
1,2-Dibromo-3-Chloropropane			50.0	51.2		ug/Kg		102	60 - 145	1	20
Ethylene Dibromide			50.0	51.9		ug/Kg		104	70 - 140	0	20
Dibromomethane			50.0	51.2		ug/Kg		102	70 - 139	0	20
Dichlorodifluoromethane			50.0	51.9		ug/Kg		104	37 - 158	1	20
1,1-Dichloroethane			50.0	57.1		ug/Kg		114	70 - 130	2	20
1,2-Dichloroethane			50.0	51.5		ug/Kg		103	70 - 130	0	20
1,1-Dichloroethene			50.0	61.4	*	ug/Kg		123	74 - 122	3	20
cis-1,2-Dichloroethene			50.0	55.9		ug/Kg		112	70 - 138	1	20
trans-1,2-Dichloroethene			50.0	58.3		ug/Kg		117	67 - 130	2	20
1,2-Dichloropropane			50.0	56.4		ug/Kg		113	73 - 127	1	20
cis-1,3-Dichloropropene			50.0	56.8		ug/Kg		114	68 - 147	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250407/6
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,3-Dichloropropene			50.0	53.6		ug/Kg		107	70 - 155	1	20
Ethylbenzene			50.0	54.4		ug/Kg		109	80 - 137	1	20
Hexachlorobutadiene			50.0	48.7		ug/Kg		97	70 - 132	1	20
2-Hexanone			250	257		ug/Kg		103	62 - 158	4	20
Isopropylbenzene			50.0	52.9		ug/Kg		106	70 - 130	0	20
4-Isopropyltoluene			50.0	54.5		ug/Kg		109	70 - 133	2	20
Methylene Chloride			50.0	54.0		ug/Kg		108	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)			250	261		ug/Kg		105	60 - 160	2	20
Naphthalene			50.0	49.5		ug/Kg		99	60 - 147	3	20
N-Propylbenzene			50.0	55.8		ug/Kg		112	70 - 130	2	20
Styrene			50.0	52.2		ug/Kg		104	70 - 130	1	20
1,1,1,2-Tetrachloroethane			50.0	53.0		ug/Kg		106	70 - 130	0	20
1,1,2,2-Tetrachloroethane			50.0	51.0		ug/Kg		102	70 - 146	1	20
Tetrachloroethene			50.0	50.7		ug/Kg		101	70 - 132	3	20
Toluene			50.0	52.5		ug/Kg		105	75 - 120	1	20
1,2,3-Trichlorobenzene			50.0	49.0		ug/Kg		98	60 - 140	4	20
1,2,4-Trichlorobenzene			50.0	49.1		ug/Kg		98	60 - 140	1	20
1,1,1-Trichloroethane			50.0	53.8		ug/Kg		108	70 - 130	3	20
1,1,2-Trichloroethane			50.0	52.6		ug/Kg		105	70 - 130	1	20
Trichloroethene			50.0	50.3		ug/Kg		101	70 - 133	2	20
Trichlorofluoromethane			50.0	53.4		ug/Kg		107	60 - 140	2	20
1,2,3-Trichloropropane			50.0	51.0		ug/Kg		102	70 - 146	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	64.7		ug/Kg		129	60 - 140	3	20
1,2,4-Trimethylbenzene			50.0	53.1		ug/Kg		106	70 - 130	2	20
1,3,5-Trimethylbenzene			50.0	53.9		ug/Kg		108	70 - 131	2	20
Vinyl acetate			50.0	52.6		ug/Kg		105	38 - 176	1	20
Vinyl chloride			50.0	53.4		ug/Kg		107	58 - 125	1	20
m-Xylene & p-Xylene			50.0	53.0		ug/Kg		106	70 - 146	0	20
o-Xylene			50.0	53.6		ug/Kg		107	70 - 140	0	20
2,2-Dichloropropane			50.0	57.5		ug/Kg		115	70 - 162	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*97*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: LCSD 720-250407/8
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	943		ug/Kg		94	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250407/8
Matrix: Solid
Analysis Batch: 250407

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	102		58 - 140

Lab Sample ID: MB 720-250450/4
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/29/18 08:25	1
Acetone	ND		50	38	ug/Kg			08/29/18 08:25	1
Benzene	ND		5.0	0.65	ug/Kg			08/29/18 08:25	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/29/18 08:25	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/29/18 08:25	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/29/18 08:25	1
Bromoform	ND		5.0	2.0	ug/Kg			08/29/18 08:25	1
Bromomethane	ND		10	0.79	ug/Kg			08/29/18 08:25	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/29/18 08:25	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/29/18 08:25	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/29/18 08:25	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/29/18 08:25	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/29/18 08:25	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/29/18 08:25	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/29/18 08:25	1
Chloroethane	ND		10	0.56	ug/Kg			08/29/18 08:25	1
Chloroform	ND		5.0	0.66	ug/Kg			08/29/18 08:25	1
Chloromethane	ND		10	0.79	ug/Kg			08/29/18 08:25	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/29/18 08:25	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/29/18 08:25	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/29/18 08:25	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/29/18 08:25	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/29/18 08:25	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 08:25	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/29/18 08:25	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 08:25	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/29/18 08:25	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/29/18 08:25	1
Dibromomethane	ND		10	0.86	ug/Kg			08/29/18 08:25	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/29/18 08:25	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/29/18 08:25	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/29/18 08:25	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/29/18 08:25	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/29/18 08:25	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/29/18 08:25	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/29/18 08:25	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 08:25	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/29/18 08:25	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/29/18 08:25	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/29/18 08:25	1
2-Hexanone	ND		50	10	ug/Kg			08/29/18 08:25	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250450/4
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/29/18 08:25	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/29/18 08:25	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/29/18 08:25	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/29/18 08:25	1
Naphthalene	ND		10	1.5	ug/Kg			08/29/18 08:25	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/29/18 08:25	1
Styrene	ND		5.0	0.63	ug/Kg			08/29/18 08:25	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/29/18 08:25	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/29/18 08:25	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/29/18 08:25	1
Toluene	ND		5.0	0.71	ug/Kg			08/29/18 08:25	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/29/18 08:25	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 08:25	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/29/18 08:25	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/29/18 08:25	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/29/18 08:25	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/29/18 08:25	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/29/18 08:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/29/18 08:25	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/29/18 08:25	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/29/18 08:25	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/29/18 08:25	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/29/18 08:25	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/29/18 08:25	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/29/18 08:25	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/29/18 08:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*45 - 131*		*08/29/18 08:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*		*08/29/18 08:25*	*1*
Toluene-d8 (Surr)	*100*		*58 - 140*		*08/29/18 08:25*	*1*

Lab Sample ID: LCS 720-250450/5
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	49.8		ug/Kg		100	70 - 144
Acetone	250	200		ug/Kg		80	30 - 162
Benzene	50.0	54.2		ug/Kg		108	70 - 130
Dichlorobromomethane	50.0	51.9		ug/Kg		104	70 - 140
Bromobenzene	50.0	49.0		ug/Kg		98	70 - 130
Chlorobromomethane	50.0	51.2		ug/Kg		102	70 - 130
Bromoform	50.0	46.3		ug/Kg		93	59 - 158
Bromomethane	50.0	50.1		ug/Kg		100	59 - 132
2-Butanone (MEK)	250	205		ug/Kg		82	59 - 159
n-Butylbenzene	50.0	56.5		ug/Kg		113	70 - 142

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250450/5
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
sec-Butylbenzene	50.0	56.3		ug/Kg		113	70 - 136
tert-Butylbenzene	50.0	54.2		ug/Kg		108	70 - 130
Carbon disulfide	50.0	73.9	*	ug/Kg		148	60 - 140
Carbon tetrachloride	50.0	56.7		ug/Kg		113	70 - 142
Chlorobenzene	50.0	51.2		ug/Kg		102	70 - 130
Chloroethane	50.0	50.2		ug/Kg		100	65 - 130
Chloroform	50.0	53.4		ug/Kg		107	77 - 127
Chloromethane	50.0	54.1		ug/Kg		108	55 - 140
2-Chlorotoluene	50.0	53.6		ug/Kg		107	70 - 138
4-Chlorotoluene	50.0	54.0		ug/Kg		108	70 - 136
Chlorodibromomethane	50.0	49.3		ug/Kg		99	70 - 146
1,2-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130
1,3-Dichlorobenzene	50.0	51.7		ug/Kg		103	70 - 131
1,4-Dichlorobenzene	50.0	50.8		ug/Kg		102	70 - 130
1,3-Dichloropropane	50.0	48.0		ug/Kg		96	70 - 140
1,1-Dichloropropene	50.0	56.6		ug/Kg		113	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	44.4		ug/Kg		89	60 - 145
Ethylene Dibromide	50.0	48.5		ug/Kg		97	70 - 140
Dibromomethane	50.0	48.2		ug/Kg		96	70 - 139
Dichlorodifluoromethane	50.0	47.9		ug/Kg		96	37 - 158
1,1-Dichloroethane	50.0	57.2		ug/Kg		114	70 - 130
1,2-Dichloroethane	50.0	49.3		ug/Kg		99	70 - 130
1,1-Dichloroethene	50.0	63.1	*	ug/Kg		126	74 - 122
cis-1,2-Dichloroethene	50.0	56.1		ug/Kg		112	70 - 138
trans-1,2-Dichloroethene	50.0	58.9		ug/Kg		118	67 - 130
1,2-Dichloropropane	50.0	55.9		ug/Kg		112	73 - 127
cis-1,3-Dichloropropene	50.0	55.5		ug/Kg		111	68 - 147
trans-1,3-Dichloropropene	50.0	52.1		ug/Kg		104	70 - 155
Ethylbenzene	50.0	54.8		ug/Kg		110	80 - 137
Hexachlorobutadiene	50.0	50.6		ug/Kg		101	70 - 132
2-Hexanone	250	226		ug/Kg		91	62 - 158
Isopropylbenzene	50.0	53.4		ug/Kg		107	70 - 130
4-Isopropyltoluene	50.0	56.0		ug/Kg		112	70 - 133
Methylene Chloride	50.0	53.3		ug/Kg		107	70 - 134
4-Methyl-2-pentanone (MIBK)	250	234		ug/Kg		93	60 - 160
Naphthalene	50.0	45.1		ug/Kg		90	60 - 147
N-Propylbenzene	50.0	56.7		ug/Kg		113	70 - 130
Styrene	50.0	51.4		ug/Kg		103	70 - 130
1,1,1,2-Tetrachloroethane	50.0	51.7		ug/Kg		103	70 - 130
1,1,2,2-Tetrachloroethane	50.0	46.5		ug/Kg		93	70 - 146
Tetrachloroethene	50.0	52.3		ug/Kg		105	70 - 132
Toluene	50.0	52.7		ug/Kg		105	75 - 120
1,2,3-Trichlorobenzene	50.0	47.7		ug/Kg		95	60 - 140
1,2,4-Trichlorobenzene	50.0	50.2		ug/Kg		100	60 - 140
1,1,1-Trichloroethane	50.0	55.2		ug/Kg		110	70 - 130
1,1,2-Trichloroethane	50.0	50.2		ug/Kg		100	70 - 130
Trichloroethene	50.0	51.1		ug/Kg		102	70 - 133
Trichlorofluoromethane	50.0	53.0		ug/Kg		106	60 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250450/5
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	45.5		ug/Kg		91	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	66.6		ug/Kg		133	60 - 140
1,2,4-Trimethylbenzene	50.0	54.1		ug/Kg		108	70 - 130
1,3,5-Trimethylbenzene	50.0	54.3		ug/Kg		109	70 - 131
Vinyl acetate	50.0	50.0		ug/Kg		100	38 - 176
Vinyl chloride	50.0	52.5		ug/Kg		105	58 - 125
m-Xylene & p-Xylene	50.0	53.5		ug/Kg		107	70 - 146
o-Xylene	50.0	53.5		ug/Kg		107	70 - 140
2,2-Dichloropropane	50.0	60.8		ug/Kg		122	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*90*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCS 720-250450/7
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	959		ug/Kg		96	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*97*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: LCSD 720-250450/6
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	52.2		ug/Kg		104	70 - 144	5	20
Acetone	250	214		ug/Kg		86	30 - 162	7	30
Benzene	50.0	54.3		ug/Kg		109	70 - 130	0	20
Dichlorobromomethane	50.0	51.8		ug/Kg		104	70 - 140	0	20
Bromobenzene	50.0	49.5		ug/Kg		99	70 - 130	1	20
Chlorobromomethane	50.0	52.1		ug/Kg		104	70 - 130	2	20
Bromoform	50.0	48.9		ug/Kg		98	59 - 158	5	20
Bromomethane	50.0	50.8		ug/Kg		102	59 - 132	2	20
2-Butanone (MEK)	250	223		ug/Kg		89	59 - 159	8	20
n-Butylbenzene	50.0	55.7		ug/Kg		111	70 - 142	1	20
sec-Butylbenzene	50.0	55.6		ug/Kg		111	70 - 136	1	20
tert-Butylbenzene	50.0	53.0		ug/Kg		106	70 - 130	2	20
Carbon disulfide	50.0	73.3	*	ug/Kg		147	60 - 140	1	20
Carbon tetrachloride	50.0	56.1		ug/Kg		112	70 - 142	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250450/6
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene	50.0	50.6		ug/Kg		101	70 - 130	1	20
Chloroethane	50.0	50.5		ug/Kg		101	65 - 130	1	20
Chloroform	50.0	53.2		ug/Kg		106	77 - 127	0	20
Chloromethane	50.0	54.3		ug/Kg		109	55 - 140	0	20
2-Chlorotoluene	50.0	53.6		ug/Kg		107	70 - 138	0	20
4-Chlorotoluene	50.0	54.2		ug/Kg		108	70 - 136	0	20
Chlorodibromomethane	50.0	51.1		ug/Kg		102	70 - 146	4	20
1,2-Dichlorobenzene	50.0	49.9		ug/Kg		100	70 - 130	0	20
1,3-Dichlorobenzene	50.0	51.5		ug/Kg		103	70 - 131	0	20
1,4-Dichlorobenzene	50.0	51.1		ug/Kg		102	70 - 130	0	20
1,3-Dichloropropane	50.0	50.2		ug/Kg		100	70 - 140	5	20
1,1-Dichloropropene	50.0	56.2		ug/Kg		112	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	47.9		ug/Kg		96	60 - 145	8	20
Ethylene Dibromide	50.0	50.8		ug/Kg		102	70 - 140	5	20
Dibromomethane	50.0	50.0		ug/Kg		100	70 - 139	4	20
Dichlorodifluoromethane	50.0	48.9		ug/Kg		98	37 - 158	2	20
1,1-Dichloroethane	50.0	57.1		ug/Kg		114	70 - 130	0	20
1,2-Dichloroethane	50.0	50.6		ug/Kg		101	70 - 130	2	20
1,1-Dichloroethene	50.0	62.4	*	ug/Kg		125	74 - 122	1	20
cis-1,2-Dichloroethene	50.0	56.0		ug/Kg		112	70 - 138	0	20
trans-1,2-Dichloroethene	50.0	58.4		ug/Kg		117	67 - 130	1	20
1,2-Dichloropropane	50.0	56.1		ug/Kg		112	73 - 127	0	20
cis-1,3-Dichloropropene	50.0	57.0		ug/Kg		114	68 - 147	3	20
trans-1,3-Dichloropropene	50.0	53.4		ug/Kg		107	70 - 155	3	20
Ethylbenzene	50.0	54.1		ug/Kg		108	80 - 137	1	20
Hexachlorobutadiene	50.0	49.2		ug/Kg		98	70 - 132	3	20
2-Hexanone	250	248		ug/Kg		99	62 - 158	9	20
Isopropylbenzene	50.0	51.9		ug/Kg		104	70 - 130	3	20
4-Isopropyltoluene	50.0	55.0		ug/Kg		110	70 - 133	2	20
Methylene Chloride	50.0	53.6		ug/Kg		107	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	255		ug/Kg		102	60 - 160	9	20
Naphthalene	50.0	47.8		ug/Kg		96	60 - 147	6	20
N-Propylbenzene	50.0	56.6		ug/Kg		113	70 - 130	0	20
Styrene	50.0	51.8		ug/Kg		104	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	51.8		ug/Kg		104	70 - 130	0	20
1,1,2,2-Tetrachloroethane	50.0	49.3		ug/Kg		99	70 - 146	6	20
Tetrachloroethene	50.0	51.6		ug/Kg		103	70 - 132	2	20
Toluene	50.0	51.9		ug/Kg		104	75 - 120	1	20
1,2,3-Trichlorobenzene	50.0	48.5		ug/Kg		97	60 - 140	2	20
1,2,4-Trichlorobenzene	50.0	50.2		ug/Kg		100	60 - 140	0	20
1,1,1-Trichloroethane	50.0	54.9		ug/Kg		110	70 - 130	1	20
1,1,2-Trichloroethane	50.0	52.0		ug/Kg		104	70 - 130	4	20
Trichloroethene	50.0	50.5		ug/Kg		101	70 - 133	1	20
Trichlorofluoromethane	50.0	53.5		ug/Kg		107	60 - 140	1	20
1,2,3-Trichloropropane	50.0	48.3		ug/Kg		97	70 - 146	6	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	65.7		ug/Kg		131	60 - 140	1	20
1,2,4-Trimethylbenzene	50.0	53.8		ug/Kg		108	70 - 130	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250450/6
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trimethylbenzene			50.0	54.0		ug/Kg		108	70 - 131	1	20
Vinyl acetate			50.0	53.5		ug/Kg		107	38 - 176	7	20
Vinyl chloride			50.0	52.6		ug/Kg		105	58 - 125	0	20
m-Xylene & p-Xylene			50.0	52.9		ug/Kg		106	70 - 146	1	20
o-Xylene			50.0	53.2		ug/Kg		106	70 - 140	0	20
2,2-Dichloropropane			50.0	59.7		ug/Kg		119	70 - 162	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*100*		*58 - 140*

Lab Sample ID: LCSD 720-250450/8
Matrix: Solid
Analysis Batch: 250450

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	959		ug/Kg		96	70 - 122	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*99*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: MB 720-250453/4
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/29/18 08:20	1
Acetone	ND		50	38	ug/Kg			08/29/18 08:20	1
Benzene	ND		5.0	0.65	ug/Kg			08/29/18 08:20	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/29/18 08:20	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/29/18 08:20	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/29/18 08:20	1
Bromoform	ND		5.0	2.0	ug/Kg			08/29/18 08:20	1
Bromomethane	ND		10	0.79	ug/Kg			08/29/18 08:20	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/29/18 08:20	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/29/18 08:20	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/29/18 08:20	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/29/18 08:20	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/29/18 08:20	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/29/18 08:20	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/29/18 08:20	1
Chloroethane	ND		10	0.56	ug/Kg			08/29/18 08:20	1
Chloroform	ND		5.0	0.66	ug/Kg			08/29/18 08:20	1
Chloromethane	ND		10	0.79	ug/Kg			08/29/18 08:20	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250453/4
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/29/18 08:20	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/29/18 08:20	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/29/18 08:20	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/29/18 08:20	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/29/18 08:20	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 08:20	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/29/18 08:20	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 08:20	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/29/18 08:20	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/29/18 08:20	1
Dibromomethane	ND		10	0.86	ug/Kg			08/29/18 08:20	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/29/18 08:20	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/29/18 08:20	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/29/18 08:20	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/29/18 08:20	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/29/18 08:20	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/29/18 08:20	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/29/18 08:20	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/29/18 08:20	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/29/18 08:20	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/29/18 08:20	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/29/18 08:20	1
2-Hexanone	ND		50	10	ug/Kg			08/29/18 08:20	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/29/18 08:20	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/29/18 08:20	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/29/18 08:20	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/29/18 08:20	1
Naphthalene	ND		10	1.5	ug/Kg			08/29/18 08:20	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/29/18 08:20	1
Styrene	ND		5.0	0.63	ug/Kg			08/29/18 08:20	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/29/18 08:20	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/29/18 08:20	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/29/18 08:20	1
Toluene	ND		5.0	0.71	ug/Kg			08/29/18 08:20	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/29/18 08:20	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/29/18 08:20	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/29/18 08:20	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/29/18 08:20	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/29/18 08:20	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/29/18 08:20	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/29/18 08:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/29/18 08:20	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/29/18 08:20	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/29/18 08:20	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/29/18 08:20	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/29/18 08:20	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/29/18 08:20	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/29/18 08:20	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250453/4
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/29/18 08:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*45 - 131*		*08/29/18 08:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*		*08/29/18 08:20*	*1*
Toluene-d8 (Surr)	*96*		*58 - 140*		*08/29/18 08:20*	*1*

Lab Sample ID: LCS 720-250453/5
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	55.9		ug/Kg		112	70 - 144
Acetone	250	221		ug/Kg		88	30 - 162
Benzene	50.0	53.0		ug/Kg		106	70 - 130
Dichlorobromomethane	50.0	55.4		ug/Kg		111	70 - 140
Bromobenzene	50.0	49.2		ug/Kg		98	70 - 130
Chlorobromomethane	50.0	56.5		ug/Kg		113	70 - 130
Bromoform	50.0	51.3		ug/Kg		103	59 - 158
Bromomethane	50.0	57.6		ug/Kg		115	59 - 132
2-Butanone (MEK)	250	233		ug/Kg		93	59 - 159
n-Butylbenzene	50.0	49.9		ug/Kg		100	70 - 142
sec-Butylbenzene	50.0	49.7		ug/Kg		99	70 - 136
tert-Butylbenzene	50.0	49.4		ug/Kg		99	70 - 130
Carbon disulfide	50.0	73.0	*	ug/Kg		146	60 - 140
Carbon tetrachloride	50.0	60.4		ug/Kg		121	70 - 142
Chlorobenzene	50.0	52.7		ug/Kg		105	70 - 130
Chloroethane	50.0	51.2		ug/Kg		102	65 - 130
Chloroform	50.0	54.4		ug/Kg		109	77 - 127
Chloromethane	50.0	51.2		ug/Kg		102	55 - 140
2-Chlorotoluene	50.0	49.9		ug/Kg		100	70 - 138
4-Chlorotoluene	50.0	50.5		ug/Kg		101	70 - 136
Chlorodibromomethane	50.0	54.7		ug/Kg		109	70 - 146
1,2-Dichlorobenzene	50.0	51.4		ug/Kg		103	70 - 130
1,3-Dichlorobenzene	50.0	51.6		ug/Kg		103	70 - 131
1,4-Dichlorobenzene	50.0	50.8		ug/Kg		102	70 - 130
1,3-Dichloropropane	50.0	51.5		ug/Kg		103	70 - 140
1,1-Dichloropropene	50.0	56.6		ug/Kg		113	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	48.0		ug/Kg		96	60 - 145
Ethylene Dibromide	50.0	54.1		ug/Kg		108	70 - 140
Dibromomethane	50.0	52.5		ug/Kg		105	70 - 139
Dichlorodifluoromethane	50.0	61.5		ug/Kg		123	37 - 158
1,1-Dichloroethane	50.0	55.4		ug/Kg		111	70 - 130
1,2-Dichloroethane	50.0	56.0		ug/Kg		112	70 - 130
1,1-Dichloroethene	50.0	68.3	*	ug/Kg		137	74 - 122
cis-1,2-Dichloroethene	50.0	55.0		ug/Kg		110	70 - 138
trans-1,2-Dichloroethene	50.0	61.8		ug/Kg		124	67 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250453/5
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	50.0	52.0		ug/Kg		104	73 - 127
cis-1,3-Dichloropropene	50.0	53.8		ug/Kg		108	68 - 147
trans-1,3-Dichloropropene	50.0	52.5		ug/Kg		105	70 - 155
Ethylbenzene	50.0	52.2		ug/Kg		104	80 - 137
Hexachlorobutadiene	50.0	53.5		ug/Kg		107	70 - 132
2-Hexanone	250	232		ug/Kg		93	62 - 158
Isopropylbenzene	50.0	54.1		ug/Kg		108	70 - 130
4-Isopropyltoluene	50.0	51.3		ug/Kg		103	70 - 133
Methylene Chloride	50.0	52.5		ug/Kg		105	70 - 134
4-Methyl-2-pentanone (MIBK)	250	229		ug/Kg		92	60 - 160
Naphthalene	50.0	49.3		ug/Kg		99	60 - 147
N-Propylbenzene	50.0	49.5		ug/Kg		99	70 - 130
Styrene	50.0	49.5		ug/Kg		99	70 - 130
1,1,1,2-Tetrachloroethane	50.0	56.1		ug/Kg		112	70 - 130
1,1,2,2-Tetrachloroethane	50.0	46.6		ug/Kg		93	70 - 146
Tetrachloroethene	50.0	58.1		ug/Kg		116	70 - 132
Toluene	50.0	50.8		ug/Kg		102	75 - 120
1,2,3-Trichlorobenzene	50.0	51.2		ug/Kg		102	60 - 140
1,2,4-Trichlorobenzene	50.0	52.8		ug/Kg		106	60 - 140
1,1,1-Trichloroethane	50.0	60.6		ug/Kg		121	70 - 130
1,1,2-Trichloroethane	50.0	52.0		ug/Kg		104	70 - 130
Trichloroethene	50.0	57.3		ug/Kg		115	70 - 133
Trichlorofluoromethane	50.0	59.2		ug/Kg		118	60 - 140
1,2,3-Trichloropropane	50.0	48.2		ug/Kg		96	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	73.1	*	ug/Kg		146	60 - 140
1,2,4-Trimethylbenzene	50.0	51.0		ug/Kg		102	70 - 130
1,3,5-Trimethylbenzene	50.0	50.6		ug/Kg		101	70 - 131
Vinyl acetate	50.0	48.2		ug/Kg		96	38 - 176
Vinyl chloride	50.0	54.2		ug/Kg		108	58 - 125
m-Xylene & p-Xylene	50.0	54.0		ug/Kg		108	70 - 146
o-Xylene	50.0	53.8		ug/Kg		108	70 - 140
2,2-Dichloropropane	50.0	66.7		ug/Kg		133	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCS 720-250453/7
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1040		ug/Kg		104	70 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250453/7
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250453/6
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	54.2		ug/Kg		108	70 - 144	3	20
Acetone	250	198		ug/Kg		79	30 - 162	11	30
Benzene	50.0	52.6		ug/Kg		105	70 - 130	1	20
Dichlorobromomethane	50.0	54.6		ug/Kg		109	70 - 140	1	20
Bromobenzene	50.0	51.5		ug/Kg		103	70 - 130	5	20
Chlorobromomethane	50.0	55.9		ug/Kg		112	70 - 130	1	20
Bromoform	50.0	49.7		ug/Kg		99	59 - 158	3	20
Bromomethane	50.0	56.6		ug/Kg		113	59 - 132	2	20
2-Butanone (MEK)	250	218		ug/Kg		87	59 - 159	7	20
n-Butylbenzene	50.0	49.2		ug/Kg		98	70 - 142	1	20
sec-Butylbenzene	50.0	51.1		ug/Kg		102	70 - 136	3	20
tert-Butylbenzene	50.0	51.4		ug/Kg		103	70 - 130	4	20
Carbon disulfide	50.0	72.1	*	ug/Kg		144	60 - 140	1	20
Carbon tetrachloride	50.0	60.6		ug/Kg		121	70 - 142	0	20
Chlorobenzene	50.0	52.6		ug/Kg		105	70 - 130	0	20
Chloroethane	50.0	50.8		ug/Kg		102	65 - 130	1	20
Chloroform	50.0	53.7		ug/Kg		107	77 - 127	1	20
Chloromethane	50.0	51.2		ug/Kg		102	55 - 140	0	20
2-Chlorotoluene	50.0	51.7		ug/Kg		103	70 - 138	4	20
4-Chlorotoluene	50.0	51.9		ug/Kg		104	70 - 136	3	20
Chlorodibromomethane	50.0	52.6		ug/Kg		105	70 - 146	4	20
1,2-Dichlorobenzene	50.0	51.9		ug/Kg		104	70 - 130	1	20
1,3-Dichlorobenzene	50.0	53.3		ug/Kg		107	70 - 131	3	20
1,4-Dichlorobenzene	50.0	52.1		ug/Kg		104	70 - 130	2	20
1,3-Dichloropropane	50.0	49.0		ug/Kg		98	70 - 140	5	20
1,1-Dichloropropene	50.0	55.5		ug/Kg		111	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	50.0	48.2		ug/Kg		96	60 - 145	1	20
Ethylene Dibromide	50.0	52.5		ug/Kg		105	70 - 140	3	20
Dibromomethane	50.0	51.4		ug/Kg		103	70 - 139	2	20
Dichlorodifluoromethane	50.0	61.3		ug/Kg		123	37 - 158	0	20
1,1-Dichloroethane	50.0	54.6		ug/Kg		109	70 - 130	1	20
1,2-Dichloroethane	50.0	54.5		ug/Kg		109	70 - 130	3	20
1,1-Dichloroethene	50.0	68.0	*	ug/Kg		136	74 - 122	0	20
cis-1,2-Dichloroethene	50.0	54.0		ug/Kg		108	70 - 138	2	20
trans-1,2-Dichloroethene	50.0	61.1		ug/Kg		122	67 - 130	1	20
1,2-Dichloropropane	50.0	51.7		ug/Kg		103	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	52.3		ug/Kg		105	68 - 147	3	20
trans-1,3-Dichloropropene	50.0	51.0		ug/Kg		102	70 - 155	3	20
Ethylbenzene	50.0	51.5		ug/Kg		103	80 - 137	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250453/6
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorobutadiene			50.0	49.3		ug/Kg		99	70 - 132	8	20
2-Hexanone			250	213		ug/Kg		85	62 - 158	8	20
Isopropylbenzene			50.0	54.1		ug/Kg		108	70 - 130	0	20
4-Isopropyltoluene			50.0	51.8		ug/Kg		104	70 - 133	1	20
Methylene Chloride			50.0	51.8		ug/Kg		104	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)			250	216		ug/Kg		86	60 - 160	6	20
Naphthalene			50.0	48.2		ug/Kg		96	60 - 147	2	20
N-Propylbenzene			50.0	50.8		ug/Kg		102	70 - 130	3	20
Styrene			50.0	49.0		ug/Kg		98	70 - 130	1	20
1,1,1,2-Tetrachloroethane			50.0	55.6		ug/Kg		111	70 - 130	1	20
1,1,2,2-Tetrachloroethane			50.0	47.8		ug/Kg		96	70 - 146	3	20
Tetrachloroethene			50.0	56.7		ug/Kg		113	70 - 132	2	20
Toluene			50.0	51.2		ug/Kg		102	75 - 120	1	20
1,2,3-Trichlorobenzene			50.0	50.0		ug/Kg		100	60 - 140	2	20
1,2,4-Trichlorobenzene			50.0	51.7		ug/Kg		103	60 - 140	2	20
1,1,1-Trichloroethane			50.0	59.3		ug/Kg		119	70 - 130	2	20
1,1,2-Trichloroethane			50.0	51.0		ug/Kg		102	70 - 130	2	20
Trichloroethene			50.0	55.4		ug/Kg		111	70 - 133	3	20
Trichlorofluoromethane			50.0	57.9		ug/Kg		116	60 - 140	2	20
1,2,3-Trichloropropane			50.0	48.5		ug/Kg		97	70 - 146	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	71.3	*	ug/Kg		143	60 - 140	2	20
1,2,4-Trimethylbenzene			50.0	52.4		ug/Kg		105	70 - 130	3	20
1,3,5-Trimethylbenzene			50.0	52.2		ug/Kg		104	70 - 131	3	20
Vinyl acetate			50.0	47.8		ug/Kg		96	38 - 176	1	20
Vinyl chloride			50.0	55.4		ug/Kg		111	58 - 125	2	20
m-Xylene & p-Xylene			50.0	53.1		ug/Kg		106	70 - 146	2	20
o-Xylene			50.0	53.2		ug/Kg		106	70 - 140	1	20
2,2-Dichloropropane			50.0	63.4		ug/Kg		127	70 - 162	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCSD 720-250453/8
Matrix: Solid
Analysis Batch: 250453

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1070		ug/Kg		107	70 - 122	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250625/4
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/30/18 19:41	1
Acetone	ND		50	38	ug/Kg			08/30/18 19:41	1
Benzene	ND		5.0	0.65	ug/Kg			08/30/18 19:41	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/30/18 19:41	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/30/18 19:41	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/30/18 19:41	1
Bromoform	ND		5.0	2.0	ug/Kg			08/30/18 19:41	1
Bromomethane	ND		10	0.79	ug/Kg			08/30/18 19:41	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/30/18 19:41	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/30/18 19:41	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/30/18 19:41	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/30/18 19:41	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/30/18 19:41	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/30/18 19:41	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/30/18 19:41	1
Chloroethane	ND		10	0.56	ug/Kg			08/30/18 19:41	1
Chloroform	ND		5.0	0.66	ug/Kg			08/30/18 19:41	1
Chloromethane	ND		10	0.79	ug/Kg			08/30/18 19:41	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/30/18 19:41	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/30/18 19:41	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/30/18 19:41	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/30/18 19:41	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/30/18 19:41	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 19:41	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/30/18 19:41	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 19:41	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/30/18 19:41	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/30/18 19:41	1
Dibromomethane	ND		10	0.86	ug/Kg			08/30/18 19:41	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/30/18 19:41	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/30/18 19:41	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/30/18 19:41	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/30/18 19:41	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/30/18 19:41	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/30/18 19:41	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/30/18 19:41	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/30/18 19:41	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/30/18 19:41	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/30/18 19:41	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/30/18 19:41	1
2-Hexanone	ND		50	10	ug/Kg			08/30/18 19:41	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/30/18 19:41	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/30/18 19:41	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/30/18 19:41	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/30/18 19:41	1
Naphthalene	ND		10	1.5	ug/Kg			08/30/18 19:41	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/30/18 19:41	1
Styrene	ND		5.0	0.63	ug/Kg			08/30/18 19:41	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250625/4
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/30/18 19:41	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/30/18 19:41	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/30/18 19:41	1
Toluene	ND		5.0	0.71	ug/Kg			08/30/18 19:41	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/30/18 19:41	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/30/18 19:41	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/30/18 19:41	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/30/18 19:41	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/30/18 19:41	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/30/18 19:41	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/30/18 19:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/30/18 19:41	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/30/18 19:41	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/30/18 19:41	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/30/18 19:41	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/30/18 19:41	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/30/18 19:41	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/30/18 19:41	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/30/18 19:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*45 - 131*		*08/30/18 19:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*60 - 140*		*08/30/18 19:41*	*1*
Toluene-d8 (Surr)	*97*		*58 - 140*		*08/30/18 19:41*	*1*

Lab Sample ID: LCS 720-250625/5
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	55.6		ug/Kg		111	70 - 144
Acetone	250	204		ug/Kg		81	30 - 162
Benzene	50.0	51.0		ug/Kg		102	70 - 130
Dichlorobromomethane	50.0	55.1		ug/Kg		110	70 - 140
Bromobenzene	50.0	50.0		ug/Kg		100	70 - 130
Chlorobromomethane	50.0	56.7		ug/Kg		113	70 - 130
Bromoform	50.0	52.1		ug/Kg		104	59 - 158
Bromomethane	50.0	51.1		ug/Kg		102	59 - 132
2-Butanone (MEK)	250	219		ug/Kg		88	59 - 159
n-Butylbenzene	50.0	47.4		ug/Kg		95	70 - 142
sec-Butylbenzene	50.0	48.0		ug/Kg		96	70 - 136
tert-Butylbenzene	50.0	49.1		ug/Kg		98	70 - 130
Carbon disulfide	50.0	67.8		ug/Kg		136	60 - 140
Carbon tetrachloride	50.0	60.3		ug/Kg		121	70 - 142
Chlorobenzene	50.0	51.0		ug/Kg		102	70 - 130
Chloroethane	50.0	45.4		ug/Kg		91	65 - 130
Chloroform	50.0	54.0		ug/Kg		108	77 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250625/5
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	41.9		ug/Kg		84	55 - 140
2-Chlorotoluene	50.0	48.9		ug/Kg		98	70 - 138
4-Chlorotoluene	50.0	48.8		ug/Kg		98	70 - 136
Chlorodibromomethane	50.0	54.8		ug/Kg		110	70 - 146
1,2-Dichlorobenzene	50.0	51.1		ug/Kg		102	70 - 130
1,3-Dichlorobenzene	50.0	51.8		ug/Kg		104	70 - 131
1,4-Dichlorobenzene	50.0	50.1		ug/Kg		100	70 - 130
1,3-Dichloropropane	50.0	50.5		ug/Kg		101	70 - 140
1,1-Dichloropropene	50.0	54.1		ug/Kg		108	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	50.1		ug/Kg		100	60 - 145
Ethylene Dibromide	50.0	54.0		ug/Kg		108	70 - 140
Dibromomethane	50.0	52.3		ug/Kg		105	70 - 139
Dichlorodifluoromethane	50.0	48.7		ug/Kg		97	37 - 158
1,1-Dichloroethane	50.0	53.0		ug/Kg		106	70 - 130
1,2-Dichloroethane	50.0	55.2		ug/Kg		110	70 - 130
1,1-Dichloroethene	50.0	65.9	*	ug/Kg		132	74 - 122
cis-1,2-Dichloroethene	50.0	52.8		ug/Kg		106	70 - 138
trans-1,2-Dichloroethene	50.0	59.1		ug/Kg		118	67 - 130
1,2-Dichloropropane	50.0	51.2		ug/Kg		102	73 - 127
cis-1,3-Dichloropropene	50.0	52.6		ug/Kg		105	68 - 147
trans-1,3-Dichloropropene	50.0	50.8		ug/Kg		102	70 - 155
Ethylbenzene	50.0	49.7		ug/Kg		99	80 - 137
Hexachlorobutadiene	50.0	53.0		ug/Kg		106	70 - 132
2-Hexanone	250	214		ug/Kg		86	62 - 158
Isopropylbenzene	50.0	52.2		ug/Kg		104	70 - 130
4-Isopropyltoluene	50.0	49.7		ug/Kg		99	70 - 133
Methylene Chloride	50.0	50.8		ug/Kg		102	70 - 134
4-Methyl-2-pentanone (MIBK)	250	213		ug/Kg		85	60 - 160
Naphthalene	50.0	49.5		ug/Kg		99	60 - 147
N-Propylbenzene	50.0	47.9		ug/Kg		96	70 - 130
Styrene	50.0	47.4		ug/Kg		95	70 - 130
1,1,1,2-Tetrachloroethane	50.0	54.6		ug/Kg		109	70 - 130
1,1,2,2-Tetrachloroethane	50.0	46.2		ug/Kg		92	70 - 146
Tetrachloroethene	50.0	57.4		ug/Kg		115	70 - 132
Toluene	50.0	49.1		ug/Kg		98	75 - 120
1,2,3-Trichlorobenzene	50.0	51.9		ug/Kg		104	60 - 140
1,2,4-Trichlorobenzene	50.0	52.0		ug/Kg		104	60 - 140
1,1,1-Trichloroethane	50.0	59.5		ug/Kg		119	70 - 130
1,1,2-Trichloroethane	50.0	51.5		ug/Kg		103	70 - 130
Trichloroethene	50.0	56.2		ug/Kg		112	70 - 133
Trichlorofluoromethane	50.0	55.2		ug/Kg		110	60 - 140
1,2,3-Trichloropropane	50.0	49.5		ug/Kg		99	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	70.7	*	ug/Kg		141	60 - 140
1,2,4-Trimethylbenzene	50.0	50.2		ug/Kg		100	70 - 130
1,3,5-Trimethylbenzene	50.0	49.8		ug/Kg		100	70 - 131
Vinyl acetate	50.0	45.5		ug/Kg		91	38 - 176
Vinyl chloride	50.0	46.0		ug/Kg		92	58 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250625/5
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	50.0	51.1		ug/Kg		102	70 - 146
o-Xylene	50.0	51.3		ug/Kg		103	70 - 140
2,2-Dichloropropane	50.0	62.6		ug/Kg		125	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*96*		*58 - 140*

Lab Sample ID: LCS 720-250625/7
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1060		ug/Kg		106	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*99*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250625/6
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	57.2		ug/Kg		114	70 - 144	3	20
Acetone	250	221		ug/Kg		89	30 - 162	8	30
Benzene	50.0	50.6		ug/Kg		101	70 - 130	1	20
Dichlorobromomethane	50.0	55.2		ug/Kg		110	70 - 140	0	20
Bromobenzene	50.0	49.3		ug/Kg		99	70 - 130	1	20
Chlorobromomethane	50.0	56.6		ug/Kg		113	70 - 130	0	20
Bromoform	50.0	54.1		ug/Kg		108	59 - 158	4	20
Bromomethane	50.0	52.5		ug/Kg		105	59 - 132	3	20
2-Butanone (MEK)	250	238		ug/Kg		95	59 - 159	8	20
n-Butylbenzene	50.0	48.2		ug/Kg		96	70 - 142	2	20
sec-Butylbenzene	50.0	47.9		ug/Kg		96	70 - 136	0	20
tert-Butylbenzene	50.0	48.6		ug/Kg		97	70 - 130	1	20
Carbon disulfide	50.0	67.9		ug/Kg		136	60 - 140	0	20
Carbon tetrachloride	50.0	59.7		ug/Kg		119	70 - 142	1	20
Chlorobenzene	50.0	50.7		ug/Kg		101	70 - 130	1	20
Chloroethane	50.0	46.6		ug/Kg		93	65 - 130	3	20
Chloroform	50.0	53.6		ug/Kg		107	77 - 127	1	20
Chloromethane	50.0	43.4		ug/Kg		87	55 - 140	3	20
2-Chlorotoluene	50.0	48.3		ug/Kg		97	70 - 138	1	20
4-Chlorotoluene	50.0	48.8		ug/Kg		98	70 - 136	0	20
Chlorodibromomethane	50.0	55.6		ug/Kg		111	70 - 146	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250625/6
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	50.0	51.2		ug/Kg		102	70 - 130	0	20
1,3-Dichlorobenzene	50.0	51.7		ug/Kg		103	70 - 131	0	20
1,4-Dichlorobenzene	50.0	50.7		ug/Kg		101	70 - 130	1	20
1,3-Dichloropropane	50.0	51.4		ug/Kg		103	70 - 140	2	20
1,1-Dichloropropene	50.0	53.9		ug/Kg		108	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	50.0	51.5		ug/Kg		103	60 - 145	3	20
Ethylene Dibromide	50.0	56.9		ug/Kg		114	70 - 140	5	20
Dibromomethane	50.0	54.4		ug/Kg		109	70 - 139	4	20
Dichlorodifluoromethane	50.0	50.5		ug/Kg		101	37 - 158	4	20
1,1-Dichloroethane	50.0	53.2		ug/Kg		106	70 - 130	0	20
1,2-Dichloroethane	50.0	55.7		ug/Kg		111	70 - 130	1	20
1,1-Dichloroethene	50.0	65.9	*	ug/Kg		132	74 - 122	0	20
cis-1,2-Dichloroethene	50.0	52.2		ug/Kg		104	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	59.1		ug/Kg		118	67 - 130	0	20
1,2-Dichloropropane	50.0	51.0		ug/Kg		102	73 - 127	0	20
cis-1,3-Dichloropropene	50.0	53.4		ug/Kg		107	68 - 147	2	20
trans-1,3-Dichloropropene	50.0	52.5		ug/Kg		105	70 - 155	3	20
Ethylbenzene	50.0	49.8		ug/Kg		100	80 - 137	0	20
Hexachlorobutadiene	50.0	52.8		ug/Kg		106	70 - 132	0	20
2-Hexanone	250	234		ug/Kg		94	62 - 158	9	20
Isopropylbenzene	50.0	52.5		ug/Kg		105	70 - 130	1	20
4-Isopropyltoluene	50.0	50.1		ug/Kg		100	70 - 133	1	20
Methylene Chloride	50.0	51.1		ug/Kg		102	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	230		ug/Kg		92	60 - 160	8	20
Naphthalene	50.0	51.4		ug/Kg		103	60 - 147	4	20
N-Propylbenzene	50.0	47.1		ug/Kg		94	70 - 130	2	20
Styrene	50.0	48.1		ug/Kg		96	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	55.4		ug/Kg		111	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	46.8		ug/Kg		94	70 - 146	1	20
Tetrachloroethene	50.0	57.1		ug/Kg		114	70 - 132	1	20
Toluene	50.0	48.8		ug/Kg		98	75 - 120	1	20
1,2,3-Trichlorobenzene	50.0	53.0		ug/Kg		106	60 - 140	2	20
1,2,4-Trichlorobenzene	50.0	53.9		ug/Kg		108	60 - 140	4	20
1,1,1-Trichloroethane	50.0	58.5		ug/Kg		117	70 - 130	2	20
1,1,2-Trichloroethane	50.0	53.6		ug/Kg		107	70 - 130	4	20
Trichloroethene	50.0	56.1		ug/Kg		112	70 - 133	0	20
Trichlorofluoromethane	50.0	54.8		ug/Kg		110	60 - 140	1	20
1,2,3-Trichloropropane	50.0	51.3		ug/Kg		103	70 - 146	3	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	70.7	*	ug/Kg		141	60 - 140	0	20
1,2,4-Trimethylbenzene	50.0	50.1		ug/Kg		100	70 - 130	0	20
1,3,5-Trimethylbenzene	50.0	49.3		ug/Kg		99	70 - 131	1	20
Vinyl acetate	50.0	46.7		ug/Kg		93	38 - 176	3	20
Vinyl chloride	50.0	48.5		ug/Kg		97	58 - 125	5	20
m-Xylene & p-Xylene	50.0	51.9		ug/Kg		104	70 - 146	2	20
o-Xylene	50.0	51.7		ug/Kg		103	70 - 140	1	20
2,2-Dichloropropane	50.0	64.9		ug/Kg		130	70 - 162	4	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250625/6
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*98*		*58 - 140*

Lab Sample ID: LCSD 720-250625/8
Matrix: Solid
Analysis Batch: 250625

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	1040		ug/Kg		104	70 - 122	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*99*		*60 - 140*
Toluene-d8 (Surr)	*97*		*58 - 140*

Lab Sample ID: MB 720-250642/4
Matrix: Solid
Analysis Batch: 250642

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			08/31/18 07:30	1
Acetone	ND		50	38	ug/Kg			08/31/18 07:30	1
Benzene	ND		5.0	0.65	ug/Kg			08/31/18 07:30	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			08/31/18 07:30	1
Bromobenzene	ND		5.0	0.79	ug/Kg			08/31/18 07:30	1
Chlorobromomethane	ND		20	0.72	ug/Kg			08/31/18 07:30	1
Bromoform	ND		5.0	2.0	ug/Kg			08/31/18 07:30	1
Bromomethane	ND		10	0.79	ug/Kg			08/31/18 07:30	1
2-Butanone (MEK)	ND		50	21	ug/Kg			08/31/18 07:30	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			08/31/18 07:30	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			08/31/18 07:30	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			08/31/18 07:30	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			08/31/18 07:30	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			08/31/18 07:30	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			08/31/18 07:30	1
Chloroethane	ND		10	0.56	ug/Kg			08/31/18 07:30	1
Chloroform	ND		5.0	0.66	ug/Kg			08/31/18 07:30	1
Chloromethane	ND		10	0.79	ug/Kg			08/31/18 07:30	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			08/31/18 07:30	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			08/31/18 07:30	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			08/31/18 07:30	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			08/31/18 07:30	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			08/31/18 07:30	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			08/31/18 07:30	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			08/31/18 07:30	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			08/31/18 07:30	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250642/4
Matrix: Solid
Analysis Batch: 250642

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/31/18 07:30	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			08/31/18 07:30	1
Dibromomethane	ND		10	0.86	ug/Kg			08/31/18 07:30	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			08/31/18 07:30	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			08/31/18 07:30	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			08/31/18 07:30	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			08/31/18 07:30	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			08/31/18 07:30	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			08/31/18 07:30	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			08/31/18 07:30	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			08/31/18 07:30	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			08/31/18 07:30	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			08/31/18 07:30	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			08/31/18 07:30	1
2-Hexanone	ND		50	10	ug/Kg			08/31/18 07:30	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			08/31/18 07:30	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			08/31/18 07:30	1
Methylene Chloride	ND		10	5.6	ug/Kg			08/31/18 07:30	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			08/31/18 07:30	1
Naphthalene	ND		10	1.5	ug/Kg			08/31/18 07:30	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			08/31/18 07:30	1
Styrene	ND		5.0	0.63	ug/Kg			08/31/18 07:30	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			08/31/18 07:30	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			08/31/18 07:30	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			08/31/18 07:30	1
Toluene	ND		5.0	0.71	ug/Kg			08/31/18 07:30	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			08/31/18 07:30	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			08/31/18 07:30	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			08/31/18 07:30	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			08/31/18 07:30	1
Trichloroethene	ND		5.0	0.63	ug/Kg			08/31/18 07:30	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			08/31/18 07:30	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			08/31/18 07:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			08/31/18 07:30	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			08/31/18 07:30	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			08/31/18 07:30	1
Vinyl acetate	ND		20	5.0	ug/Kg			08/31/18 07:30	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			08/31/18 07:30	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			08/31/18 07:30	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			08/31/18 07:30	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			08/31/18 07:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*45 - 131*		*08/31/18 07:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*60 - 140*		*08/31/18 07:30*	*1*
Toluene-d8 (Surr)	*101*		*58 - 140*		*08/31/18 07:30*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250642/5
Matrix: Solid
Analysis Batch: 250642

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	49.6		ug/Kg		99	70 - 144
Acetone	250	202		ug/Kg		81	30 - 162
Benzene	50.0	53.0		ug/Kg		106	70 - 130
Dichlorobromomethane	50.0	50.9		ug/Kg		102	70 - 140
Bromobenzene	50.0	47.9		ug/Kg		96	70 - 130
Chlorobromomethane	50.0	49.7		ug/Kg		99	70 - 130
Bromoform	50.0	46.1		ug/Kg		92	59 - 158
Bromomethane	50.0	45.1		ug/Kg		90	59 - 132
2-Butanone (MEK)	250	202		ug/Kg		81	59 - 159
n-Butylbenzene	50.0	56.0		ug/Kg		112	70 - 142
sec-Butylbenzene	50.0	55.0		ug/Kg		110	70 - 136
tert-Butylbenzene	50.0	52.3		ug/Kg		105	70 - 130
Carbon disulfide	50.0	72.1	*	ug/Kg		144	60 - 140
Carbon tetrachloride	50.0	54.6		ug/Kg		109	70 - 142
Chlorobenzene	50.0	49.9		ug/Kg		100	70 - 130
Chloroethane	50.0	45.7		ug/Kg		91	65 - 130
Chloroform	50.0	52.2		ug/Kg		104	77 - 127
Chloromethane	50.0	45.1		ug/Kg		90	55 - 140
2-Chlorotoluene	50.0	53.0		ug/Kg		106	70 - 138
4-Chlorotoluene	50.0	53.7		ug/Kg		107	70 - 136
Chlorodibromomethane	50.0	48.5		ug/Kg		97	70 - 146
1,2-Dichlorobenzene	50.0	48.8		ug/Kg		98	70 - 130
1,3-Dichlorobenzene	50.0	50.3		ug/Kg		101	70 - 131
1,4-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130
1,3-Dichloropropane	50.0	48.2		ug/Kg		96	70 - 140
1,1-Dichloropropene	50.0	56.1		ug/Kg		112	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	44.7		ug/Kg		89	60 - 145
Ethylene Dibromide	50.0	47.8		ug/Kg		96	70 - 140
Dibromomethane	50.0	47.3		ug/Kg		95	70 - 139
Dichlorodifluoromethane	50.0	31.9		ug/Kg		64	37 - 158
1,1-Dichloroethane	50.0	56.2		ug/Kg		112	70 - 130
1,2-Dichloroethane	50.0	49.4		ug/Kg		99	70 - 130
1,1-Dichloroethene	50.0	60.7		ug/Kg		121	74 - 122
cis-1,2-Dichloroethene	50.0	54.6		ug/Kg		109	70 - 138
trans-1,2-Dichloroethene	50.0	57.5		ug/Kg		115	67 - 130
1,2-Dichloropropane	50.0	55.0		ug/Kg		110	73 - 127
cis-1,3-Dichloropropene	50.0	54.7		ug/Kg		109	68 - 147
trans-1,3-Dichloropropene	50.0	51.3		ug/Kg		103	70 - 155
Ethylbenzene	50.0	53.2		ug/Kg		106	80 - 137
Hexachlorobutadiene	50.0	49.3		ug/Kg		99	70 - 132
2-Hexanone	250	234		ug/Kg		93	62 - 158
Isopropylbenzene	50.0	51.9		ug/Kg		104	70 - 130
4-Isopropyltoluene	50.0	54.2		ug/Kg		108	70 - 133
Methylene Chloride	50.0	52.0		ug/Kg		104	70 - 134
4-Methyl-2-pentanone (MIBK)	250	239		ug/Kg		96	60 - 160
Naphthalene	50.0	44.6		ug/Kg		89	60 - 147
N-Propylbenzene	50.0	55.9		ug/Kg		112	70 - 130
Styrene	50.0	50.5		ug/Kg		101	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250642/5
Matrix: Solid
Analysis Batch: 250642

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	50.2		ug/Kg		100	70 - 130
1,1,2,2-Tetrachloroethane	50.0	46.8		ug/Kg		94	70 - 146
Tetrachloroethene	50.0	51.1		ug/Kg		102	70 - 132
Toluene	50.0	51.0		ug/Kg		102	75 - 120
1,2,3-Trichlorobenzene	50.0	46.2		ug/Kg		92	60 - 140
1,2,4-Trichlorobenzene	50.0	48.9		ug/Kg		98	60 - 140
1,1,1-Trichloroethane	50.0	53.6		ug/Kg		107	70 - 130
1,1,2-Trichloroethane	50.0	49.6		ug/Kg		99	70 - 130
Trichloroethene	50.0	50.1		ug/Kg		100	70 - 133
Trichlorofluoromethane	50.0	49.2		ug/Kg		98	60 - 140
1,2,3-Trichloropropane	50.0	45.5		ug/Kg		91	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	64.5		ug/Kg		129	60 - 140
1,2,4-Trimethylbenzene	50.0	52.9		ug/Kg		106	70 - 130
1,3,5-Trimethylbenzene	50.0	53.2		ug/Kg		106	70 - 131
Vinyl acetate	50.0	48.5		ug/Kg		97	38 - 176
Vinyl chloride	50.0	45.2		ug/Kg		90	58 - 125
m-Xylene & p-Xylene	50.0	52.4		ug/Kg		105	70 - 146
o-Xylene	50.0	52.1		ug/Kg		104	70 - 140
2,2-Dichloropropane	50.0	59.5		ug/Kg		119	70 - 162

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: LCS 720-250642/7
Matrix: Solid
Analysis Batch: 250642

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	991		ug/Kg		99	70 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*102*		*60 - 140*
Toluene-d8 (Surr)	*102*		*58 - 140*

Lab Sample ID: LCSD 720-250642/6
Matrix: Solid
Analysis Batch: 250642

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	51.1		ug/Kg		102	70 - 144	3	20
Acetone	250	209		ug/Kg		84	30 - 162	3	30
Benzene	50.0	53.0		ug/Kg		106	70 - 130	0	20
Dichlorobromomethane	50.0	51.6		ug/Kg		103	70 - 140	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250642/6
Matrix: Solid
Analysis Batch: 250642

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	50.0	48.0		ug/Kg		96	70 - 130	0	20
Chlorobromomethane	50.0	50.8		ug/Kg		102	70 - 130	2	20
Bromoform	50.0	46.9		ug/Kg		94	59 - 158	2	20
Bromomethane	50.0	44.7		ug/Kg		89	59 - 132	1	20
2-Butanone (MEK)	250	217		ug/Kg		87	59 - 159	8	20
n-Butylbenzene	50.0	54.9		ug/Kg		110	70 - 142	2	20
sec-Butylbenzene	50.0	54.3		ug/Kg		109	70 - 136	1	20
tert-Butylbenzene	50.0	52.3		ug/Kg		105	70 - 130	0	20
Carbon disulfide	50.0	71.0	*	ug/Kg		142	60 - 140	2	20
Carbon tetrachloride	50.0	54.5		ug/Kg		109	70 - 142	0	20
Chlorobenzene	50.0	50.1		ug/Kg		100	70 - 130	0	20
Chloroethane	50.0	44.6		ug/Kg		89	65 - 130	3	20
Chloroform	50.0	51.9		ug/Kg		104	77 - 127	1	20
Chloromethane	50.0	43.7		ug/Kg		87	55 - 140	3	20
2-Chlorotoluene	50.0	52.6		ug/Kg		105	70 - 138	1	20
4-Chlorotoluene	50.0	53.2		ug/Kg		106	70 - 136	1	20
Chlorodibromomethane	50.0	50.3		ug/Kg		101	70 - 146	4	20
1,2-Dichlorobenzene	50.0	49.0		ug/Kg		98	70 - 130	0	20
1,3-Dichlorobenzene	50.0	50.2		ug/Kg		100	70 - 131	0	20
1,4-Dichlorobenzene	50.0	49.6		ug/Kg		99	70 - 130	0	20
1,3-Dichloropropane	50.0	48.4		ug/Kg		97	70 - 140	0	20
1,1-Dichloropropene	50.0	55.3		ug/Kg		111	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	44.8		ug/Kg		90	60 - 145	0	20
Ethylene Dibromide	50.0	48.5		ug/Kg		97	70 - 140	2	20
Dibromomethane	50.0	47.9		ug/Kg		96	70 - 139	1	20
Dichlorodifluoromethane	50.0	31.0		ug/Kg		62	37 - 158	3	20
1,1-Dichloroethane	50.0	56.4		ug/Kg		113	70 - 130	0	20
1,2-Dichloroethane	50.0	49.3		ug/Kg		99	70 - 130	0	20
1,1-Dichloroethene	50.0	60.7		ug/Kg		121	74 - 122	0	20
cis-1,2-Dichloroethene	50.0	54.9		ug/Kg		110	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	57.3		ug/Kg		115	67 - 130	0	20
1,2-Dichloropropane	50.0	56.0		ug/Kg		112	73 - 127	2	20
cis-1,3-Dichloropropene	50.0	55.7		ug/Kg		111	68 - 147	2	20
trans-1,3-Dichloropropene	50.0	52.5		ug/Kg		105	70 - 155	2	20
Ethylbenzene	50.0	52.8		ug/Kg		106	80 - 137	1	20
Hexachlorobutadiene	50.0	48.7		ug/Kg		97	70 - 132	1	20
2-Hexanone	250	238		ug/Kg		95	62 - 158	2	20
Isopropylbenzene	50.0	51.4		ug/Kg		103	70 - 130	1	20
4-Isopropyltoluene	50.0	54.1		ug/Kg		108	70 - 133	0	20
Methylene Chloride	50.0	52.3		ug/Kg		105	70 - 134	1	20
4-Methyl-2-pentanone (MIBK)	250	245		ug/Kg		98	60 - 160	2	20
Naphthalene	50.0	46.3		ug/Kg		93	60 - 147	4	20
N-Propylbenzene	50.0	55.2		ug/Kg		110	70 - 130	1	20
Styrene	50.0	50.3		ug/Kg		101	70 - 130	0	20
1,1,1,2-Tetrachloroethane	50.0	50.5		ug/Kg		101	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	47.9		ug/Kg		96	70 - 146	3	20
Tetrachloroethene	50.0	50.8		ug/Kg		102	70 - 132	1	20
Toluene	50.0	51.1		ug/Kg		102	75 - 120	0	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250642/6
Matrix: Solid
Analysis Batch: 250642

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene			50.0	47.4		ug/Kg		95	60 - 140	2	20
1,2,4-Trichlorobenzene			50.0	49.6		ug/Kg		99	60 - 140	1	20
1,1,1-Trichloroethane			50.0	53.3		ug/Kg		107	70 - 130	1	20
1,1,2-Trichloroethane			50.0	50.4		ug/Kg		101	70 - 130	2	20
Trichloroethene			50.0	49.8		ug/Kg		100	70 - 133	1	20
Trichlorofluoromethane			50.0	48.2		ug/Kg		96	60 - 140	2	20
1,2,3-Trichloropropane			50.0	46.1		ug/Kg		92	70 - 146	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	63.3		ug/Kg		127	60 - 140	2	20
1,2,4-Trimethylbenzene			50.0	52.8		ug/Kg		106	70 - 130	0	20
1,3,5-Trimethylbenzene			50.0	53.0		ug/Kg		106	70 - 131	0	20
Vinyl acetate			50.0	50.1		ug/Kg		100	38 - 176	3	20
Vinyl chloride			50.0	44.2		ug/Kg		88	58 - 125	2	20
m-Xylene & p-Xylene			50.0	52.1		ug/Kg		104	70 - 146	1	20
o-Xylene			50.0	52.1		ug/Kg		104	70 - 140	0	20
2,2-Dichloropropane			50.0	58.7		ug/Kg		117	70 - 162	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Lab Sample ID: LCSD 720-250642/8
Matrix: Solid
Analysis Batch: 250642

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			1000	996		ug/Kg		100	70 - 122	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*103*		*58 - 140*

Lab Sample ID: 720-88218-15 MS
Matrix: Solid
Analysis Batch: 250642

Client Sample ID: DG-D5S-3.5-4
Prep Type: Total/NA
Prep Batch: 250667

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	ND		49.3	54.4		ug/Kg		110	69 - 130
Acetone	ND	F2	247	251		ug/Kg		102	37 - 150
Benzene	ND		49.3	51.7		ug/Kg		105	70 - 130
Dichlorobromomethane	ND		49.3	50.4		ug/Kg		102	64 - 135
Bromobenzene	ND		49.3	50.9		ug/Kg		103	70 - 130
Chlorobromomethane	ND		49.3	51.8		ug/Kg		105	65 - 130
Bromoform	ND		49.3	52.4		ug/Kg		106	58 - 132
Bromomethane	ND		49.3	46.6		ug/Kg		95	56 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88218-15 MS
Matrix: Solid
Analysis Batch: 250642

Client Sample ID: DG-D5S-3.5-4
Prep Type: Total/NA
Prep Batch: 250667

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Butanone (MEK)	ND		247	238		ug/Kg		96	41 - 150
n-Butylbenzene	ND		49.3	52.4		ug/Kg		106	60 - 145
sec-Butylbenzene	ND		49.3	53.4		ug/Kg		108	64 - 137
tert-Butylbenzene	ND		49.3	52.7		ug/Kg		107	63 - 134
Carbon disulfide	ND	*	49.3	68.7		ug/Kg		139	10 - 150
Carbon tetrachloride	ND		49.3	54.2		ug/Kg		110	54 - 130
Chlorobenzene	ND		49.3	50.4		ug/Kg		102	70 - 130
Chloroethane	ND		49.3	45.3		ug/Kg		92	61 - 130
Chloroform	ND		49.3	51.6		ug/Kg		105	67 - 130
Chloromethane	ND		49.3	41.9		ug/Kg		85	50 - 131
2-Chlorotoluene	ND		49.3	53.2		ug/Kg		108	70 - 130
4-Chlorotoluene	ND		49.3	53.0		ug/Kg		108	70 - 130
Chlorodibromomethane	ND		49.3	51.9		ug/Kg		105	60 - 141
1,2-Dichlorobenzene	ND		49.3	50.2		ug/Kg		102	70 - 130
1,3-Dichlorobenzene	ND		49.3	50.7		ug/Kg		103	70 - 130
1,4-Dichlorobenzene	ND		49.3	50.1		ug/Kg		102	70 - 130
1,3-Dichloropropane	ND		49.3	49.4		ug/Kg		100	70 - 130
1,1-Dichloropropene	ND		49.3	53.1		ug/Kg		108	67 - 130
1,2-Dibromo-3-Chloropropane	ND		49.3	55.3		ug/Kg		112	57 - 130
Ethylene Dibromide	ND		49.3	51.2		ug/Kg		104	66 - 135
Dibromomethane	ND		49.3	50.3		ug/Kg		102	65 - 131
Dichlorodifluoromethane	ND		49.3	33.8		ug/Kg		68	38 - 130
1,1-Dichloroethane	ND		49.3	54.4		ug/Kg		110	67 - 130
1,2-Dichloroethane	ND		49.3	50.3		ug/Kg		102	70 - 130
1,1-Dichloroethene	ND		49.3	59.5		ug/Kg		121	64 - 130
cis-1,2-Dichloroethene	ND		49.3	52.2		ug/Kg		106	68 - 131
trans-1,2-Dichloroethene	ND		49.3	55.9		ug/Kg		113	70 - 130
1,2-Dichloropropane	ND		49.3	54.1		ug/Kg		110	65 - 133
cis-1,3-Dichloropropene	ND		49.3	54.5		ug/Kg		111	46 - 139
trans-1,3-Dichloropropene	ND		49.3	51.5		ug/Kg		105	55 - 131
Ethylbenzene	ND		49.3	53.3		ug/Kg		108	65 - 130
Hexachlorobutadiene	ND		49.3	45.9		ug/Kg		93	58 - 132
2-Hexanone	ND		247	249		ug/Kg		101	44 - 150
Isopropylbenzene	ND		49.3	51.1		ug/Kg		104	65 - 130
4-Isopropyltoluene	ND		49.3	53.3		ug/Kg		108	69 - 134
Methylene Chloride	ND		49.3	54.4		ug/Kg		110	63 - 130
4-Methyl-2-pentanone (MIBK)	ND		247	253		ug/Kg		103	51 - 140
Naphthalene	ND		49.3	51.1		ug/Kg		104	45 - 146
N-Propylbenzene	ND		49.3	55.5		ug/Kg		112	70 - 130
Styrene	ND		49.3	50.8		ug/Kg		103	58 - 135
1,1,1,2-Tetrachloroethane	ND		49.3	53.5		ug/Kg		108	64 - 133
1,1,2,2-Tetrachloroethane	ND	F1 F2	49.3	41.0		ug/Kg		83	70 - 131
Tetrachloroethene	ND		49.3	50.2		ug/Kg		102	67 - 130
Toluene	ND		49.3	51.8		ug/Kg		105	70 - 130
1,2,3-Trichlorobenzene	ND		49.3	48.9		ug/Kg		99	58 - 138
1,2,4-Trichlorobenzene	ND		49.3	48.8		ug/Kg		99	49 - 144
1,1,1-Trichloroethane	ND		49.3	52.3		ug/Kg		106	57 - 133
1,1,2-Trichloroethane	ND		49.3	53.5		ug/Kg		109	68 - 132

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88218-15 MS
Matrix: Solid
Analysis Batch: 250642

Client Sample ID: DG-D5S-3.5-4
Prep Type: Total/NA
Prep Batch: 250667

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	ND	F1	49.3	59.4		ug/Kg		120	66 - 130
Trichlorofluoromethane	ND		49.3	50.8		ug/Kg		103	61 - 130
1,2,3-Trichloropropane	ND		49.3	56.3		ug/Kg		114	62 - 150
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1	49.3	68.3	F1	ug/Kg		139	52 - 130
1,2,4-Trimethylbenzene	ND		49.3	52.8		ug/Kg		107	64 - 140
1,3,5-Trimethylbenzene	ND		49.3	53.7		ug/Kg		109	67 - 134
Vinyl acetate	ND	F1	49.3	10.2	J F1	ug/Kg		21	52 - 150
Vinyl chloride	ND		49.3	43.0		ug/Kg		87	62 - 130
m-Xylene & p-Xylene	ND		49.3	52.1		ug/Kg		106	70 - 130
o-Xylene	ND		49.3	51.8		ug/Kg		105	68 - 130
2,2-Dichloropropane	ND		49.3	56.5		ug/Kg		115	63 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*96*		*60 - 140*
Toluene-d8 (Surr)	*99*		*58 - 140*

Lab Sample ID: 720-88218-15 MSD
Matrix: Solid
Analysis Batch: 250642

Client Sample ID: DG-D5S-3.5-4
Prep Type: Total/NA
Prep Batch: 250667

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		47.7	52.0		ug/Kg		109	69 - 130	5	20
Acetone	ND	F2	239	202	F2	ug/Kg		85	37 - 150	22	20
Benzene	ND		47.7	52.6		ug/Kg		110	70 - 130	2	20
Dichlorobromomethane	ND		47.7	51.2		ug/Kg		107	64 - 135	2	20
Bromobenzene	ND		47.7	50.9		ug/Kg		107	70 - 130	0	20
Chlorobromomethane	ND		47.7	52.0		ug/Kg		109	65 - 130	0	20
Bromoform	ND		47.7	48.7		ug/Kg		102	58 - 132	7	20
Bromomethane	ND		47.7	45.8		ug/Kg		96	56 - 130	2	20
2-Butanone (MEK)	ND		239	205		ug/Kg		86	41 - 150	15	20
n-Butylbenzene	ND		47.7	53.5		ug/Kg		112	60 - 145	2	20
sec-Butylbenzene	ND		47.7	54.4		ug/Kg		114	64 - 137	2	20
tert-Butylbenzene	ND		47.7	53.5		ug/Kg		112	63 - 134	1	20
Carbon disulfide	ND	*	47.7	69.2		ug/Kg		145	10 - 150	1	20
Carbon tetrachloride	ND		47.7	55.9		ug/Kg		117	54 - 130	3	20
Chlorobenzene	ND		47.7	50.0		ug/Kg		105	70 - 130	1	20
Chloroethane	ND		47.7	44.3		ug/Kg		93	61 - 130	2	20
Chloroform	ND		47.7	52.5		ug/Kg		110	67 - 130	2	20
Chloromethane	ND		47.7	41.3		ug/Kg		87	50 - 131	2	20
2-Chlorotoluene	ND		47.7	53.6		ug/Kg		112	70 - 130	1	20
4-Chlorotoluene	ND		47.7	53.7		ug/Kg		113	70 - 130	1	20
Chlorodibromomethane	ND		47.7	50.5		ug/Kg		106	60 - 141	3	20
1,2-Dichlorobenzene	ND		47.7	50.5		ug/Kg		106	70 - 130	1	20
1,3-Dichlorobenzene	ND		47.7	51.4		ug/Kg		108	70 - 130	1	20
1,4-Dichlorobenzene	ND		47.7	50.8		ug/Kg		106	70 - 130	1	20
1,3-Dichloropropane	ND		47.7	48.2		ug/Kg		101	70 - 130	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88218-15 MSD
Matrix: Solid
Analysis Batch: 250642

Client Sample ID: DG-D5S-3.5-4
Prep Type: Total/NA
Prep Batch: 250667

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloropropene	ND		47.7	54.1		ug/Kg		113	67 - 130	2	20
1,2-Dibromo-3-Chloropropane	ND		47.7	49.3		ug/Kg		103	57 - 130	11	20
Ethylene Dibromide	ND		47.7	49.0		ug/Kg		103	66 - 135	5	20
Dibromomethane	ND		47.7	48.6		ug/Kg		102	65 - 131	4	20
Dichlorodifluoromethane	ND		47.7	32.3		ug/Kg		68	38 - 130	4	20
1,1-Dichloroethane	ND		47.7	55.0		ug/Kg		115	67 - 130	1	20
1,2-Dichloroethane	ND		47.7	49.3		ug/Kg		103	70 - 130	2	20
1,1-Dichloroethene	ND		47.7	61.5		ug/Kg		129	64 - 130	3	20
cis-1,2-Dichloroethene	ND		47.7	53.6		ug/Kg		112	68 - 131	3	20
trans-1,2-Dichloroethene	ND		47.7	58.0		ug/Kg		122	70 - 130	4	20
1,2-Dichloropropane	ND		47.7	54.3		ug/Kg		114	65 - 133	0	20
cis-1,3-Dichloropropene	ND		47.7	54.5		ug/Kg		114	46 - 139	0	20
trans-1,3-Dichloropropene	ND		47.7	51.1		ug/Kg		107	55 - 131	1	20
Ethylbenzene	ND		47.7	52.7		ug/Kg		110	65 - 130	1	20
Hexachlorobutadiene	ND		47.7	47.2		ug/Kg		99	58 - 132	3	20
2-Hexanone	ND		239	219		ug/Kg		92	44 - 150	13	20
Isopropylbenzene	ND		47.7	51.3		ug/Kg		107	65 - 130	0	20
4-Isopropyltoluene	ND		47.7	54.7		ug/Kg		115	69 - 134	3	20
Methylene Chloride	ND		47.7	54.0		ug/Kg		113	63 - 130	1	20
4-Methyl-2-pentanone (MIBK)	ND		239	222		ug/Kg		93	51 - 140	13	20
Naphthalene	ND		47.7	47.4		ug/Kg		99	45 - 146	7	20
N-Propylbenzene	ND		47.7	55.8		ug/Kg		117	70 - 130	1	20
Styrene	ND		47.7	50.7		ug/Kg		106	58 - 135	0	20
1,1,1,2-Tetrachloroethane	ND		47.7	52.4		ug/Kg		110	64 - 133	2	20
1,1,2,2-Tetrachloroethane	ND	F1 F2	47.7	24.6	F1 F2	ug/Kg		52	70 - 131	50	20
Tetrachloroethene	ND		47.7	52.3		ug/Kg		110	67 - 130	4	20
Toluene	ND		47.7	51.0		ug/Kg		107	70 - 130	2	20
1,2,3-Trichlorobenzene	ND		47.7	47.6		ug/Kg		100	58 - 138	3	20
1,2,4-Trichlorobenzene	ND		47.7	49.4		ug/Kg		104	49 - 144	1	20
1,1,1-Trichloroethane	ND		47.7	54.5		ug/Kg		114	57 - 133	4	20
1,1,2-Trichloroethane	ND		47.7	49.9		ug/Kg		105	68 - 132	7	20
Trichloroethene	ND	F1	47.7	72.3	F1	ug/Kg		152	66 - 130	20	20
Trichlorofluoromethane	ND		47.7	49.7		ug/Kg		104	61 - 130	2	20
1,2,3-Trichloropropane	ND		47.7	48.1		ug/Kg		101	62 - 150	16	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F1	47.7	67.9	F1	ug/Kg		142	52 - 130	1	20
1,2,4-Trimethylbenzene	ND		47.7	53.7		ug/Kg		113	64 - 140	2	20
1,3,5-Trimethylbenzene	ND		47.7	54.3		ug/Kg		114	67 - 134	1	20
Vinyl acetate	ND	F1	47.7	ND	F1	ug/Kg		0	52 - 150	NC	20
Vinyl chloride	ND		47.7	42.5		ug/Kg		89	62 - 130	1	20
m-Xylene & p-Xylene	ND		47.7	51.6		ug/Kg		108	70 - 130	1	20
o-Xylene	ND		47.7	52.3		ug/Kg		110	68 - 130	1	20
2,2-Dichloropropane	ND		47.7	58.9		ug/Kg		123	63 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*45 - 131*
1,2-Dichloroethane-d4 (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*101*		*58 - 140*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 720-250190/1-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250190

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Anthracene	ND		5.0	2.0	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Chrysene	2.59	J	5.0	1.4	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Fluorene	ND		5.0	2.2	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/24/18 15:31	08/28/18 19:42	1
Pyrene	ND		5.0	1.7	ug/Kg		08/24/18 15:31	08/28/18 19:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*98*		*33 - 120*	*08/24/18 15:31*	*08/28/18 19:42*	*1*
Terphenyl-d14	*96*		*35 - 146*	*08/24/18 15:31*	*08/28/18 19:42*	*1*

Lab Sample ID: LCS 720-250190/2-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250190

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	470		ug/Kg		71	46 - 110
Acenaphthene	667	484		ug/Kg		73	46 - 106
Acenaphthylene	667	457		ug/Kg		69	46 - 108
Anthracene	667	562		ug/Kg		84	55 - 103
Benzo[a]anthracene	667	658		ug/Kg		99	54 - 110
Benzo[a]pyrene	667	619		ug/Kg		93	62 - 111
Benzo[b]fluoranthene	667	596		ug/Kg		89	60 - 109
Benzo[g,h,i]perylene	667	625		ug/Kg		94	52 - 114
Benzo[k]fluoranthene	667	583		ug/Kg		87	58 - 109
Chrysene	667	671		ug/Kg		101	54 - 108
Dibenz(a,h)anthracene	667	635		ug/Kg		95	58 - 112
Fluoranthene	667	576		ug/Kg		86	59 - 109
Fluorene	667	505		ug/Kg		76	52 - 106
Indeno[1,2,3-cd]pyrene	667	644		ug/Kg		97	55 - 120
Naphthalene	667	443		ug/Kg		67	49 - 110
Phenanthrene	667	554		ug/Kg		83	57 - 110
Pyrene	667	689		ug/Kg		103	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*86*		*33 - 120*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 720-250190/2-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250190

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	*106*		*35 - 146*

Lab Sample ID: 720-88216-A-9-F MS
Matrix: Solid
Analysis Batch: 250501

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250190

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	28	J	666	417		ug/Kg		59	46 - 110
Acenaphthene	ND		666	472		ug/Kg		71	46 - 106
Acenaphthylene	11	J	666	504		ug/Kg		74	46 - 108
Anthracene	20		666	528		ug/Kg		76	55 - 103
Benzo[a]anthracene	50		666	602		ug/Kg		83	54 - 110
Benzo[a]pyrene	75		666	571		ug/Kg		74	62 - 111
Benzo[b]fluoranthene	100		666	595		ug/Kg		74	60 - 109
Benzo[g,h,i]perylene	96		666	499		ug/Kg		60	52 - 114
Benzo[k]fluoranthene	42		666	537		ug/Kg		74	58 - 109
Chrysene	72	B	666	569		ug/Kg		75	54 - 108
Dibenz(a,h)anthracene	16	J	666	555		ug/Kg		81	58 - 112
Fluoranthene	96		666	546		ug/Kg		68	59 - 109
Fluorene	ND		666	510		ug/Kg		77	52 - 106
Indeno[1,2,3-cd]pyrene	51		666	560		ug/Kg		77	55 - 120
Naphthalene	29		666	406		ug/Kg		57	49 - 110
Phenanthrene	71		666	524		ug/Kg		68	57 - 110
Pyrene	110		666	591		ug/Kg		72	50 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl	*68*		*33 - 120*
Terphenyl-d14	*86*		*35 - 146*

Lab Sample ID: 720-88216-A-9-G MSD
Matrix: Solid
Analysis Batch: 250501

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250190

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	28	J	628	430		ug/Kg		64	46 - 110	3	35
Acenaphthene	ND		628	477		ug/Kg		76	46 - 106	1	35
Acenaphthylene	11	J	628	503		ug/Kg		78	46 - 108	0	35
Anthracene	20		628	513		ug/Kg		78	55 - 103	3	35
Benzo[a]anthracene	50		628	573		ug/Kg		83	54 - 110	5	35
Benzo[a]pyrene	75		628	555		ug/Kg		76	62 - 111	3	35
Benzo[b]fluoranthene	100		628	551		ug/Kg		71	60 - 109	8	35
Benzo[g,h,i]perylene	96		628	478		ug/Kg		61	52 - 114	4	35
Benzo[k]fluoranthene	42		628	518		ug/Kg		76	58 - 109	4	35
Chrysene	72	B	628	546		ug/Kg		75	54 - 108	4	35
Dibenz(a,h)anthracene	16	J	628	532		ug/Kg		82	58 - 112	4	35
Fluoranthene	96		628	530		ug/Kg		69	59 - 109	3	35
Fluorene	ND		628	513		ug/Kg		82	52 - 106	1	35
Indeno[1,2,3-cd]pyrene	51		628	536		ug/Kg		77	55 - 120	4	35

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88216-A-9-G MSD
Matrix: Solid
Analysis Batch: 250501

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250190

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	29		628	430		ug/Kg		64	49 - 110	6	35
Phenanthrene	71		628	516		ug/Kg		71	57 - 110	2	35
Pyrene	110		628	571		ug/Kg		73	50 - 120	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*74*		*33 - 120*
Terphenyl-d14	*88*		*35 - 146*

Lab Sample ID: MB 720-250290/1-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250290

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Anthracene	ND		5.0	2.0	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Chrysene	ND		5.0	1.4	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Fluoranthene	1.69	J	5.0	1.4	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Fluorene	ND		5.0	2.2	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/27/18 12:37	08/28/18 18:55	1
Pyrene	1.85	J	5.0	1.7	ug/Kg		08/27/18 12:37	08/28/18 18:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*33 - 120*	*08/27/18 12:37*	*08/28/18 18:55*	*1*
Terphenyl-d14	*95*		*35 - 146*	*08/27/18 12:37*	*08/28/18 18:55*	*1*

Lab Sample ID: LCS 720-250290/2-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250290

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	508		ug/Kg		76	46 - 110
Acenaphthene	667	529		ug/Kg		79	46 - 106
Acenaphthylene	667	519		ug/Kg		78	46 - 108
Anthracene	667	543		ug/Kg		81	55 - 103
Benzo[a]anthracene	667	650		ug/Kg		98	54 - 110
Benzo[a]pyrene	667	601		ug/Kg		90	62 - 111
Benzo[b]fluoranthene	667	581		ug/Kg		87	60 - 109
Benzo[g,h,i]perylene	667	611		ug/Kg		92	52 - 114

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 720-250290/2-A
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250290

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[k]fluoranthene	667	576		ug/Kg		86	58 - 109
Chrysene	667	644		ug/Kg		97	54 - 108
Dibenz(a,h)anthracene	667	622		ug/Kg		93	58 - 112
Fluoranthene	667	544		ug/Kg		82	59 - 109
Fluorene	667	539		ug/Kg		81	52 - 106
Indeno[1,2,3-cd]pyrene	667	634		ug/Kg		95	55 - 120
Naphthalene	667	489		ug/Kg		73	49 - 110
Phenanthrene	667	542		ug/Kg		81	57 - 110
Pyrene	667	672		ug/Kg		101	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*99*		*33 - 120*
Terphenyl-d14	*105*		*35 - 146*

Lab Sample ID: 720-88216-A-17-Q MS
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250290

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	ND		657	415		ug/Kg		63	46 - 110
Acenaphthene	ND		657	479		ug/Kg		73	46 - 106
Acenaphthylene	ND		657	465		ug/Kg		71	46 - 108
Anthracene	2.3	J	657	526		ug/Kg		80	55 - 103
Benzo[a]anthracene	ND		657	585		ug/Kg		89	54 - 110
Benzo[a]pyrene	4.2	J	657	583		ug/Kg		88	62 - 111
Benzo[b]fluoranthene	4.6	J	657	592		ug/Kg		89	60 - 109
Benzo[g,h,i]perylene	7.4		657	523		ug/Kg		78	52 - 114
Benzo[k]fluoranthene	2.6	J	657	558		ug/Kg		84	58 - 109
Chrysene	3.4	J	657	584		ug/Kg		88	54 - 108
Dibenz(a,h)anthracene	ND		657	549		ug/Kg		84	58 - 112
Fluoranthene	4.6	J B	657	570		ug/Kg		86	59 - 109
Fluorene	ND		657	512		ug/Kg		78	52 - 106
Indeno[1,2,3-cd]pyrene	ND		657	549		ug/Kg		83	55 - 120
Naphthalene	ND		657	409		ug/Kg		62	49 - 110
Phenanthrene	5.9		657	539		ug/Kg		81	57 - 110
Pyrene	6.3	B	657	600		ug/Kg		90	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*33 - 120*
Terphenyl-d14	*91*		*35 - 146*

Lab Sample ID: 720-88216-A-17-R MSD
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250290

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	ND		658	442		ug/Kg		67	46 - 110	6	35
Acenaphthene	ND		658	501		ug/Kg		76	46 - 106	4	35

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88216-A-17-R MSD
Matrix: Solid
Analysis Batch: 250399

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250290

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthylene	ND		658	494		ug/Kg		75	46 - 108	6	35
Anthracene	2.3	J	658	538		ug/Kg		81	55 - 103	2	35
Benzo[a]anthracene	ND		658	640		ug/Kg		97	54 - 110	9	35
Benzo[a]pyrene	4.2	J	658	599		ug/Kg		90	62 - 111	3	35
Benzo[b]fluoranthene	4.6	J	658	629		ug/Kg		95	60 - 109	6	35
Benzo[g,h,i]perylene	7.4		658	475		ug/Kg		71	52 - 114	10	35
Benzo[k]fluoranthene	2.6	J	658	569		ug/Kg		86	58 - 109	2	35
Chrysene	3.4	J	658	614		ug/Kg		93	54 - 108	5	35
Dibenz(a,h)anthracene	ND		658	516		ug/Kg		78	58 - 112	6	35
Fluoranthene	4.6	J B	658	559		ug/Kg		84	59 - 109	2	35
Fluorene	ND		658	531		ug/Kg		81	52 - 106	4	35
Indeno[1,2,3-cd]pyrene	ND		658	518		ug/Kg		79	55 - 120	6	35
Naphthalene	ND		658	437		ug/Kg		66	49 - 110	7	35
Phenanthrene	5.9		658	548		ug/Kg		82	57 - 110	2	35
Pyrene	6.3	B	658	638		ug/Kg		96	50 - 120	6	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*82*		*33 - 120*
Terphenyl-d14	*96*		*35 - 146*

Lab Sample ID: MB 720-250376/1-A
Matrix: Solid
Analysis Batch: 250578

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		10	5.0	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Acenaphthene	ND		5.0	2.8	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Acenaphthylene	ND		5.0	2.4	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Anthracene	ND		5.0	2.0	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Benzo[a]anthracene	ND		5.0	1.5	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Benzo[a]pyrene	ND		5.0	1.9	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Benzo[b]fluoranthene	ND		5.0	2.1	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Benzo[g,h,i]perylene	ND		5.0	4.3	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Benzo[k]fluoranthene	ND		5.0	2.1	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Chrysene	ND		5.0	1.4	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Dibenz(a,h)anthracene	ND		5.0	3.5	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Fluoranthene	ND		5.0	1.4	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Fluorene	ND		5.0	2.2	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Indeno[1,2,3-cd]pyrene	ND		5.0	4.2	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Naphthalene	ND		5.0	3.5	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Phenanthrene	ND		5.0	1.8	ug/Kg		08/28/18 10:30	08/30/18 13:27	1
Pyrene	ND		5.0	1.7	ug/Kg		08/28/18 10:30	08/30/18 13:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*33 - 120*	*08/28/18 10:30*	*08/30/18 13:27*	*1*
Terphenyl-d14	*82*		*35 - 146*	*08/28/18 10:30*	*08/30/18 13:27*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 720-250376/2-A
Matrix: Solid
Analysis Batch: 250578

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	399		ug/Kg		60	46 - 110
Acenaphthene	667	424		ug/Kg		64	46 - 106
Acenaphthylene	667	430		ug/Kg		64	46 - 108
Anthracene	667	441		ug/Kg		66	55 - 103
Benzo[a]anthracene	667	495		ug/Kg		74	54 - 110
Benzo[a]pyrene	667	517		ug/Kg		78	62 - 111
Benzo[b]fluoranthene	667	490		ug/Kg		73	60 - 109
Benzo[g,h,i]perylene	667	512		ug/Kg		77	52 - 114
Benzo[k]fluoranthene	667	493		ug/Kg		74	58 - 109
Chrysene	667	461		ug/Kg		69	54 - 108
Dibenz(a,h)anthracene	667	534		ug/Kg		80	58 - 112
Fluoranthene	667	464		ug/Kg		70	59 - 109
Fluorene	667	456		ug/Kg		68	52 - 106
Indeno[1,2,3-cd]pyrene	667	538		ug/Kg		81	55 - 120
Naphthalene	667	393		ug/Kg		59	49 - 110
Phenanthrene	667	447		ug/Kg		67	57 - 110
Pyrene	667	494		ug/Kg		74	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*63*		*33 - 120*
Terphenyl-d14	*75*		*35 - 146*

Lab Sample ID: 720-88265-D-10-A MS
Matrix: Solid
Analysis Batch: 250578

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250376

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	ND		633	379		ug/Kg		60	46 - 110
Acenaphthene	ND		633	460		ug/Kg		73	46 - 106
Acenaphthylene	410		633	770		ug/Kg		57	46 - 108
Anthracene	300		633	795		ug/Kg		78	55 - 103
Benzo[a]anthracene	2100	F1	633	2290	F1	ug/Kg		24	54 - 110
Benzo[a]pyrene	1900	F1	633	2150	F1	ug/Kg		43	62 - 111
Benzo[b]fluoranthene	2200	F1	633	2350	F1	ug/Kg		17	60 - 109
Benzo[g,h,i]perylene	340	F1	633	501	F1	ug/Kg		26	52 - 114
Benzo[k]fluoranthene	860	F1	633	1680	F1	ug/Kg		130	58 - 109
Chrysene	2300	F1	633	2310	F1	ug/Kg		-0.3	54 - 108
Dibenz(a,h)anthracene	180	F1	633	478	F1	ug/Kg		47	58 - 112
Fluoranthene	2400	F1	633	2590	F1	ug/Kg		33	59 - 109
Fluorene	39	J	633	514		ug/Kg		75	52 - 106
Indeno[1,2,3-cd]pyrene	380	F1	633	604	F1	ug/Kg		35	55 - 120
Naphthalene	130		633	467		ug/Kg		53	49 - 110
Phenanthrene	950	F1	633	1390		ug/Kg		69	57 - 110
Pyrene	4100		633	3870	4	ug/Kg		-36	50 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*33 - 120*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 720-88265-D-10-A MS
Matrix: Solid
Analysis Batch: 250578

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250376

Surrogate	MS %Recovery	MS Qualifier	Limits
Terphenyl-d14	89		35 - 146

Lab Sample ID: 720-88265-D-10-B MSD
Matrix: Solid
Analysis Batch: 250578

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250376

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	ND		633	362		ug/Kg		57	46 - 110	5	35
Acenaphthene	ND		633	427		ug/Kg		68	46 - 106	7	35
Acenaphthylene	410		633	723		ug/Kg		50	46 - 108	6	35
Anthracene	300		633	730		ug/Kg		68	55 - 103	8	35
Benzo[a]anthracene	2100	F1	633	2110	F1	ug/Kg		-4	54 - 110	8	35
Benzo[a]pyrene	1900	F1	633	1900	F1	ug/Kg		2	62 - 111	13	35
Benzo[b]fluoranthene	2200	F1	633	2070	F1	ug/Kg		-28	60 - 109	13	35
Benzo[g,h,i]perylene	340	F1	633	473	F1	ug/Kg		22	52 - 114	6	35
Benzo[k]fluoranthene	860	F1	633	1360		ug/Kg		79	58 - 109	21	35
Chrysene	2300	F1	633	2190	F1	ug/Kg		-20	54 - 108	6	35
Dibenz(a,h)anthracene	180	F1	633	427	F1	ug/Kg		39	58 - 112	11	35
Fluoranthene	2400	F1	633	2200	F1	ug/Kg		-29	59 - 109	16	35
Fluorene	39	J	633	458		ug/Kg		66	52 - 106	12	35
Indeno[1,2,3-cd]pyrene	380	F1	633	568	F1	ug/Kg		29	55 - 120	6	35
Naphthalene	130		633	446		ug/Kg		50	49 - 110	5	35
Phenanthrene	950	F1	633	1200	F1	ug/Kg		40	57 - 110	14	35
Pyrene	4100		633	3410	4	ug/Kg		-110	50 - 120	13	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	59		33 - 120
Terphenyl-d14	78		35 - 146

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-250263/1-A
Matrix: Solid
Analysis Batch: 250252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250263

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1390	J	2000	750	ug/Kg		08/27/18 08:59	08/27/18 22:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	106		40 - 130	08/27/18 08:59	08/27/18 22:55	1

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 720-250263/2-A
Matrix: Solid
Analysis Batch: 250252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250263

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			167000	164000		ug/Kg		98	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*91*		*40 - 130*

Lab Sample ID: 720-88216-A-17-L MS
Matrix: Solid
Analysis Batch: 250257

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250263

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	6600	B	165000	158000		ug/Kg		92	50 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*112*		*40 - 130*

Lab Sample ID: 720-88216-A-17-M MSD
Matrix: Solid
Analysis Batch: 250257

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250263

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	6600	B	165000	161000		ug/Kg		94	50 - 150	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*105*		*40 - 130*

Lab Sample ID: MB 720-250358/1-A
Matrix: Solid
Analysis Batch: 250458

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250358

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/28/18 08:21	08/29/18 15:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*82*		*40 - 130*	*08/28/18 08:21*	*08/29/18 15:52*	*1*

Lab Sample ID: LCS 720-250358/2-A
Matrix: Solid
Analysis Batch: 250459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250358

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			167000	140000		ug/Kg		84	50 - 150		

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 720-250358/2-A
Matrix: Solid
Analysis Batch: 250459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250358

Surrogate	LCS %Recovery	LCS Qualifier	Limits
p-Terphenyl	94		40 - 130

Lab Sample ID: 720-88216-A-9-V MS
Matrix: Solid
Analysis Batch: 250459

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250358

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	83000		158000	165000		ug/Kg		52	50 - 150		

Surrogate	MS %Recovery	MS Qualifier	Limits
p-Terphenyl	55		40 - 130

Lab Sample ID: 720-88216-A-9-W MSD
Matrix: Solid
Analysis Batch: 250459

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250358

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	83000		158000	162000		ug/Kg		50	50 - 150	2	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
p-Terphenyl	65		40 - 130

Lab Sample ID: MB 720-250382/1-A
Matrix: Solid
Analysis Batch: 250456

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250382

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2000	750	ug/Kg		08/28/18 11:24	08/29/18 23:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	101		40 - 130	08/28/18 11:24	08/29/18 23:58	1

Lab Sample ID: LCS 720-250382/2-A
Matrix: Solid
Analysis Batch: 250456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250382

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			167000	163000		ug/Kg		98	50 - 150		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
p-Terphenyl	81		40 - 130

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 720-88239-D-7-A MS
Matrix: Solid
Analysis Batch: 250456

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250382

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	11000		161000	157000		ug/Kg		91	50 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
p-Terphenyl	*83*		*40 - 130*

Lab Sample ID: 720-88239-D-7-B MSD
Matrix: Solid
Analysis Batch: 250456

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250382

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	11000		161000	156000		ug/Kg		89	50 - 150	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
p-Terphenyl	*79*		*40 - 130*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-250160/1-A
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250160

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Aldrin	ND		2.0	0.50	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Endrin	ND		2.0	0.46	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
Toxaphene	ND		40	6.8	ug/Kg		08/24/18 11:26	08/28/18 05:07	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/24/18 11:26	08/28/18 05:07	1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 720-250160/1-A
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250160

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	85		21 - 136	08/24/18 11:26	08/28/18 05:07	1
Tetrachloro-m-xylene	85		21 - 145	08/24/18 11:26	08/28/18 05:07	1

Lab Sample ID: LCS 720-250160/2-A
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250160

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	13.9		ug/Kg		84	75 - 128
4,4'-DDE	16.7	13.7		ug/Kg		82	76 - 126
4,4'-DDT	16.7	13.7		ug/Kg		82	63 - 127
Aldrin	16.7	12.8		ug/Kg		77	65 - 120
alpha-BHC	16.7	12.5		ug/Kg		75	46 - 122
beta-BHC	16.7	16.3		ug/Kg		98	78 - 136
cis-Chlordane	16.7	14.5		ug/Kg		87	70 - 120
delta-BHC	16.7	12.7		ug/Kg		76	43 - 125
Dieldrin	16.7	13.8		ug/Kg		83	72 - 120
Endosulfan I	16.7	14.8		ug/Kg		89	62 - 120
Endosulfan II	16.7	15.3		ug/Kg		92	65 - 120
Endosulfan sulfate	16.7	14.7		ug/Kg		88	72 - 121
Endrin	16.7	14.9		ug/Kg		89	68 - 120
Endrin aldehyde	16.7	14.9		ug/Kg		89	68 - 120
Endrin ketone	16.7	15.2		ug/Kg		91	75 - 136
gamma-BHC (Lindane)	16.7	14.1		ug/Kg		85	72 - 120
Heptachlor	16.7	14.1		ug/Kg		85	69 - 120
Heptachlor epoxide	16.7	14.5		ug/Kg		87	68 - 120
Methoxychlor	16.7	15.3		ug/Kg		92	71 - 132
trans-Chlordane	16.7	13.8		ug/Kg		83	68 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	89		21 - 136
Tetrachloro-m-xylene	86		21 - 145

Lab Sample ID: 720-88216-A-17-F MS
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250160

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		16.6	14.3		ug/Kg		86	40 - 120
4,4'-DDE	ND		16.6	13.9		ug/Kg		83	40 - 120
4,4'-DDT	ND		16.6	14.0		ug/Kg		84	17 - 144
Aldrin	ND		16.6	13.5		ug/Kg		81	53 - 120
alpha-BHC	ND		16.6	12.5		ug/Kg		75	40 - 120
beta-BHC	ND	F1	16.6	17.0		ug/Kg		102	40 - 120
cis-Chlordane	ND		16.6	14.8		ug/Kg		89	40 - 120
delta-BHC	ND		16.6	13.3		ug/Kg		80	40 - 120
Dieldrin	ND		16.6	14.1		ug/Kg		85	46 - 130
Endosulfan I	ND		16.6	15.1		ug/Kg		91	40 - 120

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88216-A-17-F MS
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250160

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Endosulfan II	ND		16.6	15.6		ug/Kg		94	40 - 120
Endosulfan sulfate	ND		16.6	14.7		ug/Kg		88	40 - 120
Endrin	ND		16.6	15.1		ug/Kg		91	32 - 143
Endrin aldehyde	ND		16.6	14.9		ug/Kg		90	40 - 120
Endrin ketone	ND		16.6	15.1		ug/Kg		91	40 - 120
gamma-BHC (Lindane)	ND		16.6	14.0		ug/Kg		84	58 - 120
Heptachlor	ND		16.6	14.1		ug/Kg		85	52 - 120
Heptachlor epoxide	ND		16.6	14.9		ug/Kg		90	40 - 120
Methoxychlor	ND		16.6	15.6		ug/Kg		94	40 - 120
trans-Chlordane	ND		16.6	14.2		ug/Kg		86	40 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*92*		*21 - 136*
Tetrachloro-m-xylene	*82*		*21 - 145*

Lab Sample ID: 720-88216-A-17-G MSD
Matrix: Solid
Analysis Batch: 250335

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250160

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		16.0	14.4		ug/Kg		90	40 - 120	1	20
4,4'-DDE	ND		16.0	13.9		ug/Kg		87	40 - 120	0	20
4,4'-DDT	ND		16.0	14.1		ug/Kg		88	17 - 144	0	20
Aldrin	ND		16.0	13.3		ug/Kg		83	53 - 120	1	20
alpha-BHC	ND		16.0	12.3		ug/Kg		77	40 - 120	2	20
beta-BHC	ND	F1	16.0	16.6		ug/Kg		103	40 - 120	3	20
cis-Chlordane	ND		16.0	14.7		ug/Kg		92	40 - 120	1	20
delta-BHC	ND		16.0	13.0		ug/Kg		81	40 - 120	2	20
Dieldrin	ND		16.0	14.2		ug/Kg		89	46 - 130	1	20
Endosulfan I	ND		16.0	15.0		ug/Kg		93	40 - 120	0	20
Endosulfan II	ND		16.0	15.4		ug/Kg		96	40 - 120	1	30
Endosulfan sulfate	ND		16.0	15.1		ug/Kg		94	40 - 120	3	20
Endrin	ND		16.0	15.1		ug/Kg		94	32 - 143	0	20
Endrin aldehyde	ND		16.0	14.4		ug/Kg		90	40 - 120	4	20
Endrin ketone	ND		16.0	15.9		ug/Kg		99	40 - 120	5	20
gamma-BHC (Lindane)	ND		16.0	13.5		ug/Kg		84	58 - 120	4	20
Heptachlor	ND		16.0	14.0		ug/Kg		87	52 - 120	1	20
Heptachlor epoxide	ND		16.0	14.7		ug/Kg		92	40 - 120	1	20
Methoxychlor	ND		16.0	16.2		ug/Kg		101	40 - 120	4	20
trans-Chlordane	ND		16.0	14.2		ug/Kg		88	40 - 120	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*93*		*21 - 136*
Tetrachloro-m-xylene	*83*		*21 - 145*

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 720-250294/1-A
Matrix: Solid
Analysis Batch: 250549

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250294

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
Aldrin	ND		2.0	0.50	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
Endrin	ND		2.0	0.46	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
Toxaphene	ND		40	6.8	ug/Kg		08/27/18 13:33	08/30/18 05:52	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/27/18 13:33	08/30/18 05:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*106*		*21 - 136*	*08/27/18 13:33*	*08/30/18 05:52*	*1*
Tetrachloro-m-xylene	*84*		*21 - 145*	*08/27/18 13:33*	*08/30/18 05:52*	*1*

Lab Sample ID: LCS 720-250294/2-A
Matrix: Solid
Analysis Batch: 250549

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250294

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	15.2		ug/Kg		91	75 - 128
4,4'-DDE	16.7	15.6		ug/Kg		94	76 - 126
4,4'-DDT	16.7	15.4		ug/Kg		93	63 - 127
Aldrin	16.7	11.8		ug/Kg		71	65 - 120
alpha-BHC	16.7	11.3		ug/Kg		68	46 - 122
beta-BHC	16.7	15.2		ug/Kg		91	78 - 136
cis-Chlordane	16.7	14.2		ug/Kg		85	70 - 120
delta-BHC	16.7	12.2		ug/Kg		73	43 - 125
Dieldrin	16.7	14.7		ug/Kg		88	72 - 120
Endosulfan I	16.7	14.2		ug/Kg		85	62 - 120
Endosulfan II	16.7	15.8		ug/Kg		95	65 - 120
Endosulfan sulfate	16.7	15.2		ug/Kg		91	72 - 121
Endrin	16.7	14.9		ug/Kg		89	68 - 120
Endrin aldehyde	16.7	14.3		ug/Kg		86	68 - 120
Endrin ketone	16.7	16.1		ug/Kg		97	75 - 136
gamma-BHC (Lindane)	16.7	12.7		ug/Kg		76	72 - 120

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-250294/2-A
Matrix: Solid
Analysis Batch: 250549

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250294

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Heptachlor			16.7	13.0		ug/Kg		78	69 - 120		
Heptachlor epoxide			16.7	14.0		ug/Kg		84	68 - 120		
Methoxychlor			16.7	16.8		ug/Kg		101	71 - 132		
trans-Chlordane			16.7	13.9		ug/Kg		84	68 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*96*		*21 - 136*
Tetrachloro-m-xylene	*73*		*21 - 145*

Lab Sample ID: 720-88218-19 MS
Matrix: Solid
Analysis Batch: 250549

Client Sample ID: DG-B5S-0.5-1
Prep Type: Total/NA
Prep Batch: 250294

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
4,4'-DDD	ND		16.1	13.2		ug/Kg		82	40 - 120		
4,4'-DDE	ND		16.1	14.6		ug/Kg		91	40 - 120		
4,4'-DDT	ND		16.1	16.0		ug/Kg		100	17 - 144		
Aldrin	ND		16.1	14.1		ug/Kg		88	53 - 120		
alpha-BHC	ND		16.1	14.3		ug/Kg		89	40 - 120		
beta-BHC	ND		16.1	13.7		ug/Kg		85	40 - 120		
cis-Chlordane	0.52	J p	16.1	14.4		ug/Kg		87	40 - 120		
delta-BHC	ND		16.1	12.4		ug/Kg		77	40 - 120		
Dieldrin	ND		16.1	16.4		ug/Kg		102	46 - 130		
Endosulfan I	ND		16.1	13.7		ug/Kg		85	40 - 120		
Endosulfan II	ND		16.1	14.4		ug/Kg		89	40 - 120		
Endosulfan sulfate	ND		16.1	14.6		ug/Kg		91	40 - 120		
Endrin	ND		16.1	14.9		ug/Kg		93	32 - 143		
Endrin aldehyde	ND		16.1	13.8		ug/Kg		86	40 - 120		
Endrin ketone	ND		16.1	12.4		ug/Kg		78	40 - 120		
gamma-BHC (Lindane)	ND		16.1	14.2		ug/Kg		89	58 - 120		
Heptachlor	ND		16.1	14.7		ug/Kg		92	52 - 120		
Heptachlor epoxide	ND		16.1	14.6		ug/Kg		91	40 - 120		
Methoxychlor	ND		16.1	14.4		ug/Kg		89	40 - 120		
trans-Chlordane	ND		16.1	15.1		ug/Kg		94	40 - 120		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*91*		*21 - 136*
Tetrachloro-m-xylene	*94*		*21 - 145*

Lab Sample ID: 720-88218-19 MSD
Matrix: Solid
Analysis Batch: 250549

Client Sample ID: DG-B5S-0.5-1
Prep Type: Total/NA
Prep Batch: 250294

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		16.0	12.8		ug/Kg		80	40 - 120	3	20
4,4'-DDE	ND		16.0	13.9		ug/Kg		87	40 - 120	5	20
4,4'-DDT	ND		16.0	15.2		ug/Kg		95	17 - 144	5	20
Aldrin	ND		16.0	12.7		ug/Kg		79	53 - 120	10	20

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88218-19 MSD
Matrix: Solid
Analysis Batch: 250549

Client Sample ID: DG-B5S-0.5-1
Prep Type: Total/NA
Prep Batch: 250294

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
alpha-BHC	ND		16.0	13.1		ug/Kg		81	40 - 120	9	20
beta-BHC	ND		16.0	14.2		ug/Kg		89	40 - 120	4	20
cis-Chlordane	0.52	J p	16.0	13.7		ug/Kg		82	40 - 120	5	20
delta-BHC	ND		16.0	11.4		ug/Kg		71	40 - 120	8	20
Dieldrin	ND		16.0	15.6		ug/Kg		98	46 - 130	4	20
Endosulfan I	ND		16.0	13.0		ug/Kg		81	40 - 120	5	20
Endosulfan II	ND		16.0	14.1		ug/Kg		88	40 - 120	2	30
Endosulfan sulfate	ND		16.0	14.3		ug/Kg		89	40 - 120	2	20
Endrin	ND		16.0	14.7		ug/Kg		92	32 - 143	1	20
Endrin aldehyde	ND		16.0	14.0		ug/Kg		87	40 - 120	1	20
Endrin ketone	ND		16.0	12.5		ug/Kg		78	40 - 120	0	20
gamma-BHC (Lindane)	ND		16.0	13.0		ug/Kg		81	58 - 120	9	20
Heptachlor	ND		16.0	13.9		ug/Kg		87	52 - 120	6	20
Heptachlor epoxide	ND		16.0	13.9		ug/Kg		86	40 - 120	5	20
Methoxychlor	ND		16.0	13.2		ug/Kg		82	40 - 120	8	20
trans-Chlordane	ND		16.0	14.5		ug/Kg		91	40 - 120	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*106*		*21 - 136*
Tetrachloro-m-xylene	*83*		*21 - 145*

Lab Sample ID: MB 720-250393/1-A
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250393

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.61	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Aldrin	ND		2.0	0.50	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
alpha-BHC	ND		2.0	0.55	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
beta-BHC	ND		2.0	0.36	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Chlordane (technical)	ND		40	3.2	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
delta-BHC	ND		2.0	0.44	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Dieldrin	ND		2.0	0.59	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endosulfan I	ND		2.0	0.32	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endosulfan II	ND		2.0	0.49	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endrin	ND		2.0	0.46	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endrin aldehyde	ND		2.0	0.63	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Endrin ketone	ND		2.0	0.33	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Heptachlor	ND		2.0	0.46	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Methoxychlor	ND		2.0	0.68	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
Toxaphene	ND		40	6.8	ug/Kg		08/28/18 13:36	08/30/18 23:31	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		08/28/18 13:36	08/30/18 23:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	98		21 - 136	08/28/18 13:36	08/30/18 23:31	1
Tetrachloro-m-xylene	84		21 - 145	08/28/18 13:36	08/30/18 23:31	1

Lab Sample ID: LCS 720-250393/2-A
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.7	16.2		ug/Kg		97	75 - 128
4,4'-DDE	16.7	15.4		ug/Kg		92	76 - 126
4,4'-DDT	16.7	14.2		ug/Kg		85	63 - 127
Aldrin	16.7	13.7		ug/Kg		82	65 - 120
alpha-BHC	16.7	11.2		ug/Kg		67	46 - 122
beta-BHC	16.7	16.6		ug/Kg		99	78 - 136
cis-Chlordane	16.7	15.0		ug/Kg		90	70 - 120
delta-BHC	16.7	13.6		ug/Kg		81	43 - 125
Dieldrin	16.7	15.0		ug/Kg		90	72 - 120
Endosulfan I	16.7	15.3		ug/Kg		92	62 - 120
Endosulfan II	16.7	15.6		ug/Kg		94	65 - 120
Endosulfan sulfate	16.7	15.0		ug/Kg		90	72 - 121
Endrin	16.7	15.7		ug/Kg		94	68 - 120
Endrin aldehyde	16.7	16.7		ug/Kg		100	68 - 120
Endrin ketone	16.7	15.5		ug/Kg		93	75 - 136
gamma-BHC (Lindane)	16.7	14.6		ug/Kg		88	72 - 120
Heptachlor	16.7	15.1		ug/Kg		91	69 - 120
Heptachlor epoxide	16.7	15.5		ug/Kg		93	68 - 120
Methoxychlor	16.7	15.9		ug/Kg		96	71 - 132
trans-Chlordane	16.7	15.1		ug/Kg		91	68 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	95		21 - 136
Tetrachloro-m-xylene	84		21 - 145

Lab Sample ID: 720-88216-A-9-S MS
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250393

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.90	J p	15.9	13.9		ug/Kg		82	40 - 120
4,4'-DDE	0.76	J	15.9	13.9		ug/Kg		82	40 - 120
4,4'-DDT	ND		15.9	14.2		ug/Kg		89	17 - 144
Aldrin	ND		15.9	12.2		ug/Kg		77	53 - 120
alpha-BHC	ND		15.9	10.4		ug/Kg		65	40 - 120
beta-BHC	ND		15.9	15.2		ug/Kg		95	40 - 120
cis-Chlordane	ND		15.9	12.8		ug/Kg		80	40 - 120
delta-BHC	ND		15.9	12.0		ug/Kg		75	40 - 120
Dieldrin	ND		15.9	13.6		ug/Kg		85	46 - 130
Endosulfan I	ND		15.9	13.2		ug/Kg		83	40 - 120
Endosulfan II	ND		15.9	13.4		ug/Kg		84	40 - 120
Endosulfan sulfate	ND	F2	15.9	14.3		ug/Kg		90	40 - 120
Endrin	ND		15.9	14.7		ug/Kg		92	32 - 143
Endrin aldehyde	ND		15.9	12.9		ug/Kg		81	40 - 120
Endrin ketone	ND		15.9	13.5		ug/Kg		84	40 - 120

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-88216-A-9-S MS
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250393

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
gamma-BHC (Lindane)	ND		15.9	13.0		ug/Kg		82	58 - 120
Heptachlor	ND		15.9	13.2		ug/Kg		83	52 - 120
Heptachlor epoxide	ND		15.9	13.1		ug/Kg		82	40 - 120
Methoxychlor	ND		15.9	15.2		ug/Kg		95	40 - 120
trans-Chlordane	ND		15.9	13.1		ug/Kg		82	40 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*90*		*21 - 136*
Tetrachloro-m-xylene	*76*		*21 - 145*

Lab Sample ID: 720-88216-A-9-T MSD
Matrix: Solid
Analysis Batch: 250609

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250393

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	0.90	J p	15.9	15.8		ug/Kg		94	40 - 120	13	20
4,4'-DDE	0.76	J	15.9	15.7		ug/Kg		94	40 - 120	12	20
4,4'-DDT	ND		15.9	15.9		ug/Kg		100	17 - 144	12	20
Aldrin	ND		15.9	13.8		ug/Kg		87	53 - 120	12	20
alpha-BHC	ND		15.9	11.8		ug/Kg		74	40 - 120	12	20
beta-BHC	ND		15.9	17.0		ug/Kg		107	40 - 120	11	20
cis-Chlordane	ND		15.9	14.5		ug/Kg		91	40 - 120	12	20
delta-BHC	ND		15.9	13.7		ug/Kg		86	40 - 120	13	20
Dieldrin	ND		15.9	15.3		ug/Kg		96	46 - 130	12	20
Endosulfan I	ND		15.9	14.9		ug/Kg		93	40 - 120	12	20
Endosulfan II	ND		15.9	15.3		ug/Kg		96	40 - 120	13	30
Endosulfan sulfate	ND	F2	15.9	16.5		ug/Kg		104	40 - 120	15	20
Endrin	ND		15.9	16.7		ug/Kg		105	32 - 143	12	20
Endrin aldehyde	ND		15.9	14.3		ug/Kg		90	40 - 120	10	20
Endrin ketone	ND		15.9	15.2		ug/Kg		96	40 - 120	12	20
gamma-BHC (Lindane)	ND		15.9	14.9		ug/Kg		93	58 - 120	14	20
Heptachlor	ND		15.9	15.1		ug/Kg		95	52 - 120	13	20
Heptachlor epoxide	ND		15.9	14.9		ug/Kg		93	40 - 120	13	20
Methoxychlor	ND		15.9	16.2		ug/Kg		102	40 - 120	7	20
trans-Chlordane	ND		15.9	14.8		ug/Kg		93	40 - 120	12	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*100*		*21 - 136*
Tetrachloro-m-xylene	*82*		*21 - 145*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-342652/21-A
Matrix: Solid
Analysis Batch: 342862

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 342652

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/27/18 11:05	08/29/18 02:00	1
Aroclor-1221	ND		50	24	ug/Kg		08/27/18 11:05	08/29/18 02:00	1
Aroclor-1232	ND		50	23	ug/Kg		08/27/18 11:05	08/29/18 02:00	1
Aroclor-1242	ND		50	19	ug/Kg		08/27/18 11:05	08/29/18 02:00	1
Aroclor-1248	ND		50	24	ug/Kg		08/27/18 11:05	08/29/18 02:00	1
Aroclor-1254	ND		50	23	ug/Kg		08/27/18 11:05	08/29/18 02:00	1
Aroclor-1260	ND		50	22	ug/Kg		08/27/18 11:05	08/29/18 02:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*14 - 128*	*08/27/18 11:05*	*08/29/18 02:00*	*1*
DCB Decachlorobiphenyl	*95*		*10 - 132*	*08/27/18 11:05*	*08/29/18 02:00*	*1*

Lab Sample ID: LCS 240-342652/22-A
Matrix: Solid
Analysis Batch: 342862

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 342652

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			1000	628		ug/Kg		63	47 - 120		
Aroclor-1260			1000	700		ug/Kg		70	46 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*71*		*14 - 128*
DCB Decachlorobiphenyl	*86*		*10 - 132*

Lab Sample ID: 720-88218-20 MS
Matrix: Solid
Analysis Batch: 342862

Client Sample ID: DG-B5S-3.5-4
Prep Type: Total/NA
Prep Batch: 342652

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016	ND		1030	867		ug/Kg		84	31 - 120		
Aroclor-1260	ND		1030	986		ug/Kg		95	21 - 122		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*96*		*14 - 128*
DCB Decachlorobiphenyl	*126*		*10 - 132*

Lab Sample ID: 720-88218-20 MSD
Matrix: Solid
Analysis Batch: 342862

Client Sample ID: DG-B5S-3.5-4
Prep Type: Total/NA
Prep Batch: 342652

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		1020	851		ug/Kg		83	31 - 120	2	30
Aroclor-1260	ND		1020	959		ug/Kg		94	21 - 122	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*97*		*14 - 128*
DCB Decachlorobiphenyl	*112*		*10 - 132*

Lab Sample ID: MB 240-343096/23-A
Matrix: Solid
Analysis Batch: 343330

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 343096

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		50	22	ug/Kg		08/29/18 14:18	08/31/18 07:57	1
Aroclor-1221	ND		50	24	ug/Kg		08/29/18 14:18	08/31/18 07:57	1
Aroclor-1232	ND		50	23	ug/Kg		08/29/18 14:18	08/31/18 07:57	1
Aroclor-1242	ND		50	19	ug/Kg		08/29/18 14:18	08/31/18 07:57	1
Aroclor-1248	ND		50	24	ug/Kg		08/29/18 14:18	08/31/18 07:57	1
Aroclor-1254	ND		50	23	ug/Kg		08/29/18 14:18	08/31/18 07:57	1
Aroclor-1260	ND		50	22	ug/Kg		08/29/18 14:18	08/31/18 07:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*94*		*14 - 128*	*08/29/18 14:18*	*08/31/18 07:57*	*1*
DCB Decachlorobiphenyl	*96*		*10 - 132*	*08/29/18 14:18*	*08/31/18 07:57*	*1*

Lab Sample ID: LCS 240-343096/24-A
Matrix: Solid
Analysis Batch: 343330

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 343096

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			1000	811		ug/Kg		81	47 - 120		
Aroclor-1260			1000	883		ug/Kg		88	46 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*84*		*14 - 128*
DCB Decachlorobiphenyl	*90*		*10 - 132*

Lab Sample ID: 720-88218-21 MS
Matrix: Solid
Analysis Batch: 343330

Client Sample ID: DG-E5S-9.0-9.5
Prep Type: Total/NA
Prep Batch: 343096

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016	ND		998	742		ug/Kg		74	31 - 120		
Aroclor-1260	ND		998	739		ug/Kg		74	21 - 122		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*86*		*14 - 128*
DCB Decachlorobiphenyl	*76*		*10 - 132*

Lab Sample ID: 720-88218-21 MSD
Matrix: Solid
Analysis Batch: 343330

Client Sample ID: DG-E5S-9.0-9.5
Prep Type: Total/NA
Prep Batch: 343096

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		979	669		ug/Kg		68	31 - 120	10	30
Aroclor-1260	ND		979	715		ug/Kg		73	21 - 122	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*71*		*14 - 128*
DCB Decachlorobiphenyl	*72*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250242/1-A
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250242

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Arsenic	0.0855	J	1.0	0.085	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Barium	ND		0.50	0.071	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Beryllium	ND		0.10	0.033	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Cadmium	ND		0.13	0.012	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Chromium	ND		0.50	0.053	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Cobalt	ND		0.20	0.020	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Copper	ND		1.5	0.71	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Lead	ND		0.50	0.11	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Nickel	ND		0.50	0.051	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Selenium	ND		1.0	0.15	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Silver	ND		0.25	0.051	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Thallium	ND		0.50	0.15	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Vanadium	ND		0.50	0.068	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Zinc	ND		1.5	0.64	mg/Kg		08/25/18 14:28	08/27/18 18:31	1

Lab Sample ID: LCS 720-250242/2-A
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	48.2		mg/Kg		96	80 - 120
Arsenic	50.0	48.3		mg/Kg		97	80 - 120
Barium	50.0	52.4		mg/Kg		105	80 - 120
Beryllium	50.0	50.9		mg/Kg		102	80 - 120
Cadmium	50.0	48.4		mg/Kg		97	80 - 120
Chromium	50.0	47.6		mg/Kg		95	80 - 120
Cobalt	50.0	50.2		mg/Kg		100	80 - 120
Copper	50.0	48.6		mg/Kg		97	80 - 120
Lead	50.0	49.3		mg/Kg		99	80 - 120
Molybdenum	50.0	49.5		mg/Kg		99	80 - 120
Nickel	50.0	48.5		mg/Kg		97	80 - 120
Selenium	50.0	47.5		mg/Kg		95	80 - 120
Silver	25.0	26.4		mg/Kg		106	80 - 120
Thallium	50.0	49.6		mg/Kg		99	80 - 120
Vanadium	50.0	49.7		mg/Kg		99	80 - 120
Zinc	50.0	49.1		mg/Kg		98	80 - 120

Lab Sample ID: 720-88217-A-4-A MS
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250242

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.80	J F1	38.8	12.4	F1	mg/Kg		30	75 - 125
Arsenic	2.1	J B	38.8	41.2		mg/Kg		101	75 - 125
Barium	83	F1	38.8	135	F1	mg/Kg		133	75 - 125
Beryllium	0.12	J	38.8	44.1		mg/Kg		113	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88217-A-4-A MS
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250242

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	ND		38.8	39.4		mg/Kg		102	75 - 125
Chromium	96		38.8	139		mg/Kg		112	75 - 125
Cobalt	30		38.8	73.1		mg/Kg		112	75 - 125
Copper	45	F1	38.8	97.5	F1	mg/Kg		135	75 - 125
Lead	2.7		38.8	41.1		mg/Kg		99	75 - 125
Molybdenum	0.22	J	38.8	33.9		mg/Kg		87	75 - 125
Nickel	68		38.8	110		mg/Kg		110	75 - 125
Selenium	ND		38.8	34.6		mg/Kg		89	75 - 125
Silver	ND	F1	19.4	24.4	F1	mg/Kg		126	75 - 125
Thallium	1.6		38.8	39.2		mg/Kg		97	75 - 125
Vanadium	100	F1	38.8	163	F1	mg/Kg		154	75 - 125
Zinc	68		38.8	114		mg/Kg		119	75 - 125

Lab Sample ID: 720-88217-A-4-B MSD
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250242

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.80	J F1	38.2	11.0	F1	mg/Kg		27	75 - 125	12	20
Arsenic	2.1	J B	38.2	41.6		mg/Kg		103	75 - 125	1	20
Barium	83	F1	38.2	153	F1	mg/Kg		183	75 - 125	13	20
Beryllium	0.12	J	38.2	44.7		mg/Kg		117	75 - 125	1	20
Cadmium	ND		38.2	39.5		mg/Kg		104	75 - 125	0	20
Chromium	96		38.2	142		mg/Kg		122	75 - 125	2	20
Cobalt	30		38.2	70.5		mg/Kg		107	75 - 125	4	20
Copper	45	F1	38.2	92.8		mg/Kg		125	75 - 125	5	20
Lead	2.7		38.2	41.2		mg/Kg		101	75 - 125	0	20
Molybdenum	0.22	J	38.2	34.9		mg/Kg		91	75 - 125	3	20
Nickel	68		38.2	110		mg/Kg		111	75 - 125	0	20
Selenium	ND		38.2	35.5		mg/Kg		93	75 - 125	3	20
Silver	ND	F1	19.1	24.6	F1	mg/Kg		129	75 - 125	1	20
Thallium	1.6		38.2	38.7		mg/Kg		97	75 - 125	1	20
Vanadium	100	F1	38.2	160	F1	mg/Kg		148	75 - 125	2	20
Zinc	68		38.2	109		mg/Kg		108	75 - 125	5	20

Lab Sample ID: MB 720-250262/1-A
Matrix: Solid
Analysis Batch: 250431

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250262

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/27/18 09:53	08/28/18 15:23	1
Arsenic	0.104	J	1.0	0.085	mg/Kg		08/27/18 09:53	08/28/18 15:23	1
Barium	ND		0.50	0.071	mg/Kg		08/27/18 09:53	08/28/18 15:23	1
Cadmium	ND		0.13	0.012	mg/Kg		08/27/18 09:53	08/28/18 15:23	1
Chromium	ND		0.50	0.053	mg/Kg		08/27/18 09:53	08/28/18 15:23	1
Cobalt	ND		0.20	0.020	mg/Kg		08/27/18 09:53	08/28/18 15:23	1
Copper	ND		1.5	0.71	mg/Kg		08/27/18 09:53	08/28/18 15:23	1
Lead	ND		0.50	0.11	mg/Kg		08/27/18 09:53	08/28/18 15:23	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/27/18 09:53	08/28/18 15:23	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250262/1-A
Matrix: Solid
Analysis Batch: 250431

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250262

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	ND		0.50	0.051	mg/Kg		08/27/18 09:53	08/28/18 15:23	1
Selenium	ND		1.0	0.15	mg/Kg		08/27/18 09:53	08/28/18 15:23	1
Silver	ND		0.25	0.051	mg/Kg		08/27/18 09:53	08/28/18 15:23	1
Thallium	ND		0.50	0.15	mg/Kg		08/27/18 09:53	08/28/18 15:23	1
Vanadium	ND		0.50	0.068	mg/Kg		08/27/18 09:53	08/28/18 15:23	1
Zinc	ND		1.5	0.64	mg/Kg		08/27/18 09:53	08/28/18 15:23	1

Lab Sample ID: MB 720-250262/1-A
Matrix: Solid
Analysis Batch: 250558

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250262

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0950	J	0.50	0.083	mg/Kg		08/27/18 09:53	08/29/18 22:02	1
Arsenic	ND		1.0	0.085	mg/Kg		08/27/18 09:53	08/29/18 22:02	1
Barium	ND		0.50	0.071	mg/Kg		08/27/18 09:53	08/29/18 22:02	1
Beryllium	ND		0.10	0.033	mg/Kg		08/27/18 09:53	08/29/18 22:02	1
Cadmium	ND		0.13	0.012	mg/Kg		08/27/18 09:53	08/29/18 22:02	1
Chromium	ND		0.50	0.053	mg/Kg		08/27/18 09:53	08/29/18 22:02	1
Cobalt	ND		0.20	0.020	mg/Kg		08/27/18 09:53	08/29/18 22:02	1
Copper	ND		1.5	0.71	mg/Kg		08/27/18 09:53	08/29/18 22:02	1
Lead	ND		0.50	0.11	mg/Kg		08/27/18 09:53	08/29/18 22:02	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/27/18 09:53	08/29/18 22:02	1
Nickel	ND		0.50	0.051	mg/Kg		08/27/18 09:53	08/29/18 22:02	1
Selenium	ND		1.0	0.15	mg/Kg		08/27/18 09:53	08/29/18 22:02	1
Silver	ND		0.25	0.051	mg/Kg		08/27/18 09:53	08/29/18 22:02	1
Thallium	ND		0.50	0.15	mg/Kg		08/27/18 09:53	08/29/18 22:02	1
Vanadium	ND		0.50	0.068	mg/Kg		08/27/18 09:53	08/29/18 22:02	1
Zinc	ND		1.5	0.64	mg/Kg		08/27/18 09:53	08/29/18 22:02	1

Lab Sample ID: LCS 720-250262/2-A
Matrix: Solid
Analysis Batch: 250431

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250262

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	50.8		mg/Kg		102	80 - 120
Arsenic	50.0	50.5		mg/Kg		101	80 - 120
Barium	50.0	49.1		mg/Kg		98	80 - 120
Cadmium	50.0	57.3		mg/Kg		115	80 - 120
Chromium	50.0	51.3		mg/Kg		103	80 - 120
Cobalt	50.0	58.0		mg/Kg		116	80 - 120
Copper	50.0	51.4		mg/Kg		103	80 - 120
Lead	50.0	58.4		mg/Kg		117	80 - 120
Molybdenum	50.0	52.3		mg/Kg		105	80 - 120
Nickel	50.0	58.8		mg/Kg		118	80 - 120
Selenium	50.0	50.5		mg/Kg		101	80 - 120
Silver	25.0	24.9		mg/Kg		100	80 - 120
Thallium	50.0	59.3		mg/Kg		119	80 - 120
Vanadium	50.0	49.6		mg/Kg		99	80 - 120
Zinc	50.0	56.8		mg/Kg		114	80 - 120

Lab Sample ID: LCS 720-250262/2-A
Matrix: Solid
Analysis Batch: 250558

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250262

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	51.0		mg/Kg		102	80 - 120
Arsenic	50.0	50.3		mg/Kg		101	80 - 120
Barium	50.0	50.1		mg/Kg		100	80 - 120
Beryllium	50.0	48.8		mg/Kg		98	80 - 120
Cadmium	50.0	55.9		mg/Kg		112	80 - 120
Chromium	50.0	51.8		mg/Kg		104	80 - 120
Cobalt	50.0	57.1		mg/Kg		114	80 - 120
Copper	50.0	52.4		mg/Kg		105	80 - 120
Lead	50.0	56.8		mg/Kg		114	80 - 120
Molybdenum	50.0	52.1		mg/Kg		104	80 - 120
Nickel	50.0	52.0		mg/Kg		104	80 - 120
Selenium	50.0	49.7		mg/Kg		99	80 - 120
Silver	25.0	25.6		mg/Kg		102	80 - 120
Thallium	50.0	57.0		mg/Kg		114	80 - 120
Vanadium	50.0	51.4		mg/Kg		103	80 - 120
Zinc	50.0	56.0		mg/Kg		112	80 - 120

Lab Sample ID: 720-88218-16 MS
Matrix: Solid
Analysis Batch: 250431

Client Sample ID: DG-C5S-0.5-1
Prep Type: Total/NA
Prep Batch: 250262

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND	F1	34.7	8.36	F1	mg/Kg		24	75 - 125
Arsenic	3.1	B	34.7	45.7		mg/Kg		123	75 - 125
Barium	53	F1	34.7	129	F1	mg/Kg		219	75 - 125
Cadmium	0.51	F1	34.7	47.8	F1	mg/Kg		136	75 - 125
Chromium	15	F1	34.7	63.3	F1	mg/Kg		140	75 - 125
Cobalt	11	F1	34.7	61.6	F1	mg/Kg		145	75 - 125
Copper	140		34.7	262	4	mg/Kg		347	75 - 125
Lead	130	F1	34.7	194	F1	mg/Kg		198	75 - 125
Molybdenum	1.1		34.7	42.5		mg/Kg		119	75 - 125
Nickel	9.4	F1	34.7	58.5	F1	mg/Kg		141	75 - 125
Selenium	0.72	J	34.7	42.6		mg/Kg		121	75 - 125
Silver	ND	F1	17.4	22.7	F1	mg/Kg		131	75 - 125
Thallium	ND		34.7	41.2		mg/Kg		119	75 - 125
Vanadium	94	F1	34.7	174	F1	mg/Kg		228	75 - 125
Zinc	130	F1	34.7	226	F1	mg/Kg		268	75 - 125

Lab Sample ID: 720-88218-16 MS
Matrix: Solid
Analysis Batch: 250558

Client Sample ID: DG-C5S-0.5-1
Prep Type: Total/NA
Prep Batch: 250262

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.39	J B F1	34.7	6.24	F1	mg/Kg		17	75 - 125
Arsenic	2.7		34.7	30.2		mg/Kg		79	75 - 125
Barium	51		34.7	83.1		mg/Kg		93	75 - 125
Beryllium	0.11	J	34.7	30.9		mg/Kg		89	75 - 125
Cadmium	0.25	J	34.7	29.5		mg/Kg		84	75 - 125
Chromium	14		34.7	43.6		mg/Kg		85	75 - 125
Cobalt	11		34.7	39.1		mg/Kg		81	75 - 125
Copper	140		34.7	176		mg/Kg		112	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88218-16 MS
Matrix: Solid
Analysis Batch: 250558

Client Sample ID: DG-C5S-0.5-1
Prep Type: Total/NA
Prep Batch: 250262

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	120	F1	34.7	120	F1	mg/Kg		3	75 - 125
Molybdenum	1.0	J	34.7	27.9		mg/Kg		77	75 - 125
Nickel	9.3	F1	34.7	35.0	F1	mg/Kg		74	75 - 125
Selenium	ND		34.7	28.1		mg/Kg		81	75 - 125
Silver	ND		17.4	15.0		mg/Kg		86	75 - 125
Thallium	ND	F1	34.7	25.7	F1	mg/Kg		74	75 - 125
Vanadium	92		34.7	121		mg/Kg		83	75 - 125
Zinc	130	F1	34.7	143	F1	mg/Kg		38	75 - 125

Lab Sample ID: 720-88218-16 MSD
Matrix: Solid
Analysis Batch: 250431

Client Sample ID: DG-C5S-0.5-1
Prep Type: Total/NA
Prep Batch: 250262

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND	F1	35.0	7.98	F1	mg/Kg		23	75 - 125	5	20
Arsenic	3.1	B	35.0	41.9		mg/Kg		111	75 - 125	9	20
Barium	53	F1	35.0	110	F1	mg/Kg		163	75 - 125	16	20
Cadmium	0.51	F1	35.0	42.2		mg/Kg		119	75 - 125	12	20
Chromium	15	F1	35.0	57.6		mg/Kg		123	75 - 125	9	20
Cobalt	11	F1	35.0	54.5		mg/Kg		124	75 - 125	12	20
Copper	140		35.0	215	4	mg/Kg		209	75 - 125	20	20
Lead	130	F1	35.0	159		mg/Kg		95	75 - 125	20	20
Molybdenum	1.1		35.0	38.4		mg/Kg		107	75 - 125	10	20
Nickel	9.4	F1	35.0	52.6		mg/Kg		124	75 - 125	11	20
Selenium	0.72	J	35.0	38.9		mg/Kg		109	75 - 125	9	20
Silver	ND	F1	17.5	20.1		mg/Kg		115	75 - 125	12	20
Thallium	ND		35.0	36.1		mg/Kg		103	75 - 125	13	20
Vanadium	94	F1	35.0	154	F1	mg/Kg		170	75 - 125	12	20
Zinc	130	F1	35.0	208	F1	mg/Kg		213	75 - 125	9	20

Lab Sample ID: 720-88218-16 MSD
Matrix: Solid
Analysis Batch: 250558

Client Sample ID: DG-C5S-0.5-1
Prep Type: Total/NA
Prep Batch: 250262

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.39	J B F1	35.0	6.17	F1	mg/Kg		17	75 - 125	1	20
Arsenic	2.7		35.0	32.3		mg/Kg		85	75 - 125	7	20
Barium	51		35.0	84.9		mg/Kg		98	75 - 125	2	20
Beryllium	0.11	J	35.0	31.9		mg/Kg		91	75 - 125	3	20
Cadmium	0.25	J	35.0	30.1		mg/Kg		85	75 - 125	2	20
Chromium	14		35.0	47.1		mg/Kg		94	75 - 125	8	20
Cobalt	11		35.0	39.6		mg/Kg		82	75 - 125	1	20
Copper	140		35.0	174		mg/Kg		106	75 - 125	1	20
Lead	120	F1	35.0	113	F1	mg/Kg		-17	75 - 125	6	20
Molybdenum	1.0	J	35.0	29.5		mg/Kg		81	75 - 125	6	20
Nickel	9.3	F1	35.0	37.7		mg/Kg		81	75 - 125	7	20
Selenium	ND		35.0	29.9		mg/Kg		86	75 - 125	7	20
Silver	ND		17.5	16.7		mg/Kg		95	75 - 125	10	20
Thallium	ND	F1	35.0	26.8		mg/Kg		77	75 - 125	4	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88218-16 MSD
Matrix: Solid
Analysis Batch: 250558

Client Sample ID: DG-C5S-0.5-1
Prep Type: Total/NA
Prep Batch: 250262

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vanadium	92		35.0	128		mg/Kg		101	75 - 125	5	20
Zinc	130	F1	35.0	152	F1	mg/Kg		63	75 - 125	6	20

Lab Sample ID: MB 720-250280/1-A
Matrix: Solid
Analysis Batch: 250454

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250280

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Arsenic	ND		1.0	0.085	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Barium	ND		0.50	0.071	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Beryllium	ND		0.10	0.033	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Cadmium	ND		0.13	0.012	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Chromium	ND		0.50	0.053	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Cobalt	ND		0.20	0.020	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Copper	ND		1.5	0.71	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Lead	ND		0.50	0.11	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Nickel	ND		0.50	0.051	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Selenium	ND		1.0	0.15	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Silver	ND		0.25	0.051	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Thallium	ND		0.50	0.15	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Vanadium	ND		0.50	0.068	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Zinc	ND		1.5	0.64	mg/Kg		08/27/18 12:20	08/28/18 20:48	1

Lab Sample ID: LCS 720-250280/2-A
Matrix: Solid
Analysis Batch: 250454

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250280

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	45.0		mg/Kg		90	80 - 120
Arsenic	50.0	44.7		mg/Kg		89	80 - 120
Barium	50.0	46.9		mg/Kg		94	80 - 120
Beryllium	50.0	46.6		mg/Kg		93	80 - 120
Cadmium	50.0	45.7		mg/Kg		91	80 - 120
Chromium	50.0	46.3		mg/Kg		93	80 - 120
Cobalt	50.0	46.2		mg/Kg		92	80 - 120
Copper	50.0	46.6		mg/Kg		93	80 - 120
Lead	50.0	46.3		mg/Kg		93	80 - 120
Molybdenum	50.0	46.1		mg/Kg		92	80 - 120
Nickel	50.0	46.4		mg/Kg		93	80 - 120
Selenium	50.0	43.7		mg/Kg		87	80 - 120
Silver	25.0	23.0		mg/Kg		92	80 - 120
Thallium	50.0	46.1		mg/Kg		92	80 - 120
Vanadium	50.0	46.5		mg/Kg		93	80 - 120
Zinc	50.0	45.3		mg/Kg		91	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88234-A-7-A MS
Matrix: Solid
Analysis Batch: 250454

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250280

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND	F1 F2	49.0	13.4	F1	mg/Kg		27	75 - 125
Arsenic	3.7		49.0	53.8		mg/Kg		102	75 - 125
Barium	500	F2	49.0	363	4	mg/Kg		-290	75 - 125
Beryllium	ND		49.0	51.8		mg/Kg		106	75 - 125
Cadmium	2.2		49.0	49.0		mg/Kg		96	75 - 125
Chromium	22	F1	49.0	76.8		mg/Kg		112	75 - 125
Cobalt	3.9		49.0	52.8		mg/Kg		100	75 - 125
Copper	43	F1	49.0	78.4	F1	mg/Kg		73	75 - 125
Lead	500	F2	49.0	228	4	mg/Kg		-550	75 - 125
Molybdenum	0.40	J	49.0	48.0		mg/Kg		97	75 - 125
Nickel	19	F1	49.0	73.9		mg/Kg		113	75 - 125
Selenium	ND		49.0	47.4		mg/Kg		97	75 - 125
Silver	0.18	J	24.5	26.2		mg/Kg		106	75 - 125
Thallium	0.58	J	49.0	45.5		mg/Kg		92	75 - 125
Vanadium	20	F1	49.0	78.6		mg/Kg		119	75 - 125
Zinc	520	F2	49.0	235	4	mg/Kg		-574	75 - 125

Lab Sample ID: 720-88234-A-7-B MSD
Matrix: Solid
Analysis Batch: 250454

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250280

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND	F1 F2	39.4	10.8	F1 F4	mg/Kg		27	75 - 125	21	20
Arsenic	3.7		39.4	46.4		mg/Kg		108	75 - 125	15	20
Barium	500	F2	39.4	479	4 F4	mg/Kg		-66	75 - 125	28	20
Beryllium	ND		39.4	45.5		mg/Kg		116	75 - 125	13	20
Cadmium	2.2		39.4	41.8		mg/Kg		101	75 - 125	16	20
Chromium	22	F1	39.4	82.2	F1	mg/Kg		153	75 - 125	7	20
Cobalt	3.9		39.4	46.8		mg/Kg		109	75 - 125	12	20
Copper	43	F1	39.4	82.1		mg/Kg		100	75 - 125	5	20
Lead	500	F2	39.4	355	4 F4	mg/Kg		-363	75 - 125	44	20
Molybdenum	0.40	J	39.4	40.2		mg/Kg		101	75 - 125	18	20
Nickel	19	F1	39.4	70.0	F1	mg/Kg		130	75 - 125	5	20
Selenium	ND		39.4	39.5		mg/Kg		100	75 - 125	18	20
Silver	0.18	J	19.7	23.0		mg/Kg		116	75 - 125	13	20
Thallium	0.58	J	39.4	38.1		mg/Kg		95	75 - 125	18	20
Vanadium	20	F1	39.4	77.0	F1	mg/Kg		144	75 - 125	2	20
Zinc	520	F2	39.4	341	4 F4	mg/Kg		-443	75 - 125	37	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250272/1-A
Matrix: Solid
Analysis Batch: 250676

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/27/18 09:58	08/30/18 17:04	1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 720-250272/2-A
Matrix: Solid
Analysis Batch: 250676

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250272

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.833	0.805		mg/Kg		97	80 - 120		

Lab Sample ID: 720-88218-1 MS
Matrix: Solid
Analysis Batch: 250676

Client Sample ID: DG-J5S-0.5-1
Prep Type: Total/NA
Prep Batch: 250272

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.23		0.820	0.999		mg/Kg		93	75 - 125		

Lab Sample ID: 720-88218-1 MSD
Matrix: Solid
Analysis Batch: 250676

Client Sample ID: DG-J5S-0.5-1
Prep Type: Total/NA
Prep Batch: 250272

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.23		0.806	1.00		mg/Kg		95	75 - 125	0	20

Lab Sample ID: MB 720-250416/1-A
Matrix: Solid
Analysis Batch: 250599

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250416

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/28/18 15:53	08/30/18 12:05	1

Lab Sample ID: LCS 720-250416/2-A
Matrix: Solid
Analysis Batch: 250599

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250416

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.833	0.814		mg/Kg		98	80 - 120		

Lab Sample ID: 720-88215-A-21-B MS
Matrix: Solid
Analysis Batch: 250599

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250416

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.52	F1	0.833	1.43		mg/Kg		109	75 - 125		

Lab Sample ID: 720-88215-A-21-C MSD
Matrix: Solid
Analysis Batch: 250599

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250416

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.52	F1	0.833	1.61	F1	mg/Kg		131	75 - 125	12	20

GC/MS VOA

Prep Batch: 250051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-3	DG-J5S-7-7.5	Total/NA	Solid	5035	

Analysis Batch: 250350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-1	DG-J5S-0.5-1	Total/NA	Solid	8260B	250367
720-88218-2	DG-J5S-3.5-4	Total/NA	Solid	8260B	250367
MB 720-250350/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250350/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250350/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250350/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250350/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-1	DG-J5S-0.5-1	Total/NA	Solid	5035	
720-88218-2	DG-J5S-3.5-4	Total/NA	Solid	5035	
720-88218-7	DG-H5S-3.5-4	Total/NA	Solid	5035	
720-88218-10	DG-F5S-0.5-1	Total/NA	Solid	5035	
720-88218-14	DG-D5S-0.5-1	Total/NA	Solid	5035	
720-88218-21	DG-E5S-9.0-9.5	Total/NA	Solid	5035	

Analysis Batch: 250405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-7	DG-H5S-3.5-4	Total/NA	Solid	8260B	250367
720-88218-10	DG-F5S-0.5-1	Total/NA	Solid	8260B	250367
720-88218-14	DG-D5S-0.5-1	Total/NA	Solid	8260B	250367
720-88218-21	DG-E5S-9.0-9.5	Total/NA	Solid	8260B	250367
MB 720-250405/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250405/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250405/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250405/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250405/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-3	DG-J5S-7-7.5	Total/NA	Solid	8260B	250051
MB 720-250407/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250407/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250407/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250407/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250407/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-19	DG-B5S-0.5-1	Total/NA	Solid	8260B	250473
720-88218-20	DG-B5S-3.5-4	Total/NA	Solid	8260B	250473
MB 720-250450/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250450/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250450/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250450/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250450/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Analysis Batch: 250453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-6	DG-H5S-0.5-1	Total/NA	Solid	8260B	250481
720-88218-11	DG-F5S-3.5-4	Total/NA	Solid	8260B	250481
720-88218-18	DG-C5S-9-9.5	Total/NA	Solid	8260B	250473
MB 720-250453/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250453/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250453/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250453/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250453/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 250473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-18	DG-C5S-9-9.5	Total/NA	Solid	5035	
720-88218-19	DG-B5S-0.5-1	Total/NA	Solid	5035	
720-88218-20	DG-B5S-3.5-4	Total/NA	Solid	5035	

Prep Batch: 250481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-6	DG-H5S-0.5-1	Total/NA	Solid	5035	
720-88218-11	DG-F5S-3.5-4	Total/NA	Solid	5035	

Prep Batch: 250602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-18	DG-C5S-9-9.5	Total/NA	Solid	5035	

Analysis Batch: 250625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-18	DG-C5S-9-9.5	Total/NA	Solid	8260B	250602
MB 720-250625/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250625/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250625/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250625/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250625/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 250642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-15	DG-D5S-3.5-4	Total/NA	Solid	8260B	250667
MB 720-250642/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-250642/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-250642/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-250642/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-250642/8	Lab Control Sample Dup	Total/NA	Solid	8260B	
720-88218-15 MS	DG-D5S-3.5-4	Total/NA	Solid	8260B	250667
720-88218-15 MSD	DG-D5S-3.5-4	Total/NA	Solid	8260B	250667

Prep Batch: 250667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-15	DG-D5S-3.5-4	Total/NA	Solid	5030B	
720-88218-15 MS	DG-D5S-3.5-4	Total/NA	Solid	5030B	
720-88218-15 MSD	DG-D5S-3.5-4	Total/NA	Solid	5030B	

GC/MS Semi VOA

Prep Batch: 250190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-1	DG-J5S-0.5-1	Total/NA	Solid	3546	
720-88218-2	DG-J5S-3.5-4	Total/NA	Solid	3546	
720-88218-3	DG-J5S-7-7.5	Total/NA	Solid	3546	
720-88218-6	DG-H5S-0.5-1	Total/NA	Solid	3546	
720-88218-7	DG-H5S-3.5-4	Total/NA	Solid	3546	
720-88218-10	DG-F5S-0.5-1	Total/NA	Solid	3546	
720-88218-11	DG-F5S-3.5-4	Total/NA	Solid	3546	
720-88218-14	DG-D5S-0.5-1	Total/NA	Solid	3546	
720-88218-15	DG-D5S-3.5-4	Total/NA	Solid	3546	
720-88218-18	DG-C5S-9-9.5	Total/NA	Solid	3546	
MB 720-250190/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250190/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-A-9-F MS	Matrix Spike	Total/NA	Solid	3546	
720-88216-A-9-G MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-19	DG-B5S-0.5-1	Total/NA	Solid	3546	
MB 720-250290/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250290/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-A-17-Q MS	Matrix Spike	Total/NA	Solid	3546	
720-88216-A-17-R MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-20	DG-B5S-3.5-4	Total/NA	Solid	3546	
720-88218-21	DG-E5S-9.0-9.5	Total/NA	Solid	3546	
MB 720-250376/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250376/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88265-D-10-A MS	Matrix Spike	Total/NA	Solid	3546	
720-88265-D-10-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250190/1-A	Method Blank	Total/NA	Solid	8270C SIM	250190
MB 720-250290/1-A	Method Blank	Total/NA	Solid	8270C SIM	250290
LCS 720-250190/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250190
LCS 720-250290/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250290
720-88216-A-17-Q MS	Matrix Spike	Total/NA	Solid	8270C SIM	250290
720-88216-A-17-R MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250290

Analysis Batch: 250501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-1	DG-J5S-0.5-1	Total/NA	Solid	8270C SIM	250190
720-88218-3	DG-J5S-7-7.5	Total/NA	Solid	8270C SIM	250190
720-88218-7	DG-H5S-3.5-4	Total/NA	Solid	8270C SIM	250190
720-88218-11	DG-F5S-3.5-4	Total/NA	Solid	8270C SIM	250190
720-88218-15	DG-D5S-3.5-4	Total/NA	Solid	8270C SIM	250190
720-88218-18	DG-C5S-9-9.5	Total/NA	Solid	8270C SIM	250190
720-88218-19	DG-B5S-0.5-1	Total/NA	Solid	8270C SIM	250290
720-88216-A-9-F MS	Matrix Spike	Total/NA	Solid	8270C SIM	250190

GC/MS Semi VOA (Continued)

Analysis Batch: 250501 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-A-9-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250190

Analysis Batch: 250578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-2	DG-J5S-3.5-4	Total/NA	Solid	8270C SIM	250190
720-88218-6	DG-H5S-0.5-1	Total/NA	Solid	8270C SIM	250190
720-88218-10	DG-F5S-0.5-1	Total/NA	Solid	8270C SIM	250190
720-88218-14	DG-D5S-0.5-1	Total/NA	Solid	8270C SIM	250190
720-88218-20	DG-B5S-3.5-4	Total/NA	Solid	8270C SIM	250376
720-88218-21	DG-E5S-9.0-9.5	Total/NA	Solid	8270C SIM	250376
MB 720-250376/1-A	Method Blank	Total/NA	Solid	8270C SIM	250376
LCS 720-250376/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	250376
720-88265-D-10-A MS	Matrix Spike	Total/NA	Solid	8270C SIM	250376
720-88265-D-10-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8270C SIM	250376

GC Semi VOA

Prep Batch: 250160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-1	DG-J5S-0.5-1	Total/NA	Solid	3546	
720-88218-2	DG-J5S-3.5-4	Total/NA	Solid	3546	
720-88218-3	DG-J5S-7-7.5	Total/NA	Solid	3546	
720-88218-6	DG-H5S-0.5-1	Total/NA	Solid	3546	
720-88218-10	DG-F5S-0.5-1	Total/NA	Solid	3546	
720-88218-11	DG-F5S-3.5-4	Total/NA	Solid	3546	
720-88218-14	DG-D5S-0.5-1	Total/NA	Solid	3546	
720-88218-15	DG-D5S-3.5-4	Total/NA	Solid	3546	
720-88218-18	DG-C5S-9-9.5	Total/NA	Solid	3546	
MB 720-250160/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250160/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-A-17-F MS	Matrix Spike	Total/NA	Solid	3546	
720-88216-A-17-G MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250263/1-A	Method Blank	Total/NA	Solid	8015B	250263
LCS 720-250263/2-A	Lab Control Sample	Total/NA	Solid	8015B	250263

Analysis Batch: 250257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88216-A-17-L MS	Matrix Spike	Total/NA	Solid	8015B	250263
720-88216-A-17-M MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	250263

Prep Batch: 250263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-1	DG-J5S-0.5-1	Total/NA	Solid	3546	
720-88218-2	DG-J5S-3.5-4	Total/NA	Solid	3546	
720-88218-3	DG-J5S-7-7.5	Total/NA	Solid	3546	
720-88218-6	DG-H5S-0.5-1	Total/NA	Solid	3546	
720-88218-7	DG-H5S-3.5-4	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 250263 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-10	DG-F5S-0.5-1	Total/NA	Solid	3546	
720-88218-11	DG-F5S-3.5-4	Total/NA	Solid	3546	
720-88218-14	DG-D5S-0.5-1	Total/NA	Solid	3546	
MB 720-250263/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250263/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-A-17-L MS	Matrix Spike	Total/NA	Solid	3546	
720-88216-A-17-M MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-19	DG-B5S-0.5-1	Total/NA	Solid	3546	
720-88218-20	DG-B5S-3.5-4	Total/NA	Solid	3546	
720-88218-21	DG-E5S-9.0-9.5	Total/NA	Solid	3546	
MB 720-250294/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250294/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88218-19 MS	DG-B5S-0.5-1	Total/NA	Solid	3546	
720-88218-19 MSD	DG-B5S-0.5-1	Total/NA	Solid	3546	

Analysis Batch: 250335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250160/1-A	Method Blank	Total/NA	Solid	8081A	250160
LCS 720-250160/2-A	Lab Control Sample	Total/NA	Solid	8081A	250160
720-88216-A-17-F MS	Matrix Spike	Total/NA	Solid	8081A	250160
720-88216-A-17-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	250160

Analysis Batch: 250356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-1	DG-J5S-0.5-1	Total/NA	Solid	8015B	250263
720-88218-2	DG-J5S-3.5-4	Total/NA	Solid	8015B	250263
720-88218-3	DG-J5S-7-7.5	Total/NA	Solid	8015B	250263
720-88218-6	DG-H5S-0.5-1	Total/NA	Solid	8015B	250263
720-88218-7	DG-H5S-3.5-4	Total/NA	Solid	8015B	250263
720-88218-10	DG-F5S-0.5-1	Total/NA	Solid	8015B	250263
720-88218-11	DG-F5S-3.5-4	Total/NA	Solid	8015B	250263
720-88218-14	DG-D5S-0.5-1	Total/NA	Solid	8015B	250263

Prep Batch: 250358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-15	DG-D5S-3.5-4	Total/NA	Solid	3546	
720-88218-21	DG-E5S-9.0-9.5	Total/NA	Solid	3546	
MB 720-250358/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250358/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-A-9-V MS	Matrix Spike	Total/NA	Solid	3546	
720-88216-A-9-W MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-18	DG-C5S-9-9.5	Total/NA	Solid	3546	
720-88218-19	DG-B5S-0.5-1	Total/NA	Solid	3546	
720-88218-20	DG-B5S-3.5-4	Total/NA	Solid	3546	
MB 720-250382/1-A	Method Blank	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 250382 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-250382/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88239-D-7-A MS	Matrix Spike	Total/NA	Solid	3546	
720-88239-D-7-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 250393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-7	DG-H5S-3.5-4	Total/NA	Solid	3546	
MB 720-250393/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-250393/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-88216-A-9-S MS	Matrix Spike	Total/NA	Solid	3546	
720-88216-A-9-T MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 250445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-1	DG-J5S-0.5-1	Total/NA	Solid	8081A	250160
720-88218-2	DG-J5S-3.5-4	Total/NA	Solid	8081A	250160
720-88218-3	DG-J5S-7-7.5	Total/NA	Solid	8081A	250160
720-88218-6	DG-H5S-0.5-1	Total/NA	Solid	8081A	250160
720-88218-10	DG-F5S-0.5-1	Total/NA	Solid	8081A	250160
720-88218-11	DG-F5S-3.5-4	Total/NA	Solid	8081A	250160

Analysis Batch: 250456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-18	DG-C5S-9-9.5	Total/NA	Solid	8015B	250382
720-88218-19	DG-B5S-0.5-1	Total/NA	Solid	8015B	250382
720-88218-20	DG-B5S-3.5-4	Total/NA	Solid	8015B	250382
MB 720-250382/1-A	Method Blank	Total/NA	Solid	8015B	250382
LCS 720-250382/2-A	Lab Control Sample	Total/NA	Solid	8015B	250382
720-88239-D-7-A MS	Matrix Spike	Total/NA	Solid	8015B	250382
720-88239-D-7-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	250382

Analysis Batch: 250458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250358/1-A	Method Blank	Total/NA	Solid	8015B	250358

Analysis Batch: 250459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-250358/2-A	Lab Control Sample	Total/NA	Solid	8015B	250358
720-88216-A-9-V MS	Matrix Spike	Total/NA	Solid	8015B	250358
720-88216-A-9-W MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	250358

Analysis Batch: 250549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-14	DG-D5S-0.5-1	Total/NA	Solid	8081A	250160
720-88218-15	DG-D5S-3.5-4	Total/NA	Solid	8081A	250160
720-88218-18	DG-C5S-9-9.5	Total/NA	Solid	8081A	250160
720-88218-19	DG-B5S-0.5-1	Total/NA	Solid	8081A	250294
720-88218-20	DG-B5S-3.5-4	Total/NA	Solid	8081A	250294
720-88218-21	DG-E5S-9.0-9.5	Total/NA	Solid	8081A	250294
MB 720-250294/1-A	Method Blank	Total/NA	Solid	8081A	250294
LCS 720-250294/2-A	Lab Control Sample	Total/NA	Solid	8081A	250294

GC Semi VOA (Continued)

Analysis Batch: 250549 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-19 MS	DG-B5S-0.5-1	Total/NA	Solid	8081A	250294
720-88218-19 MSD	DG-B5S-0.5-1	Total/NA	Solid	8081A	250294

Analysis Batch: 250568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-21	DG-E5S-9.0-9.5	Total/NA	Solid	8015B	250358

Analysis Batch: 250569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-15	DG-D5S-3.5-4	Total/NA	Solid	8015B	250358

Analysis Batch: 250609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-7	DG-H5S-3.5-4	Total/NA	Solid	8081A	250393
MB 720-250393/1-A	Method Blank	Total/NA	Solid	8081A	250393
LCS 720-250393/2-A	Lab Control Sample	Total/NA	Solid	8081A	250393
720-88216-A-9-S MS	Matrix Spike	Total/NA	Solid	8081A	250393
720-88216-A-9-T MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	250393

Prep Batch: 342652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-1	DG-J5S-0.5-1	Total/NA	Solid	3540C	
720-88218-2	DG-J5S-3.5-4	Total/NA	Solid	3540C	
720-88218-3	DG-J5S-7-7.5	Total/NA	Solid	3540C	
720-88218-6	DG-H5S-0.5-1	Total/NA	Solid	3540C	
720-88218-7	DG-H5S-3.5-4	Total/NA	Solid	3540C	
720-88218-10	DG-F5S-0.5-1	Total/NA	Solid	3540C	
720-88218-11	DG-F5S-3.5-4	Total/NA	Solid	3540C	
720-88218-14	DG-D5S-0.5-1	Total/NA	Solid	3540C	
720-88218-15	DG-D5S-3.5-4	Total/NA	Solid	3540C	
720-88218-18	DG-C5S-9-9.5	Total/NA	Solid	3540C	
720-88218-19	DG-B5S-0.5-1	Total/NA	Solid	3540C	
720-88218-20	DG-B5S-3.5-4	Total/NA	Solid	3540C	
MB 240-342652/21-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-342652/22-A	Lab Control Sample	Total/NA	Solid	3540C	
720-88218-20 MS	DG-B5S-3.5-4	Total/NA	Solid	3540C	
720-88218-20 MSD	DG-B5S-3.5-4	Total/NA	Solid	3540C	

Analysis Batch: 342862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-1	DG-J5S-0.5-1	Total/NA	Solid	8082	342652
720-88218-2	DG-J5S-3.5-4	Total/NA	Solid	8082	342652
720-88218-3	DG-J5S-7-7.5	Total/NA	Solid	8082	342652
720-88218-6	DG-H5S-0.5-1	Total/NA	Solid	8082	342652
720-88218-7	DG-H5S-3.5-4	Total/NA	Solid	8082	342652
720-88218-10	DG-F5S-0.5-1	Total/NA	Solid	8082	342652
720-88218-11	DG-F5S-3.5-4	Total/NA	Solid	8082	342652
720-88218-14	DG-D5S-0.5-1	Total/NA	Solid	8082	342652
720-88218-15	DG-D5S-3.5-4	Total/NA	Solid	8082	342652
720-88218-18	DG-C5S-9-9.5	Total/NA	Solid	8082	342652
720-88218-19	DG-B5S-0.5-1	Total/NA	Solid	8082	342652

GC Semi VOA (Continued)

Analysis Batch: 342862 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-20	DG-B5S-3.5-4	Total/NA	Solid	8082	342652
MB 240-342652/21-A	Method Blank	Total/NA	Solid	8082	342652
LCS 240-342652/22-A	Lab Control Sample	Total/NA	Solid	8082	342652
720-88218-20 MS	DG-B5S-3.5-4	Total/NA	Solid	8082	342652
720-88218-20 MSD	DG-B5S-3.5-4	Total/NA	Solid	8082	342652

Prep Batch: 343096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-21	DG-E5S-9.0-9.5	Total/NA	Solid	3540C	
MB 240-343096/23-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-343096/24-A	Lab Control Sample	Total/NA	Solid	3540C	
720-88218-21 MS	DG-E5S-9.0-9.5	Total/NA	Solid	3540C	
720-88218-21 MSD	DG-E5S-9.0-9.5	Total/NA	Solid	3540C	

Analysis Batch: 343330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-21	DG-E5S-9.0-9.5	Total/NA	Solid	8082	343096
MB 240-343096/23-A	Method Blank	Total/NA	Solid	8082	343096
LCS 240-343096/24-A	Lab Control Sample	Total/NA	Solid	8082	343096
720-88218-21 MS	DG-E5S-9.0-9.5	Total/NA	Solid	8082	343096
720-88218-21 MSD	DG-E5S-9.0-9.5	Total/NA	Solid	8082	343096

Metals

Prep Batch: 250242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-1	DG-J5S-0.5-1	Total/NA	Solid	3050B	
720-88218-2	DG-J5S-3.5-4	Total/NA	Solid	3050B	
720-88218-3	DG-J5S-7-7.5	Total/NA	Solid	3050B	
720-88218-4	DG-I5S-0.5-1	Total/NA	Solid	3050B	
720-88218-5	DG-I5S-3.5-4	Total/NA	Solid	3050B	
720-88218-6	DG-H5S-0.5-1	Total/NA	Solid	3050B	
720-88218-7	DG-H5S-3.5-4	Total/NA	Solid	3050B	
720-88218-8	DG-G5S-0.5-1	Total/NA	Solid	3050B	
720-88218-9	DG-G5S-3.5-4	Total/NA	Solid	3050B	
720-88218-10	DG-F5S-0.5-1	Total/NA	Solid	3050B	
720-88218-11	DG-F5S-3.5-4	Total/NA	Solid	3050B	
720-88218-12	DG-E5S-0.5-1	Total/NA	Solid	3050B	
720-88218-13	DG-E5S-3.5-4	Total/NA	Solid	3050B	
MB 720-250242/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250242/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88217-A-4-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88217-A-4-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-14	DG-D5S-0.5-1	Total/NA	Solid	3050B	
720-88218-15	DG-D5S-3.5-4	Total/NA	Solid	3050B	
720-88218-16	DG-C5S-0.5-1	Total/NA	Solid	3050B	
720-88218-17	DG-C5S-3.5-4	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 250262 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-18	DG-C5S-9-9.5	Total/NA	Solid	3050B	
720-88218-19	DG-B5S-0.5-1	Total/NA	Solid	3050B	
720-88218-20	DG-B5S-3.5-4	Total/NA	Solid	3050B	
MB 720-250262/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250262/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88218-16 MS	DG-C5S-0.5-1	Total/NA	Solid	3050B	
720-88218-16 MSD	DG-C5S-0.5-1	Total/NA	Solid	3050B	

Prep Batch: 250272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-1	DG-J5S-0.5-1	Total/NA	Solid	7471A	
720-88218-2	DG-J5S-3.5-4	Total/NA	Solid	7471A	
720-88218-3	DG-J5S-7-7.5	Total/NA	Solid	7471A	
720-88218-4	DG-I5S-0.5-1	Total/NA	Solid	7471A	
720-88218-5	DG-I5S-3.5-4	Total/NA	Solid	7471A	
720-88218-6	DG-H5S-0.5-1	Total/NA	Solid	7471A	
720-88218-7	DG-H5S-3.5-4	Total/NA	Solid	7471A	
720-88218-8	DG-G5S-0.5-1	Total/NA	Solid	7471A	
720-88218-9	DG-G5S-3.5-4	Total/NA	Solid	7471A	
720-88218-10	DG-F5S-0.5-1	Total/NA	Solid	7471A	
720-88218-11	DG-F5S-3.5-4	Total/NA	Solid	7471A	
720-88218-12	DG-E5S-0.5-1	Total/NA	Solid	7471A	
720-88218-13	DG-E5S-3.5-4	Total/NA	Solid	7471A	
720-88218-14	DG-D5S-0.5-1	Total/NA	Solid	7471A	
720-88218-15	DG-D5S-3.5-4	Total/NA	Solid	7471A	
720-88218-16	DG-C5S-0.5-1	Total/NA	Solid	7471A	
720-88218-17	DG-C5S-3.5-4	Total/NA	Solid	7471A	
720-88218-18	DG-C5S-9-9.5	Total/NA	Solid	7471A	
720-88218-19	DG-B5S-0.5-1	Total/NA	Solid	7471A	
720-88218-20	DG-B5S-3.5-4	Total/NA	Solid	7471A	
MB 720-250272/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250272/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88218-1 MS	DG-J5S-0.5-1	Total/NA	Solid	7471A	
720-88218-1 MSD	DG-J5S-0.5-1	Total/NA	Solid	7471A	

Prep Batch: 250280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-21	DG-E5S-9.0-9.5	Total/NA	Solid	3050B	
MB 720-250280/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250280/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88234-A-7-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88234-A-7-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 250349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-1	DG-J5S-0.5-1	Total/NA	Solid	6010B	250242
720-88218-2	DG-J5S-3.5-4	Total/NA	Solid	6010B	250242
720-88218-3	DG-J5S-7-7.5	Total/NA	Solid	6010B	250242
720-88218-4	DG-I5S-0.5-1	Total/NA	Solid	6010B	250242
720-88218-5	DG-I5S-3.5-4	Total/NA	Solid	6010B	250242
720-88218-6	DG-H5S-0.5-1	Total/NA	Solid	6010B	250242

Metals (Continued)

Analysis Batch: 250349 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-7	DG-H5S-3.5-4	Total/NA	Solid	6010B	250242
720-88218-8	DG-G5S-0.5-1	Total/NA	Solid	6010B	250242
720-88218-9	DG-G5S-3.5-4	Total/NA	Solid	6010B	250242
720-88218-10	DG-F5S-0.5-1	Total/NA	Solid	6010B	250242
720-88218-11	DG-F5S-3.5-4	Total/NA	Solid	6010B	250242
720-88218-12	DG-E5S-0.5-1	Total/NA	Solid	6010B	250242
720-88218-13	DG-E5S-3.5-4	Total/NA	Solid	6010B	250242
MB 720-250242/1-A	Method Blank	Total/NA	Solid	6010B	250242
LCS 720-250242/2-A	Lab Control Sample	Total/NA	Solid	6010B	250242
720-88217-A-4-A MS	Matrix Spike	Total/NA	Solid	6010B	250242
720-88217-A-4-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250242

Prep Batch: 250416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-21	DG-E5S-9.0-9.5	Total/NA	Solid	7471A	
MB 720-250416/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250416/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88215-A-21-B MS	Matrix Spike	Total/NA	Solid	7471A	
720-88215-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 250431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-14	DG-D5S-0.5-1	Total/NA	Solid	6010B	250262
720-88218-15	DG-D5S-3.5-4	Total/NA	Solid	6010B	250262
720-88218-16	DG-C5S-0.5-1	Total/NA	Solid	6010B	250262
720-88218-17	DG-C5S-3.5-4	Total/NA	Solid	6010B	250262
720-88218-18	DG-C5S-9-9.5	Total/NA	Solid	6010B	250262
720-88218-19	DG-B5S-0.5-1	Total/NA	Solid	6010B	250262
720-88218-20	DG-B5S-3.5-4	Total/NA	Solid	6010B	250262
MB 720-250262/1-A	Method Blank	Total/NA	Solid	6010B	250262
LCS 720-250262/2-A	Lab Control Sample	Total/NA	Solid	6010B	250262
720-88218-16 MS	DG-C5S-0.5-1	Total/NA	Solid	6010B	250262
720-88218-16 MSD	DG-C5S-0.5-1	Total/NA	Solid	6010B	250262

Analysis Batch: 250435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-11	DG-F5S-3.5-4	Total/NA	Solid	6010B	250242

Analysis Batch: 250454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-21	DG-E5S-9.0-9.5	Total/NA	Solid	6010B	250280
MB 720-250280/1-A	Method Blank	Total/NA	Solid	6010B	250280
LCS 720-250280/2-A	Lab Control Sample	Total/NA	Solid	6010B	250280
720-88234-A-7-A MS	Matrix Spike	Total/NA	Solid	6010B	250280
720-88234-A-7-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250280

Analysis Batch: 250558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-14	DG-D5S-0.5-1	Total/NA	Solid	6010B	250262
720-88218-15	DG-D5S-3.5-4	Total/NA	Solid	6010B	250262
720-88218-16	DG-C5S-0.5-1	Total/NA	Solid	6010B	250262

Metals (Continued)

Analysis Batch: 250558 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-17	DG-C5S-3.5-4	Total/NA	Solid	6010B	250262
720-88218-18	DG-C5S-9-9.5	Total/NA	Solid	6010B	250262
720-88218-19	DG-B5S-0.5-1	Total/NA	Solid	6010B	250262
720-88218-20	DG-B5S-3.5-4	Total/NA	Solid	6010B	250262
MB 720-250262/1-A	Method Blank	Total/NA	Solid	6010B	250262
LCS 720-250262/2-A	Lab Control Sample	Total/NA	Solid	6010B	250262
720-88218-16 MS	DG-C5S-0.5-1	Total/NA	Solid	6010B	250262
720-88218-16 MSD	DG-C5S-0.5-1	Total/NA	Solid	6010B	250262

Analysis Batch: 250599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-21	DG-E5S-9.0-9.5	Total/NA	Solid	7471A	250416
MB 720-250416/1-A	Method Blank	Total/NA	Solid	7471A	250416
LCS 720-250416/2-A	Lab Control Sample	Total/NA	Solid	7471A	250416
720-88215-A-21-B MS	Matrix Spike	Total/NA	Solid	7471A	250416
720-88215-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250416

Analysis Batch: 250676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88218-1	DG-J5S-0.5-1	Total/NA	Solid	7471A	250272
720-88218-2	DG-J5S-3.5-4	Total/NA	Solid	7471A	250272
720-88218-3	DG-J5S-7-7.5	Total/NA	Solid	7471A	250272
720-88218-4	DG-I5S-0.5-1	Total/NA	Solid	7471A	250272
720-88218-5	DG-I5S-3.5-4	Total/NA	Solid	7471A	250272
720-88218-6	DG-H5S-0.5-1	Total/NA	Solid	7471A	250272
720-88218-7	DG-H5S-3.5-4	Total/NA	Solid	7471A	250272
720-88218-8	DG-G5S-0.5-1	Total/NA	Solid	7471A	250272
720-88218-9	DG-G5S-3.5-4	Total/NA	Solid	7471A	250272
720-88218-10	DG-F5S-0.5-1	Total/NA	Solid	7471A	250272
720-88218-11	DG-F5S-3.5-4	Total/NA	Solid	7471A	250272
720-88218-12	DG-E5S-0.5-1	Total/NA	Solid	7471A	250272
720-88218-13	DG-E5S-3.5-4	Total/NA	Solid	7471A	250272
720-88218-14	DG-D5S-0.5-1	Total/NA	Solid	7471A	250272
720-88218-15	DG-D5S-3.5-4	Total/NA	Solid	7471A	250272
720-88218-16	DG-C5S-0.5-1	Total/NA	Solid	7471A	250272
720-88218-17	DG-C5S-3.5-4	Total/NA	Solid	7471A	250272
720-88218-18	DG-C5S-9-9.5	Total/NA	Solid	7471A	250272
720-88218-19	DG-B5S-0.5-1	Total/NA	Solid	7471A	250272
720-88218-20	DG-B5S-3.5-4	Total/NA	Solid	7471A	250272
MB 720-250272/1-A	Method Blank	Total/NA	Solid	7471A	250272
LCS 720-250272/2-A	Lab Control Sample	Total/NA	Solid	7471A	250272
720-88218-1 MS	DG-J5S-0.5-1	Total/NA	Solid	7471A	250272
720-88218-1 MSD	DG-J5S-0.5-1	Total/NA	Solid	7471A	250272

Client Sample ID: DG-J5S-0.5-1

Lab Sample ID: 720-88218-1

Date Collected: 08/22/18 14:00

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250367	08/24/18 02:25	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250350	08/28/18 14:47	A1C	TAL PLS
Total/NA	Prep	3546			250190	08/24/18 15:31	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		5	250501	08/30/18 01:03	LPL	TAL PLS
Total/NA	Prep	3546			250263	08/27/18 08:59	WGR	TAL PLS
Total/NA	Analysis	8015B		10	250356	08/29/18 02:00	JXL	TAL PLS
Total/NA	Prep	3546			250160	08/24/18 11:26	MAB	TAL PLS
Total/NA	Analysis	8081A		2	250445	08/29/18 10:01	MQL	TAL PLS
Total/NA	Prep	3540C			342652	08/27/18 11:05	DVT	TAL CAN
Total/NA	Analysis	8082		1	342862	08/28/18 22:00	CSC	TAL CAN
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250349	08/27/18 19:09	OBI	TAL PLS
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 17:14	MAG	TAL PLS

Client Sample ID: DG-J5S-3.5-4

Lab Sample ID: 720-88218-2

Date Collected: 08/22/18 14:00

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250367	08/24/18 02:25	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250350	08/28/18 15:19	A1C	TAL PLS
Total/NA	Prep	3546			250190	08/24/18 15:31	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		5	250578	08/30/18 16:18	LPL	TAL PLS
Total/NA	Prep	3546			250263	08/27/18 08:59	WGR	TAL PLS
Total/NA	Analysis	8015B		3	250356	08/29/18 01:11	JXL	TAL PLS
Total/NA	Prep	3546			250160	08/24/18 11:26	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250445	08/29/18 11:47	MQL	TAL PLS
Total/NA	Prep	3540C			342652	08/27/18 11:05	DVT	TAL CAN
Total/NA	Analysis	8082		1	342862	08/28/18 22:22	CSC	TAL CAN
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250349	08/27/18 19:13	OBI	TAL PLS
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 17:16	MAG	TAL PLS

Client Sample ID: DG-J5S-7-7.5

Lab Sample ID: 720-88218-3

Date Collected: 08/22/18 14:00

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250051	08/24/18 02:25	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250407	08/29/18 00:52	JRM	TAL PLS
Total/NA	Prep	3546			250190	08/24/18 15:31	MAB	TAL PLS

Client Sample ID: DG-J5S-7-7.5

Lab Sample ID: 720-88218-3

Date Collected: 08/22/18 14:00

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C SIM		1	250501	08/29/18 22:18	LPL	TAL PLS
Total/NA	Prep	3546			250263	08/27/18 08:59	WGR	TAL PLS
Total/NA	Analysis	8015B		1	250356	08/28/18 21:08	JXL	TAL PLS
Total/NA	Prep	3546			250160	08/24/18 11:26	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250445	08/29/18 12:05	MQL	TAL PLS
Total/NA	Prep	3540C			342652	08/27/18 11:05	DVT	TAL CAN
Total/NA	Analysis	8082		1	342862	08/28/18 22:44	CSC	TAL CAN
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250349	08/27/18 19:28	OBI	TAL PLS
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 17:18	MAG	TAL PLS

Client Sample ID: DG-I5S-0.5-1

Lab Sample ID: 720-88218-4

Date Collected: 08/22/18 14:15

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250349	08/27/18 19:32	OBI	TAL PLS
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 17:21	MAG	TAL PLS

Client Sample ID: DG-I5S-3.5-4

Lab Sample ID: 720-88218-5

Date Collected: 08/22/18 14:15

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250349	08/27/18 19:37	OBI	TAL PLS
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 17:23	MAG	TAL PLS

Client Sample ID: DG-H5S-0.5-1

Lab Sample ID: 720-88218-6

Date Collected: 08/22/18 14:30

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250481	08/24/18 02:25	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250453	08/29/18 15:42	A1C	TAL PLS
Total/NA	Prep	3546			250190	08/24/18 15:31	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		5	250578	08/30/18 16:42	LPL	TAL PLS
Total/NA	Prep	3546			250263	08/27/18 08:59	WGR	TAL PLS
Total/NA	Analysis	8015B		5	250356	08/28/18 23:58	JXL	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-H5S-0.5-1

Date Collected: 08/22/18 14:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			250160	08/24/18 11:26	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250445	08/29/18 12:23	MQL	TAL PLS
Total/NA	Prep	3540C			342652	08/27/18 11:05	DVT	TAL CAN
Total/NA	Analysis	8082		1	342862	08/28/18 23:05	CSC	TAL CAN
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250349	08/27/18 19:42	OBI	TAL PLS
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 17:26	MAG	TAL PLS

Client Sample ID: DG-H5S-3.5-4

Date Collected: 08/22/18 14:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250367	08/24/18 02:25	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250405	08/29/18 00:07	JRM	TAL PLS
Total/NA	Prep	3546			250190	08/24/18 15:31	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250501	08/29/18 22:41	LPL	TAL PLS
Total/NA	Prep	3546			250263	08/27/18 08:59	WGR	TAL PLS
Total/NA	Analysis	8015B		1	250356	08/28/18 22:21	JXL	TAL PLS
Total/NA	Prep	3546			250393	08/28/18 13:36	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250609	08/31/18 01:27	MQL	TAL PLS
Total/NA	Prep	3540C			342652	08/27/18 11:05	DVT	TAL CAN
Total/NA	Analysis	8082		1	342862	08/28/18 23:27	CSC	TAL CAN
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250349	08/27/18 19:46	OBI	TAL PLS
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 17:33	MAG	TAL PLS

Client Sample ID: DG-G5S-0.5-1

Date Collected: 08/22/18 15:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250349	08/27/18 19:51	OBI	TAL PLS
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 17:35	MAG	TAL PLS

Client Sample ID: DG-G5S-3.5-4

Lab Sample ID: 720-88218-9

Date Collected: 08/22/18 15:15

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250349	08/27/18 19:56	OBI	TAL PLS
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 17:37	MAG	TAL PLS

Client Sample ID: DG-F5S-0.5-1

Lab Sample ID: 720-88218-10

Date Collected: 08/22/18 15:45

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250367	08/24/18 02:25	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250405	08/29/18 00:37	JRM	TAL PLS
Total/NA	Prep	3546			250190	08/24/18 15:31	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		10	250578	08/30/18 17:06	LPL	TAL PLS
Total/NA	Prep	3546			250263	08/27/18 08:59	WGR	TAL PLS
Total/NA	Analysis	8015B		10	250356	08/29/18 00:47	JXL	TAL PLS
Total/NA	Prep	3546			250160	08/24/18 11:26	MAB	TAL PLS
Total/NA	Analysis	8081A		5	250445	08/29/18 12:40	MQL	TAL PLS
Total/NA	Prep	3540C			342652	08/27/18 11:05	DVT	TAL CAN
Total/NA	Analysis	8082		1	342862	08/28/18 23:49	CSC	TAL CAN
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250349	08/27/18 20:01	OBI	TAL PLS
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 17:40	MAG	TAL PLS

Client Sample ID: DG-F5S-3.5-4

Lab Sample ID: 720-88218-11

Date Collected: 08/22/18 15:45

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250481	08/24/18 02:25	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250453	08/29/18 16:10	A1C	TAL PLS
Total/NA	Prep	3546			250190	08/24/18 15:31	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250501	08/29/18 23:05	LPL	TAL PLS
Total/NA	Prep	3546			250263	08/27/18 08:59	WGR	TAL PLS
Total/NA	Analysis	8015B		1	250356	08/28/18 21:56	JXL	TAL PLS
Total/NA	Prep	3546			250160	08/24/18 11:26	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250445	08/29/18 12:58	MQL	TAL PLS
Total/NA	Prep	3540C			342652	08/27/18 11:05	DVT	TAL CAN
Total/NA	Analysis	8082		1	342862	08/29/18 00:10	CSC	TAL CAN
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250349	08/27/18 20:05	OBI	TAL PLS
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS

Client Sample ID: DG-F5S-3.5-4

Lab Sample ID: 720-88218-11

Date Collected: 08/22/18 15:45

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		10	250435	08/28/18 15:20	OBI	TAL PLS
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 17:42	MAG	TAL PLS

Client Sample ID: DG-E5S-0.5-1

Lab Sample ID: 720-88218-12

Date Collected: 08/22/18 16:15

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250349	08/27/18 20:10	OBI	TAL PLS
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 17:44	MAG	TAL PLS

Client Sample ID: DG-E5S-3.5-4

Lab Sample ID: 720-88218-13

Date Collected: 08/22/18 16:15

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250349	08/27/18 20:24	OBI	TAL PLS
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 17:47	MAG	TAL PLS

Client Sample ID: DG-D5S-0.5-1

Lab Sample ID: 720-88218-14

Date Collected: 08/22/18 16:45

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250367	08/24/18 02:25	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250405	08/29/18 01:39	JRM	TAL PLS
Total/NA	Prep	3546			250190	08/24/18 15:31	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		5	250578	08/30/18 17:29	LPL	TAL PLS
Total/NA	Prep	3546			250263	08/27/18 08:59	WGR	TAL PLS
Total/NA	Analysis	8015B		5	250356	08/29/18 01:35	JXL	TAL PLS
Total/NA	Prep	3546			250160	08/24/18 11:26	MAB	TAL PLS
Total/NA	Analysis	8081A		2	250549	08/30/18 12:22	JZT	TAL PLS
Total/NA	Prep	3540C			342652	08/27/18 11:05	DVT	TAL CAN
Total/NA	Analysis	8082		1	342862	08/29/18 00:32	CSC	TAL CAN
Total/NA	Prep	3050B			250262	08/27/18 09:53	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250431	08/28/18 15:56	BKR	TAL PLS
Total/NA	Prep	3050B			250262	08/27/18 09:53	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250558	08/29/18 22:45	OBI	TAL PLS

Client Sample ID: DG-D5S-0.5-1

Lab Sample ID: 720-88218-14

Date Collected: 08/22/18 16:45

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 17:49	MAG	TAL PLS

Client Sample ID: DG-D5S-3.5-4

Lab Sample ID: 720-88218-15

Date Collected: 08/22/18 16:45

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			250667	08/31/18 09:19	CTD	TAL PLS
Total/NA	Analysis	8260B		1	250642	08/31/18 10:33	JRM	TAL PLS
Total/NA	Prep	3546			250190	08/24/18 15:31	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250501	08/29/18 23:29	LPL	TAL PLS
Total/NA	Prep	3546			250358	08/28/18 08:52	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250569	08/30/18 12:25	JXL	TAL PLS
Total/NA	Prep	3546			250160	08/24/18 11:26	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250549	08/30/18 12:39	JZT	TAL PLS
Total/NA	Prep	3540C			342652	08/27/18 11:05	DVT	TAL CAN
Total/NA	Analysis	8082		1	342862	08/29/18 00:54	CSC	TAL CAN
Total/NA	Prep	3050B			250262	08/27/18 09:53	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250431	08/28/18 16:01	BKR	TAL PLS
Total/NA	Prep	3050B			250262	08/27/18 09:53	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250558	08/29/18 22:49	OBI	TAL PLS
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 17:51	MAG	TAL PLS

Client Sample ID: DG-C5S-0.5-1

Lab Sample ID: 720-88218-16

Date Collected: 08/23/18 11:30

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250262	08/27/18 09:53	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250431	08/28/18 15:52	BKR	TAL PLS
Total/NA	Prep	3050B			250262	08/27/18 09:53	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250558	08/29/18 22:40	OBI	TAL PLS
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 17:54	MAG	TAL PLS

Client Sample ID: DG-C5S-3.5-4

Lab Sample ID: 720-88218-17

Date Collected: 08/23/18 11:30

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250262	08/27/18 09:53	SUN	TAL PLS

Client Sample ID: DG-C5S-3.5-4

Lab Sample ID: 720-88218-17

Date Collected: 08/23/18 11:30

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		4	250431	08/28/18 16:06	BKR	TAL PLS
Total/NA	Prep	3050B			250262	08/27/18 09:53	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250558	08/29/18 22:54	OBI	TAL PLS
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 18:01	MAG	TAL PLS

Client Sample ID: DG-C5S-9-9.5

Lab Sample ID: 720-88218-18

Date Collected: 08/23/18 11:30

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250473	08/24/18 02:25	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250453	08/29/18 10:43	A1C	TAL PLS
Total/NA	Prep	5035			250602	08/24/18 02:25	DAID	TAL PLS
Total/NA	Analysis	8260B		1	250625	08/30/18 22:03	JRM	TAL PLS
Total/NA	Prep	3546			250190	08/24/18 15:31	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250501	08/29/18 21:30	LPL	TAL PLS
Total/NA	Prep	3546			250382	08/28/18 11:24	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250456	08/30/18 00:28	JXL	TAL PLS
Total/NA	Prep	3546			250160	08/24/18 11:26	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250549	08/30/18 12:57	JZT	TAL PLS
Total/NA	Prep	3540C			342652	08/27/18 11:05	DVT	TAL CAN
Total/NA	Analysis	8082		1	342862	08/29/18 01:16	CSC	TAL CAN
Total/NA	Prep	3050B			250262	08/27/18 09:53	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250431	08/28/18 16:20	BKR	TAL PLS
Total/NA	Prep	3050B			250262	08/27/18 09:53	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250558	08/29/18 22:59	OBI	TAL PLS
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 18:03	MAG	TAL PLS

Client Sample ID: DG-B5S-0.5-1

Lab Sample ID: 720-88218-19

Date Collected: 08/23/18 11:45

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250473	08/24/18 02:25	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250450	08/29/18 17:06	JRM	TAL PLS
Total/NA	Prep	3546			250290	08/27/18 12:37	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250501	08/30/18 00:16	LPL	TAL PLS
Total/NA	Prep	3546			250382	08/28/18 11:24	MAB	TAL PLS
Total/NA	Analysis	8015B		2	250456	08/30/18 01:56	JXL	TAL PLS
Total/NA	Prep	3546			250294	08/27/18 13:33	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250549	08/30/18 09:06	JZT	TAL PLS

Client Sample ID: DG-B5S-0.5-1

Lab Sample ID: 720-88218-19

Date Collected: 08/23/18 11:45

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			342652	08/27/18 11:05	DVT	TAL CAN
Total/NA	Analysis	8082		1	342862	08/29/18 01:38	CSC	TAL CAN
Total/NA	Prep	3050B			250262	08/27/18 09:53	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250431	08/28/18 16:25	BKR	TAL PLS
Total/NA	Prep	3050B			250262	08/27/18 09:53	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250558	08/29/18 23:04	OBI	TAL PLS
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 18:05	MAG	TAL PLS

Client Sample ID: DG-B5S-3.5-4

Lab Sample ID: 720-88218-20

Date Collected: 08/23/18 11:45

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250473	08/24/18 02:25	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250450	08/29/18 17:36	JRM	TAL PLS
Total/NA	Prep	3546			250376	08/28/18 10:30	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		2	250578	08/30/18 19:04	LPL	TAL PLS
Total/NA	Prep	3546			250382	08/28/18 11:24	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250456	08/30/18 01:26	JXL	TAL PLS
Total/NA	Prep	3546			250294	08/27/18 13:33	MAB	TAL PLS
Total/NA	Analysis	8081A		1	250549	08/30/18 11:28	JZT	TAL PLS
Total/NA	Prep	3540C			342652	08/27/18 11:05	DVT	TAL CAN
Total/NA	Analysis	8082		1	342862	08/29/18 03:06	CSC	TAL CAN
Total/NA	Prep	3050B			250262	08/27/18 09:53	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250431	08/28/18 16:30	BKR	TAL PLS
Total/NA	Prep	3050B			250262	08/27/18 09:53	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250558	08/29/18 23:09	OBI	TAL PLS
Total/NA	Prep	7471A			250272	08/27/18 09:58	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250676	08/30/18 18:08	MAG	TAL PLS

Client Sample ID: DG-E5S-9.0-9.5

Lab Sample ID: 720-88218-21

Date Collected: 08/22/18 16:15

Matrix: Solid

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			250367	08/24/18 02:25	LRC	TAL PLS
Total/NA	Analysis	8260B		1	250405	08/29/18 02:43	JRM	TAL PLS
Total/NA	Prep	3546			250376	08/28/18 10:30	MAB	TAL PLS
Total/NA	Analysis	8270C SIM		1	250578	08/30/18 19:28	LPL	TAL PLS
Total/NA	Prep	3546			250358	08/28/18 08:21	MAB	TAL PLS
Total/NA	Analysis	8015B		1	250568	08/30/18 12:49	JXL	TAL PLS
Total/NA	Prep	3546			250294	08/27/18 13:33	MAB	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Client Sample ID: DG-E5S-9.0-9.5
Date Collected: 08/22/18 16:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88218-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8081A		1	250549	08/30/18 11:46	JZT	TAL PLS
Total/NA	Prep	3540C			343096	08/29/18 14:18	AMT	TAL CAN
Total/NA	Analysis	8082		1	343330	08/31/18 10:49	KMG	TAL CAN
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250454	08/28/18 21:59	OBI	TAL PLS
Total/NA	Prep	7471A			250416	08/28/18 15:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250599	08/30/18 13:09	OBI	TAL PLS

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
Subcontract	Asbestos - CARB 435	None	
3050B	Preparation, Metals	SW846	TAL PLS
3540C	Soxhlet Extraction	SW846	TAL CAN
3546	Microwave Extraction	SW846	TAL PLS
5030B	Purge and Trap	SW846	TAL PLS
5035	Closed System Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= Asbestos TEM Laboratories, Inc., 630 BANCROFT WAY, Berkeley, CA 94710

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

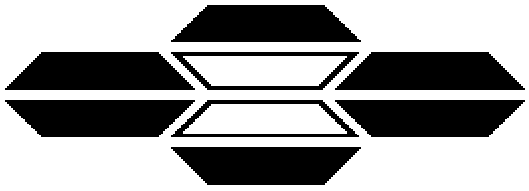
TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88218-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88218-1	DG-J5S-0.5-1	Solid	08/22/18 14:00	08/23/18 15:40
720-88218-2	DG-J5S-3.5-4	Solid	08/22/18 14:00	08/23/18 15:40
720-88218-3	DG-J5S-7-7.5	Solid	08/22/18 14:00	08/23/18 15:40
720-88218-4	DG-I5S-0.5-1	Solid	08/22/18 14:15	08/23/18 15:40
720-88218-5	DG-I5S-3.5-4	Solid	08/22/18 14:15	08/23/18 15:40
720-88218-6	DG-H5S-0.5-1	Solid	08/22/18 14:30	08/23/18 15:40
720-88218-7	DG-H5S-3.5-4	Solid	08/22/18 14:30	08/23/18 15:40
720-88218-8	DG-G5S-0.5-1	Solid	08/22/18 15:15	08/23/18 15:40
720-88218-9	DG-G5S-3.5-4	Solid	08/22/18 15:15	08/23/18 15:40
720-88218-10	DG-F5S-0.5-1	Solid	08/22/18 15:45	08/23/18 15:40
720-88218-11	DG-F5S-3.5-4	Solid	08/22/18 15:45	08/23/18 15:40
720-88218-12	DG-E5S-0.5-1	Solid	08/22/18 16:15	08/23/18 15:40
720-88218-13	DG-E5S-3.5-4	Solid	08/22/18 16:15	08/23/18 15:40
720-88218-14	DG-D5S-0.5-1	Solid	08/22/18 16:45	08/23/18 15:40
720-88218-15	DG-D5S-3.5-4	Solid	08/22/18 16:45	08/23/18 15:40
720-88218-16	DG-C5S-0.5-1	Solid	08/23/18 11:30	08/23/18 15:40
720-88218-17	DG-C5S-3.5-4	Solid	08/23/18 11:30	08/23/18 15:40
720-88218-18	DG-C5S-9-9.5	Solid	08/23/18 11:30	08/23/18 15:40
720-88218-19	DG-B5S-0.5-1	Solid	08/23/18 11:45	08/23/18 15:40
720-88218-20	DG-B5S-3.5-4	Solid	08/23/18 11:45	08/23/18 15:40
720-88218-21	DG-E5S-9.0-9.5	Solid	08/22/18 16:15	08/23/18 15:40



ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01197

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Aug/30/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01197
Polarized light microscopy analytical results for 12 bulk sample(s).
Job Site: 720-88218-1
Job No.: UPC-OU-SM

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 12

Samples Analyzed: 12

Job Site / No. UPC-OU-SM
720-88218-1

Report No. **359846**
Date Submitted: Aug-24-18
Date Reported: Aug-30-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DG-J5S-0.5-1		**<0.25%**	**None Detected**	720-88218-1
Lab ID # 1283-01197-001	**400** - Total Points			No Asbestos Detected
DG-J5S-3.5-4		**<0.25%**	**None Detected**	720-88218-2
Lab ID # 1283-01197-002	**400** - Total Points			No Asbestos Detected
DG-J5S-7-7.5		**<0.25%**	**None Detected**	720-88218-3
Lab ID # 1283-01197-003	**400** - Total Points			No Asbestos Detected
DG-H5S-0.5-1		**<0.25%**	**None Detected**	720-88218-6
Lab ID # 1283-01197-004	**400** - Total Points			No Asbestos Detected
DG-H5S-3.5-4		**<0.25%**	**None Detected**	720-88218-7
Lab ID # 1283-01197-005	**400** - Total Points			No Asbestos Detected
DG-F5S-0.5-1		**<0.25%**	**None Detected**	720-88218-10
Lab ID # 1283-01197-006	**400** - Total Points			No Asbestos Detected
DG-F5S-3.5-4		**<0.25%**	**None Detected**	720-88218-11
Lab ID # 1283-01197-007	**400** - Total Points			No Asbestos Detected
DG-D5S-0.5-1		**<0.25%**	**None Detected**	720-88218-14
Lab ID # 1283-01197-008	**400** - Total Points			No Asbestos Detected
DG-D5S-3.5-4		**<0.25%**	**None Detected**	720-88218-15
Lab ID # 1283-01197-009	**400** - Total Points			No Asbestos Detected
DG-C5S-9-9.5		**<0.25%**	**None Detected**	720-88218-18
Lab ID # 1283-01197-010	**400** - Total Points			No Asbestos Detected

QC Reviewer _____ **Analys** _____

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 12

Samples Analyzed: 12

Job Site / No. UPC-OU-SM
720-88218-1

Report No. **359846**
Date Submitted: Aug-24-18
Date Reported: Aug-30-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DG-B5S-0.5-1		**<0.25%**	**None Detected**	720-88218-19
Lab ID # 1283-01197-011	**400** - Total Points			No Asbestos Detected
DG-B5S-3.5-4		**<0.25%**	**None Detected**	720-88218-20
Lab ID # 1283-01197-012	**400** - Total Points			No Asbestos Detected
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			

QC Reviewer _____ **Analys** _____

359846

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39407.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 2
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88218-1
Address: 630 BANCROFT WAY,	Due Date Requested: 8/30/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710	PO #:			
Phone:	WO #:			
Email:	Project #: 72013717			
Project Name: UPC-OU-SM	SSOW#:			
Site:				

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-J5S--0.5-1 (720-88218-1)	8/22/18	14:00 Pacific		Solid			X	1	
DG-J5S--3.5-4 (720-88218-2)	8/22/18	14:00 Pacific		Solid			X	1	
DG-J5S--7-7.5 (720-88218-3)	8/22/18	14:00 Pacific		Solid			X	1	
DG-H5S--0.5-1 (720-88218-6)	8/22/18	14:30 Pacific		Solid			X	1	
DG-H5S--3.5-4 (720-88218-7)	8/22/18	14:30 Pacific		Solid			X	1	
DG-F5S--0.5-1 (720-88218-10)	8/22/18	15:45 Pacific		Solid			X	1	
DG-F5S--3.5-4 (720-88218-11)	8/22/18	15:45 Pacific		Solid			X	1	
DG-D5S--0.5-1 (720-88218-14)	8/22/18	16:45 Pacific		Solid			X	1	
DG-D5S--3.5-4 (720-88218-15)	8/22/18	16:45 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8/24/18 1215	TA			
Relinquished by:	Date/Time:	Company	Received by: ATOM/RY	Date/Time: AUG24 '18 12:13PM	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39407.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 2 of 2
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88218-1
Address: 630 BANCROFT WAY,	Due Date Requested: 8/30/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC-OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Oil, Waste, Tissue, Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-C5S--9-9.5 (720-88218-18)	8/22/18	11:30 Pacific		Solid			X	1	
DG-B5S--0.5-1 (720-88218-19)	8/22/18	11:45 Pacific		Solid			X	1	
DG-B5S--3.5-4 (720-88218-20)	8/22/18	11:45 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

Possible Hazard Identification Unconfirmed	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39407.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 2 of 2
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88218-1
Address: 630 BANCROFT WAY,	Due Date Requested: 8/30/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC-OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-C5S--9-9.5 (720-88218-18)	8/22/18	11:30 Pacific		Solid			X	1	
DG-B5S--0.5-1 (720-88218-19)	8/22/18	11:45 Pacific		Solid			X	1	
DG-B5S--3.5-4 (720-88218-20)	8/22/18	11:45 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:
Empty Kit Relinquished by:	Date: Time: Method of Shipment:
Relinquished by: Date/Time: 8/24/18 1215 Company TA	Received by: Date/Time: Company
Relinquished by: Date/Time: Company	Received by: ATEM/RA Date/Time: AUG24 '18 12:18PM Company
Relinquished by: Date/Time: Company	Received by: Date/Time: Company
Custody Seals Intact: ∆ Yes ∆ No Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1283-01206

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866

NVLAP Lab Code: 101891-0
Berkeley, CA

Sep/04/2018

Micah Smith
TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

RE: LABORATORY JOB # 1283-01206
Polarized light microscopy analytical results for 1 bulk sample(s).
Job Site: 720-88218-1
Job No.: UPC-OU-SM

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Micah Smith

Address: TestAmerica Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566

Samples Submitted: 1
Samples Analyzed: 1
Job Site / No. UPC-OU-SM
720-88218-1

Report No. **359917**
Date Submitted: Aug-28-18
Date Reported: Aug-30-18

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
DG-E5S-9.0-9.5		**<0.25%**	**None Detected**	720-88218-21
Lab ID # 1283-01206-001	**400** - Total Points			No Asbestos Detected
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			

QC Reviewer _____ **Analys** _____

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

359917

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39429.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: Asbestos TEM Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88218-1
Address: 630 BANCROFT WAY, .	Due Date Requested: 8/30/2018			
City: Berkeley	TAT Requested (days):			
State, Zip: CA, 94710				
Phone:	PO #:			
Email:	WO #:			
Project Name: UPC-OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Asbestos - CARB 435)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-E5--9.0-9.5 (720-88218-21)	8/22/18	16:15 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 8/28/18 1245	Company TA	Received by: MB	Date/Time: AUG28 '18 12:45PM	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88218

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185020

Date 8/22 Page 1 of 2

11/21/2018 (Rev. 1)

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: MKahrilas@geosyntec.com
Bill To: GEOSYNTEC
Sampled By: M. KAHRILAS
Attn: ANTHONY SMITH
Phone: 847-530-7602

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B ☐ EPA 8260C	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ~~EPA 8270B~~ ☒ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☒ EPA 8081 PCBs ☒ EPA 8082	CAM17-Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (CARB 435)
DG-J5S-0.5-1	8/22	1400	S		X			X		X		X	X										X
DG-J5S-3.5-4		1400			X			X		X		X	X										X
DG-J5S-7-7.5		1400			X			X		X		X	X										X
DG-I5S-0.5-1		1415											X										
DG-I5S-3.5-4		1415											X										
DG-H5S-0.5-1		1430			X			X		X		X	X										X
DG-H5S-3.5-4		1430			X			X		X		X	X										X
DG-G5S-0.5-1		1515											X										
DG-G5S-3.5-4		1515											X										
DG-F5S-0.5-1	↓	1545	↓		X			X		X		X	X										X

Project Info.

Project Name/ #: UPC OU-SM1
PO#: WO2565102
Credit Card Y/N:

Sample Receipt

of Containers:
Head Space:
Temp: 3.1, 1.9, 2.6°C

If yes, please call with payment information ASAP

10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:
	(5 Day)					

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID ___

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [illegible] Time: 1335	Signature: [illegible] Time: 1540	
Printed Name: MIRANDA KAHRILAS Date: 8/23	Printed Name: [illegible] Date: 8/23/18	720-88218 Chain of Custody
Company: GEO	Company: TA 720	

1) Received by:	2) Received by:	3) Received by:
Signature: [illegible] Time: 1345	Signature: [illegible] Time: 1540	Signature: Time:
Printed Name: Date: 8/23	Printed Name: T. Bullock Date: 8/23/18	Printed Name: Date:
Company: TA 720	Company: TA 720	Company: 7 1 1 9 2.6 C

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88218

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185090

Date 8/23 Page 2 of 2

11/21/2018 (Rev. 1)

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
Bill To: GEOSYNTEC
Sampled By: M. KAHRILAS
Attn: A. SMITH
Phone: 847-530-7602

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease ☐ Petroleum (EPA 1664/9071) ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions : ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Asbestos (LABS 436)
DG-F5S-3.5-4	8/22	1545	S		X			X		X		X	X										X
DG-E5S-0.5-1		1615											X										
DG-E5S-3.5-4		1615											X										
DG-D5S-0.5-1		1645			X			X		X		X	X										X
DG-D5S-3.5-4	↓	1645	↓		X			X		X		X	X										X
DG-C5S-0.5-1	8/23	1130											X										
DG-C5S-3.5-4		1130											X										
DG-C5S-9-9.5		1130			X			X		X		X	X										X
DG-B5S-0.5-1		1145			X			X		X		X	X										X
DG-B5S-3.5-4	↓	1145	↓		X			X		X		X	X										X

Project Info.

Project Name/ #: UPC OU-SM1
PO#: WG256502
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers:
Head Space:
Temp:

10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:
	(5 Day)					

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

as Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [illegible]	Signature: [illegible]	Signature:
Time: 1300	Time: 1540	Time:
Printed Name: MIRANDA KAHRILAS	Printed Name:	Printed Name:
Date: 8/23	Date: 8/23/18	Date:
Company:	Company: TA 720	Company:
1) Received by:	**2) Received by:**	**3) Received by:**
Signature: [illegible]	Signature: [illegible]	Signature:
Time: 1305	Time: 1540	Time:
Printed Name:	Printed Name: T. Bullock	Printed Name:
Date: 8/23/18	Date: 8/23/18	Date:
Company: TA 720	Company: TA 720	Company:

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

4.21/42.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39410.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88218-1
Address: 4101 Shuffel Street NW,	Due Date Requested: 8/30/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC-OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

CZ06

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-J5S--0.5-1 (720-88218-1)	8/22/18	14:00 Pacific		Solid			X	1	
DG-J5S--3.5-4 (720-88218-2)	8/22/18	14:00 Pacific		Solid			X	1	
DG-J5S--7-7.5 (720-88218-3)	8/22/18	14:00 Pacific		Solid			X	1	
DG-H5S--0.5-1 (720-88218-6)	8/22/18	14:30 Pacific		Solid			X	1	
DG-H5S--3.5-4 (720-88218-7)	8/22/18	14:30 Pacific		Solid			X	1	
DG-F5S--0.5-1 (720-88218-10)	8/22/18	15:45 Pacific		Solid			X	1	
DG-F5S--3.5-4 (720-88218-11)	8/22/18	15:45 Pacific		Solid			X	1	
DG-D5S--0.5-1 (720-88218-14)	8/22/18	16:45 Pacific		Solid			X	1	
DG-D5S--3.5-4 (720-88218-15)	8/22/18	16:45 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		8/24/18 12:34	TA720		8/25/18 1145	TA
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

42/42

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39410.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88218-1
Address: 4101 Shuffel Street NW,	Due Date Requested: 8/30/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC-OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

C206

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-C5S--9-9.5 (720-88218-18)	8/22/18	11:30 Pacific		Solid			X	1	
DG-B5S--0.5-1 (720-88218-19)	8/22/18	11:45 Pacific		Solid			X	1	
DG-B5S--3.5-4 (720-88218-20)	8/22/18	11:45 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/24/18 12:34	TAL SAC		8/25/18 1145	TAL
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client TA Pleasanton Site Name _____ Cooler unpacked by: DD

Cooler Received on 8/25/18 Opened on 8/27/18

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 4.2 °C Corrected Cooler Temp. 4.2 °C
   IR GUN #36 (CF -0.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# **HC849151**
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
16. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39428.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - California		Job #: 720-88218-1
Address: 4101 Shuffel Street NW,	Due Date Requested: 8/30/2018			
City: North Canton	TAT Requested (days):			
State, Zip: OH, 44720				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: UPC-OU-SM	Project #: 72013717			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

C207

Special Instructions/Note:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082/3540C (MOD) PCB 7 Aroclors	Total Number of containers
			Preservation Code:					
DG-E5--9.0-9.5 (720-88218-21)	8/22/18	16:15 Pacific		Solid			X	1

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company		Date/Time:	Company
Relinquished by: [signature]	8-27-18 1600	Fed Ex	Received by: [signature]	8/29/18 935	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____

Canton Facility

Client TA Pleasanton Site Name _____ Cooler unpacked by: SC

Cooler Received on 8/29/18 Opened on 8/29/18

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # 1A Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 1.4 °C Corrected Cooler Temp. 1.4 °C

IR GUN #36 (CF -0.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# **HC849151**
13. Were VOAs on the COC?	Yes	No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
16. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88218-1

Login Number: 88218
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88220-1
Client Project/Site: UPC OU-SM

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
9/5/2018 6:28:12 PM

Micah Smith, Project Manager II
(916)374-4302
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 6
Client Sample Results 11
Surrogate Summary 344
QC Sample Results 346
QC Association Summary 380
Lab Chronicle 385
Certification Summary 390
Method Summary 391
Sample Summary 392
Chain of Custody 393
Receipt Checklists 398

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88220-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88220-1

Comments
As discussed, samples were analyzed by method 8260B-SIM for 1,2,3-Trichloropropane.

Receipt
The samples were received on 8/23/2018 3:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 1.9º C, 2.6º C and 3.1º C.

Receipt Exceptions
The COC did not specify for metals were dissolved on the COC. The client confirmed samples are field filtered.

Did not receive sample TB-2.

Sample DG-J5W cannot run MS/MSD for 8015. Not enough sample provided.

The following samples were received outside of holding time: for Hex. Chrome EPA 7196A: DG-C3W and DG-F3W.

GC/MS VOA
Method(s) 8260B: The following volatile samples were analyzed with significant headspace in the sample container(s): DG-C3W (720-88220-1), DG-F3W (720-88220-2), DG-K3W (720-88220-4), DG-H6W (720-88220-9), DG-P5W (720-88220-10) and TB-3 (720-88220-15). Significant headspace is defined as a bubble greater than 6 mm in diameter.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250553 recovered outside control limits for the following analytes: 1,1-Dichloroethene, Carbon disulfide and trans-1,2-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-250552 recovered outside control limits for the following analytes: 1,1,2-Trichloro-1,2,2-trifluoroethane, 1,1-Dichloroethene and Carbon disulfide. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 720-250553 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 720-250554 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8260B: The method blank for analytical batch 720-250552 contained Naphthalene above the method detection limit (MDL). Associated samples were not re-analyzed because results were less than the reporting limit (RL).

Method(s) 8260B: The Gasoline Range Organics (GRO) concentration reported for the following samples is due to the presence of discrete peaks: DG-L5W (720-88220-6), DG-P5W (720-88220-10) and DUP-02 (720-88220-16).

Method(s) 8260B SIM: The following volatile sample was analyzed with significant headspace in the sample container(s): DG-H6W (720-88220-9) and TB-3 (720-88220-15. Significant headspace is defined as a bubble greater than 6 mm in diameter.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8015B: The Diesel Range Organics (DRO) concentration reported for the following samples is due to the presence of discrete

Job ID: 720-88220-1 (Continued)

Laboratory: TestAmerica Pleasanton (Continued)

peaks: DG-I3W (720-88220-3) and DG-L5W (720-88220-6).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250390 was outside of the 10% control limits: (720-88220-D-7-B SD).

Analyte	Recovery
Barium	30%

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method(s) 7196A: The following samples were received outside of holding time: DG-C3W (720-88220-1) and DG-F3W (720-88220-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-C3W — Lab Sample ID: 720-88220-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.14	J	0.50	0.11	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	7.6		0.50	0.076	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.53		0.50	0.13	ug/L	1		8260B	Total/NA
Trichloroethene	3.9		0.50	0.20	ug/L	1		8260B	Total/NA
Vinyl chloride	0.78		0.50	0.20	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	69		51	31	ug/L	1		8015B	Total/NA
Antimony	0.012		0.010	0.0027	mg/L	1		6010B	Dissolved
Arsenic	0.0071	J	0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.27		0.010	0.0014	mg/L	1		6010B	Dissolved
Beryllium	0.00042	J B	0.0020	0.00033	mg/L	1		6010B	Dissolved
Cobalt	0.0047		0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.012	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.021		0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.0077	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0060	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Zinc	0.090		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: DG-F3W — Lab Sample ID: 720-88220-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	7.9		0.50	0.076	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.39	J	0.50	0.13	ug/L	1		8260B	Total/NA
Trichloroethene	0.60		0.50	0.20	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	120		52	31	ug/L	1		8015B	Total/NA
Antimony	0.0034	J	0.010	0.0027	mg/L	1		6010B	Dissolved
Arsenic	0.19		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.20		0.010	0.0014	mg/L	1		6010B	Dissolved
Beryllium	0.00069	J B	0.0020	0.00033	mg/L	1		6010B	Dissolved
Cobalt	0.0019	J	0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.0039	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.011		0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.0059	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0029	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Vanadium	0.00097	J	0.010	0.00070	mg/L	1		6010B	Dissolved
Zinc	0.036		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: DG-I3W — Lab Sample ID: 720-88220-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	6.0		0.50	0.076	ug/L	1		8260B	Total/NA
Trichloroethene	0.52		0.50	0.20	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	57		52	31	ug/L	1		8015B	Total/NA
Antimony	0.0028	J	0.010	0.0027	mg/L	1		6010B	Dissolved
Arsenic	0.084		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.072		0.010	0.0014	mg/L	1		6010B	Dissolved
Beryllium	0.00089	J B	0.0020	0.00033	mg/L	1		6010B	Dissolved
Copper	0.0032	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.0086		0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.0063	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0018	J	0.010	0.00080	mg/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-I3W (Continued) — Lab Sample ID: 720-88220-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	0.0020	J	0.010	0.00070	mg/L	1		6010B	Dissolved
Zinc	0.025		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: DG-K3W — Lab Sample ID: 720-88220-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.9		0.50	0.076	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	52		52	31	ug/L	1		8015B	Total/NA
Arsenic	0.063		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.13		0.010	0.0014	mg/L	1		6010B	Dissolved
Cobalt	0.0012	J	0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.0042	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.0096		0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.0049	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0016	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Vanadium	0.00097	J	0.010	0.00070	mg/L	1		6010B	Dissolved
Zinc	0.050		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: DG-M3W — Lab Sample ID: 720-88220-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.3		0.50	0.076	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	56		51	31	ug/L	1		8015B	Total/NA
Antimony	0.0036	J	0.010	0.0027	mg/L	1		6010B	Dissolved
Arsenic	0.031		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.089		0.010	0.0014	mg/L	1		6010B	Dissolved
Beryllium	0.0011	J B	0.0020	0.00033	mg/L	1		6010B	Dissolved
Copper	0.0044	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.0081		0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.0054	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0015	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Vanadium	0.0010	J	0.010	0.00070	mg/L	1		6010B	Dissolved
Zinc	0.037		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: DG-L5W — Lab Sample ID: 720-88220-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	8.8	J	50	8.4	ug/L	1		8260B	Total/NA
Benzene	0.27	J	0.50	0.25	ug/L	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	57		50	21	ug/L	1		8260B	Total/NA
Toluene	0.26	J	0.50	0.17	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	170		51	31	ug/L	1		8015B	Total/NA
Antimony	0.0066	J	0.010	0.0027	mg/L	1		6010B	Dissolved
Arsenic	0.0032	J	0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.36		0.010	0.0014	mg/L	1		6010B	Dissolved
Beryllium	0.0010	J B	0.0020	0.00033	mg/L	1		6010B	Dissolved
Cobalt	0.0030		0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.16		0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.015		0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.010		0.010	0.0023	mg/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-L5W (Continued) — Lab Sample ID: 720-88220-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.0085	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Zinc	0.18		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: DG-J5W — Lab Sample ID: 720-88220-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.6		0.50	0.076	ug/L	1		8260B	Total/NA
Vinyl chloride	0.37	J	0.50	0.20	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	76		52	31	ug/L	1		8015B	Total/NA
Arsenic	0.042		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.24		0.010	0.0014	mg/L	1		6010B	Dissolved
Beryllium	0.0030	B	0.0020	0.00033	mg/L	1		6010B	Dissolved
Chromium	0.0017	J	0.010	0.0015	mg/L	1		6010B	Dissolved
Cobalt	0.0013	J	0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.0042	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.0092		0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.0058	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0016	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Vanadium	0.0013	J	0.010	0.00070	mg/L	1		6010B	Dissolved
Zinc	0.053		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: DG-H5W — Lab Sample ID: 720-88220-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	8.8	J	50	8.4	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	3.2		0.50	0.076	ug/L	1		8260B	Total/NA
Trichloroethene	0.22	J	0.50	0.20	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	59		52	31	ug/L	1		8015B	Total/NA
Arsenic	0.028		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.26		0.010	0.0014	mg/L	1		6010B	Dissolved
Beryllium	0.00062	J B	0.0020	0.00033	mg/L	1		6010B	Dissolved
Chromium	0.0040	J	0.010	0.0015	mg/L	1		6010B	Dissolved
Cobalt	0.0023		0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.0048	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.0083		0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.0043	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0032	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Zinc	0.077		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: DG-H6W — Lab Sample ID: 720-88220-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.25	J	0.50	0.076	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	71		52	31	ug/L	1		8015B	Total/NA
Arsenic	0.044		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.24		0.010	0.0014	mg/L	1		6010B	Dissolved
Chromium	0.0019	J	0.010	0.0015	mg/L	1		6010B	Dissolved
Cobalt	0.0015	J	0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.0015	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.012		0.0050	0.0023	mg/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-H6W (Continued) — Lab Sample ID: 720-88220-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Molybdenum	0.0044	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0019	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Vanadium	0.0017	J	0.010	0.00070	mg/L	1		6010B	Dissolved
Zinc	0.039		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: DG-P5W — Lab Sample ID: 720-88220-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.11	J	0.50	0.11	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	6.0		0.50	0.076	ug/L	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	30	J	50	21	ug/L	1		8260B	Total/NA
Tetrachloroethene	0.33	J	0.50	0.20	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.75		0.50	0.13	ug/L	1		8260B	Total/NA
Trichloroethene	4.1		0.50	0.20	ug/L	1		8260B	Total/NA
Vinyl chloride	0.73		0.50	0.20	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	130		52	31	ug/L	1		8015B	Total/NA
Arsenic	0.014		0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.48		0.010	0.0014	mg/L	1		6010B	Dissolved
Beryllium	0.00034	J B	0.0020	0.00033	mg/L	1		6010B	Dissolved
Cobalt	0.0019	J	0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.0025	J	0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.015		0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.0057	J	0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0049	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Zinc	0.034		0.020	0.0096	mg/L	1		6010B	Dissolved

Client Sample ID: FB-1 — Lab Sample ID: 720-88220-11

No Detections.

Client Sample ID: FB-2 — Lab Sample ID: 720-88220-12

No Detections.

Client Sample ID: FB-3 — Lab Sample ID: 720-88220-13

No Detections.

Client Sample ID: TB-3 — Lab Sample ID: 720-88220-15

No Detections.

Client Sample ID: DUP-02 — Lab Sample ID: 720-88220-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) -C4-C12	31	J	50	21	ug/L	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	190		52	31	ug/L	1		8015B	Total/NA
Antimony	0.0078	J	0.010	0.0027	mg/L	1		6010B	Dissolved
Arsenic	0.0037	J	0.010	0.0026	mg/L	1		6010B	Dissolved
Barium	0.36		0.010	0.0014	mg/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-02 (Continued)

Lab Sample ID: 720-88220-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.0019	J	0.010	0.0015	mg/L	1		6010B	Dissolved
Cobalt	0.0030		0.0020	0.0012	mg/L	1		6010B	Dissolved
Copper	0.15		0.020	0.0015	mg/L	1		6010B	Dissolved
Lead	0.015		0.0050	0.0023	mg/L	1		6010B	Dissolved
Molybdenum	0.010		0.010	0.0023	mg/L	1		6010B	Dissolved
Nickel	0.0078	J	0.010	0.00080	mg/L	1		6010B	Dissolved
Zinc	0.17		0.020	0.0096	mg/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-C3W
Date Collected: 08/22/18 08:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-1
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/30/18 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*08/30/18 17:46*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/30/18 11:44	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/30/18 11:44	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/30/18 11:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091	ug/L			08/30/18 11:44	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/30/18 11:44	1
1,1-Dichloroethane	**0.14**	**J**	0.50	0.11	ug/L			08/30/18 11:44	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/30/18 11:44	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/30/18 11:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/30/18 11:44	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/30/18 11:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/30/18 11:44	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/30/18 11:44	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/30/18 11:44	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/30/18 11:44	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/30/18 11:44	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/30/18 11:44	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/30/18 11:44	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/30/18 11:44	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/30/18 11:44	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/30/18 11:44	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/30/18 11:44	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/30/18 11:44	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 11:44	1
2-Hexanone	ND		50	3.0	ug/L			08/30/18 11:44	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 11:44	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/30/18 11:44	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/30/18 11:44	1
Acetone	ND		50	20	ug/L			08/30/18 11:44	1
Benzene	ND		0.50	0.25	ug/L			08/30/18 11:44	1
Bromobenzene	ND		1.0	0.20	ug/L			08/30/18 11:44	1
Bromoform	ND		1.0	0.50	ug/L			08/30/18 11:44	1
Bromomethane	ND		1.0	0.49	ug/L			08/30/18 11:44	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/30/18 11:44	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/30/18 11:44	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/30/18 11:44	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/30/18 11:44	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/30/18 11:44	1
Chloroethane	ND		1.0	0.17	ug/L			08/30/18 11:44	1
Chloroform	ND		1.0	0.40	ug/L			08/30/18 11:44	1
Chloromethane	ND		1.0	0.19	ug/L			08/30/18 11:44	1
cis-1,2-Dichloroethene	**7.6**		0.50	0.076	ug/L			08/30/18 11:44	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/30/18 11:44	1
Dibromomethane	ND		0.50	0.30	ug/L			08/30/18 11:44	1

Client Sample ID: DG-C3W
Date Collected: 08/22/18 08:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/30/18 11:44	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/30/18 11:44	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/30/18 11:44	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/30/18 11:44	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/30/18 11:44	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/30/18 11:44	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/30/18 11:44	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/30/18 11:44	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/30/18 11:44	1
Naphthalene	ND		1.0	0.22	ug/L			08/30/18 11:44	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/30/18 11:44	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/30/18 11:44	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/30/18 11:44	1
Styrene	ND		0.50	0.22	ug/L			08/30/18 11:44	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/30/18 11:44	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/30/18 11:44	1
Toluene	ND		0.50	0.17	ug/L			08/30/18 11:44	1
trans-1,2-Dichloroethene	**0.53**		0.50	0.13	ug/L			08/30/18 11:44	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/30/18 11:44	1
Trichloroethene	**3.9**		0.50	0.20	ug/L			08/30/18 11:44	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/30/18 11:44	1
Vinyl acetate	ND		10	0.60	ug/L			08/30/18 11:44	1
Vinyl chloride	**0.78**		0.50	0.20	ug/L			08/30/18 11:44	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/30/18 11:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*72 - 130*		*08/30/18 11:44*	*1*
4-Bromofluorobenzene	*99*		*67 - 130*		*08/30/18 11:44*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/30/18 11:44*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**69**		51	31	ug/L		08/27/18 14:49	08/27/18 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*78*		*23 - 156*	*08/27/18 14:49*	*08/27/18 22:25*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.012**		0.010	0.0027	mg/L		08/25/18 11:40	08/28/18 11:40	1
Arsenic	**0.0071**	**J**	0.010	0.0026	mg/L		08/25/18 11:40	08/28/18 11:40	1
Barium	**0.27**		0.010	0.0014	mg/L		08/25/18 11:40	08/28/18 11:40	1
Beryllium	**0.00042**	**J B**	0.0020	0.00033	mg/L		08/25/18 11:40	08/28/18 11:40	1
Cadmium	ND		0.0025	0.0013	mg/L		08/25/18 11:40	08/28/18 11:40	1
Chromium	ND		0.010	0.0015	mg/L		08/25/18 11:40	08/28/18 11:40	1
Cobalt	**0.0047**		0.0020	0.0012	mg/L		08/25/18 11:40	08/28/18 11:40	1
Copper	**0.012**	**J**	0.020	0.0015	mg/L		08/25/18 11:40	08/28/18 11:40	1
Lead	**0.021**		0.0050	0.0023	mg/L		08/25/18 11:40	08/28/18 11:40	1
Molybdenum	**0.0077**	**J**	0.010	0.0023	mg/L		08/25/18 11:40	08/28/18 11:40	1
Nickel	**0.0060**	**J**	0.010	0.00080	mg/L		08/25/18 11:40	08/28/18 11:40	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-C3W
Date Collected: 08/22/18 08:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-1
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.020	0.0071	mg/L		08/25/18 11:40	08/28/18 11:40	1
Silver	ND		0.0050	0.0012	mg/L		08/25/18 11:40	08/28/18 11:40	1
Thallium	ND		0.010	0.0035	mg/L		08/25/18 11:40	08/28/18 11:40	1
Vanadium	ND		0.010	0.00070	mg/L		08/25/18 11:40	08/28/18 11:40	1
Zinc	**0.090**		0.020	0.0096	mg/L		08/25/18 11:40	08/28/18 11:40	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/28/18 18:59	08/29/18 20:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND	H	0.010	0.0037	mg/L			08/23/18 19:31	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-F3W
Date Collected: 08/22/18 08:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-2
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/30/18 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*08/30/18 18:12*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/30/18 12:14	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/30/18 12:14	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/30/18 12:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091	ug/L			08/30/18 12:14	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/30/18 12:14	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/30/18 12:14	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/30/18 12:14	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/30/18 12:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/30/18 12:14	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/30/18 12:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/30/18 12:14	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/30/18 12:14	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/30/18 12:14	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/30/18 12:14	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/30/18 12:14	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/30/18 12:14	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/30/18 12:14	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/30/18 12:14	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/30/18 12:14	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/30/18 12:14	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/30/18 12:14	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/30/18 12:14	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 12:14	1
2-Hexanone	ND		50	3.0	ug/L			08/30/18 12:14	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 12:14	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/30/18 12:14	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/30/18 12:14	1
Acetone	ND		50	20	ug/L			08/30/18 12:14	1
Benzene	ND		0.50	0.25	ug/L			08/30/18 12:14	1
Bromobenzene	ND		1.0	0.20	ug/L			08/30/18 12:14	1
Bromoform	ND		1.0	0.50	ug/L			08/30/18 12:14	1
Bromomethane	ND		1.0	0.49	ug/L			08/30/18 12:14	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/30/18 12:14	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/30/18 12:14	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/30/18 12:14	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/30/18 12:14	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/30/18 12:14	1
Chloroethane	ND		1.0	0.17	ug/L			08/30/18 12:14	1
Chloroform	ND		1.0	0.40	ug/L			08/30/18 12:14	1
Chloromethane	ND		1.0	0.19	ug/L			08/30/18 12:14	1
cis-1,2-Dichloroethene	**7.9**		0.50	0.076	ug/L			08/30/18 12:14	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/30/18 12:14	1
Dibromomethane	ND		0.50	0.30	ug/L			08/30/18 12:14	1

Client Sample ID: DG-F3W

Date Collected: 08/22/18 08:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/30/18 12:14	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/30/18 12:14	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/30/18 12:14	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/30/18 12:14	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/30/18 12:14	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/30/18 12:14	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/30/18 12:14	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/30/18 12:14	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/30/18 12:14	1
Naphthalene	ND		1.0	0.22	ug/L			08/30/18 12:14	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/30/18 12:14	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/30/18 12:14	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/30/18 12:14	1
Styrene	ND		0.50	0.22	ug/L			08/30/18 12:14	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/30/18 12:14	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/30/18 12:14	1
Toluene	ND		0.50	0.17	ug/L			08/30/18 12:14	1
trans-1,2-Dichloroethene	**0.39**	**J**	0.50	0.13	ug/L			08/30/18 12:14	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/30/18 12:14	1
Trichloroethene	**0.60**		0.50	0.20	ug/L			08/30/18 12:14	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/30/18 12:14	1
Vinyl acetate	ND		10	0.60	ug/L			08/30/18 12:14	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/30/18 12:14	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/30/18 12:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 130*		*08/30/18 12:14*	*1*
4-Bromofluorobenzene	*99*		*67 - 130*		*08/30/18 12:14*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/30/18 12:14*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**120**		52	31	ug/L		08/27/18 14:49	08/27/18 22:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*84*		*23 - 156*	*08/27/18 14:49*	*08/27/18 22:55*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.0034**	**J**	0.010	0.0027	mg/L		08/25/18 11:40	08/28/18 11:06	1
Arsenic	**0.19**		0.010	0.0026	mg/L		08/25/18 11:40	08/28/18 11:06	1
Barium	**0.20**		0.010	0.0014	mg/L		08/25/18 11:40	08/28/18 11:06	1
Beryllium	**0.00069**	**J B**	0.0020	0.00033	mg/L		08/25/18 11:40	08/28/18 11:06	1
Cadmium	ND		0.0025	0.0013	mg/L		08/25/18 11:40	08/28/18 11:06	1
Chromium	ND		0.010	0.0015	mg/L		08/25/18 11:40	08/28/18 11:06	1
Cobalt	**0.0019**	**J**	0.0020	0.0012	mg/L		08/25/18 11:40	08/28/18 11:06	1
Copper	**0.0039**	**J**	0.020	0.0015	mg/L		08/25/18 11:40	08/28/18 11:06	1
Lead	**0.011**		0.0050	0.0023	mg/L		08/25/18 11:40	08/28/18 11:06	1
Molybdenum	**0.0059**	**J**	0.010	0.0023	mg/L		08/25/18 11:40	08/28/18 11:06	1
Nickel	**0.0029**	**J**	0.010	0.00080	mg/L		08/25/18 11:40	08/28/18 11:06	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-F3W
Date Collected: 08/22/18 08:30
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-2
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.020	0.0071	mg/L		08/25/18 11:40	08/28/18 11:06	1
Silver	ND		0.0050	0.0012	mg/L		08/25/18 11:40	08/28/18 11:06	1
Thallium	ND		0.010	0.0035	mg/L		08/25/18 11:40	08/28/18 11:06	1
Vanadium	**0.00097**	**J**	0.010	0.00070	mg/L		08/25/18 11:40	08/28/18 11:06	1
Zinc	**0.036**		0.020	0.0096	mg/L		08/25/18 11:40	08/28/18 11:06	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/28/18 18:59	08/29/18 20:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND	H	0.010	0.0037	mg/L			08/23/18 19:31	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-I3W
Date Collected: 08/23/18 07:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-3
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/30/18 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*08/30/18 18:39*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/30/18 12:43	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/30/18 12:43	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/30/18 12:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091	ug/L			08/30/18 12:43	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/30/18 12:43	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/30/18 12:43	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/30/18 12:43	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/30/18 12:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/30/18 12:43	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/30/18 12:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/30/18 12:43	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/30/18 12:43	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/30/18 12:43	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/30/18 12:43	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/30/18 12:43	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/30/18 12:43	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/30/18 12:43	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/30/18 12:43	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/30/18 12:43	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/30/18 12:43	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/30/18 12:43	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/30/18 12:43	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 12:43	1
2-Hexanone	ND		50	3.0	ug/L			08/30/18 12:43	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 12:43	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/30/18 12:43	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/30/18 12:43	1
Acetone	ND		50	20	ug/L			08/30/18 12:43	1
Benzene	ND		0.50	0.25	ug/L			08/30/18 12:43	1
Bromobenzene	ND		1.0	0.20	ug/L			08/30/18 12:43	1
Bromoform	ND		1.0	0.50	ug/L			08/30/18 12:43	1
Bromomethane	ND		1.0	0.49	ug/L			08/30/18 12:43	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/30/18 12:43	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/30/18 12:43	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/30/18 12:43	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/30/18 12:43	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/30/18 12:43	1
Chloroethane	ND		1.0	0.17	ug/L			08/30/18 12:43	1
Chloroform	ND		1.0	0.40	ug/L			08/30/18 12:43	1
Chloromethane	ND		1.0	0.19	ug/L			08/30/18 12:43	1
cis-1,2-Dichloroethene	**6.0**		0.50	0.076	ug/L			08/30/18 12:43	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/30/18 12:43	1
Dibromomethane	ND		0.50	0.30	ug/L			08/30/18 12:43	1

Client Sample ID: DG-I3W

Date Collected: 08/23/18 07:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/30/18 12:43	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/30/18 12:43	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/30/18 12:43	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/30/18 12:43	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/30/18 12:43	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/30/18 12:43	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/30/18 12:43	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/30/18 12:43	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/30/18 12:43	1
Naphthalene	ND		1.0	0.22	ug/L			08/30/18 12:43	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/30/18 12:43	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/30/18 12:43	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/30/18 12:43	1
Styrene	ND		0.50	0.22	ug/L			08/30/18 12:43	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/30/18 12:43	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/30/18 12:43	1
Toluene	ND		0.50	0.17	ug/L			08/30/18 12:43	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/30/18 12:43	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/30/18 12:43	1
Trichloroethene	**0.52**		0.50	0.20	ug/L			08/30/18 12:43	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/30/18 12:43	1
Vinyl acetate	ND		10	0.60	ug/L			08/30/18 12:43	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/30/18 12:43	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/30/18 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 130*		*08/30/18 12:43*	*1*
4-Bromofluorobenzene	*98*		*67 - 130*		*08/30/18 12:43*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/30/18 12:43*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**57**		52	31	ug/L		08/27/18 14:49	08/27/18 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*71*		*23 - 156*	*08/27/18 14:49*	*08/27/18 23:24*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.0028**	**J**	0.010	0.0027	mg/L		08/25/18 11:40	08/28/18 11:11	1
Arsenic	**0.084**		0.010	0.0026	mg/L		08/25/18 11:40	08/28/18 11:11	1
Barium	**0.072**		0.010	0.0014	mg/L		08/25/18 11:40	08/28/18 11:11	1
Beryllium	**0.00089**	**J B**	0.0020	0.00033	mg/L		08/25/18 11:40	08/28/18 11:11	1
Cadmium	ND		0.0025	0.0013	mg/L		08/25/18 11:40	08/28/18 11:11	1
Chromium	ND		0.010	0.0015	mg/L		08/25/18 11:40	08/28/18 11:11	1
Cobalt	ND		0.0020	0.0012	mg/L		08/25/18 11:40	08/28/18 11:11	1
Copper	**0.0032**	**J**	0.020	0.0015	mg/L		08/25/18 11:40	08/28/18 11:11	1
Lead	**0.0086**		0.0050	0.0023	mg/L		08/25/18 11:40	08/28/18 11:11	1
Molybdenum	**0.0063**	**J**	0.010	0.0023	mg/L		08/25/18 11:40	08/28/18 11:11	1
Nickel	**0.0018**	**J**	0.010	0.00080	mg/L		08/25/18 11:40	08/28/18 11:11	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-I3W
Date Collected: 08/23/18 07:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-3
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.020	0.0071	mg/L		08/25/18 11:40	08/28/18 11:11	1
Silver	ND		0.0050	0.0012	mg/L		08/25/18 11:40	08/28/18 11:11	1
Thallium	ND		0.010	0.0035	mg/L		08/25/18 11:40	08/28/18 11:11	1
Vanadium	**0.0020**	**J**	0.010	0.00070	mg/L		08/25/18 11:40	08/28/18 11:11	1
Zinc	**0.025**		0.020	0.0096	mg/L		08/25/18 11:40	08/28/18 11:11	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/28/18 18:59	08/29/18 20:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0037	mg/L			08/23/18 19:31	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-K3W
Date Collected: 08/23/18 08:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-4
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/30/18 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*08/30/18 19:05*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/30/18 13:14	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/30/18 13:14	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/30/18 13:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091	ug/L			08/30/18 13:14	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/30/18 13:14	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/30/18 13:14	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/30/18 13:14	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/30/18 13:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/30/18 13:14	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/30/18 13:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/30/18 13:14	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/30/18 13:14	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/30/18 13:14	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/30/18 13:14	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/30/18 13:14	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/30/18 13:14	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/30/18 13:14	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/30/18 13:14	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/30/18 13:14	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/30/18 13:14	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/30/18 13:14	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/30/18 13:14	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 13:14	1
2-Hexanone	ND		50	3.0	ug/L			08/30/18 13:14	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 13:14	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/30/18 13:14	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/30/18 13:14	1
Acetone	ND		50	20	ug/L			08/30/18 13:14	1
Benzene	ND		0.50	0.25	ug/L			08/30/18 13:14	1
Bromobenzene	ND		1.0	0.20	ug/L			08/30/18 13:14	1
Bromoform	ND		1.0	0.50	ug/L			08/30/18 13:14	1
Bromomethane	ND		1.0	0.49	ug/L			08/30/18 13:14	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/30/18 13:14	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/30/18 13:14	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/30/18 13:14	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/30/18 13:14	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/30/18 13:14	1
Chloroethane	ND		1.0	0.17	ug/L			08/30/18 13:14	1
Chloroform	ND		1.0	0.40	ug/L			08/30/18 13:14	1
Chloromethane	ND		1.0	0.19	ug/L			08/30/18 13:14	1
cis-1,2-Dichloroethene	**3.9**		0.50	0.076	ug/L			08/30/18 13:14	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/30/18 13:14	1
Dibromomethane	ND		0.50	0.30	ug/L			08/30/18 13:14	1

Client Sample ID: DG-K3W

Date Collected: 08/23/18 08:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/30/18 13:14	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/30/18 13:14	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/30/18 13:14	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/30/18 13:14	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/30/18 13:14	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/30/18 13:14	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/30/18 13:14	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/30/18 13:14	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/30/18 13:14	1
Naphthalene	ND		1.0	0.22	ug/L			08/30/18 13:14	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/30/18 13:14	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/30/18 13:14	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/30/18 13:14	1
Styrene	ND		0.50	0.22	ug/L			08/30/18 13:14	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/30/18 13:14	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/30/18 13:14	1
Toluene	ND		0.50	0.17	ug/L			08/30/18 13:14	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/30/18 13:14	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/30/18 13:14	1
Trichloroethene	ND		0.50	0.20	ug/L			08/30/18 13:14	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/30/18 13:14	1
Vinyl acetate	ND		10	0.60	ug/L			08/30/18 13:14	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/30/18 13:14	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/30/18 13:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 130*		*08/30/18 13:14*	*1*
4-Bromofluorobenzene	*97*		*67 - 130*		*08/30/18 13:14*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/30/18 13:14*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**52**		52	31	ug/L		08/27/18 14:49	08/27/18 23:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*71*		*23 - 156*	*08/27/18 14:49*	*08/27/18 23:53*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/25/18 11:40	08/28/18 11:16	1
Arsenic	**0.063**		0.010	0.0026	mg/L		08/25/18 11:40	08/28/18 11:16	1
Barium	**0.13**		0.010	0.0014	mg/L		08/25/18 11:40	08/28/18 11:16	1
Beryllium	ND		0.0020	0.00033	mg/L		08/25/18 11:40	08/28/18 11:16	1
Cadmium	ND		0.0025	0.0013	mg/L		08/25/18 11:40	08/28/18 11:16	1
Chromium	ND		0.010	0.0015	mg/L		08/25/18 11:40	08/28/18 11:16	1
Cobalt	**0.0012**	**J**	0.0020	0.0012	mg/L		08/25/18 11:40	08/28/18 11:16	1
Copper	**0.0042**	**J**	0.020	0.0015	mg/L		08/25/18 11:40	08/28/18 11:16	1
Lead	**0.0096**		0.0050	0.0023	mg/L		08/25/18 11:40	08/28/18 11:16	1
Molybdenum	**0.0049**	**J**	0.010	0.0023	mg/L		08/25/18 11:40	08/28/18 11:16	1
Nickel	**0.0016**	**J**	0.010	0.00080	mg/L		08/25/18 11:40	08/28/18 11:16	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-K3W
Date Collected: 08/23/18 08:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-4
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.020	0.0071	mg/L		08/25/18 11:40	08/28/18 11:16	1
Silver	ND		0.0050	0.0012	mg/L		08/25/18 11:40	08/28/18 11:16	1
Thallium	ND		0.010	0.0035	mg/L		08/25/18 11:40	08/28/18 11:16	1
Vanadium	**0.00097**	**J**	0.010	0.00070	mg/L		08/25/18 11:40	08/28/18 11:16	1
Zinc	**0.050**		0.020	0.0096	mg/L		08/25/18 11:40	08/28/18 11:16	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/28/18 18:59	08/29/18 20:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0037	mg/L			08/23/18 19:31	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-M3W
Date Collected: 08/23/18 08:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-5
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/30/18 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*08/30/18 19:32*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/30/18 13:45	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/30/18 13:45	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/30/18 13:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091	ug/L			08/30/18 13:45	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/30/18 13:45	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/30/18 13:45	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/30/18 13:45	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/30/18 13:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/30/18 13:45	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/30/18 13:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/30/18 13:45	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/30/18 13:45	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/30/18 13:45	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/30/18 13:45	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/30/18 13:45	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/30/18 13:45	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/30/18 13:45	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/30/18 13:45	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/30/18 13:45	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/30/18 13:45	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/30/18 13:45	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/30/18 13:45	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 13:45	1
2-Hexanone	ND		50	3.0	ug/L			08/30/18 13:45	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 13:45	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/30/18 13:45	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/30/18 13:45	1
Acetone	ND		50	20	ug/L			08/30/18 13:45	1
Benzene	ND		0.50	0.25	ug/L			08/30/18 13:45	1
Bromobenzene	ND		1.0	0.20	ug/L			08/30/18 13:45	1
Bromoform	ND		1.0	0.50	ug/L			08/30/18 13:45	1
Bromomethane	ND		1.0	0.49	ug/L			08/30/18 13:45	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/30/18 13:45	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/30/18 13:45	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/30/18 13:45	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/30/18 13:45	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/30/18 13:45	1
Chloroethane	ND		1.0	0.17	ug/L			08/30/18 13:45	1
Chloroform	ND		1.0	0.40	ug/L			08/30/18 13:45	1
Chloromethane	ND		1.0	0.19	ug/L			08/30/18 13:45	1
cis-1,2-Dichloroethene	**1.3**		0.50	0.076	ug/L			08/30/18 13:45	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/30/18 13:45	1
Dibromomethane	ND		0.50	0.30	ug/L			08/30/18 13:45	1

Client Sample ID: DG-M3W

Date Collected: 08/23/18 08:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/30/18 13:45	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/30/18 13:45	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/30/18 13:45	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/30/18 13:45	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/30/18 13:45	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/30/18 13:45	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/30/18 13:45	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/30/18 13:45	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/30/18 13:45	1
Naphthalene	ND		1.0	0.22	ug/L			08/30/18 13:45	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/30/18 13:45	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/30/18 13:45	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/30/18 13:45	1
Styrene	ND		0.50	0.22	ug/L			08/30/18 13:45	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/30/18 13:45	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/30/18 13:45	1
Toluene	ND		0.50	0.17	ug/L			08/30/18 13:45	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/30/18 13:45	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/30/18 13:45	1
Trichloroethene	ND		0.50	0.20	ug/L			08/30/18 13:45	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/30/18 13:45	1
Vinyl acetate	ND		10	0.60	ug/L			08/30/18 13:45	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/30/18 13:45	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/30/18 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 130*		*08/30/18 13:45*	*1*
4-Bromofluorobenzene	*99*		*67 - 130*		*08/30/18 13:45*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/30/18 13:45*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**56**		51	31	ug/L		08/27/18 14:49	08/28/18 00:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*65*		*23 - 156*	*08/27/18 14:49*	*08/28/18 00:22*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.0036**	**J**	0.010	0.0027	mg/L		08/25/18 11:40	08/28/18 11:30	1
Arsenic	**0.031**		0.010	0.0026	mg/L		08/25/18 11:40	08/28/18 11:30	1
Barium	**0.089**		0.010	0.0014	mg/L		08/25/18 11:40	08/28/18 11:30	1
Beryllium	**0.0011**	**J B**	0.0020	0.00033	mg/L		08/25/18 11:40	08/28/18 11:30	1
Cadmium	ND		0.0025	0.0013	mg/L		08/25/18 11:40	08/28/18 11:30	1
Chromium	ND		0.010	0.0015	mg/L		08/25/18 11:40	08/28/18 11:30	1
Cobalt	ND		0.0020	0.0012	mg/L		08/25/18 11:40	08/28/18 11:30	1
Copper	**0.0044**	**J**	0.020	0.0015	mg/L		08/25/18 11:40	08/28/18 11:30	1
Lead	**0.0081**		0.0050	0.0023	mg/L		08/25/18 11:40	08/28/18 11:30	1
Molybdenum	**0.0054**	**J**	0.010	0.0023	mg/L		08/25/18 11:40	08/28/18 11:30	1
Nickel	**0.0015**	**J**	0.010	0.00080	mg/L		08/25/18 11:40	08/28/18 11:30	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-M3W
Date Collected: 08/23/18 08:45
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-5
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.020	0.0071	mg/L		08/25/18 11:40	08/28/18 11:30	1
Silver	ND		0.0050	0.0012	mg/L		08/25/18 11:40	08/28/18 11:30	1
Thallium	ND		0.010	0.0035	mg/L		08/25/18 11:40	08/28/18 11:30	1
Vanadium	**0.0010**	**J**	0.010	0.00070	mg/L		08/25/18 11:40	08/28/18 11:30	1
Zinc	**0.037**		0.020	0.0096	mg/L		08/25/18 11:40	08/28/18 11:30	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/28/18 18:59	08/29/18 20:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0037	mg/L			08/23/18 19:31	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-L5W
Date Collected: 08/23/18 09:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-6
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/30/18 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*08/30/18 19:58*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/30/18 14:16	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/30/18 14:16	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/30/18 14:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091	ug/L			08/30/18 14:16	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/30/18 14:16	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/30/18 14:16	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/30/18 14:16	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/30/18 14:16	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/30/18 14:16	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/30/18 14:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/30/18 14:16	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/30/18 14:16	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/30/18 14:16	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/30/18 14:16	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/30/18 14:16	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/30/18 14:16	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/30/18 14:16	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/30/18 14:16	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/30/18 14:16	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/30/18 14:16	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/30/18 14:16	1
2-Butanone (MEK)	**8.8**	**J**	50	8.4	ug/L			08/30/18 14:16	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 14:16	1
2-Hexanone	ND		50	3.0	ug/L			08/30/18 14:16	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 14:16	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/30/18 14:16	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/30/18 14:16	1
Acetone	ND		50	20	ug/L			08/30/18 14:16	1
Benzene	**0.27**	**J**	0.50	0.25	ug/L			08/30/18 14:16	1
Bromobenzene	ND		1.0	0.20	ug/L			08/30/18 14:16	1
Bromoform	ND		1.0	0.50	ug/L			08/30/18 14:16	1
Bromomethane	ND		1.0	0.49	ug/L			08/30/18 14:16	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/30/18 14:16	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/30/18 14:16	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/30/18 14:16	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/30/18 14:16	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/30/18 14:16	1
Chloroethane	ND		1.0	0.17	ug/L			08/30/18 14:16	1
Chloroform	ND		1.0	0.40	ug/L			08/30/18 14:16	1
Chloromethane	ND		1.0	0.19	ug/L			08/30/18 14:16	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/30/18 14:16	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/30/18 14:16	1
Dibromomethane	ND		0.50	0.30	ug/L			08/30/18 14:16	1

Client Sample ID: DG-L5W
Date Collected: 08/23/18 09:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/30/18 14:16	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/30/18 14:16	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/30/18 14:16	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/30/18 14:16	1
Gasoline Range Organics (GRO) -C4-C12	**57**		50	21	ug/L			08/30/18 14:16	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/30/18 14:16	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/30/18 14:16	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/30/18 14:16	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/30/18 14:16	1
Naphthalene	ND		1.0	0.22	ug/L			08/30/18 14:16	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/30/18 14:16	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/30/18 14:16	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/30/18 14:16	1
Styrene	ND		0.50	0.22	ug/L			08/30/18 14:16	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/30/18 14:16	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/30/18 14:16	1
Toluene	**0.26**	**J**	0.50	0.17	ug/L			08/30/18 14:16	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/30/18 14:16	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/30/18 14:16	1
Trichloroethene	ND		0.50	0.20	ug/L			08/30/18 14:16	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/30/18 14:16	1
Vinyl acetate	ND		10	0.60	ug/L			08/30/18 14:16	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/30/18 14:16	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/30/18 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*72 - 130*		*08/30/18 14:16*	*1*
4-Bromofluorobenzene	*98*		*67 - 130*		*08/30/18 14:16*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/30/18 14:16*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**170**		51	31	ug/L		08/27/18 14:49	08/28/18 00:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*63*		*23 - 156*	*08/27/18 14:49*	*08/28/18 00:52*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.0066**	**J**	0.010	0.0027	mg/L		08/25/18 11:40	08/28/18 11:35	1
Arsenic	**0.0032**	**J**	0.010	0.0026	mg/L		08/25/18 11:40	08/28/18 11:35	1
Barium	**0.36**		0.010	0.0014	mg/L		08/25/18 11:40	08/28/18 11:35	1
Beryllium	**0.0010**	**J B**	0.0020	0.00033	mg/L		08/25/18 11:40	08/28/18 11:35	1
Cadmium	ND		0.0025	0.0013	mg/L		08/25/18 11:40	08/28/18 11:35	1
Chromium	ND		0.010	0.0015	mg/L		08/25/18 11:40	08/28/18 11:35	1
Cobalt	**0.0030**		0.0020	0.0012	mg/L		08/25/18 11:40	08/28/18 11:35	1
Copper	**0.16**		0.020	0.0015	mg/L		08/25/18 11:40	08/28/18 11:35	1
Lead	**0.015**		0.0050	0.0023	mg/L		08/25/18 11:40	08/28/18 11:35	1
Molybdenum	**0.010**		0.010	0.0023	mg/L		08/25/18 11:40	08/28/18 11:35	1
Nickel	**0.0085**	**J**	0.010	0.00080	mg/L		08/25/18 11:40	08/28/18 11:35	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-L5W
Date Collected: 08/23/18 09:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-6
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.020	0.0071	mg/L		08/25/18 11:40	08/28/18 11:35	1
Silver	ND		0.0050	0.0012	mg/L		08/25/18 11:40	08/28/18 11:35	1
Thallium	ND		0.010	0.0035	mg/L		08/25/18 11:40	08/28/18 11:35	1
Vanadium	ND		0.010	0.00070	mg/L		08/25/18 11:40	08/28/18 11:35	1
Zinc	0.18		0.020	0.0096	mg/L		08/25/18 11:40	08/28/18 11:35	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/28/18 18:59	08/29/18 20:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0037	mg/L			08/23/18 19:31	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-J5W
Date Collected: 08/23/18 10:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-7
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/30/18 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*08/30/18 16:28*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/30/18 15:54	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/30/18 15:54	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/30/18 15:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091	ug/L			08/30/18 15:54	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/30/18 15:54	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/30/18 15:54	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/30/18 15:54	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/30/18 15:54	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/30/18 15:54	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/30/18 15:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/30/18 15:54	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/30/18 15:54	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/30/18 15:54	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/30/18 15:54	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/30/18 15:54	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/30/18 15:54	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/30/18 15:54	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/30/18 15:54	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/30/18 15:54	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/30/18 15:54	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/30/18 15:54	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/30/18 15:54	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 15:54	1
2-Hexanone	ND		50	3.0	ug/L			08/30/18 15:54	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 15:54	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/30/18 15:54	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/30/18 15:54	1
Acetone	ND		50	20	ug/L			08/30/18 15:54	1
Benzene	ND		0.50	0.25	ug/L			08/30/18 15:54	1
Bromobenzene	ND		1.0	0.20	ug/L			08/30/18 15:54	1
Bromoform	ND		1.0	0.50	ug/L			08/30/18 15:54	1
Bromomethane	ND		1.0	0.49	ug/L			08/30/18 15:54	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/30/18 15:54	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/30/18 15:54	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/30/18 15:54	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/30/18 15:54	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/30/18 15:54	1
Chloroethane	ND		1.0	0.17	ug/L			08/30/18 15:54	1
Chloroform	ND		1.0	0.40	ug/L			08/30/18 15:54	1
Chloromethane	ND		1.0	0.19	ug/L			08/30/18 15:54	1
cis-1,2-Dichloroethene	**1.6**		0.50	0.076	ug/L			08/30/18 15:54	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/30/18 15:54	1
Dibromomethane	ND		0.50	0.30	ug/L			08/30/18 15:54	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-J5W
Date Collected: 08/23/18 10:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/30/18 15:54	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/30/18 15:54	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/30/18 15:54	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/30/18 15:54	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/30/18 15:54	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/30/18 15:54	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/30/18 15:54	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/30/18 15:54	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/30/18 15:54	1
Naphthalene	ND		1.0	0.22	ug/L			08/30/18 15:54	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/30/18 15:54	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/30/18 15:54	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/30/18 15:54	1
Styrene	ND		0.50	0.22	ug/L			08/30/18 15:54	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/30/18 15:54	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/30/18 15:54	1
Toluene	ND		0.50	0.17	ug/L			08/30/18 15:54	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/30/18 15:54	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/30/18 15:54	1
Trichloroethene	ND		0.50	0.20	ug/L			08/30/18 15:54	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/30/18 15:54	1
Vinyl acetate	ND		10	0.60	ug/L			08/30/18 15:54	1
Vinyl chloride	**0.37**	**J**	0.50	0.20	ug/L			08/30/18 15:54	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/30/18 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*72 - 130*		*08/30/18 15:54*	*1*
4-Bromofluorobenzene	*99*		*67 - 130*		*08/30/18 15:54*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/30/18 15:54*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**76**		52	31	ug/L		08/27/18 14:49	08/28/18 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*59*		*23 - 156*	*08/27/18 14:49*	*08/28/18 01:21*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/25/18 11:40	08/28/18 11:02	1
Arsenic	**0.042**		0.010	0.0026	mg/L		08/25/18 11:40	08/28/18 11:02	1
Barium	**0.24**		0.010	0.0014	mg/L		08/25/18 11:40	08/28/18 11:02	1
Beryllium	**0.0030**	**B**	0.0020	0.00033	mg/L		08/25/18 11:40	08/28/18 11:02	1
Cadmium	ND		0.0025	0.0013	mg/L		08/25/18 11:40	08/28/18 11:02	1
Chromium	**0.0017**	**J**	0.010	0.0015	mg/L		08/25/18 11:40	08/28/18 11:02	1
Cobalt	**0.0013**	**J**	0.0020	0.0012	mg/L		08/25/18 11:40	08/28/18 11:02	1
Copper	**0.0042**	**J**	0.020	0.0015	mg/L		08/25/18 11:40	08/28/18 11:02	1
Lead	**0.0092**		0.0050	0.0023	mg/L		08/25/18 11:40	08/28/18 11:02	1
Molybdenum	**0.0058**	**J**	0.010	0.0023	mg/L		08/25/18 11:40	08/28/18 11:02	1
Nickel	**0.0016**	**J**	0.010	0.00080	mg/L		08/25/18 11:40	08/28/18 11:02	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-J5W
Date Collected: 08/23/18 10:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-7
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.020	0.0071	mg/L		08/25/18 11:40	08/28/18 11:02	1
Silver	ND		0.0050	0.0012	mg/L		08/25/18 11:40	08/28/18 11:02	1
Thallium	ND		0.010	0.0035	mg/L		08/25/18 11:40	08/28/18 11:02	1
Vanadium	**0.0013**	**J**	0.010	0.00070	mg/L		08/25/18 11:40	08/28/18 11:02	1
Zinc	**0.053**		0.020	0.0096	mg/L		08/25/18 11:40	08/28/18 11:02	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/28/18 18:59	08/29/18 20:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0037	mg/L			08/23/18 19:31	1

Client Sample ID: DG-H5W

Date Collected: 08/23/18 10:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-8

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/30/18 20:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*08/30/18 20:24*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/30/18 11:55	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/30/18 11:55	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/30/18 11:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/30/18 11:55	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/30/18 11:55	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/30/18 11:55	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/30/18 11:55	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/30/18 11:55	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/30/18 11:55	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/30/18 11:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/30/18 11:55	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/30/18 11:55	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/30/18 11:55	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/30/18 11:55	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/30/18 11:55	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/30/18 11:55	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/30/18 11:55	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/30/18 11:55	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/30/18 11:55	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/30/18 11:55	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/30/18 11:55	1
2-Butanone (MEK)	**8.8**	**J**	50	8.4	ug/L			08/30/18 11:55	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 11:55	1
2-Hexanone	ND		50	3.0	ug/L			08/30/18 11:55	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 11:55	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/30/18 11:55	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/30/18 11:55	1
Acetone	ND		50	20	ug/L			08/30/18 11:55	1
Benzene	ND		0.50	0.25	ug/L			08/30/18 11:55	1
Bromobenzene	ND		1.0	0.20	ug/L			08/30/18 11:55	1
Bromoform	ND		1.0	0.50	ug/L			08/30/18 11:55	1
Bromomethane	ND		1.0	0.49	ug/L			08/30/18 11:55	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/30/18 11:55	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/30/18 11:55	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/30/18 11:55	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/30/18 11:55	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/30/18 11:55	1
Chloroethane	ND		1.0	0.17	ug/L			08/30/18 11:55	1
Chloroform	ND		1.0	0.40	ug/L			08/30/18 11:55	1
Chloromethane	ND		1.0	0.19	ug/L			08/30/18 11:55	1
cis-1,2-Dichloroethene	**3.2**		0.50	0.076	ug/L			08/30/18 11:55	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/30/18 11:55	1
Dibromomethane	ND		0.50	0.30	ug/L			08/30/18 11:55	1

Client Sample ID: DG-H5W

Date Collected: 08/23/18 10:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-8

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/30/18 11:55	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/30/18 11:55	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/30/18 11:55	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/30/18 11:55	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/30/18 11:55	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/30/18 11:55	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/30/18 11:55	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/30/18 11:55	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/30/18 11:55	1
Naphthalene	ND		1.0	0.22	ug/L			08/30/18 11:55	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/30/18 11:55	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/30/18 11:55	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/30/18 11:55	1
Styrene	ND		0.50	0.22	ug/L			08/30/18 11:55	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/30/18 11:55	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/30/18 11:55	1
Toluene	ND		0.50	0.17	ug/L			08/30/18 11:55	1
trans-1,2-Dichloroethene	ND	*	0.50	0.13	ug/L			08/30/18 11:55	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/30/18 11:55	1
Trichloroethene	**0.22**	**J**	0.50	0.20	ug/L			08/30/18 11:55	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/30/18 11:55	1
Vinyl acetate	ND		10	0.60	ug/L			08/30/18 11:55	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/30/18 11:55	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/30/18 11:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*72 - 130*		*08/30/18 11:55*	*1*
4-Bromofluorobenzene	*92*		*67 - 130*		*08/30/18 11:55*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/30/18 11:55*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**59**		52	31	ug/L		08/27/18 14:49	08/28/18 01:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*60*		*23 - 156*	*08/27/18 14:49*	*08/28/18 01:51*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/25/18 11:40	08/28/18 11:45	1
Arsenic	**0.028**		0.010	0.0026	mg/L		08/25/18 11:40	08/28/18 11:45	1
Barium	**0.26**		0.010	0.0014	mg/L		08/25/18 11:40	08/28/18 11:45	1
Beryllium	**0.00062**	**J B**	0.0020	0.00033	mg/L		08/25/18 11:40	08/28/18 11:45	1
Cadmium	ND		0.0025	0.0013	mg/L		08/25/18 11:40	08/28/18 11:45	1
Chromium	**0.0040**	**J**	0.010	0.0015	mg/L		08/25/18 11:40	08/28/18 11:45	1
Cobalt	**0.0023**		0.0020	0.0012	mg/L		08/25/18 11:40	08/28/18 11:45	1
Copper	**0.0048**	**J**	0.020	0.0015	mg/L		08/25/18 11:40	08/28/18 11:45	1
Lead	**0.0083**		0.0050	0.0023	mg/L		08/25/18 11:40	08/28/18 11:45	1
Molybdenum	**0.0043**	**J**	0.010	0.0023	mg/L		08/25/18 11:40	08/28/18 11:45	1
Nickel	**0.0032**	**J**	0.010	0.00080	mg/L		08/25/18 11:40	08/28/18 11:45	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-H5W
Date Collected: 08/23/18 10:15
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-8
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.020	0.0071	mg/L		08/25/18 11:40	08/28/18 11:45	1
Silver	ND		0.0050	0.0012	mg/L		08/25/18 11:40	08/28/18 11:45	1
Thallium	ND		0.010	0.0035	mg/L		08/25/18 11:40	08/28/18 11:45	1
Vanadium	ND		0.010	0.00070	mg/L		08/25/18 11:40	08/28/18 11:45	1
Zinc	0.077		0.020	0.0096	mg/L		08/25/18 11:40	08/28/18 11:45	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/28/18 18:59	08/29/18 20:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0037	mg/L			08/23/18 19:31	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-H6W
Date Collected: 08/23/18 10:35
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-9
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/30/18 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*08/30/18 20:50*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/30/18 12:24	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/30/18 12:24	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/30/18 12:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/30/18 12:24	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/30/18 12:24	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/30/18 12:24	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/30/18 12:24	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/30/18 12:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/30/18 12:24	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/30/18 12:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/30/18 12:24	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/30/18 12:24	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/30/18 12:24	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/30/18 12:24	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/30/18 12:24	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/30/18 12:24	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/30/18 12:24	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/30/18 12:24	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/30/18 12:24	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/30/18 12:24	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/30/18 12:24	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/30/18 12:24	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 12:24	1
2-Hexanone	ND		50	3.0	ug/L			08/30/18 12:24	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 12:24	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/30/18 12:24	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/30/18 12:24	1
Acetone	ND		50	20	ug/L			08/30/18 12:24	1
Benzene	ND		0.50	0.25	ug/L			08/30/18 12:24	1
Bromobenzene	ND		1.0	0.20	ug/L			08/30/18 12:24	1
Bromoform	ND		1.0	0.50	ug/L			08/30/18 12:24	1
Bromomethane	ND		1.0	0.49	ug/L			08/30/18 12:24	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/30/18 12:24	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/30/18 12:24	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/30/18 12:24	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/30/18 12:24	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/30/18 12:24	1
Chloroethane	ND		1.0	0.17	ug/L			08/30/18 12:24	1
Chloroform	ND		1.0	0.40	ug/L			08/30/18 12:24	1
Chloromethane	ND		1.0	0.19	ug/L			08/30/18 12:24	1
cis-1,2-Dichloroethene	**0.25**	**J**	0.50	0.076	ug/L			08/30/18 12:24	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/30/18 12:24	1
Dibromomethane	ND		0.50	0.30	ug/L			08/30/18 12:24	1

Client Sample ID: DG-H6W
Date Collected: 08/23/18 10:35
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/30/18 12:24	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/30/18 12:24	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/30/18 12:24	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/30/18 12:24	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/30/18 12:24	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/30/18 12:24	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/30/18 12:24	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/30/18 12:24	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/30/18 12:24	1
Naphthalene	ND		1.0	0.22	ug/L			08/30/18 12:24	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/30/18 12:24	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/30/18 12:24	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/30/18 12:24	1
Styrene	ND		0.50	0.22	ug/L			08/30/18 12:24	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/30/18 12:24	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/30/18 12:24	1
Toluene	ND		0.50	0.17	ug/L			08/30/18 12:24	1
trans-1,2-Dichloroethene	ND	*	0.50	0.13	ug/L			08/30/18 12:24	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/30/18 12:24	1
Trichloroethene	ND		0.50	0.20	ug/L			08/30/18 12:24	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/30/18 12:24	1
Vinyl acetate	ND		10	0.60	ug/L			08/30/18 12:24	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/30/18 12:24	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/30/18 12:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*72 - 130*		*08/30/18 12:24*	*1*
4-Bromofluorobenzene	*93*		*67 - 130*		*08/30/18 12:24*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/30/18 12:24*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**71**		52	31	ug/L		08/27/18 14:49	08/28/18 02:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*72*		*23 - 156*	*08/27/18 14:49*	*08/28/18 02:20*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/25/18 11:40	08/28/18 11:49	1
Arsenic	**0.044**		0.010	0.0026	mg/L		08/25/18 11:40	08/28/18 11:49	1
Barium	**0.24**		0.010	0.0014	mg/L		08/25/18 11:40	08/28/18 11:49	1
Beryllium	ND		0.0020	0.00033	mg/L		08/25/18 11:40	08/28/18 11:49	1
Cadmium	ND		0.0025	0.0013	mg/L		08/25/18 11:40	08/28/18 11:49	1
Chromium	**0.0019**	**J**	0.010	0.0015	mg/L		08/25/18 11:40	08/28/18 11:49	1
Cobalt	**0.0015**	**J**	0.0020	0.0012	mg/L		08/25/18 11:40	08/28/18 11:49	1
Copper	**0.0015**	**J**	0.020	0.0015	mg/L		08/25/18 11:40	08/28/18 11:49	1
Lead	**0.012**		0.0050	0.0023	mg/L		08/25/18 11:40	08/28/18 11:49	1
Molybdenum	**0.0044**	**J**	0.010	0.0023	mg/L		08/25/18 11:40	08/28/18 11:49	1
Nickel	**0.0019**	**J**	0.010	0.00080	mg/L		08/25/18 11:40	08/28/18 11:49	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-H6W
Date Collected: 08/23/18 10:35
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-9
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.020	0.0071	mg/L		08/25/18 11:40	08/28/18 11:49	1
Silver	ND		0.0050	0.0012	mg/L		08/25/18 11:40	08/28/18 11:49	1
Thallium	ND		0.010	0.0035	mg/L		08/25/18 11:40	08/28/18 11:49	1
Vanadium	**0.0017**	**J**	0.010	0.00070	mg/L		08/25/18 11:40	08/28/18 11:49	1
Zinc	**0.039**		0.020	0.0096	mg/L		08/25/18 11:40	08/28/18 11:49	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/28/18 18:59	08/29/18 20:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0037	mg/L			08/23/18 19:31	1

Client Sample ID: DG-P5W

Date Collected: 08/23/18 11:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-10

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/30/18 21:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*08/30/18 21:17*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/30/18 12:53	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/30/18 12:53	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/30/18 12:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/30/18 12:53	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/30/18 12:53	1
1,1-Dichloroethane	**0.11**	**J**	0.50	0.11	ug/L			08/30/18 12:53	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/30/18 12:53	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/30/18 12:53	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/30/18 12:53	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/30/18 12:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/30/18 12:53	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/30/18 12:53	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/30/18 12:53	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/30/18 12:53	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/30/18 12:53	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/30/18 12:53	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/30/18 12:53	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/30/18 12:53	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/30/18 12:53	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/30/18 12:53	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/30/18 12:53	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/30/18 12:53	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 12:53	1
2-Hexanone	ND		50	3.0	ug/L			08/30/18 12:53	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 12:53	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/30/18 12:53	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/30/18 12:53	1
Acetone	ND		50	20	ug/L			08/30/18 12:53	1
Benzene	ND		0.50	0.25	ug/L			08/30/18 12:53	1
Bromobenzene	ND		1.0	0.20	ug/L			08/30/18 12:53	1
Bromoform	ND		1.0	0.50	ug/L			08/30/18 12:53	1
Bromomethane	ND		1.0	0.49	ug/L			08/30/18 12:53	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/30/18 12:53	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/30/18 12:53	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/30/18 12:53	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/30/18 12:53	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/30/18 12:53	1
Chloroethane	ND		1.0	0.17	ug/L			08/30/18 12:53	1
Chloroform	ND		1.0	0.40	ug/L			08/30/18 12:53	1
Chloromethane	ND		1.0	0.19	ug/L			08/30/18 12:53	1
cis-1,2-Dichloroethene	**6.0**		0.50	0.076	ug/L			08/30/18 12:53	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/30/18 12:53	1
Dibromomethane	ND		0.50	0.30	ug/L			08/30/18 12:53	1

Client Sample ID: DG-P5W
Date Collected: 08/23/18 11:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/30/18 12:53	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/30/18 12:53	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/30/18 12:53	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/30/18 12:53	1
Gasoline Range Organics (GRO) -C4-C12	**30**	**J**	50	21	ug/L			08/30/18 12:53	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/30/18 12:53	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/30/18 12:53	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/30/18 12:53	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/30/18 12:53	1
Naphthalene	ND		1.0	0.22	ug/L			08/30/18 12:53	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/30/18 12:53	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/30/18 12:53	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/30/18 12:53	1
Styrene	ND		0.50	0.22	ug/L			08/30/18 12:53	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/30/18 12:53	1
Tetrachloroethene	**0.33**	**J**	0.50	0.20	ug/L			08/30/18 12:53	1
Toluene	ND		0.50	0.17	ug/L			08/30/18 12:53	1
trans-1,2-Dichloroethene	**0.75**		0.50	0.13	ug/L			08/30/18 22:41	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/30/18 12:53	1
Trichloroethene	**4.1**		0.50	0.20	ug/L			08/30/18 12:53	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/30/18 12:53	1
Vinyl acetate	ND		10	0.60	ug/L			08/30/18 12:53	1
Vinyl chloride	**0.73**		0.50	0.20	ug/L			08/30/18 12:53	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/30/18 12:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*72 - 130*		*08/30/18 12:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*72 - 130*		*08/30/18 22:41*	*1*
4-Bromofluorobenzene	*93*		*67 - 130*		*08/30/18 12:53*	*1*
4-Bromofluorobenzene	*95*		*67 - 130*		*08/30/18 22:41*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/30/18 12:53*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/30/18 22:41*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**130**		52	31	ug/L		08/27/18 14:49	08/28/18 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*69*		*23 - 156*	*08/27/18 14:49*	*08/28/18 16:14*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/25/18 11:40	08/28/18 11:54	1
Arsenic	**0.014**		0.010	0.0026	mg/L		08/25/18 11:40	08/28/18 11:54	1
Barium	**0.48**		0.010	0.0014	mg/L		08/25/18 11:40	08/28/18 11:54	1
Beryllium	**0.00034**	**J B**	0.0020	0.00033	mg/L		08/25/18 11:40	08/28/18 11:54	1
Cadmium	ND		0.0025	0.0013	mg/L		08/25/18 11:40	08/28/18 11:54	1
Chromium	ND		0.010	0.0015	mg/L		08/25/18 11:40	08/28/18 11:54	1
Cobalt	**0.0019**	**J**	0.0020	0.0012	mg/L		08/25/18 11:40	08/28/18 11:54	1
Copper	**0.0025**	**J**	0.020	0.0015	mg/L		08/25/18 11:40	08/28/18 11:54	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-P5W
Date Collected: 08/23/18 11:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-10
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.015**		0.0050	0.0023	mg/L		08/25/18 11:40	08/28/18 11:54	1
Molybdenum	**0.0057**	**J**	0.010	0.0023	mg/L		08/25/18 11:40	08/28/18 11:54	1
Nickel	**0.0049**	**J**	0.010	0.00080	mg/L		08/25/18 11:40	08/28/18 11:54	1
Selenium	ND		0.020	0.0071	mg/L		08/25/18 11:40	08/28/18 11:54	1
Silver	ND		0.0050	0.0012	mg/L		08/25/18 11:40	08/28/18 11:54	1
Thallium	ND		0.010	0.0035	mg/L		08/25/18 11:40	08/28/18 11:54	1
Vanadium	ND		0.010	0.00070	mg/L		08/25/18 11:40	08/28/18 11:54	1
Zinc	**0.034**		0.020	0.0096	mg/L		08/25/18 11:40	08/28/18 11:54	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/28/18 18:59	08/29/18 20:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0037	mg/L			08/23/18 19:31	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: FB-1
Date Collected: 08/21/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/30/18 13:22	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/30/18 13:22	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/30/18 13:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/30/18 13:22	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/30/18 13:22	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/30/18 13:22	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/30/18 13:22	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/30/18 13:22	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/30/18 13:22	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/30/18 13:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/30/18 13:22	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/30/18 13:22	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/30/18 13:22	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/30/18 13:22	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/30/18 13:22	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/30/18 13:22	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/30/18 13:22	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/30/18 13:22	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/30/18 13:22	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/30/18 13:22	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/30/18 13:22	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/30/18 13:22	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 13:22	1
2-Hexanone	ND		50	3.0	ug/L			08/30/18 13:22	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 13:22	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/30/18 13:22	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/30/18 13:22	1
Acetone	ND		50	20	ug/L			08/30/18 13:22	1
Benzene	ND		0.50	0.25	ug/L			08/30/18 13:22	1
Bromobenzene	ND		1.0	0.20	ug/L			08/30/18 13:22	1
Bromoform	ND		1.0	0.50	ug/L			08/30/18 13:22	1
Bromomethane	ND		1.0	0.49	ug/L			08/30/18 13:22	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/30/18 13:22	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/30/18 13:22	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/30/18 13:22	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/30/18 13:22	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/30/18 13:22	1
Chloroethane	ND		1.0	0.17	ug/L			08/30/18 13:22	1
Chloroform	ND		1.0	0.40	ug/L			08/30/18 13:22	1
Chloromethane	ND		1.0	0.19	ug/L			08/30/18 13:22	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/30/18 13:22	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/30/18 13:22	1
Dibromomethane	ND		0.50	0.30	ug/L			08/30/18 13:22	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/30/18 13:22	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/30/18 13:22	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/30/18 13:22	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/30/18 13:22	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/30/18 13:22	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: FB-1
Date Collected: 08/21/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/30/18 13:22	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/30/18 13:22	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/30/18 13:22	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/30/18 13:22	1
Naphthalene	ND		1.0	0.22	ug/L			08/30/18 13:22	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/30/18 13:22	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/30/18 13:22	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/30/18 13:22	1
Styrene	ND		0.50	0.22	ug/L			08/30/18 13:22	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/30/18 13:22	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/30/18 13:22	1
Toluene	ND		0.50	0.17	ug/L			08/30/18 13:22	1
trans-1,2-Dichloroethene	ND	*	0.50	0.13	ug/L			08/30/18 13:22	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/30/18 13:22	1
Trichloroethene	ND		0.50	0.20	ug/L			08/30/18 13:22	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/30/18 13:22	1
Vinyl acetate	ND		10	0.60	ug/L			08/30/18 13:22	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/30/18 13:22	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/30/18 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*72 - 130*		*08/30/18 13:22*	*1*
4-Bromofluorobenzene	*95*		*67 - 130*		*08/30/18 13:22*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/30/18 13:22*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: FB-2
Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/30/18 13:50	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/30/18 13:50	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/30/18 13:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/30/18 13:50	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/30/18 13:50	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/30/18 13:50	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/30/18 13:50	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/30/18 13:50	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/30/18 13:50	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/30/18 13:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/30/18 13:50	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/30/18 13:50	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/30/18 13:50	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/30/18 13:50	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/30/18 13:50	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/30/18 13:50	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/30/18 13:50	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/30/18 13:50	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/30/18 13:50	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/30/18 13:50	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/30/18 13:50	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/30/18 13:50	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 13:50	1
2-Hexanone	ND		50	3.0	ug/L			08/30/18 13:50	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 13:50	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/30/18 13:50	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/30/18 13:50	1
Acetone	ND		50	20	ug/L			08/30/18 13:50	1
Benzene	ND		0.50	0.25	ug/L			08/30/18 13:50	1
Bromobenzene	ND		1.0	0.20	ug/L			08/30/18 13:50	1
Bromoform	ND		1.0	0.50	ug/L			08/30/18 13:50	1
Bromomethane	ND		1.0	0.49	ug/L			08/30/18 13:50	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/30/18 13:50	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/30/18 13:50	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/30/18 13:50	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/30/18 13:50	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/30/18 13:50	1
Chloroethane	ND		1.0	0.17	ug/L			08/30/18 13:50	1
Chloroform	ND		1.0	0.40	ug/L			08/30/18 13:50	1
Chloromethane	ND		1.0	0.19	ug/L			08/30/18 13:50	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/30/18 13:50	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/30/18 13:50	1
Dibromomethane	ND		0.50	0.30	ug/L			08/30/18 13:50	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/30/18 13:50	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/30/18 13:50	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/30/18 13:50	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/30/18 13:50	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/30/18 13:50	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: FB-2
Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/30/18 13:50	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/30/18 13:50	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/30/18 13:50	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/30/18 13:50	1
Naphthalene	ND		1.0	0.22	ug/L			08/30/18 13:50	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/30/18 13:50	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/30/18 13:50	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/30/18 13:50	1
Styrene	ND		0.50	0.22	ug/L			08/30/18 13:50	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/30/18 13:50	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/30/18 13:50	1
Toluene	ND		0.50	0.17	ug/L			08/30/18 13:50	1
trans-1,2-Dichloroethene	ND	*	0.50	0.13	ug/L			08/30/18 13:50	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/30/18 13:50	1
Trichloroethene	ND		0.50	0.20	ug/L			08/30/18 13:50	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/30/18 13:50	1
Vinyl acetate	ND		10	0.60	ug/L			08/30/18 13:50	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/30/18 13:50	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/30/18 13:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*72 - 130*		*08/30/18 13:50*	*1*
4-Bromofluorobenzene	*95*		*67 - 130*		*08/30/18 13:50*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/30/18 13:50*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: FB-3
Date Collected: 08/23/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/30/18 16:13	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/30/18 16:13	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/30/18 16:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/30/18 16:13	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/30/18 16:13	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/30/18 16:13	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/30/18 16:13	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/30/18 16:13	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/30/18 16:13	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/30/18 16:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/30/18 16:13	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/30/18 16:13	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/30/18 16:13	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/30/18 16:13	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/30/18 16:13	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/30/18 16:13	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/30/18 16:13	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/30/18 16:13	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/30/18 16:13	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/30/18 16:13	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/30/18 16:13	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/30/18 16:13	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 16:13	1
2-Hexanone	ND		50	3.0	ug/L			08/30/18 16:13	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 16:13	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/30/18 16:13	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/30/18 16:13	1
Acetone	ND		50	20	ug/L			08/30/18 16:13	1
Benzene	ND		0.50	0.25	ug/L			08/30/18 16:13	1
Bromobenzene	ND		1.0	0.20	ug/L			08/30/18 16:13	1
Bromoform	ND		1.0	0.50	ug/L			08/30/18 16:13	1
Bromomethane	ND		1.0	0.49	ug/L			08/30/18 16:13	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/30/18 16:13	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/30/18 16:13	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/30/18 16:13	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/30/18 16:13	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/30/18 16:13	1
Chloroethane	ND		1.0	0.17	ug/L			08/30/18 16:13	1
Chloroform	ND		1.0	0.40	ug/L			08/30/18 16:13	1
Chloromethane	ND		1.0	0.19	ug/L			08/30/18 16:13	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/30/18 16:13	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/30/18 16:13	1
Dibromomethane	ND		0.50	0.30	ug/L			08/30/18 16:13	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/30/18 16:13	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/30/18 16:13	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/30/18 16:13	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/30/18 16:13	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/30/18 16:13	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: FB-3
Date Collected: 08/23/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/30/18 16:13	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/30/18 16:13	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/30/18 16:13	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/30/18 16:13	1
Naphthalene	ND		1.0	0.22	ug/L			08/30/18 16:13	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/30/18 16:13	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/30/18 16:13	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/30/18 16:13	1
Styrene	ND		0.50	0.22	ug/L			08/30/18 16:13	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/30/18 16:13	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/30/18 16:13	1
Toluene	ND		0.50	0.17	ug/L			08/30/18 16:13	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/30/18 16:13	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/30/18 16:13	1
Trichloroethene	ND		0.50	0.20	ug/L			08/30/18 16:13	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/30/18 16:13	1
Vinyl acetate	ND		10	0.60	ug/L			08/30/18 16:13	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/30/18 16:13	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/30/18 16:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 130*		*08/30/18 16:13*	*1*
4-Bromofluorobenzene	*95*		*67 - 130*		*08/30/18 16:13*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/30/18 16:13*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: TB-3
Date Collected: 08/23/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-15
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/31/18 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*08/31/18 14:58*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/30/18 16:43	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/30/18 16:43	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/30/18 16:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/30/18 16:43	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/30/18 16:43	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/30/18 16:43	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/30/18 16:43	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/30/18 16:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/30/18 16:43	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/30/18 16:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/30/18 16:43	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/30/18 16:43	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/30/18 16:43	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/30/18 16:43	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/30/18 16:43	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/30/18 16:43	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/30/18 16:43	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/30/18 16:43	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/30/18 16:43	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/30/18 16:43	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/30/18 16:43	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/30/18 16:43	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 16:43	1
2-Hexanone	ND		50	3.0	ug/L			08/30/18 16:43	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 16:43	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/30/18 16:43	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/30/18 16:43	1
Acetone	ND		50	20	ug/L			08/30/18 16:43	1
Benzene	ND		0.50	0.25	ug/L			08/30/18 16:43	1
Bromobenzene	ND		1.0	0.20	ug/L			08/30/18 16:43	1
Bromoform	ND		1.0	0.50	ug/L			08/30/18 16:43	1
Bromomethane	ND		1.0	0.49	ug/L			08/30/18 16:43	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/30/18 16:43	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/30/18 16:43	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/30/18 16:43	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/30/18 16:43	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/30/18 16:43	1
Chloroethane	ND		1.0	0.17	ug/L			08/30/18 16:43	1
Chloroform	ND		1.0	0.40	ug/L			08/30/18 16:43	1
Chloromethane	ND		1.0	0.19	ug/L			08/30/18 16:43	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/30/18 16:43	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/30/18 16:43	1
Dibromomethane	ND		0.50	0.30	ug/L			08/30/18 16:43	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: TB-3
Date Collected: 08/23/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-15
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/30/18 16:43	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/30/18 16:43	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/30/18 16:43	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/30/18 16:43	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/30/18 16:43	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/30/18 16:43	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/30/18 16:43	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/30/18 16:43	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/30/18 16:43	1
Naphthalene	ND		1.0	0.22	ug/L			08/30/18 16:43	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/30/18 16:43	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/30/18 16:43	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/30/18 16:43	1
Styrene	ND		0.50	0.22	ug/L			08/30/18 16:43	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/30/18 16:43	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/30/18 16:43	1
Toluene	ND		0.50	0.17	ug/L			08/30/18 16:43	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/30/18 16:43	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/30/18 16:43	1
Trichloroethene	ND		0.50	0.20	ug/L			08/30/18 16:43	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/30/18 16:43	1
Vinyl acetate	ND		10	0.60	ug/L			08/30/18 16:43	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/30/18 16:43	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/30/18 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*72 - 130*		*08/30/18 16:43*	*1*
4-Bromofluorobenzene	*95*		*67 - 130*		*08/30/18 16:43*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/30/18 16:43*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DUP-02
Date Collected: 08/23/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-16
Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/30/18 21:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*08/30/18 21:43*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/30/18 17:18	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/30/18 17:18	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/30/18 17:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/30/18 17:18	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/30/18 17:18	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/30/18 17:18	1
1,1-Dichloroethene	ND	*	0.50	0.20	ug/L			08/30/18 17:18	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/30/18 17:18	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/30/18 17:18	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/30/18 17:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/30/18 17:18	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/30/18 17:18	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/30/18 17:18	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/30/18 17:18	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/30/18 17:18	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/30/18 17:18	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/30/18 17:18	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/30/18 17:18	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/30/18 17:18	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/30/18 17:18	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/30/18 17:18	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/30/18 17:18	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 17:18	1
2-Hexanone	ND		50	3.0	ug/L			08/30/18 17:18	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 17:18	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/30/18 17:18	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/30/18 17:18	1
Acetone	ND		50	20	ug/L			08/30/18 17:18	1
Benzene	ND		0.50	0.25	ug/L			08/30/18 17:18	1
Bromobenzene	ND		1.0	0.20	ug/L			08/30/18 17:18	1
Bromoform	ND		1.0	0.50	ug/L			08/30/18 17:18	1
Bromomethane	ND		1.0	0.49	ug/L			08/30/18 17:18	1
Carbon disulfide	ND	*	5.0	0.78	ug/L			08/30/18 17:18	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/30/18 17:18	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/30/18 17:18	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/30/18 17:18	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/30/18 17:18	1
Chloroethane	ND		1.0	0.17	ug/L			08/30/18 17:18	1
Chloroform	ND		1.0	0.40	ug/L			08/30/18 17:18	1
Chloromethane	ND		1.0	0.19	ug/L			08/30/18 17:18	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/30/18 17:18	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/30/18 17:18	1
Dibromomethane	ND		0.50	0.30	ug/L			08/30/18 17:18	1

Client Sample ID: DUP-02

Date Collected: 08/23/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-16

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/30/18 17:18	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/30/18 17:18	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/30/18 17:18	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/30/18 17:18	1
Gasoline Range Organics (GRO) -C4-C12	**31**	**J**	50	21	ug/L			08/30/18 17:18	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/30/18 17:18	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/30/18 17:18	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/30/18 17:18	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/30/18 17:18	1
Naphthalene	ND		1.0	0.22	ug/L			08/30/18 17:18	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/30/18 17:18	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/30/18 17:18	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/30/18 17:18	1
Styrene	ND		0.50	0.22	ug/L			08/30/18 17:18	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/30/18 17:18	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/30/18 17:18	1
Toluene	ND		0.50	0.17	ug/L			08/30/18 17:18	1
trans-1,2-Dichloroethene	ND	*	0.50	0.13	ug/L			08/30/18 17:18	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/30/18 17:18	1
Trichloroethene	ND		0.50	0.20	ug/L			08/30/18 17:18	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/30/18 17:18	1
Vinyl acetate	ND		10	0.60	ug/L			08/30/18 17:18	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/30/18 17:18	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/30/18 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*72 - 130*		*08/30/18 17:18*	*1*
4-Bromofluorobenzene	*91*		*67 - 130*		*08/30/18 17:18*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/30/18 17:18*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**190**		52	31	ug/L		08/27/18 14:49	08/28/18 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*85*		*23 - 156*	*08/27/18 14:49*	*08/28/18 16:39*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.0078**	**J**	0.010	0.0027	mg/L		08/25/18 11:40	08/28/18 11:59	1
Arsenic	**0.0037**	**J**	0.010	0.0026	mg/L		08/25/18 11:40	08/28/18 11:59	1
Barium	**0.36**		0.010	0.0014	mg/L		08/25/18 11:40	08/28/18 11:59	1
Beryllium	ND		0.0020	0.00033	mg/L		08/25/18 11:40	08/28/18 11:59	1
Cadmium	ND		0.0025	0.0013	mg/L		08/25/18 11:40	08/28/18 11:59	1
Chromium	**0.0019**	**J**	0.010	0.0015	mg/L		08/25/18 11:40	08/28/18 11:59	1
Cobalt	**0.0030**		0.0020	0.0012	mg/L		08/25/18 11:40	08/28/18 11:59	1
Copper	**0.15**		0.020	0.0015	mg/L		08/25/18 11:40	08/28/18 11:59	1
Lead	**0.015**		0.0050	0.0023	mg/L		08/25/18 11:40	08/28/18 11:59	1
Molybdenum	**0.010**		0.010	0.0023	mg/L		08/25/18 11:40	08/28/18 11:59	1
Nickel	**0.0078**	**J**	0.010	0.00080	mg/L		08/25/18 11:40	08/28/18 11:59	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DUP-02
Date Collected: 08/23/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-16
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.020	0.0071	mg/L		08/25/18 11:40	08/28/18 11:59	1
Silver	ND		0.0050	0.0012	mg/L		08/25/18 11:40	08/28/18 11:59	1
Thallium	ND		0.010	0.0035	mg/L		08/25/18 11:40	08/28/18 11:59	1
Vanadium	ND		0.010	0.00070	mg/L		08/25/18 11:40	08/28/18 11:59	1
Zinc	0.17		0.020	0.0096	mg/L		08/25/18 11:40	08/28/18 11:59	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/28/18 18:59	08/29/18 20:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0037	mg/L			08/23/18 19:31	1

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-C3W Lab Sample ID: 720-88220-1

Matrix: Water Lab File ID: 5b082718_016.d

Analysis Method: 8015B Date Collected: 08/22/2018 08:00

Extraction Method: 3510C Date Extracted: 08/27/2018 14:49

Sample wt/vol: 968.4(mL) Date Analyzed: 08/27/2018 22:25

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250253 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	69		51	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	78		23-156

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_016.d
Lims ID: 720-88220-E-1-A
Client ID: DG-C3W
Sample Type: Client
Inject. Date: 27-Aug-2018 22:25:51 ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 105 Name: 720-0053489-016
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\DRO5B.m
Limit Group: DRO
Last Update: 28-Aug-2018 12:08:09 Calib Date: 27-Aug-2018 08:53:03
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK013

First Level Reviewer: luj Date: 28-Aug-2018 12:08:09

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	2.661	2.666	-0.005	475	NC	
23 n-Decane	3.915	3.893	0.022	1144	NC	
A 1 C9-C13	4.640	(2.666-6.614)		17919	1.41	
A 21 Stoddard Solvent	4.640	(2.666-6.614)		17919	NC	
A 57 C10-C12	4.851	(3.893-5.808)		11661	1.12	
24 Dodecane	5.779	5.808	-0.029	2398	NC	
A 3 C9 - C17	6.003	(2.666-9.341)		50346	4.25	
A 60 C10-C16	6.298	(3.893-8.703)		43354	4.18	
A 47 C9 - C18	6.299	(2.666-9.933)		77799	6.93	
A 15 Kerosene	6.571	(2.666-10.476)		104418	9.28	
A 25 C9-C19	6.571	(2.666-10.476)		104418	8.80	
26 C13		6.614			ND	
$ 27 n-Decanoic Acid (Surr)		7.238			ND	
A 59 C12-C16	7.256	(5.808-8.703)		34091	3.28	
A 62 C10-C20	7.454	(3.893-11.014)		122719	11.8	
A 28 C9-C24	7.808	(2.666-12.949)		247906	23.8	
A 29 C9-C25	8.026	(2.666-13.387)		247906	23.8	
A 54 C10-C23	8.194	(3.893-12.495)		234068	22.5	
A 4 C10-C24	8.421	(3.893-12.949)		245360	23.6	
A 16 C10-C25	8.640	(3.893-13.387)		245360	23.6	
45 Hexadecane	8.705	8.703	0.002	1925	NC	
A 14 C10-C26	8.851	(3.893-13.809)		295787	28.4	
A 67 C12-C22	8.915	(5.808-12.021)		224805	21.6	
A 5 Diesel	9.252	(3.893-14.610)		347068	33.4	
A 32 C10-C28	9.252	(3.893-14.610)		347068	33.4	
A 12 Unknown Hydrocarbons	9.252	(3.893-14.610)		347068	NC	
A 30 C13-C22	9.318	(6.614-12.021)		220695	21.2	
44 Heptadecane	9.348	9.341	0.007	9349	NC	
A 31 C12-C24	9.379	(5.808-12.949)		236097	22.7	
49 n-Octadecane		9.933			ND	
A 52 Mineral oil	10.005	(2.666-17.345)		772949	81.5	
A 9 Crude Oil Range Organics (	9.405	(2.666-17.345)		656390	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 11 Bunker Range Organics (C9-	10.005	(2.666-17.345)		403058	NC	
33 C19	10.424	10.476	-0.052	20987	NC	
A 64 C13-C28	10.612	(6.614-14.610)		333695	32.1	
A 17 C10-C36	9.950	(3.893-16.007)		400512	38.5	
A 58 C16-C24	10.826	(8.703-12.949)		202006	19.4	
A 13 C9-C40	10.829	(2.666-18.993)		909930	99.5	
A 68 Crude Oil Range Organics (	10.829	(2.666-18.993)		909930	NC	
61 icosane		11.014			ND	
A 6 C10-C40	11.443	(3.893-18.993)		906108	99.1	
$ 34 p-Terphenyl	12.003	12.009	-0.006	247627	19.4	M
35 n-Docosane		12.021			ND	
A 18 C12-C40	12.400	(5.808-18.993)		891961	97.8	
36 Tricosane		12.495			ND	
A 66 C13-C40	12.803	(6.614-18.993)		793971	87.6	
37 n-Tetracosane		12.949			ND	
A 2 C16-C36 ORO	13.024	(8.703-17.345)		459109	68.9	
38 C25		13.387			ND	
46 n-Hexacosane		13.809			ND	
A 19 C16-C40	13.848	(8.703-18.993)		832053	91.6	
A 20 C19-C36	13.910	(10.476-17.345)		369952	45.4	
A 55 C23-C32		(12.495-16.061)			ND	
39 n-Octacosane		14.610			ND	
65 C29		14.990			ND	
A 40 C24-C36	15.147	(12.949-17.345)		268341	45.9	
A 7 Motor Oil	15.147	(12.949-17.345)		268341	45.9	
A 50 C25-C36	15.366	(13.387-17.345)		242573	43.7	
A 10 C22-C40	15.507	(12.021-18.993)		217677	26.2	
A 41 C23-C40	15.744	(12.495-18.993)		91477	11.2	
A 8 C24-C40	15.971	(12.949-18.993)		360277	45.7	
56 Dotriacontane		16.061			ND	
A 51 C28-C40	16.801	(14.610-18.993)		247514	38.7	
A 63 C29-C40	16.992	(14.990-18.993)		224255	38.1	
42 n-Hexatriacontane	17.415	17.345	0.070	100173	NC	
43 C40		18.993			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

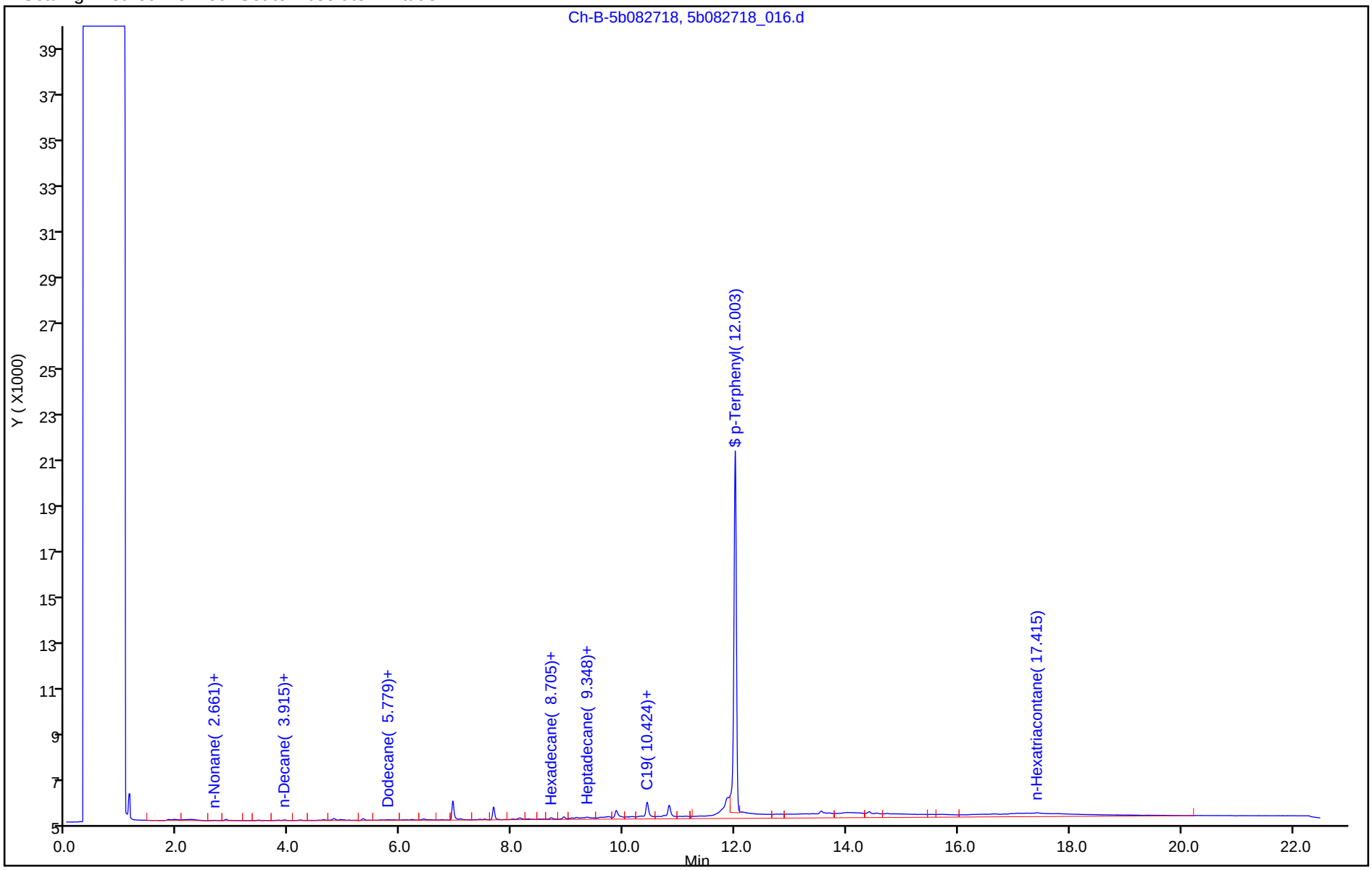
Report Date: 28-Aug-2018 12:08:09 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_016.d

Injection Date:	27-Aug-2018 22:25:51	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88220-E-1-A	Lab Sample ID:	720-88220-1	Worklist Smp#:	16
Client ID:	DG-C3W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_016.d				
Lims ID:	720-88220-E-1-A				
Client ID:	DG-C3W				
Sample Type:	Client				
Inject. Date:	27-Aug-2018 22:25:51	ALS Bottle#:	0	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 105 Name: 720-0053489-016				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\DRO5B.m				
Limit Group:	DRO				
Last Update:	28-Aug-2018 12:08:09	Calib Date:	27-Aug-2018 08:53:03		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK013				
First Level Reviewer: luj		Date:	28-Aug-2018 12:08:09		

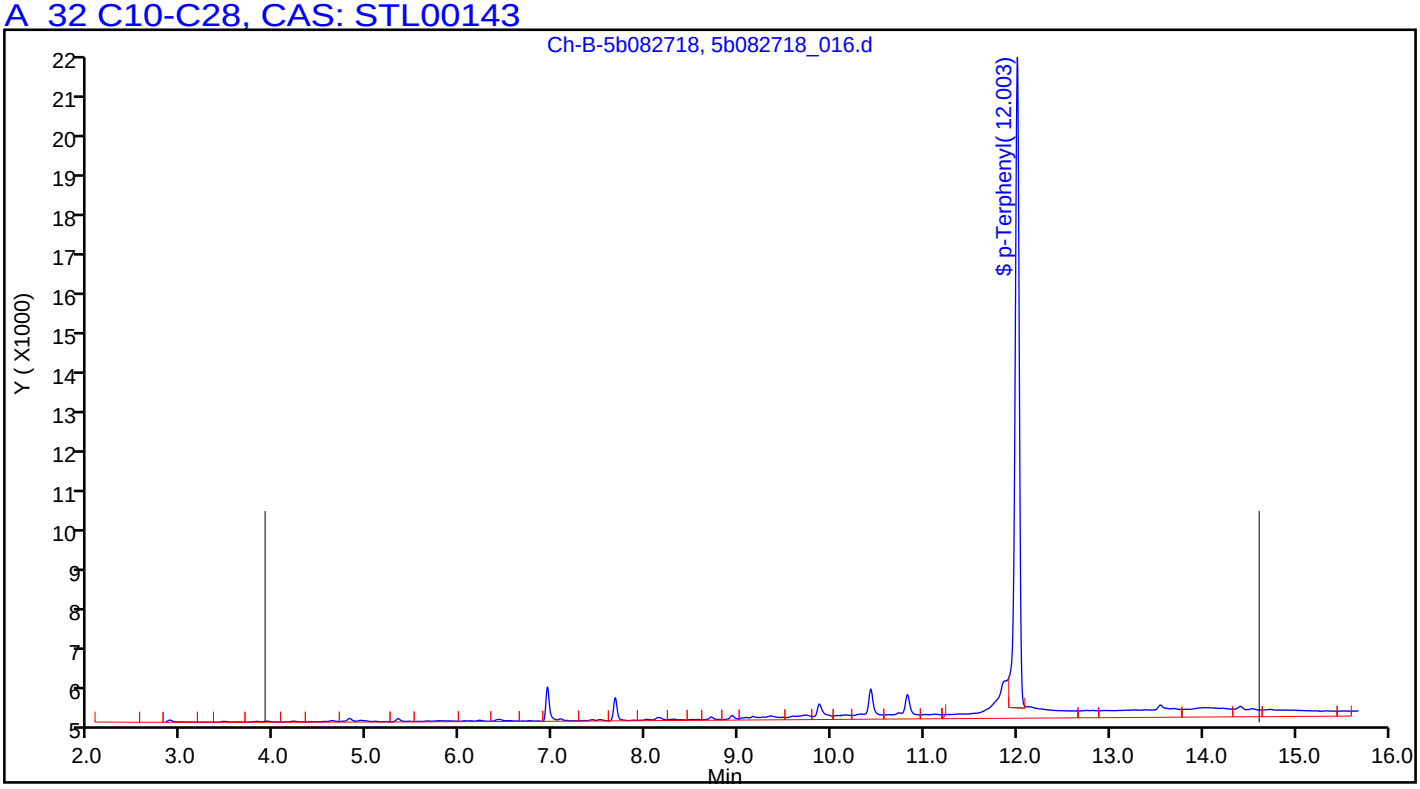
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	19.4	77.63

Report Date: 28-Aug-2018 12:08:10 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_016.d				
Injection Date:	27-Aug-2018 22:25:51	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-1-A	Lab Sample ID:	720-88220-1		
Client ID:	DG-C3W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

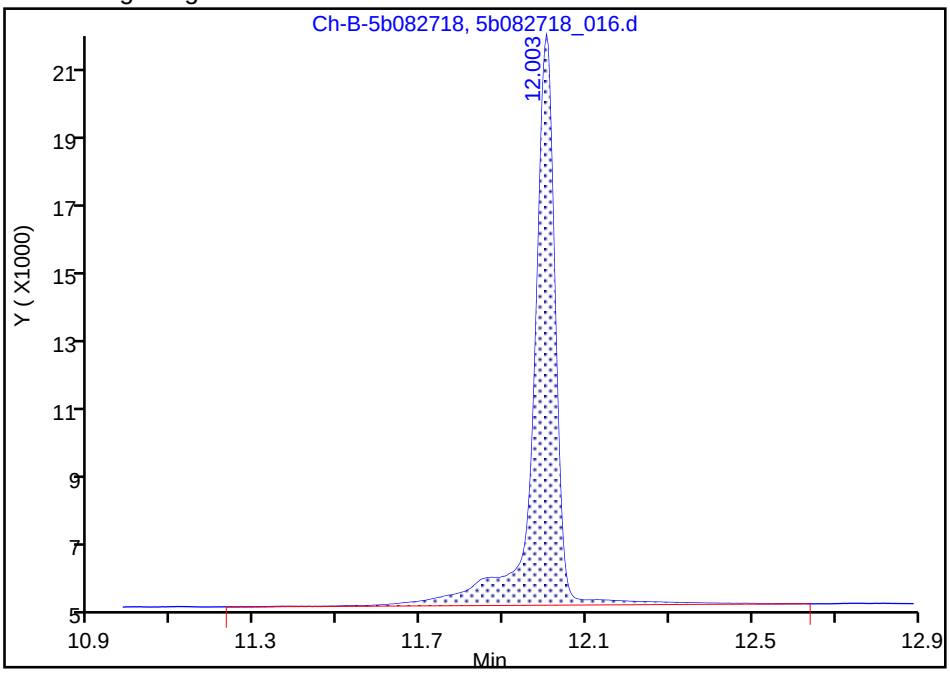
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_016.d				
Injection Date:	27-Aug-2018 22:25:51	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-1-A	Lab Sample ID:	720-88220-1		
Client ID:	DG-C3W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

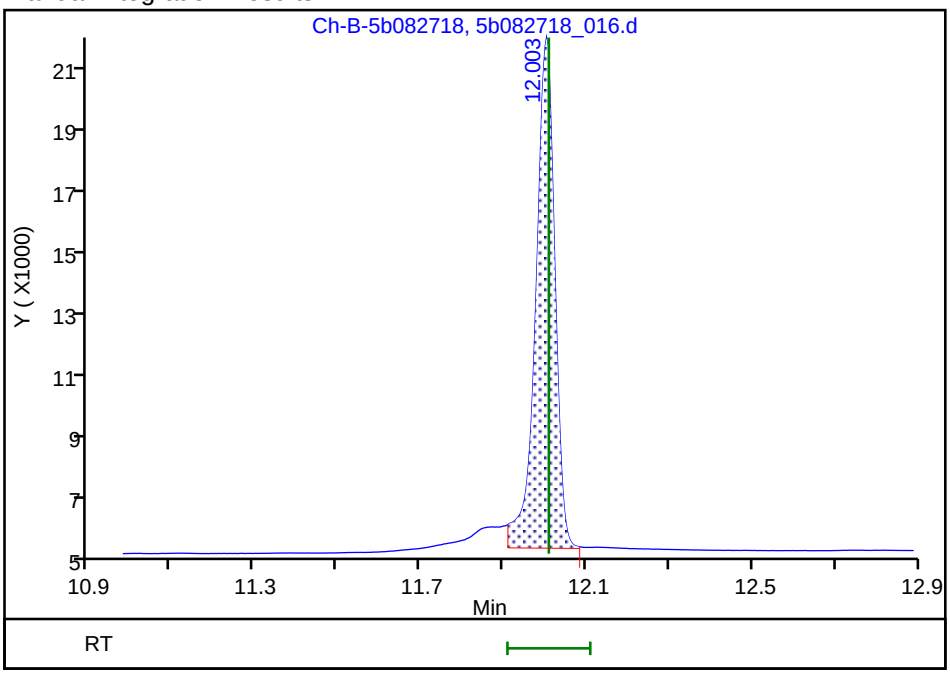
Processing Integration Results

RT: 12.00
Area: 294193
Amount: 23.056244
Amount Units: mg/L



Manual Integration Results

RT: 12.00
Area: 247627
Amount: 19.406813
Amount Units: mg/L



Reviewer: luj, 28-Aug-2018 12:08:00

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-F3W Lab Sample ID: 720-88220-2

Matrix: Water Lab File ID: 5b082718_017.d

Analysis Method: 8015B Date Collected: 08/22/2018 08:30

Extraction Method: 3510C Date Extracted: 08/27/2018 14:49

Sample wt/vol: 958.3(mL) Date Analyzed: 08/27/2018 22:55

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250253 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	120		52	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	84		23-156

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_017.d
Lims ID: 720-88220-E-2-A
Client ID: DG-F3W
Sample Type: Client
Inject. Date: 27-Aug-2018 22:55:13 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 106 Name: 720-0053489-017
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\DRO5B.m
Limit Group: DRO
Last Update: 28-Aug-2018 12:17:02 Calib Date: 27-Aug-2018 08:53:03
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK013

First Level Reviewer: luj Date: 28-Aug-2018 12:17:01

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	2.677	2.666	0.011	479	NC	
	23 n-Decane	3.909	3.893	0.016	904	NC	
A	1 C9-C13	4.640	(2.666-6.614)		19754	1.56	
A	21 Stoddard Solvent	4.640	(2.666-6.614)		19754	NC	
A	57 C10-C12	4.851	(3.893-5.808)		7457	0.7169	
	24 Dodecane	5.851	5.808	0.043	6757	NC	
A	3 C9 - C17	6.003	(2.666-9.341)		47464	4.01	
A	60 C10-C16	6.298	(3.893-8.703)		27271	2.63	
A	47 C9 - C18	6.299	(2.666-9.933)		65557	5.84	
A	15 Kerosene	6.571	(2.666-10.476)		155892	13.9	
A	25 C9-C19	6.571	(2.666-10.476)		155892	13.1	
	26 C13		6.614			ND	
$	27 n-Decanoic Acid (Surr)		7.238			ND	
A	59 C12-C16	7.256	(5.808-8.703)		19814	1.90	
A	62 C10-C20	7.454	(3.893-11.014)		190061	18.3	
A	28 C9-C24	7.808	(2.666-12.949)		449642	43.2	
A	29 C9-C25	8.026	(2.666-13.387)		449642	43.2	
A	54 C10-C23	8.194	(3.893-12.495)		432061	41.5	
A	4 C10-C24	8.421	(3.893-12.949)		446946	43.0	
A	16 C10-C25	8.640	(3.893-13.387)		446946	43.0	
	45 Hexadecane	8.704	8.703	0.001	5282	NC	
A	14 C10-C26	8.851	(3.893-13.809)		510157	49.0	
A	67 C12-C22	8.915	(5.808-12.021)		424604	40.8	
A	5 Diesel	9.252	(3.893-14.610)		576323	55.4	
A	32 C10-C28	9.252	(3.893-14.610)		576323	55.4	
A	12 Unknown Hydrocarbons	9.252	(3.893-14.610)		576323	NC	
A	30 C13-C22	9.318	(6.614-12.021)		417847	40.2	
	44 Heptadecane	9.367	9.341	0.026	9034	NC	
A	31 C12-C24	9.379	(5.808-12.949)		439489	42.3	
	49 n-Octadecane		9.933			ND	
A	52 Mineral oil	10.005	(2.666-17.345)		1020953	107.6	
A	9 Crude Oil Range Organics (	9.904	(2.666-17.345)		999802	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 11 Bunker Range Organics (C9-	10.005	(2.666-17.345)		702999	NC	
33 C19	10.425	10.476	-0.051	90335	NC	
A 64 C13-C28	10.612	(6.614-14.610)		562109	54.0	
A 17 C10-C36	10.518	(3.893-17.143)		700303	67.3	
A 58 C16-C24	10.826	(8.703-12.949)		419675	40.3	
A 13 C9-C40	10.829	(2.666-18.993)		1172192	128.1	
A 68 Crude Oil Range Organics (	10.829	(2.666-18.993)		1172192	NC	
61 icosane	11.108	11.014	0.094	23315	NC	
A 6 C10-C40	11.443	(3.893-18.993)		1168683	127.9	
$ 34 p-Terphenyl	12.003	12.009	-0.006	266385	20.9	M
35 n-Docosane		12.021			ND	
A 18 C12-C40	12.400	(5.808-18.993)		1153978	126.5	
36 Tricosane		12.495			ND	
A 66 C13-C40	12.803	(6.614-18.993)		1055641	116.5	
37 n-Tetracosane		12.949			ND	
A 2 C16-C36 ORO	13.024	(8.703-17.345)		596472	89.6	
38 C25	13.392	13.387	0.005	39273	NC	
46 n-Hexacosane		13.809			ND	
A 19 C16-C40	13.848	(8.703-18.993)		1105545	121.8	
A 20 C19-C36	13.910	(10.476-17.345)		558828	68.6	
A 55 C23-C32		(12.495-16.061)			ND	
39 n-Octacosane		14.610			ND	
65 C29		14.990			ND	
A 40 C24-C36	15.147	(12.949-17.345)		305079	52.2	
A 7 Motor Oil	15.147	(12.949-17.345)		305079	52.2	
A 50 C25-C36	15.366	(13.387-17.345)		273598	49.3	
A 10 C22-C40	15.507	(12.021-18.993)		281889	33.9	
A 41 C23-C40	15.744	(12.495-18.993)		51053	6.28	
A 8 C24-C40	15.971	(12.949-18.993)		406818	51.6	
56 Dotriacontane		16.061			ND	
A 51 C28-C40	16.801	(14.610-18.993)		276133	43.2	
A 63 C29-C40	16.992	(14.990-18.993)		249663	42.4	
42 n-Hexatriacontane	17.417	17.345	0.072	105349	NC	
43 C40		18.993			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

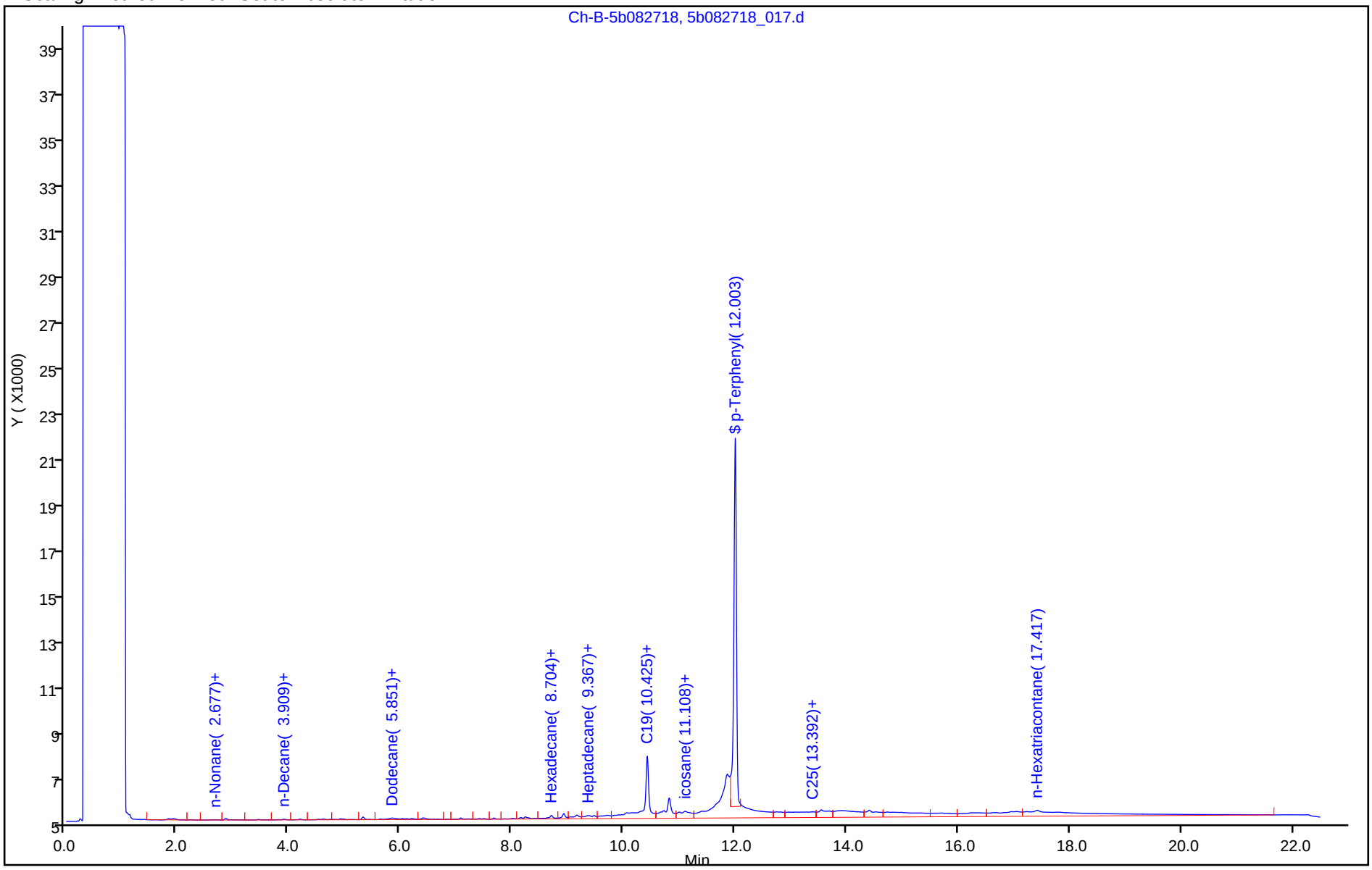
Report Date: 28-Aug-2018 12:17:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_017.d

Injection Date:	27-Aug-2018 22:55:13	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88220-E-2-A	Lab Sample ID:	720-88220-2	Worklist Smp#:	17
Client ID:	DG-F3W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_017.d				
Lims ID:	720-88220-E-2-A				
Client ID:	DG-F3W				
Sample Type:	Client				
Inject. Date:	27-Aug-2018 22:55:13	ALS Bottle#:	0	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 106 Name: 720-0053489-017				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\DRO5B.m				
Limit Group:	DRO				
Last Update:	28-Aug-2018 12:17:02	Calib Date:	27-Aug-2018 08:53:03		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK013				
First Level Reviewer: luj		Date:	28-Aug-2018 12:17:01		

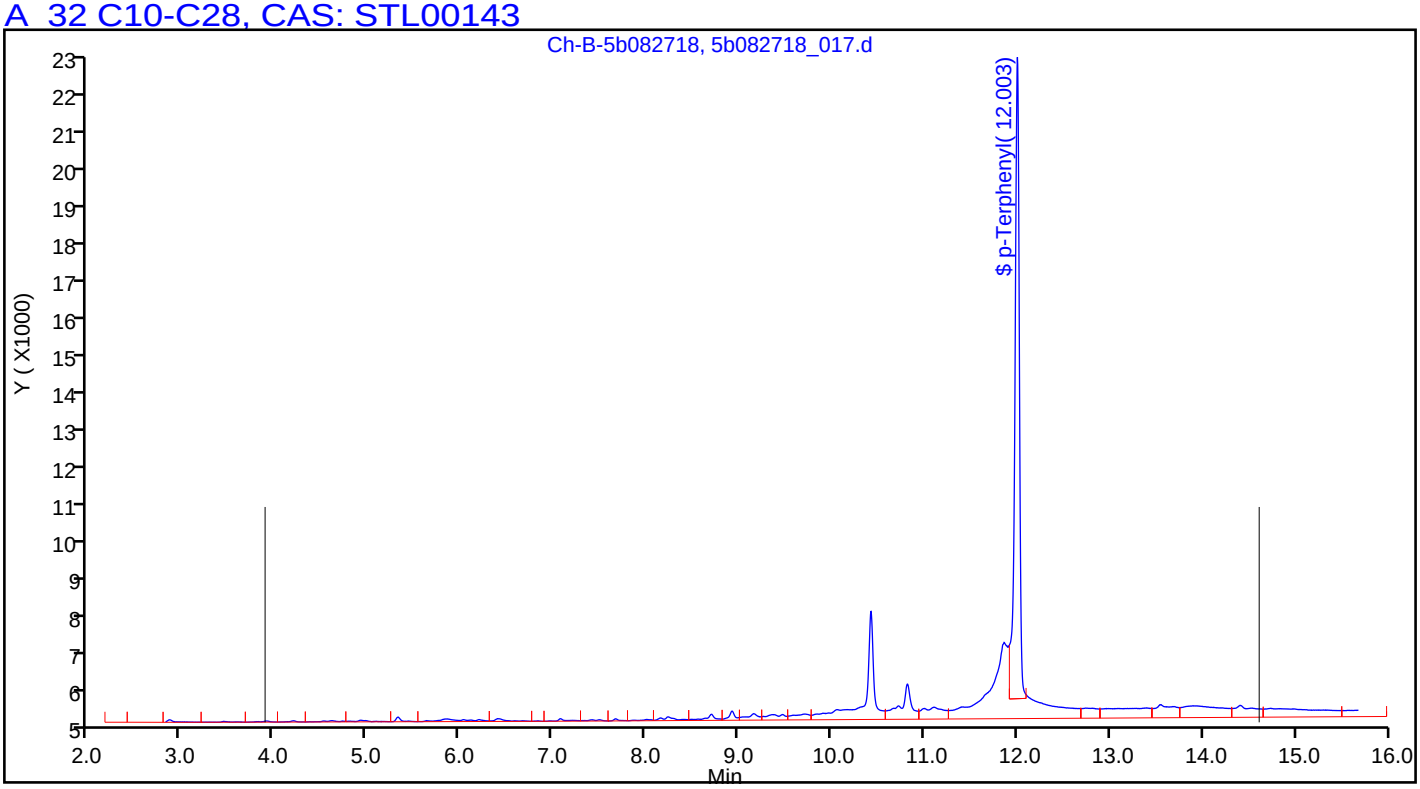
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	20.9	83.51

Report Date: 28-Aug-2018 12:17:04 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_017.d				
Injection Date:	27-Aug-2018 22:55:13	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-2-A	Lab Sample ID:	720-88220-2		
Client ID:	DG-F3W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

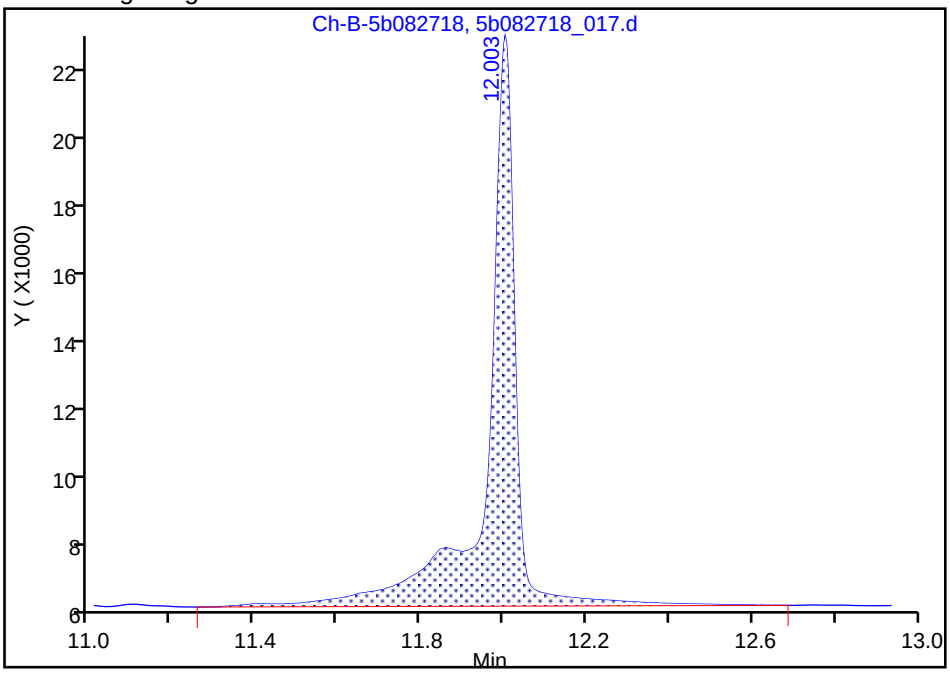
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_017.d				
Injection Date:	27-Aug-2018 22:55:13	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-2-A	Lab Sample ID:	720-88220-2		
Client ID:	DG-F3W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

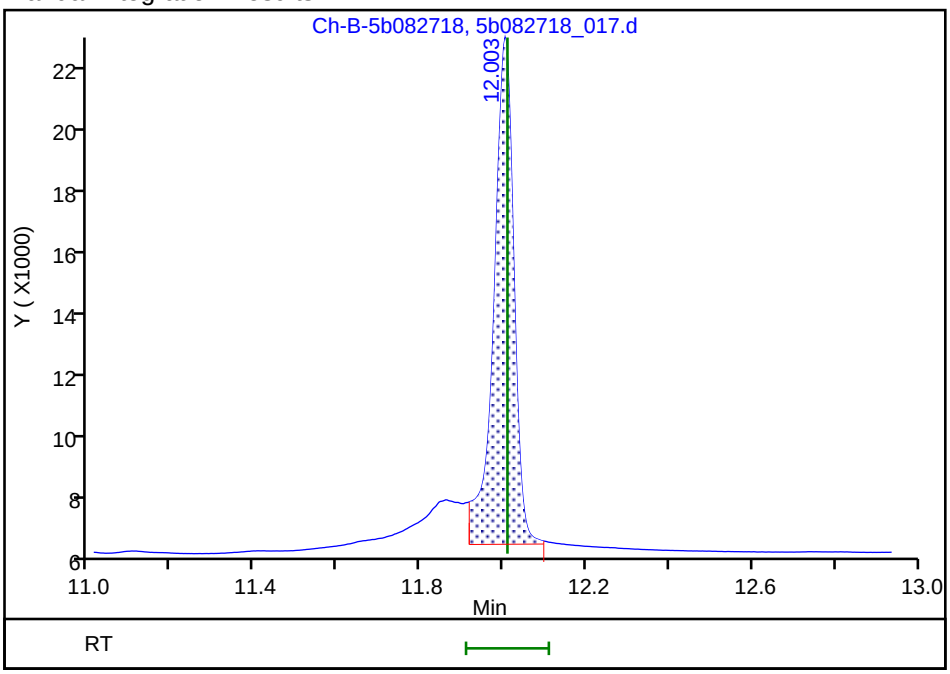
Processing Integration Results

RT: 12.00
Area: 389189
Amount: 30.501189
Amount Units: mg/L



Manual Integration Results

RT: 12.00
Area: 266385
Amount: 20.876899
Amount Units: mg/L



Reviewer: luj, 28-Aug-2018 12:16:52

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-I3W Lab Sample ID: 720-88220-3

Matrix: Water Lab File ID: 5b082718_018.d

Analysis Method: 8015B Date Collected: 08/23/2018 07:45

Extraction Method: 3510C Date Extracted: 08/27/2018 14:49

Sample wt/vol: 957.8(mL) Date Analyzed: 08/27/2018 23:24

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250253 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	57		52	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	71		23-156

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_018.d
Lims ID: 720-88220-E-3-A
Client ID: DG-I3W
Sample Type: Client
Inject. Date: 27-Aug-2018 23:24:27 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 106 Name: 720-0053489-018
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\DRO5B.m
Limit Group: DRO
Last Update: 28-Aug-2018 12:19:36 Calib Date: 27-Aug-2018 08:53:03
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK013

First Level Reviewer: luj Date: 28-Aug-2018 12:19:36

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	2.682	2.666	0.016	421	NC	
23 n-Decane	3.917	3.893	0.024	904	NC	
A 1 C9-C13	4.640	(2.666-6.614)		9842	0.7770	
A 21 Stoddard Solvent	4.640	(2.666-6.614)		9842	NC	
A 57 C10-C12	4.851	(3.893-5.808)		4120	0.3961	
24 Dodecane	5.782	5.808	-0.026	731	NC	
A 3 C9 - C17	6.003	(2.666-9.341)		22779	1.92	
A 60 C10-C16	6.298	(3.893-8.703)		17085	1.65	
A 47 C9 - C18	6.299	(2.666-9.933)		25620	2.28	
A 15 Kerosene	6.571	(2.666-10.476)		30049	2.67	
A 25 C9-C19	6.571	(2.666-10.476)		30049	2.53	
26 C13		6.614			ND	
$ 27 n-Decanoic Acid (Surr)		7.238			ND	U
A 59 C12-C16	7.256	(5.808-8.703)		13696	1.32	
A 62 C10-C20	7.454	(3.893-11.014)		42759	4.11	
A 28 C9-C24	7.808	(2.666-12.949)		128423	12.3	
A 29 C9-C25	8.026	(2.666-13.387)		138987	13.4	
A 54 C10-C23	8.194	(3.893-12.495)		101308	9.74	
A 4 C10-C24	8.421	(3.893-12.949)		126208	12.1	
A 16 C10-C25	8.640	(3.893-13.387)		136772	13.1	
45 Hexadecane	8.706	8.703	0.003	1825	NC	
A 14 C10-C26	8.851	(3.893-13.809)		172058	16.5	M
A 67 C12-C22	8.915	(5.808-12.021)		97919	9.41	
A 5 Diesel	9.252	(3.893-14.610)		283721	27.3	M
A 32 C10-C28	9.252	(3.893-14.610)		283721	27.3	M
A 12 Unknown Hydrocarbons	9.252	(3.893-14.610)		283721	NC	M
A 30 C13-C22	9.318	(6.614-12.021)		96034	9.23	
44 Heptadecane	9.353	9.341	0.012	905	NC	
A 31 C12-C24	9.379	(5.808-12.949)		122819	11.8	
49 n-Octadecane	9.944	9.933	0.011	1974	NC	
A 52 Mineral oil	10.005	(2.666-17.345)		631318	66.5	
A 9 Crude Oil Range Organics (	9.309	(2.666-15.953)		523612	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 11 Bunker Range Organics (C9-	10.005	(2.666-17.345)		326963	NC	M
33 C19	10.478	10.476	0.002	1846	NC	
A 64 C13-C28	10.612	(6.614-14.610)		278447	26.8	M
A 17 C10-C36	9.923	(3.893-15.953)		324748	31.2	M
A 58 C16-C24	10.826	(8.703-12.949)		109123	10.5	
A 13 C9-C40	10.829	(2.666-18.993)		766655	83.8	
A 68 Crude Oil Range Organics (	10.829	(2.666-18.993)		766655	NC	
61 icosane		11.014			ND	
A 6 C10-C40	11.443	(3.893-18.993)		763771	83.6	
$ 34 p-Terphenyl	12.003	12.009	-0.006	226940	17.8	M
35 n-Docosane		12.021			ND	
A 18 C12-C40	12.400	(5.808-18.993)		756890	83.0	
36 Tricosane		12.495			ND	
A 66 C13-C40	12.803	(6.614-18.993)		713934	78.8	
37 n-Tetracosane	12.954	12.949	0.005	10564	NC	
A 2 C16-C36 ORO	13.024	(8.703-17.345)		458443	68.8	
38 C25		13.387			ND	
46 n-Hexacosane		13.809			ND	
A 19 C16-C40	13.848	(8.703-18.993)		728616	80.2	
A 20 C19-C36	13.910	(10.476-17.345)		324636	39.8	
A 55 C23-C32	14.278	(12.495-16.061)		257159	66.0	
39 n-Octacosane		14.610			ND	
65 C29		14.990			ND	
A 40 C24-C36	15.147	(12.949-17.345)		305518	52.3	
A 7 Motor Oil	15.147	(12.949-17.345)		305518	52.3	
A 50 C25-C36	15.366	(13.387-17.345)		281814	50.8	
A 10 C22-C40	15.507	(12.021-18.993)		264425	31.8	
A 41 C23-C40	15.744	(12.495-18.993)		424911	52.2	
A 8 C24-C40	15.971	(12.949-18.993)		403483	51.1	
56 Dotriacontane		16.061			ND	
A 51 C28-C40	16.801	(14.610-18.993)		242130	37.9	
A 63 C29-C40	16.992	(14.990-18.993)		219532	37.3	
42 n-Hexatriacontane	17.425	17.345	0.080	113865	NC	
43 C40		18.993			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

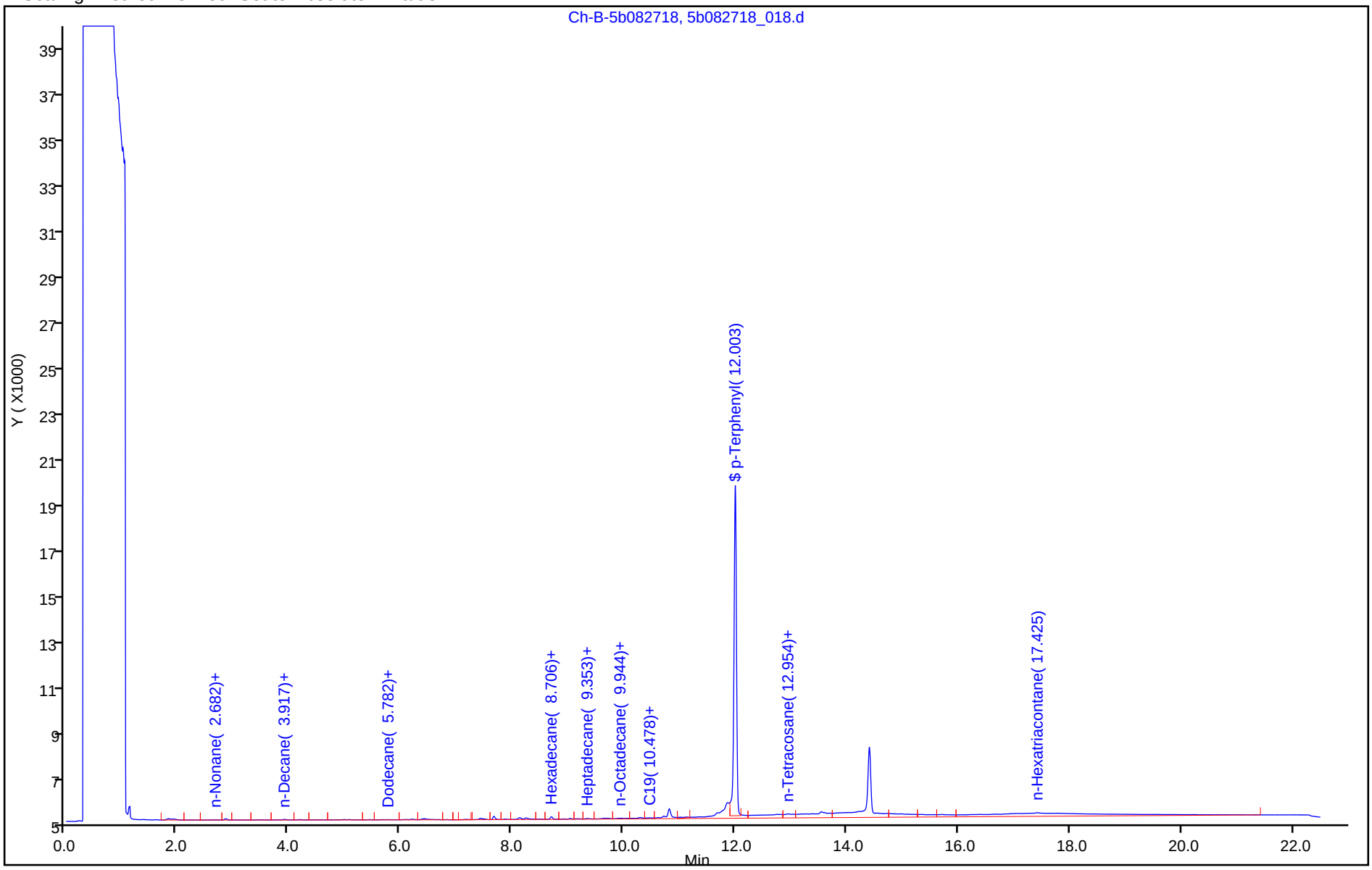
Report Date: 28-Aug-2018 12:19:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_018.d

Injection Date:	27-Aug-2018 23:24:27	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88220-E-3-A	Lab Sample ID:	720-88220-3	Worklist Smp#:	18
Client ID:	DG-I3W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_018.d				
Lims ID:	720-88220-E-3-A				
Client ID:	DG-I3W				
Sample Type:	Client				
Inject. Date:	27-Aug-2018 23:24:27	ALS Bottle#:	0	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 106 Name: 720-0053489-018				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\DRO5B.m				
Limit Group:	DRO				
Last Update:	28-Aug-2018 12:19:36	Calib Date:	27-Aug-2018 08:53:03		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK013				
First Level Reviewer: luj		Date:	28-Aug-2018 12:19:36		

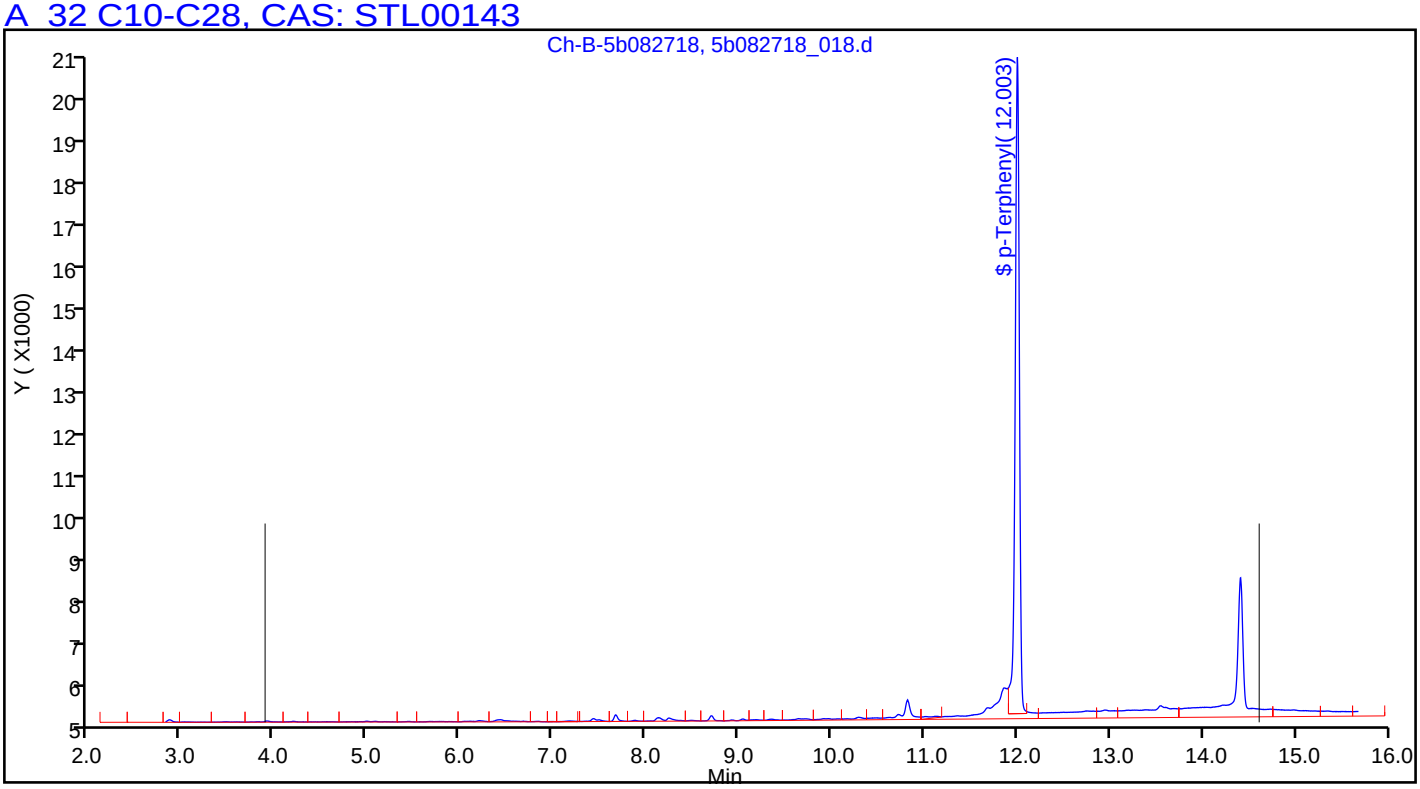
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	17.8	71.14

Report Date: 28-Aug-2018 12:19:39 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_018.d				
Injection Date:	27-Aug-2018 23:24:27	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-3-A	Lab Sample ID:	720-88220-3		
Client ID:	DG-I3W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

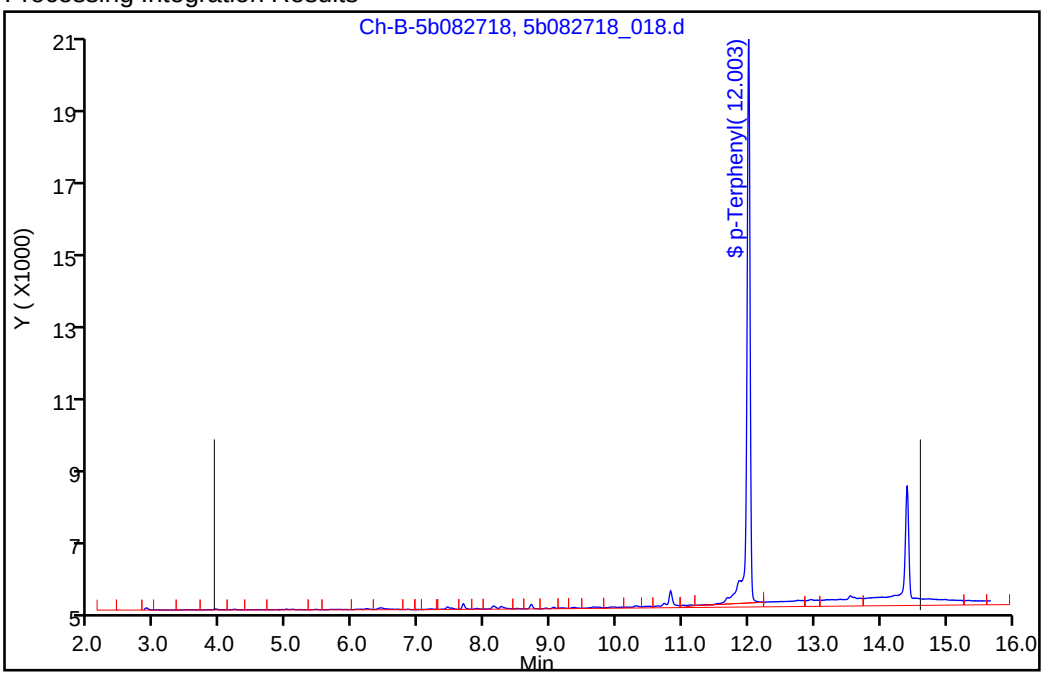
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_018.d				
Injection Date:	27-Aug-2018 23:24:27	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-3-A	Lab Sample ID:	720-88220-3		
Client ID:	DG-I3W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 9.252, CAS: STL00143

Signal: 1

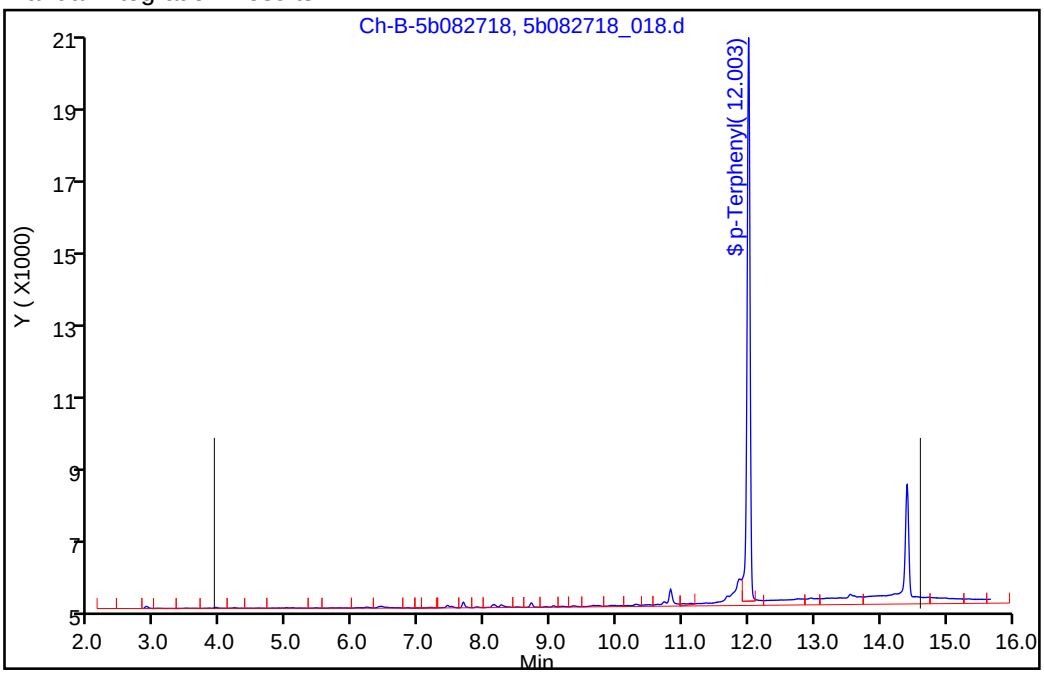
Processing Integration Results

RT: 9.25
Response: 276387
Amount: 26.572597



Manual Integration Results

RT: 9.25
Response: 283721
Amount: 27.277707



Reviewer: luj, 28-Aug-2018 12:19:08

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

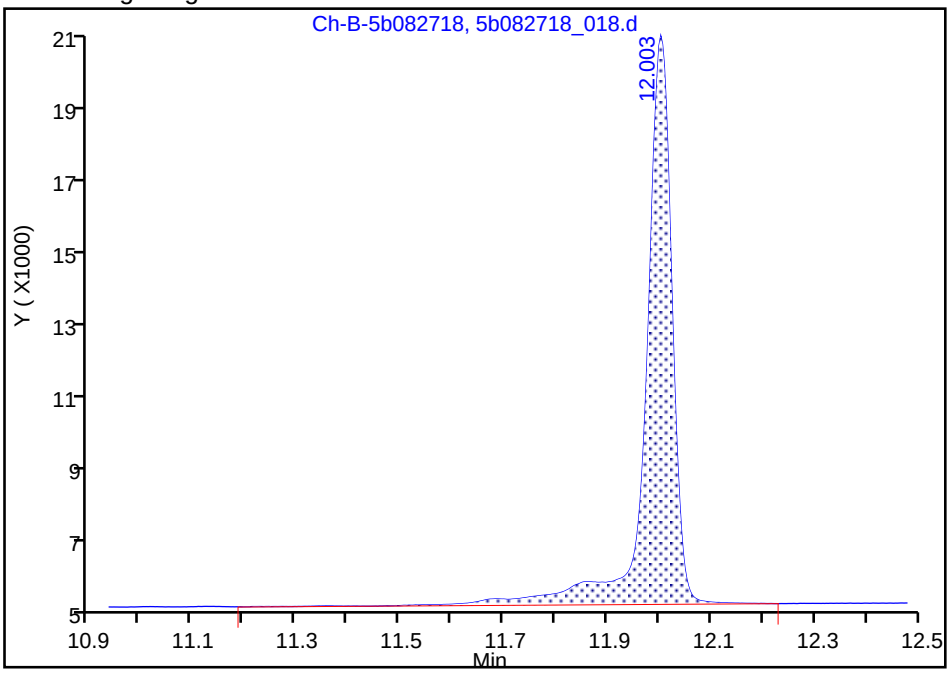
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_018.d				
Injection Date:	27-Aug-2018 23:24:27	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-3-A	Lab Sample ID:	720-88220-3		
Client ID:	DG-I3W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

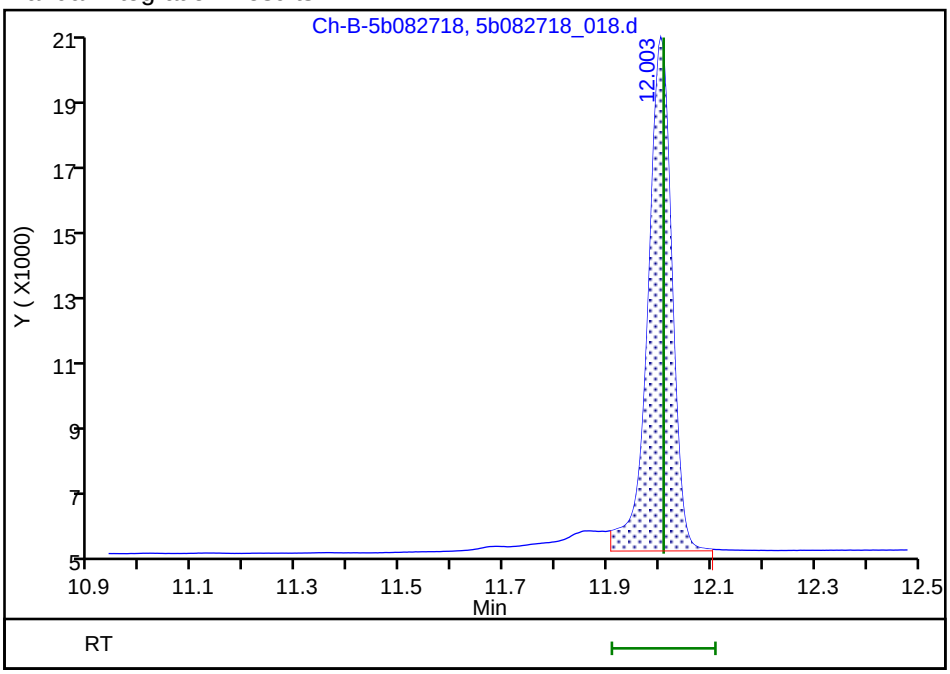
Processing Integration Results

RT: 12.00
Area: 253904
Amount: 19.898748
Amount Units: mg/L



Manual Integration Results

RT: 12.00
Area: 226940
Amount: 17.785549
Amount Units: mg/L



Reviewer: luj, 28-Aug-2018 12:19:25

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-K3W Lab Sample ID: 720-88220-4

Matrix: Water Lab File ID: 5b082718_019.d

Analysis Method: 8015B Date Collected: 08/23/2018 08:15

Extraction Method: 3510C Date Extracted: 08/27/2018 14:49

Sample wt/vol: 955.9(mL) Date Analyzed: 08/27/2018 23:53

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250253 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	52		52	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	71		23-156

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_019.d
Lims ID: 720-88220-E-4-A
Client ID: DG-K3W
Sample Type: Client
Inject. Date: 27-Aug-2018 23:53:41 ALS Bottle#: 0 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 106 Name: 720-0053489-019
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\DRO5B.m
Limit Group: DRO
Last Update: 28-Aug-2018 12:20:35 Calib Date: 27-Aug-2018 08:53:03
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK013

First Level Reviewer: luj Date: 28-Aug-2018 12:20:35

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	2.661	2.666	-0.005	435	NC	
23 n-Decane	3.915	3.893	0.022	642	NC	
A 1 C9-C13	4.640	(2.666-6.614)		14610	1.15	
A 21 Stoddard Solvent	4.640	(2.666-6.614)		14610	NC	
A 57 C10-C12	4.851	(3.893-5.808)		5227	0.5025	
24 Dodecane	5.867	5.808	0.059	1359	NC	
A 3 C9 - C17	6.003	(2.666-9.341)		25205	2.13	
A 60 C10-C16	6.298	(3.893-8.703)		18568	1.79	
A 47 C9 - C18	6.299	(2.666-9.933)		35737	3.18	
A 15 Kerosene	6.571	(2.666-10.476)		45584	4.05	
A 25 C9-C19	6.571	(2.666-10.476)		45584	3.84	
26 C13		6.614			ND	
$ 27 n-Decanoic Acid (Surr)		7.238			ND	U
A 59 C12-C16	7.256	(5.808-8.703)		13341	1.28	
A 62 C10-C20	7.454	(3.893-11.014)		64882	6.24	
A 28 C9-C24	7.808	(2.666-12.949)		169481	16.3	
A 29 C9-C25	8.026	(2.666-13.387)		169481	16.3	
A 54 C10-C23	8.194	(3.893-12.495)		140689	13.5	
A 4 C10-C24	8.421	(3.893-12.949)		165027	15.9	
A 16 C10-C25	8.640	(3.893-13.387)		165027	15.9	
45 Hexadecane	8.706	8.703	0.003	2183	NC	
A 14 C10-C26	8.851	(3.893-13.809)		210336	20.2	
A 67 C12-C22	8.915	(5.808-12.021)		135462	13.0	
A 5 Diesel	9.252	(3.893-14.610)		258784	24.9	
A 32 C10-C28	9.252	(3.893-14.610)		258784	24.9	
A 12 Unknown Hydrocarbons	9.252	(3.893-14.610)		258784	NC	
A 30 C13-C22	9.318	(6.614-12.021)		132682	12.8	
44 Heptadecane	9.353	9.341	0.012	5629	NC	
A 31 C12-C24	9.379	(5.808-12.949)		159800	15.4	
49 n-Octadecane	9.951	9.933	0.018	5072	NC	
A 52 Mineral oil	10.005	(2.666-17.345)		650578	68.6	
A 9 Crude Oil Range Organics (	10.059	(2.773-17.345)		650322	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 11 Bunker Range Organics (C9-	10.005	(2.666-17.345)		412082	NC	
33 C19		10.476			ND	
A 64 C13-C28	10.612	(6.614-14.610)		250777	24.1	
A 17 C10-C36	10.619	(3.893-17.345)		407628	39.2	
A 58 C16-C24	10.826	(8.703-12.949)		146459	14.1	
A 13 C9-C40	10.829	(2.666-18.993)		785688	85.9	
A 68 Crude Oil Range Organics (	10.829	(2.666-18.993)		785688	NC	
61 icosane		11.014			ND	
A 6 C10-C40	11.443	(3.893-18.993)		780347	85.4	
$ 34 p-Terphenyl	12.003	12.009	-0.006	225422	17.7	M
35 n-Docosane		12.021			ND	
A 18 C12-C40	12.400	(5.808-18.993)		768728	84.3	
36 Tricosane		12.495			ND	
A 66 C13-C40	12.803	(6.614-18.993)		690138	76.1	
37 n-Tetracosane		12.949			ND	
A 2 C16-C36 ORO	13.024	(8.703-17.345)		400365	60.1	
38 C25		13.387			ND	
46 n-Hexacosane	13.867	13.809	0.058	30927	NC	
A 19 C16-C40	13.848	(8.703-18.993)		732543	80.7	
A 20 C19-C36	13.910	(10.476-17.345)		294606	36.2	
A 55 C23-C32	14.278	(12.495-16.061)		193909	49.7	
39 n-Octacosane		14.610			ND	
65 C29		14.990			ND	
A 40 C24-C36	15.147	(12.949-17.345)		237772	40.7	
A 7 Motor Oil	15.147	(12.949-17.345)		237772	40.7	
A 50 C25-C36	15.366	(13.387-17.345)		214022	38.6	
A 10 C22-C40	15.507	(12.021-18.993)		197989	23.8	
A 41 C23-C40	15.744	(12.495-18.993)		351336	43.2	
A 8 C24-C40	15.971	(12.949-18.993)		328827	41.7	
56 Dotriacontane		16.061			ND	
A 51 C28-C40	16.801	(14.610-18.993)		226045	35.4	
A 63 C29-C40	16.992	(14.990-18.993)		205626	34.9	
42 n-Hexatriacontane		17.345			ND	
43 C40		18.993			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

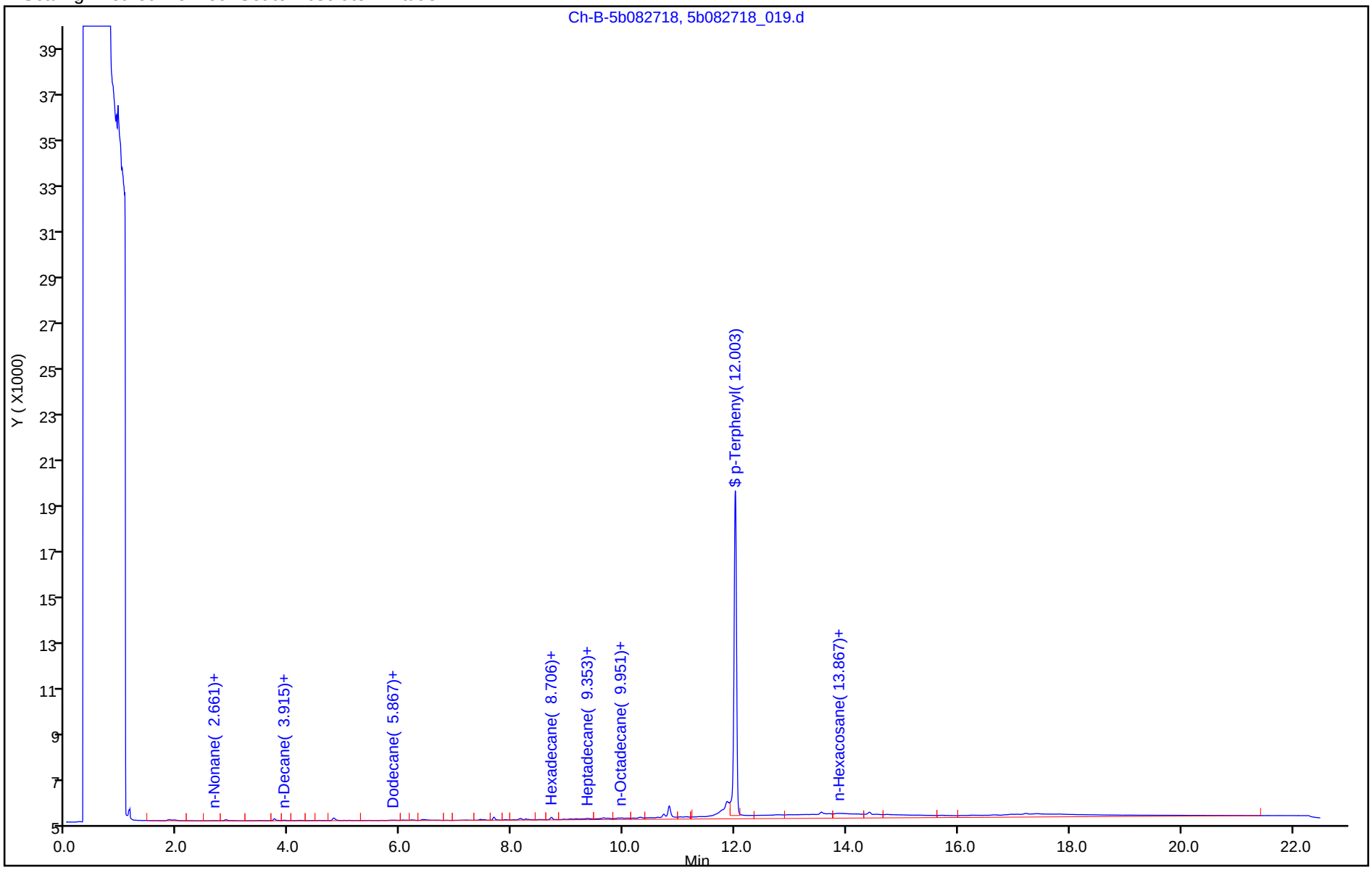
Report Date: 28-Aug-2018 12:20:36 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_019.d

Injection Date:	27-Aug-2018 23:53:41	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88220-E-4-A	Lab Sample ID:	720-88220-4	Worklist Smp#:	19
Client ID:	DG-K3W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_019.d				
Lims ID:	720-88220-E-4-A				
Client ID:	DG-K3W				
Sample Type:	Client				
Inject. Date:	27-Aug-2018 23:53:41	ALS Bottle#:	0	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 106 Name: 720-0053489-019				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\DRO5B.m				
Limit Group:	DRO				
Last Update:	28-Aug-2018 12:20:35	Calib Date:	27-Aug-2018 08:53:03		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK013				
First Level Reviewer: luj		Date:	28-Aug-2018 12:20:35		

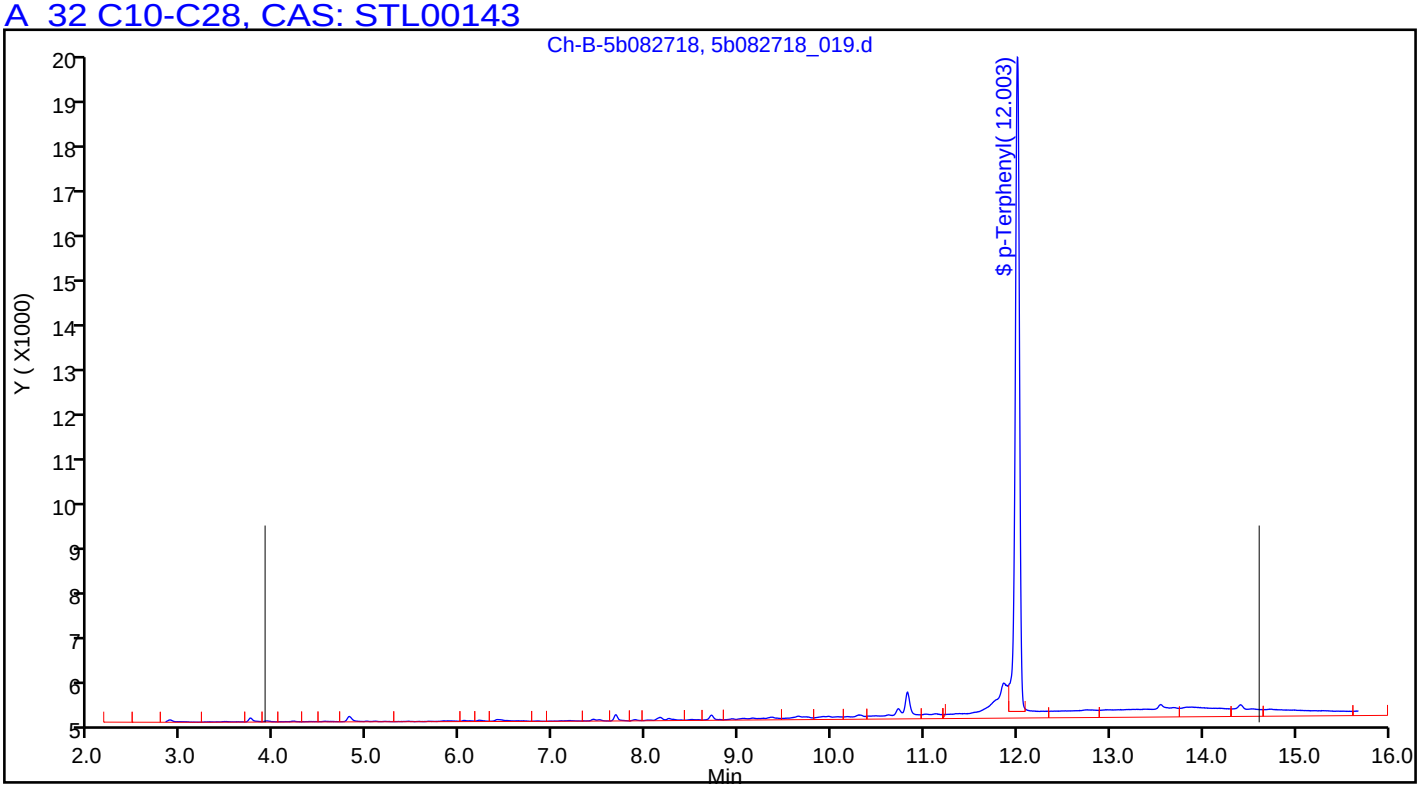
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	17.7	70.67

Report Date: 28-Aug-2018 12:20:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_019.d				
Injection Date:	27-Aug-2018 23:53:41	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-4-A	Lab Sample ID:	720-88220-4		
Client ID:	DG-K3W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

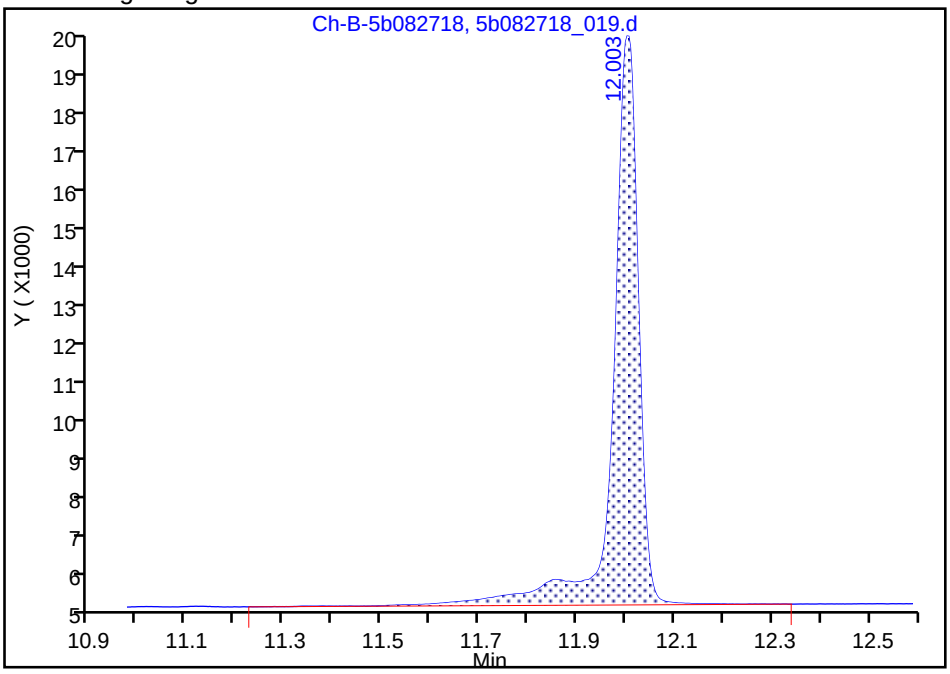
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_019.d				
Injection Date:	27-Aug-2018 23:53:41	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-4-A	Lab Sample ID:	720-88220-4		
Client ID:	DG-K3W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

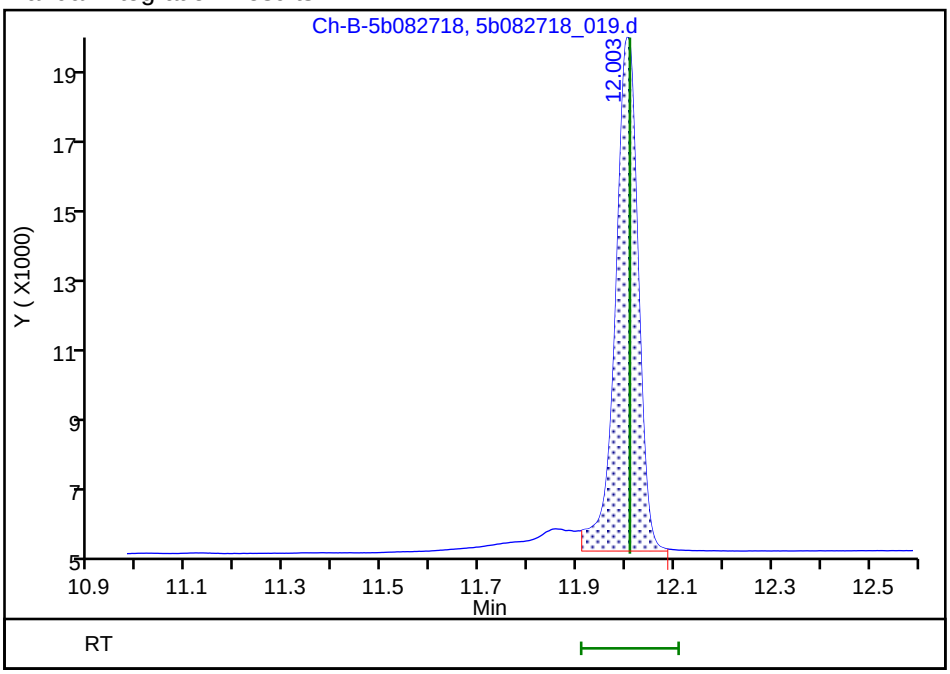
Processing Integration Results

RT: 12.00
Area: 255876
Amount: 20.053296
Amount Units: mg/L



Manual Integration Results

RT: 12.00
Area: 225422
Amount: 17.666581
Amount Units: mg/L



Reviewer: luj, 28-Aug-2018 12:20:27

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-M3W Lab Sample ID: 720-88220-5

Matrix: Water Lab File ID: 5b082718_020.d

Analysis Method: 8015B Date Collected: 08/23/2018 08:45

Extraction Method: 3510C Date Extracted: 08/27/2018 14:49

Sample wt/vol: 964.4(mL) Date Analyzed: 08/28/2018 00:22

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250253 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	56		51	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	65		23-156

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_020.d
Lims ID: 720-88220-E-5-A
Client ID: DG-M3W
Sample Type: Client
Inject. Date: 28-Aug-2018 00:22:59 ALS Bottle#: 0 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 100 Name: 720-0053489-020
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\DRO5B.m
Limit Group: DRO
Last Update: 28-Aug-2018 12:34:34 Calib Date: 27-Aug-2018 08:53:03
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK013

First Level Reviewer: luj Date: 28-Aug-2018 12:34:34

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	2.671	2.666	0.005	370	NC	
	23 n-Decane	3.920	3.893	0.027	719	NC	
A	1 C9-C13	4.640	(2.666-6.614)		9235	0.7291	
A	21 Stoddard Solvent	4.640	(2.666-6.614)		9235	NC	
A	57 C10-C12	4.851	(3.893-5.808)		3074	0.2955	
	24 Dodecane	5.879	5.808	0.071	513	NC	
A	3 C9 - C17	6.003	(2.666-9.341)		23824	2.01	M
A	60 C10-C16	6.298	(3.893-8.703)		16499	1.59	M
A	47 C9 - C18	6.299	(2.666-9.933)		30907	2.75	M
A	15 Kerosene	6.571	(2.666-10.476)		43836	3.90	M
A	25 C9-C19	6.571	(2.666-10.476)		43836	3.70	M
	26 C13		6.614			ND	
$	27 n-Decanoic Acid (Surr)		7.238			ND	U
A	59 C12-C16	7.256	(5.808-8.703)		13425	1.29	M
A	62 C10-C20	7.454	(3.893-11.014)		60156	5.78	M
A	28 C9-C24	7.808	(2.666-12.949)		165331	15.9	M
A	29 C9-C25	8.026	(2.666-13.387)		201817	19.4	M
A	54 C10-C23	8.194	(3.893-12.495)		134399	12.9	M
A	4 C10-C24	8.421	(3.893-12.949)		163228	15.7	M
A	16 C10-C25	8.640	(3.893-13.387)		199714	19.2	M
	45 Hexadecane	8.703	8.703	0.000	2144	NC	M
A	14 C10-C26	8.851	(3.893-13.809)		219112	21.1	M
A	67 C12-C22	8.915	(5.808-12.021)		131325	12.6	M
A	5 Diesel	9.252	(3.893-14.610)		279683	26.9	M
A	32 C10-C28	9.252	(3.893-14.610)		279683	26.9	M
A	12 Unknown Hydrocarbons	9.252	(3.893-14.610)		279683	NC	M
A	30 C13-C22	9.318	(6.614-12.021)		129491	12.4	M
	44 Heptadecane	9.347	9.341	0.006	2793	NC	M
A	31 C12-C24	9.379	(5.808-12.949)		160154	15.4	M
	49 n-Octadecane	9.977	9.933	0.044	4799	NC	M
A	52 Mineral oil	10.005	(2.666-17.345)		556360	58.6	
A	9 Crude Oil Range Organics (	9.584	(2.666-16.503)		490922	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 11 Bunker Range Organics (C9-	10.005	(2.666-17.345)		366358	NC	M
33 C19		10.476			ND	
A 64 C13-C28	10.612	(6.614-14.610)		274775	26.4	M
A 17 C10-C36	10.198	(3.893-16.503)		364255	35.0	M
A 58 C16-C24	10.826	(8.703-12.949)		146729	14.1	M
A 13 C9-C40	10.829	(2.666-18.993)		686465	75.0	
A 68 Crude Oil Range Organics (	10.829	(2.666-18.993)		686465	NC	
61 icosane		11.014			ND	
A 6 C10-C40	11.443	(3.893-18.993)		683445	74.8	
$ 34 p-Terphenyl	12.003	12.009	-0.006	207615	16.3	M
35 n-Docosane		12.021			ND	
A 18 C12-C40	12.400	(5.808-18.993)		676571	74.2	
36 Tricosane		12.495			ND	
A 66 C13-C40	12.803	(6.614-18.993)		626013	69.1	
37 n-Tetracosane	12.957	12.949	0.008	17086	NC	M
A 2 C16-C36 ORO	13.024	(8.703-17.345)		383487	57.6	
38 C25	13.300	13.387	-0.087	19400	NC	M
46 n-Hexacosane	13.813	13.809	0.004	29540	NC	M
A 19 C16-C40	13.848	(8.703-18.993)		652318	71.8	
A 20 C19-C36	13.910	(10.476-17.345)		269583	33.1	
A 55 C23-C32	14.278	(12.495-16.061)		185895	47.7	
39 n-Octacosane		14.610			ND	
65 C29		14.990			ND	
A 40 C24-C36	15.147	(12.949-17.345)		227344	38.9	
A 7 Motor Oil	15.147	(12.949-17.345)		227344	38.9	
A 50 C25-C36	15.366	(13.387-17.345)		203441	36.7	
A 10 C22-C40	15.507	(12.021-18.993)		203399	24.5	
A 41 C23-C40	15.744	(12.495-18.993)		342442	42.1	
A 8 C24-C40	15.971	(12.949-18.993)		319829	40.5	
56 Dotriacontane		16.061			ND	
A 51 C28-C40	16.801	(14.610-18.993)		220360	34.5	
A 63 C29-C40	16.992	(14.990-18.993)		201231	34.2	
42 n-Hexatriacontane		17.345			ND	
43 C40		18.993			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

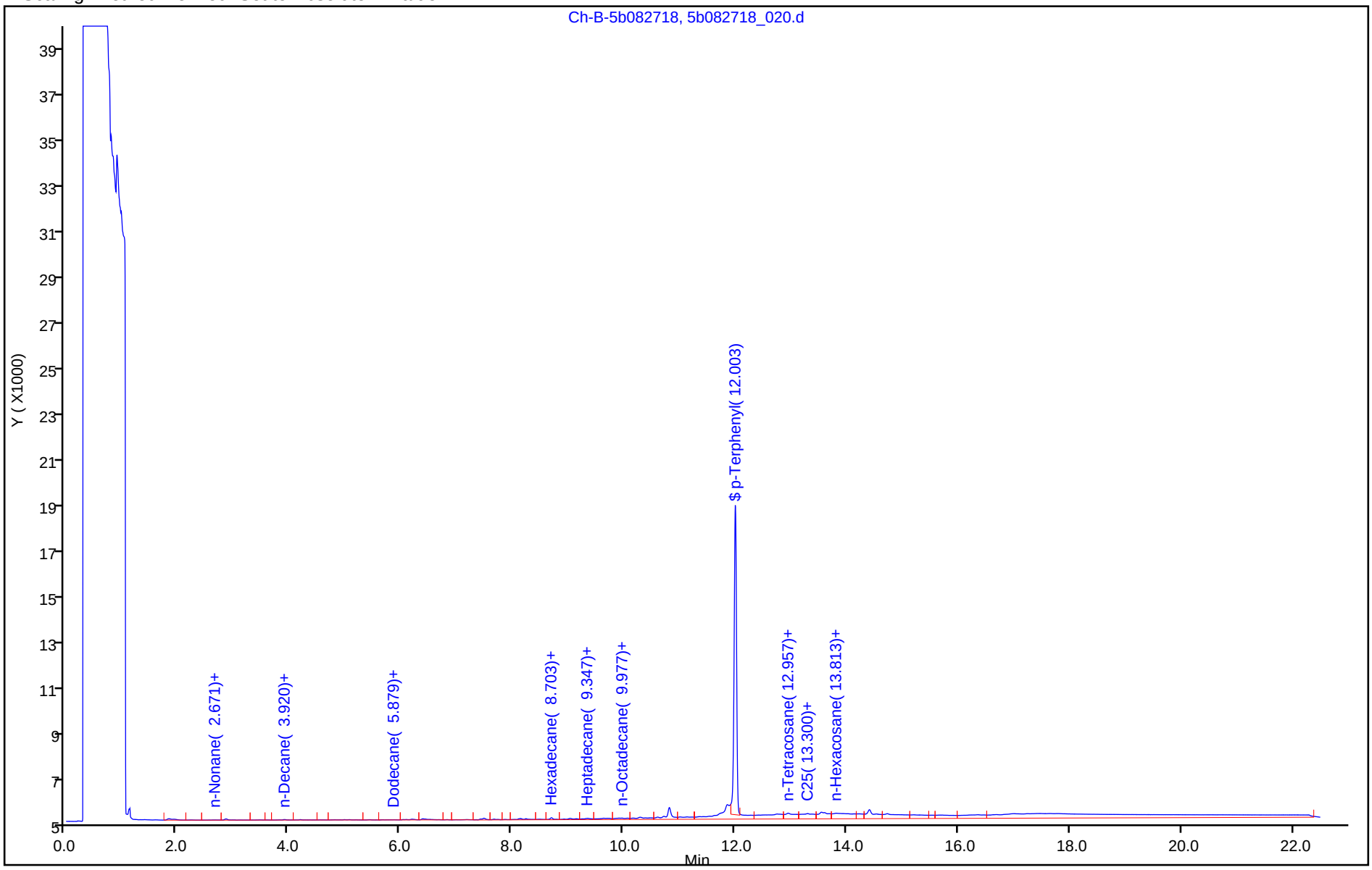
Report Date: 28-Aug-2018 12:34:35 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_020.d

Injection Date:	28-Aug-2018 00:22:59	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88220-E-5-A	Lab Sample ID:	720-88220-5	Worklist Smp#:	20
Client ID:	DG-M3W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_020.d				
Lims ID:	720-88220-E-5-A				
Client ID:	DG-M3W				
Sample Type:	Client				
Inject. Date:	28-Aug-2018 00:22:59	ALS Bottle#:	0	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 100 Name: 720-0053489-020				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\DRO5B.m				
Limit Group:	DRO				
Last Update:	28-Aug-2018 12:34:34	Calib Date:	27-Aug-2018 08:53:03		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK013				

First Level Reviewer: luj Date: 28-Aug-2018 12:34:34

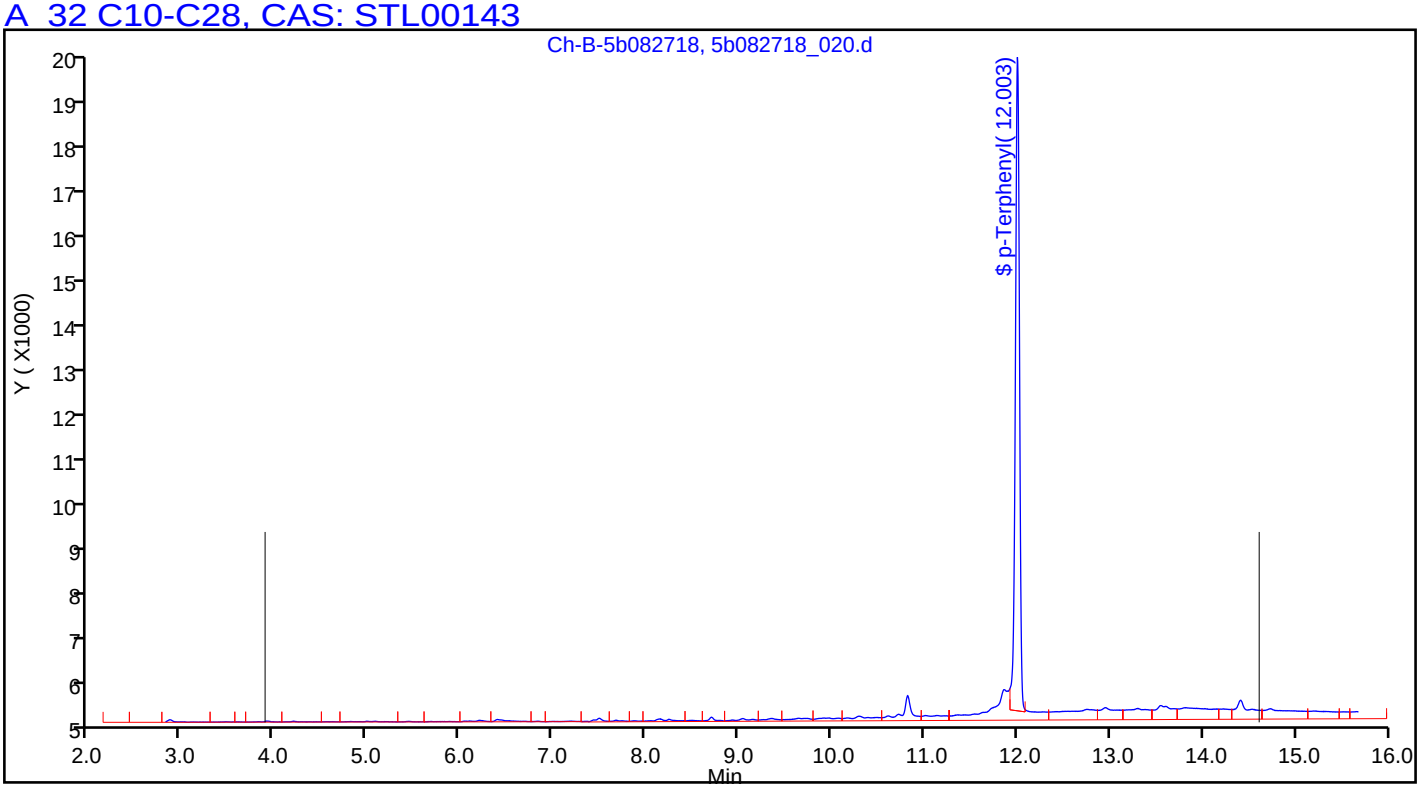
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	16.3	65.08

Report Date: 28-Aug-2018 12:34:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_020.d				
Injection Date:	28-Aug-2018 00:22:59	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-5-A	Lab Sample ID:	720-88220-5		
Client ID:	DG-M3W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

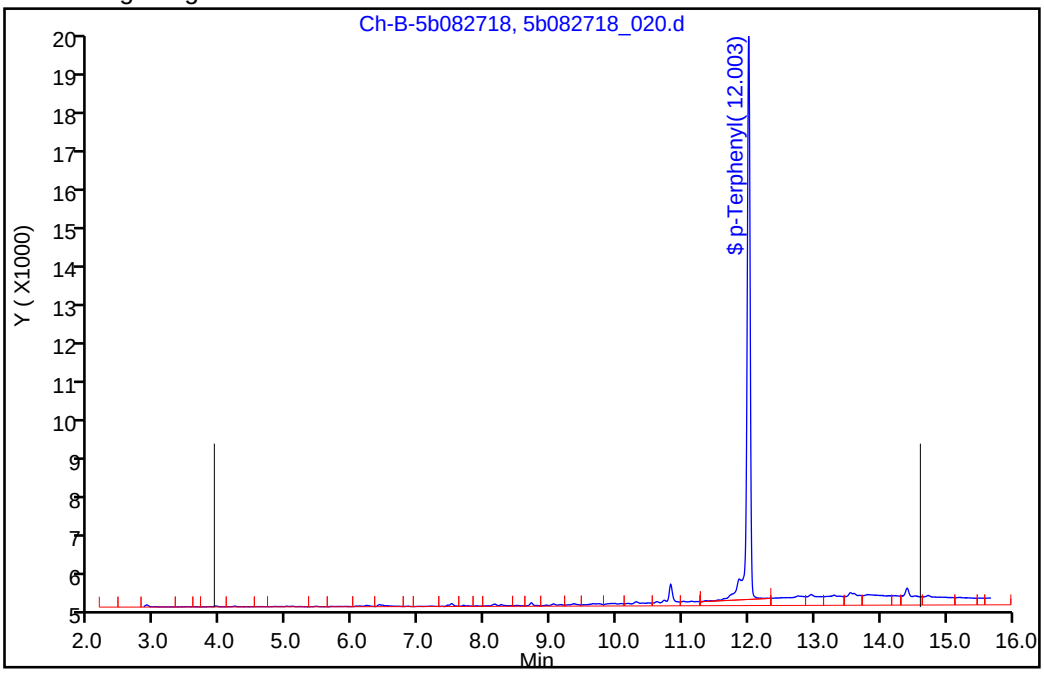
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_020.d				
Injection Date:	28-Aug-2018 00:22:59	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-5-A	Lab Sample ID:	720-88220-5		
Client ID:	DG-M3W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 9.252, CAS: STL00143

Signal: 1

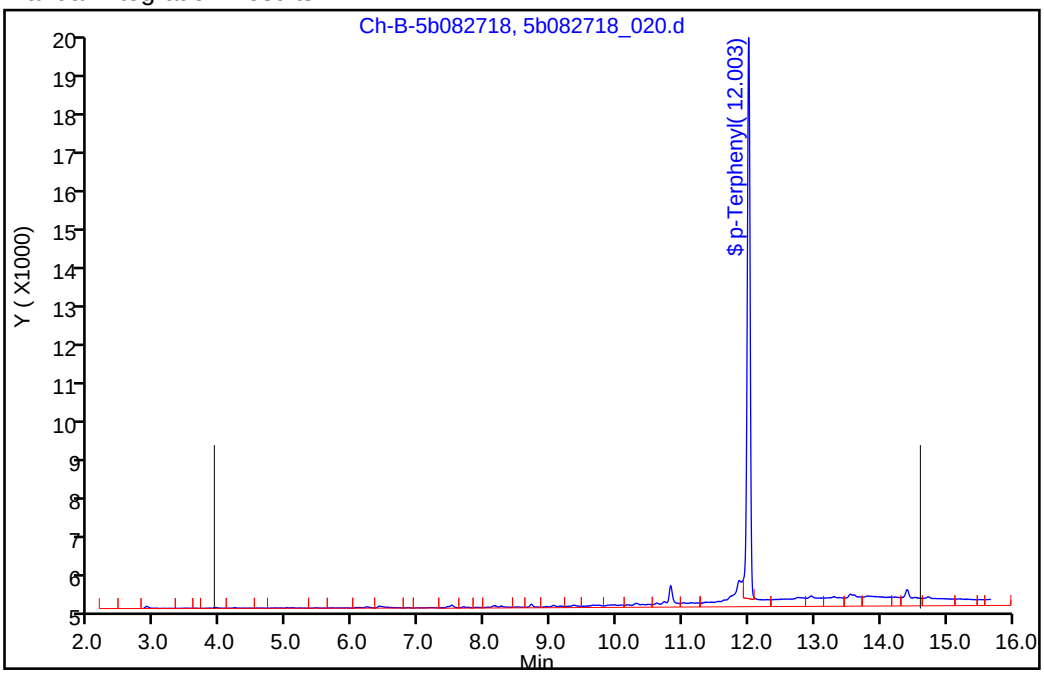
Processing Integration Results

RT: 9.25
Response: 261085
Amount: 25.101421



Manual Integration Results

RT: 9.25
Response: 279683
Amount: 26.889483



Reviewer: luj, 28-Aug-2018 12:34:11

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

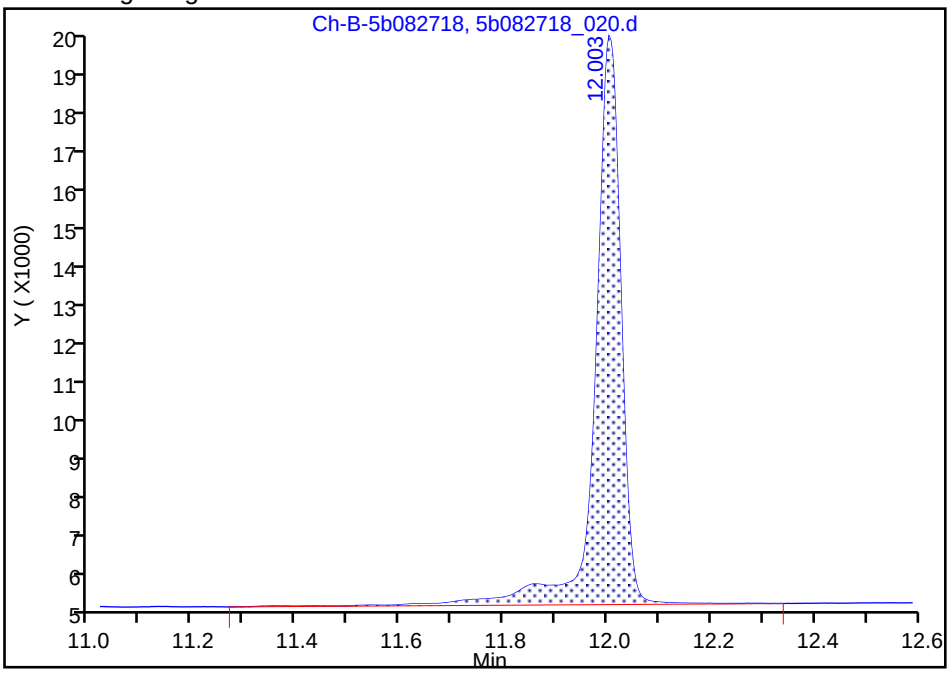
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_020.d				
Injection Date:	28-Aug-2018 00:22:59	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-5-A	Lab Sample ID:	720-88220-5		
Client ID:	DG-M3W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

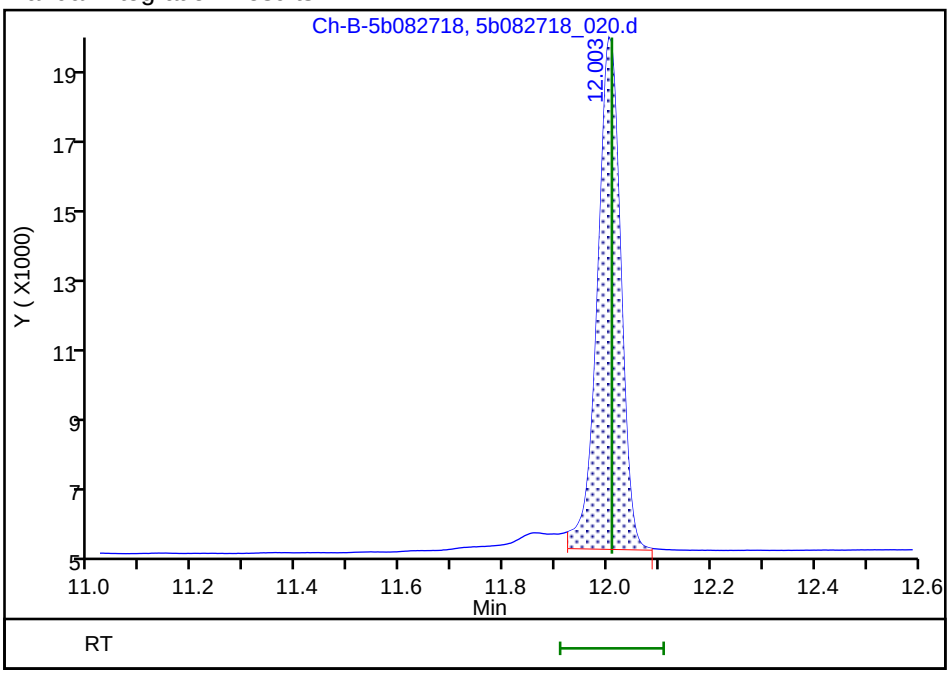
Processing Integration Results

RT: 12.00
Area: 233211
Amount: 18.277014
Amount Units: mg/L



Manual Integration Results

RT: 12.00
Area: 207615
Amount: 16.271026
Amount Units: mg/L



Reviewer: luj, 28-Aug-2018 12:34:25

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-L5W Lab Sample ID: 720-88220-6

Matrix: Water Lab File ID: 5b082718_021.d

Analysis Method: 8015B Date Collected: 08/23/2018 09:15

Extraction Method: 3510C Date Extracted: 08/27/2018 14:49

Sample wt/vol: 963.8(mL) Date Analyzed: 08/28/2018 00:52

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250253 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	170		51	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	63		23-156

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_021.d
Lims ID: 720-88220-E-6-A
Client ID: DG-L5W
Sample Type: Client
Inject. Date: 28-Aug-2018 00:52:33 ALS Bottle#: 0 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 100 Name: 720-0053489-021
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\DRO5B.m
Limit Group: DRO
Last Update: 28-Aug-2018 12:35:32 Calib Date: 27-Aug-2018 08:53:03
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK013

First Level Reviewer: luj Date: 28-Aug-2018 12:35:32

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	2.630	2.666	-0.036	592	NC	
	23 n-Decane		3.893			ND	
A	1 C9-C13	4.640	(2.666-6.614)		411148	32.5	
A	21 Stoddard Solvent	4.640	(2.666-6.614)		411148	NC	
A	57 C10-C12	4.851	(3.893-5.808)		371504	35.7	
	24 Dodecane	5.806	5.808	-0.002	2730	NC	
A	3 C9 - C17	6.003	(2.666-9.341)		492916	41.6	
A	60 C10-C16	6.298	(3.893-8.703)		443435	42.8	
A	47 C9 - C18	6.299	(2.666-9.933)		547244	48.8	
A	15 Kerosene	6.571	(2.666-10.476)		556515	49.5	
A	25 C9-C19	6.571	(2.666-10.476)		556515	46.9	
	26 C13		6.614			ND	
$	27 n-Decanoic Acid (Surr)		7.238			ND	
A	59 C12-C16	7.256	(5.808-8.703)		74661	7.18	
A	62 C10-C20	7.454	(3.893-11.014)		559714	53.8	
A	28 C9-C24	7.808	(2.666-12.949)		681514	65.5	
A	29 C9-C25	8.026	(2.666-13.387)		732572	70.4	
A	54 C10-C23	8.194	(3.893-12.495)		663585	63.8	
A	4 C10-C24	8.421	(3.893-12.949)		663585	63.8	
A	16 C10-C25	8.640	(3.893-13.387)		714643	68.7	
	45 Hexadecane		8.703			ND	
A	14 C10-C26	8.851	(3.893-13.809)		771485	74.2	
A	67 C12-C22	8.915	(5.808-12.021)		294811	28.3	
A	5 Diesel	9.252	(3.893-14.610)		853847	82.1	
A	32 C10-C28	9.252	(3.893-14.610)		853847	82.1	
A	12 Unknown Hydrocarbons	9.252	(3.893-14.610)		853847	NC	
A	30 C13-C22	9.318	(6.614-12.021)		285002	27.4	
	44 Heptadecane		9.341			ND	
A	31 C12-C24	9.379	(5.808-12.949)		294811	28.3	
	49 n-Octadecane		9.933			ND	
A	52 Mineral oil	10.005	(2.666-17.345)		1325737	139.7	
A	9 Crude Oil Range Organics (	9.965	(2.666-16.503)		1301018	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 11 Bunker Range Organics (C9-	10.005	(2.666-17.345)		1047109	NC	
33 C19		10.476			ND	
A 64 C13-C28	10.612	(6.614-14.610)		475264	45.7	
A 17 C10-C36	10.598	(4.070-17.127)		1027140	98.8	
A 58 C16-C24	10.826	(8.703-12.949)		220150	21.2	
A 13 C9-C40	10.829	(2.666-18.993)		1485173	162.4	
A 68 Crude Oil Range Organics (	10.829	(2.666-18.993)		1485173	NC	
61 icosane		11.014			ND	
A 6 C10-C40	11.443	(3.893-18.993)		1465044	160.3	
$ 34 p-Terphenyl	12.003	12.009	-0.006	202324	15.9	M
35 n-Docosane		12.021			ND	
A 18 C12-C40	12.400	(5.808-18.993)		1087973	119.3	
36 Tricosane		12.495			ND	
A 66 C13-C40	12.803	(6.614-18.993)		876612	96.7	
37 n-Tetracosane	12.965	12.949	0.016	51058	NC	
A 2 C16-C36 ORO	13.024	(8.703-17.345)		595766	89.5	
38 C25		13.387			ND	
46 n-Hexacosane	13.837	13.809	0.028	52060	NC	
A 19 C16-C40	13.848	(8.703-18.993)		982090	108.2	
A 20 C19-C36	13.910	(10.476-17.345)		430270	52.8	
A 55 C23-C32	14.278	(12.495-16.061)		272439	69.9	
39 n-Octacosane		14.610			ND	
65 C29		14.990			ND	
A 40 C24-C36	15.147	(12.949-17.345)		338023	57.9	
A 7 Motor Oil	15.147	(12.949-17.345)		338023	57.9	
A 50 C25-C36	15.366	(13.387-17.345)		306476	55.2	
A 10 C22-C40	15.507	(12.021-18.993)		342691	41.2	
A 41 C23-C40	15.744	(12.495-18.993)		474322	58.3	
A 8 C24-C40	15.971	(12.949-18.993)		445237	56.4	
56 Dotriacontane		16.061			ND	
A 51 C28-C40	16.801	(14.610-18.993)		307366	48.1	
A 63 C29-C40	16.992	(14.990-18.993)		276797	47.0	
42 n-Hexatriacontane	17.386	17.345	0.041	199065	NC	
43 C40		18.993			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

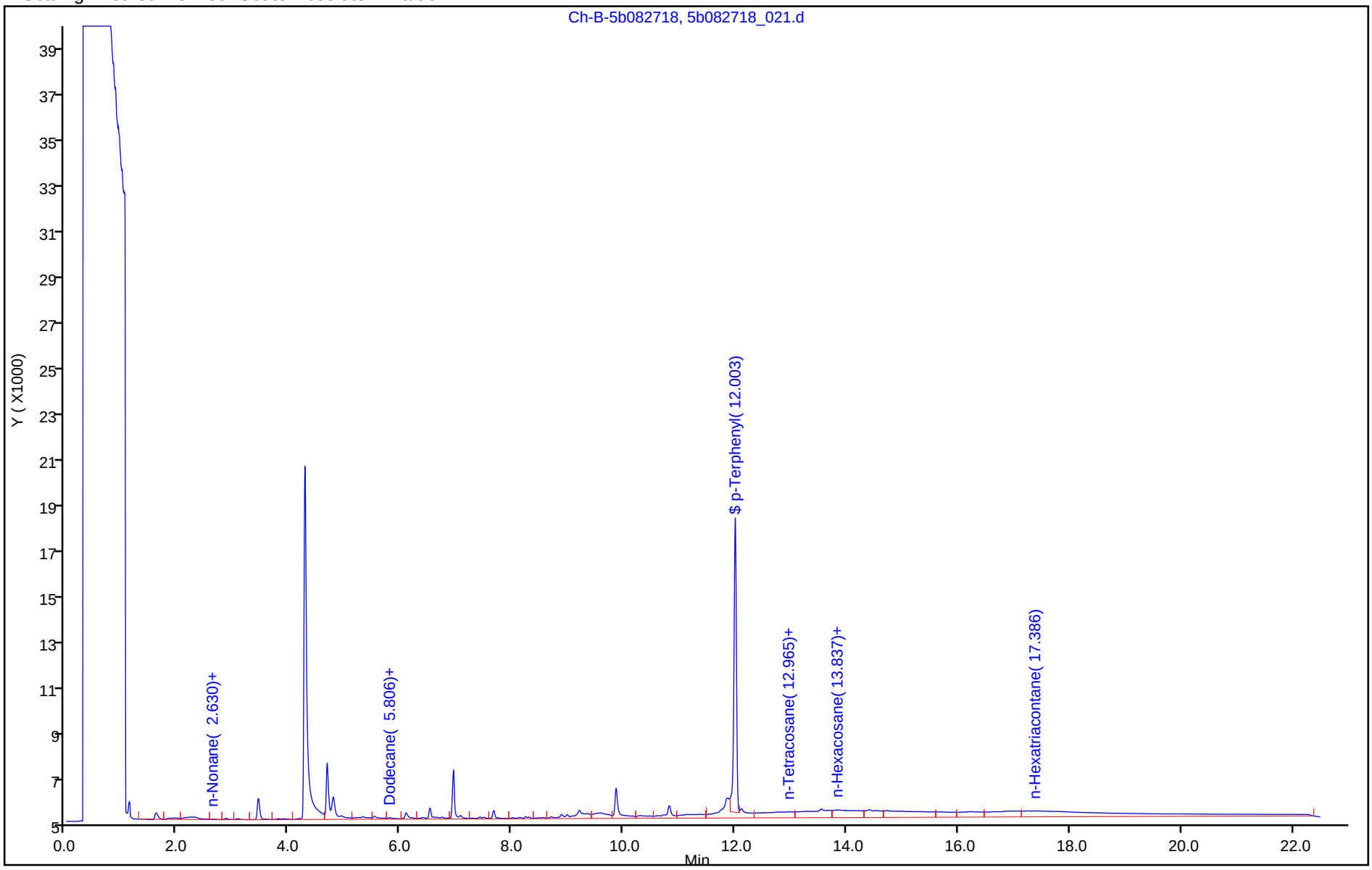
Report Date: 28-Aug-2018 12:35:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_021.d

Injection Date:	28-Aug-2018 00:52:33	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88220-E-6-A	Lab Sample ID:	720-88220-6	Worklist Smp#:	21
Client ID:	DG-L5W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_021.d				
Lims ID:	720-88220-E-6-A				
Client ID:	DG-L5W				
Sample Type:	Client				
Inject. Date:	28-Aug-2018 00:52:33	ALS Bottle#:	0	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 100 Name: 720-0053489-021				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\DRO5B.m				
Limit Group:	DRO				
Last Update:	28-Aug-2018 12:35:32	Calib Date:	27-Aug-2018 08:53:03		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK013				

First Level Reviewer: luj Date: 28-Aug-2018 12:35:32

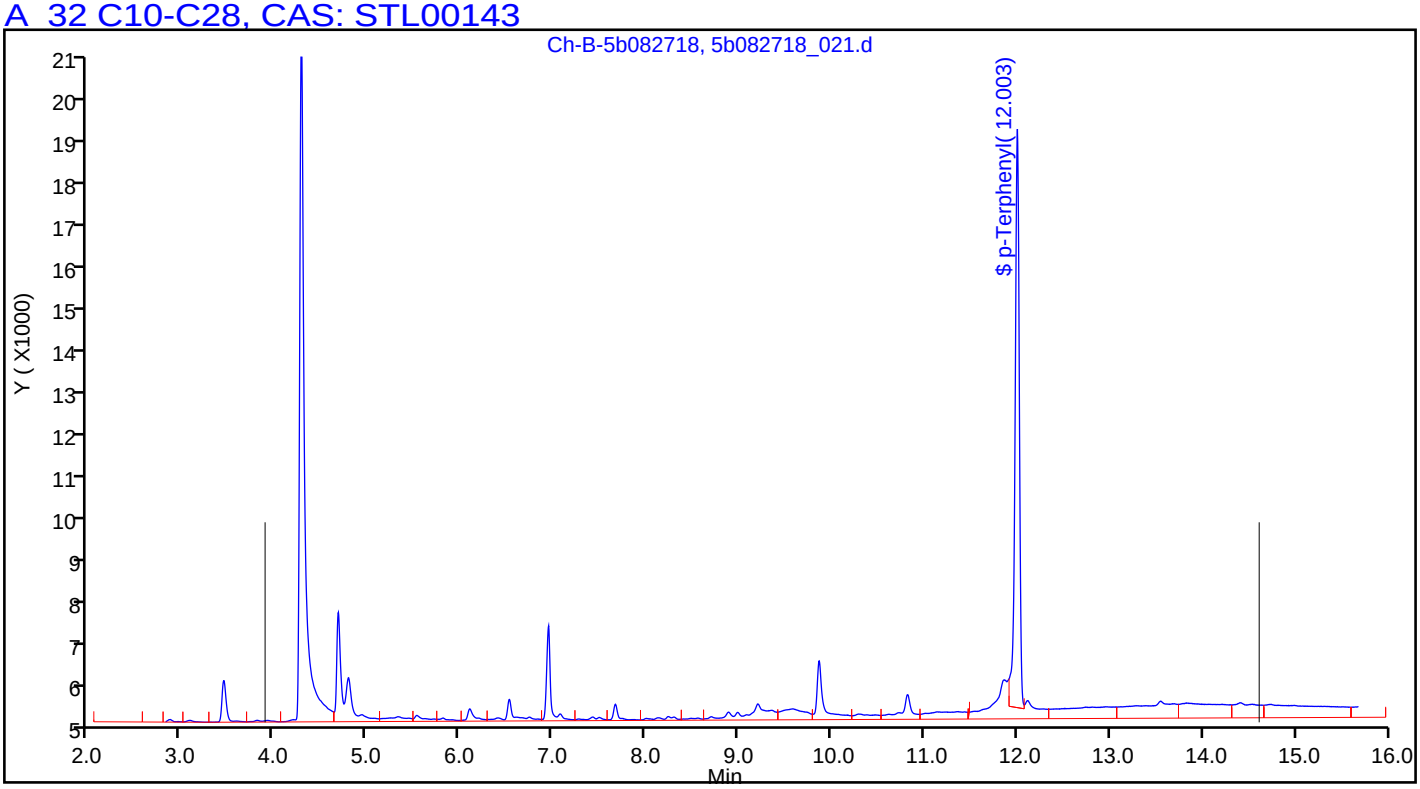
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	15.9	63.43

Report Date: 28-Aug-2018 12:35:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_021.d				
Injection Date:	28-Aug-2018 00:52:33	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-6-A	Lab Sample ID:	720-88220-6		
Client ID:	DG-L5W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

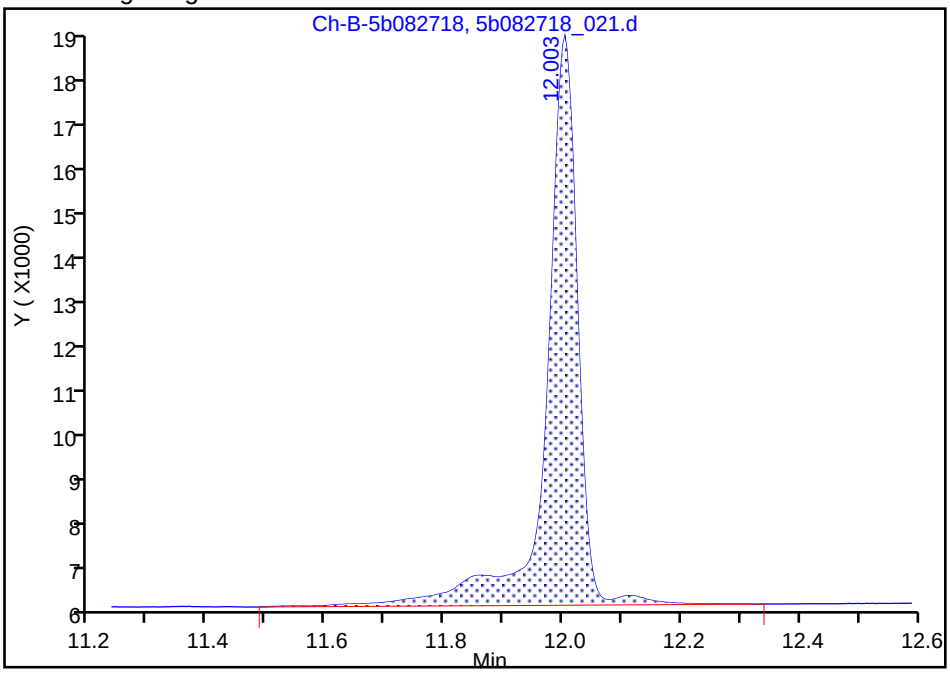
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_021.d				
Injection Date:	28-Aug-2018 00:52:33	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-6-A	Lab Sample ID:	720-88220-6		
Client ID:	DG-L5W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

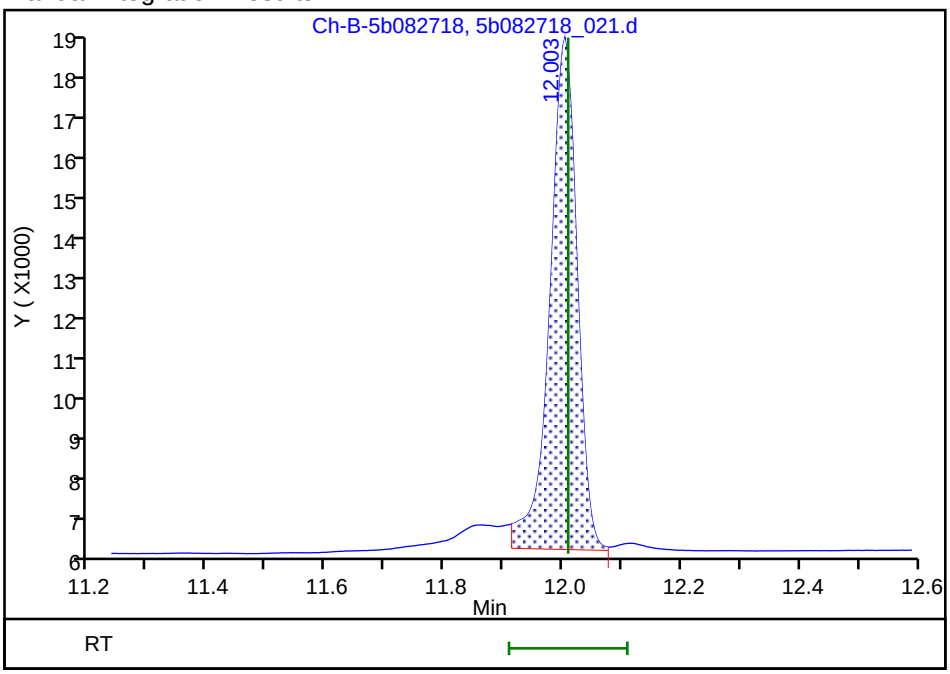
Processing Integration Results

RT: 12.00
Area: 237269
Amount: 18.595044
Amount Units: mg/L



Manual Integration Results

RT: 12.00
Area: 202324
Amount: 15.856364
Amount Units: mg/L



Reviewer: luj, 28-Aug-2018 12:35:16

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-J5W Lab Sample ID: 720-88220-7

Matrix: Water Lab File ID: 5b082718_022.d

Analysis Method: 8015B Date Collected: 08/23/2018 10:00

Extraction Method: 3510C Date Extracted: 08/27/2018 14:49

Sample wt/vol: 957.1(mL) Date Analyzed: 08/28/2018 01:21

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250253 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	76		52	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	59		23-156

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_022.d
Lims ID: 720-88220-E-7-A
Client ID: DG-J5W
Sample Type: Client
Inject. Date: 28-Aug-2018 01:21:51 ALS Bottle#: 0 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 130 Name: 720-0053489-022
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\DRO5B.m
Limit Group: DRO
Last Update: 28-Aug-2018 12:36:05 Calib Date: 27-Aug-2018 08:53:03
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK013

First Level Reviewer: luj Date: 28-Aug-2018 12:36:05

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	2.656	2.666	-0.010	279	NC	
	23 n-Decane	3.918	3.893	0.025	772	NC	
A	1 C9-C13	4.640	(2.666-6.614)		9627	0.7601	
A	21 Stoddard Solvent	4.640	(2.666-6.614)		9627	NC	
A	57 C10-C12	4.851	(3.893-5.808)		3461	0.3327	
	24 Dodecane	5.834	5.808	0.026	1437	NC	
A	3 C9 - C17	6.003	(2.666-9.341)		29809	2.52	
A	60 C10-C16	6.298	(3.893-8.703)		18632	1.80	
A	47 C9 - C18	6.299	(2.666-9.933)		39906	3.56	
A	15 Kerosene	6.571	(2.666-10.476)		61468	5.46	
A	25 C9-C19	6.571	(2.666-10.476)		61468	5.18	
	26 C13		6.614			ND	
$	27 n-Decanoic Acid (Surr)		7.238			ND	U
A	59 C12-C16	7.256	(5.808-8.703)		15171	1.46	
A	62 C10-C20	7.454	(3.893-11.014)		83872	8.06	
A	28 C9-C24	7.808	(2.666-12.949)		224432	21.6	
A	29 C9-C25	8.026	(2.666-13.387)		239091	23.0	
A	54 C10-C23	8.194	(3.893-12.495)		176492	17.0	
A	4 C10-C24	8.421	(3.893-12.949)		222655	21.4	
A	16 C10-C25	8.640	(3.893-13.387)		237314	22.8	
	45 Hexadecane	8.704	8.703	0.001	3211	NC	
A	14 C10-C26	8.851	(3.893-13.809)		287697	27.7	
A	67 C12-C22	8.915	(5.808-12.021)		173031	16.6	
A	5 Diesel	9.252	(3.893-14.610)		378292	36.4	
A	32 C10-C28	9.252	(3.893-14.610)		378292	36.4	
A	12 Unknown Hydrocarbons	9.252	(3.893-14.610)		378292	NC	
A	30 C13-C22	9.318	(6.614-12.021)		170540	16.4	
	44 Heptadecane	9.355	9.341	0.014	3225	NC	
A	31 C12-C24	9.379	(5.808-12.949)		219194	21.1	
	49 n-Octadecane	9.943	9.933	0.010	5705	NC	
A	52 Mineral oil	10.005	(2.666-17.345)		784194	82.6	
A	9 Crude Oil Range Organics (	9.650	(2.790-16.510)		698570	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 11 Bunker Range Organics (C9-	10.005	(2.666-17.345)		516601	NC	
33 C19	10.441	10.476	-0.035	5532	NC	
A 64 C13-C28	10.612	(6.614-14.610)		372340	35.8	
A 17 C10-C36	10.202	(3.893-16.510)		514824	49.5	
A 58 C16-C24	10.826	(8.703-12.949)		204023	19.6	
A 13 C9-C40	10.829	(2.666-18.993)		939538	102.7	
A 68 Crude Oil Range Organics (	10.829	(2.666-18.993)		939538	NC	
61 icosane		11.014			ND	
A 6 C10-C40	11.443	(3.893-18.993)		936771	102.5	
$ 34 p-Terphenyl	12.007	12.009	-0.002	187834	14.7	M
35 n-Docosane		12.021			ND	
A 18 C12-C40	12.400	(5.808-18.993)		927137	101.7	
36 Tricosane		12.495			ND	
A 66 C13-C40	12.803	(6.614-18.993)		841697	92.8	
37 n-Tetracosane	12.955	12.949	0.006	14659	NC	
A 2 C16-C36 ORO	13.024	(8.703-17.345)		494854	74.3	
38 C25		13.387			ND	
46 n-Hexacosane	13.809	13.809	0.000	44758	NC	
A 19 C16-C40	13.848	(8.703-18.993)		890051	98.0	
A 20 C19-C36	13.910	(10.476-17.345)		407149	50.0	
A 55 C23-C32	14.278	(12.495-16.061)		274670	70.5	
39 n-Octacosane		14.610			ND	
65 C29		14.990			ND	
A 40 C24-C36	15.147	(12.949-17.345)		334040	57.2	
A 7 Motor Oil	15.147	(12.949-17.345)		334040	57.2	
A 50 C25-C36	15.366	(13.387-17.345)		302115	54.4	
A 10 C22-C40	15.507	(12.021-18.993)		352335	42.4	
A 41 C23-C40	15.744	(12.495-18.993)		472748	58.1	
A 8 C24-C40	15.971	(12.949-18.993)		442112	56.0	
56 Dotriacontane		16.061			ND	
A 51 C28-C40	16.801	(14.610-18.993)		304969	47.7	
A 63 C29-C40	16.992	(14.990-18.993)		270893	46.0	
42 n-Hexatriacontane	17.415	17.345	0.070	281337	NC	
43 C40		18.993			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

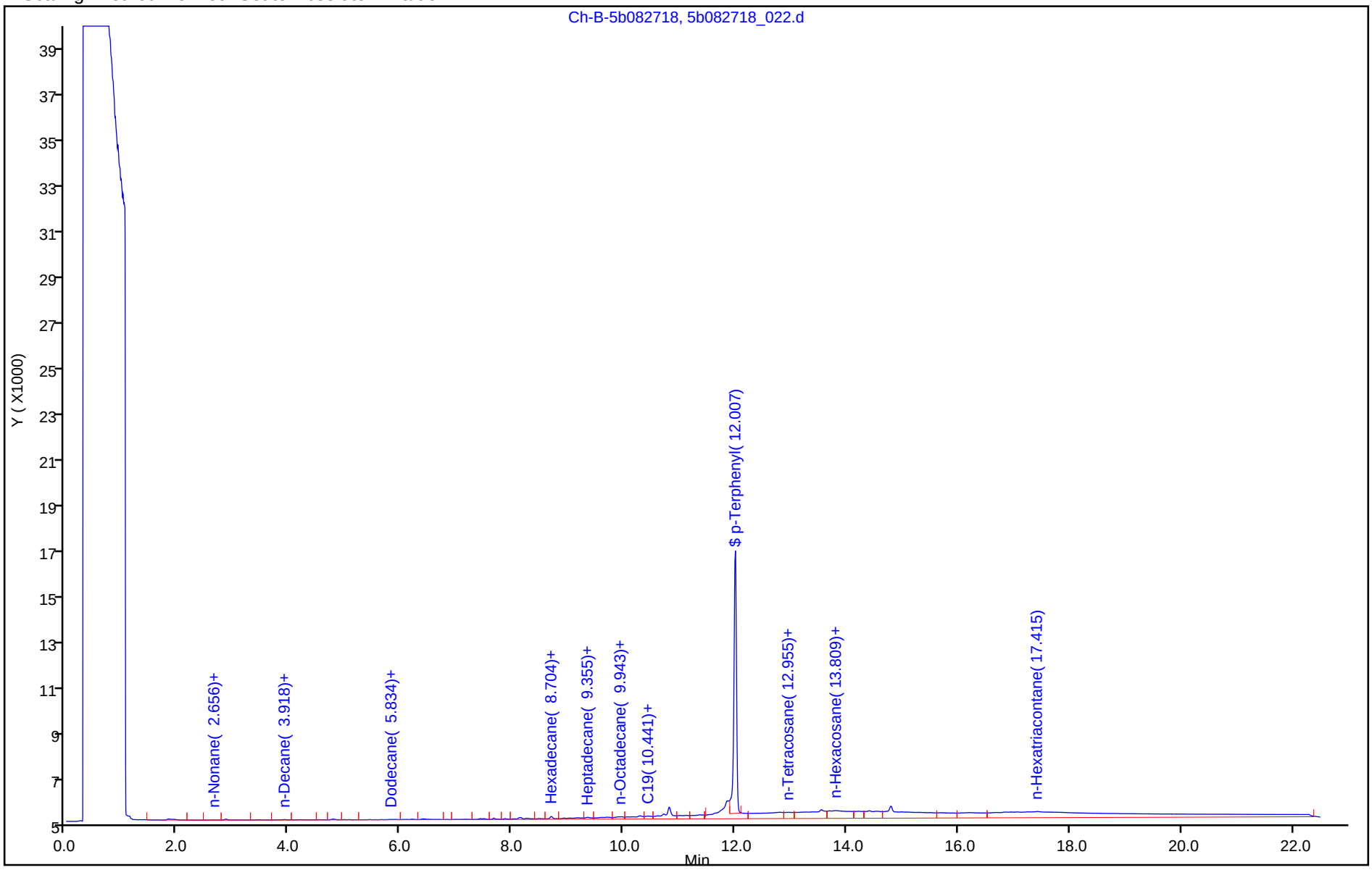
Report Date: 28-Aug-2018 12:36:06 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_022.d

Injection Date:	28-Aug-2018 01:21:51	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88220-E-7-A	Lab Sample ID:	720-88220-7	Worklist Smp#:	22
Client ID:	DG-J5W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_022.d				
Lims ID:	720-88220-E-7-A				
Client ID:	DG-J5W				
Sample Type:	Client				
Inject. Date:	28-Aug-2018 01:21:51	ALS Bottle#:	0	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 130 Name: 720-0053489-022				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\DRO5B.m				
Limit Group:	DRO				
Last Update:	28-Aug-2018 12:36:05	Calib Date:	27-Aug-2018 08:53:03		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK013				
First Level Reviewer: luj		Date:	28-Aug-2018 12:36:05		

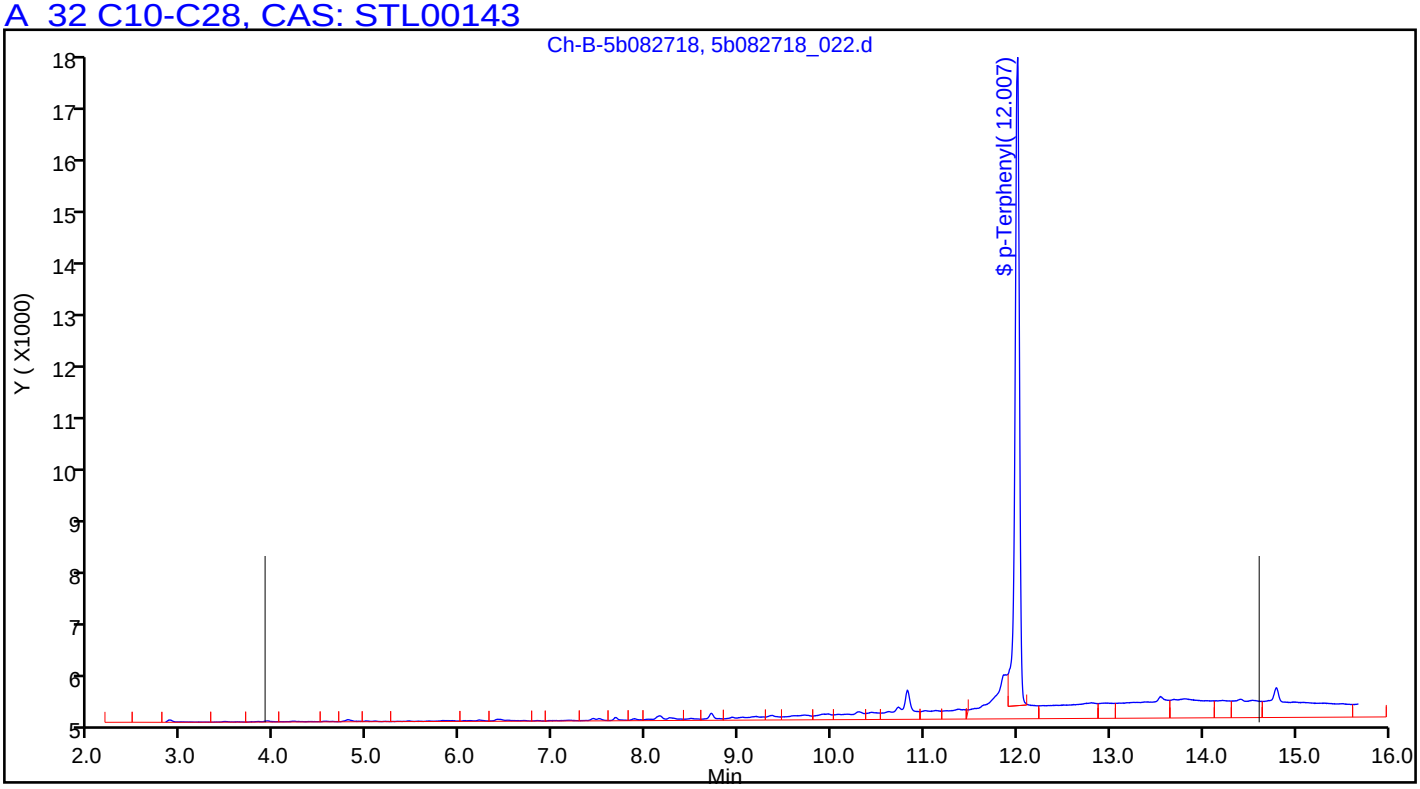
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	14.7	58.88

Report Date: 28-Aug-2018 12:36:07 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_022.d				
Injection Date:	28-Aug-2018 01:21:51	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-7-A	Lab Sample ID:	720-88220-7		
Client ID:	DG-J5W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

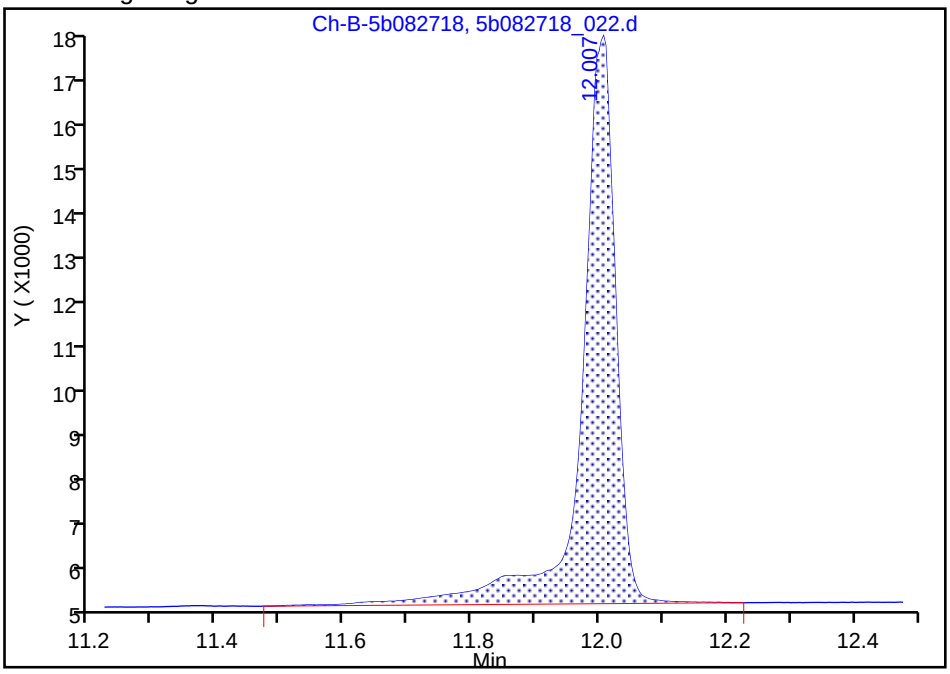
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_022.d				
Injection Date:	28-Aug-2018 01:21:51	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-7-A	Lab Sample ID:	720-88220-7		
Client ID:	DG-J5W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

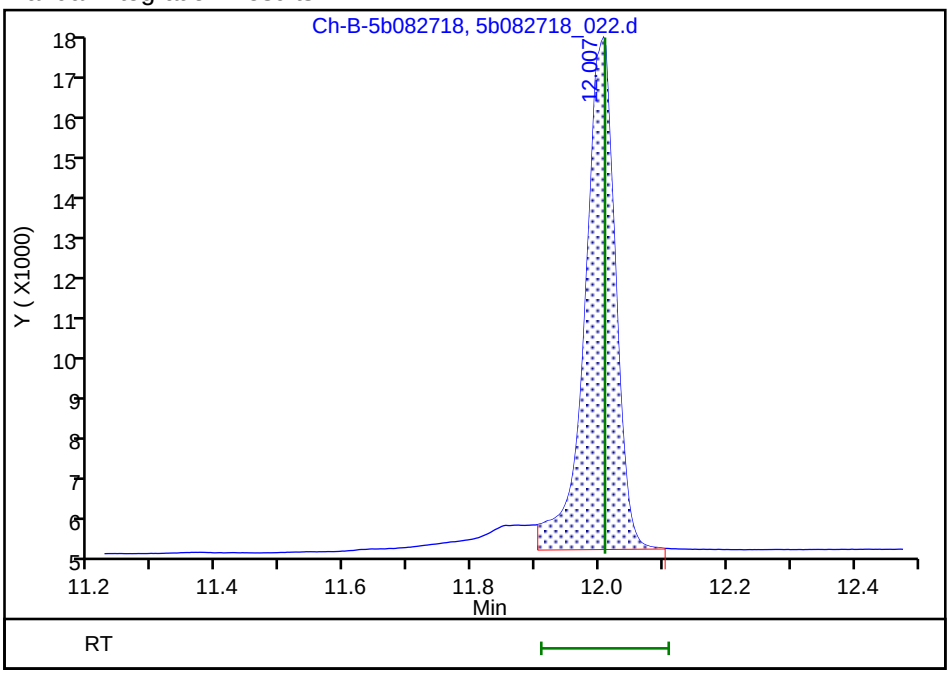
Processing Integration Results

RT: 12.01
Area: 212545
Amount: 16.657396
Amount Units: mg/L



Manual Integration Results

RT: 12.01
Area: 187834
Amount: 14.720767
Amount Units: mg/L



Reviewer: luj, 28-Aug-2018 12:35:57

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-H5W Lab Sample ID: 720-88220-8

Matrix: Water Lab File ID: 5b082718_023.d

Analysis Method: 8015B Date Collected: 08/23/2018 10:15

Extraction Method: 3510C Date Extracted: 08/27/2018 14:49

Sample wt/vol: 953.3(mL) Date Analyzed: 08/28/2018 01:51

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250253 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	59		52	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	60		23-156

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_023.d
Lims ID: 720-88220-E-8-A
Client ID: DG-H5W
Sample Type: Client
Inject. Date: 28-Aug-2018 01:51:06 ALS Bottle#: 0 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 106 Name: 720-0053489-023
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\DRO5B.m
Limit Group: DRO
Last Update: 28-Aug-2018 12:47:24 Calib Date: 27-Aug-2018 08:53:03
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK013

First Level Reviewer: luj Date: 28-Aug-2018 12:47:24

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	2.660	2.666	-0.006	255	NC	
	23 n-Decane	3.915	3.893	0.022	673	NC	
A	1 C9-C13	4.640	(2.666-6.614)		12536	0.9897	
A	21 Stoddard Solvent	4.640	(2.666-6.614)		12536	NC	
A	57 C10-C12	4.851	(3.893-5.808)		4430	0.4259	
	24 Dodecane	5.838	5.808	0.030	1261	NC	
A	3 C9 - C17	6.003	(2.666-9.341)		27197	2.30	
A	60 C10-C16	6.298	(3.893-8.703)		19491	1.88	
A	47 C9 - C18	6.299	(2.666-9.933)		37178	3.31	
A	15 Kerosene	6.571	(2.666-10.476)		41385	3.68	
A	25 C9-C19	6.571	(2.666-10.476)		41385	3.49	
	26 C13	6.614	6.614	0.000	967	NC	
$	27 n-Decanoic Acid (Surr)		7.238			ND	U
A	59 C12-C16	7.256	(5.808-8.703)		15061	1.45	
A	62 C10-C20	7.454	(3.893-11.014)		58251	5.60	
A	28 C9-C24	7.808	(2.666-12.949)		167529	16.1	
A	29 C9-C25	8.026	(2.666-13.387)		167529	16.1	
A	54 C10-C23	8.194	(3.893-12.495)		128026	12.3	
A	4 C10-C24	8.421	(3.893-12.949)		163618	15.7	
A	16 C10-C25	8.640	(3.893-13.387)		163618	15.7	
	45 Hexadecane	8.706	8.703	0.003	989	NC	
A	14 C10-C26	8.851	(3.893-13.809)		251735	24.2	
A	67 C12-C22	8.915	(5.808-12.021)		123596	11.9	
A	5 Diesel	9.252	(3.893-14.610)		292616	28.1	
A	32 C10-C28	9.252	(3.893-14.610)		292616	28.1	
A	12 Unknown Hydrocarbons	9.252	(3.893-14.610)		292616	NC	
A	30 C13-C22	9.318	(6.614-12.021)		119401	11.5	
	44 Heptadecane	9.350	9.341	0.009	1965	NC	
A	31 C12-C24	9.379	(5.808-12.949)		159188	15.3	
	49 n-Octadecane	9.931	9.933	-0.002	4322	NC	
A	52 Mineral oil	10.005	(2.666-17.345)		787482	83.0	
A	9 Crude Oil Range Organics (	10.074	(2.803-17.345)		787359	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 11 Bunker Range Organics (C9-	10.005	(2.666-17.345)		487451	NC	
33 C19		10.476			ND	
A 64 C13-C28	10.612	(6.614-14.610)		283991	27.3	
A 17 C10-C36	10.619	(3.893-17.345)		483540	46.5	
A 58 C16-C24	10.826	(8.703-12.949)		144127	13.9	
A 13 C9-C40	10.829	(2.666-18.993)		949041	103.7	
A 68 Crude Oil Range Organics (	10.829	(2.666-18.993)		949041	NC	
61 icosane	11.015	11.014	0.001	5488	NC	
A 6 C10-C40	11.443	(3.893-18.993)		944307	103.3	
$ 34 p-Terphenyl	12.003	12.009	-0.006	191827	15.0	M
35 n-Docosane		12.021			ND	
A 18 C12-C40	12.400	(5.808-18.993)		934390	102.5	
36 Tricosane		12.495			ND	
A 66 C13-C40	12.803	(6.614-18.993)		867419	95.7	
37 n-Tetracosane		12.949			ND	
A 2 C16-C36 ORO	13.024	(8.703-17.345)		526934	79.1	
38 C25		13.387			ND	
46 n-Hexacosane	13.796	13.809	-0.013	35201	NC	
A 19 C16-C40	13.848	(8.703-18.993)		898526	99.0	
A 20 C19-C36	13.910	(10.476-17.345)		414364	50.8	
A 55 C23-C32	14.278	(12.495-16.061)		290672	74.6	
39 n-Octacosane	14.705	14.610	0.095	56611	NC	
65 C29		14.990			ND	
A 40 C24-C36	15.147	(12.949-17.345)		358285	61.3	
A 7 Motor Oil	15.147	(12.949-17.345)		358285	61.3	
A 50 C25-C36	15.366	(13.387-17.345)		324235	58.4	
A 10 C22-C40	15.507	(12.021-18.993)		381377	45.9	
A 41 C23-C40	15.744	(12.495-18.993)		506062	62.2	
A 8 C24-C40	15.971	(12.949-18.993)		474552	60.1	
56 Dotriacontane		16.061			ND	
A 51 C28-C40	16.801	(14.610-18.993)		326777	51.1	
A 63 C29-C40	16.992	(14.990-18.993)		293590	49.9	
42 n-Hexatriacontane		17.345			ND	
43 C40		18.993			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

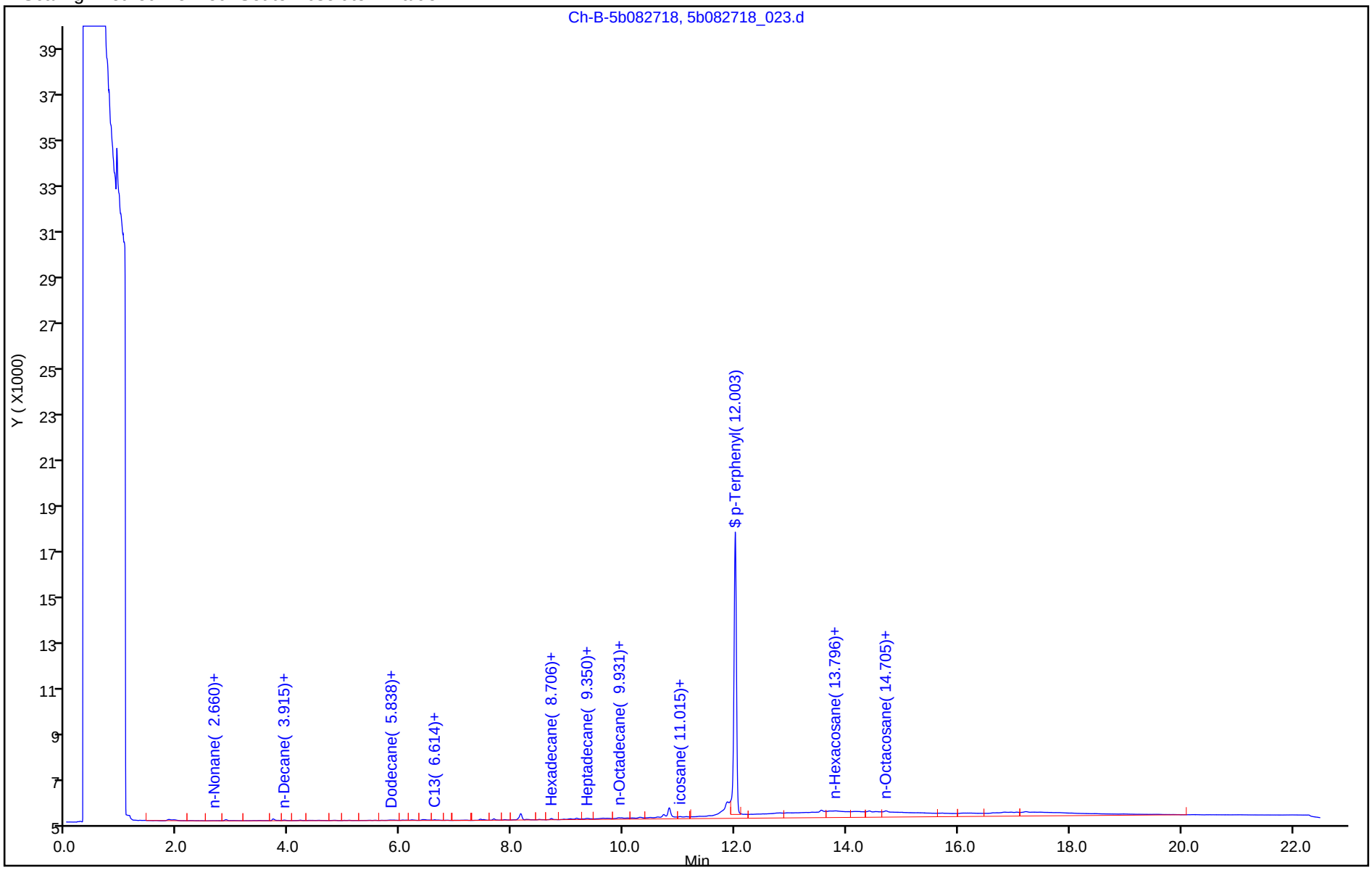
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 28-Aug-2018 12:47:26 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_023.d				
Injection Date:	28-Aug-2018 01:51:06	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88220-E-8-A	Lab Sample ID:	720-88220-8	Worklist Smp#:	23
Client ID:	DG-H5W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_023.d				
Lims ID:	720-88220-E-8-A				
Client ID:	DG-H5W				
Sample Type:	Client				
Inject. Date:	28-Aug-2018 01:51:06	ALS Bottle#:	0	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 106 Name: 720-0053489-023				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\DRO5B.m				
Limit Group:	DRO				
Last Update:	28-Aug-2018 12:47:24	Calib Date:	27-Aug-2018 08:53:03		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK013				

First Level Reviewer: luj Date: 28-Aug-2018 12:47:24

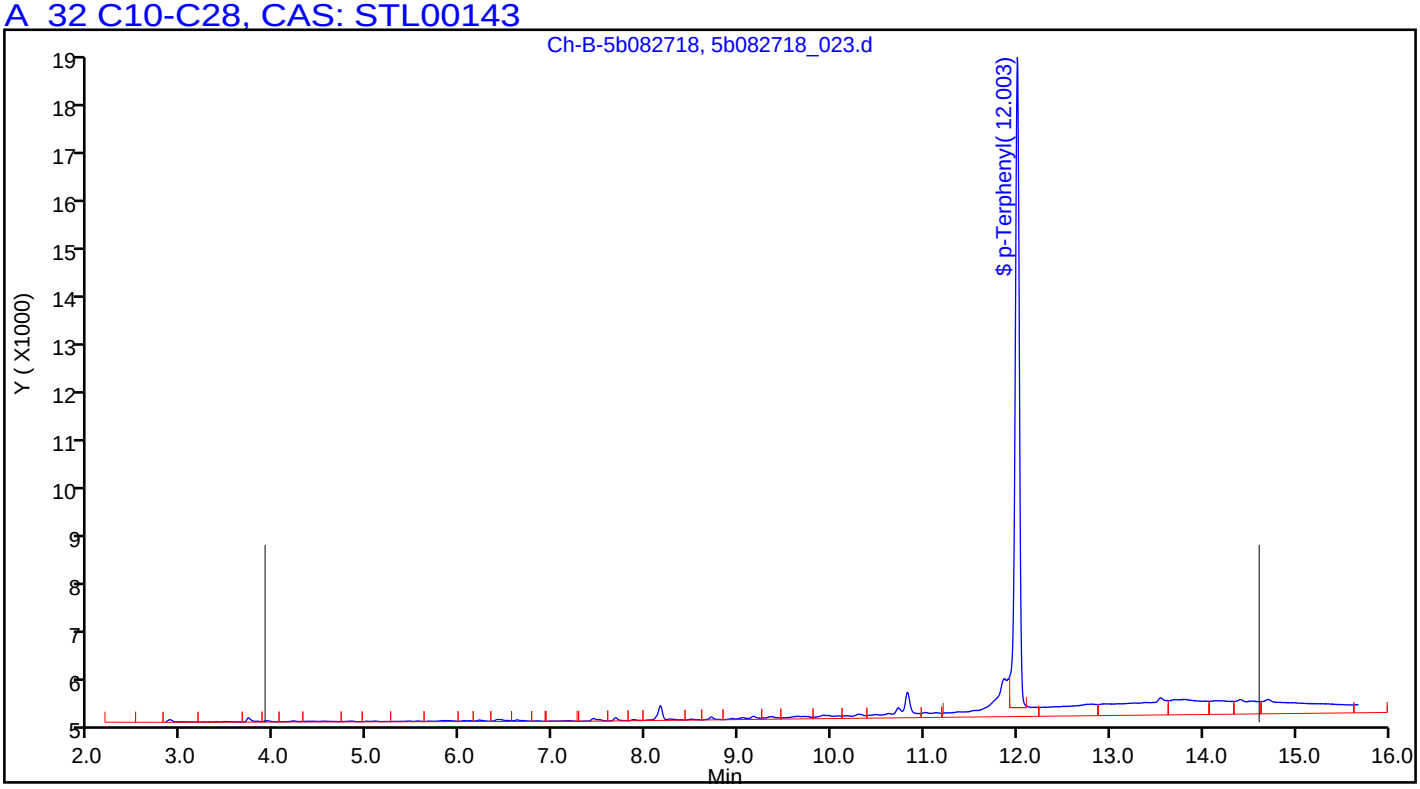
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	15.0	60.13

Report Date: 28-Aug-2018 12:47:27 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_023.d				
Injection Date:	28-Aug-2018 01:51:06	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-8-A	Lab Sample ID:	720-88220-8		
Client ID:	DG-H5W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

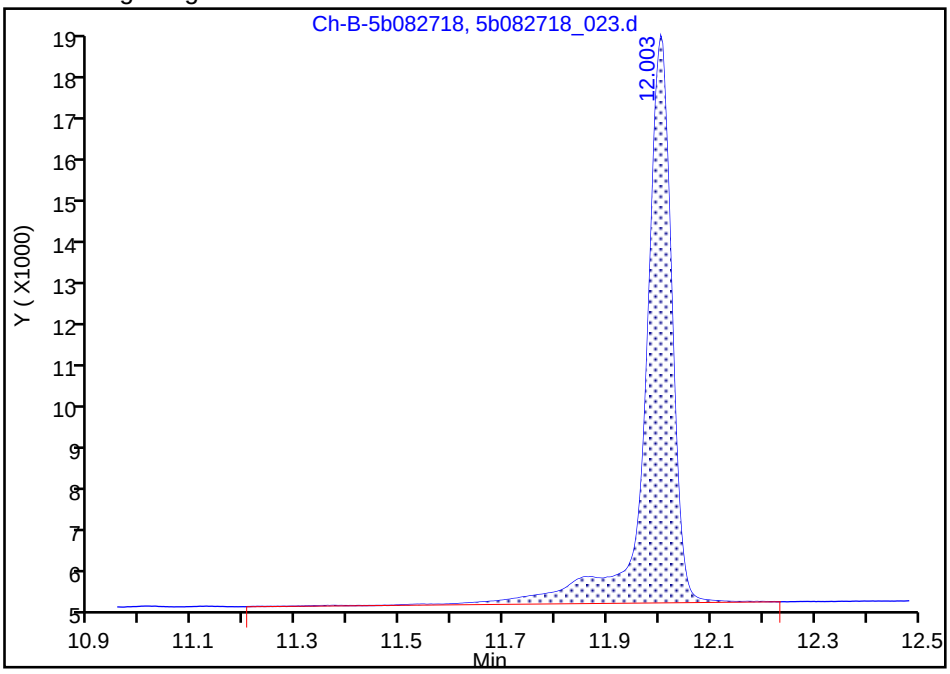
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_023.d				
Injection Date:	28-Aug-2018 01:51:06	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-8-A	Lab Sample ID:	720-88220-8		
Client ID:	DG-H5W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

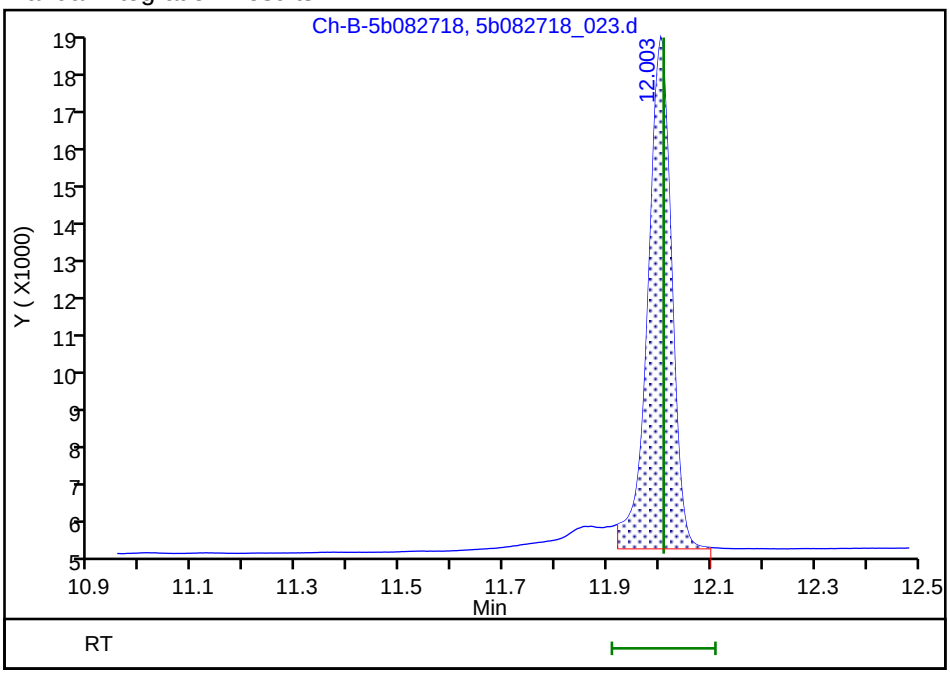
Processing Integration Results

RT: 12.00
Area: 218661
Amount: 17.136714
Amount Units: mg/L



Manual Integration Results

RT: 12.00
Area: 191827
Amount: 15.033703
Amount Units: mg/L



Reviewer: luj, 28-Aug-2018 12:47:09

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-H6W Lab Sample ID: 720-88220-9

Matrix: Water Lab File ID: 5b082718_024.d

Analysis Method: 8015B Date Collected: 08/23/2018 10:35

Extraction Method: 3510C Date Extracted: 08/27/2018 14:49

Sample wt/vol: 958(mL) Date Analyzed: 08/28/2018 02:20

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ZB-5 ID: 320(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250253 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	71		52	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	72		23-156

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_024.d
Lims ID: 720-88220-E-9-A
Client ID: DG-H6W
Sample Type: Client
Inject. Date: 28-Aug-2018 02:20:23 ALS Bottle#: 0 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: #: 106 Name: 720-0053489-024
Operator ID: manager Instrument ID: CHDRO5

Method: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\DRO5B.m
Limit Group: DRO
Last Update: 28-Aug-2018 13:01:45 Calib Date: 27-Aug-2018 08:53:03
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_003.d

Column 1 : Det: GC FID1A
Process Host: XAWRK013

First Level Reviewer: luj Date: 28-Aug-2018 13:01:44

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
22 n-Nonane	2.646	2.666	-0.020	310	NC	
23 n-Decane	3.917	3.893	0.024	764	NC	
A 1 C9-C13	4.640	(2.666-6.614)		17052	1.35	
A 21 Stoddard Solvent	4.640	(2.666-6.614)		17052	NC	
A 57 C10-C12	4.851	(3.893-5.808)		3977	0.3824	
24 Dodecane	5.822	5.808	0.014	4766	NC	
A 3 C9 - C17	6.003	(2.666-9.341)		74887	6.32	
A 60 C10-C16	6.298	(3.893-8.703)		54648	5.27	
A 47 C9 - C18	6.299	(2.666-9.933)		92972	8.28	
A 15 Kerosene	6.571	(2.666-10.476)		109012	9.69	
A 25 C9-C19	6.571	(2.666-10.476)		109012	9.19	
26 C13		6.614			ND	
$ 27 n-Decanoic Acid (Surr)		7.238			ND	
A 59 C12-C16	7.256	(5.808-8.703)		50671	4.87	
A 62 C10-C20	7.454	(3.893-11.014)		155084	14.9	
A 28 C9-C24	7.808	(2.666-12.949)		291387	28.0	
A 29 C9-C25	8.026	(2.666-13.387)		301309	29.0	
A 54 C10-C23	8.194	(3.893-12.495)		264383	25.4	
A 4 C10-C24	8.421	(3.893-12.949)		289047	27.8	
A 16 C10-C25	8.640	(3.893-13.387)		298969	28.7	
45 Hexadecane	8.703	8.703	0.000	4082	NC	
A 14 C10-C26	8.851	(3.893-13.809)		337113	32.4	
A 67 C12-C22	8.915	(5.808-12.021)		260406	25.0	
A 5 Diesel	9.252	(3.893-14.610)		355697	34.2	M
A 32 C10-C28	9.252	(3.893-14.610)		355697	34.2	M
A 12 Unknown Hydrocarbons	9.252	(3.893-14.610)		355697	NC	M
A 30 C13-C22	9.318	(6.614-12.021)		249671	24.0	
44 Heptadecane		9.341			ND	
A 31 C12-C24	9.379	(5.808-12.949)		285070	27.4	
49 n-Octadecane	9.967	9.933	0.034	16040	NC	
A 52 Mineral oil	10.005	(2.666-17.345)		831104	87.6	
A 9 Crude Oil Range Organics (	9.360	(2.803-17.345)		715102	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
A 11 Bunker Range Organics (C9-	10.005	(2.666-17.345)		395633	NC	M
33 C19		10.476			ND	
A 64 C13-C28	10.612	(6.614-14.610)		340985	32.8	M
A 17 C10-C36	9.917	(3.893-15.940)		393293	37.8	M
A 58 C16-C24	10.826	(8.703-12.949)		238481	22.9	
A 13 C9-C40	10.829	(2.666-18.993)		976837	106.8	
A 68 Crude Oil Range Organics (	10.829	(2.666-18.993)		976837	NC	
61 icosane		11.014			ND	
A 6 C10-C40	11.443	(3.893-18.993)		972939	106.4	
$ 34 p-Terphenyl	12.003	12.009	-0.006	229410	18.0	M
35 n-Docosane		12.021			ND	
A 18 C12-C40	12.400	(5.808-18.993)		956825	104.9	
36 Tricosane		12.495			ND	
A 66 C13-C40	12.803	(6.614-18.993)		734344	81.0	
37 n-Tetracosane		12.949			ND	
A 2 C16-C36 ORO	13.024	(8.703-17.345)		411116	61.7	
38 C25		13.387			ND	
46 n-Hexacosane	13.788	13.809	-0.021	20133	NC	
A 19 C16-C40	13.848	(8.703-18.993)		865416	95.3	
A 20 C19-C36	13.910	(10.476-17.345)		319401	39.2	
A 55 C23-C32		(12.495-16.061)			ND	
39 n-Octacosane	14.407	14.610	-0.203	9428	NC	M
65 C29		14.990			ND	
A 40 C24-C36	15.147	(12.949-17.345)		185269	31.7	
A 7 Motor Oil	15.147	(12.949-17.345)		185269	31.7	
A 50 C25-C36	15.366	(13.387-17.345)		164306	29.6	
A 10 C22-C40	15.507	(12.021-18.993)		128799	15.5	
A 41 C23-C40	15.744	(12.495-18.993)		25471	3.13	
A 8 C24-C40	15.971	(12.949-18.993)		264672	33.5	
56 Dotriacontane		16.061			ND	
A 51 C28-C40	16.801	(14.610-18.993)		184715	28.9	
A 63 C29-C40	16.992	(14.990-18.993)		166918	28.3	
42 n-Hexatriacontane	17.426	17.345	0.081	97093	NC	
43 C40		18.993			ND	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

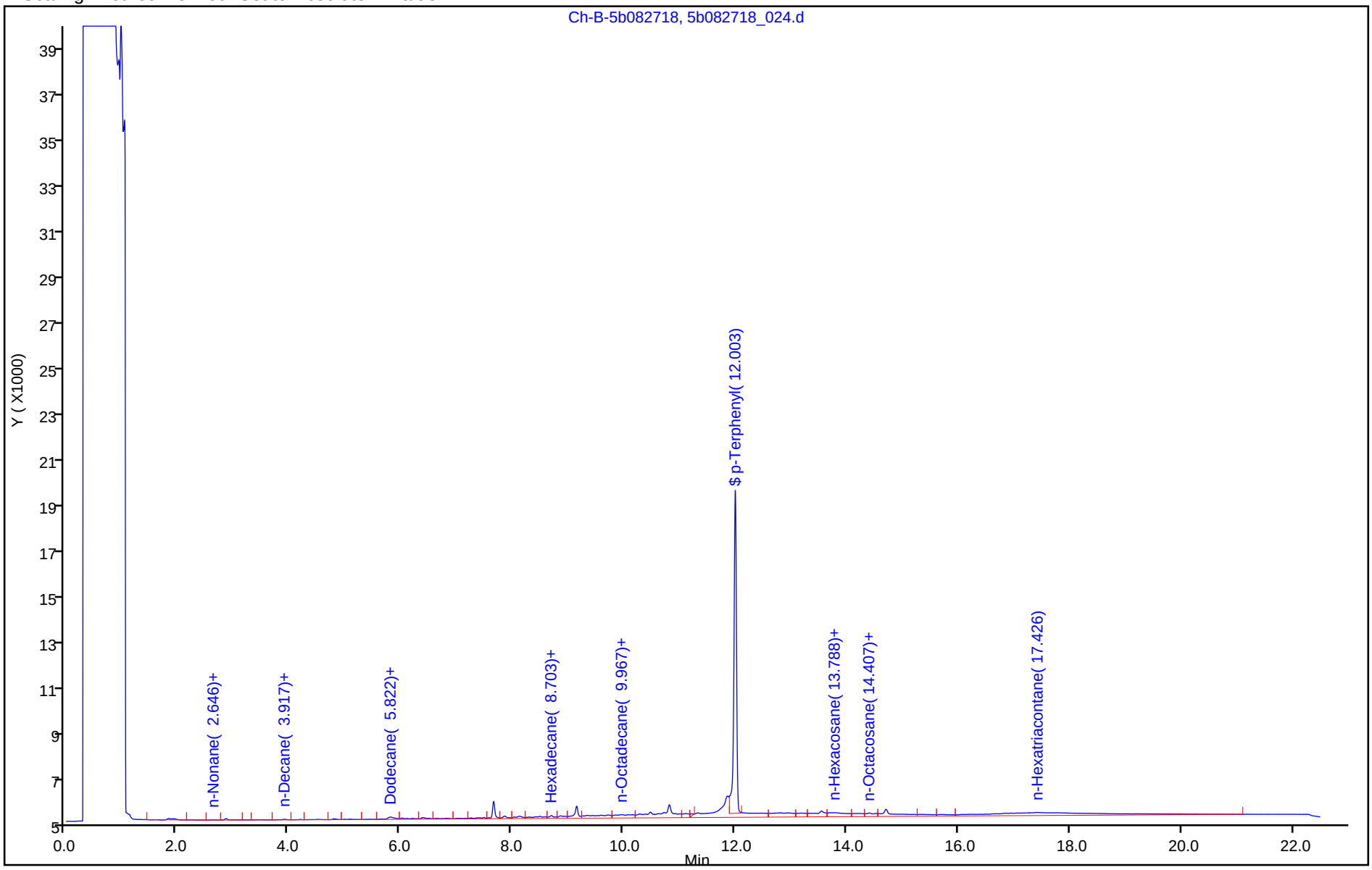
Report Date: 28-Aug-2018 13:01:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_024.d

Injection Date:	28-Aug-2018 02:20:23	Instrument ID:	CHDRO5	Operator ID:	manager
Lims ID:	720-88220-E-9-A	Lab Sample ID:	720-88220-9	Worklist Smp#:	24
Client ID:	DG-H6W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	DRO5B	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_024.d				
Lims ID:	720-88220-E-9-A				
Client ID:	DG-H6W				
Sample Type:	Client				
Inject. Date:	28-Aug-2018 02:20:23	ALS Bottle#:	0	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	#: 106 Name: 720-0053489-024				
Operator ID:	manager	Instrument ID:	CHDRO5		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\DRO5B.m				
Limit Group:	DRO				
Last Update:	28-Aug-2018 13:01:45	Calib Date:	27-Aug-2018 08:53:03		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_003.d				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK013				

First Level Reviewer: luj Date: 28-Aug-2018 13:01:44

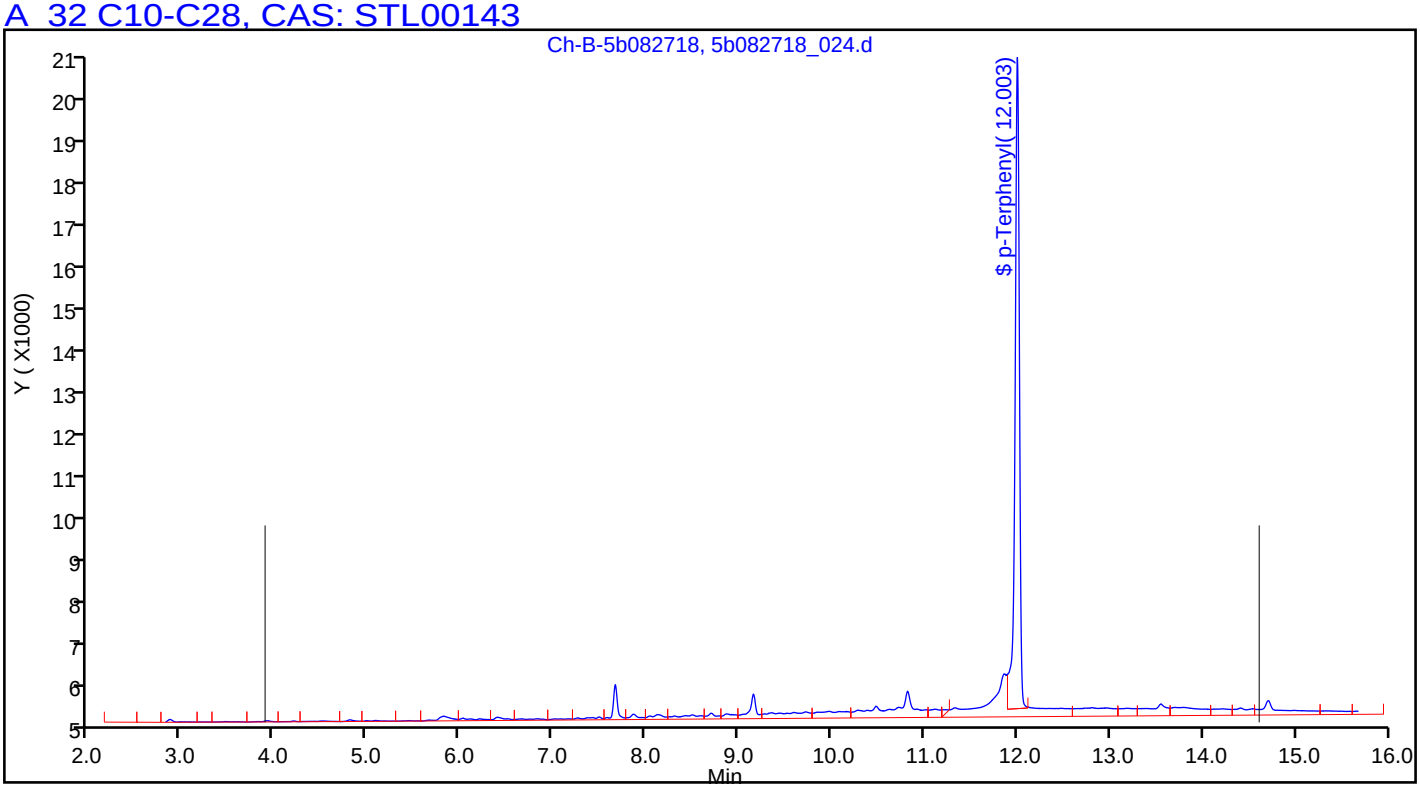
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	18.0	71.92

Report Date: 28-Aug-2018 13:01:52 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_024.d				
Injection Date:	28-Aug-2018 02:20:23	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-9-A	Lab Sample ID:	720-88220-9		
Client ID:	DG-H6W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

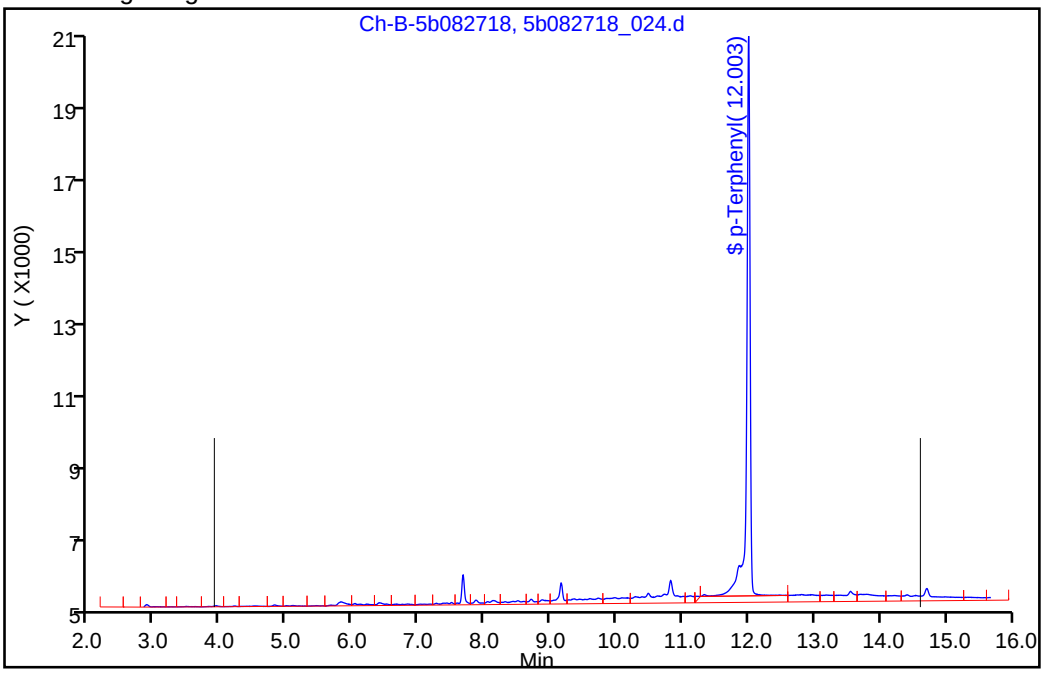
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_024.d				
Injection Date:	28-Aug-2018 02:20:23	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-9-A	Lab Sample ID:	720-88220-9		
Client ID:	DG-H6W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, RT: 9.252, CAS: STL00143

Signal: 1

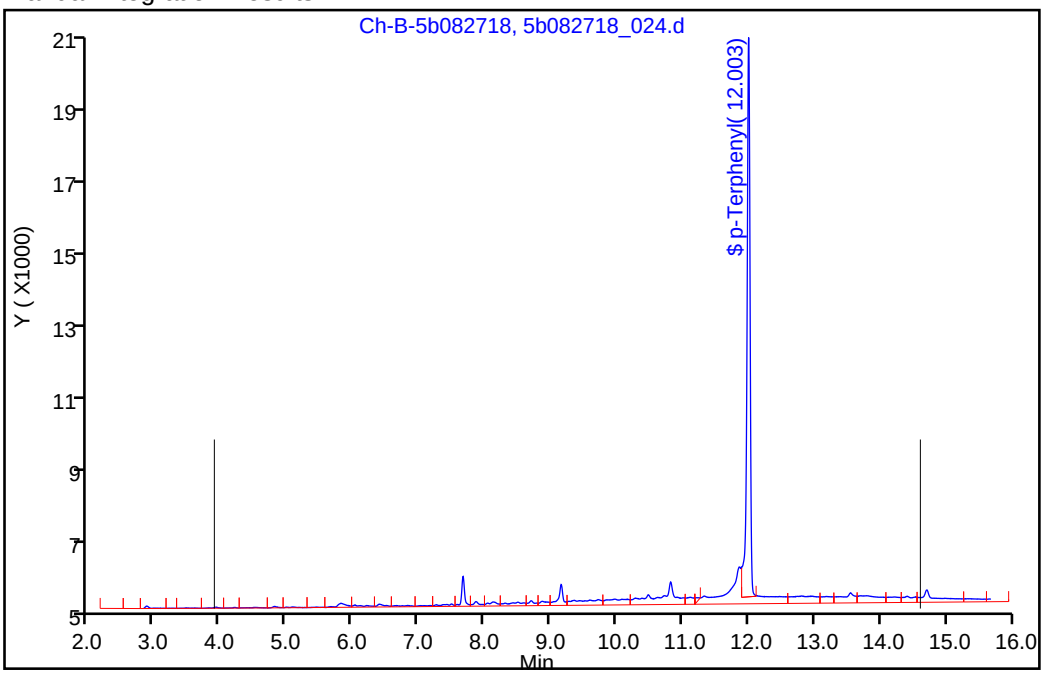
Processing Integration Results

RT: 9.25
Response: 314077
Amount: 30.196216



Manual Integration Results

RT: 9.25
Response: 355697
Amount: 34.197675



Reviewer: luj, 28-Aug-2018 13:01:26

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

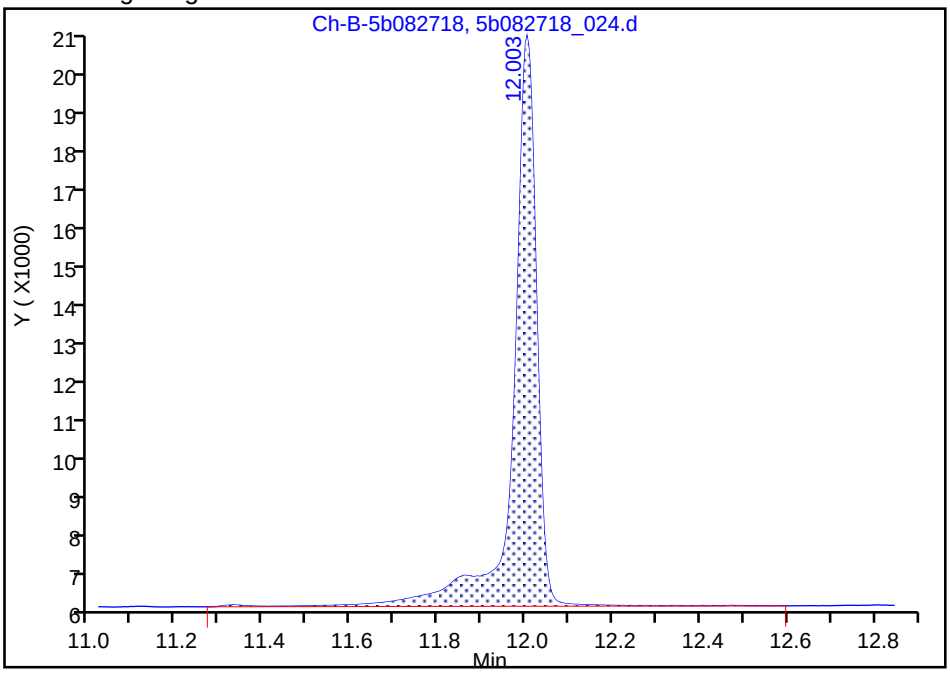
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO5\20180827-53489.b\5b082718_024.d				
Injection Date:	28-Aug-2018 02:20:23	Instrument ID:	CHDRO5		
Lims ID:	720-88220-E-9-A	Lab Sample ID:	720-88220-9		
Client ID:	DG-H6W				
Operator ID:	manager	ALS Bottle#:	0	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO5B	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

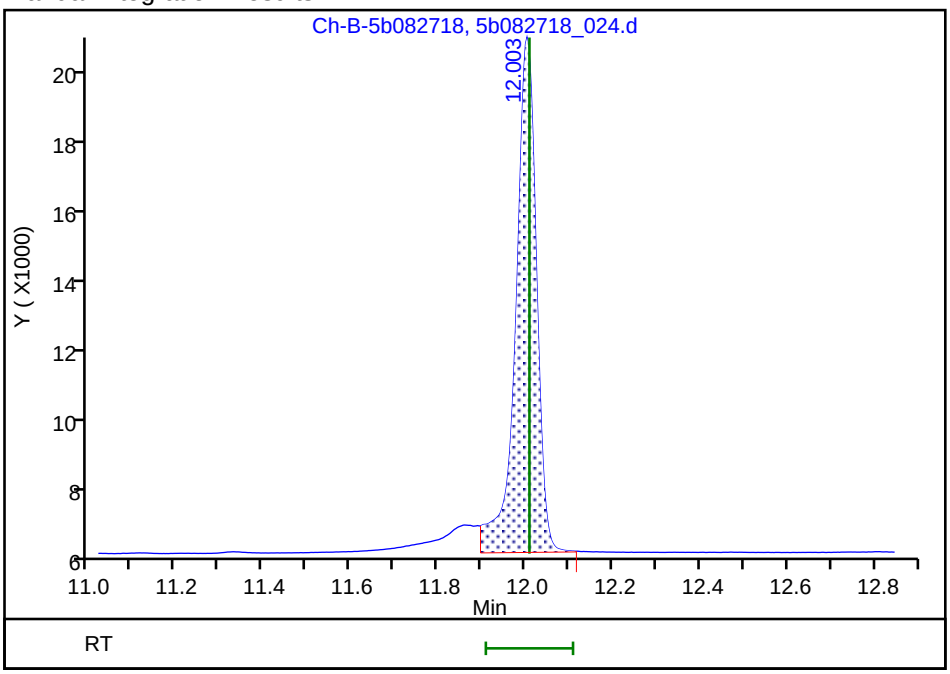
Processing Integration Results

RT: 12.00
Area: 261602
Amount: 20.502050
Amount Units: mg/L



Manual Integration Results

RT: 12.00
Area: 229410
Amount: 17.979125
Amount Units: mg/L



Reviewer: luj, 28-Aug-2018 13:01:36

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-P5W Lab Sample ID: 720-88220-10

Matrix: Water Lab File ID: FID1000007.D

Analysis Method: 8015B Date Collected: 08/23/2018 11:00

Extraction Method: 3510C Date Extracted: 08/27/2018 14:49

Sample wt/vol: 961(mL) Date Analyzed: 08/28/2018 16:14

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250355 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	130		52	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	69		23-156

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000007.D
Lims ID: 720-88220-E-10-A
Client ID: DG-P5W
Sample Type: Client
Inject. Date: 28-Aug-2018 16:14:58 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-007
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 28-Aug-2018 17:21:24 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK013

First Level Reviewer: luj Date: 28-Aug-2018 17:21:24

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane	1.312	1.232	0.080	4267	NC	
	23 n-Decane	2.119	2.120	-0.001	197059	NC	
A	21 Stoddard Solvent	2.736	(1.232-4.240)		8411006	4.72	
A	1 C9-C13	2.736	(1.232-4.240)		8411006	4.74	
A	57 C10-C12	2.867	(2.120-3.613)		5204362	3.37	
	24 Dodecane	3.603	3.613	-0.010	185252	NC	
A	3 C9 - C17	3.781	(1.232-6.330)		18063470	9.26	
A	60 C10-C16	3.985	(2.120-5.850)		14994000	8.58	
A	47 C9 - C18	4.007	(1.232-6.781)		22201607	13.7	
A	25 C9-C19	4.221	(1.232-7.211)		25897909	13.2	
A	15 Kerosene	4.221	(1.232-7.211)		25897909	16.0	
	26 C13	4.279	4.240	0.039	136327	NC	
$	27 n-Decanoic Acid (Surr)		4.609			ND	U
A	59 C12-C16	4.732	(3.613-5.850)		9974890	6.47	
A	62 C10-C20	4.872	(2.120-7.624)		31231986	20.2	
A	28 C9-C24	5.173	(1.232-9.114)		71749571	46.5	
A	29 C9-C25	5.342	(1.232-9.452)		78314306	50.8	
A	54 C10-C23	5.442	(2.120-8.763)		57689231	37.4	
A	4 C10-C24	5.617	(2.120-9.114)		70918478	46.0	
A	16 C10-C25	5.786	(2.120-9.452)		77483213	50.2	
A	67 C12-C22	5.816	(3.613-8.019)		29331827	19.0	
	45 Hexadecane	5.868	5.850	0.018	413343	NC	
A	14 C10-C26	5.950	(2.120-9.779)		92563124	60.0	
A	12 Unknown Hydrocarbons	6.107	(2.120-10.094)		94127796	NC	
A	5 Diesel	6.107	(2.120-10.094)		94127796	61.0	
A	32 C10-C28	6.107	(2.120-10.094)		94127796	61.0	
A	30 C13-C22	6.130	(4.240-8.019)		26958548	17.5	
	44 Heptadecane	6.374	6.330	0.044	1977376	NC	
A	31 C12-C24	6.364	(3.613-9.114)		65899368	42.7	
A	9 Crude Oil Range Organics (	6.761	(1.232-12.289)		128770104	NC	
A	52 Mineral oil	6.761	(1.232-12.289)		128770104	72.7	
A	11 Bunker Range Organics (C9-	6.761	(1.232-12.289)		128770104	NC	

Report Date: 28-Aug-2018 17:21:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000007.D

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
51 n-Octadecane	6.868	6.781	0.087	1940302	NC	
A 64 C13-C28	7.167	(4.240-10.094)		86735407	56.2	
A 17 C10-C36	7.205	(2.120-12.289)		127939011	82.9	
33 C19		7.211			ND	
A 13 C9-C40	7.391	(1.232-13.550)		145745325	108.1	
A 68 Crude Oil Range Organics (	7.391	(1.232-13.550)		145745325	NC	
A 58 C16-C24	7.482	(5.850-9.114)		55924478	36.3	
61 icosane	7.626	7.624	0.002	2064067	NC	
A 6 C10-C40	7.835	(2.120-13.550)		144914232	107.5	
35 n-Docosane		8.019			ND	
$ 34 p-Terphenyl	8.095	8.100	-0.005	33122835	17.2	M
A 18 C12-C40	8.582	(3.613-13.550)		139895122	104.1	
36 Tricosane	8.829	8.763	0.066	9779135	NC	
A 66 C13-C40	8.895	(4.240-13.550)		137521843	102.5	
A 2 C16-C36 ORO	9.070	(5.850-12.289)		141520617	124.1	
37 n-Tetracosane	9.177	9.114	0.063	4033870	NC	
38 C25	9.453	9.452	0.001	6226346	NC	
A 19 C16-C40	9.700	(5.850-13.550)		129920232	97.2	
A 20 C19-C36	9.750	(7.211-12.289)		115875136	87.2	
46 n-Hexacosane		9.779			ND	
A 55 C23-C32	10.010	(8.763-11.257)		58726697	84.6	
39 n-Octacosane	10.145	10.094	0.051	3360787	NC	
A 40 C24-C36	10.702	(9.114-12.289)		43937172	49.3	
A 7 Motor Oil	10.702	(9.114-12.289)		43937172	49.3	
A 10 C22-C40	10.784	(8.019-13.550)		80500574	64.7	
A 49 C25-C36	10.871	(9.452-12.289)		50455798	56.4	
65 C29		10.980			ND	
A 41 C23-C40	11.156	(8.763-13.550)		87225001	68.2	
56 Dotriacontane	11.278	11.257	0.021	2954962	NC	
A 8 C24-C40	11.332	(9.114-13.550)		73995754	60.8	
A 50 C28-C40	11.822	(10.094-13.550)		50786436	53.5	
A 63 C29-C40	12.265	(10.980-13.550)		35689006	41.2	
42 n-Hexatriacontane	12.357	12.289	0.068	2618110	NC	
43 C40	13.530	13.550	-0.020	466022	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

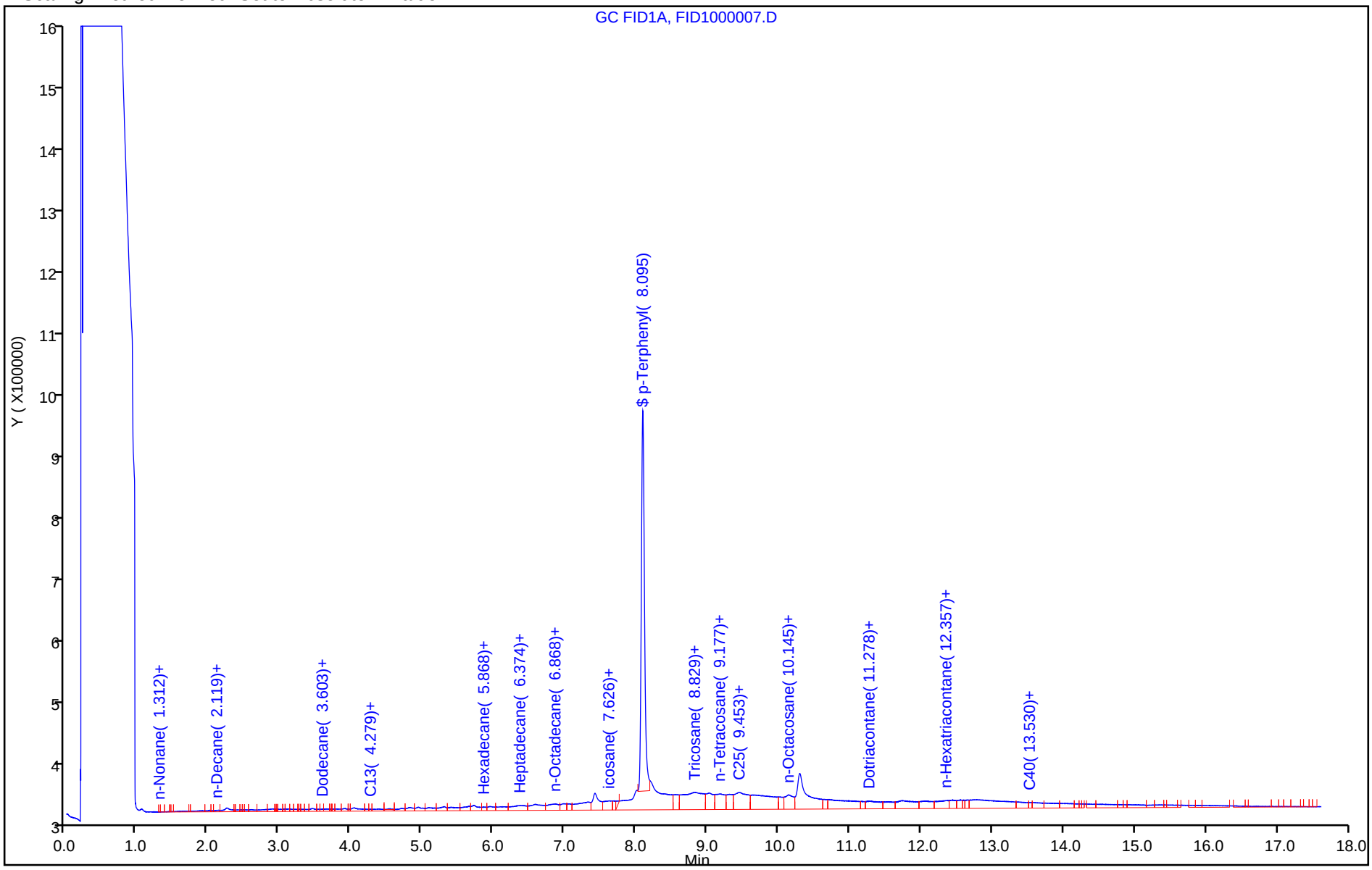
Report Date: 28-Aug-2018 17:21:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000007.D

Injection Date:	28-Aug-2018 16:14:58	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88220-E-10-A	Lab Sample ID:	720-88220-10	Worklist Smp#:	7
Client ID:	DG-P5W				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000007.D
Lims ID: 720-88220-E-10-A
Client ID: DG-P5W
Sample Type: Client
Inject. Date: 28-Aug-2018 16:14:58 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-007
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 28-Aug-2018 17:21:24 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK013

First Level Reviewer: luj Date: 28-Aug-2018 17:21:24

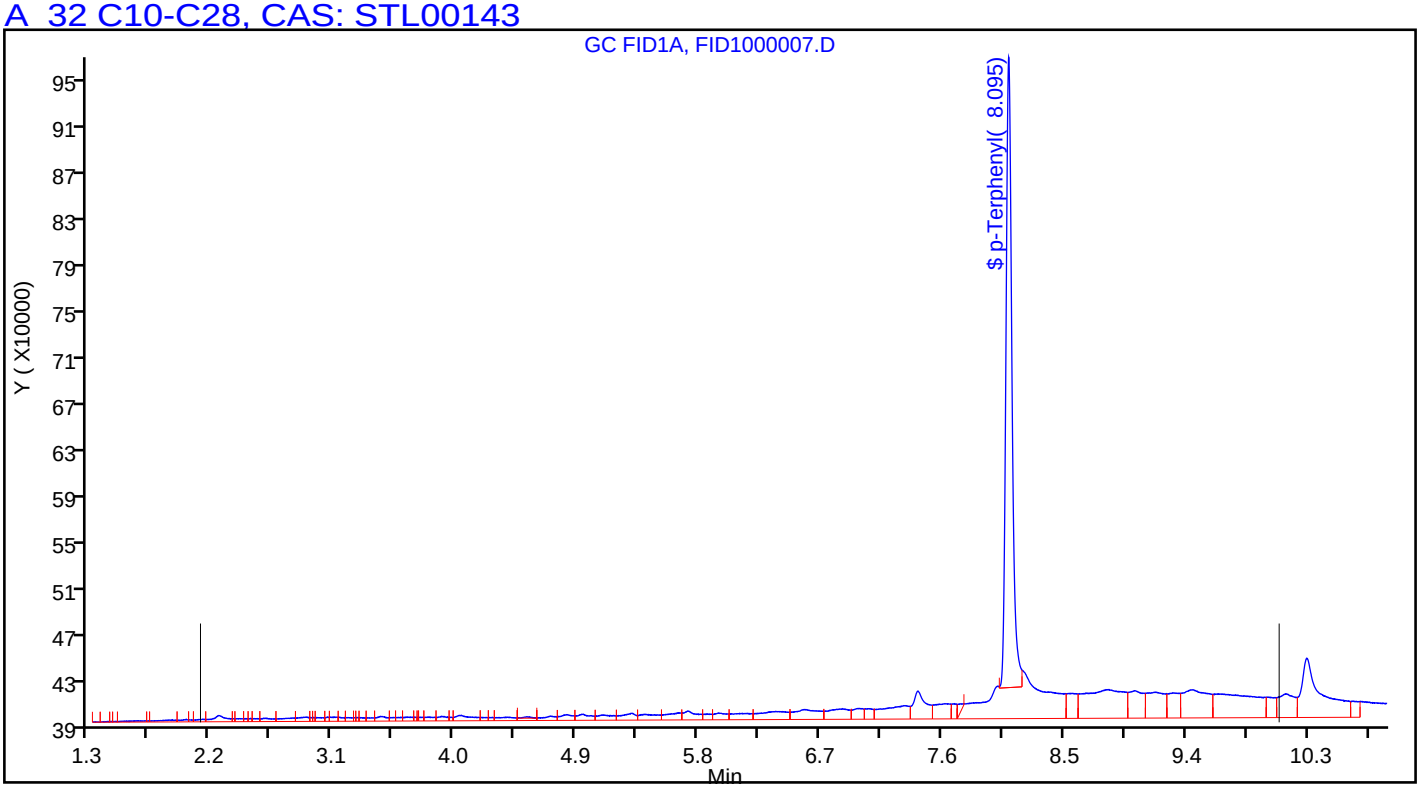
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	17.2	68.99

Report Date: 28-Aug-2018 17:21:26 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000007.D				
Injection Date:	28-Aug-2018 16:14:58	Instrument ID:	CHDRO6		
Lims ID:	720-88220-E-10-A	Lab Sample ID:	720-88220-10		
Client ID:	DG-P5W				
Operator ID:	DCH	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

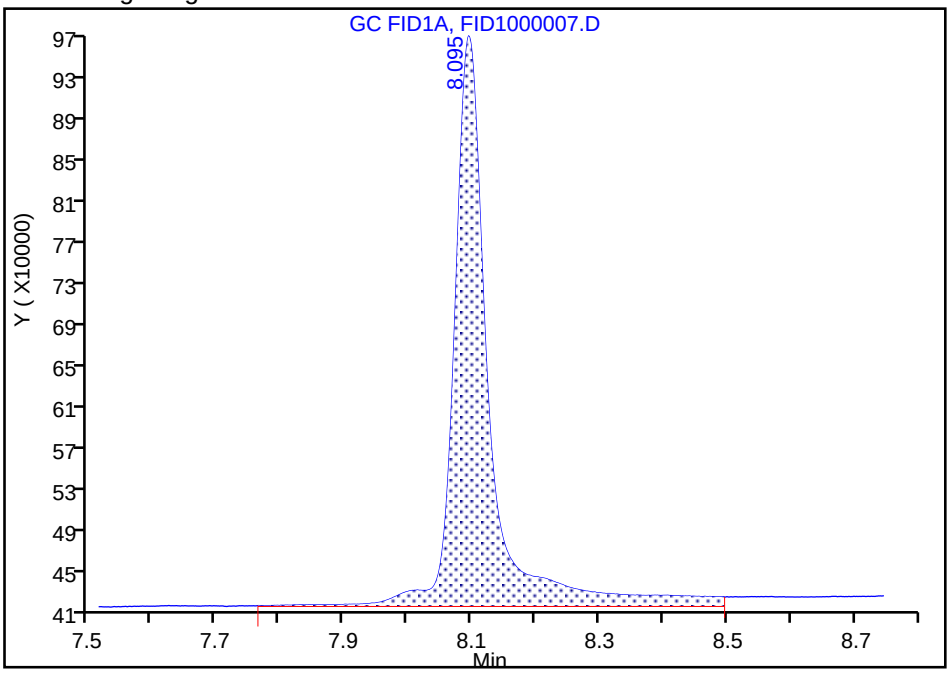
Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000007.D				
Injection Date:	28-Aug-2018 16:14:58	Instrument ID:	CHDRO6		
Lims ID:	720-88220-E-10-A	Lab Sample ID:	720-88220-10		
Client ID:	DG-P5W				
Operator ID:	DCH	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

$ 34 p-Terphenyl, CAS: 92-94-4

Signal: 1

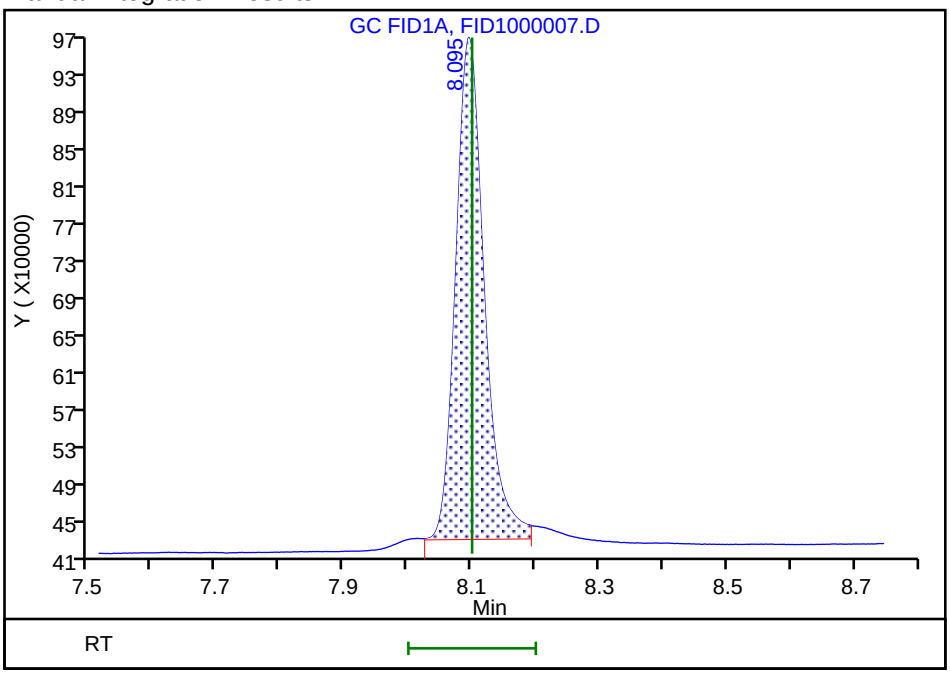
Processing Integration Results

RT: 8.09
Area: 42512529
Amount: 22.137790
Amount Units: mg/L



Manual Integration Results

RT: 8.09
Area: 33122835
Amount: 17.248242
Amount Units: mg/L



Reviewer: luj, 28-Aug-2018 17:21:05

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DUP-02 Lab Sample ID: 720-88220-16

Matrix: Water Lab File ID: FID1000008.D

Analysis Method: 8015B Date Collected: 08/23/2018 00:00

Extraction Method: 3510C Date Extracted: 08/27/2018 14:49

Sample wt/vol: 959.3(mL) Date Analyzed: 08/28/2018 16:39

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: MXT-1 ID: 530(um)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 250355 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00143	Diesel Range Organics [C10-C28]	190		52	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
92-94-4	p-Terphenyl	85		23-156

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000008.D
Lims ID: 720-88220-E-16-A
Client ID: DUP-02
Sample Type: Client
Inject. Date: 28-Aug-2018 16:39:19 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 720-0053518-008
Operator ID: DCH Instrument ID: CHDRO6

Method: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m
Limit Group: DRO
Last Update: 28-Aug-2018 17:22:05 Calib Date: 28-Aug-2018 10:16:50
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D

Column 1 : Det: GC FID1A
Process Host: XAWRK013

First Level Reviewer: luj Date: 28-Aug-2018 17:22:05

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
	22 n-Nonane		1.232			ND	
	23 n-Decane	2.168	2.120	0.048	45893961	NC	
A	21 Stoddard Solvent	2.736	(1.232-4.240)		65940860	37.0	
A	1 C9-C13	2.736	(1.232-4.240)		65940860	37.1	
A	57 C10-C12	2.867	(2.120-3.613)		59641530	38.7	
	24 Dodecane	3.685	3.613	0.072	90586	NC	
A	3 C9 - C17	3.781	(1.232-6.330)		85510208	43.8	
A	60 C10-C16	3.985	(2.120-5.850)		69802049	40.0	
A	47 C9 - C18	4.007	(1.232-6.781)		91882340	56.9	
A	25 C9-C19	4.221	(1.232-7.211)		96831717	49.4	
A	15 Kerosene	4.221	(1.232-7.211)		96831717	59.9	
	26 C13	4.241	4.240	0.001	160160	NC	
$	27 n-Decanoic Acid (Surr)		4.609			ND	U
A	59 C12-C16	4.732	(3.613-5.850)		10792444	7.00	
A	62 C10-C20	4.872	(2.120-7.624)		94825182	61.5	
A	28 C9-C24	5.173	(1.232-9.114)		124701468	80.8	
A	29 C9-C25	5.342	(1.232-9.452)		136828885	88.7	
A	54 C10-C23	5.442	(2.120-8.763)		113798496	73.8	
A	4 C10-C24	5.617	(2.120-9.114)		119908458	77.7	
A	16 C10-C25	5.786	(2.120-9.452)		132035875	85.6	
A	67 C12-C22	5.816	(3.613-8.019)		39123639	25.4	
	45 Hexadecane	5.890	5.850	0.040	5744023	NC	
A	14 C10-C26	5.950	(2.120-9.779)		135493261	87.8	
A	12 Unknown Hydrocarbons	6.107	(2.120-10.094)		141903081	NC	
A	5 Diesel	6.107	(2.120-10.094)		141903081	92.0	
A	32 C10-C28	6.107	(2.120-10.094)		141903081	92.0	
A	30 C13-C22	6.130	(4.240-8.019)		36985394	24.0	
	44 Heptadecane	6.320	6.330	-0.010	477709	NC	
A	31 C12-C24	6.364	(3.613-9.114)		60898853	39.5	
A	9 Crude Oil Range Organics (	6.761	(1.232-12.289)		176215745	NC	
A	52 Mineral oil	6.761	(1.232-12.289)		176215745	99.5	
A	11 Bunker Range Organics (C9-	6.761	(1.232-12.289)		176215745	NC	

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt mg/L	Flags
51 n-Octadecane	6.776	6.781	-0.005	546259	NC	
A 64 C13-C28	7.167	(4.240-10.094)		80755231	52.4	
A 17 C10-C36	7.205	(2.120-12.289)		171422735	111.1	
33 C19	7.174	7.211	-0.037	3198715	NC	
A 13 C9-C40	7.391	(1.232-13.550)		192364258	142.7	
A 68 Crude Oil Range Organics (	7.391	(1.232-13.550)		192364258	NC	
A 58 C16-C24	7.482	(5.850-9.114)		50106409	32.5	
61 icosane	7.631	7.624	0.007	554847	NC	
A 6 C10-C40	7.835	(2.120-13.550)		187571248	139.2	
35 n-Docosane		8.019			ND	
$ 34 p-Terphenyl	8.094	8.100	-0.006	40850620	21.3	
A 18 C12-C40	8.582	(3.613-13.550)		128561643	95.7	
36 Tricosane	8.792	8.763	0.029	2051349	NC	
A 66 C13-C40	8.895	(4.240-13.550)		126423398	94.2	
A 2 C16-C36 ORO	9.070	(5.850-12.289)		104765410	91.8	
37 n-Tetracosane	9.179	9.114	0.065	3742583	NC	
38 C25	9.447	9.452	-0.005	5954233	NC	
A 19 C16-C40	9.700	(5.850-13.550)		117769199	88.1	
A 20 C19-C36	9.750	(7.211-12.289)		84449503	63.5	
46 n-Hexacosane	9.784	9.779	0.005	1175626	NC	
A 55 C23-C32	10.010	(8.763-11.257)		44901465	64.7	
39 n-Octacosane	10.059	10.094	-0.035	827748	NC	
A 40 C24-C36	10.702	(9.114-12.289)		48956408	55.0	M
A 7 Motor Oil	10.702	(9.114-12.289)		41263905	46.3	
A 10 C22-C40	10.784	(8.019-13.550)		70808481	56.9	
A 49 C25-C36	10.871	(9.452-12.289)		45341093	50.7	
65 C29	10.982	10.980	0.002	698346	NC	
A 41 C23-C40	11.156	(8.763-13.550)		73772752	57.7	
56 Dotriacontane	11.297	11.257	0.040	2457933	NC	
A 8 C24-C40	11.332	(9.114-13.550)		67662790	55.6	
A 50 C28-C40	11.822	(10.094-13.550)		45668167	48.1	
A 63 C29-C40	12.265	(10.980-13.550)		31831570	36.7	
42 n-Hexatriacontane	12.363	12.289	0.074	1567689	NC	
43 C40	13.631	13.550	0.081	1095212	NC	
$ 69 Stearic Acid (Surr)		0.000			ND	

QC Flag Legend

Processing Flags
- NC - Not Calibrated

Review Flags
- M - Manually Integrated
- U - Marked Undetected

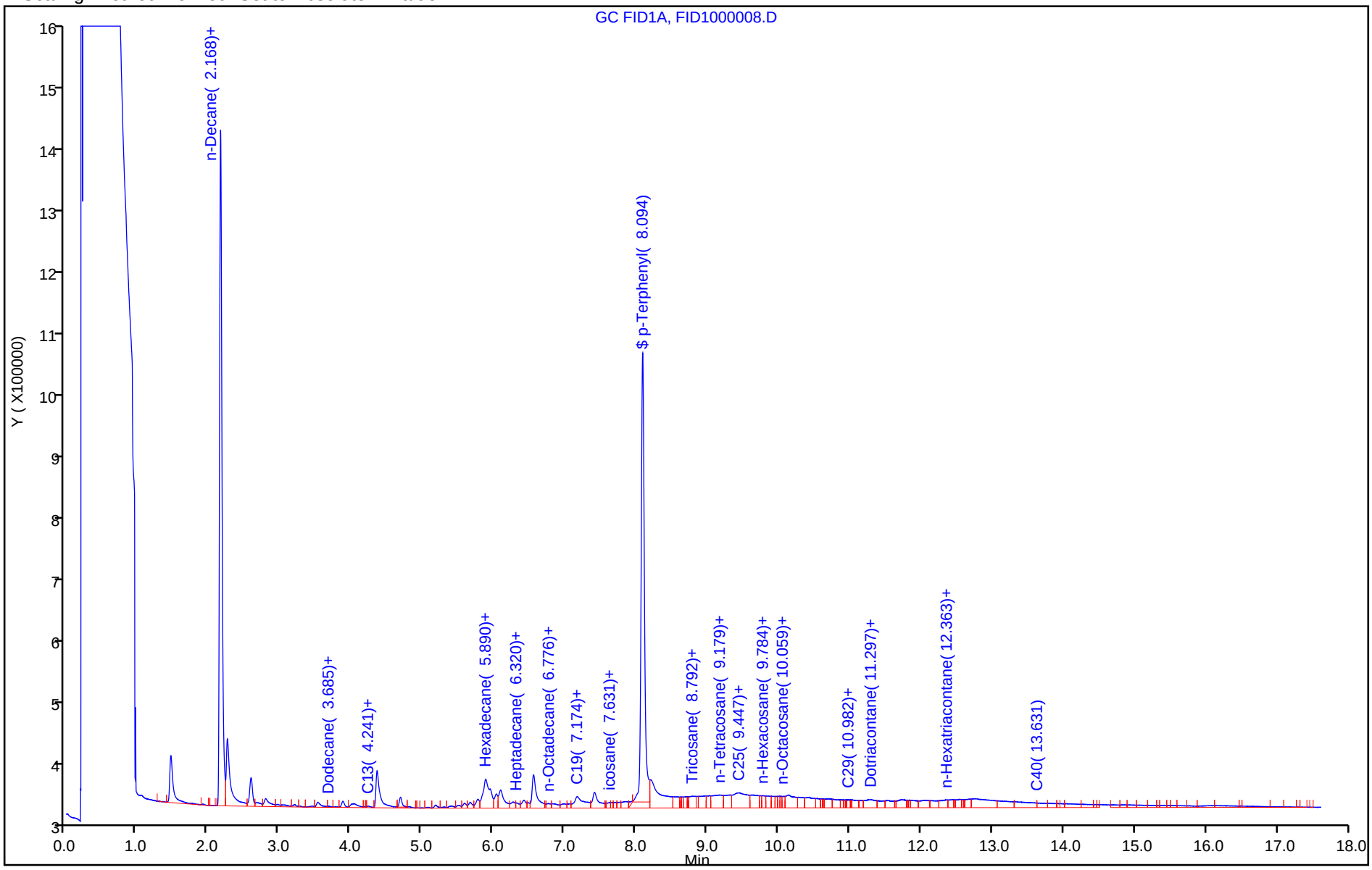
Report Date: 28-Aug-2018 17:22:06 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000008.D

Injection Date:	28-Aug-2018 16:39:19	Instrument ID:	CHDRO6	Operator ID:	DCH
Lims ID:	720-88220-E-16-A	Lab Sample ID:	720-88220-16	Worklist Smp#:	8
Client ID:	DUP-02				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	DRO6_A	Limit Group:	DRO		

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Pleasanton
Recovery Report

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000008.D				
Lims ID:	720-88220-E-16-A				
Client ID:	DUP-02				
Sample Type:	Client				
Inject. Date:	28-Aug-2018 16:39:19	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	720-0053518-008				
Operator ID:	DCH	Instrument ID:	CHDRO6		
Method:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\DRO6_A.m				
Limit Group:	DRO				
Last Update:	28-Aug-2018 17:22:05	Calib Date:	28-Aug-2018 10:16:50		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000003.D				
Column 1 :			Det: GC FID1A		
Process Host:	XAWRK013				

First Level Reviewer: luj Date: 28-Aug-2018 17:22:05

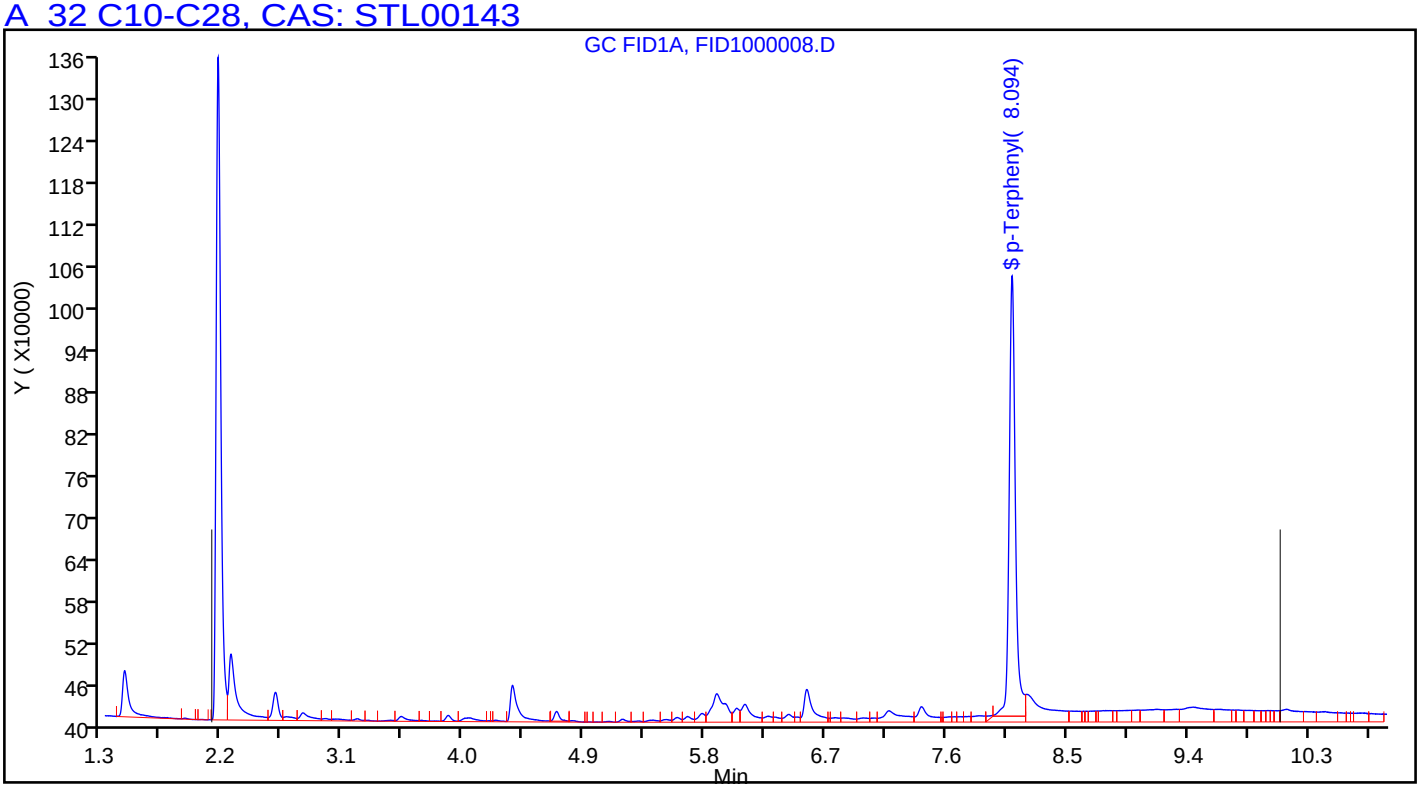
Compound	Amount Added	Amount Recovered	% Rec.
$ 34 p-Terphenyl	25.0	21.3	85.09

Report Date: 28-Aug-2018 17:22:08 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\CHDRO6\20180828-53518.b\FID1000008.D				
Injection Date:	28-Aug-2018 16:39:19	Instrument ID:	CHDRO6		
Lims ID:	720-88220-E-16-A	Lab Sample ID:	720-88220-16		
Client ID:	DUP-02				
Operator ID:	DCH	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO6_A	Limit Group:	DRO		
Column:		Detector	GC FID1A		

A 32 C10-C28, CAS: STL00143



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-C3W Lab Sample ID: 720-88220-1

Matrix: Water Lab File ID: 08301810.D

Analysis Method: 8260B Date Collected: 08/22/2018 08:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 11:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	0.14	J	0.50	0.11
75-35-4	1,1-Dichloroethene	ND	*	0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-C3W Lab Sample ID: 720-88220-1

Matrix: Water Lab File ID: 08301810.D

Analysis Method: 8260B Date Collected: 08/22/2018 08:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 11:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	7.6		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.53		0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	3.9		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	0.78		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-C3W Lab Sample ID: 720-88220-1

Matrix: Water Lab File ID: 08301810.D

Analysis Method: 8260B Date Collected: 08/22/2018 08:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 11:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		72-130
460-00-4	4-Bromofluorobenzene	99		67-130
2037-26-5	Toluene-d8 (Surr)	94		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301810.D
Lims ID: 720-88220-B-1
Client ID: DG-C3W
Sample Type: Client
Inject. Date: 30-Aug-2018 11:44:30 ALS Bottle#: 9 Worklist Smp#: 19
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-B-1
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 12:15:53 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 12:15:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.825	-0.006	0	294796	250.0	
* 2 Fluorobenzene	96	10.599	10.605	-0.007	99	1085475	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	87	869306	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	492296	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.185	0.000	94	88356	7.25	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.703	0.000	0	105737	6.93	
$ 10 Toluene-d8 (Surr)	98	12.708	12.701	0.000	93	309168	7.04	
$ 11 4-Bromofluorobenzene	95	15.933	15.926	0.000	93	125720	7.44	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	0.000	84	112382	5.89	
$ 6 BFB	95	8.818	6.434	2.384	0	2226	NR	
19 Vinyl chloride	62	4.764	4.768	-0.006	93	10112	0.7800	
23 Ethanol	45	5.520	5.509	0.006	98	13225	118.8	
24 Acrolein	56	6.215	6.216	-0.006	2	84	0.0749	
27 Isopropyl alcohol	45	6.288	6.277	0.006	99	64780	81.9	
28 Acetone	58	6.380	6.370	0.006	98	5933	4.66	
31 1,1-Dichloroethene	96	6.904	6.904	0.000	21	1051	0.1275	a
38 trans-1,2-Dichloroethene	96	7.880	7.869	0.007	96	5663	0.5283	
40 1,1-Dichloroethane	63	8.160	8.155	0.000	91	2955	0.1401	
49 cis-1,2-Dichloroethene	61	8.812	8.813	-0.006	82	134999	7.56	
59 Benzene	78	10.373	10.367	0.000	96	5276	0.1142	
66 Trichloroethene	132	11.092	11.092	-0.006	97	46139	3.86	
75 Toluene	92	12.793	12.788	0.000	96	2746	0.0961	
128 Butyl Ether	87	14.665	14.652	0.006	93	472	0.0546	
85 m-Xylene & p-Xylene	91	14.921	14.921	-0.018	0	1832	0.0418	a
88 o-Xylene	91	15.439	15.439	0.006	89	879	0.0193	a
98 1,3,5-Trimethylbenzene	105	16.780	16.780	0.000	1	552	0.0108	a
105 4-Isopropyltoluene	119	17.646	17.640	0.000	95	3677	0.0672	
107 n-Butylbenzene	91	18.176	18.164	0.006	89	826	0.0171	
142 1,3,5-Trichlorobenzene	180	19.731	19.731	0.006	1	453	0.0191	a
111 1,2,4-Trichlorobenzene	180	20.414	20.407	0.000	85	737	0.0340	
112 Naphthalene	128	20.749	20.742	0.000	95	4143	0.0817	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
113 Hexachlorobutadiene	225	20.798	20.798	-0.006	71	633	0.0497	a
114 1,2,3-Trichlorobenzene	180	21.017	21.017	0.000	86	1080	0.0528	a
29 Pentane	43	6.386	6.410	-0.024	71	21458	NR	
99 n-Decane	57	16.713	16.829	-0.116	85	802	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	1543633	15.5	
A 154 C6-C8	1	10.852	(8.550-13.153)		0	836802	8.41	
A 155 C6-C9	1	11.842	(8.550-15.134)		0	965837	9.70	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1845280	18.5	
A 119 C6-C10	1	12.732	(8.550-16.914)		0	1124589	11.3	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	1793004	18.0	
A 120 C6-C12	1	14.278	(8.550-20.005)		0	1426236	14.3	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	293831	2.95	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	914830	9.19	
S 122 Xylenes, Total	1				0		0.0610	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

a - User Assigned ID

Reagents:

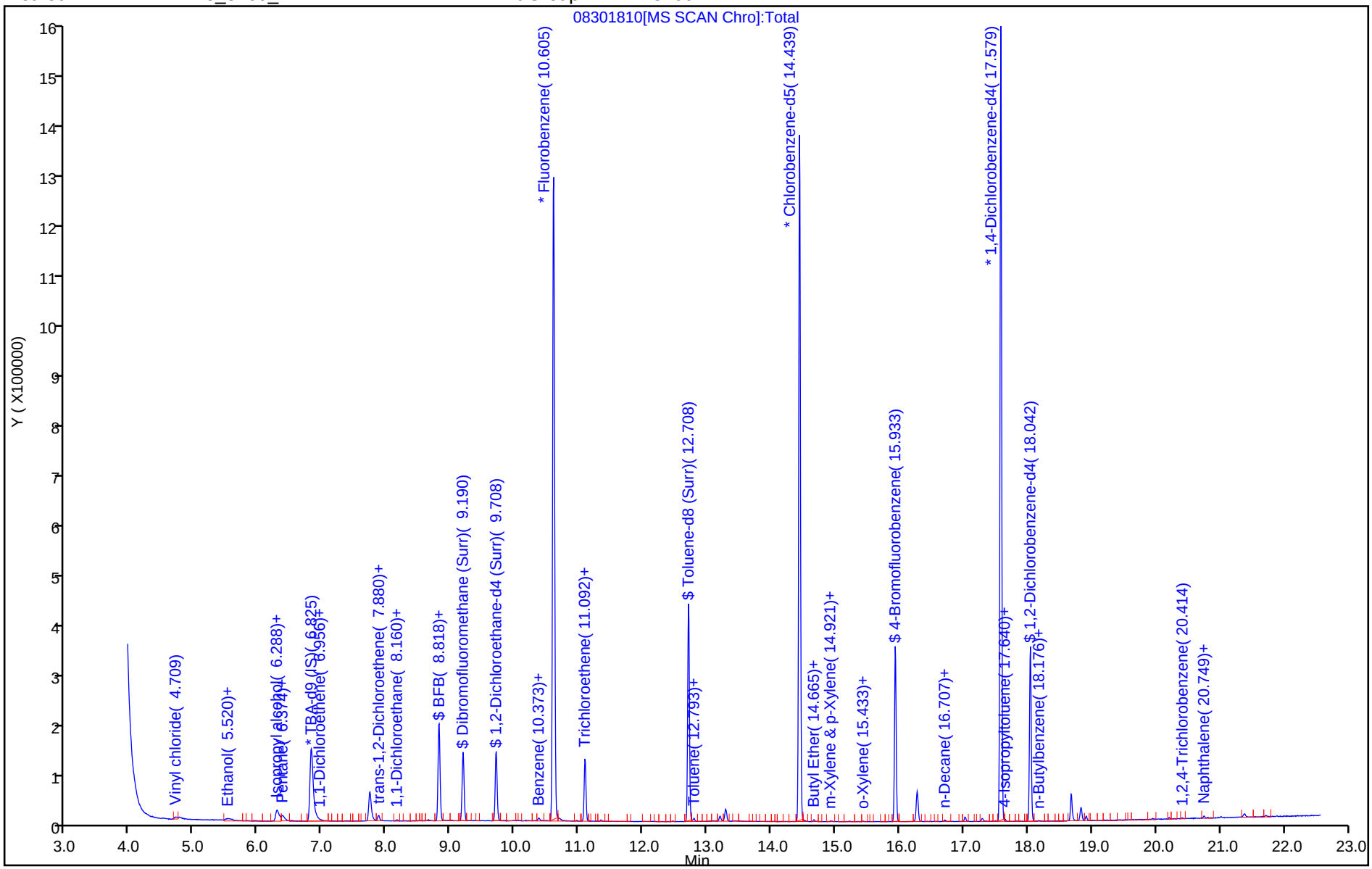
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 12:15:54 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301810.D

Injection Date:	30-Aug-2018 11:44:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88220-B-1	Lab Sample ID:	720-88220-1	Worklist Smp#:	19
Client ID:	DG-C3W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301810.D
Lims ID: 720-88220-B-1
Client ID: DG-C3W
Sample Type: Client
Inject. Date: 30-Aug-2018 11:44:30 ALS Bottle#: 9 Worklist Smp#: 19
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-B-1
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 12:15:53 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 12:15:53

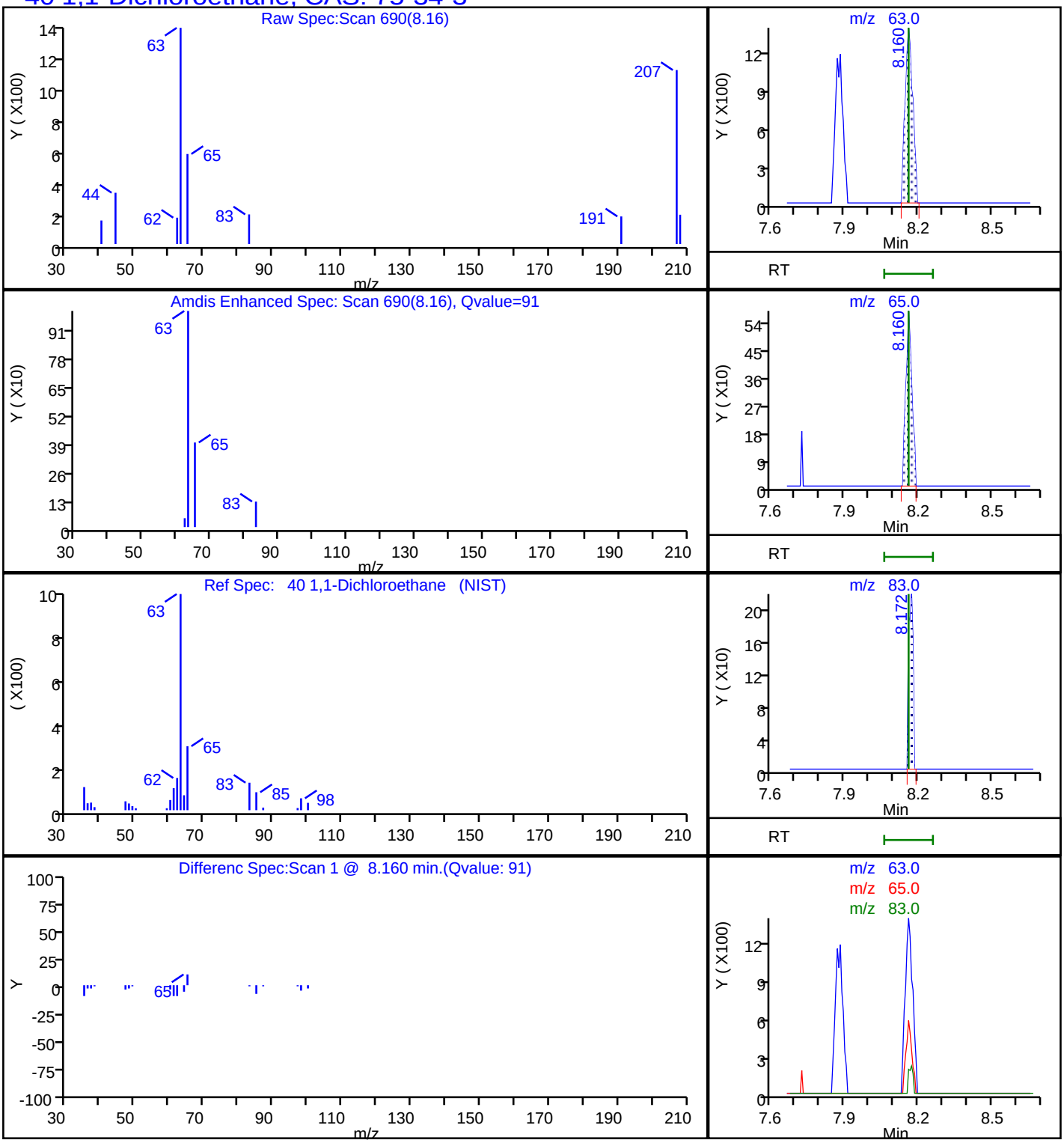
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	6.93	92.37
$ 10 Toluene-d8 (Surr)	7.50	7.04	93.90
$ 11 4-Bromofluorobenzene	7.50	7.44	99.15
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

Report Date: 30-Aug-2018 12:15:55 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301810.D				
Injection Date:	30-Aug-2018 11:44:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-1	Lab Sample ID:	720-88220-1		
Client ID:	DG-C3W				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

40 1,1-Dichloroethane, CAS: 75-34-3



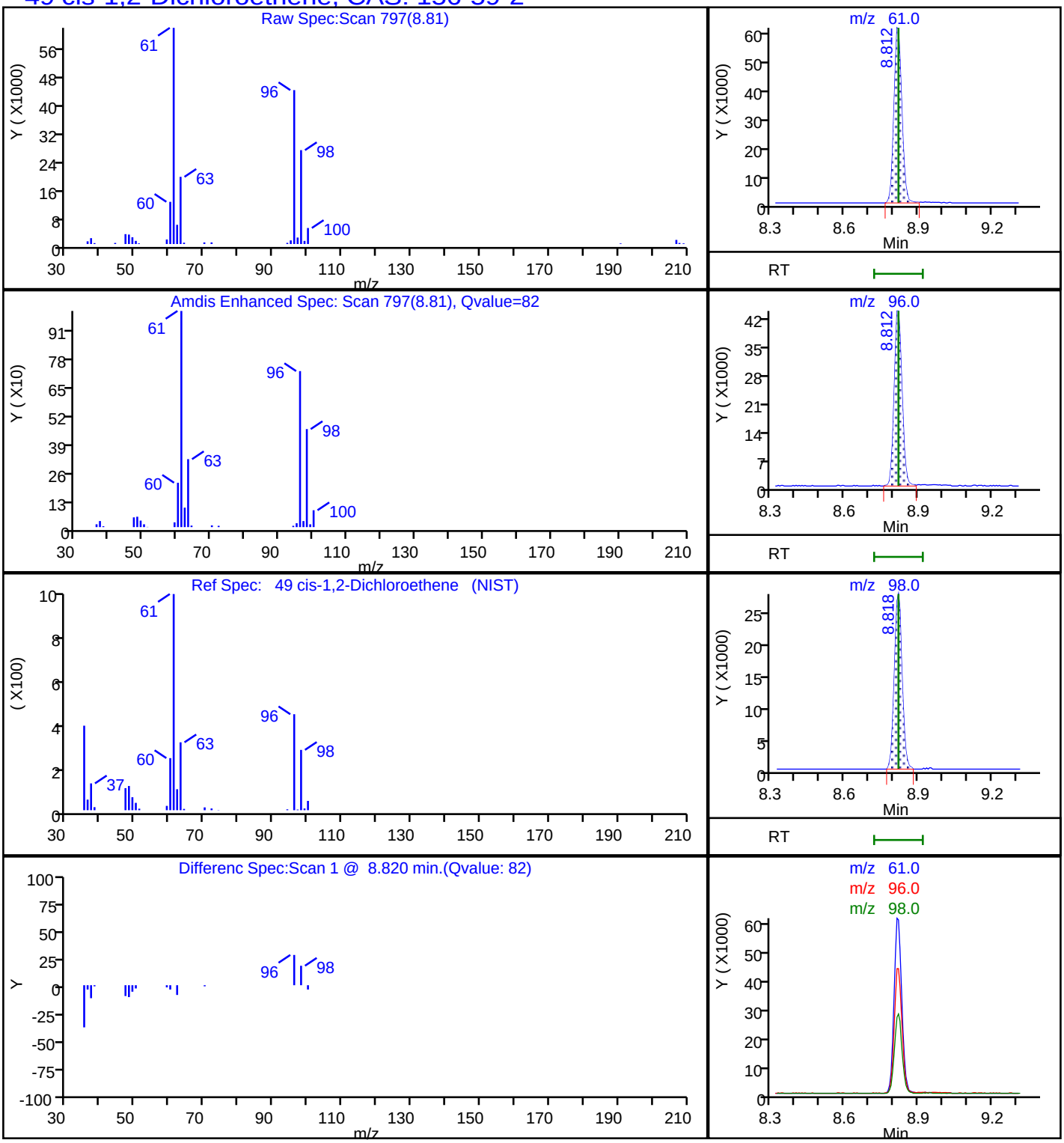
Report Date: 30-Aug-2018 12:15:55 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301810.D

Injection Date:	30-Aug-2018 11:44:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-1	Lab Sample ID:	720-88220-1		
Client ID:	DG-C3W				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

49 cis-1,2-Dichloroethene, CAS: 156-59-2

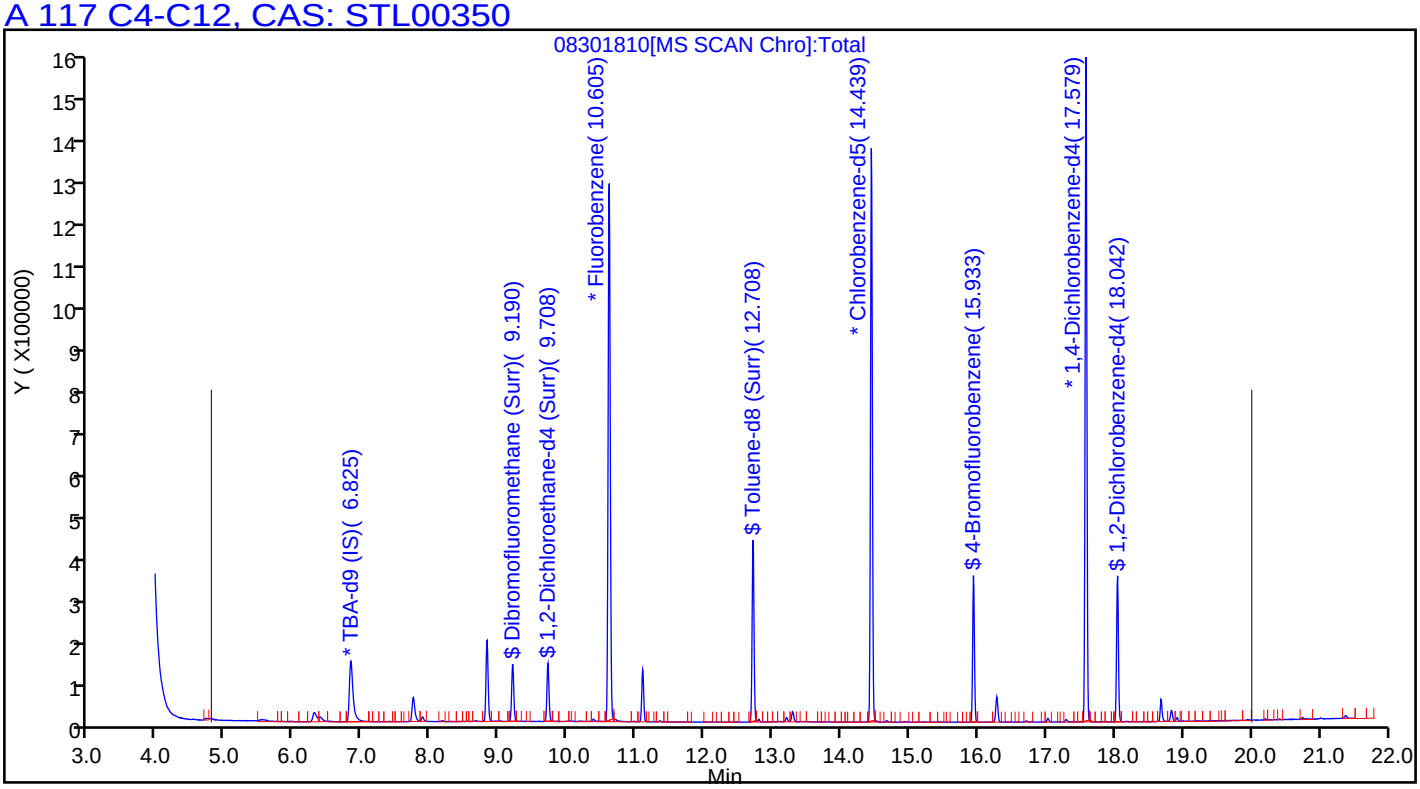


Report Date: 30-Aug-2018 12:15:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301810.D				
Injection Date:	30-Aug-2018 11:44:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-1	Lab Sample ID:	720-88220-1		
Client ID:	DG-C3W				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



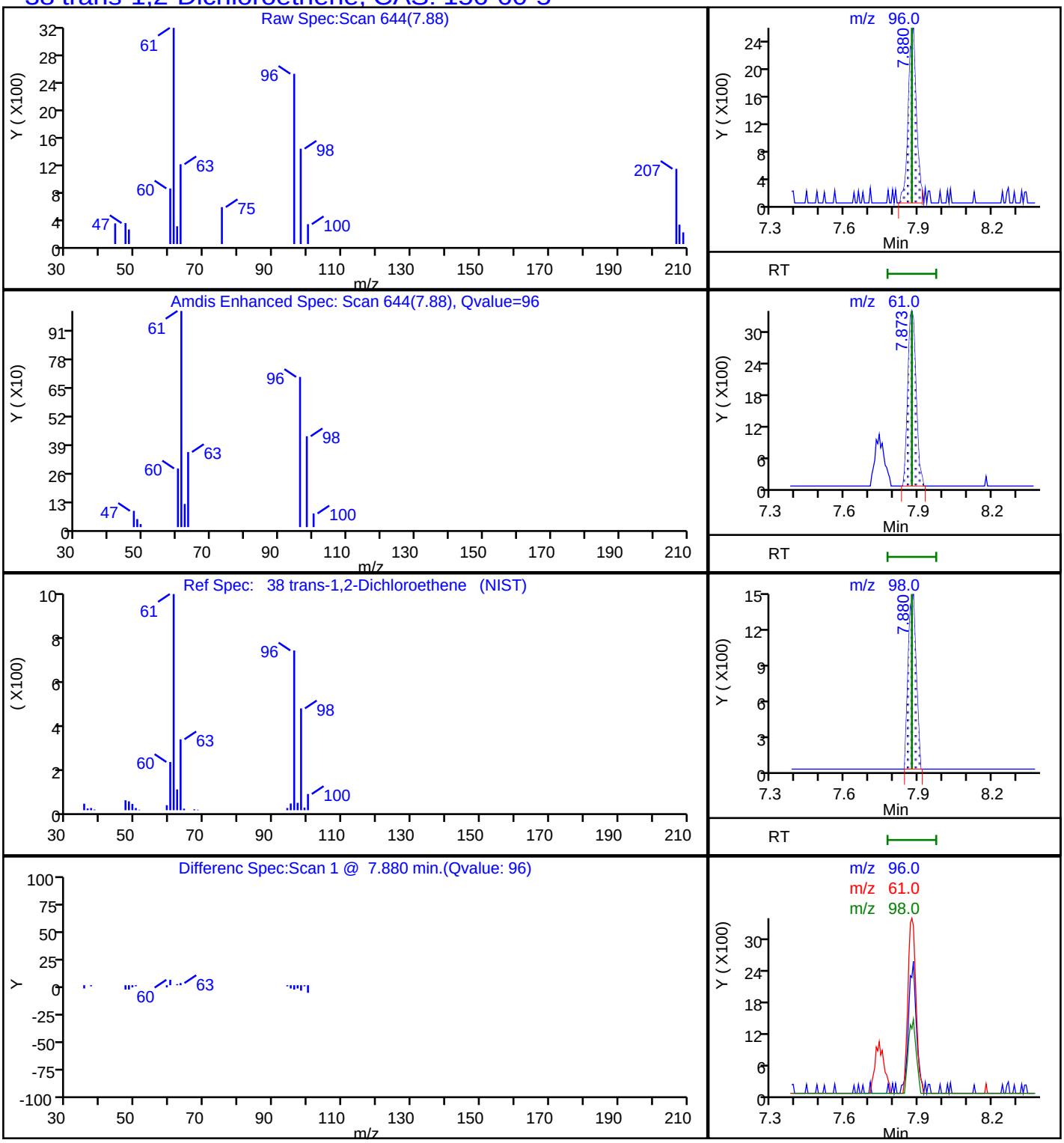
Report Date: 30-Aug-2018 12:15:55 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301810.D

Injection Date:	30-Aug-2018 11:44:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-1	Lab Sample ID:	720-88220-1		
Client ID:	DG-C3W				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

38 trans-1,2-Dichloroethene, CAS: 156-60-5



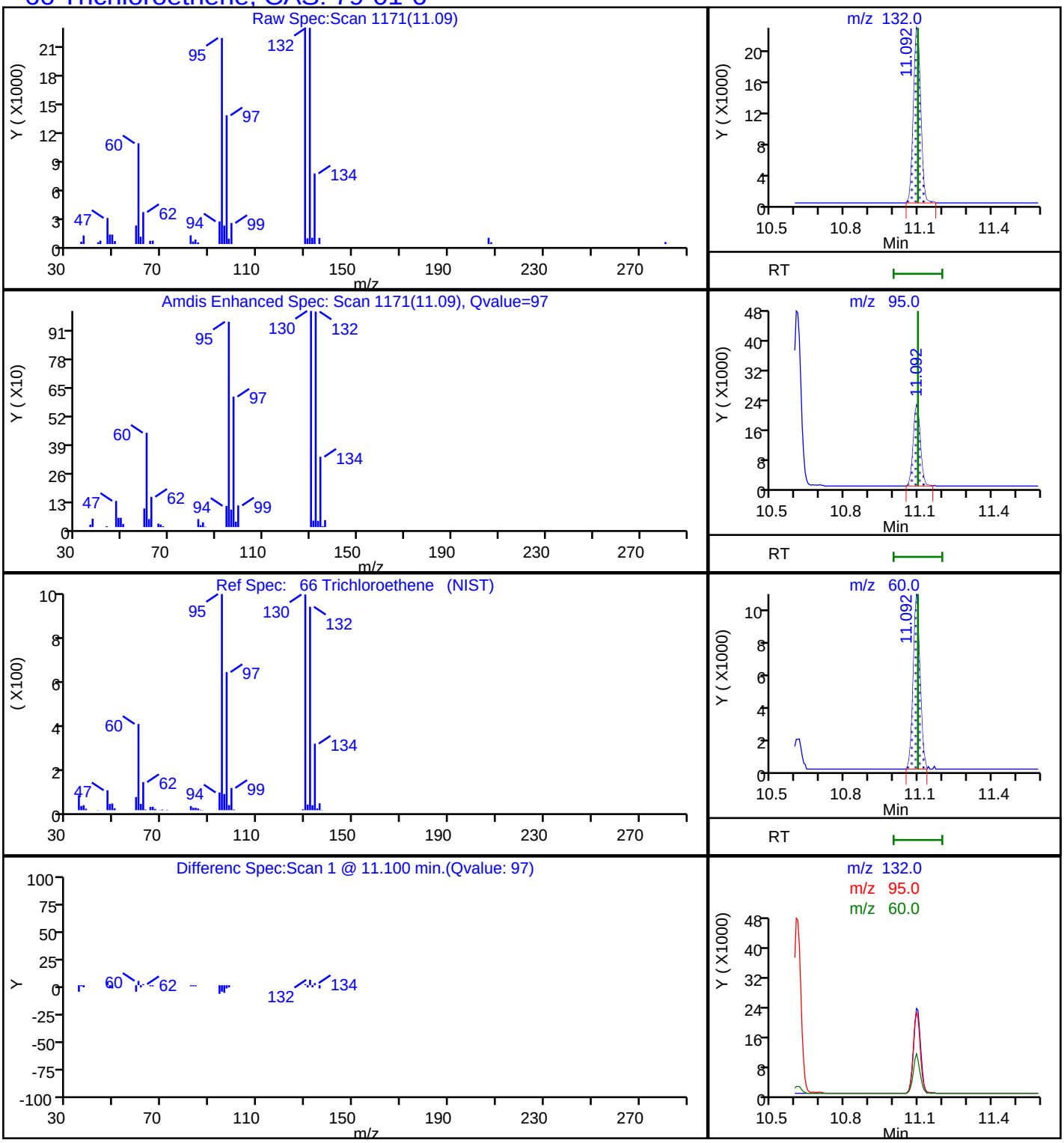
Report Date: 30-Aug-2018 12:15:55 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301810.D

Injection Date:	30-Aug-2018 11:44:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-1	Lab Sample ID:	720-88220-1		
Client ID:	DG-C3W				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

66 Trichloroethene, CAS: 79-01-6



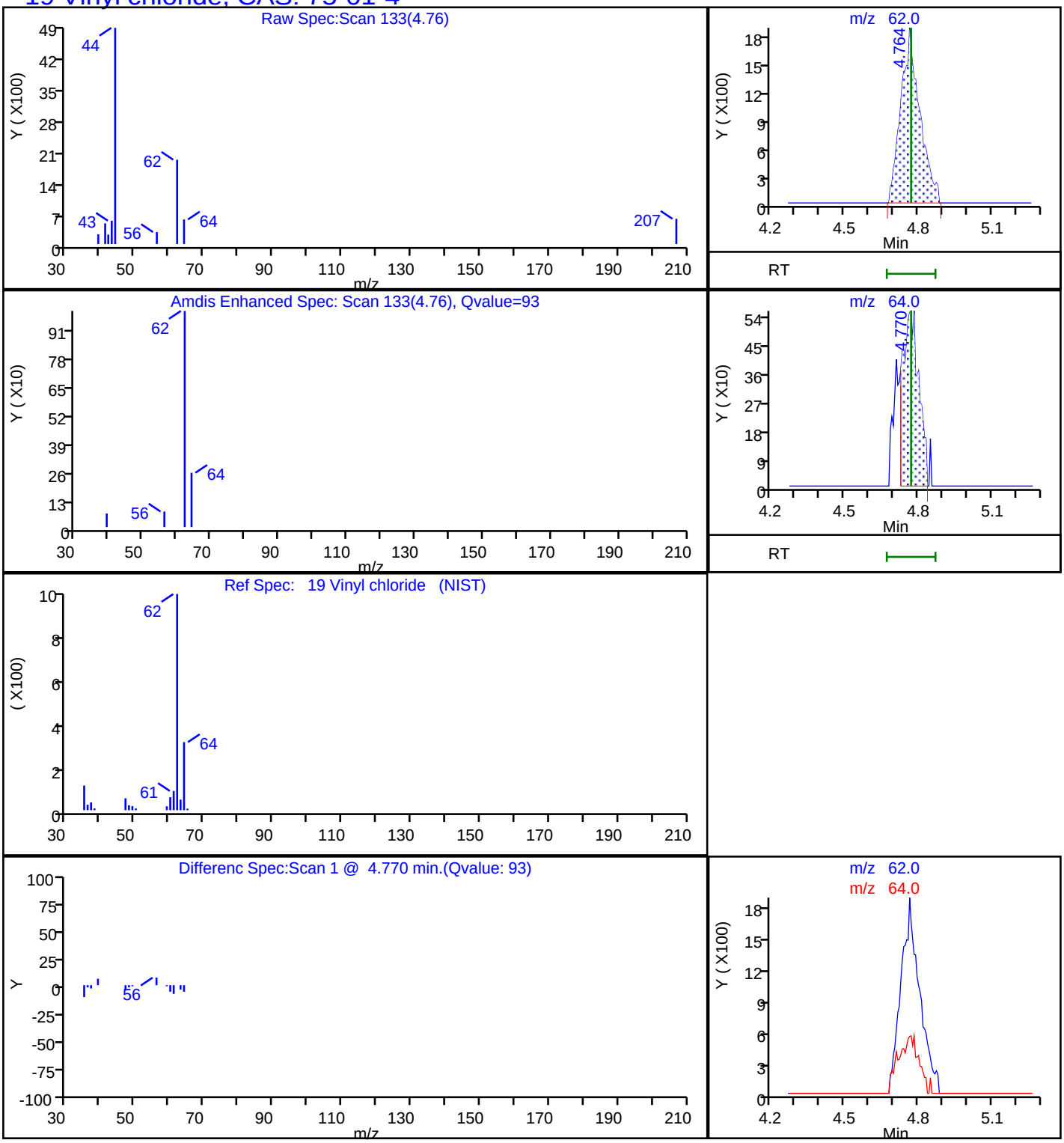
Report Date: 30-Aug-2018 12:15:55 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301810.D

Injection Date:	30-Aug-2018 11:44:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-1	Lab Sample ID:	720-88220-1		
Client ID:	DG-C3W				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

19 Vinyl chloride, CAS: 75-01-4



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

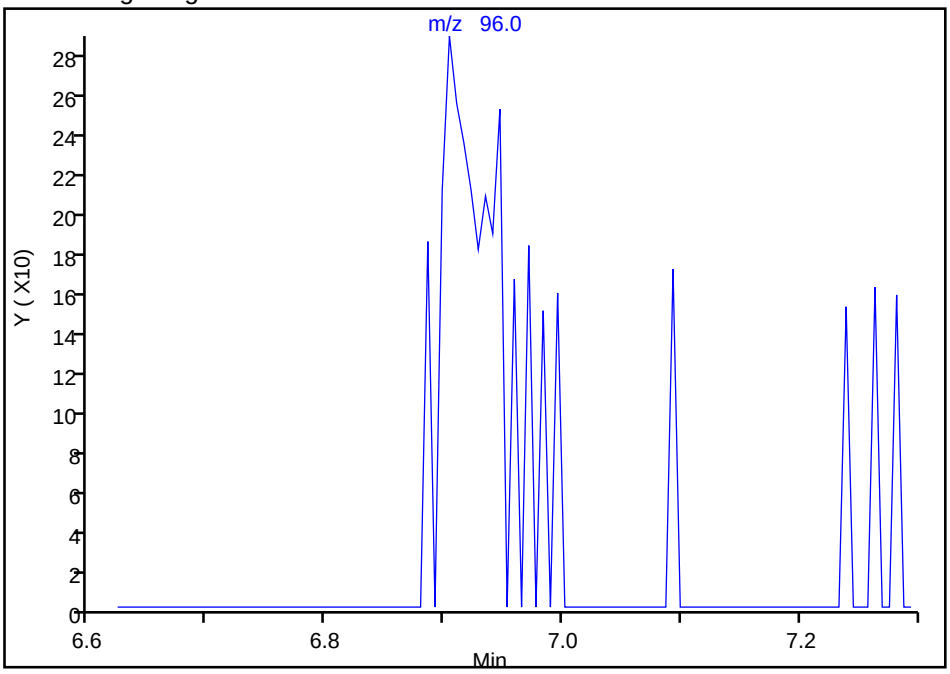
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301810.D				
Injection Date:	30-Aug-2018 11:44:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-1	Lab Sample ID:	720-88220-1		
Client ID:	DG-C3W				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

31 1,1-Dichloroethene, CAS: 75-35-4

Signal: 1

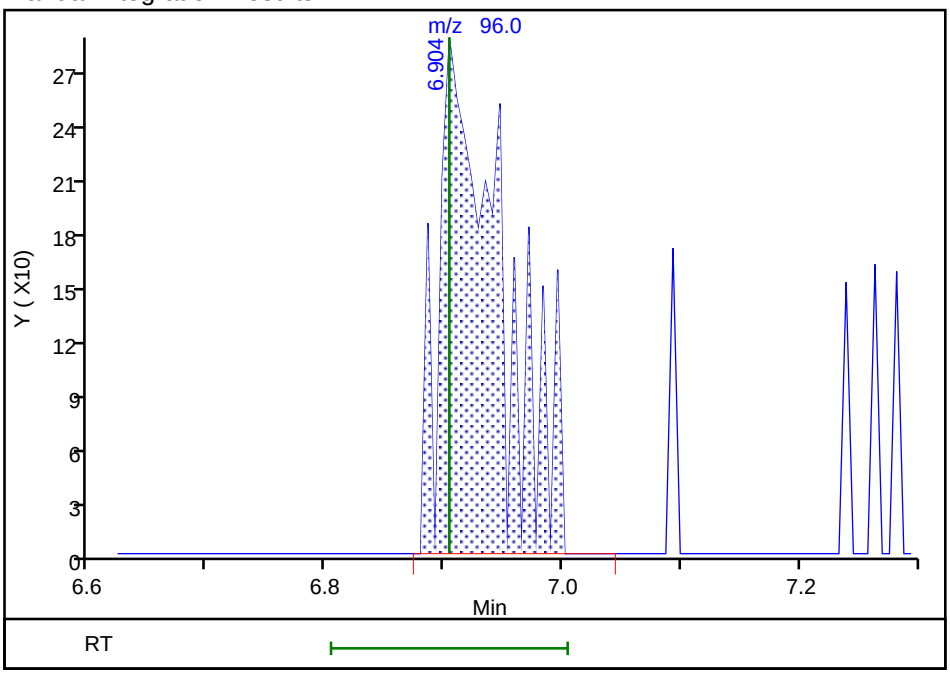
Not Detected
Expected RT: 6.90

Processing Integration Results



Manual Integration Results

RT: 6.90
Area: 1051
Amount: 0.127495
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 12:14:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

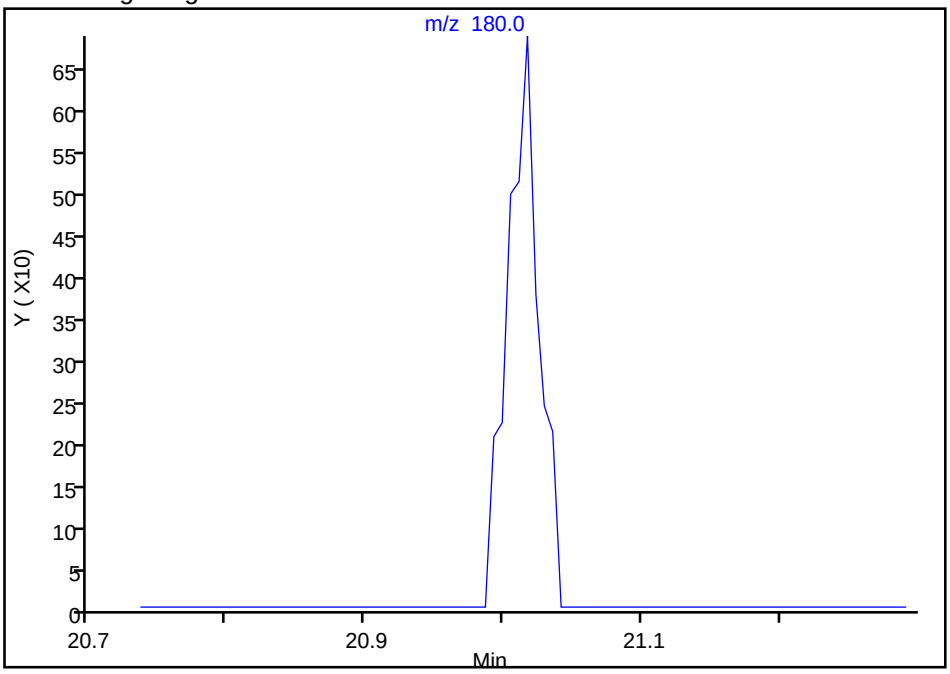
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301810.D				
Injection Date:	30-Aug-2018 11:44:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-1	Lab Sample ID:	720-88220-1		
Client ID:	DG-C3W				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

114 1,2,3-Trichlorobenzene, CAS: 87-61-6

Signal: 1

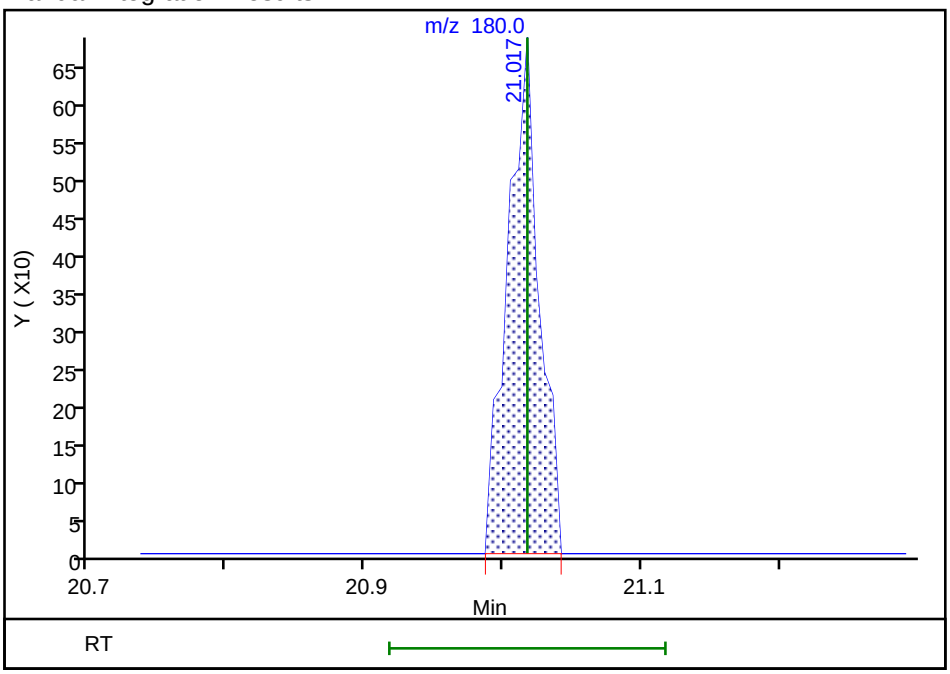
Not Detected
Expected RT: 21.02

Processing Integration Results



Manual Integration Results

RT: 21.02
Area: 1080
Amount: 0.052837
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 12:15:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

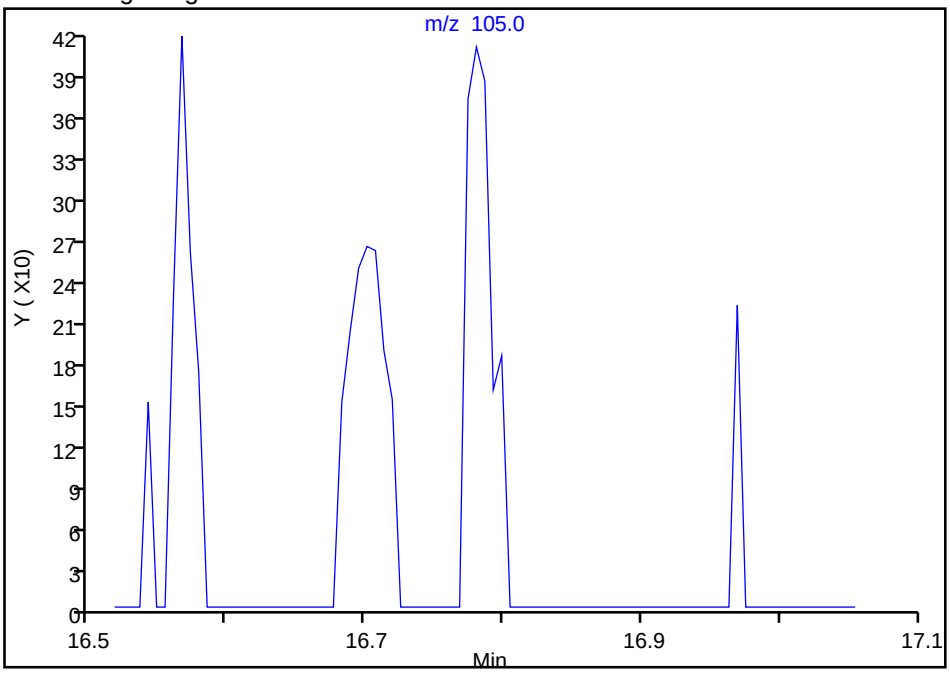
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301810.D				
Injection Date:	30-Aug-2018 11:44:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-1	Lab Sample ID:	720-88220-1		
Client ID:	DG-C3W				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

98 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

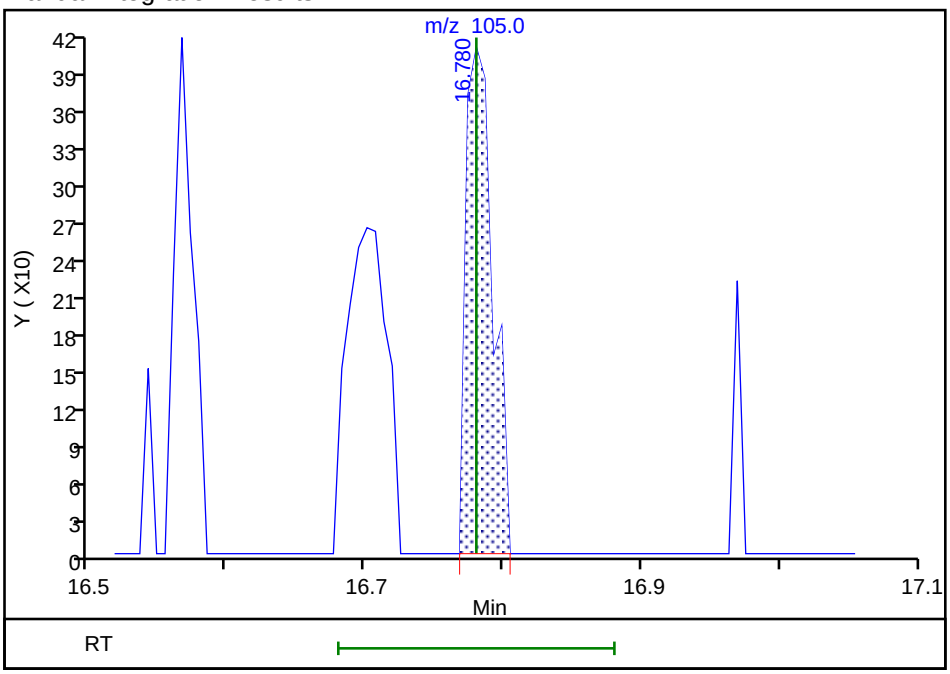
Not Detected
Expected RT: 16.78

Processing Integration Results



Manual Integration Results

RT: 16.78
Area: 552
Amount: 0.010792
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 12:15:32
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

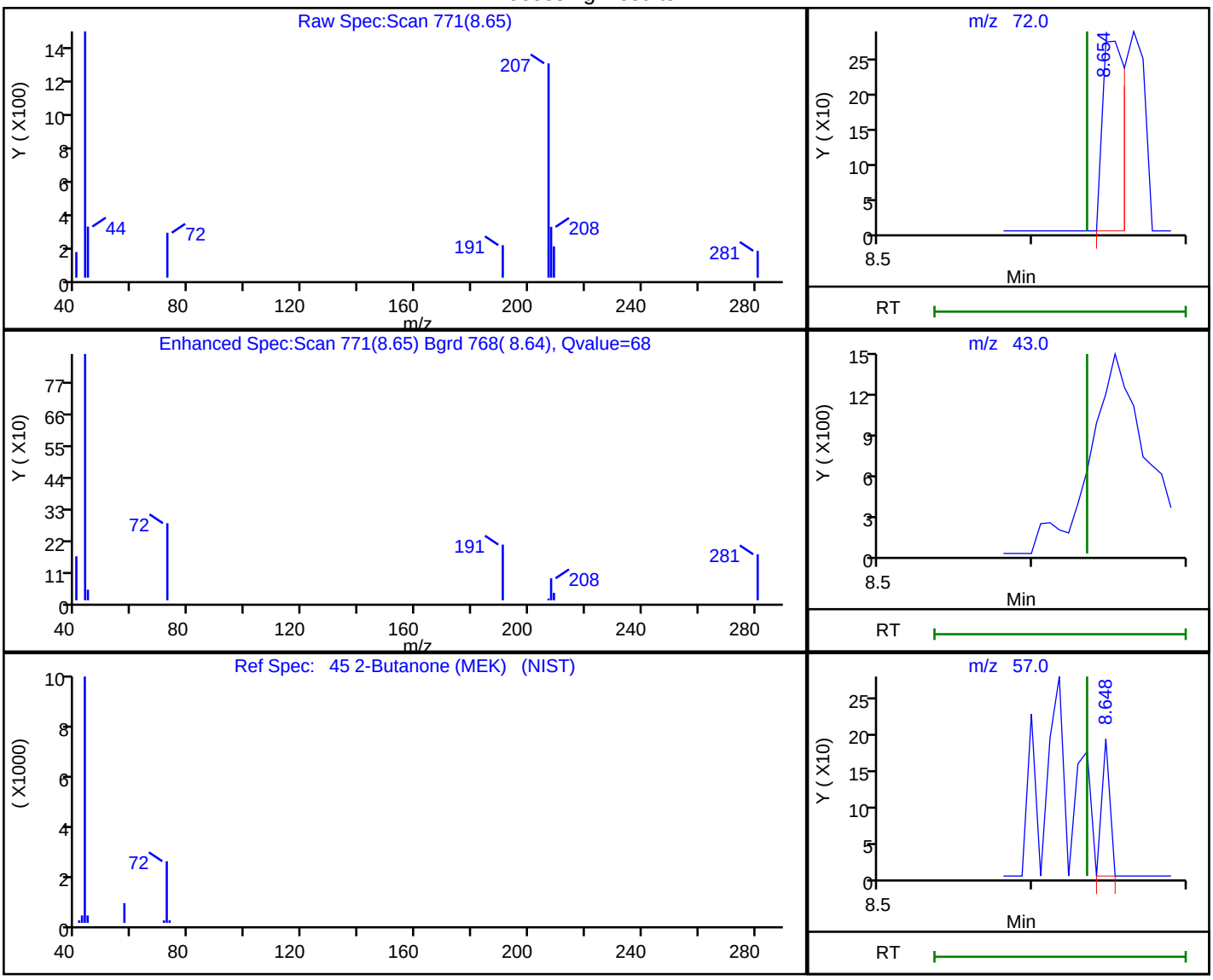
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301810.D				
Injection Date:	30-Aug-2018 11:44:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-1	Lab Sample ID:	720-88220-1		
Client ID:	DG-C3W				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

45 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
8.65	72.00	282	0.193959
8.65	43.00	2888	
8.65	57.00	68	

Reviewer: salgadoa, 30-Aug-2018 12:14:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

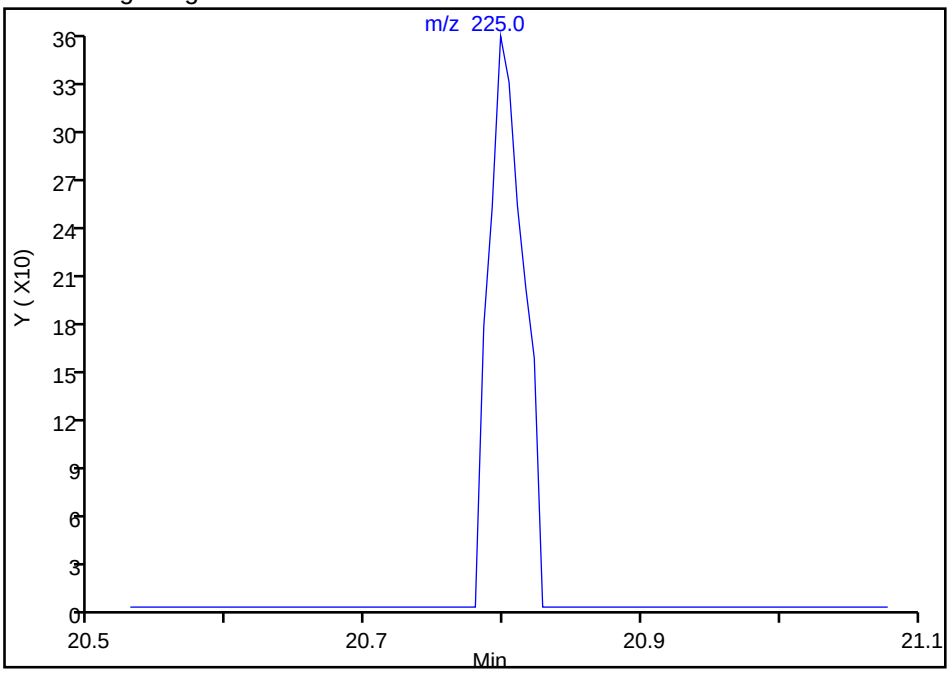
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301810.D				
Injection Date:	30-Aug-2018 11:44:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-1	Lab Sample ID:	720-88220-1		
Client ID:	DG-C3W				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

113 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

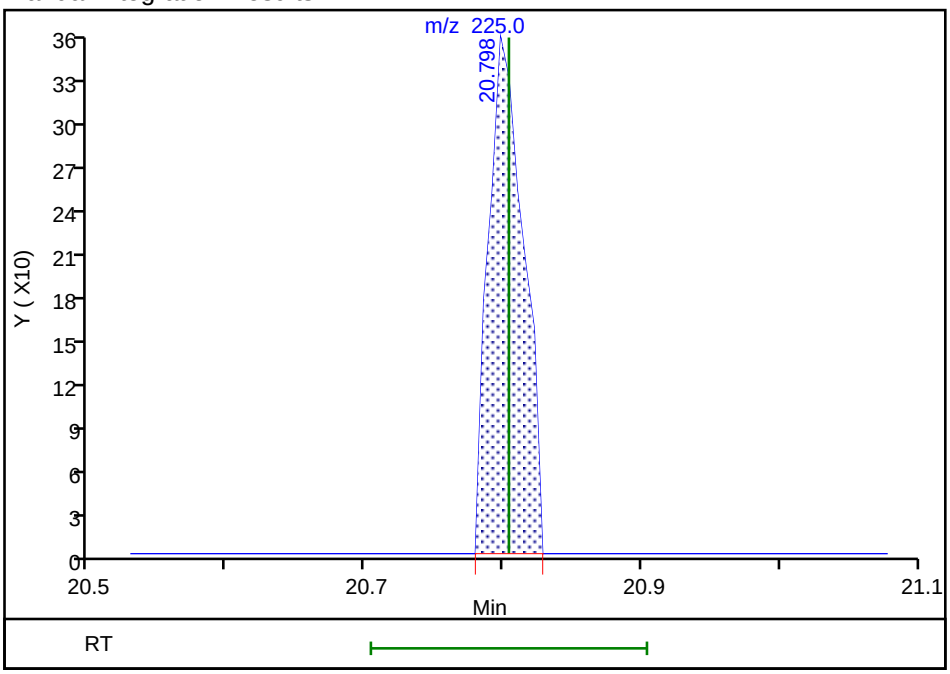
Not Detected
Expected RT: 20.80

Processing Integration Results



Manual Integration Results

RT: 20.80
Area: 633
Amount: 0.049675
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 12:15:45
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

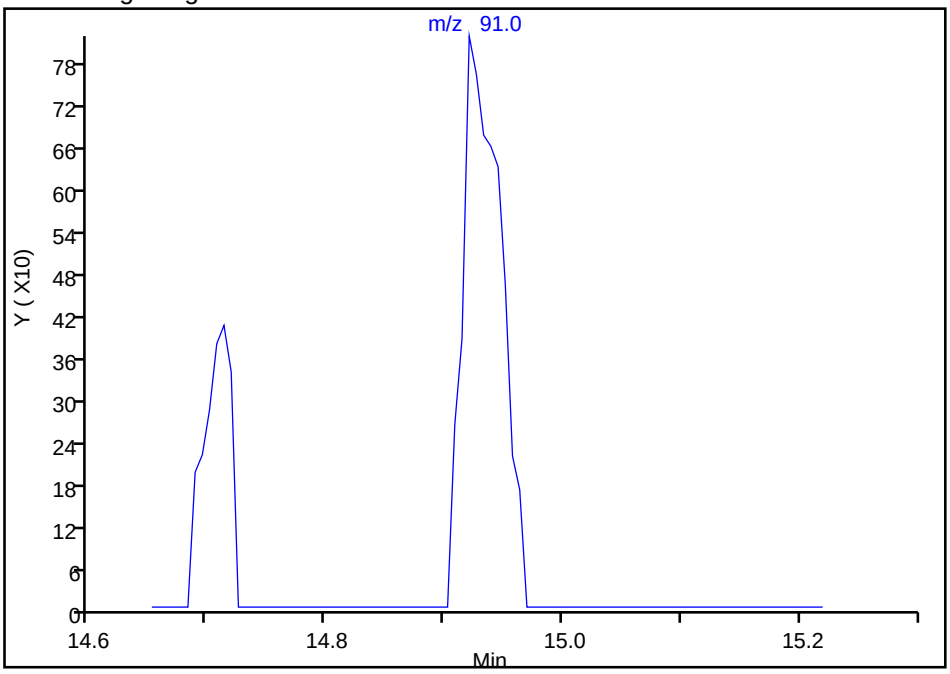
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301810.D				
Injection Date:	30-Aug-2018 11:44:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-1	Lab Sample ID:	720-88220-1		
Client ID:	DG-C3W				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

85 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

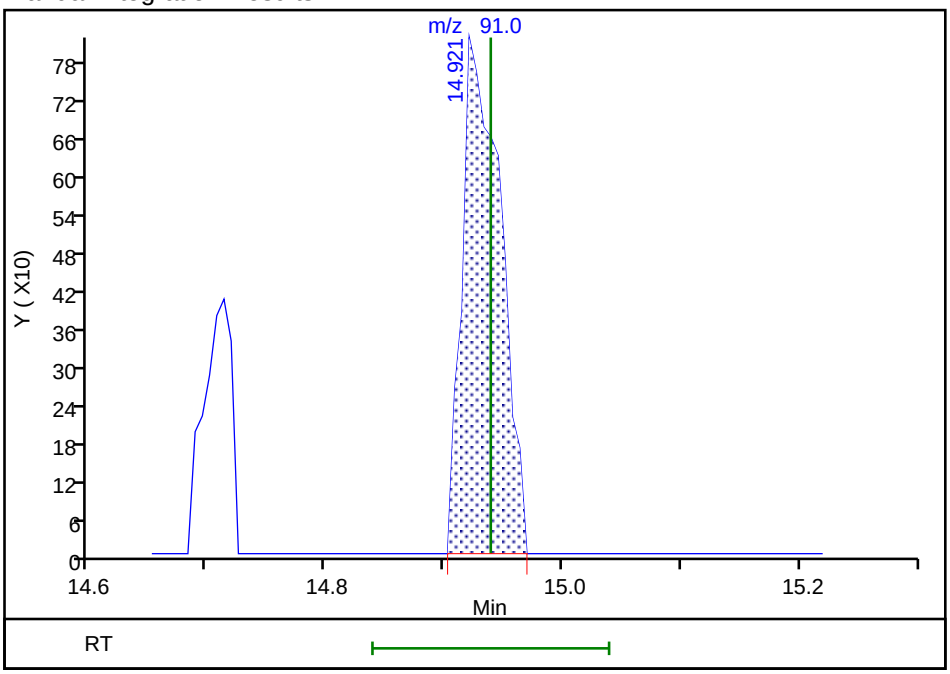
Not Detected
Expected RT: 14.94

Processing Integration Results



Manual Integration Results

RT: 14.92
Area: 1832
Amount: 0.041753
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 12:15:20
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

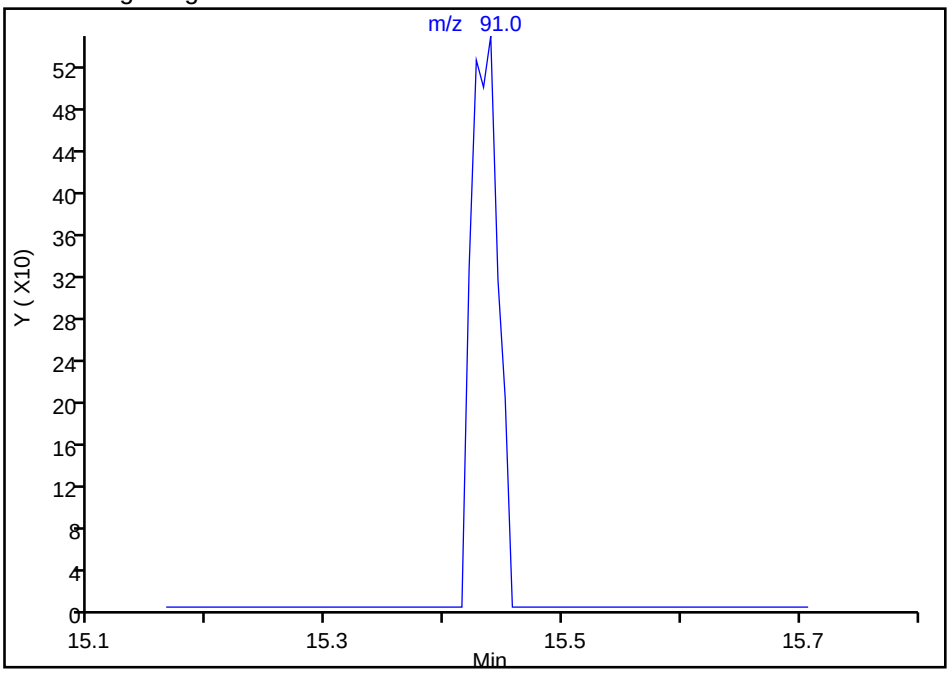
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301810.D				
Injection Date:	30-Aug-2018 11:44:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-1	Lab Sample ID:	720-88220-1		
Client ID:	DG-C3W				
Operator ID:	VOA	ALS Bottle#:	9	Worklist Smp#:	19
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

88 o-Xylene, CAS: 95-47-6

Signal: 1

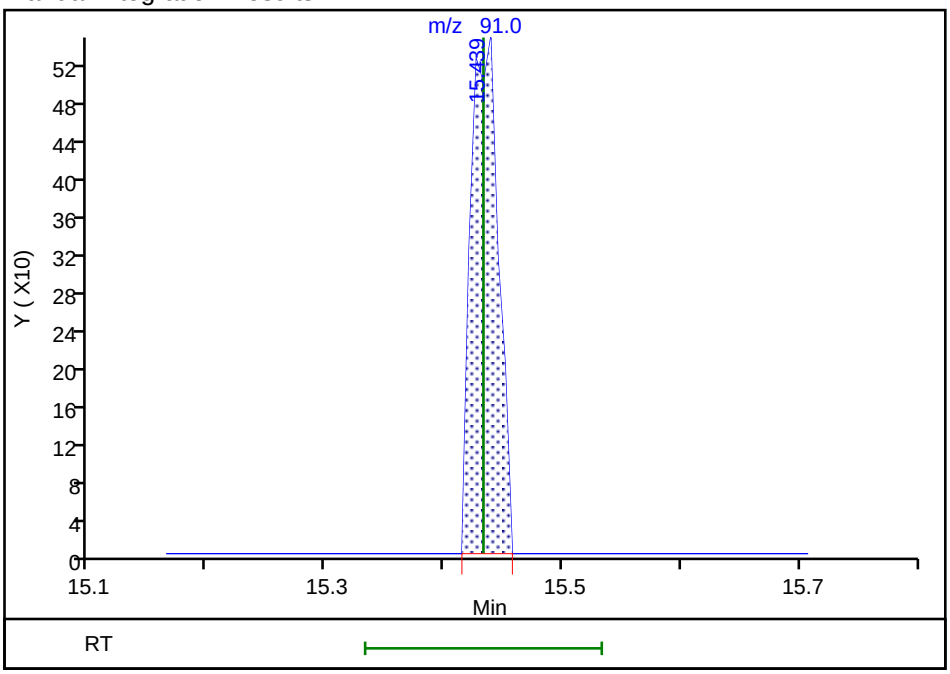
Not Detected
Expected RT: 15.43

Processing Integration Results



Manual Integration Results

RT: 15.44
Area: 879
Amount: 0.019286
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 12:15:24
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-F3W Lab Sample ID: 720-88220-2

Matrix: Water Lab File ID: 08301811.D

Analysis Method: 8260B Date Collected: 08/22/2018 08:30

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 12:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND	*	0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-F3W Lab Sample ID: 720-88220-2

Matrix: Water Lab File ID: 08301811.D

Analysis Method: 8260B Date Collected: 08/22/2018 08:30

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 12:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	7.9		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	0.39	J	0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	0.60		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	ND		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-F3W Lab Sample ID: 720-88220-2

Matrix: Water Lab File ID: 08301811.D

Analysis Method: 8260B Date Collected: 08/22/2018 08:30

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 12:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		72-130
460-00-4	4-Bromofluorobenzene	99		67-130
2037-26-5	Toluene-d8 (Surr)	95		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301811.D
Lims ID: 720-88220-A-2
Client ID: DG-F3W
Sample Type: Client
Inject. Date: 30-Aug-2018 12:14:30 ALS Bottle#: 10 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-2
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 13:01:59 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 13:01:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.825	0.000	0	296051	250.0	
* 2 Fluorobenzene	96	10.598	10.605	-0.007	99	1055015	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	86	851768	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	474884	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.185	0.000	94	88586	7.48	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.703	0.000	0	106110	7.15	
$ 10 Toluene-d8 (Surr)	98	12.708	12.700	0.000	93	305001	7.15	
$ 11 4-Bromofluorobenzene	95	15.933	15.926	0.000	94	122459	7.39	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	0.000	84	107882	5.87	
$ 6 BFB	95	8.812	6.434	2.378	0	2257	NR	
23 Ethanol	45	5.502	5.514	-0.012	97	6230	55.7	
27 Isopropyl alcohol	45	6.288	6.282	0.006	99	72939	91.9	
28 Acetone	58	6.386	6.370	0.012	97	3577	2.89	
31 1,1-Dichloroethene	96	6.922	6.922	0.018	1	498	0.0622	a
38 trans-1,2-Dichloroethene	96	7.873	7.869	0.000	96	4024	0.3862	
40 1,1-Dichloroethane	63	8.160	8.160	0.000	87	1793	0.0874	a
49 cis-1,2-Dichloroethene	61	8.812	8.813	-0.006	82	136772	7.88	
150 t-Amyl alcohol	59	9.556	9.562	-0.006	1	62	0.0612	
59 Benzene	78	10.373	10.367	0.000	86	1090	0.0243	
66 Trichloroethene	132	11.092	11.092	-0.006	97	6976	0.5999	
75 Toluene	92	12.793	12.788	0.000	98	1788	0.0639	
128 Butyl Ether	87	14.665	14.652	0.006	94	585	0.0690	
85 m-Xylene & p-Xylene	91	14.927	14.927	-0.012	0	1032	0.0240	a
88 o-Xylene	91	15.433	15.433	0.000	1	593	0.0133	a
105 4-Isopropyltoluene	119	17.640	17.640	-0.006	1	1298	0.0246	
107 n-Butylbenzene	91	18.170	18.170	0.000	1	402	0.008650	a
142 1,3,5-Trichlorobenzene	180	19.719	19.719	-0.006	1	195	0.008520	a
111 1,2,4-Trichlorobenzene	180	20.407	20.407	-0.007	1	276	0.0132	a
113 Hexachlorobutadiene	225	20.804	20.804	0.000	1	315	0.0256	a
114 1,2,3-Trichlorobenzene	180	21.017	21.017	0.000	73	522	0.0265	a
29 Pentane	43	6.288	6.410	-0.122	38	12232	NR	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 116 C4-C10	1	10.849	(4.783-16.914)		0	1360123	14.1	
A 154 C6-C8	1	10.852	(8.550-13.153)		0	619920	6.41	
A 155 C6-C9	1	11.842	(8.550-15.134)		0	763251	7.89	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1589220	16.4	
A 119 C6-C10	1	12.732	(8.550-16.914)		0	938682	9.70	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	1553449	16.1	
A 120 C6-C12	1	14.278	(8.550-20.005)		0	1167779	12.1	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	323849	3.35	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	643890	6.66	
S 122 Xylenes, Total	1				0		0.0373	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

a - User Assigned ID

Reagents:

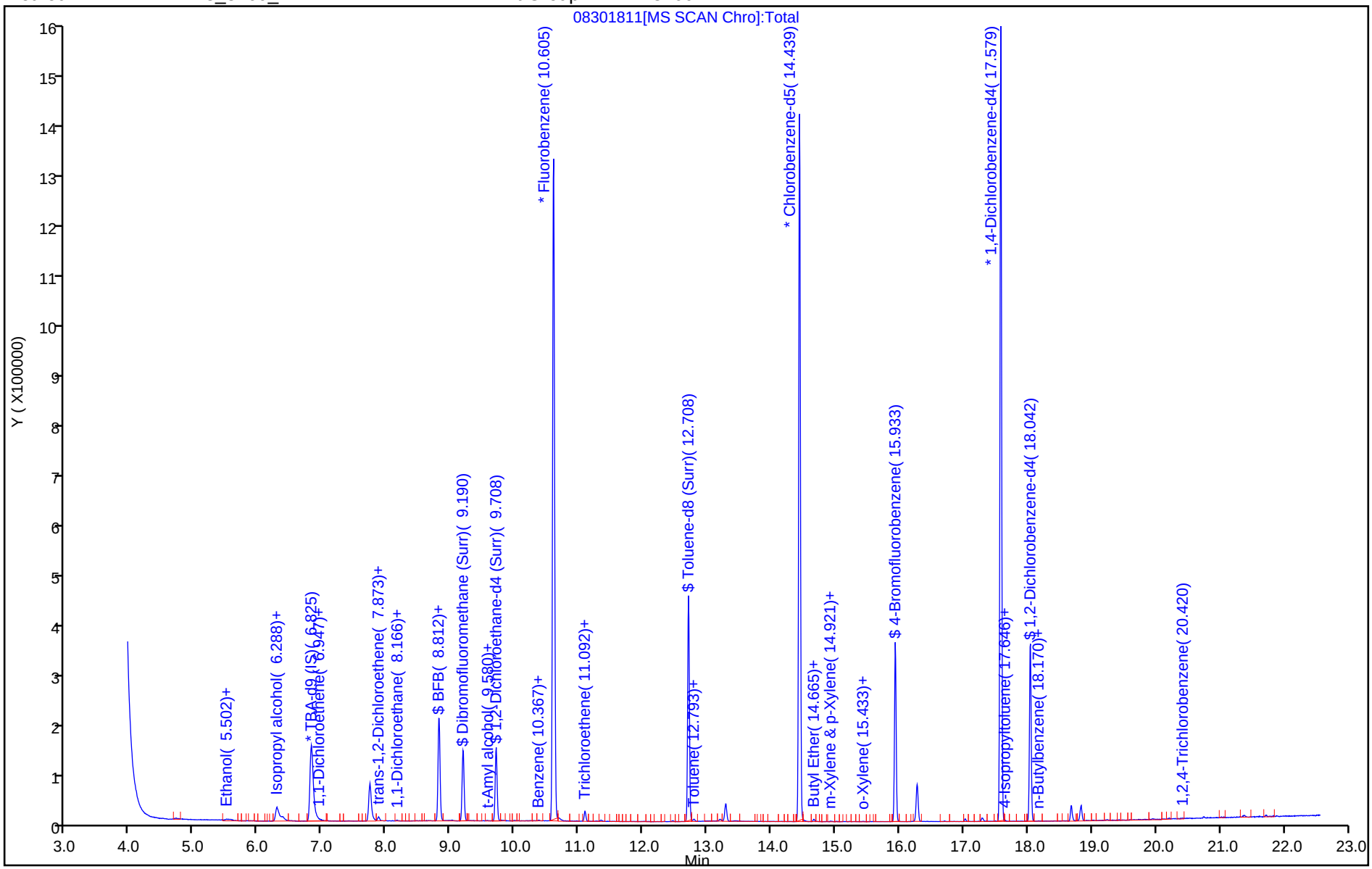
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 13:02:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301811.D

Injection Date:	30-Aug-2018 12:14:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88220-A-2	Lab Sample ID:	720-88220-2	Worklist Smp#:	9
Client ID:	DG-F3W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301811.D
Lims ID: 720-88220-A-2
Client ID: DG-F3W
Sample Type: Client
Inject. Date: 30-Aug-2018 12:14:30 ALS Bottle#: 10 Worklist Smp#: 9
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-2
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 13:01:59 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 13:01:59

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.15	95.37
$ 10 Toluene-d8 (Surr)	7.50	7.15	95.31
$ 11 4-Bromofluorobenzene	7.50	7.39	98.57
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

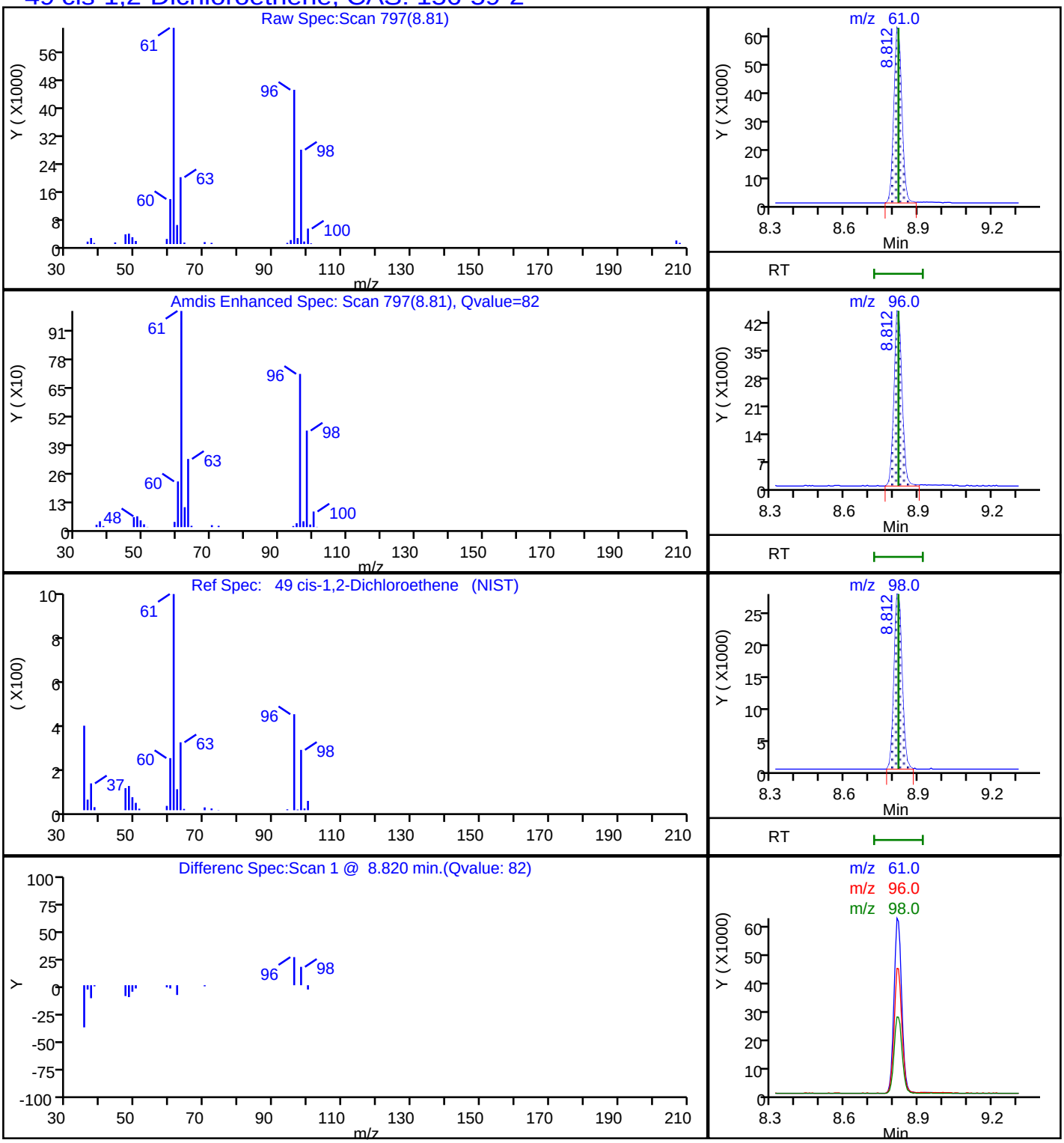
Report Date: 30-Aug-2018 13:02:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301811.D

Injection Date:	30-Aug-2018 12:14:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-2	Lab Sample ID:	720-88220-2		
Client ID:	DG-F3W				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

49 cis-1,2-Dichloroethene, CAS: 156-59-2



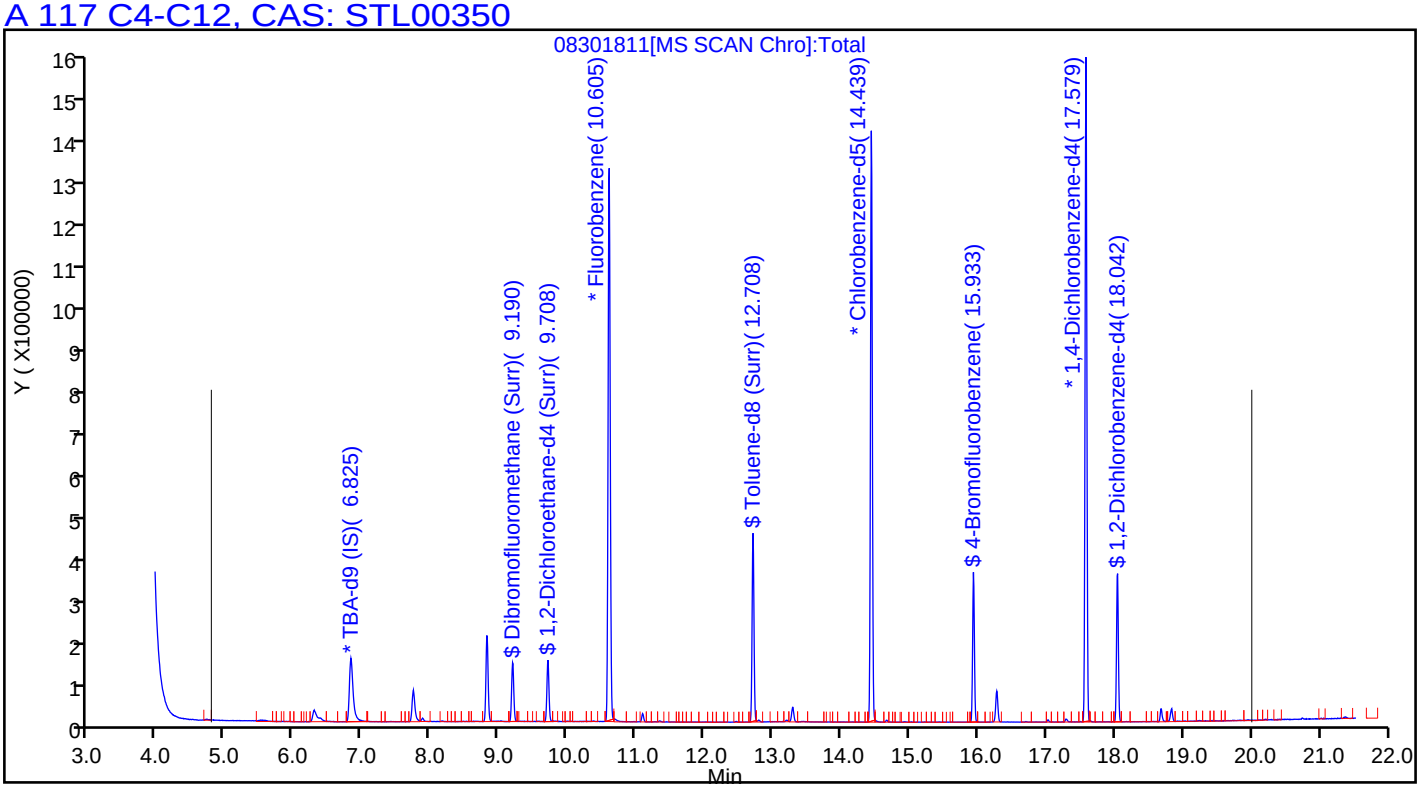
Report Date: 30-Aug-2018 13:02:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301811.D

Injection Date:	30-Aug-2018 12:14:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-2	Lab Sample ID:	720-88220-2		
Client ID:	DG-F3W				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



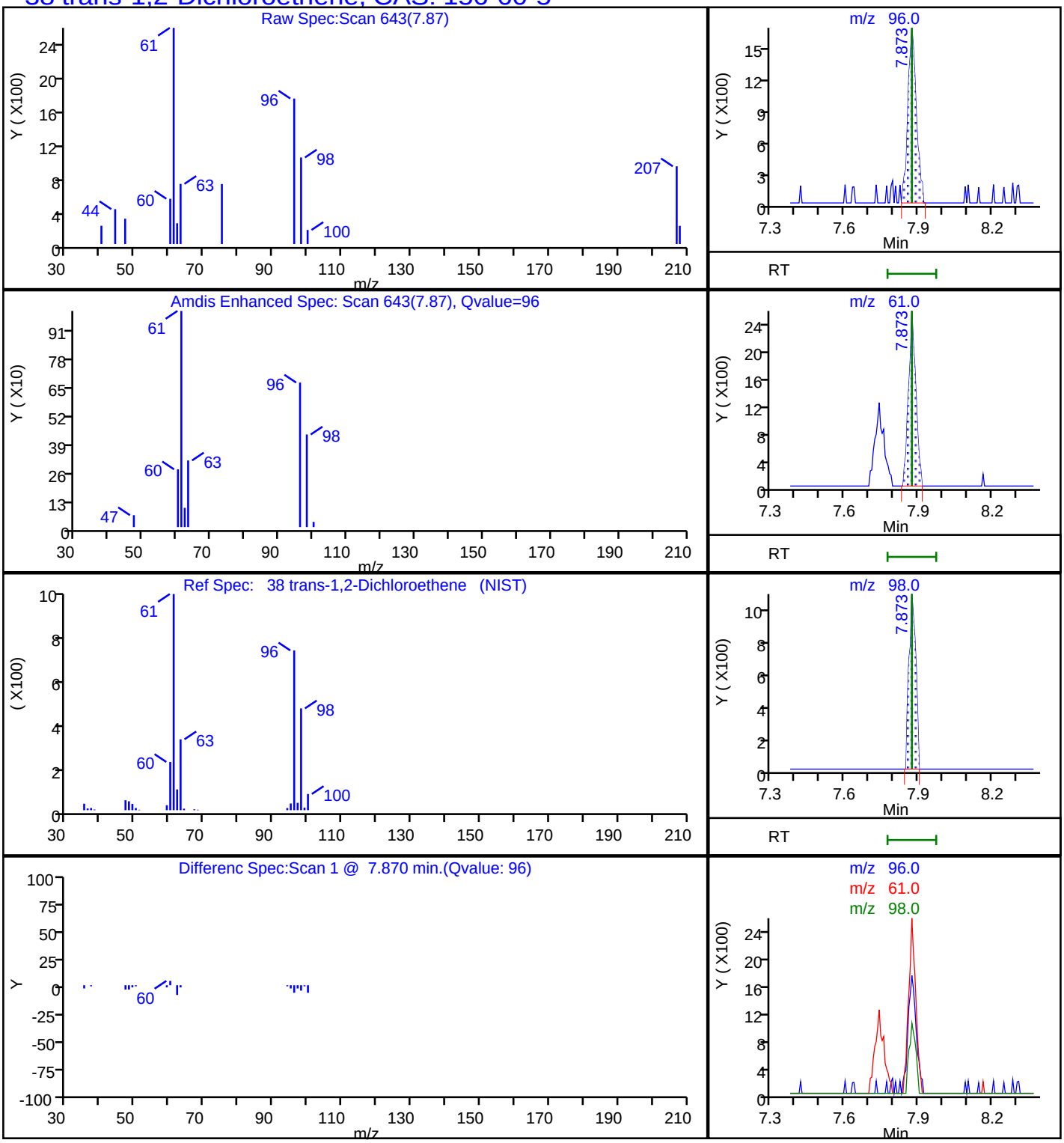
Report Date: 30-Aug-2018 13:02:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301811.D

Injection Date:	30-Aug-2018 12:14:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-2	Lab Sample ID:	720-88220-2		
Client ID:	DG-F3W				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

38 trans-1,2-Dichloroethene, CAS: 156-60-5



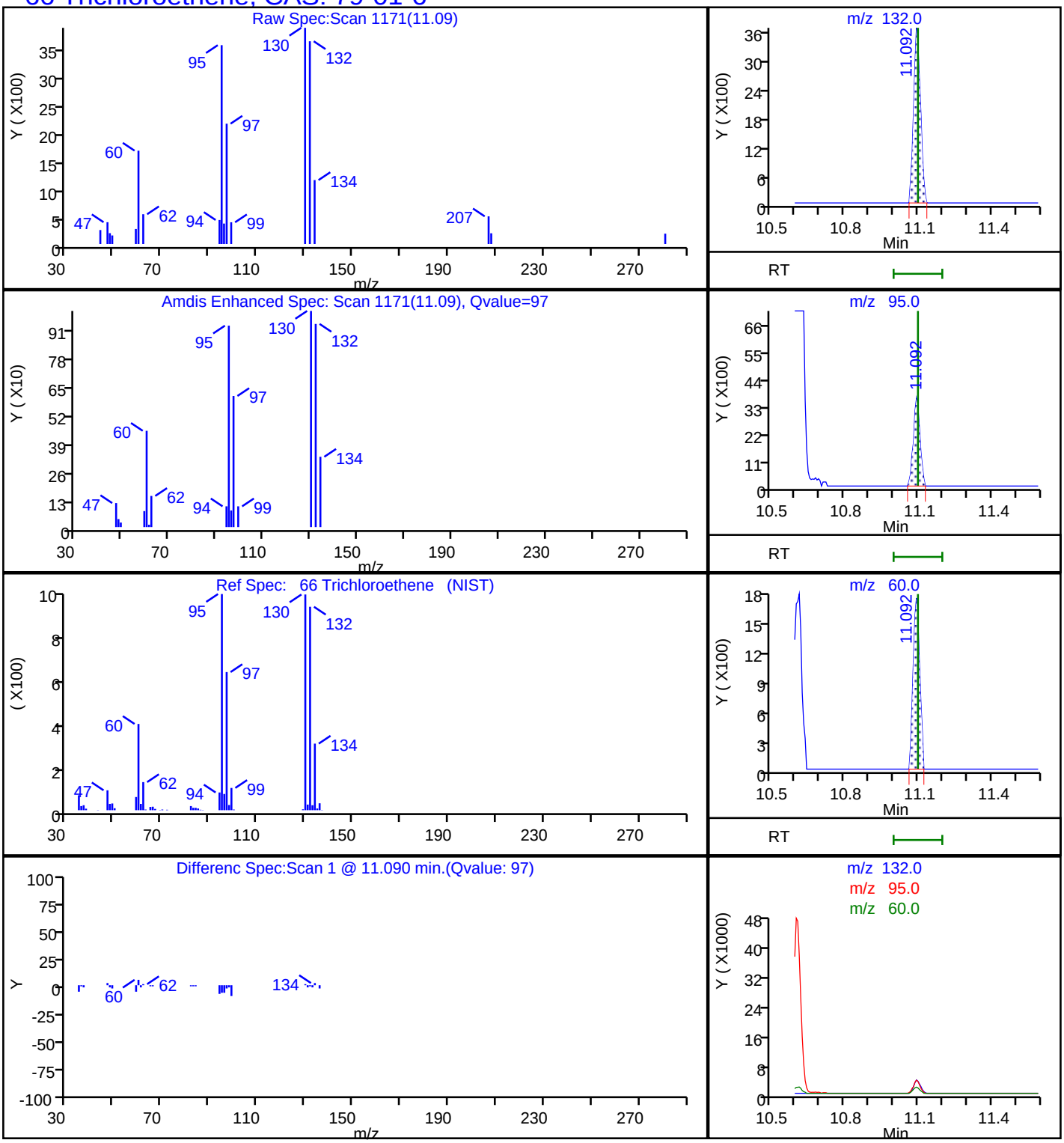
Report Date: 30-Aug-2018 13:02:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301811.D

Injection Date:	30-Aug-2018 12:14:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-2	Lab Sample ID:	720-88220-2		
Client ID:	DG-F3W				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

66 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

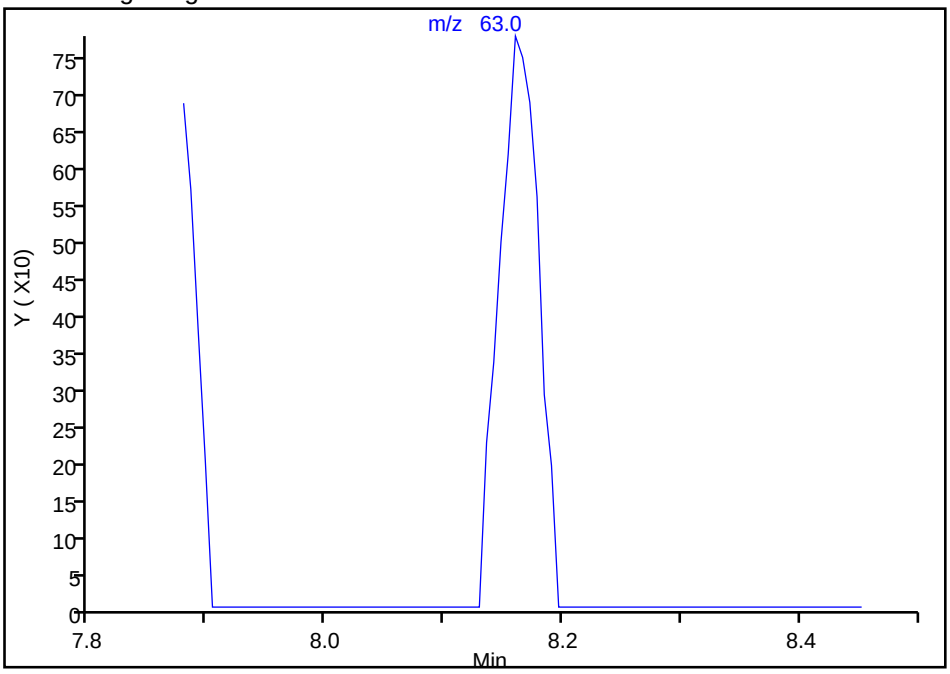
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301811.D				
Injection Date:	30-Aug-2018 12:14:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-2	Lab Sample ID:	720-88220-2		
Client ID:	DG-F3W				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

40 1,1-Dichloroethane, CAS: 75-34-3

Signal: 1

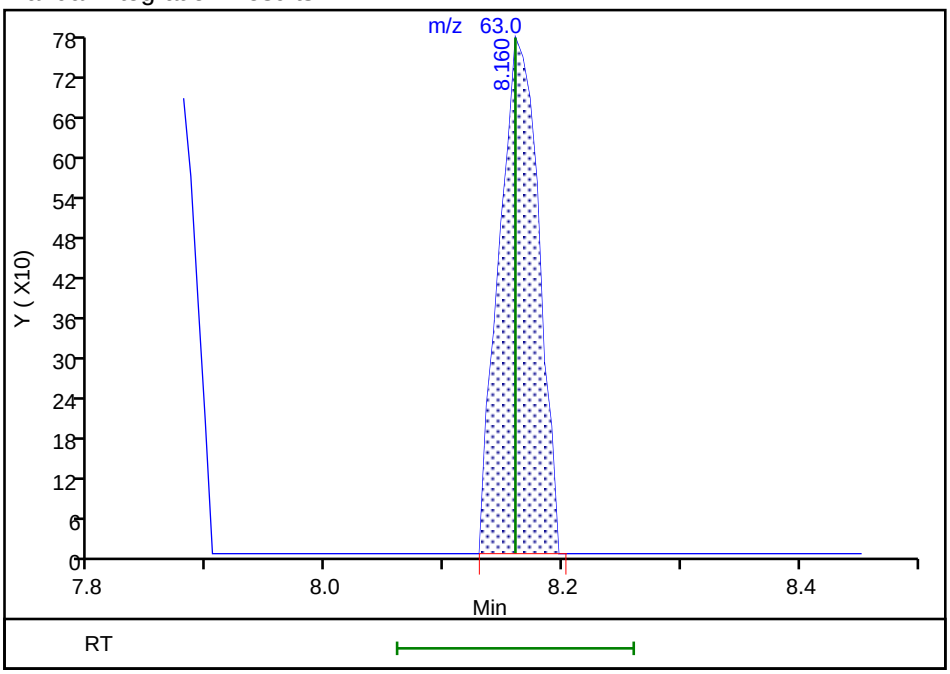
Not Detected
Expected RT: 8.16

Processing Integration Results



Manual Integration Results

RT: 8.16
Area: 1793
Amount: 0.087445
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:00:55
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

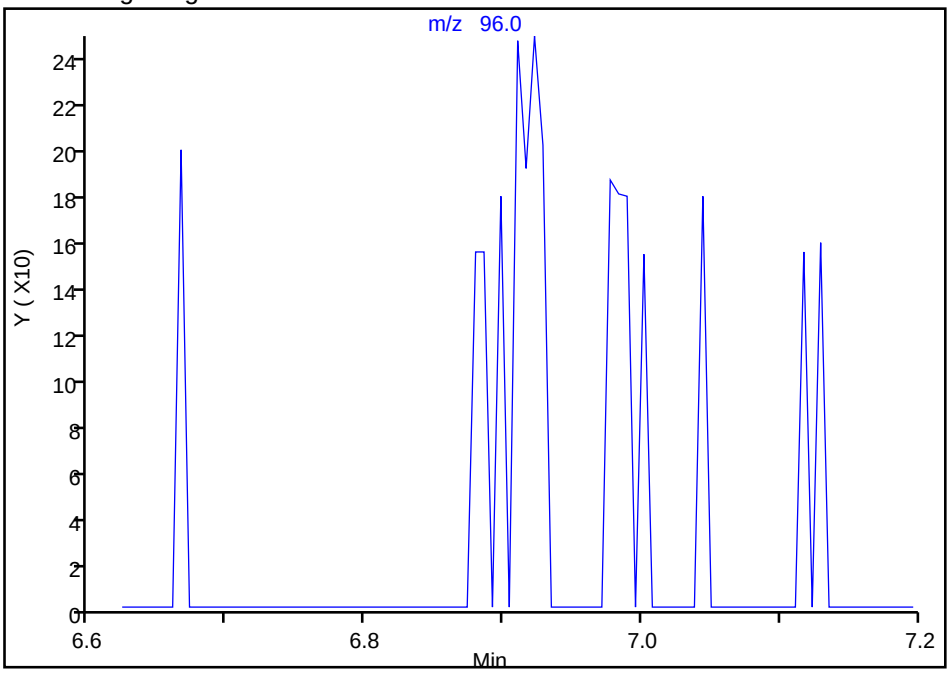
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301811.D				
Injection Date:	30-Aug-2018 12:14:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-2	Lab Sample ID:	720-88220-2		
Client ID:	DG-F3W				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

31 1,1-Dichloroethene, CAS: 75-35-4

Signal: 1

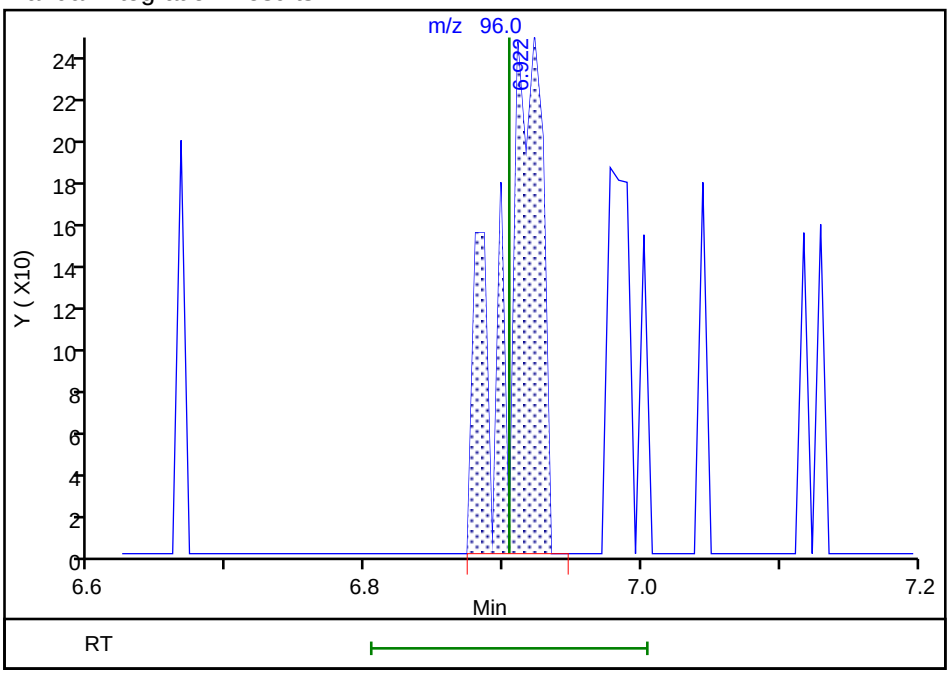
Not Detected
Expected RT: 6.90

Processing Integration Results



Manual Integration Results

RT: 6.92
Area: 498
Amount: 0.062156
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:00:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

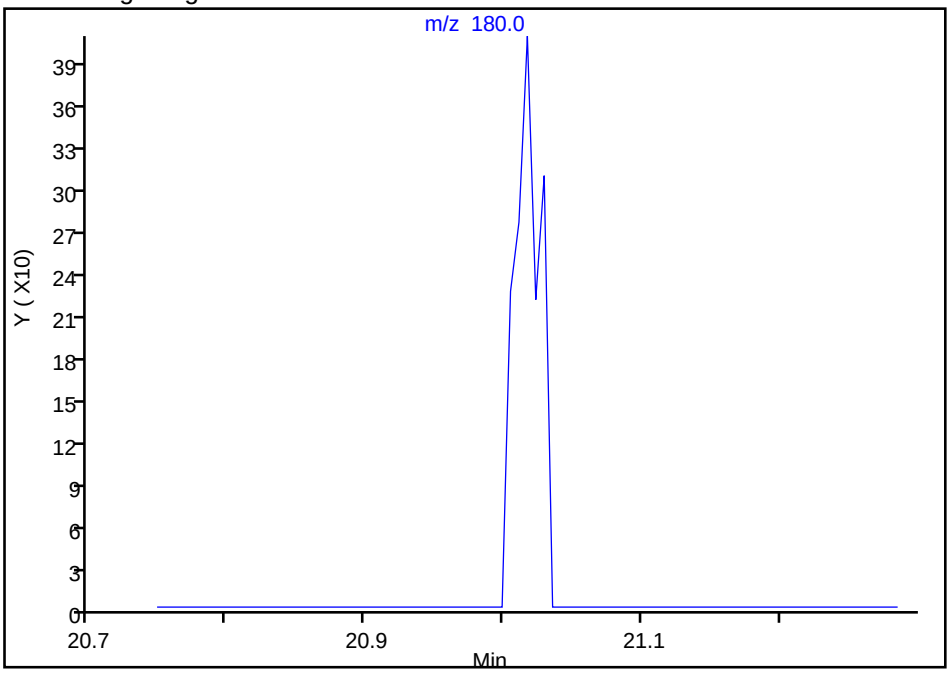
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301811.D				
Injection Date:	30-Aug-2018 12:14:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-2	Lab Sample ID:	720-88220-2		
Client ID:	DG-F3W				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

114 1,2,3-Trichlorobenzene, CAS: 87-61-6

Signal: 1

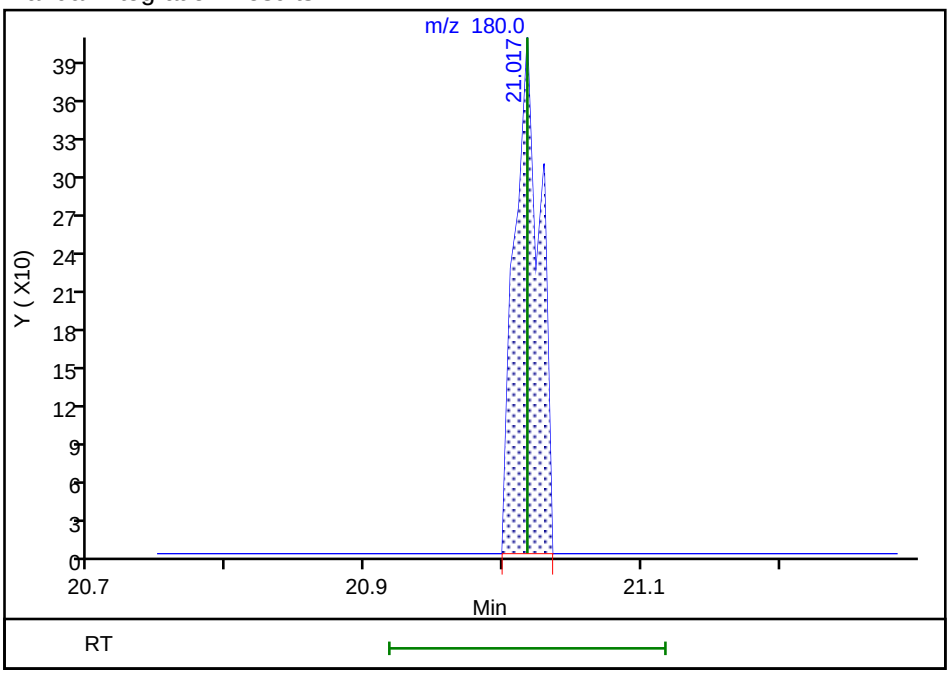
Not Detected
Expected RT: 21.02

Processing Integration Results



Manual Integration Results

RT: 21.02
Area: 522
Amount: 0.026474
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:01:54
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

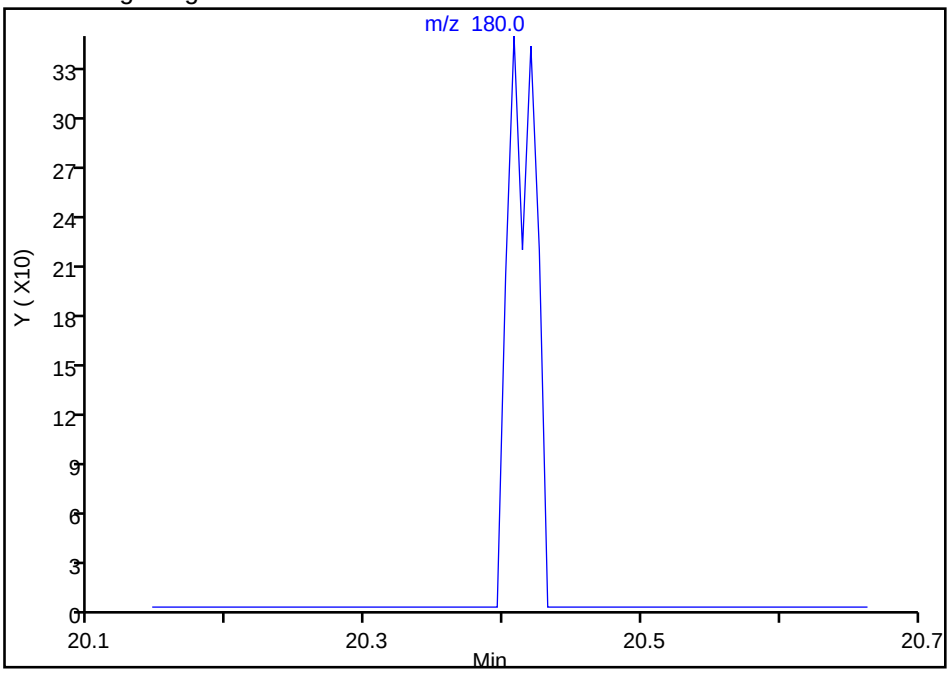
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301811.D				
Injection Date:	30-Aug-2018 12:14:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-2	Lab Sample ID:	720-88220-2		
Client ID:	DG-F3W				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

111 1,2,4-Trichlorobenzene, CAS: 120-82-1

Signal: 1

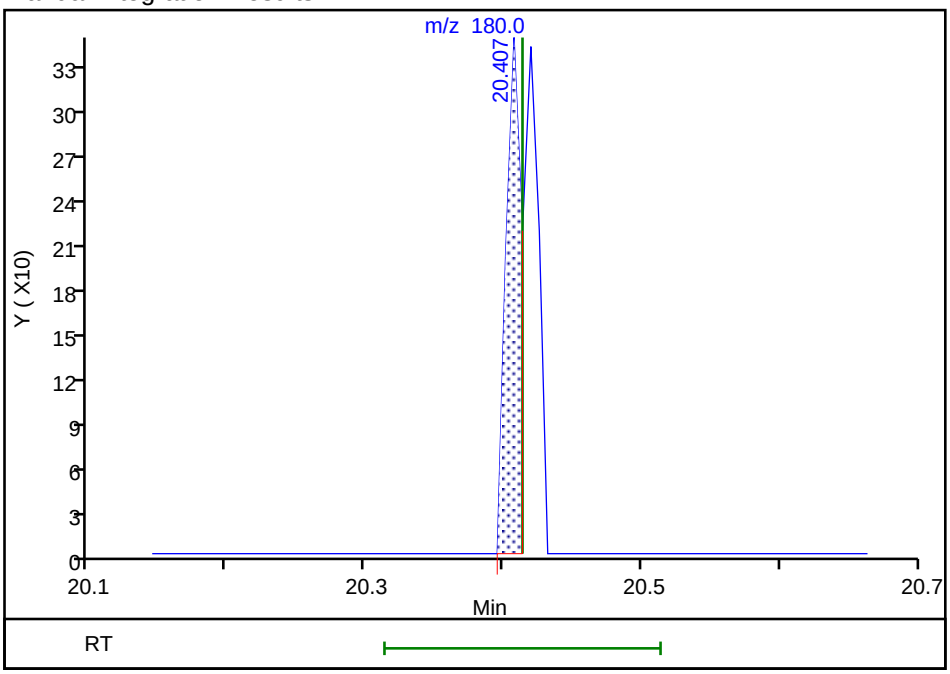
Not Detected
Expected RT: 20.41

Processing Integration Results



Manual Integration Results

RT: 20.41
Area: 276
Amount: 0.013202
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:01:43
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

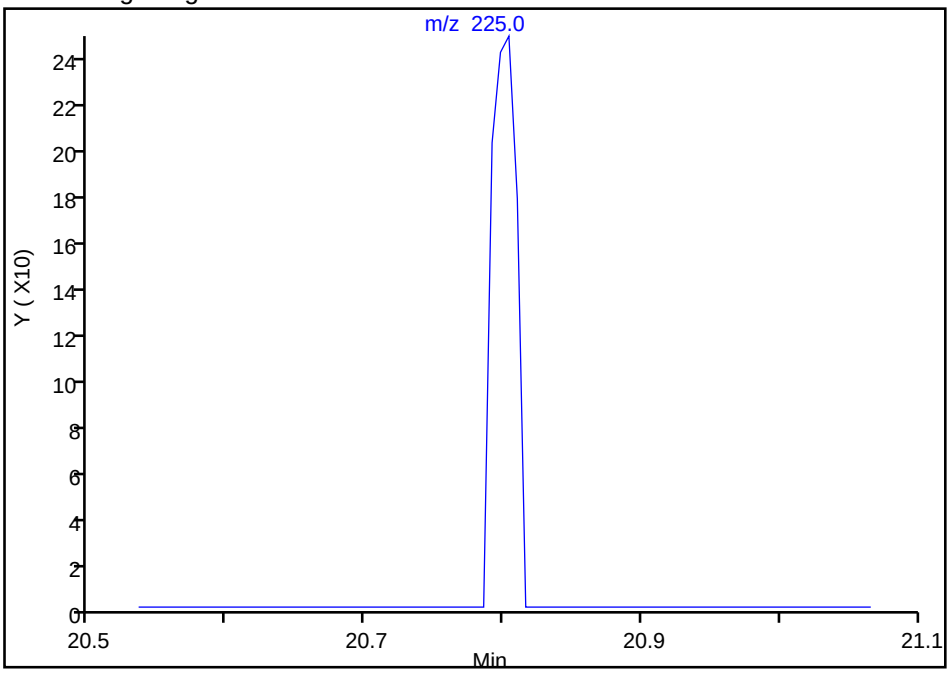
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301811.D				
Injection Date:	30-Aug-2018 12:14:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-2	Lab Sample ID:	720-88220-2		
Client ID:	DG-F3W				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

113 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

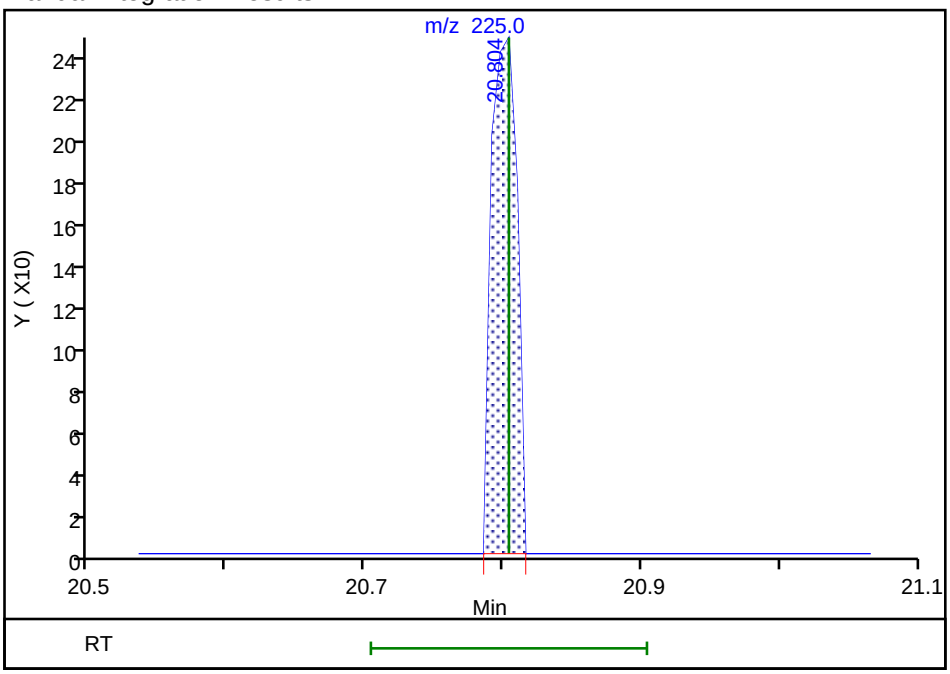
Not Detected
Expected RT: 20.80

Processing Integration Results



Manual Integration Results

RT: 20.80
Area: 315
Amount: 0.025626
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:01:50
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

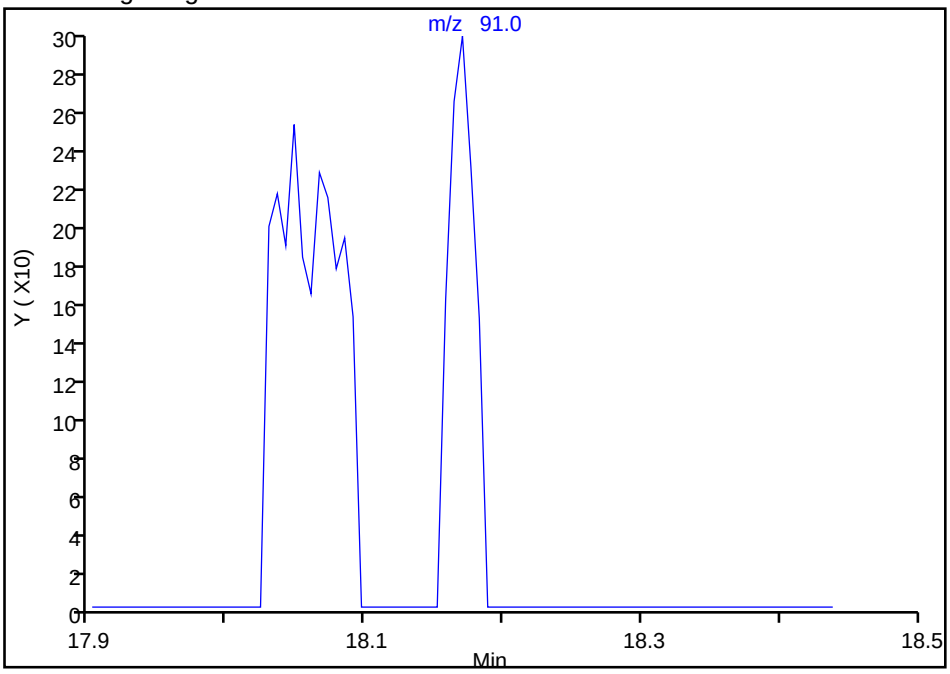
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301811.D				
Injection Date:	30-Aug-2018 12:14:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-2	Lab Sample ID:	720-88220-2		
Client ID:	DG-F3W				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

107 n-Butylbenzene, CAS: 104-51-8

Signal: 1

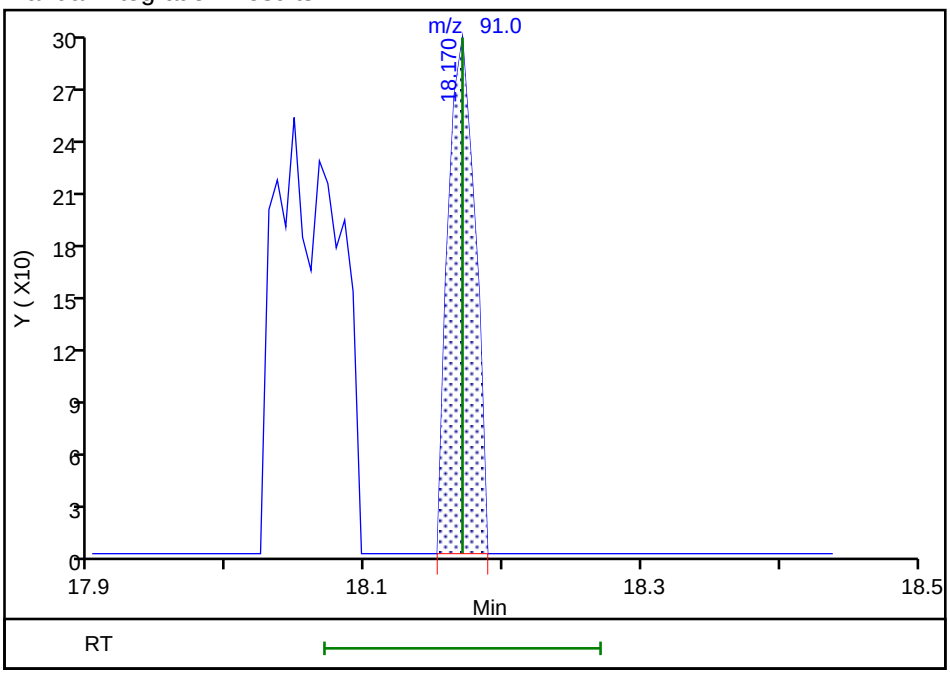
Not Detected
Expected RT: 18.17

Processing Integration Results



Manual Integration Results

RT: 18.17
Area: 402
Amount: 0.008650
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:01:31
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

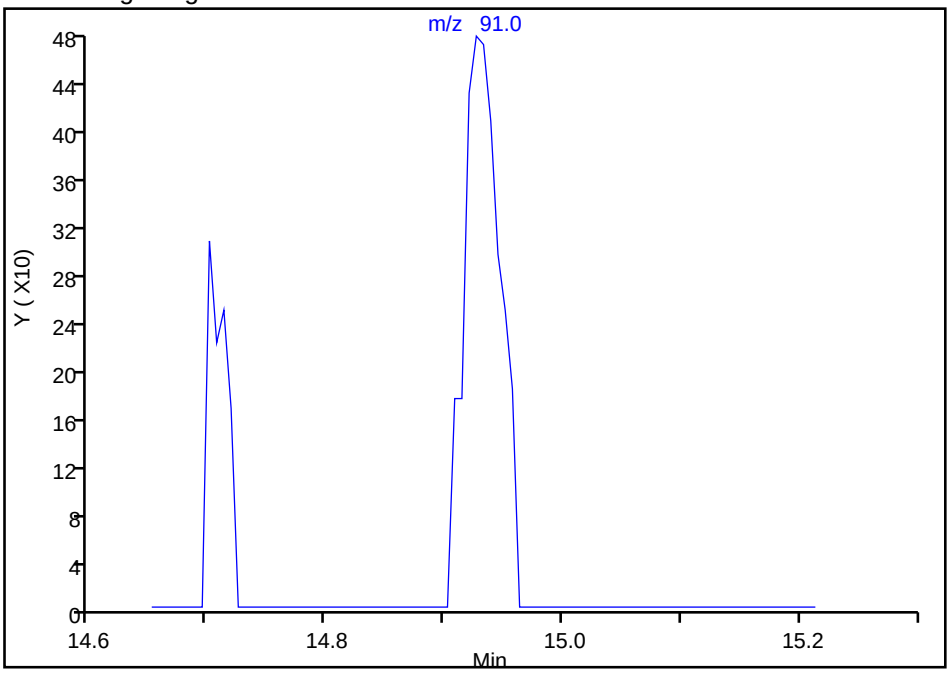
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301811.D				
Injection Date:	30-Aug-2018 12:14:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-2	Lab Sample ID:	720-88220-2		
Client ID:	DG-F3W				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

85 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

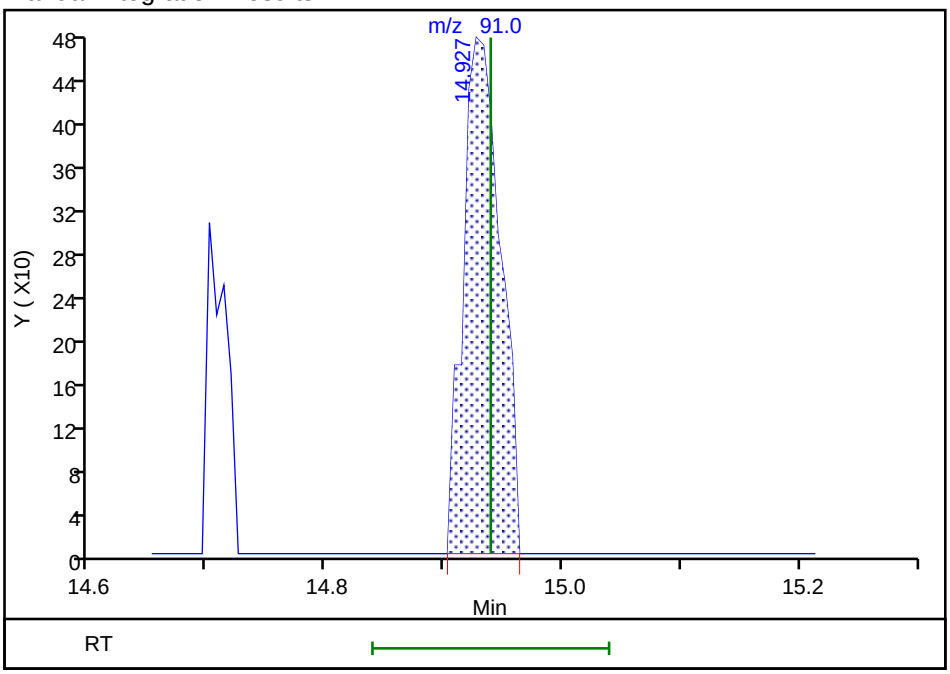
Not Detected
Expected RT: 14.94

Processing Integration Results



Manual Integration Results

RT: 14.93
Area: 1032
Amount: 0.024005
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:01:18
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

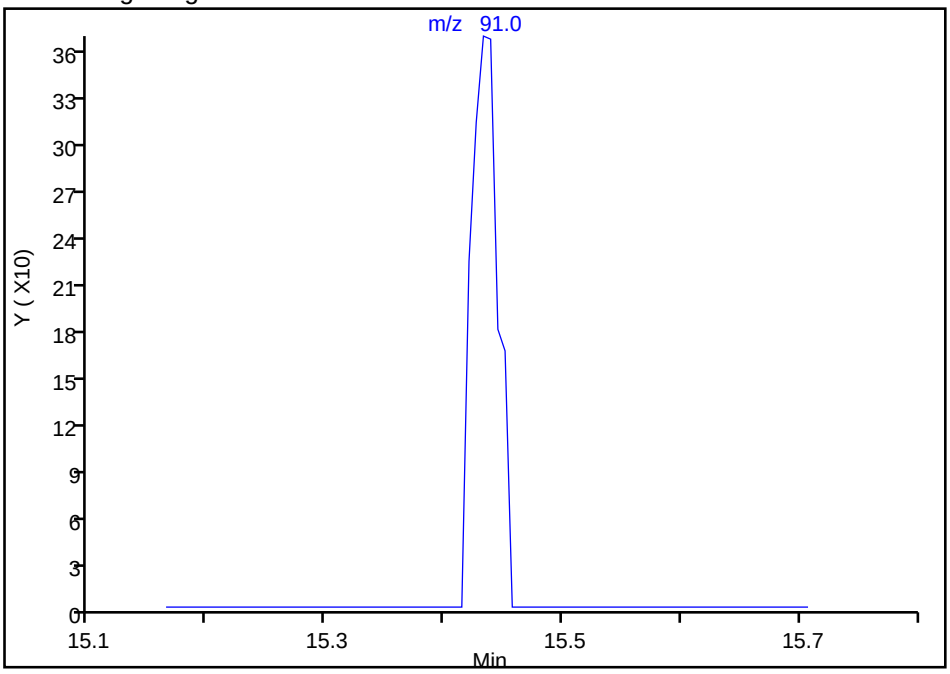
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301811.D				
Injection Date:	30-Aug-2018 12:14:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-2	Lab Sample ID:	720-88220-2		
Client ID:	DG-F3W				
Operator ID:	VOA	ALS Bottle#:	10	Worklist Smp#:	9
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

88 o-Xylene, CAS: 95-47-6

Signal: 1

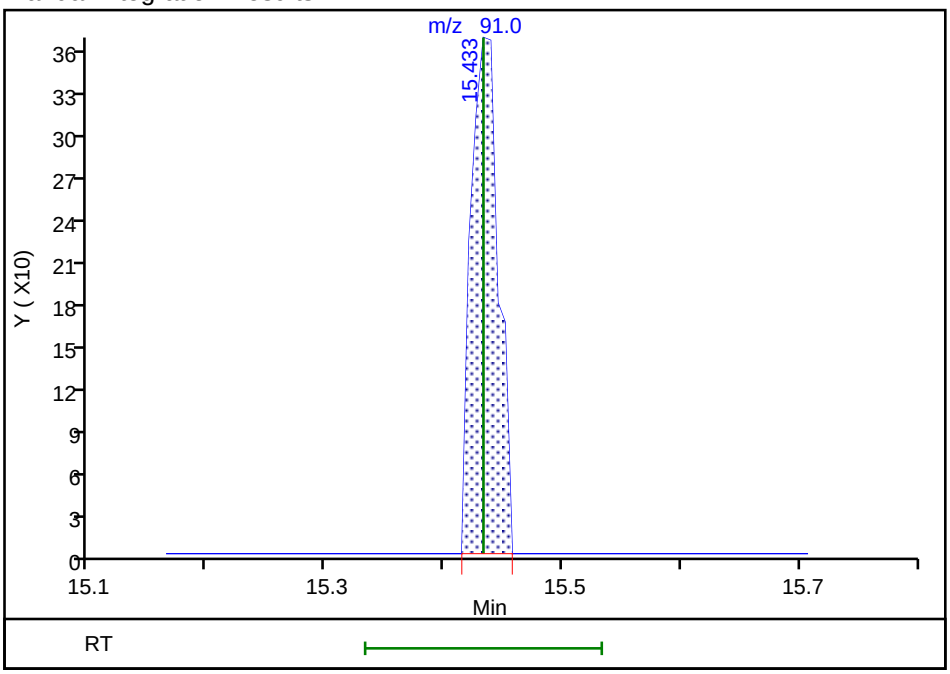
Not Detected
Expected RT: 15.43

Processing Integration Results



Manual Integration Results

RT: 15.43
Area: 593
Amount: 0.013279
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:01:23
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-I3W Lab Sample ID: 720-88220-3

Matrix: Water Lab File ID: 08301812.D

Analysis Method: 8260B Date Collected: 08/23/2018 07:45

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 12:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND	*	0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-I3W Lab Sample ID: 720-88220-3

Matrix: Water Lab File ID: 08301812.D

Analysis Method: 8260B Date Collected: 08/23/2018 07:45

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 12:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	6.0		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	0.52		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	ND		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-I3W Lab Sample ID: 720-88220-3

Matrix: Water Lab File ID: 08301812.D

Analysis Method: 8260B Date Collected: 08/23/2018 07:45

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 12:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		72-130
460-00-4	4-Bromofluorobenzene	98		67-130
2037-26-5	Toluene-d8 (Surr)	95		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301812.D
Lims ID: 720-88220-B-3
Client ID: DG-I3W
Sample Type: Client
Inject. Date: 30-Aug-2018 12:43:30 ALS Bottle#: 11 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-B-3
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 13:57:46 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 13:57:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.825	0.000	0	279493	250.0	
* 2 Fluorobenzene	96	10.599	10.605	-0.007	98	1011426	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	87	813369	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	459631	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.185	0.000	94	82490	7.27	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.703	0.000	0	101932	7.17	
$ 10 Toluene-d8 (Surr)	98	12.708	12.700	0.000	93	290878	7.11	
$ 11 4-Bromofluorobenzene	95	15.933	15.926	0.000	94	116672	7.38	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	0.000	84	106551	5.99	
$ 6 BFB	95	8.818	6.434	2.384	0	1605	NR	
23 Ethanol	45	5.539	5.539	0.025	89	8467	80.2	a
27 Isopropyl alcohol	45	6.294	6.282	0.012	99	43296	57.8	
28 Acetone	58	6.380	6.370	0.006	97	2853	2.40	
38 trans-1,2-Dichloroethene	96	7.880	7.880	0.007	75	908	0.0909	a
40 1,1-Dichloroethane	63	8.154	8.154	-0.006	90	1355	0.0689	a
45 2-Butanone (MEK)	72	8.642	8.630	0.007	99	10092	7.45	
49 cis-1,2-Dichloroethene	61	8.812	8.813	-0.006	82	99277	5.97	
59 Benzene	78	10.373	10.367	0.000	85	897	0.0208	
66 Trichloroethene	132	11.098	11.092	0.000	94	5775	0.5180	
75 Toluene	92	12.799	12.788	0.006	98	1447	0.0541	
128 Butyl Ether	87	14.665	14.652	0.006	93	628	0.0776	
85 m-Xylene & p-Xylene	91	14.939	14.939	0.000	0	842	0.0205	a
112 Naphthalene	128	20.755	20.755	0.006	90	2281	0.0482	a
29 Pentane	43	6.301	6.410	-0.109	39	7061	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	1152456	12.4	
A 154 C6-C8	1	10.852	(8.550-13.153)		0	564308	6.08	
A 155 C6-C9	1	11.842	(8.550-15.134)		0	681510	7.35	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1345838	14.5	
A 119 C6-C10	1	12.732	(8.550-16.914)		0	856051	9.23	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	1267926	13.7	
A 120 C6-C12	1	14.278	(8.550-20.005)		0	1049433	11.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 156 C8-C10	1	14.982	(13.049-16.914)		0	298938	3.22	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	577369	6.23	
S 122 Xylenes, Total	1				0		0.0205	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

a - User Assigned ID

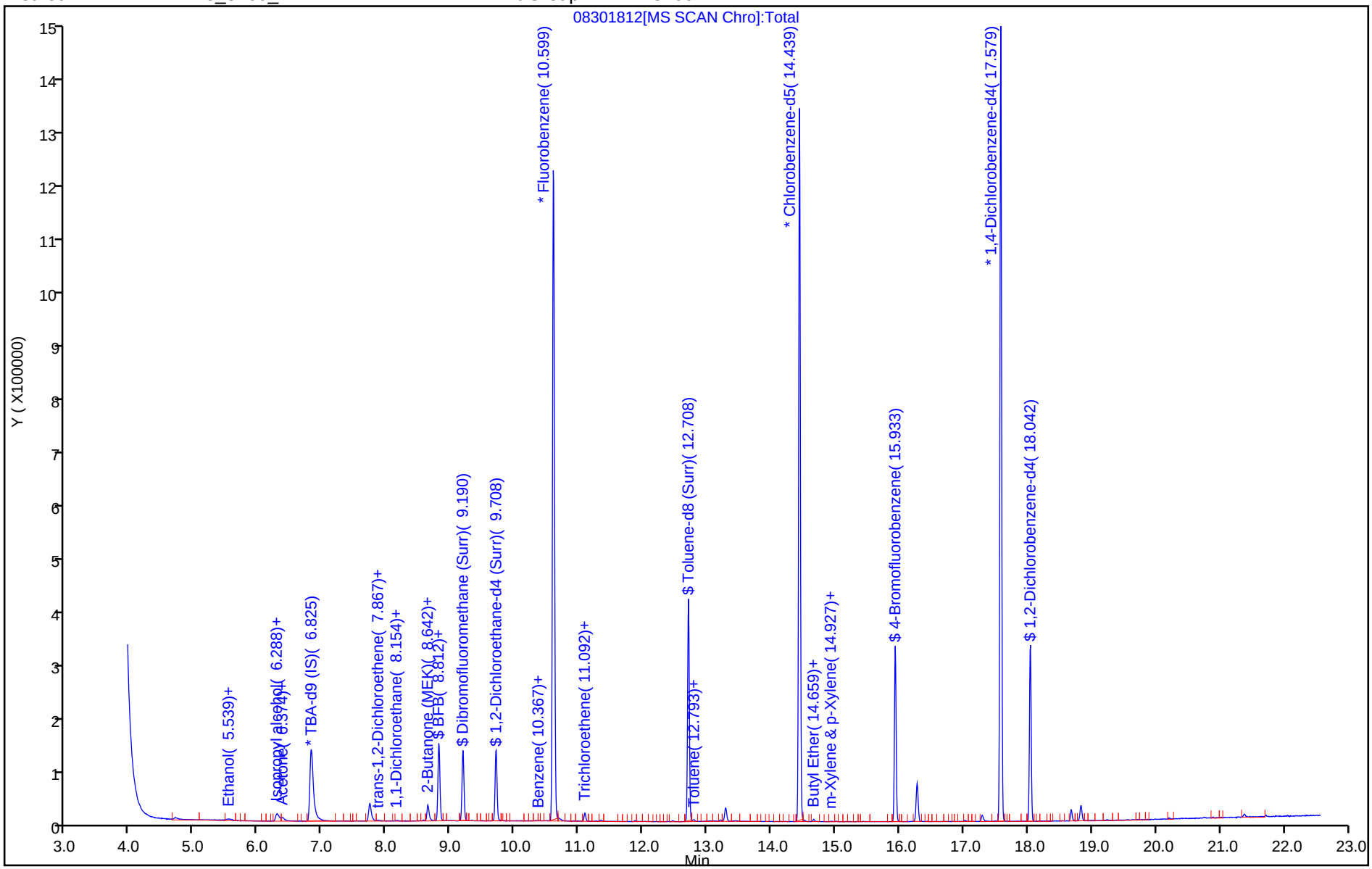
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 13:57:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301812.D				
Injection Date:	30-Aug-2018 12:43:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88220-B-3	Lab Sample ID:	720-88220-3	Worklist Smp#:	10
Client ID:	DG-I3W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301812.D
Lims ID: 720-88220-B-3
Client ID: DG-I3W
Sample Type: Client
Inject. Date: 30-Aug-2018 12:43:30 ALS Bottle#: 11 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-B-3
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 13:57:46 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 13:57:46

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.17	95.57
$ 10 Toluene-d8 (Surr)	7.50	7.11	94.81
$ 11 4-Bromofluorobenzene	7.50	7.38	98.34
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

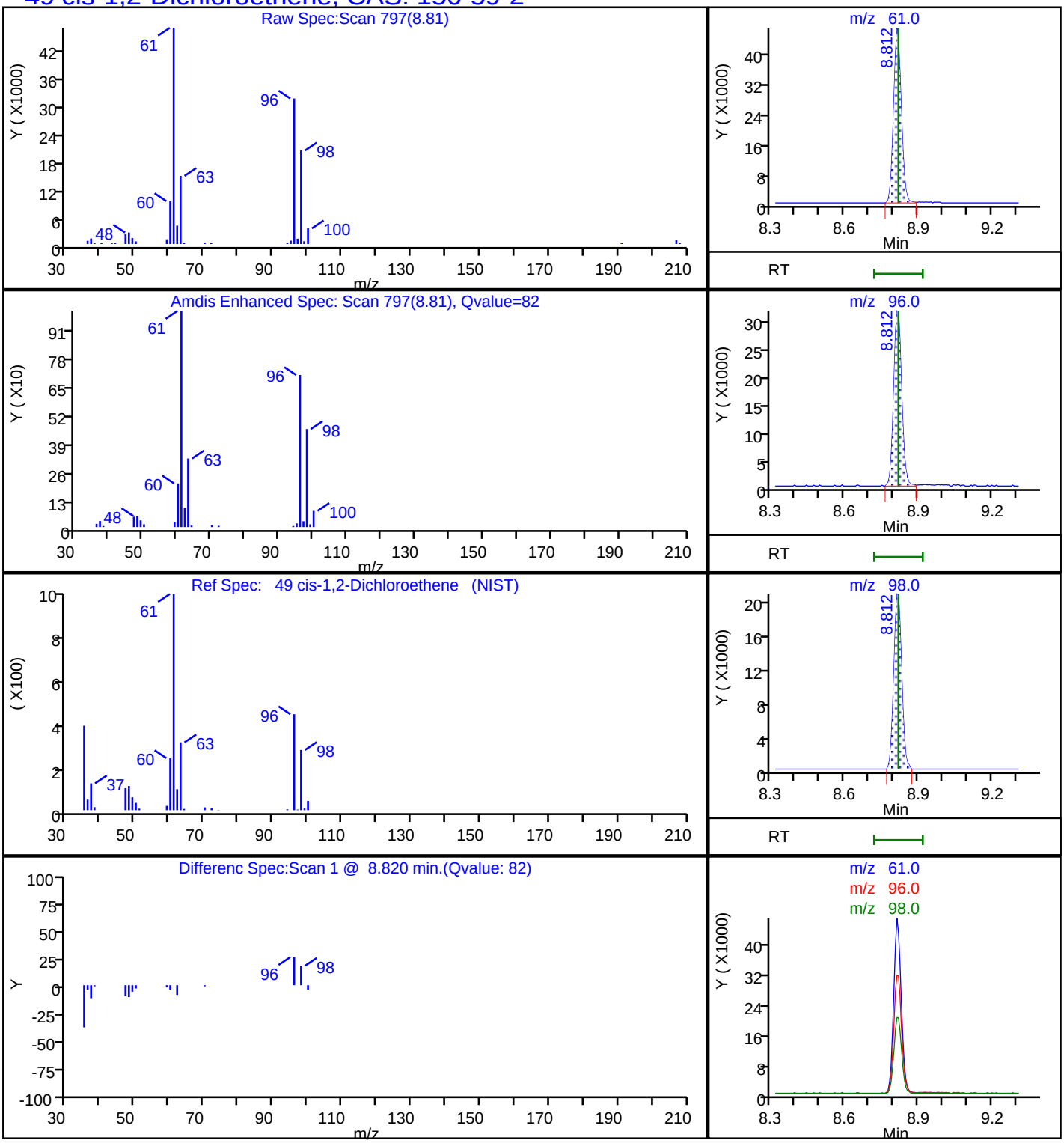
Report Date: 30-Aug-2018 13:57:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301812.D

Injection Date:	30-Aug-2018 12:43:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-3	Lab Sample ID:	720-88220-3		
Client ID:	DG-I3W				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

49 cis-1,2-Dichloroethene, CAS: 156-59-2



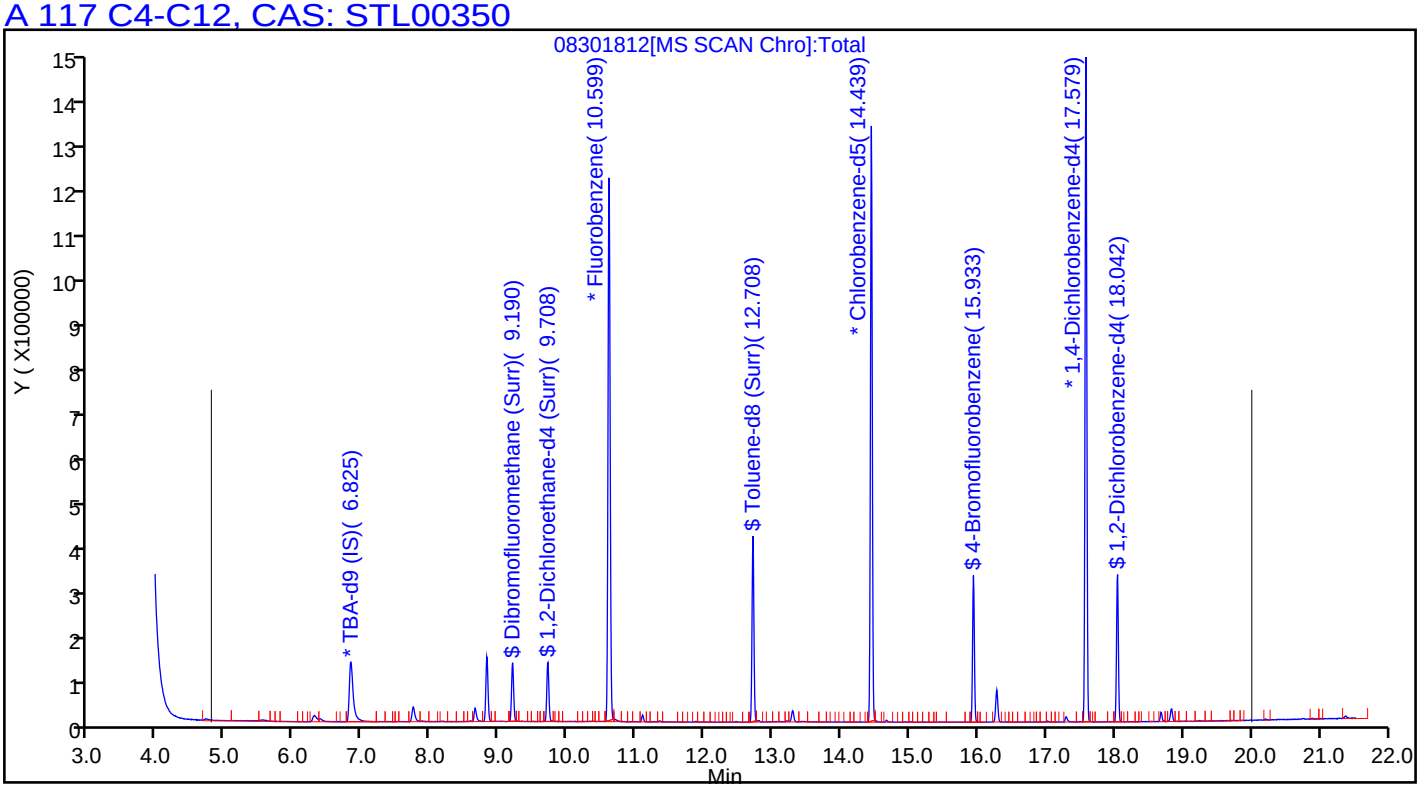
Report Date: 30-Aug-2018 13:57:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301812.D

Injection Date:	30-Aug-2018 12:43:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-3	Lab Sample ID:	720-88220-3		
Client ID:	DG-I3W				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



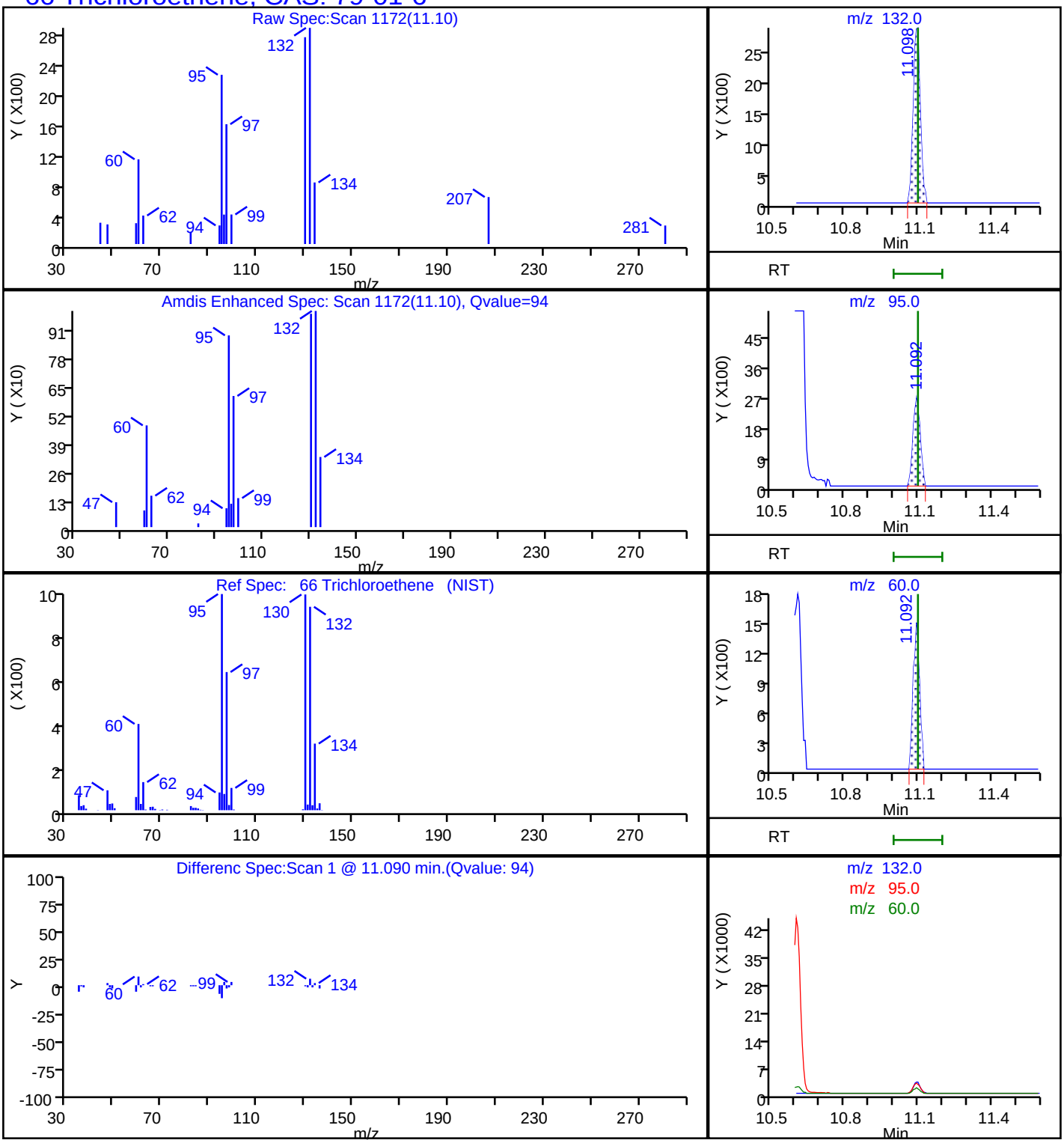
Report Date: 30-Aug-2018 13:57:47 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301812.D

Injection Date:	30-Aug-2018 12:43:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-3	Lab Sample ID:	720-88220-3		
Client ID:	DG-I3W				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

66 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

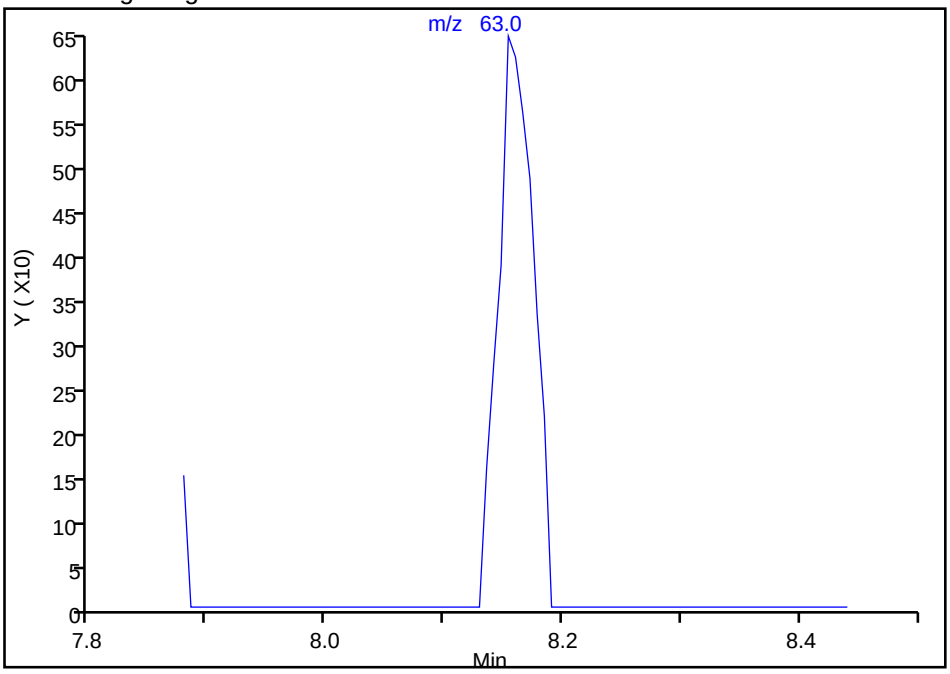
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301812.D				
Injection Date:	30-Aug-2018 12:43:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-3	Lab Sample ID:	720-88220-3		
Client ID:	DG-I3W				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

40 1,1-Dichloroethane, CAS: 75-34-3

Signal: 1

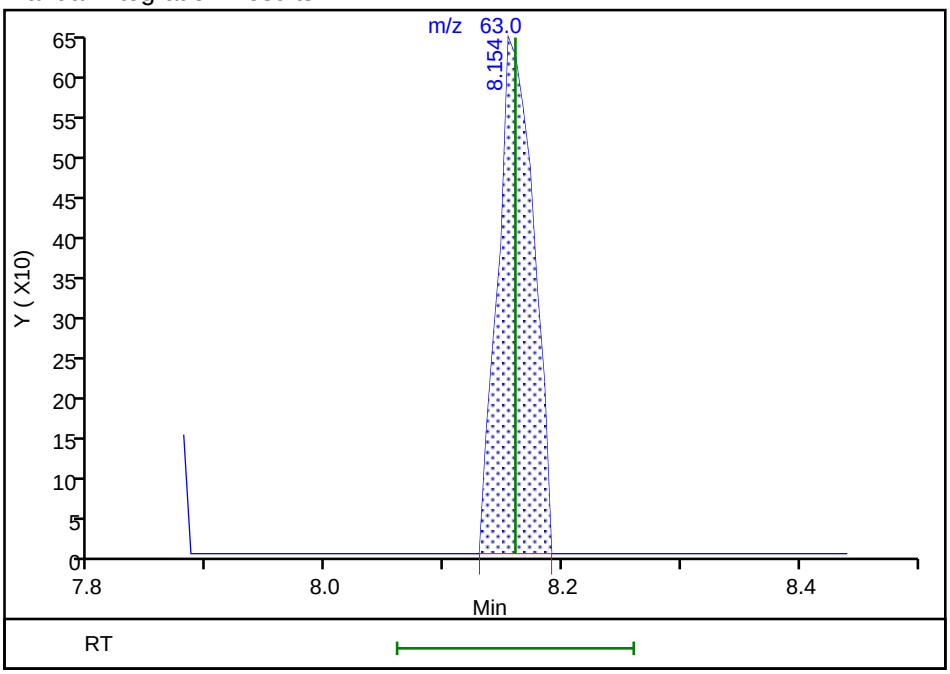
Not Detected
Expected RT: 8.16

Processing Integration Results



Manual Integration Results

RT: 8.15
Area: 1355
Amount: 0.068932
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:57:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

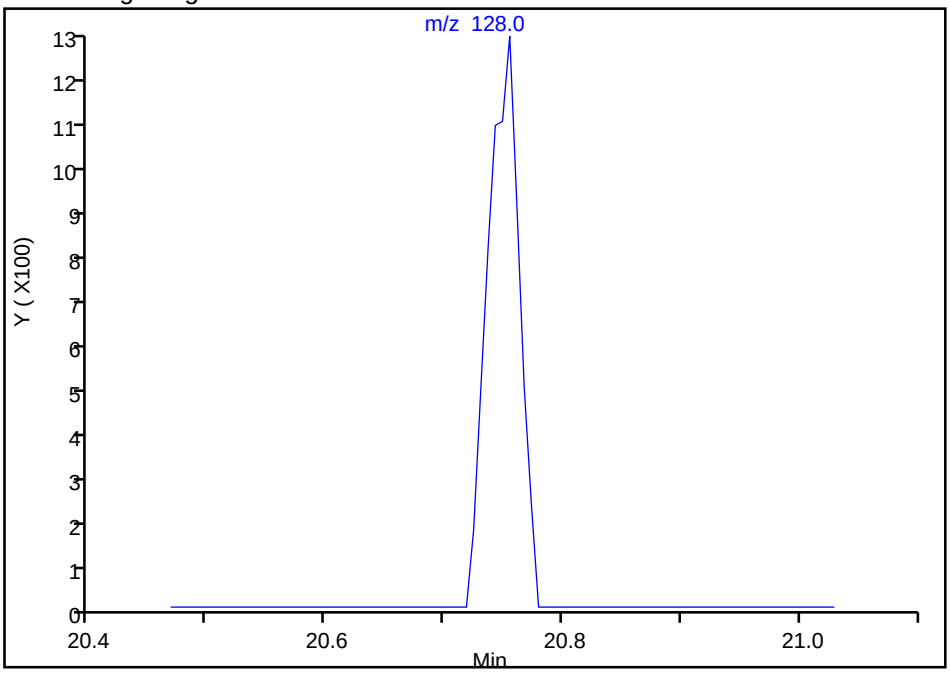
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301812.D				
Injection Date:	30-Aug-2018 12:43:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-3	Lab Sample ID:	720-88220-3		
Client ID:	DG-I3W				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

112 Naphthalene, CAS: 91-20-3

Signal: 1

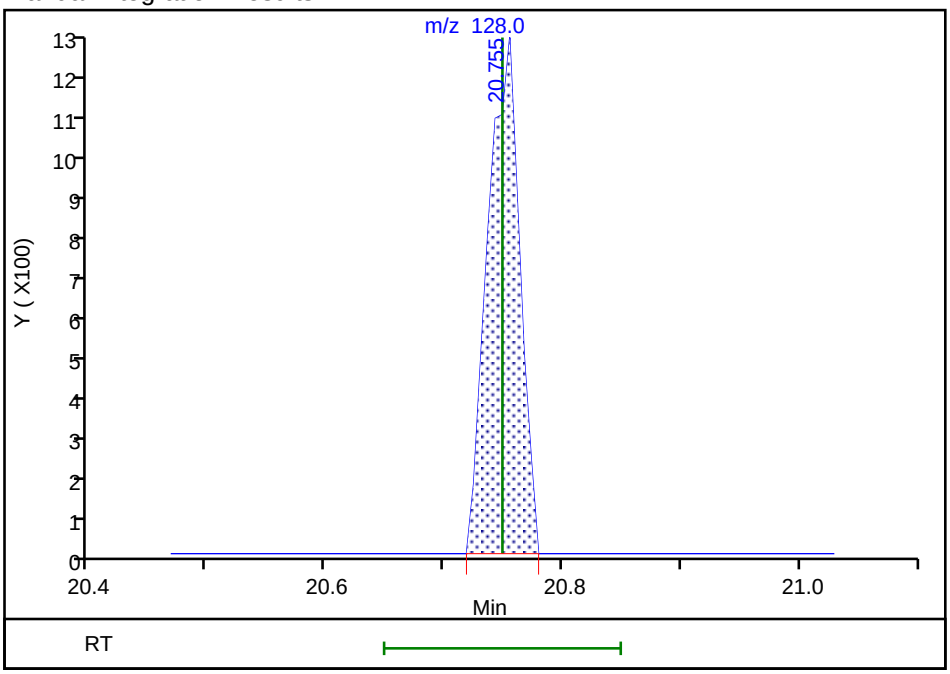
Not Detected
Expected RT: 20.75

Processing Integration Results



Manual Integration Results

RT: 20.76
Area: 2281
Amount: 0.048204
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:57:42
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

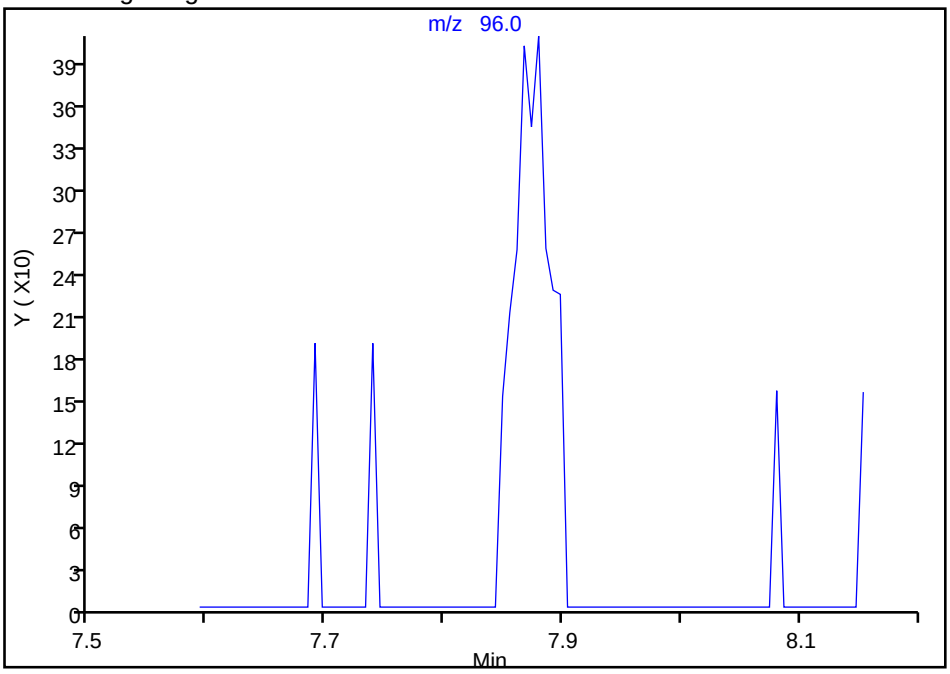
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301812.D				
Injection Date:	30-Aug-2018 12:43:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-3	Lab Sample ID:	720-88220-3		
Client ID:	DG-I3W				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

38 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 1

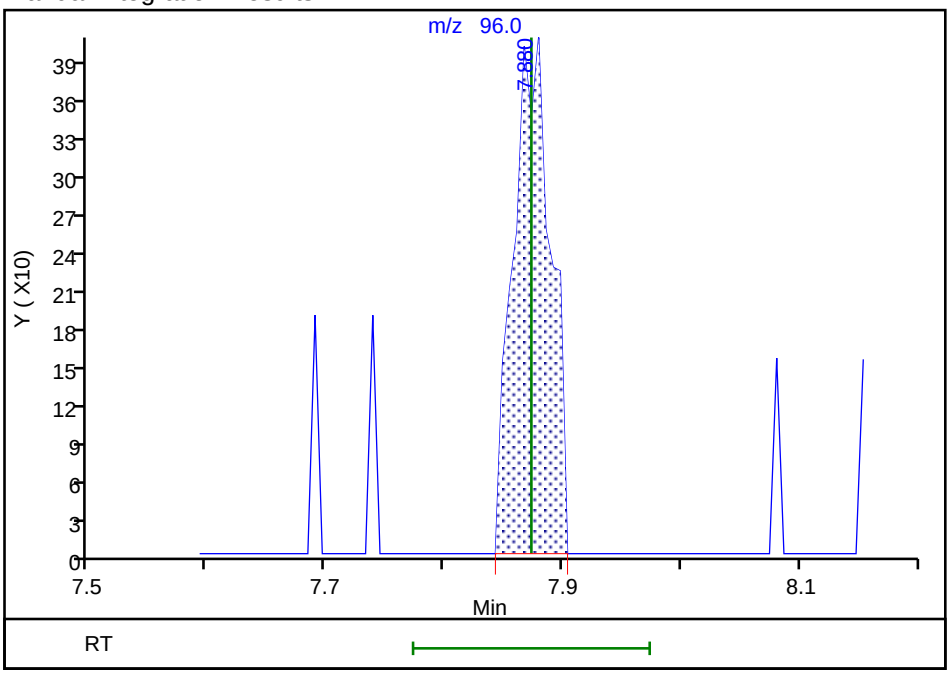
Processing Integration Results

Not Detected
Expected RT: 7.87



Manual Integration Results

RT: 7.88
Area: 908
Amount: 0.090906
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:57:11
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

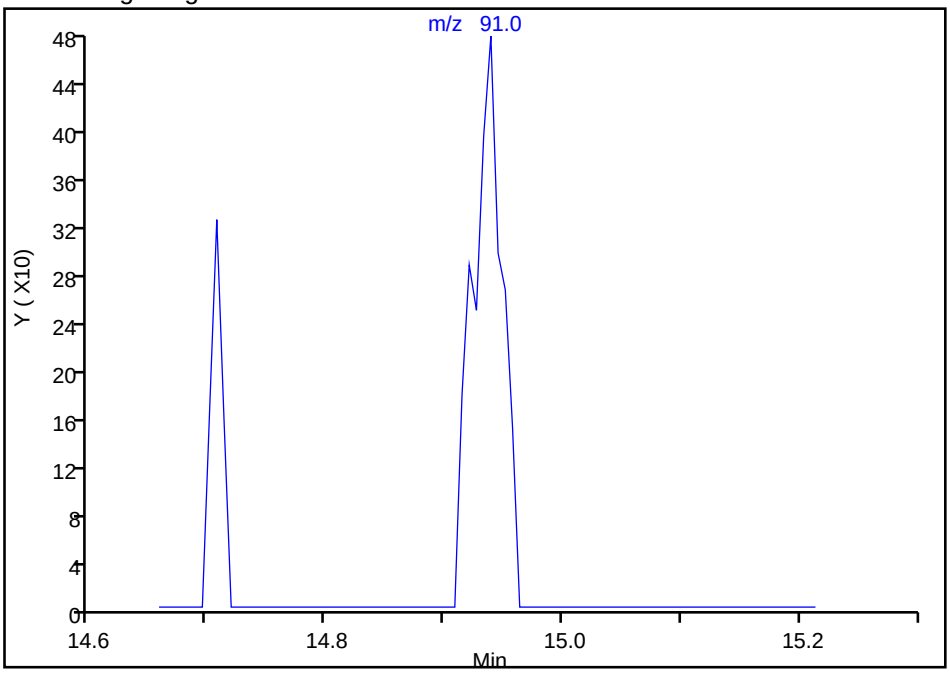
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301812.D				
Injection Date:	30-Aug-2018 12:43:30	Instrument ID:	HP13		
Lims ID:	720-88220-B-3	Lab Sample ID:	720-88220-3		
Client ID:	DG-I3W				
Operator ID:	VOA	ALS Bottle#:	11	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

85 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

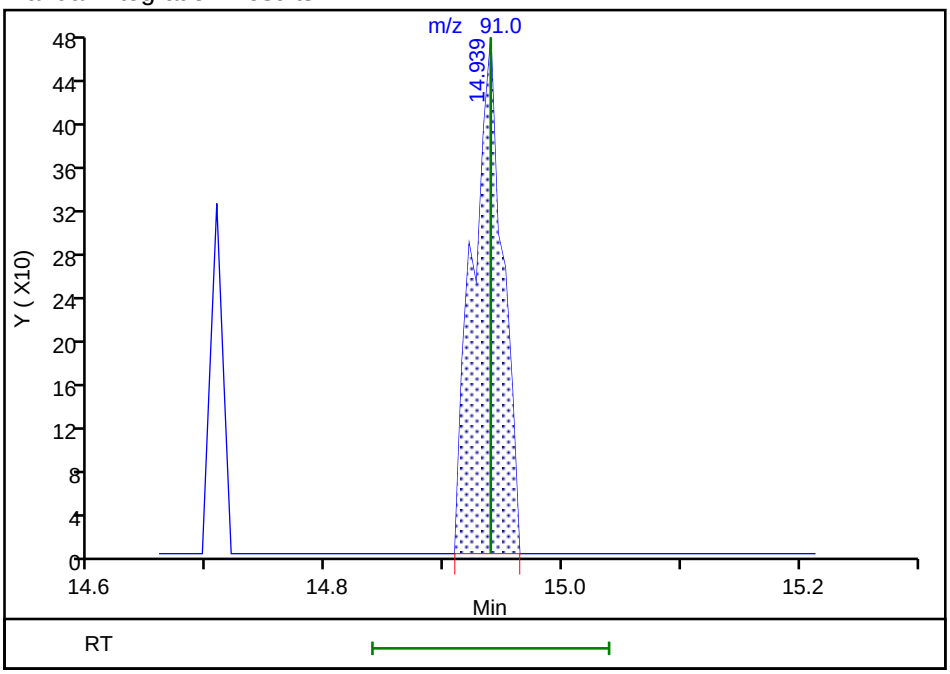
Not Detected
Expected RT: 14.94

Processing Integration Results



Manual Integration Results

RT: 14.94
Area: 842
Amount: 0.020510
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:57:31
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-K3W Lab Sample ID: 720-88220-4

Matrix: Water Lab File ID: 08301813.D

Analysis Method: 8260B Date Collected: 08/23/2018 08:15

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 13:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND	*	0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-K3W Lab Sample ID: 720-88220-4

Matrix: Water Lab File ID: 08301813.D

Analysis Method: 8260B Date Collected: 08/23/2018 08:15

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 13:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	3.9		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	ND		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	ND		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-K3W Lab Sample ID: 720-88220-4

Matrix: Water Lab File ID: 08301813.D

Analysis Method: 8260B Date Collected: 08/23/2018 08:15

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 13:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		72-130
460-00-4	4-Bromofluorobenzene	97		67-130
2037-26-5	Toluene-d8 (Surr)	95		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301813.D
Lims ID: 720-88220-A-4
Client ID: DG-K3W
Sample Type: Client
Inject. Date: 30-Aug-2018 13:14:30 ALS Bottle#: 12 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-4
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 13:58:37 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 13:58:37

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
*	1 TBA-d9 (IS)	65	6.825	6.825	0.000	0	277809	250.0	
*	2 Fluorobenzene	96	10.598	10.605	-0.007	98	998184	25.0	
*	4 Chlorobenzene-d5	117	14.439	14.445	-0.006	87	806970	25.0	
*	5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	445078	25.0	
$	7 Dibromofluoromethane (Surr	113	9.190	9.185	0.000	94	83520	7.46	
$	8 1,2-Dichloroethane-d4 (Sur	65	9.702	9.703	-0.006	0	100817	7.18	
$	10 Toluene-d8 (Surr)	98	12.708	12.700	0.000	93	287060	7.11	
$	11 4-Bromofluorobenzene	95	15.933	15.926	0.000	94	114679	7.31	
$	12 1,2-Dichlorobenzene-d4	152	18.042	18.036	0.000	84	103905	6.03	
$	6 BFB	95	8.812	6.434	2.378	0	985	NR	
	23 Ethanol	45	5.526	5.539	0.012	97	13448	128.2	
	27 Isopropyl alcohol	45	6.288	6.282	0.006	100	50200	67.4	
	28 Acetone	58	6.374	6.370	0.000	98	3599	3.07	
	34 Methylene Chloride	84	7.069	7.069	-0.012	93	959	0.0888	a
	38 trans-1,2-Dichloroethene	96	7.879	7.880	0.006	92	1011	0.1026	
	40 1,1-Dichloroethane	63	8.154	8.154	-0.006	84	693	0.0357	a
	45 2-Butanone (MEK)	72	8.641	8.630	0.006	99	2477	1.85	
	49 cis-1,2-Dichloroethene	61	8.812	8.813	-0.006	82	64824	3.95	
	59 Benzene	78	10.373	10.367	0.000	1	627	0.0148	
	66 Trichloroethene	132	11.092	11.092	-0.006	94	1859	0.1690	
	75 Toluene	92	12.787	12.788	-0.006	97	1495	0.0564	
	128 Butyl Ether	87	14.665	14.652	0.006	94	1038	0.1293	
	85 m-Xylene & p-Xylene	91	14.933	14.933	-0.006	0	454	0.0111	a
	87 Styrene	104	15.341	15.335	0.000	88	508	0.0150	
	29 Pentane	43	6.380	6.410	-0.030	69	14870	NR	
A	116 C4-C10	1	10.849	(4.783-16.914)		0	1022004	11.2	
A	154 C6-C8	1	10.852	(8.550-13.153)		0	387595	4.23	
A	155 C6-C9	1	11.842	(8.550-15.134)		0	531801	5.81	
A	117 C4-C12	1	12.394	(4.783-20.005)		0	1227298	13.4	
A	119 C6-C10	1	12.732	(8.550-16.914)		0	665772	7.27	
A	118 C5-C12	1	13.168	(6.331-20.005)		0	1136974	12.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 120 C6-C12	1	14.278	(8.550-20.005)		0	871066	9.52	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	288428	3.15	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	567726	6.20	
S 122 Xylenes, Total	1				0		0.0111	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

a - User Assigned ID

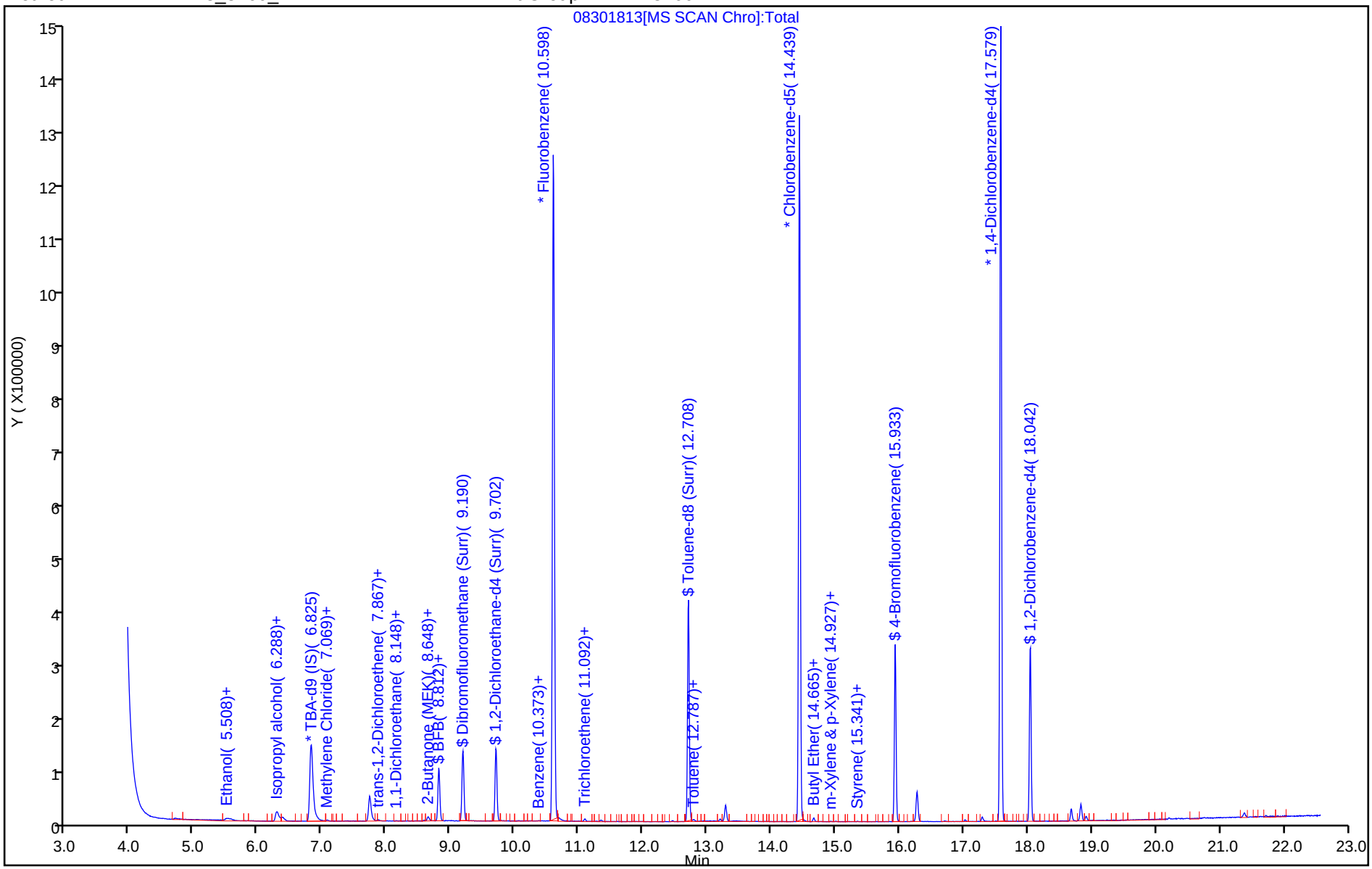
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 13:58:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301813.D				
Injection Date:	30-Aug-2018 13:14:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88220-A-4	Lab Sample ID:	720-88220-4	Worklist Smp#:	11
Client ID:	DG-K3W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301813.D
Lims ID: 720-88220-A-4
Client ID: DG-K3W
Sample Type: Client
Inject. Date: 30-Aug-2018 13:14:30 ALS Bottle#: 12 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-4
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 13:58:37 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 13:58:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.18	95.78
$ 10 Toluene-d8 (Surr)	7.50	7.11	94.81
$ 11 4-Bromofluorobenzene	7.50	7.31	97.43
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

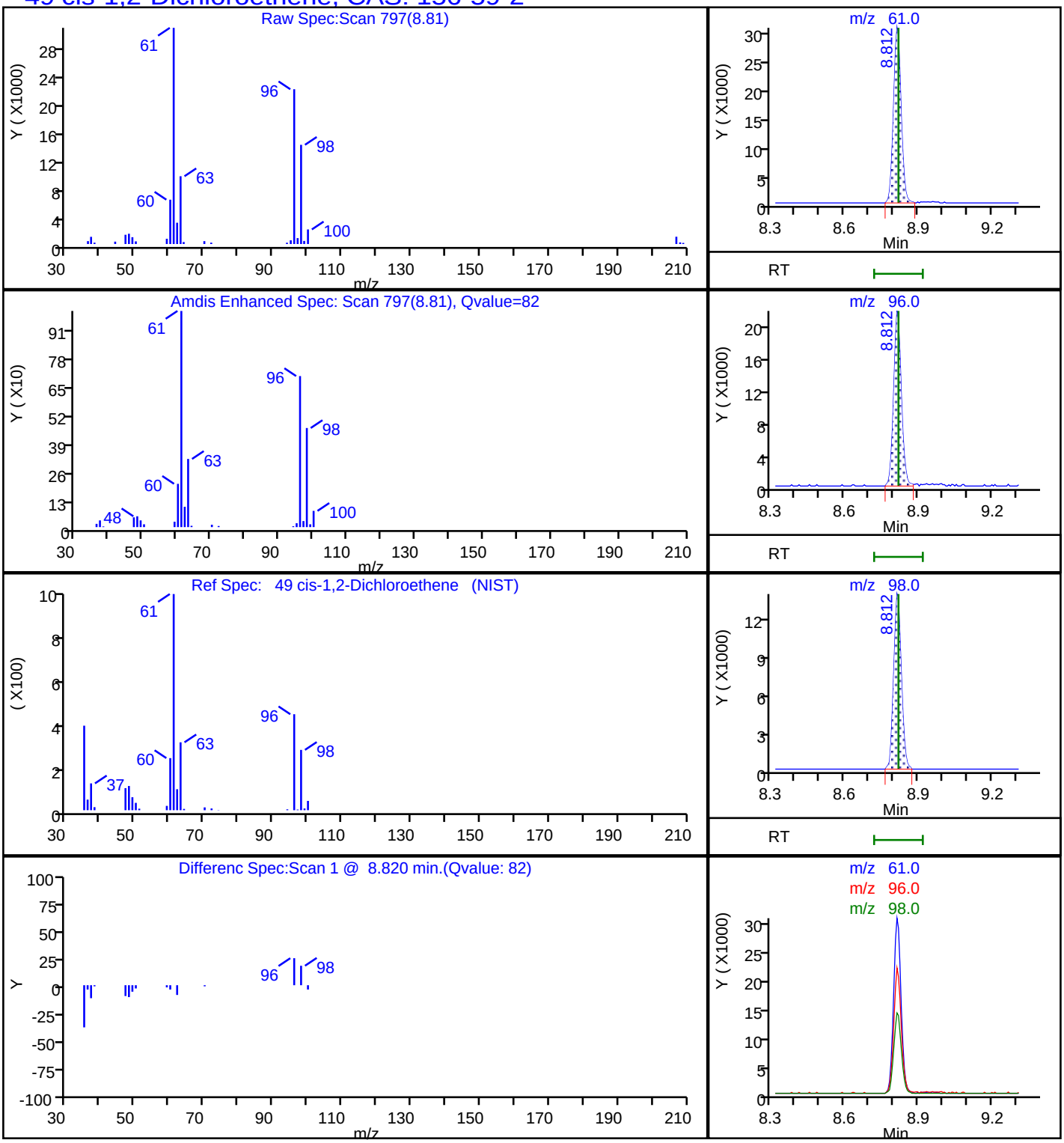
Report Date: 30-Aug-2018 13:58:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301813.D

Injection Date:	30-Aug-2018 13:14:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-4	Lab Sample ID:	720-88220-4		
Client ID:	DG-K3W				
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

49 cis-1,2-Dichloroethene, CAS: 156-59-2

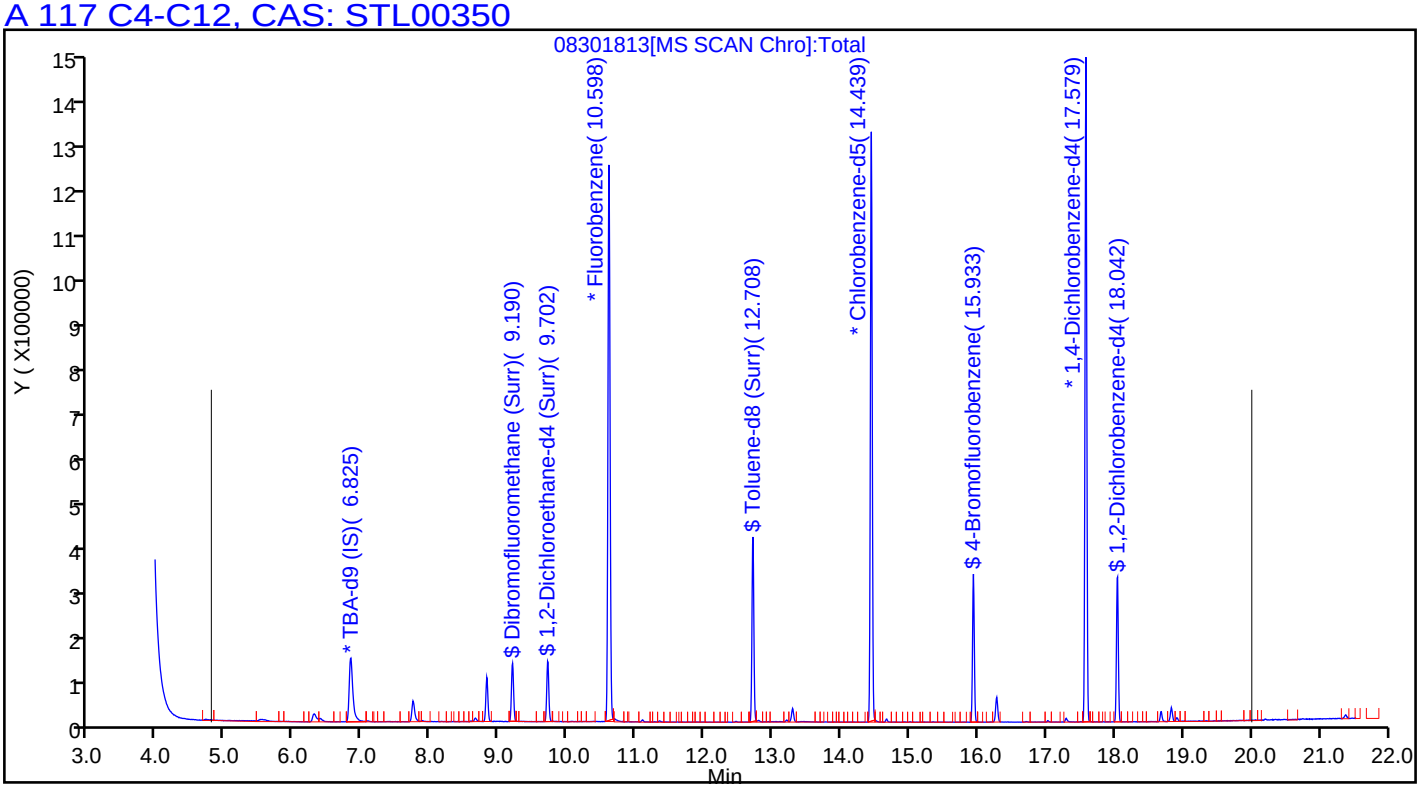


Report Date: 30-Aug-2018 13:58:39 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301813.D				
Injection Date:	30-Aug-2018 13:14:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-4	Lab Sample ID:	720-88220-4		
Client ID:	DG-K3W				
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

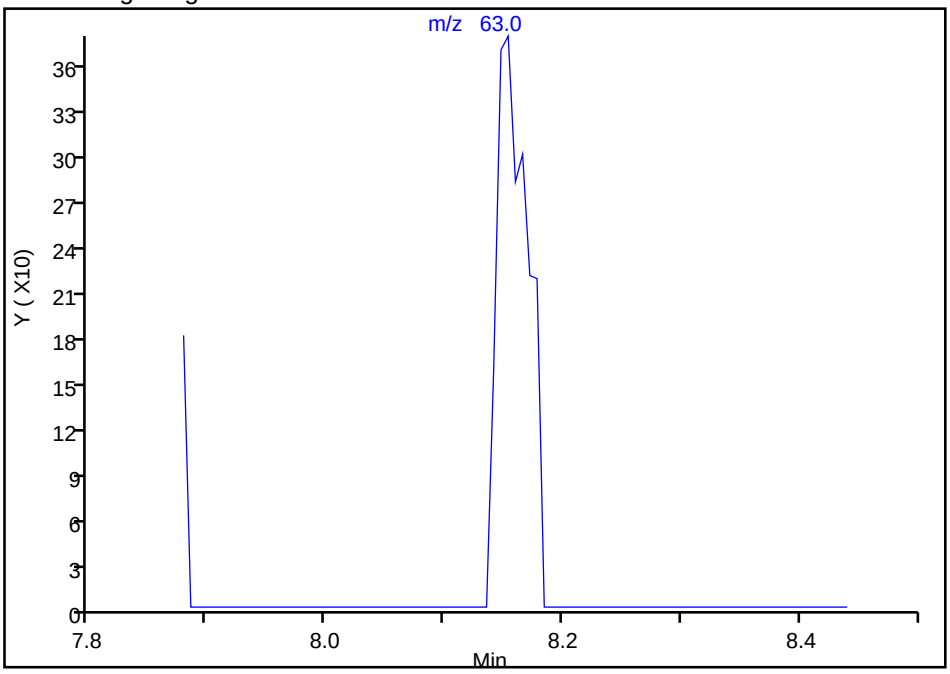
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301813.D				
Injection Date:	30-Aug-2018 13:14:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-4	Lab Sample ID:	720-88220-4		
Client ID:	DG-K3W				
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

40 1,1-Dichloroethane, CAS: 75-34-3

Signal: 1

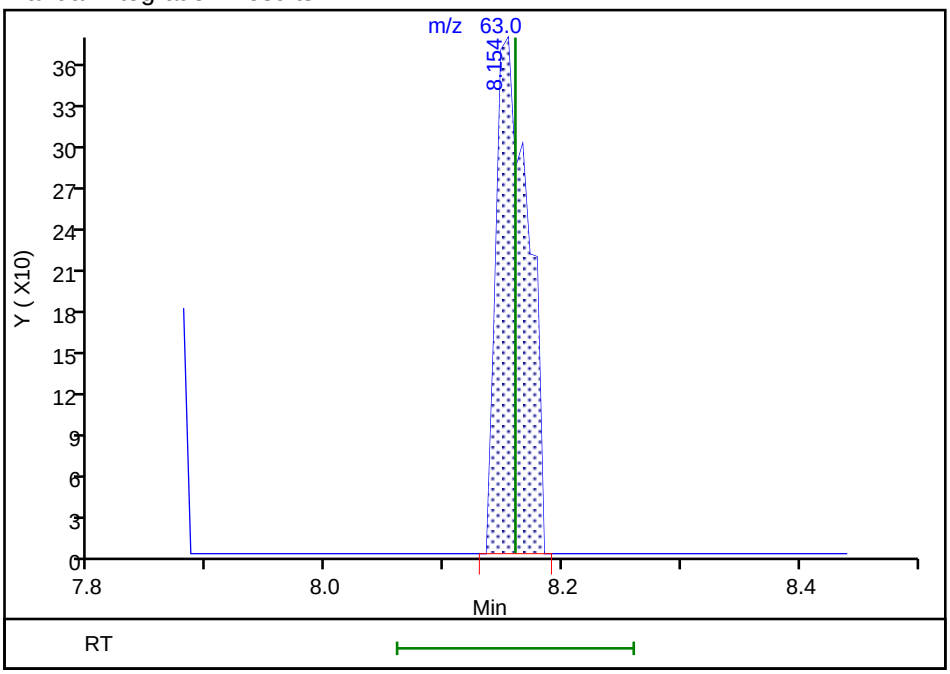
Not Detected
Expected RT: 8.16

Processing Integration Results



Manual Integration Results

RT: 8.15
Area: 693
Amount: 0.035722
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:58:04
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

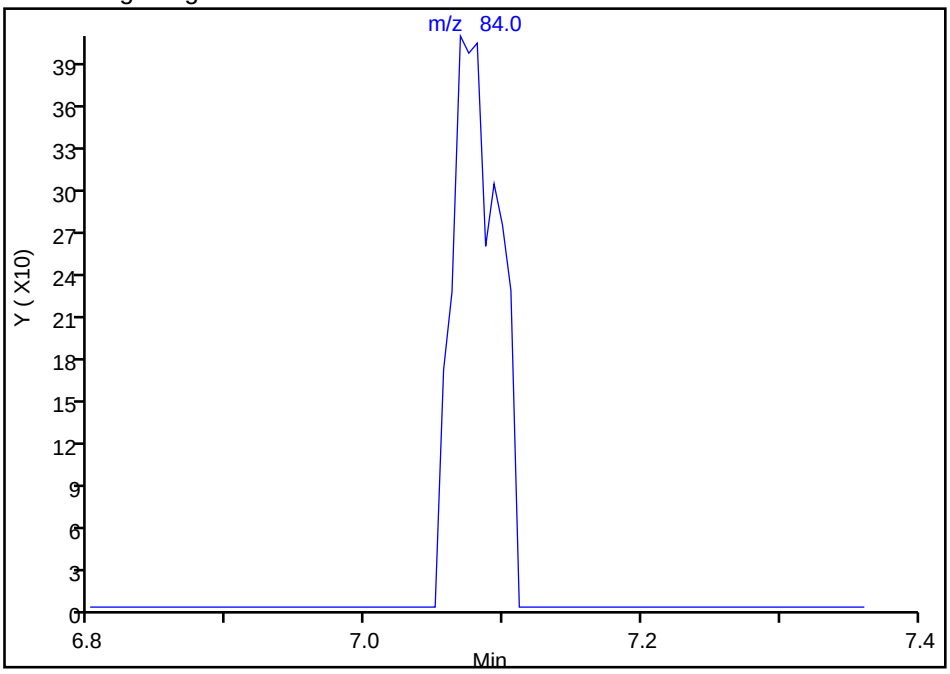
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301813.D				
Injection Date:	30-Aug-2018 13:14:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-4	Lab Sample ID:	720-88220-4		
Client ID:	DG-K3W				
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

34 Methylene Chloride, CAS: 75-09-2

Signal: 1

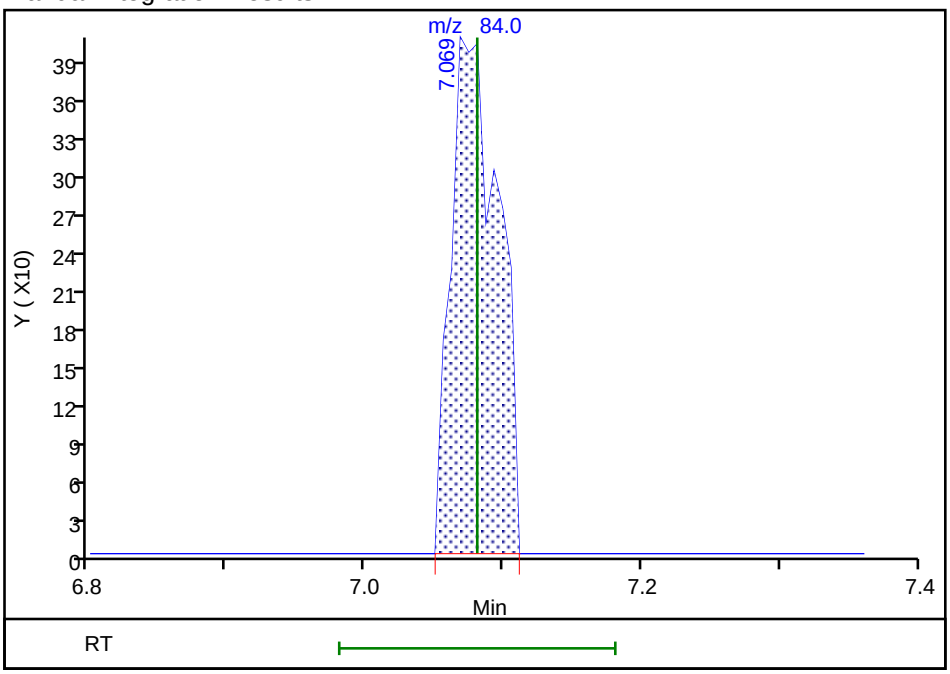
Processing Integration Results

Not Detected
Expected RT: 7.08



Manual Integration Results

RT: 7.07
Area: 959
Amount: 0.088783
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:58:00
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

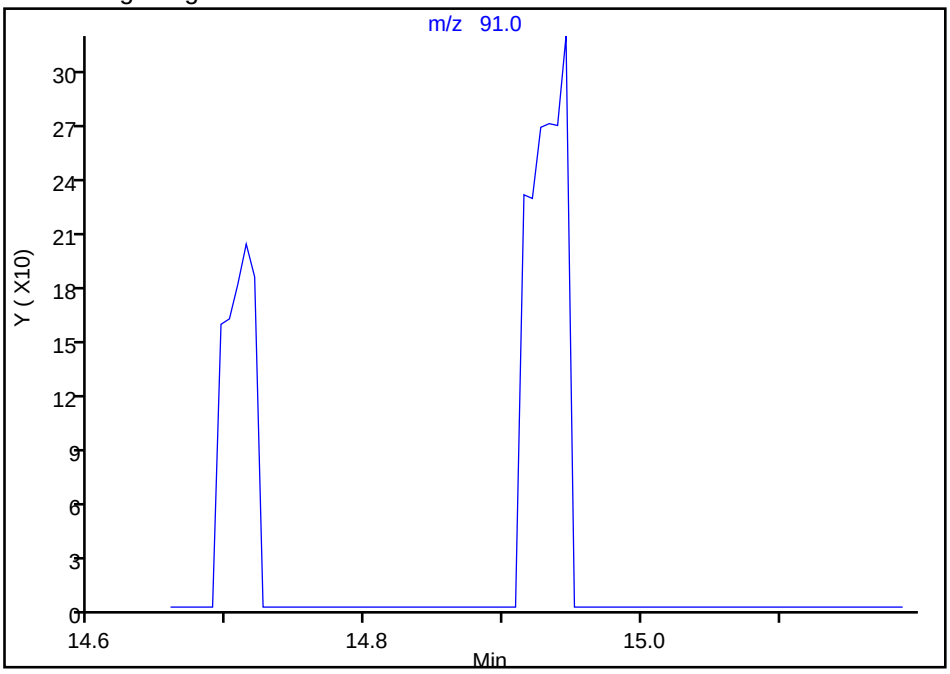
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301813.D				
Injection Date:	30-Aug-2018 13:14:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-4	Lab Sample ID:	720-88220-4		
Client ID:	DG-K3W				
Operator ID:	VOA	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

85 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

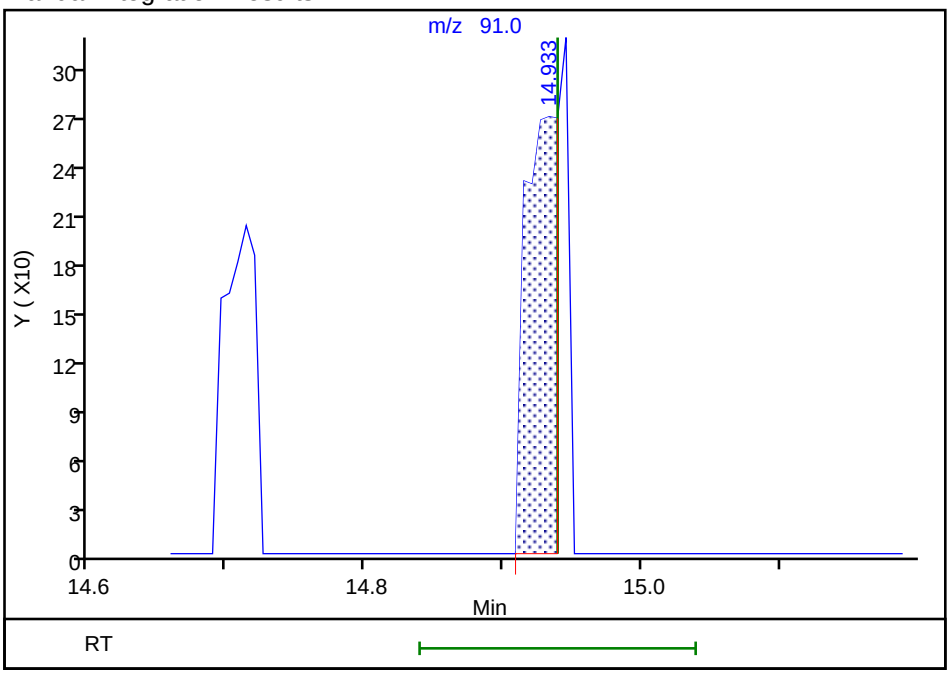
Not Detected
Expected RT: 14.94

Processing Integration Results



Manual Integration Results

RT: 14.93
Area: 454
Amount: 0.011146
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:58:24
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-M3W Lab Sample ID: 720-88220-5

Matrix: Water Lab File ID: 08301814.D

Analysis Method: 8260B Date Collected: 08/23/2018 08:45

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 13:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND	*	0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-M3W Lab Sample ID: 720-88220-5

Matrix: Water Lab File ID: 08301814.D

Analysis Method: 8260B Date Collected: 08/23/2018 08:45

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 13:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	1.3		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	ND		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	ND		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-M3W Lab Sample ID: 720-88220-5

Matrix: Water Lab File ID: 08301814.D

Analysis Method: 8260B Date Collected: 08/23/2018 08:45

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 13:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		72-130
460-00-4	4-Bromofluorobenzene	99		67-130
2037-26-5	Toluene-d8 (Surr)	96		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301814.D
Lims ID: 720-88220-A-5
Client ID: DG-M3W
Sample Type: Client
Inject. Date: 30-Aug-2018 13:45:30 ALS Bottle#: 13 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-5
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 14:32:15 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 14:32:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.825	0.000	0	255418	250.0	
* 2 Fluorobenzene	96	10.598	10.605	-0.007	98	946078	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	87	772668	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	437138	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.185	0.000	94	78119	7.36	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.708	9.703	0.000	0	96981	7.29	
$ 10 Toluene-d8 (Surr)	98	12.708	12.700	0.000	93	276143	7.22	
$ 11 4-Bromofluorobenzene	95	15.933	15.926	0.000	94	111112	7.39	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	0.000	84	100689	5.95	
$ 6 BFB	95	8.818	6.434	2.384	0	121	NR	
23 Ethanol	45	5.532	5.514	0.018	70	5540	57.4	
28 Acetone	58	6.386	6.370	0.012	98	2120	1.91	
34 Methylene Chloride	84	7.087	7.087	0.006	27	544	0.0531	a
49 cis-1,2-Dichloroethene	61	8.812	8.813	-0.006	82	19612	1.26	
59 Benzene	78	10.373	10.367	0.000	79	684	0.0170	
75 Toluene	92	12.793	12.793	0.000	96	1289	0.0507	a
128 Butyl Ether	87	14.659	14.652	0.000	95	615	0.0800	
111 1,2,4-Trichlorobenzene	180	20.408	20.408	-0.006	1	216	0.0112	a
112 Naphthalene	128	20.755	20.755	0.006	88	1601	0.0356	a
29 Pentane	43	6.288	6.410	-0.122	39	2076	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	595528	6.87	
A 154 C6-C8	1	10.852	(8.550-13.153)		0	194485	2.24	
A 155 C6-C9	1	11.842	(8.550-15.134)		0	309758	3.57	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	790411	9.11	
A 119 C6-C10	1	12.732	(8.550-16.914)		0	447462	5.16	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	762928	8.79	
A 120 C6-C12	1	14.278	(8.550-20.005)		0	642345	7.40	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	255539	2.95	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	499983	5.76	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

a - User Assigned ID

Reagents:

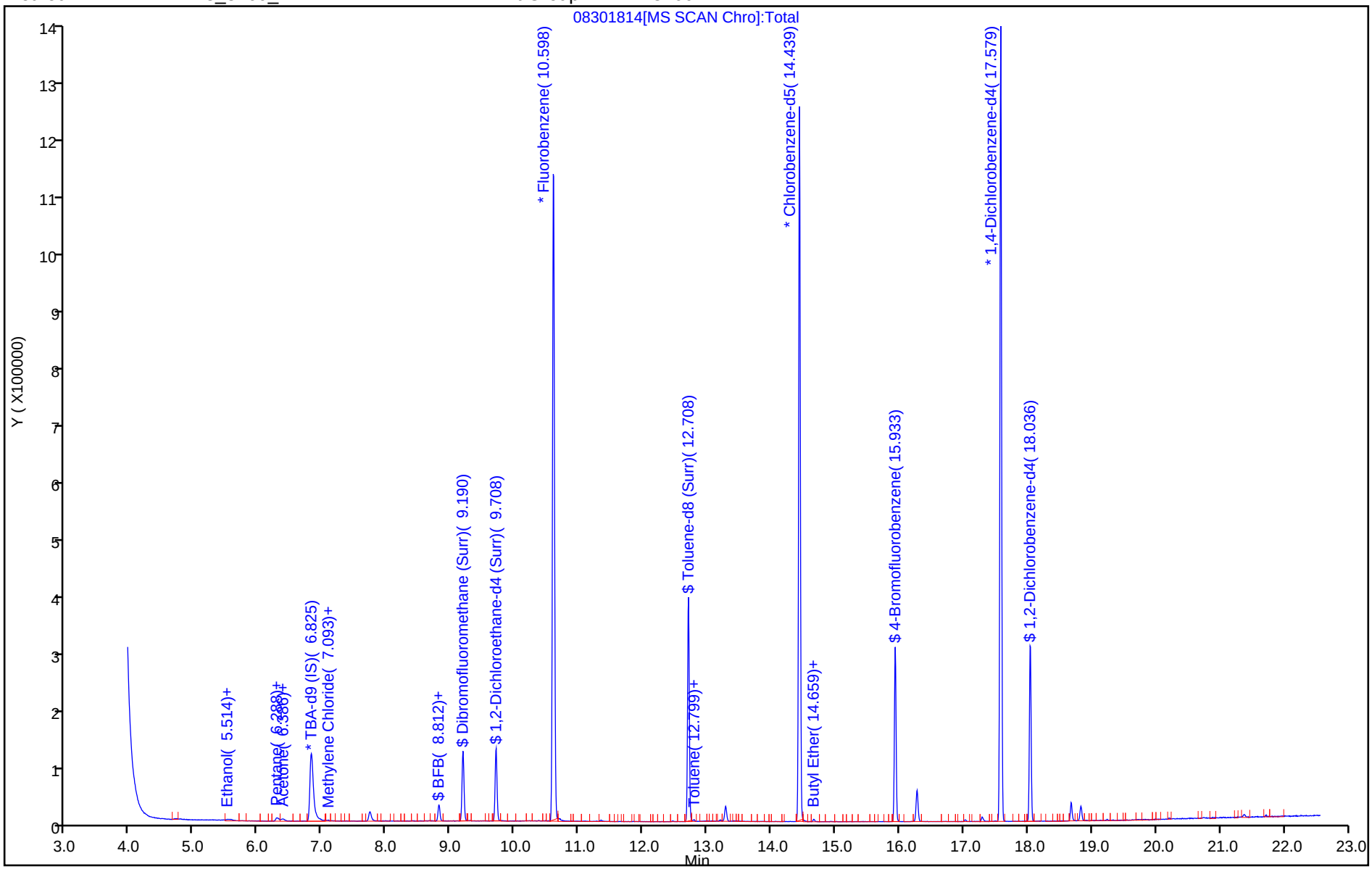
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 14:32:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301814.D

Injection Date:	30-Aug-2018 13:45:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88220-A-5	Lab Sample ID:	720-88220-5	Worklist Smp#:	15
Client ID:	DG-M3W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301814.D
Lims ID: 720-88220-A-5
Client ID: DG-M3W
Sample Type: Client
Inject. Date: 30-Aug-2018 13:45:30 ALS Bottle#: 13 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-5
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 14:32:15 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 14:32:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.29	97.21
$ 10 Toluene-d8 (Surr)	7.50	7.22	96.23
$ 11 4-Bromofluorobenzene	7.50	7.39	98.59
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00
$ 6 BFB	0.0	0	0.00

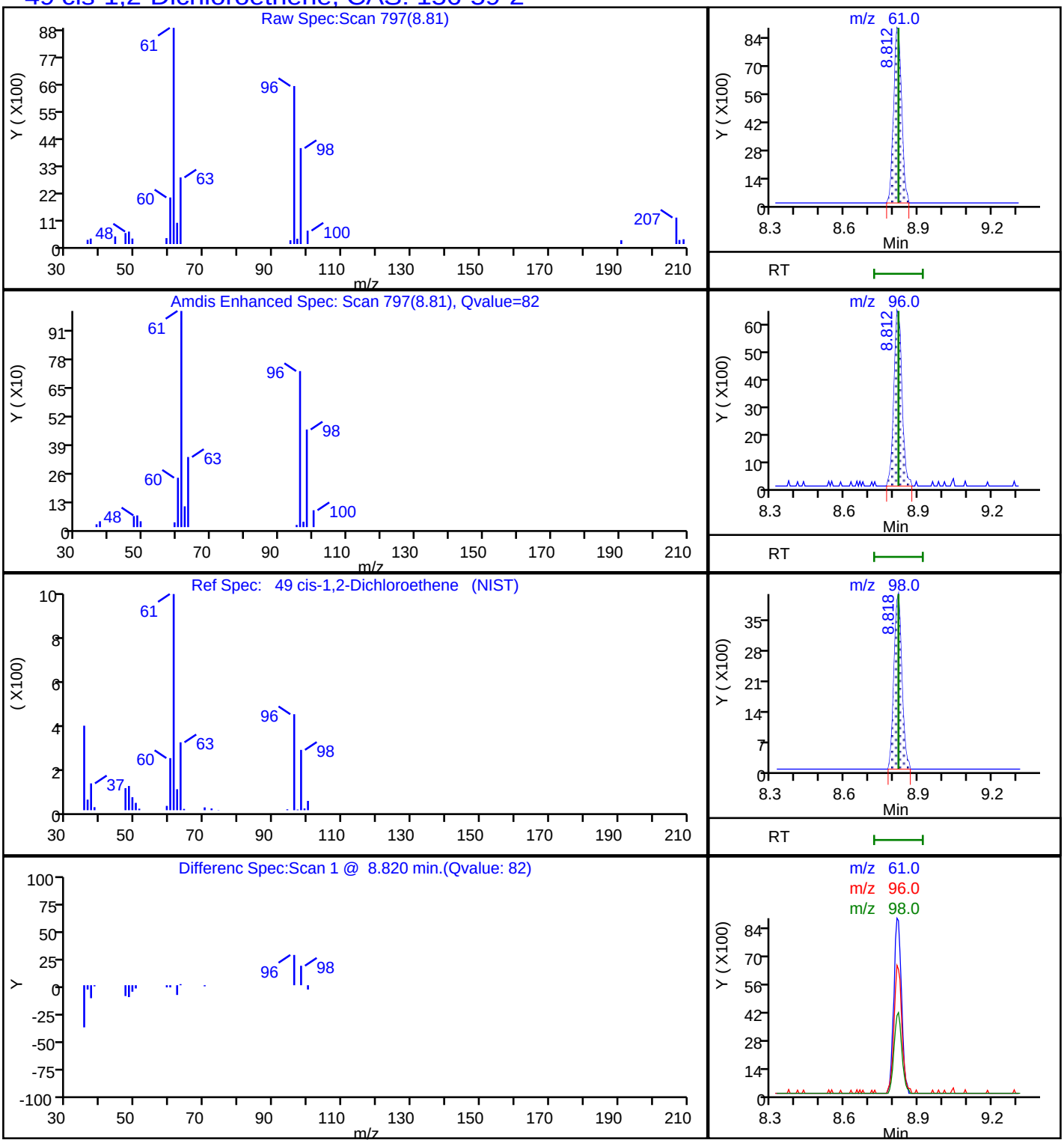
Report Date: 30-Aug-2018 14:32:16 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301814.D

Injection Date:	30-Aug-2018 13:45:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-5	Lab Sample ID:	720-88220-5		
Client ID:	DG-M3W				
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

49 cis-1,2-Dichloroethene, CAS: 156-59-2



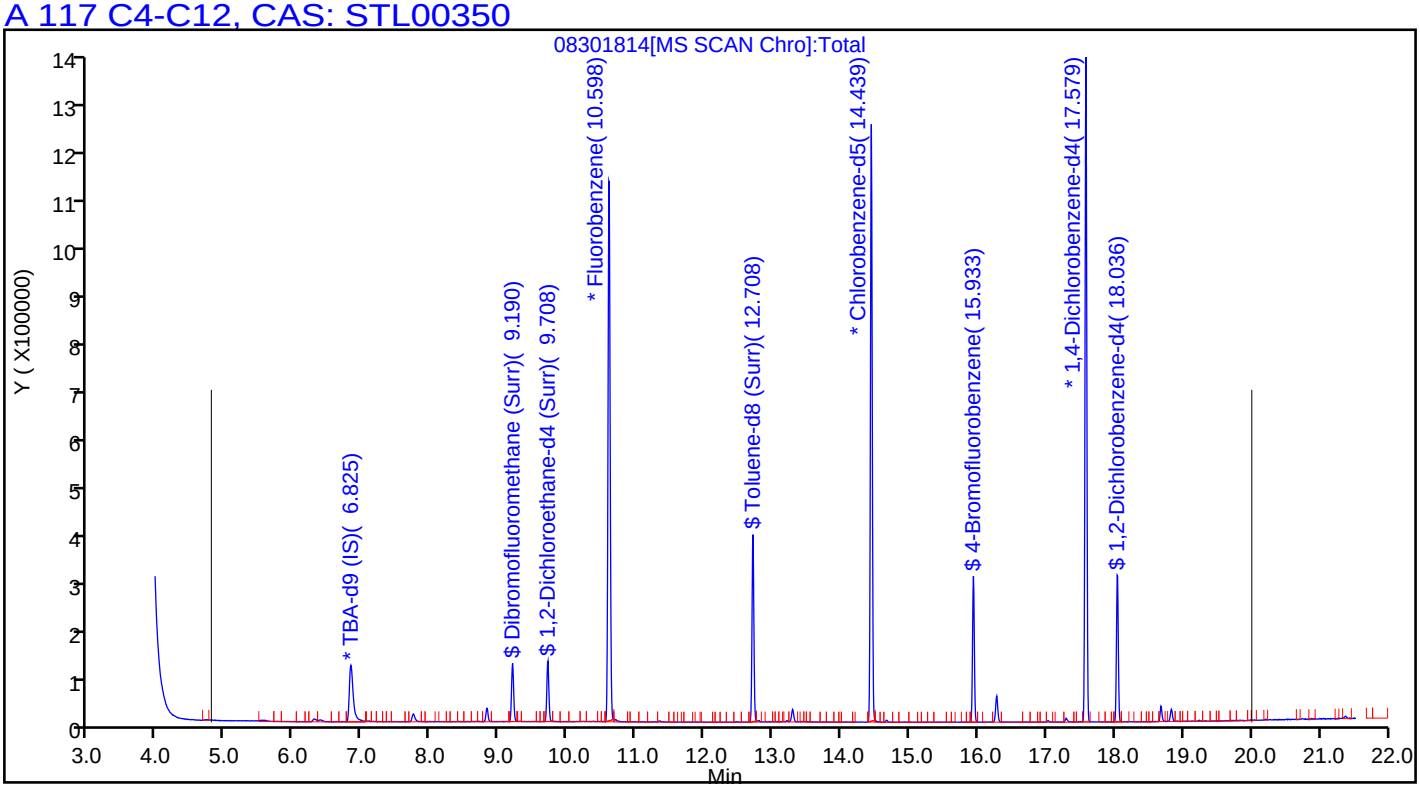
Report Date: 30-Aug-2018 14:32:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301814.D

Injection Date:	30-Aug-2018 13:45:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-5	Lab Sample ID:	720-88220-5		
Client ID:	DG-M3W				
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

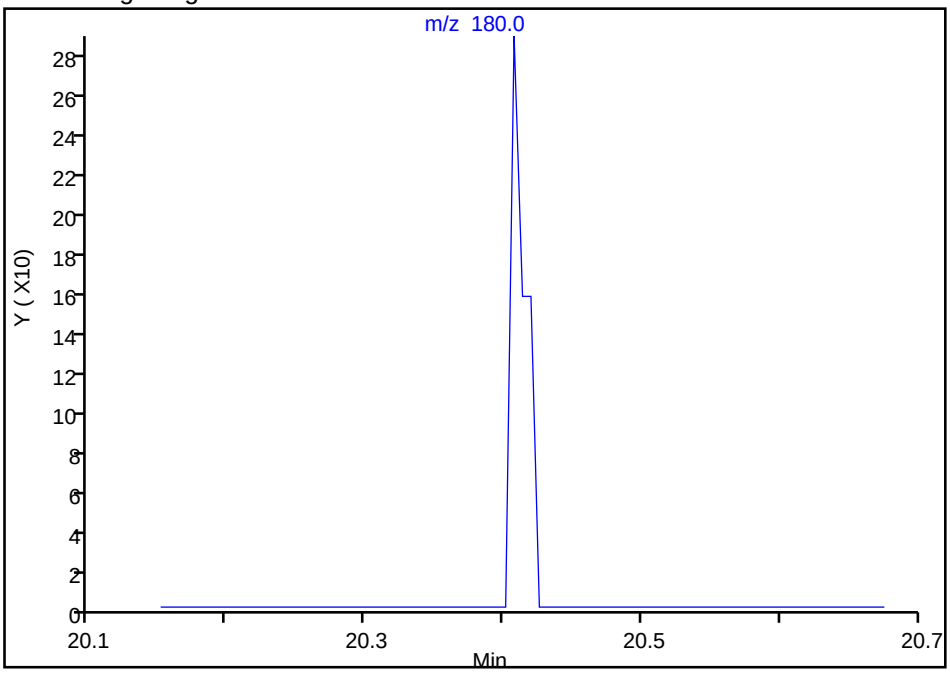
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301814.D				
Injection Date:	30-Aug-2018 13:45:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-5	Lab Sample ID:	720-88220-5		
Client ID:	DG-M3W				
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

111 1,2,4-Trichlorobenzene, CAS: 120-82-1

Signal: 1

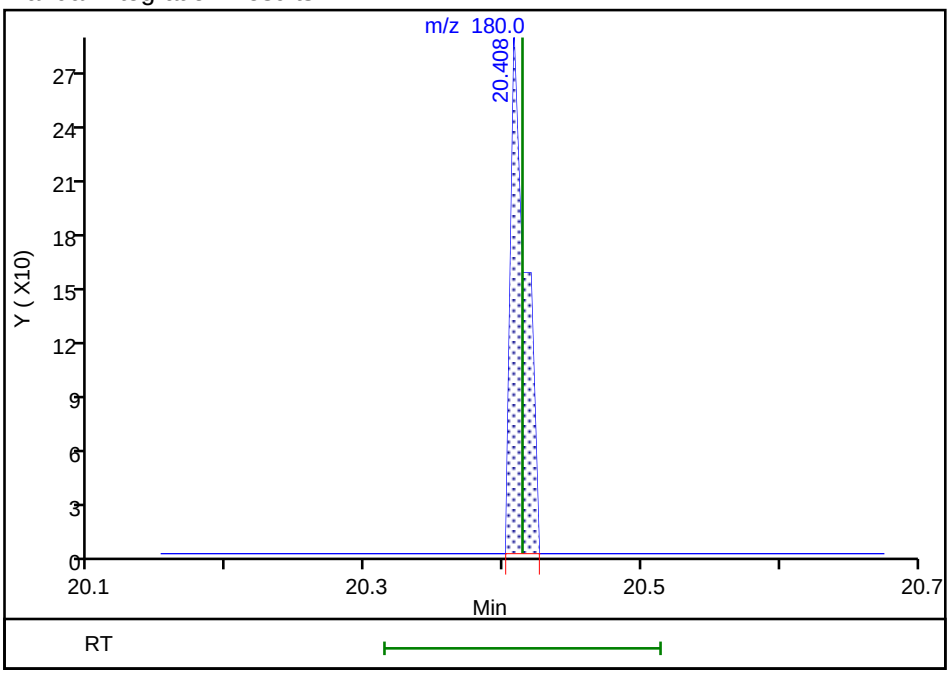
Not Detected
Expected RT: 20.41

Processing Integration Results



Manual Integration Results

RT: 20.41
Area: 216
Amount: 0.011224
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 14:32:08
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

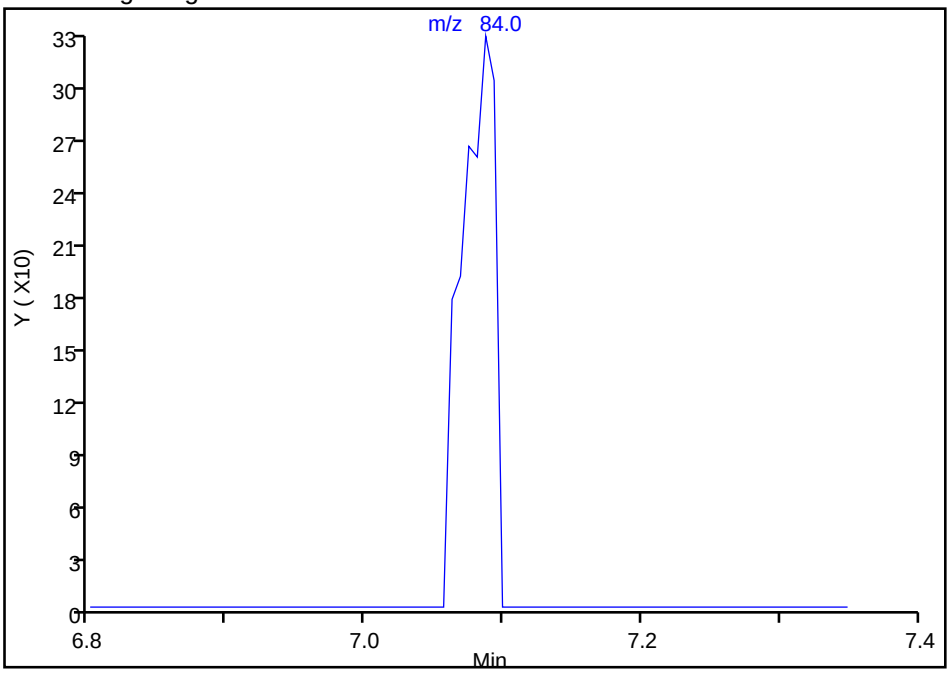
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301814.D				
Injection Date:	30-Aug-2018 13:45:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-5	Lab Sample ID:	720-88220-5		
Client ID:	DG-M3W				
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

34 Methylene Chloride, CAS: 75-09-2

Signal: 1

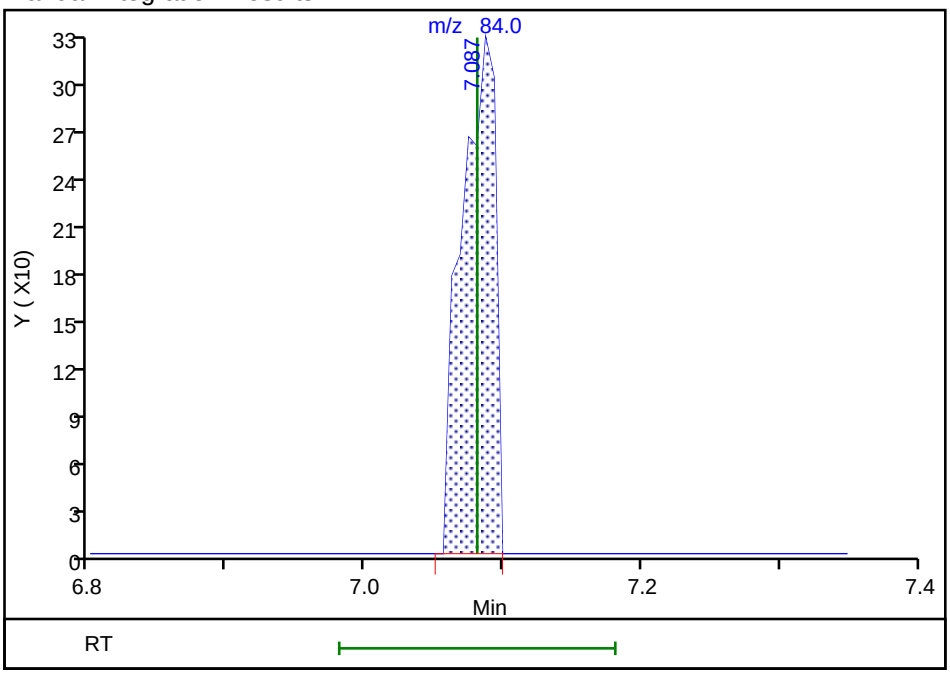
Not Detected
Expected RT: 7.08

Processing Integration Results



Manual Integration Results

RT: 7.09
Area: 544
Amount: 0.053137
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 14:31:31
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

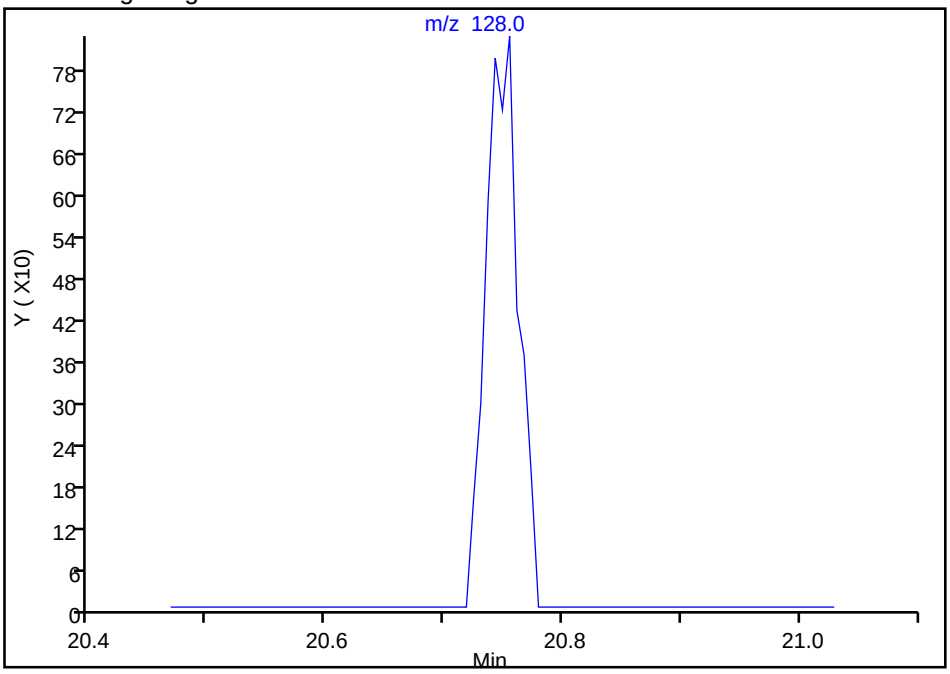
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301814.D				
Injection Date:	30-Aug-2018 13:45:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-5	Lab Sample ID:	720-88220-5		
Client ID:	DG-M3W				
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

112 Naphthalene, CAS: 91-20-3

Signal: 1

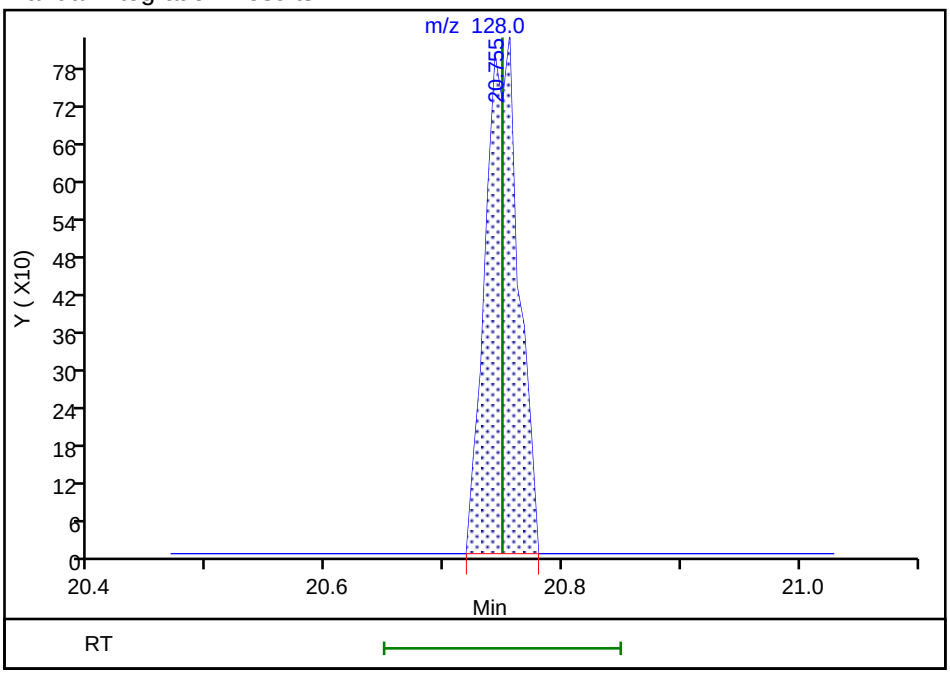
Not Detected
Expected RT: 20.75

Processing Integration Results



Manual Integration Results

RT: 20.76
Area: 1601
Amount: 0.035574
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 14:32:11
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

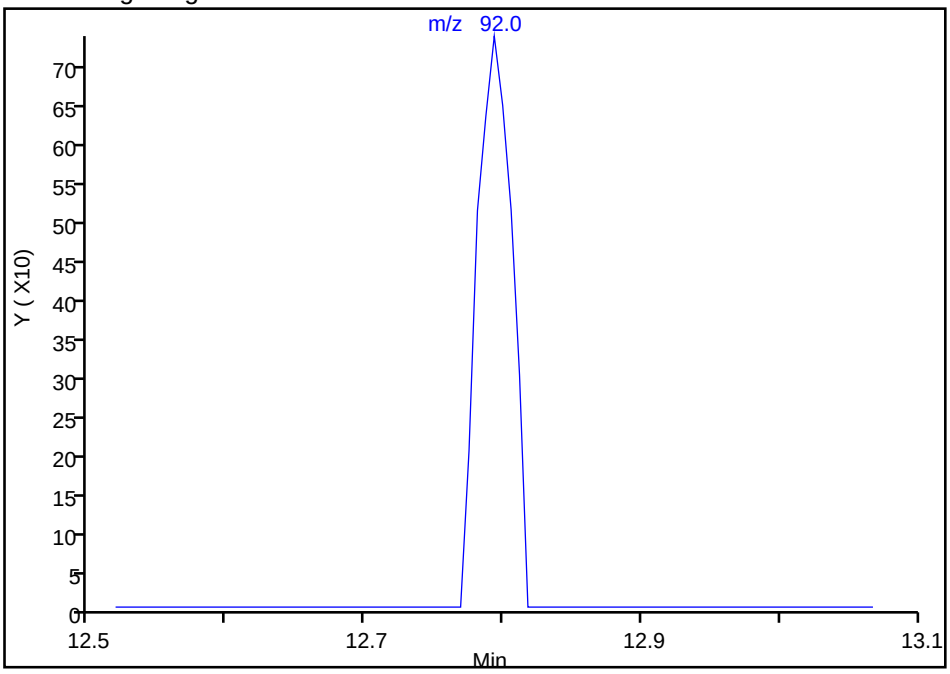
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301814.D				
Injection Date:	30-Aug-2018 13:45:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-5	Lab Sample ID:	720-88220-5		
Client ID:	DG-M3W				
Operator ID:	VOA	ALS Bottle#:	13	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

75 Toluene, CAS: 108-88-3

Signal: 1

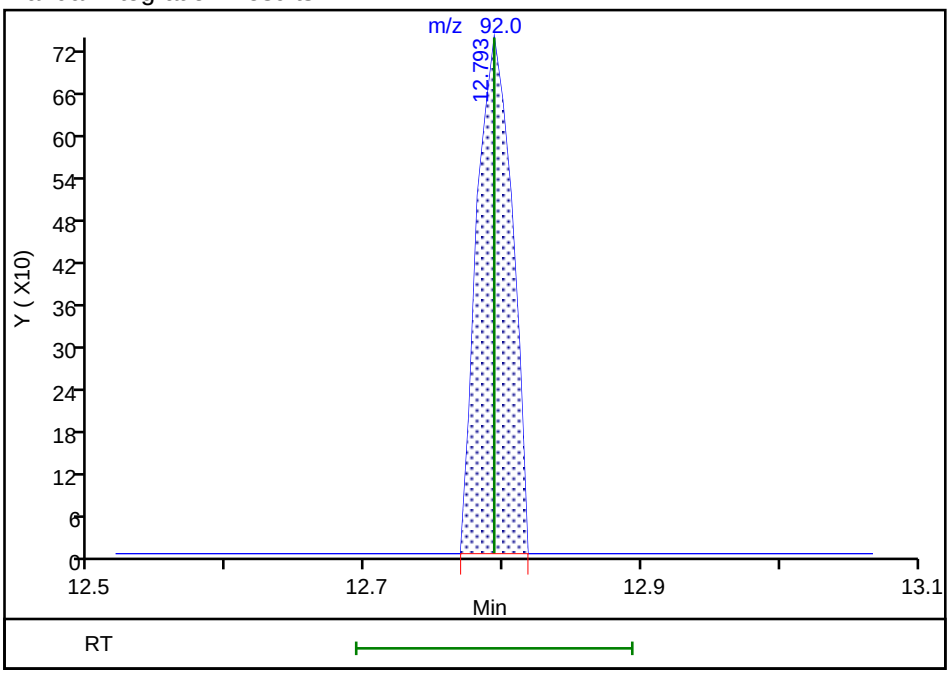
Not Detected
Expected RT: 12.79

Processing Integration Results



Manual Integration Results

RT: 12.79
Area: 1289
Amount: 0.050749
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 14:31:47
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-L5W Lab Sample ID: 720-88220-6

Matrix: Water Lab File ID: 08301815.D

Analysis Method: 8260B Date Collected: 08/23/2018 09:15

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 14:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND	*	0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	8.8	J	50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	0.27	J	0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-L5W Lab Sample ID: 720-88220-6

Matrix: Water Lab File ID: 08301815.D

Analysis Method: 8260B Date Collected: 08/23/2018 09:15

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 14:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	57		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	0.26	J	0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	ND		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	ND		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-L5W Lab Sample ID: 720-88220-6

Matrix: Water Lab File ID: 08301815.D

Analysis Method: 8260B Date Collected: 08/23/2018 09:15

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 14:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		72-130
460-00-4	4-Bromofluorobenzene	98		67-130
2037-26-5	Toluene-d8 (Surr)	96		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301815.D
Lims ID: 720-88220-A-6
Client ID: DG-L5W
Sample Type: Client
Inject. Date: 30-Aug-2018 14:16:30 ALS Bottle#: 14 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-6
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 14:48:17 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 14:48:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.819	6.825	-0.006	0	251887	250.0	
* 2 Fluorobenzene	96	10.599	10.605	-0.006	98	933999	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	87	770784	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	436527	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.185	0.000	94	79215	7.56	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.702	9.703	-0.006	0	99448	7.57	
$ 10 Toluene-d8 (Surr)	98	12.708	12.701	0.000	94	273106	7.23	
$ 11 4-Bromofluorobenzene	95	15.933	15.926	0.000	95	110538	7.37	
$ 12 1,2-Dichlorobenzene-d4	152	18.036	18.036	-0.006	84	102789	6.08	
23 Ethanol	45	5.526	5.509	0.012	100	283748	2983.2	
27 Isopropyl alcohol	45	6.288	6.277	0.006	99	81792	121.1	
28 Acetone	58	6.380	6.370	0.006	99	13783	12.6	
34 Methylene Chloride	84	7.069	7.077	-0.012	67	226	0.0224	
144 Methyl acetate	43	7.136	7.126	0.006	96	2948	0.3693	
45 2-Butanone (MEK)	72	8.636	8.631	0.001	99	10995	8.79	
49 cis-1,2-Dichloroethene	61	8.806	8.806	-0.012	1	188	0.0122	a
46 Isobutyl alcohol	43	9.154	9.127	0.019	75	2117	3.32	
59 Benzene	78	10.373	10.367	0.000	97	10635	0.2676	
75 Toluene	92	12.793	12.788	0.000	97	6466	0.2552	
128 Butyl Ether	87	14.659	14.653	0.000	96	430	0.0561	
84 Ethylbenzene	91	14.701	14.701	-0.006	91	1210	0.0245	
85 m-Xylene & p-Xylene	91	14.927	14.933	-0.012	0	3146	0.0809	
88 o-Xylene	91	15.433	15.433	0.000	91	1243	0.0308	a
105 4-Isopropyltoluene	119	17.646	17.640	0.000	97	9392	0.1934	
112 Naphthalene	128	20.743	20.743	-0.006	92	2539	0.0565	a
29 Pentane	43	6.380	6.410	-0.030	69	49340	NR	
99 n-Decane	57	16.707	16.829	-0.122	70	2010	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	4258975	49.7	
A 154 C6-C8	1	10.852	(8.550-13.153)		0	361244	4.22	
A 155 C6-C9	1	11.842	(8.550-15.134)		0	489160	5.71	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	4885329	57.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 119 C6-C10	1	12.732	(8.550-16.914)		0	3224627	37.7	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	4249189	49.6	
A 120 C6-C12	1	14.278	(8.550-20.005)		0	3850981	45.0	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	2872557	33.5	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	3600199	42.0	
S 122 Xylenes, Total	1				0		0.1116	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

a - User Assigned ID

Reagents:

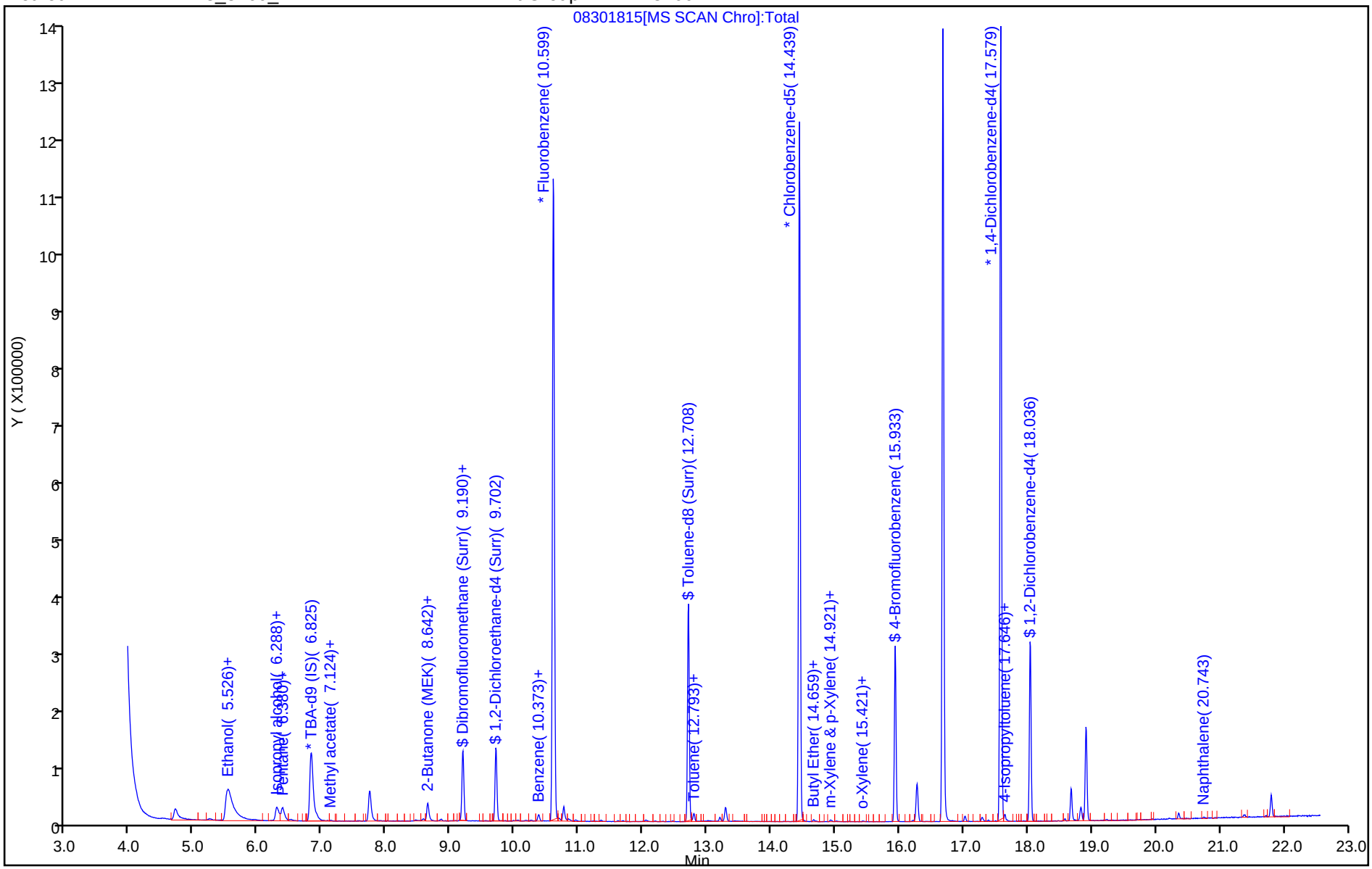
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 14:48:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301815.D

Injection Date:	30-Aug-2018 14:16:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88220-A-6	Lab Sample ID:	720-88220-6	Worklist Smp#:	16
Client ID:	DG-L5W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301815.D
Lims ID: 720-88220-A-6
Client ID: DG-L5W
Sample Type: Client
Inject. Date: 30-Aug-2018 14:16:30 ALS Bottle#: 14 Worklist Smp#: 16
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-6
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 14:48:17 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 14:48:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.57	100.97
$ 10 Toluene-d8 (Surr)	7.50	7.23	96.40
$ 11 4-Bromofluorobenzene	7.50	7.37	98.32
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

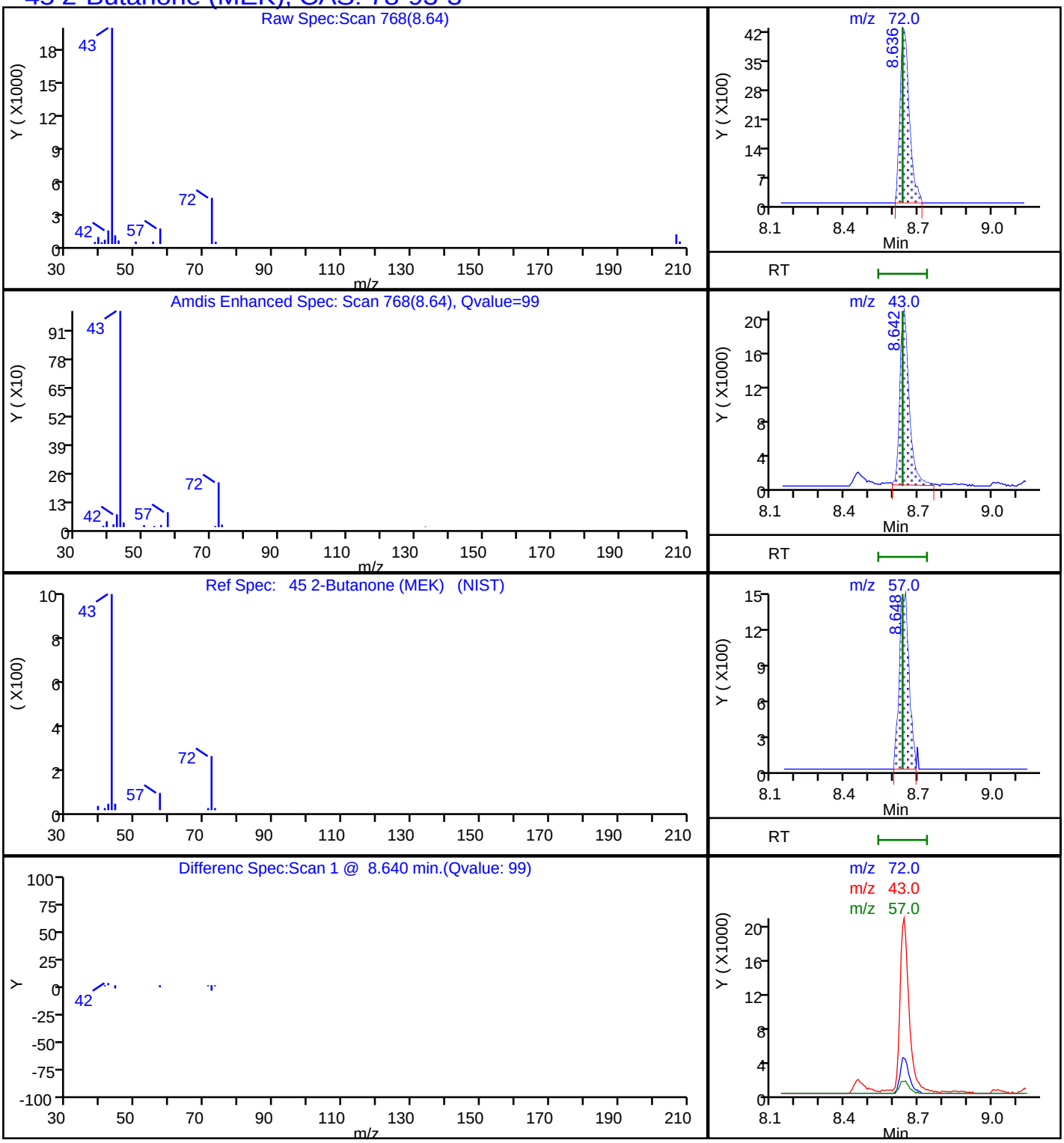
Report Date: 30-Aug-2018 14:48:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301815.D

Injection Date:	30-Aug-2018 14:16:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-6	Lab Sample ID:	720-88220-6		
Client ID:	DG-L5W				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

45 2-Butanone (MEK), CAS: 78-93-3



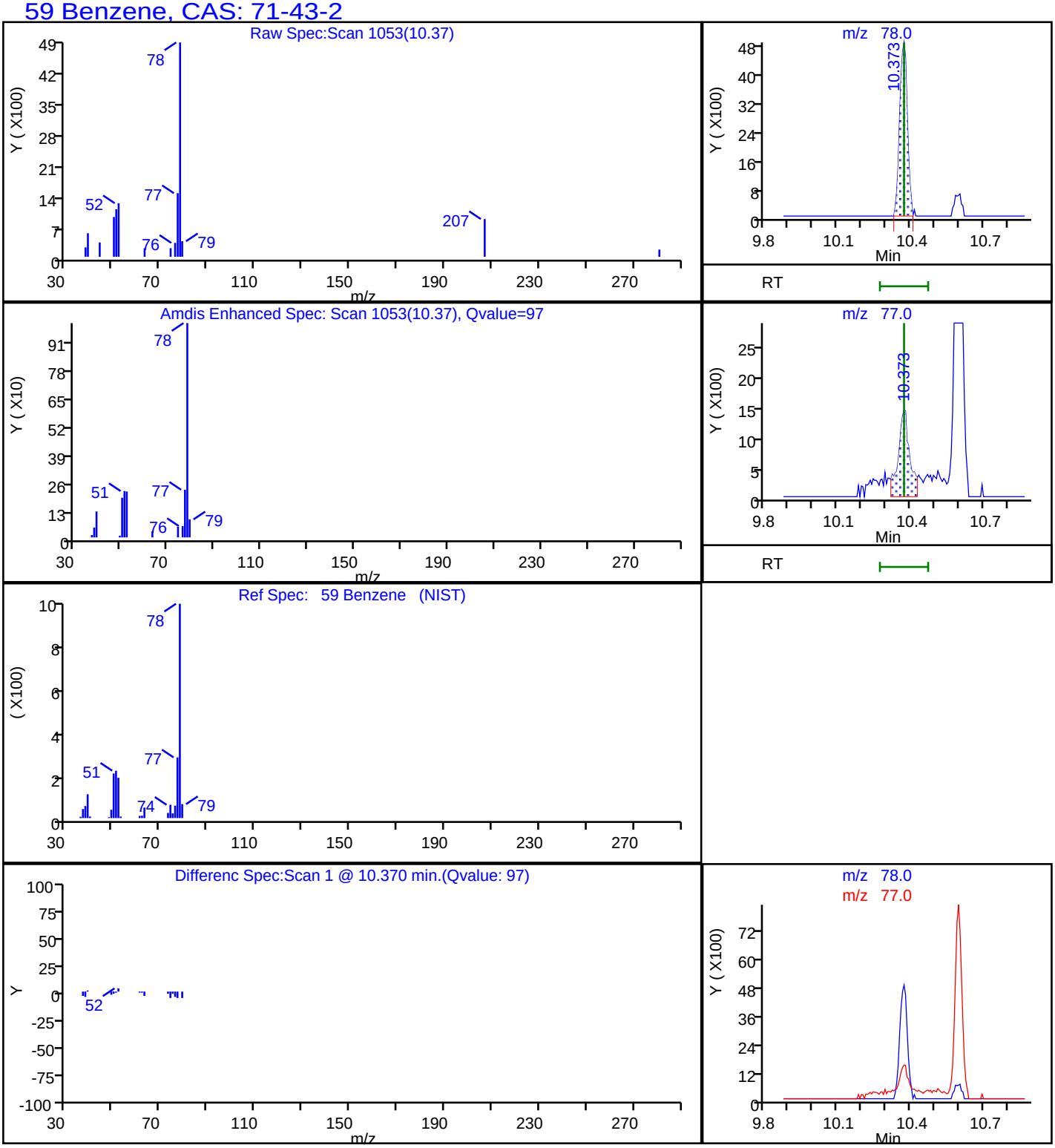
Report Date: 30-Aug-2018 14:48:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301815.D

Injection Date:	30-Aug-2018 14:16:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-6	Lab Sample ID:	720-88220-6		
Client ID:	DG-L5W				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

59 Benzene, CAS: 71-43-2

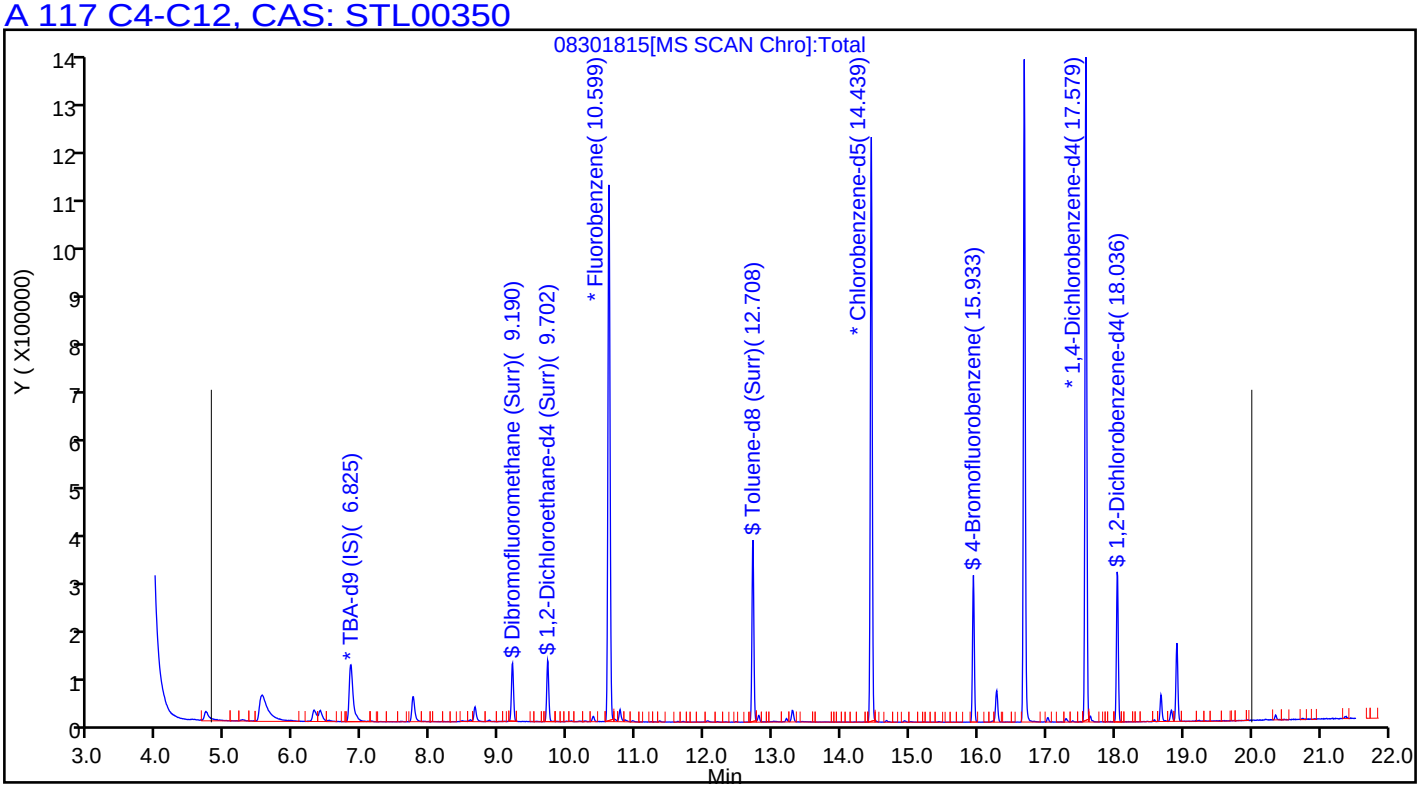


Report Date: 30-Aug-2018 14:48:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301815.D				
Injection Date:	30-Aug-2018 14:16:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-6	Lab Sample ID:	720-88220-6		
Client ID:	DG-L5W				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



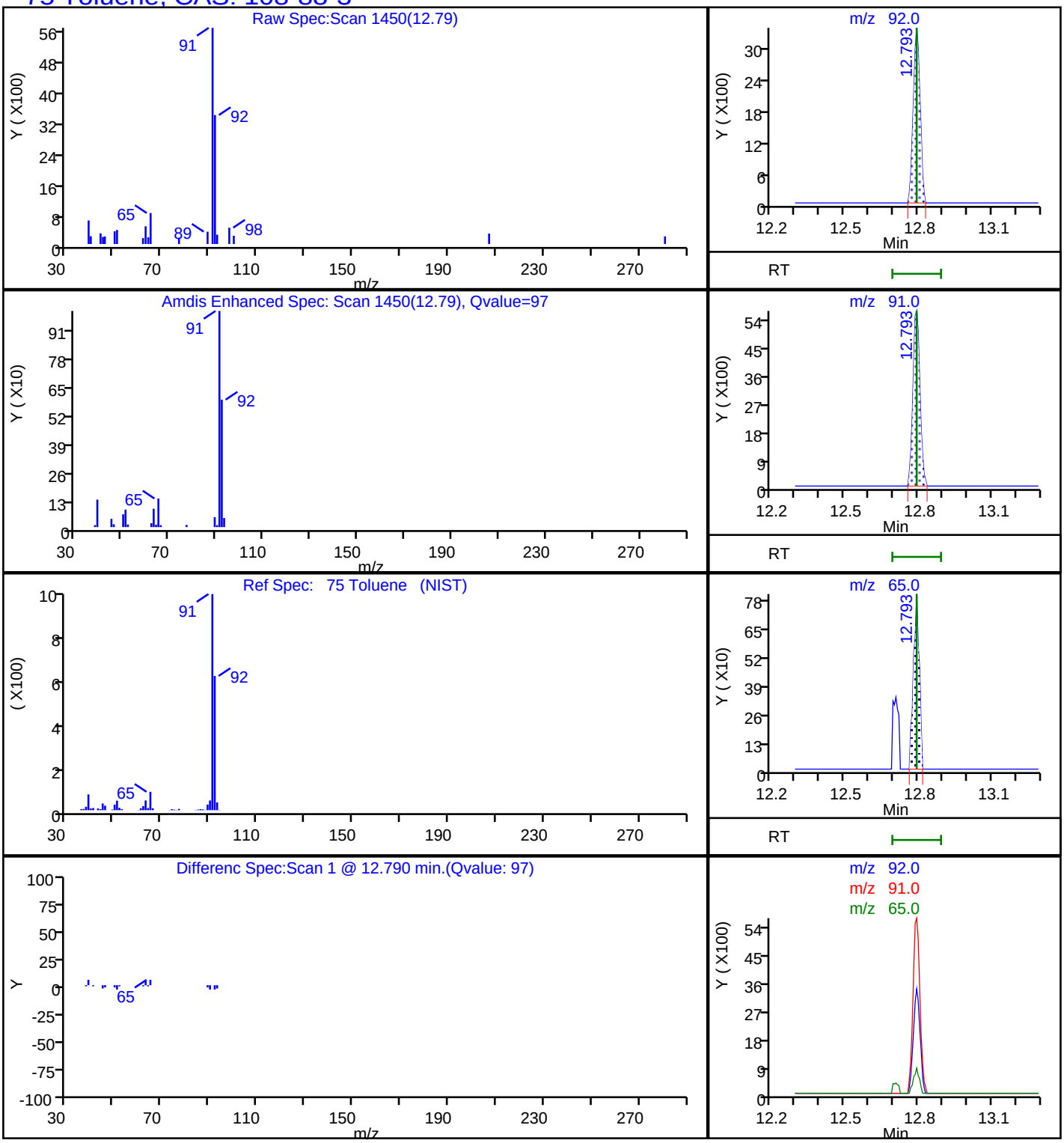
Report Date: 30-Aug-2018 14:48:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301815.D

Injection Date:	30-Aug-2018 14:16:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-6	Lab Sample ID:	720-88220-6		
Client ID:	DG-L5W				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

75 Toluene, CAS: 108-88-3



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

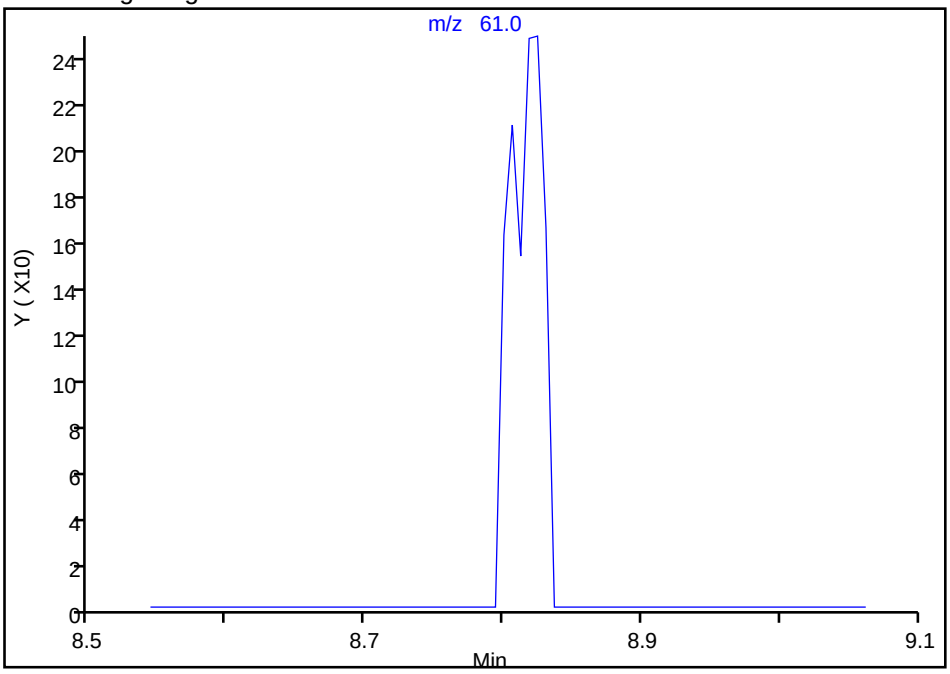
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301815.D				
Injection Date:	30-Aug-2018 14:16:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-6	Lab Sample ID:	720-88220-6		
Client ID:	DG-L5W				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

49 cis-1,2-Dichloroethene, CAS: 156-59-2

Signal: 1

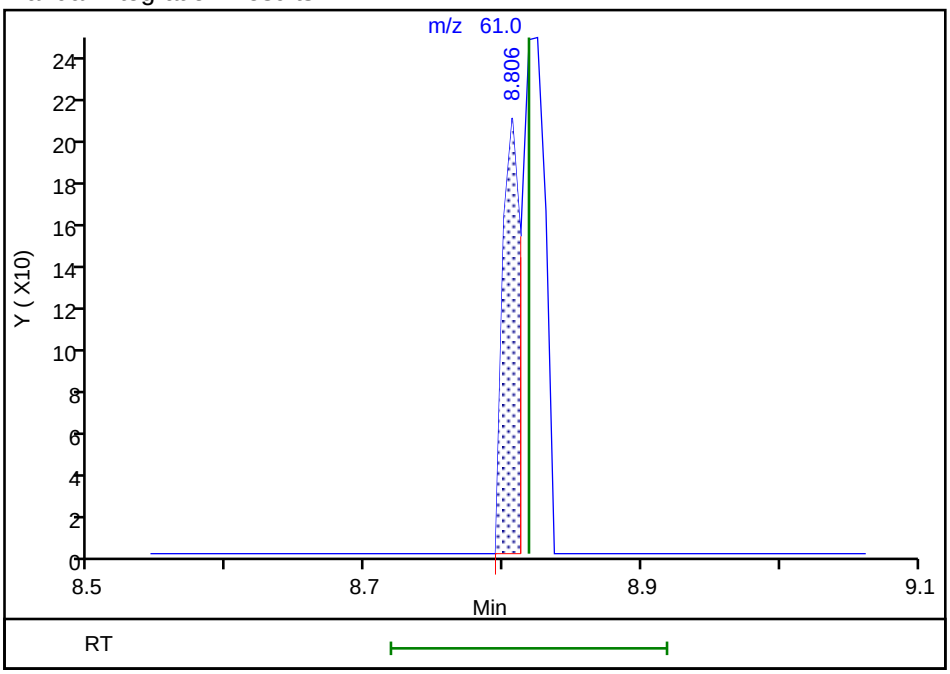
Not Detected
Expected RT: 8.82

Processing Integration Results



Manual Integration Results

RT: 8.81
Area: 188
Amount: 0.012241
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 14:47:42
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

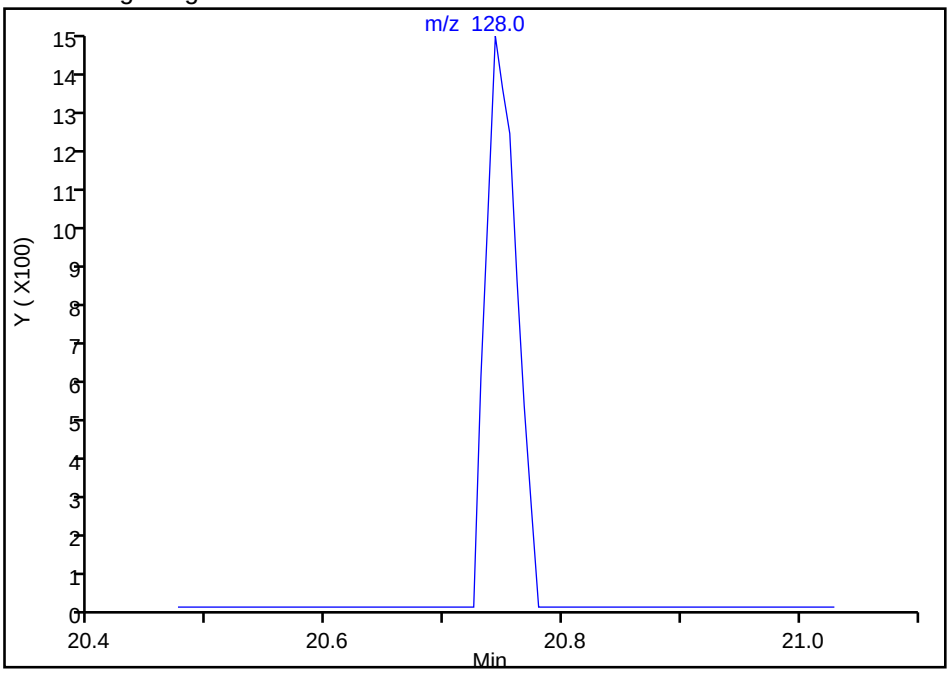
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301815.D				
Injection Date:	30-Aug-2018 14:16:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-6	Lab Sample ID:	720-88220-6		
Client ID:	DG-L5W				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

112 Naphthalene, CAS: 91-20-3

Signal: 1

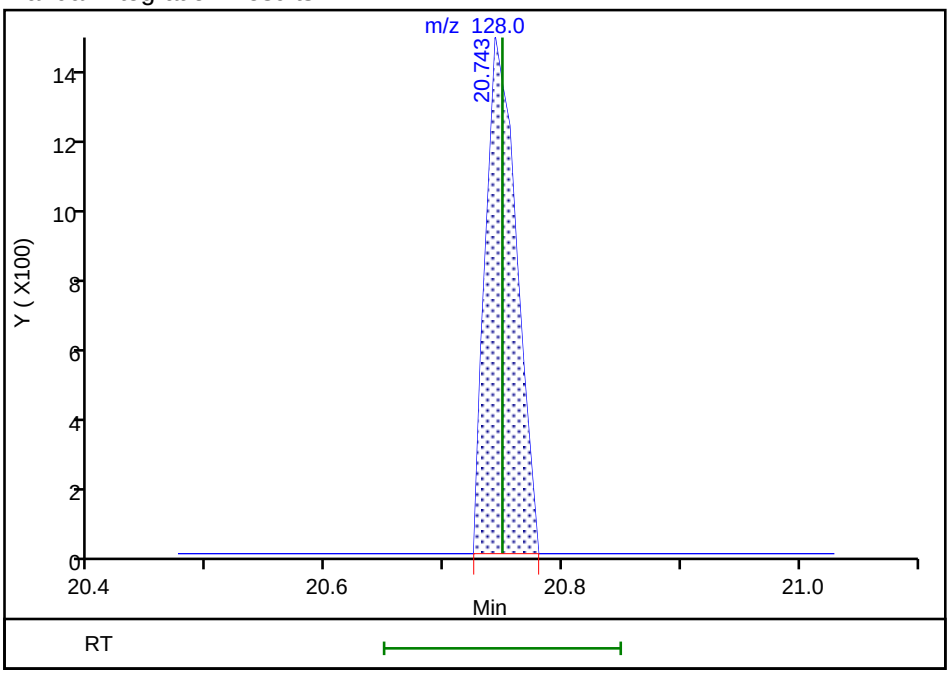
Not Detected
Expected RT: 20.75

Processing Integration Results



Manual Integration Results

RT: 20.74
Area: 2539
Amount: 0.056496
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 14:48:13
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

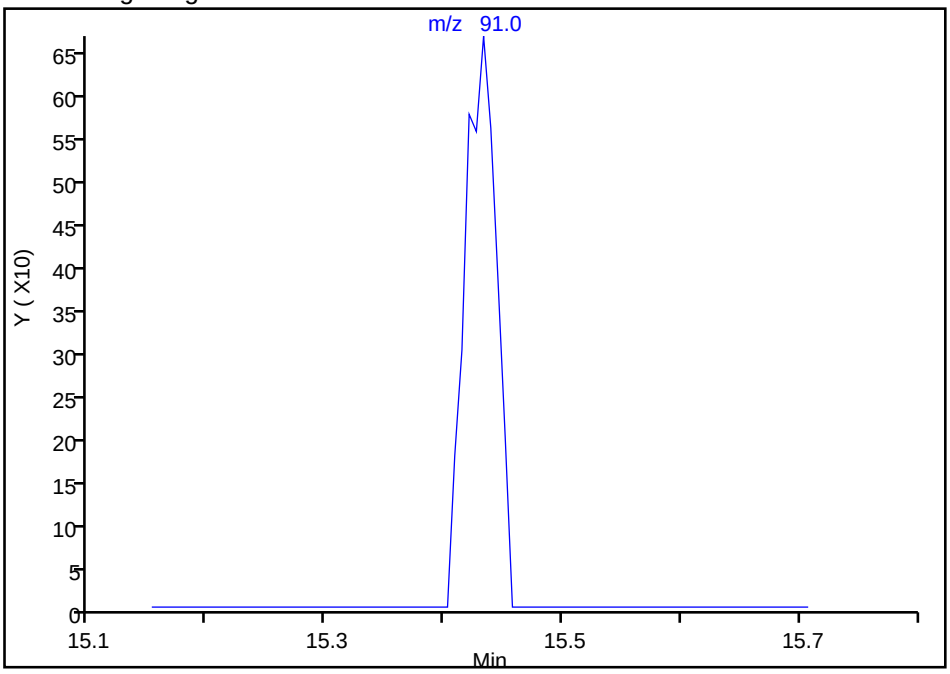
Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301815.D				
Injection Date:	30-Aug-2018 14:16:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-6	Lab Sample ID:	720-88220-6		
Client ID:	DG-L5W				
Operator ID:	VOA	ALS Bottle#:	14	Worklist Smp#:	16
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

88 o-Xylene, CAS: 95-47-6

Signal: 1

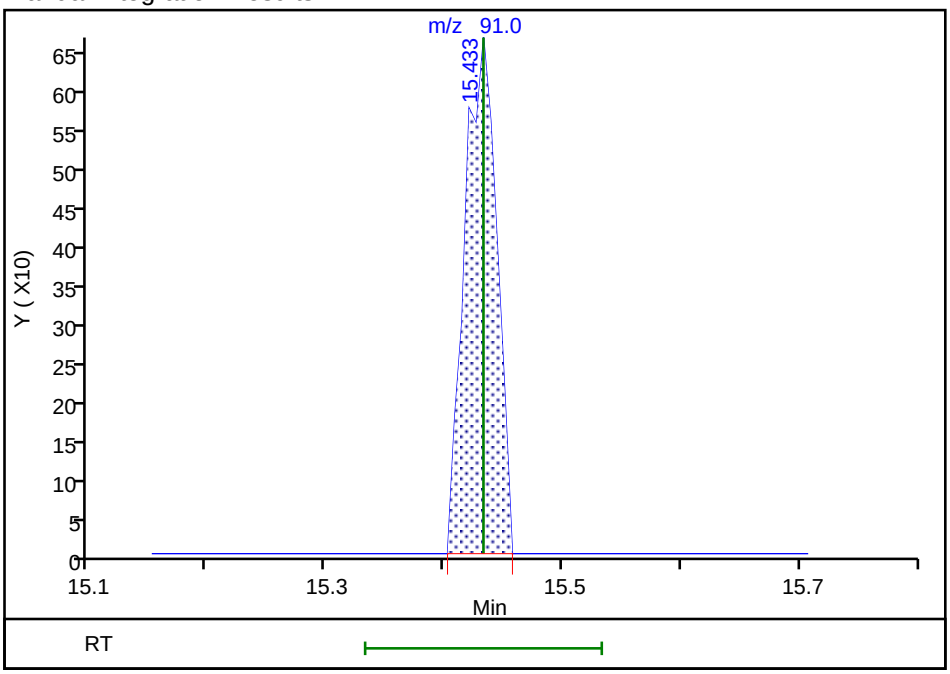
Not Detected
Expected RT: 15.43

Processing Integration Results



Manual Integration Results

RT: 15.43
Area: 1243
Amount: 0.030758
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 14:48:04
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-J5W Lab Sample ID: 720-88220-7

Matrix: Water Lab File ID: 08301818.D

Analysis Method: 8260B Date Collected: 08/23/2018 10:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 15:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND	*	0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-J5W Lab Sample ID: 720-88220-7

Matrix: Water Lab File ID: 08301818.D

Analysis Method: 8260B Date Collected: 08/23/2018 10:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 15:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	1.6		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	ND		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	0.37	J	0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-J5W Lab Sample ID: 720-88220-7

Matrix: Water Lab File ID: 08301818.D

Analysis Method: 8260B Date Collected: 08/23/2018 10:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 15:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250552 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		72-130
460-00-4	4-Bromofluorobenzene	99		67-130
2037-26-5	Toluene-d8 (Surr)	96		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301818.D
Lims ID: 720-88220-A-7
Client ID: DG-J5W
Sample Type: Client
Inject. Date: 30-Aug-2018 15:54:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-7
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:56:17 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: chaijita Date: 31-Aug-2018 08:56:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	6.825	6.825	0.000	0	257849	250.0	
* 2 Fluorobenzene	96	10.599	10.605	-0.006	99	866903	25.0	
* 4 Chlorobenzene-d5	117	14.439	14.445	-0.006	87	712603	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.579	17.585	-0.006	95	395639	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.190	9.185	0.000	94	75302	7.74	
$ 8 1,2-Dichloroethane-d4 (Sur	65	9.702	9.703	-0.006	0	95031	7.80	
$ 10 Toluene-d8 (Surr)	98	12.708	12.701	0.000	93	251291	7.17	
$ 11 4-Bromofluorobenzene	95	15.933	15.926	0.000	92	102475	7.39	
$ 12 1,2-Dichlorobenzene-d4	152	18.042	18.036	0.000	85	93833	6.12	
$ 6 BFB	95	8.806	6.434	2.372	0	58	NR	
19 Vinyl chloride	62	4.758	4.768	-0.012	21	3849	0.3717	
23 Ethanol	45	5.533	5.509	0.018	89	9157	94.0	
27 Isopropyl alcohol	45	6.295	6.277	0.013	99	44826	64.8	
28 Acetone	58	6.374	6.370	0.000	98	3671	3.61	
49 cis-1,2-Dichloroethene	61	8.812	8.813	-0.006	82	23045	1.62	
29 Pentane	43	6.374	6.410	-0.036	68	14166	NR	
A 116 C4-C10	1	10.849	(4.783-16.914)		0	768597	9.67	
A 154 C6-C8	1	10.852	(8.550-13.153)		0	202943	2.55	
A 155 C6-C9	1	11.842	(8.550-15.134)		0	302329	3.80	
A 117 C4-C12	1	12.394	(4.783-20.005)		0	1013955	12.8	
A 119 C6-C10	1	12.732	(8.550-16.914)		0	453044	5.70	
A 118 C5-C12	1	13.168	(6.331-20.005)		0	951271	12.0	
A 120 C6-C12	1	14.278	(8.550-20.005)		0	698402	8.79	
A 156 C8-C10	1	14.982	(13.049-16.914)		0	251595	3.17	
A 121 C7-C12	1	15.451	(10.897-20.005)		0	551430	6.94	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

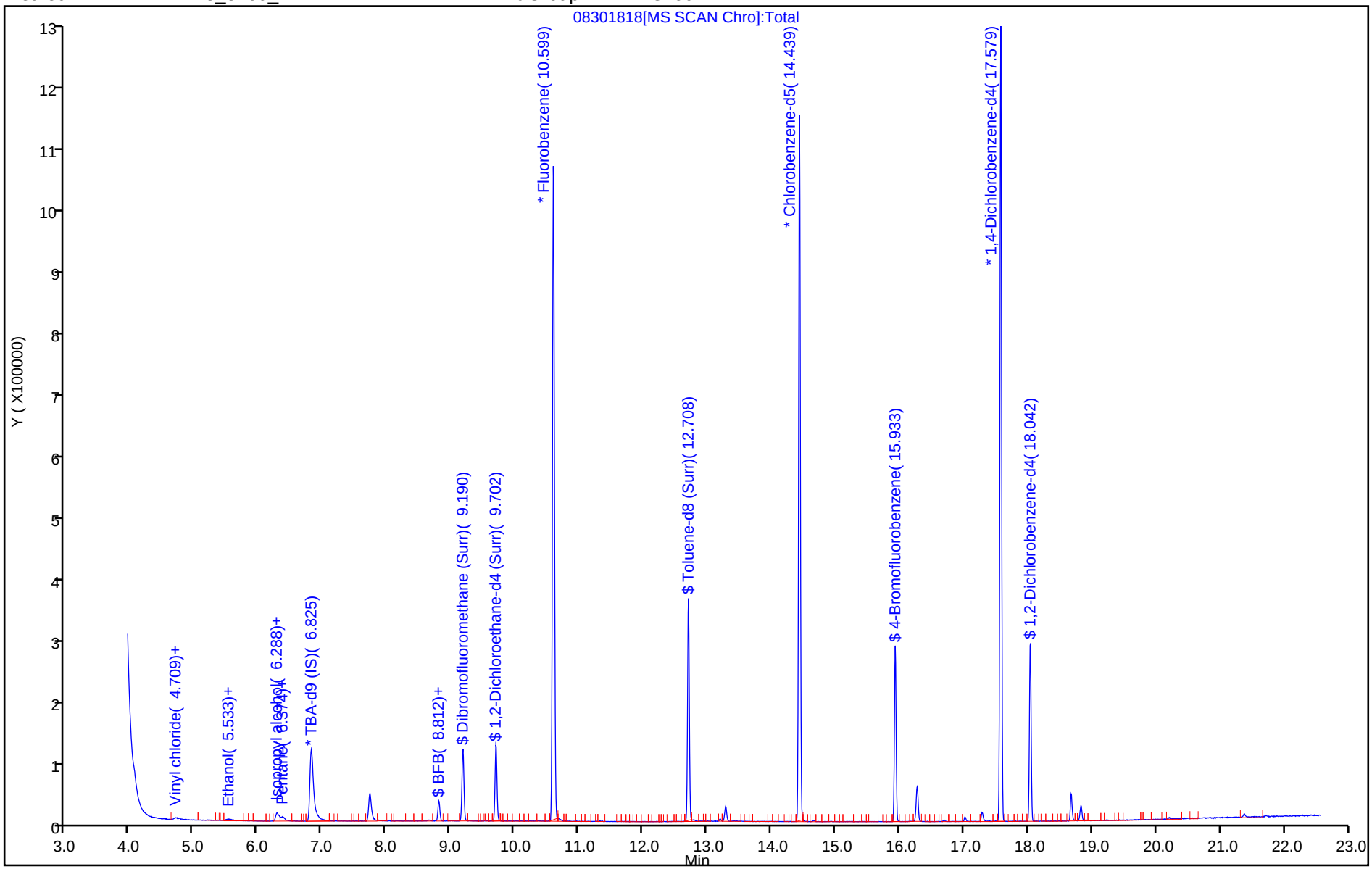
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 08:56:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301818.D

Injection Date:	30-Aug-2018 15:54:30	Instrument ID:	HP13	Operator ID:	VOA
Lims ID:	720-88220-A-7	Lab Sample ID:	720-88220-7	Worklist Smp#:	17
Client ID:	DG-J5W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	HP13_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301818.D
Lims ID: 720-88220-A-7
Client ID: DG-J5W
Sample Type: Client
Inject. Date: 30-Aug-2018 15:54:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-7
Misc. Info.: HP13
Operator ID: VOA Instrument ID: HP13

Method: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\HP13_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:56:17 Calib Date: 25-Aug-2018 20:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP13\20180825-53479.b\08251822.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: chaijita Date: 31-Aug-2018 08:56:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	7.50	7.74	103.21
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.80	103.95
$ 10 Toluene-d8 (Surr)	7.50	7.17	95.57
$ 11 4-Bromofluorobenzene	7.50	7.39	98.59
$ 12 1,2-Dichlorobenzene-d4	6.00	6.12	102.07
$ 6 BFB	0	0	0.00

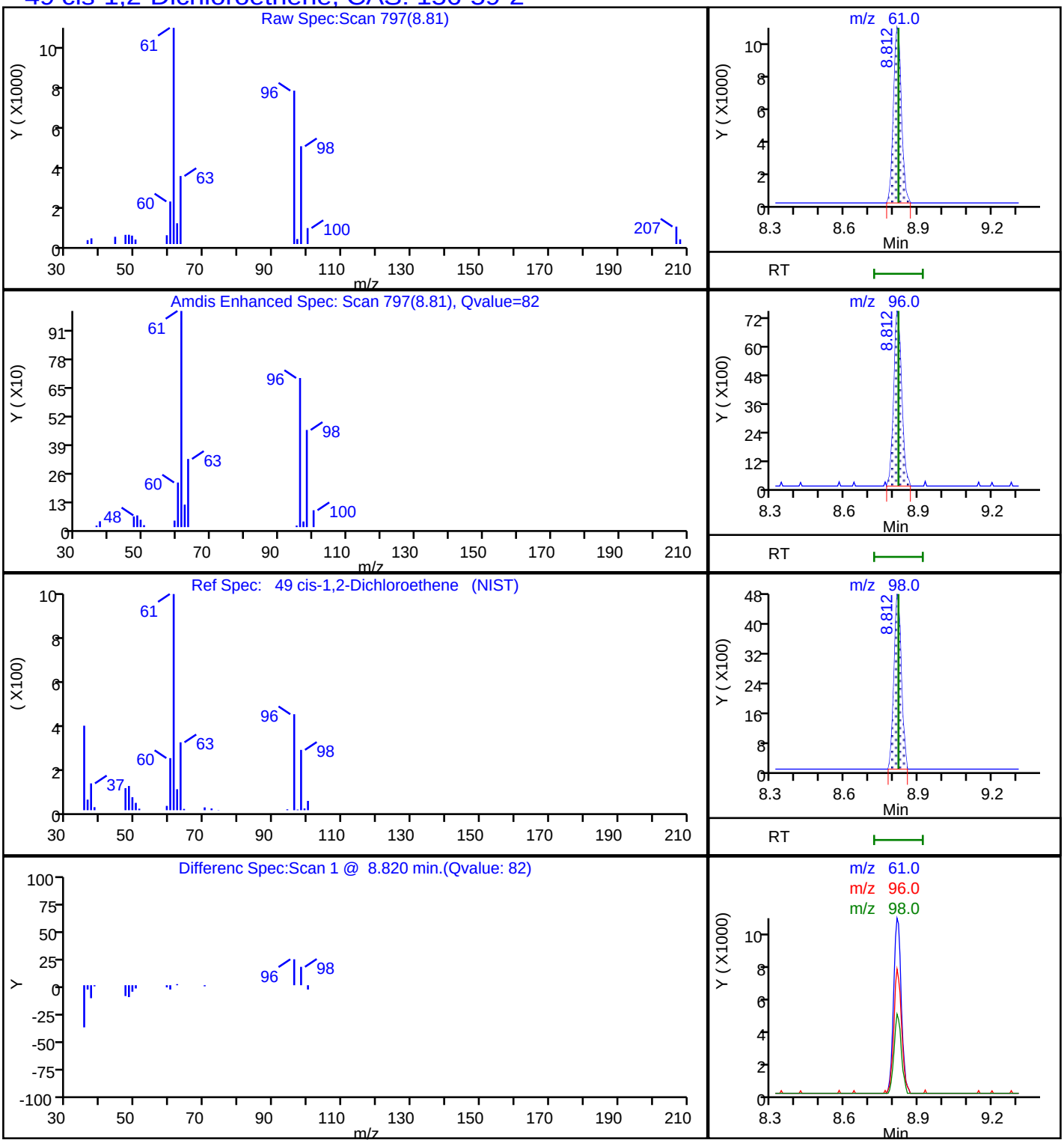
Report Date: 31-Aug-2018 08:56:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301818.D

Injection Date:	30-Aug-2018 15:54:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-7	Lab Sample ID:	720-88220-7		
Client ID:	DG-J5W				
Operator ID:	VOA	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

49 cis-1,2-Dichloroethene, CAS: 156-59-2

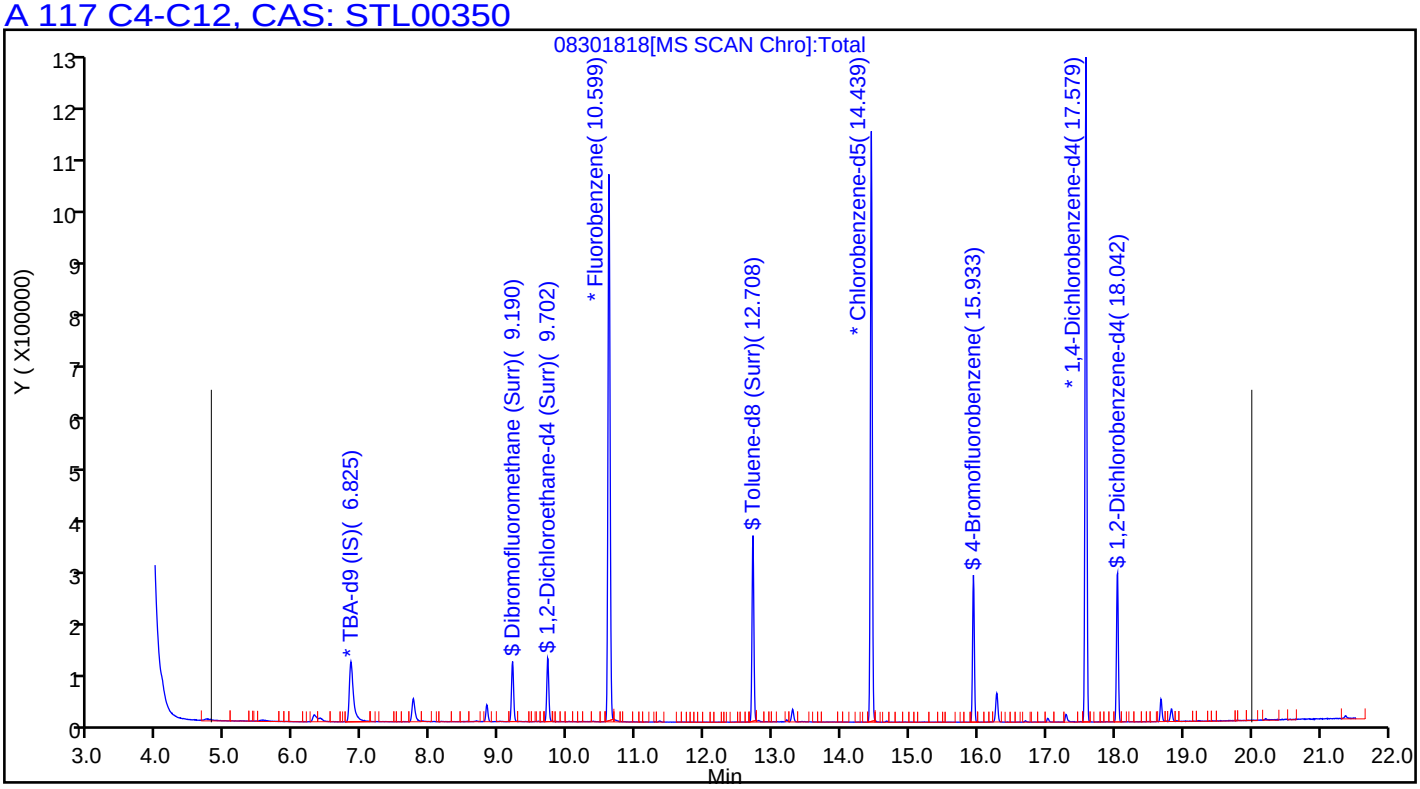


Report Date: 31-Aug-2018 08:56:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301818.D				
Injection Date:	30-Aug-2018 15:54:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-7	Lab Sample ID:	720-88220-7		
Client ID:	DG-J5W				
Operator ID:	VOA	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



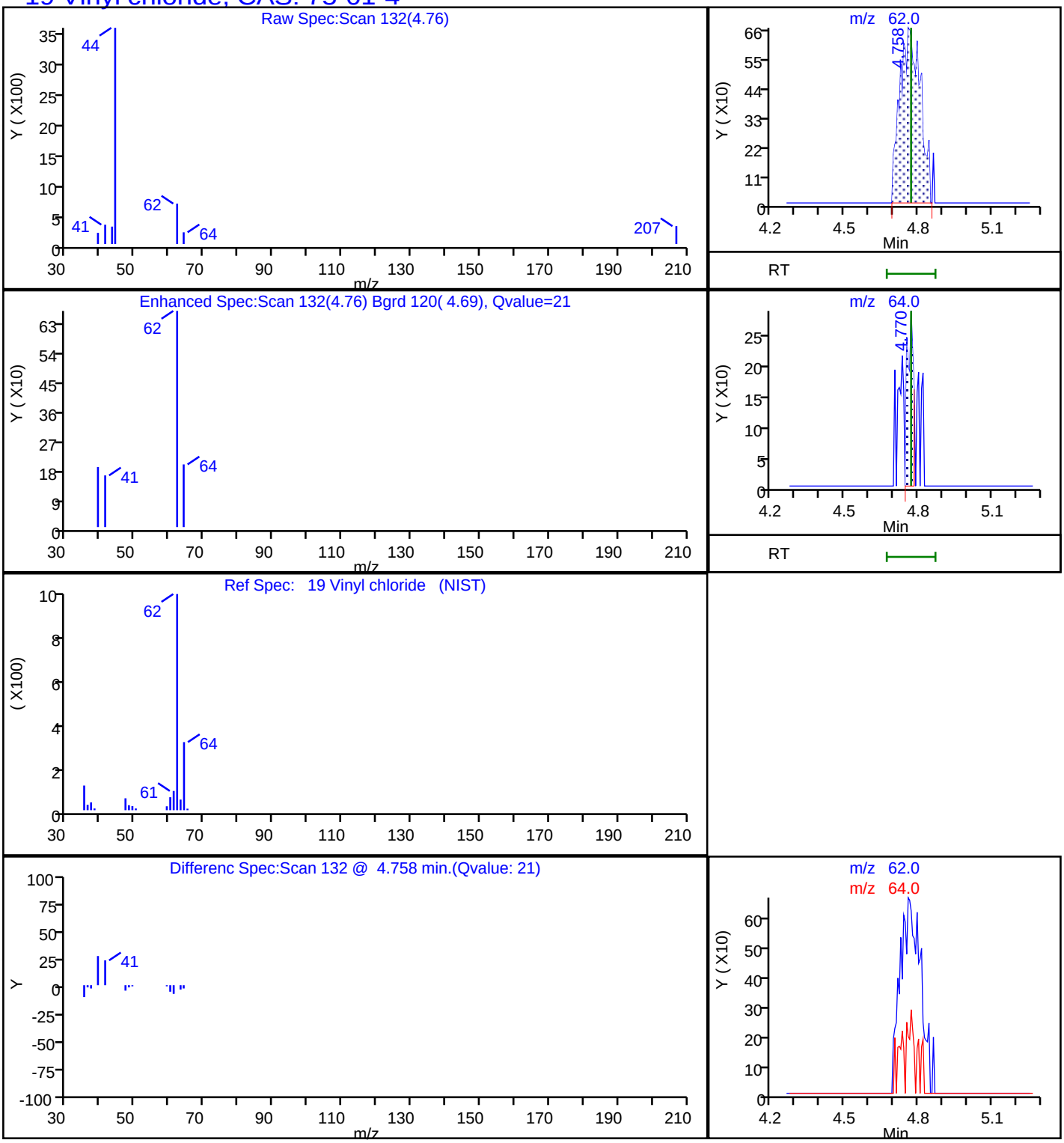
Report Date: 31-Aug-2018 08:56:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301818.D

Injection Date:	30-Aug-2018 15:54:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-7	Lab Sample ID:	720-88220-7		
Client ID:	DG-J5W				
Operator ID:	VOA	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

19 Vinyl chloride, CAS: 75-01-4



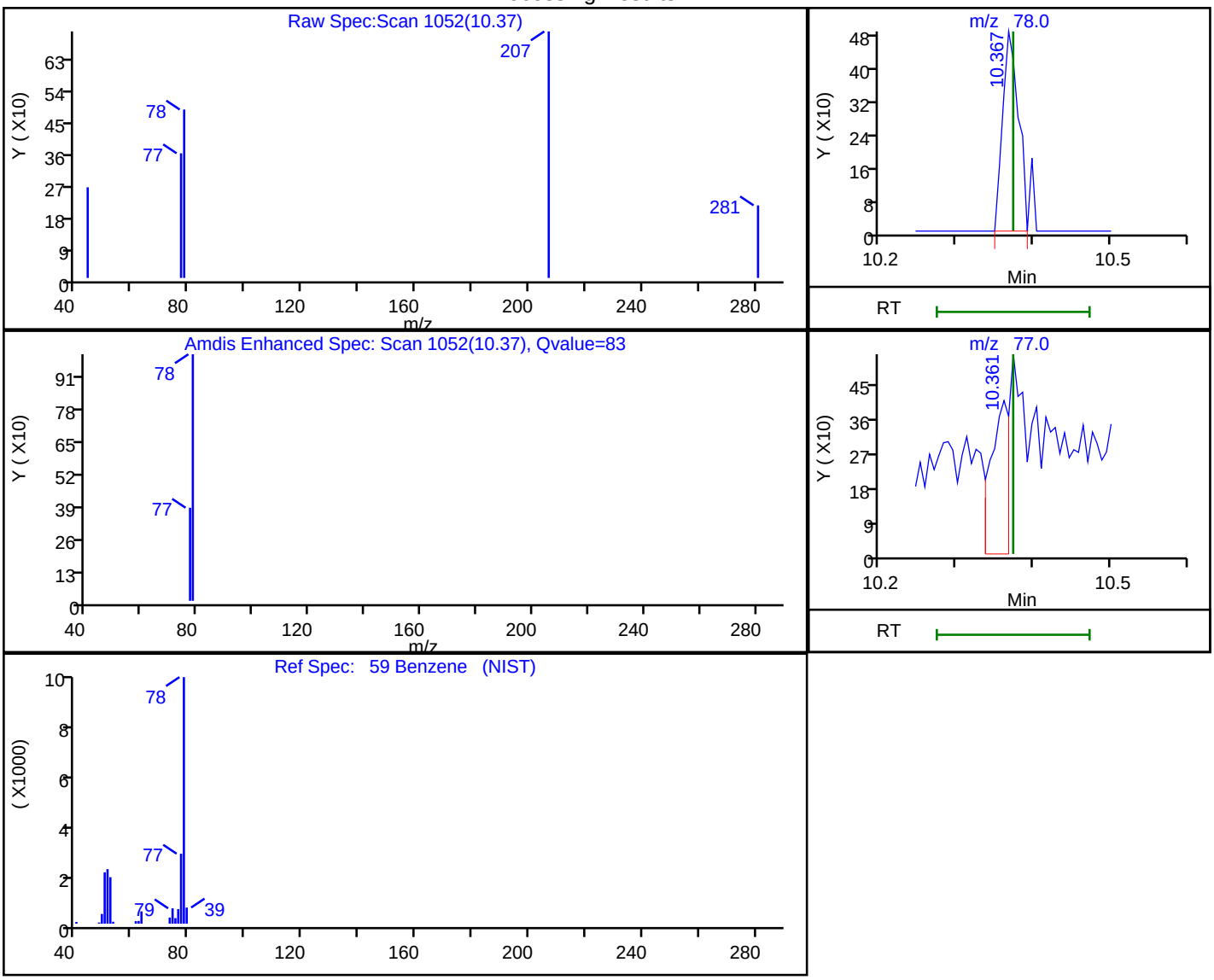
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP13\20180830-53568.b\08301818.D				
Injection Date:	30-Aug-2018 15:54:30	Instrument ID:	HP13		
Lims ID:	720-88220-A-7	Lab Sample ID:	720-88220-7		
Client ID:	DG-J5W				
Operator ID:	VOA	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP13_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

59 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
10.37	78.00	694	0.018813
10.36	77.00	670	

Reviewer: chaijita, 31-Aug-2018 08:56:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-H5W Lab Sample ID: 720-88220-8

Matrix: Water Lab File ID: 08301810.D

Analysis Method: 8260B Date Collected: 08/23/2018 10:15

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 11:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250553 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND	*	0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	8.8	J	50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-H5W Lab Sample ID: 720-88220-8

Matrix: Water Lab File ID: 08301810.D

Analysis Method: 8260B Date Collected: 08/23/2018 10:15

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 11:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250553 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	3.2		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND	*	0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	0.22	J	0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	ND		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-H5W Lab Sample ID: 720-88220-8

Matrix: Water Lab File ID: 08301810.D

Analysis Method: 8260B Date Collected: 08/23/2018 10:15

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 11:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250553 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		72-130
460-00-4	4-Bromofluorobenzene	92		67-130
2037-26-5	Toluene-d8 (Surr)	98		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301810.D
Lims ID: 720-88220-A-8
Client ID: DG-H5W
Sample Type: Client
Inject. Date: 30-Aug-2018 11:55:30 ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-8
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 12:20:47 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 12:20:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.159	7.159	0.000	0	74122	250.0	
* 2 Fluorobenzene	96	10.926	10.936	-0.010	99	786477	25.0	
* 4 Chlorobenzene-d5	117	14.763	14.774	-0.011	81	648572	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.903	17.903	0.000	92	345373	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.528	9.519	0.000	54	56587	7.09	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.045	10.035	0.000	0	37295	6.78	
$ 10 Toluene-d8 (Surr)	98	13.032	13.020	0.000	92	210959	7.33	
$ 11 4-Bromofluorobenzene	95	16.252	16.241	0.000	90	72339	6.88	
$ 12 1,2-Dichlorobenzene-d4	152	18.358	18.368	-0.011	77	77411	5.81	
19 Vinyl chloride	62	5.103	5.088	0.010	19	4491	0.1833	
23 Ethanol	45	5.842	5.842	0.000	71	5632	63.5	
28 Acetone	58	6.703	6.707	-0.010	67	1272	3.42	
34 Methylene Chloride	84	7.412	7.412	-0.010	42	688	0.0781	a
38 trans-1,2-Dichloroethene	96	8.212	8.204	0.000	61	2437	0.0172	
40 1,1-Dichloroethane	63	8.505	8.505	-0.001	1	1244	0.0776	a
44 2-Butanone (MEK)	72	8.971	8.963	0.000	92	3003	8.77	
48 cis-1,2-Dichloroethene	61	9.154	9.145	0.000	66	39880	3.20	
65 Trichloroethene	132	11.422	11.422	-0.010	48	2222	0.2198	a
75 Toluene	92	13.123	13.123	0.000	11	1228	0.0562	a
81 Tetrachloroethene	164	13.994	13.994	-0.010	21	876	0.1088	a
A 116 C4-C10	1	11.189	(5.123-17.255)		0	1201572	16.3	
A 153 C6-C8	1	11.199	(8.901-13.498)		0	470331	6.36	
A 154 C6-C9	1	12.166	(8.901-15.432)		0	616571	8.34	
A 117 C4-C12	1	12.738	(5.123-20.353)		0	1439315	19.5	
A 123 Aviation Gas	1	12.997	(8.901-17.093)		0	807183	NC	
A 119 C6-C10	1	13.078	(8.901-17.255)		0	812002	11.0	
A 118 C5-C12	1	13.528	(6.703-20.353)		0	1255074	17.0	
A 120 C6-C12	1	14.627	(8.901-20.353)		0	1049745	14.2	
A 155 C8-C10	1	15.336	(13.417-17.255)		0	347192	4.70	
A 121 C7-C12	1	15.786	(11.220-20.353)		0	660033	8.93	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

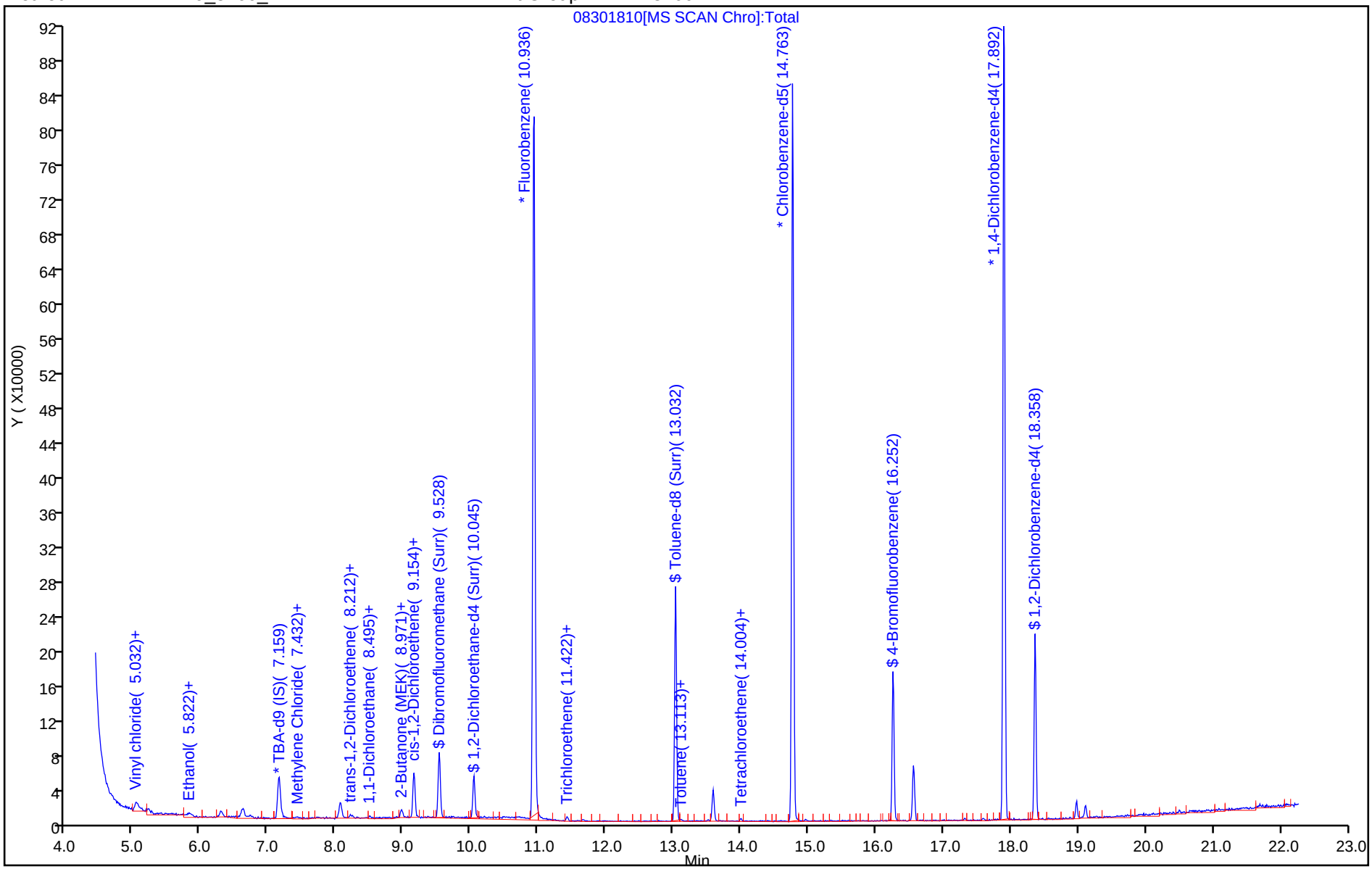
Reagents:

I_IS/SS_00092	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 30-Aug-2018 12:20:48 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301810.D				
Injection Date:	30-Aug-2018 11:55:30	Instrument ID:	HP9	Operator ID:	SF
Lims ID:	720-88220-A-8	Lab Sample ID:	720-88220-8	Worklist Smp#:	11
Client ID:	DG-H5W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	HP9_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301810.D
Lims ID: 720-88220-A-8
Client ID: DG-H5W
Sample Type: Client
Inject. Date: 30-Aug-2018 11:55:30 ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-8
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 12:20:47 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 12:20:47

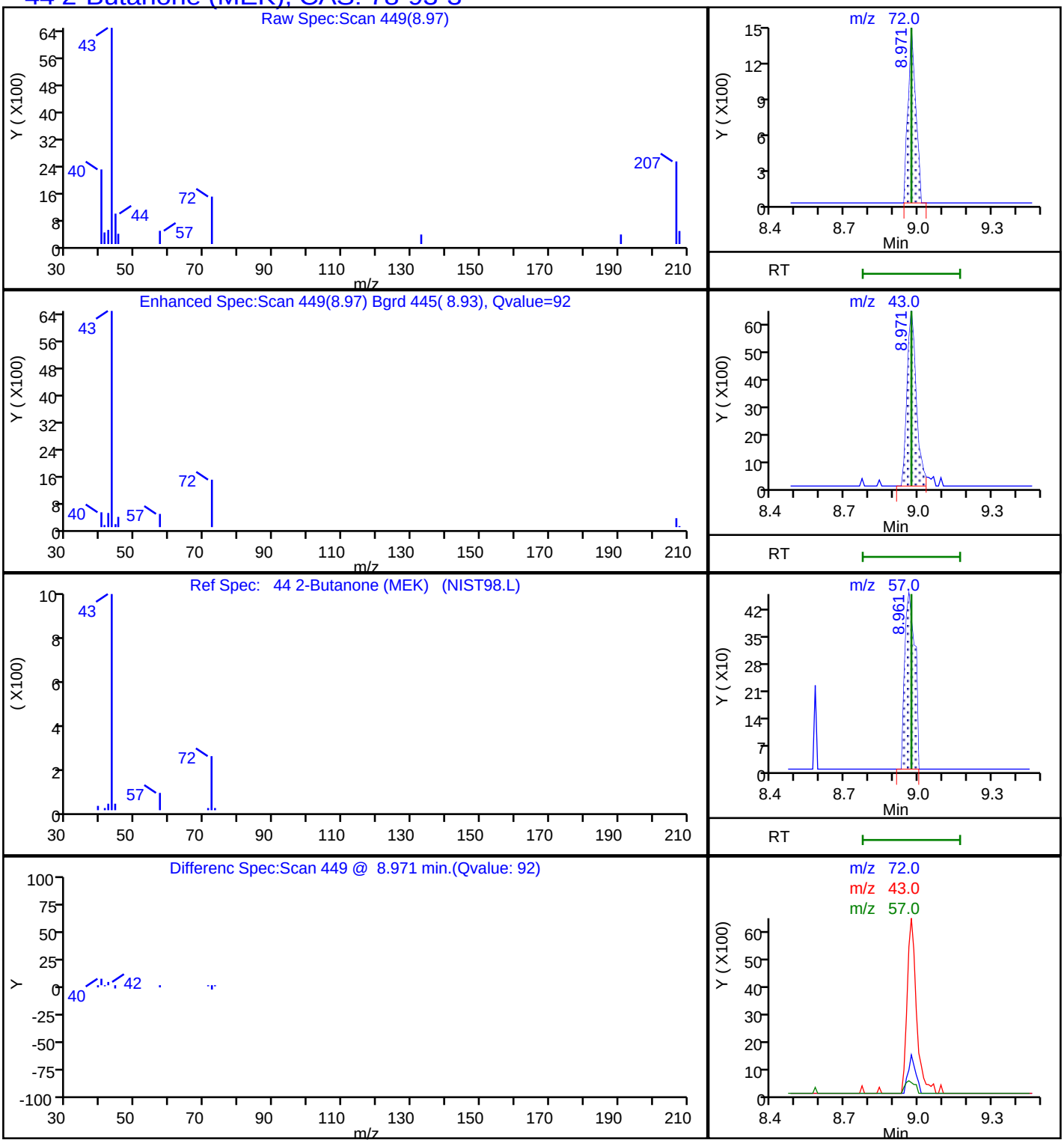
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	6.78	90.37
$ 10 Toluene-d8 (Surr)	7.50	7.33	97.77
$ 11 4-Bromofluorobenzene	7.50	6.88	91.76
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 30-Aug-2018 12:20:48 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301810.D				
Injection Date:	30-Aug-2018 11:55:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-8	Lab Sample ID:	720-88220-8		
Client ID:	DG-H5W				
Operator ID:	SF	ALS Bottle#:	9	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

44 2-Butanone (MEK), CAS: 78-93-3



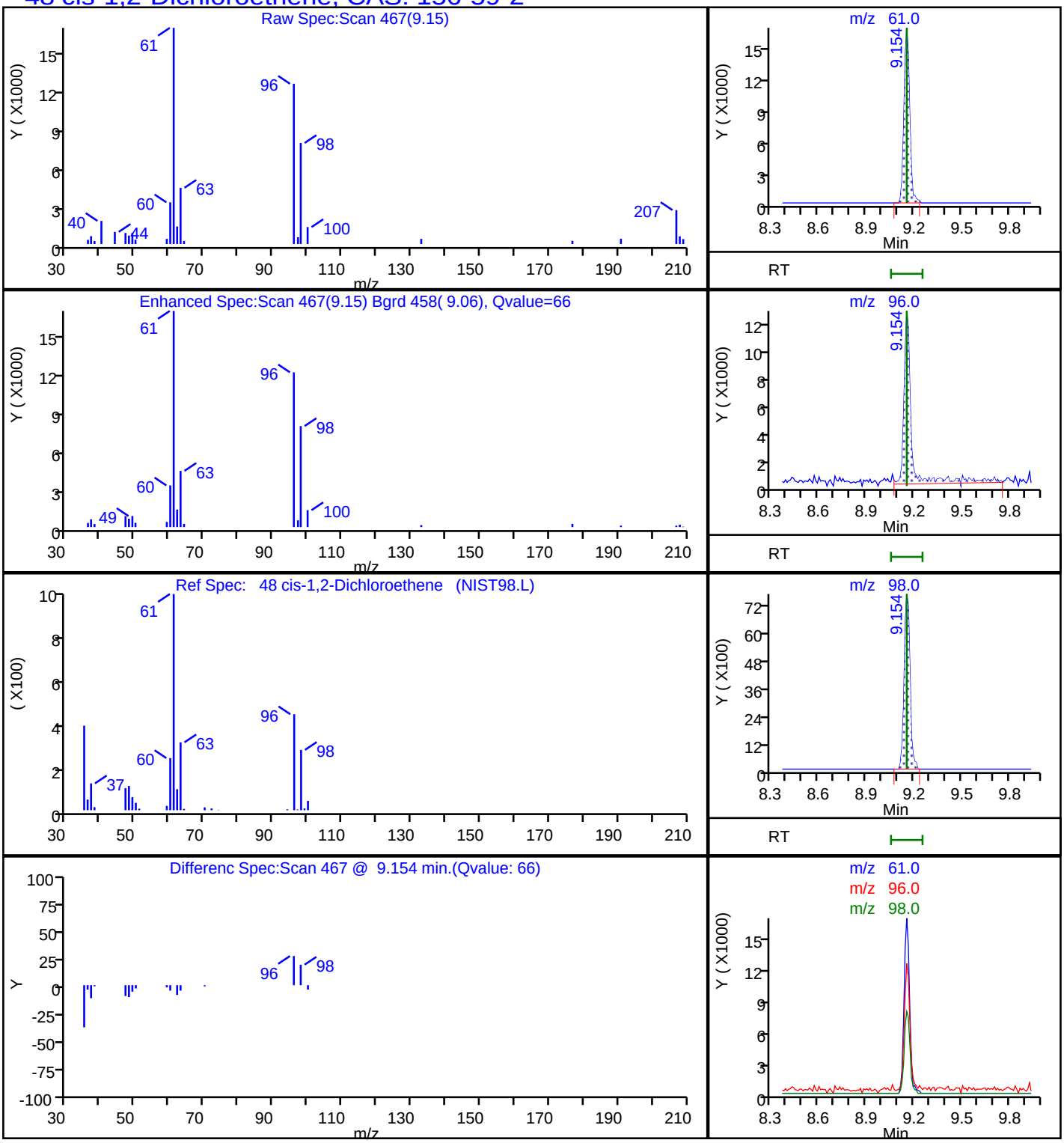
Report Date: 30-Aug-2018 12:20:48 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301810.D

Injection Date:	30-Aug-2018 11:55:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-8	Lab Sample ID:	720-88220-8		
Client ID:	DG-H5W				
Operator ID:	SF	ALS Bottle#:	9	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

48 cis-1,2-Dichloroethene, CAS: 156-59-2

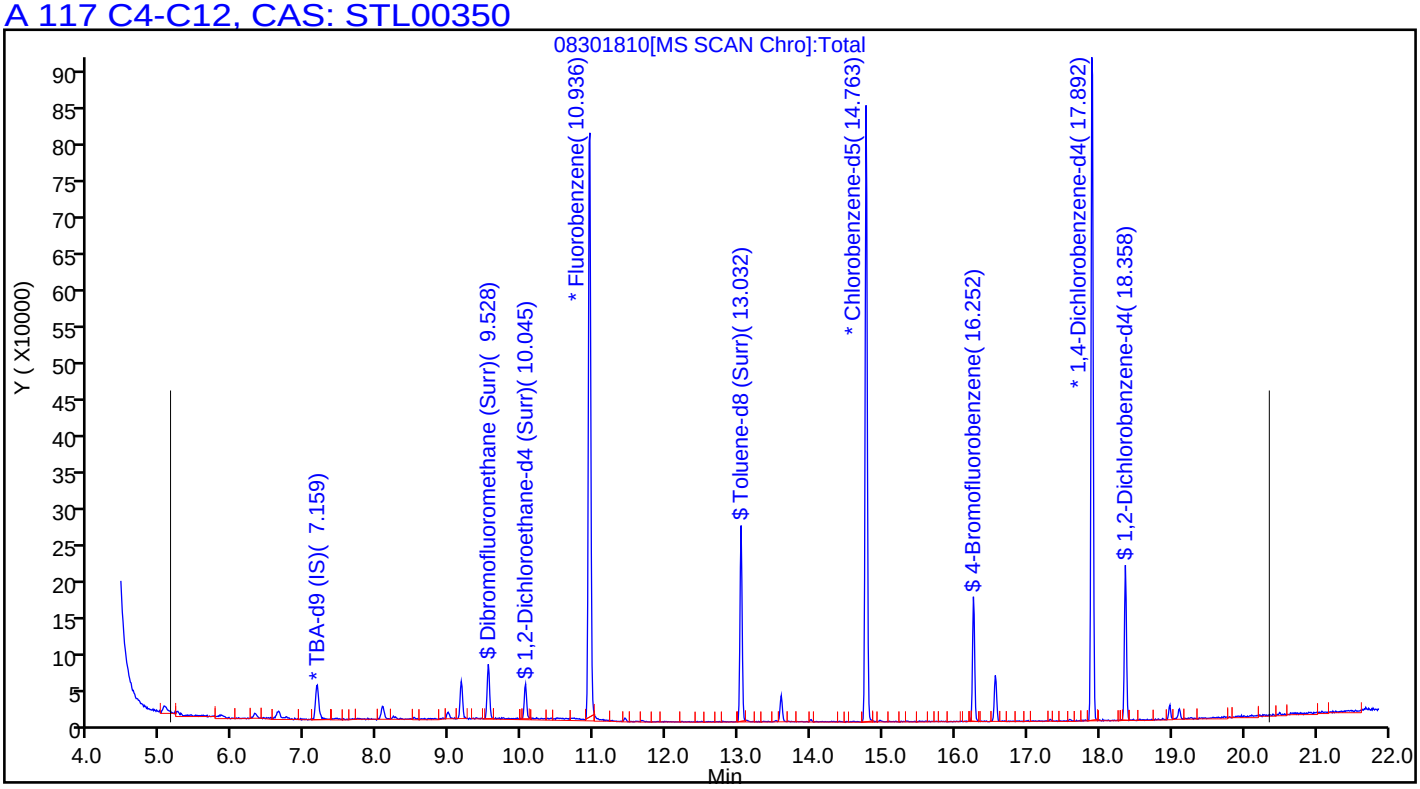


Report Date: 30-Aug-2018 12:20:48 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301810.D				
Injection Date:	30-Aug-2018 11:55:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-8	Lab Sample ID:	720-88220-8		
Client ID:	DG-H5W				
Operator ID:	SF	ALS Bottle#:	9	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350

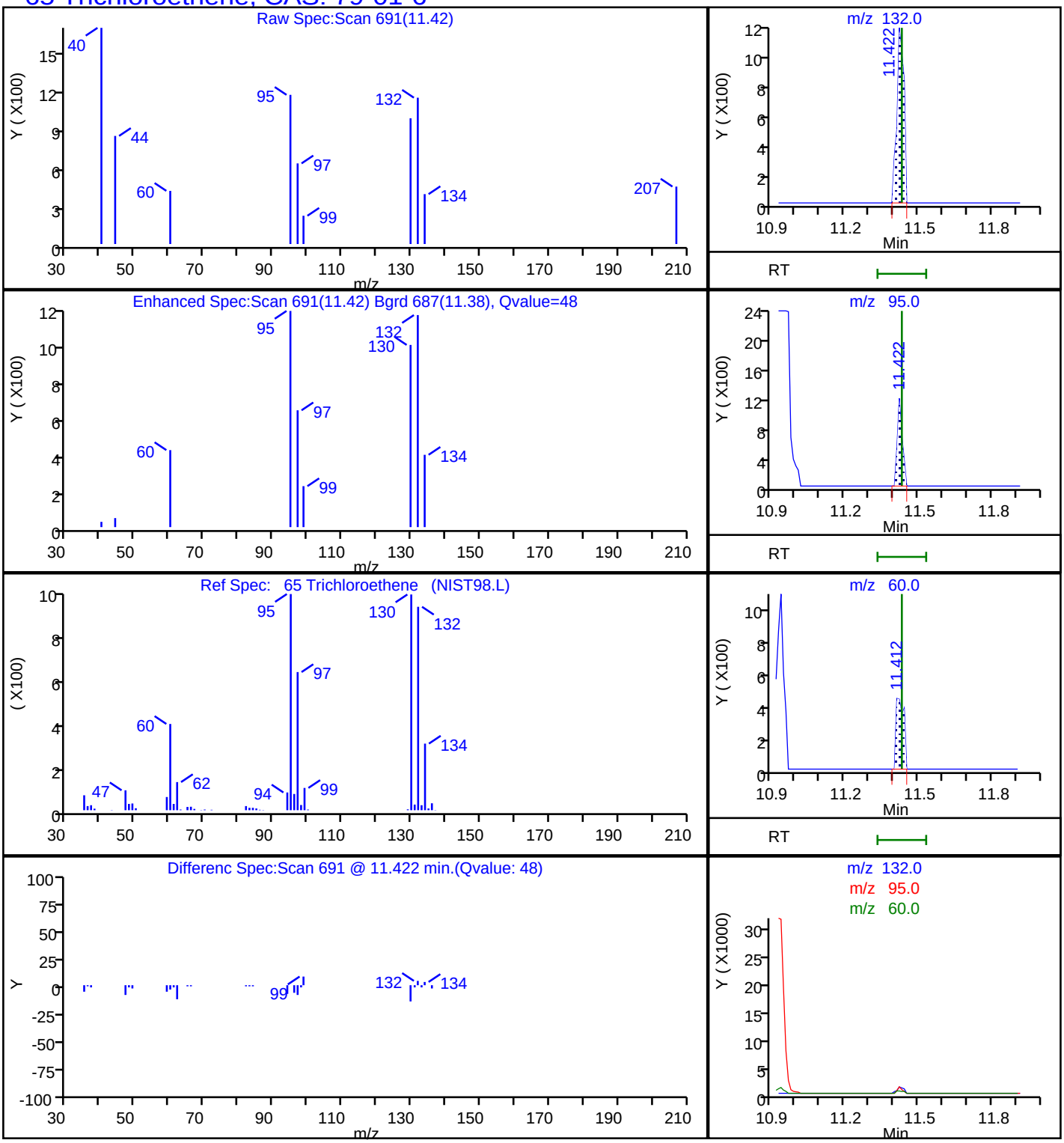


Report Date: 30-Aug-2018 12:20:48 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301810.D				
Injection Date:	30-Aug-2018 11:55:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-8	Lab Sample ID:	720-88220-8		
Client ID:	DG-H5W				
Operator ID:	SF	ALS Bottle#:	9	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

65 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

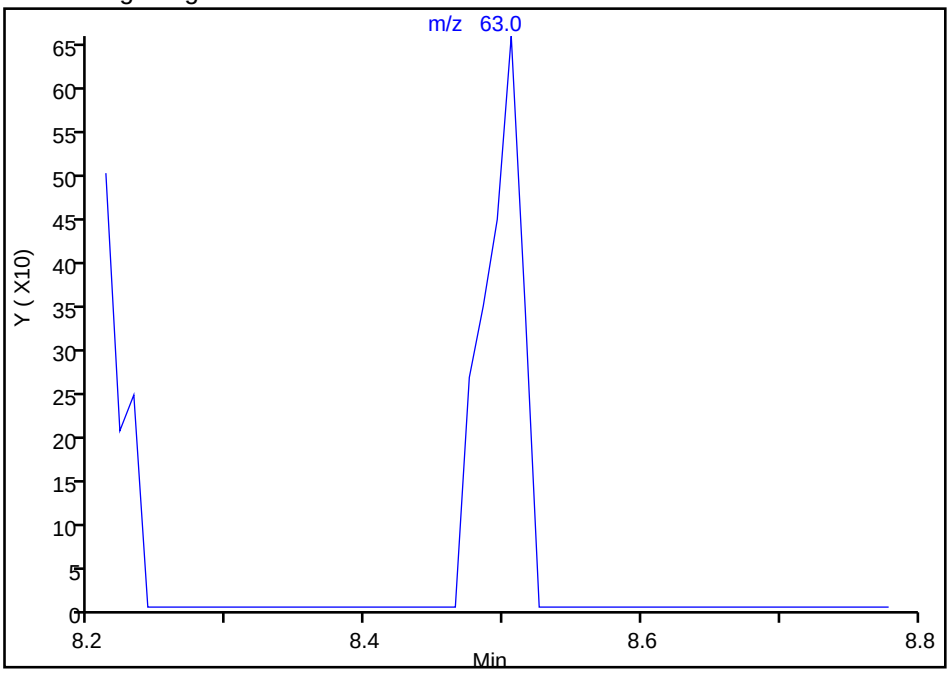
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301810.D				
Injection Date:	30-Aug-2018 11:55:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-8	Lab Sample ID:	720-88220-8		
Client ID:	DG-H5W				
Operator ID:	SF	ALS Bottle#:	9	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

40 1,1-Dichloroethane, CAS: 75-34-3

Signal: 1

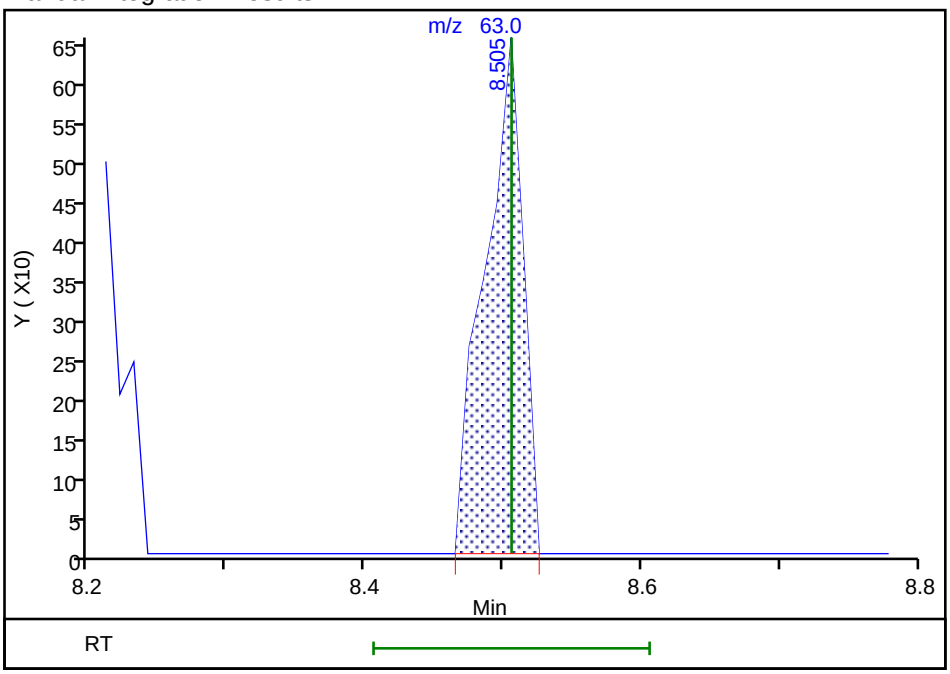
Not Detected
Expected RT: 8.51

Processing Integration Results



Manual Integration Results

RT: 8.51
Area: 1244
Amount: 0.077634
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 12:20:06
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

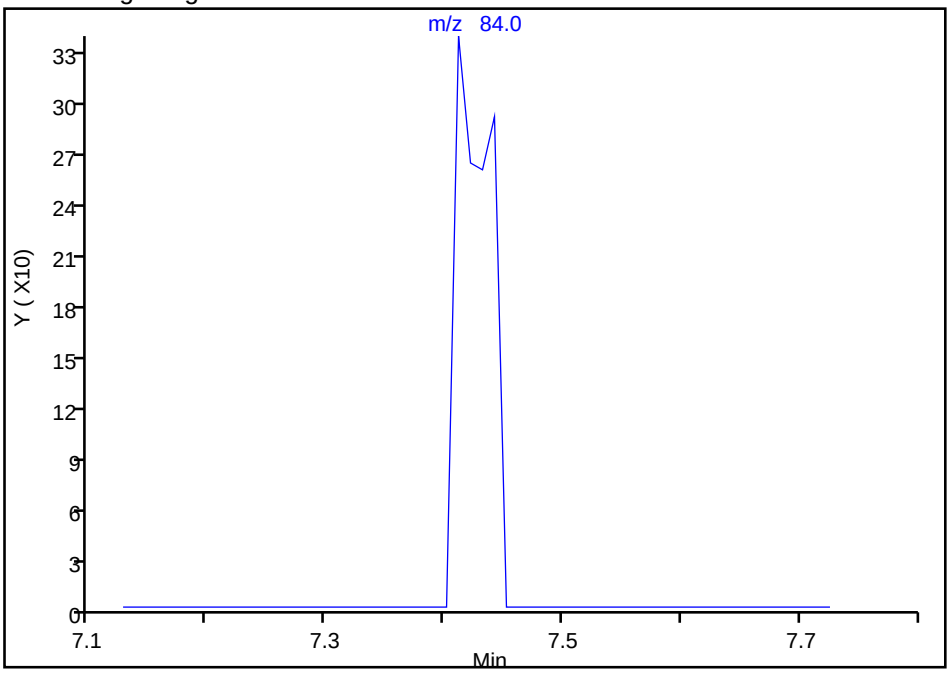
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301810.D				
Injection Date:	30-Aug-2018 11:55:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-8	Lab Sample ID:	720-88220-8		
Client ID:	DG-H5W				
Operator ID:	SF	ALS Bottle#:	9	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

34 Methylene Chloride, CAS: 75-09-2

Signal: 1

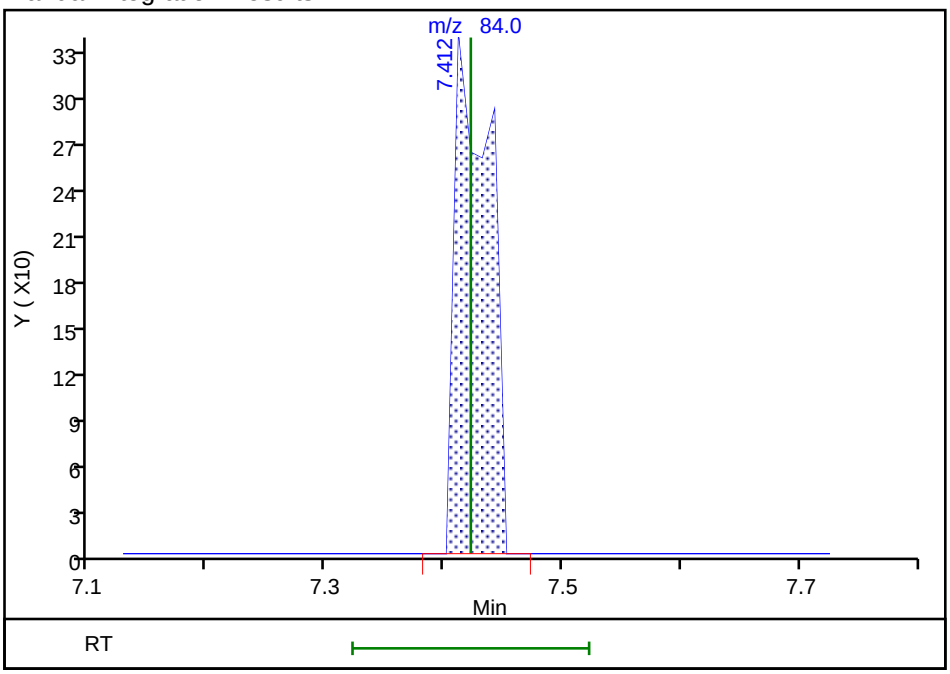
Not Detected
Expected RT: 7.42

Processing Integration Results



Manual Integration Results

RT: 7.41
Area: 688
Amount: 0.078122
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 12:20:00
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

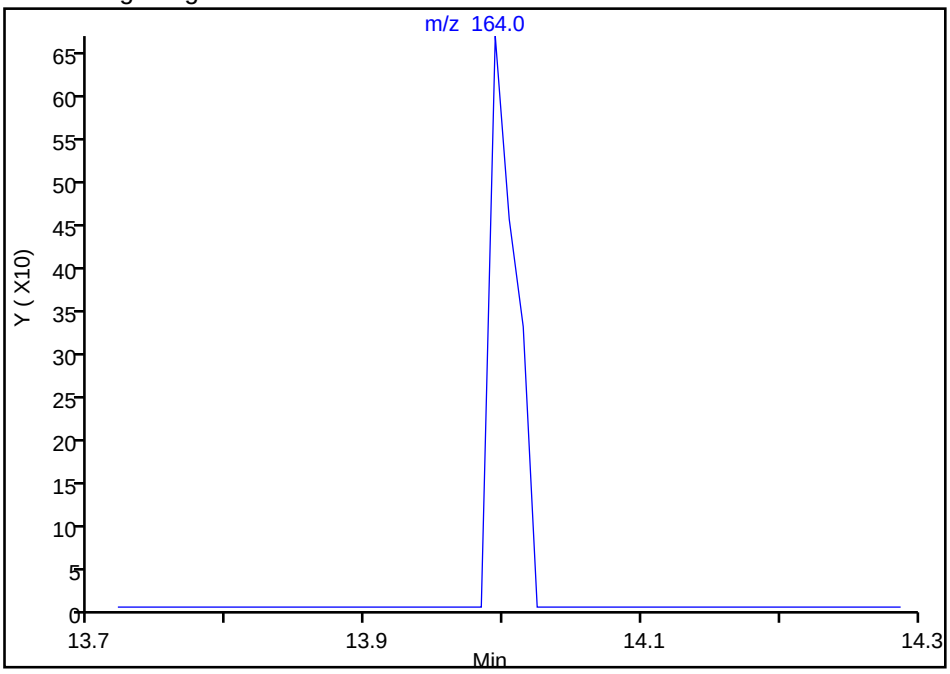
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301810.D				
Injection Date:	30-Aug-2018 11:55:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-8	Lab Sample ID:	720-88220-8		
Client ID:	DG-H5W				
Operator ID:	SF	ALS Bottle#:	9	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

81 Tetrachloroethene, CAS: 127-18-4

Signal: 1

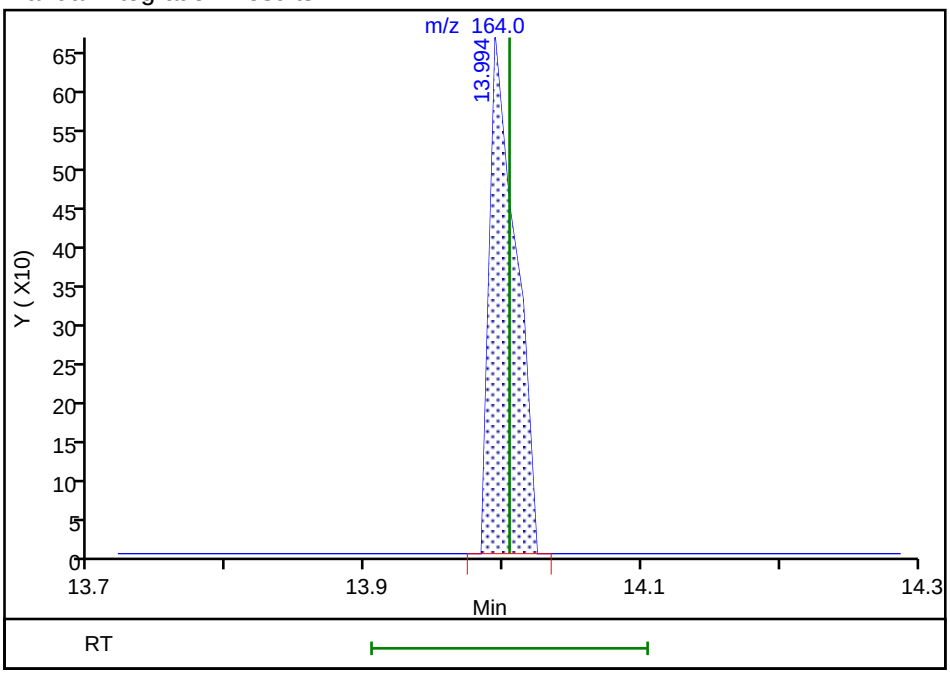
Not Detected
Expected RT: 14.00

Processing Integration Results



Manual Integration Results

RT: 13.99
Area: 876
Amount: 0.108843
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 12:20:35
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

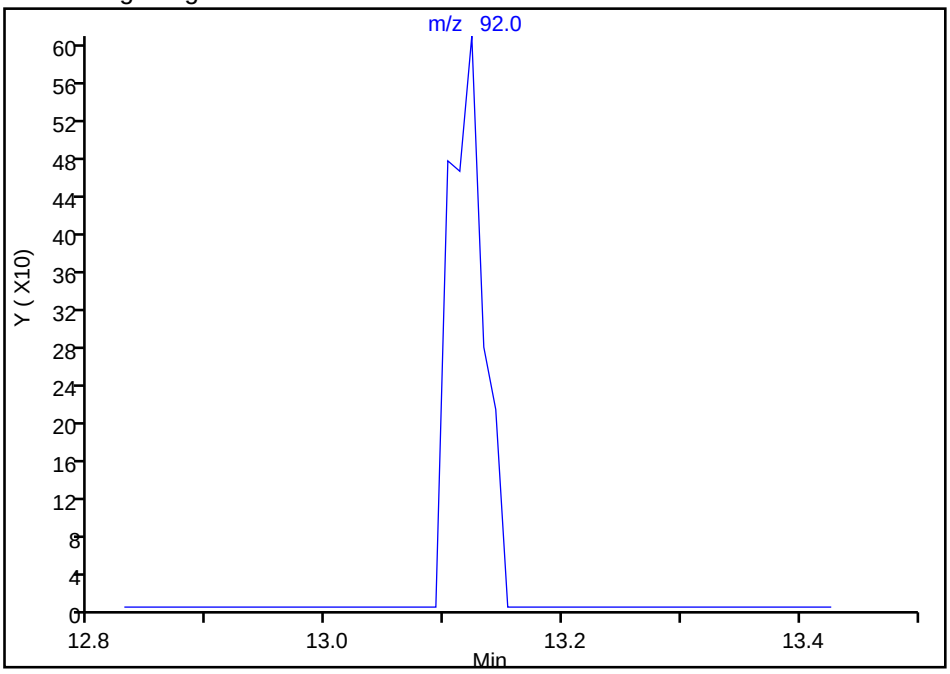
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301810.D				
Injection Date:	30-Aug-2018 11:55:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-8	Lab Sample ID:	720-88220-8		
Client ID:	DG-H5W				
Operator ID:	SF	ALS Bottle#:	9	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

75 Toluene, CAS: 108-88-3

Signal: 1

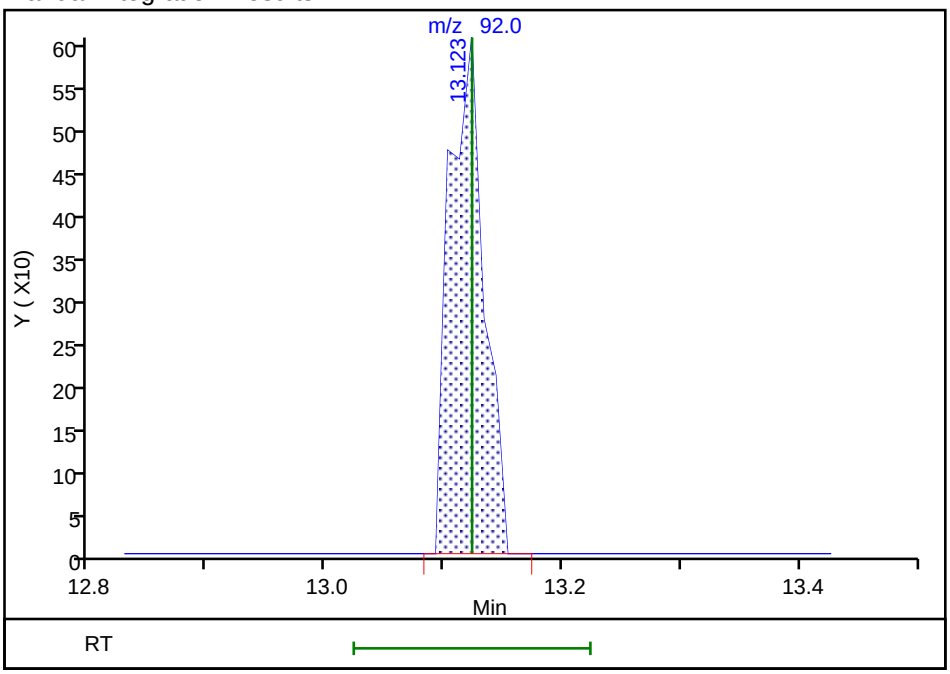
Not Detected
Expected RT: 13.12

Processing Integration Results



Manual Integration Results

RT: 13.12
Area: 1228
Amount: 0.056230
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 12:20:25
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

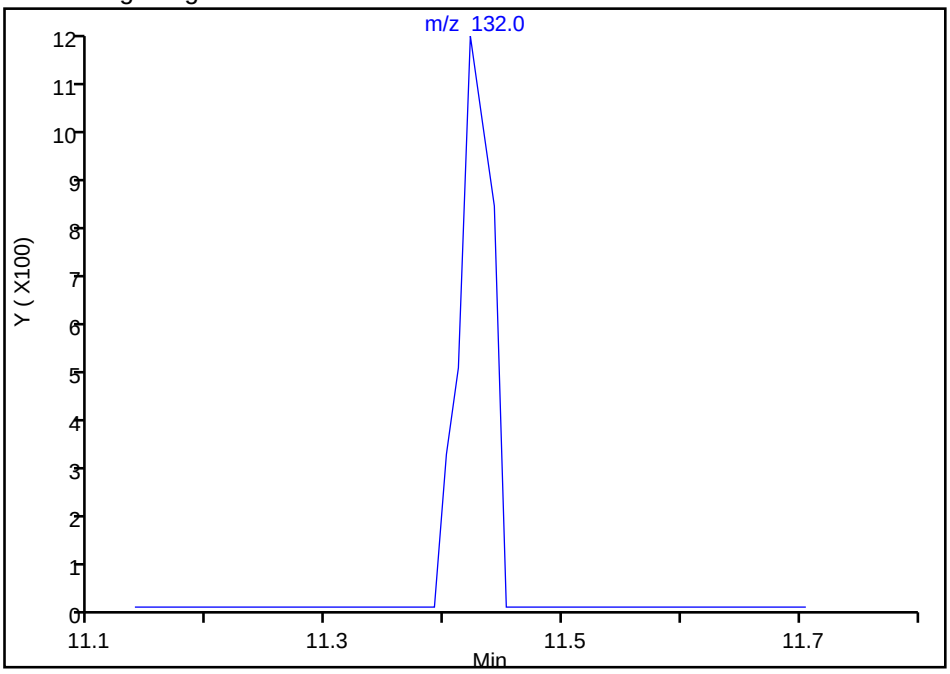
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301810.D				
Injection Date:	30-Aug-2018 11:55:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-8	Lab Sample ID:	720-88220-8		
Client ID:	DG-H5W				
Operator ID:	SF	ALS Bottle#:	9	Worklist Smp#:	11
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

65 Trichloroethene, CAS: 79-01-6

Signal: 1

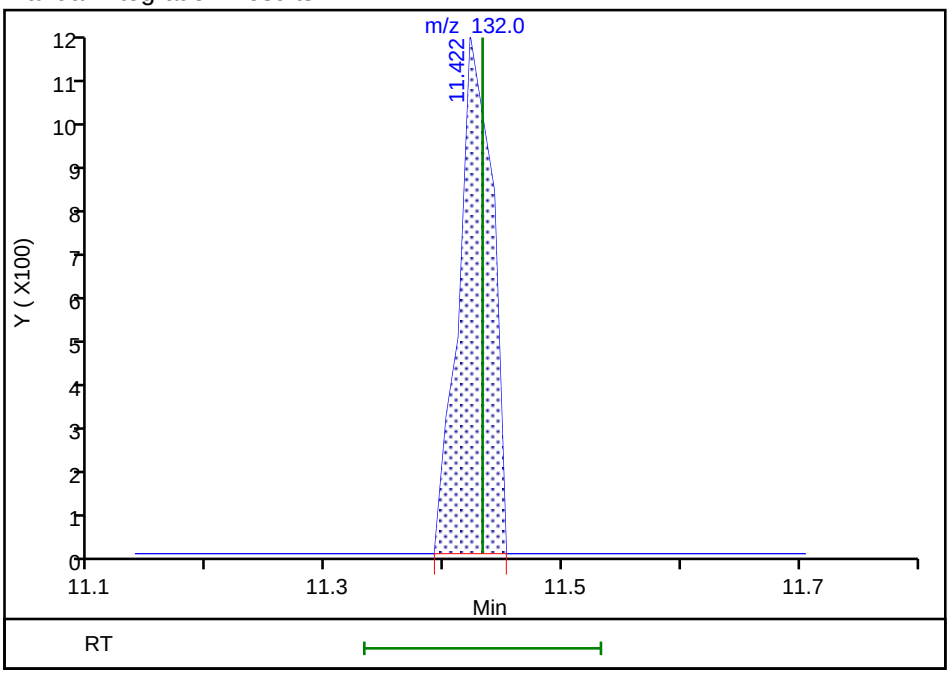
Not Detected
Expected RT: 11.43

Processing Integration Results



Manual Integration Results

RT: 11.42
Area: 2222
Amount: 0.219833
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 12:20:18
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-H6W Lab Sample ID: 720-88220-9

Matrix: Water Lab File ID: 08301811.D

Analysis Method: 8260B Date Collected: 08/23/2018 10:35

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 12:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250553 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND	*	0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-H6W Lab Sample ID: 720-88220-9

Matrix: Water Lab File ID: 08301811.D

Analysis Method: 8260B Date Collected: 08/23/2018 10:35

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 12:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250553 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	0.25	J	0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND	*	0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	ND		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	ND		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-H6W Lab Sample ID: 720-88220-9

Matrix: Water Lab File ID: 08301811.D

Analysis Method: 8260B Date Collected: 08/23/2018 10:35

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 12:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250553 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		72-130
460-00-4	4-Bromofluorobenzene	93		67-130
2037-26-5	Toluene-d8 (Surr)	99		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301811.D
Lims ID: 720-88220-B-9
Client ID: DG-H6W
Sample Type: Client
Inject. Date: 30-Aug-2018 12:24:30 ALS Bottle#: 10 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-B-9
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 13:00:17 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 13:00:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.149	7.159	-0.010	0	69869	250.0	
* 2 Fluorobenzene	96	10.926	10.936	-0.010	99	721000	25.0	
* 4 Chlorobenzene-d5	117	14.764	14.774	-0.010	81	591151	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.903	17.903	0.000	92	326376	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.528	9.520	0.000	54	53768	7.35	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.045	10.036	0.000	0	34091	6.76	
$ 10 Toluene-d8 (Surr)	98	13.032	13.020	0.000	91	196504	7.45	
$ 11 4-Bromofluorobenzene	95	16.252	16.241	0.000	89	67084	7.00	
$ 12 1,2-Dichlorobenzene-d4	152	18.358	18.369	-0.011	76	72559	5.77	
27 Isopropyl alcohol	45	6.622	6.613	0.000	86	19405	69.6	
28 Acetone	58	6.713	6.713	0.000	38	584	1.71	a
48 cis-1,2-Dichloroethene	61	9.154	9.154	0.000	15	2822	0.2473	a
59 Benzene	78	10.703	10.703	0.000	15	2112	0.0721	a
75 Toluene	92	13.113	13.113	-0.010	20	1583	0.0795	a
81 Tetrachloroethene	164	14.004	14.004	0.000	10	868	0.1176	a
85 m-Xylene & p-Xylene	91	15.240	15.240	-0.010	1	394	0.0131	a
A 116 C4-C10	1	11.189	(5.123-17.255)		0	1028916	15.2	
A 153 C6-C8	1	11.199	(8.901-13.498)		0	234595	3.46	
A 154 C6-C9	1	12.166	(8.901-15.432)		0	370160	5.46	
A 117 C4-C12	1	12.738	(5.123-20.353)		0	1234445	18.2	
A 123 Aviation Gas	1	12.997	(8.901-17.093)		0	562819	NC	
A 119 C6-C10	1	13.078	(8.901-17.255)		0	562819	8.31	
A 118 C5-C12	1	13.528	(6.703-20.353)		0	970109	14.3	
A 120 C6-C12	1	14.627	(8.901-20.353)		0	768348	11.3	
A 155 C8-C10	1	15.336	(13.417-17.255)		0	328224	4.84	
A 121 C7-C12	1	15.786	(11.220-20.353)		0	640455	9.45	
S 122 Xylenes, Total	1				0		0.0131	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

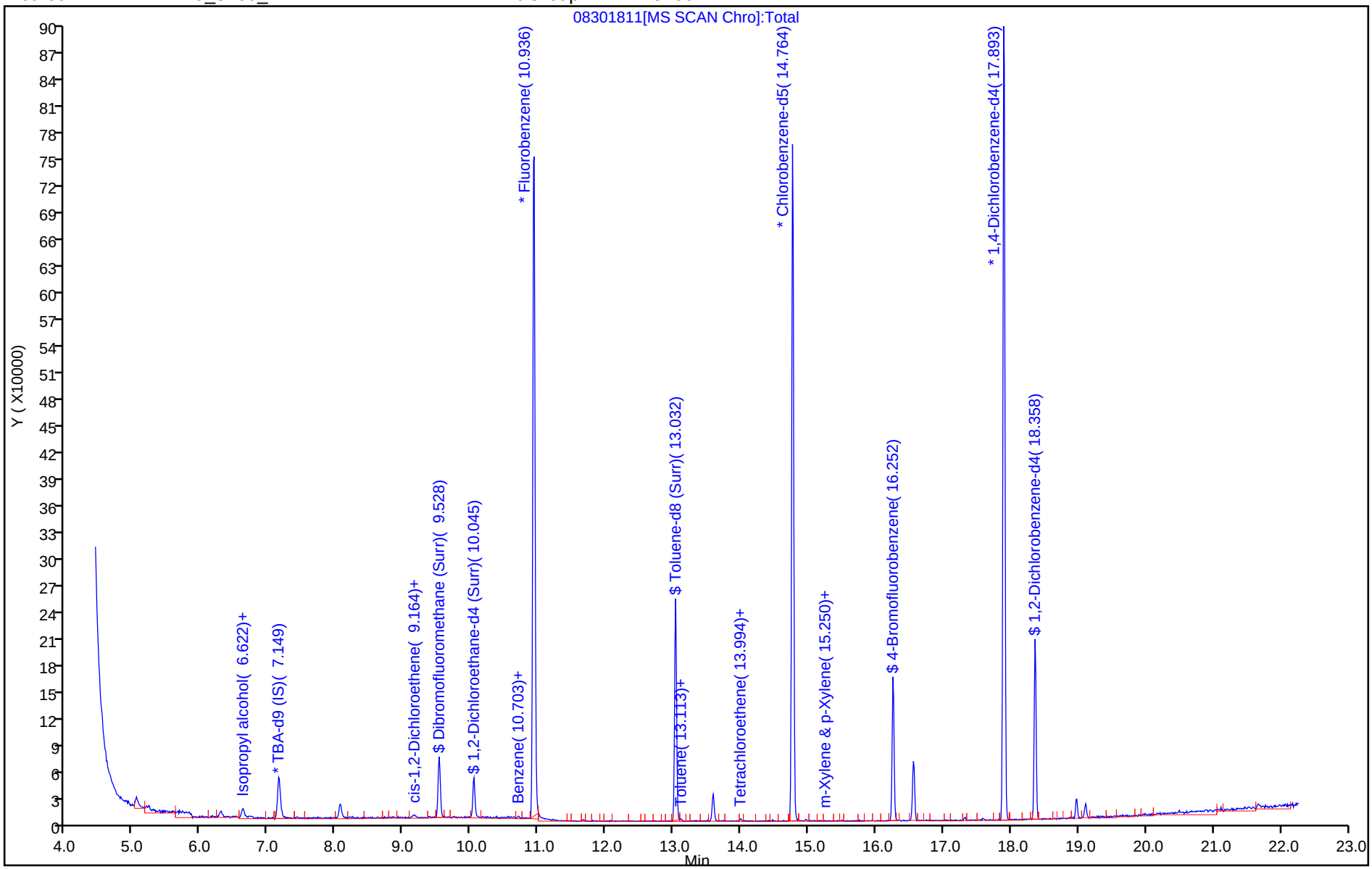
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 13:00:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301811.D				
Injection Date:	30-Aug-2018 12:24:30	Instrument ID:	HP9	Operator ID:	SF
Lims ID:	720-88220-B-9	Lab Sample ID:	720-88220-9	Worklist Smp#:	12
Client ID:	DG-H6W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	HP9_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301811.D
Lims ID: 720-88220-B-9
Client ID: DG-H6W
Sample Type: Client
Inject. Date: 30-Aug-2018 12:24:30 ALS Bottle#: 10 Worklist Smp#: 12
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-B-9
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 13:00:17 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 13:00:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	6.76	90.11
$ 10 Toluene-d8 (Surr)	7.50	7.45	99.34
$ 11 4-Bromofluorobenzene	7.50	7.00	93.36
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

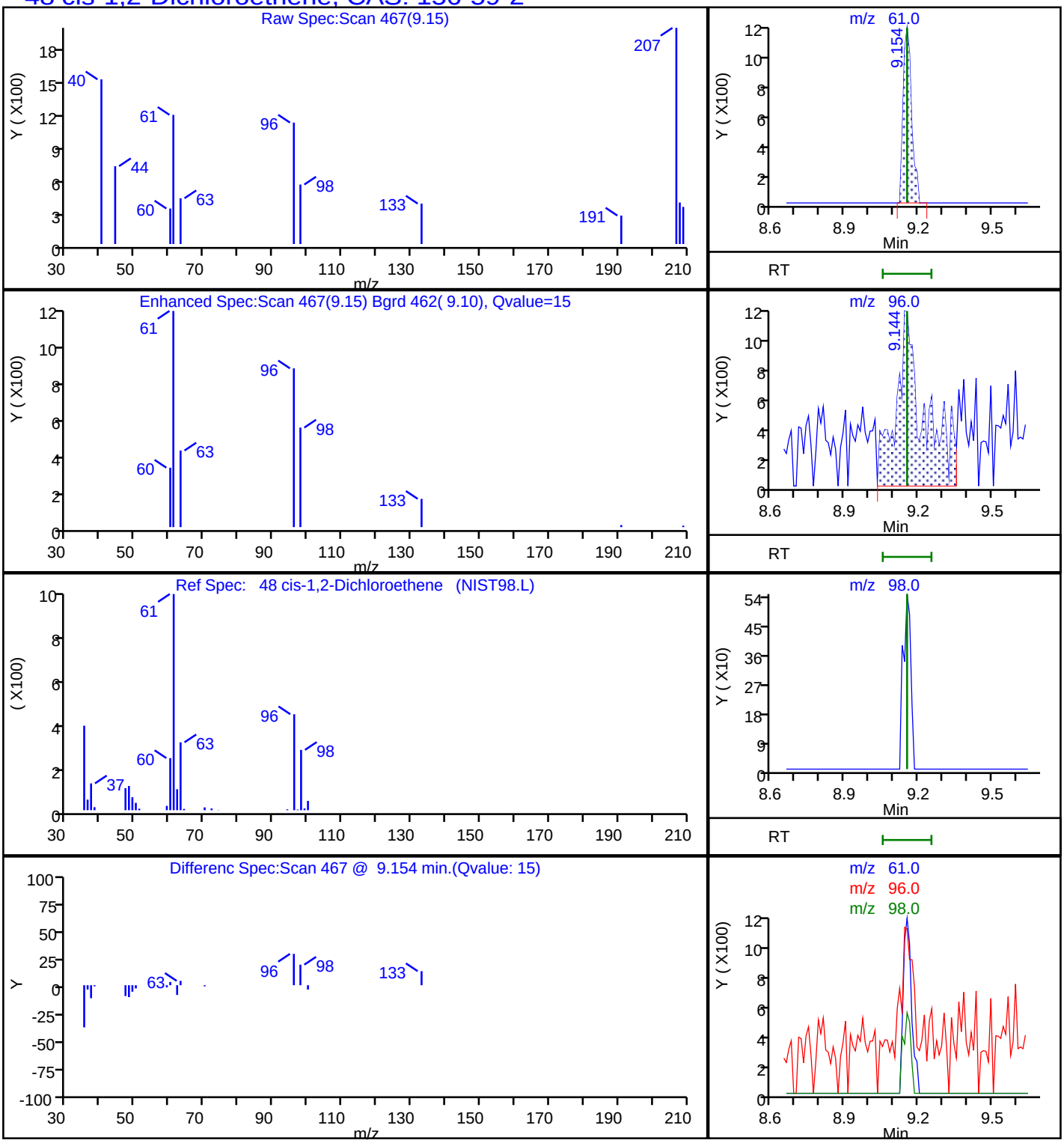
Report Date: 30-Aug-2018 13:00:17 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301811.D

Injection Date:	30-Aug-2018 12:24:30	Instrument ID:	HP9		
Lims ID:	720-88220-B-9	Lab Sample ID:	720-88220-9		
Client ID:	DG-H6W				
Operator ID:	SF	ALS Bottle#:	10	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

48 cis-1,2-Dichloroethene, CAS: 156-59-2



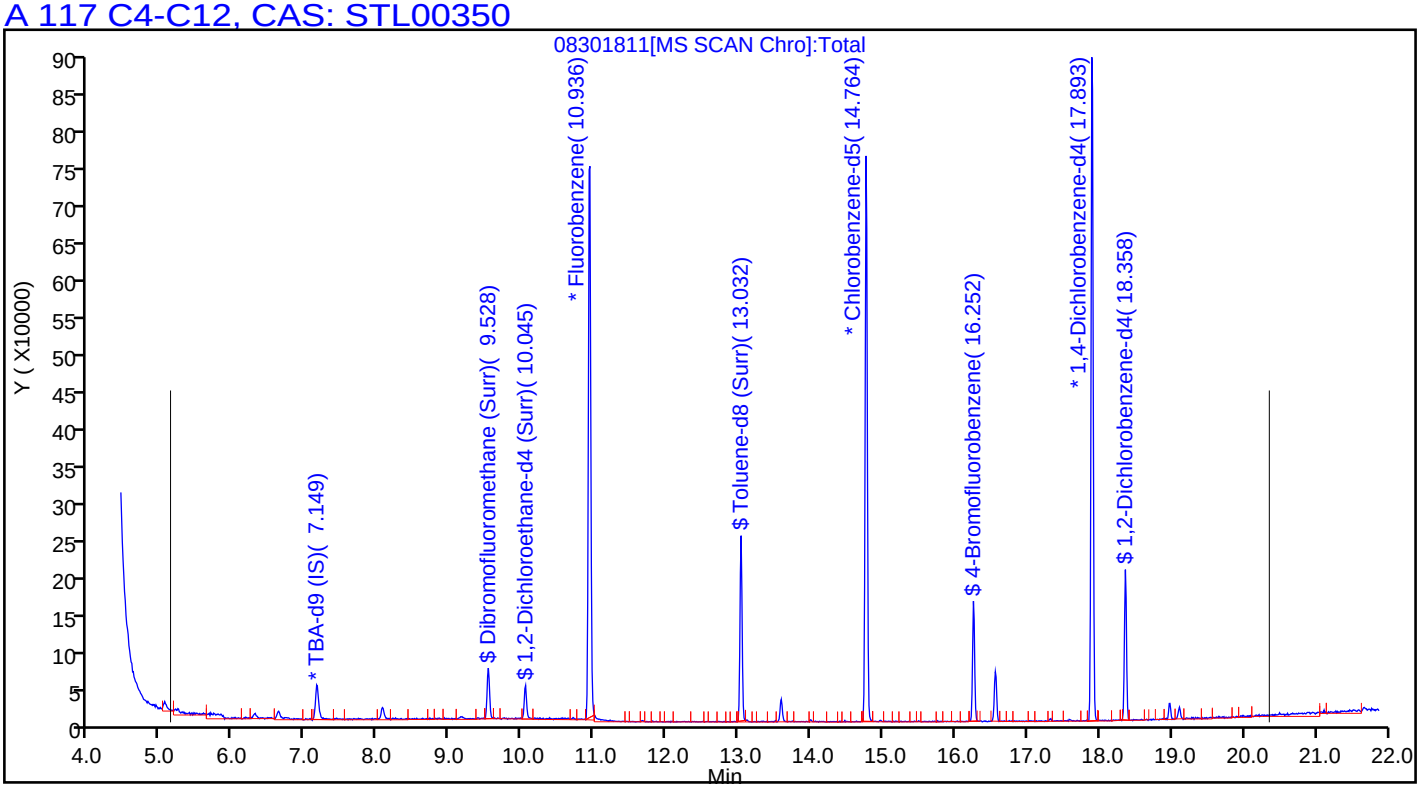
Report Date: 30-Aug-2018 13:00:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301811.D

Injection Date:	30-Aug-2018 12:24:30	Instrument ID:	HP9		
Lims ID:	720-88220-B-9	Lab Sample ID:	720-88220-9		
Client ID:	DG-H6W				
Operator ID:	SF	ALS Bottle#:	10	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

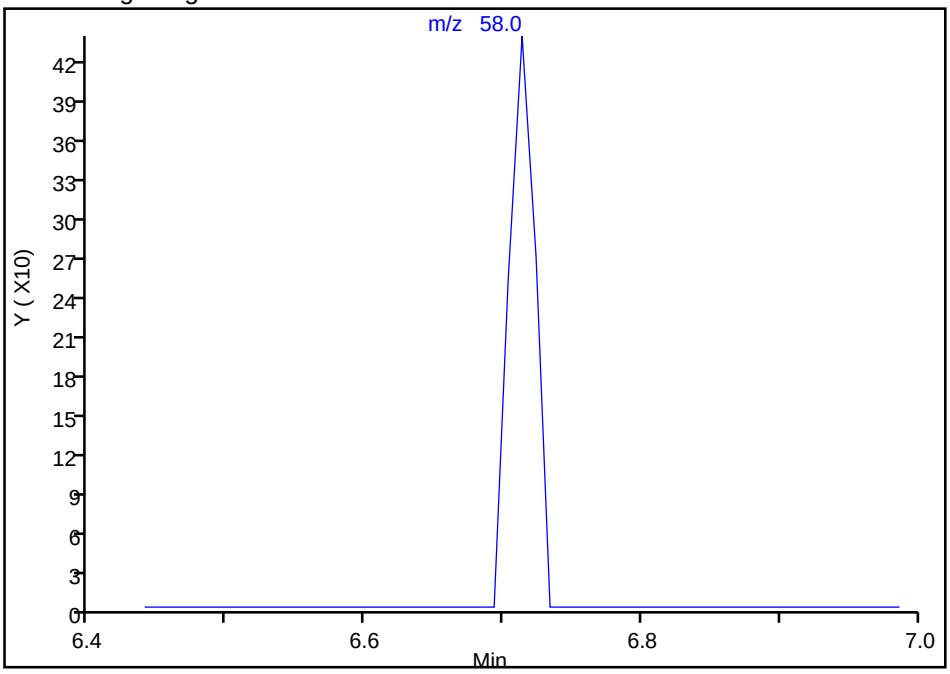
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301811.D				
Injection Date:	30-Aug-2018 12:24:30	Instrument ID:	HP9		
Lims ID:	720-88220-B-9	Lab Sample ID:	720-88220-9		
Client ID:	DG-H6W				
Operator ID:	SF	ALS Bottle#:	10	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1

Signal: 1

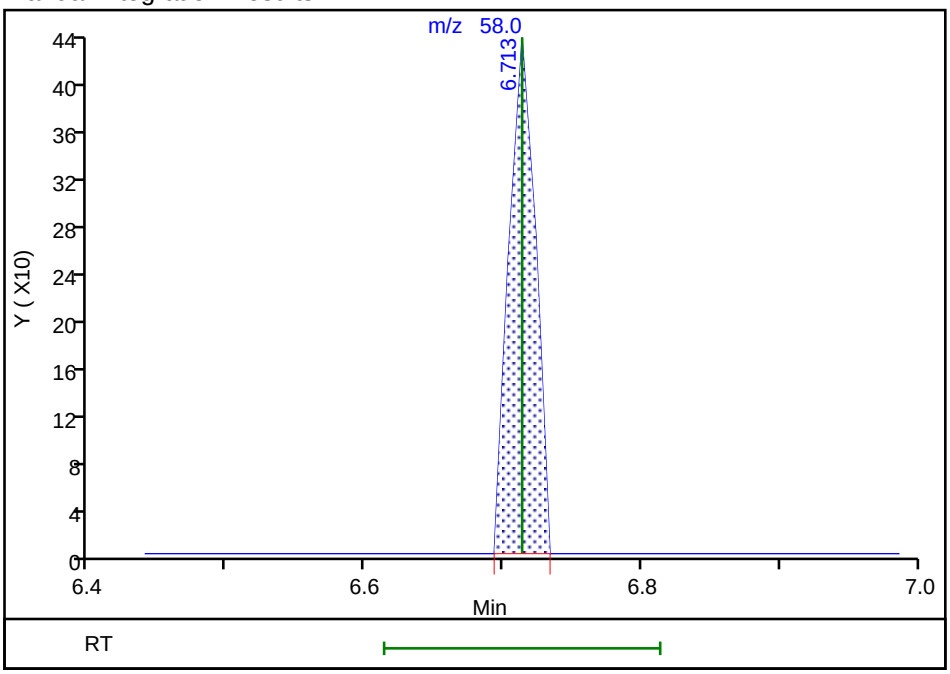
Not Detected
Expected RT: 6.71

Processing Integration Results



Manual Integration Results

RT: 6.71
Area: 584
Amount: 1.710663
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 12:59:18
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

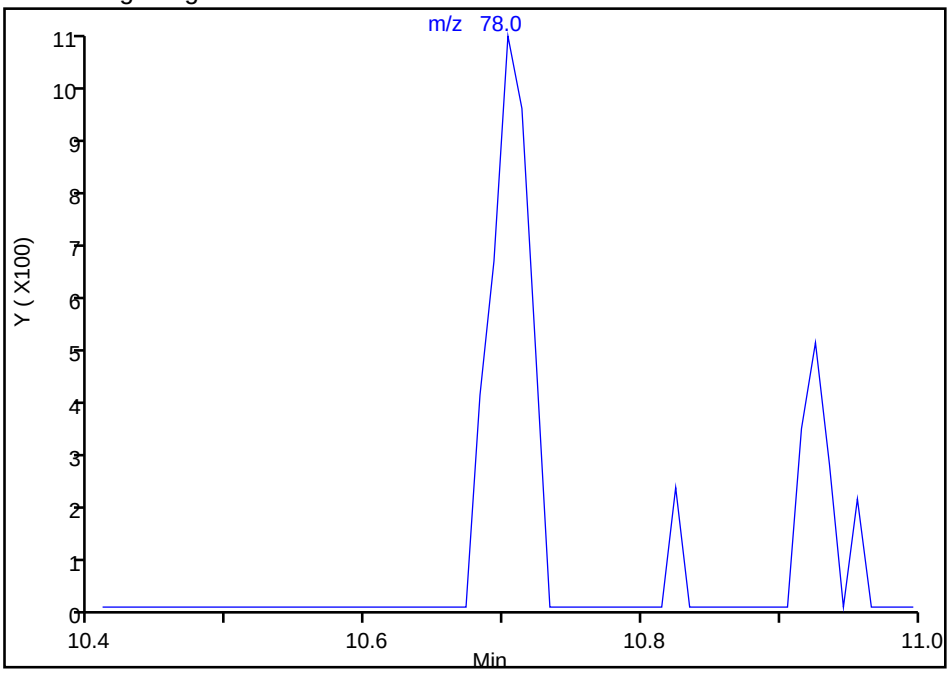
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301811.D				
Injection Date:	30-Aug-2018 12:24:30	Instrument ID:	HP9		
Lims ID:	720-88220-B-9	Lab Sample ID:	720-88220-9		
Client ID:	DG-H6W				
Operator ID:	SF	ALS Bottle#:	10	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

59 Benzene, CAS: 71-43-2

Signal: 1

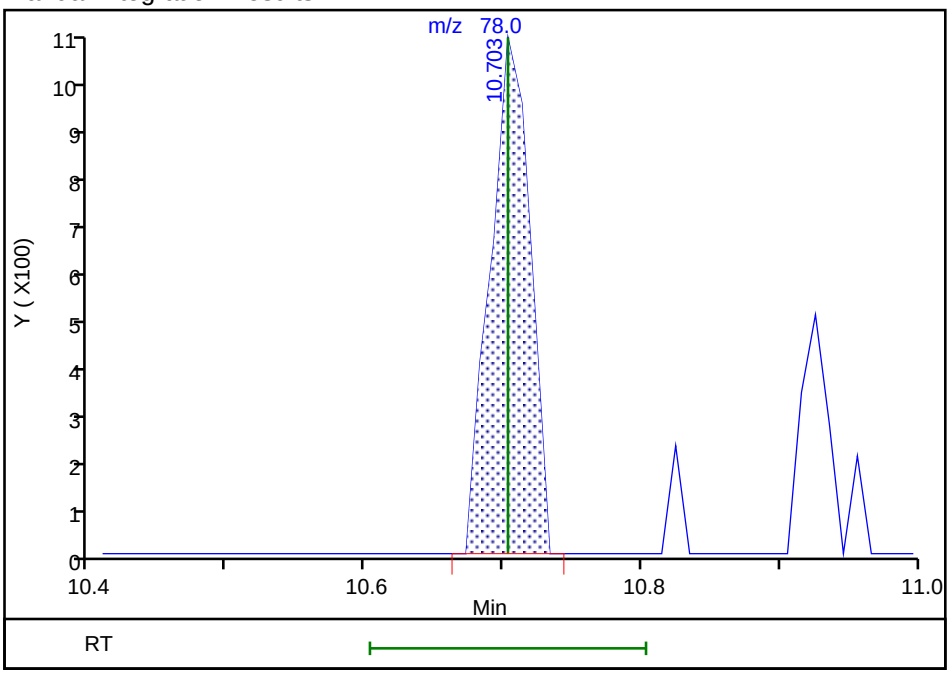
Not Detected
Expected RT: 10.70

Processing Integration Results



Manual Integration Results

RT: 10.70
Area: 2112
Amount: 0.072110
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 12:59:40
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

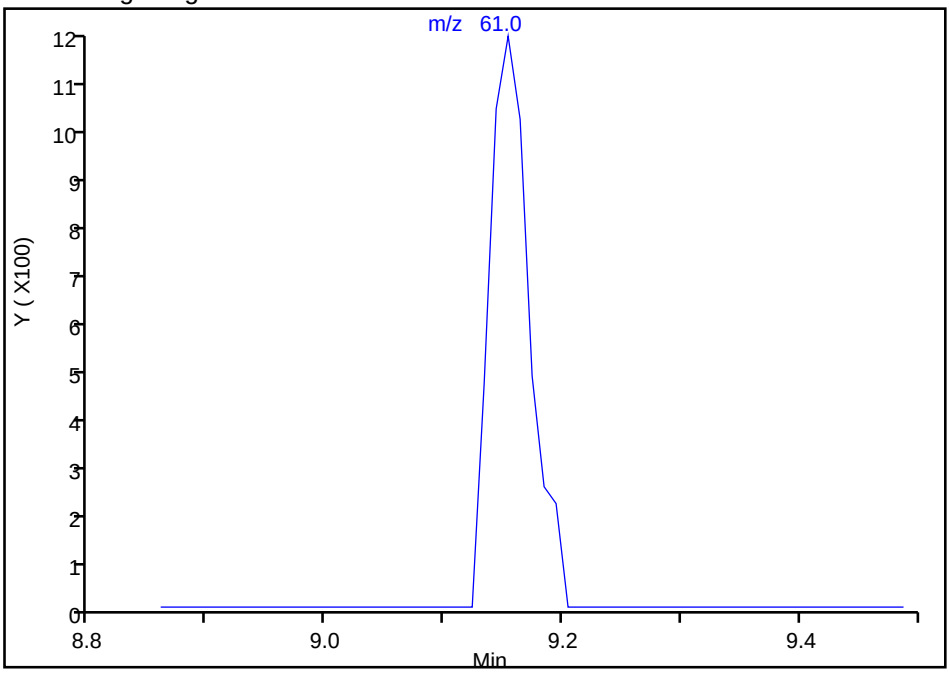
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301811.D				
Injection Date:	30-Aug-2018 12:24:30	Instrument ID:	HP9		
Lims ID:	720-88220-B-9	Lab Sample ID:	720-88220-9		
Client ID:	DG-H6W				
Operator ID:	SF	ALS Bottle#:	10	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

48 cis-1,2-Dichloroethene, CAS: 156-59-2

Signal: 1

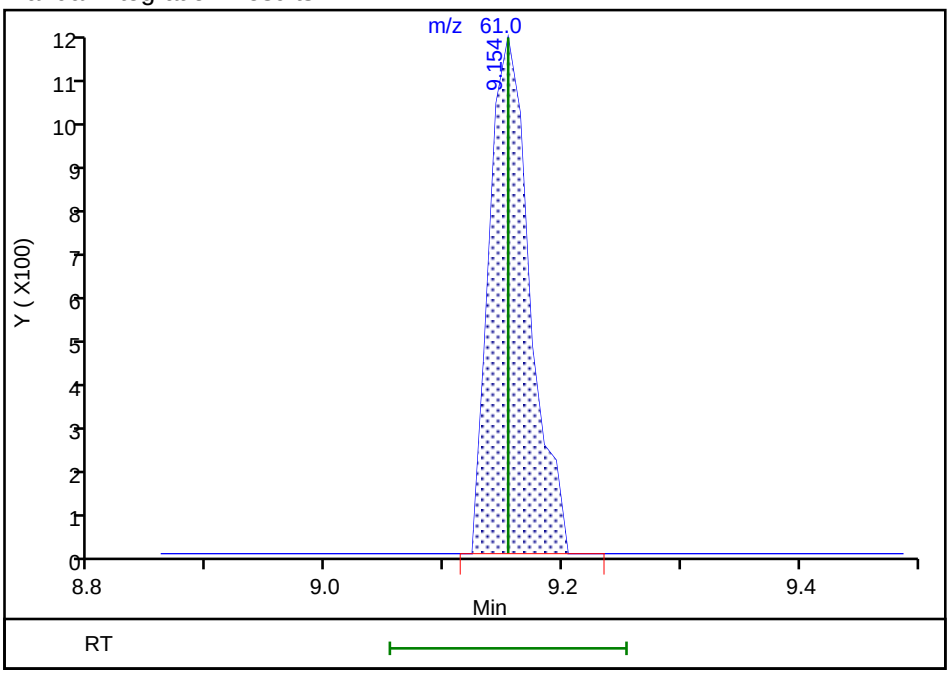
Not Detected
Expected RT: 9.15

Processing Integration Results



Manual Integration Results

RT: 9.15
Area: 2822
Amount: 0.247297
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 12:59:31
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

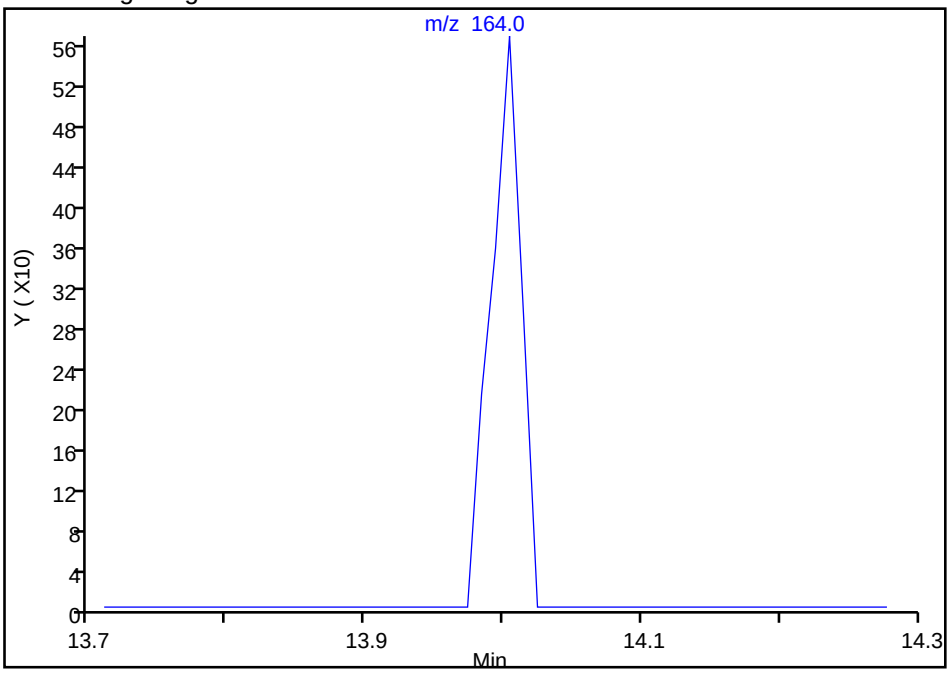
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301811.D				
Injection Date:	30-Aug-2018 12:24:30	Instrument ID:	HP9		
Lims ID:	720-88220-B-9	Lab Sample ID:	720-88220-9		
Client ID:	DG-H6W				
Operator ID:	SF	ALS Bottle#:	10	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

81 Tetrachloroethene, CAS: 127-18-4

Signal: 1

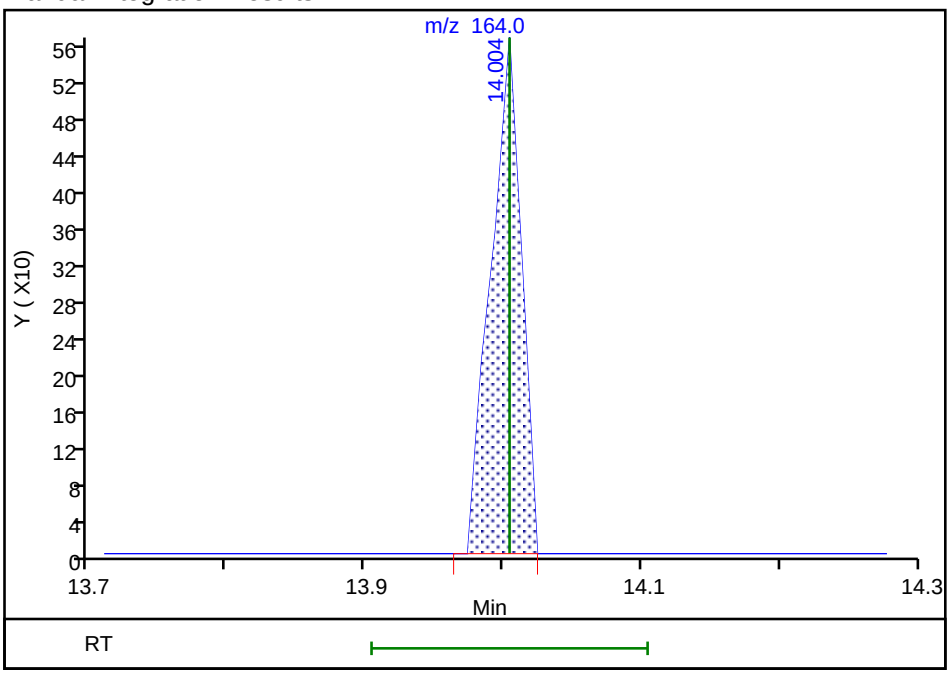
Not Detected
Expected RT: 14.00

Processing Integration Results



Manual Integration Results

RT: 14.00
Area: 868
Amount: 0.117643
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 12:59:56
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

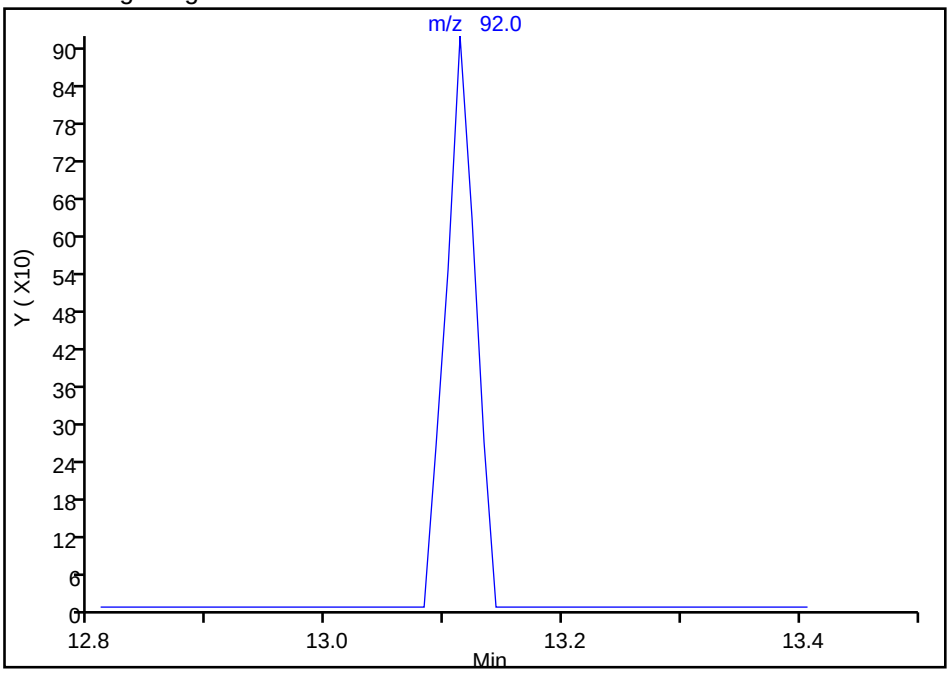
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301811.D				
Injection Date:	30-Aug-2018 12:24:30	Instrument ID:	HP9		
Lims ID:	720-88220-B-9	Lab Sample ID:	720-88220-9		
Client ID:	DG-H6W				
Operator ID:	SF	ALS Bottle#:	10	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

75 Toluene, CAS: 108-88-3

Signal: 1

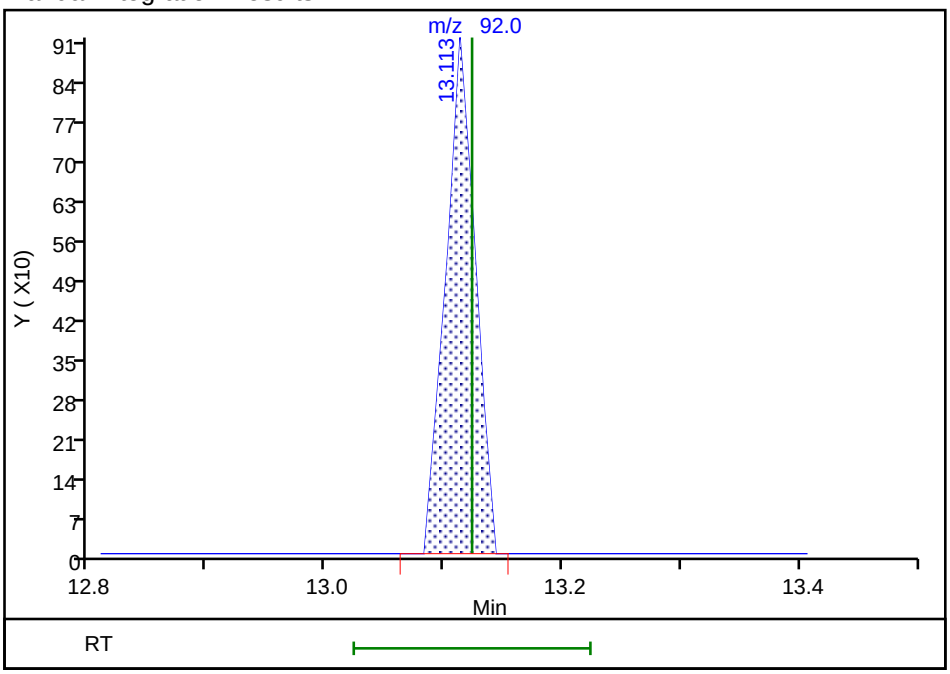
Not Detected
Expected RT: 13.12

Processing Integration Results



Manual Integration Results

RT: 13.11
Area: 1583
Amount: 0.079526
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 12:59:50
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

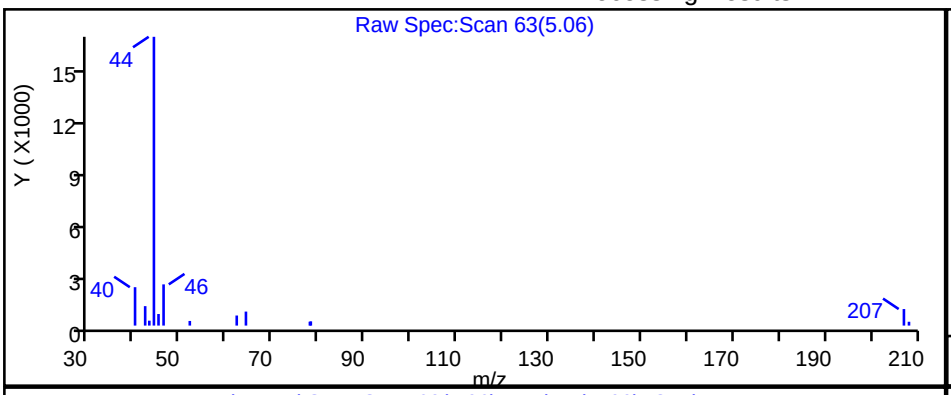
User Disabled Compound Report

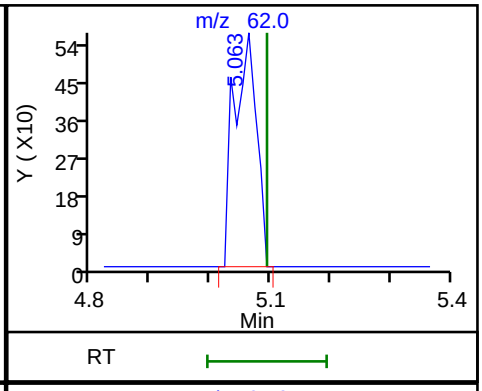
TestAmerica Pleasanton

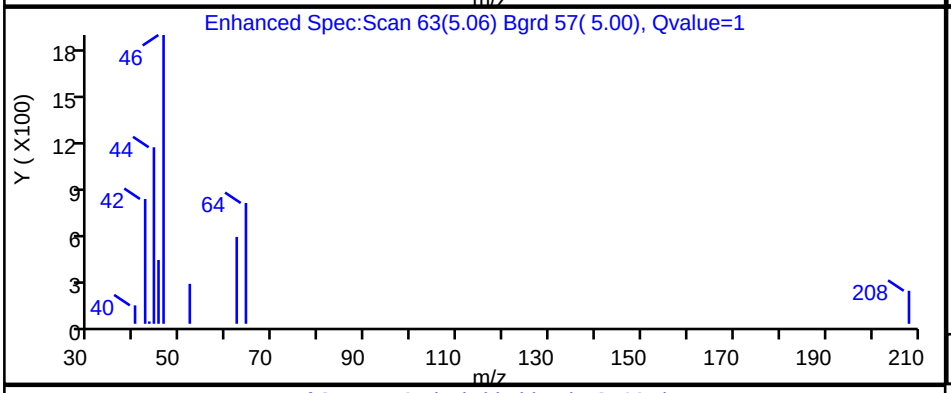
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301811.D				
Injection Date:	30-Aug-2018 12:24:30	Instrument ID:	HP9		
Lims ID:	720-88220-B-9	Lab Sample ID:	720-88220-9		
Client ID:	DG-H6W				
Operator ID:	SF	ALS Bottle#:	10	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

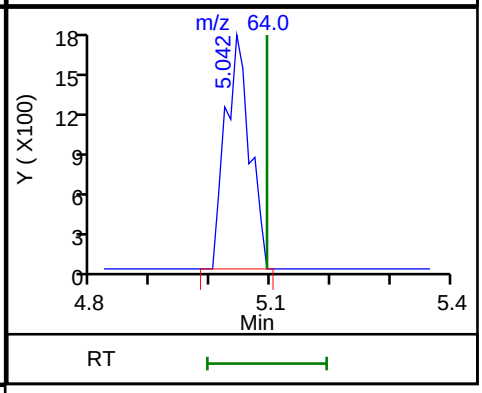
19 Vinyl chloride, CAS: 75-01-4

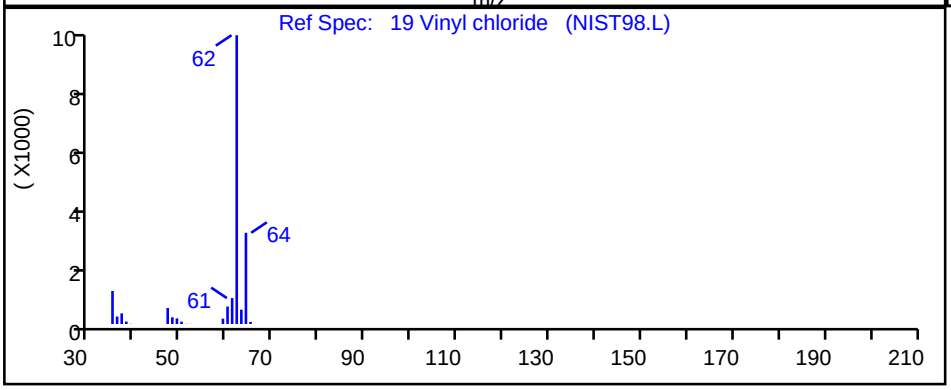
Processing Results











RT	Mass	Response	Amount
5.06	62.00	1464	0.065182
5.04	64.00	4901	

Reviewer: salgadoa, 30-Aug-2018 12:59:08

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

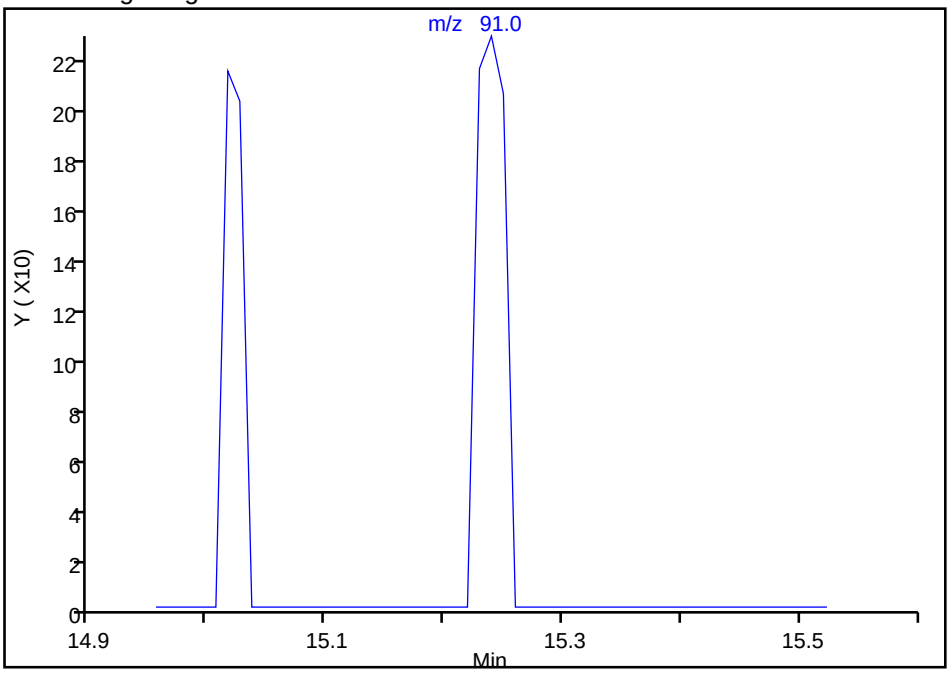
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301811.D				
Injection Date:	30-Aug-2018 12:24:30	Instrument ID:	HP9		
Lims ID:	720-88220-B-9	Lab Sample ID:	720-88220-9		
Client ID:	DG-H6W				
Operator ID:	SF	ALS Bottle#:	10	Worklist Smp#:	12
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

85 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

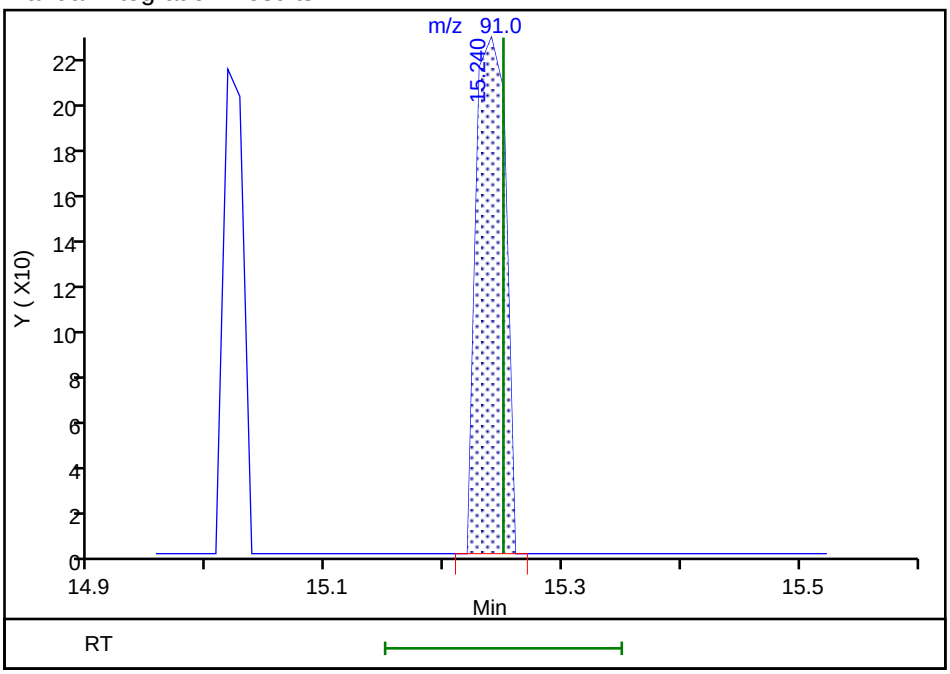
Not Detected
Expected RT: 15.25

Processing Integration Results



Manual Integration Results

RT: 15.24
Area: 394
Amount: 0.013055
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:00:05
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-P5W Lab Sample ID: 720-88220-10

Matrix: Water Lab File ID: 08301812.D

Analysis Method: 8260B Date Collected: 08/23/2018 11:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 12:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250553 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	0.11	J	0.50	0.11
75-35-4	1,1-Dichloroethene	ND	*	0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-P5W Lab Sample ID: 720-88220-10

Matrix: Water Lab File ID: 08301812.D

Analysis Method: 8260B Date Collected: 08/23/2018 11:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 12:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250553 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	6.0		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	30	J	50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	0.33	J	0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	4.1		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	0.73		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-P5W Lab Sample ID: 720-88220-10

Matrix: Water Lab File ID: 08301812.D

Analysis Method: 8260B Date Collected: 08/23/2018 11:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 12:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250553 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		72-130
460-00-4	4-Bromofluorobenzene	93		67-130
2037-26-5	Toluene-d8 (Surr)	95		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301812.D
Lims ID: 720-88220-A-10
Client ID: DG-P5W
Sample Type: Client
Inject. Date: 30-Aug-2018 12:53:30 ALS Bottle#: 11 Worklist Smp#: 13
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-10
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 13:54:59 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 13:54:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.159	7.159	0.000	0	65529	250.0	
* 2 Fluorobenzene	96	10.936	10.936	0.000	99	686879	25.0	
* 4 Chlorobenzene-d5	117	14.764	14.774	-0.010	81	542535	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.903	17.903	0.000	92	314821	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.528	9.528	0.000	51	52001	7.46	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.045	10.045	0.000	0	33776	7.03	
$ 10 Toluene-d8 (Surr)	98	13.032	13.032	0.000	91	179071	7.13	
$ 11 4-Bromofluorobenzene	95	16.252	16.241	0.000	87	61282	6.97	
$ 12 1,2-Dichlorobenzene-d4	152	18.358	18.368	-0.011	75	69424	5.72	
19 Vinyl chloride	62	5.093	5.093	0.000	52	15614	0.7297	
27 Isopropyl alcohol	45	6.622	6.622	0.000	74	9655	36.9	
28 Acetone	58	6.693	6.693	-0.020	53	1196	3.68	a
30 1,1-Dichloroethene	96	7.260	7.260	0.010	1	1500	0.1622	a
34 Methylene Chloride	84	7.432	7.422	0.010	23	969	0.1260	
38 trans-1,2-Dichloroethene	96	8.212	8.212	0.000	82	7983	0.6825	
40 1,1-Dichloroethane	63	8.495	8.495	-0.011	1	1551	0.1108	a
48 cis-1,2-Dichloroethene	61	9.154	9.154	0.000	65	65736	6.05	
65 Trichloroethene	132	11.422	11.432	-0.010	85	36633	4.15	
75 Toluene	92	13.133	13.133	0.010	6	1273	0.0697	a
81 Tetrachloroethene	164	14.004	14.004	0.000	48	2298	0.3269	a
A 116 C4-C10	1	11.189	(5.123-17.255)		0	1482672	23.0	
A 153 C6-C8	1	11.199	(8.901-13.498)		0	675143	10.5	
A 154 C6-C9	1	12.166	(8.901-15.432)		0	823089	12.8	
A 117 C4-C12	1	12.738	(5.123-20.353)		0	1909535	29.6	
A 123 Aviation Gas	1	12.997	(8.901-17.093)		0	996888	NC	
A 119 C6-C10	1	13.078	(8.901-17.255)		0	1002764	15.5	
A 118 C5-C12	1	13.528	(6.703-20.353)		0	1586069	24.6	
A 120 C6-C12	1	14.627	(8.901-20.353)		0	1429627	22.1	
A 155 C8-C10	1	15.336	(13.417-17.255)		0	335545	5.20	
A 121 C7-C12	1	15.786	(11.220-20.353)		0	1017954	15.8	
T 151 Paraldehyde TIC	45	13.032	12.961	0.071	1	335	0.6183	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

Reagents:

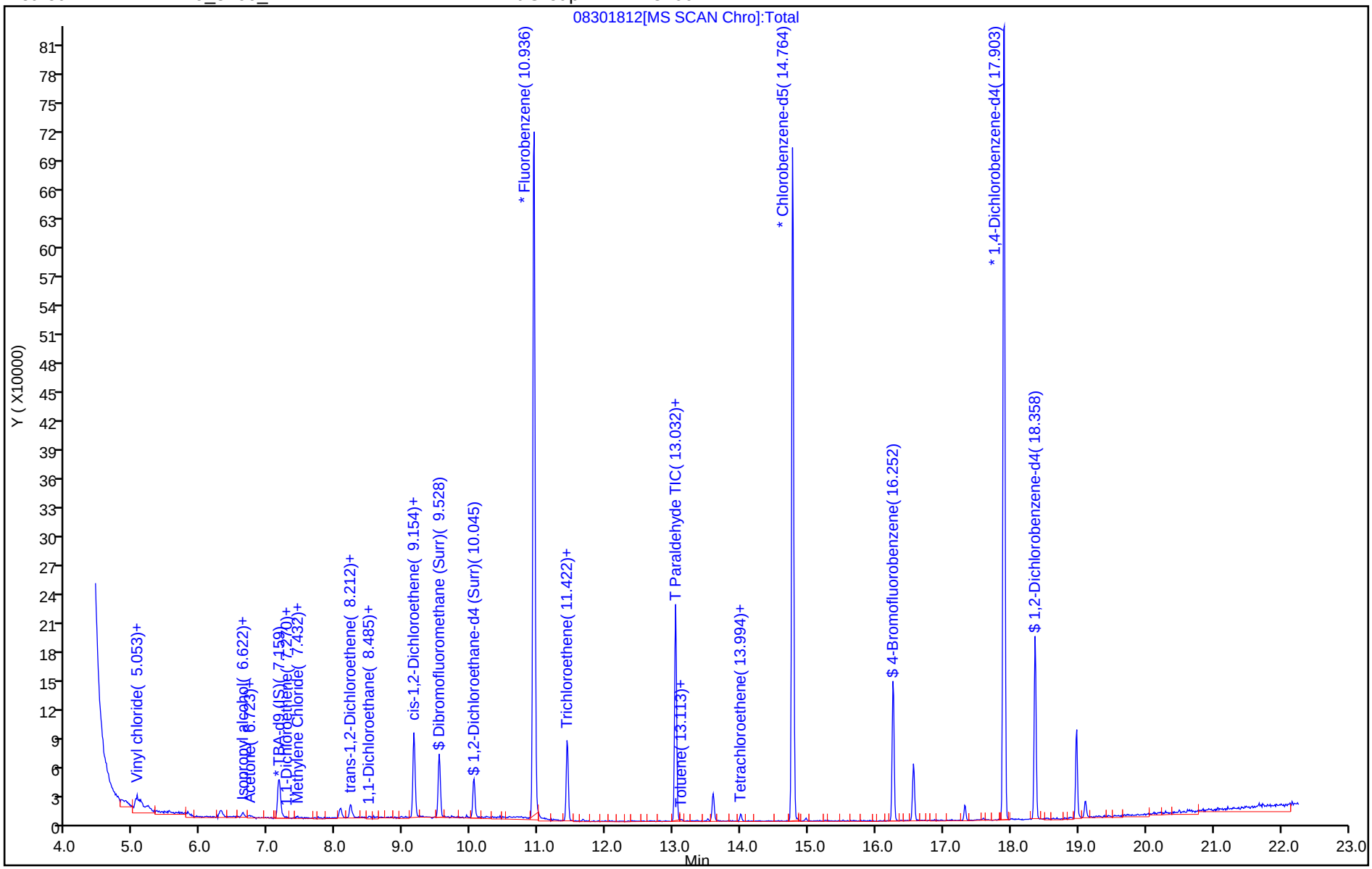
I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 13:55:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301812.D

Injection Date:	30-Aug-2018 12:53:30	Instrument ID:	HP9	Operator ID:	SF
Lims ID:	720-88220-A-10	Lab Sample ID:	720-88220-10	Worklist Smp#:	13
Client ID:	DG-P5W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	HP9_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301812.D
Lims ID: 720-88220-A-10
Client ID: DG-P5W
Sample Type: Client
Inject. Date: 30-Aug-2018 12:53:30 ALS Bottle#: 11 Worklist Smp#: 13
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-10
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 13:54:59 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 13:54:59

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	7.03	93.71
$ 10 Toluene-d8 (Surr)	7.50	7.13	95.02
$ 11 4-Bromofluorobenzene	7.50	6.97	92.93
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

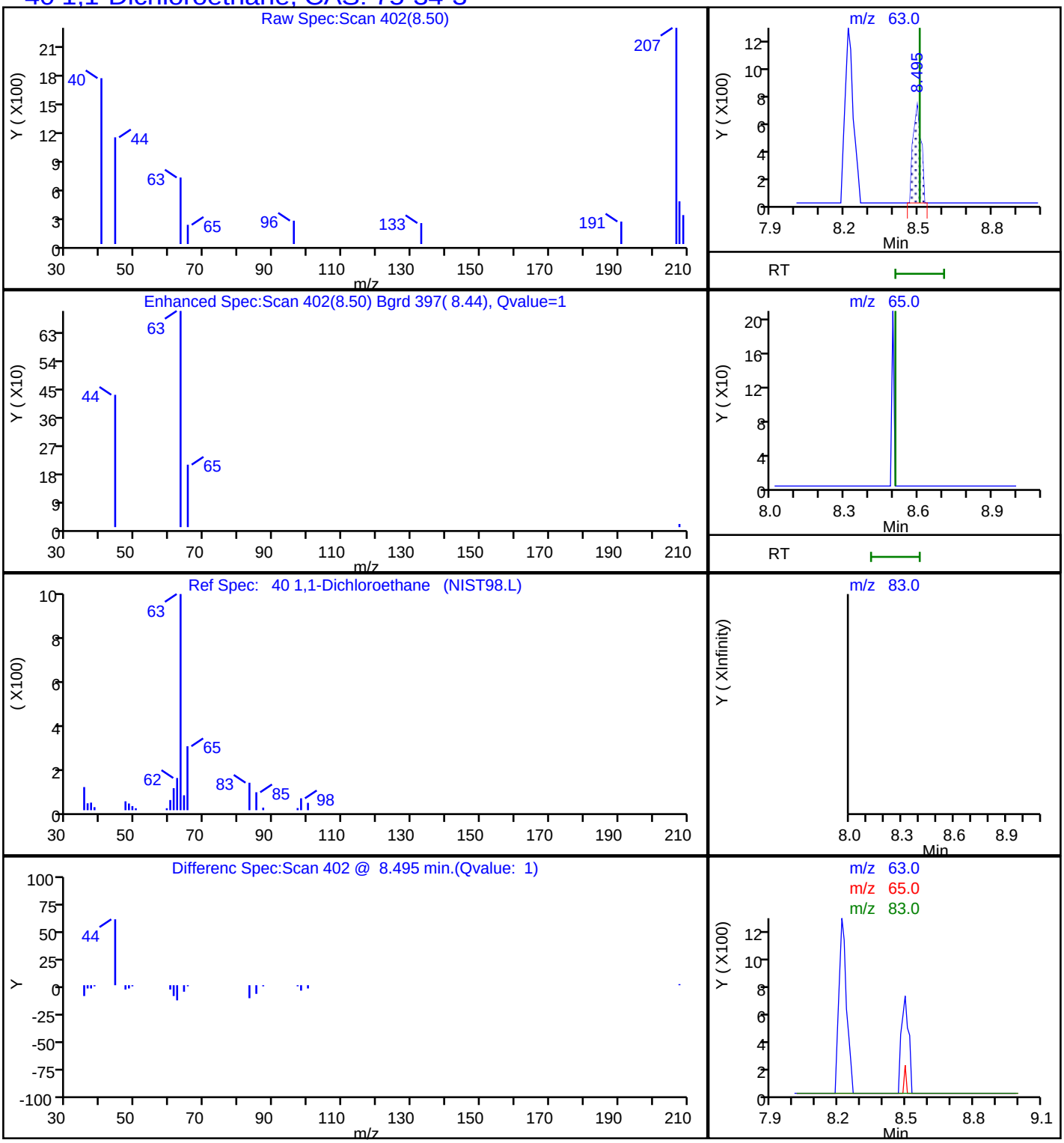
Report Date: 30-Aug-2018 13:55:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301812.D

Injection Date:	30-Aug-2018 12:53:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-10	Lab Sample ID:	720-88220-10		
Client ID:	DG-P5W				
Operator ID:	SF	ALS Bottle#:	11	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

40 1,1-Dichloroethane, CAS: 75-34-3



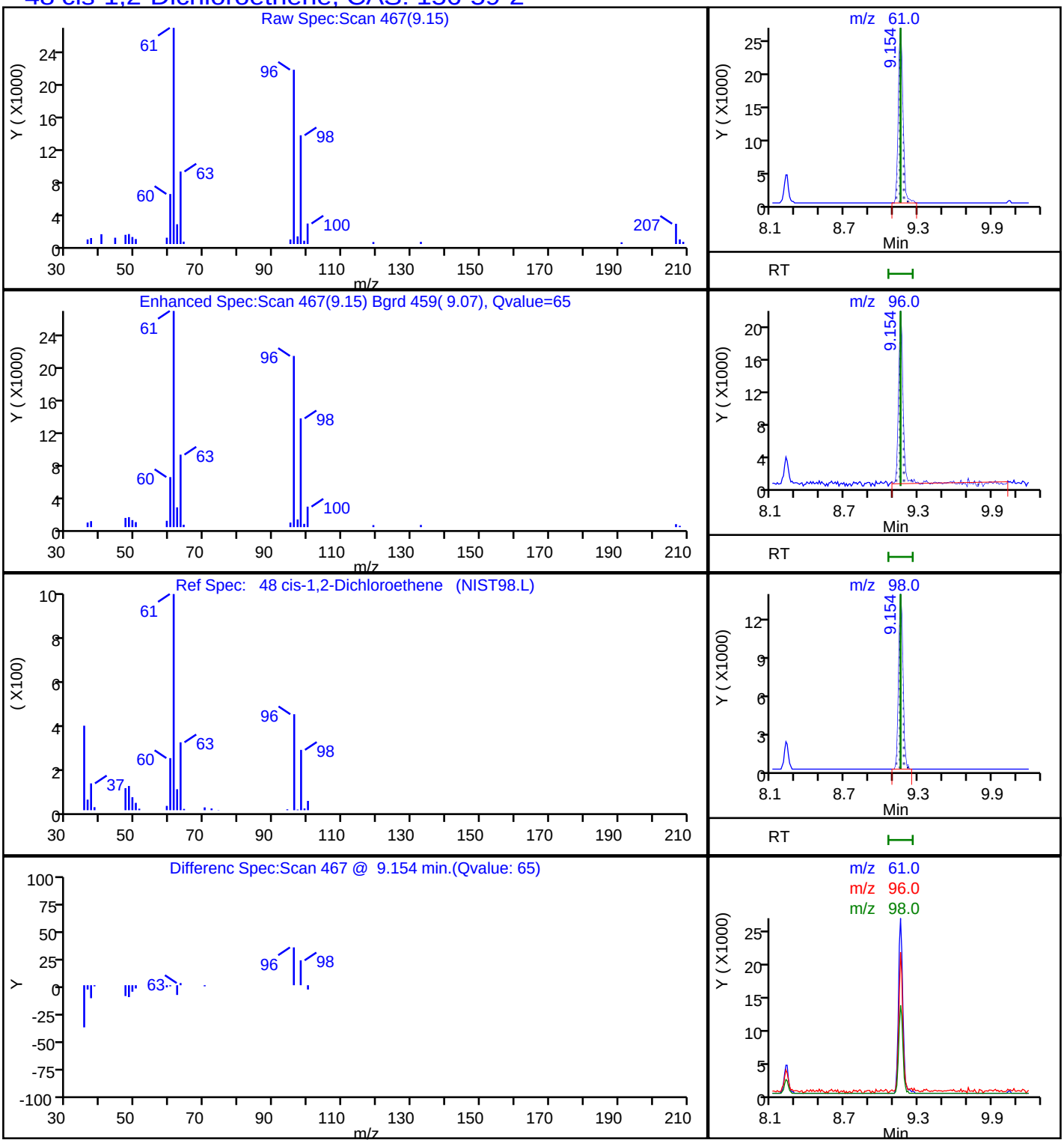
Report Date: 30-Aug-2018 13:55:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301812.D

Injection Date:	30-Aug-2018 12:53:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-10	Lab Sample ID:	720-88220-10		
Client ID:	DG-P5W				
Operator ID:	SF	ALS Bottle#:	11	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

48 cis-1,2-Dichloroethene, CAS: 156-59-2

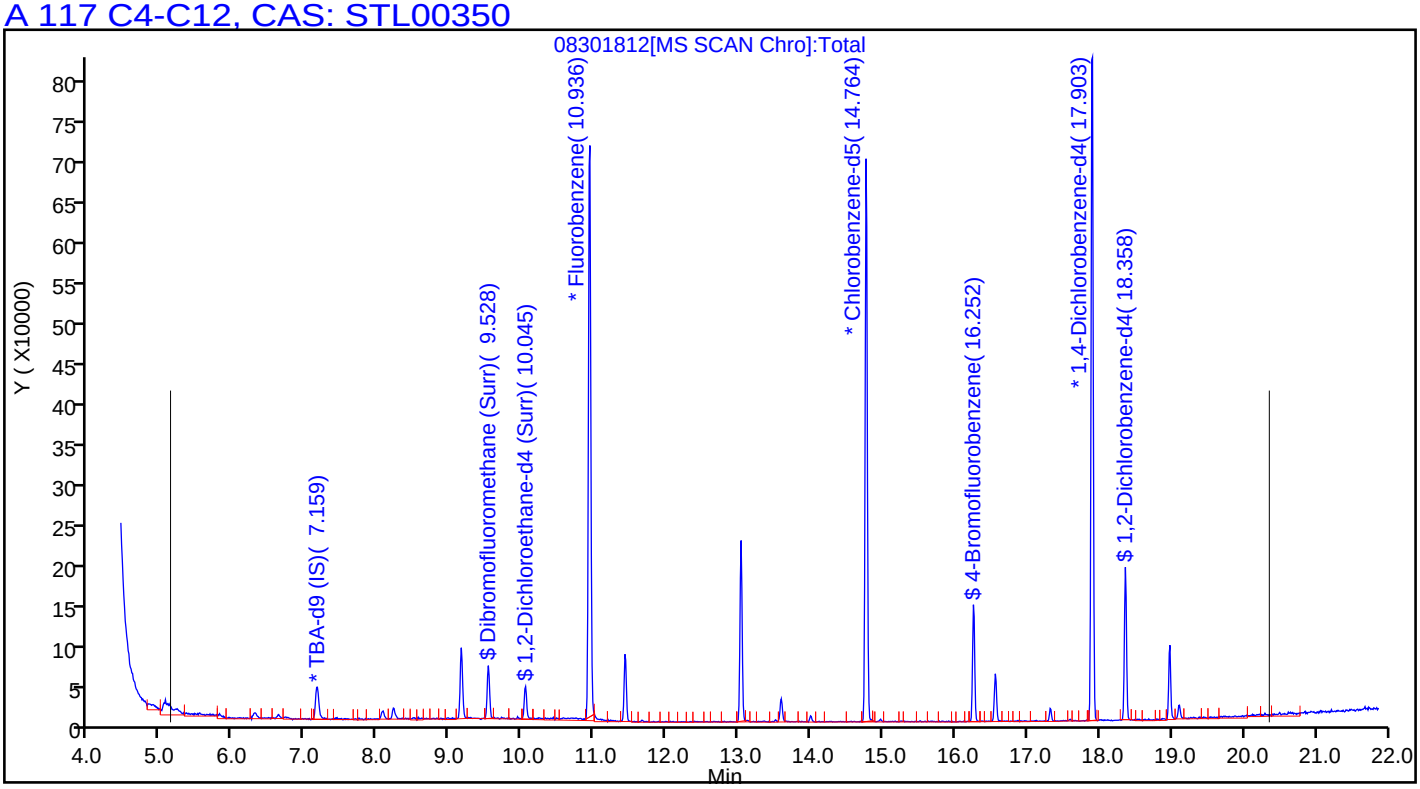


Report Date: 30-Aug-2018 13:55:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301812.D				
Injection Date:	30-Aug-2018 12:53:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-10	Lab Sample ID:	720-88220-10		
Client ID:	DG-P5W				
Operator ID:	SF	ALS Bottle#:	11	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

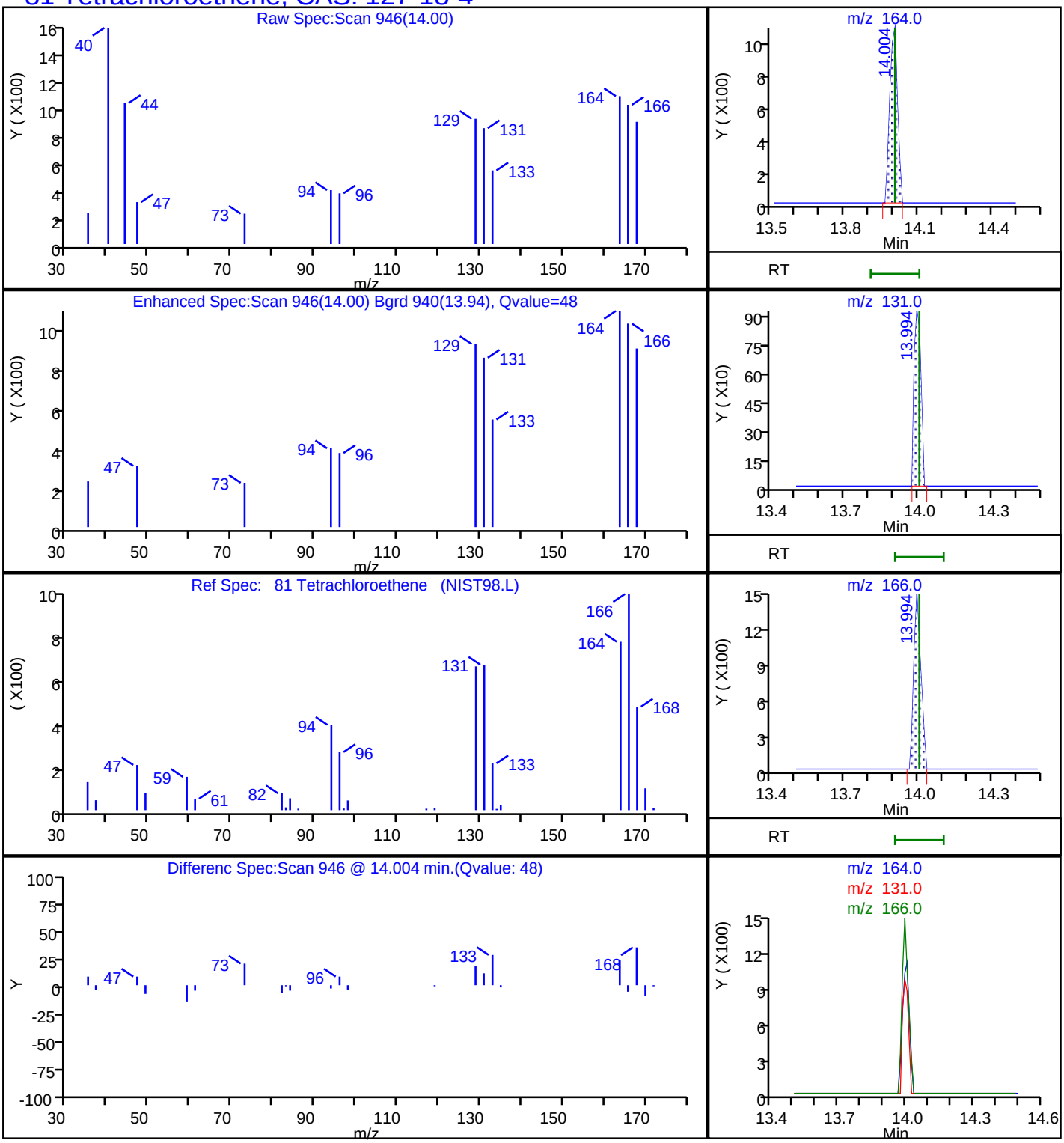
A 117 C4-C12, CAS: STL00350



TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301812.D				
Injection Date:	30-Aug-2018 12:53:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-10	Lab Sample ID:	720-88220-10		
Client ID:	DG-P5W				
Operator ID:	SF	ALS Bottle#:	11	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

81 Tetrachloroethene, CAS: 127-18-4



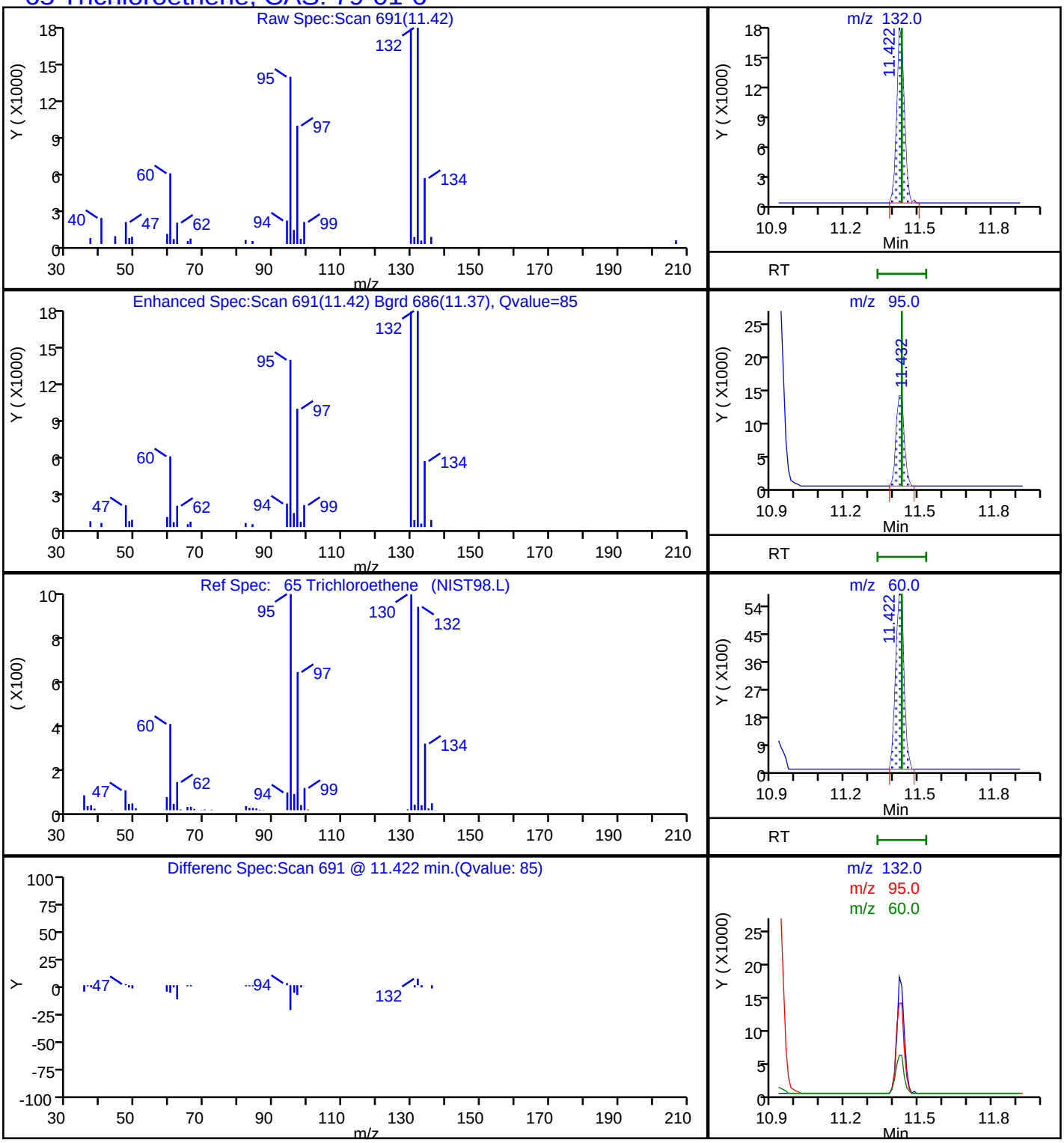
Report Date: 30-Aug-2018 13:55:01 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301812.D

Injection Date:	30-Aug-2018 12:53:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-10	Lab Sample ID:	720-88220-10		
Client ID:	DG-P5W				
Operator ID:	SF	ALS Bottle#:	11	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

65 Trichloroethene, CAS: 79-01-6



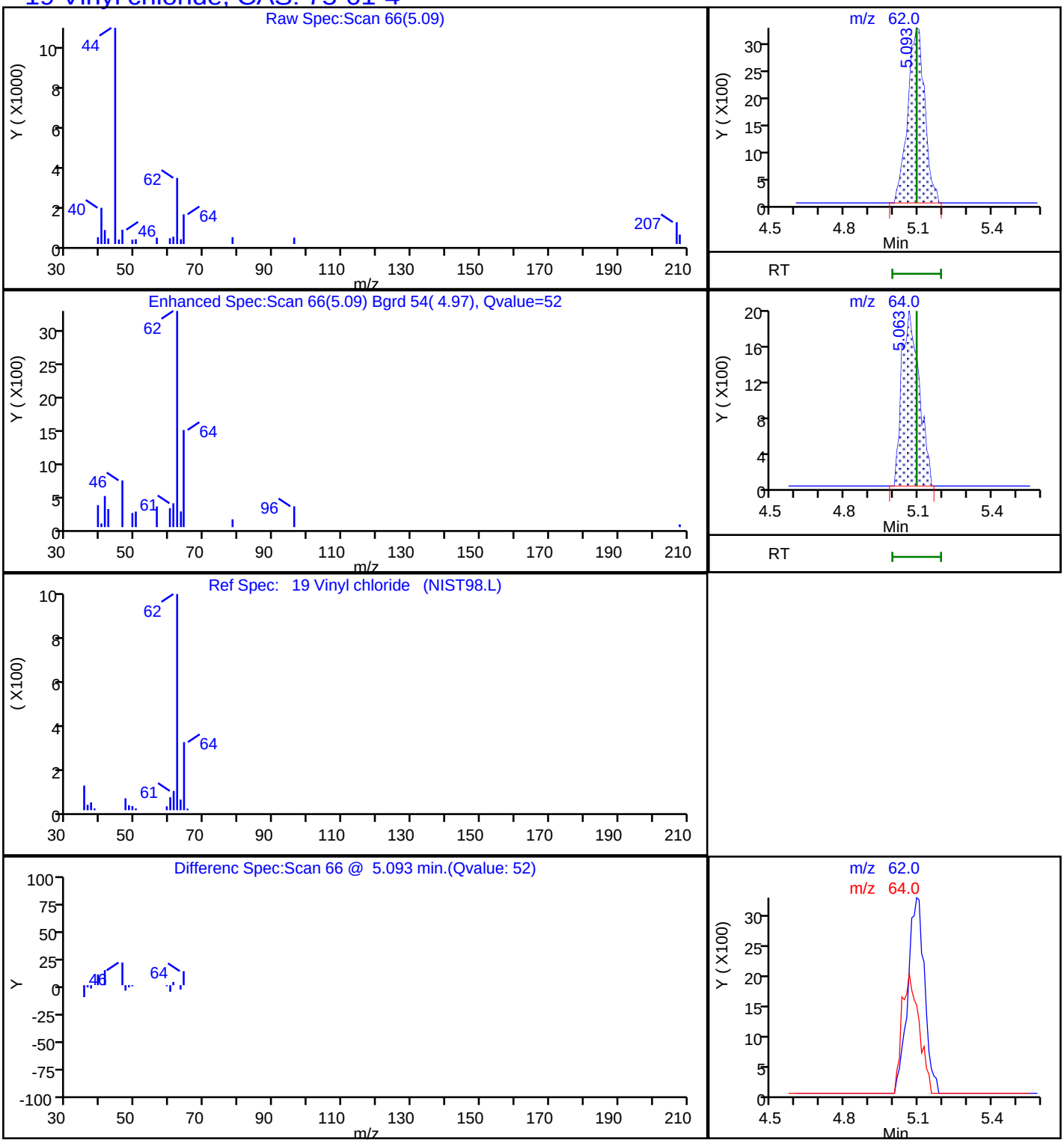
Report Date: 30-Aug-2018 13:55:00 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301812.D

Injection Date:	30-Aug-2018 12:53:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-10	Lab Sample ID:	720-88220-10		
Client ID:	DG-P5W				
Operator ID:	SF	ALS Bottle#:	11	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

19 Vinyl chloride, CAS: 75-01-4



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

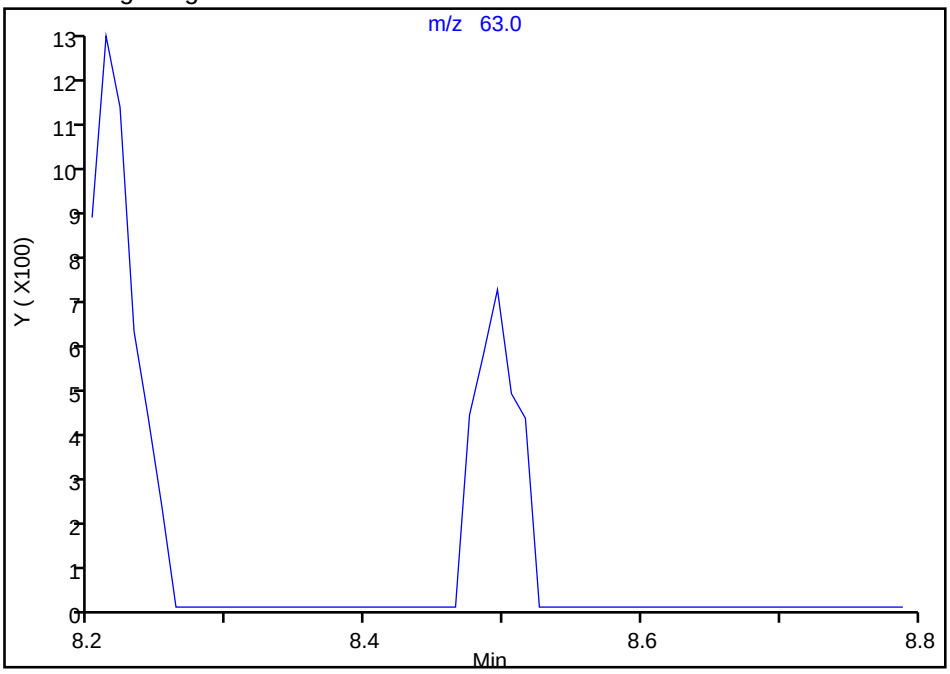
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301812.D				
Injection Date:	30-Aug-2018 12:53:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-10	Lab Sample ID:	720-88220-10		
Client ID:	DG-P5W				
Operator ID:	SF	ALS Bottle#:	11	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

40 1,1-Dichloroethane, CAS: 75-34-3

Signal: 1

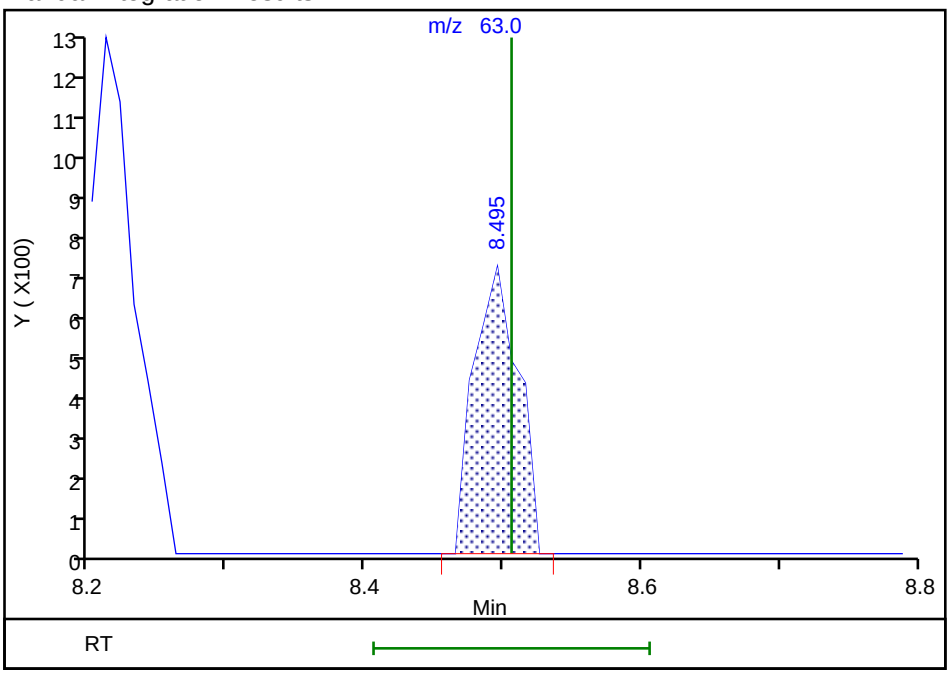
Not Detected
Expected RT: 8.51

Processing Integration Results



Manual Integration Results

RT: 8.50
Area: 1551
Amount: 0.110828
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:54:22
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

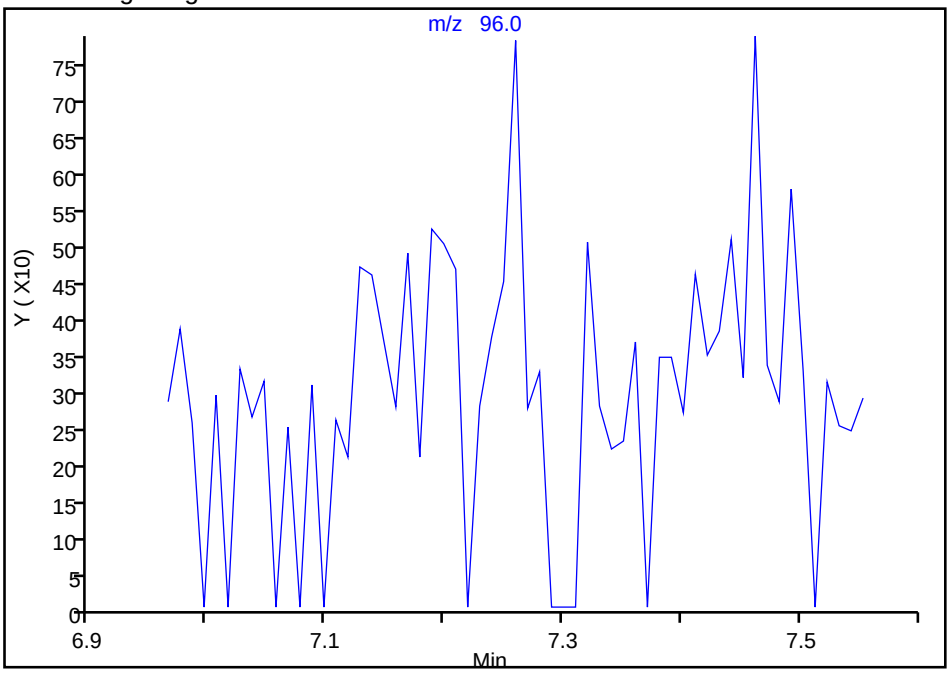
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301812.D				
Injection Date:	30-Aug-2018 12:53:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-10	Lab Sample ID:	720-88220-10		
Client ID:	DG-P5W				
Operator ID:	SF	ALS Bottle#:	11	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

30 1,1-Dichloroethene, CAS: 75-35-4

Signal: 1

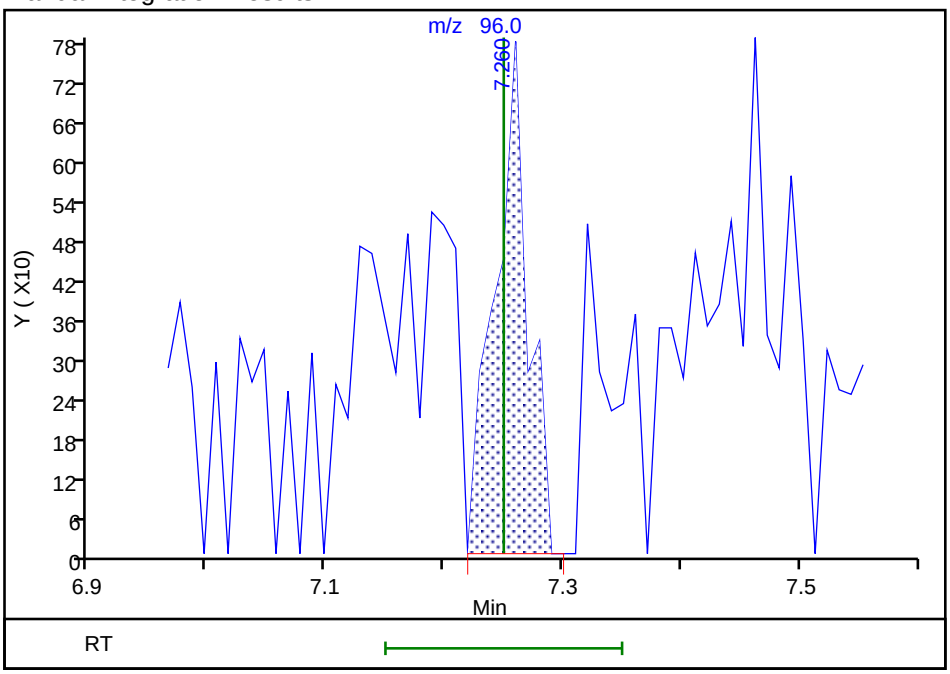
Not Detected
Expected RT: 7.25

Processing Integration Results



Manual Integration Results

RT: 7.26
Area: 1500
Amount: 0.162196
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:54:13
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

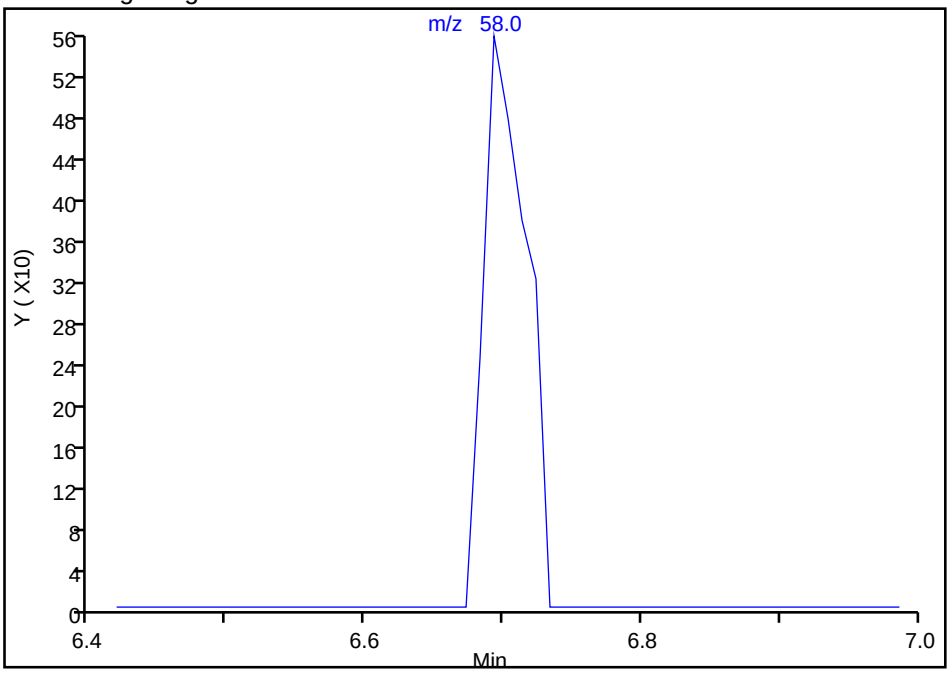
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301812.D				
Injection Date:	30-Aug-2018 12:53:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-10	Lab Sample ID:	720-88220-10		
Client ID:	DG-P5W				
Operator ID:	SF	ALS Bottle#:	11	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1

Signal: 1

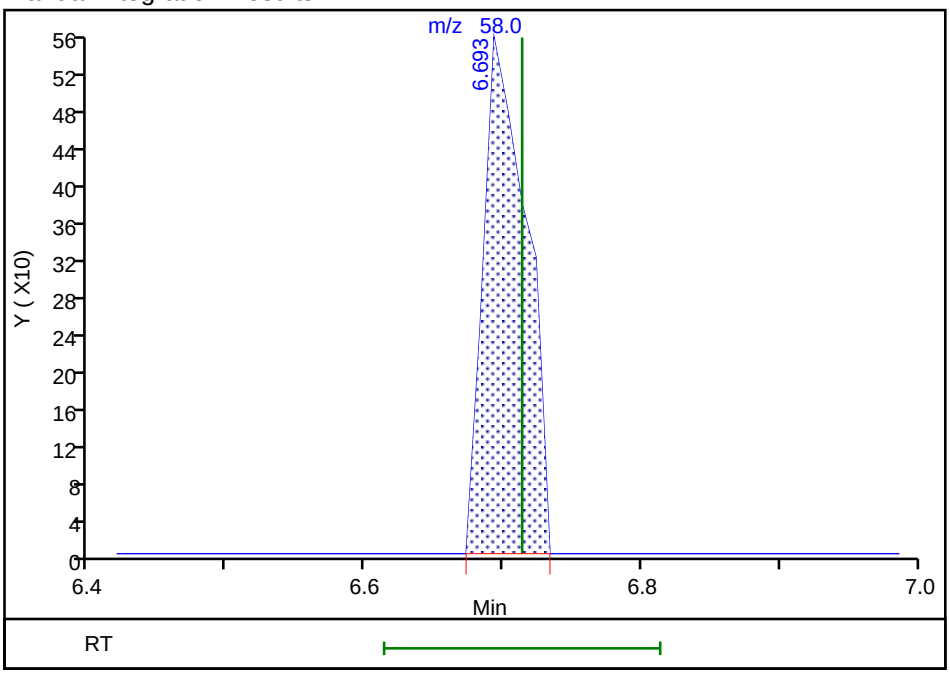
Not Detected
Expected RT: 6.71

Processing Integration Results



Manual Integration Results

RT: 6.69
Area: 1196
Amount: 3.677374
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:54:08
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

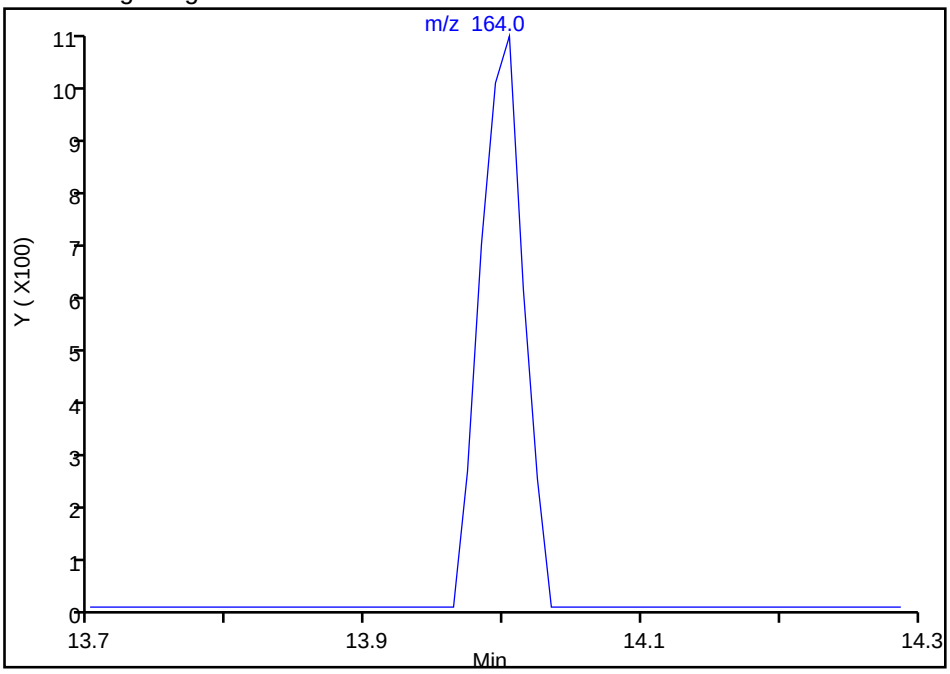
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301812.D				
Injection Date:	30-Aug-2018 12:53:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-10	Lab Sample ID:	720-88220-10		
Client ID:	DG-P5W				
Operator ID:	SF	ALS Bottle#:	11	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

81 Tetrachloroethene, CAS: 127-18-4

Signal: 1

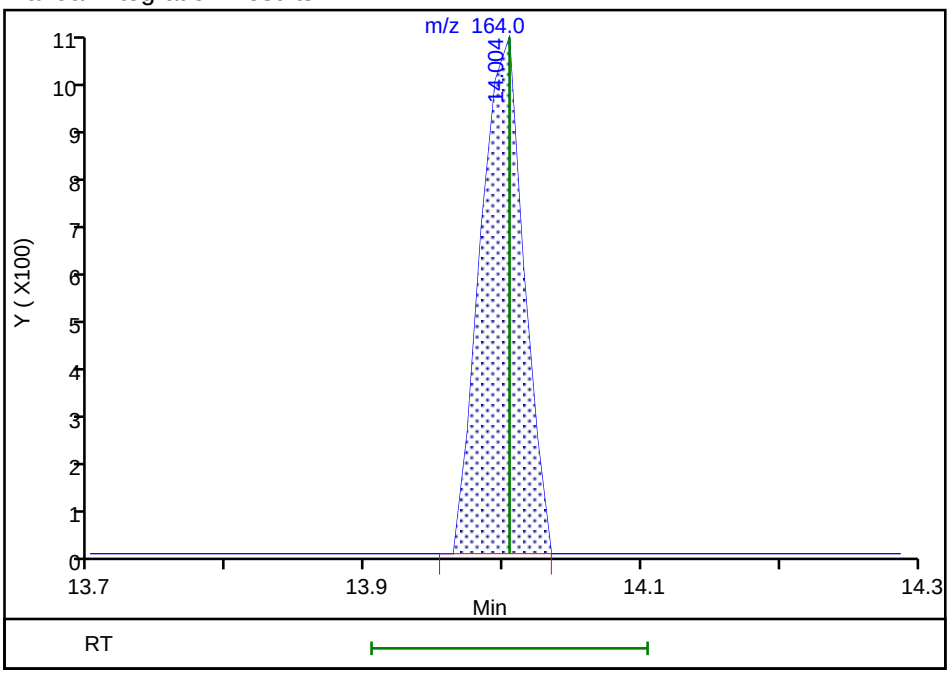
Not Detected
Expected RT: 14.00

Processing Integration Results



Manual Integration Results

RT: 14.00
Area: 2298
Amount: 0.326928
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:54:42
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

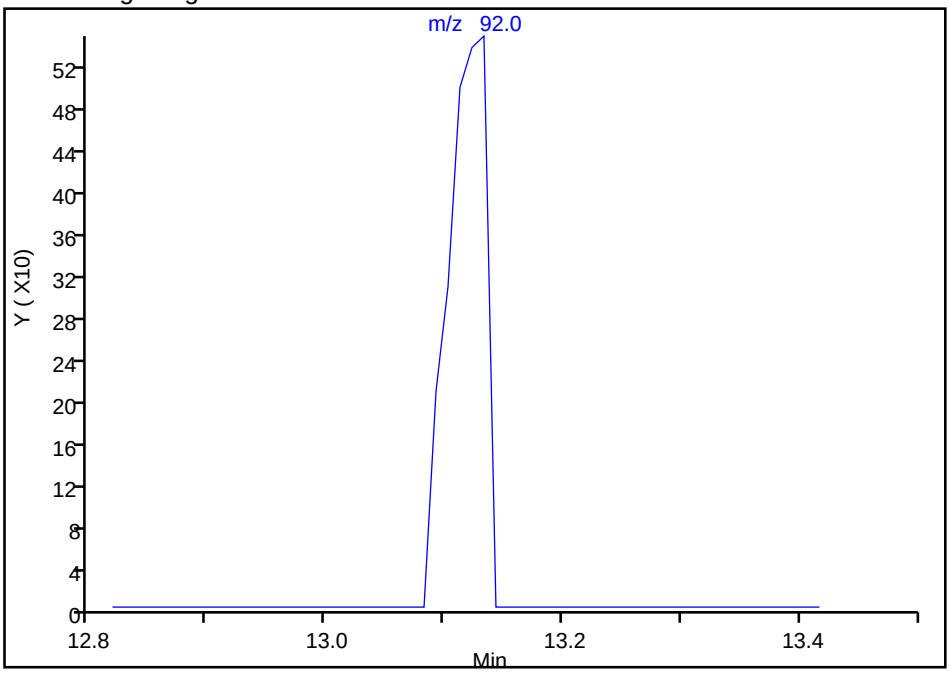
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301812.D				
Injection Date:	30-Aug-2018 12:53:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-10	Lab Sample ID:	720-88220-10		
Client ID:	DG-P5W				
Operator ID:	SF	ALS Bottle#:	11	Worklist Smp#:	13
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

75 Toluene, CAS: 108-88-3

Signal: 1

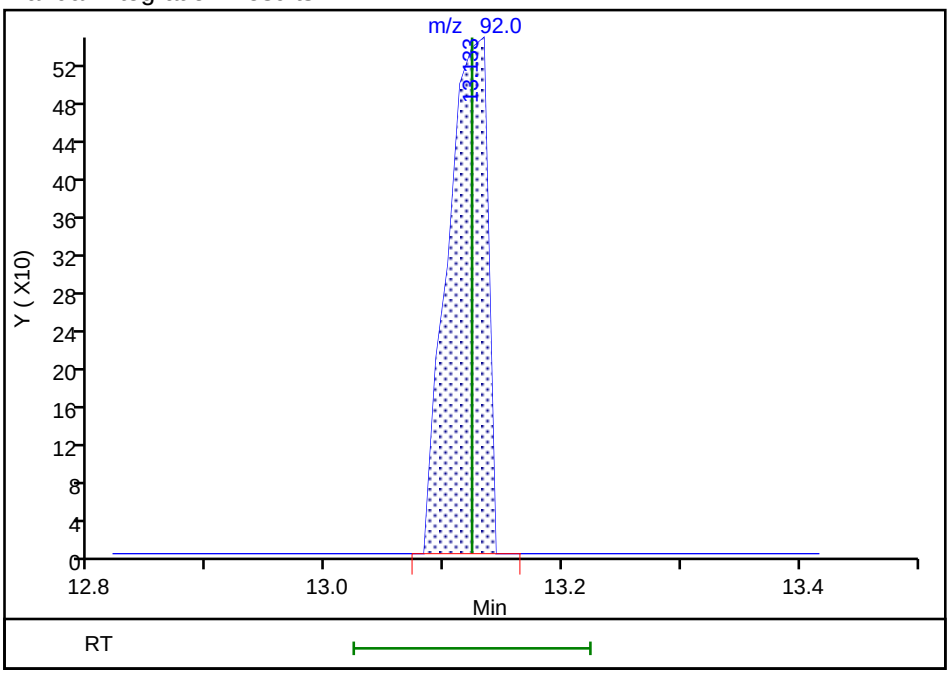
Not Detected
Expected RT: 13.12

Processing Integration Results



Manual Integration Results

RT: 13.13
Area: 1273
Amount: 0.069683
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:54:36
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DG-P5W Lab Sample ID: 720-88220-10

Matrix: Water Lab File ID: 08301831.D

Analysis Method: 8260B Date Collected: 08/23/2018 11:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 22:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250627 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	0.75		0.50	0.13

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		72-130
460-00-4	4-Bromofluorobenzene	95		67-130
2037-26-5	Toluene-d8 (Surr)	99		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180830-53588.b\08301831.D
Lims ID: 720-88220-B-10
Client ID: DG-P5W
Sample Type: Client
Inject. Date: 30-Aug-2018 22:41:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 720-88220-b-10 RR
Misc. Info.: HP-4
Operator ID: SF Instrument ID: HP4

Method: \\ChromNA\Pleasanton\ChromData\HP4\20180830-53588.b\8260W_LL_GRO_HP4.m
Limit Group: 8260B
Last Update: 31-Aug-2018 10:23:20 Calib Date: 26-Jul-2018 01:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D

Column 1 : DB-VRX (250.00 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 10:23:20

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.360	7.360	0.000	98	377245	250.0	
* 2 Fluorobenzene	96	11.167	11.177	-0.010	98	1999431	25.0	
* 3 Chlorobenzene-d5	117	15.034	15.034	0.000	88	1461923	25.0	
* 4 1,4-Dichlorobenzene-d4	152	18.192	18.192	0.000	96	747154	25.0	
$ 5 Dibromofluoromethane (Surr	113	9.755	9.747	-0.001	93	138008	7.46	
$ 6 1,2-Dichloroethane-d4 (Sur	65	10.273	10.264	0.000	0	160013	7.04	
$ 8 Toluene-d8 (Surr)	98	13.288	13.276	0.000	94	569526	7.39	
$ 9 4-Bromofluorobenzene	95	16.527	16.537	-0.010	88	209846	7.15	
$ 10 1,2-Dichlorobenzene-d4	152	18.659	18.659	0.000	85	162784	5.88	
14 Vinyl chloride	62	5.319	5.319	0.000	20	20663	0.6611	M
23 Isopropyl alcohol	45	6.822	6.822	0.000	99	48550	35.4	
24 Acetone	58	6.923	6.907	0.010	99	6119	3.04	
27 1,1-Dichloroethene	96	7.481	7.465	0.010	1	953	0.0540	
37 trans-1,2-Dichloroethene	96	8.436	8.428	0.000	94	14330	0.7515	
39 1,1-Dichloroethane	63	8.720	8.712	0.000	90	3860	0.0885	
44 2-Butanone (MEK)	72	9.207	9.189	0.010	91	455	0.2493	
47 cis-1,2-Dichloroethene	61	9.380	9.371	0.000	83	178571	4.80	
58 n-Butanol	56	10.547	10.517	0.030	6	466	0.7641	
62 Benzene	78	10.953	10.933	0.010	95	3157	0.0395	
69 Trichloroethene	132	11.674	11.664	0.000	97	91341	4.19	
74 Methylcyclohexane	83	12.263	12.262	-0.010	1	301	0.006993	
80 Toluene	92	13.369	13.370	-0.001	97	3185	0.0510	
82 Ethyl methacrylate	69	13.298	13.378	-0.092	34	1866	0.0911	
87 Tetrachloroethene	164	14.263	14.250	0.000	92	4506	0.2326	
92 Butyl Ether	87	15.237	15.214	0.010	92	2188	0.1292	
91 Ethylbenzene	91	15.288	15.288	0.000	1	1849	0.0181	
93 m-Xylene & p-Xylene	91	15.512	15.512	0.000	92	2941	0.0366	
97 o-Xylene	91	16.029	16.019	0.010	1	1135	0.0140	
105 1,3,5-Trimethylbenzene	105	17.359	17.359	0.000	1	673	0.007831	7
107 1,2,4-Trimethylbenzene	105	17.867	17.867	0.000	61	1596	0.0184	
111 1,4-Dichlorobenzene	146	18.192	18.222	-0.030	34	792	0.0173	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
112 4-Isopropyltoluene	119	18.192	18.232	-0.040	32	200	0.002062	7
126 Butane	43	5.461	5.461	0.000	17	8024	NR	
129 n-Nonane	57	15.633	15.664	-0.031	0	295	NR	
130 n-Decane	57	17.603	17.430	0.173	69	2899	NR	
A 158 C6-C8	1	11.456	(9.106-13.806)		0	1284985	6.36	
A 134 C4-C10	1	11.466	(5.451-17.481)		0	2466565	12.2	
A 159 C6-C9	1	12.400	(9.106-15.694)		0	1736086	8.59	
A 136 C4-C12	1	13.024	(5.451-20.598)		0	2871552	14.2	
A 137 C6-C10	1	13.294	(9.106-17.481)		0	1972076	9.76	
A 138 C5-C12	1	13.826	(7.055-20.598)		0	2677107	13.3	
A 139 C6-C12	1	14.852	(9.106-20.598)		0	2377063	11.8	
A 160 C8-C10	1	15.598	(13.715-17.481)		0	687091	3.40	
A 141 C7-C12	1	16.029	(11.461-20.598)		0	1719877	8.51	
S 142 Xylenes, Total	1				0		0.0506	
T 156 Paraldehyde TIC	45	13.278	13.266	0.000	0	728	0.5610	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

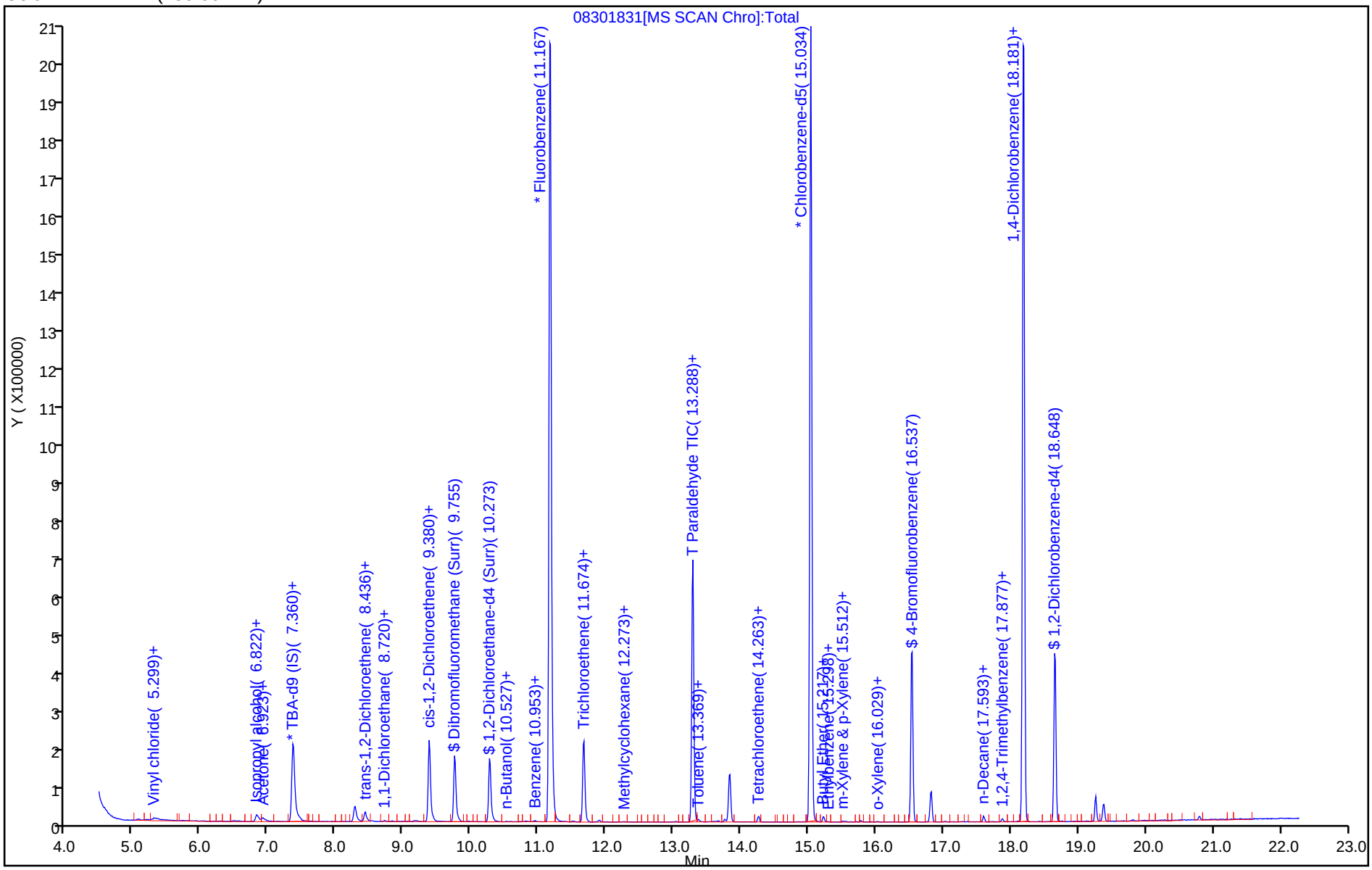
Report Date: 31-Aug-2018 10:23:21 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180830-53588.b\08301831.D

Injection Date:	30-Aug-2018 22:41:30	Instrument ID:	HP4	Operator ID:	SF
Lims ID:	720-88220-B-10	Lab Sample ID:	720-88220-10	Worklist Smp#:	10
Client ID:	DG-P5W				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		

Column: DB-VRX (250.00 mm)



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180830-53588.b\08301831.D
Lims ID: 720-88220-B-10
Client ID: DG-P5W
Sample Type: Client
Inject. Date: 30-Aug-2018 22:41:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 720-88220-b-10 RR
Misc. Info.: HP-4
Operator ID: SF Instrument ID: HP4

Method: \\ChromNA\Pleasanton\ChromData\HP4\20180830-53588.b\8260W_LL_GRO_HP4.m
Limit Group: 8260B
Last Update: 31-Aug-2018 10:23:20 Calib Date: 26-Jul-2018 01:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D

Column 1 : DB-VRX (250.00 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: medinaj Date: 31-Aug-2018 10:23:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 6 1,2-Dichloroethane-d4 (Surr)	7.50	7.04	93.92
$ 8 Toluene-d8 (Surr)	7.50	7.39	98.57
$ 9 4-Bromofluorobenzene	7.50	7.15	95.32
$ 10 1,2-Dichlorobenzene-d4	0.0	0	0.00

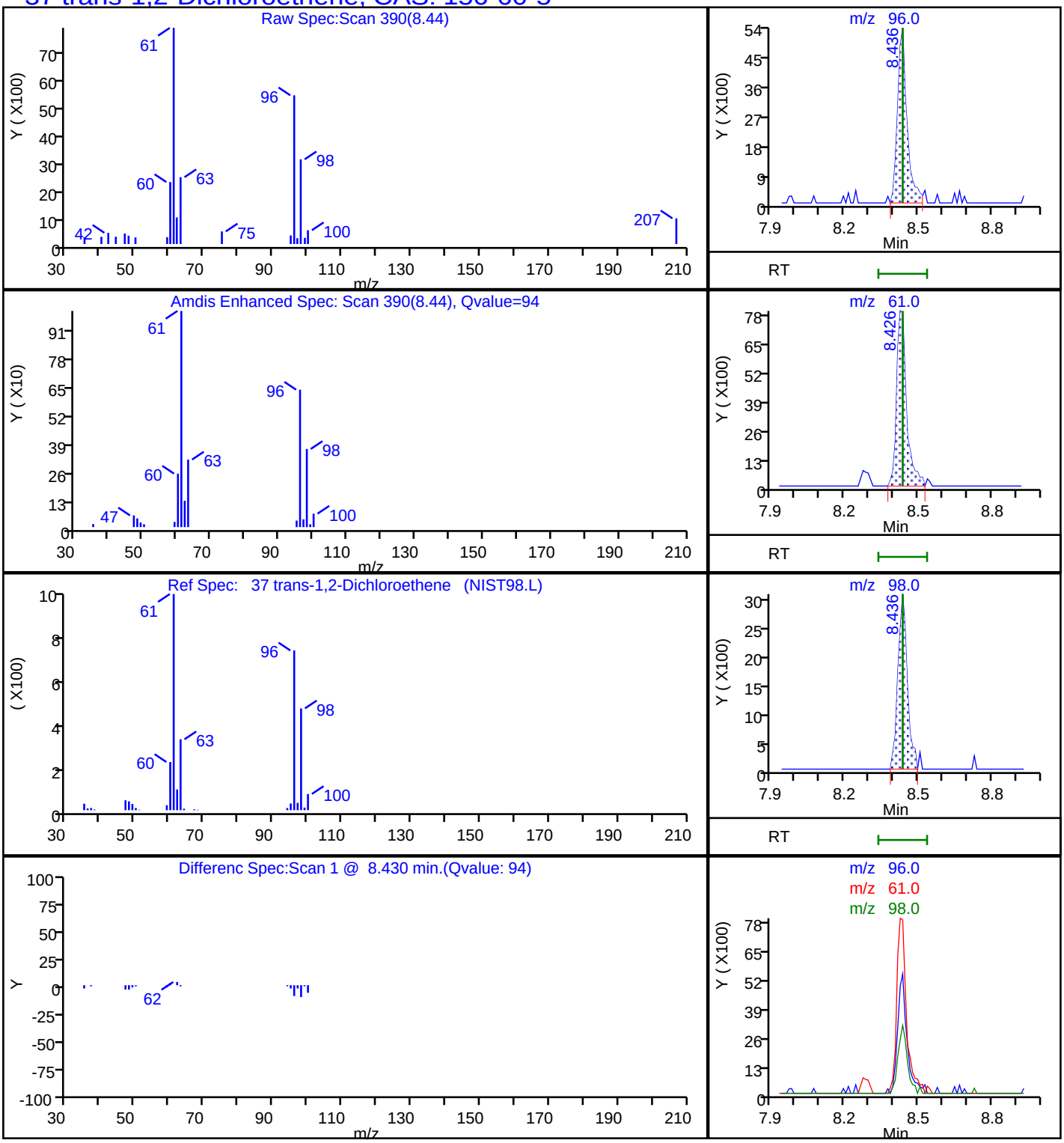
Report Date: 31-Aug-2018 10:23:21 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180830-53588.b\08301831.D

Injection Date:	30-Aug-2018 22:41:30	Instrument ID:	HP4		
Lims ID:	720-88220-B-10	Lab Sample ID:	720-88220-10		
Client ID:	DG-P5W				
Operator ID:	SF	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

37 trans-1,2-Dichloroethene, CAS: 156-60-5



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: FB-1 Lab Sample ID: 720-88220-11

Matrix: Water Lab File ID: 08301813.D

Analysis Method: 8260B Date Collected: 08/21/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 13:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250553 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND	*	0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: FB-1 Lab Sample ID: 720-88220-11

Matrix: Water Lab File ID: 08301813.D

Analysis Method: 8260B Date Collected: 08/21/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 13:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250553 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND	*	0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	ND		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	ND		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: FB-1 Lab Sample ID: 720-88220-11

Matrix: Water Lab File ID: 08301813.D

Analysis Method: 8260B Date Collected: 08/21/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 13:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250553 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		72-130
460-00-4	4-Bromofluorobenzene	95		67-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301813.D
Lims ID: 720-88220-A-11
Client ID: FB-1
Sample Type: Client
Inject. Date: 30-Aug-2018 13:22:30 ALS Bottle#: 12 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-11
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 13:56:14 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 13:56:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.159	7.159	0.000	0	61876	250.0	
* 2 Fluorobenzene	96	10.936	10.936	0.000	99	776644	25.0	
* 4 Chlorobenzene-d5	117	14.764	14.774	-0.010	82	602599	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.903	17.903	0.000	92	331728	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.528	9.528	0.000	56	58329	7.40	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.045	10.045	0.000	0	35589	6.55	
$ 10 Toluene-d8 (Surr)	98	13.032	13.032	0.000	92	206273	7.26	
$ 11 4-Bromofluorobenzene	95	16.252	16.241	0.000	89	69786	7.15	
$ 12 1,2-Dichlorobenzene-d4	152	18.358	18.368	-0.011	77	74392	5.82	
27 Isopropyl alcohol	45	6.622	6.622	0.000	80	22334	90.4	
28 Acetone	58	6.713	6.693	0.000	64	350	0.9518	
34 Methylene Chloride	84	7.422	7.422	0.000	46	1385	0.1593	a
81 Tetrachloroethene	164	14.004	14.004	0.000	14	960	0.1208	a
A 116 C4-C10	1	11.189	(5.123-17.255)		0	847241	11.6	
A 153 C6-C8	1	11.199	(8.901-13.498)		0	183607	2.52	
A 154 C6-C9	1	12.166	(8.901-15.432)		0	344764	4.72	
A 117 C4-C12	1	12.738	(5.123-20.353)		0	1084052	14.9	
A 123 Aviation Gas	1	12.997	(8.901-17.093)		0	542701	NC	
A 119 C6-C10	1	13.078	(8.901-17.255)		0	546042	7.48	
A 118 C5-C12	1	13.528	(6.703-20.353)		0	891813	12.2	
A 120 C6-C12	1	14.627	(8.901-20.353)		0	782853	10.7	
A 155 C8-C10	1	15.336	(13.417-17.255)		0	365278	5.00	
A 121 C7-C12	1	15.786	(11.220-20.353)		0	685546	9.39	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

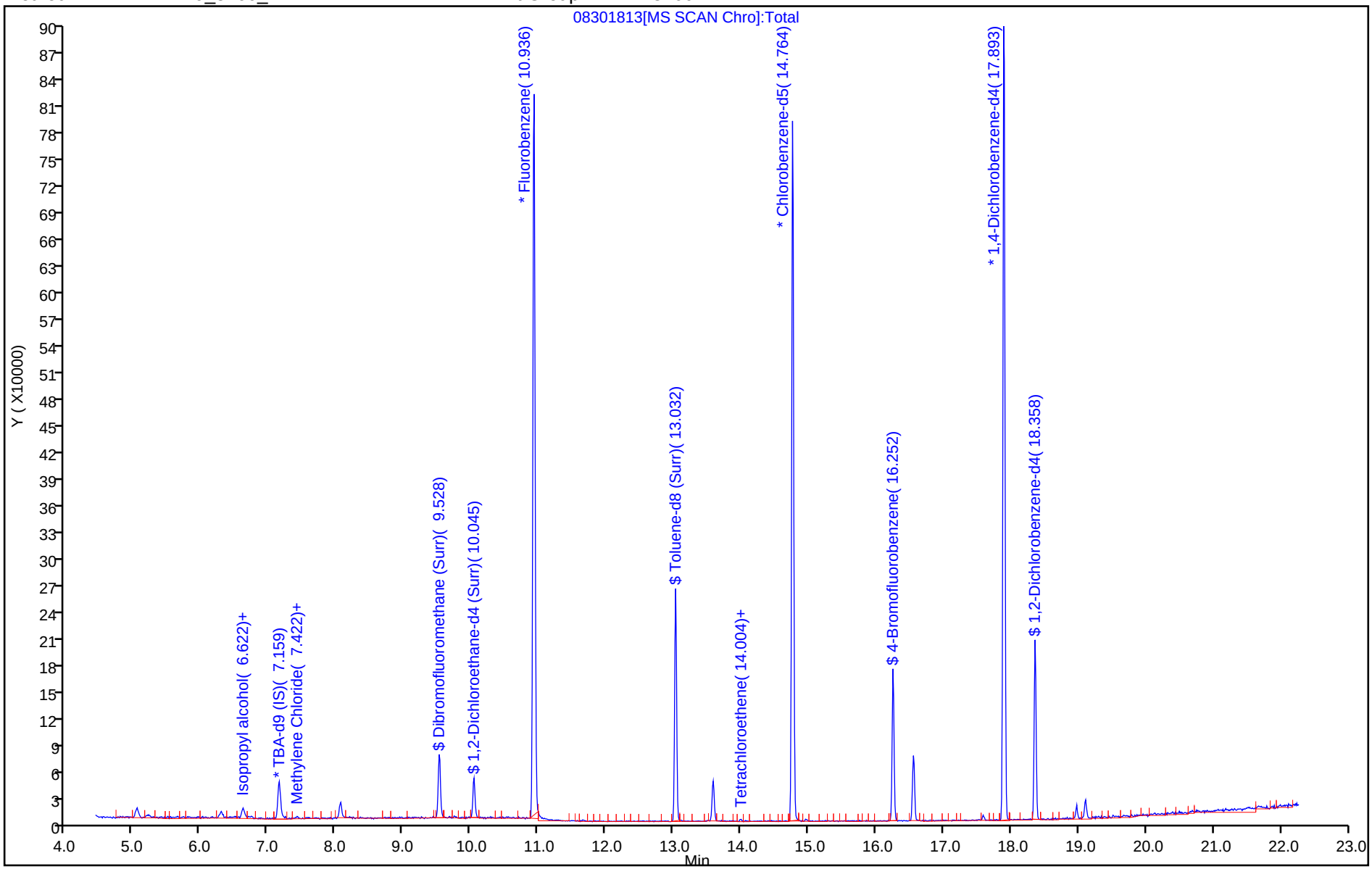
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 13:56:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301813.D				
Injection Date:	30-Aug-2018 13:22:30	Instrument ID:	HP9	Operator ID:	SF
Lims ID:	720-88220-A-11	Lab Sample ID:	720-88220-11	Worklist Smp#:	14
Client ID:	FB-1				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	HP9_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301813.D
Lims ID: 720-88220-A-11
Client ID: FB-1
Sample Type: Client
Inject. Date: 30-Aug-2018 13:22:30 ALS Bottle#: 12 Worklist Smp#: 14
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-11
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 13:56:14 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 13:56:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	6.55	87.33
$ 10 Toluene-d8 (Surr)	7.50	7.26	96.81
$ 11 4-Bromofluorobenzene	7.50	7.15	95.27
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

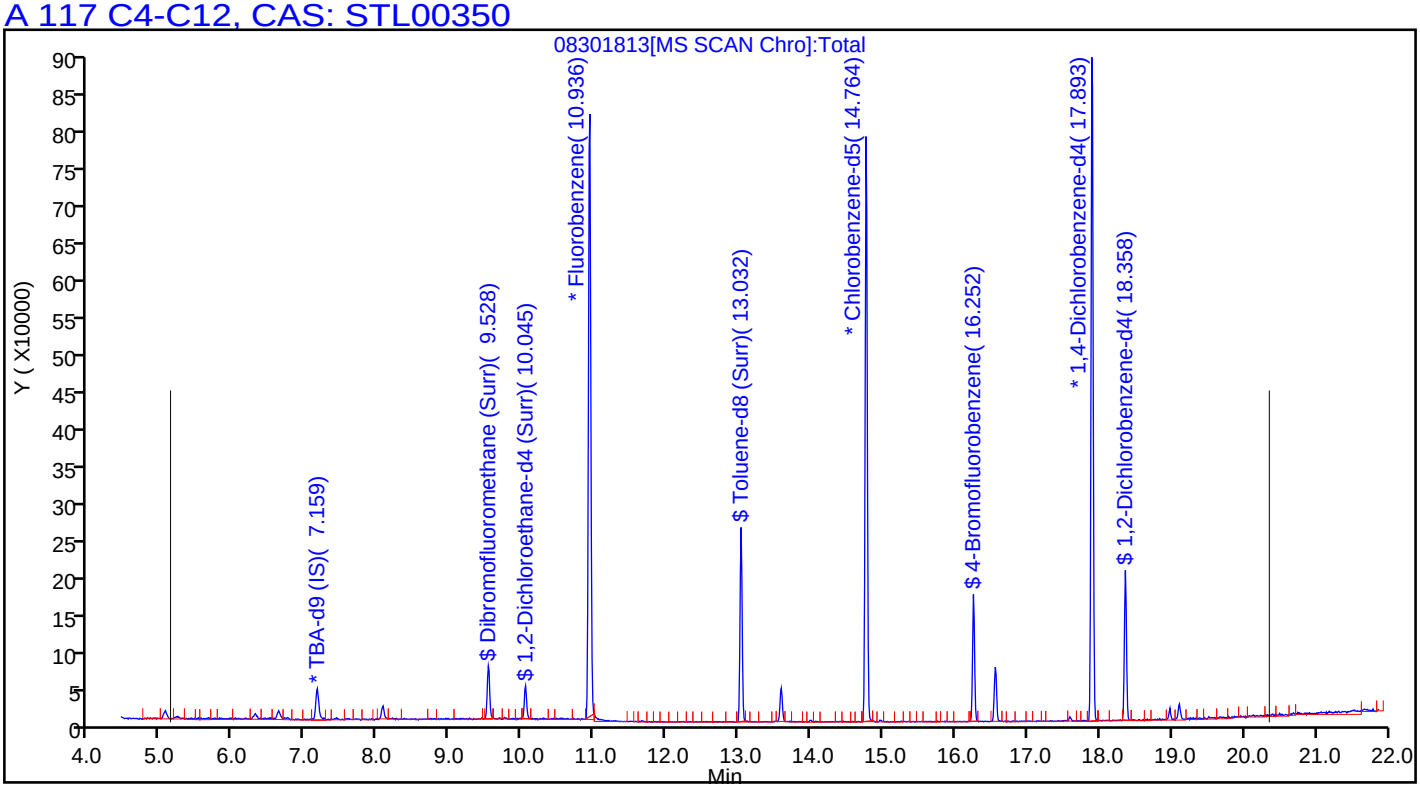
Report Date: 30-Aug-2018 13:56:15 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301813.D

Injection Date:	30-Aug-2018 13:22:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-11	Lab Sample ID:	720-88220-11		
Client ID:	FB-1				
Operator ID:	SF	ALS Bottle#:	12	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

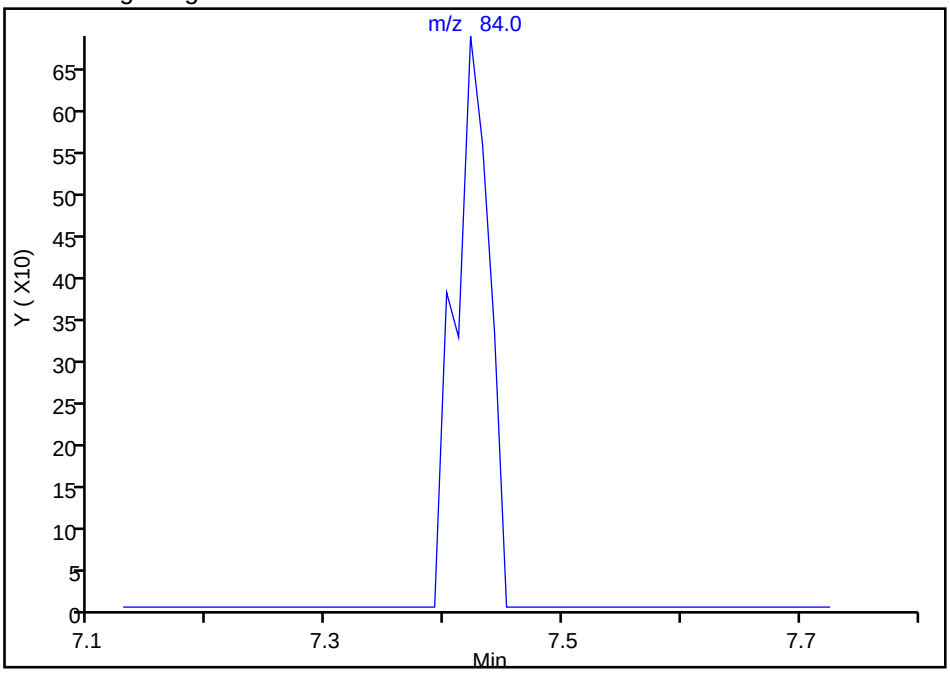
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301813.D				
Injection Date:	30-Aug-2018 13:22:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-11	Lab Sample ID:	720-88220-11		
Client ID:	FB-1				
Operator ID:	SF	ALS Bottle#:	12	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

34 Methylene Chloride, CAS: 75-09-2

Signal: 1

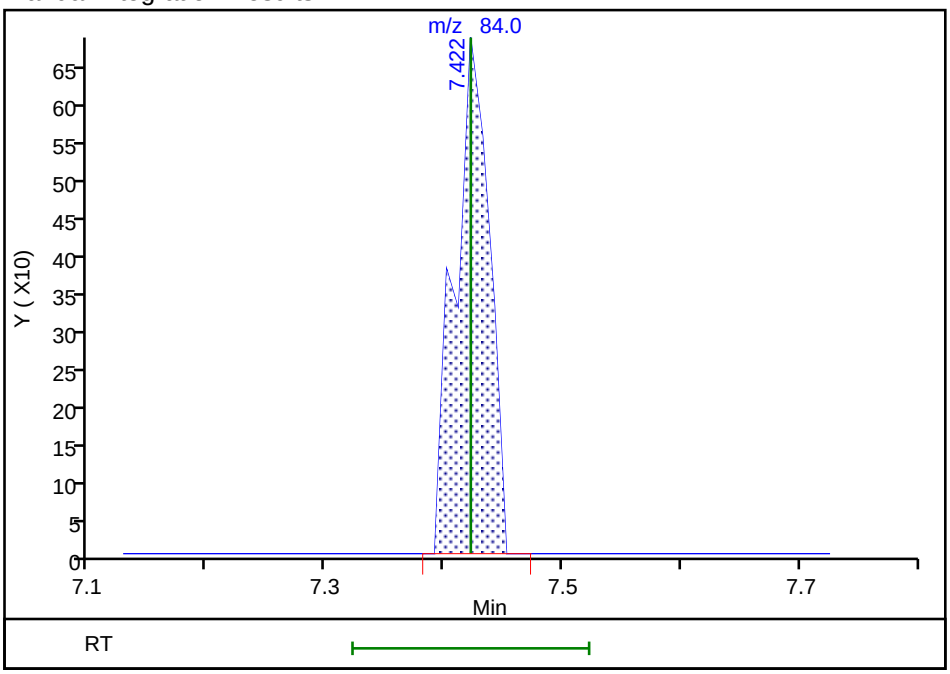
Not Detected
Expected RT: 7.42

Processing Integration Results



Manual Integration Results

RT: 7.42
Area: 1385
Amount: 0.159257
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:55:22
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

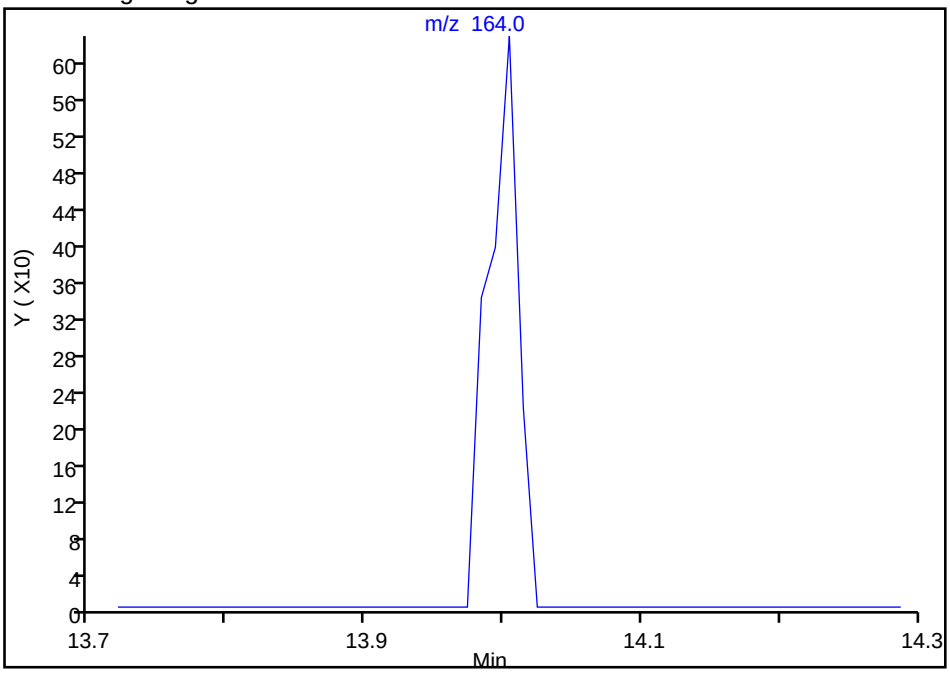
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301813.D				
Injection Date:	30-Aug-2018 13:22:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-11	Lab Sample ID:	720-88220-11		
Client ID:	FB-1				
Operator ID:	SF	ALS Bottle#:	12	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

81 Tetrachloroethene, CAS: 127-18-4

Signal: 1

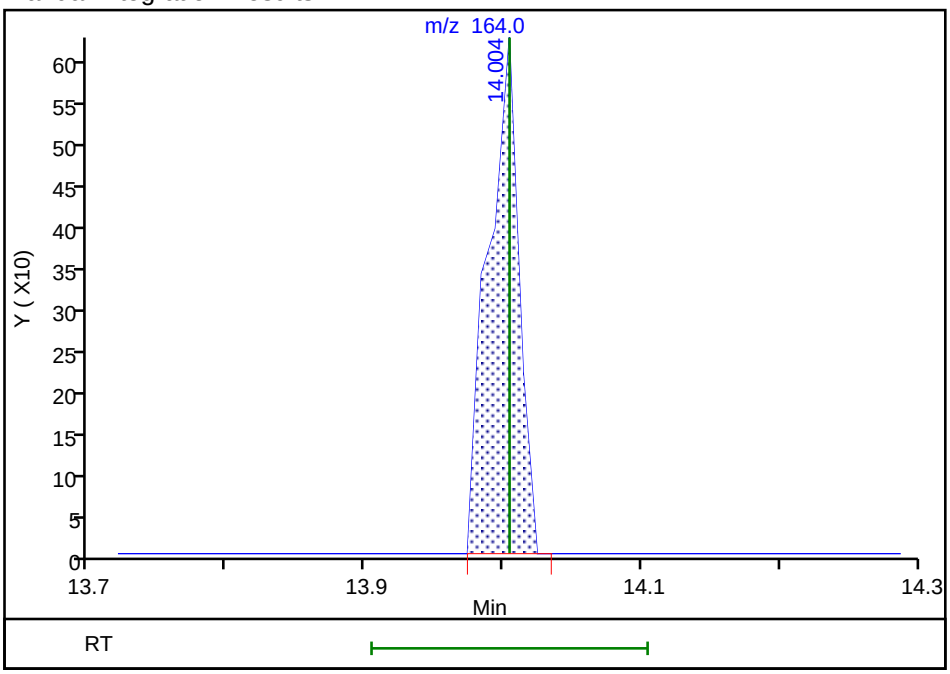
Not Detected
Expected RT: 14.00

Processing Integration Results



Manual Integration Results

RT: 14.00
Area: 960
Amount: 0.120790
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 13:56:00
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

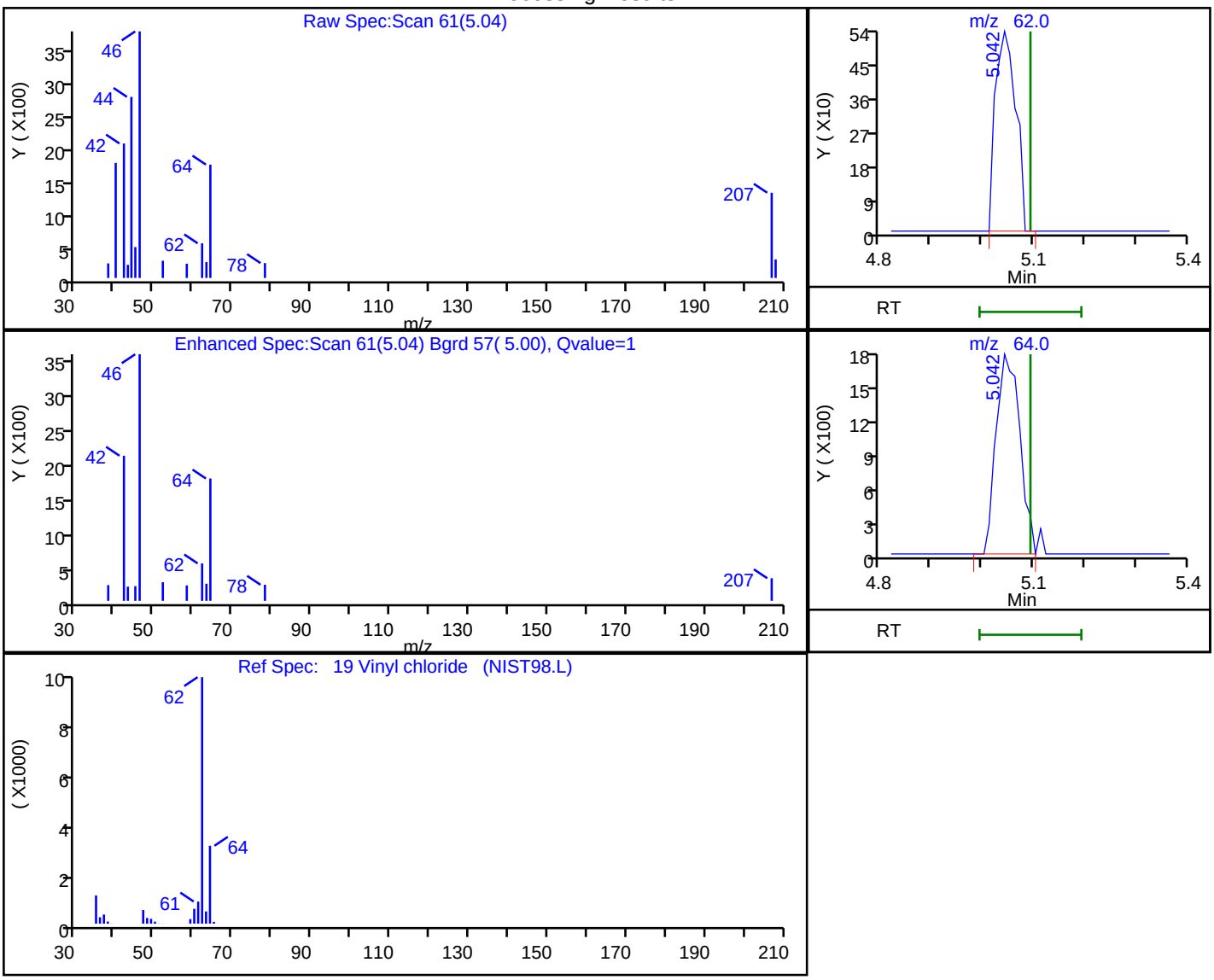
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301813.D				
Injection Date:	30-Aug-2018 13:22:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-11	Lab Sample ID:	720-88220-11		
Client ID:	FB-1				
Operator ID:	SF	ALS Bottle#:	12	Worklist Smp#:	14
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

19 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
5.04	62.00	1479	0.061132
5.04	64.00	5632	

Reviewer: salgadoa, 30-Aug-2018 13:55:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: FB-2 Lab Sample ID: 720-88220-12

Matrix: Water Lab File ID: 08301814.D

Analysis Method: 8260B Date Collected: 08/22/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 13:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250553 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND	*	0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: FB-2 Lab Sample ID: 720-88220-12

Matrix: Water Lab File ID: 08301814.D

Analysis Method: 8260B Date Collected: 08/22/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 13:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250553 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND	*	0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	ND		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	ND		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: FB-2 Lab Sample ID: 720-88220-12

Matrix: Water Lab File ID: 08301814.D

Analysis Method: 8260B Date Collected: 08/22/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 13:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250553 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		72-130
460-00-4	4-Bromofluorobenzene	95		67-130
2037-26-5	Toluene-d8 (Surr)	94		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301814.D
Lims ID: 720-88220-A-12
Client ID: FB-2
Sample Type: Client
Inject. Date: 30-Aug-2018 13:50:30 ALS Bottle#: 13 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-12
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 14:33:02 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 14:33:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.159	7.159	0.000	0	62953	250.0	
* 2 Fluorobenzene	96	10.926	10.936	-0.010	99	714711	25.0	
* 4 Chlorobenzene-d5	117	14.763	14.774	-0.011	81	557399	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.903	17.903	0.000	92	310251	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.528	9.519	0.000	54	52806	7.28	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.034	10.035	-0.011	0	33691	6.74	
$ 10 Toluene-d8 (Surr)	98	13.032	13.020	0.000	92	183358	7.01	
$ 11 4-Bromofluorobenzene	95	16.252	16.241	0.000	89	64531	7.14	
$ 12 1,2-Dichlorobenzene-d4	152	18.358	18.368	-0.011	77	68322	5.71	
27 Isopropyl alcohol	45	6.622	6.622	0.000	91	19473	77.5	
28 Acetone	58	6.703	6.707	-0.010	60	662	1.96	
34 Methylene Chloride	84	7.412	7.412	-0.010	17	1365	0.1706	a
81 Tetrachloroethene	164	14.004	14.004	0.000	30	671	0.0917	a
A 116 C4-C10	1	11.189	(5.123-17.255)		0	813856	12.1	
A 153 C6-C8	1	11.199	(8.901-13.498)		0	196318	2.92	
A 154 C6-C9	1	12.166	(8.901-15.432)		0	342119	5.09	
A 117 C4-C12	1	12.738	(5.123-20.353)		0	1079779	16.1	
A 123 Aviation Gas	1	12.997	(8.901-17.093)		0	486217	NC	
A 119 C6-C10	1	13.078	(8.901-17.255)		0	492464	7.33	
A 118 C5-C12	1	13.528	(6.703-20.353)		0	907326	13.5	
A 120 C6-C12	1	14.627	(8.901-20.353)		0	758387	11.3	
A 155 C8-C10	1	15.336	(13.417-17.255)		0	297943	4.44	
A 121 C7-C12	1	15.786	(11.220-20.353)		0	628207	9.35	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

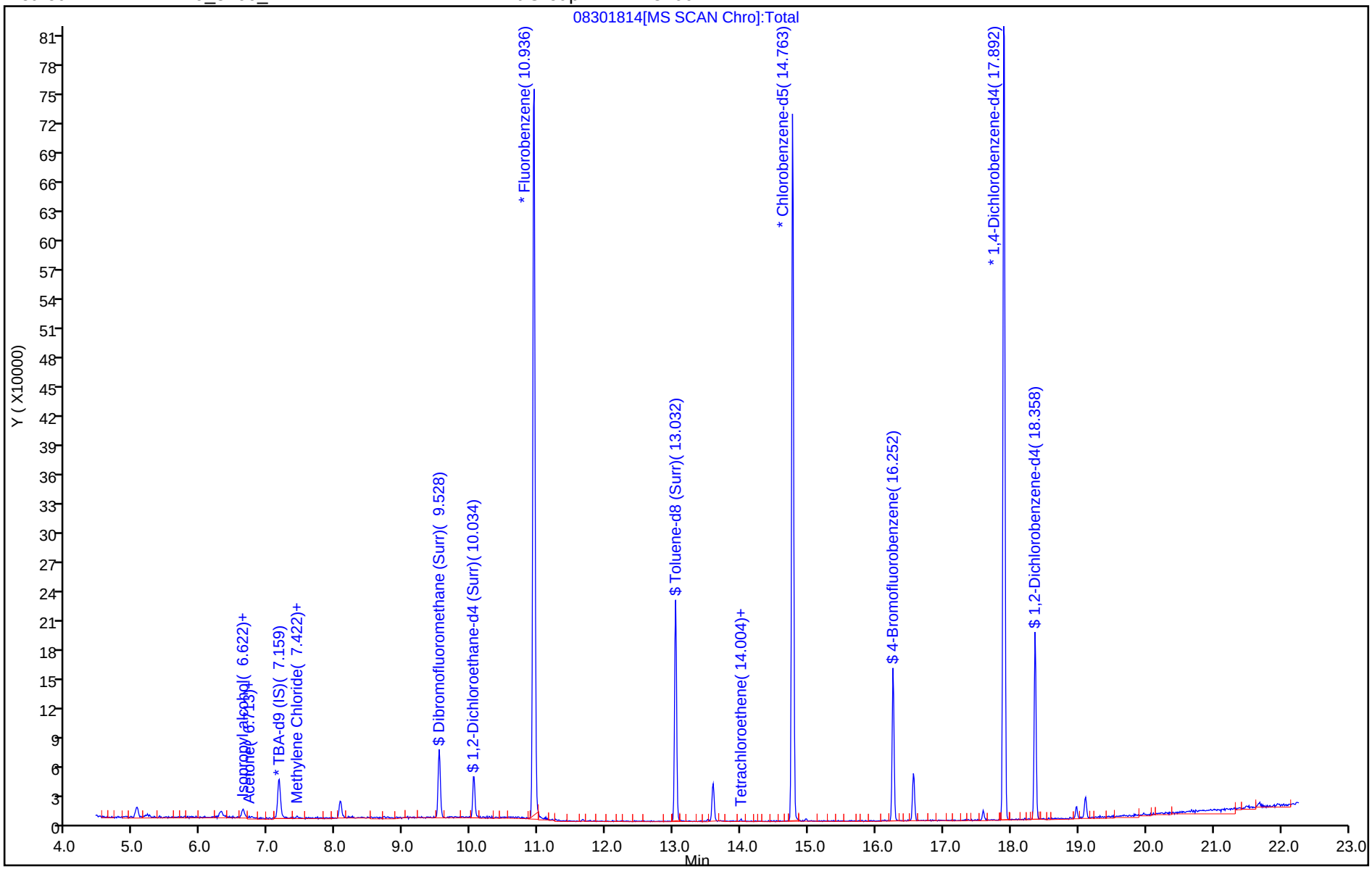
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 30-Aug-2018 14:33:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301814.D				
Injection Date:	30-Aug-2018 13:50:30	Instrument ID:	HP9	Operator ID:	SF
Lims ID:	720-88220-A-12	Lab Sample ID:	720-88220-12	Worklist Smp#:	15
Client ID:	FB-2				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	HP9_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301814.D
Lims ID: 720-88220-A-12
Client ID: FB-2
Sample Type: Client
Inject. Date: 30-Aug-2018 13:50:30 ALS Bottle#: 13 Worklist Smp#: 15
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-12
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 30-Aug-2018 14:33:02 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: salgadoa Date: 30-Aug-2018 14:33:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	6.74	89.84
$ 10 Toluene-d8 (Surr)	7.50	7.01	93.51
$ 11 4-Bromofluorobenzene	7.50	7.14	95.24
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

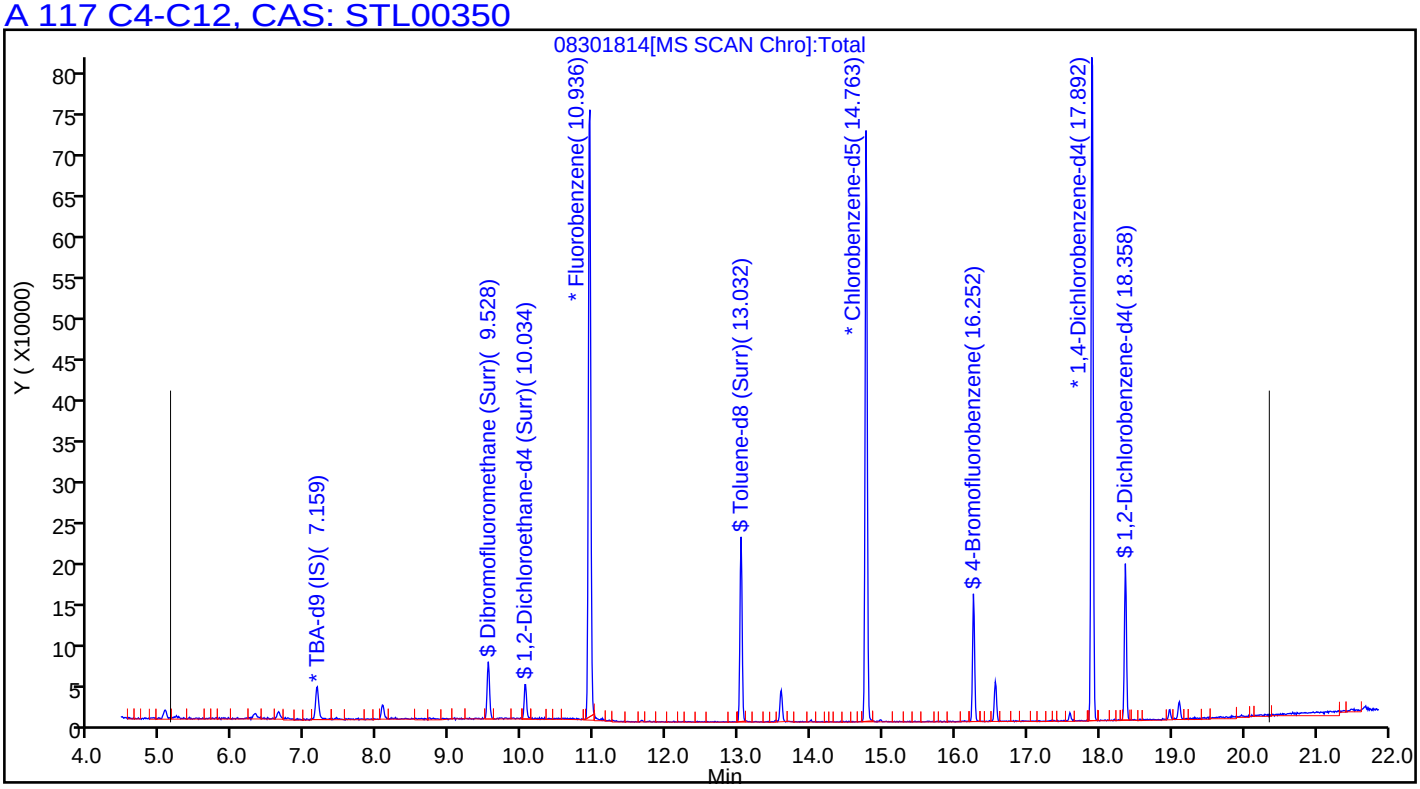
Report Date: 30-Aug-2018 14:33:04 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301814.D

Injection Date:	30-Aug-2018 13:50:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-12	Lab Sample ID:	720-88220-12		
Client ID:	FB-2				
Operator ID:	SF	ALS Bottle#:	13	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

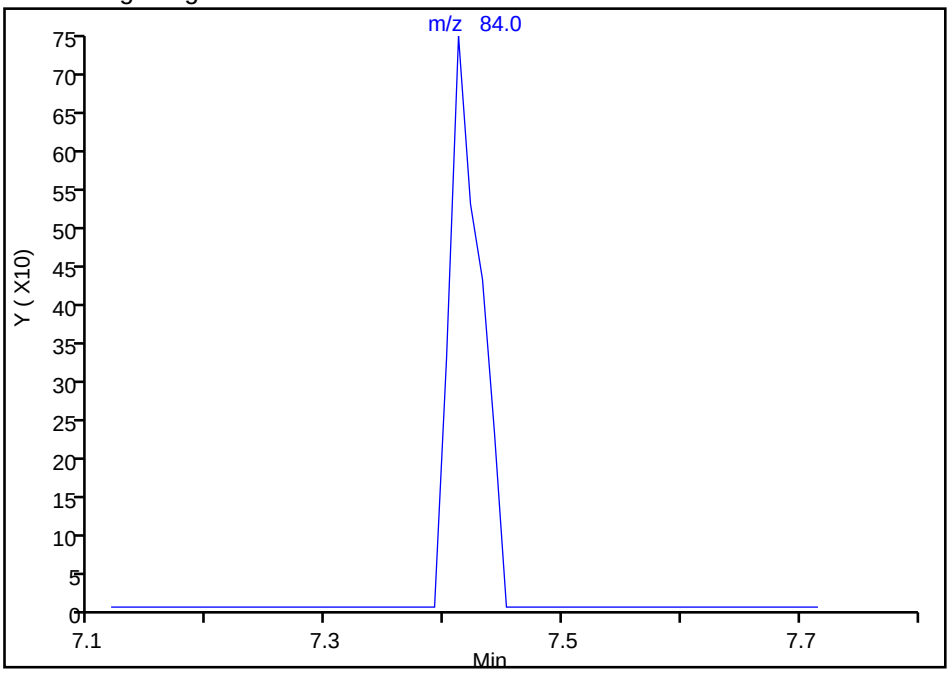
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301814.D				
Injection Date:	30-Aug-2018 13:50:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-12	Lab Sample ID:	720-88220-12		
Client ID:	FB-2				
Operator ID:	SF	ALS Bottle#:	13	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

34 Methylene Chloride, CAS: 75-09-2

Signal: 1

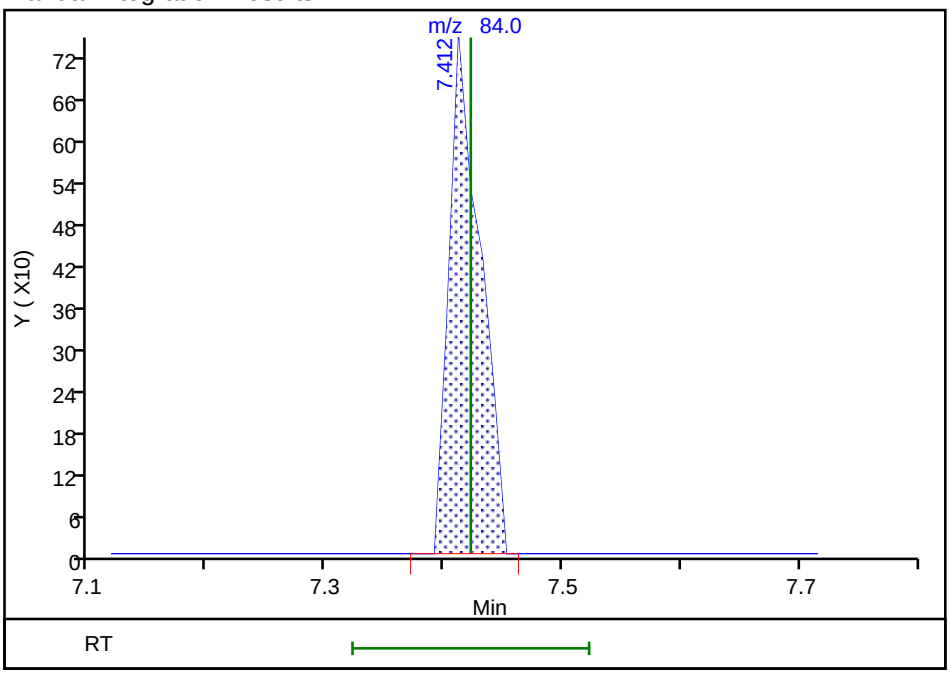
Not Detected
Expected RT: 7.42

Processing Integration Results



Manual Integration Results

RT: 7.41
Area: 1365
Amount: 0.170559
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 14:32:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

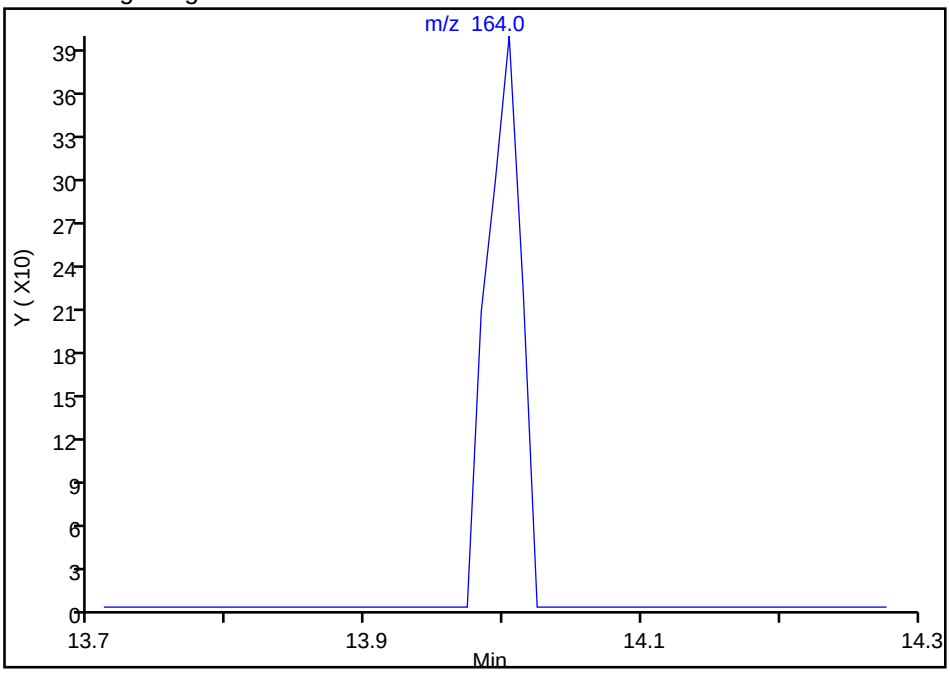
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301814.D				
Injection Date:	30-Aug-2018 13:50:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-12	Lab Sample ID:	720-88220-12		
Client ID:	FB-2				
Operator ID:	SF	ALS Bottle#:	13	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

81 Tetrachloroethene, CAS: 127-18-4

Signal: 1

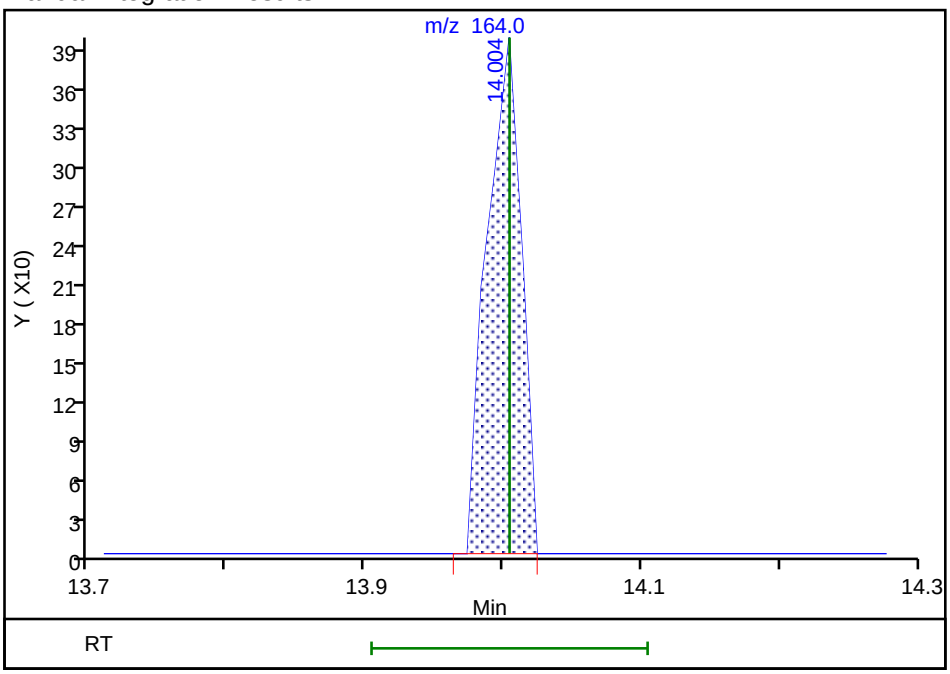
Not Detected
Expected RT: 14.00

Processing Integration Results



Manual Integration Results

RT: 14.00
Area: 671
Amount: 0.091743
Amount Units: ug/L



Reviewer: salgadoa, 30-Aug-2018 14:32:51
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

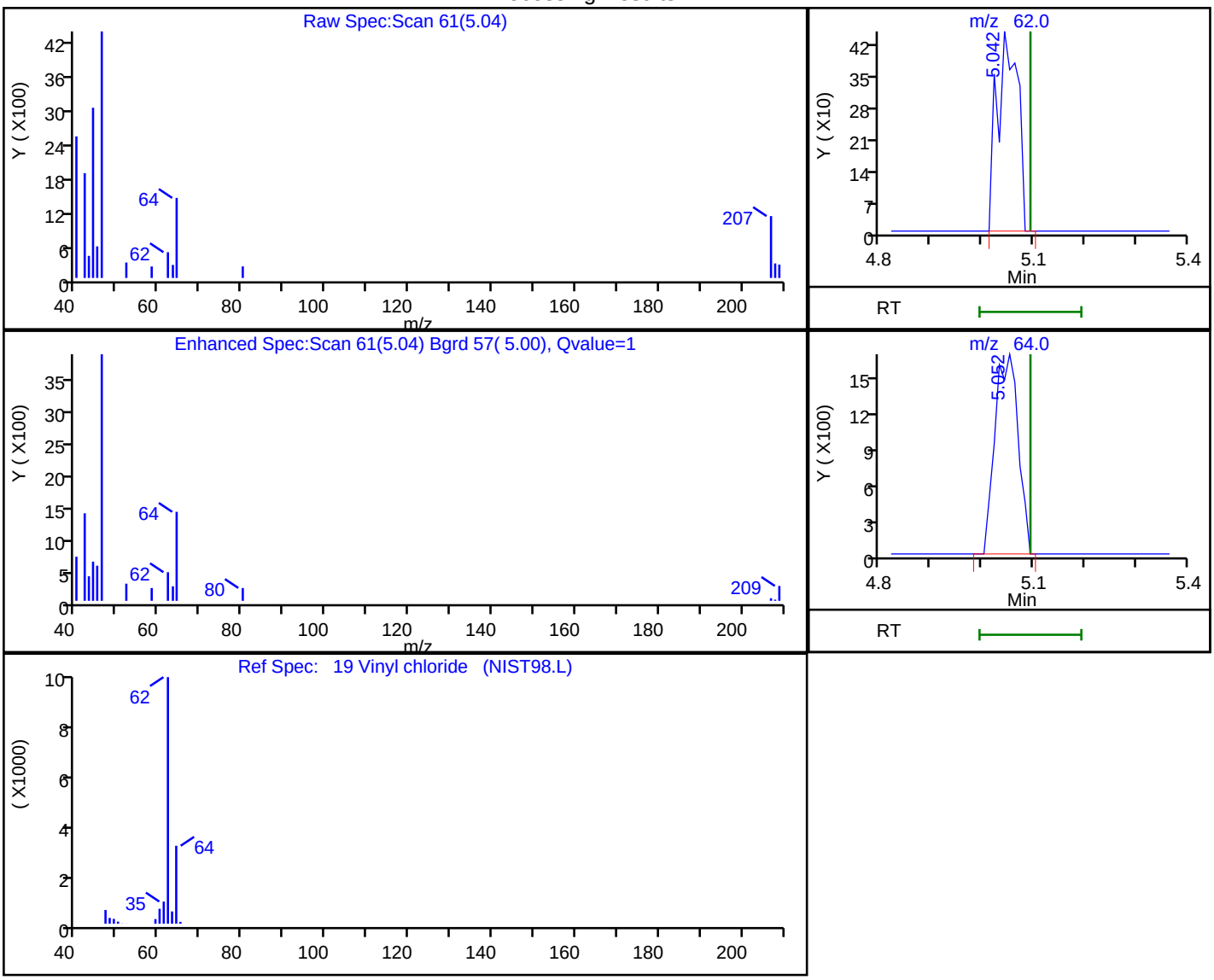
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301814.D				
Injection Date:	30-Aug-2018 13:50:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-12	Lab Sample ID:	720-88220-12		
Client ID:	FB-2				
Operator ID:	SF	ALS Bottle#:	13	Worklist Smp#:	15
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

19 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
5.04	62.00	1258	0.056503
5.05	64.00	5059	

Reviewer: salgadoa, 30-Aug-2018 14:32:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: FB-3 Lab Sample ID: 720-88220-13

Matrix: Water Lab File ID: 08301818.D

Analysis Method: 8260B Date Collected: 08/23/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 16:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250554 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND		0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND		5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: FB-3 Lab Sample ID: 720-88220-13

Matrix: Water Lab File ID: 08301818.D

Analysis Method: 8260B Date Collected: 08/23/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 16:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250554 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	ND		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	ND		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: FB-3 Lab Sample ID: 720-88220-13

Matrix: Water Lab File ID: 08301818.D

Analysis Method: 8260B Date Collected: 08/23/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 16:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250554 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		72-130
460-00-4	4-Bromofluorobenzene	95		67-130
2037-26-5	Toluene-d8 (Surr)	99		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180830-53570.b\08301818.D
Lims ID: 720-88220-A-13
Client ID: FB-3
Sample Type: Client
Inject. Date: 30-Aug-2018 16:13:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-13
Misc. Info.: HP-4
Operator ID: SF Instrument ID: HP4

Method: \\ChromNA\Pleasanton\ChromData\HP4\20180830-53570.b\8260W_LL_GRO_HP4.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:22:54 Calib Date: 26-Jul-2018 01:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D

Column 1 : DB-VRX (250.00 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: chaijita Date: 31-Aug-2018 08:22:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.360	7.360	0.000	99	386398	250.0	
* 2 Fluorobenzene	96	11.167	11.177	-0.010	98	1813311	25.0	
* 3 Chlorobenzene-d5	117	15.035	15.034	0.001	88	1326978	25.0	
* 4 1,4-Dichlorobenzene-d4	152	18.192	18.192	0.000	96	656620	25.0	
$ 5 Dibromofluoromethane (Surr	113	9.756	9.747	0.000	93	125892	7.50	
$ 6 1,2-Dichloroethane-d4 (Sur	65	10.273	10.264	0.000	0	151154	7.34	
$ 8 Toluene-d8 (Surr)	98	13.288	13.276	0.000	94	518587	7.42	
$ 9 4-Bromofluorobenzene	95	16.527	16.537	-0.010	88	189174	7.10	
$ 10 1,2-Dichlorobenzene-d4	152	18.659	18.659	0.000	85	146829	6.03	
23 Isopropyl alcohol	45	6.822	6.832	-0.010	100	108285	77.1	
24 Acetone	58	6.913	6.907	0.000	99	3864	2.12	
31 Methylene Chloride	84	7.634	7.627	0.000	34	1509	0.0879	
38 Methyl tert-butyl ether	73	8.537	8.540	-0.010	19	1955	0.0432	
54 Tetrahydrofuran	42	9.999	9.990	0.000	82	4356	0.6702	
55 t-Amyl alcohol	59	10.121	10.121	0.000	13	1447	0.9053	
58 n-Butanol	56	10.517	10.517	0.000	27	1252	2.00	
66 n-Heptane	71	11.502	11.491	0.000	88	1446	0.0744	
80 Toluene	92	13.370	13.370	0.000	95	1349	0.0238	
126 Butane	43	5.472	5.461	0.011	1	1534	NR	
128 n-Octane	43	13.674	13.745	-0.071	86	5078	NR	
129 n-Nonane	57	15.623	15.664	-0.041	0	3504	NR	
130 n-Decane	57	17.390	17.430	-0.040	94	3890	NR	
131 Dodecane	57	20.506	20.547	-0.041	93	5998	NR	
132 C13	57	22.019	22.059	-0.040	91	8007	NR	
A 158 C6-C8	1	11.456	(9.106-13.806)		0	297055	1.62	
A 134 C4-C10	1	11.466	(5.451-17.481)		0	1681702	9.18	
A 159 C6-C9	1	12.400	(9.106-15.694)		0	833839	4.55	
A 136 C4-C12	1	13.024	(5.451-20.598)		0	2080259	11.4	
A 137 C6-C10	1	13.293	(9.106-17.481)		0	1151690	6.29	
A 138 C5-C12	1	13.826	(7.055-20.598)		0	1821078	9.94	
A 139 C6-C12	1	14.852	(9.106-20.598)		0	1550247	8.46	

Report Date: 31-Aug-2018 08:22:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50
Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180830-53570.b\08301818.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
A 160 C8-C10	1	15.598	(13.715-17.481)		0	883379	4.82	
A 141 C7-C12	1	16.029	(11.461-20.598)		0	1384827	7.56	
T 156 Paraldehyde TIC	45	13.278	13.266	0.000	0	589	0.5005	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

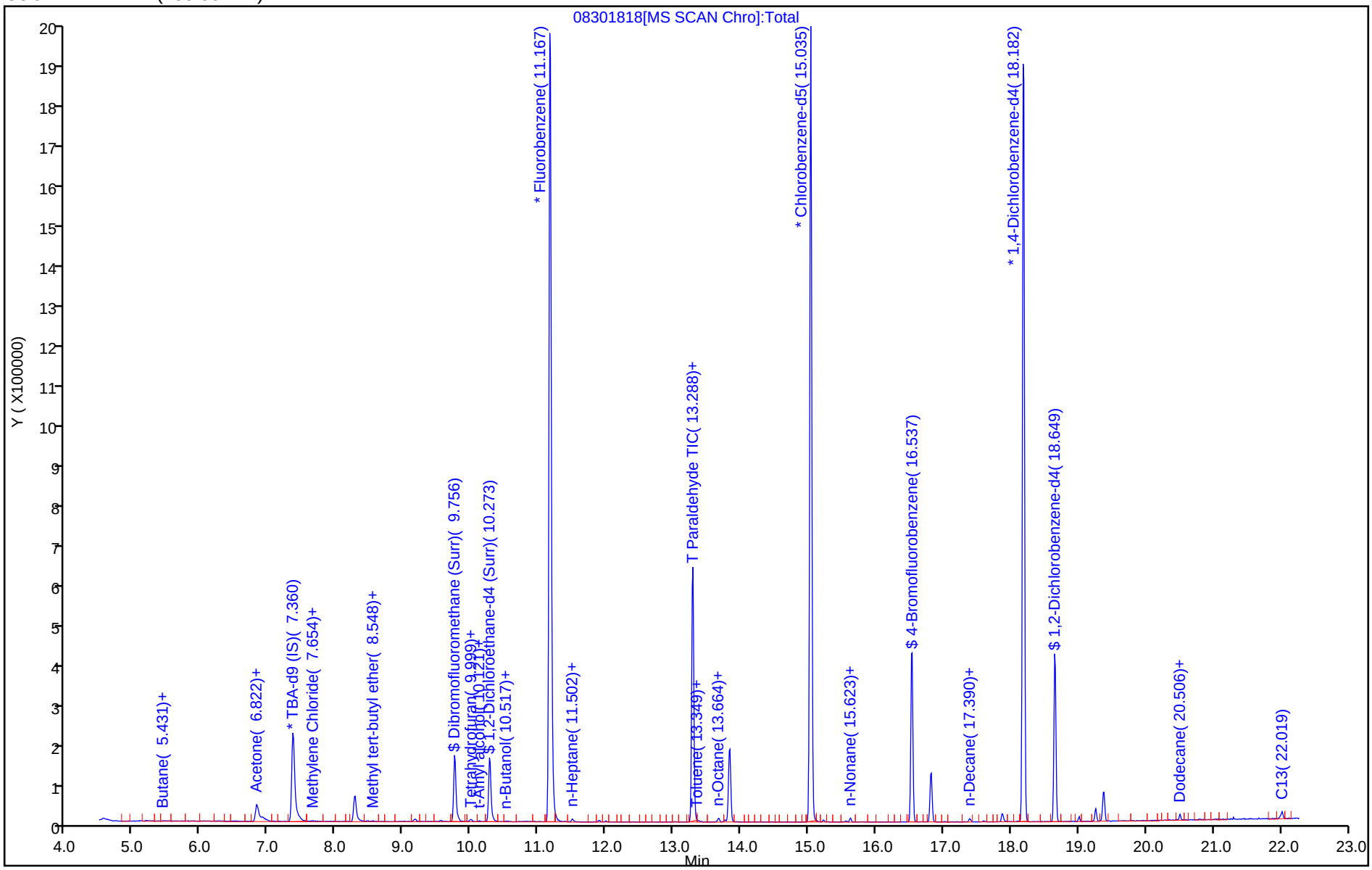
Report Date: 31-Aug-2018 08:22:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180830-53570.b\08301818.D

Injection Date:	30-Aug-2018 16:13:30	Instrument ID:	HP4	Operator ID:	SF
Lims ID:	720-88220-A-13	Lab Sample ID:	720-88220-13	Worklist Smp#:	17
Client ID:	FB-3				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		

Column: DB-VRX (250.00 mm)



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180830-53570.b\08301818.D
Lims ID: 720-88220-A-13
Client ID: FB-3
Sample Type: Client
Inject. Date: 30-Aug-2018 16:13:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-13
Misc. Info.: HP-4
Operator ID: SF Instrument ID: HP4

Method: \\ChromNA\Pleasanton\ChromData\HP4\20180830-53570.b\8260W_LL_GRO_HP4.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:22:54 Calib Date: 26-Jul-2018 01:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D

Column 1 : DB-VRX (250.00 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: chaijita Date: 31-Aug-2018 08:22:54

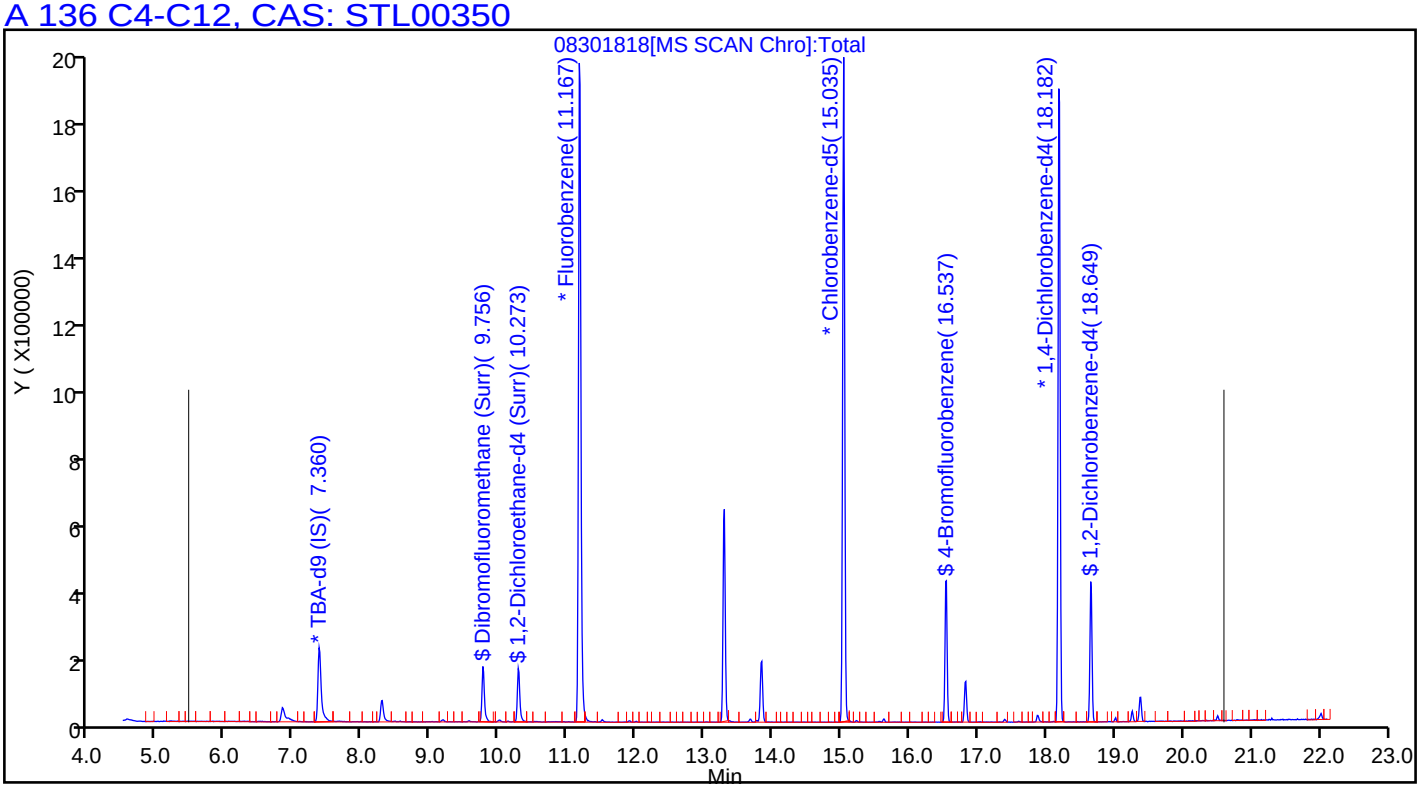
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 6 1,2-Dichloroethane-d4 (Surr)	7.50	7.34	97.82
$ 8 Toluene-d8 (Surr)	7.50	7.42	98.97
$ 9 4-Bromofluorobenzene	7.50	7.10	94.67
$ 10 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 08:22:57 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180830-53570.b\08301818.D				
Injection Date:	30-Aug-2018 16:13:30	Instrument ID:	HP4		
Lims ID:	720-88220-A-13	Lab Sample ID:	720-88220-13		
Client ID:	FB-3				
Operator ID:	SF	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

A 136 C4-C12, CAS: STL00350



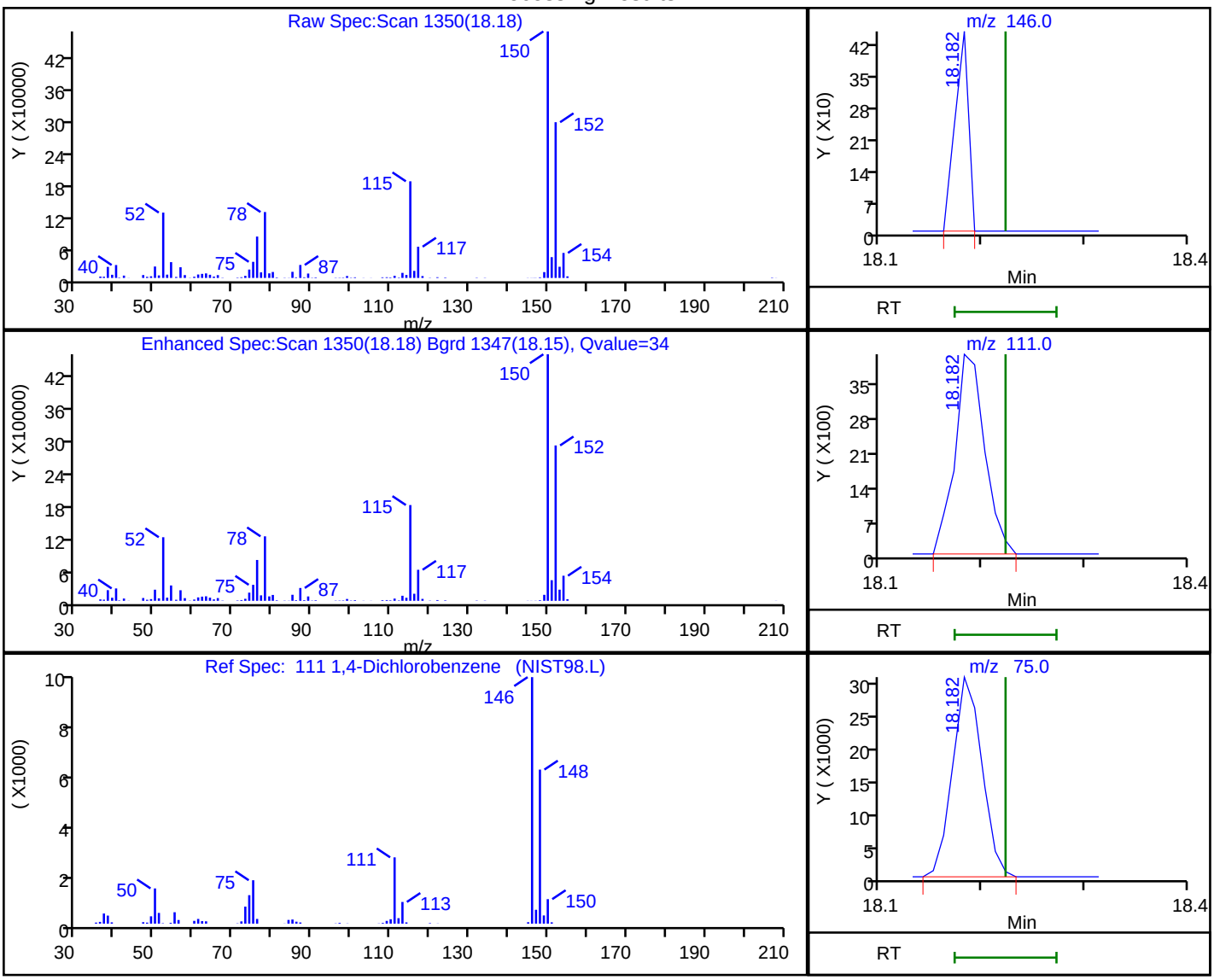
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180830-53570.b\08301818.D				
Injection Date:	30-Aug-2018 16:13:30	Instrument ID:	HP4		
Lims ID:	720-88220-A-13	Lab Sample ID:	720-88220-13		
Client ID:	FB-3				
Operator ID:	SF	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

111 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
18.18	146.00	406	0.010092
18.18	111.00	8214	
18.18	75.00	60893	
18.19	148.00	2837	

Reviewer: chaijita, 31-Aug-2018 08:22:47

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

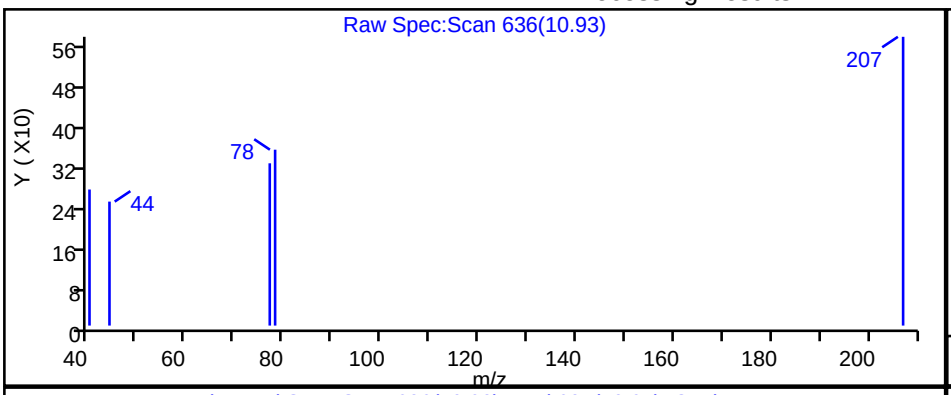
User Disabled Compound Report

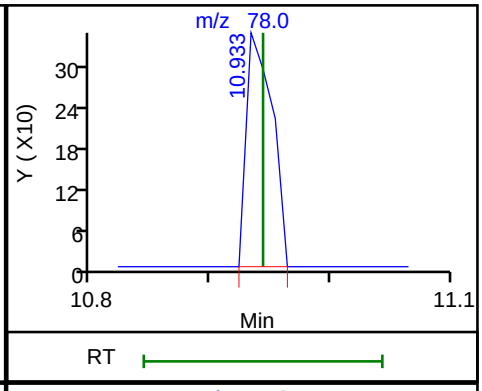
TestAmerica Pleasanton

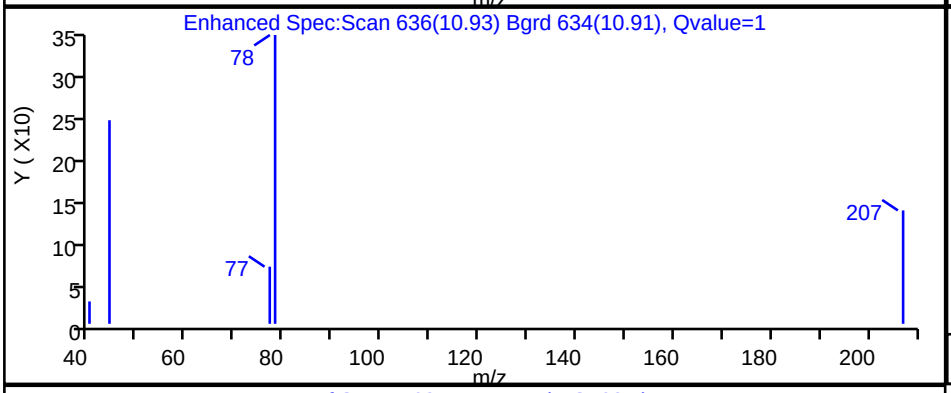
Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180830-53570.b\08301818.D				
Injection Date:	30-Aug-2018 16:13:30	Instrument ID:	HP4		
Lims ID:	720-88220-A-13	Lab Sample ID:	720-88220-13		
Client ID:	FB-3				
Operator ID:	SF	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

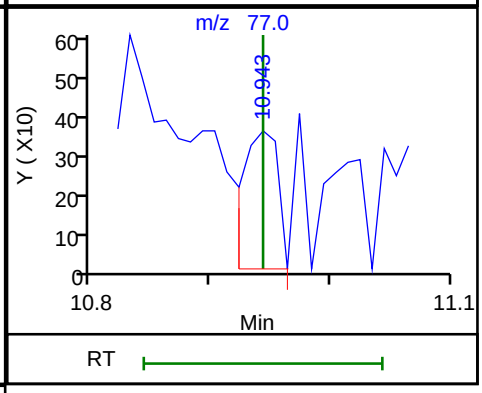
62 Benzene, CAS: 71-43-2

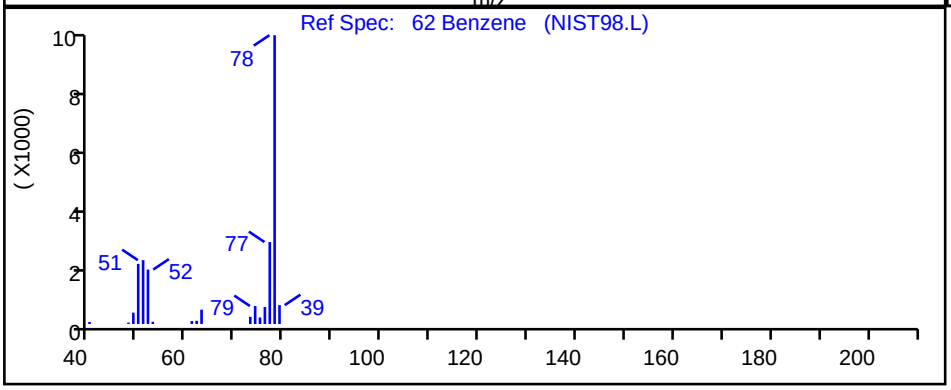
Processing Results











RT	Mass	Response	Amount
10.93	78.00	526	0.007252
10.94	77.00	748	

Reviewer: chaijita, 31-Aug-2018 08:21:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: TB-3 Lab Sample ID: 720-88220-15

Matrix: Water Lab File ID: 08301819.D

Analysis Method: 8260B Date Collected: 08/23/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 16:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250554 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND		0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND		5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: TB-3 Lab Sample ID: 720-88220-15

Matrix: Water Lab File ID: 08301819.D

Analysis Method: 8260B Date Collected: 08/23/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 16:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250554 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	ND		50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	ND		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	ND		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: TB-3 Lab Sample ID: 720-88220-15

Matrix: Water Lab File ID: 08301819.D

Analysis Method: 8260B Date Collected: 08/23/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 16:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250554 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		72-130
460-00-4	4-Bromofluorobenzene	95		67-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180830-53570.b\08301819.D
Lims ID: 720-88220-A-15
Client ID: TB-3
Sample Type: Client
Inject. Date: 30-Aug-2018 16:43:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-15
Misc. Info.: HP-4
Operator ID: SF Instrument ID: HP4

Method: \\ChromNA\Pleasanton\ChromData\HP4\20180830-53570.b\8260W_LL_GRO_HP4.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:24:37 Calib Date: 26-Jul-2018 01:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D

Column 1 : DB-VRX (250.00 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: chaijita Date: 31-Aug-2018 08:24:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.360	7.360	0.000	98	336727	250.0	
* 2 Fluorobenzene	96	11.167	11.177	-0.010	99	1620818	25.0	
* 3 Chlorobenzene-d5	117	15.035	15.034	0.001	88	1160186	25.0	
* 4 1,4-Dichlorobenzene-d4	152	18.192	18.192	0.000	96	572897	25.0	
$ 5 Dibromofluoromethane (Surr	113	9.756	9.747	0.000	93	117202	7.81	
$ 6 1,2-Dichloroethane-d4 (Sur	65	10.273	10.264	0.000	0	138143	7.50	
$ 8 Toluene-d8 (Surr)	98	13.289	13.276	0.001	94	456583	7.31	
$ 9 4-Bromofluorobenzene	95	16.527	16.537	-0.010	87	166542	7.15	
$ 10 1,2-Dichlorobenzene-d4	152	18.659	18.659	0.000	85	128424	6.05	
31 Methylene Chloride	84	7.634	7.627	0.000	7	1073	0.0700	
38 Methyl tert-butyl ether	73	8.537	8.540	-0.010	25	2234	0.0552	
54 Tetrahydrofuran	42	9.999	9.990	0.000	94	4451	0.7662	
66 n-Heptane	71	11.492	11.491	-0.010	94	1212	0.0698	
126 Butane	43	5.461	5.461	0.000	1	415	NR	
127 Pentane	43	7.005	7.146	-0.141	1	1496	NR	
128 n-Octane	43	13.664	13.745	-0.081	84	4176	NR	
129 n-Nonane	57	15.613	15.664	-0.051	0	3059	NR	
130 n-Decane	57	17.400	17.430	-0.030	98	3785	NR	
131 Dodecane	57	20.506	20.547	-0.041	90	5665	NR	
132 C13	57	22.019	22.059	-0.040	93	6449	NR	
A 158 C6-C8	1	11.456	(9.106-13.806)		0	225412	1.38	
A 134 C4-C10	1	11.466	(5.451-17.481)		0	1037348	6.33	
A 159 C6-C9	1	12.400	(9.106-15.694)		0	633137	3.87	
A 136 C4-C12	1	13.024	(5.451-20.598)		0	1384924	8.46	
A 137 C6-C10	1	13.293	(9.106-17.481)		0	888067	5.42	
A 138 C5-C12	1	13.826	(7.055-20.598)		0	1326447	8.10	
A 139 C6-C12	1	14.852	(9.106-20.598)		0	1235643	7.55	
A 160 C8-C10	1	15.598	(13.715-17.481)		0	684900	4.18	
A 141 C7-C12	1	16.029	(11.461-20.598)		0	1117386	6.82	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

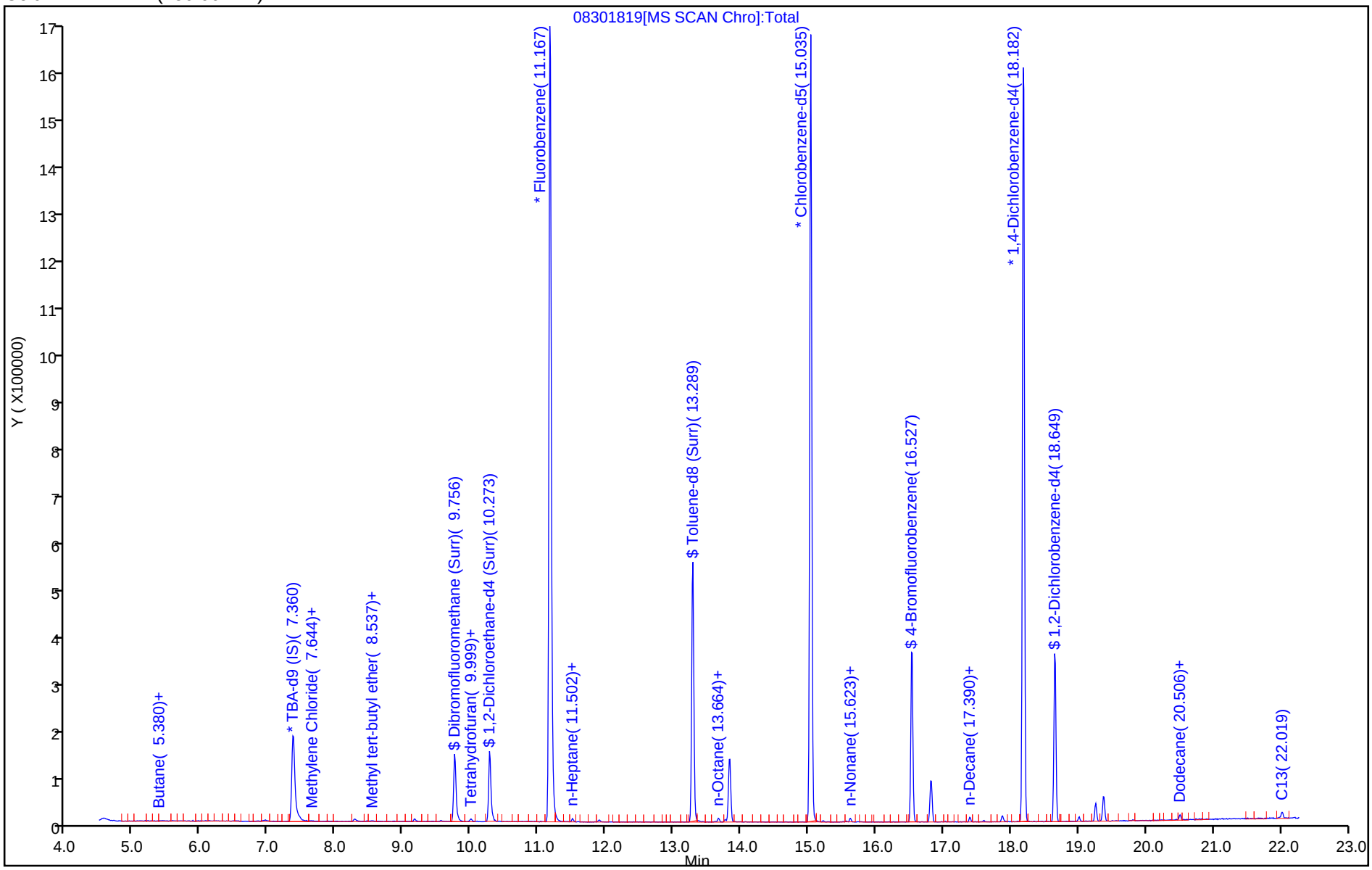
Report Date: 31-Aug-2018 08:24:38 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180830-53570.b\08301819.D

Injection Date:	30-Aug-2018 16:43:30	Instrument ID:	HP4	Operator ID:	SF
Lims ID:	720-88220-A-15	Lab Sample ID:	720-88220-15	Worklist Smp#:	18
Client ID:	TB-3				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		

Column: DB-VRX (250.00 mm)



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP4\20180830-53570.b\08301819.D
Lims ID: 720-88220-A-15
Client ID: TB-3
Sample Type: Client
Inject. Date: 30-Aug-2018 16:43:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-15
Misc. Info.: HP-4
Operator ID: SF Instrument ID: HP4

Method: \\ChromNA\Pleasanton\ChromData\HP4\20180830-53570.b\8260W_LL_GRO_HP4.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:24:37 Calib Date: 26-Jul-2018 01:42:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP4\20180725-52939.b\07251826.D

Column 1 : DB-VRX (250.00 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: chaijita Date: 31-Aug-2018 08:24:37

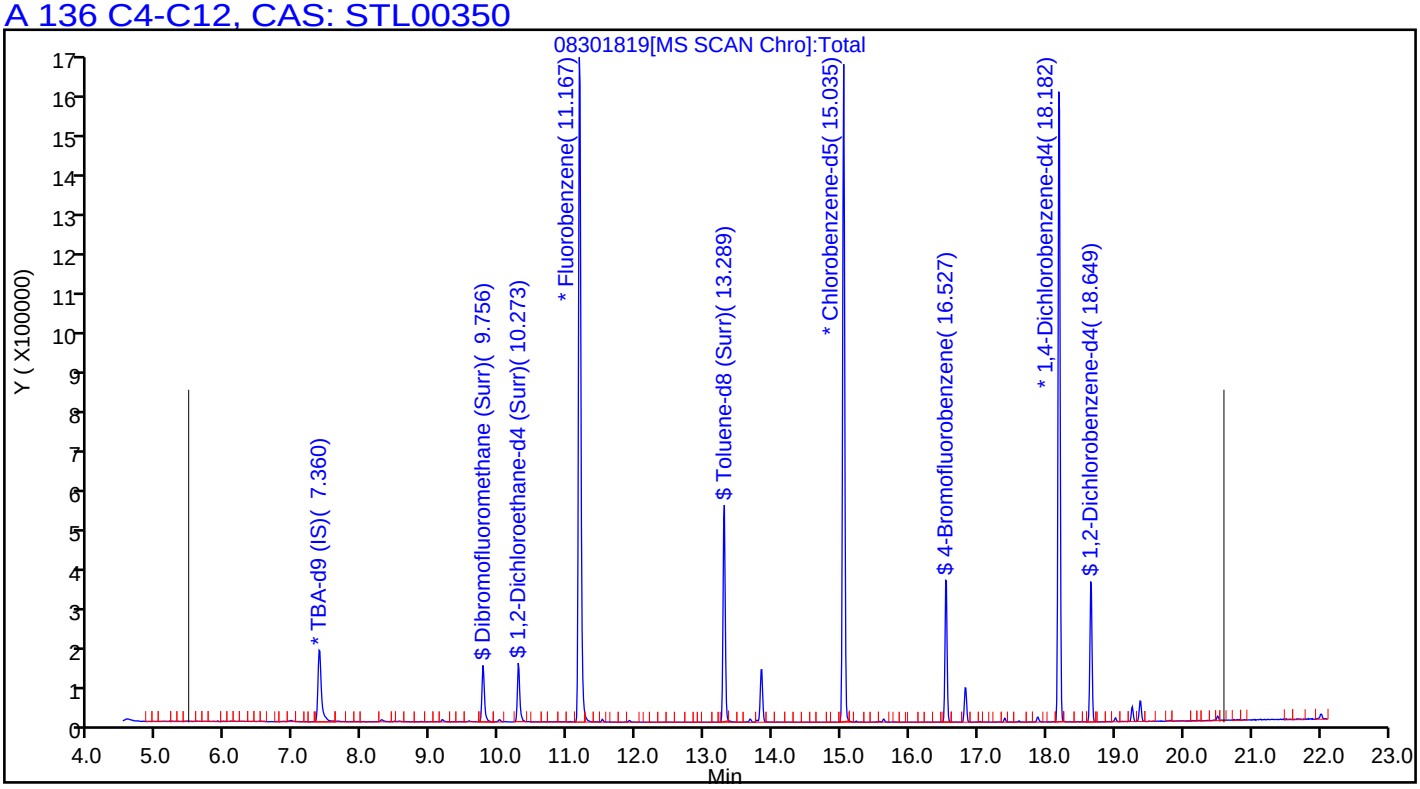
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 6 1,2-Dichloroethane-d4 (Surr)	7.50	7.50	100.02
$ 8 Toluene-d8 (Surr)	7.50	7.31	97.48
$ 9 4-Bromofluorobenzene	7.50	7.15	95.33
$ 10 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 08:24:41 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180830-53570.b\08301819.D				
Injection Date:	30-Aug-2018 16:43:30	Instrument ID:	HP4		
Lims ID:	720-88220-A-15	Lab Sample ID:	720-88220-15		
Client ID:	TB-3				
Operator ID:	SF	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

A 136 C4-C12, CAS: STL00350



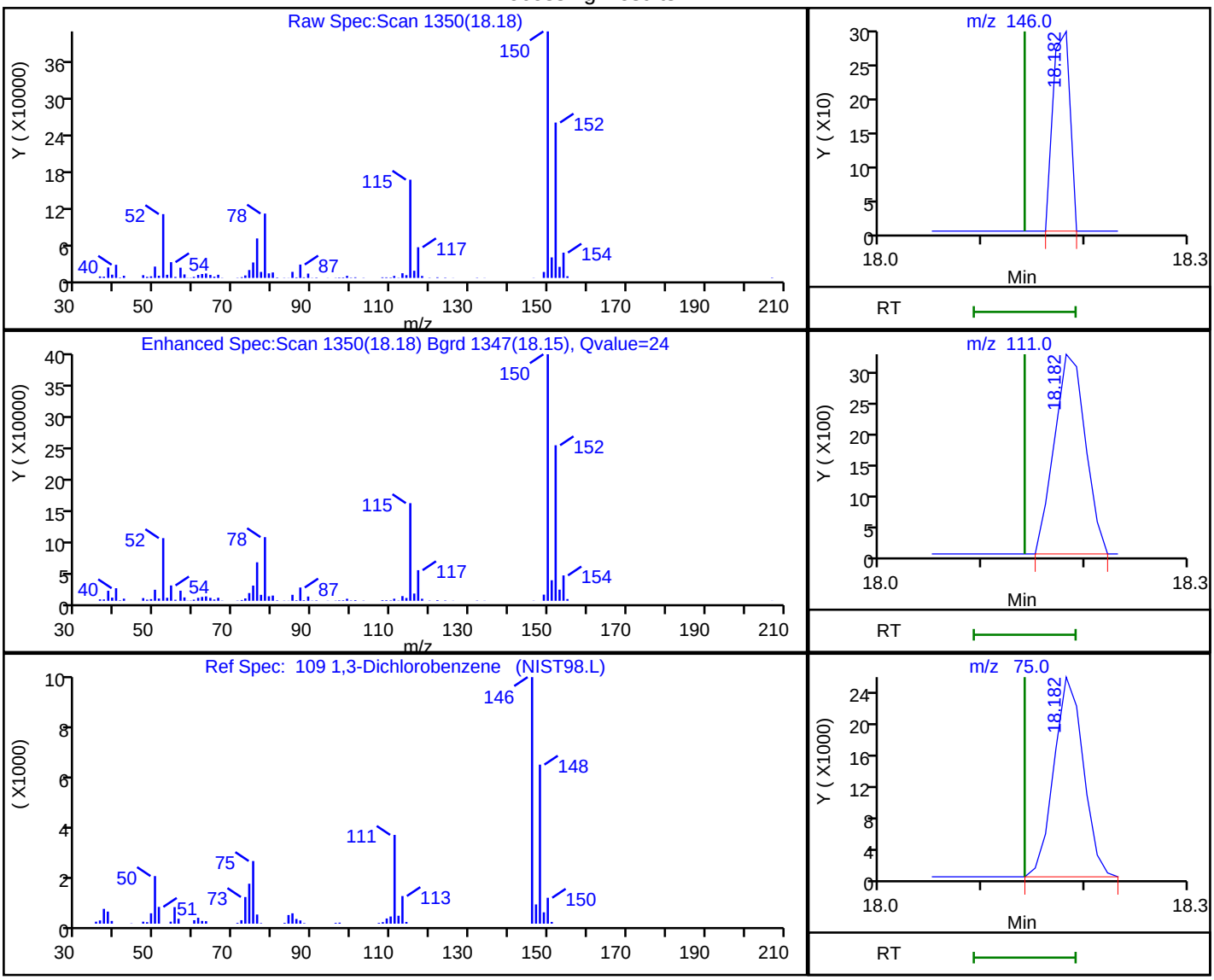
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180830-53570.b\08301819.D				
Injection Date:	30-Aug-2018 16:43:30	Instrument ID:	HP4		
Lims ID:	720-88220-A-15	Lab Sample ID:	720-88220-15		
Client ID:	TB-3				
Operator ID:	SF	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

109 1,3-Dichlorobenzene, CAS: 541-73-1

Processing Results



RT	Mass	Response	Amount
18.18	146.00	341	0.009451
18.18	111.00	6975	
18.18	75.00	51211	
18.17	148.00	730	

Reviewer: chaijita, 31-Aug-2018 08:24:34

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

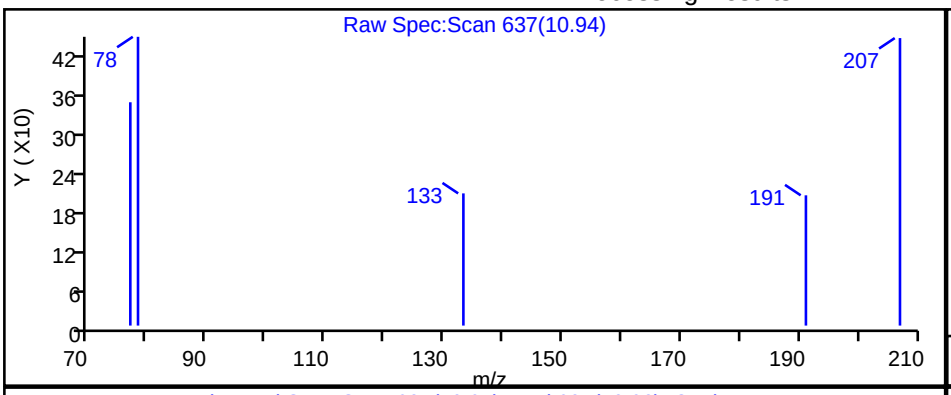
User Disabled Compound Report

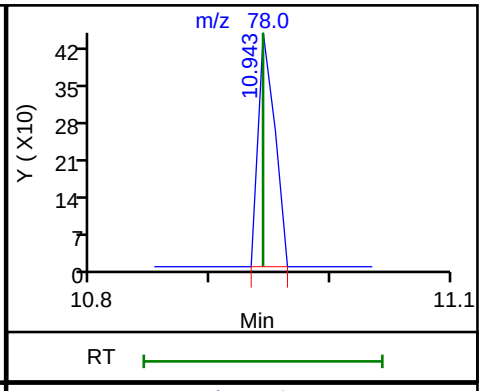
TestAmerica Pleasanton

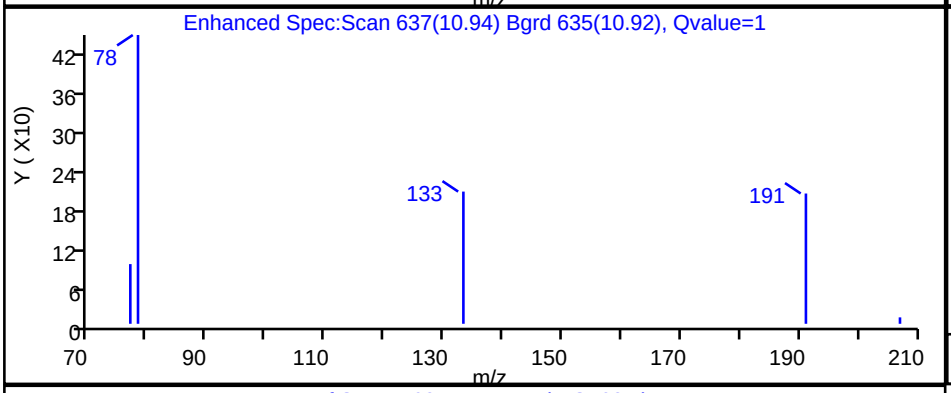
Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180830-53570.b\08301819.D				
Injection Date:	30-Aug-2018 16:43:30	Instrument ID:	HP4		
Lims ID:	720-88220-A-15	Lab Sample ID:	720-88220-15		
Client ID:	TB-3				
Operator ID:	SF	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

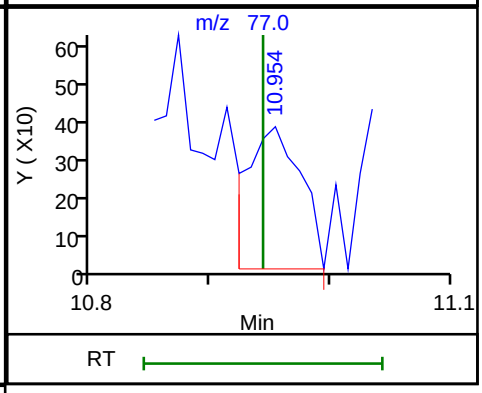
62 Benzene, CAS: 71-43-2

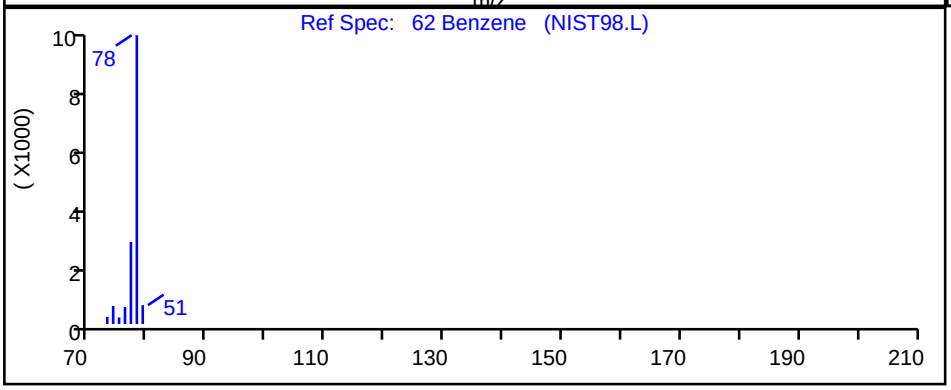
Processing Results











RT	Mass	Response	Amount
10.94	78.00	434	0.006694
10.95	77.00	1230	

Reviewer: chaijita, 31-Aug-2018 08:24:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

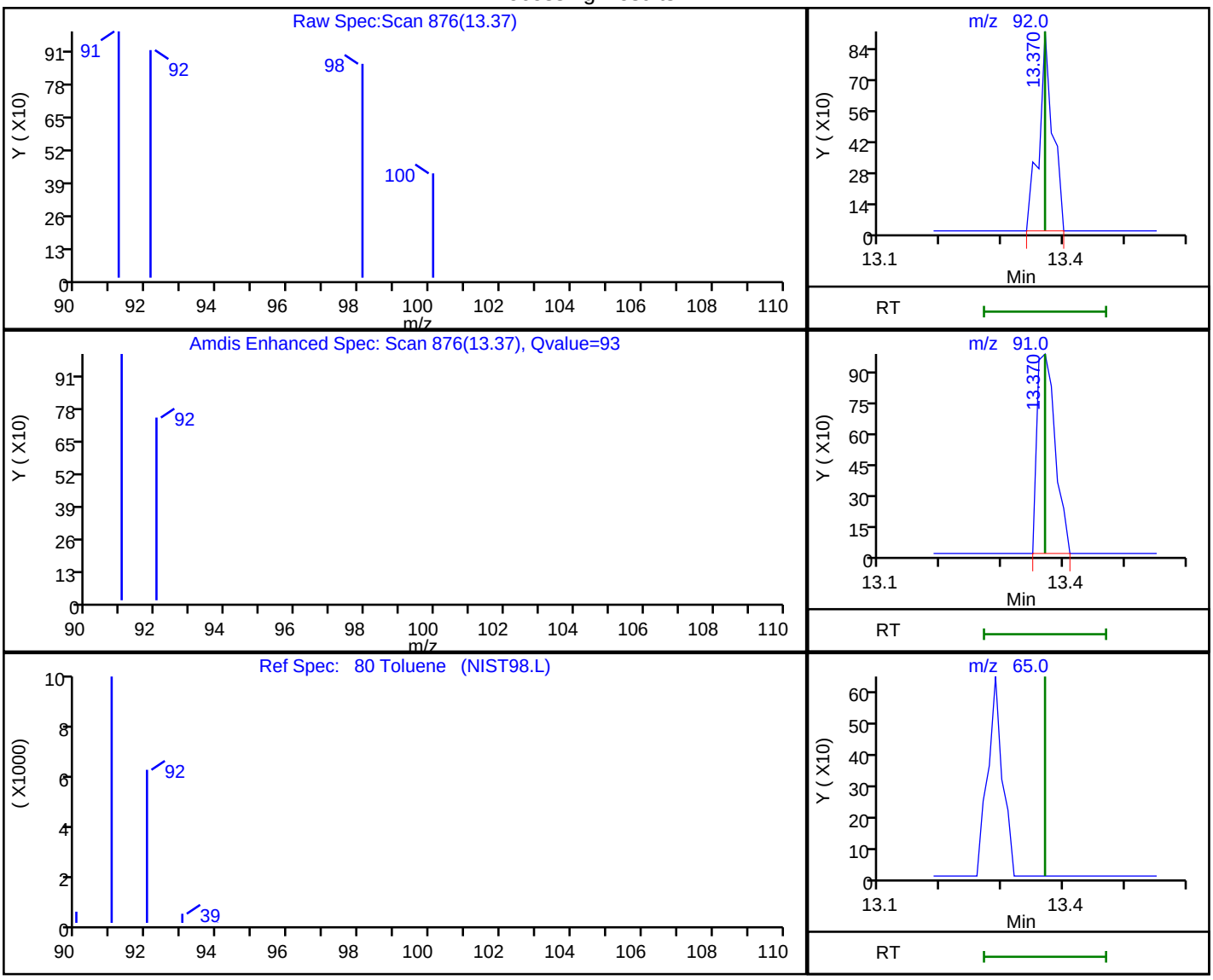
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180830-53570.b\08301819.D				
Injection Date:	30-Aug-2018 16:43:30	Instrument ID:	HP4		
Lims ID:	720-88220-A-15	Lab Sample ID:	720-88220-15		
Client ID:	TB-3				
Operator ID:	SF	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

80 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
13.37	92.00	1428	0.028840
13.37	91.00	2040	
13.37	65.00	0	

Reviewer: chaijita, 31-Aug-2018 08:24:18

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

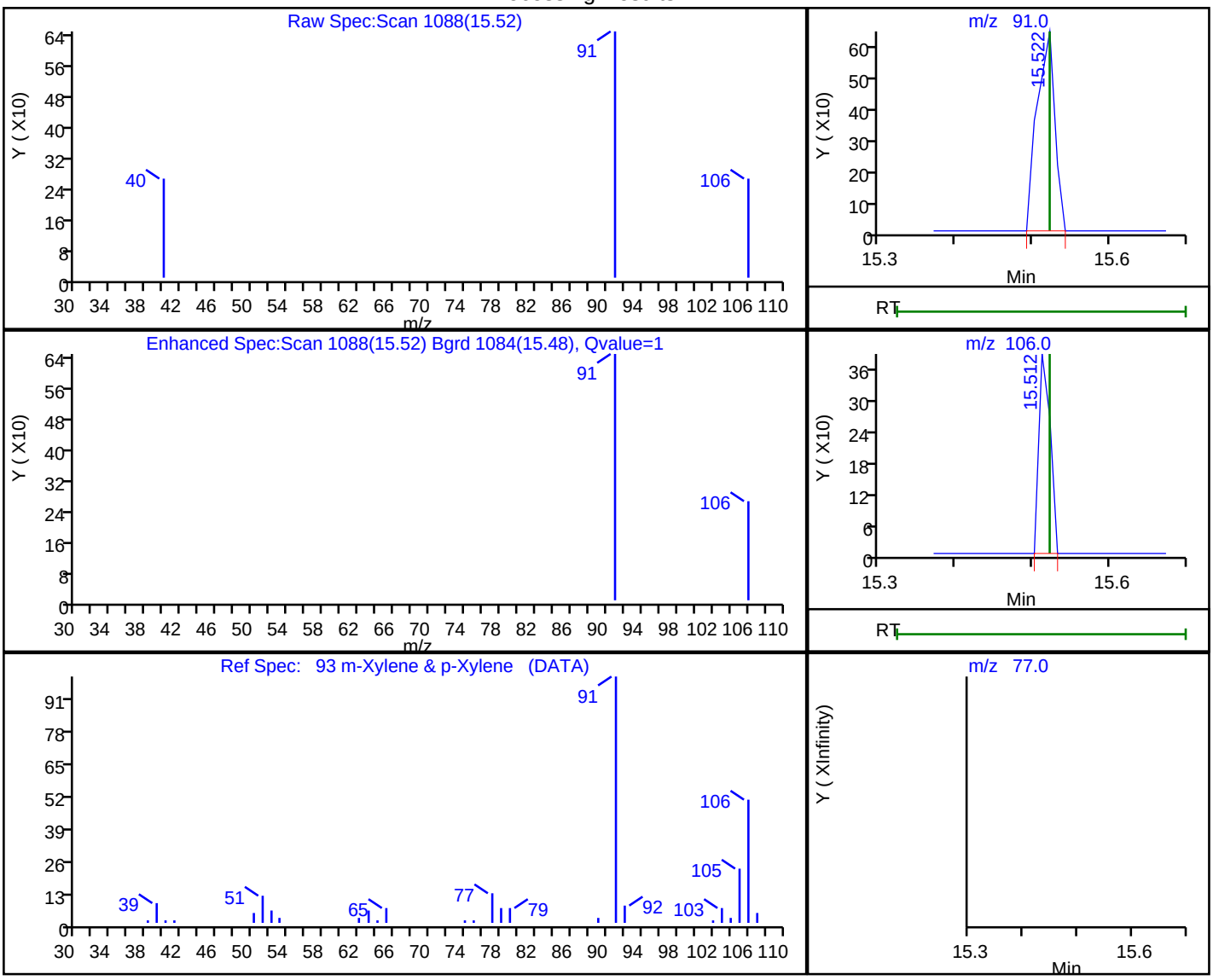
User Disabled Compound Report

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP4\20180830-53570.b\08301819.D				
Injection Date:	30-Aug-2018 16:43:30	Instrument ID:	HP4		
Lims ID:	720-88220-A-15	Lab Sample ID:	720-88220-15		
Client ID:	TB-3				
Operator ID:	SF	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	8260W_LL_GRO_HP4	Limit Group:	8260B		
Column:	DB-VRX (250.00 mm)	Detector	MS SCAN		

93 m-Xylene & p-Xylene, CAS: 179601-23-1

Processing Results



RT	Mass	Response	Amount
15.52	91.00	1050	0.016482
15.51	106.00	392	
15.52	77.00	0	

Reviewer: chaijita, 31-Aug-2018 08:24:27

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DUP-02 Lab Sample ID: 720-88220-16

Matrix: Water Lab File ID: 08301822.D

Analysis Method: 8260B Date Collected: 08/23/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 17:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250553 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.067
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.074
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.11
75-34-3	1,1-Dichloroethane	ND		0.50	0.11
75-35-4	1,1-Dichloroethene	ND	*	0.50	0.20
563-58-6	1,1-Dichloropropene	ND		0.50	0.20
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.21
96-18-4	1,2,3-Trichloropropane	ND		0.50	0.087
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	ND		0.50	0.20
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.30
95-50-1	1,2-Dichlorobenzene	ND		0.50	0.21
107-06-2	1,2-Dichloroethane	ND		0.50	0.077
78-87-5	1,2-Dichloropropane	ND		0.50	0.20
108-67-8	1,3,5-Trimethylbenzene	ND		0.50	0.17
541-73-1	1,3-Dichlorobenzene	ND		0.50	0.20
142-28-9	1,3-Dichloropropane	ND		1.0	0.17
106-46-7	1,4-Dichlorobenzene	ND		0.50	0.16
594-20-7	2,2-Dichloropropane	ND		0.50	0.17
78-93-3	2-Butanone (MEK)	ND		50	8.4
95-49-8	2-Chlorotoluene	ND		0.50	0.20
591-78-6	2-Hexanone	ND		50	3.0
106-43-4	4-Chlorotoluene	ND		0.50	0.20
99-87-6	4-Isopropyltoluene	ND		1.0	0.20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	4.5
67-64-1	Acetone	ND		50	20
71-43-2	Benzene	ND		0.50	0.25
108-86-1	Bromobenzene	ND		1.0	0.20
75-25-2	Bromoform	ND		1.0	0.50
74-83-9	Bromomethane	ND		1.0	0.49
75-15-0	Carbon disulfide	ND	*	5.0	0.78
56-23-5	Carbon tetrachloride	ND		0.50	0.11
108-90-7	Chlorobenzene	ND		0.50	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DUP-02 Lab Sample ID: 720-88220-16

Matrix: Water Lab File ID: 08301822.D

Analysis Method: 8260B Date Collected: 08/23/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 17:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250553 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-97-5	Chlorobromomethane	ND		1.0	0.25
124-48-1	Chlorodibromomethane	ND		0.50	0.10
75-00-3	Chloroethane	ND		1.0	0.17
67-66-3	Chloroform	ND		1.0	0.40
74-87-3	Chloromethane	ND		1.0	0.19
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.076
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
74-95-3	Dibromomethane	ND		0.50	0.30
75-27-4	Dichlorobromomethane	ND		0.50	0.20
75-71-8	Dichlorodifluoromethane	ND		0.50	0.25
100-41-4	Ethylbenzene	ND		0.50	0.13
106-93-4	Ethylene Dibromide	ND		0.50	0.075
STL00350	Gasoline Range Organics (GRO)-C4-C12	31	J	50	21
87-68-3	Hexachlorobutadiene	ND		1.0	0.27
98-82-8	Isopropylbenzene	ND		0.50	0.20
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.11
75-09-2	Methylene Chloride	ND		5.0	1.5
91-20-3	Naphthalene	ND		1.0	0.22
104-51-8	n-Butylbenzene	ND		1.0	0.30
103-65-1	N-Propylbenzene	ND		1.0	0.20
135-98-8	sec-Butylbenzene	ND		1.0	0.17
100-42-5	Styrene	ND		0.50	0.22
98-06-6	tert-Butylbenzene	ND		1.0	0.20
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.17
156-60-5	trans-1,2-Dichloroethene	ND	*	0.50	0.13
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.17
79-01-6	Trichloroethene	ND		0.50	0.20
75-69-4	Trichlorofluoromethane	ND		1.0	0.30
108-05-4	Vinyl acetate	ND		10	0.60
75-01-4	Vinyl chloride	ND		0.50	0.20
1330-20-7	Xylenes, Total	ND		0.50	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-88220-1

SDG No.:

Client Sample ID: DUP-02 Lab Sample ID: 720-88220-16

Matrix: Water Lab File ID: 08301822.D

Analysis Method: 8260B Date Collected: 08/23/2018 00:00

Sample wt/vol: 10(mL) Date Analyzed: 08/30/2018 17:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-VRX ID: 250(um)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250553 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		72-130
460-00-4	4-Bromofluorobenzene	91		67-130
2037-26-5	Toluene-d8 (Surr)	92		70-130

Report Date: 31-Aug-2018 08:54:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton
Target Compound Quantitation Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301822.D
Lims ID: 720-88220-A-16
Client ID: DUP-02
Sample Type: Client
Inject. Date: 30-Aug-2018 17:18:30 ALS Bottle#: 21 Worklist Smp#: 23
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-16
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:54:43 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: chaijita Date: 31-Aug-2018 08:54:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 TBA-d9 (IS)	65	7.159	7.159	0.000	0	60055	250.0	
* 2 Fluorobenzene	96	10.926	10.936	-0.010	99	722001	25.0	
* 4 Chlorobenzene-d5	117	14.764	14.774	-0.010	81	557011	25.0	
* 5 1,4-Dichlorobenzene-d4	152	17.903	17.903	0.000	92	292118	25.0	
$ 7 Dibromofluoromethane (Surr	113	9.528	9.519	0.000	56	53592	7.32	
$ 8 1,2-Dichloroethane-d4 (Sur	65	10.045	10.035	0.000	0	33377	6.61	
$ 10 Toluene-d8 (Surr)	98	13.032	13.020	0.000	91	182866	6.92	
$ 11 4-Bromofluorobenzene	95	16.252	16.241	0.000	89	61904	6.86	
$ 12 1,2-Dichlorobenzene-d4	152	18.358	18.368	-0.011	76	65896	5.85	
23 Ethanol	45	5.842	5.842	0.000	98	62814	874.1	
28 Acetone	58	6.723	6.723	0.010	83	2921	8.54	M
105 4-Isopropyltoluene	119	17.953	17.953	0.000	1	8004	0.1575	
130 n-Octane	43	13.417	13.447	-0.030	10	1310	NR	
A 116 C4-C10	1	11.189	(5.123-17.255)		0	1703721	25.1	
A 153 C6-C8	1	11.199	(8.901-13.498)		0	346348	5.10	
A 154 C6-C9	1	12.166	(8.901-15.432)		0	502573	7.41	
A 117 C4-C12	1	12.738	(5.123-20.353)		0	2130350	31.4	
A 123 Aviation Gas	1	12.997	(8.901-17.093)		0	1225089	NC	
A 119 C6-C10	1	13.078	(8.901-17.255)		0	1238292	18.3	
A 118 C5-C12	1	13.528	(6.703-20.353)		0	1781428	26.3	
A 120 C6-C12	1	14.627	(8.901-20.353)		0	1664921	24.5	
A 155 C8-C10	1	15.336	(13.417-17.255)		0	897706	13.2	
A 121 C7-C12	1	15.786	(11.220-20.353)		0	1433061	21.1	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

Review Flags

M - Manually Integrated

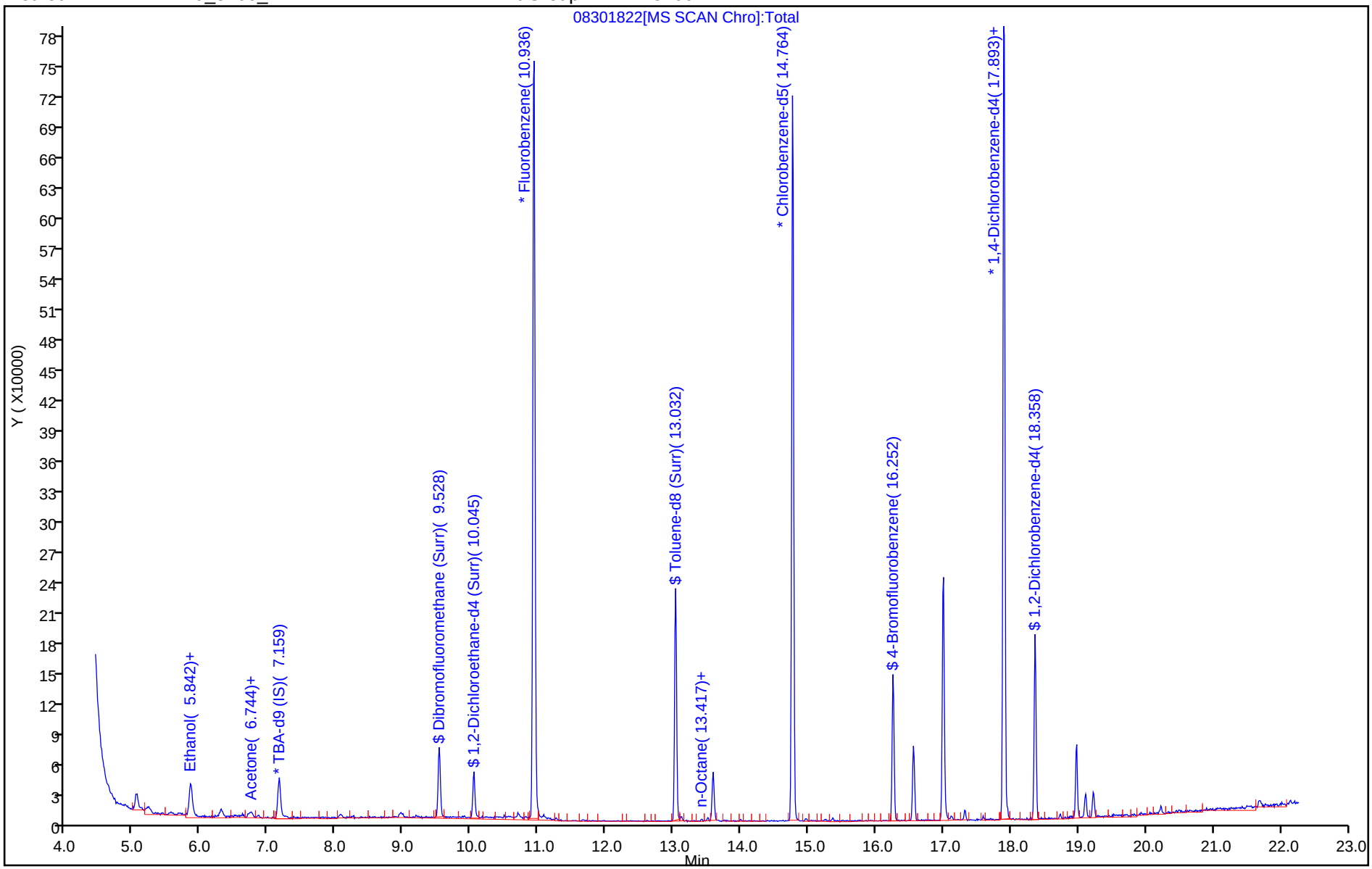
Reagents:

I_IS/SS_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 31-Aug-2018 08:54:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301822.D				
Injection Date:	30-Aug-2018 17:18:30	Instrument ID:	HP9	Operator ID:	SF
Lims ID:	720-88220-A-16	Lab Sample ID:	720-88220-16	Worklist Smp#:	23
Client ID:	DUP-02				
Purge Vol:	10.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	HP9_8260_LL	Limit Group:	8260B		



TestAmerica Pleasanton
Recovery Report

Data File: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301822.D
Lims ID: 720-88220-A-16
Client ID: DUP-02
Sample Type: Client
Inject. Date: 30-Aug-2018 17:18:30 ALS Bottle#: 21 Worklist Smp#: 23
Purge Vol: 10.000 mL Dil. Factor: 1.0000
Sample Info: 88220-A-16
Operator ID: SF Instrument ID: HP9

Method: \\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\HP9_8260_LL.m
Limit Group: 8260B
Last Update: 31-Aug-2018 08:54:43 Calib Date: 23-Aug-2018 18:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pleasanton\ChromData\HP9\20180823-53445.b\08231828.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: chaijita Date: 31-Aug-2018 08:54:43

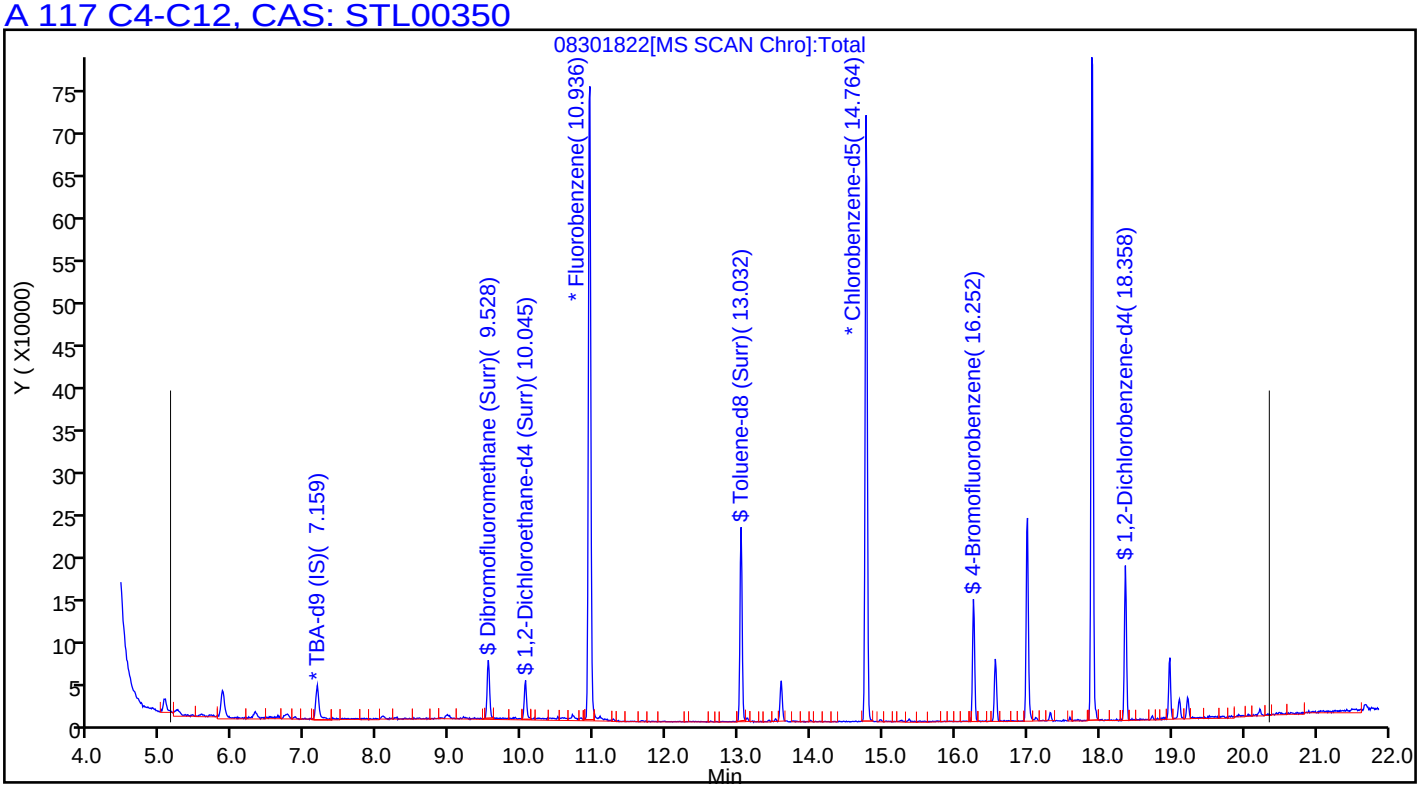
Compound	Amount Added	Amount Recovered	% Rec.
$ 7 Dibromofluoromethane (Surr)	0.0	0	0.00
$ 8 1,2-Dichloroethane-d4 (Surr)	7.50	6.61	88.10
$ 10 Toluene-d8 (Surr)	7.50	6.92	92.32
$ 11 4-Bromofluorobenzene	7.50	6.86	91.43
$ 12 1,2-Dichlorobenzene-d4	0.0	0	0.00

Report Date: 31-Aug-2018 08:54:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Pleasanton

Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301822.D				
Injection Date:	30-Aug-2018 17:18:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-16	Lab Sample ID:	720-88220-16		
Client ID:	DUP-02				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	23
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

A 117 C4-C12, CAS: STL00350



Manual Integration/User Assign Peak Report

TestAmerica Pleasanton

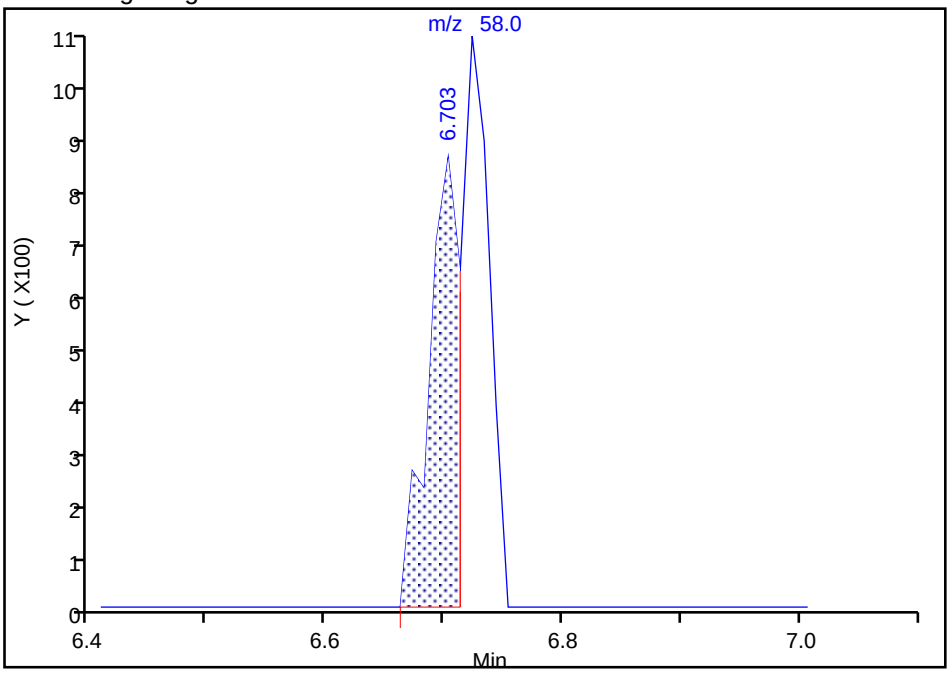
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301822.D				
Injection Date:	30-Aug-2018 17:18:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-16	Lab Sample ID:	720-88220-16		
Client ID:	DUP-02				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	23
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

28 Acetone, CAS: 67-64-1

Signal: 1

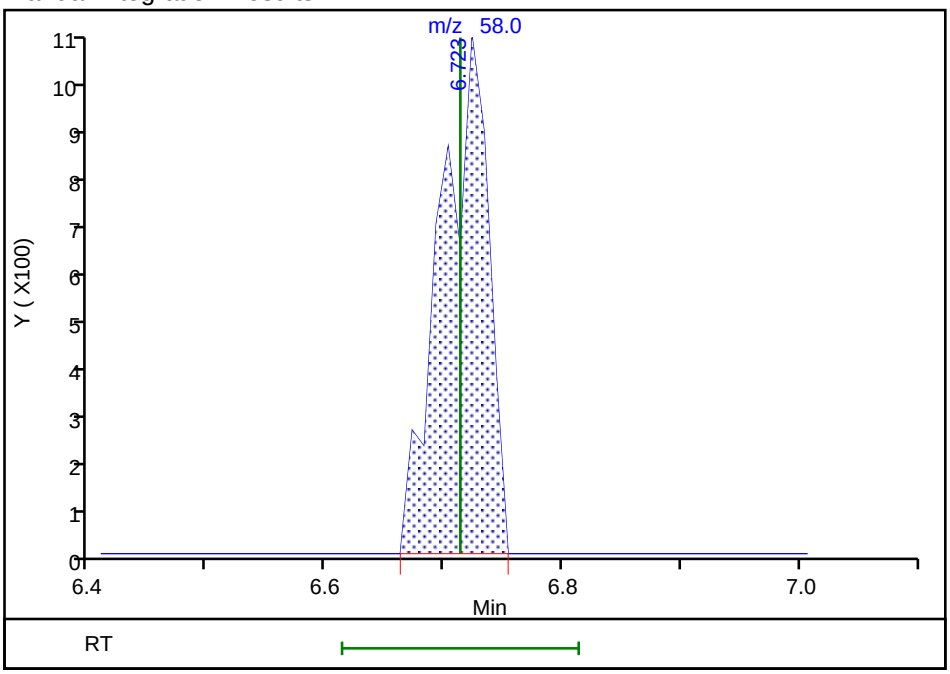
Processing Integration Results

RT: 6.70
Area: 1552
Amount: 4.539842
Amount Units: ug/L



Manual Integration Results

RT: 6.72
Area: 2921
Amount: 8.544381
Amount Units: ug/L



Reviewer: chaijita, 31-Aug-2018 08:53:59

Audit Action: Manually Integrated Audit Reason: Baseline

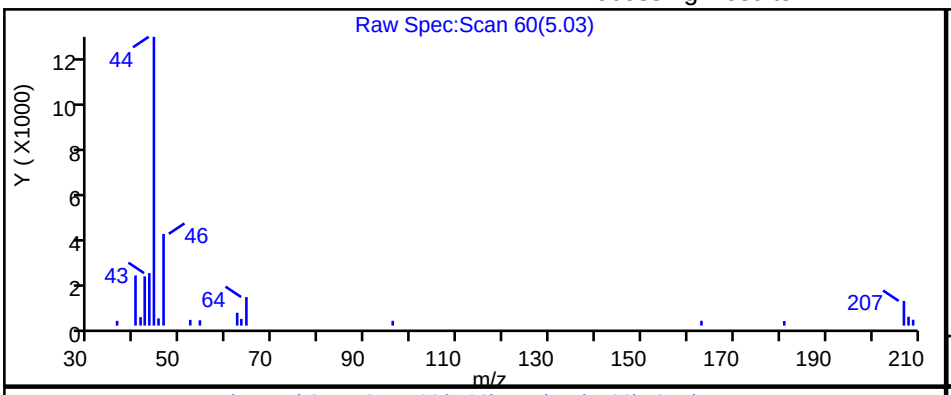
User Disabled Compound Report

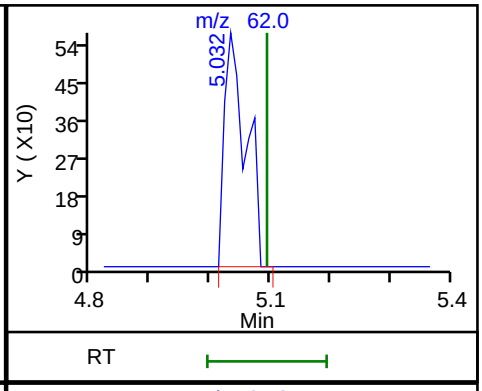
TestAmerica Pleasanton

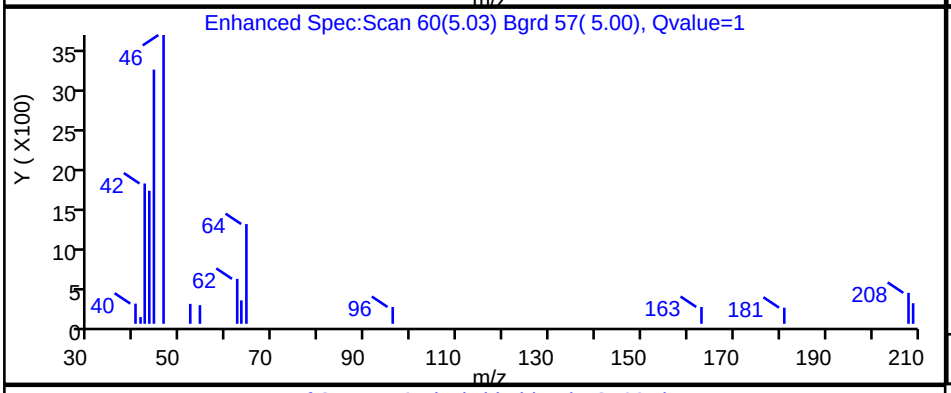
Data File:	\\ChromNA\Pleasanton\ChromData\HP9\20180830-53569.b\08301822.D				
Injection Date:	30-Aug-2018 17:18:30	Instrument ID:	HP9		
Lims ID:	720-88220-A-16	Lab Sample ID:	720-88220-16		
Client ID:	DUP-02				
Operator ID:	SF	ALS Bottle#:	21	Worklist Smp#:	23
Purge Vol:	10.000 mL	Dil. Factor:	1.0000		
Method:	HP9_8260_LL	Limit Group:	8260B		
Column:		Detector	MS SCAN		

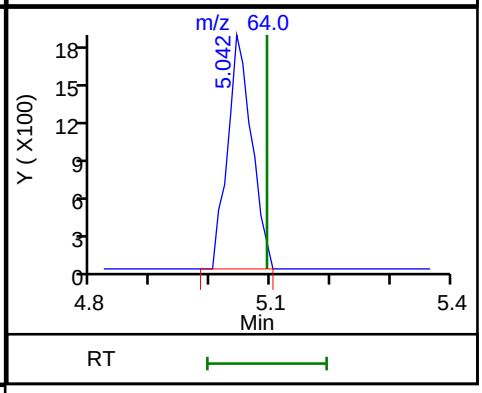
19 Vinyl chloride, CAS: 75-01-4

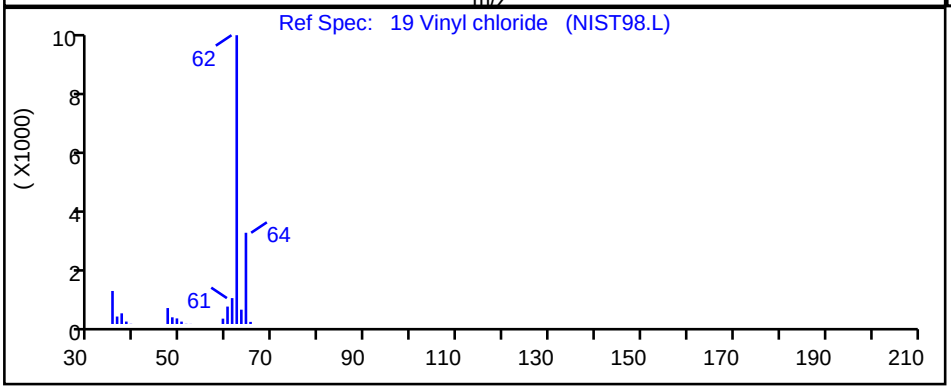
Processing Results











RT	Mass	Response	Amount
5.03	62.00	1413	0.062824
5.04	64.00	5280	

Reviewer: chaijita, 31-Aug-2018 08:53:47

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(72-130)	(67-130)	(70-130)
720-88175-B-11 MS	Matrix Spike	97	94	99
720-88175-B-11 MSD	Matrix Spike Duplicate	96	96	101
720-88188-A-5 MS	Matrix Spike	108	98	102
720-88188-A-5 MSD	Matrix Spike Duplicate	106	100	101
720-88214-A-1 MS	Matrix Spike	87	94	91
720-88214-A-1 MSD	Matrix Spike Duplicate	85	98	92
720-88220-1	DG-C3W	92	99	94
720-88220-2	DG-F3W	95	99	95
720-88220-3	DG-I3W	96	98	95
720-88220-4	DG-K3W	96	97	95
720-88220-5	DG-M3W	97	99	96
720-88220-6	DG-L5W	101	98	96
720-88220-7	DG-J5W	104	99	96
720-88220-7 MS	DG-J5W	102	98	98
720-88220-7 MSD	DG-J5W	103	96	98
720-88220-8	DG-H5W	90	92	98
720-88220-9	DG-H6W	90	93	99
720-88220-10	DG-P5W	94	93	95
720-88220-10	DG-P5W	94	95	99
720-88220-11	FB-1	87	95	97
720-88220-12	FB-2	90	95	94
720-88220-13	FB-3	98	95	99
720-88220-15	TB-3	100	95	97
720-88220-16	DUP-02	88	91	92
LCS 720-250552/5	Lab Control Sample	91	95	97
LCS 720-250552/7	Lab Control Sample	90	98	94
LCS 720-250553/5	Lab Control Sample	87	95	96
LCS 720-250553/7	Lab Control Sample	88	99	97
LCS 720-250554/5	Lab Control Sample	83	95	100
LCS 720-250554/7	Lab Control Sample	88	95	100
LCS 720-250627/5	Lab Control Sample	92	96	99
LCS 720-250627/7	Lab Control Sample	95	96	99
LCSD 720-250552/6	Lab Control Sample Dup	90	94	97
LCSD 720-250552/8	Lab Control Sample Dup	89	97	95
LCSD 720-250553/6	Lab Control Sample Dup	85	93	94
LCSD 720-250553/8	Lab Control Sample Dup	91	100	99
LCSD 720-250554/6	Lab Control Sample Dup	84	95	99
LCSD 720-250554/8	Lab Control Sample Dup	90	94	99
LCSD 720-250627/6	Lab Control Sample Dup	92	96	99
LCSD 720-250627/8	Lab Control Sample Dup	98	96	101
MB 720-250552/4	Method Blank	86	98	95
MB 720-250553/4	Method Blank	90	91	102
MB 720-250554/4	Method Blank	82	96	98
MB 720-250627/4	Method Blank	97	96	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
TOL = Toluene-d8 (Surr)

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DBFM (80-120)
720-88220-1	DG-C3W	100
720-88220-2	DG-F3W	100
720-88220-3	DG-I3W	102
720-88220-4	DG-K3W	102
720-88220-5	DG-M3W	104
720-88220-6	DG-L5W	104
720-88220-7	DG-J5W	99
720-88220-7 MS	DG-J5W	100
720-88220-7 MSD	DG-J5W	102
720-88220-8	DG-H5W	99
720-88220-9	DG-H6W	102
720-88220-10	DG-P5W	99
720-88220-15	TB-3	98
720-88220-16	DUP-02	102
720-88255-C-8 MS	Matrix Spike	100
720-88255-C-8 MSD	Matrix Spike Duplicate	96
LCS 440-496565/4	Lab Control Sample	101
LCS 440-496818/4	Lab Control Sample	102
MB 440-496565/3	Method Blank	100
MB 440-496818/3	Method Blank	99

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TPH1 (23-156)
720-88220-1	DG-C3W	78
720-88220-2	DG-F3W	84
720-88220-3	DG-I3W	71
720-88220-4	DG-K3W	71
720-88220-5	DG-M3W	65
720-88220-6	DG-L5W	63
720-88220-7	DG-J5W	59
720-88220-8	DG-H5W	60
720-88220-9	DG-H6W	72
720-88220-10	DG-P5W	69
720-88220-16	DUP-02	85
LCS 720-250307/2-A	Lab Control Sample	92
LCSD 720-250307/3-A	Lab Control Sample Dup	98
MB 720-250307/1-A	Method Blank	87

Surrogate Legend

TPH = p-Terphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-250552/4
Matrix: Water
Analysis Batch: 250552

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/30/18 09:00	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/30/18 09:00	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/30/18 09:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/30/18 09:00	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/30/18 09:00	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/30/18 09:00	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/30/18 09:00	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/30/18 09:00	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/30/18 09:00	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/30/18 09:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/30/18 09:00	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/30/18 09:00	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/30/18 09:00	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/30/18 09:00	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/30/18 09:00	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/30/18 09:00	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/30/18 09:00	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/30/18 09:00	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/30/18 09:00	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/30/18 09:00	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/30/18 09:00	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/30/18 09:00	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 09:00	1
2-Hexanone	ND		50	3.0	ug/L			08/30/18 09:00	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 09:00	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/30/18 09:00	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/30/18 09:00	1
Acetone	ND		50	20	ug/L			08/30/18 09:00	1
Benzene	ND		0.50	0.25	ug/L			08/30/18 09:00	1
Bromobenzene	ND		1.0	0.20	ug/L			08/30/18 09:00	1
Bromoform	ND		1.0	0.50	ug/L			08/30/18 09:00	1
Bromomethane	ND		1.0	0.49	ug/L			08/30/18 09:00	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/30/18 09:00	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/30/18 09:00	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/30/18 09:00	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/30/18 09:00	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/30/18 09:00	1
Chloroethane	ND		1.0	0.17	ug/L			08/30/18 09:00	1
Chloroform	ND		1.0	0.40	ug/L			08/30/18 09:00	1
Chloromethane	ND		1.0	0.19	ug/L			08/30/18 09:00	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/30/18 09:00	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/30/18 09:00	1
Dibromomethane	ND		0.50	0.30	ug/L			08/30/18 09:00	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/30/18 09:00	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/30/18 09:00	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/30/18 09:00	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/30/18 09:00	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250552/4
Matrix: Water
Analysis Batch: 250552

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/30/18 09:00	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/30/18 09:00	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/30/18 09:00	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/30/18 09:00	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/30/18 09:00	1
Naphthalene	0.252	J	1.0	0.22	ug/L			08/30/18 09:00	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/30/18 09:00	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/30/18 09:00	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/30/18 09:00	1
Styrene	ND		0.50	0.22	ug/L			08/30/18 09:00	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/30/18 09:00	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/30/18 09:00	1
Toluene	ND		0.50	0.17	ug/L			08/30/18 09:00	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/30/18 09:00	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/30/18 09:00	1
Trichloroethene	ND		0.50	0.20	ug/L			08/30/18 09:00	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/30/18 09:00	1
Vinyl acetate	ND		10	0.60	ug/L			08/30/18 09:00	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/30/18 09:00	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/30/18 09:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*72 - 130*		*08/30/18 09:00*	*1*
4-Bromofluorobenzene	*98*		*67 - 130*		*08/30/18 09:00*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/30/18 09:00*	*1*

Lab Sample ID: LCS 720-250552/5
Matrix: Water
Analysis Batch: 250552

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	26.0		ug/L		104	81 - 121
1,1,1-Trichloroethane	25.0	27.5		ug/L		110	74 - 130
1,1,2,2-Tetrachloroethane	25.0	22.9		ug/L		92	70 - 115
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	36.0	*	ug/L		144	70 - 133
1,1,2-Trichloroethane	25.0	24.0		ug/L		96	80 - 117
1,1-Dichloroethane	25.0	26.7		ug/L		107	77 - 119
1,1-Dichloroethene	25.0	32.5	*	ug/L		130	69 - 119
1,1-Dichloropropene	25.0	26.7		ug/L		107	83 - 130
1,2,3-Trichlorobenzene	25.0	26.2		ug/L		105	87 - 123
1,2,3-Trichloropropane	25.0	23.9		ug/L		96	77 - 120
1,2,4-Trichlorobenzene	25.0	26.8		ug/L		107	78 - 120
1,2,4-Trimethylbenzene	25.0	24.5		ug/L		98	75 - 115
1,2-Dibromo-3-Chloropropane	25.0	25.7		ug/L		103	74 - 126
1,2-Dichlorobenzene	25.0	25.0		ug/L		100	77 - 117
1,2-Dichloroethane	25.0	24.4		ug/L		98	73 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250552/5
Matrix: Water
Analysis Batch: 250552

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	25.0	25.0		ug/L		100	79 - 119
1,3,5-Trimethylbenzene	25.0	24.7		ug/L		99	77 - 117
1,3-Dichlorobenzene	25.0	25.0		ug/L		100	76 - 116
1,3-Dichloropropane	25.0	23.4		ug/L		93	77 - 117
1,4-Dichlorobenzene	25.0	25.0		ug/L		100	76 - 116
2,2-Dichloropropane	25.0	27.7		ug/L		111	74 - 156
2-Butanone (MEK)	125	110		ug/L		88	66 - 133
2-Chlorotoluene	25.0	24.2		ug/L		97	75 - 115
2-Hexanone	125	112		ug/L		90	63 - 140
4-Chlorotoluene	25.0	24.1		ug/L		96	73 - 119
4-Isopropyltoluene	25.0	26.2		ug/L		105	80 - 120
4-Methyl-2-pentanone (MIBK)	125	112		ug/L		90	66 - 140
Acetone	125	117		ug/L		94	61 - 147
Benzene	25.0	25.3		ug/L		101	79 - 119
Bromobenzene	25.0	24.7		ug/L		99	77 - 117
Bromoform	25.0	25.4		ug/L		101	75 - 127
Bromomethane	25.0	25.8		ug/L		103	70 - 132
Carbon disulfide	25.0	34.8	*	ug/L		139	64 - 127
Carbon tetrachloride	25.0	27.8		ug/L		111	72 - 142
Chlorobenzene	25.0	25.3		ug/L		101	76 - 116
Chlorobromomethane	25.0	26.4		ug/L		105	81 - 122
Chlorodibromomethane	25.0	25.3		ug/L		101	77 - 133
Chloroethane	25.0	24.8		ug/L		99	70 - 131
Chloroform	25.0	25.1		ug/L		100	82 - 119
Chloromethane	25.0	25.8		ug/L		103	49 - 134
cis-1,2-Dichloroethene	25.0	25.6		ug/L		102	77 - 117
cis-1,3-Dichloropropene	25.0	25.3		ug/L		101	82 - 119
Dibromomethane	25.0	24.1		ug/L		97	79 - 117
Dichlorobromomethane	25.0	24.1		ug/L		96	81 - 130
Dichlorodifluoromethane	25.0	24.7		ug/L		99	21 - 150
Ethylbenzene	25.0	25.0		ug/L		100	77 - 117
Ethylene Dibromide	25.0	24.4		ug/L		98	80 - 121
Hexachlorobutadiene	25.0	28.2		ug/L		113	78 - 140
Isopropylbenzene	25.0	25.8		ug/L		103	77 - 130
Methyl tert-butyl ether	25.0	24.1		ug/L		96	70 - 130
Methylene Chloride	25.0	25.8		ug/L		103	75 - 117
m-Xylene & p-Xylene	25.0	24.6		ug/L		98	74 - 119
Naphthalene	25.0	24.3		ug/L		97	81 - 121
n-Butylbenzene	25.0	26.5		ug/L		106	78 - 119
N-Propylbenzene	25.0	25.0		ug/L		100	77 - 117
o-Xylene	25.0	24.8		ug/L		99	77 - 118
sec-Butylbenzene	25.0	25.6		ug/L		102	78 - 118
Styrene	25.0	24.2		ug/L		97	76 - 116
tert-Butylbenzene	25.0	25.4		ug/L		102	78 - 118
Tetrachloroethene	25.0	27.1		ug/L		108	81 - 130
Toluene	25.0	25.4		ug/L		102	75 - 120
trans-1,2-Dichloroethene	25.0	28.1		ug/L		112	79 - 117
trans-1,3-Dichloropropene	25.0	23.8		ug/L		95	76 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250552/5
Matrix: Water
Analysis Batch: 250552

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	25.0	26.8		ug/L		107	80 - 123
Trichlorofluoromethane	25.0	28.0		ug/L		112	75 - 141
Vinyl acetate	25.0	22.4		ug/L		90	50 - 126
Vinyl chloride	25.0	24.7		ug/L		99	58 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*72 - 130*
4-Bromofluorobenzene	*95*		*67 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: LCS 720-250552/7
Matrix: Water
Analysis Batch: 250552

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	500	476		ug/L		95	77 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*72 - 130*
4-Bromofluorobenzene	*98*		*67 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 720-250552/6
Matrix: Water
Analysis Batch: 250552

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	26.2		ug/L		105	81 - 121	1	20
1,1,1-Trichloroethane	25.0	27.5		ug/L		110	74 - 130	0	20
1,1,2,2-Tetrachloroethane	25.0	23.3		ug/L		93	70 - 115	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	36.9	*	ug/L		148	70 - 133	2	20
1,1,2-Trichloroethane	25.0	23.9		ug/L		95	80 - 117	1	20
1,1-Dichloroethane	25.0	26.8		ug/L		107	77 - 119	1	20
1,1-Dichloroethene	25.0	32.9	*	ug/L		132	69 - 119	1	20
1,1-Dichloropropene	25.0	26.9		ug/L		108	83 - 130	1	20
1,2,3-Trichlorobenzene	25.0	27.2		ug/L		109	87 - 123	4	20
1,2,3-Trichloropropane	25.0	23.8		ug/L		95	77 - 120	0	20
1,2,4-Trichlorobenzene	25.0	27.5		ug/L		110	78 - 120	3	20
1,2,4-Trimethylbenzene	25.0	24.6		ug/L		98	75 - 115	0	20
1,2-Dibromo-3-Chloropropane	25.0	26.6		ug/L		106	74 - 126	3	20
1,2-Dichlorobenzene	25.0	25.5		ug/L		102	77 - 117	2	20
1,2-Dichloroethane	25.0	24.4		ug/L		98	73 - 122	0	20
1,2-Dichloropropane	25.0	24.9		ug/L		100	79 - 119	0	20
1,3,5-Trimethylbenzene	25.0	25.1		ug/L		100	77 - 117	2	20
1,3-Dichlorobenzene	25.0	25.3		ug/L		101	76 - 116	1	20
1,3-Dichloropropane	25.0	23.5		ug/L		94	77 - 117	0	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250552/6
Matrix: Water
Analysis Batch: 250552

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene	25.0	25.4		ug/L		102	76 - 116	2	20
2,2-Dichloropropane	25.0	27.8		ug/L		111	74 - 156	0	20
2-Butanone (MEK)	125	116		ug/L		93	66 - 133	6	22
2-Chlorotoluene	25.0	24.5		ug/L		98	75 - 115	1	20
2-Hexanone	125	110		ug/L		88	63 - 140	2	24
4-Chlorotoluene	25.0	24.3		ug/L		97	73 - 119	1	20
4-Isopropyltoluene	25.0	26.5		ug/L		106	80 - 120	1	20
4-Methyl-2-pentanone (MIBK)	125	109		ug/L		87	66 - 140	3	21
Acetone	125	119		ug/L		95	61 - 147	2	30
Benzene	25.0	25.5		ug/L		102	79 - 119	1	20
Bromobenzene	25.0	24.9		ug/L		100	77 - 117	1	20
Bromoform	25.0	25.1		ug/L		100	75 - 127	1	20
Bromomethane	25.0	26.5		ug/L		106	70 - 132	3	20
Carbon disulfide	25.0	35.2	*	ug/L		141	64 - 127	1	20
Carbon tetrachloride	25.0	28.0		ug/L		112	72 - 142	0	20
Chlorobenzene	25.0	25.6		ug/L		103	76 - 116	1	20
Chlorobromomethane	25.0	26.6		ug/L		106	81 - 122	1	20
Chlorodibromomethane	25.0	25.1		ug/L		100	77 - 133	1	20
Chloroethane	25.0	25.2		ug/L		101	70 - 131	2	20
Chloroform	25.0	25.3		ug/L		101	82 - 119	1	20
Chloromethane	25.0	25.7		ug/L		103	49 - 134	0	20
cis-1,2-Dichloroethene	25.0	25.7		ug/L		103	77 - 117	0	20
cis-1,3-Dichloropropene	25.0	25.4		ug/L		101	82 - 119	0	20
Dibromomethane	25.0	24.1		ug/L		97	79 - 117	0	20
Dichlorobromomethane	25.0	24.4		ug/L		97	81 - 130	1	20
Dichlorodifluoromethane	25.0	24.8		ug/L		99	21 - 150	1	20
Ethylbenzene	25.0	25.2		ug/L		101	77 - 117	1	20
Ethylene Dibromide	25.0	24.1		ug/L		97	80 - 121	1	20
Hexachlorobutadiene	25.0	29.0		ug/L		116	78 - 140	3	20
Isopropylbenzene	25.0	26.1		ug/L		104	77 - 130	1	20
Methyl tert-butyl ether	25.0	23.9		ug/L		96	70 - 130	1	20
Methylene Chloride	25.0	26.2		ug/L		105	75 - 117	1	20
m-Xylene & p-Xylene	25.0	24.7		ug/L		99	74 - 119	0	20
Naphthalene	25.0	25.5		ug/L		102	81 - 121	5	20
n-Butylbenzene	25.0	27.0		ug/L		108	78 - 119	2	20
N-Propylbenzene	25.0	25.3		ug/L		101	77 - 117	1	20
o-Xylene	25.0	24.9		ug/L		100	77 - 118	0	20
sec-Butylbenzene	25.0	25.9		ug/L		104	78 - 118	1	20
Styrene	25.0	24.2		ug/L		97	76 - 116	0	20
tert-Butylbenzene	25.0	25.9		ug/L		104	78 - 118	2	20
Tetrachloroethene	25.0	27.2		ug/L		109	81 - 130	1	20
Toluene	25.0	25.6		ug/L		102	75 - 120	1	20
trans-1,2-Dichloroethene	25.0	28.7		ug/L		115	79 - 117	2	20
trans-1,3-Dichloropropene	25.0	23.7		ug/L		95	76 - 122	0	20
Trichloroethene	25.0	27.1		ug/L		109	80 - 123	1	20
Trichlorofluoromethane	25.0	28.2		ug/L		113	75 - 141	1	20
Vinyl acetate	25.0	22.3		ug/L		89	50 - 126	1	20
Vinyl chloride	25.0	25.1		ug/L		100	58 - 138	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250552/6
Matrix: Water
Analysis Batch: 250552

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*90*		*72 - 130*
4-Bromofluorobenzene	*94*		*67 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 720-250552/8
Matrix: Water
Analysis Batch: 250552

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			500	462		ug/L		92	77 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 130*
4-Bromofluorobenzene	*97*		*67 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Lab Sample ID: 720-88220-7 MS
Matrix: Water
Analysis Batch: 250552

Client Sample ID: DG-J5W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	28.1		ug/L		112	60 - 140
1,1,1-Trichloroethane	ND		25.0	27.9		ug/L		111	60 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	24.5		ug/L		98	60 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	25.0	32.5		ug/L		130	60 - 140
1,1,2-Trichloroethane	ND		25.0	26.4		ug/L		106	60 - 140
1,1-Dichloroethane	ND		25.0	27.8		ug/L		111	60 - 140
1,1-Dichloroethene	ND	*	25.0	31.3		ug/L		125	60 - 140
1,1-Dichloropropene	ND		25.0	26.5		ug/L		106	60 - 140
1,2,3-Trichlorobenzene	ND		25.0	26.7		ug/L		107	60 - 140
1,2,3-Trichloropropane	ND		25.0	25.9		ug/L		104	60 - 140
1,2,4-Trichlorobenzene	ND		25.0	26.3		ug/L		105	60 - 140
1,2,4-Trimethylbenzene	ND		25.0	24.4		ug/L		98	60 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	27.3		ug/L		109	60 - 140
1,2-Dichlorobenzene	ND		25.0	26.3		ug/L		105	60 - 140
1,2-Dichloroethane	ND		25.0	28.1		ug/L		112	60 - 140
1,2-Dichloropropane	ND		25.0	26.7		ug/L		107	60 - 140
1,3,5-Trimethylbenzene	ND		25.0	24.3		ug/L		97	60 - 140
1,3-Dichlorobenzene	ND		25.0	25.0		ug/L		100	60 - 140
1,3-Dichloropropane	ND		25.0	26.0		ug/L		104	60 - 140
1,4-Dichlorobenzene	ND		25.0	25.4		ug/L		102	60 - 140
2,2-Dichloropropane	ND		25.0	26.1		ug/L		105	60 - 140
2-Butanone (MEK)	ND		125	120		ug/L		96	60 - 140
2-Chlorotoluene	ND		25.0	24.2		ug/L		97	60 - 140
2-Hexanone	ND		125	124		ug/L		99	60 - 140
4-Chlorotoluene	ND		25.0	24.2		ug/L		97	60 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88220-7 MS
Matrix: Water
Analysis Batch: 250552

Client Sample ID: DG-J5W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Isopropyltoluene	ND		25.0	25.3		ug/L		101	60 - 140
4-Methyl-2-pentanone (MIBK)	ND		125	124		ug/L		100	58 - 130
Acetone	ND		125	118		ug/L		94	60 - 140
Benzene	ND		25.0	25.7		ug/L		103	60 - 140
Bromobenzene	ND		25.0	25.6		ug/L		102	60 - 140
Bromoform	ND		25.0	28.5		ug/L		114	56 - 140
Bromomethane	ND		25.0	26.4		ug/L		106	23 - 140
Carbon disulfide	ND	*	25.0	34.1		ug/L		136	38 - 140
Carbon tetrachloride	ND		25.0	28.8		ug/L		115	60 - 140
Chlorobenzene	ND		25.0	26.3		ug/L		105	60 - 140
Chlorobromomethane	ND		25.0	28.3		ug/L		113	60 - 140
Chlorodibromomethane	ND		25.0	28.5		ug/L		114	60 - 140
Chloroethane	ND		25.0	24.2		ug/L		97	51 - 140
Chloroform	ND		25.0	26.8		ug/L		107	60 - 140
Chloromethane	ND		25.0	26.5		ug/L		106	52 - 140
cis-1,2-Dichloroethene	1.6		25.0	28.6		ug/L		108	60 - 140
cis-1,3-Dichloropropene	ND		25.0	27.1		ug/L		108	60 - 140
Dibromomethane	ND		25.0	27.0		ug/L		108	60 - 140
Dichlorobromomethane	ND		25.0	27.2		ug/L		109	60 - 140
Dichlorodifluoromethane	ND		25.0	25.6		ug/L		102	38 - 140
Ethylbenzene	ND		25.0	25.4		ug/L		102	60 - 140
Ethylene Dibromide	ND		25.0	26.9		ug/L		108	60 - 140
Hexachlorobutadiene	ND		25.0	26.3		ug/L		105	60 - 140
Isopropylbenzene	ND		25.0	26.2		ug/L		105	60 - 140
Methyl tert-butyl ether	ND		25.0	26.9		ug/L		107	60 - 138
Methylene Chloride	ND		25.0	27.0		ug/L		108	40 - 140
m-Xylene & p-Xylene	ND		25.0	25.1		ug/L		101	60 - 140
Naphthalene	ND		25.0	25.5		ug/L		102	56 - 140
n-Butylbenzene	ND		25.0	25.0		ug/L		100	60 - 140
N-Propylbenzene	ND		25.0	24.4		ug/L		98	60 - 140
o-Xylene	ND		25.0	25.7		ug/L		103	60 - 140
sec-Butylbenzene	ND		25.0	24.7		ug/L		99	60 - 140
Styrene	ND		25.0	24.8		ug/L		99	60 - 140
tert-Butylbenzene	ND		25.0	25.3		ug/L		101	60 - 140
Tetrachloroethene	ND		25.0	26.9		ug/L		107	60 - 140
Toluene	ND		25.0	25.8		ug/L		103	60 - 140
trans-1,2-Dichloroethene	ND		25.0	28.0		ug/L		112	60 - 140
trans-1,3-Dichloropropene	ND		25.0	26.2		ug/L		105	60 - 140
Trichloroethene	ND		25.0	27.1		ug/L		108	60 - 140
Trichlorofluoromethane	ND		25.0	27.7		ug/L		111	60 - 140
Vinyl acetate	ND		25.0	23.8		ug/L		95	40 - 140
Vinyl chloride	0.37	J	25.0	24.6		ug/L		97	58 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*72 - 130*
4-Bromofluorobenzene	*98*		*67 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88220-7 MSD
Matrix: Water
Analysis Batch: 250552

Client Sample ID: DG-J5W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	27.6		ug/L		110	60 - 140	2	20
1,1,1-Trichloroethane	ND		25.0	28.5		ug/L		114	60 - 140	2	20
1,1,2,2-Tetrachloroethane	ND		25.0	25.2		ug/L		101	60 - 140	3	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	*	25.0	33.9		ug/L		136	60 - 140	4	20
1,1,2-Trichloroethane	ND		25.0	26.7		ug/L		107	60 - 140	1	20
1,1-Dichloroethane	ND		25.0	27.7		ug/L		111	60 - 140	0	20
1,1-Dichloroethene	ND	*	25.0	32.6		ug/L		130	60 - 140	4	20
1,1-Dichloropropene	ND		25.0	26.5		ug/L		106	60 - 140	0	20
1,2,3-Trichlorobenzene	ND		25.0	27.2		ug/L		109	60 - 140	2	20
1,2,3-Trichloropropane	ND		25.0	26.4		ug/L		106	60 - 140	2	20
1,2,4-Trichlorobenzene	ND		25.0	26.6		ug/L		107	60 - 140	1	20
1,2,4-Trimethylbenzene	ND		25.0	24.7		ug/L		99	60 - 140	1	20
1,2-Dibromo-3-Chloropropane	ND		25.0	28.5		ug/L		114	60 - 140	4	20
1,2-Dichlorobenzene	ND		25.0	26.6		ug/L		107	60 - 140	1	20
1,2-Dichloroethane	ND		25.0	27.8		ug/L		111	60 - 140	1	20
1,2-Dichloropropane	ND		25.0	26.9		ug/L		108	60 - 140	1	20
1,3,5-Trimethylbenzene	ND		25.0	25.1		ug/L		100	60 - 140	3	20
1,3-Dichlorobenzene	ND		25.0	25.4		ug/L		101	60 - 140	1	20
1,3-Dichloropropane	ND		25.0	26.3		ug/L		105	60 - 140	1	20
1,4-Dichlorobenzene	ND		25.0	25.7		ug/L		103	60 - 140	1	20
2,2-Dichloropropane	ND		25.0	26.8		ug/L		107	60 - 140	2	20
2-Butanone (MEK)	ND		125	123		ug/L		99	60 - 140	3	20
2-Chlorotoluene	ND		25.0	24.7		ug/L		99	60 - 140	2	20
2-Hexanone	ND		125	132		ug/L		106	60 - 140	6	20
4-Chlorotoluene	ND		25.0	24.3		ug/L		97	60 - 140	0	20
4-Isopropyltoluene	ND		25.0	26.1		ug/L		104	60 - 140	3	20
4-Methyl-2-pentanone (MIBK)	ND		125	131		ug/L		105	58 - 130	6	20
Acetone	ND		125	120		ug/L		96	60 - 140	2	20
Benzene	ND		25.0	26.2		ug/L		105	60 - 140	2	20
Bromobenzene	ND		25.0	25.9		ug/L		103	60 - 140	1	20
Bromoform	ND		25.0	28.0		ug/L		112	56 - 140	2	20
Bromomethane	ND		25.0	27.2		ug/L		109	23 - 140	3	20
Carbon disulfide	ND	*	25.0	35.1		ug/L		140	38 - 140	3	20
Carbon tetrachloride	ND		25.0	28.8		ug/L		115	60 - 140	0	20
Chlorobenzene	ND		25.0	26.1		ug/L		104	60 - 140	1	20
Chlorobromomethane	ND		25.0	28.8		ug/L		115	60 - 140	2	20
Chlorodibromomethane	ND		25.0	28.7		ug/L		115	60 - 140	1	20
Chloroethane	ND		25.0	25.2		ug/L		101	51 - 140	4	20
Chloroform	ND		25.0	26.9		ug/L		108	60 - 140	0	20
Chloromethane	ND		25.0	27.0		ug/L		108	52 - 140	2	20
cis-1,2-Dichloroethene	1.6		25.0	28.4		ug/L		107	60 - 140	1	20
cis-1,3-Dichloropropene	ND		25.0	27.4		ug/L		110	60 - 140	1	20
Dibromomethane	ND		25.0	26.7		ug/L		107	60 - 140	1	20
Dichlorobromomethane	ND		25.0	26.7		ug/L		107	60 - 140	2	20
Dichlorodifluoromethane	ND		25.0	25.7		ug/L		103	38 - 140	0	20
Ethylbenzene	ND		25.0	25.1		ug/L		100	60 - 140	1	20
Ethylene Dibromide	ND		25.0	27.1		ug/L		109	60 - 140	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88220-7 MSD
Matrix: Water
Analysis Batch: 250552

Client Sample ID: DG-J5W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorobutadiene	ND		25.0	26.6		ug/L		107	60 - 140	1	20
Isopropylbenzene	ND		25.0	26.0		ug/L		104	60 - 140	1	20
Methyl tert-butyl ether	ND		25.0	27.1		ug/L		108	60 - 138	1	20
Methylene Chloride	ND		25.0	27.1		ug/L		108	40 - 140	0	20
m-Xylene & p-Xylene	ND		25.0	24.8		ug/L		99	60 - 140	2	20
Naphthalene	ND		25.0	26.6		ug/L		106	56 - 140	4	20
n-Butylbenzene	ND		25.0	25.5		ug/L		102	60 - 140	2	20
N-Propylbenzene	ND		25.0	24.9		ug/L		100	60 - 140	2	20
o-Xylene	ND		25.0	25.4		ug/L		102	60 - 140	1	20
sec-Butylbenzene	ND		25.0	25.6		ug/L		102	60 - 140	3	20
Styrene	ND		25.0	24.6		ug/L		98	60 - 140	1	20
tert-Butylbenzene	ND		25.0	25.9		ug/L		104	60 - 140	3	20
Tetrachloroethene	ND		25.0	27.0		ug/L		108	60 - 140	0	20
Toluene	ND		25.0	25.6		ug/L		102	60 - 140	1	20
trans-1,2-Dichloroethene	ND		25.0	28.7		ug/L		115	60 - 140	2	20
trans-1,3-Dichloropropene	ND		25.0	26.4		ug/L		106	60 - 140	1	20
Trichloroethene	ND		25.0	27.6		ug/L		110	60 - 140	2	20
Trichlorofluoromethane	ND		25.0	27.8		ug/L		111	60 - 140	0	20
Vinyl acetate	ND		25.0	23.8		ug/L		95	40 - 140	0	20
Vinyl chloride	0.37	J	25.0	26.4		ug/L		104	58 - 140	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*72 - 130*
4-Bromofluorobenzene	*96*		*67 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: MB 720-250553/4
Matrix: Water
Analysis Batch: 250553

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/30/18 09:03	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/30/18 09:03	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/30/18 09:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/30/18 09:03	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/30/18 09:03	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/30/18 09:03	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/30/18 09:03	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/30/18 09:03	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/30/18 09:03	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/30/18 09:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/30/18 09:03	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/30/18 09:03	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/30/18 09:03	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/30/18 09:03	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/30/18 09:03	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/30/18 09:03	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/30/18 09:03	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250553/4
Matrix: Water
Analysis Batch: 250553

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/30/18 09:03	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/30/18 09:03	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/30/18 09:03	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/30/18 09:03	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/30/18 09:03	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 09:03	1
2-Hexanone	ND		50	3.0	ug/L			08/30/18 09:03	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 09:03	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/30/18 09:03	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/30/18 09:03	1
Acetone	ND		50	20	ug/L			08/30/18 09:03	1
Benzene	ND		0.50	0.25	ug/L			08/30/18 09:03	1
Bromobenzene	ND		1.0	0.20	ug/L			08/30/18 09:03	1
Bromoform	ND		1.0	0.50	ug/L			08/30/18 09:03	1
Bromomethane	ND		1.0	0.49	ug/L			08/30/18 09:03	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/30/18 09:03	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/30/18 09:03	1
Chlorobenzene	ND		0.50	0.13	ug/L			08/30/18 09:03	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/30/18 09:03	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/30/18 09:03	1
Chloroethane	ND		1.0	0.17	ug/L			08/30/18 09:03	1
Chloroform	ND		1.0	0.40	ug/L			08/30/18 09:03	1
Chloromethane	ND		1.0	0.19	ug/L			08/30/18 09:03	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/30/18 09:03	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/30/18 09:03	1
Dibromomethane	ND		0.50	0.30	ug/L			08/30/18 09:03	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/30/18 09:03	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/30/18 09:03	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/30/18 09:03	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/30/18 09:03	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/30/18 09:03	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/30/18 09:03	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/30/18 09:03	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/30/18 09:03	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/30/18 09:03	1
Naphthalene	ND		1.0	0.22	ug/L			08/30/18 09:03	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/30/18 09:03	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/30/18 09:03	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/30/18 09:03	1
Styrene	ND		0.50	0.22	ug/L			08/30/18 09:03	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/30/18 09:03	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/30/18 09:03	1
Toluene	ND		0.50	0.17	ug/L			08/30/18 09:03	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/30/18 09:03	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/30/18 09:03	1
Trichloroethene	ND		0.50	0.20	ug/L			08/30/18 09:03	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/30/18 09:03	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250553/4
Matrix: Water
Analysis Batch: 250553

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl acetate	ND		10	0.60	ug/L			08/30/18 09:03	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/30/18 09:03	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/30/18 09:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*72 - 130*		*08/30/18 09:03*	*1*
4-Bromofluorobenzene	*91*		*67 - 130*		*08/30/18 09:03*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*08/30/18 09:03*	*1*

Lab Sample ID: LCS 720-250553/5
Matrix: Water
Analysis Batch: 250553

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	25.1		ug/L		100	81 - 121
1,1,1-Trichloroethane	25.0	25.9		ug/L		104	74 - 130
1,1,2,2-Tetrachloroethane	25.0	21.2		ug/L		85	70 - 115
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	33.3		ug/L		133	70 - 133
1,1,2-Trichloroethane	25.0	23.4		ug/L		93	80 - 117
1,1-Dichloroethane	25.0	27.6		ug/L		110	77 - 119
1,1-Dichloroethene	25.0	32.1	*	ug/L		128	69 - 119
1,1-Dichloropropene	25.0	26.4		ug/L		106	83 - 130
1,2,3-Trichlorobenzene	25.0	25.7		ug/L		103	87 - 123
1,2,3-Trichloropropane	25.0	21.7		ug/L		87	77 - 120
1,2,4-Trichlorobenzene	25.0	27.3		ug/L		109	78 - 120
1,2,4-Trimethylbenzene	25.0	27.2		ug/L		109	75 - 115
1,2-Dibromo-3-Chloropropane	25.0	23.3		ug/L		93	74 - 126
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	77 - 117
1,2-Dichloroethane	25.0	23.2		ug/L		93	73 - 122
1,2-Dichloropropane	25.0	25.5		ug/L		102	79 - 119
1,3,5-Trimethylbenzene	25.0	27.2		ug/L		109	77 - 117
1,3-Dichlorobenzene	25.0	25.0		ug/L		100	76 - 116
1,3-Dichloropropane	25.0	22.3		ug/L		89	77 - 117
1,4-Dichlorobenzene	25.0	24.3		ug/L		97	76 - 116
2,2-Dichloropropane	25.0	28.1		ug/L		113	74 - 156
2-Butanone (MEK)	125	104		ug/L		83	66 - 133
2-Chlorotoluene	25.0	26.6		ug/L		106	75 - 115
2-Hexanone	125	106		ug/L		85	63 - 140
4-Chlorotoluene	25.0	26.1		ug/L		104	73 - 119
4-Isopropyltoluene	25.0	26.8		ug/L		107	80 - 120
4-Methyl-2-pentanone (MIBK)	125	106		ug/L		85	66 - 140
Acetone	125	109		ug/L		87	61 - 147
Benzene	25.0	25.7		ug/L		103	79 - 119
Bromobenzene	25.0	25.2		ug/L		101	77 - 117
Bromoform	25.0	22.2		ug/L		89	75 - 127
Bromomethane	25.0	24.2		ug/L		97	70 - 132
Carbon disulfide	25.0	36.9	*	ug/L		148	64 - 127

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250553/5
Matrix: Water
Analysis Batch: 250553

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon tetrachloride	25.0	26.0		ug/L		104	72 - 142
Chlorobenzene	25.0	24.4		ug/L		98	76 - 116
Chlorobromomethane	25.0	25.8		ug/L		103	81 - 122
Chlorodibromomethane	25.0	23.6		ug/L		95	77 - 133
Chloroethane	25.0	23.7		ug/L		95	70 - 131
Chloroform	25.0	24.4		ug/L		98	82 - 119
Chloromethane	25.0	23.4		ug/L		93	49 - 134
cis-1,2-Dichloroethene	25.0	26.7		ug/L		107	77 - 117
cis-1,3-Dichloropropene	25.0	26.1		ug/L		104	82 - 119
Dibromomethane	25.0	22.3		ug/L		89	79 - 117
Dichlorobromomethane	25.0	23.8		ug/L		95	81 - 130
Dichlorodifluoromethane	25.0	19.5		ug/L		78	21 - 150
Ethylbenzene	25.0	25.3		ug/L		101	77 - 117
Ethylene Dibromide	25.0	22.2		ug/L		89	80 - 121
Hexachlorobutadiene	25.0	25.6		ug/L		102	78 - 140
Isopropylbenzene	25.0	27.1		ug/L		108	77 - 130
Methyl tert-butyl ether	25.0	23.0		ug/L		92	70 - 130
Methylene Chloride	25.0	27.8		ug/L		111	75 - 117
m-Xylene & p-Xylene	25.0	25.7		ug/L		103	74 - 119
Naphthalene	25.0	24.9		ug/L		100	81 - 121
n-Butylbenzene	25.0	26.4		ug/L		106	78 - 119
N-Propylbenzene	25.0	26.7		ug/L		107	77 - 117
o-Xylene	25.0	26.0		ug/L		104	77 - 118
sec-Butylbenzene	25.0	27.2		ug/L		109	78 - 118
Styrene	25.0	25.0		ug/L		100	76 - 116
tert-Butylbenzene	25.0	26.8		ug/L		107	78 - 118
Tetrachloroethene	25.0	26.5		ug/L		106	81 - 130
Toluene	25.0	25.0		ug/L		100	75 - 120
trans-1,2-Dichloroethene	25.0	31.0	*	ug/L		124	79 - 117
trans-1,3-Dichloropropene	25.0	23.4		ug/L		94	76 - 122
Trichloroethene	25.0	25.3		ug/L		101	80 - 123
Trichlorofluoromethane	25.0	24.2		ug/L		97	75 - 141
Vinyl acetate	25.0	24.9		ug/L		99	50 - 126
Vinyl chloride	25.0	21.9		ug/L		88	58 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*72 - 130*
4-Bromofluorobenzene	*95*		*67 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Lab Sample ID: LCS 720-250553/7
Matrix: Water
Analysis Batch: 250553

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	500	559		ug/L		112	77 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250553/7
Matrix: Water
Analysis Batch: 250553

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*88*		*72 - 130*
4-Bromofluorobenzene	*99*		*67 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 720-250553/6
Matrix: Water
Analysis Batch: 250553

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	25.8		ug/L		103	81 - 121	3	20
1,1,1-Trichloroethane	25.0	25.4		ug/L		102	74 - 130	2	20
1,1,2,2-Tetrachloroethane	25.0	21.9		ug/L		88	70 - 115	3	20
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	32.1		ug/L		129	70 - 133	4	20
1,1,2-Trichloroethane	25.0	23.3		ug/L		93	80 - 117	0	20
1,1-Dichloroethane	25.0	26.9		ug/L		108	77 - 119	3	20
1,1-Dichloroethene	25.0	30.7	*	ug/L		123	69 - 119	4	20
1,1-Dichloropropene	25.0	25.8		ug/L		103	83 - 130	2	20
1,2,3-Trichlorobenzene	25.0	27.4		ug/L		110	87 - 123	6	20
1,2,3-Trichloropropane	25.0	22.5		ug/L		90	77 - 120	4	20
1,2,4-Trichlorobenzene	25.0	28.6		ug/L		114	78 - 120	5	20
1,2,4-Trimethylbenzene	25.0	27.6		ug/L		110	75 - 115	1	20
1,2-Dibromo-3-Chloropropane	25.0	24.8		ug/L		99	74 - 126	6	20
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	77 - 117	3	20
1,2-Dichloroethane	25.0	22.9		ug/L		91	73 - 122	2	20
1,2-Dichloropropane	25.0	26.1		ug/L		104	79 - 119	2	20
1,3,5-Trimethylbenzene	25.0	26.8		ug/L		107	77 - 117	1	20
1,3-Dichlorobenzene	25.0	25.3		ug/L		101	76 - 116	1	20
1,3-Dichloropropane	25.0	22.2		ug/L		89	77 - 117	0	20
1,4-Dichlorobenzene	25.0	25.1		ug/L		101	76 - 116	3	20
2,2-Dichloropropane	25.0	27.8		ug/L		111	74 - 156	1	20
2-Butanone (MEK)	125	108		ug/L		87	66 - 133	4	22
2-Chlorotoluene	25.0	26.4		ug/L		106	75 - 115	1	20
2-Hexanone	125	110		ug/L		88	63 - 140	4	24
4-Chlorotoluene	25.0	26.7		ug/L		107	73 - 119	2	20
4-Isopropyltoluene	25.0	26.8		ug/L		107	80 - 120	0	20
4-Methyl-2-pentanone (MIBK)	125	111		ug/L		89	66 - 140	4	21
Acetone	125	117		ug/L		94	61 - 147	7	30
Benzene	25.0	25.3		ug/L		101	79 - 119	1	20
Bromobenzene	25.0	25.4		ug/L		102	77 - 117	1	20
Bromoform	25.0	23.1		ug/L		92	75 - 127	4	20
Bromomethane	25.0	24.3		ug/L		97	70 - 132	0	20
Carbon disulfide	25.0	35.9	*	ug/L		144	64 - 127	3	20
Carbon tetrachloride	25.0	25.1		ug/L		101	72 - 142	3	20
Chlorobenzene	25.0	24.4		ug/L		98	76 - 116	0	20
Chlorobromomethane	25.0	25.4		ug/L		101	81 - 122	2	20
Chlorodibromomethane	25.0	23.5		ug/L		94	77 - 133	1	20
Chloroethane	25.0	23.0		ug/L		92	70 - 131	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250553/6
Matrix: Water
Analysis Batch: 250553

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroform			25.0	24.5		ug/L		98	82 - 119	0	20
Chloromethane			25.0	22.8		ug/L		91	49 - 134	2	20
cis-1,2-Dichloroethene			25.0	26.1		ug/L		104	77 - 117	2	20
cis-1,3-Dichloropropene			25.0	25.8		ug/L		103	82 - 119	1	20
Dibromomethane			25.0	22.8		ug/L		91	79 - 117	2	20
Dichlorobromomethane			25.0	23.7		ug/L		95	81 - 130	1	20
Dichlorodifluoromethane			25.0	18.5		ug/L		74	21 - 150	5	20
Ethylbenzene			25.0	25.3		ug/L		101	77 - 117	0	20
Ethylene Dibromide			25.0	21.5		ug/L		86	80 - 121	4	20
Hexachlorobutadiene			25.0	26.0		ug/L		104	78 - 140	2	20
Isopropylbenzene			25.0	27.3		ug/L		109	77 - 130	1	20
Methyl tert-butyl ether			25.0	25.3		ug/L		101	70 - 130	10	20
Methylene Chloride			25.0	27.4		ug/L		109	75 - 117	2	20
m-Xylene & p-Xylene			25.0	25.7		ug/L		103	74 - 119	0	20
Naphthalene			25.0	26.9		ug/L		108	81 - 121	8	20
n-Butylbenzene			25.0	26.2		ug/L		105	78 - 119	1	20
N-Propylbenzene			25.0	26.6		ug/L		106	77 - 117	0	20
o-Xylene			25.0	26.3		ug/L		105	77 - 118	1	20
sec-Butylbenzene			25.0	26.9		ug/L		108	78 - 118	1	20
Styrene			25.0	25.1		ug/L		100	76 - 116	0	20
tert-Butylbenzene			25.0	26.3		ug/L		105	78 - 118	2	20
Tetrachloroethene			25.0	25.5		ug/L		102	81 - 130	4	20
Toluene			25.0	25.1		ug/L		101	75 - 120	1	20
trans-1,2-Dichloroethene			25.0	29.8	*	ug/L		119	79 - 117	4	20
trans-1,3-Dichloropropene			25.0	23.2		ug/L		93	76 - 122	1	20
Trichloroethene			25.0	25.0		ug/L		100	80 - 123	1	20
Trichlorofluoromethane			25.0	23.7		ug/L		95	75 - 141	2	20
Vinyl acetate			25.0	25.3		ug/L		101	50 - 126	2	20
Vinyl chloride			25.0	21.4		ug/L		85	58 - 138	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*72 - 130*
4-Bromofluorobenzene	*93*		*67 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 720-250553/8
Matrix: Water
Analysis Batch: 250553

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			500	576		ug/L		115	77 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*72 - 130*
4-Bromofluorobenzene	*100*		*67 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88214-A-1 MS
Matrix: Water
Analysis Batch: 250553

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	26.5		ug/L		106	60 - 140
1,1,1-Trichloroethane	ND		25.0	25.6		ug/L		102	60 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	21.1		ug/L		84	60 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	32.0		ug/L		128	60 - 140
1,1,2-Trichloroethane	ND		25.0	23.6		ug/L		94	60 - 140
1,1-Dichloroethane	ND		25.0	27.8		ug/L		111	60 - 140
1,1-Dichloroethene	ND	*	25.0	30.9		ug/L		124	60 - 140
1,1-Dichloropropene	ND		25.0	26.7		ug/L		107	60 - 140
1,2,3-Trichlorobenzene	ND		25.0	26.1		ug/L		105	60 - 140
1,2,3-Trichloropropane	ND		25.0	21.3		ug/L		85	60 - 140
1,2,4-Trichlorobenzene	ND		25.0	28.3		ug/L		113	60 - 140
1,2,4-Trimethylbenzene	ND		25.0	27.2		ug/L		109	60 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	24.3		ug/L		97	60 - 140
1,2-Dichlorobenzene	ND		25.0	25.2		ug/L		101	60 - 140
1,2-Dichloroethane	ND		25.0	24.0		ug/L		96	60 - 140
1,2-Dichloropropane	ND		25.0	26.1		ug/L		104	60 - 140
1,3,5-Trimethylbenzene	ND		25.0	27.2		ug/L		109	60 - 140
1,3-Dichlorobenzene	ND		25.0	25.3		ug/L		101	60 - 140
1,3-Dichloropropane	ND		25.0	22.2		ug/L		89	60 - 140
1,4-Dichlorobenzene	ND		25.0	25.1		ug/L		100	60 - 140
2,2-Dichloropropane	ND		25.0	28.0		ug/L		112	60 - 140
2-Butanone (MEK)	ND		125	102		ug/L		82	60 - 140
2-Chlorotoluene	ND		25.0	26.4		ug/L		105	60 - 140
2-Hexanone	ND		125	100		ug/L		80	60 - 140
4-Chlorotoluene	ND		25.0	26.6		ug/L		106	60 - 140
4-Isopropyltoluene	ND		25.0	26.4		ug/L		106	60 - 140
4-Methyl-2-pentanone (MIBK)	ND		125	104		ug/L		83	58 - 130
Acetone	ND		125	111		ug/L		89	60 - 140
Benzene	ND		25.0	25.8		ug/L		103	60 - 140
Bromobenzene	ND		25.0	25.7		ug/L		103	60 - 140
Bromoform	ND		25.0	22.5		ug/L		90	56 - 140
Bromomethane	ND		25.0	22.7		ug/L		91	23 - 140
Carbon disulfide	ND	* F1	25.0	34.8		ug/L		139	38 - 140
Carbon tetrachloride	ND		25.0	25.3		ug/L		101	60 - 140
Chlorobenzene	ND		25.0	24.7		ug/L		99	60 - 140
Chlorobromomethane	ND		25.0	26.5		ug/L		106	60 - 140
Chlorodibromomethane	ND		25.0	23.4		ug/L		94	60 - 140
Chloroethane	ND		25.0	21.8		ug/L		87	51 - 140
Chloroform	ND		25.0	25.6		ug/L		102	60 - 140
Chloromethane	ND		25.0	20.7		ug/L		83	52 - 140
cis-1,2-Dichloroethene	ND		25.0	27.5		ug/L		110	60 - 140
cis-1,3-Dichloropropene	ND		25.0	25.3		ug/L		101	60 - 140
Dibromomethane	ND		25.0	23.2		ug/L		93	60 - 140
Dichlorobromomethane	ND		25.0	24.0		ug/L		96	60 - 140
Dichlorodifluoromethane	ND		25.0	16.7		ug/L		67	38 - 140
Ethylbenzene	ND		25.0	25.4		ug/L		102	60 - 140
Ethylene Dibromide	ND		25.0	21.5		ug/L		86	60 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88214-A-1 MS
Matrix: Water
Analysis Batch: 250553

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobutadiene	ND		25.0	24.6		ug/L		98	60 - 140
Isopropylbenzene	ND		25.0	27.6		ug/L		111	60 - 140
Methyl tert-butyl ether	ND		25.0	23.9		ug/L		96	60 - 138
Methylene Chloride	ND		25.0	27.7		ug/L		111	40 - 140
m-Xylene & p-Xylene	ND		25.0	26.1		ug/L		104	60 - 140
Naphthalene	ND		25.0	24.8		ug/L		99	56 - 140
n-Butylbenzene	ND		25.0	26.3		ug/L		105	60 - 140
N-Propylbenzene	ND		25.0	26.0		ug/L		104	60 - 140
o-Xylene	ND		25.0	27.0		ug/L		108	60 - 140
sec-Butylbenzene	ND		25.0	26.4		ug/L		106	60 - 140
Styrene	ND		25.0	25.2		ug/L		101	60 - 140
tert-Butylbenzene	ND		25.0	26.6		ug/L		106	60 - 140
Tetrachloroethene	54	F1	25.0	59.0	F1	ug/L		19	60 - 140
Toluene	ND		25.0	25.5		ug/L		102	60 - 140
trans-1,2-Dichloroethene	ND	*	25.0	30.4		ug/L		121	60 - 140
trans-1,3-Dichloropropene	ND		25.0	22.4		ug/L		90	60 - 140
Trichloroethene	1.5		25.0	27.0		ug/L		102	60 - 140
Trichlorofluoromethane	ND		25.0	22.8		ug/L		91	60 - 140
Vinyl acetate	ND		25.0	25.7		ug/L		103	40 - 140
Vinyl chloride	ND		25.0	19.8		ug/L		79	58 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*72 - 130*
4-Bromofluorobenzene	*94*		*67 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*

Lab Sample ID: 720-88214-A-1 MSD
Matrix: Water
Analysis Batch: 250553

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	26.5		ug/L		106	60 - 140	0	20
1,1,1-Trichloroethane	ND		25.0	26.4		ug/L		106	60 - 140	3	20
1,1,2,2-Tetrachloroethane	ND		25.0	21.7		ug/L		87	60 - 140	3	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	32.9		ug/L		131	60 - 140	3	20
1,1,2-Trichloroethane	ND		25.0	23.8		ug/L		95	60 - 140	1	20
1,1-Dichloroethane	ND		25.0	28.2		ug/L		113	60 - 140	1	20
1,1-Dichloroethene	ND	*	25.0	30.5		ug/L		122	60 - 140	2	20
1,1-Dichloropropene	ND		25.0	26.4		ug/L		105	60 - 140	1	20
1,2,3-Trichlorobenzene	ND		25.0	28.1		ug/L		112	60 - 140	7	20
1,2,3-Trichloropropane	ND		25.0	22.3		ug/L		89	60 - 140	5	20
1,2,4-Trichlorobenzene	ND		25.0	29.1		ug/L		116	60 - 140	3	20
1,2,4-Trimethylbenzene	ND		25.0	27.5		ug/L		110	60 - 140	1	20
1,2-Dibromo-3-Chloropropane	ND		25.0	25.0		ug/L		100	60 - 140	3	20
1,2-Dichlorobenzene	ND		25.0	26.0		ug/L		104	60 - 140	3	20
1,2-Dichloroethane	ND		25.0	23.9		ug/L		96	60 - 140	0	20
1,2-Dichloropropane	ND		25.0	26.7		ug/L		107	60 - 140	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88214-A-1 MSD
Matrix: Water
Analysis Batch: 250553

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trimethylbenzene	ND		25.0	27.0		ug/L		108	60 - 140	1	20
1,3-Dichlorobenzene	ND		25.0	25.9		ug/L		104	60 - 140	2	20
1,3-Dichloropropane	ND		25.0	22.4		ug/L		90	60 - 140	1	20
1,4-Dichlorobenzene	ND		25.0	25.7		ug/L		103	60 - 140	2	20
2,2-Dichloropropane	ND		25.0	28.7		ug/L		115	60 - 140	3	20
2-Butanone (MEK)	ND		125	105		ug/L		84	60 - 140	3	20
2-Chlorotoluene	ND		25.0	26.8		ug/L		107	60 - 140	2	20
2-Hexanone	ND		125	106		ug/L		85	60 - 140	6	20
4-Chlorotoluene	ND		25.0	26.7		ug/L		107	60 - 140	1	20
4-Isopropyltoluene	ND		25.0	26.7		ug/L		107	60 - 140	1	20
4-Methyl-2-pentanone (MIBK)	ND		125	109		ug/L		87	58 - 130	4	20
Acetone	ND		125	114		ug/L		91	60 - 140	2	20
Benzene	ND		25.0	26.2		ug/L		105	60 - 140	1	20
Bromobenzene	ND		25.0	25.5		ug/L		102	60 - 140	1	20
Bromoform	ND		25.0	23.5		ug/L		94	56 - 140	5	20
Bromomethane	ND		25.0	24.3		ug/L		97	23 - 140	7	20
Carbon disulfide	ND	* F1	25.0	36.8	F1	ug/L		147	38 - 140	6	20
Carbon tetrachloride	ND		25.0	26.3		ug/L		105	60 - 140	4	20
Chlorobenzene	ND		25.0	24.7		ug/L		99	60 - 140	0	20
Chlorobromomethane	ND		25.0	26.2		ug/L		105	60 - 140	1	20
Chlorodibromomethane	ND		25.0	24.1		ug/L		96	60 - 140	3	20
Chloroethane	ND		25.0	23.4		ug/L		94	51 - 140	7	20
Chloroform	ND		25.0	25.4		ug/L		101	60 - 140	1	20
Chloromethane	ND		25.0	22.5		ug/L		90	52 - 140	8	20
cis-1,2-Dichloroethene	ND		25.0	27.5		ug/L		110	60 - 140	0	20
cis-1,3-Dichloropropene	ND		25.0	26.2		ug/L		105	60 - 140	4	20
Dibromomethane	ND		25.0	24.0		ug/L		96	60 - 140	4	20
Dichlorobromomethane	ND		25.0	24.2		ug/L		97	60 - 140	1	20
Dichlorodifluoromethane	ND		25.0	17.7		ug/L		71	38 - 140	6	20
Ethylbenzene	ND		25.0	25.5		ug/L		102	60 - 140	0	20
Ethylene Dibromide	ND		25.0	22.8		ug/L		91	60 - 140	6	20
Hexachlorobutadiene	ND		25.0	25.6		ug/L		102	60 - 140	4	20
Isopropylbenzene	ND		25.0	27.3		ug/L		109	60 - 140	1	20
Methyl tert-butyl ether	ND		25.0	25.2		ug/L		101	60 - 138	5	20
Methylene Chloride	ND		25.0	28.5		ug/L		114	40 - 140	3	20
m-Xylene & p-Xylene	ND		25.0	25.5		ug/L		102	60 - 140	2	20
Naphthalene	ND		25.0	27.2		ug/L		109	56 - 140	9	20
n-Butylbenzene	ND		25.0	26.3		ug/L		105	60 - 140	0	20
N-Propylbenzene	ND		25.0	26.4		ug/L		106	60 - 140	1	20
o-Xylene	ND		25.0	26.8		ug/L		107	60 - 140	1	20
sec-Butylbenzene	ND		25.0	26.5		ug/L		106	60 - 140	1	20
Styrene	ND		25.0	25.5		ug/L		102	60 - 140	1	20
tert-Butylbenzene	ND		25.0	26.5		ug/L		106	60 - 140	0	20
Tetrachloroethene	54	F1	25.0	60.5	F1	ug/L		25	60 - 140	3	20
Toluene	ND		25.0	24.7		ug/L		99	60 - 140	4	20
trans-1,2-Dichloroethene	ND	*	25.0	31.6		ug/L		126	60 - 140	4	20
trans-1,3-Dichloropropene	ND		25.0	24.1		ug/L		96	60 - 140	7	20
Trichloroethene	1.5		25.0	26.3		ug/L		99	60 - 140	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88214-A-1 MSD
Matrix: Water
Analysis Batch: 250553

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichlorofluoromethane	ND		25.0	23.7		ug/L		95	60 - 140	4	20
Vinyl acetate	ND		25.0	25.2		ug/L		101	40 - 140	2	20
Vinyl chloride	ND		25.0	21.4		ug/L		86	58 - 140	8	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*72 - 130*
4-Bromofluorobenzene	*98*		*67 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

Lab Sample ID: MB 720-250554/4
Matrix: Water
Analysis Batch: 250554

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			08/30/18 09:09	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			08/30/18 09:09	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			08/30/18 09:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			08/30/18 09:09	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			08/30/18 09:09	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			08/30/18 09:09	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			08/30/18 09:09	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			08/30/18 09:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			08/30/18 09:09	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			08/30/18 09:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			08/30/18 09:09	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			08/30/18 09:09	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			08/30/18 09:09	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			08/30/18 09:09	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			08/30/18 09:09	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			08/30/18 09:09	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			08/30/18 09:09	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			08/30/18 09:09	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			08/30/18 09:09	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			08/30/18 09:09	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			08/30/18 09:09	1
2-Butanone (MEK)	ND		50	8.4	ug/L			08/30/18 09:09	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 09:09	1
2-Hexanone	ND		50	3.0	ug/L			08/30/18 09:09	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			08/30/18 09:09	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			08/30/18 09:09	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			08/30/18 09:09	1
Acetone	ND		50	20	ug/L			08/30/18 09:09	1
Benzene	ND		0.50	0.25	ug/L			08/30/18 09:09	1
Bromobenzene	ND		1.0	0.20	ug/L			08/30/18 09:09	1
Bromoform	ND		1.0	0.50	ug/L			08/30/18 09:09	1
Bromomethane	ND		1.0	0.49	ug/L			08/30/18 09:09	1
Carbon disulfide	ND		5.0	0.78	ug/L			08/30/18 09:09	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			08/30/18 09:09	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250554/4
Matrix: Water
Analysis Batch: 250554

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.50	0.13	ug/L			08/30/18 09:09	1
Chlorobromomethane	ND		1.0	0.25	ug/L			08/30/18 09:09	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			08/30/18 09:09	1
Chloroethane	ND		1.0	0.17	ug/L			08/30/18 09:09	1
Chloroform	ND		1.0	0.40	ug/L			08/30/18 09:09	1
Chloromethane	ND		1.0	0.19	ug/L			08/30/18 09:09	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			08/30/18 09:09	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			08/30/18 09:09	1
Dibromomethane	ND		0.50	0.30	ug/L			08/30/18 09:09	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			08/30/18 09:09	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			08/30/18 09:09	1
Ethylbenzene	ND		0.50	0.13	ug/L			08/30/18 09:09	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			08/30/18 09:09	1
Gasoline Range Organics (GRO) -C4-C12	ND		50	21	ug/L			08/30/18 09:09	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			08/30/18 09:09	1
Isopropylbenzene	ND		0.50	0.20	ug/L			08/30/18 09:09	1
Methyl tert-butyl ether	ND		0.50	0.11	ug/L			08/30/18 09:09	1
Methylene Chloride	ND		5.0	1.5	ug/L			08/30/18 09:09	1
Naphthalene	ND		1.0	0.22	ug/L			08/30/18 09:09	1
n-Butylbenzene	ND		1.0	0.30	ug/L			08/30/18 09:09	1
N-Propylbenzene	ND		1.0	0.20	ug/L			08/30/18 09:09	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			08/30/18 09:09	1
Styrene	ND		0.50	0.22	ug/L			08/30/18 09:09	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			08/30/18 09:09	1
Tetrachloroethene	ND		0.50	0.20	ug/L			08/30/18 09:09	1
Toluene	ND		0.50	0.17	ug/L			08/30/18 09:09	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/30/18 09:09	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			08/30/18 09:09	1
Trichloroethene	ND		0.50	0.20	ug/L			08/30/18 09:09	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			08/30/18 09:09	1
Vinyl acetate	ND		10	0.60	ug/L			08/30/18 09:09	1
Vinyl chloride	ND		0.50	0.20	ug/L			08/30/18 09:09	1
Xylenes, Total	ND		0.50	0.40	ug/L			08/30/18 09:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*72 - 130*		*08/30/18 09:09*	*1*
4-Bromofluorobenzene	*96*		*67 - 130*		*08/30/18 09:09*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/30/18 09:09*	*1*

Lab Sample ID: LCS 720-250554/5
Matrix: Water
Analysis Batch: 250554

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	26.1		ug/L		104	81 - 121
1,1,1-Trichloroethane	25.0	27.3		ug/L		109	74 - 130
1,1,2,2-Tetrachloroethane	25.0	24.4		ug/L		98	70 - 115

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250554/5
Matrix: Water
Analysis Batch: 250554

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	30.2		ug/L		121	70 - 133
1,1,2-Trichloroethane	25.0	24.6		ug/L		99	80 - 117
1,1-Dichloroethane	25.0	23.7		ug/L		95	77 - 119
1,1-Dichloroethene	25.0	28.7		ug/L		115	69 - 119
1,1-Dichloropropene	25.0	26.0		ug/L		104	83 - 130
1,2,3-Trichlorobenzene	25.0	23.1		ug/L		92	87 - 123
1,2,3-Trichloropropane	25.0	26.2		ug/L		105	77 - 120
1,2,4-Trichlorobenzene	25.0	24.2		ug/L		97	78 - 120
1,2,4-Trimethylbenzene	25.0	26.7		ug/L		107	75 - 115
1,2-Dibromo-3-Chloropropane	25.0	24.0		ug/L		96	74 - 126
1,2-Dichlorobenzene	25.0	24.9		ug/L		99	77 - 117
1,2-Dichloroethane	25.0	21.7		ug/L		87	73 - 122
1,2-Dichloropropane	25.0	22.7		ug/L		91	79 - 119
1,3,5-Trimethylbenzene	25.0	27.0		ug/L		108	77 - 117
1,3-Dichlorobenzene	25.0	25.0		ug/L		100	76 - 116
1,3-Dichloropropane	25.0	24.2		ug/L		97	77 - 117
1,4-Dichlorobenzene	25.0	25.7		ug/L		103	76 - 116
2,2-Dichloropropane	25.0	31.7		ug/L		127	74 - 156
2-Butanone (MEK)	125	112		ug/L		90	66 - 133
2-Chlorotoluene	25.0	26.2		ug/L		105	75 - 115
2-Hexanone	125	90.4		ug/L		72	63 - 140
4-Chlorotoluene	25.0	26.1		ug/L		104	73 - 119
4-Isopropyltoluene	25.0	28.2		ug/L		113	80 - 120
4-Methyl-2-pentanone (MIBK)	125	92.4		ug/L		74	66 - 140
Acetone	125	90.5		ug/L		72	61 - 147
Benzene	25.0	25.7		ug/L		103	79 - 119
Bromobenzene	25.0	25.1		ug/L		100	77 - 117
Bromoform	25.0	23.0		ug/L		92	75 - 127
Bromomethane	25.0	27.2		ug/L		109	70 - 132
Carbon disulfide	25.0	31.5		ug/L		126	64 - 127
Carbon tetrachloride	25.0	27.5		ug/L		110	72 - 142
Chlorobenzene	25.0	26.1		ug/L		104	76 - 116
Chlorobromomethane	25.0	27.8		ug/L		111	81 - 122
Chlorodibromomethane	25.0	26.7		ug/L		107	77 - 133
Chloroethane	25.0	22.6		ug/L		91	70 - 131
Chloroform	25.0	25.8		ug/L		103	82 - 119
Chloromethane	25.0	20.7		ug/L		83	49 - 134
cis-1,2-Dichloroethene	25.0	21.9		ug/L		88	77 - 117
cis-1,3-Dichloropropene	25.0	25.9		ug/L		104	82 - 119
Dibromomethane	25.0	25.0		ug/L		100	79 - 117
Dichlorobromomethane	25.0	25.5		ug/L		102	81 - 130
Dichlorodifluoromethane	25.0	27.7		ug/L		111	21 - 150
Ethylbenzene	25.0	26.0		ug/L		104	77 - 117
Ethylene Dibromide	25.0	25.3		ug/L		101	80 - 121
Hexachlorobutadiene	25.0	21.8		ug/L		87	78 - 140
Isopropylbenzene	25.0	26.7		ug/L		107	77 - 130
Methyl tert-butyl ether	25.0	24.9		ug/L		99	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-250554/5
Matrix: Water
Analysis Batch: 250554

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	25.0	26.0		ug/L		104	75 - 117
m-Xylene & p-Xylene	25.0	25.9		ug/L		103	74 - 119
Naphthalene	25.0	25.3		ug/L		101	81 - 121
n-Butylbenzene	25.0	27.1		ug/L		108	78 - 119
N-Propylbenzene	25.0	27.1		ug/L		108	77 - 117
o-Xylene	25.0	25.4		ug/L		102	77 - 118
sec-Butylbenzene	25.0	27.2		ug/L		109	78 - 118
Styrene	25.0	24.9		ug/L		100	76 - 116
tert-Butylbenzene	25.0	27.2		ug/L		109	78 - 118
Tetrachloroethene	25.0	23.3		ug/L		93	81 - 130
Toluene	25.0	22.2		ug/L		89	75 - 120
trans-1,2-Dichloroethene	25.0	28.6		ug/L		114	79 - 117
trans-1,3-Dichloropropene	25.0	25.0		ug/L		100	76 - 122
Trichloroethene	25.0	25.2		ug/L		101	80 - 123
Trichlorofluoromethane	25.0	25.2		ug/L		101	75 - 141
Vinyl acetate	25.0	25.1		ug/L		100	50 - 126
Vinyl chloride	25.0	24.0		ug/L		96	58 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*72 - 130*
4-Bromofluorobenzene	*95*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCS 720-250554/7
Matrix: Water
Analysis Batch: 250554

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	500	460		ug/L		92	77 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*72 - 130*
4-Bromofluorobenzene	*95*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 720-250554/6
Matrix: Water
Analysis Batch: 250554

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	25.9		ug/L		103	81 - 121	1	20
1,1,1-Trichloroethane	25.0	26.9		ug/L		108	74 - 130	2	20
1,1,2,2-Tetrachloroethane	25.0	24.1		ug/L		96	70 - 115	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	30.0		ug/L		120	70 - 133	1	20
1,1,2-Trichloroethane	25.0	23.9		ug/L		96	80 - 117	3	20
1,1-Dichloroethane	25.0	23.3		ug/L		93	77 - 119	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250554/6
Matrix: Water
Analysis Batch: 250554

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			25.0	28.0		ug/L		112	69 - 119	2	20
1,1-Dichloropropene			25.0	25.4		ug/L		101	83 - 130	2	20
1,2,3-Trichlorobenzene			25.0	23.0		ug/L		92	87 - 123	1	20
1,2,3-Trichloropropane			25.0	25.9		ug/L		104	77 - 120	1	20
1,2,4-Trichlorobenzene			25.0	23.8		ug/L		95	78 - 120	2	20
1,2,4-Trimethylbenzene			25.0	26.4		ug/L		106	75 - 115	1	20
1,2-Dibromo-3-Chloropropane			25.0	23.8		ug/L		95	74 - 126	1	20
1,2-Dichlorobenzene			25.0	24.5		ug/L		98	77 - 117	1	20
1,2-Dichloroethane			25.0	21.4		ug/L		86	73 - 122	1	20
1,2-Dichloropropane			25.0	22.3		ug/L		89	79 - 119	2	20
1,3,5-Trimethylbenzene			25.0	26.7		ug/L		107	77 - 117	1	20
1,3-Dichlorobenzene			25.0	24.9		ug/L		100	76 - 116	1	20
1,3-Dichloropropane			25.0	24.0		ug/L		96	77 - 117	1	20
1,4-Dichlorobenzene			25.0	25.3		ug/L		101	76 - 116	1	20
2,2-Dichloropropane			25.0	32.7		ug/L		131	74 - 156	3	20
2-Butanone (MEK)			125	109		ug/L		87	66 - 133	3	22
2-Chlorotoluene			25.0	25.8		ug/L		103	75 - 115	1	20
2-Hexanone			125	89.5		ug/L		72	63 - 140	1	24
4-Chlorotoluene			25.0	25.7		ug/L		103	73 - 119	2	20
4-Isopropyltoluene			25.0	27.8		ug/L		111	80 - 120	2	20
4-Methyl-2-pentanone (MIBK)			125	90.8		ug/L		73	66 - 140	2	21
Acetone			125	92.4		ug/L		74	61 - 147	2	30
Benzene			25.0	25.3		ug/L		101	79 - 119	2	20
Bromobenzene			25.0	24.6		ug/L		98	77 - 117	2	20
Bromoform			25.0	22.3		ug/L		89	75 - 127	3	20
Bromomethane			25.0	26.9		ug/L		108	70 - 132	1	20
Carbon disulfide			25.0	31.0		ug/L		124	64 - 127	2	20
Carbon tetrachloride			25.0	26.9		ug/L		108	72 - 142	2	20
Chlorobenzene			25.0	25.6		ug/L		102	76 - 116	2	20
Chlorobromomethane			25.0	27.1		ug/L		109	81 - 122	3	20
Chlorodibromomethane			25.0	26.2		ug/L		105	77 - 133	2	20
Chloroethane			25.0	22.3		ug/L		89	70 - 131	1	20
Chloroform			25.0	25.4		ug/L		102	82 - 119	2	20
Chloromethane			25.0	20.7		ug/L		83	49 - 134	0	20
cis-1,2-Dichloroethene			25.0	21.7		ug/L		87	77 - 117	1	20
cis-1,3-Dichloropropene			25.0	25.6		ug/L		103	82 - 119	1	20
Dibromomethane			25.0	24.1		ug/L		97	79 - 117	3	20
Dichlorobromomethane			25.0	25.0		ug/L		100	81 - 130	2	20
Dichlorodifluoromethane			25.0	27.8		ug/L		111	21 - 150	0	20
Ethylbenzene			25.0	25.6		ug/L		102	77 - 117	2	20
Ethylene Dibromide			25.0	25.0		ug/L		100	80 - 121	2	20
Hexachlorobutadiene			25.0	21.5		ug/L		86	78 - 140	1	20
Isopropylbenzene			25.0	26.4		ug/L		105	77 - 130	1	20
Methyl tert-butyl ether			25.0	24.5		ug/L		98	70 - 130	1	20
Methylene Chloride			25.0	25.5		ug/L		102	75 - 117	2	20
m-Xylene & p-Xylene			25.0	25.5		ug/L		102	74 - 119	1	20
Naphthalene			25.0	25.2		ug/L		101	81 - 121	0	20
n-Butylbenzene			25.0	26.7		ug/L		107	78 - 119	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250554/6
Matrix: Water
Analysis Batch: 250554

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
N-Propylbenzene			25.0	26.9		ug/L		108	77 - 117	0	20
o-Xylene			25.0	25.0		ug/L		100	77 - 118	2	20
sec-Butylbenzene			25.0	27.0		ug/L		108	78 - 118	1	20
Styrene			25.0	24.6		ug/L		98	76 - 116	1	20
tert-Butylbenzene			25.0	27.0		ug/L		108	78 - 118	1	20
Tetrachloroethene			25.0	23.0		ug/L		92	81 - 130	2	20
Toluene			25.0	21.6		ug/L		87	75 - 120	2	20
trans-1,2-Dichloroethene			25.0	28.3		ug/L		113	79 - 117	1	20
trans-1,3-Dichloropropene			25.0	24.6		ug/L		99	76 - 122	1	20
Trichloroethene			25.0	24.9		ug/L		100	80 - 123	1	20
Trichlorofluoromethane			25.0	25.2		ug/L		101	75 - 141	0	20
Vinyl acetate			25.0	24.4		ug/L		98	50 - 126	3	20
Vinyl chloride			25.0	23.8		ug/L		95	58 - 138	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*84*		*72 - 130*
4-Bromofluorobenzene	*95*		*67 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 720-250554/8
Matrix: Water
Analysis Batch: 250554

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			500	442		ug/L		88	77 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*72 - 130*
4-Bromofluorobenzene	*94*		*67 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: 720-88175-B-11 MS
Matrix: Water
Analysis Batch: 250554

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	29.4		ug/L		118	60 - 140
1,1,1-Trichloroethane	ND		25.0	31.2		ug/L		125	60 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	26.9		ug/L		108	60 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	30.3		ug/L		121	60 - 140
1,1,2-Trichloroethane	ND		25.0	27.9		ug/L		112	60 - 140
1,1-Dichloroethane	ND		25.0	26.1		ug/L		104	60 - 140
1,1-Dichloroethene	0.30	J	25.0	28.9		ug/L		114	60 - 140
1,1-Dichloropropene	ND		25.0	27.7		ug/L		111	60 - 140
1,2,3-Trichlorobenzene	ND		25.0	25.4		ug/L		102	60 - 140
1,2,3-Trichloropropane	ND		25.0	30.4		ug/L		122	60 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88175-B-11 MS
Matrix: Water
Analysis Batch: 250554

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	ND		25.0	25.8		ug/L		103	60 - 140
1,2,4-Trimethylbenzene	ND		25.0	27.8		ug/L		111	60 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	28.1		ug/L		112	60 - 140
1,2-Dichlorobenzene	ND		25.0	27.1		ug/L		108	60 - 140
1,2-Dichloroethane	0.18	J	25.0	27.8		ug/L		111	60 - 140
1,2-Dichloropropane	ND		25.0	25.5		ug/L		102	60 - 140
1,3,5-Trimethylbenzene	ND		25.0	28.3		ug/L		113	60 - 140
1,3-Dichlorobenzene	ND		25.0	26.5		ug/L		106	60 - 140
1,3-Dichloropropane	ND		25.0	28.0		ug/L		112	60 - 140
1,4-Dichlorobenzene	ND		25.0	27.3		ug/L		109	60 - 140
2,2-Dichloropropane	ND	F1	25.0	35.5	F1	ug/L		142	60 - 140
2-Butanone (MEK)	ND		125	126		ug/L		101	60 - 140
2-Chlorotoluene	ND		25.0	27.5		ug/L		110	60 - 140
2-Hexanone	ND		125	112		ug/L		90	60 - 140
4-Chlorotoluene	ND		25.0	27.7		ug/L		111	60 - 140
4-Isopropyltoluene	ND		25.0	28.8		ug/L		115	60 - 140
4-Methyl-2-pentanone (MIBK)	ND		125	115		ug/L		92	58 - 130
Acetone	ND		125	101		ug/L		81	60 - 140
Benzene	ND		25.0	27.9		ug/L		112	60 - 140
Bromobenzene	ND		25.0	27.5		ug/L		110	60 - 140
Bromoform	ND		25.0	26.7		ug/L		107	56 - 140
Bromomethane	ND		25.0	27.8		ug/L		111	23 - 140
Carbon disulfide	ND		25.0	31.5		ug/L		126	38 - 140
Carbon tetrachloride	ND		25.0	31.5		ug/L		126	60 - 140
Chlorobenzene	ND		25.0	27.6		ug/L		111	60 - 140
Chlorobromomethane	ND		25.0	32.1		ug/L		129	60 - 140
Chlorodibromomethane	ND		25.0	32.6		ug/L		130	60 - 140
Chloroethane	ND		25.0	22.5		ug/L		90	51 - 140
Chloroform	ND		25.0	29.9		ug/L		120	60 - 140
Chloromethane	ND		25.0	22.3		ug/L		89	52 - 140
cis-1,2-Dichloroethene	15		25.0	40.4		ug/L		100	60 - 140
cis-1,3-Dichloropropene	ND		25.0	29.2		ug/L		117	60 - 140
Dibromomethane	ND		25.0	29.0		ug/L		116	60 - 140
Dichlorobromomethane	ND		25.0	30.3		ug/L		121	60 - 140
Dichlorodifluoromethane	ND		25.0	29.8		ug/L		119	38 - 140
Ethylbenzene	ND		25.0	26.9		ug/L		107	60 - 140
Ethylene Dibromide	ND		25.0	29.8		ug/L		119	60 - 140
Hexachlorobutadiene	ND		25.0	22.5		ug/L		90	60 - 140
Isopropylbenzene	ND		25.0	27.7		ug/L		111	60 - 140
Methyl tert-butyl ether	1.5		25.0	31.1		ug/L		118	60 - 138
Methylene Chloride	ND		25.0	28.1		ug/L		112	40 - 140
m-Xylene & p-Xylene	ND		25.0	26.9		ug/L		108	60 - 140
Naphthalene	ND		25.0	29.0		ug/L		116	56 - 140
n-Butylbenzene	ND		25.0	27.1		ug/L		108	60 - 140
N-Propylbenzene	ND		25.0	28.0		ug/L		112	60 - 140
o-Xylene	ND		25.0	27.0		ug/L		108	60 - 140
sec-Butylbenzene	ND		25.0	27.8		ug/L		111	60 - 140
Styrene	ND		25.0	26.1		ug/L		105	60 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88175-B-11 MS
Matrix: Water
Analysis Batch: 250554

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
tert-Butylbenzene	ND		25.0	28.5		ug/L		114	60 - 140
Tetrachloroethene	32		25.0	55.6		ug/L		95	60 - 140
Toluene	ND		25.0	22.6		ug/L		91	60 - 140
trans-1,2-Dichloroethene	1.8		25.0	32.5		ug/L		123	60 - 140
trans-1,3-Dichloropropene	ND		25.0	29.4		ug/L		118	60 - 140
Trichloroethene	27		25.0	53.1		ug/L		104	60 - 140
Trichlorofluoromethane	ND		25.0	27.5		ug/L		110	60 - 140
Vinyl acetate	ND		25.0	29.9		ug/L		119	40 - 140
Vinyl chloride	ND		25.0	24.3		ug/L		97	58 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 130*
4-Bromofluorobenzene	*94*		*67 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: 720-88175-B-11 MSD
Matrix: Water
Analysis Batch: 250554

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	29.4		ug/L		118	60 - 140	0	20
1,1,1-Trichloroethane	ND		25.0	31.9		ug/L		128	60 - 140	2	20
1,1,2,2-Tetrachloroethane	ND		25.0	25.4		ug/L		102	60 - 140	6	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	32.3		ug/L		129	60 - 140	6	20
1,1,2-Trichloroethane	ND		25.0	27.4		ug/L		110	60 - 140	2	20
1,1-Dichloroethane	ND		25.0	26.1		ug/L		104	60 - 140	0	20
1,1-Dichloroethene	0.30	J	25.0	30.3		ug/L		120	60 - 140	5	20
1,1-Dichloropropene	ND		25.0	28.4		ug/L		114	60 - 140	2	20
1,2,3-Trichlorobenzene	ND		25.0	25.2		ug/L		101	60 - 140	1	20
1,2,3-Trichloropropane	ND		25.0	27.7		ug/L		111	60 - 140	9	20
1,2,4-Trichlorobenzene	ND		25.0	25.9		ug/L		104	60 - 140	1	20
1,2,4-Trimethylbenzene	ND		25.0	28.3		ug/L		113	60 - 140	2	20
1,2-Dibromo-3-Chloropropane	ND		25.0	25.7		ug/L		103	60 - 140	9	20
1,2-Dichlorobenzene	ND		25.0	26.7		ug/L		107	60 - 140	1	20
1,2-Dichloroethane	0.18	J	25.0	27.4		ug/L		109	60 - 140	2	20
1,2-Dichloropropane	ND		25.0	25.4		ug/L		102	60 - 140	0	20
1,3,5-Trimethylbenzene	ND		25.0	28.5		ug/L		114	60 - 140	1	20
1,3-Dichlorobenzene	ND		25.0	26.8		ug/L		107	60 - 140	1	20
1,3-Dichloropropane	ND		25.0	27.3		ug/L		109	60 - 140	3	20
1,4-Dichlorobenzene	ND		25.0	27.7		ug/L		111	60 - 140	1	20
2,2-Dichloropropane	ND	F1	25.0	35.8	F1	ug/L		143	60 - 140	1	20
2-Butanone (MEK)	ND		125	117		ug/L		94	60 - 140	8	20
2-Chlorotoluene	ND		25.0	27.8		ug/L		111	60 - 140	1	20
2-Hexanone	ND		125	102		ug/L		82	60 - 140	9	20
4-Chlorotoluene	ND		25.0	27.8		ug/L		111	60 - 140	0	20
4-Isopropyltoluene	ND		25.0	29.5		ug/L		118	60 - 140	2	20
4-Methyl-2-pentanone (MIBK)	ND		125	106		ug/L		85	58 - 130	8	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88175-B-11 MSD
Matrix: Water
Analysis Batch: 250554

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		125	90.8		ug/L		73	60 - 140	11	20
Benzene	ND		25.0	28.0		ug/L		112	60 - 140	0	20
Bromobenzene	ND		25.0	27.1		ug/L		108	60 - 140	2	20
Bromoform	ND		25.0	25.7		ug/L		103	56 - 140	4	20
Bromomethane	ND		25.0	28.3		ug/L		113	23 - 140	2	20
Carbon disulfide	ND		25.0	32.3		ug/L		129	38 - 140	2	20
Carbon tetrachloride	ND		25.0	32.5		ug/L		130	60 - 140	3	20
Chlorobenzene	ND		25.0	27.8		ug/L		111	60 - 140	0	20
Chlorobromomethane	ND		25.0	31.7		ug/L		127	60 - 140	1	20
Chlorodibromomethane	ND		25.0	31.9		ug/L		127	60 - 140	2	20
Chloroethane	ND		25.0	22.7		ug/L		91	51 - 140	1	20
Chloroform	ND		25.0	29.9		ug/L		120	60 - 140	0	20
Chloromethane	ND		25.0	22.7		ug/L		91	52 - 140	2	20
cis-1,2-Dichloroethene	15		25.0	40.1		ug/L		99	60 - 140	1	20
cis-1,3-Dichloropropene	ND		25.0	29.3		ug/L		117	60 - 140	0	20
Dibromomethane	ND		25.0	28.5		ug/L		114	60 - 140	2	20
Dichlorobromomethane	ND		25.0	29.9		ug/L		120	60 - 140	1	20
Dichlorodifluoromethane	ND		25.0	31.0		ug/L		124	38 - 140	4	20
Ethylbenzene	ND		25.0	27.4		ug/L		110	60 - 140	2	20
Ethylene Dibromide	ND		25.0	29.1		ug/L		116	60 - 140	2	20
Hexachlorobutadiene	ND		25.0	23.1		ug/L		93	60 - 140	3	20
Isopropylbenzene	ND		25.0	28.4		ug/L		113	60 - 140	2	20
Methyl tert-butyl ether	1.5		25.0	30.3		ug/L		115	60 - 138	3	20
Methylene Chloride	ND		25.0	28.6		ug/L		114	40 - 140	2	20
m-Xylene & p-Xylene	ND		25.0	27.6		ug/L		110	60 - 140	2	20
Naphthalene	ND		25.0	27.7		ug/L		111	56 - 140	4	20
n-Butylbenzene	ND		25.0	27.8		ug/L		111	60 - 140	3	20
N-Propylbenzene	ND		25.0	28.2		ug/L		113	60 - 140	1	20
o-Xylene	ND		25.0	27.5		ug/L		110	60 - 140	2	20
sec-Butylbenzene	ND		25.0	28.4		ug/L		114	60 - 140	2	20
Styrene	ND		25.0	26.5		ug/L		106	60 - 140	1	20
tert-Butylbenzene	ND		25.0	28.7		ug/L		115	60 - 140	1	20
Tetrachloroethene	32		25.0	55.9		ug/L		96	60 - 140	1	20
Toluene	ND		25.0	23.0		ug/L		92	60 - 140	2	20
trans-1,2-Dichloroethene	1.8		25.0	32.8		ug/L		124	60 - 140	1	20
trans-1,3-Dichloropropene	ND		25.0	29.1		ug/L		116	60 - 140	1	20
Trichloroethene	27		25.0	53.3		ug/L		105	60 - 140	0	20
Trichlorofluoromethane	ND		25.0	28.2		ug/L		113	60 - 140	2	20
Vinyl acetate	ND		25.0	28.0		ug/L		112	40 - 140	7	20
Vinyl chloride	ND		25.0	25.0		ug/L		100	58 - 140	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 130*
4-Bromofluorobenzene	*96*		*67 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-250627/4
Matrix: Water
Analysis Batch: 250627

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			08/30/18 19:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 130*		*08/30/18 19:37*	*1*
4-Bromofluorobenzene	*96*		*67 - 130*		*08/30/18 19:37*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/30/18 19:37*	*1*

Lab Sample ID: LCS 720-250627/5
Matrix: Water
Analysis Batch: 250627

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	25.0	27.8		ug/L		111	79 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*72 - 130*
4-Bromofluorobenzene	*96*		*67 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: LCS 720-250627/7
Matrix: Water
Analysis Batch: 250627

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	500	445		ug/L		89	77 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 130*
4-Bromofluorobenzene	*96*		*67 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 720-250627/6
Matrix: Water
Analysis Batch: 250627

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	25.0	27.9		ug/L		112	79 - 117	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*72 - 130*
4-Bromofluorobenzene	*96*		*67 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-250627/8
Matrix: Water
Analysis Batch: 250627

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			500	445		ug/L		89	77 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 130*
4-Bromofluorobenzene	*96*		*67 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: 720-88188-A-5 MS
Matrix: Water
Analysis Batch: 250627

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
trans-1,2-Dichloroethene	ND		25.0	21.2		ug/L		85	60 - 140		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*72 - 130*
4-Bromofluorobenzene	*98*		*67 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: 720-88188-A-5 MSD
Matrix: Water
Analysis Batch: 250627

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	ND		25.0	20.2		ug/L		81	60 - 140	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*72 - 130*
4-Bromofluorobenzene	*100*		*67 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-496565/3
Matrix: Water
Analysis Batch: 496565

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/30/18 15:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*08/30/18 15:35*	*1*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-496565/4
Matrix: Water
Analysis Batch: 496565

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.0500	0.0455		ug/L		91	60 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*101*		*80 - 120*

Lab Sample ID: 720-88220-7 MS
Matrix: Water
Analysis Batch: 496565

Client Sample ID: DG-J5W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane	ND		0.0500	0.0499		ug/L		100	55 - 135		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*100*		*80 - 120*

Lab Sample ID: 720-88220-7 MSD
Matrix: Water
Analysis Batch: 496565

Client Sample ID: DG-J5W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	ND		0.0500	0.0477		ug/L		95	55 - 135	5	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*102*		*80 - 120*

Lab Sample ID: MB 440-496818/3
Matrix: Water
Analysis Batch: 496818

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		0.0050	0.0025	ug/L			08/31/18 13:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*08/31/18 13:56*	*1*

Lab Sample ID: LCS 440-496818/4
Matrix: Water
Analysis Batch: 496818

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.0500	0.0485		ug/L		97	60 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*102*		*80 - 120*

Method: 8260B SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-88255-C-8 MS
Matrix: Water
Analysis Batch: 496818

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	ND		0.0500	0.0477		ug/L		95	55 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*100*		*80 - 120*

Lab Sample ID: 720-88255-C-8 MSD
Matrix: Water
Analysis Batch: 496818

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	ND		0.0500	0.0449		ug/L		90	55 - 135	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*80 - 120*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-250307/1-A
Matrix: Water
Analysis Batch: 250252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250307

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50	30	ug/L		08/27/18 14:49	08/28/18 00:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*87*		*23 - 156*	*08/27/18 14:49*	*08/28/18 00:22*	*1*

Lab Sample ID: LCS 720-250307/2-A
Matrix: Water
Analysis Batch: 250252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250307

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]			2500	2570		ug/L		103	34 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*92*		*23 - 156*

Lab Sample ID: LCSD 720-250307/3-A
Matrix: Water
Analysis Batch: 250252

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 250307

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			2500	2560		ug/L		102	34 - 115	0	35

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 720-250307/3-A
Matrix: Water
Analysis Batch: 250252

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 250307

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*98*		*23 - 156*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250227/1-A
Matrix: Water
Analysis Batch: 250390

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250227

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0027	mg/L		08/25/18 11:40	08/28/18 10:34	1
Arsenic	ND		0.010	0.0026	mg/L		08/25/18 11:40	08/28/18 10:34	1
Barium	ND		0.010	0.0014	mg/L		08/25/18 11:40	08/28/18 10:34	1
Beryllium	0.00135	J	0.0020	0.00033	mg/L		08/25/18 11:40	08/28/18 10:34	1
Cadmium	ND		0.0025	0.0013	mg/L		08/25/18 11:40	08/28/18 10:34	1
Chromium	ND		0.010	0.0015	mg/L		08/25/18 11:40	08/28/18 10:34	1
Cobalt	ND		0.0020	0.0012	mg/L		08/25/18 11:40	08/28/18 10:34	1
Copper	ND		0.020	0.0015	mg/L		08/25/18 11:40	08/28/18 10:34	1
Lead	ND		0.0050	0.0023	mg/L		08/25/18 11:40	08/28/18 10:34	1
Molybdenum	ND		0.010	0.0023	mg/L		08/25/18 11:40	08/28/18 10:34	1
Nickel	ND		0.010	0.00080	mg/L		08/25/18 11:40	08/28/18 10:34	1
Selenium	ND		0.020	0.0071	mg/L		08/25/18 11:40	08/28/18 10:34	1
Silver	ND		0.0050	0.0012	mg/L		08/25/18 11:40	08/28/18 10:34	1
Thallium	ND		0.010	0.0035	mg/L		08/25/18 11:40	08/28/18 10:34	1
Vanadium	ND		0.010	0.00070	mg/L		08/25/18 11:40	08/28/18 10:34	1
Zinc	ND		0.020	0.0096	mg/L		08/25/18 11:40	08/28/18 10:34	1

Lab Sample ID: LCS 720-250227/2-A
Matrix: Water
Analysis Batch: 250390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250227

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.00	0.907		mg/L		91	80 - 120
Arsenic	1.00	0.901		mg/L		90	80 - 120
Barium	1.00	0.967		mg/L		97	80 - 120
Beryllium	1.00	0.974		mg/L		97	80 - 120
Cadmium	1.00	0.914		mg/L		91	80 - 120
Chromium	1.00	0.911		mg/L		91	80 - 120
Cobalt	1.00	0.932		mg/L		93	80 - 120
Copper	1.00	0.977		mg/L		98	80 - 120
Lead	1.00	0.930		mg/L		93	80 - 120
Molybdenum	1.00	0.933		mg/L		93	80 - 120
Nickel	1.00	0.931		mg/L		93	80 - 120
Selenium	1.00	0.879		mg/L		88	80 - 120
Silver	0.500	0.490		mg/L		98	80 - 120
Thallium	1.00	0.930		mg/L		93	80 - 120
Vanadium	1.00	0.973		mg/L		97	80 - 120
Zinc	1.00	0.921		mg/L		92	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88220-7 MS
Matrix: Water
Analysis Batch: 250390

Client Sample ID: DG-J5W
Prep Type: Dissolved
Prep Batch: 250227

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		1.00	0.917		mg/L		92	75 - 125
Arsenic	0.042		1.00	0.982		mg/L		94	75 - 125
Barium	0.24		1.00	1.14		mg/L		90	75 - 125
Beryllium	0.0030	B	1.00	0.920		mg/L		92	75 - 125
Cadmium	ND		1.00	0.913		mg/L		91	75 - 125
Chromium	0.0017	J	1.00	0.921		mg/L		92	75 - 125
Cobalt	0.0013	J	1.00	0.916		mg/L		91	75 - 125
Copper	0.0042	J	1.00	0.913		mg/L		91	75 - 125
Lead	0.0092		1.00	0.905		mg/L		90	75 - 125
Molybdenum	0.0058	J	1.00	0.948		mg/L		94	75 - 125
Nickel	0.0016	J	1.00	0.907		mg/L		91	75 - 125
Selenium	ND		1.00	0.910		mg/L		91	75 - 125
Silver	ND		0.500	0.476		mg/L		95	75 - 125
Thallium	ND		1.00	0.862		mg/L		86	75 - 125
Vanadium	0.0013	J	1.00	0.926		mg/L		92	75 - 125
Zinc	0.053		1.00	0.971		mg/L		92	75 - 125

Lab Sample ID: 720-88220-7 MSD
Matrix: Water
Analysis Batch: 250390

Client Sample ID: DG-J5W
Prep Type: Dissolved
Prep Batch: 250227

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		1.00	0.922		mg/L		92	75 - 125	1	20
Arsenic	0.042		1.00	0.976		mg/L		93	75 - 125	1	20
Barium	0.24		1.00	1.16		mg/L		92	75 - 125	2	20
Beryllium	0.0030	B	1.00	0.939		mg/L		94	75 - 125	2	20
Cadmium	ND		1.00	0.909		mg/L		91	75 - 125	0	20
Chromium	0.0017	J	1.00	0.912		mg/L		91	75 - 125	1	20
Cobalt	0.0013	J	1.00	0.913		mg/L		91	75 - 125	0	20
Copper	0.0042	J	1.00	0.915		mg/L		91	75 - 125	0	20
Lead	0.0092		1.00	0.901		mg/L		89	75 - 125	0	20
Molybdenum	0.0058	J	1.00	0.945		mg/L		94	75 - 125	0	20
Nickel	0.0016	J	1.00	0.902		mg/L		90	75 - 125	1	20
Selenium	ND		1.00	0.908		mg/L		91	75 - 125	0	20
Silver	ND		0.500	0.476		mg/L		95	75 - 125	0	20
Thallium	ND		1.00	0.858		mg/L		86	75 - 125	1	20
Vanadium	0.0013	J	1.00	0.933		mg/L		93	75 - 125	1	20
Zinc	0.053		1.00	0.966		mg/L		91	75 - 125	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 720-250432/1-A
Matrix: Water
Analysis Batch: 250564

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250432

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		08/28/18 18:59	08/29/18 20:18	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 720-250432/2-A
Matrix: Water
Analysis Batch: 250564

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250432

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.0100	0.00944		mg/L		94	85 - 115		

Lab Sample ID: 720-88220-7 MS
Matrix: Water
Analysis Batch: 250564

Client Sample ID: DG-J5W
Prep Type: Dissolved
Prep Batch: 250432

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	ND		0.0100	0.00959		mg/L		96	75 - 125		

Lab Sample ID: 720-88220-7 MSD
Matrix: Water
Analysis Batch: 250564

Client Sample ID: DG-J5W
Prep Type: Dissolved
Prep Batch: 250432

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.0100	0.00954		mg/L		95	75 - 125	1	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 720-250111/9
Matrix: Water
Analysis Batch: 250111

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.010	0.0037	mg/L			08/23/18 19:31	1

Lab Sample ID: LCS 720-250111/10
Matrix: Water
Analysis Batch: 250111

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cr (VI)			0.250	0.250		mg/L		100	90 - 110		

Lab Sample ID: LCSD 720-250111/11
Matrix: Water
Analysis Batch: 250111

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cr (VI)			0.250	0.249		mg/L		100	90 - 110	0	20

Lab Sample ID: 720-88220-7 MS
Matrix: Water
Analysis Batch: 250111

Client Sample ID: DG-J5W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cr (VI)	ND		0.250	0.216		mg/L		86	85 - 115		

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: 720-88220-7 MSD
Matrix: Water
Analysis Batch: 250111

Client Sample ID: DG-J5W
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cr (VI)	ND		0.250	0.217		mg/L		87	85 - 115	0	20

GC/MS VOA

Analysis Batch: 250552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88220-1	DG-C3W	Total/NA	Water	8260B	
720-88220-2	DG-F3W	Total/NA	Water	8260B	
720-88220-3	DG-I3W	Total/NA	Water	8260B	
720-88220-4	DG-K3W	Total/NA	Water	8260B	
720-88220-5	DG-M3W	Total/NA	Water	8260B	
720-88220-6	DG-L5W	Total/NA	Water	8260B	
720-88220-7	DG-J5W	Total/NA	Water	8260B	
MB 720-250552/4	Method Blank	Total/NA	Water	8260B	
LCS 720-250552/5	Lab Control Sample	Total/NA	Water	8260B	
LCS 720-250552/7	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-250552/6	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 720-250552/8	Lab Control Sample Dup	Total/NA	Water	8260B	
720-88220-7 MS	DG-J5W	Total/NA	Water	8260B	
720-88220-7 MSD	DG-J5W	Total/NA	Water	8260B	

Analysis Batch: 250553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88220-8	DG-H5W	Total/NA	Water	8260B	
720-88220-9	DG-H6W	Total/NA	Water	8260B	
720-88220-10	DG-P5W	Total/NA	Water	8260B	
720-88220-11	FB-1	Total/NA	Water	8260B	
720-88220-12	FB-2	Total/NA	Water	8260B	
720-88220-16	DUP-02	Total/NA	Water	8260B	
MB 720-250553/4	Method Blank	Total/NA	Water	8260B	
LCS 720-250553/5	Lab Control Sample	Total/NA	Water	8260B	
LCS 720-250553/7	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-250553/6	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 720-250553/8	Lab Control Sample Dup	Total/NA	Water	8260B	
720-88214-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
720-88214-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 250554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88220-13	FB-3	Total/NA	Water	8260B	
720-88220-15	TB-3	Total/NA	Water	8260B	
MB 720-250554/4	Method Blank	Total/NA	Water	8260B	
LCS 720-250554/5	Lab Control Sample	Total/NA	Water	8260B	
LCS 720-250554/7	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-250554/6	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 720-250554/8	Lab Control Sample Dup	Total/NA	Water	8260B	
720-88175-B-11 MS	Matrix Spike	Total/NA	Water	8260B	
720-88175-B-11 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 250627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88220-10	DG-P5W	Total/NA	Water	8260B	
MB 720-250627/4	Method Blank	Total/NA	Water	8260B	
LCS 720-250627/5	Lab Control Sample	Total/NA	Water	8260B	
LCS 720-250627/7	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-250627/6	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 720-250627/8	Lab Control Sample Dup	Total/NA	Water	8260B	

GC/MS VOA (Continued)

Analysis Batch: 250627 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88188-A-5 MS	Matrix Spike	Total/NA	Water	8260B	
720-88188-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 496565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88220-1	DG-C3W	Total/NA	Water	8260B SIM	
720-88220-2	DG-F3W	Total/NA	Water	8260B SIM	
720-88220-3	DG-I3W	Total/NA	Water	8260B SIM	
720-88220-4	DG-K3W	Total/NA	Water	8260B SIM	
720-88220-5	DG-M3W	Total/NA	Water	8260B SIM	
720-88220-6	DG-L5W	Total/NA	Water	8260B SIM	
720-88220-7	DG-J5W	Total/NA	Water	8260B SIM	
720-88220-8	DG-H5W	Total/NA	Water	8260B SIM	
720-88220-9	DG-H6W	Total/NA	Water	8260B SIM	
720-88220-10	DG-P5W	Total/NA	Water	8260B SIM	
720-88220-16	DUP-02	Total/NA	Water	8260B SIM	
MB 440-496565/3	Method Blank	Total/NA	Water	8260B SIM	
LCS 440-496565/4	Lab Control Sample	Total/NA	Water	8260B SIM	
720-88220-7 MS	DG-J5W	Total/NA	Water	8260B SIM	
720-88220-7 MSD	DG-J5W	Total/NA	Water	8260B SIM	

Analysis Batch: 496818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88220-15	TB-3	Total/NA	Water	8260B SIM	
MB 440-496818/3	Method Blank	Total/NA	Water	8260B SIM	
LCS 440-496818/4	Lab Control Sample	Total/NA	Water	8260B SIM	
720-88255-C-8 MS	Matrix Spike	Total/NA	Water	8260B SIM	
720-88255-C-8 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

GC Semi VOA

Analysis Batch: 250252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250307/1-A	Method Blank	Total/NA	Water	8015B	250307
LCS 720-250307/2-A	Lab Control Sample	Total/NA	Water	8015B	250307
LCSD 720-250307/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	250307

Analysis Batch: 250253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88220-1	DG-C3W	Total/NA	Water	8015B	250307
720-88220-2	DG-F3W	Total/NA	Water	8015B	250307
720-88220-3	DG-I3W	Total/NA	Water	8015B	250307
720-88220-4	DG-K3W	Total/NA	Water	8015B	250307
720-88220-5	DG-M3W	Total/NA	Water	8015B	250307
720-88220-6	DG-L5W	Total/NA	Water	8015B	250307
720-88220-7	DG-J5W	Total/NA	Water	8015B	250307
720-88220-8	DG-H5W	Total/NA	Water	8015B	250307
720-88220-9	DG-H6W	Total/NA	Water	8015B	250307

GC Semi VOA (Continued)

Prep Batch: 250307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88220-1	DG-C3W	Total/NA	Water	3510C	
720-88220-2	DG-F3W	Total/NA	Water	3510C	
720-88220-3	DG-I3W	Total/NA	Water	3510C	
720-88220-4	DG-K3W	Total/NA	Water	3510C	
720-88220-5	DG-M3W	Total/NA	Water	3510C	
720-88220-6	DG-L5W	Total/NA	Water	3510C	
720-88220-7	DG-J5W	Total/NA	Water	3510C	
720-88220-8	DG-H5W	Total/NA	Water	3510C	
720-88220-9	DG-H6W	Total/NA	Water	3510C	
720-88220-10	DG-P5W	Total/NA	Water	3510C	
720-88220-16	DUP-02	Total/NA	Water	3510C	
MB 720-250307/1-A	Method Blank	Total/NA	Water	3510C	
LCS 720-250307/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-250307/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 250355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88220-10	DG-P5W	Total/NA	Water	8015B	250307
720-88220-16	DUP-02	Total/NA	Water	8015B	250307

Metals

Prep Batch: 250227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88220-1	DG-C3W	Dissolved	Water	3010A	
720-88220-2	DG-F3W	Dissolved	Water	3010A	
720-88220-3	DG-I3W	Dissolved	Water	3010A	
720-88220-4	DG-K3W	Dissolved	Water	3010A	
720-88220-5	DG-M3W	Dissolved	Water	3010A	
720-88220-6	DG-L5W	Dissolved	Water	3010A	
720-88220-7	DG-J5W	Dissolved	Water	3010A	
720-88220-8	DG-H5W	Dissolved	Water	3010A	
720-88220-9	DG-H6W	Dissolved	Water	3010A	
720-88220-10	DG-P5W	Dissolved	Water	3010A	
720-88220-16	DUP-02	Dissolved	Water	3010A	
MB 720-250227/1-A	Method Blank	Total/NA	Water	3010A	
LCS 720-250227/2-A	Lab Control Sample	Total/NA	Water	3010A	
720-88220-7 MS	DG-J5W	Dissolved	Water	3010A	
720-88220-7 MSD	DG-J5W	Dissolved	Water	3010A	

Analysis Batch: 250390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88220-1	DG-C3W	Dissolved	Water	6010B	250227
720-88220-2	DG-F3W	Dissolved	Water	6010B	250227
720-88220-3	DG-I3W	Dissolved	Water	6010B	250227
720-88220-4	DG-K3W	Dissolved	Water	6010B	250227
720-88220-5	DG-M3W	Dissolved	Water	6010B	250227
720-88220-6	DG-L5W	Dissolved	Water	6010B	250227
720-88220-7	DG-J5W	Dissolved	Water	6010B	250227
720-88220-8	DG-H5W	Dissolved	Water	6010B	250227

Metals (Continued)

Analysis Batch: 250390 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88220-9	DG-H6W	Dissolved	Water	6010B	250227
720-88220-10	DG-P5W	Dissolved	Water	6010B	250227
720-88220-16	DUP-02	Dissolved	Water	6010B	250227
MB 720-250227/1-A	Method Blank	Total/NA	Water	6010B	250227
LCS 720-250227/2-A	Lab Control Sample	Total/NA	Water	6010B	250227
720-88220-7 MS	DG-J5W	Dissolved	Water	6010B	250227
720-88220-7 MSD	DG-J5W	Dissolved	Water	6010B	250227

Prep Batch: 250432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88220-1	DG-C3W	Dissolved	Water	7470A	
720-88220-2	DG-F3W	Dissolved	Water	7470A	
720-88220-3	DG-I3W	Dissolved	Water	7470A	
720-88220-4	DG-K3W	Dissolved	Water	7470A	
720-88220-5	DG-M3W	Dissolved	Water	7470A	
720-88220-6	DG-L5W	Dissolved	Water	7470A	
720-88220-7	DG-J5W	Dissolved	Water	7470A	
720-88220-8	DG-H5W	Dissolved	Water	7470A	
720-88220-9	DG-H6W	Dissolved	Water	7470A	
720-88220-10	DG-P5W	Dissolved	Water	7470A	
720-88220-16	DUP-02	Dissolved	Water	7470A	
MB 720-250432/1-A	Method Blank	Total/NA	Water	7470A	
LCS 720-250432/2-A	Lab Control Sample	Total/NA	Water	7470A	
720-88220-7 MS	DG-J5W	Dissolved	Water	7470A	
720-88220-7 MSD	DG-J5W	Dissolved	Water	7470A	

Analysis Batch: 250564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88220-1	DG-C3W	Dissolved	Water	7470A	250432
720-88220-2	DG-F3W	Dissolved	Water	7470A	250432
720-88220-3	DG-I3W	Dissolved	Water	7470A	250432
720-88220-4	DG-K3W	Dissolved	Water	7470A	250432
720-88220-5	DG-M3W	Dissolved	Water	7470A	250432
720-88220-6	DG-L5W	Dissolved	Water	7470A	250432
720-88220-7	DG-J5W	Dissolved	Water	7470A	250432
720-88220-8	DG-H5W	Dissolved	Water	7470A	250432
720-88220-9	DG-H6W	Dissolved	Water	7470A	250432
720-88220-10	DG-P5W	Dissolved	Water	7470A	250432
720-88220-16	DUP-02	Dissolved	Water	7470A	250432
MB 720-250432/1-A	Method Blank	Total/NA	Water	7470A	250432
LCS 720-250432/2-A	Lab Control Sample	Total/NA	Water	7470A	250432
720-88220-7 MS	DG-J5W	Dissolved	Water	7470A	250432
720-88220-7 MSD	DG-J5W	Dissolved	Water	7470A	250432

General Chemistry

Analysis Batch: 250111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88220-1	DG-C3W	Total/NA	Water	7196A	
720-88220-2	DG-F3W	Total/NA	Water	7196A	

General Chemistry (Continued)

Analysis Batch: 250111 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88220-3	DG-I3W	Total/NA	Water	7196A	
720-88220-4	DG-K3W	Total/NA	Water	7196A	
720-88220-5	DG-M3W	Total/NA	Water	7196A	
720-88220-6	DG-L5W	Total/NA	Water	7196A	
720-88220-7	DG-J5W	Total/NA	Water	7196A	
720-88220-8	DG-H5W	Total/NA	Water	7196A	
720-88220-9	DG-H6W	Total/NA	Water	7196A	
720-88220-10	DG-P5W	Total/NA	Water	7196A	
720-88220-16	DUP-02	Total/NA	Water	7196A	
MB 720-250111/9	Method Blank	Total/NA	Water	7196A	
LCS 720-250111/10	Lab Control Sample	Total/NA	Water	7196A	
LCSD 720-250111/11	Lab Control Sample Dup	Total/NA	Water	7196A	
720-88220-7 MS	DG-J5W	Total/NA	Water	7196A	
720-88220-7 MSD	DG-J5W	Total/NA	Water	7196A	

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-C3W

Lab Sample ID: 720-88220-1

Date Collected: 08/22/18 08:00

Matrix: Water

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250552	08/30/18 11:44	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496565	08/30/18 17:46	GK	TAL IRV
Total/NA	Prep	3510C			250307	08/27/18 14:49	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250253	08/27/18 22:25	JXL	TAL PLS
Dissolved	Prep	3010A			250227	08/25/18 11:40	MAA	TAL PLS
Dissolved	Analysis	6010B		1	250390	08/28/18 11:40	OBI	TAL PLS
Dissolved	Prep	7470A			250432	08/28/18 18:59	OBI	TAL PLS
Dissolved	Analysis	7470A		1	250564	08/29/18 20:29	OBI	TAL PLS
Total/NA	Analysis	7196A		1	250111	08/23/18 19:31	ECB	TAL PLS

Client Sample ID: DG-F3W

Lab Sample ID: 720-88220-2

Date Collected: 08/22/18 08:30

Matrix: Water

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250552	08/30/18 12:14	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496565	08/30/18 18:12	GK	TAL IRV
Total/NA	Prep	3510C			250307	08/27/18 14:49	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250253	08/27/18 22:55	JXL	TAL PLS
Dissolved	Prep	3010A			250227	08/25/18 11:40	MAA	TAL PLS
Dissolved	Analysis	6010B		1	250390	08/28/18 11:06	OBI	TAL PLS
Dissolved	Prep	7470A			250432	08/28/18 18:59	OBI	TAL PLS
Dissolved	Analysis	7470A		1	250564	08/29/18 20:32	OBI	TAL PLS
Total/NA	Analysis	7196A		1	250111	08/23/18 19:31	ECB	TAL PLS

Client Sample ID: DG-I3W

Lab Sample ID: 720-88220-3

Date Collected: 08/23/18 07:45

Matrix: Water

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250552	08/30/18 12:43	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496565	08/30/18 18:39	GK	TAL IRV
Total/NA	Prep	3510C			250307	08/27/18 14:49	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250253	08/27/18 23:24	JXL	TAL PLS
Dissolved	Prep	3010A			250227	08/25/18 11:40	MAA	TAL PLS
Dissolved	Analysis	6010B		1	250390	08/28/18 11:11	OBI	TAL PLS
Dissolved	Prep	7470A			250432	08/28/18 18:59	OBI	TAL PLS
Dissolved	Analysis	7470A		1	250564	08/29/18 20:34	OBI	TAL PLS
Total/NA	Analysis	7196A		1	250111	08/23/18 19:31	ECB	TAL PLS

Client Sample ID: DG-K3W

Lab Sample ID: 720-88220-4

Date Collected: 08/23/18 08:15

Matrix: Water

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250552	08/30/18 13:14	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496565	08/30/18 19:05	GK	TAL IRV
Total/NA	Prep	3510C			250307	08/27/18 14:49	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250253	08/27/18 23:53	JXL	TAL PLS
Dissolved	Prep	3010A			250227	08/25/18 11:40	MAA	TAL PLS
Dissolved	Analysis	6010B		1	250390	08/28/18 11:16	OBI	TAL PLS
Dissolved	Prep	7470A			250432	08/28/18 18:59	OBI	TAL PLS
Dissolved	Analysis	7470A		1	250564	08/29/18 20:36	OBI	TAL PLS
Total/NA	Analysis	7196A		1	250111	08/23/18 19:31	ECB	TAL PLS

Client Sample ID: DG-M3W

Lab Sample ID: 720-88220-5

Date Collected: 08/23/18 08:45

Matrix: Water

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250552	08/30/18 13:45	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496565	08/30/18 19:32	GK	TAL IRV
Total/NA	Prep	3510C			250307	08/27/18 14:49	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250253	08/28/18 00:22	JXL	TAL PLS
Dissolved	Prep	3010A			250227	08/25/18 11:40	MAA	TAL PLS
Dissolved	Analysis	6010B		1	250390	08/28/18 11:30	OBI	TAL PLS
Dissolved	Prep	7470A			250432	08/28/18 18:59	OBI	TAL PLS
Dissolved	Analysis	7470A		1	250564	08/29/18 20:39	OBI	TAL PLS
Total/NA	Analysis	7196A		1	250111	08/23/18 19:31	ECB	TAL PLS

Client Sample ID: DG-L5W

Lab Sample ID: 720-88220-6

Date Collected: 08/23/18 09:15

Matrix: Water

Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250552	08/30/18 14:16	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496565	08/30/18 19:58	GK	TAL IRV
Total/NA	Prep	3510C			250307	08/27/18 14:49	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250253	08/28/18 00:52	JXL	TAL PLS
Dissolved	Prep	3010A			250227	08/25/18 11:40	MAA	TAL PLS
Dissolved	Analysis	6010B		1	250390	08/28/18 11:35	OBI	TAL PLS
Dissolved	Prep	7470A			250432	08/28/18 18:59	OBI	TAL PLS
Dissolved	Analysis	7470A		1	250564	08/29/18 20:45	OBI	TAL PLS
Total/NA	Analysis	7196A		1	250111	08/23/18 19:31	ECB	TAL PLS

Client Sample ID: DG-J5W

Lab Sample ID: 720-88220-7

Date Collected: 08/23/18 10:00
Matrix: Water
Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250552	08/30/18 15:54	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496565	08/30/18 16:28	GK	TAL IRV
Total/NA	Prep	3510C			250307	08/27/18 14:49	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250253	08/28/18 01:21	JXL	TAL PLS
Dissolved	Prep	3010A			250227	08/25/18 11:40	MAA	TAL PLS
Dissolved	Analysis	6010B		1	250390	08/28/18 11:02	OBI	TAL PLS
Dissolved	Prep	7470A			250432	08/28/18 18:59	OBI	TAL PLS
Dissolved	Analysis	7470A		1	250564	08/29/18 20:27	OBI	TAL PLS
Total/NA	Analysis	7196A		1	250111	08/23/18 19:31	ECB	TAL PLS

Client Sample ID: DG-H5W

Lab Sample ID: 720-88220-8

Date Collected: 08/23/18 10:15
Matrix: Water
Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250553	08/30/18 11:55	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496565	08/30/18 20:24	GK	TAL IRV
Total/NA	Prep	3510C			250307	08/27/18 14:49	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250253	08/28/18 01:51	JXL	TAL PLS
Dissolved	Prep	3010A			250227	08/25/18 11:40	MAA	TAL PLS
Dissolved	Analysis	6010B		1	250390	08/28/18 11:45	OBI	TAL PLS
Dissolved	Prep	7470A			250432	08/28/18 18:59	OBI	TAL PLS
Dissolved	Analysis	7470A		1	250564	08/29/18 20:48	OBI	TAL PLS
Total/NA	Analysis	7196A		1	250111	08/23/18 19:31	ECB	TAL PLS

Client Sample ID: DG-H6W

Lab Sample ID: 720-88220-9

Date Collected: 08/23/18 10:35
Matrix: Water
Date Received: 08/23/18 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250553	08/30/18 12:24	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496565	08/30/18 20:50	GK	TAL IRV
Total/NA	Prep	3510C			250307	08/27/18 14:49	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250253	08/28/18 02:20	JXL	TAL PLS
Dissolved	Prep	3010A			250227	08/25/18 11:40	MAA	TAL PLS
Dissolved	Analysis	6010B		1	250390	08/28/18 11:49	OBI	TAL PLS
Dissolved	Prep	7470A			250432	08/28/18 18:59	OBI	TAL PLS
Dissolved	Analysis	7470A		1	250564	08/29/18 20:50	OBI	TAL PLS
Total/NA	Analysis	7196A		1	250111	08/23/18 19:31	ECB	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DG-P5W
Date Collected: 08/23/18 11:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250627	08/30/18 22:41	JRM	TAL PLS
Total/NA	Analysis	8260B		1	250553	08/30/18 12:53	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496565	08/30/18 21:17	GK	TAL IRV
Total/NA	Prep	3510C			250307	08/27/18 14:49	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250355	08/28/18 16:14	JXL	TAL PLS
Dissolved	Prep	3010A			250227	08/25/18 11:40	MAA	TAL PLS
Dissolved	Analysis	6010B		1	250390	08/28/18 11:54	OBI	TAL PLS
Dissolved	Prep	7470A			250432	08/28/18 18:59	OBI	TAL PLS
Dissolved	Analysis	7470A		1	250564	08/29/18 20:52	OBI	TAL PLS
Total/NA	Analysis	7196A		1	250111	08/23/18 19:31	ECB	TAL PLS

Client Sample ID: FB-1
Date Collected: 08/21/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250553	08/30/18 13:22	AJS	TAL PLS

Client Sample ID: FB-2
Date Collected: 08/22/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250553	08/30/18 13:50	AJS	TAL PLS

Client Sample ID: FB-3
Date Collected: 08/23/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250554	08/30/18 16:13	JRM	TAL PLS

Client Sample ID: TB-3
Date Collected: 08/23/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250554	08/30/18 16:43	JRM	TAL PLS
Total/NA	Analysis	8260B SIM		1	496818	08/31/18 14:58	GK	TAL IRV

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Client Sample ID: DUP-02

Date Collected: 08/23/18 00:00
Date Received: 08/23/18 15:40

Lab Sample ID: 720-88220-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	250553	08/30/18 17:18	AJS	TAL PLS
Total/NA	Analysis	8260B SIM		1	496565	08/30/18 21:43	GK	TAL IRV
Total/NA	Prep	3510C			250307	08/27/18 14:49	BRR	TAL PLS
Total/NA	Analysis	8015B		1	250355	08/28/18 16:39	JXL	TAL PLS
Dissolved	Prep	3010A			250227	08/25/18 11:40	MAA	TAL PLS
Dissolved	Analysis	6010B		1	250390	08/28/18 11:59	OBI	TAL PLS
Dissolved	Prep	7470A			250432	08/28/18 18:59	OBI	TAL PLS
Dissolved	Analysis	7470A		1	250564	08/29/18 20:55	OBI	TAL PLS
Total/NA	Analysis	7196A		1	250111	08/23/18 19:31	ECB	TAL PLS

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc. TestAmerica Job ID: 720-88220-1
Project/Site: UPC OU-SM

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: TestAmerica Irvine

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	CA01531	06-30-19
Arizona	State Program	9	AZ0671	10-14-18 *
California	LA Cty Sanitation Districts	9	10256	06-30-19
California	State Program	9	CA ELAP 2706	06-30-19
Guam	State Program	9	Cert. No. 17-003R	01-23-19
Hawaii	State Program	9	N/A	01-29-19
Kansas	NELAP	7	E-10420	07-31-19
Nevada	State Program	9	CA015312018-1	07-31-19
New Mexico	State Program	6	N/A	01-29-19
Oregon	NELAP	10	4028	01-29-19
USDA	Federal		P330-15-00184	07-09-21
Washington	State Program	10	C900	09-03-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7470A	Mercury (CVAA)	SW846	TAL PLS
7196A	Chromium, Hexavalent	SW846	TAL PLS
3010A	Preparation, Total Metals	SW846	TAL PLS
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL PLS
5030B	Purge and Trap	SW846	TAL IRV
5030B	Purge and Trap	SW846	TAL PLS
7470A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88220-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88220-1	DG-C3W	Water	08/22/18 08:00	08/23/18 15:40
720-88220-2	DG-F3W	Water	08/22/18 08:30	08/23/18 15:40
720-88220-3	DG-I3W	Water	08/23/18 07:45	08/23/18 15:40
720-88220-4	DG-K3W	Water	08/23/18 08:15	08/23/18 15:40
720-88220-5	DG-M3W	Water	08/23/18 08:45	08/23/18 15:40
720-88220-6	DG-L5W	Water	08/23/18 09:15	08/23/18 15:40
720-88220-7	DG-J5W	Water	08/23/18 10:00	08/23/18 15:40
720-88220-8	DG-H5W	Water	08/23/18 10:15	08/23/18 15:40
720-88220-9	DG-H6W	Water	08/23/18 10:35	08/23/18 15:40
720-88220-10	DG-P5W	Water	08/23/18 11:00	08/23/18 15:40
720-88220-11	FB-1	Water	08/21/18 00:00	08/23/18 15:40
720-88220-12	FB-2	Water	08/22/18 00:00	08/23/18 15:40
720-88220-13	FB-3	Water	08/23/18 00:00	08/23/18 15:40
720-88220-15	TB-3	Water	08/23/18 00:00	08/23/18 15:40
720-88220-16	DUP-02	Water	08/23/18 00:00	08/23/18 15:40

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88220

TESTAMERICA Pleasanton Chain of Custody

1220 Quarry Lane ● Pleasanton CA 94566-4756

Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: 185091

Date 8/23 Page 1 of 2

9/5/2018

Report To

Attn: MIRANDA KAHRILAS

Company: GEOSYNTEC

Address: 1111 BROADWAY 6TH FLOOR

Email: MKahrilas@geosyntec.com

Bill To: ANTHONY SMITH

Sampled By: M. KAHRILAS

Attn: GEOSYNTEC

Phone: 847-530-7602

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B ☐ 624.0	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☒ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	1,2,3-TCP (524.2 SIM)	
DG-C3W	8/22	800	GW	Y	X			X					X				X						X		
DG-E3W	8/22	830			X			X					X				X						X		
DG-I3W	8/23	~~815~~ 745			X			X					X				X						X		
DG-K3W		815			X			X					X				X						X		
DG-M3W		845			X			X					X				X						X		
DG-L5W		915			X			X					X				X						X		
DG-J5W		1000			X			X					X				X						X		MS/MSD
DG-H5W		1015			X			X					X				X						X		
DG-H6W		1035			X			X					X				X						X		
DG-P5W		1100			X			X					X				X						X		

Project Info.

Project Name/ #: UPC OU-SM

PO#: WG2565/02

Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers:

Head Space:

Temp:

10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:
	X					

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF

Special Instructions / Comments: ☐ Global ID ___

See Terms and Conditions on reverse

1) Relinquished by: MK	Time 1500	2) Relinquished by:	Time 1546
Signature		Signature	
Printed Name: MIRANDA KAHRILAS	Date 8/23	Printed Name	Date 8/23/18
Company: GEO		Company: TA720	
1) Received by:	Time 1730	2) Received by:	Time 1540
Signature		Signature	
Printed Name: TA720	Date 8/23/18	Printed Name: T. Bullock	Date 8/23/18
Company		Company: TA-720	
		3) Received by:	
		Signature	Time
		Printed Name	Date
		Company: 3.1/1-9/	

720-88220 Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: 185-091

Date 9/23 Page 2 of 2

9/5/2018

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
Bill To: GEOSYNTEC ANTHONY SMITH
Sampled By: M. KAHRILAS
Attn:
Phone: 847-530-7602

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☒ EPA 8260B ☐ GRO	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☒ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease ☐ Petroleum (EPA 1664/9071) ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☒ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	1,2,3-TCLP (524.2 SIM)
FB-1	8/21				X								X										X
FB-2	8/22				X								X										X
FB-3	8/23				X								X										X
TB-2	8/22				X								X										X
TB-3	8/23				X								X										X
DUP-02	8/23				X			X					X				X						X

Project Info.

Project Name/ #:
PO#:
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers:
Head Space:
Temp:

10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1305	Signature: [signature] Time: 1540	Signature: Time:
Printed Name: MIRANDA KAHRILAS Date: 8/23	Printed Name: Date: 8/23/18	Printed Name: Date:
Company: GEO	Company: TA TAL	Company:
1) Received by:	**2) Received by:**	**3) Received by:**
Signature: [signature] Time: 1305	Signature: [signature] Time: 1540	Signature: Time:
Printed Name: [signature] Date: 8/23/18	Printed Name: T. Bullock Date: 8/23/18	Printed Name: Date:
Company: TA TAL	Company: TA-TAL	Company: 9-1 1-9 7 [illegible]

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No: 720-39415.1
Client Contact: Shipping/Receiving	Phone	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California		Job #: 720-88220-1
Address: 17461 Derian Ave, Suite 100,	Due Date Requested: 8/29/2018			
City: Irvine	TAT Requested (days):			
State, Zip: CA, 92614-5817				
Phone: 949-261-1022(Tel) 949-260-3297(Fax)	PO #			
Email	WO #			
Project Name: Brisbane Data Gap Invest Work Plan	Project #: 72013717			
Site:	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-C3W (720-88220-1)	8/22/18	08:00 Pacific		Water			X	3	
DG-F3W (720-88220-2)	8/22/18	08:30 Pacific		Water			X	3	
DG-I3W (720-88220-3)	8/22/18	07:45 Pacific		Water			X	3	
DG-K3W (720-88220-4)	8/22/18	08:15 Pacific		Water			X	3	
DG-M3W (720-88220-5)	8/22/18	08:45 Pacific		Water			X	3	
DG-L5W (720-88220-6)	8/22/18	09:15 Pacific		Water			X	3	
DG-J5W (720-88220-7)	8/22/18	10:00 Pacific		Water			X	1	
DG-J5W (720-88220-7MS)	8/22/18	10:00 Pacific	MS	Water			X	1	
DG-J5W (720-88220-7MSD)	8/22/18	10:00 Pacific	MSD	Water			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		8/24/18 1234	TMTO		8/25/18 0950	TAIRY
2	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 447 9852 5465	Cooler Temperature(s) °C and Other Remarks: 0.4/0.5 2.9/3.0 IR88

Ver: 09/20/2016

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler	Lab PM: Smith, Micah	Carrier Tracking No(s):	COC No.: 720-39415.2
Client Contact: Shipping/Receiving	Phone	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California		Job #: 720-88220-1
Address: 17461 Derian Ave, Suite 100,	Due Date Requested: 8/29/2018			
City: Irvine	TAT Requested (days):			
State, Zip: CA, 92614-5817				
Phone: 949-261-1022(Tel) 949-260-3297(Fax)	PO #			
Email	WO #			
Project Name: Brisbane Data Gap Invest Work Plan	Project #: 72013717			
Site	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DG-H5W (720-88220-8)	8/22/18	10 15 Pacific		Water			X	3	
DG-H6W (720-88220-9)	8/22/18	10:35 Pacific		Water			X	3	
DG-P5W (720-88220-10)	8/22/18	11:00 Pacific		Water			X	3	
DUP-02 (720-88220-16)	8/23/18	Pacific		Water			X	3	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) — Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:		Method of Shipment	
Relinquished by	Date/Time: 8/24/18 1234	Company: TAL20	Received by	Date/Time: 8/25/18 0950	Company: TAL RV	
Relinquished by	Date/Time	Company	Received by	Date/Time	Company	
Relinquished by	Date/Time	Company	Received by	Date/Time	Company	

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.: 4471 9852 5565	Cooler Temperature(s) °C and Other Remarks: 0.4/0.5 2.9/3.0 IR88

Ver: 09/20/2016

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler	Lab PM: Smith, Micah	Carrier Tracking No(s)	COC No: 720-39453 1
Client Contact: Shipping/Receiving	Phone	E-Mail: micah.smith@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - California		Job #: 720-88220-1
Address: 17461 Derian Ave, Suite 100,	Due Date Requested: 8/29/2018			
City: Irvine	TAT Requested (days):			
State, Zip: CA, 92614-5817				
Phone: 949-261-1022(Tel) 949-260-3297(Fax)	PO #			
Email	WO #			
Project Name: Brisbane Data Gap Invest Work Plan	Project #: 72013717			
Site	SSOW#			

Analysis Requested

Geosfuel

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_SIM	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
TB-3 (720-88220-15)	8/23/18	Pacific		Water			X	1	

1 HCL VOA Prev sample 12 samples

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time	Method of Shipment

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		8/28/18 14:14	TAJ			
2	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
				Tan by GM	8/29/18 708	TA IRV

Custody Seals Intact:	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks
Δ Yes Δ No		9.6 IR566 4471 9852 5763 2.4/2.7

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88220-1

Login Number: 88220
List Number: 1
Creator: Arauz, Dennis

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	False	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88220-1

Login Number: 88220
List Number: 2
Creator: Skinner, Alma D

List Source: TestAmerica Irvine
List Creation: 08/25/18 12:34 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88220-1

Login Number: 88220
List Number: 3
Creator: Avila, Stephanie 1

List Source: TestAmerica Irvine
List Creation: 08/29/18 08:47 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88231-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/27/2018 6:36:30 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 7
QC Sample Results 13
QC Association Summary 16
Lab Chronicle 17
Certification Summary 19
Method Summary 20
Sample Summary 21
Chain of Custody 22
Receipt Checklists 23

Definitions/Glossary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88231-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F4	MS/MSD RPD exceeds control limits due to sample size difference.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88231-1

Job ID: 720-88231-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88231-1

Comments
This report was revised on 11/27/18 to change the units for the metals data to report in mg/Kg, as requested.

Receipt
The samples were received on 8/24/2018 3:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8º C.

Receipt Exceptions
Collection times for "DUP-" samples are not indicated on the COC.

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 720-250280 and analytical batch 720-250454 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DUP-17 (720-88231-1), DUP-18 (720-88231-2), DUP-19 (720-88231-3), DUP-26 (720-88231-4), DUP-27 (720-88231-5) and DUP-28 (720-88231-6). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88231-1

Client Sample ID: DUP-17 — Lab Sample ID: 720-88231-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.8		1.7	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	2.3	J	3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	48		1.7	0.23	mg/Kg	4		6010B	Total/NA
Cadmium	0.053	J	0.41	0.041	mg/Kg	4		6010B	Total/NA
Chromium	4.6		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	6.6		0.66	0.066	mg/Kg	4		6010B	Total/NA
Copper	25		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	36		1.7	0.35	mg/Kg	4		6010B	Total/NA
Nickel	3.0		1.7	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	42		1.7	0.22	mg/Kg	4		6010B	Total/NA
Zinc	59		5.0	2.1	mg/Kg	4		6010B	Total/NA
Mercury	0.14		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-18 — Lab Sample ID: 720-88231-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.2	J	1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	2.9	J	3.6	0.31	mg/Kg	4		6010B	Total/NA
Barium	50		1.8	0.26	mg/Kg	4		6010B	Total/NA
Cadmium	0.25	J	0.45	0.045	mg/Kg	4		6010B	Total/NA
Chromium	16		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.73	0.073	mg/Kg	4		6010B	Total/NA
Copper	120		5.5	2.6	mg/Kg	4		6010B	Total/NA
Lead	120		1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	0.56	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	7.6		1.8	0.19	mg/Kg	4		6010B	Total/NA
Silver	0.23	J	0.91	0.18	mg/Kg	4		6010B	Total/NA
Thallium	0.81	J	1.8	0.53	mg/Kg	4		6010B	Total/NA
Vanadium	98		1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	99		5.5	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.090		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-19 — Lab Sample ID: 720-88231-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.71	J	1.3	0.21	mg/Kg	4		6010B	Total/NA
Arsenic	1.5	J	2.6	0.22	mg/Kg	4		6010B	Total/NA
Barium	25		1.3	0.18	mg/Kg	4		6010B	Total/NA
Cadmium	0.12	J	0.32	0.032	mg/Kg	4		6010B	Total/NA
Chromium	10		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.52	0.052	mg/Kg	4		6010B	Total/NA
Copper	120		3.9	1.8	mg/Kg	4		6010B	Total/NA
Lead	49		1.3	0.27	mg/Kg	4		6010B	Total/NA
Nickel	5.5		1.3	0.13	mg/Kg	4		6010B	Total/NA
Selenium	0.69	J	2.6	0.39	mg/Kg	4		6010B	Total/NA
Silver	0.45	J	0.65	0.13	mg/Kg	4		6010B	Total/NA
Thallium	1.4		1.3	0.37	mg/Kg	4		6010B	Total/NA
Vanadium	120		1.3	0.18	mg/Kg	4		6010B	Total/NA
Zinc	72		3.9	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.042		0.015	0.0022	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88231-1

Client Sample ID: DUP-26 — Lab Sample ID: 720-88231-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.5		1.0	0.17	mg/Kg	4		6010B	Total/NA
Arsenic	9.8		2.1	0.17	mg/Kg	4		6010B	Total/NA
Barium	68		1.0	0.15	mg/Kg	4		6010B	Total/NA
Cadmium	0.72		0.26	0.025	mg/Kg	4		6010B	Total/NA
Chromium	25		1.0	0.11	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.41	0.041	mg/Kg	4		6010B	Total/NA
Copper	200		3.1	1.5	mg/Kg	4		6010B	Total/NA
Lead	310		1.0	0.22	mg/Kg	4		6010B	Total/NA
Molybdenum	0.83	J	1.0	0.13	mg/Kg	4		6010B	Total/NA
Nickel	21		1.0	0.10	mg/Kg	4		6010B	Total/NA
Selenium	1.2	J	2.1	0.31	mg/Kg	4		6010B	Total/NA
Silver	0.42	J	0.51	0.10	mg/Kg	4		6010B	Total/NA
Thallium	1.4		1.0	0.30	mg/Kg	4		6010B	Total/NA
Vanadium	90		1.0	0.14	mg/Kg	4		6010B	Total/NA
Zinc	160		3.1	1.3	mg/Kg	4		6010B	Total/NA
Mercury	0.18		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-27 — Lab Sample ID: 720-88231-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.34	J	3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	36		1.7	0.24	mg/Kg	4		6010B	Total/NA
Chromium	11		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	8.3		0.68	0.068	mg/Kg	4		6010B	Total/NA
Copper	110		5.1	2.4	mg/Kg	4		6010B	Total/NA
Lead	23		1.7	0.36	mg/Kg	4		6010B	Total/NA
Nickel	3.7		1.7	0.17	mg/Kg	4		6010B	Total/NA
Thallium	0.79	J	1.7	0.49	mg/Kg	4		6010B	Total/NA
Vanadium	88		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	38		5.1	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.068		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DUP-28 — Lab Sample ID: 720-88231-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.5		3.1	0.26	mg/Kg	4		6010B	Total/NA
Barium	190		1.5	0.22	mg/Kg	4		6010B	Total/NA
Cadmium	0.44		0.38	0.038	mg/Kg	4		6010B	Total/NA
Chromium	40		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	9.2		0.62	0.062	mg/Kg	4		6010B	Total/NA
Copper	69		4.6	2.2	mg/Kg	4		6010B	Total/NA
Lead	250		1.5	0.32	mg/Kg	4		6010B	Total/NA
Molybdenum	0.70	J	1.5	0.20	mg/Kg	4		6010B	Total/NA
Nickel	35		1.5	0.16	mg/Kg	4		6010B	Total/NA
Silver	0.25	J	0.77	0.16	mg/Kg	4		6010B	Total/NA
Thallium	1.6		1.5	0.45	mg/Kg	4		6010B	Total/NA
Vanadium	93		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	130		4.6	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.037		0.016	0.0023	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-17
Date Collected: 08/23/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88231-1
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.8**		1.7	0.27	mg/Kg		08/27/18 12:20	08/28/18 21:21	4
Arsenic	**2.3**	**J**	3.3	0.28	mg/Kg		08/27/18 12:20	08/28/18 21:21	4
Barium	**48**		1.7	0.23	mg/Kg		08/27/18 12:20	08/28/18 21:21	4
Beryllium	ND		0.33	0.11	mg/Kg		08/27/18 12:20	08/28/18 21:21	4
Cadmium	**0.053**	**J**	0.41	0.041	mg/Kg		08/27/18 12:20	08/28/18 21:21	4
Chromium	**4.6**		1.7	0.18	mg/Kg		08/27/18 12:20	08/28/18 21:21	4
Cobalt	**6.6**		0.66	0.066	mg/Kg		08/27/18 12:20	08/28/18 21:21	4
Copper	**25**		5.0	2.4	mg/Kg		08/27/18 12:20	08/28/18 21:21	4
Lead	**36**		1.7	0.35	mg/Kg		08/27/18 12:20	08/28/18 21:21	4
Molybdenum	ND		1.7	0.21	mg/Kg		08/27/18 12:20	08/28/18 21:21	4
Nickel	**3.0**		1.7	0.17	mg/Kg		08/27/18 12:20	08/28/18 21:21	4
Selenium	ND		3.3	0.50	mg/Kg		08/27/18 12:20	08/28/18 21:21	4
Silver	ND		0.83	0.17	mg/Kg		08/27/18 12:20	08/28/18 21:21	4
Thallium	ND		1.7	0.48	mg/Kg		08/27/18 12:20	08/28/18 21:21	4
Vanadium	**42**		1.7	0.22	mg/Kg		08/27/18 12:20	08/28/18 21:21	4
Zinc	**59**		5.0	2.1	mg/Kg		08/27/18 12:20	08/28/18 21:21	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.14**		0.015	0.0022	mg/Kg		08/29/18 20:30	08/30/18 09:34	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88231-1

Client Sample ID: DUP-18
Date Collected: 08/23/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88231-2
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.2	J	1.8	0.30	mg/Kg		08/27/18 12:20	08/28/18 21:26	4
Arsenic	2.9	J	3.6	0.31	mg/Kg		08/27/18 12:20	08/28/18 21:26	4
Barium	50		1.8	0.26	mg/Kg		08/27/18 12:20	08/28/18 21:26	4
Beryllium	ND		0.36	0.12	mg/Kg		08/27/18 12:20	08/28/18 21:26	4
Cadmium	0.25	J	0.45	0.045	mg/Kg		08/27/18 12:20	08/28/18 21:26	4
Chromium	16		1.8	0.19	mg/Kg		08/27/18 12:20	08/28/18 21:26	4
Cobalt	13		0.73	0.073	mg/Kg		08/27/18 12:20	08/28/18 21:26	4
Copper	120		5.5	2.6	mg/Kg		08/27/18 12:20	08/28/18 21:26	4
Lead	120		1.8	0.38	mg/Kg		08/27/18 12:20	08/28/18 21:26	4
Molybdenum	0.56	J	1.8	0.23	mg/Kg		08/27/18 12:20	08/28/18 21:26	4
Nickel	7.6		1.8	0.19	mg/Kg		08/27/18 12:20	08/28/18 21:26	4
Selenium	ND		3.6	0.55	mg/Kg		08/27/18 12:20	08/28/18 21:26	4
Silver	0.23	J	0.91	0.18	mg/Kg		08/27/18 12:20	08/28/18 21:26	4
Thallium	0.81	J	1.8	0.53	mg/Kg		08/27/18 12:20	08/28/18 21:26	4
Vanadium	98		1.8	0.25	mg/Kg		08/27/18 12:20	08/28/18 21:26	4
Zinc	99		5.5	2.3	mg/Kg		08/27/18 12:20	08/28/18 21:26	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.090		0.015	0.0022	mg/Kg		08/29/18 20:30	08/30/18 09:37	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88231-1

Client Sample ID: DUP-19
Date Collected: 08/23/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88231-3
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.71	J	1.3	0.21	mg/Kg		08/27/18 12:20	08/28/18 21:30	4
Arsenic	1.5	J	2.6	0.22	mg/Kg		08/27/18 12:20	08/28/18 21:30	4
Barium	25		1.3	0.18	mg/Kg		08/27/18 12:20	08/28/18 21:30	4
Beryllium	ND		0.26	0.084	mg/Kg		08/27/18 12:20	08/28/18 21:30	4
Cadmium	0.12	J	0.32	0.032	mg/Kg		08/27/18 12:20	08/28/18 21:30	4
Chromium	10		1.3	0.14	mg/Kg		08/27/18 12:20	08/28/18 21:30	4
Cobalt	15		0.52	0.052	mg/Kg		08/27/18 12:20	08/28/18 21:30	4
Copper	120		3.9	1.8	mg/Kg		08/27/18 12:20	08/28/18 21:30	4
Lead	49		1.3	0.27	mg/Kg		08/27/18 12:20	08/28/18 21:30	4
Molybdenum	ND		1.3	0.17	mg/Kg		08/27/18 12:20	08/28/18 21:30	4
Nickel	5.5		1.3	0.13	mg/Kg		08/27/18 12:20	08/28/18 21:30	4
Selenium	0.69	J	2.6	0.39	mg/Kg		08/27/18 12:20	08/28/18 21:30	4
Silver	0.45	J	0.65	0.13	mg/Kg		08/27/18 12:20	08/28/18 21:30	4
Thallium	1.4		1.3	0.37	mg/Kg		08/27/18 12:20	08/28/18 21:30	4
Vanadium	120		1.3	0.18	mg/Kg		08/27/18 12:20	08/28/18 21:30	4
Zinc	72		3.9	1.6	mg/Kg		08/27/18 12:20	08/28/18 21:30	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.042		0.015	0.0022	mg/Kg		08/29/18 20:30	08/30/18 09:39	1

Client Sample ID: DUP-26

Date Collected: 08/23/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88231-4

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.5		1.0	0.17	mg/Kg		08/27/18 12:20	08/28/18 21:45	4
Arsenic	9.8		2.1	0.17	mg/Kg		08/27/18 12:20	08/28/18 21:45	4
Barium	68		1.0	0.15	mg/Kg		08/27/18 12:20	08/28/18 21:45	4
Beryllium	ND		0.21	0.067	mg/Kg		08/27/18 12:20	08/28/18 21:45	4
Cadmium	0.72		0.26	0.025	mg/Kg		08/27/18 12:20	08/28/18 21:45	4
Chromium	25		1.0	0.11	mg/Kg		08/27/18 12:20	08/28/18 21:45	4
Cobalt	13		0.41	0.041	mg/Kg		08/27/18 12:20	08/28/18 21:45	4
Copper	200		3.1	1.5	mg/Kg		08/27/18 12:20	08/28/18 21:45	4
Lead	310		1.0	0.22	mg/Kg		08/27/18 12:20	08/28/18 21:45	4
Molybdenum	0.83	J	1.0	0.13	mg/Kg		08/27/18 12:20	08/28/18 21:45	4
Nickel	21		1.0	0.10	mg/Kg		08/27/18 12:20	08/28/18 21:45	4
Selenium	1.2	J	2.1	0.31	mg/Kg		08/27/18 12:20	08/28/18 21:45	4
Silver	0.42	J	0.51	0.10	mg/Kg		08/27/18 12:20	08/28/18 21:45	4
Thallium	1.4		1.0	0.30	mg/Kg		08/27/18 12:20	08/28/18 21:45	4
Vanadium	90		1.0	0.14	mg/Kg		08/27/18 12:20	08/28/18 21:45	4
Zinc	160		3.1	1.3	mg/Kg		08/27/18 12:20	08/28/18 21:45	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.18		0.016	0.0024	mg/Kg		08/29/18 20:30	08/30/18 09:46	1

Client Sample ID: DUP-27
Date Collected: 08/23/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88231-5
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.7	0.28	mg/Kg		08/27/18 12:20	08/28/18 21:49	4
Arsenic	**0.34**	**J**	3.4	0.29	mg/Kg		08/27/18 12:20	08/28/18 21:49	4
Barium	**36**		1.7	0.24	mg/Kg		08/27/18 12:20	08/28/18 21:49	4
Beryllium	ND		0.34	0.11	mg/Kg		08/27/18 12:20	08/28/18 21:49	4
Cadmium	ND		0.42	0.042	mg/Kg		08/27/18 12:20	08/28/18 21:49	4
Chromium	**11**		1.7	0.18	mg/Kg		08/27/18 12:20	08/28/18 21:49	4
Cobalt	**8.3**		0.68	0.068	mg/Kg		08/27/18 12:20	08/28/18 21:49	4
Copper	**110**		5.1	2.4	mg/Kg		08/27/18 12:20	08/28/18 21:49	4
Lead	**23**		1.7	0.36	mg/Kg		08/27/18 12:20	08/28/18 21:49	4
Molybdenum	ND		1.7	0.22	mg/Kg		08/27/18 12:20	08/28/18 21:49	4
Nickel	**3.7**		1.7	0.17	mg/Kg		08/27/18 12:20	08/28/18 21:49	4
Selenium	ND		3.4	0.51	mg/Kg		08/27/18 12:20	08/28/18 21:49	4
Silver	ND		0.85	0.17	mg/Kg		08/27/18 12:20	08/28/18 21:49	4
Thallium	**0.79**	**J**	1.7	0.49	mg/Kg		08/27/18 12:20	08/28/18 21:49	4
Vanadium	**88**		1.7	0.23	mg/Kg		08/27/18 12:20	08/28/18 21:49	4
Zinc	**38**		5.1	2.2	mg/Kg		08/27/18 12:20	08/28/18 21:49	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.068**		0.016	0.0024	mg/Kg		08/29/18 20:30	08/30/18 09:48	1

Client Sample ID: DUP-28
Date Collected: 08/23/18 00:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88231-6
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.5	0.26	mg/Kg		08/27/18 12:20	08/28/18 21:54	4
Arsenic	**3.5**		3.1	0.26	mg/Kg		08/27/18 12:20	08/28/18 21:54	4
Barium	**190**		1.5	0.22	mg/Kg		08/27/18 12:20	08/28/18 21:54	4
Beryllium	ND		0.31	0.10	mg/Kg		08/27/18 12:20	08/28/18 21:54	4
Cadmium	**0.44**		0.38	0.038	mg/Kg		08/27/18 12:20	08/28/18 21:54	4
Chromium	**40**		1.5	0.16	mg/Kg		08/27/18 12:20	08/28/18 21:54	4
Cobalt	**9.2**		0.62	0.062	mg/Kg		08/27/18 12:20	08/28/18 21:54	4
Copper	**69**		4.6	2.2	mg/Kg		08/27/18 12:20	08/28/18 21:54	4
Lead	**250**		1.5	0.32	mg/Kg		08/27/18 12:20	08/28/18 21:54	4
Molybdenum	**0.70**	**J**	1.5	0.20	mg/Kg		08/27/18 12:20	08/28/18 21:54	4
Nickel	**35**		1.5	0.16	mg/Kg		08/27/18 12:20	08/28/18 21:54	4
Selenium	ND		3.1	0.46	mg/Kg		08/27/18 12:20	08/28/18 21:54	4
Silver	**0.25**	**J**	0.77	0.16	mg/Kg		08/27/18 12:20	08/28/18 21:54	4
Thallium	**1.6**		1.5	0.45	mg/Kg		08/27/18 12:20	08/28/18 21:54	4
Vanadium	**93**		1.5	0.21	mg/Kg		08/27/18 12:20	08/28/18 21:54	4
Zinc	**130**		4.6	2.0	mg/Kg		08/27/18 12:20	08/28/18 21:54	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.037**		0.016	0.0023	mg/Kg		08/29/18 20:30	08/30/18 09:51	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250280/1-A
Matrix: Solid
Analysis Batch: 250454

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250280

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Arsenic	ND		1.0	0.085	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Barium	ND		0.50	0.071	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Beryllium	ND		0.10	0.033	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Cadmium	ND		0.13	0.012	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Chromium	ND		0.50	0.053	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Cobalt	ND		0.20	0.020	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Copper	ND		1.5	0.71	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Lead	ND		0.50	0.11	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Nickel	ND		0.50	0.051	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Selenium	ND		1.0	0.15	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Silver	ND		0.25	0.051	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Thallium	ND		0.50	0.15	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Vanadium	ND		0.50	0.068	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Zinc	ND		1.5	0.64	mg/Kg		08/27/18 12:20	08/28/18 20:48	1

Lab Sample ID: LCS 720-250280/2-A
Matrix: Solid
Analysis Batch: 250454

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250280

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	45.0		mg/Kg		90	80 - 120
Arsenic	50.0	44.7		mg/Kg		89	80 - 120
Barium	50.0	46.9		mg/Kg		94	80 - 120
Beryllium	50.0	46.6		mg/Kg		93	80 - 120
Cadmium	50.0	45.7		mg/Kg		91	80 - 120
Chromium	50.0	46.3		mg/Kg		93	80 - 120
Cobalt	50.0	46.2		mg/Kg		92	80 - 120
Copper	50.0	46.6		mg/Kg		93	80 - 120
Lead	50.0	46.3		mg/Kg		93	80 - 120
Molybdenum	50.0	46.1		mg/Kg		92	80 - 120
Nickel	50.0	46.4		mg/Kg		93	80 - 120
Selenium	50.0	43.7		mg/Kg		87	80 - 120
Silver	25.0	23.0		mg/Kg		92	80 - 120
Thallium	50.0	46.1		mg/Kg		92	80 - 120
Vanadium	50.0	46.5		mg/Kg		93	80 - 120
Zinc	50.0	45.3		mg/Kg		91	80 - 120

Lab Sample ID: 720-88234-A-7-A MS
Matrix: Solid
Analysis Batch: 250454

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250280

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND	F1 F2	49.0	13.4	F1	mg/Kg		27	75 - 125
Arsenic	3.7		49.0	53.8		mg/Kg		102	75 - 125
Barium	500	F2	49.0	363	4	mg/Kg		-290	75 - 125
Beryllium	ND		49.0	51.8		mg/Kg		106	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88234-A-7-A MS
Matrix: Solid
Analysis Batch: 250454

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250280

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	2.2		49.0	49.0		mg/Kg		96	75 - 125
Chromium	22	F1	49.0	76.8		mg/Kg		112	75 - 125
Cobalt	3.9		49.0	52.8		mg/Kg		100	75 - 125
Copper	43	F1	49.0	78.4	F1	mg/Kg		73	75 - 125
Lead	500	F2	49.0	228	4	mg/Kg		-550	75 - 125
Molybdenum	0.40	J	49.0	48.0		mg/Kg		97	75 - 125
Nickel	19	F1	49.0	73.9		mg/Kg		113	75 - 125
Selenium	ND		49.0	47.4		mg/Kg		97	75 - 125
Silver	0.18	J	24.5	26.2		mg/Kg		106	75 - 125
Thallium	0.58	J	49.0	45.5		mg/Kg		92	75 - 125
Vanadium	20	F1	49.0	78.6		mg/Kg		119	75 - 125
Zinc	520	F2	49.0	235	4	mg/Kg		-574	75 - 125

Lab Sample ID: 720-88234-A-7-B MSD
Matrix: Solid
Analysis Batch: 250454

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250280

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND	F1 F2	39.4	10.8	F1 F4	mg/Kg		27	75 - 125	21	20
Arsenic	3.7		39.4	46.4		mg/Kg		108	75 - 125	15	20
Barium	500	F2	39.4	479	4 F4	mg/Kg		-66	75 - 125	28	20
Beryllium	ND		39.4	45.5		mg/Kg		116	75 - 125	13	20
Cadmium	2.2		39.4	41.8		mg/Kg		101	75 - 125	16	20
Chromium	22	F1	39.4	82.2	F1	mg/Kg		153	75 - 125	7	20
Cobalt	3.9		39.4	46.8		mg/Kg		109	75 - 125	12	20
Copper	43	F1	39.4	82.1		mg/Kg		100	75 - 125	5	20
Lead	500	F2	39.4	355	4 F4	mg/Kg		-363	75 - 125	44	20
Molybdenum	0.40	J	39.4	40.2		mg/Kg		101	75 - 125	18	20
Nickel	19	F1	39.4	70.0	F1	mg/Kg		130	75 - 125	5	20
Selenium	ND		39.4	39.5		mg/Kg		100	75 - 125	18	20
Silver	0.18	J	19.7	23.0		mg/Kg		116	75 - 125	13	20
Thallium	0.58	J	39.4	38.1		mg/Kg		95	75 - 125	18	20
Vanadium	20	F1	39.4	77.0	F1	mg/Kg		144	75 - 125	2	20
Zinc	520	F2	39.4	341	4 F4	mg/Kg		-443	75 - 125	37	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250285/1-A
Matrix: Solid
Analysis Batch: 250591

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250285

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/29/18 20:30	08/30/18 08:50	1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 720-250285/2-A
Matrix: Solid
Analysis Batch: 250591

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250285

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.801		mg/Kg		96	80 - 120

Lab Sample ID: 720-88235-A-11-A MS
Matrix: Solid
Analysis Batch: 250591

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250285

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.042		0.820	0.865		mg/Kg		100	75 - 125

Lab Sample ID: 720-88235-A-11-B MSD
Matrix: Solid
Analysis Batch: 250591

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250285

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.042		0.820	0.870		mg/Kg		101	75 - 125	1	20

Metals

Prep Batch: 250280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88231-1	DUP-17	Total/NA	Solid	3050B	
720-88231-2	DUP-18	Total/NA	Solid	3050B	
720-88231-3	DUP-19	Total/NA	Solid	3050B	
720-88231-4	DUP-26	Total/NA	Solid	3050B	
720-88231-5	DUP-27	Total/NA	Solid	3050B	
720-88231-6	DUP-28	Total/NA	Solid	3050B	
MB 720-250280/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250280/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88234-A-7-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88234-A-7-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88231-1	DUP-17	Total/NA	Solid	7471A	
720-88231-2	DUP-18	Total/NA	Solid	7471A	
720-88231-3	DUP-19	Total/NA	Solid	7471A	
720-88231-4	DUP-26	Total/NA	Solid	7471A	
720-88231-5	DUP-27	Total/NA	Solid	7471A	
720-88231-6	DUP-28	Total/NA	Solid	7471A	
MB 720-250285/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250285/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88235-A-11-A MS	Matrix Spike	Total/NA	Solid	7471A	
720-88235-A-11-B MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 250454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88231-1	DUP-17	Total/NA	Solid	6010B	250280
720-88231-2	DUP-18	Total/NA	Solid	6010B	250280
720-88231-3	DUP-19	Total/NA	Solid	6010B	250280
720-88231-4	DUP-26	Total/NA	Solid	6010B	250280
720-88231-5	DUP-27	Total/NA	Solid	6010B	250280
720-88231-6	DUP-28	Total/NA	Solid	6010B	250280
MB 720-250280/1-A	Method Blank	Total/NA	Solid	6010B	250280
LCS 720-250280/2-A	Lab Control Sample	Total/NA	Solid	6010B	250280
720-88234-A-7-A MS	Matrix Spike	Total/NA	Solid	6010B	250280
720-88234-A-7-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250280

Analysis Batch: 250591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88231-1	DUP-17	Total/NA	Solid	7471A	250285
720-88231-2	DUP-18	Total/NA	Solid	7471A	250285
720-88231-3	DUP-19	Total/NA	Solid	7471A	250285
720-88231-4	DUP-26	Total/NA	Solid	7471A	250285
720-88231-5	DUP-27	Total/NA	Solid	7471A	250285
720-88231-6	DUP-28	Total/NA	Solid	7471A	250285
MB 720-250285/1-A	Method Blank	Total/NA	Solid	7471A	250285
LCS 720-250285/2-A	Lab Control Sample	Total/NA	Solid	7471A	250285
720-88235-A-11-A MS	Matrix Spike	Total/NA	Solid	7471A	250285
720-88235-A-11-B MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	250285

Client Sample ID: DUP-17

Lab Sample ID: 720-88231-1

Date Collected: 08/23/18 00:00

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250454	08/28/18 21:21	OBI	TAL PLS
Total/NA	Prep	7471A			250285	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250591	08/30/18 09:34	OBI	TAL PLS

Client Sample ID: DUP-18

Lab Sample ID: 720-88231-2

Date Collected: 08/23/18 00:00

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250454	08/28/18 21:26	OBI	TAL PLS
Total/NA	Prep	7471A			250285	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250591	08/30/18 09:37	OBI	TAL PLS

Client Sample ID: DUP-19

Lab Sample ID: 720-88231-3

Date Collected: 08/23/18 00:00

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250454	08/28/18 21:30	OBI	TAL PLS
Total/NA	Prep	7471A			250285	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250591	08/30/18 09:39	OBI	TAL PLS

Client Sample ID: DUP-26

Lab Sample ID: 720-88231-4

Date Collected: 08/23/18 00:00

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250454	08/28/18 21:45	OBI	TAL PLS
Total/NA	Prep	7471A			250285	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250591	08/30/18 09:46	OBI	TAL PLS

Client Sample ID: DUP-27

Lab Sample ID: 720-88231-5

Date Collected: 08/23/18 00:00

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250454	08/28/18 21:49	OBI	TAL PLS
Total/NA	Prep	7471A			250285	08/29/18 20:30	MAG	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88231-1

Client Sample ID: DUP-27

Lab Sample ID: 720-88231-5

Date Collected: 08/23/18 00:00

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	250591	08/30/18 09:48	OBI	TAL PLS

Client Sample ID: DUP-28

Lab Sample ID: 720-88231-6

Date Collected: 08/23/18 00:00

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250454	08/28/18 21:54	OBI	TAL PLS
Total/NA	Prep	7471A			250285	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250591	08/30/18 09:51	OBI	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc. TestAmerica Job ID: 720-88231-1
Project/Site: UPC OU-SM

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88231-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
3050B	Preparation, Metals	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88231-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88231-1	DUP-17	Solid	08/23/18 00:00	08/24/18 15:00
720-88231-2	DUP-18	Solid	08/23/18 00:00	08/24/18 15:00
720-88231-3	DUP-19	Solid	08/23/18 00:00	08/24/18 15:00
720-88231-4	DUP-26	Solid	08/23/18 00:00	08/24/18 15:00
720-88231-5	DUP-27	Solid	08/23/18 00:00	08/24/18 15:00
720-88231-6	DUP-28	Solid	08/23/18 00:00	08/24/18 15:00

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-88231

TESTAMERICA Pleasanton Chain of Custody

1220 Quarry Lane ● Pleasanton CA 94566-4756

Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: 185113

Date 8/23/18 Page 1 of 1

11/27/2018 (Rev. 1)

Report To

Attn: Kaitlyn Bell

Company: Geosyntec

Address: 1111 Broadway Oakland CA

Email: KBell@geosyntec.com

Bill To: Geosyntec

Sampled By: RT/KB

Attn: Anthony Smith

Phone: 510 285 2795

Analysis Request

Sample ID	Date	Time	Mat. Ix.	Preserv.	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other___	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐200.7 ☐ Lead ☐ LUFT ☐RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions : ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity
DUP-17	8/23/18	N/A	S	N/A									X										
DUP-18													X										
DUP-19													X										
DUP-26													X										
DUP-27													X										
DUP-28													X										

720-88231 Chain of Custody

Page 22 of 23

Project Info.

Project Name/ #: UPC OV-SM

PO#: WG2565/02

Credit Card Y/N:

Sample Receipt

of Containers:

Head Space:

Temp:

If yes, please call with payment information ASAP

TAT: 10 Day | (5 Day) | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF

Special Instructions / Comments: ☐ Global ID _____

See Terms and Conditions on reverse

1.Y.C

1) Relinquished by:

Signature: [signature] Time: 1305

Printed Name: Kaitlyn Bell Date: 8/24

Company: Geosyntec

1) Received by:

Signature: [signature] Time: 1305

Printed Name: Robt Date: 8/24/18

Company: TA

2) Relinquished by:

Signature: [signature] Time: 1500

Printed Name: Robt Date: 8/24/18

Company: TA

2) Received by:

Signature: [signature] Time: 1500

Printed Name: Janae Date: 8/24/18

Company: TA720

3) Relinquished by:

Signature: _____ Time: _____

Printed Name: _____ Date: _____

Company: _____

3) Received by:

Signature: _____ Time: _____

Printed Name: _____ Date: _____

Company: _____

Rev 10/2014

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88231-1

Login Number: 88231
List Number: 1
Creator: Perry, Janae R

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88234-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/21/2018 6:21:16 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 13
QC Sample Results 33
QC Association Summary 38
Lab Chronicle 41
Certification Summary 46
Method Summary 47
Sample Summary 48
Chain of Custody 49
Receipt Checklists 51

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F4	MS/MSD RPD exceeds control limits due to sample size difference.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88234-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88234-1

Comments
This report was revised on 11/21/18 to change the units for the metals data to report in mg/Kg, as requested.

Receipt
The samples were received on 8/24/2018 3:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8º C.

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batches 720-250280 and 720-250292 and analytical batches 720-250454 and 720-250491 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method(s) 6010B: The post digestion spike percent recovery for Silver, Arsenic, Barium, Beryllium, Chromium, Copper, Lead, Vanadium, and Zinc associated with batch 720-250454 was outside of control limits.

Silver recovery 137%; Arsenic recovery 126%; Barium recovery 232%; Beryllium recovery 136%; Chromium recovery 129%; Copper recovery 140%; Lead recovery 175%; Vanadium recovery 137%; Zinc recovery 178%. (Control limits 75-125%.)

Method(s) 6010B: The post digestion spike percent recovery for Silver, Barium, Beryllium, Chromium, Copper, and Vanadium associated with batch 720-250491 was outside of control limits.

Silver recovery 133%; Barium recovery 145%; Beryllium recovery 139%; Chromium recovery 130%; Copper recovery 155%; Vanadium recovery 144%. (Control limits 75-125%.)

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250454 was outside control limits: (720-88234-A-7-C SD)

Analyte:	% D:
Barium	20%
Cadmium	46%
Cobalt	37%
Chromium	26%
Nickel	23%
Lead	21%
Vanadium	26%
Zinc	19%

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DG-D10S-0.5-1 (720-88234-1), DG-D10S-3.5-4 (720-88234-2), DG-E10S-0.5-1 (720-88234-3), DG-E10S-3.5-4 (720-88234-4), DG-H10S-0.5-1 (720-88234-5), DG-H10S-3.5-4 (720-88234-6), DG-I10S-0.5-1 (720-88234-7), DG-I10S-3.5-4 (720-88234-8), DG-K10S-0.5-1 (720-88234-9), DG-K10S-3.5-4 (720-88234-10), DG-F8S-0.5-1 (720-88234-11), DG-F8S-3.5-4 (720-88234-12), DG-E8S-0.5-1 (720-88234-13), DG-D8S-0.5-1 (720-88234-15), DG-B8S-0.5-1 (720-88234-17), DG-B8S-3.5-4 (720-88234-18), DG-C10S-0.5-1 (720-88234-19) and DG-C10S-3.5-4 (720-88234-20). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88234-1

Client Sample ID: DG-D10S-0.5-1 — Lab Sample ID: 720-88234-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	8.9		3.9	0.65	mg/Kg	10		6010B	Total/NA
Arsenic	64		7.8	0.66	mg/Kg	10		6010B	Total/NA
Barium	110		1.6	0.22	mg/Kg	4		6010B	Total/NA
Cadmium	0.36	J	0.98	0.097	mg/Kg	10		6010B	Total/NA
Chromium	32		3.9	0.41	mg/Kg	10		6010B	Total/NA
Cobalt	16		1.6	0.16	mg/Kg	10		6010B	Total/NA
Copper	640		12	5.6	mg/Kg	10		6010B	Total/NA
Lead	1200		3.9	0.82	mg/Kg	10		6010B	Total/NA
Molybdenum	3.4		1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	29		3.9	0.40	mg/Kg	10		6010B	Total/NA
Silver	1.0	J	2.0	0.39	mg/Kg	10		6010B	Total/NA
Vanadium	96		3.9	0.53	mg/Kg	10		6010B	Total/NA
Zinc	460		12	5.0	mg/Kg	10		6010B	Total/NA
Mercury	0.29		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-D10S-3.5-4 — Lab Sample ID: 720-88234-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	8.1		1.6	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	7.2		3.2	0.27	mg/Kg	4		6010B	Total/NA
Barium	68		1.6	0.23	mg/Kg	4		6010B	Total/NA
Cadmium	0.41		0.40	0.040	mg/Kg	4		6010B	Total/NA
Chromium	28		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	14		0.64	0.064	mg/Kg	4		6010B	Total/NA
Copper	140		4.8	2.3	mg/Kg	4		6010B	Total/NA
Lead	270		1.6	0.34	mg/Kg	4		6010B	Total/NA
Molybdenum	0.42	J	1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	27		1.6	0.16	mg/Kg	4		6010B	Total/NA
Silver	0.50	J	0.80	0.16	mg/Kg	4		6010B	Total/NA
Thallium	1.3	J	1.6	0.46	mg/Kg	4		6010B	Total/NA
Vanadium	93		1.6	0.22	mg/Kg	4		6010B	Total/NA
Zinc	140		4.8	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.064		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E10S-0.5-1 — Lab Sample ID: 720-88234-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	3.6		1.3	0.22	mg/Kg	4		6010B	Total/NA
Arsenic	13		2.6	0.22	mg/Kg	4		6010B	Total/NA
Barium	68		1.3	0.19	mg/Kg	4		6010B	Total/NA
Cadmium	0.68		0.33	0.032	mg/Kg	4		6010B	Total/NA
Chromium	28		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.52	0.052	mg/Kg	4		6010B	Total/NA
Copper	220		3.9	1.9	mg/Kg	4		6010B	Total/NA
Lead	400		1.3	0.27	mg/Kg	4		6010B	Total/NA
Molybdenum	1.0	J	1.3	0.17	mg/Kg	4		6010B	Total/NA
Nickel	24		1.3	0.13	mg/Kg	4		6010B	Total/NA
Selenium	0.86	J	2.6	0.39	mg/Kg	4		6010B	Total/NA
Silver	0.42	J	0.65	0.13	mg/Kg	4		6010B	Total/NA
Thallium	1.6		1.3	0.38	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-E10S-0.5-1 (Continued) — Lab Sample ID: 720-88234-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	94		1.3	0.18	mg/Kg	4		6010B	Total/NA
Zinc	190		3.9	1.7	mg/Kg	4		6010B	Total/NA
Mercury	0.12		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E10S-3.5-4 — Lab Sample ID: 720-88234-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.0	J	1.3	0.22	mg/Kg	4		6010B	Total/NA
Arsenic	2.1	J	2.7	0.23	mg/Kg	4		6010B	Total/NA
Barium	68		1.3	0.19	mg/Kg	4		6010B	Total/NA
Cadmium	0.054	J	0.33	0.033	mg/Kg	4		6010B	Total/NA
Chromium	19		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.53	0.053	mg/Kg	4		6010B	Total/NA
Copper	120		4.0	1.9	mg/Kg	4		6010B	Total/NA
Lead	76		1.3	0.28	mg/Kg	4		6010B	Total/NA
Nickel	13		1.3	0.14	mg/Kg	4		6010B	Total/NA
Selenium	0.62	J	2.7	0.40	mg/Kg	4		6010B	Total/NA
Silver	0.24	J	0.67	0.13	mg/Kg	4		6010B	Total/NA
Thallium	1.0	J	1.3	0.39	mg/Kg	4		6010B	Total/NA
Vanadium	120		1.3	0.18	mg/Kg	4		6010B	Total/NA
Zinc	91		4.0	1.7	mg/Kg	4		6010B	Total/NA
Mercury	0.039		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H10S-0.5-1 — Lab Sample ID: 720-88234-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.50	J	2.2	0.19	mg/Kg	4		6010B	Total/NA
Barium	40		1.1	0.16	mg/Kg	4		6010B	Total/NA
Chromium	12		1.1	0.12	mg/Kg	4		6010B	Total/NA
Cobalt	9.2		0.45	0.045	mg/Kg	4		6010B	Total/NA
Copper	120		3.4	1.6	mg/Kg	4		6010B	Total/NA
Lead	23		1.1	0.24	mg/Kg	4		6010B	Total/NA
Molybdenum	0.16	J	1.1	0.14	mg/Kg	4		6010B	Total/NA
Nickel	4.3		1.1	0.11	mg/Kg	4		6010B	Total/NA
Selenium	0.67	J	2.2	0.34	mg/Kg	4		6010B	Total/NA
Silver	0.12	J	0.56	0.11	mg/Kg	4		6010B	Total/NA
Thallium	0.73	J	1.1	0.33	mg/Kg	4		6010B	Total/NA
Vanadium	100		1.1	0.15	mg/Kg	4		6010B	Total/NA
Zinc	40		3.4	1.4	mg/Kg	4		6010B	Total/NA
Mercury	0.056		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H10S-3.5-4 — Lab Sample ID: 720-88234-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.51	J	1.3	0.22	mg/Kg	4		6010B	Total/NA
Arsenic	1.8	J	2.7	0.23	mg/Kg	4		6010B	Total/NA
Barium	33		1.3	0.19	mg/Kg	4		6010B	Total/NA
Chromium	8.2		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.54	0.054	mg/Kg	4		6010B	Total/NA
Copper	68		4.0	1.9	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-H10S-3.5-4 (Continued) — Lab Sample ID: 720-88234-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	45		1.3	0.28	mg/Kg	4		6010B	Total/NA
Molybdenum	0.32	J	1.3	0.17	mg/Kg	4		6010B	Total/NA
Nickel	3.9		1.3	0.14	mg/Kg	4		6010B	Total/NA
Selenium	0.80	J	2.7	0.40	mg/Kg	4		6010B	Total/NA
Silver	0.26	J	0.67	0.14	mg/Kg	4		6010B	Total/NA
Thallium	0.69	J	1.3	0.39	mg/Kg	4		6010B	Total/NA
Vanadium	82		1.3	0.18	mg/Kg	4		6010B	Total/NA
Zinc	62		4.0	1.7	mg/Kg	4		6010B	Total/NA
Mercury	0.030		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I10S-0.5-1 — Lab Sample ID: 720-88234-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.7		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	500	F2	1.7	0.24	mg/Kg	4		6010B	Total/NA
Cadmium	2.2		0.43	0.042	mg/Kg	4		6010B	Total/NA
Chromium	22	F1	1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	3.9		0.68	0.068	mg/Kg	4		6010B	Total/NA
Copper	43	F1	5.1	2.4	mg/Kg	4		6010B	Total/NA
Lead	500	F2	1.7	0.36	mg/Kg	4		6010B	Total/NA
Molybdenum	0.40	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	19	F1	1.7	0.17	mg/Kg	4		6010B	Total/NA
Silver	0.18	J	0.85	0.17	mg/Kg	4		6010B	Total/NA
Thallium	0.58	J	1.7	0.50	mg/Kg	4		6010B	Total/NA
Vanadium	20	F1	1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	520	F2	5.1	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.092		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I10S-3.5-4 — Lab Sample ID: 720-88234-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.9		1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	5.1		3.0	0.25	mg/Kg	4		6010B	Total/NA
Barium	82		1.5	0.21	mg/Kg	4		6010B	Total/NA
Beryllium	0.23	J	0.30	0.096	mg/Kg	4		6010B	Total/NA
Chromium	350		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	36		0.59	0.059	mg/Kg	4		6010B	Total/NA
Copper	34		4.4	2.1	mg/Kg	4		6010B	Total/NA
Lead	8.1		1.5	0.31	mg/Kg	4		6010B	Total/NA
Molybdenum	0.20	J	1.5	0.19	mg/Kg	4		6010B	Total/NA
Nickel	500		1.5	0.15	mg/Kg	4		6010B	Total/NA
Selenium	0.49	J	3.0	0.44	mg/Kg	4		6010B	Total/NA
Silver	0.24	J	0.74	0.15	mg/Kg	4		6010B	Total/NA
Thallium	0.82	J	1.5	0.43	mg/Kg	4		6010B	Total/NA
Vanadium	61		1.5	0.20	mg/Kg	4		6010B	Total/NA
Zinc	67		4.4	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.087		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K10S-0.5-1 — Lab Sample ID: 720-88234-9

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-K10S-0.5-1 (Continued) — Lab Sample ID: 720-88234-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	5.5		1.3	0.21	mg/Kg	4		6010B	Total/NA
Arsenic	12		2.6	0.22	mg/Kg	4		6010B	Total/NA
Barium	490		1.3	0.18	mg/Kg	4		6010B	Total/NA
Beryllium	0.098	J	0.26	0.083	mg/Kg	4		6010B	Total/NA
Cadmium	2.0		0.32	0.032	mg/Kg	4		6010B	Total/NA
Chromium	62		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.51	0.051	mg/Kg	4		6010B	Total/NA
Copper	240		3.8	1.8	mg/Kg	4		6010B	Total/NA
Lead	440		1.3	0.27	mg/Kg	4		6010B	Total/NA
Molybdenum	4.7		1.3	0.16	mg/Kg	4		6010B	Total/NA
Nickel	41		1.3	0.13	mg/Kg	4		6010B	Total/NA
Silver	0.29	J	0.64	0.13	mg/Kg	4		6010B	Total/NA
Thallium	0.75	J	1.3	0.37	mg/Kg	4		6010B	Total/NA
Vanadium	67		1.3	0.17	mg/Kg	4		6010B	Total/NA
Zinc	510		3.8	1.6	mg/Kg	4		6010B	Total/NA
Mercury	1.0		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K10S-3.5-4 — Lab Sample ID: 720-88234-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.9		1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	4.4		3.6	0.31	mg/Kg	4		6010B	Total/NA
Barium	120		1.8	0.26	mg/Kg	4		6010B	Total/NA
Cadmium	0.29	J	0.45	0.045	mg/Kg	4		6010B	Total/NA
Chromium	88		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	17		0.72	0.072	mg/Kg	4		6010B	Total/NA
Copper	98		5.4	2.6	mg/Kg	4		6010B	Total/NA
Lead	330		1.8	0.38	mg/Kg	4		6010B	Total/NA
Nickel	150		1.8	0.18	mg/Kg	4		6010B	Total/NA
Selenium	0.74	J	3.6	0.54	mg/Kg	4		6010B	Total/NA
Silver	0.67	J	0.90	0.18	mg/Kg	4		6010B	Total/NA
Thallium	1.3	J	1.8	0.52	mg/Kg	4		6010B	Total/NA
Vanadium	88		1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	160		5.4	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.28		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-F8S-0.5-1 — Lab Sample ID: 720-88234-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	3.2		1.1	0.18	mg/Kg	4		6010B	Total/NA
Arsenic	14		2.2	0.18	mg/Kg	4		6010B	Total/NA
Barium	69		1.1	0.15	mg/Kg	4		6010B	Total/NA
Cadmium	0.94		0.27	0.027	mg/Kg	4		6010B	Total/NA
Chromium	12		1.1	0.11	mg/Kg	4		6010B	Total/NA
Cobalt	8.4		0.43	0.043	mg/Kg	4		6010B	Total/NA
Copper	110		3.2	1.5	mg/Kg	4		6010B	Total/NA
Lead	290		1.1	0.23	mg/Kg	4		6010B	Total/NA
Molybdenum	0.98	J	1.1	0.14	mg/Kg	4		6010B	Total/NA
Nickel	13		1.1	0.11	mg/Kg	4		6010B	Total/NA
Selenium	0.69	J	2.2	0.32	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-F8S-0.5-1 (Continued) — Lab Sample ID: 720-88234-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	0.31	J	0.54	0.11	mg/Kg	4		6010B	Total/NA
Thallium	0.31	J	1.1	0.31	mg/Kg	4		6010B	Total/NA
Vanadium	45		1.1	0.15	mg/Kg	4		6010B	Total/NA
Zinc	210		3.2	1.4	mg/Kg	4		6010B	Total/NA
Mercury	0.10		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-F8S-3.5-4 — Lab Sample ID: 720-88234-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.1		1.3	0.22	mg/Kg	4		6010B	Total/NA
Arsenic	7.0		2.6	0.23	mg/Kg	4		6010B	Total/NA
Barium	78		1.3	0.19	mg/Kg	4		6010B	Total/NA
Beryllium	0.15	J	0.26	0.086	mg/Kg	4		6010B	Total/NA
Cadmium	0.21	J	0.33	0.033	mg/Kg	4		6010B	Total/NA
Chromium	48		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	8.0		0.53	0.053	mg/Kg	4		6010B	Total/NA
Copper	32		4.0	1.9	mg/Kg	4		6010B	Total/NA
Lead	42		1.3	0.28	mg/Kg	4		6010B	Total/NA
Molybdenum	0.44	J	1.3	0.17	mg/Kg	4		6010B	Total/NA
Nickel	39		1.3	0.14	mg/Kg	4		6010B	Total/NA
Selenium	0.70	J	2.6	0.40	mg/Kg	4		6010B	Total/NA
Thallium	0.55	J	1.3	0.38	mg/Kg	4		6010B	Total/NA
Vanadium	39		1.3	0.18	mg/Kg	4		6010B	Total/NA
Zinc	57		4.0	1.7	mg/Kg	4		6010B	Total/NA
Mercury	0.039		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E8S-0.5-1 — Lab Sample ID: 720-88234-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.87	J	3.1	0.26	mg/Kg	4		6010B	Total/NA
Barium	63		1.5	0.22	mg/Kg	4		6010B	Total/NA
Chromium	11		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	10		0.62	0.062	mg/Kg	4		6010B	Total/NA
Copper	130		4.6	2.2	mg/Kg	4		6010B	Total/NA
Lead	15		1.5	0.32	mg/Kg	4		6010B	Total/NA
Molybdenum	0.21	J	1.5	0.20	mg/Kg	4		6010B	Total/NA
Nickel	4.1		1.5	0.16	mg/Kg	4		6010B	Total/NA
Selenium	0.54	J	3.1	0.46	mg/Kg	4		6010B	Total/NA
Silver	0.20	J	0.77	0.16	mg/Kg	4		6010B	Total/NA
Thallium	1.1	J	1.5	0.45	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	45		4.6	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.085		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-E8S-3.5-4 — Lab Sample ID: 720-88234-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	60		1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	7.3		3.8	0.32	mg/Kg	4		6010B	Total/NA
Barium	84		1.9	0.27	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-E8S-3.5-4 (Continued) — Lab Sample ID: 720-88234-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.073	J	0.48	0.047	mg/Kg	4		6010B	Total/NA
Chromium	17		1.9	0.20	mg/Kg	4		6010B	Total/NA
Cobalt	10		0.76	0.076	mg/Kg	4		6010B	Total/NA
Copper	380		5.7	2.7	mg/Kg	4		6010B	Total/NA
Lead	170		1.9	0.40	mg/Kg	4		6010B	Total/NA
Molybdenum	0.64	J	1.9	0.24	mg/Kg	4		6010B	Total/NA
Nickel	16		1.9	0.19	mg/Kg	4		6010B	Total/NA
Thallium	1.1	J	1.9	0.55	mg/Kg	4		6010B	Total/NA
Vanadium	79		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	95		5.7	2.4	mg/Kg	4		6010B	Total/NA
Mercury	0.13		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-D8S-0.5-1 — Lab Sample ID: 720-88234-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.41	J	3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	35		1.7	0.24	mg/Kg	4		6010B	Total/NA
Chromium	10		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.68	0.068	mg/Kg	4		6010B	Total/NA
Copper	140		5.1	2.4	mg/Kg	4		6010B	Total/NA
Lead	9.9		1.7	0.36	mg/Kg	4		6010B	Total/NA
Molybdenum	0.34	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	5.3		1.7	0.17	mg/Kg	4		6010B	Total/NA
Thallium	0.94	J	1.7	0.49	mg/Kg	4		6010B	Total/NA
Vanadium	100		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	42		5.1	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.036		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-D8S-3.5-4 — Lab Sample ID: 720-88234-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.2	J	1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	2.5	J	3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	58		1.7	0.24	mg/Kg	4		6010B	Total/NA
Chromium	5.7		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	6.0		0.68	0.068	mg/Kg	4		6010B	Total/NA
Copper	15		5.1	2.4	mg/Kg	4		6010B	Total/NA
Lead	32		1.7	0.36	mg/Kg	4		6010B	Total/NA
Nickel	3.4		1.7	0.17	mg/Kg	4		6010B	Total/NA
Vanadium	36		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	59		5.1	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.18		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B8S-0.5-1 — Lab Sample ID: 720-88234-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	4.6		1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	7.0		3.6	0.31	mg/Kg	4		6010B	Total/NA
Barium	100		1.8	0.26	mg/Kg	4		6010B	Total/NA
Beryllium	0.19	J	0.36	0.12	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-B8S-0.5-1 (Continued) — Lab Sample ID: 720-88234-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.21	J	0.45	0.045	mg/Kg	4		6010B	Total/NA
Chromium	43		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.73	0.073	mg/Kg	4		6010B	Total/NA
Copper	110		5.5	2.6	mg/Kg	4		6010B	Total/NA
Lead	260		1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	0.87	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	48		1.8	0.19	mg/Kg	4		6010B	Total/NA
Thallium	1.1	J	1.8	0.53	mg/Kg	4		6010B	Total/NA
Vanadium	52		1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	120		5.5	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.046		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-B8S-3.5-4 — Lab Sample ID: 720-88234-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.2		1.6	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	4.8		3.1	0.27	mg/Kg	4		6010B	Total/NA
Barium	160		1.6	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.15	J	0.31	0.10	mg/Kg	4		6010B	Total/NA
Chromium	180		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	18		0.63	0.063	mg/Kg	4		6010B	Total/NA
Copper	22		4.7	2.2	mg/Kg	4		6010B	Total/NA
Lead	2.0		1.6	0.33	mg/Kg	4		6010B	Total/NA
Nickel	160		1.6	0.16	mg/Kg	4		6010B	Total/NA
Thallium	1.5	J	1.6	0.46	mg/Kg	4		6010B	Total/NA
Vanadium	120		1.6	0.21	mg/Kg	4		6010B	Total/NA
Zinc	48		4.7	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.024		0.015	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-C10S-0.5-1 — Lab Sample ID: 720-88234-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.1	J	2.0	0.33	mg/Kg	4		6010B	Total/NA
Arsenic	11		4.0	0.34	mg/Kg	4		6010B	Total/NA
Barium	34		2.0	0.28	mg/Kg	4		6010B	Total/NA
Cadmium	0.060	J	0.50	0.049	mg/Kg	4		6010B	Total/NA
Chromium	13		2.0	0.21	mg/Kg	4		6010B	Total/NA
Cobalt	19		0.79	0.079	mg/Kg	4		6010B	Total/NA
Copper	150		5.9	2.8	mg/Kg	4		6010B	Total/NA
Lead	58		2.0	0.42	mg/Kg	4		6010B	Total/NA
Molybdenum	0.47	J	2.0	0.25	mg/Kg	4		6010B	Total/NA
Nickel	11		2.0	0.20	mg/Kg	4		6010B	Total/NA
Thallium	1.9	J	2.0	0.57	mg/Kg	4		6010B	Total/NA
Vanadium	130		2.0	0.27	mg/Kg	4		6010B	Total/NA
Zinc	88		5.9	2.5	mg/Kg	4		6010B	Total/NA
Mercury	0.084		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-C10S-3.5-4 — Lab Sample ID: 720-88234-20

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-C10S-3.5-4 (Continued)

Lab Sample ID: 720-88234-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.6		1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	190		3.9	0.33	mg/Kg	4		6010B	Total/NA
Barium	120		1.9	0.28	mg/Kg	4		6010B	Total/NA
Beryllium	0.42		0.39	0.13	mg/Kg	4		6010B	Total/NA
Chromium	180		1.9	0.21	mg/Kg	4		6010B	Total/NA
Cobalt	24		0.78	0.078	mg/Kg	4		6010B	Total/NA
Copper	45		5.8	2.8	mg/Kg	4		6010B	Total/NA
Lead	16		1.9	0.41	mg/Kg	4		6010B	Total/NA
Molybdenum	0.56	J	1.9	0.25	mg/Kg	4		6010B	Total/NA
Nickel	200		1.9	0.20	mg/Kg	4		6010B	Total/NA
Thallium	1.1	J	1.9	0.56	mg/Kg	4		6010B	Total/NA
Vanadium	89		1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	81		5.8	2.5	mg/Kg	4		6010B	Total/NA
Mercury	2.3		0.065	0.0095	mg/Kg	4		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88234-1

Client Sample ID: DG-D10S-0.5-1
Date Collected: 08/23/18 14:25
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-1
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	8.9		3.9	0.65	mg/Kg		08/27/18 12:20	08/29/18 23:13	10
Arsenic	64		7.8	0.66	mg/Kg		08/27/18 12:20	08/29/18 23:13	10
Barium	110		1.6	0.22	mg/Kg		08/27/18 12:20	08/28/18 22:03	4
Beryllium	ND		0.31	0.10	mg/Kg		08/27/18 12:20	08/28/18 22:03	4
Cadmium	0.36	J	0.98	0.097	mg/Kg		08/27/18 12:20	08/29/18 23:13	10
Chromium	32		3.9	0.41	mg/Kg		08/27/18 12:20	08/29/18 23:13	10
Cobalt	16		1.6	0.16	mg/Kg		08/27/18 12:20	08/29/18 23:13	10
Copper	640		12	5.6	mg/Kg		08/27/18 12:20	08/29/18 23:13	10
Lead	1200		3.9	0.82	mg/Kg		08/27/18 12:20	08/29/18 23:13	10
Molybdenum	3.4		1.6	0.20	mg/Kg		08/27/18 12:20	08/28/18 22:03	4
Nickel	29		3.9	0.40	mg/Kg		08/27/18 12:20	08/29/18 23:13	10
Selenium	ND		7.8	1.2	mg/Kg		08/27/18 12:20	08/29/18 23:13	10
Silver	1.0	J	2.0	0.39	mg/Kg		08/27/18 12:20	08/29/18 23:13	10
Thallium	ND		3.9	1.1	mg/Kg		08/27/18 12:20	08/29/18 23:13	10
Vanadium	96		3.9	0.53	mg/Kg		08/27/18 12:20	08/29/18 23:13	10
Zinc	460		12	5.0	mg/Kg		08/27/18 12:20	08/29/18 23:13	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.29		0.016	0.0024	mg/Kg		08/28/18 15:27	08/30/18 19:32	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88234-1

Client Sample ID: DG-D10S-3.5-4
Date Collected: 08/23/18 14:25
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-2
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	8.1		1.6	0.27	mg/Kg		08/27/18 12:20	08/28/18 22:08	4
Arsenic	7.2		3.2	0.27	mg/Kg		08/27/18 12:20	08/28/18 22:08	4
Barium	68		1.6	0.23	mg/Kg		08/27/18 12:20	08/28/18 22:08	4
Beryllium	ND		0.32	0.10	mg/Kg		08/27/18 12:20	08/28/18 22:08	4
Cadmium	0.41		0.40	0.040	mg/Kg		08/27/18 12:20	08/28/18 22:08	4
Chromium	28		1.6	0.17	mg/Kg		08/27/18 12:20	08/28/18 22:08	4
Cobalt	14		0.64	0.064	mg/Kg		08/27/18 12:20	08/28/18 22:08	4
Copper	140		4.8	2.3	mg/Kg		08/27/18 12:20	08/28/18 22:08	4
Lead	270		1.6	0.34	mg/Kg		08/27/18 12:20	08/28/18 22:08	4
Molybdenum	0.42	J	1.6	0.20	mg/Kg		08/27/18 12:20	08/28/18 22:08	4
Nickel	27		1.6	0.16	mg/Kg		08/27/18 12:20	08/28/18 22:08	4
Selenium	ND		3.2	0.48	mg/Kg		08/27/18 12:20	08/28/18 22:08	4
Silver	0.50	J	0.80	0.16	mg/Kg		08/27/18 12:20	08/28/18 22:08	4
Thallium	1.3	J	1.6	0.46	mg/Kg		08/27/18 12:20	08/28/18 22:08	4
Vanadium	93		1.6	0.22	mg/Kg		08/27/18 12:20	08/28/18 22:08	4
Zinc	140		4.8	2.0	mg/Kg		08/27/18 12:20	08/28/18 22:08	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.064		0.017	0.0025	mg/Kg		08/28/18 15:27	08/30/18 19:35	1

Client Sample ID: DG-E10S-0.5-1
Date Collected: 08/23/18 14:38
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-3
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.6		1.3	0.22	mg/Kg		08/27/18 12:20	08/28/18 22:13	4
Arsenic	13		2.6	0.22	mg/Kg		08/27/18 12:20	08/28/18 22:13	4
Barium	68		1.3	0.19	mg/Kg		08/27/18 12:20	08/28/18 22:13	4
Beryllium	ND		0.26	0.085	mg/Kg		08/27/18 12:20	08/28/18 22:13	4
Cadmium	0.68		0.33	0.032	mg/Kg		08/27/18 12:20	08/28/18 22:13	4
Chromium	28		1.3	0.14	mg/Kg		08/27/18 12:20	08/28/18 22:13	4
Cobalt	13		0.52	0.052	mg/Kg		08/27/18 12:20	08/28/18 22:13	4
Copper	220		3.9	1.9	mg/Kg		08/27/18 12:20	08/28/18 22:13	4
Lead	400		1.3	0.27	mg/Kg		08/27/18 12:20	08/28/18 22:13	4
Molybdenum	1.0	J	1.3	0.17	mg/Kg		08/27/18 12:20	08/28/18 22:13	4
Nickel	24		1.3	0.13	mg/Kg		08/27/18 12:20	08/28/18 22:13	4
Selenium	0.86	J	2.6	0.39	mg/Kg		08/27/18 12:20	08/28/18 22:13	4
Silver	0.42	J	0.65	0.13	mg/Kg		08/27/18 12:20	08/28/18 22:13	4
Thallium	1.6		1.3	0.38	mg/Kg		08/27/18 12:20	08/28/18 22:13	4
Vanadium	94		1.3	0.18	mg/Kg		08/27/18 12:20	08/28/18 22:13	4
Zinc	190		3.9	1.7	mg/Kg		08/27/18 12:20	08/28/18 22:13	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.015	0.0022	mg/Kg		08/28/18 15:27	08/30/18 19:37	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88234-1

Client Sample ID: DG-E10S-3.5-4
Date Collected: 08/23/18 14:38
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-4
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.0	J	1.3	0.22	mg/Kg		08/27/18 12:20	08/28/18 22:18	4
Arsenic	2.1	J	2.7	0.23	mg/Kg		08/27/18 12:20	08/28/18 22:18	4
Barium	68		1.3	0.19	mg/Kg		08/27/18 12:20	08/28/18 22:18	4
Beryllium	ND		0.27	0.087	mg/Kg		08/27/18 12:20	08/28/18 22:18	4
Cadmium	0.054	J	0.33	0.033	mg/Kg		08/27/18 12:20	08/28/18 22:18	4
Chromium	19		1.3	0.14	mg/Kg		08/27/18 12:20	08/28/18 22:18	4
Cobalt	13		0.53	0.053	mg/Kg		08/27/18 12:20	08/28/18 22:18	4
Copper	120		4.0	1.9	mg/Kg		08/27/18 12:20	08/28/18 22:18	4
Lead	76		1.3	0.28	mg/Kg		08/27/18 12:20	08/28/18 22:18	4
Molybdenum	ND		1.3	0.17	mg/Kg		08/27/18 12:20	08/28/18 22:18	4
Nickel	13		1.3	0.14	mg/Kg		08/27/18 12:20	08/28/18 22:18	4
Selenium	0.62	J	2.7	0.40	mg/Kg		08/27/18 12:20	08/28/18 22:18	4
Silver	0.24	J	0.67	0.13	mg/Kg		08/27/18 12:20	08/28/18 22:18	4
Thallium	1.0	J	1.3	0.39	mg/Kg		08/27/18 12:20	08/28/18 22:18	4
Vanadium	120		1.3	0.18	mg/Kg		08/27/18 12:20	08/28/18 22:18	4
Zinc	91		4.0	1.7	mg/Kg		08/27/18 12:20	08/28/18 22:18	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.016	0.0023	mg/Kg		08/28/18 15:27	08/30/18 19:39	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88234-1

Client Sample ID: DG-H10S-0.5-1
Date Collected: 08/23/18 15:32
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-5
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.1	0.19	mg/Kg		08/27/18 12:20	08/28/18 22:22	4
Arsenic	**0.50**	**J**	2.2	0.19	mg/Kg		08/27/18 12:20	08/28/18 22:22	4
Barium	**40**		1.1	0.16	mg/Kg		08/27/18 12:20	08/28/18 22:22	4
Beryllium	ND		0.22	0.073	mg/Kg		08/27/18 12:20	08/28/18 22:22	4
Cadmium	ND		0.28	0.028	mg/Kg		08/27/18 12:20	08/28/18 22:22	4
Chromium	**12**		1.1	0.12	mg/Kg		08/27/18 12:20	08/28/18 22:22	4
Cobalt	**9.2**		0.45	0.045	mg/Kg		08/27/18 12:20	08/28/18 22:22	4
Copper	**120**		3.4	1.6	mg/Kg		08/27/18 12:20	08/28/18 22:22	4
Lead	**23**		1.1	0.24	mg/Kg		08/27/18 12:20	08/28/18 22:22	4
Molybdenum	**0.16**	**J**	1.1	0.14	mg/Kg		08/27/18 12:20	08/28/18 22:22	4
Nickel	**4.3**		1.1	0.11	mg/Kg		08/27/18 12:20	08/28/18 22:22	4
Selenium	**0.67**	**J**	2.2	0.34	mg/Kg		08/27/18 12:20	08/28/18 22:22	4
Silver	**0.12**	**J**	0.56	0.11	mg/Kg		08/27/18 12:20	08/28/18 22:22	4
Thallium	**0.73**	**J**	1.1	0.33	mg/Kg		08/27/18 12:20	08/28/18 22:22	4
Vanadium	**100**		1.1	0.15	mg/Kg		08/27/18 12:20	08/28/18 22:22	4
Zinc	**40**		3.4	1.4	mg/Kg		08/27/18 12:20	08/28/18 22:22	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.056**		0.015	0.0022	mg/Kg		08/28/18 15:27	08/30/18 19:42	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88234-1

Client Sample ID: DG-H10S-3.5-4
Date Collected: 08/23/18 15:32
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-6
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.51	J	1.3	0.22	mg/Kg		08/27/18 12:20	08/28/18 22:27	4
Arsenic	1.8	J	2.7	0.23	mg/Kg		08/27/18 12:20	08/28/18 22:27	4
Barium	33		1.3	0.19	mg/Kg		08/27/18 12:20	08/28/18 22:27	4
Beryllium	ND		0.27	0.087	mg/Kg		08/27/18 12:20	08/28/18 22:27	4
Cadmium	ND		0.34	0.033	mg/Kg		08/27/18 12:20	08/28/18 22:27	4
Chromium	8.2		1.3	0.14	mg/Kg		08/27/18 12:20	08/28/18 22:27	4
Cobalt	11		0.54	0.054	mg/Kg		08/27/18 12:20	08/28/18 22:27	4
Copper	68		4.0	1.9	mg/Kg		08/27/18 12:20	08/28/18 22:27	4
Lead	45		1.3	0.28	mg/Kg		08/27/18 12:20	08/28/18 22:27	4
Molybdenum	0.32	J	1.3	0.17	mg/Kg		08/27/18 12:20	08/28/18 22:27	4
Nickel	3.9		1.3	0.14	mg/Kg		08/27/18 12:20	08/28/18 22:27	4
Selenium	0.80	J	2.7	0.40	mg/Kg		08/27/18 12:20	08/28/18 22:27	4
Silver	0.26	J	0.67	0.14	mg/Kg		08/27/18 12:20	08/28/18 22:27	4
Thallium	0.69	J	1.3	0.39	mg/Kg		08/27/18 12:20	08/28/18 22:27	4
Vanadium	82		1.3	0.18	mg/Kg		08/27/18 12:20	08/28/18 22:27	4
Zinc	62		4.0	1.7	mg/Kg		08/27/18 12:20	08/28/18 22:27	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.030		0.016	0.0023	mg/Kg		08/28/18 15:27	08/30/18 19:44	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88234-1

Client Sample ID: DG-I10S-0.5-1
Date Collected: 08/23/18 15:55
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-7
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	F1 F2	1.7	0.28	mg/Kg		08/27/18 12:20	08/28/18 21:16	4
Arsenic	**3.7**		3.4	0.29	mg/Kg		08/27/18 12:20	08/28/18 21:16	4
Barium	**500**	**F2**	1.7	0.24	mg/Kg		08/27/18 12:20	08/28/18 21:16	4
Beryllium	ND		0.34	0.11	mg/Kg		08/27/18 12:20	08/28/18 21:16	4
Cadmium	**2.2**		0.43	0.042	mg/Kg		08/27/18 12:20	08/28/18 21:16	4
Chromium	**22**	**F1**	1.7	0.18	mg/Kg		08/27/18 12:20	08/28/18 21:16	4
Cobalt	**3.9**		0.68	0.068	mg/Kg		08/27/18 12:20	08/28/18 21:16	4
Copper	**43**	**F1**	5.1	2.4	mg/Kg		08/27/18 12:20	08/28/18 21:16	4
Lead	**500**	**F2**	1.7	0.36	mg/Kg		08/27/18 12:20	08/28/18 21:16	4
Molybdenum	**0.40**	**J**	1.7	0.22	mg/Kg		08/27/18 12:20	08/28/18 21:16	4
Nickel	**19**	**F1**	1.7	0.17	mg/Kg		08/27/18 12:20	08/28/18 21:16	4
Selenium	ND		3.4	0.51	mg/Kg		08/27/18 12:20	08/28/18 21:16	4
Silver	**0.18**	**J**	0.85	0.17	mg/Kg		08/27/18 12:20	08/28/18 21:16	4
Thallium	**0.58**	**J**	1.7	0.50	mg/Kg		08/27/18 12:20	08/28/18 21:16	4
Vanadium	**20**	**F1**	1.7	0.23	mg/Kg		08/27/18 12:20	08/28/18 21:16	4
Zinc	**520**	**F2**	5.1	2.2	mg/Kg		08/27/18 12:20	08/28/18 21:16	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.092**		0.015	0.0022	mg/Kg		08/28/18 15:27	08/30/18 19:30	1

Client Sample ID: DG-I10S-3.5-4

Date Collected: 08/23/18 15:55
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-8

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.9		1.5	0.25	mg/Kg		08/27/18 12:20	08/28/18 22:41	4
Arsenic	5.1		3.0	0.25	mg/Kg		08/27/18 12:20	08/28/18 22:41	4
Barium	82		1.5	0.21	mg/Kg		08/27/18 12:20	08/28/18 22:41	4
Beryllium	0.23	J	0.30	0.096	mg/Kg		08/27/18 12:20	08/28/18 22:41	4
Cadmium	ND		0.37	0.037	mg/Kg		08/27/18 12:20	08/28/18 22:41	4
Chromium	350		1.5	0.16	mg/Kg		08/27/18 12:20	08/28/18 22:41	4
Cobalt	36		0.59	0.059	mg/Kg		08/27/18 12:20	08/28/18 22:41	4
Copper	34		4.4	2.1	mg/Kg		08/27/18 12:20	08/28/18 22:41	4
Lead	8.1		1.5	0.31	mg/Kg		08/27/18 12:20	08/28/18 22:41	4
Molybdenum	0.20	J	1.5	0.19	mg/Kg		08/27/18 12:20	08/28/18 22:41	4
Nickel	500		1.5	0.15	mg/Kg		08/27/18 12:20	08/28/18 22:41	4
Selenium	0.49	J	3.0	0.44	mg/Kg		08/27/18 12:20	08/28/18 22:41	4
Silver	0.24	J	0.74	0.15	mg/Kg		08/27/18 12:20	08/28/18 22:41	4
Thallium	0.82	J	1.5	0.43	mg/Kg		08/27/18 12:20	08/28/18 22:41	4
Vanadium	61		1.5	0.20	mg/Kg		08/27/18 12:20	08/28/18 22:41	4
Zinc	67		4.4	1.9	mg/Kg		08/27/18 12:20	08/28/18 22:41	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.087		0.015	0.0022	mg/Kg		08/28/18 15:27	08/30/18 19:46	1

Client Sample ID: DG-K10S-0.5-1
Date Collected: 08/23/18 16:10
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-9
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.5		1.3	0.21	mg/Kg		08/27/18 12:20	08/28/18 22:46	4
Arsenic	12		2.6	0.22	mg/Kg		08/27/18 12:20	08/28/18 22:46	4
Barium	490		1.3	0.18	mg/Kg		08/27/18 12:20	08/28/18 22:46	4
Beryllium	0.098	J	0.26	0.083	mg/Kg		08/27/18 12:20	08/28/18 22:46	4
Cadmium	2.0		0.32	0.032	mg/Kg		08/27/18 12:20	08/28/18 22:46	4
Chromium	62		1.3	0.14	mg/Kg		08/27/18 12:20	08/28/18 22:46	4
Cobalt	11		0.51	0.051	mg/Kg		08/27/18 12:20	08/28/18 22:46	4
Copper	240		3.8	1.8	mg/Kg		08/27/18 12:20	08/28/18 22:46	4
Lead	440		1.3	0.27	mg/Kg		08/27/18 12:20	08/28/18 22:46	4
Molybdenum	4.7		1.3	0.16	mg/Kg		08/27/18 12:20	08/28/18 22:46	4
Nickel	41		1.3	0.13	mg/Kg		08/27/18 12:20	08/28/18 22:46	4
Selenium	ND		2.6	0.38	mg/Kg		08/27/18 12:20	08/28/18 22:46	4
Silver	0.29	J	0.64	0.13	mg/Kg		08/27/18 12:20	08/28/18 22:46	4
Thallium	0.75	J	1.3	0.37	mg/Kg		08/27/18 12:20	08/28/18 22:46	4
Vanadium	67		1.3	0.17	mg/Kg		08/27/18 12:20	08/28/18 22:46	4
Zinc	510		3.8	1.6	mg/Kg		08/27/18 12:20	08/28/18 22:46	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.0		0.016	0.0024	mg/Kg		08/28/18 15:27	08/30/18 19:53	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88234-1

Client Sample ID: DG-K10S-3.5-4
Date Collected: 08/23/18 16:10
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-10
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.9		1.8	0.30	mg/Kg		08/27/18 12:20	08/28/18 22:51	4
Arsenic	4.4		3.6	0.31	mg/Kg		08/27/18 12:20	08/28/18 22:51	4
Barium	120		1.8	0.26	mg/Kg		08/27/18 12:20	08/28/18 22:51	4
Beryllium	ND		0.36	0.12	mg/Kg		08/27/18 12:20	08/28/18 22:51	4
Cadmium	0.29	J	0.45	0.045	mg/Kg		08/27/18 12:20	08/28/18 22:51	4
Chromium	88		1.8	0.19	mg/Kg		08/27/18 12:20	08/28/18 22:51	4
Cobalt	17		0.72	0.072	mg/Kg		08/27/18 12:20	08/28/18 22:51	4
Copper	98		5.4	2.6	mg/Kg		08/27/18 12:20	08/28/18 22:51	4
Lead	330		1.8	0.38	mg/Kg		08/27/18 12:20	08/28/18 22:51	4
Molybdenum	ND		1.8	0.23	mg/Kg		08/27/18 12:20	08/28/18 22:51	4
Nickel	150		1.8	0.18	mg/Kg		08/27/18 12:20	08/28/18 22:51	4
Selenium	0.74	J	3.6	0.54	mg/Kg		08/27/18 12:20	08/28/18 22:51	4
Silver	0.67	J	0.90	0.18	mg/Kg		08/27/18 12:20	08/28/18 22:51	4
Thallium	1.3	J	1.8	0.52	mg/Kg		08/27/18 12:20	08/28/18 22:51	4
Vanadium	88		1.8	0.25	mg/Kg		08/27/18 12:20	08/28/18 22:51	4
Zinc	160		5.4	2.3	mg/Kg		08/27/18 12:20	08/28/18 22:51	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.28		0.016	0.0024	mg/Kg		08/28/18 15:27	08/30/18 19:56	1

Client Sample ID: DG-F8S-0.5-1

Date Collected: 08/23/18 10:30
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-11

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.2		1.1	0.18	mg/Kg		08/27/18 12:20	08/28/18 22:56	4
Arsenic	14		2.2	0.18	mg/Kg		08/27/18 12:20	08/28/18 22:56	4
Barium	69		1.1	0.15	mg/Kg		08/27/18 12:20	08/28/18 22:56	4
Beryllium	ND		0.22	0.070	mg/Kg		08/27/18 12:20	08/28/18 22:56	4
Cadmium	0.94		0.27	0.027	mg/Kg		08/27/18 12:20	08/28/18 22:56	4
Chromium	12		1.1	0.11	mg/Kg		08/27/18 12:20	08/28/18 22:56	4
Cobalt	8.4		0.43	0.043	mg/Kg		08/27/18 12:20	08/28/18 22:56	4
Copper	110		3.2	1.5	mg/Kg		08/27/18 12:20	08/28/18 22:56	4
Lead	290		1.1	0.23	mg/Kg		08/27/18 12:20	08/28/18 22:56	4
Molybdenum	0.98	J	1.1	0.14	mg/Kg		08/27/18 12:20	08/28/18 22:56	4
Nickel	13		1.1	0.11	mg/Kg		08/27/18 12:20	08/28/18 22:56	4
Selenium	0.69	J	2.2	0.32	mg/Kg		08/27/18 12:20	08/28/18 22:56	4
Silver	0.31	J	0.54	0.11	mg/Kg		08/27/18 12:20	08/28/18 22:56	4
Thallium	0.31	J	1.1	0.31	mg/Kg		08/27/18 12:20	08/28/18 22:56	4
Vanadium	45		1.1	0.15	mg/Kg		08/27/18 12:20	08/28/18 22:56	4
Zinc	210		3.2	1.4	mg/Kg		08/27/18 12:20	08/28/18 22:56	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10		0.016	0.0023	mg/Kg		08/28/18 15:27	08/30/18 19:58	1

Client Sample ID: DG-F8S-3.5-4

Date Collected: 08/23/18 10:30
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-12

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.1		1.3	0.22	mg/Kg		08/27/18 12:20	08/28/18 23:01	4
Arsenic	7.0		2.6	0.23	mg/Kg		08/27/18 12:20	08/28/18 23:01	4
Barium	78		1.3	0.19	mg/Kg		08/27/18 12:20	08/28/18 23:01	4
Beryllium	0.15	J	0.26	0.086	mg/Kg		08/27/18 12:20	08/28/18 23:01	4
Cadmium	0.21	J	0.33	0.033	mg/Kg		08/27/18 12:20	08/28/18 23:01	4
Chromium	48		1.3	0.14	mg/Kg		08/27/18 12:20	08/28/18 23:01	4
Cobalt	8.0		0.53	0.053	mg/Kg		08/27/18 12:20	08/28/18 23:01	4
Copper	32		4.0	1.9	mg/Kg		08/27/18 12:20	08/28/18 23:01	4
Lead	42		1.3	0.28	mg/Kg		08/27/18 12:20	08/28/18 23:01	4
Molybdenum	0.44	J	1.3	0.17	mg/Kg		08/27/18 12:20	08/28/18 23:01	4
Nickel	39		1.3	0.14	mg/Kg		08/27/18 12:20	08/28/18 23:01	4
Selenium	0.70	J	2.6	0.40	mg/Kg		08/27/18 12:20	08/28/18 23:01	4
Silver	ND		0.66	0.13	mg/Kg		08/27/18 12:20	08/28/18 23:01	4
Thallium	0.55	J	1.3	0.38	mg/Kg		08/27/18 12:20	08/28/18 23:01	4
Vanadium	39		1.3	0.18	mg/Kg		08/27/18 12:20	08/28/18 23:01	4
Zinc	57		4.0	1.7	mg/Kg		08/27/18 12:20	08/28/18 23:01	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.016	0.0024	mg/Kg		08/28/18 15:27	08/30/18 20:01	1

Client Sample ID: DG-E8S-0.5-1

Date Collected: 08/23/18 10:50
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-13

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.5	0.26	mg/Kg		08/27/18 12:20	08/28/18 23:05	4
Arsenic	**0.87**	**J**	3.1	0.26	mg/Kg		08/27/18 12:20	08/28/18 23:05	4
Barium	**63**		1.5	0.22	mg/Kg		08/27/18 12:20	08/28/18 23:05	4
Beryllium	ND		0.31	0.10	mg/Kg		08/27/18 12:20	08/28/18 23:05	4
Cadmium	ND		0.38	0.038	mg/Kg		08/27/18 12:20	08/28/18 23:05	4
Chromium	**11**		1.5	0.16	mg/Kg		08/27/18 12:20	08/28/18 23:05	4
Cobalt	**10**		0.62	0.062	mg/Kg		08/27/18 12:20	08/28/18 23:05	4
Copper	**130**		4.6	2.2	mg/Kg		08/27/18 12:20	08/28/18 23:05	4
Lead	**15**		1.5	0.32	mg/Kg		08/27/18 12:20	08/28/18 23:05	4
Molybdenum	**0.21**	**J**	1.5	0.20	mg/Kg		08/27/18 12:20	08/28/18 23:05	4
Nickel	**4.1**		1.5	0.16	mg/Kg		08/27/18 12:20	08/28/18 23:05	4
Selenium	**0.54**	**J**	3.1	0.46	mg/Kg		08/27/18 12:20	08/28/18 23:05	4
Silver	**0.20**	**J**	0.77	0.16	mg/Kg		08/27/18 12:20	08/28/18 23:05	4
Thallium	**1.1**	**J**	1.5	0.45	mg/Kg		08/27/18 12:20	08/28/18 23:05	4
Vanadium	**110**		1.5	0.21	mg/Kg		08/27/18 12:20	08/28/18 23:05	4
Zinc	**45**		4.6	2.0	mg/Kg		08/27/18 12:20	08/28/18 23:05	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.085**		0.017	0.0025	mg/Kg		08/28/18 15:27	08/30/18 20:03	1

Client Sample ID: DG-E8S-3.5-4

Date Collected: 08/23/18 10:50
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-14

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	60		1.9	0.32	mg/Kg		08/27/18 12:41	08/29/18 09:59	4
Arsenic	7.3		3.8	0.32	mg/Kg		08/27/18 12:41	08/29/18 09:59	4
Barium	84		1.9	0.27	mg/Kg		08/27/18 12:41	08/29/18 09:59	4
Beryllium	ND		0.38	0.12	mg/Kg		08/27/18 12:41	08/29/18 09:59	4
Cadmium	0.073	J	0.48	0.047	mg/Kg		08/27/18 12:41	08/29/18 09:59	4
Chromium	17		1.9	0.20	mg/Kg		08/27/18 12:41	08/29/18 09:59	4
Cobalt	10		0.76	0.076	mg/Kg		08/27/18 12:41	08/29/18 09:59	4
Copper	380		5.7	2.7	mg/Kg		08/27/18 12:41	08/29/18 09:59	4
Lead	170		1.9	0.40	mg/Kg		08/27/18 12:41	08/29/18 09:59	4
Molybdenum	0.64	J	1.9	0.24	mg/Kg		08/27/18 12:41	08/29/18 09:59	4
Nickel	16		1.9	0.19	mg/Kg		08/27/18 12:41	08/29/18 09:59	4
Selenium	ND		3.8	0.57	mg/Kg		08/27/18 12:41	08/29/18 09:59	4
Silver	ND		0.95	0.19	mg/Kg		08/27/18 12:41	08/29/18 09:59	4
Thallium	1.1	J	1.9	0.55	mg/Kg		08/27/18 12:41	08/29/18 09:59	4
Vanadium	79		1.9	0.26	mg/Kg		08/27/18 12:41	08/29/18 09:59	4
Zinc	95		5.7	2.4	mg/Kg		08/27/18 12:41	08/29/18 09:59	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13		0.015	0.0023	mg/Kg		08/28/18 15:27	08/30/18 20:05	1

Client Sample ID: DG-D8S-0.5-1

Date Collected: 08/23/18 11:20
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-15

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.7	0.28	mg/Kg		08/27/18 12:41	08/29/18 10:04	4
Arsenic	**0.41**	**J**	3.4	0.29	mg/Kg		08/27/18 12:41	08/29/18 10:04	4
Barium	**35**		1.7	0.24	mg/Kg		08/27/18 12:41	08/29/18 10:04	4
Beryllium	ND		0.34	0.11	mg/Kg		08/27/18 12:41	08/29/18 10:04	4
Cadmium	ND		0.42	0.042	mg/Kg		08/27/18 12:41	08/29/18 10:04	4
Chromium	**10**		1.7	0.18	mg/Kg		08/27/18 12:41	08/29/18 10:04	4
Cobalt	**12**		0.68	0.068	mg/Kg		08/27/18 12:41	08/29/18 10:04	4
Copper	**140**		5.1	2.4	mg/Kg		08/27/18 12:41	08/29/18 10:04	4
Lead	**9.9**		1.7	0.36	mg/Kg		08/27/18 12:41	08/29/18 10:04	4
Molybdenum	**0.34**	**J**	1.7	0.22	mg/Kg		08/27/18 12:41	08/29/18 10:04	4
Nickel	**5.3**		1.7	0.17	mg/Kg		08/27/18 12:41	08/29/18 10:04	4
Selenium	ND		3.4	0.51	mg/Kg		08/27/18 12:41	08/29/18 10:04	4
Silver	ND		0.85	0.17	mg/Kg		08/27/18 12:41	08/29/18 10:04	4
Thallium	**0.94**	**J**	1.7	0.49	mg/Kg		08/27/18 12:41	08/29/18 10:04	4
Vanadium	**100**		1.7	0.23	mg/Kg		08/27/18 12:41	08/29/18 10:04	4
Zinc	**42**		5.1	2.2	mg/Kg		08/27/18 12:41	08/29/18 10:04	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.036**		0.015	0.0023	mg/Kg		08/28/18 15:27	08/30/18 20:07	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88234-1

Client Sample ID: DG-D8S-3.5-4
Date Collected: 08/23/18 11:20
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-16
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.2	J	1.7	0.28	mg/Kg		08/27/18 12:41	08/29/18 10:09	4
Arsenic	2.5	J	3.4	0.29	mg/Kg		08/27/18 12:41	08/29/18 10:09	4
Barium	58		1.7	0.24	mg/Kg		08/27/18 12:41	08/29/18 10:09	4
Beryllium	ND		0.34	0.11	mg/Kg		08/27/18 12:41	08/29/18 10:09	4
Cadmium	ND		0.42	0.042	mg/Kg		08/27/18 12:41	08/29/18 10:09	4
Chromium	5.7		1.7	0.18	mg/Kg		08/27/18 12:41	08/29/18 10:09	4
Cobalt	6.0		0.68	0.068	mg/Kg		08/27/18 12:41	08/29/18 10:09	4
Copper	15		5.1	2.4	mg/Kg		08/27/18 12:41	08/29/18 10:09	4
Lead	32		1.7	0.36	mg/Kg		08/27/18 12:41	08/29/18 10:09	4
Molybdenum	ND		1.7	0.22	mg/Kg		08/27/18 12:41	08/29/18 10:09	4
Nickel	3.4		1.7	0.17	mg/Kg		08/27/18 12:41	08/29/18 10:09	4
Selenium	ND		3.4	0.51	mg/Kg		08/27/18 12:41	08/29/18 10:09	4
Silver	ND		0.85	0.17	mg/Kg		08/27/18 12:41	08/29/18 10:09	4
Thallium	ND		1.7	0.49	mg/Kg		08/27/18 12:41	08/29/18 10:09	4
Vanadium	36		1.7	0.23	mg/Kg		08/27/18 12:41	08/29/18 10:09	4
Zinc	59		5.1	2.2	mg/Kg		08/27/18 12:41	08/29/18 10:09	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.18		0.015	0.0022	mg/Kg		08/28/18 15:27	08/30/18 20:10	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88234-1

Client Sample ID: DG-B8S-0.5-1
Date Collected: 08/23/18 12:15
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-17
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.6		1.8	0.30	mg/Kg		08/27/18 12:41	08/29/18 10:23	4
Arsenic	7.0		3.6	0.31	mg/Kg		08/27/18 12:41	08/29/18 10:23	4
Barium	100		1.8	0.26	mg/Kg		08/27/18 12:41	08/29/18 10:23	4
Beryllium	0.19	J	0.36	0.12	mg/Kg		08/27/18 12:41	08/29/18 10:23	4
Cadmium	0.21	J	0.45	0.045	mg/Kg		08/27/18 12:41	08/29/18 10:23	4
Chromium	43		1.8	0.19	mg/Kg		08/27/18 12:41	08/29/18 10:23	4
Cobalt	11		0.73	0.073	mg/Kg		08/27/18 12:41	08/29/18 10:23	4
Copper	110		5.5	2.6	mg/Kg		08/27/18 12:41	08/29/18 10:23	4
Lead	260		1.8	0.38	mg/Kg		08/27/18 12:41	08/29/18 10:23	4
Molybdenum	0.87	J	1.8	0.23	mg/Kg		08/27/18 12:41	08/29/18 10:23	4
Nickel	48		1.8	0.19	mg/Kg		08/27/18 12:41	08/29/18 10:23	4
Selenium	ND		3.6	0.55	mg/Kg		08/27/18 12:41	08/29/18 10:23	4
Silver	ND		0.91	0.18	mg/Kg		08/27/18 12:41	08/29/18 10:23	4
Thallium	1.1	J	1.8	0.53	mg/Kg		08/27/18 12:41	08/29/18 10:23	4
Vanadium	52		1.8	0.25	mg/Kg		08/27/18 12:41	08/29/18 10:23	4
Zinc	120		5.5	2.3	mg/Kg		08/27/18 12:41	08/29/18 10:23	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.046		0.017	0.0025	mg/Kg		08/28/18 15:27	08/30/18 20:12	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88234-1

Client Sample ID: DG-B8S-3.5-4
Date Collected: 08/23/18 12:15
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-18
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.2		1.6	0.26	mg/Kg		08/27/18 12:41	08/29/18 10:28	4
Arsenic	4.8		3.1	0.27	mg/Kg		08/27/18 12:41	08/29/18 10:28	4
Barium	160		1.6	0.22	mg/Kg		08/27/18 12:41	08/29/18 10:28	4
Beryllium	0.15	J	0.31	0.10	mg/Kg		08/27/18 12:41	08/29/18 10:28	4
Cadmium	ND		0.39	0.039	mg/Kg		08/27/18 12:41	08/29/18 10:28	4
Chromium	180		1.6	0.17	mg/Kg		08/27/18 12:41	08/29/18 10:28	4
Cobalt	18		0.63	0.063	mg/Kg		08/27/18 12:41	08/29/18 10:28	4
Copper	22		4.7	2.2	mg/Kg		08/27/18 12:41	08/29/18 10:28	4
Lead	2.0		1.6	0.33	mg/Kg		08/27/18 12:41	08/29/18 10:28	4
Molybdenum	ND		1.6	0.20	mg/Kg		08/27/18 12:41	08/29/18 10:28	4
Nickel	160		1.6	0.16	mg/Kg		08/27/18 12:41	08/29/18 10:28	4
Selenium	ND		3.1	0.47	mg/Kg		08/27/18 12:41	08/29/18 10:28	4
Silver	ND		0.79	0.16	mg/Kg		08/27/18 12:41	08/29/18 10:28	4
Thallium	1.5	J	1.6	0.46	mg/Kg		08/27/18 12:41	08/29/18 10:28	4
Vanadium	120		1.6	0.21	mg/Kg		08/27/18 12:41	08/29/18 10:28	4
Zinc	48		4.7	2.0	mg/Kg		08/27/18 12:41	08/29/18 10:28	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.015	0.0021	mg/Kg		08/28/18 15:27	08/30/18 20:14	1

Client Sample ID: DG-C10S-0.5-1

Date Collected: 08/23/18 12:25
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-19

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.1	J	2.0	0.33	mg/Kg		08/27/18 12:41	08/29/18 10:32	4
Arsenic	11		4.0	0.34	mg/Kg		08/27/18 12:41	08/29/18 10:32	4
Barium	34		2.0	0.28	mg/Kg		08/27/18 12:41	08/29/18 10:32	4
Beryllium	ND		0.40	0.13	mg/Kg		08/27/18 12:41	08/29/18 10:32	4
Cadmium	0.060	J	0.50	0.049	mg/Kg		08/27/18 12:41	08/29/18 10:32	4
Chromium	13		2.0	0.21	mg/Kg		08/27/18 12:41	08/29/18 10:32	4
Cobalt	19		0.79	0.079	mg/Kg		08/27/18 12:41	08/29/18 10:32	4
Copper	150		5.9	2.8	mg/Kg		08/27/18 12:41	08/29/18 10:32	4
Lead	58		2.0	0.42	mg/Kg		08/27/18 12:41	08/29/18 10:32	4
Molybdenum	0.47	J	2.0	0.25	mg/Kg		08/27/18 12:41	08/29/18 10:32	4
Nickel	11		2.0	0.20	mg/Kg		08/27/18 12:41	08/29/18 10:32	4
Selenium	ND		4.0	0.59	mg/Kg		08/27/18 12:41	08/29/18 10:32	4
Silver	ND		0.99	0.20	mg/Kg		08/27/18 12:41	08/29/18 10:32	4
Thallium	1.9	J	2.0	0.57	mg/Kg		08/27/18 12:41	08/29/18 10:32	4
Vanadium	130		2.0	0.27	mg/Kg		08/27/18 12:41	08/29/18 10:32	4
Zinc	88		5.9	2.5	mg/Kg		08/27/18 12:41	08/29/18 10:32	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.084		0.017	0.0025	mg/Kg		08/28/18 15:27	08/30/18 20:21	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88234-1

Client Sample ID: DG-C10S-3.5-4
Date Collected: 08/23/18 12:25
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-20
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.6		1.9	0.32	mg/Kg		08/27/18 12:41	08/29/18 10:37	4
Arsenic	190		3.9	0.33	mg/Kg		08/27/18 12:41	08/29/18 10:37	4
Barium	120		1.9	0.28	mg/Kg		08/27/18 12:41	08/29/18 10:37	4
Beryllium	0.42		0.39	0.13	mg/Kg		08/27/18 12:41	08/29/18 10:37	4
Cadmium	ND		0.49	0.048	mg/Kg		08/27/18 12:41	08/29/18 10:37	4
Chromium	180		1.9	0.21	mg/Kg		08/27/18 12:41	08/29/18 10:37	4
Cobalt	24		0.78	0.078	mg/Kg		08/27/18 12:41	08/29/18 10:37	4
Copper	45		5.8	2.8	mg/Kg		08/27/18 12:41	08/29/18 10:37	4
Lead	16		1.9	0.41	mg/Kg		08/27/18 12:41	08/29/18 10:37	4
Molybdenum	0.56	J	1.9	0.25	mg/Kg		08/27/18 12:41	08/29/18 10:37	4
Nickel	200		1.9	0.20	mg/Kg		08/27/18 12:41	08/29/18 10:37	4
Selenium	ND		3.9	0.58	mg/Kg		08/27/18 12:41	08/29/18 10:37	4
Silver	ND		0.97	0.20	mg/Kg		08/27/18 12:41	08/29/18 10:37	4
Thallium	1.1	J	1.9	0.56	mg/Kg		08/27/18 12:41	08/29/18 10:37	4
Vanadium	89		1.9	0.26	mg/Kg		08/27/18 12:41	08/29/18 10:37	4
Zinc	81		5.8	2.5	mg/Kg		08/27/18 12:41	08/29/18 10:37	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.3		0.065	0.0095	mg/Kg		08/28/18 15:27	08/30/18 20:51	4

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250280/1-A
Matrix: Solid
Analysis Batch: 250454

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250280

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Arsenic	ND		1.0	0.085	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Barium	ND		0.50	0.071	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Beryllium	ND		0.10	0.033	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Cadmium	ND		0.13	0.012	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Chromium	ND		0.50	0.053	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Cobalt	ND		0.20	0.020	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Copper	ND		1.5	0.71	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Lead	ND		0.50	0.11	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Nickel	ND		0.50	0.051	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Selenium	ND		1.0	0.15	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Silver	ND		0.25	0.051	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Thallium	ND		0.50	0.15	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Vanadium	ND		0.50	0.068	mg/Kg		08/27/18 12:20	08/28/18 20:48	1
Zinc	ND		1.5	0.64	mg/Kg		08/27/18 12:20	08/28/18 20:48	1

Lab Sample ID: LCS 720-250280/2-A
Matrix: Solid
Analysis Batch: 250454

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250280

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	45.0		mg/Kg		90	80 - 120
Arsenic	50.0	44.7		mg/Kg		89	80 - 120
Barium	50.0	46.9		mg/Kg		94	80 - 120
Beryllium	50.0	46.6		mg/Kg		93	80 - 120
Cadmium	50.0	45.7		mg/Kg		91	80 - 120
Chromium	50.0	46.3		mg/Kg		93	80 - 120
Cobalt	50.0	46.2		mg/Kg		92	80 - 120
Copper	50.0	46.6		mg/Kg		93	80 - 120
Lead	50.0	46.3		mg/Kg		93	80 - 120
Molybdenum	50.0	46.1		mg/Kg		92	80 - 120
Nickel	50.0	46.4		mg/Kg		93	80 - 120
Selenium	50.0	43.7		mg/Kg		87	80 - 120
Silver	25.0	23.0		mg/Kg		92	80 - 120
Thallium	50.0	46.1		mg/Kg		92	80 - 120
Vanadium	50.0	46.5		mg/Kg		93	80 - 120
Zinc	50.0	45.3		mg/Kg		91	80 - 120

Lab Sample ID: 720-88234-7 MS
Matrix: Solid
Analysis Batch: 250454

Client Sample ID: DG-I10S-0.5-1
Prep Type: Total/NA
Prep Batch: 250280

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND	F1 F2	49.0	13.4	F1	mg/Kg		27	75 - 125
Arsenic	3.7		49.0	53.8		mg/Kg		102	75 - 125
Barium	500	F2	49.0	363	4	mg/Kg		-290	75 - 125
Beryllium	ND		49.0	51.8		mg/Kg		106	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88234-7 MS
Matrix: Solid
Analysis Batch: 250454

Client Sample ID: DG-I10S-0.5-1
Prep Type: Total/NA
Prep Batch: 250280

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	2.2		49.0	49.0		mg/Kg		96	75 - 125
Chromium	22	F1	49.0	76.8		mg/Kg		112	75 - 125
Cobalt	3.9		49.0	52.8		mg/Kg		100	75 - 125
Copper	43	F1	49.0	78.4	F1	mg/Kg		73	75 - 125
Lead	500	F2	49.0	228	4	mg/Kg		-550	75 - 125
Molybdenum	0.40	J	49.0	48.0		mg/Kg		97	75 - 125
Nickel	19	F1	49.0	73.9		mg/Kg		113	75 - 125
Selenium	ND		49.0	47.4		mg/Kg		97	75 - 125
Silver	0.18	J	24.5	26.2		mg/Kg		106	75 - 125
Thallium	0.58	J	49.0	45.5		mg/Kg		92	75 - 125
Vanadium	20	F1	49.0	78.6		mg/Kg		119	75 - 125
Zinc	520	F2	49.0	235	4	mg/Kg		-574	75 - 125

Lab Sample ID: 720-88234-7 MSD
Matrix: Solid
Analysis Batch: 250454

Client Sample ID: DG-I10S-0.5-1
Prep Type: Total/NA
Prep Batch: 250280

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND	F1 F2	39.4	10.8	F1 F4	mg/Kg		27	75 - 125	21	20
Arsenic	3.7		39.4	46.4		mg/Kg		108	75 - 125	15	20
Barium	500	F2	39.4	479	4 F4	mg/Kg		-66	75 - 125	28	20
Beryllium	ND		39.4	45.5		mg/Kg		116	75 - 125	13	20
Cadmium	2.2		39.4	41.8		mg/Kg		101	75 - 125	16	20
Chromium	22	F1	39.4	82.2	F1	mg/Kg		153	75 - 125	7	20
Cobalt	3.9		39.4	46.8		mg/Kg		109	75 - 125	12	20
Copper	43	F1	39.4	82.1		mg/Kg		100	75 - 125	5	20
Lead	500	F2	39.4	355	4 F4	mg/Kg		-363	75 - 125	44	20
Molybdenum	0.40	J	39.4	40.2		mg/Kg		101	75 - 125	18	20
Nickel	19	F1	39.4	70.0	F1	mg/Kg		130	75 - 125	5	20
Selenium	ND		39.4	39.5		mg/Kg		100	75 - 125	18	20
Silver	0.18	J	19.7	23.0		mg/Kg		116	75 - 125	13	20
Thallium	0.58	J	39.4	38.1		mg/Kg		95	75 - 125	18	20
Vanadium	20	F1	39.4	77.0	F1	mg/Kg		144	75 - 125	2	20
Zinc	520	F2	39.4	341	4 F4	mg/Kg		-443	75 - 125	37	20

Lab Sample ID: MB 720-250292/1-A
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250292

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Arsenic	ND		1.0	0.085	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Barium	ND		0.50	0.071	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Beryllium	ND		0.10	0.033	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Cadmium	ND		0.13	0.012	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Chromium	ND		0.50	0.053	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Cobalt	ND		0.20	0.020	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Copper	ND		1.5	0.71	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Lead	ND		0.50	0.11	mg/Kg		08/27/18 12:41	08/29/18 09:26	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250292/1-A
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250292

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.50	0.064	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Nickel	ND		0.50	0.051	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Selenium	ND		1.0	0.15	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Silver	ND		0.25	0.051	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Thallium	ND		0.50	0.15	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Vanadium	ND		0.50	0.068	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Zinc	ND		1.5	0.64	mg/Kg		08/27/18 12:41	08/29/18 09:26	1

Lab Sample ID: LCS 720-250292/2-A
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250292

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	45.2		mg/Kg		90	80 - 120
Arsenic	50.0	44.9		mg/Kg		90	80 - 120
Barium	50.0	47.6		mg/Kg		95	80 - 120
Beryllium	50.0	47.8		mg/Kg		96	80 - 120
Cadmium	50.0	45.7		mg/Kg		91	80 - 120
Chromium	50.0	46.1		mg/Kg		92	80 - 120
Cobalt	50.0	46.1		mg/Kg		92	80 - 120
Copper	50.0	46.4		mg/Kg		93	80 - 120
Lead	50.0	46.2		mg/Kg		92	80 - 120
Molybdenum	50.0	46.2		mg/Kg		92	80 - 120
Nickel	50.0	46.6		mg/Kg		93	80 - 120
Selenium	50.0	43.9		mg/Kg		88	80 - 120
Silver	25.0	22.7		mg/Kg		91	80 - 120
Thallium	50.0	46.5		mg/Kg		93	80 - 120
Vanadium	50.0	46.1		mg/Kg		92	80 - 120
Zinc	50.0	45.3		mg/Kg		91	80 - 120

Lab Sample ID: 720-88216-A-9-K MS
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250292

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND	F1	45.5	12.0	F1	mg/Kg		26	75 - 125
Arsenic	1.2	J	45.5	51.7		mg/Kg		111	75 - 125
Barium	42	F1	45.5	93.3		mg/Kg		114	75 - 125
Beryllium	ND	F1	45.5	55.7		mg/Kg		123	75 - 125
Cadmium	ND		45.5	50.6		mg/Kg		111	75 - 125
Chromium	11		45.5	62.1		mg/Kg		112	75 - 125
Cobalt	8.2		45.5	58.2		mg/Kg		110	75 - 125
Copper	120	F1	45.5	162		mg/Kg		81	75 - 125
Lead	6.9		45.5	56.0		mg/Kg		108	75 - 125
Molybdenum	ND		45.5	49.3		mg/Kg		108	75 - 125
Nickel	5.0		45.5	54.6		mg/Kg		109	75 - 125
Selenium	ND		45.5	49.4		mg/Kg		109	75 - 125
Silver	ND	F1	22.7	27.5		mg/Kg		121	75 - 125
Thallium	0.83	J	45.5	49.7		mg/Kg		108	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88216-A-9-K MS
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250292

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	81	F1	45.5	134		mg/Kg		116	75 - 125
Zinc	32		45.5	82.5		mg/Kg		111	75 - 125

Lab Sample ID: 720-88216-A-9-L MSD
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250292

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND	F1	45.0	11.2	F1	mg/Kg		25	75 - 125	6	20
Arsenic	1.2	J	45.0	53.6		mg/Kg		116	75 - 125	4	20
Barium	42	F1	45.0	105	F1	mg/Kg		140	75 - 125	12	20
Beryllium	ND	F1	45.0	58.2	F1	mg/Kg		129	75 - 125	4	20
Cadmium	ND		45.0	51.4		mg/Kg		114	75 - 125	2	20
Chromium	11		45.0	67.6		mg/Kg		125	75 - 125	8	20
Cobalt	8.2		45.0	60.4		mg/Kg		116	75 - 125	4	20
Copper	120	F1	45.0	186	F1	mg/Kg		136	75 - 125	14	20
Lead	6.9		45.0	58.6		mg/Kg		115	75 - 125	4	20
Molybdenum	ND		45.0	49.9		mg/Kg		111	75 - 125	1	20
Nickel	5.0		45.0	56.1		mg/Kg		113	75 - 125	3	20
Selenium	ND		45.0	51.4		mg/Kg		114	75 - 125	4	20
Silver	ND	F1	22.5	29.3	F1	mg/Kg		130	75 - 125	6	20
Thallium	0.83	J	45.0	50.5		mg/Kg		110	75 - 125	2	20
Vanadium	81	F1	45.0	156	F1	mg/Kg		167	75 - 125	16	20
Zinc	32		45.0	87.9		mg/Kg		124	75 - 125	6	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250410/1-A
Matrix: Solid
Analysis Batch: 250678

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250410

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/28/18 15:27	08/30/18 19:16	1

Lab Sample ID: LCS 720-250410/2-A
Matrix: Solid
Analysis Batch: 250678

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250410

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.808		mg/Kg		97	80 - 120

Lab Sample ID: 720-88234-7 MS
Matrix: Solid
Analysis Batch: 250678

Client Sample ID: DG-I10S-0.5-1
Prep Type: Total/NA
Prep Batch: 250410

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.092		0.725	0.839		mg/Kg		103	75 - 125

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: 720-88234-7 MSD
Matrix: Solid
Analysis Batch: 250678

Client Sample ID: DG-I10S-0.5-1
Prep Type: Total/NA
Prep Batch: 250410

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.092		0.735	0.880		mg/Kg		107	75 - 125	5	20

Metals

Prep Batch: 250280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88234-1	DG-D10S-0.5-1	Total/NA	Solid	3050B	
720-88234-2	DG-D10S-3.5-4	Total/NA	Solid	3050B	
720-88234-3	DG-E10S-0.5-1	Total/NA	Solid	3050B	
720-88234-4	DG-E10S-3.5-4	Total/NA	Solid	3050B	
720-88234-5	DG-H10S-0.5-1	Total/NA	Solid	3050B	
720-88234-6	DG-H10S-3.5-4	Total/NA	Solid	3050B	
720-88234-7	DG-I10S-0.5-1	Total/NA	Solid	3050B	
720-88234-8	DG-I10S-3.5-4	Total/NA	Solid	3050B	
720-88234-9	DG-K10S-0.5-1	Total/NA	Solid	3050B	
720-88234-10	DG-K10S-3.5-4	Total/NA	Solid	3050B	
720-88234-11	DG-F8S-0.5-1	Total/NA	Solid	3050B	
720-88234-12	DG-F8S-3.5-4	Total/NA	Solid	3050B	
720-88234-13	DG-E8S-0.5-1	Total/NA	Solid	3050B	
MB 720-250280/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250280/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88234-7 MS	DG-I10S-0.5-1	Total/NA	Solid	3050B	
720-88234-7 MSD	DG-I10S-0.5-1	Total/NA	Solid	3050B	

Prep Batch: 250292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88234-14	DG-E8S-3.5-4	Total/NA	Solid	3050B	
720-88234-15	DG-D8S-0.5-1	Total/NA	Solid	3050B	
720-88234-16	DG-D8S-3.5-4	Total/NA	Solid	3050B	
720-88234-17	DG-B8S-0.5-1	Total/NA	Solid	3050B	
720-88234-18	DG-B8S-3.5-4	Total/NA	Solid	3050B	
720-88234-19	DG-C10S-0.5-1	Total/NA	Solid	3050B	
720-88234-20	DG-C10S-3.5-4	Total/NA	Solid	3050B	
MB 720-250292/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250292/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88216-A-9-K MS	Matrix Spike	Total/NA	Solid	3050B	
720-88216-A-9-L MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88234-1	DG-D10S-0.5-1	Total/NA	Solid	7471A	
720-88234-2	DG-D10S-3.5-4	Total/NA	Solid	7471A	
720-88234-3	DG-E10S-0.5-1	Total/NA	Solid	7471A	
720-88234-4	DG-E10S-3.5-4	Total/NA	Solid	7471A	
720-88234-5	DG-H10S-0.5-1	Total/NA	Solid	7471A	
720-88234-6	DG-H10S-3.5-4	Total/NA	Solid	7471A	
720-88234-7	DG-I10S-0.5-1	Total/NA	Solid	7471A	
720-88234-8	DG-I10S-3.5-4	Total/NA	Solid	7471A	
720-88234-9	DG-K10S-0.5-1	Total/NA	Solid	7471A	
720-88234-10	DG-K10S-3.5-4	Total/NA	Solid	7471A	
720-88234-11	DG-F8S-0.5-1	Total/NA	Solid	7471A	
720-88234-12	DG-F8S-3.5-4	Total/NA	Solid	7471A	
720-88234-13	DG-E8S-0.5-1	Total/NA	Solid	7471A	
720-88234-14	DG-E8S-3.5-4	Total/NA	Solid	7471A	
720-88234-15	DG-D8S-0.5-1	Total/NA	Solid	7471A	
720-88234-16	DG-D8S-3.5-4	Total/NA	Solid	7471A	
720-88234-17	DG-B8S-0.5-1	Total/NA	Solid	7471A	

Metals (Continued)

Prep Batch: 250410 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88234-18	DG-B8S-3.5-4	Total/NA	Solid	7471A	
720-88234-19	DG-C10S-0.5-1	Total/NA	Solid	7471A	
720-88234-20	DG-C10S-3.5-4	Total/NA	Solid	7471A	
MB 720-250410/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250410/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88234-7 MS	DG-I10S-0.5-1	Total/NA	Solid	7471A	
720-88234-7 MSD	DG-I10S-0.5-1	Total/NA	Solid	7471A	

Analysis Batch: 250454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88234-1	DG-D10S-0.5-1	Total/NA	Solid	6010B	250280
720-88234-2	DG-D10S-3.5-4	Total/NA	Solid	6010B	250280
720-88234-3	DG-E10S-0.5-1	Total/NA	Solid	6010B	250280
720-88234-4	DG-E10S-3.5-4	Total/NA	Solid	6010B	250280
720-88234-5	DG-H10S-0.5-1	Total/NA	Solid	6010B	250280
720-88234-6	DG-H10S-3.5-4	Total/NA	Solid	6010B	250280
720-88234-7	DG-I10S-0.5-1	Total/NA	Solid	6010B	250280
720-88234-8	DG-I10S-3.5-4	Total/NA	Solid	6010B	250280
720-88234-9	DG-K10S-0.5-1	Total/NA	Solid	6010B	250280
720-88234-10	DG-K10S-3.5-4	Total/NA	Solid	6010B	250280
720-88234-11	DG-F8S-0.5-1	Total/NA	Solid	6010B	250280
720-88234-12	DG-F8S-3.5-4	Total/NA	Solid	6010B	250280
720-88234-13	DG-E8S-0.5-1	Total/NA	Solid	6010B	250280
MB 720-250280/1-A	Method Blank	Total/NA	Solid	6010B	250280
LCS 720-250280/2-A	Lab Control Sample	Total/NA	Solid	6010B	250280
720-88234-7 MS	DG-I10S-0.5-1	Total/NA	Solid	6010B	250280
720-88234-7 MSD	DG-I10S-0.5-1	Total/NA	Solid	6010B	250280

Analysis Batch: 250491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88234-14	DG-E8S-3.5-4	Total/NA	Solid	6010B	250292
720-88234-15	DG-D8S-0.5-1	Total/NA	Solid	6010B	250292
720-88234-16	DG-D8S-3.5-4	Total/NA	Solid	6010B	250292
720-88234-17	DG-B8S-0.5-1	Total/NA	Solid	6010B	250292
720-88234-18	DG-B8S-3.5-4	Total/NA	Solid	6010B	250292
720-88234-19	DG-C10S-0.5-1	Total/NA	Solid	6010B	250292
720-88234-20	DG-C10S-3.5-4	Total/NA	Solid	6010B	250292
MB 720-250292/1-A	Method Blank	Total/NA	Solid	6010B	250292
LCS 720-250292/2-A	Lab Control Sample	Total/NA	Solid	6010B	250292
720-88216-A-9-K MS	Matrix Spike	Total/NA	Solid	6010B	250292
720-88216-A-9-L MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250292

Analysis Batch: 250559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88234-1	DG-D10S-0.5-1	Total/NA	Solid	6010B	250280

Analysis Batch: 250678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88234-1	DG-D10S-0.5-1	Total/NA	Solid	7471A	250410
720-88234-2	DG-D10S-3.5-4	Total/NA	Solid	7471A	250410
720-88234-3	DG-E10S-0.5-1	Total/NA	Solid	7471A	250410

Metals (Continued)

Analysis Batch: 250678 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88234-4	DG-E10S-3.5-4	Total/NA	Solid	7471A	250410
720-88234-5	DG-H10S-0.5-1	Total/NA	Solid	7471A	250410
720-88234-6	DG-H10S-3.5-4	Total/NA	Solid	7471A	250410
720-88234-7	DG-I10S-0.5-1	Total/NA	Solid	7471A	250410
720-88234-8	DG-I10S-3.5-4	Total/NA	Solid	7471A	250410
720-88234-9	DG-K10S-0.5-1	Total/NA	Solid	7471A	250410
720-88234-10	DG-K10S-3.5-4	Total/NA	Solid	7471A	250410
720-88234-11	DG-F8S-0.5-1	Total/NA	Solid	7471A	250410
720-88234-12	DG-F8S-3.5-4	Total/NA	Solid	7471A	250410
720-88234-13	DG-E8S-0.5-1	Total/NA	Solid	7471A	250410
720-88234-14	DG-E8S-3.5-4	Total/NA	Solid	7471A	250410
720-88234-15	DG-D8S-0.5-1	Total/NA	Solid	7471A	250410
720-88234-16	DG-D8S-3.5-4	Total/NA	Solid	7471A	250410
720-88234-17	DG-B8S-0.5-1	Total/NA	Solid	7471A	250410
720-88234-18	DG-B8S-3.5-4	Total/NA	Solid	7471A	250410
720-88234-19	DG-C10S-0.5-1	Total/NA	Solid	7471A	250410
720-88234-20	DG-C10S-3.5-4	Total/NA	Solid	7471A	250410
MB 720-250410/1-A	Method Blank	Total/NA	Solid	7471A	250410
LCS 720-250410/2-A	Lab Control Sample	Total/NA	Solid	7471A	250410
720-88234-7 MS	DG-I10S-0.5-1	Total/NA	Solid	7471A	250410
720-88234-7 MSD	DG-I10S-0.5-1	Total/NA	Solid	7471A	250410

Client Sample ID: DG-D10S-0.5-1

Lab Sample ID: 720-88234-1

Date Collected: 08/23/18 14:25

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		10	250559	08/29/18 23:13	OBI	TAL PLS
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250454	08/28/18 22:03	OBI	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250678	08/30/18 19:32	MAG	TAL PLS

Client Sample ID: DG-D10S-3.5-4

Lab Sample ID: 720-88234-2

Date Collected: 08/23/18 14:25

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250454	08/28/18 22:08	OBI	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250678	08/30/18 19:35	MAG	TAL PLS

Client Sample ID: DG-E10S-0.5-1

Lab Sample ID: 720-88234-3

Date Collected: 08/23/18 14:38

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250454	08/28/18 22:13	OBI	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250678	08/30/18 19:37	MAG	TAL PLS

Client Sample ID: DG-E10S-3.5-4

Lab Sample ID: 720-88234-4

Date Collected: 08/23/18 14:38

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250454	08/28/18 22:18	OBI	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250678	08/30/18 19:39	MAG	TAL PLS

Client Sample ID: DG-H10S-0.5-1

Lab Sample ID: 720-88234-5

Date Collected: 08/23/18 15:32

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS

Client Sample ID: DG-H10S-0.5-1

Lab Sample ID: 720-88234-5

Date Collected: 08/23/18 15:32

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		4	250454	08/28/18 22:22	OBI	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250678	08/30/18 19:42	MAG	TAL PLS

Client Sample ID: DG-H10S-3.5-4

Lab Sample ID: 720-88234-6

Date Collected: 08/23/18 15:32

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250454	08/28/18 22:27	OBI	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250678	08/30/18 19:44	MAG	TAL PLS

Client Sample ID: DG-I10S-0.5-1

Lab Sample ID: 720-88234-7

Date Collected: 08/23/18 15:55

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250454	08/28/18 21:16	OBI	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250678	08/30/18 19:30	MAG	TAL PLS

Client Sample ID: DG-I10S-3.5-4

Lab Sample ID: 720-88234-8

Date Collected: 08/23/18 15:55

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250454	08/28/18 22:41	OBI	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250678	08/30/18 19:46	MAG	TAL PLS

Client Sample ID: DG-K10S-0.5-1

Lab Sample ID: 720-88234-9

Date Collected: 08/23/18 16:10

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250454	08/28/18 22:46	OBI	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250678	08/30/18 19:53	MAG	TAL PLS

Client Sample ID: DG-K10S-3.5-4

Lab Sample ID: 720-88234-10

Date Collected: 08/23/18 16:10

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250454	08/28/18 22:51	OBI	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250678	08/30/18 19:56	MAG	TAL PLS

Client Sample ID: DG-F8S-0.5-1

Lab Sample ID: 720-88234-11

Date Collected: 08/23/18 10:30

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250454	08/28/18 22:56	OBI	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250678	08/30/18 19:58	MAG	TAL PLS

Client Sample ID: DG-F8S-3.5-4

Lab Sample ID: 720-88234-12

Date Collected: 08/23/18 10:30

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250454	08/28/18 23:01	OBI	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250678	08/30/18 20:01	MAG	TAL PLS

Client Sample ID: DG-E8S-0.5-1

Lab Sample ID: 720-88234-13

Date Collected: 08/23/18 10:50

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250280	08/27/18 12:20	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250454	08/28/18 23:05	OBI	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250678	08/30/18 20:03	MAG	TAL PLS

Client Sample ID: DG-E8S-3.5-4

Lab Sample ID: 720-88234-14

Date Collected: 08/23/18 10:50

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 09:59	BKR	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88234-1

Client Sample ID: DG-E8S-3.5-4
Date Collected: 08/23/18 10:50
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	250678	08/30/18 20:05	MAG	TAL PLS

Client Sample ID: DG-D8S-0.5-1
Date Collected: 08/23/18 11:20
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 10:04	BKR	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250678	08/30/18 20:07	MAG	TAL PLS

Client Sample ID: DG-D8S-3.5-4
Date Collected: 08/23/18 11:20
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 10:09	BKR	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250678	08/30/18 20:10	MAG	TAL PLS

Client Sample ID: DG-B8S-0.5-1
Date Collected: 08/23/18 12:15
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 10:23	BKR	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250678	08/30/18 20:12	MAG	TAL PLS

Client Sample ID: DG-B8S-3.5-4
Date Collected: 08/23/18 12:15
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88234-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 10:28	BKR	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250678	08/30/18 20:14	MAG	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88234-1

Client Sample ID: DG-C10S-0.5-1

Lab Sample ID: 720-88234-19

Date Collected: 08/23/18 12:25

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 10:32	BKR	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250678	08/30/18 20:21	MAG	TAL PLS

Client Sample ID: DG-C10S-3.5-4

Lab Sample ID: 720-88234-20

Date Collected: 08/23/18 12:25

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 10:37	BKR	TAL PLS
Total/NA	Prep	7471A			250410	08/28/18 15:27	MAG	TAL PLS
Total/NA	Analysis	7471A		4	250678	08/30/18 20:51	MAG	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc. TestAmerica Job ID: 720-88234-1
Project/Site: UPC OU-SM

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88234-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
3050B	Preparation, Metals	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88234-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88234-1	DG-D10S-0.5-1	Solid	08/23/18 14:25	08/24/18 15:00
720-88234-2	DG-D10S-3.5-4	Solid	08/23/18 14:25	08/24/18 15:00
720-88234-3	DG-E10S-0.5-1	Solid	08/23/18 14:38	08/24/18 15:00
720-88234-4	DG-E10S-3.5-4	Solid	08/23/18 14:38	08/24/18 15:00
720-88234-5	DG-H10S-0.5-1	Solid	08/23/18 15:32	08/24/18 15:00
720-88234-6	DG-H10S-3.5-4	Solid	08/23/18 15:32	08/24/18 15:00
720-88234-7	DG-I10S-0.5-1	Solid	08/23/18 15:55	08/24/18 15:00
720-88234-8	DG-I10S-3.5-4	Solid	08/23/18 15:55	08/24/18 15:00
720-88234-9	DG-K10S-0.5-1	Solid	08/23/18 16:10	08/24/18 15:00
720-88234-10	DG-K10S-3.5-4	Solid	08/23/18 16:10	08/24/18 15:00
720-88234-11	DG-F8S-0.5-1	Solid	08/23/18 10:30	08/24/18 15:00
720-88234-12	DG-F8S-3.5-4	Solid	08/23/18 10:30	08/24/18 15:00
720-88234-13	DG-E8S-0.5-1	Solid	08/23/18 10:50	08/24/18 15:00
720-88234-14	DG-E8S-3.5-4	Solid	08/23/18 10:50	08/24/18 15:00
720-88234-15	DG-D8S-0.5-1	Solid	08/23/18 11:20	08/24/18 15:00
720-88234-16	DG-D8S-3.5-4	Solid	08/23/18 11:20	08/24/18 15:00
720-88234-17	DG-B8S-0.5-1	Solid	08/23/18 12:15	08/24/18 15:00
720-88234-18	DG-B8S-3.5-4	Solid	08/23/18 12:15	08/24/18 15:00
720-88234-19	DG-C10S-0.5-1	Solid	08/23/18 12:25	08/24/18 15:00
720-88234-20	DG-C10S-3.5-4	Solid	08/23/18 12:25	08/24/18 15:00

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

720-88234

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185114

Date 8/23/18 Page 1 of 2

11/21/2018 (Rev. 1)

Page 49 of 51

Report To

Name: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH Floor
Email: mkahrilas@geosyntec.com
To: GEOSYNTEC
Sampled By: Rosemarie Thomas
Name: A SMITH
Phone: 5102852795

Analysis Request

Sample ID	Date	Time	Matrix	Preserv	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Perform MS/MSD (Lab to homogenize)
DG-D10S-0.5-1	8/23	1425	S	N									X										
DG-D10S-3.5-4		1425											X										
DG-E10S-0.5-1		1438											X										
DG-E10S-3.5-4		1438											X										
DG-H10S-0.5-1		1532											X										
DG-H10S-3.5-4		1532											X										
DG-I10S-0.5-1		1555											X										
DG-I10S-3.5-4		1555											X										
DG-K10S-0.5-1		1610											X										
DG-K10S-3.5-4	↓	1610	↓	↓									X										

720-88234 Chain of Custody

Project Info.

Project Name/ #: UPC OU-SM
#: NG256502
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

# of Containers:
Head Space:
Temp:

10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

1.8°

Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1305	Signature: [signature] Time: 1500	Signature: Time:
Printed Name: KeatonBell Date: 8/24	Printed Name: Robert Date: 8/24/18	Printed Name: Date:
Company: Geosyntec	Company: TA	Company:
1) Received by:	**2) Received by:**	**3) Received by:**
Signature: [signature] Time: 1305	Signature: [signature] Time: 1500	Signature: Time:
Printed Name: Robert Date: 8/24/18	Printed Name: Diana Date: 8/24/18	Printed Name: Date:
Company: TA	Company: TA/2C	Company:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: _____

Date 8/23/18 Page 2 of 2

11/21/2018 (Rev. 1)

Page 50 of 51

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
Cc To: GEOSYNTEC
Sampled By: Rosemarie Thomas
Attn: A SMITH
Phone: 5102052795

Analysis Request

Sample ID	Date	Time	# of Containers	Preserv.	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GCMS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other: ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity		
DG-FBS-0.5-1	8/23	1030	5	N									X											
DG-FBS-3.5-4		1030											X											
DG-EBS-0.5-1		1050											X											
DG-EBS-3.5-4		1050											X											
DG-DBS-0.5-1		1120											X											
DG-DBS-3.5-4		1120											X											
DG-BBS-0.5-1		1215											X											
DG-BBS-3.5-4		1215											X											
DG-CDS-0.5-1		1225											X											
DG-CDS-3.5-4	D	1225	↓	↓									X											

Project Info.

Project Name/ #: UPC OU-SM
PO #: WG2565/02
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

# of Containers:
Head Space:
Temp:

10 Day | 5 Day | 4 Day | 3 Day | 2 Day | 1 Day | Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1305	Signature: [signature] Time: 1500	Signature: Time:
Printed Name: Keatyn Bell Date: 8/24	Printed Name: Rob Date: 8/24/18	Printed Name: Date:
Company: Geosyntec	Company: TA	Company:
1) Received by:	**2) Received by:**	**3) Received by:**
Signature: [signature] Time: 1305	Signature: [signature] Time: 1500	Signature: Time:
Printed Name: Rob Date: 8/24/18	Printed Name: Manae Date: 8/24/18	Printed Name: Date:
Company: TA	Company: TA	Company:

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88234-1

Login Number: 88234
List Number: 1
Creator: Perry, Janae R

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-88235-1
Client Project/Site: UPC OU-SM
Revision: 1

For:
Geosyntec Consultants, Inc.
201 N. Civic Drive
Suite 245
Walnut Creek, California 94596

Attn: Mr. Krys Jesionek

Authorized for release by:
11/21/2018 6:28:24 PM

Micah Smith, Project Manager II
(925)484-1919
micah.smith@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 13
QC Sample Results 33
QC Association Summary 43
Lab Chronicle 47
Certification Summary 52
Method Summary 53
Sample Summary 54
Chain of Custody 55
Receipt Checklists 57

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-88235-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-88235-1

Comments
This report was revised on 11/21/18 to change the units for the metals data to report in mg/Kg, as requested.

Receipt
The samples were received on 8/24/2018 3:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.3º C.

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batches 720-250242, 720-250310, 720-250292, and 720-250365 and analytical batches 720-250349, 720-250437, 720-250491, and 720-250585 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 720-250437 was outside of the 10% control limits: (720-88235-A-1-F SD).

Analyte	Recovery
Barium	49%
Cobalt	38%
Chromium	36%
Copper	34%
Nickel	38%
Lead	31%
Vanadium	35%
Zinc	29%

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: DG-C6S-0.5-1 (720-88235-1), DG-C6S-3.5-4 (720-88235-2), DG-F6S-0.5-1 (720-88235-3), DG-F6S-3.5-4 (720-88235-4), DG-K6S-0.5-1 (720-88235-5), DG-K6S-3.5-4 (720-88235-6), DG-I8S-0.5-1 (720-88235-7), DG-I8S-3.5-4 (720-88235-8), DG-G8S-0.5-1 (720-88235-9) and DG-G8S-3.5-4 (720-88235-10), DG-J10S-0.5-1 (720-88235-11), DG-J10S-3.5-4 (720-88235-12), DG-L10S-0.5-1 (720-88235-13), DG-L10S-3.5-4 (720-88235-14), DG-H8S-0.5-1 (720-88235-15), DG-H8S-3.5-4 (720-88235-16) and DG-C8S-0.5-1 (720-88235-17), (DG-C8S-3.5-4 (720-88235-18), DG-F10S-0.5-1 (720-88235-19), and DG-F10S-3.5-4 (720-88235-20). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The Internal standard responses were outside of acceptance limits for the ICSAB, however, recoveries met criteria: (ICSAB 720-250701/8).

Method(s) 6010B: The method blank for preparation batch 720-250385 and analytical batch 720-250634 contained Chromium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: The method blank for preparation batch 720-250242 and analytical batch 720-250349 contained Arsenic above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: The method blank for preparation batch 720-250365 and analytical batch 720-250585 contained Antimony and Barium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Client Sample ID: DG-C6S-0.5-1 — Lab Sample ID: 720-88235-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.9	F1	1.9	0.32	mg/Kg	4		6010B	Total/NA
Arsenic	4.2		3.9	0.33	mg/Kg	4		6010B	Total/NA
Barium	44	F1	1.9	0.28	mg/Kg	4		6010B	Total/NA
Cadmium	0.54		0.49	0.048	mg/Kg	4		6010B	Total/NA
Chromium	19		1.9	0.21	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.78	0.078	mg/Kg	4		6010B	Total/NA
Copper	150	F1	5.8	2.8	mg/Kg	4		6010B	Total/NA
Lead	140	F1	1.9	0.41	mg/Kg	4		6010B	Total/NA
Molybdenum	1.5	J	1.9	0.25	mg/Kg	4		6010B	Total/NA
Nickel	15		1.9	0.20	mg/Kg	4		6010B	Total/NA
Silver	0.66	J	0.97	0.20	mg/Kg	4		6010B	Total/NA
Thallium	1.4	J	1.9	0.56	mg/Kg	4		6010B	Total/NA
Vanadium	88	F1	1.9	0.26	mg/Kg	4		6010B	Total/NA
Zinc	120	F1	5.8	2.5	mg/Kg	4		6010B	Total/NA
Mercury	0.12		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-C6S-3.5-4 — Lab Sample ID: 720-88235-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	4.2		1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	6.0		3.0	0.26	mg/Kg	4		6010B	Total/NA
Barium	98		1.5	0.22	mg/Kg	4		6010B	Total/NA
Cadmium	0.27	J	0.38	0.038	mg/Kg	4		6010B	Total/NA
Chromium	35		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.61	0.061	mg/Kg	4		6010B	Total/NA
Copper	3400		4.5	2.2	mg/Kg	4		6010B	Total/NA
Lead	230		1.5	0.32	mg/Kg	4		6010B	Total/NA
Molybdenum	1.1	J	1.5	0.19	mg/Kg	4		6010B	Total/NA
Nickel	33		1.5	0.15	mg/Kg	4		6010B	Total/NA
Selenium	0.67	J	3.0	0.45	mg/Kg	4		6010B	Total/NA
Silver	0.81		0.76	0.15	mg/Kg	4		6010B	Total/NA
Thallium	0.84	J	1.5	0.44	mg/Kg	4		6010B	Total/NA
Vanadium	51		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	140		4.5	1.9	mg/Kg	4		6010B	Total/NA
Mercury	1.7		0.16	0.023	mg/Kg	10		7471A	Total/NA

Client Sample ID: DG-F6S-0.5-1 — Lab Sample ID: 720-88235-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	3.0		1.7	0.28	mg/Kg	4		6010B	Total/NA
Arsenic	6.6		3.4	0.29	mg/Kg	4		6010B	Total/NA
Barium	100		1.7	0.24	mg/Kg	4		6010B	Total/NA
Cadmium	1.2		0.43	0.042	mg/Kg	4		6010B	Total/NA
Chromium	42		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	16		0.68	0.068	mg/Kg	4		6010B	Total/NA
Copper	620		5.1	2.4	mg/Kg	4		6010B	Total/NA
Lead	370		1.7	0.36	mg/Kg	4		6010B	Total/NA
Molybdenum	3.1		1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	29		1.7	0.17	mg/Kg	4		6010B	Total/NA
Selenium	0.86	J	3.4	0.51	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-F6S-0.5-1 (Continued) — Lab Sample ID: 720-88235-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	1.4		0.85	0.17	mg/Kg	4		6010B	Total/NA
Thallium	1.3	J	1.7	0.50	mg/Kg	4		6010B	Total/NA
Vanadium	98		1.7	0.23	mg/Kg	4		6010B	Total/NA
Zinc	400		5.1	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.29		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-F6S-3.5-4 — Lab Sample ID: 720-88235-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.54	J	1.8	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	5.9		3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	21		1.8	0.25	mg/Kg	4		6010B	Total/NA
Chromium	14		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.70	0.070	mg/Kg	4		6010B	Total/NA
Copper	130		5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	37		1.8	0.37	mg/Kg	4		6010B	Total/NA
Molybdenum	1.4	J	1.8	0.22	mg/Kg	4		6010B	Total/NA
Nickel	6.5		1.8	0.18	mg/Kg	4		6010B	Total/NA
Selenium	0.88	J	3.5	0.53	mg/Kg	4		6010B	Total/NA
Silver	0.46	J	0.88	0.18	mg/Kg	4		6010B	Total/NA
Thallium	1.1	J	1.8	0.51	mg/Kg	4		6010B	Total/NA
Vanadium	100		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	74		5.3	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.026		0.015	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K6S-0.5-1 — Lab Sample ID: 720-88235-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	3.2		1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	19		3.6	0.31	mg/Kg	4		6010B	Total/NA
Barium	51		1.8	0.26	mg/Kg	4		6010B	Total/NA
Cadmium	0.38	J	0.45	0.045	mg/Kg	4		6010B	Total/NA
Chromium	23		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.73	0.073	mg/Kg	4		6010B	Total/NA
Copper	160		5.5	2.6	mg/Kg	4		6010B	Total/NA
Lead	170		1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	0.79	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	35		1.8	0.19	mg/Kg	4		6010B	Total/NA
Selenium	0.74	J	3.6	0.55	mg/Kg	4		6010B	Total/NA
Silver	0.49	J	0.91	0.18	mg/Kg	4		6010B	Total/NA
Thallium	1.5	J	1.8	0.53	mg/Kg	4		6010B	Total/NA
Vanadium	85		1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	110		5.5	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.21		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-K6S-3.5-4 — Lab Sample ID: 720-88235-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.7		1.7	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	440		3.5	0.30	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-K6S-3.5-4 (Continued) — Lab Sample ID: 720-88235-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	69		1.7	0.25	mg/Kg	4		6010B	Total/NA
Cadmium	0.37	J	0.43	0.043	mg/Kg	4		6010B	Total/NA
Chromium	41		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.70	0.070	mg/Kg	4		6010B	Total/NA
Copper	84		5.2	2.5	mg/Kg	4		6010B	Total/NA
Lead	130		1.7	0.37	mg/Kg	4		6010B	Total/NA
Molybdenum	0.95	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	38		1.7	0.18	mg/Kg	4		6010B	Total/NA
Selenium	0.73	J	3.5	0.52	mg/Kg	4		6010B	Total/NA
Silver	0.35	J	0.87	0.18	mg/Kg	4		6010B	Total/NA
Thallium	1.6	J	1.7	0.50	mg/Kg	4		6010B	Total/NA
Vanadium	54		1.7	0.24	mg/Kg	4		6010B	Total/NA
Zinc	92		5.2	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.38		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I8S-0.5-1 — Lab Sample ID: 720-88235-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.55	J	1.5	0.24	mg/Kg	4		6010B	Total/NA
Arsenic	3.4		2.9	0.25	mg/Kg	4		6010B	Total/NA
Barium	39		1.5	0.21	mg/Kg	4		6010B	Total/NA
Cadmium	0.047	J	0.37	0.036	mg/Kg	4		6010B	Total/NA
Chromium	13		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	14		0.59	0.059	mg/Kg	4		6010B	Total/NA
Copper	99		4.4	2.1	mg/Kg	4		6010B	Total/NA
Lead	96		1.5	0.31	mg/Kg	4		6010B	Total/NA
Molybdenum	0.27	J	1.5	0.19	mg/Kg	4		6010B	Total/NA
Nickel	6.6		1.5	0.15	mg/Kg	4		6010B	Total/NA
Selenium	0.88	J	2.9	0.44	mg/Kg	4		6010B	Total/NA
Silver	0.40	J	0.74	0.15	mg/Kg	4		6010B	Total/NA
Thallium	1.6		1.5	0.43	mg/Kg	4		6010B	Total/NA
Vanadium	120		1.5	0.20	mg/Kg	4		6010B	Total/NA
Zinc	88		4.4	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.068		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-I8S-3.5-4 — Lab Sample ID: 720-88235-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.36	J	1.7	0.27	mg/Kg	4		6010B	Total/NA
Arsenic	1.6	J	3.3	0.28	mg/Kg	4		6010B	Total/NA
Barium	49		1.7	0.23	mg/Kg	4		6010B	Total/NA
Chromium	14		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	8.3		0.66	0.066	mg/Kg	4		6010B	Total/NA
Copper	67		5.0	2.4	mg/Kg	4		6010B	Total/NA
Lead	18		1.7	0.35	mg/Kg	4		6010B	Total/NA
Nickel	8.2		1.7	0.17	mg/Kg	4		6010B	Total/NA
Silver	0.27	J	0.83	0.17	mg/Kg	4		6010B	Total/NA
Thallium	0.85	J	1.7	0.48	mg/Kg	4		6010B	Total/NA
Vanadium	71		1.7	0.22	mg/Kg	4		6010B	Total/NA
Zinc	51		5.0	2.1	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-I8S-3.5-4 (Continued) — Lab Sample ID: 720-88235-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.049		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-G8S-0.5-1 — Lab Sample ID: 720-88235-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.39	J	1.6	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	6.3		3.1	0.27	mg/Kg	4		6010B	Total/NA
Barium	51		1.6	0.22	mg/Kg	4		6010B	Total/NA
Cadmium	0.14	J	0.39	0.039	mg/Kg	4		6010B	Total/NA
Chromium	12		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	12		0.63	0.063	mg/Kg	4		6010B	Total/NA
Copper	110		4.7	2.2	mg/Kg	4		6010B	Total/NA
Lead	95		1.6	0.33	mg/Kg	4		6010B	Total/NA
Molybdenum	0.81	J	1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	6.6		1.6	0.16	mg/Kg	4		6010B	Total/NA
Silver	0.47	J	0.79	0.16	mg/Kg	4		6010B	Total/NA
Thallium	1.3	J	1.6	0.46	mg/Kg	4		6010B	Total/NA
Vanadium	100		1.6	0.21	mg/Kg	4		6010B	Total/NA
Zinc	80		4.7	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.090		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-G8S-3.5-4 — Lab Sample ID: 720-88235-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.8		1.5	0.25	mg/Kg	4		6010B	Total/NA
Arsenic	11		3.0	0.25	mg/Kg	4		6010B	Total/NA
Barium	130		1.5	0.21	mg/Kg	4		6010B	Total/NA
Cadmium	0.28	J	0.37	0.037	mg/Kg	4		6010B	Total/NA
Chromium	28		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	9.1		0.60	0.060	mg/Kg	4		6010B	Total/NA
Copper	66		4.5	2.1	mg/Kg	4		6010B	Total/NA
Lead	150		1.5	0.31	mg/Kg	4		6010B	Total/NA
Molybdenum	0.35	J	1.5	0.19	mg/Kg	4		6010B	Total/NA
Nickel	82		1.5	0.15	mg/Kg	4		6010B	Total/NA
Silver	0.62	J	0.75	0.15	mg/Kg	4		6010B	Total/NA
Thallium	0.78	J	1.5	0.43	mg/Kg	4		6010B	Total/NA
Vanadium	41		1.5	0.20	mg/Kg	4		6010B	Total/NA
Zinc	190		4.5	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.062		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-J10S-0.5-1 — Lab Sample ID: 720-88235-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.0	J B	1.2	0.21	mg/Kg	4		6010B	Total/NA
Arsenic	3.1		2.5	0.21	mg/Kg	4		6010B	Total/NA
Barium	78	B	1.2	0.18	mg/Kg	4		6010B	Total/NA
Cadmium	0.23	J	0.31	0.031	mg/Kg	4		6010B	Total/NA
Chromium	110		1.2	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	10		0.50	0.050	mg/Kg	4		6010B	Total/NA
Copper	100		3.7	1.8	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-J10S-0.5-1 (Continued) — Lab Sample ID: 720-88235-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	130		1.2	0.26	mg/Kg	4		6010B	Total/NA
Molybdenum	15		1.2	0.16	mg/Kg	4		6010B	Total/NA
Nickel	30		1.2	0.13	mg/Kg	4		6010B	Total/NA
Thallium	0.65	J	1.2	0.36	mg/Kg	4		6010B	Total/NA
Vanadium	81		1.2	0.17	mg/Kg	4		6010B	Total/NA
Zinc	65		3.7	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.042		0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-J10S-3.5-4 — Lab Sample ID: 720-88235-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.98	J B	1.5	0.24	mg/Kg	4		6010B	Total/NA
Arsenic	5.0		2.9	0.25	mg/Kg	4		6010B	Total/NA
Barium	120	B	1.5	0.21	mg/Kg	4		6010B	Total/NA
Beryllium	0.41		0.29	0.096	mg/Kg	4		6010B	Total/NA
Cadmium	0.042	J	0.37	0.036	mg/Kg	4		6010B	Total/NA
Chromium	95		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	21		0.59	0.059	mg/Kg	4		6010B	Total/NA
Copper	32		4.4	2.1	mg/Kg	4		6010B	Total/NA
Lead	7.2		1.5	0.31	mg/Kg	4		6010B	Total/NA
Molybdenum	0.31	J	1.5	0.19	mg/Kg	4		6010B	Total/NA
Nickel	110		1.5	0.15	mg/Kg	4		6010B	Total/NA
Silver	0.22	J	0.74	0.15	mg/Kg	4		6010B	Total/NA
Thallium	0.70	J	1.5	0.43	mg/Kg	4		6010B	Total/NA
Vanadium	63		1.5	0.20	mg/Kg	4		6010B	Total/NA
Zinc	54		4.4	1.9	mg/Kg	4		6010B	Total/NA
Mercury	0.088		0.015	0.0021	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L10S-0.5-1 — Lab Sample ID: 720-88235-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.8	B	1.3	0.21	mg/Kg	4		6010B	Total/NA
Arsenic	4.2		2.5	0.22	mg/Kg	4		6010B	Total/NA
Barium	83	B	1.3	0.18	mg/Kg	4		6010B	Total/NA
Cadmium	0.47		0.32	0.031	mg/Kg	4		6010B	Total/NA
Chromium	27		1.3	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	8.7		0.51	0.051	mg/Kg	4		6010B	Total/NA
Copper	95		3.8	1.8	mg/Kg	4		6010B	Total/NA
Lead	400		1.3	0.27	mg/Kg	4		6010B	Total/NA
Molybdenum	0.20	J	1.3	0.16	mg/Kg	4		6010B	Total/NA
Nickel	5.9		1.3	0.13	mg/Kg	4		6010B	Total/NA
Silver	0.21	J	0.63	0.13	mg/Kg	4		6010B	Total/NA
Thallium	0.62	J	1.3	0.37	mg/Kg	4		6010B	Total/NA
Vanadium	68		1.3	0.17	mg/Kg	4		6010B	Total/NA
Zinc	120		3.8	1.6	mg/Kg	4		6010B	Total/NA
Mercury	1.1		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-L10S-3.5-4 — Lab Sample ID: 720-88235-14

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-L10S-3.5-4 (Continued) — Lab Sample ID: 720-88235-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.4	J B	1.6	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	11		3.1	0.27	mg/Kg	4		6010B	Total/NA
Barium	97	B	1.6	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.61		0.31	0.10	mg/Kg	4		6010B	Total/NA
Cadmium	0.050	J	0.39	0.039	mg/Kg	4		6010B	Total/NA
Chromium	31		1.6	0.17	mg/Kg	4		6010B	Total/NA
Cobalt	17		0.63	0.063	mg/Kg	4		6010B	Total/NA
Copper	62		4.7	2.2	mg/Kg	4		6010B	Total/NA
Lead	14		1.6	0.33	mg/Kg	4		6010B	Total/NA
Molybdenum	0.47	J	1.6	0.20	mg/Kg	4		6010B	Total/NA
Nickel	45		1.6	0.16	mg/Kg	4		6010B	Total/NA
Silver	0.32	J	0.79	0.16	mg/Kg	4		6010B	Total/NA
Vanadium	35		1.6	0.21	mg/Kg	4		6010B	Total/NA
Zinc	95		4.7	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.065		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H8S-0.5-1 — Lab Sample ID: 720-88235-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.48	J	1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	7.8		3.6	0.30	mg/Kg	4		6010B	Total/NA
Barium	56		1.8	0.25	mg/Kg	4		6010B	Total/NA
Chromium	17	B	1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.71	0.071	mg/Kg	4		6010B	Total/NA
Copper	140		5.4	2.5	mg/Kg	4		6010B	Total/NA
Lead	180		1.8	0.38	mg/Kg	4		6010B	Total/NA
Molybdenum	1.1	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	11		1.8	0.18	mg/Kg	4		6010B	Total/NA
Selenium	1.4	J	3.6	0.54	mg/Kg	4		6010B	Total/NA
Vanadium	83		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	140		5.4	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.15		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-H8S-3.5-4 — Lab Sample ID: 720-88235-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.69	J	1.0	0.17	mg/Kg	4		6010B	Total/NA
Arsenic	2.2		2.1	0.18	mg/Kg	4		6010B	Total/NA
Barium	29		1.0	0.15	mg/Kg	4		6010B	Total/NA
Cadmium	0.027	J	0.26	0.026	mg/Kg	4		6010B	Total/NA
Chromium	19		1.0	0.11	mg/Kg	4		6010B	Total/NA
Cobalt	5.7		0.41	0.041	mg/Kg	4		6010B	Total/NA
Copper	29		3.1	1.5	mg/Kg	4		6010B	Total/NA
Lead	29		1.0	0.22	mg/Kg	4		6010B	Total/NA
Nickel	12		1.0	0.11	mg/Kg	4		6010B	Total/NA
Thallium	0.34	J	1.0	0.30	mg/Kg	4		6010B	Total/NA
Vanadium	37		1.0	0.14	mg/Kg	4		6010B	Total/NA
Zinc	31		3.1	1.3	mg/Kg	4		6010B	Total/NA
Mercury	0.024		0.017	0.0025	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Client Sample ID: DG-C8S-0.5-1 — Lab Sample ID: 720-88235-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.4	J	1.8	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	5.1		3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	55		1.8	0.25	mg/Kg	4		6010B	Total/NA
Cadmium	0.60		0.44	0.044	mg/Kg	4		6010B	Total/NA
Chromium	17		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.70	0.070	mg/Kg	4		6010B	Total/NA
Copper	190		5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	89		1.8	0.37	mg/Kg	4		6010B	Total/NA
Molybdenum	0.39	J	1.8	0.22	mg/Kg	4		6010B	Total/NA
Nickel	11		1.8	0.18	mg/Kg	4		6010B	Total/NA
Thallium	1.5	J	1.8	0.51	mg/Kg	4		6010B	Total/NA
Vanadium	100		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	380		5.3	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.077		0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-C8S-3.5-4 — Lab Sample ID: 720-88235-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.7		1.4	0.23	mg/Kg	4		6010B	Total/NA
Arsenic	4.1	B	2.8	0.24	mg/Kg	4		6010B	Total/NA
Barium	90		1.4	0.20	mg/Kg	4		6010B	Total/NA
Beryllium	0.26	J	0.28	0.091	mg/Kg	4		6010B	Total/NA
Cadmium	0.067	J	0.35	0.035	mg/Kg	4		6010B	Total/NA
Chromium	130		1.4	0.15	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.56	0.056	mg/Kg	4		6010B	Total/NA
Copper	37		4.2	2.0	mg/Kg	4		6010B	Total/NA
Lead	150		1.4	0.29	mg/Kg	4		6010B	Total/NA
Molybdenum	0.31	J	1.4	0.18	mg/Kg	4		6010B	Total/NA
Nickel	130		1.4	0.14	mg/Kg	4		6010B	Total/NA
Thallium	0.78	J	1.4	0.41	mg/Kg	4		6010B	Total/NA
Vanadium	52		1.4	0.19	mg/Kg	4		6010B	Total/NA
Zinc	88		4.2	1.8	mg/Kg	4		6010B	Total/NA
Mercury	0.35		0.017	0.0025	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-F10S-0.5-1 — Lab Sample ID: 720-88235-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.3	J	1.7	0.29	mg/Kg	4		6010B	Total/NA
Arsenic	2.6	J B	3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	52		1.7	0.25	mg/Kg	4		6010B	Total/NA
Cadmium	0.073	J	0.43	0.043	mg/Kg	4		6010B	Total/NA
Chromium	14		1.7	0.18	mg/Kg	4		6010B	Total/NA
Cobalt	15		0.70	0.070	mg/Kg	4		6010B	Total/NA
Copper	120		5.2	2.5	mg/Kg	4		6010B	Total/NA
Lead	85		1.7	0.37	mg/Kg	4		6010B	Total/NA
Molybdenum	0.51	J	1.7	0.22	mg/Kg	4		6010B	Total/NA
Nickel	12		1.7	0.18	mg/Kg	4		6010B	Total/NA
Thallium	1.3	J	1.7	0.50	mg/Kg	4		6010B	Total/NA
Vanadium	110		1.7	0.24	mg/Kg	4		6010B	Total/NA
Zinc	80		5.2	2.2	mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-F10S-0.5-1 (Continued)

Lab Sample ID: 720-88235-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.070		0.015	0.0022	mg/Kg	1		7471A	Total/NA

Client Sample ID: DG-F10S-3.5-4

Lab Sample ID: 720-88235-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.63	J	1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	6.2	B	3.7	0.31	mg/Kg	4		6010B	Total/NA
Barium	160		1.8	0.26	mg/Kg	4		6010B	Total/NA
Beryllium	0.47		0.37	0.12	mg/Kg	4		6010B	Total/NA
Chromium	72		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	23		0.73	0.073	mg/Kg	4		6010B	Total/NA
Copper	49		5.5	2.6	mg/Kg	4		6010B	Total/NA
Lead	14		1.8	0.39	mg/Kg	4		6010B	Total/NA
Molybdenum	0.33	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	87		1.8	0.19	mg/Kg	4		6010B	Total/NA
Thallium	1.5	J	1.8	0.53	mg/Kg	4		6010B	Total/NA
Vanadium	67		1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	93		5.5	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.13		0.016	0.0023	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Client Sample ID: DG-C6S-0.5-1
Date Collected: 08/23/18 08:30
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-1
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.9	F1	1.9	0.32	mg/Kg		08/27/18 14:52	08/28/18 16:17	4
Arsenic	4.2		3.9	0.33	mg/Kg		08/27/18 14:52	08/28/18 16:17	4
Barium	44	F1	1.9	0.28	mg/Kg		08/27/18 14:52	08/28/18 16:17	4
Beryllium	ND		0.39	0.13	mg/Kg		08/27/18 14:52	08/28/18 16:17	4
Cadmium	0.54		0.49	0.048	mg/Kg		08/27/18 14:52	08/28/18 16:17	4
Chromium	19		1.9	0.21	mg/Kg		08/27/18 14:52	08/28/18 16:17	4
Cobalt	12		0.78	0.078	mg/Kg		08/27/18 14:52	08/28/18 16:17	4
Copper	150	F1	5.8	2.8	mg/Kg		08/27/18 14:52	08/28/18 16:17	4
Lead	140	F1	1.9	0.41	mg/Kg		08/27/18 14:52	08/28/18 16:17	4
Molybdenum	1.5	J	1.9	0.25	mg/Kg		08/27/18 14:52	08/28/18 16:17	4
Nickel	15		1.9	0.20	mg/Kg		08/27/18 14:52	08/28/18 16:17	4
Selenium	ND		3.9	0.58	mg/Kg		08/27/18 14:52	08/28/18 16:17	4
Silver	0.66	J	0.97	0.20	mg/Kg		08/27/18 14:52	08/28/18 16:17	4
Thallium	1.4	J	1.9	0.56	mg/Kg		08/27/18 14:52	08/28/18 16:17	4
Vanadium	88	F1	1.9	0.26	mg/Kg		08/27/18 14:52	08/28/18 16:17	4
Zinc	120	F1	5.8	2.5	mg/Kg		08/27/18 14:52	08/28/18 16:17	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.015	0.0022	mg/Kg		08/25/18 13:53	08/29/18 12:35	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Client Sample ID: DG-C6S-3.5-4
Date Collected: 08/23/18 08:30
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-2
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.2		1.5	0.25	mg/Kg		08/27/18 14:52	08/28/18 17:19	4
Arsenic	6.0		3.0	0.26	mg/Kg		08/27/18 14:52	08/28/18 17:19	4
Barium	98		1.5	0.22	mg/Kg		08/27/18 14:52	08/28/18 17:19	4
Beryllium	ND		0.30	0.098	mg/Kg		08/27/18 14:52	08/28/18 17:19	4
Cadmium	0.27	J	0.38	0.038	mg/Kg		08/27/18 14:52	08/28/18 17:19	4
Chromium	35		1.5	0.16	mg/Kg		08/27/18 14:52	08/28/18 17:19	4
Cobalt	12		0.61	0.061	mg/Kg		08/27/18 14:52	08/28/18 17:19	4
Copper	3400		4.5	2.2	mg/Kg		08/27/18 14:52	08/28/18 17:19	4
Lead	230		1.5	0.32	mg/Kg		08/27/18 14:52	08/28/18 17:19	4
Molybdenum	1.1	J	1.5	0.19	mg/Kg		08/27/18 14:52	08/28/18 17:19	4
Nickel	33		1.5	0.15	mg/Kg		08/27/18 14:52	08/28/18 17:19	4
Selenium	0.67	J	3.0	0.45	mg/Kg		08/27/18 14:52	08/28/18 17:19	4
Silver	0.81		0.76	0.15	mg/Kg		08/27/18 14:52	08/28/18 17:19	4
Thallium	0.84	J	1.5	0.44	mg/Kg		08/27/18 14:52	08/28/18 17:19	4
Vanadium	51		1.5	0.21	mg/Kg		08/27/18 14:52	08/28/18 17:19	4
Zinc	140		4.5	1.9	mg/Kg		08/27/18 14:52	08/28/18 17:19	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.7		0.16	0.023	mg/Kg		08/25/18 13:53	08/29/18 13:32	10

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Client Sample ID: DG-F6S-0.5-1

Date Collected: 08/23/18 09:08
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-3

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.0		1.7	0.28	mg/Kg		08/27/18 14:52	08/28/18 17:24	4
Arsenic	6.6		3.4	0.29	mg/Kg		08/27/18 14:52	08/28/18 17:24	4
Barium	100		1.7	0.24	mg/Kg		08/27/18 14:52	08/28/18 17:24	4
Beryllium	ND		0.34	0.11	mg/Kg		08/27/18 14:52	08/28/18 17:24	4
Cadmium	1.2		0.43	0.042	mg/Kg		08/27/18 14:52	08/28/18 17:24	4
Chromium	42		1.7	0.18	mg/Kg		08/27/18 14:52	08/28/18 17:24	4
Cobalt	16		0.68	0.068	mg/Kg		08/27/18 14:52	08/28/18 17:24	4
Copper	620		5.1	2.4	mg/Kg		08/27/18 14:52	08/28/18 17:24	4
Lead	370		1.7	0.36	mg/Kg		08/27/18 14:52	08/28/18 17:24	4
Molybdenum	3.1		1.7	0.22	mg/Kg		08/27/18 14:52	08/28/18 17:24	4
Nickel	29		1.7	0.17	mg/Kg		08/27/18 14:52	08/28/18 17:24	4
Selenium	0.86	J	3.4	0.51	mg/Kg		08/27/18 14:52	08/28/18 17:24	4
Silver	1.4		0.85	0.17	mg/Kg		08/27/18 14:52	08/28/18 17:24	4
Thallium	1.3	J	1.7	0.50	mg/Kg		08/27/18 14:52	08/28/18 17:24	4
Vanadium	98		1.7	0.23	mg/Kg		08/27/18 14:52	08/28/18 17:24	4
Zinc	400		5.1	2.2	mg/Kg		08/27/18 14:52	08/28/18 17:24	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.29		0.016	0.0024	mg/Kg		08/25/18 13:53	08/29/18 12:40	1

Client Sample ID: DG-F6S-3.5-4

Date Collected: 08/23/18 09:08
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-4

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.54	J	1.8	0.29	mg/Kg		08/27/18 14:52	08/28/18 17:29	4
Arsenic	5.9		3.5	0.30	mg/Kg		08/27/18 14:52	08/28/18 17:29	4
Barium	21		1.8	0.25	mg/Kg		08/27/18 14:52	08/28/18 17:29	4
Beryllium	ND		0.35	0.11	mg/Kg		08/27/18 14:52	08/28/18 17:29	4
Cadmium	ND		0.44	0.044	mg/Kg		08/27/18 14:52	08/28/18 17:29	4
Chromium	14		1.8	0.19	mg/Kg		08/27/18 14:52	08/28/18 17:29	4
Cobalt	15		0.70	0.070	mg/Kg		08/27/18 14:52	08/28/18 17:29	4
Copper	130		5.3	2.5	mg/Kg		08/27/18 14:52	08/28/18 17:29	4
Lead	37		1.8	0.37	mg/Kg		08/27/18 14:52	08/28/18 17:29	4
Molybdenum	1.4	J	1.8	0.22	mg/Kg		08/27/18 14:52	08/28/18 17:29	4
Nickel	6.5		1.8	0.18	mg/Kg		08/27/18 14:52	08/28/18 17:29	4
Selenium	0.88	J	3.5	0.53	mg/Kg		08/27/18 14:52	08/28/18 17:29	4
Silver	0.46	J	0.88	0.18	mg/Kg		08/27/18 14:52	08/28/18 17:29	4
Thallium	1.1	J	1.8	0.51	mg/Kg		08/27/18 14:52	08/28/18 17:29	4
Vanadium	100		1.8	0.24	mg/Kg		08/27/18 14:52	08/28/18 17:29	4
Zinc	74		5.3	2.2	mg/Kg		08/27/18 14:52	08/28/18 17:29	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.015	0.0023	mg/Kg		08/25/18 13:53	08/29/18 12:43	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Client Sample ID: DG-K6S-0.5-1
Date Collected: 08/23/18 09:30
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-5
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.2		1.8	0.30	mg/Kg		08/27/18 14:52	08/28/18 17:43	4
Arsenic	19		3.6	0.31	mg/Kg		08/27/18 14:52	08/28/18 17:43	4
Barium	51		1.8	0.26	mg/Kg		08/27/18 14:52	08/28/18 17:43	4
Beryllium	ND		0.36	0.12	mg/Kg		08/27/18 14:52	08/28/18 17:43	4
Cadmium	0.38	J	0.45	0.045	mg/Kg		08/27/18 14:52	08/28/18 17:43	4
Chromium	23		1.8	0.19	mg/Kg		08/27/18 14:52	08/28/18 17:43	4
Cobalt	15		0.73	0.073	mg/Kg		08/27/18 14:52	08/28/18 17:43	4
Copper	160		5.5	2.6	mg/Kg		08/27/18 14:52	08/28/18 17:43	4
Lead	170		1.8	0.38	mg/Kg		08/27/18 14:52	08/28/18 17:43	4
Molybdenum	0.79	J	1.8	0.23	mg/Kg		08/27/18 14:52	08/28/18 17:43	4
Nickel	35		1.8	0.19	mg/Kg		08/27/18 14:52	08/28/18 17:43	4
Selenium	0.74	J	3.6	0.55	mg/Kg		08/27/18 14:52	08/28/18 17:43	4
Silver	0.49	J	0.91	0.18	mg/Kg		08/27/18 14:52	08/28/18 17:43	4
Thallium	1.5	J	1.8	0.53	mg/Kg		08/27/18 14:52	08/28/18 17:43	4
Vanadium	85		1.8	0.25	mg/Kg		08/27/18 14:52	08/28/18 17:43	4
Zinc	110		5.5	2.3	mg/Kg		08/27/18 14:52	08/28/18 17:43	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.21		0.017	0.0025	mg/Kg		08/25/18 13:53	08/29/18 12:45	1

Client Sample ID: DG-K6S-3.5-4

Date Collected: 08/23/18 09:30
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-6

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.7		1.7	0.29	mg/Kg		08/27/18 14:52	08/28/18 17:48	4
Arsenic	440		3.5	0.30	mg/Kg		08/27/18 14:52	08/28/18 17:48	4
Barium	69		1.7	0.25	mg/Kg		08/27/18 14:52	08/28/18 17:48	4
Beryllium	ND		0.35	0.11	mg/Kg		08/27/18 14:52	08/28/18 17:48	4
Cadmium	0.37	J	0.43	0.043	mg/Kg		08/27/18 14:52	08/28/18 17:48	4
Chromium	41		1.7	0.18	mg/Kg		08/27/18 14:52	08/28/18 17:48	4
Cobalt	11		0.70	0.070	mg/Kg		08/27/18 14:52	08/28/18 17:48	4
Copper	84		5.2	2.5	mg/Kg		08/27/18 14:52	08/28/18 17:48	4
Lead	130		1.7	0.37	mg/Kg		08/27/18 14:52	08/28/18 17:48	4
Molybdenum	0.95	J	1.7	0.22	mg/Kg		08/27/18 14:52	08/28/18 17:48	4
Nickel	38		1.7	0.18	mg/Kg		08/27/18 14:52	08/28/18 17:48	4
Selenium	0.73	J	3.5	0.52	mg/Kg		08/27/18 14:52	08/28/18 17:48	4
Silver	0.35	J	0.87	0.18	mg/Kg		08/27/18 14:52	08/28/18 17:48	4
Thallium	1.6	J	1.7	0.50	mg/Kg		08/27/18 14:52	08/28/18 17:48	4
Vanadium	54		1.7	0.24	mg/Kg		08/27/18 14:52	08/28/18 17:48	4
Zinc	92		5.2	2.2	mg/Kg		08/27/18 14:52	08/28/18 17:48	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.38		0.017	0.0025	mg/Kg		08/25/18 13:53	08/29/18 12:47	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Client Sample ID: DG-I8S-0.5-1
Date Collected: 08/23/18 10:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-7
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.55	J	1.5	0.24	mg/Kg		08/27/18 14:52	08/28/18 17:52	4
Arsenic	3.4		2.9	0.25	mg/Kg		08/27/18 14:52	08/28/18 17:52	4
Barium	39		1.5	0.21	mg/Kg		08/27/18 14:52	08/28/18 17:52	4
Beryllium	ND		0.29	0.096	mg/Kg		08/27/18 14:52	08/28/18 17:52	4
Cadmium	0.047	J	0.37	0.036	mg/Kg		08/27/18 14:52	08/28/18 17:52	4
Chromium	13		1.5	0.16	mg/Kg		08/27/18 14:52	08/28/18 17:52	4
Cobalt	14		0.59	0.059	mg/Kg		08/27/18 14:52	08/28/18 17:52	4
Copper	99		4.4	2.1	mg/Kg		08/27/18 14:52	08/28/18 17:52	4
Lead	96		1.5	0.31	mg/Kg		08/27/18 14:52	08/28/18 17:52	4
Molybdenum	0.27	J	1.5	0.19	mg/Kg		08/27/18 14:52	08/28/18 17:52	4
Nickel	6.6		1.5	0.15	mg/Kg		08/27/18 14:52	08/28/18 17:52	4
Selenium	0.88	J	2.9	0.44	mg/Kg		08/27/18 14:52	08/28/18 17:52	4
Silver	0.40	J	0.74	0.15	mg/Kg		08/27/18 14:52	08/28/18 17:52	4
Thallium	1.6		1.5	0.43	mg/Kg		08/27/18 14:52	08/28/18 17:52	4
Vanadium	120		1.5	0.20	mg/Kg		08/27/18 14:52	08/28/18 17:52	4
Zinc	88		4.4	1.9	mg/Kg		08/27/18 14:52	08/28/18 17:52	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.068		0.016	0.0024	mg/Kg		08/25/18 13:53	08/29/18 12:54	1

Client Sample ID: DG-I8S-3.5-4

Date Collected: 08/23/18 10:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-8

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.36	J	1.7	0.27	mg/Kg		08/27/18 14:52	08/28/18 17:57	4
Arsenic	1.6	J	3.3	0.28	mg/Kg		08/27/18 14:52	08/28/18 17:57	4
Barium	49		1.7	0.23	mg/Kg		08/27/18 14:52	08/28/18 17:57	4
Beryllium	ND		0.33	0.11	mg/Kg		08/27/18 14:52	08/28/18 17:57	4
Cadmium	ND		0.41	0.041	mg/Kg		08/27/18 14:52	08/28/18 17:57	4
Chromium	14		1.7	0.18	mg/Kg		08/27/18 14:52	08/28/18 17:57	4
Cobalt	8.3		0.66	0.066	mg/Kg		08/27/18 14:52	08/28/18 17:57	4
Copper	67		5.0	2.4	mg/Kg		08/27/18 14:52	08/28/18 17:57	4
Lead	18		1.7	0.35	mg/Kg		08/27/18 14:52	08/28/18 17:57	4
Molybdenum	ND		1.7	0.21	mg/Kg		08/27/18 14:52	08/28/18 17:57	4
Nickel	8.2		1.7	0.17	mg/Kg		08/27/18 14:52	08/28/18 17:57	4
Selenium	ND		3.3	0.50	mg/Kg		08/27/18 14:52	08/28/18 17:57	4
Silver	0.27	J	0.83	0.17	mg/Kg		08/27/18 14:52	08/28/18 17:57	4
Thallium	0.85	J	1.7	0.48	mg/Kg		08/27/18 14:52	08/28/18 17:57	4
Vanadium	71		1.7	0.22	mg/Kg		08/27/18 14:52	08/28/18 17:57	4
Zinc	51		5.0	2.1	mg/Kg		08/27/18 14:52	08/28/18 17:57	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.049		0.016	0.0024	mg/Kg		08/25/18 13:53	08/29/18 12:57	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Client Sample ID: DG-G8S-0.5-1
Date Collected: 08/23/18 10:18
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-9
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.39	J	1.6	0.26	mg/Kg		08/27/18 14:52	08/28/18 18:02	4
Arsenic	6.3		3.1	0.27	mg/Kg		08/27/18 14:52	08/28/18 18:02	4
Barium	51		1.6	0.22	mg/Kg		08/27/18 14:52	08/28/18 18:02	4
Beryllium	ND		0.31	0.10	mg/Kg		08/27/18 14:52	08/28/18 18:02	4
Cadmium	0.14	J	0.39	0.039	mg/Kg		08/27/18 14:52	08/28/18 18:02	4
Chromium	12		1.6	0.17	mg/Kg		08/27/18 14:52	08/28/18 18:02	4
Cobalt	12		0.63	0.063	mg/Kg		08/27/18 14:52	08/28/18 18:02	4
Copper	110		4.7	2.2	mg/Kg		08/27/18 14:52	08/28/18 18:02	4
Lead	95		1.6	0.33	mg/Kg		08/27/18 14:52	08/28/18 18:02	4
Molybdenum	0.81	J	1.6	0.20	mg/Kg		08/27/18 14:52	08/28/18 18:02	4
Nickel	6.6		1.6	0.16	mg/Kg		08/27/18 14:52	08/28/18 18:02	4
Selenium	ND		3.1	0.47	mg/Kg		08/27/18 14:52	08/28/18 18:02	4
Silver	0.47	J	0.79	0.16	mg/Kg		08/27/18 14:52	08/28/18 18:02	4
Thallium	1.3	J	1.6	0.46	mg/Kg		08/27/18 14:52	08/28/18 18:02	4
Vanadium	100		1.6	0.21	mg/Kg		08/27/18 14:52	08/28/18 18:02	4
Zinc	80		4.7	2.0	mg/Kg		08/27/18 14:52	08/28/18 18:02	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.090		0.016	0.0024	mg/Kg		08/25/18 13:53	08/29/18 12:59	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Client Sample ID: DG-G8S-3.5-4
Date Collected: 08/23/18 10:18
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-10
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.8		1.5	0.25	mg/Kg		08/27/18 14:52	08/28/18 18:07	4
Arsenic	11		3.0	0.25	mg/Kg		08/27/18 14:52	08/28/18 18:07	4
Barium	130		1.5	0.21	mg/Kg		08/27/18 14:52	08/28/18 18:07	4
Beryllium	ND		0.30	0.097	mg/Kg		08/27/18 14:52	08/28/18 18:07	4
Cadmium	0.28	J	0.37	0.037	mg/Kg		08/27/18 14:52	08/28/18 18:07	4
Chromium	28		1.5	0.16	mg/Kg		08/27/18 14:52	08/28/18 18:07	4
Cobalt	9.1		0.60	0.060	mg/Kg		08/27/18 14:52	08/28/18 18:07	4
Copper	66		4.5	2.1	mg/Kg		08/27/18 14:52	08/28/18 18:07	4
Lead	150		1.5	0.31	mg/Kg		08/27/18 14:52	08/28/18 18:07	4
Molybdenum	0.35	J	1.5	0.19	mg/Kg		08/27/18 14:52	08/28/18 18:07	4
Nickel	82		1.5	0.15	mg/Kg		08/27/18 14:52	08/28/18 18:07	4
Selenium	ND		3.0	0.45	mg/Kg		08/27/18 14:52	08/28/18 18:07	4
Silver	0.62	J	0.75	0.15	mg/Kg		08/27/18 14:52	08/28/18 18:07	4
Thallium	0.78	J	1.5	0.43	mg/Kg		08/27/18 14:52	08/28/18 18:07	4
Vanadium	41		1.5	0.20	mg/Kg		08/27/18 14:52	08/28/18 18:07	4
Zinc	190		4.5	1.9	mg/Kg		08/27/18 14:52	08/28/18 18:07	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.062		0.015	0.0022	mg/Kg		08/25/18 13:53	08/29/18 13:01	1

Client Sample ID: DG-J10S-0.5-1

Date Collected: 08/23/18 16:55
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-11

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.0	J B	1.2	0.21	mg/Kg		08/28/18 10:26	08/29/18 20:48	4
Arsenic	3.1		2.5	0.21	mg/Kg		08/28/18 10:26	08/29/18 20:48	4
Barium	78	B	1.2	0.18	mg/Kg		08/28/18 10:26	08/29/18 20:48	4
Beryllium	ND		0.25	0.081	mg/Kg		08/28/18 10:26	08/29/18 20:48	4
Cadmium	0.23	J	0.31	0.031	mg/Kg		08/28/18 10:26	08/29/18 20:48	4
Chromium	110		1.2	0.13	mg/Kg		08/28/18 10:26	08/29/18 20:48	4
Cobalt	10		0.50	0.050	mg/Kg		08/28/18 10:26	08/29/18 20:48	4
Copper	100		3.7	1.8	mg/Kg		08/28/18 10:26	08/29/18 20:48	4
Lead	130		1.2	0.26	mg/Kg		08/28/18 10:26	08/29/18 20:48	4
Molybdenum	15		1.2	0.16	mg/Kg		08/28/18 10:26	08/29/18 20:48	4
Nickel	30		1.2	0.13	mg/Kg		08/28/18 10:26	08/29/18 20:48	4
Selenium	ND		2.5	0.37	mg/Kg		08/28/18 10:26	08/29/18 20:48	4
Silver	ND		0.62	0.13	mg/Kg		08/28/18 10:26	08/29/18 20:48	4
Thallium	0.65	J	1.2	0.36	mg/Kg		08/28/18 10:26	08/29/18 20:48	4
Vanadium	81		1.2	0.17	mg/Kg		08/28/18 10:26	08/29/18 20:48	4
Zinc	65		3.7	1.6	mg/Kg		08/28/18 10:26	08/29/18 20:48	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.042		0.016	0.0024	mg/Kg		08/29/18 20:30	08/30/18 08:59	1

Client Sample ID: DG-J10S-3.5-4

Date Collected: 08/23/18 16:55
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-12

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.98	J B	1.5	0.24	mg/Kg		08/28/18 10:26	08/29/18 20:53	4
Arsenic	5.0		2.9	0.25	mg/Kg		08/28/18 10:26	08/29/18 20:53	4
Barium	120	B	1.5	0.21	mg/Kg		08/28/18 10:26	08/29/18 20:53	4
Beryllium	0.41		0.29	0.096	mg/Kg		08/28/18 10:26	08/29/18 20:53	4
Cadmium	0.042	J	0.37	0.036	mg/Kg		08/28/18 10:26	08/29/18 20:53	4
Chromium	95		1.5	0.16	mg/Kg		08/28/18 10:26	08/29/18 20:53	4
Cobalt	21		0.59	0.059	mg/Kg		08/28/18 10:26	08/29/18 20:53	4
Copper	32		4.4	2.1	mg/Kg		08/28/18 10:26	08/29/18 20:53	4
Lead	7.2		1.5	0.31	mg/Kg		08/28/18 10:26	08/29/18 20:53	4
Molybdenum	0.31	J	1.5	0.19	mg/Kg		08/28/18 10:26	08/29/18 20:53	4
Nickel	110		1.5	0.15	mg/Kg		08/28/18 10:26	08/29/18 20:53	4
Selenium	ND		2.9	0.44	mg/Kg		08/28/18 10:26	08/29/18 20:53	4
Silver	0.22	J	0.74	0.15	mg/Kg		08/28/18 10:26	08/29/18 20:53	4
Thallium	0.70	J	1.5	0.43	mg/Kg		08/28/18 10:26	08/29/18 20:53	4
Vanadium	63		1.5	0.20	mg/Kg		08/28/18 10:26	08/29/18 20:53	4
Zinc	54		4.4	1.9	mg/Kg		08/28/18 10:26	08/29/18 20:53	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.088		0.015	0.0021	mg/Kg		08/29/18 20:30	08/30/18 09:02	1

Client Sample ID: DG-L10S-0.5-1

Date Collected: 08/23/18 17:15
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-13

Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.8	B	1.3	0.21	mg/Kg		08/28/18 10:26	08/29/18 20:58	4
Arsenic	4.2		2.5	0.22	mg/Kg		08/28/18 10:26	08/29/18 20:58	4
Barium	83	B	1.3	0.18	mg/Kg		08/28/18 10:26	08/29/18 20:58	4
Beryllium	ND		0.25	0.082	mg/Kg		08/28/18 10:26	08/29/18 20:58	4
Cadmium	0.47		0.32	0.031	mg/Kg		08/28/18 10:26	08/29/18 20:58	4
Chromium	27		1.3	0.13	mg/Kg		08/28/18 10:26	08/29/18 20:58	4
Cobalt	8.7		0.51	0.051	mg/Kg		08/28/18 10:26	08/29/18 20:58	4
Copper	95		3.8	1.8	mg/Kg		08/28/18 10:26	08/29/18 20:58	4
Lead	400		1.3	0.27	mg/Kg		08/28/18 10:26	08/29/18 20:58	4
Molybdenum	0.20	J	1.3	0.16	mg/Kg		08/28/18 10:26	08/29/18 20:58	4
Nickel	5.9		1.3	0.13	mg/Kg		08/28/18 10:26	08/29/18 20:58	4
Selenium	ND		2.5	0.38	mg/Kg		08/28/18 10:26	08/29/18 20:58	4
Silver	0.21	J	0.63	0.13	mg/Kg		08/28/18 10:26	08/29/18 20:58	4
Thallium	0.62	J	1.3	0.37	mg/Kg		08/28/18 10:26	08/29/18 20:58	4
Vanadium	68		1.3	0.17	mg/Kg		08/28/18 10:26	08/29/18 20:58	4
Zinc	120		3.8	1.6	mg/Kg		08/28/18 10:26	08/29/18 20:58	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.1		0.015	0.0022	mg/Kg		08/29/18 20:30	08/30/18 09:04	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Client Sample ID: DG-L10S-3.5-4
Date Collected: 08/23/18 17:15
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-14
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.4	J B	1.6	0.26	mg/Kg		08/28/18 10:26	08/29/18 21:03	4
Arsenic	11		3.1	0.27	mg/Kg		08/28/18 10:26	08/29/18 21:03	4
Barium	97	B	1.6	0.22	mg/Kg		08/28/18 10:26	08/29/18 21:03	4
Beryllium	0.61		0.31	0.10	mg/Kg		08/28/18 10:26	08/29/18 21:03	4
Cadmium	0.050	J	0.39	0.039	mg/Kg		08/28/18 10:26	08/29/18 21:03	4
Chromium	31		1.6	0.17	mg/Kg		08/28/18 10:26	08/29/18 21:03	4
Cobalt	17		0.63	0.063	mg/Kg		08/28/18 10:26	08/29/18 21:03	4
Copper	62		4.7	2.2	mg/Kg		08/28/18 10:26	08/29/18 21:03	4
Lead	14		1.6	0.33	mg/Kg		08/28/18 10:26	08/29/18 21:03	4
Molybdenum	0.47	J	1.6	0.20	mg/Kg		08/28/18 10:26	08/29/18 21:03	4
Nickel	45		1.6	0.16	mg/Kg		08/28/18 10:26	08/29/18 21:03	4
Selenium	ND		3.1	0.47	mg/Kg		08/28/18 10:26	08/29/18 21:03	4
Silver	0.32	J	0.79	0.16	mg/Kg		08/28/18 10:26	08/29/18 21:03	4
Thallium	ND		1.6	0.46	mg/Kg		08/28/18 10:26	08/29/18 21:03	4
Vanadium	35		1.6	0.21	mg/Kg		08/28/18 10:26	08/29/18 21:03	4
Zinc	95		4.7	2.0	mg/Kg		08/28/18 10:26	08/29/18 21:03	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.065		0.015	0.0022	mg/Kg		08/29/18 20:30	08/30/18 09:07	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Client Sample ID: DG-H8S-0.5-1
Date Collected: 08/23/18 10:15
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-15
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.48	J	1.8	0.30	mg/Kg		08/28/18 12:45	08/31/18 00:24	4
Arsenic	7.8		3.6	0.30	mg/Kg		08/28/18 12:45	08/31/18 00:24	4
Barium	56		1.8	0.25	mg/Kg		08/28/18 12:45	08/31/18 00:24	4
Beryllium	ND		0.36	0.12	mg/Kg		08/28/18 12:45	08/31/18 11:59	4
Cadmium	ND		0.45	0.044	mg/Kg		08/28/18 12:45	08/31/18 00:24	4
Chromium	17	B	1.8	0.19	mg/Kg		08/28/18 12:45	08/31/18 11:59	4
Cobalt	11		0.71	0.071	mg/Kg		08/28/18 12:45	08/31/18 00:24	4
Copper	140		5.4	2.5	mg/Kg		08/28/18 12:45	08/31/18 11:59	4
Lead	180		1.8	0.38	mg/Kg		08/28/18 12:45	08/31/18 00:24	4
Molybdenum	1.1	J	1.8	0.23	mg/Kg		08/28/18 12:45	08/31/18 00:24	4
Nickel	11		1.8	0.18	mg/Kg		08/28/18 12:45	08/31/18 00:24	4
Selenium	1.4	J	3.6	0.54	mg/Kg		08/28/18 12:45	08/31/18 00:24	4
Silver	ND		0.89	0.18	mg/Kg		08/28/18 12:45	08/31/18 11:59	4
Thallium	ND		1.8	0.52	mg/Kg		08/28/18 12:45	08/31/18 00:24	4
Vanadium	83		1.8	0.24	mg/Kg		08/28/18 12:45	08/31/18 11:59	4
Zinc	140		5.4	2.3	mg/Kg		08/28/18 12:45	08/31/18 00:24	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15		0.017	0.0025	mg/Kg		08/29/18 20:30	08/30/18 09:09	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Client Sample ID: DG-H8S-3.5-4
Date Collected: 08/23/18 10:15
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-16
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.69	J	1.0	0.17	mg/Kg		08/27/18 12:41	08/29/18 11:34	4
Arsenic	2.2		2.1	0.18	mg/Kg		08/27/18 12:41	08/29/18 11:34	4
Barium	29		1.0	0.15	mg/Kg		08/27/18 12:41	08/29/18 11:34	4
Beryllium	ND		0.21	0.067	mg/Kg		08/27/18 12:41	08/29/18 11:34	4
Cadmium	0.027	J	0.26	0.026	mg/Kg		08/27/18 12:41	08/29/18 11:34	4
Chromium	19		1.0	0.11	mg/Kg		08/27/18 12:41	08/29/18 11:34	4
Cobalt	5.7		0.41	0.041	mg/Kg		08/27/18 12:41	08/29/18 11:34	4
Copper	29		3.1	1.5	mg/Kg		08/27/18 12:41	08/29/18 11:34	4
Lead	29		1.0	0.22	mg/Kg		08/27/18 12:41	08/29/18 11:34	4
Molybdenum	ND		1.0	0.13	mg/Kg		08/27/18 12:41	08/29/18 11:34	4
Nickel	12		1.0	0.11	mg/Kg		08/27/18 12:41	08/29/18 11:34	4
Selenium	ND		2.1	0.31	mg/Kg		08/27/18 12:41	08/29/18 11:34	4
Silver	ND		0.52	0.10	mg/Kg		08/27/18 12:41	08/29/18 11:34	4
Thallium	0.34	J	1.0	0.30	mg/Kg		08/27/18 12:41	08/29/18 11:34	4
Vanadium	37		1.0	0.14	mg/Kg		08/27/18 12:41	08/29/18 11:34	4
Zinc	31		3.1	1.3	mg/Kg		08/27/18 12:41	08/29/18 11:34	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.017	0.0025	mg/Kg		08/29/18 20:30	08/30/18 09:11	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Client Sample ID: DG-C8S-0.5-1
Date Collected: 08/23/18 11:45
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-17
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.4	J	1.8	0.29	mg/Kg		08/27/18 12:41	08/29/18 11:39	4
Arsenic	5.1		3.5	0.30	mg/Kg		08/27/18 12:41	08/29/18 11:39	4
Barium	55		1.8	0.25	mg/Kg		08/27/18 12:41	08/29/18 11:39	4
Beryllium	ND		0.35	0.11	mg/Kg		08/27/18 12:41	08/29/18 11:39	4
Cadmium	0.60		0.44	0.044	mg/Kg		08/27/18 12:41	08/29/18 11:39	4
Chromium	17		1.8	0.19	mg/Kg		08/27/18 12:41	08/29/18 11:39	4
Cobalt	13		0.70	0.070	mg/Kg		08/27/18 12:41	08/29/18 11:39	4
Copper	190		5.3	2.5	mg/Kg		08/27/18 12:41	08/29/18 11:39	4
Lead	89		1.8	0.37	mg/Kg		08/27/18 12:41	08/29/18 11:39	4
Molybdenum	0.39	J	1.8	0.22	mg/Kg		08/27/18 12:41	08/29/18 11:39	4
Nickel	11		1.8	0.18	mg/Kg		08/27/18 12:41	08/29/18 11:39	4
Selenium	ND		3.5	0.53	mg/Kg		08/27/18 12:41	08/29/18 11:39	4
Silver	ND		0.88	0.18	mg/Kg		08/27/18 12:41	08/29/18 11:39	4
Thallium	1.5	J	1.8	0.51	mg/Kg		08/27/18 12:41	08/29/18 11:39	4
Vanadium	100		1.8	0.24	mg/Kg		08/27/18 12:41	08/29/18 11:39	4
Zinc	380		5.3	2.2	mg/Kg		08/27/18 12:41	08/29/18 11:39	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.077		0.016	0.0023	mg/Kg		08/29/18 20:30	08/30/18 09:18	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Client Sample ID: DG-C8S-3.5-4
Date Collected: 08/23/18 11:45
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-18
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.7		1.4	0.23	mg/Kg		08/25/18 14:28	08/27/18 20:29	4
Arsenic	4.1	B	2.8	0.24	mg/Kg		08/25/18 14:28	08/27/18 20:29	4
Barium	90		1.4	0.20	mg/Kg		08/25/18 14:28	08/27/18 20:29	4
Beryllium	0.26	J	0.28	0.091	mg/Kg		08/25/18 14:28	08/27/18 20:29	4
Cadmium	0.067	J	0.35	0.035	mg/Kg		08/25/18 14:28	08/27/18 20:29	4
Chromium	130		1.4	0.15	mg/Kg		08/25/18 14:28	08/27/18 20:29	4
Cobalt	15		0.56	0.056	mg/Kg		08/25/18 14:28	08/27/18 20:29	4
Copper	37		4.2	2.0	mg/Kg		08/25/18 14:28	08/27/18 20:29	4
Lead	150		1.4	0.29	mg/Kg		08/25/18 14:28	08/27/18 20:29	4
Molybdenum	0.31	J	1.4	0.18	mg/Kg		08/25/18 14:28	08/27/18 20:29	4
Nickel	130		1.4	0.14	mg/Kg		08/25/18 14:28	08/27/18 20:29	4
Selenium	ND		2.8	0.42	mg/Kg		08/25/18 14:28	08/27/18 20:29	4
Silver	ND		0.70	0.14	mg/Kg		08/25/18 14:28	08/27/18 20:29	4
Thallium	0.78	J	1.4	0.41	mg/Kg		08/25/18 14:28	08/27/18 20:29	4
Vanadium	52		1.4	0.19	mg/Kg		08/25/18 14:28	08/27/18 20:29	4
Zinc	88		4.2	1.8	mg/Kg		08/25/18 14:28	08/27/18 20:29	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.35		0.017	0.0025	mg/Kg		08/29/18 20:30	08/30/18 09:21	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Client Sample ID: DG-F10S-0.5-1
Date Collected: 08/23/18 15:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-19
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.3	J	1.7	0.29	mg/Kg		08/25/18 14:28	08/27/18 20:34	4
Arsenic	2.6	J B	3.5	0.30	mg/Kg		08/25/18 14:28	08/27/18 20:34	4
Barium	52		1.7	0.25	mg/Kg		08/25/18 14:28	08/27/18 20:34	4
Beryllium	ND		0.35	0.11	mg/Kg		08/25/18 14:28	08/27/18 20:34	4
Cadmium	0.073	J	0.43	0.043	mg/Kg		08/25/18 14:28	08/27/18 20:34	4
Chromium	14		1.7	0.18	mg/Kg		08/25/18 14:28	08/27/18 20:34	4
Cobalt	15		0.70	0.070	mg/Kg		08/25/18 14:28	08/27/18 20:34	4
Copper	120		5.2	2.5	mg/Kg		08/25/18 14:28	08/27/18 20:34	4
Lead	85		1.7	0.37	mg/Kg		08/25/18 14:28	08/27/18 20:34	4
Molybdenum	0.51	J	1.7	0.22	mg/Kg		08/25/18 14:28	08/27/18 20:34	4
Nickel	12		1.7	0.18	mg/Kg		08/25/18 14:28	08/27/18 20:34	4
Selenium	ND		3.5	0.52	mg/Kg		08/25/18 14:28	08/27/18 20:34	4
Silver	ND		0.87	0.18	mg/Kg		08/25/18 14:28	08/27/18 20:34	4
Thallium	1.3	J	1.7	0.50	mg/Kg		08/25/18 14:28	08/27/18 20:34	4
Vanadium	110		1.7	0.24	mg/Kg		08/25/18 14:28	08/27/18 20:34	4
Zinc	80		5.2	2.2	mg/Kg		08/25/18 14:28	08/27/18 20:34	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.070		0.015	0.0022	mg/Kg		08/29/18 20:30	08/30/18 09:23	1

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Client Sample ID: DG-F10S-3.5-4
Date Collected: 08/23/18 15:00
Date Received: 08/24/18 15:00

Lab Sample ID: 720-88235-20
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.63	J	1.8	0.30	mg/Kg		08/25/18 14:28	08/27/18 20:39	4
Arsenic	6.2	B	3.7	0.31	mg/Kg		08/25/18 14:28	08/27/18 20:39	4
Barium	160		1.8	0.26	mg/Kg		08/25/18 14:28	08/27/18 20:39	4
Beryllium	0.47		0.37	0.12	mg/Kg		08/25/18 14:28	08/27/18 20:39	4
Cadmium	ND		0.46	0.046	mg/Kg		08/25/18 14:28	08/27/18 20:39	4
Chromium	72		1.8	0.19	mg/Kg		08/25/18 14:28	08/27/18 20:39	4
Cobalt	23		0.73	0.073	mg/Kg		08/25/18 14:28	08/27/18 20:39	4
Copper	49		5.5	2.6	mg/Kg		08/25/18 14:28	08/27/18 20:39	4
Lead	14		1.8	0.39	mg/Kg		08/25/18 14:28	08/27/18 20:39	4
Molybdenum	0.33	J	1.8	0.23	mg/Kg		08/25/18 14:28	08/27/18 20:39	4
Nickel	87		1.8	0.19	mg/Kg		08/25/18 14:28	08/27/18 20:39	4
Selenium	ND		3.7	0.55	mg/Kg		08/25/18 14:28	08/27/18 20:39	4
Silver	ND		0.92	0.19	mg/Kg		08/25/18 14:28	08/27/18 20:39	4
Thallium	1.5	J	1.8	0.53	mg/Kg		08/25/18 14:28	08/27/18 20:39	4
Vanadium	67		1.8	0.25	mg/Kg		08/25/18 14:28	08/27/18 20:39	4
Zinc	93		5.5	2.3	mg/Kg		08/25/18 14:28	08/27/18 20:39	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13		0.016	0.0023	mg/Kg		08/29/18 20:30	08/30/18 09:25	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-250242/1-A
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250242

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Arsenic	0.0855	J	1.0	0.085	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Barium	ND		0.50	0.071	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Beryllium	ND		0.10	0.033	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Cadmium	ND		0.13	0.012	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Chromium	ND		0.50	0.053	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Cobalt	ND		0.20	0.020	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Copper	ND		1.5	0.71	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Lead	ND		0.50	0.11	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Nickel	ND		0.50	0.051	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Selenium	ND		1.0	0.15	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Silver	ND		0.25	0.051	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Thallium	ND		0.50	0.15	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Vanadium	ND		0.50	0.068	mg/Kg		08/25/18 14:28	08/27/18 18:31	1
Zinc	ND		1.5	0.64	mg/Kg		08/25/18 14:28	08/27/18 18:31	1

Lab Sample ID: LCS 720-250242/2-A
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	48.2		mg/Kg		96	80 - 120
Arsenic	50.0	48.3		mg/Kg		97	80 - 120
Barium	50.0	52.4		mg/Kg		105	80 - 120
Beryllium	50.0	50.9		mg/Kg		102	80 - 120
Cadmium	50.0	48.4		mg/Kg		97	80 - 120
Chromium	50.0	47.6		mg/Kg		95	80 - 120
Cobalt	50.0	50.2		mg/Kg		100	80 - 120
Copper	50.0	48.6		mg/Kg		97	80 - 120
Lead	50.0	49.3		mg/Kg		99	80 - 120
Molybdenum	50.0	49.5		mg/Kg		99	80 - 120
Nickel	50.0	48.5		mg/Kg		97	80 - 120
Selenium	50.0	47.5		mg/Kg		95	80 - 120
Silver	25.0	26.4		mg/Kg		106	80 - 120
Thallium	50.0	49.6		mg/Kg		99	80 - 120
Vanadium	50.0	49.7		mg/Kg		99	80 - 120
Zinc	50.0	49.1		mg/Kg		98	80 - 120

Lab Sample ID: 720-88217-A-4-A MS
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250242

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.80	J F1	38.8	12.4	F1	mg/Kg		30	75 - 125
Arsenic	2.1	J B	38.8	41.2		mg/Kg		101	75 - 125
Barium	83	F1	38.8	135	F1	mg/Kg		133	75 - 125
Beryllium	0.12	J	38.8	44.1		mg/Kg		113	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88217-A-4-A MS
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250242

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	ND		38.8	39.4		mg/Kg		102	75 - 125
Chromium	96		38.8	139		mg/Kg		112	75 - 125
Cobalt	30		38.8	73.1		mg/Kg		112	75 - 125
Copper	45	F1	38.8	97.5	F1	mg/Kg		135	75 - 125
Lead	2.7		38.8	41.1		mg/Kg		99	75 - 125
Molybdenum	0.22	J	38.8	33.9		mg/Kg		87	75 - 125
Nickel	68		38.8	110		mg/Kg		110	75 - 125
Selenium	ND		38.8	34.6		mg/Kg		89	75 - 125
Silver	ND	F1	19.4	24.4	F1	mg/Kg		126	75 - 125
Thallium	1.6		38.8	39.2		mg/Kg		97	75 - 125
Vanadium	100	F1	38.8	163	F1	mg/Kg		154	75 - 125
Zinc	68		38.8	114		mg/Kg		119	75 - 125

Lab Sample ID: 720-88217-A-4-B MSD
Matrix: Solid
Analysis Batch: 250349

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250242

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.80	J F1	38.2	11.0	F1	mg/Kg		27	75 - 125	12	20
Arsenic	2.1	J B	38.2	41.6		mg/Kg		103	75 - 125	1	20
Barium	83	F1	38.2	153	F1	mg/Kg		183	75 - 125	13	20
Beryllium	0.12	J	38.2	44.7		mg/Kg		117	75 - 125	1	20
Cadmium	ND		38.2	39.5		mg/Kg		104	75 - 125	0	20
Chromium	96		38.2	142		mg/Kg		122	75 - 125	2	20
Cobalt	30		38.2	70.5		mg/Kg		107	75 - 125	4	20
Copper	45	F1	38.2	92.8		mg/Kg		125	75 - 125	5	20
Lead	2.7		38.2	41.2		mg/Kg		101	75 - 125	0	20
Molybdenum	0.22	J	38.2	34.9		mg/Kg		91	75 - 125	3	20
Nickel	68		38.2	110		mg/Kg		111	75 - 125	0	20
Selenium	ND		38.2	35.5		mg/Kg		93	75 - 125	3	20
Silver	ND	F1	19.1	24.6	F1	mg/Kg		129	75 - 125	1	20
Thallium	1.6		38.2	38.7		mg/Kg		97	75 - 125	1	20
Vanadium	100	F1	38.2	160	F1	mg/Kg		148	75 - 125	2	20
Zinc	68		38.2	109		mg/Kg		108	75 - 125	5	20

Lab Sample ID: MB 720-250292/1-A
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250292

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Arsenic	ND		1.0	0.085	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Barium	ND		0.50	0.071	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Beryllium	ND		0.10	0.033	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Cadmium	ND		0.13	0.012	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Chromium	ND		0.50	0.053	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Cobalt	ND		0.20	0.020	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Copper	ND		1.5	0.71	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Lead	ND		0.50	0.11	mg/Kg		08/27/18 12:41	08/29/18 09:26	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-250292/1-A
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250292

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.50	0.064	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Nickel	ND		0.50	0.051	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Selenium	ND		1.0	0.15	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Silver	ND		0.25	0.051	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Thallium	ND		0.50	0.15	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Vanadium	ND		0.50	0.068	mg/Kg		08/27/18 12:41	08/29/18 09:26	1
Zinc	ND		1.5	0.64	mg/Kg		08/27/18 12:41	08/29/18 09:26	1

Lab Sample ID: LCS 720-250292/2-A
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250292

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	45.2		mg/Kg		90	80 - 120
Arsenic	50.0	44.9		mg/Kg		90	80 - 120
Barium	50.0	47.6		mg/Kg		95	80 - 120
Beryllium	50.0	47.8		mg/Kg		96	80 - 120
Cadmium	50.0	45.7		mg/Kg		91	80 - 120
Chromium	50.0	46.1		mg/Kg		92	80 - 120
Cobalt	50.0	46.1		mg/Kg		92	80 - 120
Copper	50.0	46.4		mg/Kg		93	80 - 120
Lead	50.0	46.2		mg/Kg		92	80 - 120
Molybdenum	50.0	46.2		mg/Kg		92	80 - 120
Nickel	50.0	46.6		mg/Kg		93	80 - 120
Selenium	50.0	43.9		mg/Kg		88	80 - 120
Silver	25.0	22.7		mg/Kg		91	80 - 120
Thallium	50.0	46.5		mg/Kg		93	80 - 120
Vanadium	50.0	46.1		mg/Kg		92	80 - 120
Zinc	50.0	45.3		mg/Kg		91	80 - 120

Lab Sample ID: 720-88216-A-9-K MS
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250292

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND	F1	45.5	12.0	F1	mg/Kg		26	75 - 125
Arsenic	1.2	J	45.5	51.7		mg/Kg		111	75 - 125
Barium	42	F1	45.5	93.3		mg/Kg		114	75 - 125
Beryllium	ND	F1	45.5	55.7		mg/Kg		123	75 - 125
Cadmium	ND		45.5	50.6		mg/Kg		111	75 - 125
Chromium	11		45.5	62.1		mg/Kg		112	75 - 125
Cobalt	8.2		45.5	58.2		mg/Kg		110	75 - 125
Copper	120	F1	45.5	162		mg/Kg		81	75 - 125
Lead	6.9		45.5	56.0		mg/Kg		108	75 - 125
Molybdenum	ND		45.5	49.3		mg/Kg		108	75 - 125
Nickel	5.0		45.5	54.6		mg/Kg		109	75 - 125
Selenium	ND		45.5	49.4		mg/Kg		109	75 - 125
Silver	ND	F1	22.7	27.5		mg/Kg		121	75 - 125
Thallium	0.83	J	45.5	49.7		mg/Kg		108	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88216-A-9-K MS
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250292

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	81	F1	45.5	134		mg/Kg		116	75 - 125
Zinc	32		45.5	82.5		mg/Kg		111	75 - 125

Lab Sample ID: 720-88216-A-9-L MSD
Matrix: Solid
Analysis Batch: 250491

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250292

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND	F1	45.0	11.2	F1	mg/Kg		25	75 - 125	6	20
Arsenic	1.2	J	45.0	53.6		mg/Kg		116	75 - 125	4	20
Barium	42	F1	45.0	105	F1	mg/Kg		140	75 - 125	12	20
Beryllium	ND	F1	45.0	58.2	F1	mg/Kg		129	75 - 125	4	20
Cadmium	ND		45.0	51.4		mg/Kg		114	75 - 125	2	20
Chromium	11		45.0	67.6		mg/Kg		125	75 - 125	8	20
Cobalt	8.2		45.0	60.4		mg/Kg		116	75 - 125	4	20
Copper	120	F1	45.0	186	F1	mg/Kg		136	75 - 125	14	20
Lead	6.9		45.0	58.6		mg/Kg		115	75 - 125	4	20
Molybdenum	ND		45.0	49.9		mg/Kg		111	75 - 125	1	20
Nickel	5.0		45.0	56.1		mg/Kg		113	75 - 125	3	20
Selenium	ND		45.0	51.4		mg/Kg		114	75 - 125	4	20
Silver	ND	F1	22.5	29.3	F1	mg/Kg		130	75 - 125	6	20
Thallium	0.83	J	45.0	50.5		mg/Kg		110	75 - 125	2	20
Vanadium	81	F1	45.0	156	F1	mg/Kg		167	75 - 125	16	20
Zinc	32		45.0	87.9		mg/Kg		124	75 - 125	6	20

Lab Sample ID: MB 720-250310/1-A
Matrix: Solid
Analysis Batch: 250437

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250310

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Arsenic	ND		1.0	0.085	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Barium	ND		0.50	0.071	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Beryllium	ND		0.10	0.033	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Cadmium	ND		0.13	0.012	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Chromium	ND		0.50	0.053	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Cobalt	ND		0.20	0.020	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Copper	ND		1.5	0.71	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Lead	ND		0.50	0.11	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Nickel	ND		0.50	0.051	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Selenium	ND		1.0	0.15	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Silver	ND		0.25	0.051	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Thallium	ND		0.50	0.15	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Vanadium	ND		0.50	0.068	mg/Kg		08/27/18 14:52	08/28/18 15:49	1
Zinc	ND		1.5	0.64	mg/Kg		08/27/18 14:52	08/28/18 15:49	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-250310/2-A
Matrix: Solid
Analysis Batch: 250437

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250310

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	45.0		mg/Kg		90	80 - 120
Arsenic	50.0	44.9		mg/Kg		90	80 - 120
Barium	50.0	46.6		mg/Kg		93	80 - 120
Beryllium	50.0	46.9		mg/Kg		94	80 - 120
Cadmium	50.0	45.8		mg/Kg		92	80 - 120
Chromium	50.0	45.9		mg/Kg		92	80 - 120
Cobalt	50.0	46.5		mg/Kg		93	80 - 120
Copper	50.0	46.7		mg/Kg		93	80 - 120
Lead	50.0	46.4		mg/Kg		93	80 - 120
Molybdenum	50.0	46.3		mg/Kg		93	80 - 120
Nickel	50.0	46.4		mg/Kg		93	80 - 120
Selenium	50.0	44.1		mg/Kg		88	80 - 120
Silver	25.0	23.0		mg/Kg		92	80 - 120
Thallium	50.0	46.7		mg/Kg		93	80 - 120
Vanadium	50.0	46.4		mg/Kg		93	80 - 120
Zinc	50.0	45.5		mg/Kg		91	80 - 120

Lab Sample ID: 720-88235-1 MS
Matrix: Solid
Analysis Batch: 250437

Client Sample ID: DG-C6S-0.5-1
Prep Type: Total/NA
Prep Batch: 250310

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.9	F1	47.6	13.4	F1	mg/Kg		24	75 - 125
Arsenic	4.2		47.6	56.2		mg/Kg		109	75 - 125
Barium	44	F1	47.6	110	F1	mg/Kg		139	75 - 125
Beryllium	ND		47.6	55.3		mg/Kg		116	75 - 125
Cadmium	0.54		47.6	51.5		mg/Kg		107	75 - 125
Chromium	19		47.6	77.5		mg/Kg		123	75 - 125
Cobalt	12		47.6	65.9		mg/Kg		113	75 - 125
Copper	150	F1	47.6	232	F1	mg/Kg		177	75 - 125
Lead	140	F1	47.6	214	F1	mg/Kg		147	75 - 125
Molybdenum	1.5	J	47.6	50.9		mg/Kg		104	75 - 125
Nickel	15		47.6	63.6		mg/Kg		102	75 - 125
Selenium	ND		47.6	51.4		mg/Kg		108	75 - 125
Silver	0.66	J	23.8	28.1		mg/Kg		115	75 - 125
Thallium	1.4	J	47.6	49.8		mg/Kg		102	75 - 125
Vanadium	88	F1	47.6	161	F1	mg/Kg		151	75 - 125
Zinc	120	F1	47.6	208	F1	mg/Kg		175	75 - 125

Lab Sample ID: 720-88235-1 MSD
Matrix: Solid
Analysis Batch: 250437

Client Sample ID: DG-C6S-0.5-1
Prep Type: Total/NA
Prep Batch: 250310

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.9	F1	48.1	13.0	F1	mg/Kg		23	75 - 125	3	20
Arsenic	4.2		48.1	56.4		mg/Kg		109	75 - 125	0	20
Barium	44	F1	48.1	107	F1	mg/Kg		133	75 - 125	2	20
Beryllium	ND		48.1	56.2		mg/Kg		117	75 - 125	2	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88235-1 MSD
Matrix: Solid
Analysis Batch: 250437

Client Sample ID: DG-C6S-0.5-1
Prep Type: Total/NA
Prep Batch: 250310

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	0.54		48.1	51.5		mg/Kg		106	75 - 125	0	20
Chromium	19		48.1	72.8		mg/Kg		112	75 - 125	6	20
Cobalt	12		48.1	66.4		mg/Kg		113	75 - 125	1	20
Copper	150	F1	48.1	233	F1	mg/Kg		178	75 - 125	0	20
Lead	140	F1	48.1	207	F1	mg/Kg		132	75 - 125	3	20
Molybdenum	1.5	J	48.1	50.5		mg/Kg		102	75 - 125	1	20
Nickel	15		48.1	63.9		mg/Kg		101	75 - 125	0	20
Selenium	ND		48.1	50.9		mg/Kg		106	75 - 125	1	20
Silver	0.66	J	24.0	28.7		mg/Kg		117	75 - 125	2	20
Thallium	1.4	J	48.1	49.9		mg/Kg		101	75 - 125	0	20
Vanadium	88	F1	48.1	170	F1	mg/Kg		169	75 - 125	6	20
Zinc	120	F1	48.1	202	F1	mg/Kg		162	75 - 125	3	20

Lab Sample ID: MB 720-250365/1-A
Matrix: Solid
Analysis Batch: 250585

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250365

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.105	J	0.50	0.083	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Arsenic	ND		1.0	0.085	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Barium	0.0888	J	0.50	0.071	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Beryllium	ND		0.10	0.033	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Cadmium	ND		0.13	0.012	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Chromium	ND		0.50	0.053	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Cobalt	ND		0.20	0.020	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Copper	ND		1.5	0.71	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Lead	ND		0.50	0.11	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Nickel	ND		0.50	0.051	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Selenium	ND		1.0	0.15	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Silver	ND		0.25	0.051	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Thallium	ND		0.50	0.15	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Vanadium	ND		0.50	0.068	mg/Kg		08/28/18 10:26	08/29/18 20:06	1
Zinc	ND		1.5	0.64	mg/Kg		08/28/18 10:26	08/29/18 20:06	1

Lab Sample ID: LCS 720-250365/2-A
Matrix: Solid
Analysis Batch: 250585

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250365

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.1		mg/Kg		94	80 - 120
Arsenic	50.0	47.7		mg/Kg		95	80 - 120
Barium	50.0	49.3		mg/Kg		99	80 - 120
Beryllium	50.0	48.6		mg/Kg		97	80 - 120
Cadmium	50.0	48.2		mg/Kg		96	80 - 120
Chromium	50.0	48.2		mg/Kg		96	80 - 120
Cobalt	50.0	49.6		mg/Kg		99	80 - 120
Copper	50.0	47.8		mg/Kg		96	80 - 120
Lead	50.0	49.1		mg/Kg		98	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-250365/2-A
Matrix: Solid
Analysis Batch: 250585

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250365

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Molybdenum			50.0	48.6		mg/Kg		97	80 - 120		
Nickel			50.0	48.4		mg/Kg		97	80 - 120		
Selenium			50.0	46.1		mg/Kg		92	80 - 120		
Silver			25.0	24.5		mg/Kg		98	80 - 120		
Thallium			50.0	48.5		mg/Kg		97	80 - 120		
Vanadium			50.0	48.4		mg/Kg		97	80 - 120		
Zinc			50.0	48.6		mg/Kg		97	80 - 120		

Lab Sample ID: 720-88216-A-17-Y MS
Matrix: Solid
Analysis Batch: 250585

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250365

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony	0.85	J B F1	45.5	12.2	F1	mg/Kg		25	75 - 125		
Arsenic	2.0	J	45.5	43.5		mg/Kg		91	75 - 125		
Barium	55	B	45.5	105		mg/Kg		109	75 - 125		
Beryllium	ND		45.5	43.8		mg/Kg		96	75 - 125		
Cadmium	0.064	J	45.5	43.5		mg/Kg		96	75 - 125		
Chromium	63		45.5	115		mg/Kg		114	75 - 125		
Cobalt	13		45.5	58.8		mg/Kg		101	75 - 125		
Copper	29		45.5	74.8		mg/Kg		102	75 - 125		
Lead	25		45.5	65.7		mg/Kg		89	75 - 125		
Molybdenum	ND		45.5	40.7		mg/Kg		90	75 - 125		
Nickel	35		45.5	80.9		mg/Kg		100	75 - 125		
Selenium	ND		45.5	38.9		mg/Kg		86	75 - 125		
Silver	ND		22.7	23.3		mg/Kg		103	75 - 125		
Thallium	0.69	J	45.5	42.6		mg/Kg		92	75 - 125		
Vanadium	79		45.5	136		mg/Kg		124	75 - 125		
Zinc	37		45.5	84.5		mg/Kg		105	75 - 125		

Lab Sample ID: 720-88216-A-17-Z MSD
Matrix: Solid
Analysis Batch: 250585

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250365

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.85	J B F1	44.6	12.0	F1	mg/Kg		25	75 - 125	2	20
Arsenic	2.0	J	44.6	41.3		mg/Kg		88	75 - 125	5	20
Barium	55	B	44.6	104		mg/Kg		110	75 - 125	0	20
Beryllium	ND		44.6	42.1		mg/Kg		94	75 - 125	4	20
Cadmium	0.064	J	44.6	41.7		mg/Kg		93	75 - 125	4	20
Chromium	63		44.6	110		mg/Kg		105	75 - 125	4	20
Cobalt	13		44.6	56.2		mg/Kg		96	75 - 125	5	20
Copper	29		44.6	74.5		mg/Kg		103	75 - 125	0	20
Lead	25		44.6	62.1		mg/Kg		82	75 - 125	6	20
Molybdenum	ND		44.6	38.4		mg/Kg		86	75 - 125	6	20
Nickel	35		44.6	83.6		mg/Kg		108	75 - 125	3	20
Selenium	ND		44.6	37.4		mg/Kg		84	75 - 125	4	20
Silver	ND		22.3	22.5		mg/Kg		101	75 - 125	4	20
Thallium	0.69	J	44.6	41.0		mg/Kg		90	75 - 125	4	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88216-A-17-Z MSD
Matrix: Solid
Analysis Batch: 250585

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250365

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vanadium	79		44.6	130		mg/Kg		113	75 - 125	5	20
Zinc	37		44.6	81.0		mg/Kg		99	75 - 125	4	20

Lab Sample ID: MB 720-250385/1-A
Matrix: Solid
Analysis Batch: 250634

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250385

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Arsenic	ND		1.0	0.085	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Barium	ND		0.50	0.071	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Beryllium	ND		0.10	0.033	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Cadmium	ND		0.13	0.012	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Chromium	0.0676	J	0.50	0.053	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Cobalt	ND		0.20	0.020	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Copper	ND		1.5	0.71	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Lead	ND		0.50	0.11	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Molybdenum	ND		0.50	0.064	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Nickel	ND		0.50	0.051	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Selenium	ND		1.0	0.15	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Silver	ND		0.25	0.051	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Thallium	ND		0.50	0.15	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Vanadium	ND		0.50	0.068	mg/Kg		08/28/18 12:45	08/30/18 14:17	1
Zinc	ND		1.5	0.64	mg/Kg		08/28/18 12:45	08/30/18 14:17	1

Lab Sample ID: LCS 720-250385/2-A
Matrix: Solid
Analysis Batch: 250634

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250385

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	49.5		mg/Kg		99	80 - 120
Arsenic	50.0	49.0		mg/Kg		98	80 - 120
Barium	50.0	48.9		mg/Kg		98	80 - 120
Beryllium	50.0	46.1		mg/Kg		92	80 - 120
Cadmium	50.0	49.1		mg/Kg		98	80 - 120
Chromium	50.0	50.3		mg/Kg		101	80 - 120
Cobalt	50.0	50.1		mg/Kg		100	80 - 120
Copper	50.0	50.9		mg/Kg		102	80 - 120
Lead	50.0	49.6		mg/Kg		99	80 - 120
Molybdenum	50.0	50.7		mg/Kg		101	80 - 120
Nickel	50.0	50.8		mg/Kg		102	80 - 120
Selenium	50.0	49.3		mg/Kg		99	80 - 120
Silver	25.0	25.3		mg/Kg		101	80 - 120
Thallium	50.0	50.1		mg/Kg		100	80 - 120
Vanadium	50.0	49.2		mg/Kg		98	80 - 120
Zinc	50.0	49.4		mg/Kg		99	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-88240-D-3-A MS
Matrix: Solid
Analysis Batch: 250634

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 250385

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.4	J F1	43.1	12.0	F1	mg/Kg		25	75 - 125
Arsenic	38	F1 F2	43.1	169	F1	mg/Kg		303	75 - 125
Barium	90	F1 F2	43.1	256	F1	mg/Kg		387	75 - 125
Beryllium	ND		43.1	50.3		mg/Kg		117	75 - 125
Cadmium	0.12	J	43.1	46.5		mg/Kg		108	75 - 125
Chromium	51	B F1	43.1	135	F1	mg/Kg		194	75 - 125
Cobalt	9.5		43.1	61.4		mg/Kg		120	75 - 125
Copper	55	F1	43.1	119	F1	mg/Kg		147	75 - 125
Lead	120	F1	43.1	204	F1	mg/Kg		188	75 - 125
Molybdenum	0.90	J	43.1	48.5		mg/Kg		110	75 - 125
Nickel	52	F1	43.1	130	F1	mg/Kg		180	75 - 125
Selenium	1.6	J	43.1	50.5		mg/Kg		113	75 - 125
Silver	ND	F1	21.6	26.3		mg/Kg		122	75 - 125
Thallium	ND		43.1	44.7		mg/Kg		104	75 - 125
Vanadium	43	F1	43.1	98.6	F1	mg/Kg		129	75 - 125
Zinc	130	F1 F2	43.1	193	F1	mg/Kg		154	75 - 125

Lab Sample ID: 720-88240-D-3-B MSD
Matrix: Solid
Analysis Batch: 250634

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 250385

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.4	J F1	42.7	12.6	F1	mg/Kg		26	75 - 125	5	20
Arsenic	38	F1 F2	42.7	121	F1 F2	mg/Kg		195	75 - 125	33	20
Barium	90	F1 F2	42.7	195	F1 F2	mg/Kg		247	75 - 125	27	20
Beryllium	ND		42.7	53.3		mg/Kg		125	75 - 125	6	20
Cadmium	0.12	J	42.7	49.3		mg/Kg		115	75 - 125	6	20
Chromium	51	B F1	42.7	137	F1	mg/Kg		201	75 - 125	2	20
Cobalt	9.5		42.7	62.1		mg/Kg		123	75 - 125	1	20
Copper	55	F1	42.7	129	F1	mg/Kg		171	75 - 125	8	20
Lead	120	F1	42.7	249	F1	mg/Kg		293	75 - 125	20	20
Molybdenum	0.90	J	42.7	51.1		mg/Kg		117	75 - 125	5	20
Nickel	52	F1	42.7	123	F1	mg/Kg		166	75 - 125	5	20
Selenium	1.6	J	42.7	51.6		mg/Kg		117	75 - 125	2	20
Silver	ND	F1	21.4	27.6	F1	mg/Kg		129	75 - 125	5	20
Thallium	ND		42.7	45.9		mg/Kg		107	75 - 125	3	20
Vanadium	43	F1	42.7	106	F1	mg/Kg		149	75 - 125	8	20
Zinc	130	F1 F2	42.7	239	F1 F2	mg/Kg		264	75 - 125	22	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-250239/1-A
Matrix: Solid
Analysis Batch: 250500

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250239

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/25/18 13:53	08/29/18 12:26	1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 720-250239/2-A
Matrix: Solid
Analysis Batch: 250500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250239

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.833	0.920		mg/Kg		110	80 - 120		

Lab Sample ID: 720-88235-1 MS
Matrix: Solid
Analysis Batch: 250500

Client Sample ID: DG-C6S-0.5-1
Prep Type: Total/NA
Prep Batch: 250239

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.12		0.735	0.903		mg/Kg		107	75 - 125		

Lab Sample ID: 720-88235-1 MSD
Matrix: Solid
Analysis Batch: 250500

Client Sample ID: DG-C6S-0.5-1
Prep Type: Total/NA
Prep Batch: 250239

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.12		0.725	0.952		mg/Kg		115	75 - 125	5	20

Lab Sample ID: MB 720-250285/1-A
Matrix: Solid
Analysis Batch: 250591

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 250285

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017	0.0025	mg/Kg		08/29/18 20:30	08/30/18 08:50	1

Lab Sample ID: LCS 720-250285/2-A
Matrix: Solid
Analysis Batch: 250591

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 250285

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.833	0.801		mg/Kg		96	80 - 120		

Lab Sample ID: 720-88235-11 MS
Matrix: Solid
Analysis Batch: 250591

Client Sample ID: DG-J10S-0.5-1
Prep Type: Total/NA
Prep Batch: 250285

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.042		0.820	0.865		mg/Kg		100	75 - 125		

Lab Sample ID: 720-88235-11 MSD
Matrix: Solid
Analysis Batch: 250591

Client Sample ID: DG-J10S-0.5-1
Prep Type: Total/NA
Prep Batch: 250285

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.042		0.820	0.870		mg/Kg		101	75 - 125	1	20

Metals

Prep Batch: 250239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88235-1	DG-C6S-0.5-1	Total/NA	Solid	7471A	
720-88235-2	DG-C6S-3.5-4	Total/NA	Solid	7471A	
720-88235-3	DG-F6S-0.5-1	Total/NA	Solid	7471A	
720-88235-4	DG-F6S-3.5-4	Total/NA	Solid	7471A	
720-88235-5	DG-K6S-0.5-1	Total/NA	Solid	7471A	
720-88235-6	DG-K6S-3.5-4	Total/NA	Solid	7471A	
720-88235-7	DG-I8S-0.5-1	Total/NA	Solid	7471A	
720-88235-8	DG-I8S-3.5-4	Total/NA	Solid	7471A	
720-88235-9	DG-G8S-0.5-1	Total/NA	Solid	7471A	
720-88235-10	DG-G8S-3.5-4	Total/NA	Solid	7471A	
MB 720-250239/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250239/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88235-1 MS	DG-C6S-0.5-1	Total/NA	Solid	7471A	
720-88235-1 MSD	DG-C6S-0.5-1	Total/NA	Solid	7471A	

Prep Batch: 250242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88235-18	DG-C8S-3.5-4	Total/NA	Solid	3050B	
720-88235-19	DG-F10S-0.5-1	Total/NA	Solid	3050B	
720-88235-20	DG-F10S-3.5-4	Total/NA	Solid	3050B	
MB 720-250242/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250242/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88217-A-4-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88217-A-4-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88235-11	DG-J10S-0.5-1	Total/NA	Solid	7471A	
720-88235-12	DG-J10S-3.5-4	Total/NA	Solid	7471A	
720-88235-13	DG-L10S-0.5-1	Total/NA	Solid	7471A	
720-88235-14	DG-L10S-3.5-4	Total/NA	Solid	7471A	
720-88235-15	DG-H8S-0.5-1	Total/NA	Solid	7471A	
720-88235-16	DG-H8S-3.5-4	Total/NA	Solid	7471A	
720-88235-17	DG-C8S-0.5-1	Total/NA	Solid	7471A	
720-88235-18	DG-C8S-3.5-4	Total/NA	Solid	7471A	
720-88235-19	DG-F10S-0.5-1	Total/NA	Solid	7471A	
720-88235-20	DG-F10S-3.5-4	Total/NA	Solid	7471A	
MB 720-250285/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-250285/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-88235-11 MS	DG-J10S-0.5-1	Total/NA	Solid	7471A	
720-88235-11 MSD	DG-J10S-0.5-1	Total/NA	Solid	7471A	

Prep Batch: 250292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88235-16	DG-H8S-3.5-4	Total/NA	Solid	3050B	
720-88235-17	DG-C8S-0.5-1	Total/NA	Solid	3050B	
MB 720-250292/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250292/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88216-A-9-K MS	Matrix Spike	Total/NA	Solid	3050B	
720-88216-A-9-L MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 250310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88235-1	DG-C6S-0.5-1	Total/NA	Solid	3050B	
720-88235-2	DG-C6S-3.5-4	Total/NA	Solid	3050B	
720-88235-3	DG-F6S-0.5-1	Total/NA	Solid	3050B	
720-88235-4	DG-F6S-3.5-4	Total/NA	Solid	3050B	
720-88235-5	DG-K6S-0.5-1	Total/NA	Solid	3050B	
720-88235-6	DG-K6S-3.5-4	Total/NA	Solid	3050B	
720-88235-7	DG-I8S-0.5-1	Total/NA	Solid	3050B	
720-88235-8	DG-I8S-3.5-4	Total/NA	Solid	3050B	
720-88235-9	DG-G8S-0.5-1	Total/NA	Solid	3050B	
720-88235-10	DG-G8S-3.5-4	Total/NA	Solid	3050B	
MB 720-250310/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250310/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88235-1 MS	DG-C6S-0.5-1	Total/NA	Solid	3050B	
720-88235-1 MSD	DG-C6S-0.5-1	Total/NA	Solid	3050B	

Analysis Batch: 250349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88235-18	DG-C8S-3.5-4	Total/NA	Solid	6010B	250242
720-88235-19	DG-F10S-0.5-1	Total/NA	Solid	6010B	250242
720-88235-20	DG-F10S-3.5-4	Total/NA	Solid	6010B	250242
MB 720-250242/1-A	Method Blank	Total/NA	Solid	6010B	250242
LCS 720-250242/2-A	Lab Control Sample	Total/NA	Solid	6010B	250242
720-88217-A-4-A MS	Matrix Spike	Total/NA	Solid	6010B	250242
720-88217-A-4-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250242

Prep Batch: 250365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88235-11	DG-J10S-0.5-1	Total/NA	Solid	3050B	
720-88235-12	DG-J10S-3.5-4	Total/NA	Solid	3050B	
720-88235-13	DG-L10S-0.5-1	Total/NA	Solid	3050B	
720-88235-14	DG-L10S-3.5-4	Total/NA	Solid	3050B	
MB 720-250365/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250365/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88216-A-17-Y MS	Matrix Spike	Total/NA	Solid	3050B	
720-88216-A-17-Z MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 250385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88235-15	DG-H8S-0.5-1	Total/NA	Solid	3050B	
MB 720-250385/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-250385/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-88240-D-3-A MS	Matrix Spike	Total/NA	Solid	3050B	
720-88240-D-3-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 250437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88235-1	DG-C6S-0.5-1	Total/NA	Solid	6010B	250310
720-88235-2	DG-C6S-3.5-4	Total/NA	Solid	6010B	250310
720-88235-3	DG-F6S-0.5-1	Total/NA	Solid	6010B	250310
720-88235-4	DG-F6S-3.5-4	Total/NA	Solid	6010B	250310
720-88235-5	DG-K6S-0.5-1	Total/NA	Solid	6010B	250310

Metals (Continued)

Analysis Batch: 250437 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88235-6	DG-K6S-3.5-4	Total/NA	Solid	6010B	250310
720-88235-7	DG-I8S-0.5-1	Total/NA	Solid	6010B	250310
720-88235-8	DG-I8S-3.5-4	Total/NA	Solid	6010B	250310
720-88235-9	DG-G8S-0.5-1	Total/NA	Solid	6010B	250310
720-88235-10	DG-G8S-3.5-4	Total/NA	Solid	6010B	250310
MB 720-250310/1-A	Method Blank	Total/NA	Solid	6010B	250310
LCS 720-250310/2-A	Lab Control Sample	Total/NA	Solid	6010B	250310
720-88235-1 MS	DG-C6S-0.5-1	Total/NA	Solid	6010B	250310
720-88235-1 MSD	DG-C6S-0.5-1	Total/NA	Solid	6010B	250310

Analysis Batch: 250491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88235-16	DG-H8S-3.5-4	Total/NA	Solid	6010B	250292
720-88235-17	DG-C8S-0.5-1	Total/NA	Solid	6010B	250292
MB 720-250292/1-A	Method Blank	Total/NA	Solid	6010B	250292
LCS 720-250292/2-A	Lab Control Sample	Total/NA	Solid	6010B	250292
720-88216-A-9-K MS	Matrix Spike	Total/NA	Solid	6010B	250292
720-88216-A-9-L MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250292

Analysis Batch: 250500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88235-1	DG-C6S-0.5-1	Total/NA	Solid	7471A	250239
720-88235-2	DG-C6S-3.5-4	Total/NA	Solid	7471A	250239
720-88235-3	DG-F6S-0.5-1	Total/NA	Solid	7471A	250239
720-88235-4	DG-F6S-3.5-4	Total/NA	Solid	7471A	250239
720-88235-5	DG-K6S-0.5-1	Total/NA	Solid	7471A	250239
720-88235-6	DG-K6S-3.5-4	Total/NA	Solid	7471A	250239
720-88235-7	DG-I8S-0.5-1	Total/NA	Solid	7471A	250239
720-88235-8	DG-I8S-3.5-4	Total/NA	Solid	7471A	250239
720-88235-9	DG-G8S-0.5-1	Total/NA	Solid	7471A	250239
720-88235-10	DG-G8S-3.5-4	Total/NA	Solid	7471A	250239
MB 720-250239/1-A	Method Blank	Total/NA	Solid	7471A	250239
LCS 720-250239/2-A	Lab Control Sample	Total/NA	Solid	7471A	250239
720-88235-1 MS	DG-C6S-0.5-1	Total/NA	Solid	7471A	250239
720-88235-1 MSD	DG-C6S-0.5-1	Total/NA	Solid	7471A	250239

Analysis Batch: 250585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88235-11	DG-J10S-0.5-1	Total/NA	Solid	6010B	250365
720-88235-12	DG-J10S-3.5-4	Total/NA	Solid	6010B	250365
720-88235-13	DG-L10S-0.5-1	Total/NA	Solid	6010B	250365
720-88235-14	DG-L10S-3.5-4	Total/NA	Solid	6010B	250365
MB 720-250365/1-A	Method Blank	Total/NA	Solid	6010B	250365
LCS 720-250365/2-A	Lab Control Sample	Total/NA	Solid	6010B	250365
720-88216-A-17-Y MS	Matrix Spike	Total/NA	Solid	6010B	250365
720-88216-A-17-Z MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250365

Analysis Batch: 250591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88235-11	DG-J10S-0.5-1	Total/NA	Solid	7471A	250285
720-88235-12	DG-J10S-3.5-4	Total/NA	Solid	7471A	250285

Metals (Continued)

Analysis Batch: 250591 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88235-13	DG-L10S-0.5-1	Total/NA	Solid	7471A	250285
720-88235-14	DG-L10S-3.5-4	Total/NA	Solid	7471A	250285
720-88235-15	DG-H8S-0.5-1	Total/NA	Solid	7471A	250285
720-88235-16	DG-H8S-3.5-4	Total/NA	Solid	7471A	250285
720-88235-17	DG-C8S-0.5-1	Total/NA	Solid	7471A	250285
720-88235-18	DG-C8S-3.5-4	Total/NA	Solid	7471A	250285
720-88235-19	DG-F10S-0.5-1	Total/NA	Solid	7471A	250285
720-88235-20	DG-F10S-3.5-4	Total/NA	Solid	7471A	250285
MB 720-250285/1-A	Method Blank	Total/NA	Solid	7471A	250285
LCS 720-250285/2-A	Lab Control Sample	Total/NA	Solid	7471A	250285
720-88235-11 MS	DG-J10S-0.5-1	Total/NA	Solid	7471A	250285
720-88235-11 MSD	DG-J10S-0.5-1	Total/NA	Solid	7471A	250285

Analysis Batch: 250634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-250385/1-A	Method Blank	Total/NA	Solid	6010B	250385
LCS 720-250385/2-A	Lab Control Sample	Total/NA	Solid	6010B	250385
720-88240-D-3-A MS	Matrix Spike	Total/NA	Solid	6010B	250385
720-88240-D-3-B MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	250385

Analysis Batch: 250650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88235-15	DG-H8S-0.5-1	Total/NA	Solid	6010B	250385

Analysis Batch: 250701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-88235-15	DG-H8S-0.5-1	Total/NA	Solid	6010B	250385

Client Sample ID: DG-C6S-0.5-1

Lab Sample ID: 720-88235-1

Date Collected: 08/23/18 08:30

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250437	08/28/18 16:17	BKR	TAL PLS
Total/NA	Prep	7471A			250239	08/25/18 13:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250500	08/29/18 12:35	OBI	TAL PLS

Client Sample ID: DG-C6S-3.5-4

Lab Sample ID: 720-88235-2

Date Collected: 08/23/18 08:30

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250437	08/28/18 17:19	BKR	TAL PLS
Total/NA	Prep	7471A			250239	08/25/18 13:53	MAG	TAL PLS
Total/NA	Analysis	7471A		10	250500	08/29/18 13:32	OBI	TAL PLS

Client Sample ID: DG-F6S-0.5-1

Lab Sample ID: 720-88235-3

Date Collected: 08/23/18 09:08

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250437	08/28/18 17:24	BKR	TAL PLS
Total/NA	Prep	7471A			250239	08/25/18 13:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250500	08/29/18 12:40	OBI	TAL PLS

Client Sample ID: DG-F6S-3.5-4

Lab Sample ID: 720-88235-4

Date Collected: 08/23/18 09:08

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250437	08/28/18 17:29	BKR	TAL PLS
Total/NA	Prep	7471A			250239	08/25/18 13:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250500	08/29/18 12:43	OBI	TAL PLS

Client Sample ID: DG-K6S-0.5-1

Lab Sample ID: 720-88235-5

Date Collected: 08/23/18 09:30

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250437	08/28/18 17:43	BKR	TAL PLS
Total/NA	Prep	7471A			250239	08/25/18 13:53	MAG	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Client Sample ID: DG-K6S-0.5-1

Lab Sample ID: 720-88235-5
Date Collected: 08/23/18 09:30
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	250500	08/29/18 12:45	OBI	TAL PLS

Client Sample ID: DG-K6S-3.5-4

Lab Sample ID: 720-88235-6
Date Collected: 08/23/18 09:30
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250437	08/28/18 17:48	BKR	TAL PLS
Total/NA	Prep	7471A			250239	08/25/18 13:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250500	08/29/18 12:47	OBI	TAL PLS

Client Sample ID: DG-I8S-0.5-1

Lab Sample ID: 720-88235-7
Date Collected: 08/23/18 10:00
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250437	08/28/18 17:52	BKR	TAL PLS
Total/NA	Prep	7471A			250239	08/25/18 13:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250500	08/29/18 12:54	OBI	TAL PLS

Client Sample ID: DG-I8S-3.5-4

Lab Sample ID: 720-88235-8
Date Collected: 08/23/18 10:00
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250437	08/28/18 17:57	BKR	TAL PLS
Total/NA	Prep	7471A			250239	08/25/18 13:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250500	08/29/18 12:57	OBI	TAL PLS

Client Sample ID: DG-G8S-0.5-1

Lab Sample ID: 720-88235-9
Date Collected: 08/23/18 10:18
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250437	08/28/18 18:02	BKR	TAL PLS
Total/NA	Prep	7471A			250239	08/25/18 13:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250500	08/29/18 12:59	OBI	TAL PLS

Client Sample ID: DG-G8S-3.5-4

Lab Sample ID: 720-88235-10

Date Collected: 08/23/18 10:18

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250310	08/27/18 14:52	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250437	08/28/18 18:07	BKR	TAL PLS
Total/NA	Prep	7471A			250239	08/25/18 13:53	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250500	08/29/18 13:01	OBI	TAL PLS

Client Sample ID: DG-J10S-0.5-1

Lab Sample ID: 720-88235-11

Date Collected: 08/23/18 16:55

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250365	08/28/18 10:26	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250585	08/29/18 20:48	OBI	TAL PLS
Total/NA	Prep	7471A			250285	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250591	08/30/18 08:59	OBI	TAL PLS

Client Sample ID: DG-J10S-3.5-4

Lab Sample ID: 720-88235-12

Date Collected: 08/23/18 16:55

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250365	08/28/18 10:26	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250585	08/29/18 20:53	OBI	TAL PLS
Total/NA	Prep	7471A			250285	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250591	08/30/18 09:02	OBI	TAL PLS

Client Sample ID: DG-L10S-0.5-1

Lab Sample ID: 720-88235-13

Date Collected: 08/23/18 17:15

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250365	08/28/18 10:26	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250585	08/29/18 20:58	OBI	TAL PLS
Total/NA	Prep	7471A			250285	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250591	08/30/18 09:04	OBI	TAL PLS

Client Sample ID: DG-L10S-3.5-4

Lab Sample ID: 720-88235-14

Date Collected: 08/23/18 17:15

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250365	08/28/18 10:26	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250585	08/29/18 21:03	OBI	TAL PLS
Total/NA	Prep	7471A			250285	08/29/18 20:30	MAG	TAL PLS

Client Sample ID: DG-L10S-3.5-4

Lab Sample ID: 720-88235-14

Date Collected: 08/23/18 17:15

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	250591	08/30/18 09:07	OBI	TAL PLS

Client Sample ID: DG-H8S-0.5-1

Lab Sample ID: 720-88235-15

Date Collected: 08/23/18 10:15

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250650	08/31/18 00:24	OBI	TAL PLS
Total/NA	Prep	3050B			250385	08/28/18 12:45	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250701	08/31/18 11:59	OBI	TAL PLS
Total/NA	Prep	7471A			250285	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250591	08/30/18 09:09	OBI	TAL PLS

Client Sample ID: DG-H8S-3.5-4

Lab Sample ID: 720-88235-16

Date Collected: 08/23/18 10:15

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 11:34	BKR	TAL PLS
Total/NA	Prep	7471A			250285	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250591	08/30/18 09:11	OBI	TAL PLS

Client Sample ID: DG-C8S-0.5-1

Lab Sample ID: 720-88235-17

Date Collected: 08/23/18 11:45

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250292	08/27/18 12:41	SUN	TAL PLS
Total/NA	Analysis	6010B		4	250491	08/29/18 11:39	BKR	TAL PLS
Total/NA	Prep	7471A			250285	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250591	08/30/18 09:18	OBI	TAL PLS

Client Sample ID: DG-C8S-3.5-4

Lab Sample ID: 720-88235-18

Date Collected: 08/23/18 11:45

Matrix: Solid

Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250349	08/27/18 20:29	OBI	TAL PLS
Total/NA	Prep	7471A			250285	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250591	08/30/18 09:21	OBI	TAL PLS

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Client Sample ID: DG-F10S-0.5-1

Lab Sample ID: 720-88235-19

Date Collected: 08/23/18 15:00
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250349	08/27/18 20:34	OBI	TAL PLS
Total/NA	Prep	7471A			250285	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250591	08/30/18 09:23	OBI	TAL PLS

Client Sample ID: DG-F10S-3.5-4

Lab Sample ID: 720-88235-20

Date Collected: 08/23/18 15:00
Matrix: Solid
Date Received: 08/24/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			250242	08/25/18 14:28	MAG	TAL PLS
Total/NA	Analysis	6010B		4	250349	08/27/18 20:39	OBI	TAL PLS
Total/NA	Prep	7471A			250285	08/29/18 20:30	MAG	TAL PLS
Total/NA	Analysis	7471A		1	250591	08/30/18 09:25	OBI	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc. TestAmerica Job ID: 720-88235-1
Project/Site: UPC OU-SM

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
3050B	Preparation, Metals	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: UPC OU-SM

TestAmerica Job ID: 720-88235-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-88235-1	DG-C6S-0.5-1	Solid	08/23/18 08:30	08/24/18 15:00
720-88235-2	DG-C6S-3.5-4	Solid	08/23/18 08:30	08/24/18 15:00
720-88235-3	DG-F6S-0.5-1	Solid	08/23/18 09:08	08/24/18 15:00
720-88235-4	DG-F6S-3.5-4	Solid	08/23/18 09:08	08/24/18 15:00
720-88235-5	DG-K6S-0.5-1	Solid	08/23/18 09:30	08/24/18 15:00
720-88235-6	DG-K6S-3.5-4	Solid	08/23/18 09:30	08/24/18 15:00
720-88235-7	DG-I8S-0.5-1	Solid	08/23/18 10:00	08/24/18 15:00
720-88235-8	DG-I8S-3.5-4	Solid	08/23/18 10:00	08/24/18 15:00
720-88235-9	DG-G8S-0.5-1	Solid	08/23/18 10:18	08/24/18 15:00
720-88235-10	DG-G8S-3.5-4	Solid	08/23/18 10:18	08/24/18 15:00
720-88235-11	DG-J10S-0.5-1	Solid	08/23/18 16:55	08/24/18 15:00
720-88235-12	DG-J10S-3.5-4	Solid	08/23/18 16:55	08/24/18 15:00
720-88235-13	DG-L10S-0.5-1	Solid	08/23/18 17:15	08/24/18 15:00
720-88235-14	DG-L10S-3.5-4	Solid	08/23/18 17:15	08/24/18 15:00
720-88235-15	DG-H8S-0.5-1	Solid	08/23/18 10:15	08/24/18 15:00
720-88235-16	DG-H8S-3.5-4	Solid	08/23/18 10:15	08/24/18 15:00
720-88235-17	DG-C8S-0.5-1	Solid	08/23/18 11:45	08/24/18 15:00
720-88235-18	DG-C8S-3.5-4	Solid	08/23/18 11:45	08/24/18 15:00
720-88235-19	DG-F10S-0.5-1	Solid	08/23/18 15:00	08/24/18 15:00
720-88235-20	DG-F10S-3.5-4	Solid	08/23/18 15:00	08/24/18 15:00

720-88235

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 185115

Date 8/23/18 Page 1 of 2

11/21/2018 (Rev. 1)

Report To

Attn: MIRANDA KAHRILAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH FLOOR
Email: mkahrilas@geosyntec.com
Bill To: GEOSYNTEC
Sampled By: Rosemarie Thomas
Attn: A SMITH
Phone: 5102052795

Analysis Request

Sample ID	Date	Time	Matrix	Preserv.	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease (EPA 1664/9071) ☐ Petroleum ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	Perform MS/MSD (lab to homogenize)
DG-C6S-0.5-1	8/23	830	S	N									X											
DG-C6S-3.5-4		830											X											
DG-F6S-0.5-1		908											X											
DG-F6S-3.5-4		908											X											
DG-K6S-0.5-1		930											X											
DG-K6S-3.5-4		930											X											
DG-I8S-0.5-1		1000											X											
DG-I8S-3.5-4		1000											X											
DG-G8S-0.5-1		1018											X											
DG-G8S-3.5-4	↓	1018	↓	↓									X											

720-88235 Chain of Custody

Page 55 of 57

Project Info.

Project Name/ #: UPC OU-SM
PO#: WG2565/02
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers:
Head Space:
Temp:

10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:
	X					

Report: ☐ Routine ☐ Level 3 ☒ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID
2.3°C

Terms and Conditions on reverse

1) Relinquished by: Keith Lilli	Time: 1050	1) Received by:	Time: 1305
Signature		Signature	
Printed Name: Keaton Tirelli	Date: 8/24	Printed Name: R. L	Date: 8/24/18
Company: Geosyntec		Company: TA	
2) Relinquished by:	Time: 1500	2) Received by:	Time: 1500
Signature		Signature	
Printed Name: R. L	Date: 8/24/18	Printed Name: Janae	Date: 8/24/18
Company: TA		Company: TAMO	
3) Relinquished by:	Time:	3) Received by:	Time:
Signature		Signature	
Printed Name	Date:	Printed Name	Date:
Company		Company	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA Pleasanton Chain of Custody
1220 Quarry Lane ● Pleasanton CA 94566-4756
Phone: (925) 484-1919 ● Fax: (925) 600-3002

Reference #: _____

Date 8/23/18 Page 2 of 2

11/21/2018 (Rev. 1)

Report To

Attn: MIRANDA KAHRICAS
Company: GEOSYNTEC
Address: 1111 BROADWAY 6TH Floor
Email: mkahrlas@geosyntec.com
Bill To: GEOSYNTEC
Sampled By: Rosemarie Thomas
Attn: A SMITH
Phone: 5102852795

Analysis Request

Sample ID	Date	Time	# Cont.	Preserv.	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☐ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other ___	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease ☐ Petroleum (EPA 1664/9071) ☐ Total	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other. ___	Metals: ☐ 6020 ☐ 200.8 (ICP-MS): ___	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions : ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity
DG-J10S-0.5-1	8/23	1655	5	N									X									
DG-J10S-3.5-4		1655											X									
DG-L10S-0.5-1		1715											X									
DG-L10S-3.5-4		1715											X									
DG-H8S-0.5-1		1015											X									
DG-H8S-3.5-4		1015											X									
DG-C8S-0.5-1		1145											X									
DG-C8S-3.5-4		1145											X									
DG-F10S-0.5-1		1500											X									
DG-F10S-3.5-4	↓	1500	↓	↓									X									

Project Info.

Project Name/ #: UPC OU-SM
PO#: WG2565/02
Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers:
Head Space:
Temp:

10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:
	(5 Day)					

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1305	Signature: [signature] Time: 1500	Signature: Time:
Printed Name: Keaton Bell Date: 8/24	Printed Name: Robert Date: 8/24/18	Printed Name: Date:
Company: Geosyntec	Company: TA	Company:
1) Received by:	**2) Received by:**	**3) Received by:**
Signature: [signature] Time: 1305	Signature: [signature] Time: 15:00	Signature: Time:
Printed Name: Robert Date: 8/24/18	Printed Name: Janae Date: 8/24/18	Printed Name: Date:
Company: TA	Company: TA 720	Company:

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 720-88235-1

Login Number: 88235
List Number: 1
Creator: Perry, Janae R

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	